USE OF THESES

This copy is supplied for purposes of private study and research only. Passages from the thesis may not be copied or closely paraphrased without the written consent of the author.
DUST AND DREAMS

A regional history of mining and community in south east New South Wales, 1850-1914.

by Barry McGowan

A thesis submitted for the degree of Doctor of Philosophy of the Australian National University.

June 2001
Dust and Dreams

I certify that this thesis is my own work containing,

to the best of my knowledge and belief,

no material published or written by another person

except as referred to in the text.

Barry J. McGowan

22 June 2001

Unless stated, copyright of all artwork, graphics and photographs remains the property of Barry J. McGowan, and may not be reproduced for any purpose in whole or part, without written permission, under The Copyright Act 1968.
Abstract

Until recently the focus of interest in gold mining history has been Victoria, and to a lesser extent Western Australia. The New South Wales story has, in contrast, attracted relatively little research or interest, the Lambing Flat race riots often being the only instance in which the New South Wales gold fields are specifically mentioned. Furthermore, mining history has tended to emphasise the unusual, dramatic, and colourful aspects of the gold rushes at the expense of an investigation of what mining was like most of the time.

Recent scholarship produced especially for the sesquicentennial anniversary has helped broaden the focus of gold mining history beyond its traditionally rather narrow focus. This thesis is part of this new scholarship. Not only does it have a New South Wales focus, but also it places gold mining in a broad context, discussing other forms of mineral exploitation and examining the effects of mining generally within a regional setting. It also uses material evidence such as field surveys, photographs and maps, extensively, demonstrating its importance to the historian. The thesis contributes to this growing body of work with new questions and new research, and helps broaden the focus of Australian mining history.

The thesis is a regional history of mining in south east New South Wales in the years between 1850 and 1914. It differs from most regional histories in that the focus is on one industry, and from most mining histories in that all the mining fields within the region are discussed, large and small, gold and base metals. The region is large and includes a number of contiguous and representative fields in the Southern Tablelands, the Braidwood and Shoalhaven, Monaro and South West Slopes Districts of New South Wales.

There are several themes in the thesis.

One is the history of mining itself, focussing on mining technology, and the ebb and flow of particular fields as a result of factors such as resource discovery and depletion, changed economic conditions, technological change, mining regulations, and weather patterns. The thesis examines in depth the changing value of mineral production on the fields, a task of considerable difficulty, since before 1875 there were no official statistics of any real value. There is attention to the environmental effects of mining.

A second theme is the contribution of mining to regional development through the settlement of towns and villages and the encouragement given to ancillary industries and infrastructure. It is in this discussion that the material evidence is particularly useful.

A third theme concerns the cultural development of the communities, with attention given to the relationships between working miners their wage based colleagues, the Chinese miners, and the nature of everyday life in these communities. The thesis argues that there is a culture which embraces most forms of mining.
Prologue and acknowledgements

My thesis is the end of an odyssey that began 18 years ago in the wilds of Tasmania, astride the rusting remains of a railway line, and within sight and smell of a heavily polluted river. The scene, though degraded, had some attraction, for the dead and decaying trees and the sluggish, if not moribund river, were set against a backdrop of brightly coloured river sands. It certainly evoked questions, and I felt strongly compelled to write. The article was modest, and was submitted successfully to a popular magazine generally given more to ribaldry than serious historical discourse. But it was enough. Unbeknown to myself at the time, I had taken my first tentative steps on a journey that was to repeatedly take me from one end of the continent to the other, and to change my life in ways I could have barely contemplated.

Over the next few years further bush odysseys and a flood of articles followed. A two month journey through north and central Queensland turned my curiosity to an abiding interest. I was increasingly drawn to the derelict citadels and ruined landscapes of the outback. All pretense of traditional vacation destinations such as beach and city were abandoned for the remote interior and successive vehicles were gradually upgraded to full 4WD status. Some of the journeys were perilous. Silent prayers were fervently offered that the next dune would bring me in sight of a long anticipated land mark, or that the chaos of bull dust and potholes, or in some instances the deep oozing mud, would vanish as quickly as it came. In time these landscapes became my family’s playground, for it was not all toil, and there were warm fires at night and quiet contemplation amidst the silent splendour of the bush.

With these experiences came other journals such as heritage and 4WD magazines, for readers of the latter are amongst the most inquisitive of all. Inevitably my focus shifted. What of the region in which I lived? I had heard rumours of lost towns in the bush. Some of these could be visited on day trips. What had been an antiquarian interest became more intense, for as a local I had access to sources and contacts that I could only access fleetingly on my longer journeys. A three part series on ‘lost mines’ in the Canberra region all but sealed my fate. A heritage project on historic mining sites in the local region followed, cobbled together with whatever leave and forbearance I could muster from work.

My first book was based on this project. The book launch was an exciting, but in some ways somber occasion, for I had tasted of the fruits of recognition, and wanted more. In a fateful conversation, a neighbour, Ray Spear, an academic at the ANU, asked whether I had considered undertaking doctoral studies. Initially, I thought this a bit premature, for I was only just finishing my second degree, a BA, and was about to commence work on yet another heritage project. But it was exactly what I wanted to do, and I was fortunate that the proposal was supported enthusiastically by two ANU lecturers, Ian Farrington and John Merritt. My application was successful, and within twelve months I had left my comfortable work environment of some 26 years behind, and had embarked on a new career, combining my studies with heritage consultancy work. The dream had become a reality.

There were always people. Many of them were fossickers and farmers. But sometimes it was only the publican, his wife and a few exuberant clientele. Without them, however, little would have happened, and most of the sites would not have been located. Local landowners in the Canberra region are fiercely proud of their heritage. They don’t wish it to be neglected and abandoned, and are usually overwhelmed when anyone
shows an interest in it. There had been no attempt to record any of mining sites in the region. I was truly blazing a path, but I had many willing helpers.

These men and women gave freely of their time, sometimes in very trying circumstances. Rugged terrain was the norm. On many occasions we were faced with nearly impenetrable thickets of tea tree and blackberry bushes. At other times an unexpectedly difficult journey meant that, with fading light, we faced the very real prospect of a long and uncomfortable night in the bush. Many trips were undertaken in inclement weather conditions and involved fording rivers and creeks, sometimes in flood conditions. Some journeys were made in the height of summer, with searing heat and humidity and the water in the bottle almost too hot to drink.

Inevitably there were snakes, which I never saw until almost too late, when a savage hiss reminded me that I had but yet again narrowly avoided stepping on one. Even travelling in the Pajero was not always safe, for there were several heart in the mouth trips on rapidly deteriorating tracks, with few opportunities to beat a retreat. But there were serendipities too; lunch time breaks on the banks of the Shoalhaven or Mongarlowe Rivers or the picturesque glades of Bells’ Creek on a still and warm autumn day. The lighthearted banter of my companions was always there, and now with my quest ended, it is that which I miss the most.

Sadly, some of my companions have now passed on, yet it seems only yesterday that we were talking and laughing together. If I have to attribute my work to anyone then it is to these, my now silent friends, in particular the late John Clark and Ted Richardson. Both men had a vivid and entertaining memory of the past and both had been miners, and I learnt much from them. It is not possible to mention every other person, but there are some who stand out. For instance, Neil Waddell, who has pushed relentlessly for a proper recording of the heritage of the Araluen gold field and Bessie Williams, who has put so much effort into promoting the history of the Windellema area and its attendant mining sites. Dallas Ford and Kevin Smith were two others who had a strong local memory of the past, and proved invaluable in locating and recording many sites in the Shoalhaven River, Nerriga area. Paul Dann and Stephen Wright were my frequent companions on many forays into the Braidwood area, particularly the Mongarlowe and Bell’s Creek gold fields. The names of those who provided historical and site information and accompanied me on my trips is set out in the Bibliography.

Thanks also go to the various historical societies and their tireless workers, who are the unsung heroes of Australian history. Patricia Clarke, as editor of the Canberra Historical Journal, helped me publish a number of articles for the journal and gave me my earliest and most formative encouragement. The Canberra and District Historical Society sponsored me for my first substantial heritage project and the Braidwood and District Historical Society for the second. In the latter project I received considerable assistance from Netta and Nevin Ellis, and I benefitted from the use of the resources of both societies on a number of occasions. Other local historians to provide important assistance were Dick Littlejohn, Peter Blundell and Peter and Win Doolan of the Murrumburrah and District Historical Society, and Keith Clarke of the Snowy Mountains Historical Society. Keith Clarke and Peter Doolan were invaluable in helping locate sites in the Cooma and Harden areas respectively.

My thesis has been unique in its strong multidisciplinary approach. My panel included Professor Ann Curthoys and John Merritt from the then Department of History, Ian Farrington from the Department of Archaeology and Anthropology and Richard Baker
from the Department of Geography, all from the Australian National University. I am extremely grateful for their constant encouragement and, in particular, their assistance in helping me to clarify the themes and questions of my work. My relationship with John and Ian predated the commencement of the thesis and I thank them warmly for their guidance and friendship. The interest shown in my work by other university colleagues, such as Anthea Hyslop and staff of the former History Department, such as Tracey Deasey and Marion Robson, was also a constant source of encouragement.

Richard Greene and John Field from the Departments of Geography and Forestry respectively at the ANU also provided guidance in environmental matters, and two of their former students, Christina O'Grady and Katrina Cousins, assisted with my study of the Araluen catchment area. In the field I was also assisted by Michael and Jenny Lambert Tracey, and more recently by Lindsay Smith, with whom I have had many fruitful discussions on the archaeology and history of the Chinese. I have also benefitted from my attendance at several workshops on the Chinese organised by Henry Chan and my participation in the Australian Mining History Association conferences organised by Mel Davies, a lecturer at the University of Western Australia and president of the Association. Mel's leadership in this area has been vital to all students of Australian mining history.

No work of this magnitude could be completed successfully without enormous assistance from staff of various archives and libraries. These include the Newspaper, Petherick, Photographic and Manuscript rooms of the National Library in Canberra, the State Records Centre of NSW, the National Australian Archives and the Mitchell Library in Sydney. Two people who provided constant assistance were Al Bashford of the Department of Mineral Resources Library, Sydney, and Bev. Allen of the Australian Geological Survey Organisation Library, Canberra. I also received help from the Lands and Soils Conservation office at Braidwood and Sydney Water. Obtaining quality photos was critical and for this I am most grateful for the care and attention of Nick Lourandos and staff at the City Camera House.

Tasks of this magnitude are not completed without the support and forbearance of family and friends. In this regard I am indebted to my two sons, Andrew and Douglas, who endured numerous bush trips and their occasional hazards and discomforts, with nary a grumble, and to my companion, Chong Choe and her children, Sean and Genie. Chong helped me immeasurably in preparing the tables in the appendices and in providing advice, support and solace, particularly in those trying times when a myriad of competing deadlines and other distractions beckoned. Last, but not least I should mention my many friends from other walks of life for their constant interest and encouragement in my work. I thank you all.
Contents

Abstract ii

Prologue and acknowledgements iii

List of photographs, charts and tables ix

Abbreviations xiv

Locational maps xv

Introduction 1

Chapter One. Mullock heaps and tailing mounds 6

Alluvial mining 6
Reef mining 19
Base metal mining 20
Conclusion 27

Chapter Two. Alluvial gold mining 29

The first rushes: 1851-1856 30
The second rush: 1857-1874 33
Drought and decline: 1875-1887 38
Rain, revival and the unemployed: 1888-1898 41
The age of capital: 1899-1914 47
Conclusion 50

Chapter Three. Reef gold mining 51

The first strikes: 1860-1874 51
The doldrums: 1875-1887 54
A halting prosperity: 1888-1899 56
The last hurrah: 1900-1914 62
Conclusion 65

Chapter Four. Base metal mining 67

The copper boom: 1850-1885 67
Silver and copper: 1886-1899 72
Renewed hope and dashed dreams: 1900-1914 80
Conclusion 83

Chapter Five. Who Were the Miners? 84

Adaptability and versatility 85
A question of earnings-subsistence men, wages men, or something else again? 90
Chapter Six. The value of mineral production

Defining the problem
A production formula
The value of production
The alluvial fields
The reef fields
The base metal fields
Conclusion

Chapter Seven. The alluvial gold settlements

Gold rush settlements: 1851-1856
Towns and villages: 1857-1874
Decline and abandonment: 1875-1887
Revival and decline: 1888-1898
Dredging towns: 1899-1914
Conclusion

Chapter Eight. The reef gold settlements

The first settlements: 1860-1874
Towns and villages: 1875-1899
Gold towns to ghost towns: 1900-1914
Conclusion

Chapter Nine. The base metal settlements

The copper towns: 1850-1885
Captain’s Flat: 1886-1899
Kangiara and Kyloe: 1900-1914
Conclusion

Chapter Ten. Sly grog and mammon - the alluvial gold communities

Booze and bacchanalia: 1851-1856
Civilizing influences: 1857-1874
The quiet years: 1875-1898
Socials and suppers: 1899-1914
Conclusion

Chapter Eleven. A struggling civility - the reefing communities

‘A quiet lot’: 1860-1874
Grizzlies and grumbles: 1875-1899
Lost tribes: 1900-1914
Conclusion
Chapter Twelve. Benevolence and beatitudes – the base metal communities

The Welsh connection: 1851-1885
Debate and discussion: 1886-1899
Eight hour days and telephones: 1900-1914
Conclusion

Epilogue. An overview of mining, settlement and community: 1915–1945

Conclusion

Bibliography

Appendices
List of photographs, charts and tables

Photographs

Chapter 1


1.2. Remnant of small claim or pot hole tailings at Mudmelong, Araluen field.


1.4. Vertical stone packings, Chinese diggings, Shoalhaven River fields.

1.5. 1. View of the Araluen valley from the high road. 2. The workings of the Southern Cross claim. 3. Men at work at the sluice boxes (throwing out stones).

1.6. Old sluiced ground, Major’s Creek. 5. Party sluicing unworked ground at Major’s Creek. *Town and Country Journal*, 26 September 1885. Permission of the National Library of Australia.


1.7. Hydraulically sluiced gully, now flooded, Limekilns diggings, Shoalhaven River field. Looking towards the Shoalhaven River (background).


1.9. Tailing mounds deposited after bucket dredging, Araluen.


1.11. Eroded alluvial workings, Araluen. Tail race in centre foreground. Subsequent overgrazing has been a major factor in shaping this landscape.


1.13. Traction engine of the Araluen Valley Dredging Company carting timber through the main street of Araluen. Permission of the National Library of Australia.

1.14. Mine shaft (timber collaring at top of shaft) from the 1890’s and adit dating from the 1930s, Cowra Creek.

1.15. Mullock heap, United Miner’s mine, Major’s Creek.

1.16. Remains of ten head stamper, Cullina.

1.17. Macanally battery site, boiler in foreground, ore loading ramp on edge of embankment in background, Cowra Creek.

1.18. Cyanide tailings dump, Cullina.

1.19. Remains of slag heap from the 1890s smelting operations, Captain’s Flat. Smelting plant was located above the heap.

1.20. Foundations of part of processing plant. Tailings, slag heap, reverberatory furnace site and Lake Eucumbene in background, Kyloe.

1.21. Polluted and denuded mining landscape, Frogmore, Looking towards smelter site and slag heap.

Chapter 2

Permission of the National Library of Australia.

2.2. Boiler used for draining claims, Jembacumbene.

2.3. Araluen Proprietary dredge in excavated pond. NSW Department of Mines *Annual Report*, Sydney, 1901.

2.4. Dam on Nadgigomar Creek, 141 m long and 26 m high. Water was pumped from the dam to trestles and thence to a water race to the Spa diggings, Jacqua Spring Creek field.

**Chapter 3**

3.1. Transport of boiler by traction engine from Marulan railway station to Manton’s Reef, Spring Creek Jacqua field. A costly and time consuming exercise.

3.2. Remains of timber bedding for Flook’s battery, Spa Creek, Jacqua Spring Creek field. Loading ramp in background.

3.3. Reverberatory furnace, chlorination plant, McMahon’s Reef.

3.4. Wooden cyanide vat, Cowra Creek.

**Chapter 4**


4.3. Remains of smelter chimney, with Brian Drew, Woolgarlowe. Normally this site is under the waters of Burrinjuck dam. The shore line is in the background.

4.4. Remains of reverberatory furnace, Mulloon.


**Chapter 5**

5.1. Miners at Snob’s Reef, Major’s Creek, 1894. These men were wage employees, and the size of the group was typical of those working the larger reef mines. Permission of the National Library of Australia.

5.2. Reef miners, Manton’s Reef, Spring Creek Jacqua field. These men were both wages employees and working miners. Permission of Ms. Bessie Williams, Windellemia.

5.3. Working miners, Belle Vue dredge, Major’s Creek. Fewer numbers of men were needed to work the dredges. Permission of the National Library of Australia.

5.4. Small group of working miners engaged in paddocking at Jembacumbene, date uncertain. Claims of this nature required far fewer miners than most reef mines. Permission of the Braidwood and District Historical Society.
5.5. Chinese miners at Jembaicumbene, 1869. A very close resemblance in the
mode and size of workings to those in Fig. 5.3. Drawing by Penkerville Slade.
Reproduced from copy held at Mitchell Library, Sydney. Owner unknown.
reproduced from copy held at Mitchell Library, Sydney. Owner unknown.

Chapter 7

7.1. Dransfield's mill, built in 1860, Jembaicumbene.
7.2. Chinese cemetery, Jembaicumbene. All the graves appear to have been
exhumed. There are no grave markers or headstones.
7.3. Chinese hut, Broad Gully, Mongarlowe. Chinese coins have been found
at this site.
7.4. Mongarlowe village, Chinese huts in foreground, Chinese market gardeners
crossing the river bed. The 'joss house' was to the left of the drawing.
Illustrated Sydney News, 20 January 1870. Permission of the National Library
of Australia.
7.5. Shong Foon Nomchong's stores, the Millhouse and the Premier, Braidwood.
Permission of the Braidwood and District Historical Society.
7.6. Chee Dock Nomchong's store, Braidwood, Chee Dock on right. Permission
of the Braidwood and District Historical Society.
7.7. Chimney of large house site, Taylor's village, Mongarlowe.
7.8. Remains of hut site at Pipeclay diggings (with Kirsty Altenburg), Shoalhaven
River field.
7.9. Dredge construction, Araluen, workers and their wives. Note large quantities
of timber used. Permission of the National Library of Australia.
7.10. Dredge construction on the Shoalhaven River. Again, large quantities of
timber have been used. Permission of Patricia Grimshaw, Canberra.

Chapter 8

8.1. St. Stephen's church, Major's Creek, built in 1870 during the reefing boom.
8.2. Mrs Hockey visiting the Manton's Reef miners, Spring Creek Jacqua field.
She supplied them with fresh vegetables. Permission of Ms. Bessie Williams,
Windellema.
8.3. Hut site, Blanketburn Gully, Spring Creek Jacqua field.
8.4. Hotel site, Spring Creek, Spring Creek Jacqua field.
8.5. Hotel site, Fernbank, Spring Creek Jacqua field.
8.6. Pise built hotel, McMahon's Reef.
8.7. Hotel, Cowra Creek.
8.8. School building, Cowra Creek.

Chapter 9

9.1. Woolgarlowe settlement. The dwellings include both tents and huts, and
there are several women in the foreground. Permission of Graham Roberston,
Woolgarlowe.
9.2. William Robertson's homestead, Woolgarlowe, Permission of Graham
Robertson, Woolgarlowe.
9.5. Bullock teams in Foxlow Street, Captain’s Flat; smelters, smoke pollution and denuded landscape. From Susan Pryke, *Boom To Bust and Back Again. Captain’s Flat. 1883...*, Captain’s Flat Residents & Ratepayer’s Association, 1993.

Chapter 10

11.2. Quong Tart with his horse ‘Nobby’ at Braidwood in the 1870s. From an original painting held by Ian Tart, Collaroy.
13.4. Light horse troop. Allegedly from Major’s Creek, but more likely from Araluen. Permission of the National Library of Australia.

Chapter 11

11.1. Sports day and picnic at the cricket ground, Spring Creek Jacqua. Permission of Ms. Bessie Williams, Windellema.
11.2. Races at Major’s Creek, 1908. Permission of the National Library of Australia.
11.3. Cricket pitch, Cunningham’s Creek, with Peter Doolan. Matches against McMahon’s Reef would have been played on this ground.
11.4. The boys in the band, Harden mines, 1900s. Permission of the Harden and Murrumburrah Historical Society.

Epilogue

Ep.1. 1930s hut site at Timberlight, Nerriga gold field.
Ep.2. Hut site, 1930s Depression village, Spring Creek, Bungonia gold field.
Ep.3. Two head crushing plant, Cunningham’s Creek, McMahon’s Reef gold field. This type of plant was often used in the 1930s by small parties of working miners.
Ep.4. Captain’s Flat township, 1940s. Permission of the National Library of Australia.
Ep.5. Mullock heaps and settling ponds of Lake George Mines Company at the end of operations. This area has now been reclaimed. From Susan Pryke, *Boom To Bust and Back Again. Captain’s Flat. 1883...*, Captains Flat Residents & Ratepayer’s Association, 1993.
Ep.6. Power plant and stack in background, store and grease house in foreground, Cowarra, 1940. Permission of BHP Archives. 255
Ep.8. Main street of Cowarra on top of the ridge. Permission of the National Library of Australia. 256
Ep.9. Clothes boiler made from 44 gallon drum, Cowarra. 257
Ep.10. Stone terracing for hut site and remains of hut, Cowarra. 257

Charts and tables

2.1. Rainfall. Goulburn and Braidwood, 1871-1914 39
6.1. Average annual earnings by alluvial miners. 105
6.2. Miner’s earnings by type of claim. 108
6.3. Average value of claims per week by type of field. 109
6.4. Value of gold production-Braidwood gold fields 1851-1854. 109
6.5. Value of gold production-Braidwood gold field 1858-1862. 110
6.6. Escort Figures, ex Araluen and Braidwood 1858-1870. 111
6.7. Gold production, Araluen and NSW, 1900-1914. 111
Abbreviations

AMA = Amalgamated Miner’s Association
AR = New South Wales, Department of Mines, Annual Report.
GPO = General Post Office.
km = kilometre.
m = metre.
MLA = Member of the NSW Legislative Assembly
NAA = National Archives of Australia
NSWLA = New South Wales Legislative Assembly.
NSWLC = New South Wales Legislative Council.
oz = ounces of gold.
SRCNSW = State Records Centre of New South Wales

All measurements have been converted to metric, except where citing regulations for the size of leases and claims. Imperial measurements are used for currency. As a guide to standards of living then and now, an ounce of gold in the nineteenth century was valued at about £3 10s. On the data presented in Appendix Four a yield of one ounce a week was, therefore, the equivalent of at least good wages, often more. Current $A prices for gold (as of June 2001) suggest that it has held its purchasing value reasonably well over the last 100 years.
Locational map. Southern Mining Region and environs; towns and villages.
Locational map. South West Slopes.
Locational map. Monaro and Southern Tablelands District.
Introduction

Gold mining has long been a favourite topic in Australian history for schools and universities, professional historians and freelance writers alike. It has captured the imagination, and furnished the context for innumerable stories, anecdotes, movies, television series, paintings and the like. This year is the 150th anniversary of the discovery of gold and the anniversary has generated a range of museum exhibitions, books and new research. My thesis contributes to this growing body of work with new questions and new research. In focussing on New South Wales, not only on gold but on base metals as well, this thesis helps broaden the focus of Australian mining history.

Conducted virtually all over the continent, mining has an important place in Australian history. Many historians see the advent of the gold rushes as one of the singularly most important events in Australia’s history, an event which reshaped the demographic, political and economic contours of the country. They have examined in some detail the consequences of the rushes for the colonies and ultimately the nation as a whole. Until recently the focus of interest has been on Victoria, and to a lesser extent Western Australia. The New South Wales story has, in contrast, attracted relatively little research or interest, the Lambing Flat race riots are often the only instance in which the New South Wales gold fields are specifically mentioned. Furthermore, gold mining history has tended to emphasise the unusual, dramatic, and colourful aspects of the gold rushes at the expense of an investigation of what gold mining was like most of the time.

Recent scholarship produced especially for the sesquicentennial anniversary has helped broaden the focus of gold mining history beyond its traditionally rather narrow focus. A new discourse on gold and its place in the shaping of Australian society has now emerged. In particular, the publication of Iain McCalman, Alex Cook, and Andrew Reeves’ large edited collection, Gold, Forgotten Histories and Lost Objects of Australia, has changed this earlier somewhat narrow focus. It considers, for example, the interaction between gold miners and indigenous peoples in both Australia and New Guinea, the effect of gold mining on the environment, the contribution of gold to art and culture, the role of women on the gold fields, and the impact of gold mining on post Federation immigrants. In addition, there have been new insights into some of the more traditional themes such as the impact on the economy, urbanisation, industrial relations, and race relations. Its companion volume, A World Turned Upside Down: Cultural Change on Australia’s Goldfields 1851-2000, (in print), by Kerry Crandell and Cliff

---

3 One of the clearest expressions of these sentiments is by Nancy Keeving, who states that her book, History Of The Australian Gold Rushes, is ‘chiefly intended for the interest and entertainment of the general readers’. Nancy Keeving (ed), History Of The Australian Gold Rushes, Angus and Robertson, Melbourne, 1976, p.1.
Cumming, has also provided new insights into gold and culture, in particular the question of ethnicity and identity.\(^5\)

I am a contributor to both books and my thesis is part of this new scholarship. My thesis has a New South Wales focus and places gold mining in a broad context, discussing other forms of mineral exploitation and examining the effects of mining within a regional setting. It also uses material evidence extensively, demonstrating its importance to the historian.

Notwithstanding the importance of these most recent developments, the best general history of mining in Australia is still Geoffrey Blainey's *The Rush That Never Ended*, first published in 1963.\(^6\) He discusses not only gold, but base metal mining, and does not focus narrowly on the Victorian experience but includes the mining experience across the whole Australian continent, including Tasmania. Inevitably, however, his focus too is on the more dramatic discoveries and developments, and apart from Broken Hill and the early discoveries on the Turon, he says little else about New South Wales. The main excitement is clearly elsewhere.\(^7\)

Some historians discuss mining at the micro level, focussing on particular mining fields, and some of these histories focus on fields other than the Victorian ones. They also include accounts of fields in existence well beyond the 1860s. The significant mining fields have attracted a large number of historians. Examples of this work include Geoffrey Blainey's accounts of the Mount Isa, Mount Lyell and Broken Hill fields.\(^8\) George Farwell, Brian Kennedy, Barry Ellis and Kay Koenig have also written on Broken Hill.\(^9\) Histories of the more significant Victorian gold fields include those by Weston Bate on Ballarat, Gwynydd James and Charles Lee on Walhalla, Carole Woods on Beechworth, and Frank Cusack on Bendigo.\(^10\)

---


\(^7\) New South Wales fields such as Cobar, Gulgong, Hill End, Kiandra, Inverell and Lambing Flat are discussed briefly. The few other general histories of mining that exist are not comparable in style, scope or vision. For instance, the most recent of these, *A Mining History of Australia*, Donovan and Associates for the Australian Council of National Trusts, 1995, was a composite work in which the essays differed substantially in quality and emphasis. The paucity of general mining histories is illustrated by the brief mention of them by Gerald Walsh, *Australia History & Historians*, Australian Defence Force Academy and the University of New South Wales, 1997, p.19.


Local historians and heritage consultants have been important for the development and writing of Australian history and in particular, Australian mining history.\textsuperscript{11} The smaller mining fields are usually the preserve of local historians, and their output has been impressive.\textsuperscript{12} Mining heritage consultants and historical archaeologists have also contributed to the historiography. They have worked in almost all branches of the mining industry and their reports are a rich source of information. Almost all of my consultancy work, some of which was undertaken before I had thought of doing a doctorate, has been on the history and heritage of mining and mining communities in southern New South Wales.\textsuperscript{13}

Mining is also discussed by regional historians. Geoffrey Bolton’s history of North Queensland, Robert Walker’s history of the New England region, Margaret Kiddle’s account of Victoria’s Western Districts and Errol Lea Scarlett’s history of the Queanbeyan district are examples.\textsuperscript{14} Such histories typically include chapters on the agricultural, pastoral and manufacturing industries and trace the growth and decline of regional towns and cities. They devote one or more chapters to mining, but as a rule they concentrate on the region as whole, not on one specific industry. There are several histories of mining in States and Territories. They include Timothy Jones’ account of mining in the Northern Territory and the South Australian Department of Mines and Energy’s account of that State’s mining heritage.\textsuperscript{15}

My approach is different from that of any of my predecessors. I have written a regional history of mining. The focus is on one industry, and all the fields within the region are discussed, large and small, gold and base metals. I am also concerned with the development and decline of the mining settlements and the nature of the mining communities and the type of society that developed on these fields.


\textsuperscript{12} Mel Davies, \textit{A Bibliography of Australian Mining History}; Australian Mining History Association, Department of Economics, University of Western Australia, Nedlands, 1997.

\textsuperscript{13} Barry McGowan, Historic mining sites in the Monaro, Southern Tablelands Districts of New South Wales, report to the New South Wales Department of Planning and the Australian Heritage Commission, November 1993; Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, report to the New South Wales Department of Planning and the Australian Heritage Commission, November 1995; Conservation and heritage overview of the Araluen, Bell’s Creek and Major’s Creek gold fields, report to the Lower South Coast Catchment Management Committee, August 1998; Barry McGowan and Brendan O’Keefe, Yalwal post contact heritage investigation and conservation management plan, report to the Shoalhaven City Council, November 1998. I have also written three books on local mining communities. They are \textit{Bungonia To Braidwood}, Barry McGowan, Canberra, 1996; \textit{Lost Mines Revisited}, Barry McGowan, Canberra, 1996; and \textit{The Golden South}, Barry McGowan, Canberra, 2000.


A regional approach to mining history has much to recommend it. The wide dispersal of this diverse industry across the continent has meant that it is difficult to make generalisations about mining and mining communities based on a study of one field or even a handful of fields. Working with a large geographic unit enables one to compare and contrast different types of fields. Reef gold and alluvial gold mining and base metals, gave rise to a wide range of technologies and capitalisation, and to different mining settlements and communities. With a regional approach it is possible to discern the different economic, political and social relationships of these diverse mining fields. At the same time, within the regional setting, it is possible to establish links both between these diverse fields and the wider community of which they are a part. A regional approach can also provide a clearer view of the impact of mining on the physical environment, an aspect of mining history generally ignored, except by Blainey and Bolton.  

There are several mining regions in New South Wales that contain this sort of diversity, for example, New England, the Broken Hill district and the region once known as the Southern Mining District. The latter region was chosen. It is the one in which I live and work, and I have been familiar with a number of the fields for many years. The region includes a large number of contiguous and representative fields ranging from Braidwood in the east to Harden in the west, and from Goulburn in the north to Cooma in the south. It includes almost all fields in the Southern Tablelands, the Braidwood and Shoalhaven and Monaro districts and some fields in the South West Slopes Districts.  

I have made use of material evidence in the form of field surveys of settlement and mining sites, and mining archives, maps and photographs, and I have referred to the work of historical archaeologists such as Lindsay Smith and Susan Lawrence. Historians rarely use archaeological evidence. But material evidence can be just as important for them as it is for archaeologists. It can corroborate and complement the archival record, and provide insights into the physical impact of mining on the environment. Often the archival record is silent on the nature and spread of mining and settlement. There were many mining camps and villages whose existence was never acknowledged in either the mining reports or the media. Moreover, archival records  

---


17 Not all mining fields within the boundaries of this region are included. This would have been unmanageable, for there were far too many of them. However, there needed to be a sufficient number of each type to provide a basis for comparison and contrast, and this has been achieved. The fields chosen are contiguous.

18 Lindsay Smith, *Cold Hard Cash, A Study of Chinese Ethnicity in Archaeology at Kiandra, New South Wales, M.A.*, Australian National University, 1998. Susan Lawrence, 'Poor Man's Diggings: Subsistence Mining in the Nineteenth Century', *Australasian Historical Archaeology*, vol.13, 1995, pp.569-68; *Dolly's Creek*, Melbourne University Press, Carlton, 2000. Susan Lawrence and I have been undertaking similar research contemporaneously and have reached many similar conclusions (though there are also some important differences). I have indicated these similarities and differences throughout the thesis either in the text, or in footnotes, as appropriate.

rarely include information on the physical impact and extent of mining. This thesis demonstrates clearly the value and importance to historians of material evidence.

For the Southern Mining Region, the archival record is extensive. Of prime importance are the NSW Department of Mines publications, mining legislation, select committee reports and occasional Parliamentary debates, and the annual reports of the NSW Council of Education. There are many regional newspapers, and the Sydney based *Town and Country Journal* is also valuable. The correspondence files of the postal and education authorities shed light on the fortunes of the schools, post offices and the communities. Lease maps, town and village plans, photographs and illustrations help locate and identify mining sites and mining camps, enhance understanding of the different technologies and, occasionally, illuminate some aspects of daily life. Another vital source is meteorological data. Oral accounts by local residents, who often assisted in field surveys, helped locate many mining camps and sites. Family histories are also used.

My thesis begins with a discussion of mining technology and its environmental consequences. Chapters two to four investigate the factors influencing the growth and decline of the fields, which included economic conditions, changes in technology, climate, the rules and regulations set by the mining authorities, and - for the base metal fields - prices and markets. In chapter five attention turns to the miners, both the independent miners and their wage based colleagues. The relationship between these two types of miners and between mining and other occupations is a major theme. In chapter six the value of mineral production on the fields is discussed. This is no simple matter. Before 1875 there were no official statistics of any real value and after 1875 there were serious discrepancies in the statistics. The nature of these discrepancies is discussed, and a methodology is suggested to assist with estimating the value of production.

Chapters seven to nine are devoted to the development of the mining settlements and their impact on the region. There is a discussion of the size and structure of each type of settlement, their commercial, institutional and residential development, their pattern of growth and decline, and their contribution to regional development. Chapters ten to twelve are concerned with the social development of the mining communities and their social institutions, in particular, the place of politics and debate, family and community, race relations and ethnicity. This discussion involves a critical appraisal of many of the stereotypes applied to mining societies, in particular the alleged propensity of the miners for drunken, disorderly and footloose behaviour and their propensity for racism. The final chapter is an epilogue. In it I offer an overview of mining, settlement and community in the Southern Mining Region from 1915 and 1945.

An overriding question throughout the thesis, especially in chapters ten to thirteen, is ‘to what extent is it possible to talk of a distinct mining culture?’ There were many differences between the mining communities under study. For instance, there were different standards of living between and within the communities. Furthermore, the larger communities were inhabited by varying proportions of women and children, whereas in the smaller communities women and children were less visible. The communities were also populated in some instances by people of different ethnic backgrounds, such as the Chinese, or different cultural and religious traditions. I argue, however, that the similarities between the different communities in this region were greater than their differences, so that it is indeed possible to speak of a distinct ‘mining culture’ at this time.
Chapter 1.

Mullock heaps and tailing mounds

Any study of mining needs to begin with the practice of mining itself. These practices rested on, among other things, particular mining technologies. The type of technology varied between the three kinds of mining under study and changed over time. Where the mineral deposits were easily extracted, for instance in the early stages of mining, less complex technologies were required. If the ore required further processing, more complex and capital intensive technologies were almost always needed, particularly with base metals. Lack of appropriate technology thwarted the development of many mining fields, but the availability of new technologies revitalised many of them and allowed for the mining and processing of ore which would otherwise have been left in the ground.¹

As mining was an extractive industry it invariably had environmental consequences. Some historians have commented upon this. Bolton has described the impact of the gold rushes as ‘almost entirely destructive’, and has commented unfavourably on the voracious demand of the mining industries for timber and the effects of waste sludge on streams and rivers.² Blainey has commented in a similar vein.³ I have also written extensively on the environmental effects of alluvial mining.⁴ Usually, most general histories, and many local mining histories, do not include any discussion on the environmental impact of mining.⁵ Most contemporary accounts are similarly deficient. However, some observers, such as William Howitt, were aware of the issue.⁶

Alluvial mining

Alluvial gold was found in current and ancient river beds, the latter of which can be hundreds of metres above the current stream levels.⁷ At its most basic, alluvial mining

⁵ Two exceptions are Susan Lawrence, Dolly’s Creek, Melbourne University Press, 2000, pp.174-176, and Susan Pryke, Boom To Bust-And Back Again. Captain’s Flat From 1883..., Captain’s Flat Residents & Ratepayers Association, 1996, pp.75-77.
resulted in heavily scoured creek beds and gullies, and adjacent to this, numerous shallow holes and hummocks of dirt, sometimes referred to as ‘small claim’ or ‘pohole tailings’. (Figs. 1.1, 1.2)\(^8\) Claims were worked by washing river or stream dirt in a gold pan. As an advance on that, a cradle or long tom with a bucket to raise water, or a short box sluice were used. Where the fall was insufficient the boxes were set on trestles, the incline depending upon the nature of the wash dirt. (Fig. 1.3).\(^9\) The more difficult the wash, the steeper the grade required. Where the bottom was sufficiently high to provide the necessary fall, ground sluicing was used. Often the ground sluices were only channels cut down to bed rock. The wash dirt was dug or broken out of the claim and washed into the sluice by a stream of water run over the face of the claim from water races. (Fig. 1.5)\(^10\)

Associated with these workings were small races, dams, puddlers, barrow ways and tips. The puddlers were used where the wash dirt had a high clay content and the barrow ways and tips were used for the carrying and disposal of the stripping from the claim.\(^11\) Other equipment included Californian pumps, waterwheels and tredmills. Individual claims were often very small and not worked to any great depth. The environmental effect was, however, more significant where a large number were established in the same area.\(^12\) Where gullies were worked to a shallow depth, the process was known as ‘gully raking’.\(^13\)

Paddocking claims resembled large rectangular pits and were located typically on or very near existing stream beds.\(^14\) Working involved, firstly, the removal of the overburden by barrows (stripping) to tips, and secondly, the removal of the wash dirt to the sluice boxes for washing. On the smaller claims the boxes were set on trestles, which were moved back into the cutting as work progressed. On some fields, horses and drays eventually replaced the barrows. Excess water on the creek bed claims at the Araluen and Jembaicumbene fields led many proprietors to introduce steam engines and construct

---

\(^9\) The cradle was an open box with rockers underneath, a moveable hopper with a perforated screen on the top and inside the box, a number of slides with riffles. Long toms were a type of sluice box and were used where the bottom of the workings was below the adjacent creek bed and there was insufficient fall, or where the water supply was insufficient. Department of Mines, Prospectors Guide, Melbourne, undated, pp. 2-9; Department of Mineral Resources, Traditional Prospecting Equipment, Information Sheet Number 193, Sydney, undated, pp. 1-14.
\(^11\) The puddlers consisted of a large circular hole into which the wash dirt and water were mixed. The dirt was broken down by triangular harrows attached by a chain to a shaft located in the centre of the hole, the shaft being yoked to a horse. Prospectors Guide, pp. 6-7.
\(^12\) Ritchie, ‘Archaeological interpretation of alluvial gold tailing sites, Central Otago, New Zealand’, p. 62.
\(^13\) Interview with Peter Doolan, Harden, 1995.
extensive tail races for drainage purposes. (Fig. 1.5)\textsuperscript{15} At Araluen, locomotives and mechanical grabs were used for the stripping of some claims.\textsuperscript{16}

An important feature of many alluvial fields was the presence of piles of river worn stone known as tailing mounds. These mounds were a part of the technology used on the field and were often arranged as tail races (drainage channels), which would in turn hold ground sluices or sluice boxes. On the Chinese claims the network of tailing mounds was often very much neater, and they were vertically stacked and included stone lined tail races and rock dams (Fig. 1.4). Often the area of workings was very small, only a few square metres. (Appendix One, Map 1) These features reflected the greater degree of perseverance and precision with which these miners worked. Another characteristic was the presence of carefully crafted round holes as opposed to the rectangular holes more commonly excavated by Europeans.\textsuperscript{17}

Hydraulic sluicing was used on elevated ground, where the drift and overburden were too deep and often too poor to be worked by any other method.\textsuperscript{18} In essence it involved the removal of the auriferous drift by the use of water conveyed under pressure to a hose or hoses, which would then be turned against the face of the workings. The aim was to wash the drift down to bed rock and thence into sluice boxes. By this method much larger areas could be processed in much less time than would be the case with ground sluicing, which relied on manual labour. After the mine was opened up the gravel banks were undercut by the hose or hoses, and the gravel reduced by the fall and swept by the hoses into the sluice boxes. (Fig. 1.6) Centrifugal sluicing or elevating was similar to hydraulic sluicing, with the difference that the gravel was forced up pipes to the top of the face where the sluice boxes were located. It was used typically where the fall was insufficient to allow the claim to drain, usually on or near the stream beds.

The network of dams and water races on the hydraulic sluicing claims and some of the larger ground sluicing claims was complex and extensive. On the Upper Shoalhaven River field, the Limekilns race was 38.6 km long, with branch races of between 13 km and 16 km long, and the Spa race was 26.5 km long. Both race complexes had a mosaic of small branch races and holding dams on or near the diggings, and large holding dams at their source (Appendix One, Maps 2-5)\textsuperscript{19}

\textsuperscript{15} Braidwood Dispatch in the Sydney Empire, 14 January 1860; Braidwood Observer and Miner’s Advocate in the Sydney Empire, 10 April 1860; Braidwood Observer and Miner’s Advocate, 7 April 1860; Town and Country Journal, 5 February 1860, 4 March 1876; New South Wales Department of Mines, Annual Report, 1875, Sydney, p.81 (hereafter the Annual Report will be referred to as AR); AR, 1877, p.93.


\textsuperscript{17} Barry McGowan, ‘The archaeology of Chinese alluvial mining in Australia’, Symposium on the archaeology of the overseas Chinese, University of New South Wales, 10-13 February 2000.


\textsuperscript{19} AR, 1875, pp.44-45. The Spa dam, for example, was 141.7 m long, 26.8 m high and 6.7 m wide. Braidwood Dispatch, 7 September 1892. On the Corang race, which was 32.2 km long, an inverted siphon was constructed as a means of crossing one of the gullies. Braidwood Dispatch, 16 July 1887. The race was extended subsequently by about another 15 km with a further inverted siphon added. Town and Country Journal, 15 November 1890.
Fig. 1.1. Treeless aspect of pot hole tailings on Blind Creek field near Murrumburrah. Edward Pittman, *The Mineral Resources of New South Wales*, Geological Survey of New South Wales, Sydney, 1901.

Fig. 1.2. Remnant of small claim or pot hole tailings at Mudmelong, Araluen field.
Fig. 1.3. Chinese sluicing at Beechworth. N. Chevalier, *Illustrated Australian News*, 28 January 1867. Permission of the National Library of Australia.

Fig. 1.4. Vertical stone packings, Chinese diggings, Shoalhaven River field.
Fig 1.5. 1. View of the Araluen Valley from the high road. 2. The workings of the Southern Cross claim. 3. Men at work at the sluice boxes (throwing out stones). 4. Old sluiced ground, Major’s Creek. 5. Party sluicing unworked ground at Major’s Creek. *Town and Country Journal*, 26 September 1885. Permission of the National Library of Australia.
Fig. 1.6. Hydraulic sluicing, Oriental claim, Omeo, Victoria. Permission of the Omeo and District Historical Society.

Fig. 1.7. Hydraulically sluiced gully, now flooded, Limekilns diggings, Shoalhaven River field. Looking towards the Shoalhaven River (background).
Sluicing was a form of accelerated erosion, and at the end of their working life many of the claims resembled massive quarries. One ground sluicing claim at Pipeclay on the Upper Shoalhaven River field is 300 m by 350 m, with the face of the diggings varying in height to five metres. (Appendix One, Map 2)  

On the Spa diggings one hydraulic site is 300 m by 50 m, with a face of between 20 m and 30 m. (Appendix One, Map 3). At North Araluen the face on another hydraulically sluiced claim is 400 m long and 15 to 20 m high. (Appendix One, Map 4) Every gully on the main spur was worked by ground sluicing. There are several hydraulic claims on the Limekils diggings. (Fig. 17) The largest is 300 m long and about 60 m wide, with a face of up to 30 m. (Appendix One, Map 5) The size of these claims indicates that vast quantities of earth were excavated and washed into the surrounding streams.

A further environmental aspect concerns heavy metal pollution, in particular, mercury contamination. It is difficult to ascertain the extent of mercury usage in alluvial mining. Its use was, however, advocated in contemporary accounts of sluicing, especially hydraulic sluicing. Mercury was sprinkled behind the ripples of the upper sluice boxes, from which it gradually progressed to the lower ones. It was also placed in the lower boxes. The amount used depended on the proportion of fine gold in the wash dirt.

Alluvial mining technology was based on two main principles, the provision of adequate water supplies and the provision of adequate drainage. Water was an essential prerequisite for alluvial mining, particularly for hydraulic sluicing, and mining activity was substantially affected by the onset of prolonged periods of dry weather. Without adequate water, claims could not be sluiced and the wash dirt processed. Alternatively, on some fields, of which Araluen was the prime example, too much water or flooding could have serious consequences, filling in claims, washing away machinery and equipment and destroying dams and tail races.

This form of mining affected the environment from the outset. The land was first cleared and then it was dug or otherwise scoured, and the timber used for housing and in the mine workings. A contemporary account of this process was written by William Howitt in 1853. He was referring to the Beechworth field in Victoria, but his observations are equally applicable to this region. For example, he described the wet diggings as 'deep and unshapely abysses...black with mud, in which lie beams and poles, and masses of stringy-bark...'. Of the dry diggings he stated that 'every yard of ground is there dug up... The whole surface is honey combed with holes, from ten to forty feet and more deep...' On visiting nearby Reid's Creek he wrote that 'all the trees were cut down, the ground, where it was not actually dug up, was eaten perfectly bare by lean horses...'

Although written many years after the gold rushes, the following description of the

---

23 McGowan, *Bungonia To Braidwood*, pp.57-61; McGowan, Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.54-55.
Araluen valley in 1896 suggests that their environmental impact had been of a similar dimension to that described by Howitt.

The bed of the river in its upper reaches is all cut up with old alluvial gold workings, and looks like a gigantic collection of ant hills, quite bare of any vegetation and giving a very dismal appearance to the whole valley. 27

Apart from the general appearance of desolation, the most important environmental effect was siltation, for the waste water, sludge and debris from the workings were fed into tail races which in turn drained this material into the streams and rivers. In Victoria, an inquiry into the sludge question in 1886 stated that from the earliest days, ‘the creeks and rivers were looked upon as the natural outlets for the debris from the mines’ and that ‘no thought had been given to the ultimate effects in filling up water courses’. Excessive siltation had caused the sludge to overflow on to agricultural lands, and this had led to the destruction of vegetation and fruit trees and to harmful effects on cattle and sheep. 28 Although similar enquiries were not held in NSW, the effect would have been the same. 29

Dredges were used to exploit those lower stream gravels which could not be extracted by any other method. Bucket dredges were built on site and were akin to large floating factories, moving under their own power by cutting a passage for themselves by breaking down the gravel in front and depositing it behind after processing. The machinery was mounted upon wooden pontoons, and elevators were eventually built to stop the tailings from finding their way back into the excavation made by the buckets. As an example of size, the Jembacumbene Gold Dredging Company and the Shoalhaven River Company’s dredges were 22.8 m long and 6.5 m wide and 27.4 m long and 9.4 m wide respectively (Fig.1.8). The Dreadnought dredge at Araluen, which was built in 1909, was reputed to be the largest in New South Wales at that time. It was 33 m long and 9.8 m wide. 30

Centrifugal dredges were constructed on pontoons of a similar size to those used by the bucket dredges. They were, however, functionally different, and relied on hydraulic sluicing to wash the dirt, which was pumped by suction pumps into pipes to the top of the workings and thence into sluice boxes (Fig.1.10). 31 Rather than buckets and elevator ladders, the centrifugal dredge had pumping machinery, hoses and extensive piping set up on trestles. The pontoon did not have its own motive power, but was floated to new ground. Often extensive water race networks were built to convey water for hosing. The main physical legacies were sluiced cliffs and deep water holes.

The environmental effects of dredging and sluicing were referred to extensively in a report into the sludge question in Victoria in 1914. Although much of the damage had occurred prior to dredging, there were concerns that a continuation of dredging on the

---

28 Report of the Board appointed by his Excellency the Governor in Council to Inquire into the Sludge Question, presented to both Houses of Parliament, Melbourne, 1887, pp.vii-viii.
29 The environmental effect of hydraulic sluicing and the consequent conflict between miners and farmers is the theme of Kelley’s book, Gold v Grain.
30 Braidwood Dispatch, 31 October, 17 November 1900, 2 January 1909. On the later dredges the buckets discharged their contents by a chute into sluice boxes. Many of the older dredges were converted from the revolving screen to sluice box type.
31 Braidwood Dispatch, 6 July 1900; Braidwood and Araluen Express, 31 August, 14 December 1900, 26 April 1901.
Fig. 1.8. Bucket dredging, Jembaicumbene Gold Dredging Company. Note disposal of tailings into the stream. NSW Department of Mines, *Annual Report*, 1901.

Fig. 1.9. Tailing mounds deposited after bucket dredging, Araluen.
Fig. 1.10. Centrifugal dredging, Federal Centrifugal Gold Sluicing Company. NSW Department of Mines, *Annual Report*, 1901.

Fig. 1.11. Eroded alluvial workings, Araluen. Tail race in centre foreground. Subsequent overgrazing has been a factor in shaping this landscape.
Fig. 1.12. Ryan's wood carting team. Dredge in background, denuded landscape in foreground. Permission of the National Library of Australia.

Fig. 1.13. Traction engine of the Araluen Valley Dredging Company carting timber through the main street of Araluen. Permission of the National Library of Australia.
present scale would permanently injure valuable agricultural land. The report included a quote from the Conservation Commissioners of California to the effect that bucket dredging had turned 'the land upside down, putting the top soil at the bottom and the bottom cobbles on top of the spoil heaps. The result was that the productivity of the land was practically destroyed'. These observations would have applied equally to the Southern Mining Region of NSW, for the effect of dredging on the streams and river banks was immediate and permanent. Jembacumbene Creek, for one, resembles little more than a series of interconnected dredge ponds along much of its length, and the surrounding river flats both there and at Araluen are strewn with pebbles and broken machinery. Obviously substantial quantities of earth were removed in this process, most of which found its way into the streams. For instance, in 1912 the Araluen Valley, Araluen Central, Tewksbury, Victorian Araluen and Redbank dredges excavated a combined total of 2.1 million cubic yards of earth.

Another important physical legacy of both types of dredging was their effect on nearby forests. There was a significant demand for timber for the dredge boilers, and a large number of men were engaged in felling and carting. In addition, timber was needed for the construction of the dredges. Local timber supplies were invariably depleted and supplies sought from more distant sources. In 1913 the difficulties in securing timber supplies for the Araluen dredges led to a 20 per cent increase in the cost of firewood, but even at that price there were insufficient hauling teams. Damage to local roads led to the use of traction engines to haul timber. The denuded landscapes of the Araluen valley and Jembacumbene Creek bear witness to these processes. It is possible that dredging also adversely affected the aquifer. At Araluen, dredging continued into the early 1920s, disturbing further the ecology and hydrology of the streams and floodplains.

The 1913 inquiry referred to the possible healing effects of time on the landscape through revegetation. These processes have occurred on most 'small claim' workings in the Southern Mining Region, but many sluicing claims have been less fortunate. In a number of instances the slope and fall of the ground and the very thin nature of the top soil have led to further erosion. Where there has been continued soil disturbance through grazing, track construction or further mining, erosion has spread to a much larger area. The disturbed soil is often home to noxious weeds such as blackberries and broom, both of which have reached epidemic proportions at Major's Creek. On many fields, only remnants of these mining landscapes are left, as most of the workings have been obliterated by subsequent farm and orchard cultivation.

32 Dredging and Sluicing Inquiry Board, Report Upon Complaints Of Injury By Dredging And Sluicing, presented to both Houses of Parliament, Melbourne, 1914, p.11.
33 The Commissioners questioned whether it was in the State's interest to 'permit the spoilage of large areas of land and the turning of them into hills of unproductive scenery of cobblestones.' Dredging and Sluicing Inquiry Board, Report Upon Complaints Of Injury By Dredging And Sluicing, p.12.
34 McGowan, The Golden South, pp.28-31. The dredging landscapes are littered with discarded or broken equipment such as cables, buckets, ladders, screens, winding gear and boilers, and occasionally, dredge pontoons. The use of heavy earth moving machinery has enabled the clearing of some of this land, but this option was not available in the immediate aftermath of dredging.
35 D.S. Clift, Gold Dredging in New South Wales, Mineral Resources No.41, NSW Department of Mines, Sydney, 1975, p.29, pp.43-44.
36 AR, 1912, p.21.
38 Dredging and Sluicing Inquiry Board, Report Upon Complaints Of Injury by Dredging and Sluicing, p.18.
Reef mining

On the reef gold and base metal fields the gold or other minerals were found in quartz, ironstone or other mediums. The mine workings are characterised by numbers of shafts, adits (tunnels), costeans (exploratory trenches), and internal workings such as stopes and winzes. (Fig. 1.14) The deeper the shafts the greater the accompanying waste or mullock heaps, the field often resembling a giant rabbit warren surrounded by a myriad of horse and vehicular tracks. (Fig. 1.15). For the most part it was uneconomic to transport the ore in an unprocessed state and processing or reduction plants were installed. Some fields never progressed to this stage, either fading into obscurity after a relatively short time, or forwarding all the ore to other locations for processing, such as Cockle Creek at Newcastle or Dapto on the South Coast.

At the more highly capitalised mining ventures the same type of mining plant existed, but it was larger and more complex. For instance, the shafts were deeper and the tunnels longer, which meant that water was encountered more frequently and the mines needed more efficient ventilation. To address these challenges more efficient pumping equipment had to be installed and ventilation shafts constructed. Steam driven hauling equipment, railways and tramcars were often used. At the Harden gold mine an extensive pumping plant was introduced to cope with the flow of water, which reached over 900,000 litres a day in 1909. At the time of the mine’s closure in 1913 the main shaft was 231 m deep, and the plant included a lathe, automatic hoist, fitting shops. At McMahon’s Reef in 1885 the plant included a rock drilling plant, air compressor, air receiver, drills, piping, steam winding gear, pumps and a complete engineer’s and blacksmith’s shop.

The processing plant was also more complex, and included crushing equipment such as jaw crushers, Cornish mills, stamp batteries or Huntington mills, and recovery equipment such as amalgamating tables, Willey tables, concentrators, cyanide and slimes plants. A battery consisted of between one and ten stamps for crushing the ore, the stamps consisting of iron rods with heavy cylindrical stamper shoes on the bottom. (Fig. 1.16) The stamps were raised and dropped by a series of cams on a shaft, the stamper shoes falling on stamper dies and crushing the ore. Most batteries were driven by wood fired boilers and steam engines, although there are several instances where water powered batteries were used in the region. Typically, they were located in embankments cut into hillsides, and the ore was fed into the back of the battery by gravity. (Fig. 1.17) Huntington mills worked by a grinding process, and like most other roller mills had an ore breaker or jaw crusher attached to them. Water was essential for the boilers and one or more dams were built close to the processing site (Appendix One, Map 6) Lack of water not only affected the processing of gold, but it thwarted the transport of ore and materials, as the price of fodder was too high and there was no water for the bullock and horse teams.

After crushing, the ore was washed over copper plates dressed with mercury, which absorbed the gold. This was known as the amalgamation process. The amalgam was later retorted to recover the gold. Concentrators were also used, the most basic being blanket tables, which were simply a continuation of the mercury tables, but covered with

---

39 They comprised a stationary iron cylinder 0.9 m in diameter and about 1.2 m deep, having three, sometimes four, revolving rollers suspended on a cross arm and shaft. When the pan to which the shaft was attached was set in motion the rollers flew outwards with the centrifugal force, and the stone was ground between them and a steel ring on the inside of the cylinder. Goulburn Evening Penny Post, 20 August 1887.
strips of coarse blanket intended to arrest the heavier metallic particles. Percussion or shaker tables, of which the Wilfley table was the best known, were an improvement on this method.\textsuperscript{40} The residue from these operations was known as tailings. From the late 1890s, cyanide was applied to the tailings to enable recovery of the very fine gold which had escaped the amalgamation process.\textsuperscript{(Appendix One, Map 7)} Cyanide was also used to assist in the recovery of gold from refractory or mndic ore, that is, gold found in association with other minerals, such as iron pyrites. This gold could not be recovered by the amalgamation process.\textsuperscript{41} To further enhance recovery the tailings were reduced to slimes, but this technology was introduced even later than the cyanide process and was only used at Harden. Typically, most processing sites are characterised by mounds of tailings, some of which have been cyanided.\textsuperscript{(Fig.1.18)}

Treatment of refractory ore was a challenge throughout the region and warrants separate mention. Prior to the introduction of cyaniding the chlorination process was used. This process involved the roasting of the ore and its treatment with a solution of chlorine in water. The gold was precipitated from the solution by ferrous sulphate or sulphurated hydrogen, and the resulting product refined.\textsuperscript{42} Chlorination plants were erected at McMahon’s Reef in 1885 and at Major’s Creek in 1889. Elaborate crushing was needed to reduce the ore to as fine a constituency as possible to allow for penetration of the chlorine solution. At McMahon’s Reef the crushing and concentrating plant consisted of a giant rock breaking plant, three Huntington mills, six Duncan concentrators, and five Frey Vanners. The chlorinating plant consisted of a reverberatory furnace, two pairs of patent roasting and desulphuring furnaces, three chlorine barrels and filters, a boiler, horizontal engine, air pump, liquor pump, three liquor vats, a charcoal incinerating furnace, silver amalgamating plant, Wheeler’s pans and electroplates.

**Base metal mining**

Reef gold and base metal fields used similar extractive processes on both the low and highly capitalised mining operations. For instance, at Captain’s Flat in 1897 the mining plant included blacksmith’s and engineer’s shops, forges, machinery such as lathes, drilling, punching and screwing machinery, and rock drilling equipment, with the hauling gear capable of descending to about 1,000 m.\textsuperscript{43} At Kyloe in 1912 the main shaft was 213 m deep and required the use of extensive pumping, rock drilling and hauling machinery.\textsuperscript{44}

Mining practices could be more predatory than in reef mining. In the early years of base metal mining in New South Wales many companies eschewed a systematic approach and depleted the richest ore, known as oxides and gossan, as quickly as possible. According to Carne, proving of the ore almost invariably ceased when it should have been progressed, that is, when dividends were being paid, and more rarely still was any reasonable proportion of the latter set aside as a reserve against contingencies. A policy of making a mine ‘pay from the start by exploiting the rich ores first often left the poorer

\textsuperscript{40} The shaker tables gave a jerking motion against the flow of water and pulp, resulting in a concentration of the heavier minerals towards the upper part of the table.

\textsuperscript{41} The tailings were placed in large vats and treated with solutions of Potassium or Sodium Cyanide of varying strengths. The solutions dissolved the gold, which was eventually precipitated by zinc shavings or other precipitants. Kenny, *Gold*, p.12.


\textsuperscript{43} *Town and Country Journal*, 7 August 1897.

\textsuperscript{44} *AR*, 1912, p.53.
Fig. 1.14. Mine shaft (timber collaring at top of shaft) from the 1890s and adit dating from the 1930s, Cowra Creek.

Fig. 1.15. Mullock heap, United Miner’s mine, Major’s Creek.
Fig. 1.16. Remains of ten head stamper, Cullina.

Fig. 1.17. Macanally battery site, boiler in foreground, ore loading ramp on edge of embankment in background, Cowra Creek.
Fig. 1.18. Cyanide tailings dump, Cullina.

Fig. 1.19. Remains of slag heap from the 1890s smelting operations, Captain’s Flat. Smelting plant was located above the heap.
Fig. 1.20. Foundations of part of processing plant. Tailings, slag heap, reverberatory furnace site and Lake Eucumbene in background, Kyloe.

Fig. 1.21. Polluted and denuded mining landscape, Frogmore. Looking towards smelter site and slag heap.
ores to bear the cost of providing suitable processing plant'. Establishment of a smelting plant in advance of the proving of reserves was not uncommon, leading to a ‘hand to mouth existence’. Smelting was, therefore, dependent upon daily mining output, which prevented prospecting ahead of stoping.45

Many base metal fields never developed beyond the extractive stage. In some instances, however, particularly where silver ore was concerned, operations continued profitably for a number of years, with primitive extractive gear and no processing other than the heap roasting of ore. For the most part, especially with copper ore, the absence of processing facilities indicated that the deposits were not economically viable and not worth further exploitation. There were many of these fields in the Southern Mining Region.

On the base metal fields the processing plant was usually larger and more complex than on the reef fields. These differences arose because base metals were almost always found in association with other minerals. Copper was found with iron and lead sulphides, and silver was found with lead, copper and gold. On the larger fields the processing plant included extensive crushing machinery such as batteries, mills and jaw crushers. Crushing of the ore allowed for a faster oxidation process. Roasting, or calcination, and smelting facilities were constructed to allow the removal of the associated sulphides and minerals. These processes were similar to those used in chlorination. The art of smelting and refining copper was not widely known, and confined to a few families.46

The art of processing silver ore was even more obscure. A correspondent for the *Town and Country Journal* stated that, with the exception of the Sunny Corner mine for a short period and the Broken Hill mines from their opening to the present time, every silver mine had been more or less a failure.47 Silver posed special problems for it often occurred in ‘combination with such a variety of other elements that no one method for its extraction was applicable’. The tendency was to say that because the Broken Hill mines succeeded with using the blast furnace, then they would use the same appliance, even though it may have been inappropriate.

Huge stock companies were formed with absurdly large nominal capital. Boards of directors who knew as much about managing a silver mine as navigating a ship sat daily...Had the silver mines which were discovered after the Broken Hill was begun to be worked been as rich as that mine, and having ore as easily raised and treated, they might have stood the strain on them by the management of the directors in Sydney, the extravagance of the mining manager at the mine and the almost total absence of metallurgical skill of the smelters, but as they were inferior, they have almost all collapsed...

In copper processing, the ore was roasted in a heap, stall, kiln or reverberatory calciner before smelting. The ore was subjected to a comparatively moderate temperature, with the purpose of effecting a chemical rather than mechanical change. Much of the sulphur was expelled, but the iron remained. The calciner was a masonry hearth covered by an

---

47 *Town and Country Journal*, November 1894. The article stated that the legal managers were as ignorant of mining as the directors themselves. Many of the mining managers were described as pick and shovel men, ‘good enough at opening up quartz reefs and erecting hauling and pumping machinery, but who necessarily knew nothing whatever about silver mining...’
arched roof. The hearth was heated by a fireplace, and the gases were discharged into a chimney, often after passing through a series of flues and chambers. After roasting the ore was referred to as a calcine. Reverberatory furnaces were similar in construction to the calciners. They effected a mechanical change by separating the valuable and worthless portions of the ore according to their respective specific gravities. Ore containing the copper, and often also gold and silver, sank to the bottom, from where it could be drawn off separately, with the final product known as matte or regulus. The worthless molten rock, known as slag, floated on the surface where it was also removed separately.48

Blast furnaces required coke for fuel and a coarser charge than a reverberatory furnace, and produced a richer matte than the latter. The one distinctive feature of the blast furnace was the absence of a separate fireplace, as the ore and fuel were in direct contact in their passage through the furnace. Its operations were continuous and it was assisted with a forced blast from a blower. The most advanced type was the water jacket furnace, which was introduced into Australia in the mid 1880s. It consisted of a circular or oval shell, with the inner skin sometimes constructed of thick sheet copper to withstand corrosion or of four or more wrought jackets that were clamped together to form the side and ends of a rectangle.49

Pyritic smelting was also used. In this process the ore was treated by the heat generated from its own oxidation, without the aid of extraneous heat. This was achieved by the aids of a hot blast and the addition of from 1.5 to 5 per cent of coke, by weight of the charge, thus saving on the fuel and labour costs of roasting or calcining. The air was forced into the main air pipe by the blowers and forced over the stove and heated to very high temperatures, before passing through the blast furnaces. In the furnaces the sulphur in the ore was burnt by the hot blast, and converted into fuel, the sulphur in the pyritic ore doing its own smelting.50 In 1896 partial pyritic smelting was introduced at Captain’s Flat. There were three hot air stoves located between the blower house and the blast furnaces.51

Extensive extractive and processing plants were also constructed at Currawang, Frogmore, Kyloe and Woolgarlowe. At Frogmore in the 1870s the ore on the main property was associated with silica and needed crushing and washing. It was first broken up by a stone breaker, and then passed through Cornish rollers and an ore washer, after which it was processed in a reverberatory furnace and refining furnace.52 A Hancock’s patent jigger and the wet, sulphuric acid, process were introduced later to assist in processing the poor ores.53 At Kyloe in the 1900s a ball mill concentrator, reverberatory furnaces and MacMurray calcining pot were used initially, and extensive facilities for the concentration of the lower grade ores were introduced subsequently. These facilities included Cornish rolls, hydraulic classifiers, jigs, settling bins, Wilfley table, and a ball mill.54 A flotation plant was introduced subsequently.55

49 Peters, Modern Copper Smelting, pp.250-349; Pearson and McGowan, Mining Heritage Places Assessment Manual, pp.141-144.
50 Peters, Modern Copper Smelting, pp.372-425; Carne, The Copper Mining Industry and the Distribution of Copper Ores in New South Wales, pp.24-30.
51 Town and Country Journal, 7 August 1897.
52 Burrowa News, 27 May 1876.
53 Yass Courier, 5 October 1882.
54 Australian Mining Standard, 2 March 1910.
Pollution and environmental degradation were ever present features of the base metal fields. On the mullock heaps, the leaching of sulphides denuded the vegetation down slope from the heaps, the bright yellow brown hues of the ore forming an attractive kaleidoscope of colour against an otherwise barren scene. Where processing occurred the environmental degradation was much greater. Sulphides and sometimes arsenic were eliminated in the processing stages and affected the surrounding vegetation, converting the landscape to a desolate waste land. Smoke pollution was an ever present feature of these processing plants. In addition, smelting left large slag heaps, from which heavy metals were leached into the soil. Large slag heaps still remain at Kyloe, Frogmore and Captain’s Flat. (Figs. 1.19-1.21) The slag heap from the Currawang smelters was not reclaimed until the 1980s. At Captain’s Flat, part of the slag heap has been used as land fill. (1.19) Heavy metal contamination of the Molonglo River, which ran through the town, was inevitable.

Deforestation also occurred as a result of the very high usage of timber for fuel supplies by the smelters. For instance, at Currawang in 1868 there were 7,000 tons of cut wood at grass and by 1871 the monthly consumption of timber was 1,500 tons, with supplies coming from afar as Mittagong. A description of Currawang in 1872 illustrates the environmental consequences of these operations.

A number of huge, tall, square chimneys, incessantly vomiting forth clouds of sulphurous smoke; near these, a number of shed-like buildings, and these surrounded, for a radius of some six hundred yards, by huge piles of fire-wood, and the refuse from the copper; behind this, an open space of some two miles in circumference, dotted over by some two thousand stumps, a number of low bushes and about two hundred huts.

While no data is available on the number of carting teams used during the main period of mining, there were up to 15 wood carting teams operating between 1880 and 1882. The closure of the mines in 1882 was attributable largely to the inability of the company to procure sufficient timber supplies to keep the furnaces operating. At Kyloe the mines supported several local sawmills and in 1910 there were 12 wood carting teams. Data is unavailable on timber usage at other base metal mines, but it can be reasonably assumed to have been of a similar order. Timber usage of this magnitude explains partly the heavily deforested appearance of much of the surrounding landscape at Currawang and Frogmore today.

Conclusion

Alluvial mining had a substantial environmental impact on the Southern Mining Region. Streams such as Araluen Creek, Major’s Creek, Bell’s Creek, Jembacumbene Creek and the Mongarlowe River were worked along almost their entire length, and were often reworked by different technologies. On some fields, the alluvial deposits seemed to form an almost endless repository of wealth during the period under examination. The two

55 *AR*, 1911, p.53.
56 Woodawn Mines, Environmental effects statement, undated.
60 F. Armstrong to W. Varley, Postmaster General’s Department, 15 June 1910, SP 32/1, Box 304, NAA, Sydney.
environmental hall marks of alluvial mining were the scouring of the hills and valleys for their timber and the subsequent reworking and eroding of the landscape through sluicing, dredging and other activities. Eroded and pockmarked hills and valleys, quarries, silted stream courses and pebble strewn floodplains are a physical measure of this activity.

Reef mining resulted in a heavily degraded environment of abandoned mine shafts, mullock heaps and tailing and cyanide mounds, and contributed to the depletion of local timber resources. However, it had less environmental impact in the region than alluvial gold mining because the mining operations were not as substantial. The same cannot be said of base metal mining and processing activities, which were extensive, prolonged and highly toxic. These operations resulted in stream and water table pollution and deforestation, the latter occurring through the effect of toxic fumes and waste, and timber removal. Timber was used extensively for fuel in the boilers and furnace smelters, for buildings and in the mine workings. For all forms of mining, the landscape was 'mined' almost as much for its timber resources as for its payable minerals. The destruction wrought upon local forests is one of the most important environmental legacies of mining.
Chapter 2.

Alluvial gold mining

The most relevant existing work on the development of the mining industry relative to other industries in the Australian colonies in the second half of the nineteenth century was undertaken by Noel Butlin in his Investment in Australian Economic Development 1861-1900. Butlin chooses several time frames to illustrate his points. To analyse the changing composition of economic activity he identified three periods following the gold rush years of the 1850s. From 1861/3 to 1876/8, the compound rate of growth of mining declined, and from 1876/8 to 1887/9 the rate of growth increased, albeit not as rapidly as other sectors. During the 1890s, mining went through a further growth phase as a result of the Western Australian discoveries and the attractions of fixed gold prices in the depression.1 The discussion in this chapter and the following two chapters suggests a rather different pattern of growth and decline.

In his discussion of the factors influencing mineral discovery, Blainey has taken Butlin’s work a step further, and has argued that the overwhelming majority of effective discoveries in Australia coincided with the trough and initial upswing of the business cycle.2 In this work he draws upon Butlin’s discussion, arguing that the main clusters of discoveries were in 1851-52, 1871-72 and 1891-94, the latter two of which coincided with downturns in the business cycle.3 A further smaller cluster in 1869 was possibly attributable to the short interval between the two slumps of 1867 and 1871 and the lack of an intervening boom.4 Blainey’s conclusions have been debated and disputed by several economic historians.5 The discussion in this chapter and the following two chapters, partly supports his observations, but at the same time suggests a rather more complex causal pattern of discovery and exploitation, particularly for alluvial mining.

Alluvial mining was the major and most persistent form of mining in the Southern Mining Region, and lasted on a number of fields throughout the period (Appendix Two. Timelines-Alluvial Gold Mining). After the very early gold rushes in the Braidwood and Shoalhaven District from 1851 to 1856, alluvial mining spread to almost all the fields in the region over the next seventeen years. From 1875, however, alluvial mining went into a general decline, apart from brief periods of revival in the late 1880s and early 1890s,

---

1 N.G. Butlin, Investment in Australian Economic Development 1861-1900, Cambridge University Press, London, pp.16-41. For the Australian economy as a whole, Butlin identified three growth phases, the 1860s, 1870s and the 1880s.
2 Geoffrey Blainey, ‘A Theory of Mineral Discovery: Australia in the Nineteenth Century’, Australian Economic History Review, vol. XXIII (2), pp.298-313. At these times interest rates were low, there was greater access to capital and other investment alternatives were less attractive.
4 Blainey, ‘A Theory of Mineral Discovery’, p.310. Butlin has described the period 1867 to 1871 as one where the ‘Growth of gross domestic product slackened somewhat...’. Butlin, Investment in Australian Economic Development 1861-1900, p.34.
and on a few fields in the 1900s. In the very early years most miners worked cooperatively as small groups of working miners. Subsequently, on some fields, physical imperatives dictated that larger parties be formed and ultimately that hired labour, plant and equipment be used. The large paddocking claims, and the hydraulic sluicing ventures of the 1890s and dredging enterprises of the 1900s are examples of this. Many miners, however, still worked cooperatively.

This chapter traces in detail the overall rise and subsequent fall of the alluvial fields, and the reasons for these fluctuating fortunes, most notably the exploitation and subsequent depletion of payable deposits, the supply of water, general economic conditions, and the availability of capital and technological expertise. Particular attention is given to the effect of climate on alluvial mining. Geographers discuss the effects of climate generally on farming and settlement, and some economic historians such as Mel Davies have discussed its effects on mining. I argue that there was a very strong relationship between climate and alluvial mining, marked downturns coinciding with the onset of dry weather, and the return of wet weather leading generally to an increase in mining activity.

Because of the gold standard the price of gold was stable throughout the period, and an ounce of gold was valued at between £3 10s and £4.7 As Butlin and Blainey have pointed out, this stability was of enormous consequence during times of general economic recession such as the 1890s. Generally falling prices elsewhere meant an increase in the purchasing power of gold.8 This degree of price stability was a substantial inducement to gold miners, for they could work without concerning themselves with falling gold prices. A yield of an ounce of gold compared very favourably with average weekly wages throughout the period.9

The first rushes: 1851-1856

The early gold rushes corresponded in timing and character with the Victorian gold rushes. It was a time of great expectations, sudden riches and disappointments. Most mining was conducted by small parties of working miners, and the availability of capital was not an issue. As Jackson has argued, while the rushes coincided with the stage of the business cycle predicted by Blainey, other mechanisms did not appear to be operative. The rush of men to the diggings was insensitive to cyclical variations in profits and interest rates.10

---

7 Appendix Three, Mineral production and prices-gold, 1851-1914. From 1851 to 1854 gold prices were steady at £3.25 an ounce. They subsequently rose in 1855 to £3.82 and for the most part ranged between that price and £3.89 until 1876 when prices fell to £3.66 an ounce, prices ranging from then until 1900 at between £3.60 and £3.80. From 1900 prices dipped again, this time ranging between £3.45 and £3.65 an ounce. Overall, therefore, for the period 1851 to 1914, the largest fall from the high of £3.89 in 1868 was £0.44, or about 11 per cent. There were also variations in the price of gold between mining districts. For example, prices in the Lachlan, Southern, Tumut and Adelong Divisions in 1879 ranged between 72s 6d and 77s 6d, 65s and 80s, and 66s and 80s respectively for each of the districts. AR, 1879, p.53. These variations were not of sufficient magnitude to have influenced the numbers of miners seeking gold, though the latter may have had some influence on where the miners sold their gold.
9 Appendix Four, Wages 1851-1900.
10 Jackson, Australian Economic Development, pp.60-61.
In late 1851 large numbers of men flocked to Araluen, Bell’s Creek and Major’s Creek, and before long there were between 1,200 and 2,000 on these fields. At Major’s Creek, the average earnings were between one to one and a half ounces per man a day, some men obtaining from two to three ounces. On the Bell’s Creek field, all of the miners were described as ‘getting good wages’, with some ‘making fortunes’, later reports indicating that most were making about 20s a day. These yields were highly rewarding. By July 1852 there were still 1,000 on the fields, three quarters of whom were at Major’s Creek, and many of whom were making 10s a day. The harsh reality of winter soon had its effect, however, and by August there were only 500 on the fields. The wage levels at Bell’s Creek were £3 with rations and £2 10s without.

By February 1853 the average minimum return in the district was regarded as half an ounce a day, while at Araluen few were obtaining less than one ounce a week, while most were making much more. The Araluen miners were stated to be certain of earning wages as long as they wished to, a later report suggesting that Araluen was populated more by those seeking steady rather than spectacular returns. Earnings of between 10s and 12s a day were regarded as good wages. At Major’s Creek none of the miners made less than 20s a day, and while the returns at Bell’s Creek had declined, they were large enough to leave a ‘handsome profit’. By December of that year it was commented that the gold diggings in the district would soon settle down into a regular occupation, with its regular returns, of no more interest to the general public than the returns from sheep stations or farms. All were ‘making their ounce a week’ with returns of between 20s and 30s a day not uncommon.

In February 1854 new diggings were opened at Major’s Creek, and soon there were about 1,000 on the ground, most of who were earning more than wages. There were other finds during the year, with returns of 20s a day continuing to be common. By 1856, Major’s Creek was in decline, and by August there were no more than about 120 diggers on this field. At Araluen, however, Commissioner King reported that several large parties were mining very successfully, and the men were each earning £3 5s a week. He considered that it was impossible for small parties of men to work successfully on that field. There were 230 miners at Bell’s Creek and Araluen combined.

The rushes on the Mongarlowe and Jembaiumbene fields came a little later, in February and September 1852 respectively. On the former field there were 700 miners in the first few weeks, but not long after the number of miners fell sharply. In February 1853 it

11 Goulburn Herald, 8, 15 November 1851.
12 Goulburn Herald, 25 October 1851.
13 Goulburn Herald, 8 November 1851.
14 Goulburn Herald, 24 July 1852. There were 700 at Major’s Creek, 190 at Bell’s Creek, and less than 100 at Araluen.
15 Sydney Empire, 15 September 1852.
16 Sydney Empire, 18 September 1852.
17 Goulburn Herald, 26 February 1853.
18 Sydney Empire, 25 March 1853; Goulburn Herald, 7 May 1853.
19 Goulburn Herald, 19, 26 March 1853.
20 Goulburn Herald, 24 December 1853.
21 Goulburn Herald, 17 December 1853.
22 Goulburn Herald, 4, 9, 11, 16, 25 February 1864.
23 Goulburn Herald, 30 May 1854.
was reported that most of the diggers were earning ‘first rate wages, far better than if they were hired servants’. A subsequent account, however, described the diggers as ‘moderately successful’, with some making less than an ounce a week. By 1855, most miners were described as ‘doing well’, and by 1856 the population had increased to 200.

Jembaicumbene was very remunerative in the first few months. In October 1852 there were 200 miners at Bell’s Paddock and an unspecified number in other locations, many of whom were making £40 a week and almost all more than £5 a week. By January 1853 thirty to forty ounces a week was regarded as almost an average return, and later that month there were about 500 miners on the field, each of whom were earning 20 ounces a week. As a consequence of the high private licence fee and the ‘capricious’ behaviour of the private Gold Commissioner, however, the field soon went into decline. By the middle of 1853 good returns and high wages were regarded as the exception, and by December, there were only 100 miners at work.

While the exhaustion of the more easily won deposits was obviously a factor in the decline of these fields, a more important consideration was the high licence fee, which was first set in May 1851 at 30s a month. In 1852 the fee was set at 30s a month on Crown land and 15s a month on private land. Aliens were charged double and there were many non mining categories of employment which were not exempted from the fees. In 1853 the licence fee was reduced to 10s a month, with half this amount charged for mining on private land. Aliens were to pay the same charges as British subjects, and the exemption list was extended. The licence fee was, however, still a considerable impost. In Victoria, the licence fee, known as the miners’ right, was reduced to 20s a year in 1855.

---

26 Goulburn Herald, 5 February 1853.
27 Sydney Empire, 30 March 1853.
28 Sydney Empire, 14 March 1855; Return from Commissioner King, Votes and Proceedings, 1856.
29 Goulburn Herald, 30 October 1852; Braidwood Dispatch, 10 August 1907.
30 Goulburn Herald, 8, 22, 29 January 1853.
31 Sydney Empire, 6 April 1853.
32 Goulburn Herald, 7 May, 24 December 1853.
33 This amount was set by regulation. Lewis Lloyd, The Sources and Development of Australian Mining Law, Ph.D., ANU, 1966, p.216.
34 Where a royalty was charged instead of a licence, it was ten per cent for Crown lands and five per cent for private lands. Gold Fields Management Act (1852) 16 Vic. no.43 (28 December 1852).
35 All persons on a gold field were required to hold a licence except where royalty or tribute was being paid. The exceptions were those engaged in pastoral or agricultural pursuits or prospecting or cutting races or tunnels and women and children under 14 years of age not engaged in mining or any trade or business.
36 Gold Fields Management Act (1853) 17 Vic. no.23 (28 September 1853). Clergymen, police, civil servants, schoolmasters, sick persons and servants were added to the list of persons exempted from payment of the licence fee. The royalties were reduced to three per cent, with half that amount charged for mining on private land.
37 Gold Fields Royal Commission of Inquiry, ‘Report of the Royal Commission’, Votes and Proceedings, NSWLA, Vol.2, 1871-72, Appendix D, Summary of New South Wales Gold Fields Legislation, from 1852 up to the present time, p.6. The regulations prior to 1857 encouraged only two systems of working, firstly, that of the digger taking out only the richest deposits and secondly, that of the miner working difficult ground. For the former, small claims were allowed, and for the latter, larger claims were allowed. However, this concession was offset by the high cost of the licence fee, which, when added to the large outlay for opening and prospecting was enough to discourage miners in situations where months of work would be needed before any profit could be made. For the small claims each miner could have either a 15 ft frontage to a stream, 20 ft frontage to a river tributary, 60 ft frontage to a
The second rush: 1857-1874

A sustained period of general boom conditions commenced throughout the region from 1857 on. Although the frenetic rushes and exceptionally high yields of the early 1850s were not to be repeated, the boom was long and substantial, and ran counter to the lower growth rates in mining activity identified by Butlin.\(^{39}\) It was no coincidence that the boom followed closely the reduction of the licence fee (now named a miner’s right) to 10s per annum, one twelfth of what it had been previously. Provision was also made for the issue of leases, which granted greater security of tenure.\(^{40}\) To a degree these positive developments were offset by the new regulations which came into effect in 1858.\(^{41}\) However, the introduction of the miner’s right at a vastly reduced fee clearly overshadowed all other legislative and regulatory developments.

The commencement of the boom coincided with the downturn in the business cycle in Victoria identified by Serle and Blainey.\(^{42}\) It also, however, coincided with the arrival en masse of the Chinese in New South Wales in 1858. The timing of this important development is unlikely to have been a response to either profits or interest rates, but rather a reaction to the progressive introduction of punitive taxes and immigration restrictions in Victoria and South Australia. Regionally, the arrival of the Chinese and other miners was also linked to the opening of the Clyde road, which gave access to sea transport from Nelligen on the South Coast.\(^{43}\) Clearly, the causal pattern during this period was far more complex than that suggested by Blainey.

Chinese miners were well established at Mongarlowe by 1858 and at Araluen, Jembaicumbene, Major’s Creek and Bell’s Creek by 1859.\(^{44}\) Their arrival corresponded very closely with the re commencement of sustained mining activity in the Braidwood and Shoalhaven district. They did not merely ‘make up the numbers’, but opened up new areas, and contributed substantially to the prosperity of the diggings. For example, by June 1859 the Chinese at Jembaicumbene were reported to be doing very well, the

---


\(^{40}\) *Gold Fields Management Act (1857)*, 17 Vic.no.29 (11 March 1857). Pastoral leases or licences could also be suspended to provide for the use of the land by those holding miner’s rights for the accommodation of their horses, cattle and sheep and for the supply of water. The power for framing regulations was still left in the hands of the Executive, but authority was given to establish local courts in a district on the petition of one hundred miners. One such court was established at Araluen.

\(^{41}\) *Gold Fields Royal Commission of Inquiry, 1871*, Appendix D, p.6. No limits on the number of claims in a working party were set for river frontage claims, but the number of claims on block alluvial claims was limited to four. There were some improvements in the regulations which came into operation in February 1862. These included increases to alluvial block claims to 40 square feet, with a limit of four claims to a party and increases to river and creek claims of 30 fl a claim, with a limit of six claims to a party. Provisions for frontage and sluicing claims were included for the first time, the former claims applying where deep alluvial leads were concerned.


\(^{43}\) Serle, *The Golden Age*, pp.324-331. In 1855 an entry tax, poll tax and immigration restrictions were introduced into Victoria. The Chinese traffic was diverted through South Australia, but by 1857 immigration restrictions were introduced in that colony and in Victoria the government imposed a combined poll and residence tax and an entry tax on Chinese arriving overland. *Sydney Empire*, 27 January 1858.

\(^{44}\) *Sydney Empire*, 7 July 1858, 2, 14, 18 June 1859; *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 23 July 1859.
bosses having accumulated ‘considerable fortunes’, and by early February 1861 there were between 400 and 500 on the diggings. In April it was observed that works of a considerable magnitude were being carried out and according to one of the ‘bosses’ there were good yields. There were between 300 and 400 miners on Bell’s Paddock by June 1862, the vast majority of whom were Chinese. Of the 212 miners recorded in the 1871 Census, about 140 were Chinese.

At Mongarlowe in February 1860 ‘hordes of Chinamen’ were reported to be arriving, with ‘mobs of them’ coming daily from Tuena, on their way to the diggings. By September there were about 500 Chinese on the field, which was by this time predominantly Chinese, and they were making very good wages. Exceptionally rich finds were made by some Chinese parties over the next two years, particularly at Broad Gully. By December 1862 there were between 300 and 400 Chinese on the field, most of them doing well. In 1866 there were 500 miners on the field, of whom half were Chinese, and in the early 1870s there were between 300 and 400 miners on the field and a similar proportion of Chinese miners. A large number of mining sites along the Mongarlowe River, with the signature tailing mound pattern associated with the Chinese, have been identified by field surveys.

A similar pattern emerged at Major’s Creek. By June 1860 large numbers of Chinese were reported to be working ‘in all directions’. It was commented that ‘the riches of the old creek will never be exhausted, though we much fear that the hordes of Chinese...coming to this locality will eventually overrun the whole place’. Later that month there were reported to be ‘hordes’ of Chinese up and down the creek, and from the amount of labour used it was concluded that they must have all been doing ‘exceedingly well’. In November, Long Flat was described as ‘becoming more and more Celestial every day’. By 1863 the European population was in decline, but the Chinese population increased, many of them buying up claims for high prices.

While the success and prosperity of the Chinese appears to have been much more commented upon than that of the Europeans, it was not confined to them. At Major’s Creek in March 1857 a ‘steady industrious man’ could earn between £7 and £8 a week in the summer months, and in early 1860 all diggers were reported as doing well. Some were earning £1 a day and others from £30 to £40 a week. Unlike almost all other

---

45 *Sydney Empire*, 25 June 1859; *Braidwood Observer and Miner’s Advocate*, 20 February 1861.
46 *Braidwood Observer and Miner’s Advocate*, 13 April 1861.
47 *Chief Commissioner’s Report on the Southern Gold Fields for the six months to June 1862*, reported in the *Braidwood Observer and Miner’s Advocate*, 29 July 1862.
48 Registrar General, *New South Wales Census of 1871*, Sydney, 1873, p.292. 149 Chinese males (or ‘Pagans’) were recorded in the Census, but a few of these would have been children. There were only three Chinese females.
49 *Sydney Empire*, 22 May 1860.
50 *Braidwood Observer and Miner’s Advocate*, 29 September 1860, 6 March 1861.
51 *Braidwood Observer and Miner’s Advocate*, 10 December 1862. Sixteen Chinese had left recently for China after amassing a considerable amount of gold.
52 *Bailleure’s New South Wales Gazetteer and Road Guide*, Sydney, 1866, p.363. The Chinese represented half the mining population in 1875, and a similar percentage has been assumed for the early 1870s. *AR*, 1875, p.45.
54 *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 5 June 1860.
55 *Braidwood Observer and Miner’s Advocate*, 20 June 1860.
56 *Braidwood Observer and Miner’s Advocate*, 10 November 1860.
alluvial diggings during this period, however, Major’s Creek, and in particular Long Flat, was to be plagued by water shortages. By May 1862 the population was described as in a ‘very shifting state, and although the miners were making wages, by July only a few of them were left’. There were about 200 miners at Major’s Creek and Bell’s Creek combined.

The introduction of capital and new technology was also important during this boom period, and supports Butlin’s observation that real investment in Australia rose rapidly from about 1857. Araluen was the most technologically advanced field in this period. While the independent working miners, armed with their miner’s right, were important in opening up this field, the wet and difficult ground favoured those working in large parties. Wet weather was the norm and flooding was all too frequent. This field, in particular, benefitted from investment in new technology. The stripping was removed by horse and dray rather than wheel barrow, and the claims were drained by steam engines, water wheels and Californian pumps. This technology allowed larger claims to be worked and drained more quickly than in the past, and meant an increased recourse to the use of hired labour.

Initial discoveries were made at Deep Creek, Favourite Flat, Merricumbene, Mudmelong and Crown Flat. By August 1859 all claims down stream to Merricumbene, where there were 400 miners, were turning out well, with ‘those persevering at their work realising more than they had expected’. In 1860 the first of many severe floods visited the Araluen valley, causing immense disruption to almost all claims and occasioning loss of life. While not necessarily of that magnitude, other floods, sometimes several in close succession, were to be a challenge for many years to come. The magnitude of this problem is illustrated by a comment in 1873 that:

‘While Little River [Mongarlowe] is overjoyed at anything approaching a flood, the slightest shower is viewed with apprehension in Araluen, for while at the one place water in quantity is the only hopes of making up for almost lost time during fine weather, at the other a slight fresh in the creek is often sufficient to destroy the labour of months.’

In the face of these hardships, the perseverance of the miners indicates that the field was very profitable. In December 1860 the Araluen diggings were described as ‘surprisingly rich’, with gold obtained by a majority of the claim holders.

By July 1862 there were 800 miners and considerable capital had been invested in expensive machinery, such as steam engines. A dozen of these were in full operation, and the continued prosperity of the valley was dependent upon them. The larger claims

---

58 *Braidwood Observer and Miner’s Advocate*, 17 May, 9 July 1862. By late 1861, concerns at future prospects resulted in the formation of a short lived prospecting association. The association suspended its operations in November, by which time severe water shortages were causing the suspension of many operations.
60 *Butlin, Investment in Australian Economic Development, 1861-1900*, p.39.
61 *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 18 June 1859.
62 *Sydney Empire*, 20 February 1860.
64 *Braidwood Observer and Miner’s Advocate*, 15 December 1860.
were worked almost entirely by cooperative labour. In September 1863 it was commented that ‘everything had the scene of bustle unequalled even in the palmy days of the lower part of the valley’, and upwards of 1,000 ounces were sent weekly to the Mint. Severe flooding in 1864 caused extensive damage to the claims, but it did not deter the miners, for later that year the yield was again 1,000 ounces a week. In the same year wages were reduced to £3 5s, but this was well above the town wage rates. There were also several large hydraulic claims during this period, the size of which has been confirmed by field surveys.

The field continued to prosper throughout the 1860s. One report in 1866 stated that there were 1,200 miners, and another estimated that there were about 2,000. In 1868 the Gold Commissioner referred to Araluen as the leading gold field in the colony, and production for the year was ‘remarkably large’. He estimated the mining population at 3,000. The Braidwood gold fields, of which Araluen was the leading gold producer, were the most productive in the colony from 1859 to 1860, 1864 to 1866 and in 1869. Some of the claims were very large, and in 1866 the first limited liability company commenced operations. Other claims to commence operations over the next few years included the Big Engine, which employed 60 men and boys and 40 horses, the Perseverance, with 50 men and 35 horses, and the Fenians, with 40 men and boys and 30 horses, and wages of £2 2s a week. In 1871 the valley was visited by a particularly severe flood, which led to the abandonment of many claims. The yield for 1872 improved considerably, however, and in 1873 the miners were reported to be doing better in proportion to their number than in the palmer days when there were more of them. The larger production was attributed to the Chinese, who were moving up the valley, buying up and working abandoned ground.

Capital and technology were also important at Jembaicumbene, where similar conditions of excess water and soakage applied. It was considered that small parties could do little because of the water, but that large parties of ten to twenty, properly organised with Californian pumps and a suitable amount of capital would do well almost anywhere on the field. On one of the Chinese claims 40 men were at work, and on John Hyland’s claim 20 men were employed. The wages paid were attractive. In October 1857 hired men were paid £4 a week, and by March 1859 there were up to 1,000 miners on the

---

66 Braidwood News and General Advertiser, 24, 27 February 1864.
67 Goulburn Herald, 12 September 1863.
68 Braidwood News and General Advertiser, 24, 27 February 1864.
69 Town and Country Journal, 5 February 1870. No information is available on the yields or men employed on these undertakings, except that they were operative for about ten years. The size of the workings indicates that they were significant.
70 Baillière’s Gazetteer, pp.9-10; Report of the Commissioner, Southern Gold Fields in the Colony of New South Wales, Gold Commissioner’s Office, Goulburn, 1866, pp.9-10.
72 Registrar General, Statistical Register of New South Wales, Sydney, 1858-1870.
73 Goulburn Herald, 29 August 1866.
74 Town and Country Journal, 5 February 1870.
75 Goulburn Herald, 6 May 1871.
76 Report of the Commissioner, Southern Gold District in the Colony of New South Wales, (For 1872), Southern Gold Fields Office, Young, 13 January 1873, p.5; Goulburn Herald, 4 June 1873.
77 Sydney Empire, 2 June 1859.
78 Sydney Empire, 14 June 1859; John Hyland, Account books, 1857 to 1861, Murray Hyland, Braidwood.
field, with wages paid to the European miners of between £3 and £3 10s a week.\textsuperscript{79} On John Hyland’s claim the wages were £2 10s a week.\textsuperscript{80} In early 1860 the diggings extended the full length of the creek to the Shoalhaven River, and the yields ranged from ‘excellent wages’ to ‘wages’.\textsuperscript{81} By 1863, the diggings were on the wane, but there were still over 200 miners on the field in 1871.\textsuperscript{82}

There were a number of other alluvial fields in the Braidwood and Shoalhaven District. On the Nerriga field there were between 40 and 50 miners in 1861, most ‘far from doing well’, although by early 1862, there were 300, most of whom were doing ‘very well’.\textsuperscript{83} The Shoalhaven River and its tributary gullies were worked extensively by small parties during the 1860s, but the first mention of alluvial mining on the Spring Creek Jacqua field was not until 1870.\textsuperscript{84} In 1873 it was reported that the tableland workings were ‘paying wages’, and that the owners of the Spa Sluicing Company were confident of ‘making a pile’.\textsuperscript{85} On the nearby Bungonia field, alluvial mining commenced in 1857 on the tableland area at Washed Away Creek and along the Shoalhaven River.\textsuperscript{86} Subsequent reports indicate that most miners were earning at least wages.\textsuperscript{87} Alluvial mining was conducted extensively on the Shoalhaven River gold field in the vicinity of Bombay Creek. Field surveys have confirmed the existence of two large Chinese camps in this area.\textsuperscript{88}(Appendix One, Map 9) In the late 1860s and early 1870s there was a shift to more highly capitalised ground sluicing ventures. These were worked by larger cooperative parties and involved the construction of substantial head and tail races. The largest of these ventures were at Pipeclay, Bombay and Limekilns.\textsuperscript{89}

The pattern of timing, cause and effect on other alluvial fields in the Southern Mining Region was broadly similar to that in the Braidwood and Shoalhaven District, with the commencement of mining often coinciding with the arrival of the Chinese. For example, the first report of alluvial mining in the Monaro District was on the Badja field in 1858, and the first Chinese presence was reported in 1860.\textsuperscript{90} By 1868 nearly all the miners were Chinese.\textsuperscript{91} At Colyer’s Creek, alluvial mining coincided with the arrival of the Chinese in 1862. There were 140 Chinese at work in that year, with the field promising to be a ‘first rate poor man’s diggings’.\textsuperscript{92} The Chinese were still on the field in 1868.\textsuperscript{93}

At both Cunningham’s Creek on the South West Slopes and Foxlow on the Southern Tablelands, mining coincided with the arrival of the Chinese in 1862.\textsuperscript{94} On the Southern

\textsuperscript{79} Sydney Empire, 13 October 1857, 25 June 1859; Colonial Mining Journal, Railway and Share Gazette, March 1859.
\textsuperscript{80} John Hyland, Account books, 1857 to 1861.
\textsuperscript{81} Sydney Empire, 14 January 1860.
\textsuperscript{82} Sydney Empire, 28 July 1863; Registrar General, NSW Census of 1871, Sydney, 1873, p.1126.
\textsuperscript{83} Braidwood Observer and Miner’s Advocate, 23 October, 2 November 1861.
\textsuperscript{84} Goulburn Herald and Chronicle, 26 October, 1870; Max Laidley, History of John Hockey 1803-1878, privately published paper, 1993, pp.13-31.
\textsuperscript{85} Goulburn Evening Penny Post, 8 March 1873; Town and Country Journal, 8 March 1873.
\textsuperscript{86} Goulburn Herald, 14 March 1857.
\textsuperscript{87} Bailleire’s Gazetteer, 1866, pp.99-100.
\textsuperscript{88} McGowan, Bungonia To Braidwood, pp.52-55.
\textsuperscript{89} Town and Country Journal, 4 June, 1870, 18 March 1871, 6 December 1873.
\textsuperscript{90} Goulburn Herald, 22 May 1858; Yass Courier, 23 June 1860.
\textsuperscript{91} Sydney Morning Herald in the Perkins’ Papers, 17 June 1868, p.970.
\textsuperscript{92} Queanbeyan Age in the Perkins’ Papers, 27 February 1862, p.758; Queanbeyan Age in the Perkins’ Papers, 15 March 1862, p.757B.
\textsuperscript{93} Sydney Morning Herald in the Perkins’ Papers, 12 May, 23 June 1868, p.970.
\textsuperscript{94} Yass Courier, 11 June 1862; Goulburn Herald, 4 August 1858.
Tablelands, alluvial mining was first reported at Brook's Creek in 1861, the Chinese arriving briefly, but in large numbers in 1862. At Nanima the first reports of alluvial mining were in 1859, with Chinese 'exiles from Lambing Flat' arriving in 1861. At Jerrawa Creek the first reports of alluvial mining were in 1859, and the first reports of the Chinese were in 1862. Other alluvial mining fields were at Brindabella in the Southern Tablelands and the Cumbermura River on the South West Slopes. Mining on these latter two fields was not, however, associated with the Chinese.

**Drought and decline: 1875-1887**

Important changes were introduced by the *Mining Act 1874*, which underpinned theoretically what should have been a continuation of the earlier favourable mining conditions. The Department of Mines and the portfolio of Secretary of Mines were established and the practice of appointing Gold Commissioners was abolished. A holder of a miner's right was entitled to a quarter acre block and had the right to enter onto any Crown lands, to cut, construct and use water races and dams and to take or divert water, provided that compensation was paid if necessary. A building could be erected and bark, live or dead timber or stone could be cut, stripped and removed.

Exhaustion of deposits, declining yields, the absence of new discoveries, and in particular, the commencement of drought or near drought conditions, however, ensured that this would be a much less prosperous period. These factors would have far outweighed any business cycle effects, and ran counter to the trend in mining investment in Australia identified by Butlin. From hence on there was no further mention of fields such as Foxlow, Colyer's Creek, Nanima, Jerrawa Creek, and the Cumbermura River. Adverse climatic conditions were probably the main influence, for they exacerbated the already fragile economic position of many of the fields, and constituted for most of them a distinct period of decline, if not demise. Without adequate water the deposits could not be worked, regardless of how payable they may have been. As an illustration of this influence, the Department of Mines stated in 1877 that:

> on almost every field the want of water had not only put a stop to the working of mines that were in operation, but it has, as a rule rendered prospecting works by which new deposits might have been opened up quite impracticable.

Of the few persons who have been out prospecting, some report satisfactory progress though they have had to carry the earth miles in search of water to test it. And where the miners, have in some instances persevered in the work of raising auriferous earth, they have been compelled to stack it until a supply of water could be obtained.

---

95 *Golden Age*, 4 July 1861, 11 February 1862.
96 *Yass Courier*, 22 January, 2 March 1859.
97 *Yass Courier*, 1 March 1862.
98 Queanbeyan Age, 17 March 1864, 20 March 1875; *Report of the Commissioner, Southern Gold District in the Colony of New South Wales* (For 1872), Southern Gold Fields Office, Young, 13 January 1873, p.8.
99 *Mining Act (1874) Vic.37 no.13* (16 April 1874). Other provisions were the division of the Colony into eight mining districts, with Wardens appointed to each district and Warden's Courts established. Alluvial ground, except worked and abandoned ground or land of great depth or wetness, was excluded from leasing.
100 *AR*, 1877, pp.4-5.
Alternate bouts of dry and wet weather, particularly the latter, had occurred in earlier years, but these paled in comparison with the period after 1874. The severity of these droughts is confirmed by data from the Bureau of Meteorology, which is set out in the chart below. For Braidwood and Goulburn, rainfall was below average between 1875 and 1877, and between 1881 and 1887. Drought conditions were experienced at Goulburn in 1885 and 1886.

**CHART 1.1**

**RAINFALL. GOULBURN AND BRAIDWOOD, 1871-1914**

![Rainfall Chart](image)

In the Braidwood and Shoalhaven district there were many examples of the effects of these weather conditions. At Mongarlowe in 1877 the water supply was described as having been very intermittent for the last three years, and miners were located away from the river, either stock piling wash dirt or carting it to the river for sluicing. The following year work was completely suspended except on the immediate river banks. In 1880 many miners had left for the Temora and Montreal fields. By 1883 many claims were abandoned and in 1884 no more than one half of the registered miners were working at any one time. Of those, most were fossicking near where water could be

---

102 The average rainfall for Goulburn and Braidwood during the period 1870 to 1914 was 624 mm and 685 mm respectively and the long term drought line for both centres was 460mm.
103 *AR*, 1877, pp.95-96, 129.
104 *AR*, 1878, p.19, pp.112-113.
105 *AR*, 1880, pp.128-129.
106 *AR*, 1883, p.74, 78, 1884, p.76, 80.
found for washing. The number of alluvial miners on the field fell from 248 in 1877 to 117 by 1887.

At Major’s Creek the position was even more parlous, for by 1877 the ground was so poor and the depth so great that it was not economic to remove it other than by ground sluicing or ‘flooding off’, which required a strong head of water. 1881 was described as ‘one of the driest on record, and … during not more than one-fourth of it could sluicing or puddling operations be carried on except to a very limited extent’. By 1882 Major’s Creek was at a standstill for want of water and with one or two exceptions all the alluvial claims were described as worthless. The situation worsened in 1883, when sources of water dried up, which had rarely, if ever, been known to fail. As a consequence a large proportion of the miners left to look for other employment. By 1884 the field was nearly abandoned, and for the next two years almost all diggers had to seek employment elsewhere. The number of alluvial miners on the field fell from 133 in 1877 to 67 in 1887.

By 1877 mining on the Shoalhaven River gold field was also affected by the continued dry weather, and the more extensive claims and those dependent upon the large creeks had been abandoned for some time. Continuation of dry weather in 1878 forced many miners to turn their attention to other pursuits. By 1881 the severity of the drought over the past six years had forced miners to abandon old and valuable workings and confine their activity to the river and its banks and to one or two permanent creeks and springs. At Jembaicumbene in 1876 the field was dominated by the Chinese, who had done ‘pretty well’ on their claims, several of which ranged from two to twelve men’s ground, with all the necessary plant such as water wheels, pumps and races. In 1877, however, the creek ceased to run. There were still some Europeans holding on in hope of improvement and some Chinese who were making a ‘hard living by small workings in the creek’ and living in ‘miserable huts’.

Low rainfall was less of an immediate issue on the Araluen field, where there was often an excess of water. The valley sustained a level of activity and population during the drought years, therefore, that was denied the tableland workings. The drier weather did, however, affect adversely the ground sluicing claims and eventually affected some of the stripping claims. In 1875 there were 343 miners on the field, which was a clear indication that its boom days were over. Investment in new technology was, however, still important, and several large river claims continued to be worked. In some of these locomotives and skips were used to strip the claims, rather than horses and carts. There

---

106 AR, 1884, p.76, 80.
107 Appendix Five, Gold Mining Statistics, Mongarlowe.
108 AR, 1877, p.49.
109 AR, 1881, p.57, 62.
110 AR, 1882, p.65.
111 AR, 1883, pp.77-78.
112 AR, 1884, p.79.
113 Appendix Five, Gold Mining Statistics, Major’s Creek.
114 AR, 1877, p.127.
115 AR, 1878, p.79, pp.110-111.
116 AR, 1881, p.60.
117 AR, 1876, p.95.
118 AR, 1877, p.127.
119 AR, 1875, p.7. The Warden estimated that there were 500 miners, of whom about 40 per cent were Chinese. From hereon the Registrar’s figures were the most frequently used and for consistency they have been used in this and all other instances. AR, 1875, p.45.
was also a considerable investment in boxed tail races, rather than steam engines, to drain the claims.\(^{120}\)

One of the largest claims was Johnson’s Southern Cross. In 1880, he employed 50 men and 25 horses, carts and skips. He also constructed an elaborate 2.4 km covered tail race and installed a rail line and locomotive for removing the stripping.\(^{121}\) By 1883 the dry seasons were impacting more severely on Araluen, and the continued existence of the field was attributed almost entirely to the future of Blatchford and Johnson’s mining claims.\(^{122}\) During 1885 Johnson’s claim was reduced to 15 men and 18 horses and carts.\(^{123}\) As a measure of this decline, by 1887 the number of alluvial miners had fallen to 233.\(^{124}\)

The effects of drought were also evident elsewhere in the Southern Mining Region. For example, by 1878 there were only 36 miners at Nerriga, though the number had risen to 60 in 1887, possibly as a consequence of good rainfall in that year.\(^{125}\) Extensive ground sluicing commenced at Brindabella in the Southern Tablelands in 1883, but by the following year it had ceased because of the lack of water.\(^{126}\) At Blind Creek on the South West Slopes there were on average about 100 miners a year in the early 1880s.\(^{127}\) By 1885 mining was reported to be at a low ebb on account of poor rainfall, and by 1887 many miners had left the field.\(^{128}\) There were, some exceptions, however. On the Spring Creek Jacqua field in the Braidwood and Shoalhaven District, there were 12 Europeans and 20 Chinese in 1877.\(^{129}\) For a number of years, one party made wages of over £3 a week for about two hours work a day in the wet seasons, while another made £2 a week.\(^{130}\) In the Southern Tablelands, alluvial mining occurred at Foxlow in 1875 and at Foxlow Reefs (Captain’s Flat) in the 1880s.\(^{131}\) Fossickers in the nearby gullies were earning more than ‘tucker’ wages, with average earnings of about £3 per man.\(^{132}\)

Rain, revival and the unemployed: 1888-1899

There was a revitalisation of alluvial mining in the first half of this period, partly as a result of improved rainfall. Good rainfall in 1887 had encouraged the start of several large hydraulic sluicing ventures in 1888, despite the low rainfall in that year. Better rainfall in 1889 presaged a succession of good years until 1895, when there was again a severe drought. In the Braidwood area there was average or above rainfall in subsequent years, with the exception of 1897. At Goulburn, however, below average rainfall was experienced in all subsequent years (Chart 1.1). Capital investment in more advanced technology such as hydraulic sluicing was also important. Contrary to Blaineys’s theory,

\(^{120}\) Town and Country Journal, 4 March 1876; AR, 1877, pp.93-94, 128.
\(^{121}\) Sydney Mail, 25 September 1880.
\(^{122}\) Internal memo from Mr. Moyse, 28 March 1883; response of 24 April 1883, Postmaster General’s Department, SP 32/1, Box 9, NAA, Sydney.
\(^{123}\) Town and Country Journal, 26 September 1885.
\(^{124}\) Appendix Five, Gold Mining Statistics, Araluen.
\(^{125}\) Appendix Five, Gold Mining Statistics, Nerriga.
\(^{126}\) AR, 1883, p.82; 1884, p.82.
\(^{127}\) Appendix Five, Gold Mining Statistics, Murrumburrah.
\(^{128}\) AR, 1885, p.70; 1887, p.65.
\(^{129}\) AR, 1877, p.127. A site consistent in appearance with Chinese diggings elsewhere was identified by field survey, October 2000.
\(^{130}\) Australian Mining Standard, 23, 27 July 1892.
\(^{131}\) Queanbeyan Age, 21 April, 15 May 1875, Goulburn Evening Penny Post, 29 May 1886. In 1875 shallow surfacing and paddocking returned earnings of about 30s a week in 1875.
\(^{132}\) Goulburn Evening Penny Post, 29 May 1886.
however, this investment took place in the early part of this period, when the upturn of the business cycle was still evident throughout most of Australia. The almost cavalier way in which such projects were conducted suggests that capital was in plentiful supply. Legislative change, for example, the Mining on Private Lands Act 1894, may also have had some effect on alluvial mining activity, but these benefits were confined more to reef mining.  

Economic conditions in the form of a severe downturn in the business cycle in the early 1890s were, nevertheless, important in stimulating new discoveries and revitalising some fields. These developments cannot, however, be attributed to any stimulus arising from lower interest rates and other incentives to investors, but rather to the large number of unemployed men prepared to work for much lower returns than normal, simply to survive. By 1893, severe economic depression had forced thousands of workers onto the ‘Wallaby Track’, and the old gold fields were one of the key destinations. This migration was encouraged by the Government, which created the Fossicker’s Board in 1893, the aim of which was to encourage the unemployed to work on deserted or partially deserted gold fields. In some instances, the arrival of the unemployed was a mixed blessing. For example, in late 1893 numbers of destitute and inexperienced men were reported to be living off local credit in the Braidwood area. A report in January 1894 referred to men ‘coming and going along the Clyde road every day in dozens, a large proportion of them being in a pitiable condition, half starved and half naked’. 

On the Mongarlowe field in the Braidwood and Shoalhaven district both old and new claims were worked. For example, there was a considerable investment in ground sluicing activity at Newbury’s Point in 1888 and George’s Point in 1894, the former venture involving the use of waterwheels and Californian pumps, and the latter the construction of an eight kilometre water race. In May 1894 there were 300 men at Warrumbucca Creek, but only a few of whom were doing much more than ‘making tucker’. The number of miners on the field rose from 85 in 1888 to 220 in 1894, an occurrence almost certainly attributable to the arrival of the unemployed. There were also discoveries at Bentley’s Point in 1896. At Jembaicumbene several large and very profitable creek bed claims were worked from 1888 to 1891 using more capital intensive techniques. By 1889 there were three large Chinese claims worked by horse and cart.

---

133 Barry McGowan, ‘Mining on Private Lands Act 1894: miners versus capital’, paper delivered to the Australian Mining History Association Conference, Newcastle, October, 1998. Mining on Private Lands (No.2) (1894) Vic.57.no.32 (11 June 1894). The benefits of this legislation were more for those miners who were working under the lease system. However, the provision in the 1896 amendments that mining could commence before the issuance of a lease, that is with only a miner’s right, would also have benefitted alluvial miners. Another amendment affecting alluvial miners was the extension of the resumption provisions to alluvial mining, however, there are no records of any resumptions in the region.

134 AR, 1893, p.61; 1894, pp.6-7; 1895, p.6. It was considered that the measure would save many poor families from starvation or pauperism until better times emerged. Initially, eligible applicants were issued with a miner’s right, with its attendant privileges, free railway passes, and in some cases, rations. During 1893, 2,630 persons were assisted. In 1894, 9,572 were assisted by the provision of a railway pass and a miner’s right on credit. In the year to end June 1895, 4,081 were assisted. The measure was deemed a success at the official level on the basis of the numbers that had repaid the miner’s right and had induced either their mates or families to join them.

135 Braidwood Dispatch, 29 July, 5 August 1893.

136 Braidwood Dispatch, 24 January 1894.

137 Braidwood Dispatch, 3 November 1888, 3 February 1897.

138 Braidwood Dispatch, 25 May 1894; Goulburn Evening Penny Post, 9 June 1894.

139 Appendix Five, Gold Mining Statistics, Mongarlowe.

140 Goulburn Evening Penny Post, 2 May 1896.
steam engine pumps or Californian pumps, employing at least 100 men. (Fig. 2.2)\textsuperscript{141} There were new discoveries in the Back Creek area in 1895, and by the middle of 1896 there were 200 on the field, earning between £2 and £3 a week per man.\textsuperscript{142}

The Nerriga field was also affected by investment in new technology, and subsequently, the arrival of the unemployed. For example, by 1889 the Corang Company, later reconstituted as the Golden Terrace Gold Sluicing Company, had commenced sluicing, and the following year it had commenced work on an extension to Oallen on the Shoalhaven River.\textsuperscript{143} Unwillingness or inability to build a dam at the head of the race led to its closure in 1893.\textsuperscript{144} The Croker's Mint Proprietary Hydraulic Sluicing Company commenced operations in the early 1890s, but folded in 1895 due to the cost and difficulty of the pumping scheme.\textsuperscript{145} A considerable sum of money was spent on a venture on the Endrick River, but it was abandoned after the dam had been swept away a third time by floods.\textsuperscript{146}

Poor management ensured that this capital induced prosperity would be relatively short lived, and before long the field had become the refuge of the indigent and desperate. In 1894 a large number of unemployed were reported to be working the banks of the Shoalhaven River.\textsuperscript{147} Their numbers were enhanced by the onset of dry weather, which in 1895 forced the abandonment of the tableland workings in favour of the river.\textsuperscript{148} Few of these miners would have made more than rations. The increase in the number of alluvial miners from 46 in 1888 to 120 in 1896 would have been almost entirely attributable to the presence of the unemployed.\textsuperscript{149}

Capital and new technology were also important on the nearby Spring Creek Jacqua field, where the construction of large scale hydraulic sluicing works commenced on the old Spa and Black Springs workings in 1891. (Fig. 2.4)\textsuperscript{150} However, the scheme was beset by poor management and engineering decisions of almost breathtaking proportions, and by 1895 the cost of the pumping scheme and the onset of dry weather led to the venture's demise.\textsuperscript{151} Capital and new technology also resulted in increased mining activity on the Shoalhaven River field at Bombay and Pipeclay. Although little information is available on these workings, field surveys have confirmed that the ground sluicing claims were extensive. At the Limekilns workings, a highly capitalised hydraulic sluicing venture commenced in 1888, but by the end of 1894 it had been abandoned as the ground was too poor.\textsuperscript{152}

At Araluen a large number of new stripping claims were opened in the late 1880s. Most of these were owned by small parties of miners working on the co-operative principle.\textsuperscript{153}

\textsuperscript{141} Braidwood Dispatch, 29 September, 27 October 1888, 6 March 1889.
\textsuperscript{142} Goulburn Evening Penny Post, 30 May, 6 August 1895, 16 May, 16 June 1896.
\textsuperscript{143} AR, 1889, p.83; Town and Country Journal, 15 November 1890.
\textsuperscript{144} Town and Country Journal, 27 August 1892.
\textsuperscript{145} Goulburn Herald, 1 October 1894.
\textsuperscript{146} Braidwood Dispatch, 19 July 1890; Town and Country Journal, 15 November 1890; 7 March 1891.
\textsuperscript{147} AR, 1894, p.27; 1895, p.25.
\textsuperscript{148} AR, 1895, p.25.
\textsuperscript{149} Appendix Five, Gold Mining Statistics, Nerriga.
\textsuperscript{150} Australian Mining Standard, 19 March, 23, 30 July 1892.
\textsuperscript{151} Australian Mining Standard, 26 August, 16 September, 21 October 1893. At the Spa, the sluice boxes had been poorly constructed and much of the gold lost over the ripples. At Black Springs water had been brought on site despite the adequate local supplies and insufficient fall for a tail race.
\textsuperscript{152} Braidwood Dispatch, 8, 22 September 1888; Goulburn Herald, 22 March 1895.
\textsuperscript{153} Braidwood Dispatch, 16 March, 11 May 1889.
New technology, such as centrifugal pumps, was also introduced on a limited basis.\textsuperscript{154} The benefits from these developments were offset significantly by severe flooding in the early 1890s and subsequent years, the floods in 1898 causing a cessation of work in all the principal claims for several months.\textsuperscript{155} In 1892 there was an increase in the number of alluvial miners for the first time in five years, a likely consequence of the arrival of the unemployed. The number of miners increased until 1898, but did not translate into increased production, for by 1898 Araluen was only the 26th largest producer in the colony.\textsuperscript{156}

An increased level of mining activity on other fields in the Braidwood and Shoalhaven District was due almost wholly to the arrival of the unemployed. The Shoalhaven River was one of the destinations specifically mentioned by the Fossicking Board.\textsuperscript{157} For example, on the Bungonia field there were 50 men in 1894, most ‘making tucker but little else’, and in 1895 there were about 100 on the field.\textsuperscript{158} In the latter instance earnings ranged from those that were doing ‘fairly well’ or making a ‘profitable living’ to those who were not getting much above tucker.\textsuperscript{159} As a consequence of the prevailing dry weather, there were only 20 on the field by 1898.\textsuperscript{160} On the Snowball field there were between 70 and 80 miners in mid 1894, but a few years later there were only 25 miners, and by 1899 the field was almost deserted.\textsuperscript{161} The few miners that were left were earning between 10s and 15s a week.\textsuperscript{162} At Major’s Creek the number of alluvial miners rose from 63 in 1888 to 178 by 1896.\textsuperscript{163} By 1898, however, their numbers had fallen substantially, and the few parties that were working were making about 0.2 oz a week, which was ‘very small to live upon’.

Elsewhere in the Southern Mining Region, the level of mining activity was also influenced by investment in new technology in the late 1880s and early 1890s, and subsequently by the arrival of the unemployed. Hydraulic sluicing was introduced on the Brindabella field in the Southern Tablelands in 1890, but by the following year the company was in liquidation, a consequence of poor management and poor ground.\textsuperscript{164} On the Big Badja and Numeralla field in the Monaro sluicing was undertaken on the Big Badja River between 1892 and 1896, but little is known of the company’s operations.\textsuperscript{165} In 1895 it was stated that ‘if it were not for the little gold obtainable in this district some hundreds of people would be starving’.\textsuperscript{166} By 1897 these diggings were described as ‘a few persons shifting mud with poor results’, all the old ground having been worked out.\textsuperscript{167} The Brook’s Creek field in the Southern Tablelands was also the preserve of the

\textsuperscript{154} \textit{Town and Country Journal}, 26 December 1891.
\textsuperscript{155} \textit{Braidwood Dispatch}, 9 April 1890, 22 July 1891, 7 April, 1894; \textit{AR}, 1898, p.41.
\textsuperscript{156} Appendix Five, Gold Mining Statistics, Araluen.
\textsuperscript{157} \textit{AR}, 1894, p.6.
\textsuperscript{158} \textit{Goulburn Evening Penny Post}, 27 September 1894, 7 September 1895. The figure of 100 is an estimate based partly on the attendance of 70 miners at a protest meeting.
\textsuperscript{159} \textit{Goulburn Evening Penny Post}, 7 September 1895.
\textsuperscript{160} Internal memos, 5 and 28 November 1898, Postmaster General’s Department, SP 32/1, Box 88, NAA, Sydney.
\textsuperscript{161} \textit{Braidwood Dispatch}, 26 May 1894; \textit{AR}, 1896, p.32; 1899, p.34.
\textsuperscript{162} \textit{AR}, 1899, p.34.
\textsuperscript{163} Appendix Five, Gold Mining Statistics, Major’s Creek.
\textsuperscript{164} \textit{AR}, 1890, p.99; 1891, p.107.
\textsuperscript{165} \textit{Cooma Express}, 19 August 1892, 26 May 1893.
\textsuperscript{166} \textit{Cooma Express}, 20 December 1895.
\textsuperscript{167} \textit{Cooma Express}, 20 August 1897.
Fig. 2.1. Southern Cross claim, Araluen. Rail track and carriages to left, horses and carts in centre foreground. *Sydney Mail*, 25 September 1880. Permission by the National Library of Australia.

Fig. 2.2. Boiler used for draining claims, Jembaicumbene.
Fig 2.3. Araluen Proprietary dredge in excavated dredge pond. NSW Department of Mines, *Annual Report*, Sydney, 1901.

Fig 2.4. Dam on Nadgigomar Creek, 141m long and 26 m high. Water was pumped from the dam to trestles and thence to a water race to the Spa diggings, Jacqua Spring Creek field.
unemployed and the indigent. A contemporary observer stated that none of the diggers 'ever struck a nugget or appeared to rise above bitter poverty'.

The South West Slopes district also benefited from the arrival of large numbers of unemployed, some of whom were recipients of assistance provided by the Fossiliser's Board. Alluvial gold was discovered at Garangula in 1894, and there were 1,200 men on the field within a month. However, the number of miners fell to 225 by the end of 1895, and the field declined steadily after that date, despite the existence of reef mining. At Cunningham's Creek there was a rush in 1896 and 200 men were soon on the field, these workings continuing for several years. The number of alluvial miners in the Murrumburrah Division, which included the Garangula, Blind Creek and Cunningham's Creek fields, rose from 20 in 1888 to 510 by 1894, but fell to 70 by 1899.

The age of capital: 1899-1914

This final period was characterised by two countervailing forces, extensive capital investment in new technology in the form of dredging and centrifugal sluicing, and the onset again of a prolonged spell of dry weather. Most of the dredging companies were listed on the stock exchange and were funded from subscribed capital, and almost all men working on the dredges were working for wages. On the dredging fields, the day of the independent miner was gone. Almost simultaneously, however, dry weather of unrelenting severity set in. From 1901 to 1910, below average rainfall was recorded at Braidwood and Goulburn, and drought conditions were experienced in several years (see Chart 1.1). In combination with the now inevitable depletion of gold reserves, the non dredging fields went into a final phase of decline, to be eventually abandoned to the lone fossicker.

The two main dredging fields were Araluen and Jembaicumbene. Critically, and possibly for the first time, mining in the valley involved overseas capital and expertise, in both instances from New Zealand. In 1899 several publicly listed companies and one private company were formed for the purpose of dredging. The first and possibly the most successful dredge was privately financed by two New Zealand entrepreneurs, Hughen and Tulloch, and a number of other dredges were managed or operated by New Zealanders. These ventures were highly capital intensive. For instance, the Araluen Proprietary and Araluen Valley Consolidated had issued capital of £15,000 and £24,000 respectively. Dredging operations commenced in 1900, and in a very short space of time the dredges replaced almost all other forms of alluvial working at Araluen and Jembaicumbene.

By 1901 the Araluen Consolidated and Araluen Proprietary Companies, the Araluen Central Gold Dredging Company, the Crown Flat Dredging Company and the Araluen Junction Company had commenced operations, and Hughen and Tulloch had

---

169 Garangula was one of the destinations mentioned by the Fossicking Board. AR, 1894, p.6.
170 Cootamundra Herald, 23 June 1894.
171 AR, 1895, p.21.
172 Cootamundra Herald, 2 September 1896; Murrumburrah Signal, 18 March 1899.
173 Appendix Five, Gold Mining Statistics, Murrumburrah. There are no figures for 1898.
175 Braidwood Dispatch, 23 February, 3, 17 May 1899.
commenced work with a second dredge. (Fig. 2.3) In 1902 and 1903 respectively the Araluen Central and Araluen Consolidated Companies commenced work with second dredges and in 1905 the Redbank dredge commenced operations. It had capital of £16,000. The engineering works of the Proprietary Company employed 16 men and were the largest such works outside Sydney. Araluen recovered much of its status as a leading gold producer, and for much of the period 1900 to 1914 it was in the top six gold producing fields in New South Wales, and on five occasions it was as high as number six.

In 1907 the Araluen Steam Shovel Company commenced work with a steam navvy and locomotive. It lasted for six months, with little success and much expense. Operations recommenced in 1908 with a similar result. These operations had employed as many men as all the dredges combined, and its loss was severely felt. However, while some dredges were decommissioned over the next few years, new ones were built. In 1910 a new steel dredge, the Victorian Araluen, was constructed, and the Tewksbury Company acquired the Dreadnought dredge and installed heavier machinery. A further dredge was built by the Tewksbury Company in 1912, and in subsequent years heavier machinery was installed on a number of other dredges. The importance of the dredges can be gauged by the number of men employed on them. In 1900 there were 306 alluvial miners, the highest number on the field since 1883. Although the number of miners fell in subsequent years there were 229 alluvial miners on the field in 1908. There was a revival in production in 1913, largely as a result of the introduction of larger dredges and heavier, more powerful machinery. By 1914, Araluen was the only active gold field left in the Southern Mining Region.

Dredging commenced at Jembaicumbene in 1900 with the Federal Centrifugal Gold Sluicing Company, but this operation was uneconomic and it was closed down the following year. In 1901 the Jembaicumbene Gold Dredging Company and a company using a sand pump began operations. Two further bucket dredges, the Jembaicumbene Middle Ground and the Jembaicumbene Central, and a centrifugal dredge owned by the United States Gold Dredging Syndicate, commenced operations in 1902. The Elrington began operations in 1903, and a centrifugal dredge owned by the Belle Vue Syndicate commenced in 1905. The two centrifugal dredges were owned and worked by small groups of seven or eight working miners, who in the case of the Belle Vue, rented the necessary equipment.

---

176 Braidwood Dispatch, 22 May 1901.
177 AR, 1902, p.25; 1903, p.30; 1905, p.25; Braidwood Dispatch, 8 February 1905.
178 Braidwood Dispatch, 8 February 1905.
179 Braidwood Dispatch, 8 February 1905.
180 Table 6, ‘Gold production, Araluen and NSW, 1900-1914’, Chapter Six.
183 Braidwood Dispatch, 31 October 1908.
185 AR, 1912, pp.24-25.
186 Appendix Five, Gold Mining Statistics, Araluen.
188 Braidwood Dispatch, 6 July 1900, Braidwood and Araluen Express, 19 July 1901.
189 Braidwood and Araluen Express, 8 February 1901.
190 Braidwood and Araluen Express, 22 July 1902; Braidwood Dispatch, 25 February, 29 April 1903.
191 Braidwood Dispatch, 12 August 1903; AR, 1905, p.25.
192 Braidwood Dispatch, 8 March 1905.
These were boom years for Jembaiicumbene. By 1909, however, the Jembaiicumbene Central, Middle Ground and Elrington had ceased operations, followed by the United States Dredging Syndicate in 1911 and the Jembaiicumbene Gold Dredging Company in 1913.\textsuperscript{193} Other smaller operators commenced work in these latter years, but by 1914 the Jembaiicumbene field was in a very serious state of decline. In the Braidwood Division, which also included the Jembaiicumbene and Shoalhaven River gold fields, there were 127 alluvial miners in 1908, but only 52 in 1914.\textsuperscript{194}

Only two dredges operated on the Mongarlowe field, one a bucket dredge and the other a centrifugal dredge operated by the New Zealand Mines Trust. Both dredges had ceased operations by 1903, the field effectively reverting to the low and medium capitalised operations of the past.\textsuperscript{195} In 1908 there were 140 men engaged in alluvial mining, most of whom were fossickers with average weekly earnings of about 12s 6d a week.\textsuperscript{196} In 1909 there were 80 alluvial miners on the field, with earnings of between 5s to 12s 6d a week.\textsuperscript{197} There were only 27 fossickers on the field in 1914.\textsuperscript{198} A small centrifugal dredge plant operated profitably at Major's Creek between 1911 and 1914.\textsuperscript{199}

Investment in new technology also occurred on the Nerriga field. Two highly capitalised hydraulic sluicing ventures commenced operations at Oallen in 1899 and 1900.\textsuperscript{200} Both ventures continued until late 1902, when a combination of poor yields and the re-commencement of prolonged dry weather caused them to be abandoned.\textsuperscript{201} Several dredges worked on the Nerriga field, but these were very short lived, and the equally short lived deep lead mining operations at Corang had been abandoned by late 1900.\textsuperscript{202} From thereon, alluvial mining was effectively the preserve of a few hardy fossickers, of whom there were 62 at work in 1907, with estimated earnings of £1 a week each.\textsuperscript{203} On the nearby Bungonia field in 1901, fossickers were reported to be eking out an existence and thereafter, because of the dry conditions, the only gold won was along the banks of the Shoalhaven River. In 1900 there were 60 alluvial miners in the whole of the Goulburn Division, and by 1908 there were only six.\textsuperscript{204}

On the Shoalhaven River field there were several dredges at work at various times. However, the only one to show any degree of success was the Tewksbury, which commenced operations at Warri in 1909.\textsuperscript{205} Hydraulic sluicing began on the Limekilns diggings in 1900, and ground sluicing at the Bombay and Pipeclay diggings continued, with some hydraulic elevating in both areas.\textsuperscript{206} Despite occasional difficulties with water

\begin{footnotes}
\footnote{\textit{AR}, 1908, p.24; 1909, p.25; 1911, p.28; 1913, p.28.}
\footnote{Appendix Five, Gold Mining Statistics, Braidwood.}
\footnote{\textit{AR}, 1903, p.29.}
\footnote{\textit{AR}, 1908, p.21.}
\footnote{\textit{AR}, 1909, p.21.}
\footnote{\textit{AR}, 1913, p.24; 1914, p.24.}
\footnote{\textit{AR}, 1911, p.28; 1912, p.25; 1913, p.28; 1914, p.25.}
\footnote{\textit{Braidwood Dispatch}, 21 January, 8 April 1899, 6 October, 22 December 1900.}
\footnote{Internal memo, Postmaster General's Department, 2 November 1902, SP 32/1, Box 416, NAA, Sydney. Only two men were working at Oallen.}
\footnote{Nerriga Postmaster to Inspector Golding, Postmaster General's Department, 19 November 1900, SP 32/1, Box 146, NAA, Sydney.}
\footnote{\textit{AR}, 1907, p.20.}
\footnote{\textit{AR}, 1900, p.40; 1908, p.29.}
\footnote{\textit{Braidwood Review}, 12 January, 12 February 1907; \textit{AR}, 1912, p.25.}
\footnote{\textit{Braidwood Dispatch}, 10 October 1900; \textit{Braidwood and Araluen Express}, 11 May, 8 September 1906; \textit{Braidwood Review}, 24 November 1908.}
\end{footnotes}
availability the Bombay and Pipeclay operations continued to be profitable for a number of years. The last report on these diggings was in 1909. Thereafter, the field was abandoned to a few small parties. On the Snowball field there was a similar process of attrition and by 1906 there were only six men at work.

The only other recorded activity outside this district was at Blind Creek on the South West Slopes and Spring Range on the Southern Tablelands. In both instances the workings were the province of men with little capital. There were 100 miners on the former field in the early 1900s, but by 1905 alluvial mining had ceased, superseded by the attractions of regular wages at the nearby Harden reef mines. The main period of activity on the Spring Range field was from 1900 to 1903, but there were probably never more than 50 men on the field at any one point of time.

Conclusion

A striking feature of alluvial mining in the region was its significance and persistence over relatively long periods of time. There was always some mining activity, even in the most severe periods of drought and rain. Several fields, such as Araluen, Major’s Creek, Jembacumbene and Mongarlowe were very remunerative, particularly in the 1850s and 1860s. These fields were not only important regionally, but were significant to the colony as a whole. In subsequent years earnings were more subdued, but the fields persisted. Others, such as Bungonia, Garangula and Brook’s Creek, were more ephemeral and only of regional significance.

As with any mineral resource the most obvious factor in the rise and fall of the alluvial fields was the exploitation and subsequent depletion of payable deposits. The next most important factor was rainfall. Good supplies of water were crucial. Marked downturns in alluvial mining coincided with the onset of dry weather, and increased investment followed the onset of long periods of wet weather. Excessive wet weather and flooding, however, discouraged investment. Downturns in the business cycle were also important, for in the 1890s the gold fields sustained large numbers of unemployed men, suggesting that for this period at least Blainey’s hypothesis is plausible. However, for the earlier gold rush periods it is found wanting.

There were important qualitative differences between the rushes of the 1850s and those of the 1890s. The earlier rushes saw hope and eager anticipation as the fields became home to thousands of miners. In the 1890s the rushes were borne more from despair. Hundreds, if not thousands, of the unemployed found sustenance on the diggings, and in so doing avoided starvation. These rushes bore little resemblance to those of the 1850s. Many of the miners and their families barely eke out an existence, and almost all of the fields were abandoned later in the decade because of dry weather. Nevertheless, the fields provided some relief during these trying times.

---

207 Australian Mining Standard, 29 September, 27 October 1909.
208 Braidwood Dispatch, 26 January 1906.
Chapter 3.

Reef gold mining

Reef mining began much later in the region than alluvial mining. The gold bearing ore was generally poor quality and low in quantity, making reef mining much less successful than alluvial mining. Most reef mining operations never went beyond small cooperative ventures owned by groups of working miners or small companies employing hired or tribute labour.¹ With one possible exception the mines did not approach even remotely those on the larger Australian reefing fields, for example, Bendigo and the Eastern Gold Fields in Western Australia. For instance, there was no reefing field which lasted throughout the entire period, and many fields existed intermittently for only a few years at a time. (Appendix Two. Timelines-Reef Gold Mining) Even on the longer-lasting fields, such as Mongarlowe, Bell's Creek and Major's Creek, there were long periods of inactivity.

The first report of reef mining in the region was in 1860, almost ten years after the initial gold rushes, with a short lived burst of growth in the late 1860s and early 1870s. From this point on the fortunes of reef mining parallel those of alluvial mining very closely: a second period of subdued mining activity lasted from 1875 to 1887, followed by some revival in the late 1880s and early 1890s, and a third period of revival and decline between 1900 and 1914. This chapter explores the fortunes of reef mining in the Southern Mining Region in some detail. Particular attention is given to the pattern of cause and effect.

The first strikes: 1860-1874

There are several reasons for the absence of reef mining prior to 1860. The main one was the greater attraction of alluvial mining in the region, and the relative ease with which these deposits were worked. In addition, the punitive licence fees prior to 1857 were very injurious to reef mining, for the yields were generally lower than for alluvial mining, even in the early rushes, and the development and processing costs were higher. In 1857 legislation provided for reduced licence fees in the form of the miner’s right and for the issuance of leases, with the amount to be paid by way of rent.² However, the regulations that followed in 1858 restricted severely the amount of land available to the reef miners, and this was not changed until 1862.³

¹ Patrick Bertola defines tributers as those ‘who contracted with a company for the sub-lease of a portion of mine; from this tributers or their employees cold extract ore for sale to and treatment by a company, paying the company or leaseholder a royalty on the gold won and an agreed sum based on a scale of charges for service and stores the company provided’. He argues that tributing was used by the Boulder companies to transfer labour costs and allow the extraction of higher grade ore, thus allowing other forms of less remunerative mining, such as development work, to continue. Bertola, ‘Tributers and Gold Mining in Boulder, 1918-1934’, Labour History, No 65, November 1993, pp.54-74. Charles Fahey argues the Bendigo tributers ‘seldom made half wage’ and that tributes were only let when mines could not be profitably run through wage labour. Charles Fahey, ‘Labour and Trade Unionism in Victorian Goldmining. Bendigo, 1861-1915’, in Gold, Forgotten Histories and Lost Objects of Australia, Iain McCalman, Alexander Cook and Andrew Reeves (eds), Cambridge University Press, Cambridge, 2001.
² Gold Fields Management Act (1857), 17 Vict.no.29 (11 March 1857).
³ Gold Fields Royal Commission of Inquiry, ‘Report of the Royal Commission’, Votes and Proceedings, NSWLA, Vol.2, 1871-72, Appendix D, p.6, ‘Summary of New South Wales Gold Fields Legislation, from 1852 up to the present time’. Prior to 1857 claims of up to 160 acres were allowed for reef mining on payment of the equivalent of 20 licence fees, a particularly punitive measure for an activity that often required much non paying prospecting work over large tracts of land. In 1858 only 20 ft was allowed
Introduction of the lease system corrected one important limitation, namely security of tenure. Under the system of licence fees and miner’s rights, tenure had been determined by occupancy, which was a substantial deterrent to the formation of companies and the raising of capital. Introduction of leases did not, however, automatically make reefing more attractive, for the administration of the lease system was seriously inadequate, particularly prior to the Mining Act 1874. Leases required formal survey and approval, and there were very substantial delays in this process. In addition, there was no requirement to commence mining until after issue of the lease, during which time the land could have been worked by those with miner’s rights. Other matters to discourage miners were the system of suspension of labour, which allowed work to be suspended on leases, and the practice of shepherding, whereby claims were not worked pending developments on adjoining claims. Another adverse practice was claim jumping, which was particularly prevalent with claims held under miner’s rights. Coupled with the generally higher capital costs of reef mining, these factors discouraged many miners.

The first recorded reefing activity in the Southern Mining Region was at Mongarlowe, in the Braidwood and Shoalhaven District, in 1860. There were very rich finds initially and some basic crushing machinery was erected, but by the following year most of the reefs had been abandoned. The next significant find was at Mac’s Reef on the Southern Tablelands in November 1865. Within a few weeks of the find there were several hundred men on the field. The early finds were very rich, and claims were taken out for several kilometres, although a crushing plant was not installed for some months. By August 1866 only two claims were operational, and a fatal accident that month put a sudden end to the mining.

Reef mining did not come to the fore again until 1869, when a wave of discoveries hit the region. In the Braidwood and Shoalhaven District reef mining commenced at Major’s Creek, Bell’s Creek and Mongarlowe. At Major’s Creek the main areas of mining were at Big Hill (later Snob’s line of reef) and Dargues, and by January 1870 there were two ten head batteries on the field, and one other at nearby Jembacumbene. Two other batteries of 15 and 17 head capacity were erected in 1870. The most

per man and only six claims were allowed to form a working party. Critics of this provision felt that it had been a great obstacle to the formation of cooperative companies. In 1862 the area per man was increased to 30 square metres.

4 Mr Harrie Woods, 'Gold Mining Leases, Progress Report of 15 December 1873', Votes and Proceedings, NSWLA, 1874, p.2. It was also commented that many of the leases had been so poorly prepared that if issued they would have been 'utterly worthless as deeds of titles'. Further, surveys of the claims were usually made by the Gold Commissioners, 'who often had no instrument and were not supposed to know how to use one'. Mr Harrie Woods, Mining Branches of the Lands Department, Second Progress Report, of 13 November 1874, Votes and Proceedings, NSWLA, 1874, pp.3-4

5 Gold Fields Royal Commission of Inquiry, 'Report of the Royal Commission', pp.29-31. Claims held under miner's right lacked the security of tenure associated with leases, and the miner risked forfeiture if he was absent from his claim for only a few hours. The Commissioners referred to a 'class of person, generally idlers and 'loafers', who took up fresh ground and did preliminary work, but basically waited for the tripping of others more industrious and energetic than themselves'. The Commissioners regarded the system of suspension of labour as a great cause of dissatisfaction to 'industrious and honest miners', who saw a claim of an 'idle and unscrupulous neighbour lying unworked and protected'.

6 Braidwood Observer and Miner's Advocate, 29 September, 6 October 1860, 12 January 1861.

7 Queanbeyan Age, 2, 9 November 1865.

8 Goulburn Herald and Chronicle, 27 December 1865, 26 May 1866.

9 Goulburn Herald and Chronicle, 4 August 1866; Queanbeyan Age, 23 August 1866.

10 Town and Country Journal, 22 January 1870.

11 Town and Country Journal, 24 September 1870, 3 June 1871.
profitable mine was Dargues. In 1871 production from Major’s Creek was extraordinarily high, and in that year it was the second largest reefing field in the Southern Districts of NSW. There were almost 900 miners on the field. By 1872, however, Major’s Creek was in decline. The ore had become increasingly refractory with depth and was not amenable to treatment by the amalgamation process.

At Bell’s Creek reef mining commenced in late 1869, and at one stage there were between 500 and 600 miners at work. Mining was thwarted initially by the insistence of the landowners on a royalty of five per cent, in addition to the private licence fee and a registration fee of 5s a claim, but this was resolved by the end of the year. By 1870 there were ten reefs, two of which were worked by a number of Chinese parties, and a battery had been erected. Some of the stone would also have been crushed at the Jembaicumbene mills. The few details on yields that are available suggest that the stone was very rich, particularly from Quong Tart’s mine, which was the main claim on the field. 1873 appears to have been the peak year, although Quong Tart’s claim continued to be worked until the late 1870s.

Reef mining commenced at Mongarlowe in 1869, and three batteries, two of which were water powered, were erected. Again the early finds were very rich, but there was excess water at depth, and constant problems with inadequate or inappropriate pumping machinery. Problems with excess water continued throughout 1870. By early 1871 several miners had suspended work pending repairs to the pumps or the arrival of new machinery. This was, nevertheless, the peak year for production. In 1872 many alluvial workings were abandoned in favour of the reefs, but by December reef mining was at a standstill because of the rains. No production was recorded in that year.

At Spring Creek Jacqua reef mining also commenced in 1869, and the early yields were very high. A large number of men were employed, with wages ranging from 30s to £2 10s a week. Later that year one crushing plant was in place and two others were erected shortly after. Problems with the efficiency of one of the batteries and the high cartage costs were setbacks, a correspondent commenting that Flook’s processing plant

---

12 Town and Country Journal, 3 June 1871.
13 In 1871 over 24,000 tons were raised for a yield of 7,506 oz. Commissioner-In-Charge, Southern District, Report on the Southern Gold Fields for 1871, Young, 1 January 1872, Votes and Proceedings, NSWLA, Vol.2, 1871-172, p.4.
15 Goulburn Herald and Chronicle, 13 October 1869.
16 Goulburn Herald and Chronicle, 20, 27 November, 4 December 1869.
19 Goulburn Herald and Chronicle, 24 August 1872. One crushing of 11.5 tons in August 1872 yielded almost 161 oz.
20 Goulburn Herald and Chronicle, 4 June 1873.
22 Town and Country Journal, 15 January, 4 August 1870.
23 Town and Country Journal, 4 February 1871.
24 Town and Country Journal, 18 May, 7 December 1872. Although average yields were only 0.5 oz a ton, over 1,000 oz were recovered in 1870 and 1871. Commissioner-In-Charge, Southern District, Report on the Southern Gold Fields for 1871, Young, 1 January 1872, Votes and Proceedings, NSWLA, Vol.2, 1871-172, p.4.
26 Goulburn Herald and Chronicle, 21 August 1869.
27 Goulburn Herald and Chronicle, 20 November 1869.
had done more harm to the livelihood of the miners than if they had been held up by bushrangers (Figs.3.1-3.2)²⁸ By late 1870 only one battery remained, but by early 1871 reefing activity was again on the increase.²⁹ Early in 1872 there were promising reef finds at Yellow Springs and Fernbank, and a crushing plant was installed at the latter location in 1873.³⁰ Thereafter, progress in the mines waxed and waned, and by the following year, Fernbank was all but deserted.³¹ All reef mines, bar one, were abandoned by the end of 1875, almost all of them failing at depth.³²

Other gold fields to briefly flourish in the early 1870s were McMahon’s Reef and Kangaroo Reef on the South West Slopes, Nanima and Dalton on the Southern Tablelands and Michelago on the Monaro. Reef gold was found at McMahon’s Reef in 1871 and at Kangaroo Reef in 1872. Later that year there were two batteries at McMahon’s Reef processing ore from that field and from Kangaroo Reef.³³ The very first crushings were extremely rich, but not long after, yields on both fields began to fall, possibly as a consequence of the refractory nature of the ore, and all work ceased in September 1873.³⁴ At Nanima, reef mining commenced in August 1872, and there were 30 working claims and 70 working miners on the field within a few months.³⁵ No crushing plant was erected, however, and by 1874 the proclamation of Nanima as a gold field was withdrawn.³⁶ Reef mining commenced at Dalton in 1874. There were a number of claim holders and a battery was installed, but by August 1875 only one claim was working.³⁷ Gold was found at Michelago in 1872 and a water powered battery was constructed in 1874.³⁸ Although the first crushings were modest, mining continued, albeit intermittently, for another 18 years.

Excluding Mac’s Reef and the first desultory efforts at Mongarlowe, the timing of these developments is remarkable. In 1869 reef mining commenced on four of the fields, one field commenced in 1871, three in 1872 and one in 1874. The timing of these developments mirrors closely the onset of the 1867-1871 flat period identified by Butlin, and supports Blainey’s observations on the link between a downturn in the business cycle and an increase in mineral discoveries and mining activity. In addition, by the late 1860s, many of the alluvial fields in the region were less attractive to miners, and resources which had been used in alluvial mining were now more available to other forms of mining. The demise of the reef fields a few years later was due almost entirely to technological factors, that is, the inability to cope with excess water and refractory ore.

The doldrums: 1875-1887

Proclamation of the Mining Act 1874 was an important boost for mining throughout New South Wales, although problems such as shepherding and unjustified suspensions continued. An additional helpful development was the introduction of the Prospecting

²⁸ Town and Country Journal, 8 January 1870; Goulburn Herald and Chronicle, 26 February 1870.
²⁹ Goulburn Herald and Chronicle, 26 October 1870, 20 May 1871.
³² AR, 1875, pp.88-89.
³³ Yass Courier, 22 November 1872.
³⁵ Yass Courier, 2 August, 8, 11, 22 October 1872.
³⁶ Yass Courier, 11 May 1874.
³⁷ Yass Courier, 17 April, 21 July 1874, 6 August 1875.
³⁸ Perkins Papers, 3 December 1872, p.1173; 27 January 1874.
Vote in 1878, which provided funds for assistance in prospecting.\textsuperscript{39} Despite these positive developments, reef mining in this period was ‘in the doldrums’, for broadly similar reasons as alluvial mining, that is, the onset of prolonged periods of severe dry weather. To an extent the effects of the dry weather were offset by improved pumping technology, which meant that water could be obtained from water courses or from mine shafts. But this technology would not have been available on the more poorly capitalised ventures. In addition, generally favourable economic conditions meant that other forms of investment may have been more attractive. These subdued conditions run counter to the growth rates for mining identified by Butlin for Australia as a whole.\textsuperscript{40}

The most successful reef mines during this period were at McMahon’s Reef on the South West Slopes and Captain’s Flat on the Southern Tablelands. In both instances capital and technology were forthcoming. At McMahon’s Reef, mining recommenced under tribute in 1883. This form of mining was highly profitable, but because of the limited term of the lease, further investment for an extension of the plant and mine did not proceed. The tributors amalgamated with the parent company to form the Cunningar Proprietary Gold Mining and Chlorination Company. This allowed further capital to be obtained.\textsuperscript{41} Sixty men were employed in 1884.\textsuperscript{42} The mine was equipped with a rock drilling plant, air compressor, air receiver, steam winding plant and pumping plant. Because of the pyritic nature of the ore, extensive crushing machinery, concentrators and a chlorinating plant, which included reverberatory furnaces, were also erected.\textsuperscript{(Fig.3.3)} In 1885 100 men were employed.\textsuperscript{43} At Captain’s Flat, reef mining commenced in 1881, and by the following year there were two crushing plants and about 50 men on the field.\textsuperscript{44} Water scarcity was a problem in 1884, but the main difficulty was the occurrence of gold in association with silver and lead.\textsuperscript{45} In 1885 silver smelting facilities were erected, and from thence on gold production was a by product of base metal mining.\textsuperscript{46}

In the Braidwood and Shoalhaven District intermittent reef mining occurred on a number of fields. Reef mining recommenced on the Mongarlowe field in 1881, but it was plagued by financial and management problems, and mining ceased in 1883.\textsuperscript{47} The following year the Day Dawn was discovered, but lack of capital impeded progress, and it was not until 1887 that pumping machinery was installed.\textsuperscript{48} At Major’s Creek reef mining was equally desultory. In 1876 very few reef miners were earning wages, in some cases ‘not even half wages’, and by 1877 the only claim paying dividends was Dargues.\textsuperscript{49} By 1879, all claims were raising refractory ore, and there was considerable uncertainty as to the best method of treatment.\textsuperscript{50} The treatment plant at Dargues failed the following year.\textsuperscript{51} In 1881 there were three crushing plants, but very little ore was processed, and

\textsuperscript{39} Cootamundra Herald, 2 July 1878. Regulations for the Vote were first issued in 1878, and a sum of £5,000 was set aside to assist mining associations or companies. Disbursement of monies was administered by a Prospecting Board.

\textsuperscript{40} Butlin, Investment in Australian Economic Development 1861-1900, pp.16-24.


\textsuperscript{42} Murrumburrah Signal, 17 May 1884.

\textsuperscript{43} Clift, The McMahan’s Reef Gold Mines, pp.4-5.

\textsuperscript{44} Goulburn Evening Penny Post, 21 July 1881, 13 May 1882; Queanbeyan Age, 28 July 1882.

\textsuperscript{45} AR, 1884, p.82; 1885, p.77.

\textsuperscript{46} AR, 1885, p.77.

\textsuperscript{47} AR, 1881, p.63; 1884, p.80; Goulburn Evening Penny Post, 30 July, 16, 27 August 1881.

\textsuperscript{48} AR, 1884, p.80; 1885, p.74; 1887, p.79.

\textsuperscript{49} AR, 1876, p.96; 1877, p.95.

\textsuperscript{50} AR, 1879, p.111.

\textsuperscript{51} AR, 1880, p.128.
by the following year reef mining was described as 'a thing of the past'.

52 By 1887 the only party working at Major's Creek was 'doing little better than making a living'.

53 At Bell's Creek the only regular mining was on Quong Tart's claim, but after 1877 the reefs supported only a few miners with indifferent results.

54 As a measure of the failing fortunes of these fields, by 1887 there were eight reef miners at Bell's Creek, 12 at Major's Creek, and ten at Mongarlowe. In some years there was no reef mining.

Reef mining elsewhere in the region was even more desultory. There is no record of viable commercial production at Mac's Reef, Brook's Creek and Dalton, even though crushing plants were erected on the latter two fields.

55 Crushing plants were also erected at Kydara and Michelago in the Monaro. At Kydara mining commenced in 1881 and lasted for about 15 years, however, production was spasmodic and the claims were often abandoned.

56 Production was more continuous at Michelago, and in 1879 the miners were reported to be earning good wages, with production continuing throughout the period.

57 It is unlikely, however, that the number of miners exceeded 20 at either Kydara or Michelago.

A halting prosperity: 1888-1899

Several factors were responsible for the increase in reef mining activity in the Southern Mining Region during this period. The return to favourable weather conditions in 1887 would have encouraged the establishment of mining ventures. Although there was a brief return of dry weather in 1888, there were a number of important discoveries in that year and mining was bolstered by the six good rainfall years that followed. The severity of the economic depression in the early 1890s may have also resulted in an increase in investment in gold mining. It certainly led to an increase in the number of prospectors and working miners. By the mid 1890s, however, these favourable developments were offset by the return of severe dry weather conditions.

Legislation and administration were mixed blessings. The Mining on Private Lands Act 1894 provided miners with access to private land. But the benefits from this legislation were not generally available until the 1896 amendments, which provided that mining could commence before the issuance of a lease, provided that the miner had a miner's right and other preconditions were met. There was a significant increase in the number

58 AR, 1881, p.62; 1882, p.65.

59 AR, 1887, p.80.

54 AR, 1877, p.95; 1878, p.111; 1879, p.118; 1881, p.61; 1882, p.62, 64; 1883, p.77.

55 Appendix Five, Gold Mining Statistics, Major's Creek. There were no reef miners at Major's Creek in 1885, or at Mongarlowe from 1877 to 1879 and 1883 to 1886.

56 Town and Country Journal, 11 October, 17 April 1880; Tass Courier, 21 October 1879, 16 January, 30 July 1880; AR, 1878, pp. 82-83; 1879, p.113; 1883, p.83.

57 AR, 1881, p.67; 1882, p 68; 1883, p.81; 1887, p.85; Cooma Express, 10 June, 21 June 1882.

58 Queanbeyan Age, 20 January 1875; Town and Country Journal, 23 August 1879; AR 1881, p.66; 1887, p.82.

59 Another helpful piece of legislation was the Church and School Lands Mining Act (1888) 52 Vic. no.12 (23 July 1888), which provided that a holder of a miner's right or license could enter on church and school lands and search for gold or other minerals. The Mining on Private Lands Act provided that all alienated land and land under lease or reserved for public purposes was to be open for the mining of gold, silver, lead, tin and antimony. Land could be resumed for mining purposes, after payment of compensation. There were a number of restrictive provisions, in particular the insistence upon issuance of a lease and payment of compensation before mining could commence. In addition there was no right of way through any garden, orchard or pleasure ground, and the Act was not to apply to lands under
Fig. 3.1. Transport of battery boiler by traction engine from Marulan railway station to Manton's Reef, Spring Creek Jacqua field. A costly and time consuming exercise.

Fig. 3.2. Remains of timber bedding for Flook's battery, Spa Creek, Jacqua Spring Creek field. Loading ramp in background.
Fig. 3.3. Reverberatory furnace, chlorination plant, McMahon’s Reef.

Fig. 3.4. Wooden cyanide vat, Cowra Creek.
of lease applications, and although data is not available on the increase by district or mining field it can be assumed that the benefit was felt in the Southern Mining Region as well.\textsuperscript{60}

Problems with the leasing system continued, however. An article in an 1894 issue of the \textit{Town and Country Journal} stated that:

The expectant lessee can go to work at his own risk but he was not compelled to do so till he becomes actually the lessee. This is the first delay. From the time the ground is applied for as a rule the lease is not ready for signature for 4 to 6 months, all this time if the applicant chooses the land lies dormant...leases on old and abandoned ground and all mineral leases need not be worked till the execution and delivery of the lease...Shepherding on a big scale came in as soon as the lease was executed and although one of the conditions is that labor shall be used almost immediately many months more often elapse before the lessee gets to work. He may need to form a company or sell shares etc. Consequently he applies to suspend labor on the lease for six months to enable them to get machinery to work the ground. Later at the expiration of the suspension he may apply for another suspension. If he cannot sell shares he simply drops the lease and fails to pay the rent. Months often pass before the lease is cancelled for non payment of rent. \textsuperscript{61}

The main reef mining field in the region was at Cowra Creek on the Monaro. Mining commenced in 1888, when there were 60 miners on the field.\textsuperscript{62} Most of the miners worked for wages, though some worked profitably as tributers.\textsuperscript{63} Despite its initial prosperity the field had a stop start existence. By the end of 1891 few miners were at work, but by late 1892 the level of mining activity had increased and by the following year the field was referred to as the new 'El Dorado'.\textsuperscript{64} Late in 1894, however, the field was described as 'a thing of the past', a major problem proving to be the lack of a proper treatment works for the pyritic ore.\textsuperscript{65} By the following year the field was again improving. There were 200 miners, most of whom were still working for wages, and batteries were operating at Macanally, Fiery Creek and Cowra Creek.\textsuperscript{66} Concerns were, however, often expressed at the frequency of shepherding and suspensions of labour, and mines, plant and equipment changed hands regularly.\textsuperscript{67}

As with so many other fields in the region, the main problem was the prevalence of refractory ore and the lack of capital and the facilities to treat it.\textsuperscript{68} Additional difficulties were caused by the onset of dry weather in the mid 1890s.\textsuperscript{69} This often led to a shortage of forage and water, which increased the cost and availability of carting, which most miners were dependent on to get their ore to the batteries. It also hindered the successful working of the batteries. Ore from Fiery Creek and Macanally was often

\begin{footnotes}
\item[60] \textit{AR}, 1898, p.2; 1899, p.5.
\item[61] \textit{Town and Country Journal}, 1 November 1894.
\item[62] \textit{AR}, 1888, p.97.
\item[63] \textit{Cooma Express}, 6 February 1891, 24 August 1894.
\item[64] \textit{Cooma Express}, 11 December 1891, 30 September 1892, 2 June 1893.
\item[65] \textit{Cooma Express}, 24 August, 16 October 1894.
\item[66] \textit{Cooma Express}, 26 February, 27 August 1895. There were two batteries at Cowra Creek.
\item[67] \textit{Cooma Express}, 9 January, 16 October 1894, 1 April 1895.
\item[68] \textit{Cooma Express}, 24 August 1894, 1 April 1895, 24 September 1897.
\item[69] \textit{Cooma Express}, 7 February 1896, 8 October 1897.
\end{footnotes}
processed at Cowra Creek and vice versa, depending on the availability of water for crushing.  

By 1896 many miners were seeking assistance from the Prospecting Vote, and in later years the field was described as 'just lingering on, a few working there and only making tucker'. In the summer of that year there was not even enough water for domestic purposes and mining ceased, leading to a shortage of ore for crushing. By the middle of 1898 most of the miners were described as making a living, 'although there were obviously no great riches to be had', and the batteries were again silent in summer due to water shortages. By the following year the field was described as not much more than a good wages one, for there were only 50 to 60 men employed, a good number of whom would have been working on their own account.

Elsewhere on the Monaro, mining recommenced at Michelago in 1888 and two years later a crushing plant had been erected by the Bowery Company, which employed 12 miners initially. A separate battery had been installed earlier. Mining continued at Kydria, where a ten head battery was erected in 1888. At both Michelago and Kydria mining operations were dependent largely upon assistance from the Prospecting Vote, and there would rarely have been more than 20 men on either field. More promising mining operations commenced at Colinton near Bredbo in 1888 and Bushy Hill near Cooma in 1897. Batteries were erected at both fields, and there were several profitable companies such as Quigg's Prospector's claim at Colinton and the Bushy Hill Proprietary Gold Mining Company. However, there were probably never more than 30 men on either field at any one point in time and there were very few consistently profitable claims. At Bushy Hill the yields on some claims were high, particularly on those worked by tribute, but production was eventually thwarted by the refractory nature of the ore. Concerns were also expressed about the frequency of shepherding and suspensions of labour and the use of child labour. The Colinton mines were considerably more productive than those at Bushy Hill, but by 1898 mining had ceased.

There was also a brief revitalisation of reef mining on a number of fields in the Braidwood and Shoalhaven District. At Major's Creek, the newly formed Dargue Company erected a crushing plant in 1888 for the processing of ore from several nearby reefs. In the following year a chlorination plant was built to treat the refractory ore. Erection of the plant was supervised by the one of the principals of the Cunningar works.

---

70 Cooma Express, 27 August 1895.
71 Cooma Express, 29 September 1897.
72 Cooma Express, 7 February 1896, 29 September 1897.
73 Cooma Express, 8 October 1897.
74 Cooma Express, 24 May, 30 December 1898; AR, 1890, p.81; 1891, p.92.
75 Manaro Mercury, 13 March 1899. The description of the field as a good wages one is, however, questionable and in contrast to the tone of most of the reports from the Cooma Express.
76 Queanbeyan Age, 30 May 1888; AR, 1890, p.99.
77 AR, 1890, p.81.
78 Cooma Express, 9 May, 2 June 1888.
79 AR, 1888, p.94; 1889, p.92; 1891, p.92.
80 AR, 1888, p.97; Cooma Express, 3 September 1897.
81 Cooma Express, 9 May, 29 June 1900.
82 Cooma Express, 27 February 1889, 9 March 1894, 17 December 1897, AR, 1889, p.90; 1891, p.92.
83 Cooma Express, 8 March 1898, 9 May, 29 June 1900, 24 May 1904.
84 Cooma Express, 28 June 1898.
85 AR, 1897, p.38; Manaro Mercury, 4 February 1888.
86 AR, 1888, p.89.
at McMahon’s Reef. The plant was expected to be the most perfect of its kind in the colony, capable of treating 500 tons of ore a week and employing between 400 and 500 men.87 However, by the end of 1890 the plant had failed comprehensively, operating costs having been much higher than expected.88 Sixty-five men had been engaged in reef mining in that year, but by the following year reef mining had ceased altogether.89 Reef mining recommenced in 1893, primarily at Snob’s mine, and there was a marked increase in the level of activity in 1895.90 Some of the pyritic ore was sent to Maryborough in Queensland for treatment.91

At nearby Bell’s Creek there was also a brief revitalisation of reef mining, though this was of a much lesser magnitude than at Major’s Creek. From 1892 to 1896 between 10 and 20 men were employed on the reefs and there was one battery in operation.92 There was also a short-lived revival at Mongarlowe, primarily as a result of activity at the Day Dawn. Processing machinery and concentrators were installed at this mine in 1888 and 40 men were employed.93 The mine was initially very profitable, but changed hands in 1890 and was closed the following year, with the owners divided on the merits of acquiring further pumping machinery.94 By 1897 reef mining had ceased altogether.95 Reefing also commenced on the Nerriga field in 1888, with crushing machinery erected at Welcome Reef and Mountenay.96 In 1897 extensive crushing and hauling plant and workshops were erected at the Phoenix mine.97 There were, however, never more than 45 employed in reef mining on the field at any one time.98

On the Southern Tablelands there were a number of promising gold rushes, but none of them were prosperous for more than a short period. Gold was found at Gooda Creek in 1896 and at nearby Nania the following year.99 The ore from Gooda Creek was rich enough to warrant transporting to Sydney and Dapto for crushing.100 A battery was installed at Nanima and there were 200 miners on the field in 1897, although the numbers fell considerably after that.101 Within two years there was a rash of applications for assistance under the Prospecting Vote.102 Both fields were handicapped by the presence of refractory ore, an absence of capital and expertise and the onset of drought conditions.103 The most promising development in the district was at Bywong in late 1894.104 The earliest finds were very rich, and within a few months there were 300 men

87 Braidwood Dispatch, 27 February, 13 March 1889; AR, 1889, p.79, 84.
88 Braidwood Dispatch, 4 February 1891.
89 Appendix Five, Gold Mining Statistics, Major’s Creek.
90 Braidwood Dispatch, 3 June, 12 July 1893; AR, 1894, p.27; 1895, p.24; Appendix Five, Gold Mining Statistics, Major’s Creek.
91 AR, 1895, p.24.
93 AR, 1888, pp.87-88; Braidwood Dispatch, 10 October 1888.
94 AR, 1889, p.83; 1890, p.84; 1891, p.95; Braidwood Dispatch, 5 August 1891, Goulburn Evening Penny Post, 26 August, 5 September 1891.
95 Appendix Five, Gold Mining Statistics, Mongarlowe.
97 Goulburn Evening Penny Post, 31 July, 18 September 1897.
98 Appendix Five, Gold Mining Statistics, Nerriga.
101 Yass Courier, 7 September, 15 October 1897.
102 Yass Courier, 18 February 1899.
103 Goulburn Evening Penny Post, 6 September 1898.
104 Goulburn Herald and Chronicle, 15 August 1894.
on the field.105 A short while later, however, it was stated that ‘whatever rush there had been was over’.106 Several batteries were erected, but production gradually declined, and the majority of claims were either abandoned or for sale. Thereafter, Bywong only supported a small number of payable claims.107 Mining at nearby Dairy Creek commenced at about the same time as Bywong, but it only ever supported one or two small claims.108

On the South West Slopes, the McMahon’s Reef chlorination works were described in 1888 as one of the largest plants in the district, with ‘everything in the way of machinery that money can procure’.109 One hundred and twelve men were employed in that year, but by the following year their numbers had been reduced to between 20 and 30.110 The main activity was the processing of local refractory ore and ore from other colonies.111 A similar number of men were employed in 1890 and the works were closed not long thereafter.112 Mining resumed in 1896 and 50 men were employed in that year, but within two years the mine was again dormant.113 Work recommenced in the following year, but appears to have been confined to cyaniding.114

At Cullina, there were two mining phases, the first commencing in 1892 and the second in 1899. A problem in the first phase was the poor relationship between the private landowners and the miners, for the private charges were regarded as excessive.115 There were only two payable claims, the main one of which was Tildens.116 A crushing plant was erected in 1894, but there was no production in the following two years.117 In 1899 a rich lode was struck at the Christmas Gift mine and 23 men were employed.118

The last hurrah: 1900-1914

Improved mining technology such as stronger pumping and hauling machinery and the cyanide process prolonged and revitalised many fields. The Major’s Creek and Harden fields, in particular, were to benefit from these developments. Further beneficial changes in mining legislation were also made in 1906, although these probably came too late for most fields.119 Of possibly more significance was the Prospecting Vote, which sustained a number of fields during this period, notwithstanding the quite valid reservations in

---

105 Goulburn Herald and Chronicle, 18 February 1895, Queanbeyan Age, 13, 27 February 1895.
106 Goulburn Evening Penny Post, 23 March 1895.
107 Queanbeyan Age, 19 September 1895; AR, 1895, p.24; 1896, p.31.
109 Murrumburrah Signal, 3 November 1888.
110 Murrumburrah Signal, 3 November 1888; Clift, The McMahons Reef Gold Mines, p.6.
111 Murrumburrah Signal, 24 August 1889.
112 Town and Country Journal, 1 March 1890.
113 Clift, The McMahons Reef Gold Mines, p 6; Inspector to Chief Inspector, 15 June 1896, New South Wales Department of Public Instruction, SRCSW, Sydney; Internal memorandum, 15 April 1896, Postmaster General’s Department, NAA, Sydney; Cootamundra Herald, 2 August 1896; Murrumburrah Signal, 31 December 1898.
114 Murrumburrah Signal, 22 July 1899.
116 Cootamundra Herald, 8 July 1893.
117 Cootamundra Herald, 10 February 1894.
119 AR, 1906, pp.61-64. In the Mining Act 1906, the term for a miner’s right or business license was extended to 20 years, and the privileges conferred by a miner’s right were extended to include the grazing of horses on Crown lands. Claims could also be amalgamated without any limit as to extent. Provisions concerning access to private land were also further liberalised.
official quarters on its effectiveness. On the converse side, the return of a prolonged spell of dry weather, and the continued under capitalisation of most mines militated against their prolonged success.

The largest and most profitable mining operation in the region was at Blind Creek near Harden on the South West Slopes. Quartz reefs were discovered in 1903 and worked profitably by small parties of co-operative miners. Two years later the Harden Gold Mining Company was formed and crushing and cyanide plants were erected. This mine was, unlike almost all others in the region, highly capitalised and funded from subscribed capital. There was a substantial investment in development work and in plant and equipment, including extensive pumping and hauling equipment, buildings and a slime plant. The mine was highly profitable, and at the end of its operations in 1912, it had yielded £194,837, a return which most reef mine companies in the region could only dream about. There were three other mining companies at Harden, but by 1912 they had also ceased operations. In 1909 a peak of 146 reef miners worked in the Murrumburrah Division, most of whom would have been at Harden.

Reef mining also continued at Cullina. Some of the ore was sent to Cockle Creek and Dapto for treatment, and cyaniding commenced in 1902. This latter activity offset the quiet periods when the battery could not work because of drought conditions. In 1903 there were between 40 and 50 men employed, but by the following year disappointing results led to a reduction in the workforce. For the next eight years mining activity was confined primarily to cyaniding and developmental work. Mining recommenced in 1912. At McMahon’s Reef mining activity was confined to cyaniding, which ceased in 1907. Some crushing also occurred.

Another successful mining operation during this period was at Major’s Creek, commencing in 1901. There were three main mines, namely the Mount Hope (formerly Snobs), the United Miners and Stuart and Mertons, all on the Snob’s line of reef. All mines, including the Mount Hope, were owned by co-operative groups of working miners, comprised of old residents and their sons, using ‘the most primitive methods and appliances’. Nevertheless, the mines were worked to a considerable depth, and although the ore was refractory, it was high yielding. This meant that it was economic to

---

120 In 1902 it was conceded that the expenditure of large sums of Government money must have had some beneficial effect. In the vast majority of cases, however, the only beneficiaries were the actual finders, the Vote bringing into existence a class of men whose only ambition was to live on Government monies. Although the Vote was reduced in 1905 to £15,000, it was often underused. For example, in 1906 only £12,165 was allocated, but as the prospectors failed to enter on or complete the work the total amount spent was only £8,596. AR, 1902, p.61; 1905, p.56; 1906, p.65.


122 Clift, The Harden Murrumburrah Goldfield, p.4; AR, 1904, p.16.

123 Clift, The Harden Murrumburrah Goldfield, pp.11-33.


125 Clift, The Harden Murrumburrah Goldfield, pp.36-43.

126 Appendix Five, Gold Mining Statistics, Murrumburrah.

127 Clift, The Cullina Gold Field, pp.13-14. Dapto was 320km distant; Cokcle Creek was 595km.


132 Braidwood Dispatch, 3 September 1903; AR, 1902, pp.28-29.

133 Braidwood Dispatch, 2 May 1906, 14 March 1908; Inspector to Major’s Creek Postmaster, 25 February 1907, SP 32/1, Box 332, NAA, Sydney.
treat the ore elsewhere, for example, in Victoria, Cockle Creek or the Cunningar works.  

The cost of cartage and processing was, nevertheless, an impediment to the development of the field, particularly with the low grade ore. In 1905 the Cockle Creek smelting works increased their smelting charge from 30s to 50s a ton, raising the cost of transport and treatment to £5 10s a ton.  

This meant that the ore had to yield at least two ounces a ton to break even. Nevertheless, mining activity continued for some years, and as late as 1908 it was claimed that the stone sent to Cockle Creek paid good wages to the working shareholders. By the middle of that year, however, the yields had fallen considerably and there were problems with water at depth. The mines were progressively closed, and within a few years there were only a few operating, many of the miners having left the district to seek work elsewhere. A peak of 75 reef miners were employed in 1907, but six years later there were only 11.

Elsewhere in the district, there was a short-lived rush to nearby Bell’s Creek in 1904, when nearly the whole of the field was pegged out, mainly by parties from Major’s Creek. The battery was reopened and a cyanide plant introduced, though both were closed later that year. Mining operations recommenced the following year, and there was considerable work on the field in 1906, but this too was short-lived and not particularly profitable. There were between 10 and 23 miners on the field during this period, most of whom would have been self employed. Thereafter, the number of miners fell considerably and by 1913 reef mining had ceased altogether. At Mongarlowe reef mining recommenced on or about 1902 with the reopening of the Day Dawn, and the following year a public battery was erected to service a number of other smaller mines. A considerable sum was spent on plant and equipment for the Day Dawn, but by 1904 it had been let on tribute. The most successful mine during this period was the Alma, which was worked from 1906 until the internment of its owner on the outbreak of World War 1 in 1914. Most mines were operated by small parties of working miners. On the Nerriga field, the only reef mine of significance was the Phoenix, which closed down in 1905.

On the Monaro the stop start existence of the Cowra Creek field continued, ameliorated only by a brief respite from the dry weather in 1900, the provision of money from the Prospecting Vote and the belated introduction of cyaniding in 1904. By 1901

---

134 AR, 1903, p.25; 1904, p.23.
136 Braidwood Dispatch, 14 March 1908.
137 Braidwood Dispatch, 3 June, 18 July 1908.
138 AR, 1911, pp.24-25.
139 Appendix Five, Gold Mining Statistics, Major’s Creek.
140 Braidwood Dispatch, 3 February, 11 May 1904.
141 Braidwood Dispatch, 11 May 1904; Braidwood and Araluen Express, 20 May, 24 June 1904.
142 Braidwood Dispatch, 8 March 1905, 20 June 1906; Braidwood Dispatch, 15, 18 August 1906; AR, 1906, p.22.
143 Appendix Five, Gold Mining Statistics, Araluen.
144 Braidwood Dispatch, 13 August 1902, 1 August 1903.
145 Braidwood Dispatch, 23 May 1903.
146 AR, 1906, pp.21-22; 1912, p.21; Braidwood Review, 25 February, 22 April 1913; Oral discussions with the late Ted Richardson, 1995.
147 AR, 1909, p.21; 1910, p.23.
148 AR, 1902, p.22; Braidwood Dispatch, 13 May 1905.
149 Cooma Express, 24 August 1900, 2 February 1902, 16 February 1904.
most mines were at a depth where refractory ore was frequently encountered, and the ore was carted to the railhead at Bredbo and transported to Dapto and Cockle Creek for processing. 150 Fortunately, much of the ore was very high yielding and occasionally very rich seams were located. 151 Consequently, the field lingered on for a number of years. There were 20 miners on the field in 1905, and in the following year the mining population was described as ‘fast dwindling’. 152 The next significant flurry of activity was in 1908, but after that there were rarely more than a few mines operating, and the lack of an operating battery and the advent of World War 1 put paid to the field. 153 There were four active claims at Bushy Hill in 1900, but by the following year the field was fading, and in 1903 a large number of leases were cancelled. 154 The main problem was the prevalence of refractory ore at depth, and by 1907 only one claim was at work. 155

Reef mining was even more unsuccessful on the Southern Tablelands. At Captain’s Flat the erection of a cyanide plant in 1900 signalled a change from the mining and smelting of base metals to gold recovery, although some attempts at base metal mining continued. 156 Difficulties with the gold saving equipment allowed the company to successfully apply for suspension of labor on a number of occasions, and the full complement of men was never employed. There were also frequent layoffs. 157 By 1903 there were only 12 men at work, most of whom were prospecting. 158 In 1905 there were only ten miners on the field and during the year much of the machinery was removed because of the refractory nature of the ore. 159 Little further work occurred until 1912, when the main leases had a full complement of men, and machinery and plant were erected. 160 During these years some men may have fossicked for gold in the gullies just as their predecessors had done in the 1880s, but there is no record of this. At Nanima mining ceased in 1905, although several years later a battery and concentrating plant were constructed to extract gold and bismuth. 161 At Bywong there was rarely more than two working claims and by 1910 there were only seven men on the field. 162

Conclusion

With the exception of Harden, none of the reefing fields could be described as overly prosperous, and even the more productive ones had a start and stop existence. Most mining coincided with the onset of subdued or depressed economic conditions in the late 1860s, early 1870s and early 1890s, and did not persist for long, providing some support to Blainey’s hypothesis. Other factors were also important, especially weather patterns, such as the breaking of the drought in the late 1880s, and the absence of adequate legislation, regulatory provisions and administration.
Lack of capital and technological expertise were constant limitations. Many mines were owned by groups of working miners or small companies using hired or tribute labour, many of whom were unable or unwilling to invest in adequate pumping and hauling machinery and suitable treatment plants for the pyritic ore. With the exception of Harden and McMahon's Reef, these small scale mining enterprises existed on all the fields, including Major's Creek. Tributing was sparingly and was usually associated with high, rather than low returns. In common with alluvial mining, persistence and perseverance were common traits, and there was a continual, albeit limited, reef mining presence throughout the Southern Mining Region for most of the period.
Chapter 4.  

Base metal mining

The base metal fields in the Southern Mining Region differed considerably from most gold fields in technology, capital requirements and longevity, although there was some similarity with the funding needs of the dredging fields and the technology requirements of the chlorination plants. More important and profitable fields, such as Currawang, Captain's Flat, Frogmore, Kangiara and Kyloe, lasted for long periods, in some cases for 15 years or more. (Appendix Two. Timelines—Base Metal Mining) But no one field lasted throughout the entire period, and many only lasted for a few years. The main base metals changed over the study period, with copper mining predominating from 1850 to 1885 and 1893 to 1899, silver mining predominating from 1886 to 1893, and a mixture of the two existing from 1900 to 1914.

Because the ore was often complex, expensive processing facilities had to be built. Consequently, large amounts of capital had to be found and the successful fields became the province of companies, many of which were large and heavily capitalised. Some of them were listed on the Stock Exchange and attracted overseas capital. There was, therefore, little scope for the working miner or lone fossicker, other than on small or new fields, or where tribute arrangements applied. Base metal fields were much more subject to fluctuations in market demand and prices than the gold fields. Ore prices were affected by industrial demand, which meant that in times of global recession as in the 1890s, base metal ventures were part of the problem rather than the solution.

The copper boom: 1850-1885

Base metal mining in this period was influenced primarily by economic factors such as metal prices and costs, although technological limitations, unfavourable weather conditions, bad management and mining practices were also important. There was, for instance, often a lack of systematic mining and a too frequent recourse to investment in plant and equipment ahead of proving the ore reserves.¹ Between 1850 and 1865 there were a number of ventures that did not develop beyond discovery and initial development, which to an extent illustrates Blainey’s point that discovery and exploitation were two different processes.² The latter was dependent upon a range of other factors such as capital, favourable metal prices, transport, technological expertise and the absence of more attractive investment opportunities. In the period before 1865 gold was obviously a far greater attraction than base metal mining. Contrary to Butlin’s pattern of growth and decline, the period from 1865 to the late 1870s was a boom time for base metal mining in the Southern Mining Region.³

The Good Hope copper lode on the South West Slopes was worked as early as March 1849, but work did not recommence until the early 1860s, when at one stage 18 men

¹ J.E. Carne, The Copper Mining Industry and the Distribution of Copper Ores in New South Wales, Department of Mines, Geological Survey, Mineral Resources No.6, Sydney, 1908, pp.21-23.
were employed at wages of between £1 10s and £2 10s a week.⁴ At Wallah Wallah, copper mining commenced in late 1850 and by August of the following year 20 men were employed.⁵ Although a substantial infrastructure was erected, the cost of labour and cartage and the inability to attract expertise were major constraints and later that year the mines were closed.⁶ The Primrose Valley silver, lead and copper mines in the Southern Tablelands were opened in May 1851, and although £300 was spent on development they were also soon abandoned.⁷ At Currawang, copper deposits had been known to exist in 1853, but the high cost of transport resulting from the diversion of resources to gold mining prevented their earlier development.⁸ Anecdotal evidence suggests that the copper deposits at Frogmore were also known of in the 1850s.⁹ At both locales the deposits were found on grazing land and were, therefore, highly visible.

Price movements were an important factor influencing the subsequent development of a number of base metal mines. For example, copper prices per ton of matte, regulus or refined ore in the years 1858 and 1869 (the only years in which production was recorded before 1870) were £45.2. However, from 1870 to 1877 copper prices ranged between £78 and £87 a ton. The price received for copper ore from the Currawang mine rose from £55 a ton in 1867 to £67.5 in 1870 and £96.7 in 1873.¹⁰ Conversely, prices could fall as sharply as they rose, with consequent pauses and declines in mining activity. In 1878, copper prices fell to £68 a ton, and thereafter were between £61 and £72, before falling to £57 in 1884 and £42 in 1886.¹¹ With prices at high levels during the late 1860s and early 1870s, the substantial amounts of capital needed for mining and processing were soon found. The effects of the business cycle downturn between 1867 and 1871 and the declining attractions of alluvial gold mining would have assisted this process.¹²

The two most successful copper mines in the region were at Currawang on the Southern Tablelands and Frogmore on the South West Slopes. In 1865 between 60 and 70 men were employed at Currawang, and in August of that year a prospectus was issued for the Currawang Copper Mining Company, with a capital of £60,000.¹³ By 1866 there was a considerable establishment of workshops and a substantial investment in gold recovery machinery.¹⁴ The mine was very profitable, for later that year a ten per cent dividend was declared.¹⁵ In early 1868, 125 men were employed at the mine and others were engaged in cutting and carting timber.¹⁶ Some properties were also bought with the intention of harvesting the timber for the smelters.¹⁷

---

⁵ Goulburn Herald, 19 October 1850, 2 August 1851.
⁶ Goulburn Herald, 22 May 1872.
⁷ Goulburn Herald, 10 May 1851.
⁸ Goulburn Herald and Chronicle, 8 March, 1 April 1865.
¹⁰ Registrar General, Statistical Register of NSW, Sydney, various years.
¹¹ Appendix Three, Mineral Production And Prices – Copper, 1858-1914.
¹³ Goulburn Herald and Chronicle, 9 May, 9, 12 August 1865.
¹⁴ Goulburn Herald and Chronicle, 27 June 1866, 19 September 1866; Carne, The Copper Mining Industry, p.341.
¹⁵ Carne, The Copper Mining Industry, p.341.
¹⁶ Goulburn Herald and Chronicle, 18 July 1868.
¹⁷ Discussions with Cedric Old and Kevin Byrne, Currawang, 1989.
In 1868 the company refused to reimburse Eynon Deer for contract work, causing him to suspend work on erecting the smelting works and other plant and in smelting the ore. The company was subsequently wound up, with Deer eventually becoming lessee of the mines with all machinery and apparatus. At first Deer worked with ten partners, six of whom were miners and four of whom were smelter men. After 17 months their interests were sold to the Phoenix Company, with Deer maintaining an interest in the company and managing the works. It is clear that there had been some poor management decisions in these early years. Heavy investment in gold recovery equipment came to naught, and much of the copper ore raised for processing had been of a very poor quality.

Early in 1871, 110 men and boys were employed, including those engaged in obtaining wood for the furnaces, and by November of that year, 140 were employed. By the following year the Phoenix was clearly very profitable, and the poor early practice of taking out only the richest ore had been corrected. A constant problem at the mine was the difficulty arising from timber shortages caused by the bad weather, which often made the bush tracks impassable for the wood carting teams. This problem was particularly severe in late 1870, causing the furnaces to be extinguished and relit at considerable expense. The problem also recurred in subsequent years. For this reason large quantities of timber were kept on hand to ensure the continuous operation of the furnaces. By late 1871 between 1,400 and 1,600 tons of timber were used monthly, and the timber supplies covered several acres.

The mines were shut down in 1875 before their purchase by the Esk Company later that year. At the time it was stated that if the mine at its opening had been conducted with the same care and economy as had been done more recently, then it might have been in a more flourishing condition. Even so a reasonable profit had been made in the previous half year, notwithstanding the low yields. By November 1878 underground work ceased because of the large fall in the price of copper, and by March the following year the mine was closed. The mine had been expected to pay its own way, and this had been achieved by shedding labour and gutting the workings without regard to ongoing maintenance or safe working conditions. Worn out equipment was not replaced, and at the conclusion of operations the engine shaft was full of water and the drives clogged with earth.

Mining operations recommenced in early 1880 under the auspices of the Currawang Copper Mining Company, a co-operative venture of local miners. Considerable rehabilitation work was undertaken, and by early the following year a new furnace had been built and four others, comprising a roaster, a refiner and two furnaces, were in good

---

23 *Goulburn Evening Penny Post*, 20 September 1873, 6 October 1874.
25 *Goulburn Evening Penny Post*, 21 September 1875.
26 *Goulburn Herald and Chronicle*, 22 September 1875.
working order, and two tramways had been erected. From January to the end of April 17 to 21 men were employed, and to the end of July between two and six men were employed daily. By January 1882, however, the company had been wound up. The major problem was the lack of timber and the consequent inability to keep two furnaces working, for it was impossible to pay expenses with only one furnace operating. In addition, the accessible ore was low yielding. The better ore was in the old mine workings, which were still flooded.

With the exception of the period of cooperative working in 1870 and 1871 and post 1880, all of the miners were wage employees. The wage rates were on a par with the maximum rates paid for town based workers in these trades, and well above those quoted for country based workers. In 1868 the wages of the skilled miners, who were all working on contract, and tradesmen such as blacksmiths, carpenters, were £2 10s a week. Labourers could earn regularly 5s 10d a day and boys from 14 years old to 17, £1 a week. No persons under 20 years of age were employed underground. In 1871 the average wage bill for all employees was about £1 16s.

In 1870 and 1872 copper mining commenced in earnest at a number of locations on the South West Slopes, for example, Keny, Lang's Creek, Hovell's Creek and Frogmore. One of those involved in the Keny venture was Eynon Deer from Currawang. In November 1874 the Frogmore mines were leased on tribute for 14 years to his brother, John Deer, who was soon joined by Eynon, who had by then left Currawang. By the following year one smelting furnace was complete and preparations were in hand for two further furnaces. There were between 30 and 40 workmen employed, of whom about 12 were miners. By 1876 there were four mine shafts and an engine had been erected to drive machinery for hauling, pumping and crushing. The ore was, however, refractory and needed crushing and washing. It was also intended to erect another smelting furnace for the treatment of ore from the adjoining mines of John Sheedy. Exclusive of wood cutters, about 50 men were employed.

Production problems arose in 1877 as a result of the scarcity of timber and the high cost of forage. However, there were about 90 men employed at the Deer mine and three furnaces were in constant operation. On Sheedy's property there were about 40 men employed and one furnace at work with plans for another. By June 1878 only one smelting furnace at Deer's mine was operating, the owners preferring to leave the ore in the mine rather than work it at its then low price. (Fig.4.1) At Bensusan's mine, which had been leased from Sheedy, arrangements were under way for the ore to be smelted by the Deer Brothers, but concerns at the continuing low price of copper resulted in the closure of the mine later that year.

---

29 Goulburn Herald, 29 January 1881.
30 New South Wales Government Gazette, 29 March, 26 July 1881.
31 Goulburn Herald, 29 January 1882.
33 Frogmore Centenary Committee, Frogmore Public School Centenary 1875-1975, Boorowa, 1975, p.16. The only verified reports commence in 1872, though they also indicate that mining, or at least prospecting, had commenced earlier. Town and Country Journal, 27 July, 21 September 1872.
34 Yass Courier, 19 July 1872.
35 Burrowa News, 14 November 1874.
36 Burrowa News, 7 August 1875.
37 Burrowa News, 27 May 1876.
38 Burrowa News, 7 April 1877; Goulburn Herald and Chronicle, 1 September 1877.
39 Town and Country Journal, 29 June 1878; Burrowa News, 4 October, 8 November 1878.
The next few years saw a significant corporate reorganisation of the mines. In 1879 the new owners of Bensusan’s mine let it on tribute for 12 months. At the Deer mine, as a result of the continuing low price of copper, the reduced work force was engaged in opening out the mine rather than working for immediate profit. By December copper was at a ‘fair price’ again, and by 1880 preparations were in hand to work the mine on a larger scale. A considerable number of shares in the new company, the Froogmore Copper Company, were to be owned by the employees. By the middle of 1881, the Deer mine was again fully operational, and by early 1882 one furnace was at work, a quantity of second grade ore was ready for further treatment and a sulphuric acid chamber was under construction. A new lode was subsequently discovered and a new machine erected for dressing the poor ores. The new lode did not live up to expectations, however, and by mid 1884, the concentrating plant had been idle for four months owing to the severe drought conditions. During the six months to January 1885 only one furnace had been used and the wet process had been abandoned, a defect apparently causing the wastage of much of the copper. Because of the low price of copper the mine was closed.

Other base metal mining ventures (not all of which were copper) to emerge in this period were at Good Hope, Woolgarlowe and Bogolong on the South West Slopes, and Primrose Valley and Mulleno on the Southern Tablelands. At Good Hope mining recommenced in 1865 and 17 men were employed, but by the following year all efforts were concentrated on the rich lead deposits at nearby Woolgarlowe. A smelter furnace was built and 15 men were employed on the various works, earning from £1 10s to £3 a week. The smelter was a failure, however, and subsequent efforts to raise capital were unsuccessful.

By June 1869 operations at Woolgarlowe recommenced, and early the following year a substantial complex had been constructed, which included brick kilns, brick sheds, a Chilian crushing mill for making bricks, charcoal kilns, a ten head stamper, four concentrators, slime pits and a settling pool. Three furnaces were also in the course of erection, and there were 28 men employed at the mines and another 35 engaged on the various works. The first smelter furnace was built in March and by April a second furnace was nearly ready. (Figs 4.2, 4.3) Massive flooding in May, however, caused substantial losses and dislocation, including the destruction of two of the furnaces. Although the works were reopened later that year the cost of relocating the plant would have been prohibitive, and early in 1871 the company was wound up.

At Bogolong, the Bogolong Iron Mining Company was floated in 1873 with an initial capital of £1,200 for the purpose of exploiting local iron ore deposits. A blast furnace

---

40 Burrowa News, 6 June 1879.
41 Burrowa News, 29 October, 12 December 1879.
42 Burrowa News, 8 April 1879.
43 Burrowa News, 5 August 1881; Carne, The Copper Mining Industry, p.345, 348.
44 Burrowa News, 5 October 1882.
46 Yass Courier, 23 December 1865, Goulburn Herald, 28 November 1866.
47 Yass Courier, 23 February, 30 March, 14 September 1867.
48 Yass Courier, 1 June, 16 July 1869, 28 January 1870; Town and Country Journal, 12 February 1870.
49 Yass Courier, 22 March, 19 April 1870.
50 Yass Courier, 3 May 1870.
51 Yass Courier, 29 July, 4 October 1870; Goulburn Herald and Chronicle, 8 February 1871.
was constructed and a blower installed, but because of difficulties with the fire bricks, operations ceased after two smelts. The Primrose Valley mines were reopened in 1868 by local and Sydney based investors and steps taken to work the mine and employ a batch of Cornish miners. It was decided to form a company with capital of up to £20,000, and although some infrastructure was erected, by 1869 operations had ceased. At Mulloon, copper mining commenced in 1870 and by the following year sixteen men were employed. The early yields were very high, but a scheme to issue 30,000 shares at £1 each was unsuccessful. Nevertheless, by August 1872 between 20 and 22 men were at work, with more employed in the following month. A reverberatory furnace was operational by the middle of 1874. By the following year, however, the plant, machinery and leases were sold and the company wound up.

Silver and copper: 1886-1899

This period is characterised by the rise of Captain’s Flat as a major producer of silver and copper, and the ultimate collapse of all base metal mining ventures before the turn of the century. The severe downturn in the business cycle in the early 1890s did not encourage new ventures as it had done before, for it had a depressing effect on demand and employment and led to generally lower base metal prices. Silver ore prices rose rapidly from 1882 to 1886, to reach a high of £61.1 a ton. These prices encouraged the development of a number of silver mining ventures in the Southern Mining Region, but by 1898 silver prices had fallen to a mere £4.1 a ton. There was a limited recovery in copper prices from 1888 to 1890, but by 1893 prices had fallen substantially to £34 a ton. By 1896 prices had risen to £45 a ton, recovering further to reach a peak of £72 in 1899. Another factor affecting base metal mining during this period was the use of inappropriate technology. Unlike the gold fields, the prevailing drought conditions in much of the 1880s and 1890s had only a marginal effect on production. Heavy rains were possibly a greater constraint, for they damaged the already inadequate road systems and often led to delays in receiving raw materials and disruptions in production.

A number of base metal mines were unprofitable almost from the outset, although for a time they employed small numbers of miners. Such mines were at Breadalbane, Curra Creek, Cullulla, Paddy’s River and Wyambene, and again at Mulloon, Primrose Valley and Woolgarlowe. At Mulloon copper mining recommenced in 1889 and some ore was sent to Dapto for smelting. Silver and lead ore were also raised at Primrose Valley in 1897. The Curra Creek copper mines were opened in 1890, and at nearby Cullulla in early 1893 a rich lead and silver find led to an unsuccessful proposal to float a large company and to erect smelting facilities. Mining recommenced at Woolgarlowe in 1886 when 20 men were employed and the ore was sent to South Australia for

---

53 *Queanbeyan Age*, 29 July 1868.
54 *Queanbeyan Age*, 30 December 1868, 25 February 1869.
55 *Queanbeyan Age*, 23 March 1871; *Town and Country Journal*, 4 March 1871.
57 *Queanbeyan Age*, 21 February 1874; *Goulburn Evening Penny Post*, 16 May 1874.
58 Information provided by Robert Scott, 1993.
59 Appendix Three, *Mineral Production And Prices – Silver*, 1882-
60 *Goulburn Evening Penny Post*, 1 August 1899.
61 *Queanbeyan Observer*, 24, 31 August 1897.
Fig. 4.1. Copper mining and smelter site, Frogmore. J.E. Carne. *The Copper Mining Industry and the Distribution of Copper Ores in New South Wales*, Department of Mines, Geological Survey, Mineral Resources No.6, Sydney, 1908.

Fig. 4.2. Lead smelter site, Woolgarlowe, slag heap in foreground. *Town and Country Journal*, 12 February 1870. Permission of the National Library of Australia.
Fig. 4.3. Remains of smelter chimney, with Brian Drew, Woolgarlowe. Normally this site is under the waters of Burrinjuck dam. The shore line is in the background.

Fig. 4.4. Remains of reverberatory furnace, Mulloon.
Fig. 4.5. Lake George Mines smelter, Captain's Flat, slag heap in foreground. *Town and Country Journal*, 7 August 1897. Permission of the National Library of Australia.

Fig. 4.6. Smelter site, Captain's Flat. *Sydney Mail*, 3 July 1897. Permission of the National Library of Australia.
Fig. 4.7. Reverberatory furnace, Kyloe. *Australian Mining Standard*, 2 March 1910. Permission of the National Library of Australia.

Fig. 4.8. Arsenic collecting chambers, Tolwong, Shoalhaven River.
processing, but by the following year this venture had ceased.\textsuperscript{63} The Wyambene silver lode, south of Braidwood, was possibly the most speculative. Reports in late 1888 indicated that the lode was very rich, and a company was formed with plans to purchase and effect machinery. Within twelve months the venture had been wound up.\textsuperscript{64}

At Boro, Bredbo and Currawang, it appeared for a time as if major developments would get under way. Silver mining commenced at Bredbo in 1886, and substantial buildings, including a storeroom, powder magazine, smithy and manager’s residence, were built.\textsuperscript{65} Mining was only able to continue until 1890, however, with aid from the Prospecting Vote.\textsuperscript{66} At Boro, silver mining commenced in 1888, and by 1890 many investors, mining experts and surveyors had visited the field and claims had been taken up over a large area. There were 120 men on the field.\textsuperscript{67} By the following year, however, mining was at a standstill because of the number of claims that were held by speculators who were not working them.\textsuperscript{68} The main problem was that the ore was not rich enough and that it ran out at depth. There was intermittent activity in succeeding years, but by 1893 the main period of mining was over.\textsuperscript{69}

Prospecting recommenced at Currawang in 1894, and by 1896 mining prospects were regarded very favourably, largely because of recent rises in copper prices. It was also felt that access to improved technology such as water jacket furnaces, rather than the reverberatory furnaces, would enable the economic treatment of lower yielding ores.\textsuperscript{70} Ten men were engaged in erecting the mining plant, and six men were employed in getting timber, but by January the following year the mine had closed and most of the machinery was sent to Captain’s Flat.\textsuperscript{71}

Two slightly more successful ventures were at Frogmore and Wallah Wallah. As a consequence of vastly improved copper prices work at the Frogmore copper mines resumed in 1888.\textsuperscript{72} Forty men were employed in that year, but early the following year, the mine was closed and most of the men discharged because of a sudden fall in copper prices.\textsuperscript{73} Mining recommenced in 1890 and first class ore was raised.\textsuperscript{74} Smelting was resumed, although it only continued for three months.\textsuperscript{75} Early the following year there were machinery breakdowns and problems with the furnace, and in April the mines were closed again.\textsuperscript{76} At Wallah Wallah, silver mining commenced in 1889, and between eight to ten men were employed at the main complex.\textsuperscript{77} The mine paid its way, despite the

\begin{itemize}
\item \textsuperscript{63} \textit{Yass Courier}, 28 August 1888; Standing Committee on Public Works, ‘Barren Jack Storage Reservoir’, p 250, pp.409-410.
\item \textsuperscript{64} \textit{Braidwood Dispatch}, 19 September 1888, 27 July 1889.
\item \textsuperscript{65} AR, 1886, p.72, p.74; \textit{Cooma Express}, 15 August 1888.
\item \textsuperscript{66} AR, 1889, p.90; 1890, p.81.
\item \textsuperscript{68} \textit{Goulburn Evening Penny Post}, 22 September 1891.
\item \textsuperscript{69} \textit{Town and Country Journal}, 10 September 1893.
\item \textsuperscript{70} \textit{Goulburn Herald}, 22 August 1896.
\item \textsuperscript{71} \textit{Goulburn Herald}, 28 February 1894, 6 November 1896, 14 January 1897.
\item \textsuperscript{72} Carne, \textit{The Copper Mining Industry}, p.347.
\item \textsuperscript{73} \textit{Burrowa News}, 29 March 1889.
\item \textsuperscript{74} \textit{Burrowa News}, 16 May 1890.
\item \textsuperscript{75} Carne, \textit{The Copper Mining Industry}, p.347.
\item \textsuperscript{76} \textit{Burrowa News}, 27 February, 10 April 1891; Carne; \textit{The Copper Mining Industry}, p.347.
\item \textsuperscript{77} AR, 1889, p.81.
\end{itemize}
limited scale of operations and the use of primitive technology. However, by 1892 mining had ceased because of the sudden collapse in silver prices.

The main base metal mining venture was at Captain’s Flat. By 1885 silver and lead were found in payable quantities, and the focus of operations shifted from gold to silver. Early the following year there were 300 miners at the two main operations, the El Capitan and the Kohinoor, both of which were equipped with blast furnaces. Many of the miners had worked in Nevada and Sunny Corner, while others were from Araluen and other mining centres. The mining operations were, however, plagued by intermittent shut downs of the furnaces, sometimes for repairs and at other times because of shortages of raw material such as timber, coke and iron. The latter was a consequence of the teams bogging down on the bad roads, as most materials were conveyed by bullock dray from the railhead at Bungendore.

Another difficulty was lack of capital. The mines were at a standstill during 1887 for that reason. Disruptions were also caused by the occasional attempts to reconstitute the companies. In early 1888 no smelting was undertaken at the El Capitan pending steps to acquire more capital. The mine was eventually reconstituted a few months later as the Commodore, and was managed jointly with the Vanderbilt, both companies using the same assaying and smelting facilities. Mining at the Kohinoor was also suspended following the termination of a tribute agreement, but later that year it was acquired by a company with substantial capital resources, and active work resumed soon thereafter.

1889 was a relatively prosperous year. Work had been carried on very successfully at the Commodore with a large amount of ore delivered to the furnaces, and smelting had been conducted more or less continuously at the Kohinoor, where an extra water jacket smelting furnace had been erected. At the Kohinoor, a reverberatory furnace was also under construction to treat the sulphide ores, as the silver ore was now regarded as very refractory. A 20 head battery and a Huntington mill were also been erected to treat the large body of gold bearing ore. When in full work it was expected that this mine would employ about 250 men.

By early 1890, the increasingly refractory nature of the sulphide ores had led to a change in the method of treatment. The silver required roasting prior to smelting, and operations were to be curtailed until such time as a calciner was erected. A number of roasting stalls were built, but they were very dependent on dry weather, and they were not particularly successful. At the Commodore Vanderbilt a second hand Desulphurising furnace had been bought, but it too had not been successful. These vicissitudes continued into the following year, and by March the Commodore Vanderbilt was smelting with only one furnace, with another lying idle. At the New Kohinoor the only processing was the extraction of gold. It was commented that both companies had

---

79 Burrowa News, 17 June 1892.
80 AR, 1885, p.77.
81 Queanbeyan Age, 29 April 1886.
82 Queanbeyan Age, 1 July 1886, 29 March 1887; Braidwood Dispatch, 24 July 1889.
83 Queanbeyan Age, 11 November 1887.
84 Queanbeyan Age, 1 July 1886, 29 March 1887; Braidwood Dispatch, 24 July 1889.
85 Queanbeyan Age, 29 February 1888.
86 AR, 1889, pp.91-92.
87 Queanbeyan Age, 5 February 1890.
worked their mines in the wrong direction, relying on the gossan to make lead bullion as at Broken Hill and Sunny Corner. If they had proven the mines by testing if there was copper, which there was, then they would have only had to decide whether to smelt with the blast furnace or the reverberatory furnace to make copper matte. But there had been a misconception of the nature of the ore, the mode of treatment, extravagance in the construction of the works and errors of judgement in laying them out.88

In 1893 steps were taken to rectify the earlier production problems. New furnaces and treatment methods were introduced by both companies and there were about 200 miners employed in both ventures, with the Commodore Vanderbilt now reconstituted as the Lake George Copper Mining Company. The main mineral now extracted was copper rather than silver, and there were about 25 teams on the road carrying coke from Bungendore.89 Towards the end of the year the furnaces were running continuously and progress had been made at the Lake George mines in the erection of a new copper treatment plant. At the New Kohinoor a new smelter had been blown in and more men were employed in early November. The ore was now roasted in a calciner prior to smelting.90 By late 1894, however, both mines had shut down their furnaces pending amalgamation.91

By the middle of 1896 Lake George shares had risen sharply on the share market. As a result of the sharp increase in copper prices, mining was now to be directed primarily to copper. Steps were also to be taken to reconstitute the company. It had been concluded that the property must be worked on a very large scale, with a plant capable of treating a much larger quantity of ore and reducing it to a much richer product than at present. A large London based company was to provide the necessary working capital, and it was predicted that there could be 1,000 men and boys employed by early 1897.92 A direct pyritic smelting process similar to that at Mt Lyell was to be adopted, with the plant having a smelting capacity of 2,500 tons per week as against the present output of 625 tons. It was expected that the mine would also be a large gold producer, and a large cyanide plant was also to be erected.93

The erection of plant and equipment proceeded steadily throughout the early part of 1897. However, not all the miners shared the company’s confidence, for while men were flocking to the Flat from all parts, a good many of the old miners were leaving for Sydney where they readily obtained work on the sewers at a much better rate of pay.94 In March, 20 left for Sydney in one week.95 The plant was extensive. It comprised a smelting plant with a large smoke stack and a tramway between Elliott’s shafts and the smelters with a viaduct across the Commodore Gorge. A blacksmith and engineer’s shop were constructed near Elliott’s shaft, and there were four furnaces each capable of smelting from 100 to 120 tons and three hot air stoves.(Figs.4.5, 4.6) Four hundred men were directly employed in and about the mines, with this number to increase when all the furnaces were blown in.96

88 AR, 1890, p.97.
89 Cooma Express, 12 August 1893.
90 Braidwood Dispatch, 28 October, 11 November, 9 December 1893.
91 AR, 1894, p.27.
92 AR, 1895, p.24; Queanbeyan Age, 18 July, 15 August 1896.
93 Queanbeyan Age, 9 September 1896.
94 Queanbeyan Age, 27 February 1897.
95 Queanbeyan Age, 13 March 1897.
96 Queanbeyan Age, 5 May 1897; Town and Country Journal, 7 August 1897.
This new found prosperity came to a sudden end, for a year later all miners had been retrenched and the officials given four weeks notice. Mining was to continue in the northern section pending the future of the pyritic treatment process. There were now only about 80 men employed in smelting and these would only be needed until the present stocks of coke and limestone were consumed. It appeared that the company had not verified the quality and quantity of the ore and the adequacy and efficiency of the reduction process. By October large numbers were leaving the district. There were representations to the local member from the progress committee protesting against the suspension of labour to the company as it was considered that the leases would yield from one to five ounces of gold per ton, which would give employment to a number of men. This matter was raised in Parliament and suspension was granted for two months to allow the Company to experiment with new treatment methods.

By early December mining and smelting had recommenced, and several months later the Company's shares rose sharply. However, by late 1899 a large number of hands were again laid off. The sulphide ores were now of too low a grade to warrant smelting, and the furnaces were closed down. Only a few miners were working, and they were engaged in erecting a cyanide plant, the future clearly resting where it had started, with gold mining and processing. There was still a strong feeling that the Flat would recover in a few months, however, the reality was that base metal mining was now finished.

Renewed hope and dashed dreams: 1900-1914

This period was characterised by renewed optimism as base metal prices recovered some of the ground lost over the last decade. There was a brief recovery in copper prices from 1905 to 1907 and some recovery in silver prices. A number of copper mining ventures recommenced in this period. Ultimately they were unsuccessful, but that they were contemplated at all can be attributable directly to improved metal prices. There was a brief flurry of activity at Primrose Valley in 1902, at Curra Creek and Cullah in 1906, and again at the latter in 1912. Mining recommenced at Froghmore in 1906 and by the following year there had been a considerable investment in opening the mines and installing plant and equipment, with a view to erecting furnaces. However, the subsequent fall in the price of copper dissuaded any further developments. The Mulloon mines were reworked on tribute by two miners in 1906 and 1907, who sent small parcels of high grade ore to Lithgow for processing. In 1912 the improved state of the copper market led to a revival of operations, but the ore raised was not sufficient to cover expenses, and by 1914 the mines were closed.

At Breadalbane, Wallah Wallah and Tolwong initial developments were more hopeful. The Breadalbane copper mines were worked between 1906 and 1908, with aid from the Prospecting Vote. In 1909 a blast furnace and plant valued at £4,000 were erected to

---

97 Queanbeyan Age, 1 October 1898.
98 Braidwood Dispatch, 26 October 1898; Queanbeyan Age, 22 October 1898.
99 Queanbeyan Age, 3 December 1898, 5 April 1899.
100 Queanbeyan Age, 3 September 1899; Braidwood Dispatch, 2 September 1899.
101 Queanbeyan Age, 7 October 1899.
102 AR, 1905, p.45; 1906, p.48; 1907, p.54; 1908, p 49; 1912, p.80.
103 AR, 1906, p.48; 1907, p.54; 1908, p.49; Carne, The Copper Mining Industry, pp.349-350.
104 AR, 1906, p.48; 1907, p.53.
105 AR, 1912, p.51; 1914, p.54.
106 AR, 1906, p.48; 1907, p.54, 1908, p.49.
treat silver ore from Kangiara, in conjunction with local ores, but smelting was only carried on for a month.\textsuperscript{107} Nine men were employed in 1911, and a new hauling plant, engine and poppet legs were installed.\textsuperscript{108} The leases were acquired by Pyrites Limited in 1913, which had also commenced mining at Kangiara.\textsuperscript{109}

Silver mining at Wallah Wallah was conducted by the Walla Walla Silver and Lead Mines, with capital of £15,000, and the West Walla Company.\textsuperscript{110} By 1901 mining was conducted by the Walla Walla Tribute Company. The plant included a steam winding and pumping plant, Hartz jig, Wilfley concentrating table, a ten head stamp mill and a dam.\textsuperscript{111} By 1902, between 16 and 20 men were employed. The ore was sent to Cockle Creek for processing at a good profit and it was proposed to erect a large smelting plant on site with over 100 men employed. However, these plans did not eventuate.\textsuperscript{112} By 1904 a new company had erected a water jacket furnace, but again little work was done and efforts to obtain sufficient capital to equip and maintain the plant were unsuccessful.\textsuperscript{113} A rise in the price of silver stimulated operations in 1905, and by the following year smelting had commenced. This was, however, unsuccessful for technical reasons.\textsuperscript{114} Further limited work continued in subsequent years, but the processing costs at Cockle Creek were too high to allow the ore to be sent away for treatment and proposals to erect a concentration plant did not come to fruition.\textsuperscript{115}

At Tolwong, an arsenic, tin and copper lode was discovered in 1904, and mining by the Tolwong Mineral Company, which had an issued capital of £60,000, commenced in 1907. This site was located in a precipitous gorge of the Shoalhaven River and aerial cable ways were built from the tableland to the processing site and from the processing site to the mines. The crushing plant consisted of a rock breaker and rollers powered by an electric motor, and the processing plant included a roasting or calcining furnace, consisting of 15 partial ovens, arsenic collecting rooms and a reverberatory furnace.\textsuperscript{(Fig.4.8)} By 1910 sixty men were employed and smelting operations had commenced. However, by the following year it was evident that there were difficulties in the processing of the ore, which was very refractory, and smelting ceased. After the expenditure of £23,000 on plant and equipment, less than £1,000 of ore had been sold.\textsuperscript{116}

The only two successful mining ventures in this period were at Kyloe and Kangiara. At Kyloe the copper lodes had been worked in the past by small parties whenever the market price of copper had been high enough, and in 1904 systematic mining commenced, with occasional help from the Prospecting Vote.\textsuperscript{117} Large scale exploitation of the deposits did not begin, however, until the purchase of the property by Kyloe Copper Mines Limited in 1907. In that year substantial development work was undertaken and a ball mill and concentrator were erected.\textsuperscript{118} A reverberatory furnace and MacMurtry calcining pot were erected in 1908, but the concentration mill proved

\textsuperscript{107} AR, 1909, p.49.  
\textsuperscript{108} AR, 1911, p.53; 1912, p.50.  
\textsuperscript{109} AR, 1913, p.53.  
\textsuperscript{110} AR, 1900, p.52.  
\textsuperscript{111} AR, 1901,  
\textsuperscript{112} Yass Courier, 24 January, 14 February 1902.  
\textsuperscript{113} Yass Courier, 5 January 1904; AR, 1904, p.43  
\textsuperscript{114} AR, 1905, p.41; 1906, p.42.  
\textsuperscript{115} AR, 1907, p.46; 1908, p.41; 1909, p.43; 1910, p. 43.  
\textsuperscript{117} Carne, The Copper Mining Industry, p.383; AR, 1905, p.45, 1906, p.48  
\textsuperscript{118} AR, 1907, p.53.
unsuitable and it was closed down. An ore dressing mill for the treatment of the lower grade ore was installed the following year.

By 1910 the Kyloe mines were assuming considerable importance in the district, for there was a total work force of 195, of whom 150 were employed at the mine. There were, in addition, 30 teams carrying ore to Cooma, and 12 teams belonging to wood contractors. The main shaft had been sunk to 124 m, and a compressed air pump, new hoisting machinery and a rock drill plant installed. Near the main shaft large storage bins had been erected, three for high grade ore and one for milling ore. The coarse high grade ore was roasted and then smelted in the reverberatory furnaces and the fine ore calcined in a McMurtry pot. (Fig.4.7) Processing and handling of the milling ore was complex, and involved crushing by a rock breaker and Cornish rolls. The concentrates were sold to the Customs Works. Limestone was obtained from Cooma and firewood was obtained locally.

During 1911, production problems began to emerge, for the main drive had been sunk to the 183 m level without success. In addition, the cartage of ore to Cooma had been seriously hampered by the condition of the roads. Nevertheless, the mine had a fairly successful year, and the high grade ore was sold as concentrates rather than smelted at the mine. A flotation plant was also installed for treating the ore prior to concentration. In 1912 the main shaft was sunk to the 213 m level and the drives were extended. However at the year’s end payable ore could not be located and in early 1913 the mines were closed.

Silver, copper and gold deposits were found at Kangiara in 1901, and by late 1904 good returns were reported. The main claim was the Prospectors, where there were five men working, and by 1907 it was the only claim returning anything of consequence. Although the owners had only sunk to the 18 m level and had confined their activities to the easily worked veins, they had extracted ore valued at £17,000. The Prospectors mine was purchased by Kangiara Mines Limited in 1908, and by the end of that year there had been a substantial investment in extractive plant and equipment. The silver lead ore was sent to Port Kembla for treatment and the copper, gold and silver ore was sent to Cockle Creek. By the following year a water-jacket furnace had been erected, however, this must have been unsuccessful, for later that year the ore was sent to Breadalbane for smelting, together with ore from the Kootra mines. Several other mines were also in operation, the most significant of which was the White Flag, where the plant included a Huntingdon mill, card concentrating table and rock breaker.

By 1913 the mines were in difficulties, and the failure to locate a good lode caused the main mine to shut down by the middle of the year, at which time only four men were

---

119 AR, 1908, p.48.
120 AR, 1909, p.48.
121 F. Armstrong to W. Varley, Postmaster General’s Department, 15 June 1910, SP 32/1, Box 304, NAA, Sydney.
122 Australian Mining Standard, 2 March 1910.
123 AR, 1911, p.53.
124 AR, 1912, p.53; 1913, p.52.
125 Burrawa News, 24 April 1903, 19 August 1904.
126 Burrawa News, 19 March 1907, 27 November 1908.
127 Burrawa News, 27 November 1908.
128 Burrawa News, 30 April, 14 May 1909.
129 AR, 1911, p.47.
working. The miners were leaving daily for Ardlethan and other mining centres.\textsuperscript{130} By November much of the plant had been sold and most of the mine buildings pulled down and carted away.\textsuperscript{131} The same month, however, it was announced that a company was to recommence mining, and that the plant was to be remodelled and the tailings processed.\textsuperscript{132} In March the following year the mine was working under a company called Pyrites Limited, but on a more limited scale.\textsuperscript{133}

**Conclusion**

The main factors affecting base metal fields were metal prices and markets, and the availability of capital and technology. Almost all silver mining ventures commenced or were first contemplated in the late 1880s when metal prices were at a never to be repeated peak. The same phenomenon can clearly be seen with copper mining in the 1870s, late 1880s and mid 1890s and from 1905 to 1907. An additional factor may have been the downturn in the business cycle from 1867 to 1871, for a number of mining operations commenced at that time. This factor did not apply in the early 1890s, for the depression impacted severely on the demand and price for all base metals, and it was a deterrent to investment in this form of enterprise, not a stimulus. The base metal enterprises may not have been as numerous as the reef gold ventures, but generally they were far more productive and profitable and provided employment to larger numbers of miners and other workers.

\textsuperscript{130} *Burrowa News*, 18 April, 6, 27 June 1913.
\textsuperscript{131} *Burrowa News*, 4 November 1913.
\textsuperscript{132} *Burrowa News*, 28 November 1913.
\textsuperscript{133} *Burrowa News*, 20 March 1914.
Chapter 5.

Who were the miners?

In the historiography the miners are nearly always men. However, as Katrina Alfard has discussed, women participated in alluvial mining on their own account or, more commonly, with their husbands and sometimes their children, although they were ignored by the mining statisticians.¹ There is more evidence for the formal employment of children, in this instance, young boys, in mining operations, for they were used to pick the ore or drive the horses and carts, but neither children nor women worked underground in the Southern Mining Region. Only one instance of a female miner has come to hand: on the Mongarlowe field in 1892 a woman and her two daughters made an average of £2 10s a week fossicking over the old workings.² There were no doubt other instances, but they have not been recorded. Aboriginals were also miners, and they were often assisted by their women and children.³ At Caoura on the Bungonia field in 1862, the most successful among the 30 miners present were two Aboriginal families.⁴ Aboriginals were also mining on the Mongarlowe field in 1853.⁵

Yet if most miners were men, they were divided in other ways. The most obvious, perhaps, was ethnicity. The two main ethnic groups investigated here are on the one hand European miners, who were more often English and Irish, but could also be Scottish, Cornish, Welsh or continental European (most often German or Scandinavian), and on the other the Chinese miners, who usually came from southern China, in particular, Guandong Province.⁶ One of the purposes of this chapter is to consider the ways in which the practices and experiences of the two main groups were comparable, and how they differed.

Miners also differed from one another in their relationship to the labour market. They worked in one of three ways: independently on their own account, in co-operative groups, or as wage employees for companies or syndicates (Figs.5.1-5.4) Some also worked on their own or in co-operative groups as tributers. Most miners wishing to work independently almost invariably combined with other like minded men. The term ‘working miner’ was used by contemporary observers, and will be used in the discussion here to describe both those working on their own account and those working in co-

³ Braidwood Dispatch, 3 December 1892.
⁵ Goulburn Herald, 5 March 1862.
⁶ Goulburn Herald, 13 March 1852.
operative groups. Miners also differed in the nature of their work. Many of those working in the more capital intensive operations such as chlorination, cyanidation, smelting and refining and dredging, were highly skilled tradesmen. The mining work force was, therefore, rather more complex than sometimes depicted, for not everyone was a pick and shovel man.

Some historians have argued that the working miner was a fleeting phenomenon, a product of the gold rush era, and that this mode of employment soon gave way to wage employment. This chapter examines the validity of this assertion and the interrelationship between the different groups of miners and between mining and other occupations. It is suggested that working miners did not disappear, but rather, because of their independent nature, they escaped the notice of official statisticians and, therefore, of historians. Particular attention is given to the discourse on subsistence miners.

Adaptability and versatility

A number of historians have argued that miners should be viewed as part of a wider, more adaptable rural work force. Blainey referred to those who ‘alternated the seasons between mining and sheep-shearing and harvesting, and found a miner’s wage the highest’, and those who ‘owned an acre or two and cows and poultry and gladly worked intermittently in the mines’. In addition, there were thousands of miners who ‘retained the optimism of the old order’, by speculating in mining shares, while gaining the ‘regular wage of the new order’. Blainey subsequently commented that most men could be divided into two groups, those working for themselves or in the family business and those working for wages, with the two groups overlapping, and people often moving ‘from wages to independence or back to wages’. Many small farmers or their sons would leave home to earn money by shearing sheep or working for wages for a few months in gold-mines, or working as railway navvies.

Other historians have also commented upon the adaptability and versatility of the rural and mining work force. John Merritt stated that in the 1870s and 1880s, the nomadic bush workers ‘could turn their hands to many things: fencing, dam sinking, bush carpentry, building roads and railways, rabbiting, droving, hunting dingoes or harvesting wheat’. In addition, ‘Clearing, earth moving, building, usually ceased during the shearing season and contractors and their employees would seek work as shearsers or shed hands’. Mine employees and urban based workers also turned to the shed. Bolton also commented upon this phenomenon in north Queensland. Most mines had a fairly rapid turnover of employees, the men leaving their wages jobs to go mining on their own account or to undertake seasonal work in the sugar industry.

Charles Fahey has

referred extensively to the versatility of the rural labourer, although he has not mentioned their possible involvement in mining.\textsuperscript{13}

In her study of the gold and copper mining community at Bethanga in north east Victoria, June Philipp commented that the gold miners, almost all of whom were reef miners, could turn their hand to a wide variety of different tasks. She referred to them as ‘Swagmen seeking seasonal employment for wages...’, who ‘might turn their hands to other tasks and from time to time work on their own account—for example as timber splitters and carters or as prospectors. Some were smallholders, owning or leasing plots of land often located in the vicinity of gold field towns and usually insufficient to provide a living even at subsistence level’.\textsuperscript{14} Susan Lawrence has also referred to the ‘persistence of what has been identified as informal mining’, with the mining ‘restricted to short periods separated by much longer periods, sometimes as long as several years, in which miners are employed in other forms of labour, primarily farming’.\textsuperscript{15}

The relationship between labouring and mining was perhaps best described by Henry Thomas Fox, a visitor to the Major’s Creek field in early 1852. In his diary he stated that there were few who worked who did not make ‘excellent wages for labourers’, but ‘it is only for this class that the gold diggings are fitted’.\textsuperscript{16} Another statement along similar lines was made by Commissioner King before the 1852 Select Committee on the Management on the Gold Fields. He stated that while the number of miners who could not be engaged in harvesting was gradually increasing, nearly every man on the diggings at present ‘could make himself useful’ in this area.\textsuperscript{17}

This adaptability and versatility never found its way into the official statistics. Miners and other workers were categorised then, as now, into distinct occupational groups, a product of the penchant for neatness, precision and categorisation so beloved of statisticians and economists, and of the trade based nature of worker representations through unions and other employee and professional associations. In the 1871 Census it was stated that it was only possible to record one occupation for each individual. Thus if it was considered that persons were working primarily as miners or labourers they were classified as such by the Statistician and presumably by other officials, such as the wardens and registrars. The Statistician noted, however, that multiple occupations were common, and that many gold miners were also proprietors and occupiers of land.

\textsuperscript{13} Charles Fahey ‘Abusing the horses and exploiting the labourer, the Victorian agricultural and pastoral labourer, 1871-1911’, Labour History, No.65, November 1993, pp.54-74.

\textsuperscript{14} June Philipp, A Poor Man’s Diggings: Mining and Community at Bethanga Victoria 1875-1912, Hyland House, Melbourne, 1987, p.xii.


\textsuperscript{16} He commented that ‘the discomforts felt by those who had been accustomed to the comforts of a house and town life is wholly unknown to them. To this class the certainty of good wages with the not improbable chance of something handsome renders this the most adventurous work they would be employed in’. Henry Thomas Fox, Private log, 11 April 1852, Mitchell Library.

\textsuperscript{17} ‘Minutes of evidence taken before the Select Committee on the Management of the Gold Fields’, Votes and Proceedings, NSWLC, Vol.2, 1852, p.101. The statement arose following questions from the Commissioners aimed at the practicality of preventing mining during the harvesting and shearing seasons.
Then there are others, forming an important part of the working class in this country, who in the shearing season would be employed as station hands, and might at the time of the year when the Census was taken have been doing “job work” as miners, carriers, labourers on the roads & c.

Only the principal occupation followed was recorded by the Census, that is ‘the one from which each person was chiefly deriving his income at the time of the Census’. Part time or informal miners were, therefore, included in one or another employment category depending on their circumstances at the time of the Census. As Alford has indicated, women working on their own or alongside their husbands were not included at all, and it is uncertain how many Aboriginales were included. 18

Farmers and labourers were correctly classified as such for as long as they were so employed. However, this classification clearly masked the degree to which such workers were also engaged in mining activities. It has also masked the distinction between those miners working on their own account and those employed by mining companies or syndicates. Timothy Coghlan is one contemporary observer who admitted of some movement between other occupations and mining, not so much as a norm, but rather as a response to the early gold rushes or to depressed economic activity and employment generally. The implication was this was a temporary phenomenon and that in normal circumstances the persons would assume their rightful occupations. 19 If large numbers of part time miners fell into this multiple occupation category, or were in excluded categories, such as women and Aboriginales, then the official statistics have understated grossly the number of persons dependent or partly dependent upon mining for their livelihood. It would follow, therefore, that the contribution of mining, in particular, gold mining, to regional development would also be understated.

There were many examples of this part time or multiple occupation category within the Southern Mining Region, almost all of them related to gold mining. In the Braidwood and Shoalhaven District, at the height of the rush at Major’s Creek in late 1851, it was stated that many men had returned home to look after their crops rather than pay a licence fee for half a month. 20 At Araluen in early 1853 it was commented that many of the miners resided at Reidsdale on the tableland. The diggings were regarded as a spare time activity and if the miners were unsuccessful they could return to their farms. 21 On the Nerriga field all the miners at Oallen in 1856 were local farmers. 22

The same pattern emerged in subsequent periods. For instance, some members of the Hockey family mined for gold on the Nerriga field in the 1860s before establishing themselves as farmers on the Spring Creek Jacqua field and elsewhere in the district,

19 Coghlan stated that a good many miners (that is coal miners) employed themselves searching for gold in 1879 and 1880, particularly in alluvial mining, and that the gold discoveries at Temora in 1880 being attended not only by coal miners but unemployed mechanics. He also referred to the success of the fossicker’s scheme in 1893 and 1894. Timothy Coghlan, Labour and Industry in Australia. From the First Settlement to the Establishment of the Commonwealth in 1901, Oxford University Press, London, 1918, vol.II, p.1439, 1464.
20 Goulburn Herald, 8 November 1851.
21 Sydney Empire, 25 March 1853.
22 Goulburn Herald, 6 December 1856.
while others combined both activities. At Spring Creek Jacqua in December 1869 all
the miners were described as having gone harvesting while awaiting the arrival of a
crushing machine, and in 1870 most miners had left to tend their own selections while
mining matters were at a standstill. The latter comment implies strongly that most of
the miners on this field were also farmers. In the Monaro District a correspondent
commented in 1899 that at Cowra Creek many leases were worked until shearing time
when they were left dormant, and it was expected that those who remained would not
interfere with the leases in the men’s absence.

A similar pattern can be seen in the Southern Tablelands. The principal mine owner on
the Brindabella gold field was William Reid, who was also a local guest house and hotel
proprietor. In January 1862 many of the miners at Brook’s Creek travelled to
Gundaroo to assist in reaping for a few weeks as many of the farmers were short of
hands and their crops were very substantial. By 1880 the men were fossicking in the
winter and working as farm labourers or shearsers in the other months. At Mac’s Reef
the first initial gold find in 1865 was made by John MacEnally, a local free selector, who
discovered gold while working for another landowner, Cartwright, the field coming to an
end with the death of two miners, one of whom was a free selector. The Cartwright
family was also involved in gold mining at Bywong in the 1890’s. Other successful
claims on this field were held by Johnston, a railway engineer, and Lowe, a
schoolteacher. One miner raised enough money to pay the debts on a free selection,
and with the balance purchased some stock. On the nearby Dairy Creek field the main
miner was a local landowner, James Kershaw. In 1912 and 1913 the miners depended
on their savings from labouring to finance the mines.

On the Nania field near Murrumbateman there was a very close relationship between
mining and farming. In August 1872 all the hands on nearby Nania station left to take
up claims, and by November delays in obtaining assay results allowed many of them to
return to the station to help it through its busy time. Others had stopped work on their
leases to work on their farms as they could not afford to pay for labour to work the
claims in their absence. Among the miners were George Butt and George Crocker,
both of who were from local farming families. In the 1890’s, one of the main Nania
mines was on Butt’s property. One of the more successful miners on the nearby Spring
Range gold field was Southwell, a local landowner.

---

24 Goulburn Herald and Chronicle, 4 December 1869, December 1870.
25 Manaro Mercury, 13 March 1879.
26 Queanbeyan Age, 2 May, 30 June 1888.
27 Golden Age, 23 January 1862.
28 Yass Courier, 16 January 1880.
29 Queanbeyan Age, 11 November 1865.
30 Queanbeyan Age, 10 March, 17 March 1888.
32 Letter, c.1898, in possession of Lyall Gillespie, Canberra.
33 Errol Lea-Scarlett, Gundaroo, p.90, 123.
34 AR, 1912, p.14; 1913, p.15.
35 Yass Courier, 30 July, 12, 26 November 1872.
36 Jennifer Butt, Our Family Tree from Dorset to Yass, privately published, undated, pp.323-333.
37 Queanbeyan Age, 28 July 1900.
Much of this versatility was related to seasonal ebbs and flows in working patterns, a process commented on extensively by Jenny Lee and Charles Fahey.38 In the Southern Mining Region the miners supplemented their mine income by off farm work, which fortuitously in many cases, coincided with the off season in mining, that is, summer. The position of the miners became considerably more precarious, however, with the onset of severe drought conditions in the late 1870s and early to mid 1880s. Working off mine was not now a matter of choice so much as a necessity and many miners were forced to work temporarily on the roads and railways or at their previous occupations, pending good rains.

There are many instances of these developments. For example, on the Shoalhaven River gold field in 1878, the dry weather forced many miners to work temporarily on the roads and railways or at their previous occupations, pending good rains.39 In 1881 it was commented that the yields were surprisingly high given that the miners spent a large proportion of their time on their farms and on Government contracts on the roads.40 On the Mongarlowe gold field in 1880 one third of the Europeans followed other occupations during part of the year, and in 1882 most of the race holders abandoned their claims and sought employment elsewhere, particularly on the railway contracts.41 In 1883 there was ‘a regular stampede to the railway works Goulburn to Tarago’.42

Similarly, at Major’s Creek in 1878 the miners were forced to work on the roads and railways in the bush or at their former occupations. This was regarded as a temporary situation until such time as they could work their own claims.43 Those miners who were also settlers only worked during heavy rains.44 In 1883 many miners were working on the railway line and road works until the rainy season.45 At Jembacumbene in 1876 the Europeans were described as having a garden and a cow or two and struggling on by some means, many if not all of them working on the roads and taking any other job they could get. Failing this they fossicked through the old workings.46

These examples are not confined to one district or to one era or type of mining, for they span several generations over a wide geographic area, and include all types of mining.47 Miners combined mining with other forms of work, sometimes on their own account on their own farms, and at other times for other landholders or for the Government. This versatility also implies that many miners had a strong empathy with other pastoral and agricultural workers, a point also made by Philipp.48 Working ‘off mine’ was often viewed as a normal seasonal activity, which compensated for periods of dry weather in the summer months, and which took advantage of the shearing and harvesting seasons.

39 AR, 1878, p.79.
40 AR, 1881, p.60.
41 AR, 1880, p.129; 1882, p.65.
42 AR, 1883, p.78.
43 AR, 1878, p.79.
44 AR, 1879, p.119.
45 AR, 1883, pp.77-78.
46 AR, 1876, p.97.
47 This phenomenon also existed in gold fields outside the Southern Mining Region, for example, the Yalwal gold fields near Nowra. Barry McGowan and Brendan O’Keefe, Yalwal Post Contact Heritage Investigation And Conservation Management Plan, Report to the Shoalhaven City Council, 4 November 1998, pp.5-6.
48 Philipp, A Poor Man’s Diggings, p. 57.
In other instances the desire to work ‘off mine’ was driven by economic necessity, in particular, sustained periods of drought or dry weather.

The strong relationship between mining, farming and labouring work was an integral part of rural culture in the colonial and post Federation periods. Similar physical skills were needed, and in the event of a local gold find the best placed persons to profit from it would be those who were already in the locality. The principal conclusion is that there were many miners who were only too willing to embrace wages employment and vice versa, and that as a consequence the statisticians’ task in identifying the numbers engaged in mining was, even if they were aware of the problem, next to impossible.

A question of earnings-subsistence men, wages men or something else again?

The blurring of distinctions between miners and other workers, was further exacerbated by the large numbers of miners who were oscillating between work as independent working miners and as paid employees of mining syndicates or companies. Both forms of mining coexisted on most gold fields, particularly on the alluvial fields and those with both alluvial and reef mining. The working miners would have been aware of what the wage employees on neighbouring claims were earning, particularly when such details were publicised in the local press, or were otherwise common knowledge. While the latter may not have known what their more independently minded colleagues were earning, it is difficult to imagine that the reverse was the case. It could be expected, therefore, that the working miner would react to any marked discrepancy between current earnings and the opportunity cost of wages foregone, particularly if the costs and inconveniences arising from a change of occupation were minimal.

Base metal miners in the Southern Mining Region also oscillated between work as working miners and other occupations, although the context differed. In the very early stage of a base metal field most miners were engaged as independent working miners. However, this type of mining could not be advanced without a substantial investment in plant and equipment, particularly for processing. Invariably, the mining leases were acquired by large companies or syndicates and the vast majority of miners worked as wage employees. This was the case on all the base metal fields in the region, for instance at Currawang, Froghmore, Captain’s Flat, Kyloe and Kangiara. The only exceptions were, and then only for a time, the silver mining ventures at Kangiara and Wallah Wallah, but even here ultimately the companies and syndicates prevailed. Wage employment in the base metal mines would still, however, have been attractive to the working miners on nearby gold fields, who were earning less than wages on their own claims. Similarly, if hard times fell, base metal miners would seek employment on the gold fields. This process happened at Captain’s Flat in the early 1890s.49

The blurring of relationships between working miners and wage based employees raises the question of whether miners could be regarded as part of a proletariat of workers or as small scale capitalists or entrepreneurs, or perhaps as something else. A number of historians have discussed the question of status and identity. Blainey stated that as late as 1900 most wage based metal miners still did not belong to a union. Furthermore, the Amalgamated Miners’ Association (AMA) was not militant, and there was little conflict between shareholders and wage miners. Gold miners did not use their union as a battering ram against company mining because they ‘still hoped to make a fortune’. For

49 Queanbeyan Age, 21 March 1894.
Fig. 5.1. Miners at Snob’s Reef, Major’s Creek, 1894. These men were wage employees, and their numbers were typical of those working the larger reef mines. Permission of the National Library of Australia.

Fig. 5.2. Reef miners, Manton’s Reef, Spring Creek Jacqua field. These men were both wages employees and working miners. Permission of Ms Bessie Williams, Windellema.
Fig. 5.4. Working miners, Belle Vue dredge, Major's Creek. Fewer numbers of men were needed to work the dredges. Permission of the National Library of Australia.

Fig. 5.3. Small group of working miners engaged in paddocking at Jembaicumbene, date uncertain. Claims of this nature required far fewer miners than most reef mines. Permission of the Braidwood and District Historical Society.
Fig. 5.5. Chinese miners at Jembacumbene, 1869. A very close resemblance to the mode and size of workings in Fig. 5.3. Drawing by Penkerville Slade. Reproduced from copy held at Mitchell Library, Sydney. Owner unknown.

Fig. 5.6. Chinese treadmill, Jembacumbene, 1869. Drawing by Penkerville Slade. Reproduced from copy held at Mitchell Library, Sydney. Owner unknown.
the metal miners, as long as the field was new or the price of metal high, there was little prospect of conflict between owners and men, but once metal prices fell, tensions quickly arose, particularly if wages were cut or working hours were extended.  

Bolton also commented that in the 1870s it was the ‘prospect of being one’s own master which attracted many to the north Queensland fields’. He stated that by this time ‘mining had become well imbued with those traditions of mateship, cooperative individualism and belief in the equality of all white men which Russel Ward has called the ‘Australian legend’. A similar view is provided by Humphrey McQueen, who commented that ‘gold contributed to the consciousness of the labouring class in a number of ways all of which served to reinforce the belief that there was something to be gained under capitalism—perhaps that most prized of all possessions, independence’. Gold, silver, or some precious stone, combined with land sustained the hope of aspiring labourers, to ‘hold out to them a chance of escape from wage-slavery. It could never offer sufficient to retire but it could set up a business or a farm.’ These ideological consequences were described ‘as important in subordinating the labour movement as were the very real riches and widespread prosperity which gold engendered’. He also questioned whether ‘every mine-employee was a wage-slave’, as some miners earned very high returns as tributers or as wage employees.

These views have been challenged by a number of historians. Both Bertola and Fahey have referred to the use of the tribute system as a means of reducing labour costs. According to Fahey, tributing was associated with a considerable degree of industrial confrontation at the Bendigo gold mines. The description of the AMA as non militant certainly appears at odds with Brian Kennedy’s account of the serious conflicts which arose at Broken Hill in 1891 and 1909, to cite just two instances. Nevertheless, as will be discussed in subsequent chapters, the gold fields in the Southern Mining Region were largely non unionised and even at the base metal mines industrial disputation was rare, with the AMA appearing to be visible more as a community organisation than an industrial one.

In her discussion of the reef miners of Bethanga in Victoria, Philipp argued that they fell into neither the category of small scale capitalists nor working class proletariat, but rather should be described as ‘subsistence men’. Their description as subsistence men has also been taken up more recently by Susan Lawrence in her history of the Dolly’s Creek gold fields. Philipp stated that:

from time to time they might be compelled to work for wages, their constant endeavours were directed at avoidance of wage labour. Neither the scale of their

---

51 Bolton, A Thousand Miles Away, p.63.
53 McQueen, A New Britannia, p.145.
56 Philipp, A Poor Man’s Diggings, p.53. Although Bethanga is located in Victoria, it was not dissimilar in some respects to several fields in the Southern Mining Region, and her discussion of the mining work force is very pertinent.
57 Lawrence, Dolly’s Creek, pp.9-12.
independent operations nor their expectations qualify them as entrepreneurs or small capitalists. They were subsistence men; they aimed to make a living to gain and independence on the basis their own hard manual labour. Above that, success was not expected, if it came it was a matter of luck and a cause for celebrations. 58

To categorise this:

large and shifting body of men, in the post gold era, as small independent producers staunchly upholding the capitalist ethic of personal gain was to discount their origins and their experience in the colony and to provide them with a niche in the social order which the great majority never attained and which many did not value as a goal to be pursued. To describe them contrawise as wage labourers and therefore as forming part of a working class is to ignore a way of life that was in constant flux and its appraisal by those whose way of life it was. 59

Clearly, both the historiography and the contemporary record support the contention that there was a breed of miner who was independent, versatile and skilled at a number of tasks and occupations. The versatility of the colonial work force suggests that many miners had these characteristics. However, to describe the more independently minded of them as subsistence men is as limiting and narrow a definition as that of proletarian or small scale capitalist. The question of definition is important, for it has implications for the nature of mining society. If the majority of miners could be described as subsistence men, then it could be expected that most mining communities would be less affluent, and possibly more fractious than would otherwise be the case.

Some guidance on the question of identity and status can be derived from contemporary reports on the level of earnings on the mining fields. There was, for example, a considerable diversity in earnings from one gold field to another and within a particular field. This diversity was particularly evident amongst working miners on the alluvial gold fields. Miners were described as ‘getting wages’, ‘getting good wages’, ‘just getting wages’, ‘making little more than a living’ or ‘just making tucker’. 60 In my work it is only these latter two terms which are synonymous with subsistence earnings. Where individual gold fields were described as ‘wages’ or ‘good wages’ fields, it can be safely assumed that this level of earnings applied to most miners. On these fields many would have earned more than good wages. 61

Very few fields of substance were described in subsistence terms, for the poorer ones generally supported only a relatively small number of miners, and then often only in a situation of general economic depression as in the 1890’s. Many miners may have also worked initially for less than subsistence earnings, but this situation could not endure for any length of time. As a category, subsistence miners were not as prevalent as some historians have suggested. In addition, many miners were not without property, and of course those who owned the land on which mining was taking place derived a substantial benefit from it.

58 Philipp, A Poor Man’s Diggings, p.53.
59 Philipp, A Poor Man’s Diggings, p.xii.
60 There are numerous references to these terms in chapters two and three.
61 On the gold fields of Bell’s Creek, Jembaicumbene and Major’s Creek, earnings well above the average wages level were obtained long after the initial boom period.
Even in Philipp's Bethanga the earnings of the miners far exceeded anything that could be regarded as subsistence in the strict economic meaning of the word. The tributers at one claim earned about £6 a week and earnings on another claim were £12 2s 6d, suggesting earnings well above going rates in NSW. Lawrence describes the miners at Dolly's Creek diggings as subsistence miners, but also suggests that the minimum that they could earn was tucker wages. This latter statement implies that the field was, on average, a wages field.

False perceptions of the earnings of working miners were sometimes reflected in contemporary accounts. There were some observers who argued that the independent working miners, armed with their miner's right and the privileges it bestowed, were happy souls. They constituted a 'yeomanry of mining' and were content with much lower remuneration than if they were working in the towns or cities. Most contemporary accounts, however, provided a different view, for the conditions under which miners lived and worked were often far from idyllic. This suggests that the working miner may have needed additional remuneration to compensate for such hardships, rather than less.

To argue that the generality of miners would pursue their vocation in total ignorance or disinterest in any concept of a reasonable level of remuneration does not hold. Many men may have been prepared to work for a time as subsistence miners for very poor returns, or perhaps no returns at all. What led men to pine on their own account, however, was the expectation of a return better than they could get by working for someone else as an employee. It is unlikely that these miners would endure subsistence earnings indefinitely. Without occasional and sometimes considerable recourse to wages labour, then the ultimate dream of the working miner, that is, to gain an independence in mining or another occupation or business, could rarely be achieved.

Another related characteristic of the mining workforce which warrants discussion is their occasional description as nomads, itinerants, swagmen, or part of a shifting population. Philipp, for one, has used these terms. Others have used such terms in a derogatory sense, to imply that here was a class of persons not worthy of consideration. A clear example of these sentiments occurred during the debates in the Legislative Council in 1893 and 1894 on the Mining on Private Lands Bill. There were many members who were very antagonistic towards the bill, which they saw as a class measure. In moving to exclude agricultural land from the Bill, Pilcher stated that the agriculturists were a great deal more important than miners, and that they had no right to interfere with an interest far more permanent, and which in the long run would 'conduce more to the interests of the country than mining, which is generally followed by persons of very migratory habits'. He described the bulk of miners as 'men who are here today and gone tomorrow whereas the agriculturist is a man who remains with us and spends in the country all that he makes...'

---

62 Philipp, A Poor Man's Digging, p.36.
63 Susan Lawrence, 'Poor Man's Diggings: Subsistence Mining in the Nineteenth Century', Australasian Historical Archaeology, vol.13, 1995, p.59; Lawrence, Dolly's Creek, pp.9-12.
64 AR, 1879, pp.9-10.
65 Philipp, A Poor Man's Diggings, pp.xii-xiii.
The views of these Council members were influenced by the large number of men roaming the countryside looking for work, and they may, therefore, have had some cause to be apprehensive. However, over the whole period of mining from 1851 to 1914 there were many miners who were of a more settled disposition. Further, it is evident that if miners needed to take up other employment opportunities, they did not stray far from their own abode in so doing, for in many instances it was their intention to return to their claims when conditions became more favourable. Those that owned land in the district were even more constrained in their choices, for they were bound to the land, even if the living was meagre. Eventually all miners found a permanent home, and in many cases it was near their former place of employment as miners. The question of whether the mining fraternity could be best described as part of a nomadic and shifting population has important implications for the type of society that was emerging on the mining fields. It would be expected, for example, that a more shifting workforce would be less likely to develop strong community attachments.

**Working miners, syndicates and companies**

One further aspect with possible social implications concerns the relationship between working miners and those employed by mining companies and syndicates. There was, for instance, a considerable degree of tension on the gold fields between those working miners armed with little more than their miner’s rights and the larger companies and syndicates, particularly those of a more speculative nature. However, there is little evidence to suggest that tension existed between the working miners and the employees of the larger companies and syndicates. Of principal concern was the nature of enterprise and capitalism on the fields and the concern that the granting of large leases would significantly diminish the opportunities for others. The antipathy between the working miners and the large syndicates and companies was referred to in the *1871 Report of the Gold Fields Royal Commission of Inquiry* and subsequent reports by Mr Harrie Woods. Philipp also commented upon the hostility of the Bethanga miners towards the leasing system, particularly with its ‘attendant evil of shepherding’.

One of the clearest examples of this conflict arose in the 1890s debates in the Legislative Assembly on the *Mining on Private Lands bill*. In the first set of debates in 1892 and early 1893 a number of Legislative Assembly members supported the granting of access to private land to the holders of miner’s rights. Reid referred to the inevitable delays in issuing leases, stating that the bill ‘must throw the lands open, not to the syndicates only, but to the miners’, and that ‘the struggling miners of the country should be the first to reap the advantage of this measure’. At the Third Reading Speech some members expressed their clear disappointment in the bill, some stating or implying that the only beneficiaries were syndicates, companies and landowners. Carruthers perhaps voiced best these concerns when he stated that ‘all the miner could now do was become the employee of the rich man, there being no possibility of a working miner earning a day’s pay on his own account...’

---


69 Philipp, *A Poor Man’s Diggings*, p.33.


Similar concerns were expressed in subsequent Parliamentary debates commencing in late 1893. Reid summed up the mood of members when he stated that the ‘curse of the mining industry has been that the moment anything like a good field was discovered which would give occupation and profit to a large number of miners, a small number of gambling speculators have come in and have converted the miners into their servants’. They were ‘now fighting the battle between the big speculator and the little miner...’

In the final days of debate on the Bill Reid stated that it:

had been frittered away in every possible degree so as to make the owners of the land supreme over the minerals of the country, and so as to enable every possible legal difficulty to be put in the way of those unfortunate men, the ordinary mining population of the country...One of the strongest feelings they had had with reference to this bill was to give the miner a show of working for himself instead of working for wages?...if they are prepared to give their enterprise and risk the loss of wages on their own account, surely that is one of the best things for mining in this country.

It should be noted that in this debate the differing views for and against the lease system were not for and against mining employees or working miners, both sides of the debate almost tumbling over themselves in their eagerness to proclaim their solidarity with the mining fraternity. If there was any scorn directed at those in the industry it was reserved for those who were ethically on the fringes, such as the claim jumpers, shepherders, speculators and the more unscrupulous of the syndicates and companies. Mining was regarded as a highly valued industry and those properly engaged in it, particularly the working miners, were by and large given the respect that was their due.

The Chinese

There was a significant Chinese presence in the Southern Mining Region from 1858 on, particularly in the Braidwood and Shoalhaven District, for example, at Jembaicumbene, Mongarlowe, Araluen and Major’s Creek. They were present in smaller numbers and for shorter periods of time on a number of other fields. This secondary presence was a reflection of their constant migratory patterns, with most Chinese moving in a triangular pattern between the Braidwood gold fields, Lambing Flat and Kiandra. Obviously, the Chinese were culturally different from the European miners, but they also had their cultural differences, for they did not all come from the same district in China. To contemporary observers, however, the Chinese were but one, and they were often referred to in derogatory terms such as ‘barbarians’, ‘mongolians’ and ‘heathens’. In this chapter the main question is whether the Chinese as miners differed from the Europeans,

---

72 Reid (Sydney), Mining on Private Lands Bill, NSWLA, Parliamentary Debates, 30 November 1893, pp.1555-1556.
73 Reid (Sydney), Mining on Private Lands Bill, NSWLA, Parliamentary Debates, 6 June 1894, p.3069
74 Copeland (New England), Mining on Private Lands Bill, NSWLA, Parliamentary Debates, 8 February 1893, p.3977.
75 Braidwood Observer and Miner’s Advocate, 1 August 1860, 14 December 1861; Sydney Empire, 6 July, 9 September 1861; Lindsay Smith, Cold Hard Cash. A Study of Chinese Ethnicity & Archaeology at Kiandra, New South Wales, MA, ANU, pp.42-46.
76 Eric Rolls, Sojourners: The epic story of China’s century-old relationship with Australia, University of Queensland Press, 1993. The question of regional differences amongst the Chinese in Victoria is discussed at length by Kathryn Cronin, however, the task of making similar observations in the south east region of NSW is well beyond the scope of this thesis. Kathryn Cronin, Colonial Casualties: Chinese in early Victoria, Melbourne University Press, Carlton, 1982.
and whether these differences impacted upon race relations and the type of mining society that was developing on the fields.

The Chinese miners in the Braidwood and Shoalhaven District often arrived in large numbers and were very well organised and well financed. They usually worked in large groups with a defined chain of command under the control of a ‘boss’, who would organise the purchase of claims, supply of provisions and payments. Most Chinese were willing immigrants who either borrowed their fare monies or worked under contract until they had paid back their debts. This form of organisation was common to many. For example, in July 1858 it was reported that there were:

parties of from forty to eighty to be met with on the road going and coming. The burthens the fellows carry and jog on with are surprising. They have saws, axes, spades, frying pans, tins, and buckets. They seem to be well provided with necessaries and well clothed; a great many of them wear long water tight boots; all their turn out shows that they are not destitute of considerable means.

In the Southern Mining Region the Chinese miners were engaged predominantly in alluvial mining, although there was an important Chinese presence on the reef gold mines at Bell’s Creek. For the most part Chinese and European miners used similar mining techniques and equipment (Figs. 5.4, 5.5) However, the Chinese miners were to be found more frequently in large co-operative groups and, as discussed in chapter one, the archaeological evidence suggests strongly that they worked their claims more meticulously and intensely. For instance, in 1858 it was commented that the Chinese at Mongarlowe were a lesson for the unemployed to work together in co-operative and communicative bands. At Jembacumbene in 1859 there were 40 Chinese ‘extensively and systematically’ working a claim. On this field the Chinese must have been well equipped, for despite an abundance of gold it was considered that small parties could do little owing to the excess of water in the claims. Properly organised parties of ten to twenty, with Californian pumps and a suitable amount of capital, were regarded as more likely to succeed. Treadmills were used on this field by the Chinese. These were a physically exhausting and particularly labour intensive way of draining the claims. A subsequent report referred to the Chinese as doing well, showing that ‘combinations and careful working go nearly the whole length to success on the goldfields’.

By 1860 the Chinese were reported to be doing extremely well at Jembacumbene, the correspondent stating that

---

78 Yass Courier, 10 July 1858.
80 Sydney Empire, 7 July 1858.
81 Sydney Empire, 18 June 1858.
82 Sydney Empire, 2 June 1859.
83 Richard Kennedy, ‘The Braidwood gold fields in the 50's and 60's', Braidwood Dispatch, 31 August 1907. Up to eight men worked these devices.
84 Sydney Empire, 18 June 1859.
the comparative nonsuccess [of the Europeans]...is to a great extent entirely owing to the want of perseverance and energy on their part, for the Chinese let them set in where they will are sure to find gold in payable quantities, and not only in fresh ground, but in the prosecution of claims which have been abandoned, or dirt which has been condemned as not worth the labour by Europeans.  

In 1861 it was commented that the effect of rain inundating the claims at the Jembaicumbene gold field was ‘particularly marked on the European portion of the population who did not work on the same co-operative principle as the Chinese’.  

A similar comment was also made in 1862, when the Chinese were reported to be ‘doing particularly well, in distinct contrast to the European miners’. It was pointed out that this was ‘largely the fault of the latter, who gave up easily before they had given the claim a fair trial’.  

Some historians have suggested that the Chinese only worked abandoned ground and tailings, that they were rarely seen on new rushes, and were rarely prosperous. In the Southern Mining Region these assertions cannot be sustained. The relationship between the opening or reopening of many of the gold fields and the arrival of large numbers of Chinese miners is too strong to be coincidental. Shen Yuanfang’s ‘pioneer’ concept is, therefore, clearly applicable to the Chinese miners of the Southern Mining Region. Further, they were very successful in this role and references to the amassing of fortunes were not uncommon. An over riding impression was that during the period 1858 to 1874, most Chinese were earning very good wages, and generally faring much better than most Europeans. The main reason for them leaving the diggings was not so much that they were hounded off as that they had ‘made their pile’.  

As further proof of their success, the Chinese frequently bought claims, machines and tailings from European miners. For example, at Araluin in 1859 a European party sold their claim to the Chinese for £300, the Chinese having also purchased water rights from the adjoining party for £15, and in 1860 the Europeans were reported to be fast selling their claims to the Chinese. In 1859 the Chinese were buying up puddling machines at Major’s Creek and erecting new ones. There was a great influx of Chinese to this field in 1863, where they reported to be buying up claims wherever they could for high prices. On the Jembaicumbene field, A Hung and John Young Sam bought a claim in 1859 from Gilligan and party, adjacent to John Hyland’s, who in turn sold water rights and tailings to the Chinese. A report in 1870 referred to the Chinese buying claims from the Europeans and ‘departing for China on the money derived from what the others supposedly worked out and selling their claim to other Chinese before their departure’.

---

85 Brahwood Observer and Miner’s Advocate, 20 June 1860.
86 Brahwood Observer and Miner’s Advocate, 6 February 1861.
87 Brahwood Observer and Miner’s Advocate, 29 July 1862.
90 Brahwood Observer and Miner’s Advocate, 20 June, 29 September, 8 December, 29 December 1860, 10 December 1862; Sydney Empire, 25 June 1859.
91 Brahwood Observer and Miner’s Advocate in the Sydney Empire, 18 June 1859, 14 July 1860.
92 Brahwood Observer and Miner’s Advocate in the Sydney Empire, 23 July 1859.
93 Brahwood Dispatch in the Goulburn Herald, 24 June 1863.
94 Sydney Empire, 14 June 1859; John Hyland, Account books, 1857 to 1861, in the possession of Murray Hyland, Brahwood.
95 Town and Country Journal, 22 January 1870.
Despite a number of cultural and organisational differences and the occasional concentration of Chinese miners on certain parts of a field, both races often worked in close physical proximity to each other.\textsuperscript{96} There were, in addition, a number of instances where Europeans and Chinese worked claims co-operatively. For example, in 1862 the success of the claims at Jembaicumbene was attributed to the amalgamation of Chinese and European labour.\textsuperscript{97} A reference to the amalgamation of some Chinese and European claims was also made in 1866.\textsuperscript{98} In the late 1880’s references were made to claims on which large numbers of Chinese were employed, and of one in which there were several Englishmen in the partnership.\textsuperscript{99}

Another aspect of Chinese mining practices commented upon occasionally was their reluctance to take out miner’s rights. At the Gold Fields Royal Commission of Inquiry in 1871 it was stated that 19 out of 20 Chinese and about one third of the Europeans did not take out miner’s rights. Another witness said that only a third of the Chinese on the Mongarlowe field had miner’s rights.\textsuperscript{100} The Commissioners commented that this evasion arose because of ‘the great physical resemblance of one Chinamen to another, combined with imperfect acquaintance possessed by officials with the distinctive peculiarities of Chinese nomenclature, enabling this class of miners to make one miner’s right do duty for several individuals’.\textsuperscript{101} In 1875 it was stated that there was ‘no scheme or trick that they will not resort to, if by so doing they can escape payment.’\textsuperscript{102} While these statements indicate a degree of intolerance, they also indicate the difficulty that officials had in estimating the exact numbers of miners, in particular the Chinese.

\textbf{Conclusion}

Working miners, with their desire for an independence, were a far more prevalent part of the mining work force than most historians have recognised, particularly on the gold fields. Furthermore, whether they were working miners or employees, miners generally were very versatile in their mode and nature of employment, moving between independent mining and wage based employment, both on and off the mining fields, with relative ease. This versatility suggests that most historians and economists have underestimated the pervasive influence of mining throughout the colonial and post Federation periods. Many miners, even if they had not entirely discarded their more humble working class aspirations, had clearly embraced a more ambitious consciousness.

The relatively greater success of the Chinese was a consequence of their use of superior techniques and their diligence and organisation, rather than their ability to live off meagre earnings. They often worked in close proximity to European miners and earned a grudging respect from them, many of whom benefitted from having the Chinese as ready buyers for their claims and equipment. Nevertheless, many Europeans would have resented the success of the Chinese and their ability to more easily avoid paying for their miner’s rights. Their presence on the gold fields was a constant reminder to the working miners that their dreams of earning an independence were not to go unchallenged. The question of race relations is more fully discussed in chapter ten.

\textsuperscript{96} For example, Mudmelong at Araluen and Bell’s Paddock at Jembaicumbene.
\textsuperscript{97} Braidwood Observer and Miner’s Advocate, 31 May 1862.
\textsuperscript{98} Bailliere’s New South Wales Gazetteer and Road Guide, Sydney, 1866.
\textsuperscript{99} Braidwood Dispatch, 13 March, 16 March 1889.
\textsuperscript{101} Gold Fields Royal Commission of Inquiry, ‘Report of the Royal Commission’, p.27.
\textsuperscript{102} AR, 1875, pp.44-45.
Chapter 6.

The value of mineral production

The economic importance of mining for the Australian colonies in the nineteenth century has been investigated by statisticians and economists such as Coghlan and Butlin. These measurements included the value of production, the share of mining in gross national product, investment, exports, and the rate of growth of the mining sector compared to other sectors.¹ Most of these measurements have been calculated for the colony of New South Wales or for the Australian colonies as a whole, and have been of very limited use in measuring the regional significance of mining. This task is the focus of this chapter.

It is a difficult task. Before 1875 consistent production data for any form of mining in New South Wales is largely absent. Production data was occasionally set out in the reports of the Gold Commissioner for the Southern Gold Fields. However, very few of these are available, particularly prior to 1870.² Gold production estimates are available after 1875, but these are not always accurate or sufficiently disaggregated, for the mining registrar’s returns can also combine data from a number of gold fields.³ Official data on base metal production is only available for the more significant fields after 1890. Some measure is needed in addition to official estimates and data.

As a guide to production levels, particularly on the gold fields, I have developed a production formula based on the concept that all miners were aware of the opportunity cost of their mining in wages terms. While this level of statistical refinement is not normally the province of the historian, in my thesis it is an essential tool of analysis. This analysis will also allow a further examination of Butlin’s observations on the contribution of mining, in particular, whether it is correct to exclude mining from having a role in the ‘smooth expansion’ of the Australian economy.⁴

Defining the problem

Historians and economists have not generally been concerned with measuring or commenting upon mineral production on individual mining fields. Their comments, where they are made, are based on official estimates, the veracity of which is rarely questioned. Two exceptions are Butlin and Serle. Butlin dealt with broad aggregate

¹ Investment is next to meaningless as a measure of alluvial gold mining, for on many fields the only input of significance was the miner’s own time.
² This situation appears to improve after 1870, quite possibly in response to the criticisms arising from the 1871 Gold fields Royal Commission of Inquiry. Full reports have, however, only been found for 1871 and 1872. Escort figures from the New South Wales Statistical Register are available from 1858 on, but the data is aggregated and many fields did not have access to escorts. Until 1866 the Braidwood escort included the returns from at least six major gold fields in the district.
³ For example, after 1901 there are no separate figures for the Mongarlowe or Nerriga gold fields, as these fields were included in the Braidwood series. In addition, prior to 1909 all dredging figures for the Jembiaumbene field were included under the Araluen Division. A further difficulty is posed by geography. There is considerable uncertainty whether the returns for the Nerriga Division included those on the adjacent Bungonia and Spring Creek Jacqua fields, all three of which had frontage to the Shoalhaven River. Further, the paucity of reports on these fields in the drought years of the 1870s and 1880s, if taken at face value, could suggest that little mining was occurring. It is more likely that the dry weather discouraged official visitation, for these conditions were precisely the ones which attracted miners to the Shoalhaven River.
data. However, his comments on its accuracy are equally applicable to data in its more disaggregated form. He stated that it was unlikely that errors arose from delays in recording new mineral development, but rather the techniques for recording, for the different sources could produce different results. No great discrepancy occurred between these sources, and overall New South Wales gold production may have been underestimated by only five per cent.⁵

The question of conflicting official estimates is an important one at the regional level. For example, in 1877 there were four different statistical sources for the Braidwood and Shoalhaven District gold fields, all of which differed, some substantially. The official escort figures ex Braidwood were 5,783 oz and the quantity of gold imported into the Royal Mint from Braidwood was 9,003 oz.⁶ Statistical discrepancies also applied to estimates of the numbers of miners, and are highlighted by the practice of the registrars in rounding off the numbers and sometimes citing the same ones in consecutive years. Clearly these numbers were best guesses only. On the more scattered and geographically diverse alluvial fields, particularly where there were large numbers of Chinese present, the errors must have been substantial.⁷

Problems of recording data, especially on production levels, were not so much a reflection of the vigour with which wardens and registrars pursued their tasks, but rather with the attitude of the mining fraternity, particularly on the gold fields. It is, therefore, of some merit to look more closely at this aspect, for it reveals much about the independence and astuteness of the miners when it came to maximising their returns. Many miners were very reticent about disclosing their returns to guard against theft, claim jumping and other unwanted attention, and were constantly on the lookout for better buying prices.⁸ This reticence was even greater with the Chinese, for cultural and language reasons, and for the very real fear of physical attack. Most contemporary observers, including the registrars, lamented the difficulty in ascertaining their yields. On the Jembaicumbene field, which was predominantly Chinese, it was considered that most

---

⁵ He added that official estimates did not take account of hoards, which may have been significant in the 1860s, 1890s and later in the 1930s. N.G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing, 1861-1938/39*, Cambridge University Press, Cambridge, 1962, pp. 116-117. Serle also commented that the real Victorian production figure in the 1850s was up to 10 per cent higher than the exports, as a considerable quantity of gold was taken out of the colony without passing through Customs. Estimates of production for 1852, for example, were particularly questionable. Geoffrey Serle, *The Golden Age. A History Of The Colony Of Victoria 1851-1861*, Melbourne University Press, Carlton, 1977, pp. 390-392.

⁶ *AR*, 1877, p. 44, pp. 96-97. A separate series of returns presented by the Mining Warden and based on bank records showed production of 5,798 oz for Braidwood and the Mining Registrar’s returns showed production at 5,555 oz.

⁷ For example, in the Murrumburrah Division in 1897 only six miners were recorded, all of whom were quartz miners, who produced 1,991 oz. However, the report stated that almost all the production was from Cunningham’s Creek, which was an alluvial field. *AR*, 1897, p. 34, 70. In 1902 there were 124 alluvial miners and 18 quartz miners, yet the former produced only 57 oz and the latter 812 oz. The report contradicted the statistics by stating that quartz mining was not very active and that the alluvial miners were ‘earning wages’. *AR*, 1902, p. 19, 33. In 1903 there were 12 alluvial miners and 135 quartz miners and yet the former produced 884 oz and the latter 165 oz. However, the report stated that there were about 100 alluvial miners, most of whom only ‘earned a living’. *AR*, 1903, p. 16, 31.

⁸ The problem of disclosure persisted throughout the period 1851 to 1914. A correspondent for the *Daily Telegraph* commented in 1896 that ‘In some instances working miners had been securing much better returns than they cared to publish abroad having before them the fear of attracting too much notice to finds which they wished as far as possible to monopolise...’ *Daily Telegraph*, 27 October 1896.
of the gold did not find its way by escort, but was bought by the Chinese themselves who stored it for ‘personal conveyance back to China’.

From 1875 on a succession of wardens and registrars commented upon the difficulties of obtaining data from the mining fraternity. In 1875 the Registrar for the Major’s Creek field stated that it was impossible to give a correct estimate of the quantity of gold. Some parcels went direct to the Mint, some was sold to the banks at Braidwood and Araluen, some came from outside the Division, and the Chinese did not sell all their gold. In 1876 the Registrar at Araluen commented that no regular account was kept of the dirt washed and that as a rule the miners were averse to giving particulars of their earnings. He was unable to get the total yield of gold for the Division as the banks had refused to provide the information.

The Registrar at Major’s Creek commented in 1876 that ‘to find out what the Chinese have been obtaining is certainly more than I can do’. There were some miners who would not let him or anyone else know their business and ‘there are others who would not keep an account of what they were doing, even if paid for it’. Similar problems emerged later with the reef miners, for in 1881 the Registrar lamented that some gold had been sold direct to the Mint or to the banks for a higher price than local buyers would provide. He was unable, therefore, to form a correct or even an approximate estimate of gold production. These problems were also prevalent before 1875, a correspondent commenting in 1853 that if all the gold won had been sent by escort then the official figures would have doubled.

Comments by the registrars concerning the gold yields of the Chinese are particularly pertinent, for they were a significant presence on many fields in the region, particularly in the Braidwood and Shoalhaven district. Some contemporary observers and historians have commented on the contentment of the Chinese with a lesser yield than the Europeans. However, as discussed in chapter five, most contemporary observers in the Southern Mining Region regarded the Chinese as highly profitable. In reality, no one was really sure of what they were earning, but if the latter view is the more accurate one then the understatement of yields was even greater than that recognised by the registrars.

A measure of the likely magnitude of the discrepancies in the official estimates can be gleaned from a reference to the average return per alluvial miner derived from the Registrars’ series (Table 6.1). For most of the fields the returns were very low when compared with what the miners could earn in other occupations. For example, the average return per annum for an alluvial miner at Mongarlowe from 1878 to 1900 was £40, for Nerriga between 1878 and 1900 the figure was £34, and for Braidwood between 1877 and 1897 the return was £32. These returns would have been equivalent to wages of between 13s and 16s a week. Annual wage rates in other occupations were

---

9 Braidwood Observer and Miner’s Advocate, 9 July 1862. The Oriental Bank at Braidwood and Araluen was formed by Shong Foon Nomchong and Quong Tart expressly for the purpose of buying and selling gold and conveying it back to China. Discussion with Lionel Nomchong, November 2000.

10 AR, 1875, p.95.

11 AR, 1876, p.95.

12 AR, 1876, p.97.

13 AR, 1881, pp.82-83.

14 Goulburn Herald, 26 February 1853.

more than double these earnings, implying that the Registrars’ returns could have understated actual gold production by a factor of between two and three.\textsuperscript{16}

There are a number of possible explanations for the divergence between the miners' returns and earnings elsewhere. For example, there was a strong seasonal factor in alluvial mining and many miners may have worked part time and gained their primary

\begin{table}[h]
\centering
\caption{Average Annual Earnings per Alluvial Miner (\textpounds{})}
\begin{tabular}{|c|c|c|c|c|c|}
\hline
Year & Braidwood & Mongarlowe & Nerriga & Murr'burrah & Major's Creek & Araluen \\
\hline
1877 & 26 & 37 & & & 50 & 56 \\
1878 & 28 & 33 & 39 & & 28 & 46 \\
1879 & 20 & 43 & 56 & & 55 & 39 \\
1880 & 29 & 63 & 52 & & 75 & 60 \\
1881 & 21 & 52 & 53 & & 64 & 57 \\
1882 & 33 & 64 & 52 & & 57 & 73 \\
1883 & 47 & 46 & 94 & & 39 & 41 \\
1884 & 28 & 39 & 97 & & 34 & 75 \\
1885 & 35 & 28 & 40 & 19 & 20 & 68 \\
1886 & 16 & 28 & 31 & 30 & 38 & 81 \\
1887 & 26 & 25 & 21 & 46 & 28 & 58 \\
1888 & 26 & 30 & 38 & 44 & 26 & 60 \\
1889 & 71 & 45 & 26 & 45 & 78 & 44 \\
1890 & 99 & 40 & 8 & 42 & 37 & 43 \\
1891 & n.a. & 38 & 14 & 23 & 65 & 39 \\
1892 & n.a. & 44 & 17 & 16 & 40 & 50 \\
1893 & 5 & 38 & 15 & 24 & 38 & 47 \\
1894 & 52 & 37 & 39 & 26 & 36 & 49 \\
1895 & 39 & 33 & 23 & 55 & 25 & 56 \\
1896 & 19 & 49 & 26 & 66 & 62 & 36 \\
1897 & 58 & 33 & 16 & n.a. & 54 & 35 \\
1898 & 14 & 44 & 9 & 88 & 68 & 30 \\
1899 & 1 & 44 & 4 & 46 & 46 & 19 \\
1900 & 2 & 34 & 14 & 42 & 70 & n.a. \\
\hline
\end{tabular}
\end{table}

\textsuperscript{*1} Statistics estimated from NSW Department of Mines, Annual Report, Sydney, various years. (see Appendix Five) Up until the early 1890s most alluvial miners at Araluen were employees.

sustenance from other sources, particularly in times of drought. While many undoubtedly behaved in this way, others continued to view mining as the main source of income and achieved good returns even during drought conditions. Further, if they were too much akin to part time miners then they probably would not have been included in the mining statistics.\textsuperscript{17} It is also possible that the wage rate data was overstated. Ray

\textsuperscript{16} Appendix Four, Wages 1851-1900.

\textsuperscript{17} Katrina Alford, 'Gilt-Edged Women: Women and Mining in Colonial Australia', Working Papers in Economic History, 64, Australian National University, Canberra, February 1986, p.28. It is most unlikely that the Registrars would have included all or even most of those working on a part time basis. Like the Statistician, he would have to be convinced that mining was the principal occupation in which these persons were engaged at the time of recording, thus many part timers would have been excluded.
Markey has commented, for example, that the official wage rates relied largely on union 'standard' wages, with the top end more hypothetical than realistic. However, this factor would only reduce the size of the discrepancy, not remove it.  

A production formula

Because of these inadequacies a formula has been developed to help assess the value of production of individual fields as a guide to the contribution of mining to regional development and overall colony or state production. The production formula is based on a comparative wage or opportunity cost concept, the central elements of which are the use of contemporary observations on the overall earnings on a field and wage data. As discussed in chapter five, the value of a diggings was often expressed by miners and other contemporary observers in terms of yields or returns per miner on a daily or weekly basis, and the value of a field was often referred to in wages terms. Thus, terminology such as 'wages' or 'good wages' fields was used. Other terminology implied that miners were working on subsistence fields. It has been argued in chapter five that miners were rational economic beings and were well aware of the opportunity cost of their labour. Thus, if individual miners were described generally as earning 'good wages' then it is assumed that the field was a 'good wages' one.

It is possible to attribute a figure to the wage terminology used on the mining fields. In my formula, 'good wages' are calculated by using an average of the maximum town wage rates (country rates were not available until 1863) for the three trades of carpenter, blacksmith and bricklayer based on 50 working weeks a year. These wages would...

---

18 Ray Markey, Labour and Politics in New South Wales, 1880-1900. Ph.D., Wollongong, 1983, p.40. For consistency, the wage rate data used in my tables has been based on town rates. While the country rates were substantially less in the early years, even the minimum country wage rates exceeded the Registrar’s returns by at least a factor of two.

19 Other alternative calculations were considered. For example, Coreenos, has implied that estimates could be made of alluvial gold production based on the quantum of wash and estimated yield. Except in rare instances, however, details are unavailable on the yields of individual claims, the length of time a particular claim was worked, or the amount of overburden that had to be shifted. Coreenos implied correctly, however, that ultimately gold production had to cover costs and that if the level of costs could be ascertained for a particular claim then the output could also be determined. C.Coreenos, 'Why is that hole so big? An analysis of expenditure versus gain in alluvial gold mining', Australasian Historical Archaeology, vol.13, 1995, pp.24-30.

20 To avoid confusion reference to fields as 'poor man’s diggings' has been eschewed. This terminology was used frequently by contemporary writers, and is the title of June Philipp’s book on the Bethanga miners. It is also used by Coreenos and by Lawrence, both Philipp and Lawrence equating their 'poor man’s diggings’ with subsistence mining. The term was used by contemporary writers to refer to the nature of a diggings rather than its poverty, for the term was used to indicate that a diggings could be worked with a minimal capital outlay. As stated by Lawrence 'the use of the term poor man’s diggings was not a pejorative one', for the ‘perceived reliability of returns was something of a cause for celebration’. The term did not mean that only poor men would be working the field, but rather that the field could be worked by poor men, and the declaration of a field as a ‘poor man’s diggings' was an open invitation for the less well off to try their luck. However, such a field would not only attract the more indigent, for the prospect of earning reasonable returns without having recourse to expensive outlays was generally attractive. A ‘poor man’s diggings’ may, therefore, have been a subsistence field, but it may equally have been a wages or even in some instances a good wages field. Susan Lawrence, 'Gender and Community Structure in Subsistence Mining', paper delivered to the Australian Mining History Association Conference, Sydney, 5-7 July 1998; p.2; Susan Lawrence, 'Poor Man’s Diggings: Subsistence Mining in the Nineteenth Century', Australasian Historical Archaeology, vol.13, 1995, p.59; C.Coreenos, 'A Poor Mans Diggings, an Archaeological Survey of the Lisle Denison Goldfields', unpublished report prepared for the Forestry Commission, Hobart and the Queen Victoria Museum and Art Gallery, Launceston, 1993.
represent the highest available opportunity cost to most miners. For ‘wages’ the minimum rates are used. There are several guides to the level of subsistence wages. For example, at Mongarlowe in 1908 and 1909, miners were earning 12s 6d a week.\textsuperscript{21} At Major’s Creek in 1898 miners were earning 0.2 oz, or about 14s a week and at Snowball in 1899, most miners were earning between 10s and 15s a week.\textsuperscript{22} The diggings on all three fields were well into decline by these dates, which suggests that returns of 12s 6d would be appropriate for subsistence wages.

To the three categories of ‘good wages’, ‘wages’ and ‘subsistence’ wages a fourth category, ‘boom’ wages, can be added, this category taking account of those miners who were earning substantially more than good wages in the early boom period of a gold rush. Just what the boom wages were is uncertain for there was no upper limit, but an average return of 5.0 oz a week, amounting to £17 10s a week would not be unreasonable.\textsuperscript{23} A return of this amount is consistent with the estimate of £3 or an ounce a day presented by Commissioner King before the Select Committee on the Management of the Gold Fields.\textsuperscript{24} A yield of only half that would still double good wages, and clearly many were earning more than that. While these returns may seem high, the length of time miners could earn boom wages was often measured in months rather than years. In these estimates boom wages and subsistence wages are taken as constants throughout the period, for in the Southern Mining Region boom fields did not occur after 1854, and subsistence fields occurred primarily from the mid 1890s on. In other periods there would have been some miners earning subsistence and boom wages, but in most instances they would have been in a distinct minority.

A different approach needs to be taken for wage and good wage fields, for wage rates varied over time. In the period to 1900 there were three distinct wage periods, 1851 to 1857, 1858 to 1889, and 1890 to 1900. The first cut off date of 1857 coincides with a pronounced move to lower wage rates and also a change from a monthly licence charge to the annual miner’s right. The monthly licence fee was 30s on Crown land and 15s on private land, to which could be added additional charges such as the private fee, which could be £1 a month or more. Thus yields had to be high enough to encompass these fees, which, broadly speaking were equivalent to 30s a month on both Crown and private land, or 7s a week.\textsuperscript{25}

The second cut off date of 1889 has been chosen because it coincided with the lower wage rates preceding the depressed economic conditions of the 1890’s. For the period 1858 to 1889 the wages and good wages figures were £2 7s and £2 13s respectively a week. From 1890 to 1900 wages and good wages were £2 and £3 respectively a week. Miner’s average weekly earnings for each of the four types of fields and for the three periods are set out in Table 6.2 below. It has been unnecessary to make estimates for the

\textsuperscript{21} AR, 1908, p.21; 1909, p.21.
\textsuperscript{22} AR, 1899, p.34; 1898, p.41.
\textsuperscript{23} Assuming an average price for gold of £3 10s. The actual price from 1851 to 1857 in NSW was £3.48. Appendix Three, Mineral Production And Prices-Gold.
\textsuperscript{24} Minutes of evidence submitted to the Select Committee on the Management of the Gold Fields, NSWLC, Votes and Proceedings, 1852, Vol.2, p.72. He stated that ‘first rate luck was at the rate of £1,000 a year’, that is, three pounds or about one ounce a day. The Commissioners were greatly surprised at this estimate and even more surprised when King stated that about half would earn that much. He also stated, however, that twenty per cent would earn nothing at all, and that the other 30 per cent would earn between 10s and 7s 6d a day. Those earning three pounds only did so for the time that they were working, which may be only two months. He was not commenting on how many earned £1,000 a year.
post 1900 period. The gold fields were, by that time, subsistence fields or ones on which production figures are available through the dredging returns. On the latter fields, the official figures are, with some adjustments, broadly adequate.

As some support for these figures it was commented in 1913 that on the Araluen gold field in the 1850s and 1860s, £4 a week was sometimes paid to each man, but generally £3 10s and £3 were regarded as standard wages. As the very rich claims began to peter out some decrease in the weekly allowance occurred. For those in co-operative groups the wages were regulated by the amount of gold found each week. If they struck it rich and were fortunate enough to escape the floods, they could be much better paid than those employed. The wages may have seemed high, but the hours were long, the work extremely arduous and the men were exposed to the vicissitudes of the local climate. Towards the end of the century the miners were working for a much smaller reward of £1 10s or less. On one of the last claims worked on the field the men were accepting a sovereign and a half a day and sometimes nothing at all. The dredge workers were skilled workers and were highly valued, and obtained very comfortable salaries for many years, at least equal to those of the palmy days on the diggings.26

**TABLE 6.2**

<table>
<thead>
<tr>
<th>Type of claim</th>
<th>Pre 1857</th>
<th>1858 to 1889</th>
<th>1890 to 1900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom wages</td>
<td>17.17s</td>
<td>17.10s</td>
<td>17.10s</td>
</tr>
<tr>
<td>Good wages</td>
<td>4.7s</td>
<td>2.13s</td>
<td>3.0s</td>
</tr>
<tr>
<td>Wages</td>
<td>3.7s</td>
<td>2.7s</td>
<td>2.0s</td>
</tr>
<tr>
<td>Subsistence</td>
<td>19s.6d</td>
<td>12s.6d</td>
<td>12s.6d</td>
</tr>
</tbody>
</table>

My estimates provide a guide to the earnings of individual miners by type of claim, but they need to be further developed if attempting to estimate the overall value of gold production on individual fields. For example, a miner earning wages would be found on a wages and good wages field. Similarly, the subsistence miner would be found on a subsistence and wages field. No matter how a field may have been regarded generally by contemporaries, the earnings of individual miners fluctuated over time, and some claims were more of a prospecting and developmental nature than others, and good claims were located alongside indifferent ones. To arrive at an average earnings figure for the different fields it is necessary, therefore, to estimate the percentage of wages and good wages miners on each field, and to have an estimate of the overall number of miners on each field. For the latter estimate an average rather than peak figure is taken.

It is conceded that an apportionment can only be a ‘best guess’, but it needs to be made, and has been done conservatively. Thus, on the boom wages field it is assumed that one third of the miners were earning boom wages, one third were earning good wages and one third were earning wages.27 For a good wages field it is assumed that two thirds were earning good wages and one third making wages. On a wages field it is assumed that two thirds were making wages and one third subsistence wages. For a subsistence

---

26 *Braidwood Dispatch*, 1 March 1913.

27 This differs from Commissioner King’s apportionment. His figure of 50 per cent for the boom wages category seems too high. The discussion in chapter two suggests that on the boom fields most miners would have fallen into the good wages and wages categories.
field it is assumed that two thirds were making subsistence wages, and one third nothing. The average value of miner’s claims by type of field are set out in Table 6.3 below. It is

TABLE 6.3

AVERAGE VALUE OF CLAIMS PER WEEK BY TYPE OF FIELD (£)

<table>
<thead>
<tr>
<th>Type of field</th>
<th>Pre 1857</th>
<th>1858 to 1889</th>
<th>1890 to 1900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom wages</td>
<td>8.10s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good wages</td>
<td>4.0s</td>
<td>2.11s</td>
<td>2.11s</td>
</tr>
<tr>
<td>Wages</td>
<td>2.11s</td>
<td>1.17s</td>
<td>1.11s</td>
</tr>
<tr>
<td>Subsistence</td>
<td>12s6d</td>
<td>12s6d</td>
<td></td>
</tr>
</tbody>
</table>

assumed that there were no subsistence fields in the pre 1857 period and no boom fields in the period 1858 to 1900.

The value of production

*The alluvial fields*

To arrive at a total production figure on each field it is necessary to multiply the average weekly value of miner’s claims on a field (Table 6.3) by the average number of miners on the field per week and the number of weeks that the field was in operation. To illustrate this methodology two examples are taken from the Braidwood gold fields. The first is

TABLE 6.4

VALUE OF GOLD PRODUCTION-BRAIDWOOD GOLD FIELDS 1851-1854

<table>
<thead>
<tr>
<th>Name of field</th>
<th>Type of field by average value of claim (£)</th>
<th>Weeks in existence</th>
<th>Number of miners</th>
<th>Totals (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jembaicum bene</td>
<td>8.5</td>
<td>16.5</td>
<td>300</td>
<td>42,075</td>
</tr>
<tr>
<td></td>
<td>1.85</td>
<td>96</td>
<td>100</td>
<td>17,760</td>
</tr>
<tr>
<td>Major’s Creek &amp; Bell’s Creek</td>
<td>8.5</td>
<td>62.5</td>
<td>1,000</td>
<td>531,250</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>100</td>
<td>750</td>
<td>300,000</td>
</tr>
<tr>
<td>Araluen</td>
<td>4.0</td>
<td>162.5</td>
<td>100</td>
<td>65,000</td>
</tr>
<tr>
<td>Mongarlowe</td>
<td>4.0</td>
<td>137.5</td>
<td>100</td>
<td>55,000</td>
</tr>
</tbody>
</table>

for the early gold rush years, 1851 to 1854 (Table 6.4). Three of the gold fields, Jembaicum, Bell’s Creek and Major’s Creek, had significant boom periods.

Production commenced at Jembaicum in October 1852, the boom period lasting for four months before the field declined rapidly into a wages field for the remainder of the period. For Bell’s Creek and Major’s Creek the boom period lasted until the end of 1852, that is for a period of 15 months, and there were about 1,000 miners on both fields. Thereafter, both fields could be described as good wages, with about 750 miners.
Miners earned good wages on all other fields. The second example is taken from the same gold fields during the period 1858 to 1862 (Table 6.5). All except Bell’s Creek were good wage’s fields during this period.

These examples provide a clear indication of the usefulness of the formula. The estimates confirm that the Braidwood fields were significant gold producers in NSW during both periods. From 1851 to 1854 production was 17.8 per cent of the total NSW figure. Production from 1858 to 1862 represented 26.3 per cent of the total NSW production. For the individual fields, Araluen was 11.8 per cent of the NSW total, Jembaicumbene 7.9, Mongarlowe 4.0, Major’s Creek and Bell’s Creek 1.9 and the Shoalhaven River 0.8. These results may at first glance appear excessive, but

**TABLE 6.5**

**VALUE OF GOLD PRODUCTION-BRAIDWOOD GOLD FIELDS 1858-1862**

<table>
<thead>
<tr>
<th>Name of field</th>
<th>Type of field by average weekly value of claim (£)</th>
<th>Weeks in existence</th>
<th>Number of miners</th>
<th>Totals (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jembaicumbene</td>
<td>2.55</td>
<td>2,500</td>
<td>1,000</td>
<td>637,000</td>
</tr>
<tr>
<td>Major’s Creek and Bell’s Creek</td>
<td>2.55</td>
<td>1,500</td>
<td>400</td>
<td>153,000</td>
</tr>
<tr>
<td>Araluen</td>
<td>1.85</td>
<td>1,000</td>
<td>200</td>
<td>37,000</td>
</tr>
<tr>
<td>Mongarlowe</td>
<td>2.55</td>
<td>2,500</td>
<td>500</td>
<td>318,750</td>
</tr>
<tr>
<td>Shoalhaven River</td>
<td>2.55</td>
<td>2,500</td>
<td>50</td>
<td>31,875</td>
</tr>
</tbody>
</table>

Table 6.6 shows that measured by escort figures alone these fields were significant in the colony. The estimates confirm that at least one set of official figures, in this instance the escort figures, understates gold production by a factor of about two.

Use of the formula is not always necessary, particularly where reliable figures are available. However, even in these instances the data sometimes needs adjustment. The example of the Araluen and Jembaicumbene fields during the period 1899 to 1914 illustrates this point. Almost all gold was recovered by the dredges, which were for the most part owned by listed companies, with publicly available returns. However, there were also a number of highly profitable companies, particularly on the Araluen field, which were privately owned and for which there were no dredge returns. Furthermore, the official returns sometimes included the Jembaicumbene returns in the Araluen figures. While an adjustment can be made to account for the latter deficiency it is not possible to do so for the former.

Total production figures (adjusted) for both fields are set out in Table 6.7 below. Two periods of production are examined - 1902 to 1905 and 1911 to 1914. By the latter period the Jembaicumbene field was well into decline, but Araluen was still a significant producer. Average per annum gold production at Jembaicumbene for the two periods is
### TABLE 6.6*1

**ESCORT FIGURES, EX ARALUEN AND BRAIDWOOD 1858-1870 (oz)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Ex Braidwood</th>
<th>Ex Araluen</th>
<th>Total</th>
<th>Ranking in NSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1858</td>
<td>37,279</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1859</td>
<td>56,980</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1860</td>
<td>65,755</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1861</td>
<td>68,016</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1862</td>
<td>60,226</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1863</td>
<td>63,736</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1864</td>
<td>60,521</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1865</td>
<td>67,846</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1866</td>
<td>46,465</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1867</td>
<td>20,422</td>
<td>6,767</td>
<td>28,189</td>
<td>3</td>
</tr>
<tr>
<td>1868</td>
<td>7,837</td>
<td>46,634</td>
<td>54,471</td>
<td>2</td>
</tr>
<tr>
<td>1869</td>
<td>11,170</td>
<td>38,824</td>
<td>49,994</td>
<td>1</td>
</tr>
<tr>
<td>1870</td>
<td>12,411</td>
<td>17,637</td>
<td>30,048</td>
<td>2</td>
</tr>
</tbody>
</table>

*1 Statistics derived from NSW Statistical Register, various years.

### TABLE 6.7

**GOLD PRODUCTION, ARALUEN AND NSW, 1900-1914**

<table>
<thead>
<tr>
<th>Year</th>
<th>Araluen oz</th>
<th>Total alluvial NSW oz</th>
<th>Total output NSW oz</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>2,833</td>
<td>51,987</td>
<td>251,979</td>
<td>11</td>
</tr>
<tr>
<td>1901</td>
<td>9,713</td>
<td>48,051</td>
<td>195,192</td>
<td>5</td>
</tr>
<tr>
<td>1902</td>
<td>11,406</td>
<td>55,396</td>
<td>190,473</td>
<td>4</td>
</tr>
<tr>
<td>1903</td>
<td>12,415</td>
<td>55,741</td>
<td>235,980</td>
<td>4</td>
</tr>
<tr>
<td>1904</td>
<td>11,898</td>
<td>61,782</td>
<td>250,824</td>
<td>6</td>
</tr>
<tr>
<td>1905</td>
<td>13,111</td>
<td>65,806</td>
<td>268,700</td>
<td>4</td>
</tr>
<tr>
<td>1906</td>
<td>11,436</td>
<td>62,579</td>
<td>240,610</td>
<td>6</td>
</tr>
<tr>
<td>1907</td>
<td>8,520</td>
<td>56,486</td>
<td>213,484</td>
<td>8</td>
</tr>
<tr>
<td>1908</td>
<td>9,482</td>
<td>55,928</td>
<td>230,597</td>
<td>8</td>
</tr>
<tr>
<td>1909</td>
<td>9,711</td>
<td>47,682</td>
<td>204,755</td>
<td>7</td>
</tr>
<tr>
<td>1910</td>
<td>10,360</td>
<td>39,992</td>
<td>173,966</td>
<td>5</td>
</tr>
<tr>
<td>1911</td>
<td>8,860</td>
<td>33,567</td>
<td>166,792</td>
<td>4</td>
</tr>
<tr>
<td>1912</td>
<td>7,950</td>
<td>27,636</td>
<td>163,274</td>
<td>5</td>
</tr>
<tr>
<td>1913</td>
<td>10,348</td>
<td>28,929</td>
<td>147,191</td>
<td>4</td>
</tr>
<tr>
<td>1914</td>
<td>11,310</td>
<td>30,097</td>
<td>121,712</td>
<td>4</td>
</tr>
</tbody>
</table>

* Compiled from NSW Department of Mines, Annual Report, various years; D.S. Clift, Gold Dredging in New South Wales, Geological Survey of New South Wales, Mineral Resources, No.41 Department of Mines, Sydney, various press reports. See also Appendix Five.
estimated at 3,033 oz and 859 oz respectively, constituting 1.1 and 0.5 per cent respectively of total NSW gold production. At Araluen, average gold production for the two periods is estimated at 12,208 oz and 9,617 oz respectively, constituting 4.3 and 5.1 per cent respectively of total NSW gold production. In the second period Araluen contributed almost one third of the total State production of alluvial gold. Clearly, Araluen was a significant gold producing field on a State wide basis during the period 1902 to 1914. This data confirms that in the three main growth periods in the Braidwood area mineral production was very important on a regional, state or colony basis.

The formula can also be used to calculate production on the smaller less remunerative alluvial fields, that is those fields with a mining population of about 100 or less. Two examples, Bungonia and Brook’s Creek can be used to illustrate this process. Bungonia was a wage’s field for most of the 1890s, until persistent dry seasons forced all but the most desperate elsewhere. The main period of mining appears to have been from 1892 to 1898, when on average there were about 100 miners per annum. Total production and average annual production are estimated at £54,250 and £7,750 respectively, the latter constituting only .001 per cent of total NSW production. Brook’s Creek on the Southern Tablelands was a wage’s field from 1861 to 1866, when on average it would have had an annual population of 75, and a subsistence field for the next 35 years and beyond, with a much reduced mining population. Total production and average annual production from 1861 to 1866 are estimated at £41,625, which only constituted .0007 per cent of total NSW production.

Another example was Garangula. On this field the formula is probably unnecessary as the mining was entirely on private land and the gold recovery process was tightly controlled and recorded. According to the registrar, 2,410 oz were won in the first six months of 1894 and 4,302 oz were recovered for the whole of 1895. As the average price of gold at the time was £3.6 an ounce, the value of production was £8,676 and £15,584 in 1894 and 1895 respectively, equivalent to .008 and .012 per cent of total NSW production in each of those years. There were 500 miners in 1894 and 225 in 1895, and they earned on average £34.7 and £69.3 in each of those years. Earnings of this order suggest that the field was a subsistence one in 1894 and a wages one in 1895. While seemingly insignificant producers of gold, Bungonia and Garangula were the brief refuge for large numbers of unemployed. Together with Brook’s Creek they indicate that while the small alluvial fields contributed an insignificant part of overall gold production, they could be significant regionally, particularly when looked at in combination.

The reef fields

Reef gold processing was usually centrally located and visible, and official production figures were generally more reliable than for alluvial mining. Nevertheless, this was not always the case and the formula can still be used, although it requires some refinement. For example, data on the numbers of miners/less meaningful as there were often large

29 £1.55 (wages) x 350 (weeks) x 100 (number of miners).
30 £1.85 (wages) x 300 (weeks) x 75 (number of miners).
31 AR, 1894, p.24; 1895, p.21.
32 This seeming reversal in the boom to bust pattern can be explained by the large numbers of unemployed men who were on the field in the very early months, the less successful of whom would have departed by early 1895.
numbers engaged in shepherding or in unproductive work such as prospecting or development. With regard to the former category it is assumed that the contemporary accounts did not generally regard these unworthies as miners. On the second category, there was generally often a substantial lead time in fully developing reef mines, and a substantial proportion of miners were engaged in this type of work. By contrast, most alluvial claims came into production much more quickly. The examples in chapter three suggest that an adjustment factor of about one sixth needs to be incorporated into the formula. Thus the lead time on a six year field would be one year, and if production was to measured from the date the field opened it would need to be discounted by 0.17 per cent.

Further, a wages based formula is less meaningful where larger companies or syndicates are involved. In these instances the inducement to invest and produce is not based on the opportunity cost to the miner, that is wages, but the opportunity cost to the company. Wages generally constitute a much smaller percentage of production costs than in alluvial mines, as other costs, for example, freight, machinery and processing costs are much higher. As a guide to an appropriate adjustment, official estimates for the Colinton field in the Monaro were 8,960 oz from 1888 to 1898. The average price of gold during these years was £3.12s an ounce, giving a value of production of £32,256. Assuming an average of 25 miners earning wages of £1.55 a week the wages bill is estimated at £21,312, or about two thirds of the value of production. Thus, where larger companies or syndicates were involved the wage based formula should be adjusted upwards by a third (0.33).

Another disadvantage with using the formula on these fields is the difficulty of describing them as either good wages or wages fields. All employees were paid wages, but precise figures on the going rates for individual fields or mining operations were only occasionally available, and as a rule, reef and base metal fields were only occasionally referred to in wages terms. As a rule of thumb it can be assumed that on the less capitalised reef and base metal ventures wages were paid, and in the more highly capitalised ventures good wages were paid. With regard to the latter, production figures are generally more reliable and recourse to the formula is less necessary.

On many reef fields commercially viable production never eventuated, or if it did it was for only a short period of time, and the ventures proved unprofitable to the companies or syndicates. The only winners were the employees and for a time the surrounding communities, a factor underlining the relevance of a wages formula as a measure of the direct economic impact of these fields. There were a large number of marginally profitable fields such as Michelago and Bushy Hill in the Monaro, Bywong, Nanima and Gooda Creek on the Southern Tablelands and Cullinga on the South West Slopes. For example, on the Michelago field, it was reported that 1,000 tons had been extracted from 1872 to 1880. Yields averaged about 0.6 oz to a ton, and on that basis the value of production is estimated at £2,100 or £233 per annum. The next period of activity was from 1887 to 1891, when between 12 and 17 men were employed by a syndicate on good wages. Using the adjusted gold production formula the total value of production is

33 *Monaro Mercury*, 4 February 1898.
34 While the production and mining population figures are based on official estimates, the latter has been corroborated by field work.
35 *AR*, 1881, p.66.
estimated at £12,719 or £2,544 per annum.\footnote{2.55 \textit{(wages)} \times 250 \textit{(weeks)} \times 15 \textit{(miners)} \times 1.33 \textit{(adjustment)}. No adjustment for development work was made as these workings were using the same claim as earlier companies, and, therefore, less work was needed.} At Bushy Hill there were about 20 productive miners from 1897 to 1904, most of whom were employed on wages by small syndicates. Total production is estimated at £11,050 or £1,381 per annum.\footnote{1.55 \textit{(wages)} \times 400 \textit{(weeks)} \times 20 \textit{(miners)} \times 0.67 \textit{(developmental adjustment factor)} \times 1.33 \textit{(other costs adjustment factor)}.} As the value of gold production in NSW ranged from £500,000 to £1,000,000 for most years, none of the above mentioned fields was a significant contributor on a colony or state wide basis, but they were of regional significance.

Several larger and more profitable fields included Colinton (discussed above), Cowra Creek, McMahon's Reef, Captain's Flat, Cullinga, Major's Creek and Harden. In the case of Cowra Creek there were no separate official production figures and the formula can be used. There were three distinct periods. The first was from 1888 to 1895, during which time there was an average of about 60 miners per annum, most of who were employed on good wages by the larger syndicates. In the second period from 1896 to 1904 there were about 40 miners per annum, most of whom were earning wages as working miners, and from 1905 to 1910 there were about 20 miners, most of whom were earning subsistence wages as working miners. Using the adjusted gold production formula, total and per annum production in the first period was estimated at £70,815 and £8,852 respectively. In the second period, the total and per annum value of production was estimated at £33,396 and £3,7107 respectively, and in the third period, £4,988 and £831 respectively.\footnote{2.55 \textit{(wages)} \times 400 \textit{(weeks)} \times 60 \textit{(miners)} \times 0.87 \textit{(developmental adjustment factor)} \times 1.33 \textit{(other costs adjustment factor)} for the first period; \textit{1.55 (wages)} \times 450 \textit{(weeks)} \times 40 \textit{(miners)} \times 1.33 \textit{(other costs adjustment factor)} for the second period; and \textit{6.625 (wages)} \times 300 \textit{(weeks)} \times 20 \textit{(miners)} \times 1.33 \textit{(other costs adjustment factor)} for the third period.}

For the other fields more reliance can be placed on official returns, although even with these there are difficulties. For instance, in the early operations at McMahon's Reef gold production lasted only 18 months because of the refractory nature of the ore. However, during 1872 one mine alone yielded £15,000.\footnote{Town and Country Journal, 22 February 1873.} In addition, the Cunningar Company's 1885 Prospectus indicated that 20,000 oz had been processed in the past.\footnote{D. Clift, \textit{The McMahon's Reef Gold Mines - A Compilation}, Geological Survey Report, New South Wales Department of Mines, GS 1970/676, pp.2-5.} A yield of this order would have been valued at about £70,000. The second phase of operations at McMahon's Reef lasted from 1883 to 1889. After that period the plant operated for another three years, but was confined to processing ore from other fields. The Registrar's estimates, however, only cover 1886 to 1889 and indicate that the value of production was about £17,700. A separate report in 1888 stated that £12,446 had been processed in that year alone, but the Registrar's returns for that year were £6,780.\footnote{D. Clift, \textit{The McMahon's Reef Gold Mines - A Compilation}, p.6.} This would suggest that the output from 1886 to 1889 was considerably higher than indicated by the Registrar. Extrapolating from the alternate figure for 1888, output would have been £32,492 or £8,123 per annum.\footnote{To arrive at this figure the ratio of the 1888 estimate and Registrar's returns has been applied to the 1886 to 1889 figures.} Using the formula, output is estimated at
Whatever set of returns are adopted, this highly capitalised mining venture was obviously very remunerative for a short period of time in both periods and was clearly of regional significance.

Production figures for Cullinga are available from Clift’s work. Between 1899 and 1903, 9,781 oz were recovered, valued at £34,722 or £6,944 per annum (£3.11s an ounce), the mines lingering on for a number of years until a second phase of activity in 1912. At Major’s Creek there were several periods of reef mining activity which, apart from a brief and unsuccessful period of highly capitalised mining in 1889 and 1890, were conducted exclusively by syndicates of working miners. The main period of mining occurred between 1901 and 1910, during which 16,158 oz were recovered. Total and per annum production (at £3.12s an ounce) was valued at £56,179 and £5,617 respectively, mining continuing at a substantially reduced level for a number of years thereafter. Because of the proximity of the main mines and processing plant to the town, the Registrar’s returns can be taken as reliable. Using the formula an estimate of £73,256 was obtained, which in this case appears to be a little too high. These fields clearly had regional significance.

The standout reef gold mining venture in the Southern Mining Region was at Harden, where from 1905 to 1912 total production was valued at £195,000, or £24,735 per annum. In the peak year of 1908 output was 0.5 per cent of total NSW production. This highly capitalised mining venture was clearly of more than regional significance, but it was also the exception in the region, no other reef mining ventures coming close in terms of overall output. Captain’s Flat was also in a category of its own, as gold production after 1886 was largely a by-product of base metal production. As there were only two smelting operations at any one time the figures are relatively reliable. Average annual gold production between 1889 and 1900 (the last year for which production figures were available) was £6,009. This figure was higher than for many fields which depended wholly upon reef gold production.

The base metal fields

There were a number of base metal mines which did not proceed much beyond the development stage. In others, notably Tolwong, Bogolong and Woolgarlowe, Breadalbane and to a lesser extent Mulloon, there was a substantial investment in plant and equipment, but the output was not high and the ventures were often short lived. In these instances the main contribution can be measured principally in terms of wages earned by the miners and contractors.

---

43 £2.55 (wages) x 200 (weeks) x 60 (miners) x 1.33 (other costs adjustment factor). The adjustment for development work at the mine can be ignored for this period as this would have taken place in 1883. Crushing commenced in 1884, but for comparative purposes these early years have been ignored.
45 AR, 1901 to 1914. £2.55 (wages) x 500 (weeks) x 48 (miners) x 0.9 (developmental adjustment factor) x 1.33 (other costs adjustment factor). The latter adjustment factor is possibly too high as some of the mines were very poorly capitalised.
47 J.E. Carne, The Copper Mining Industry and the Distribution of Copper Ores in New South Wales, Department of Mines, Geological Survey, Mineral Resources No.6, Sydney, 1908, pp.356-357.
Other mines were more significant, but for some of these official returns are unavailable or unreliable and the production formula can be used. For instance, the Wallah Wallah silver mines were described as payable from 1899 to 1902. There were about ten men employed using the most basic of equipment, and assuming that they were earning wages, which in this period were about £2 a week, total production has been valued at £5,320 or £1,330 per annum.  

At Kangiara, £17,000 had been won from 1901 to 1907 by five men working only the most easily won ore. From field work it is clear that there would have been at least 15 miners on the field, all of whom would have at least earned wages. Thus for the other mines it is estimated that total output was £9,310, giving a total output on the field of £26,310, or £3,759 per annum.

For 1907 to 1914, official data on Kangiara is available. The value of production in those years was £205,027, 89 per cent of which occurred between 1909 and 1912. Together with estimated production prior to 1907, overall production to 1914 has been valued at £222,000. In the peak production years of 1910, 1911 and 1912 the volume of silver ore extracted and treated (but not refined) was 3.2, 1.5 and 2.3 per cent respectively of the NSW total. This may appear an insignificant level of production, but NSW production of silver was dominated by the Broken Hill mines, which were significant both nationally and internationally. Kangiara was, therefore, of Statewide significance.

Other significant mining ventures occurred at Currawang, Frogmore, Kyloe and Captain’s Flat. Official figures are available for Currawang until 1873. From 1867 to 1872, Currawang was the largest copper mining and smelting centre in New South Wales. The value of production in those years was £89,900, compared to £122,600 for New South Wales as a whole. After 1873 there is no record of production at Currawang, as production was clearly dwarfed by the Cobar mines. However, apart from a shut down in 1879 they continued largely uninterrupted until 1882, and were a significant employer of local wage and contract labour.

At Frogmore no official production data is available for the early years, although an unofficial estimate in June 1878 put the value of refined copper since June 1876 at £20,000. This was about five per cent of the Colony’s production at that time. There is no account of production between June 1878 and mid 1881, the year in which the Frogmor Copper Company commenced operations, as much, but not all, of the efforts were concentrated on development work. One account states, however, that nine tons of refined copper a month were produced during this period. If an annual average of 100 tons of refined copper at an average price of £65 is assumed then the value of production for this period would have been £19,500, which was about one per cent of total NSW production. Official figures are available from 1881 to 1885. The value of

---

48 £2.0 (wages) x 200 (weeks) x 10 (miners) x 1.33 (other costs adjustment factor).
50 £2.0 (wages) x 350 (weeks) x 10 (miners) x 1.33 (other costs adjustment factor). At both Wallah Wallah and Kangiara pre production development work would have been minimal, although freight costs would have been high.
51 Appendix Six, Base Metal Mining Statistics, Kangiara.
53 Appendix Six, Base Metal Mining Statistics, Currawang.
55 *Burrowa News*, 4 October 1878.
production was £25,000, which was also about one per cent of total NSW production.\textsuperscript{56} There is no account of production during the period 1888 to 1891.

The Kyloe copper mine was the largest mining operation in the Cooma Division during the period prior to 1914, and from 1908 to the mine’s closure in 1913, £258,400 of copper ore, matte and concentrates were produced.\textsuperscript{57} In 1910 and 1911 the value of production was 17 and 11 per cent respectively of the NSW total. Captain’s Flat was in a category of its own and was a significant producer of silver and copper between 1887 and 1899. Production figures are not available for 1888 and 1891, but in 1895, refined silver production was 137,951 oz, representing 25.0 per cent of the total NSW output, and in 1897 and 1898 the combined production of 206,460 oz was 30.2 per cent of total NSW production. In these latter two years copper matte production was 978 tons, which was 8.3 per cent of total NSW production.\textsuperscript{58}

**Conclusion**

The principal challenge with estimating mineral production has been with gold, for its contribution has been understated substantially by historians and economists alike. On the estimates presented in this chapter gold production was about double that recorded in the official data. A number of gold and base metal mining fields in the Southern Mining Region were important from a national perspective, but the majority were primarily of regional importance. There were, nevertheless, a large number of these fields and mining was a very important regional industry.

With the exception of the 1890s, the pattern of production is at odds with that described nationally by Butlin. For example, the 1860s were a boom period on many fields, some of which were also significant in the 1870s, but the 1880s were quieter, largely as a consequence of drought conditions. My estimates confirm that mining was continuous throughout the Southern Mining Region for many years. The quietly pervasive nature of much of the mining activity suggests that it may have been more important in contributing to regional economic stability and the ‘smooth expansion’ of the Australian economy in the post 1860 period than hitherto admitted.

\textsuperscript{56} Appendix Six, Base Metal Mining Statistics, Frogmore; Carne, The Copper Mining Industry, pp.345-348.

\textsuperscript{57} Appendix Six, Base Metal Mining Statistics, Kyloe.

\textsuperscript{58} Appendix Six, Base Metal Mining Statistics, Captain’s Flat; Carne, The Copper Mining Industry, pp.356-357.
Chapter 7.
The alluvial settlements

The role of alluvial gold mining in the settlement and development of the colonies - in the development of towns and villages, public institutions, commercial enterprises, roads and bridges, has rarely been investigated in any detail. One exception is Derek Carrington, who has discussed at length the development of towns, transport facilities, postal services and settlement on the alluvial gold fields in New South Wales.\(^1\) Several general histories have also noted the importance of mining to settlement and development. Bolton, for example, referred to the development of publicans, storekeepers, families, churches and schools, followed by newspapers, entertainers and lodges, and Molony has also commented on this phenomenon.\(^2\) Most general histories are, however, silent on the role of mining in regional development. To a degree this neglect is understandable: as Blainey points out, most mining towns ‘vanished from the map’, and their physical remains are now lost or, at best, obscure.\(^3\) Mining settlements located in more remote and less arable environs are often marked by little more than a few stone chimney remains and fragments of pottery, glass or rusting metal fragments, such as axe or shovel heads. Little wonder that their regional effect is still little understood.

Where historians have commented upon the development of mining settlements, their attention has been invariably drawn to the larger and more enduring ones. For example, a considerable historiography exists on the more prominent Victorian gold field towns such as Ballarat, Bendigo, Beechworth and Castlemaine, the New South Wales settlements of the Turon and Queensland gold field towns such as Gympie.\(^4\) Both Michael Cannon and John Ritchie have characterised country towns, including mining towns, as possessing a wide range of institutions and facilities, many more than were possessed by the more ephemeral, lesser known alluvial mining settlements.\(^5\) There has, however, been only a limited discussion of their material culture.\(^6\)

---

5 Michael Cannon, Life in the Country: Australia in the Victorian Age: 2, Thomas Nelson Australia, Melbourne 1973, pp.238-239; John Ritchie, Australia as once we were, Heinemann, Melbourne, 1975, p.102. Cannon did not distinguish between gold mining and non gold mining towns.
6 This discussion has been confined to historical archaeologists. One aspect of the material culture concerns boundaries. The 1871 NSW Census referred to the difficulty of distinguishing the population of towns and villages from that dispersed over the country and engaged in rural pursuits. Registrar General, New South Wales Census of 1871, Sydney, 1873, p.26. Ambiguity in the identity of the miners, a matter discussed in chapter five, also had implications for the definition of boundaries. In my thesis these boundaries have been broadly interpreted.
One exception is Susan Lawrence, who has focussed on the material culture of the lesser known Dolly’s Creek diggings in Victoria. There are several accounts of the larger mining settlements in the Southern Mining Region, such as Araluen and Major’s Creek, but apart from my own work, very little has been written about the smaller ones. This chapter considers the region as a whole and a wide range of settlements within it. In it I discuss the pattern of development of amenities such as roads, bridges, transport, shops, churches, schools, and post offices, the effects, if any, on these services when the mining declined, and the economic impact of mining on the region. Attention is given to the involvement of the Chinese and women in the settlements. Mining fields with both reef and alluvial mining have been categorised as one or the other depending on the dominant form of mining at any one point of time.

**Gold rush settlements: 1851-1856**

The only gold mining settlements in existence in the Southern Mining Region during this period were in the Braidwood and Shoalhaven District. Most of the population on Major’s Creek was located at or near the town site on the upper reaches of the main creek. Sly grog selling was carried out at both Bell’s Creek and Major’s creek within the first few months, the vendors at the former locale selling to the public ‘as if they had licenses’. The mounted police were soon established at Major’s Creek and a store was erected near the police tents. A mounted police detachment was established at Bell’s Creek not long after. By mid 1852 there were public houses at both settlements, the sly grog selling having by that time been suppressed by the police. Later that year, tents had been erected at Major’s Creek for the Roman Catholic, Anglican and Presbyterian congregations, the Wesleyans following suit in early 1853. In his reminiscences Richard Kennedy states that at Major’s Creek there were several stores, a private school, a butcher’s shop, a number of gold buyers, and tents for the holding of religious services. By 1856 there were three hotels, but no shops.

---


11 *Goulburn Herald*, 6 December 1851.
12 *Goulburn Herald*, 13 December 1851.
13 *Goulburn Herald*, 20 March 1852.
14 *Goulburn Herald*, 27 March, 17 April 1852.
15 *Goulburn Herald*, 23 October, 11 December 1852.
16 Richard Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, *Braidwood Dispatch*, 17 August 1907.
At Jembacumbene there were a number of mining camps along the length of the creek, for example, at Honeysuckle Flat, Reedy Creek, Moreing’s Flat and Bell’s Paddock. There did not appear to be a formal township, but there was a scatter of businesses, and by February 1853 there were several stores and John Wilson’s public house, in which a receiving office was located later that year. By April the diggings were in decline and sly grog selling was widespread. Tents had been erected, however, for the holding of religious services by the Anglican and Roman Catholic clergy. The decline in mining activity was very marked for the remainder of the period, and with the exception of the hotel and receiving office, little else survived.

There was only a small, scattered population at Araluen, despite the mild climate and the relatively large areas of cultivable land. By early 1853 some miners lived with their wives and families in bark huts and kept stock and poultry. A number of historians have commented on the role of women and children in tending the stock and gardens. Although there are no explicit references to their involvement in such activities in the Southern Mining Region, it can be safely assumed that these activities occurred at Araluen and most other gold fields in the region. In addition, a Benevolent Society was established and a store erected. In the early days sly grog establishments were as prevalent here as elsewhere, but towards the end of this period Araluen had assumed a more settled appearance. In 1855 the first religious services were held and a private school established. By the following year there were five traders and five public houses at Araluen, Bell’s Creek and Jembacumbene combined.

At Mongarlowe, the population was scattered along the length of the Mongarlowe River, though most would have resided close to the main village at Sergeant’s Point. In early 1852 there were six or seven stores on the field, most of which were removed not long after. Reports of drunkenness at this time suggest that there was a deal of sly grog selling, for a hotel was not established until later that year. By 1853 religious services were held by the Methodists, though there was no church building, and by mid to late 1856 there were five stores and two butcher’s shops, a small Anglican church, a Presbyterian church, and four hotels. In 1856 Commissioner King commented favourably on Mongarlowe and stated that the population had ‘made themselves so comfortable in their huts and gardens, that it requires very startling news to induce them to move’. There were four hotels and five traders.

18 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 10 August 1907.
19 Sydney Empire, 24 February 1853.
20 Goulburn Herald, 23 October 1852, 25 March 1853.
22 Goulburn Herald, 23 October 1852, 25 March 1853.
23 Goulburn Herald, 23 October 1852.
24 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 5 October 1907.
26 Goulburn Herald, 27 March 1852.
The only other mining settlement in the district during this period was at Oallen on the Nerriga field, where a small number of miners were earning wages in 1856. The miners purchased provisions from a nearby landowner. By the end of 1856 the overall population on the Braidwood and Shoalhaven District fields was modest. The total male mining population was 540, and there were about 500 women and children, but in some instances, the nucleus of a town or village had been established and great encouragement given to farming and industries such as carting and transport.

**Towns and villages: 1857-1874**

During this period the largest alluvial gold mining settlement was Araluen. Mining camps and satellite settlements were located along the valley, for example, at Crown Flat, Favourite Flat, Mudmelong, Merricumbene and Deep Creek. By June 1859, stores, public houses and other business premises had been erected at Merricumbene, which was one of the more distant settlements on the field. Within a few months the flats at lower Araluen were a prime focus, and at Crown Flat a restaurant, two new public houses and a dispensary had been erected. Other business premises were ‘rapidly springing up’ and the number of tents were increasing to a ‘surprising extent’. There was a population of about 700 at lower Araluen at that time, over half of whom were at Merricumbene, and there were many stores and seven or eight public houses, besides sly grog shops.

This flurry of activity received a substantial setback with severe floods in early 1860, occasioning loss of life and severe damage to mining claims. From one end of the creek to the other, every hut or tent within about 50 metres of the banks had been carried away. At Mudmelong all the stores and public houses were flooded, but all the houses at Crown Flat escaped. Floods were to visit the valley on many occasions in the future, but from here on the main damage would be to the mining claims, as thenceforth most tents and buildings were located at a safe distance from the creek. By 1861 the valley had assumed a settled appearance, a report in December of that year referring to the population at Upper Araluen as, ‘settling down with homesteads going up in all directions’. A private school had been established and there were churches and Sunday schools. Public schools were not built until much later. The stipends of the goldfield chaplains for the Church of England were paid by local subscriptions and the Sydney Church Society. Transport infrastructure was a problem, however, for the track from Braidwood was all but impassable and all traffic had to be diverted to Moruya or via a

---

29 Commissioner King, Gold Fields-Braidwood District (residents and public houses thereon.), *Votes and Proceedings*, 1857.
30 *Goulburn Herald*, 6 December 1856.
31 Commissioner King, Gold Fields-Braidwood District (residents and public houses thereon.), *Votes and Proceedings*, 1857.
32 *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 18 June 1859. It was also proposed to move the Temperance Society building to that vicinity, possibly for use as a hall for the holding of religious services.
33 *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 6 August 1859; *Braidwood Observer and Miner’s Advocate*, 10 September 1859. A butcher’s shop had been erected at Favourite Flat and a photographer was also on the field.
34 *Goulburn Herald*, 12 August 1859.
35 *Sydney Empire*, 20 February 1860; *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 21 February 1860.
36 *Braidwood Observer and Miner’s Advocate* in the *Sydney Empire*, 21 December 1861.
new track called Shoebridges. By 1862 a new track had been built from Braidwood to Araluen. By late 1863 the Redbank settlement was the main attraction, with ‘all the excitement and bustle which used formerly to make Crown Flat so lively having been removed to that location’. One indication of this change was the clamour for removal of the post office from Crown Flat to the Plains and Redbank at upper Araluen, the population in both places totalling about 3,000. The former settlement was described as ‘almost deserted’. In 1864 new hotels and businesses were established, several of them by those already at Crown Flat. Severe floods visited the valley later that year with considerable destitution apparent. By 1865, Newtown was the new focus. It was as busy as Redbank, with many new businesses and private buildings under construction. A branch of the Australian Joint Stock (AJS) Bank was opened at Redbank.

In 1866 Araluen had one sawmill, a brewery, post office and telegraph station, an office for the Nelligen coach, a Freemasons, two Odd fellows’ lodges, 28 hotels and public houses, a branch of the AJS bank and a good race course. The township was described as one long street, with over 11 km of residences and a population of 3,500, the ‘street’ incorporating the settlements at Newtown, Redbank, Crown Flat, Favourite Flat and Mudmelong. By 1867, Redbank presented a bustling and business like appearance on Saturday evening. The main street was crowded and the stores all doing a fair share of business, with ‘more money stirring than we have seen for many a day’.

By 1870 Araluen was a more subdued settlement. There were three distinct townships, Redbank, Newtown and Bourketown, further up the valley. The former was the principal site of population and trade, and there were Anglican, Catholic and Presbyterian churches, a post office, a new school and a newspaper office. A Wesleyan chapel was located at Newtown and a Baptist at Bourketown. There were two police stations and a court of petty sessions, which was held every Wednesday, and a magistrate. While there was no mechanic’s institute, there were many hotels, three banks, three public schools and five private schools. As an indication of the importance of the churches, there were five Church of England Sunday schools with an enrolment of 497, churches at Redbank and Newtown, a meeting house at Mudmelong and premises at Burketown.

It was also commented that the Chinese had some fine gardens and grew corn, an indication that they were substantial suppliers of market produce. Several historians have commented that the supply of vegetables and fruits in the colonial Australian diet.

---

38 Braidwood Observer and Miner’s Advocate, 27 October 1860.
40 Goulburn Herald, 12 September 1863.
41 E. Eaton to Postmaster General, 20 September 1863; petition (undated), SP 32/1, Box 9, NAA, Sydney.
42 Braidwood News and General Advertiser, 24, 27 February 1864.
43 Braidwood News and General Advertiser, 23 April, 1 May, 22 June 1864.
44 Goulburn Herald, 16 August 1865.
45 Goulburn Herald, 23 August 1865.
47 Goulburn Herald, 28 August 1867.
49 Town and Country Journal, 5 February 1870.
was largely dependent upon the Chinese. 50 Where families were involved and the soil favourable, gold field residents could partake of their own produce, but where this was not the case then they were dependent upon other sources. In 1861 it was commented that those diggers in the Braidwood District who had settled on the fields had gardens, which would more than support their families with vegetables. 51 The existence of the miner’s right with its quarter an acre entitlements and the fertility of the Araluen valley encouraged many residents to supply their own produce, but others would not have had the time, inclination or skill to do so. Their needs were met by the Chinese market gardeners, who pioneered this form of commercial enterprise. 52

Severe floods in 1871 had a devastating effect on Araluen, and many families abandoned their homes and left. By May 1872 the number of public houses had decreased, and there were only five in Newtown and two in Redbank, and although there were 24 storekeepers, trade was not flourishing. There were, however, still two banks, the Oriental and New South Wales, and a post and telegraph office. The Anglican and Roman Catholic churches still functioned, though the Wesleyan chapel was only occasionally visited by the ministry. Other institutions and establishments included the public schools, a hospital, Sons of Temperance and Oddfellows, each with a hall at Redbank, a chemist, herbalist and two doctors. 53

During this period Araluen was by far the largest town in the district, for in 1871 there were 2,900 residents at Araluen East and 1,339 at Araluen West, both of which were larger than Braidwood, which had only 1,197 residents. Its regional impact went well beyond the employment of persons in mining, and included many other industries and occupations, the variety of which is borne out by the 1871 Census. For example, at Araluen East, which would have included Redbank, Newtown and Bourketown, there were 583 miners, three clergy, two doctors, three chemists, 22 teachers, two police, three civil servants, 30 storekeepers, six bankers, 36 engaged in the production and distribution of food and drinks (such as butchers, bakers and brewers), nineteen hoteliers, five farmers, four market gardeners, two blacksmiths, eight boot makers or saddlers, 12 needle women and 97 carriers and draymen. There were also large numbers engaged as labourers, workmen, apprentices and assistants. The working population of West Araluen was similarly composed. 54

Field work has confirmed the size, spread and composition of Araluen during this period. Although there is very little left of the buildings, the sites of the Newtown and Redbank settlements can be seen. They are now incorporated into the current village of Araluen. (Appendix One, Map 10) Elsewhere, most sites have been obliterated by the effects of paddocking and dredging, orchard development and grazing. (Appendix One, Map 11) 55 The main physical evidence of this period are the Roman Catholic and

51 Sydney Morning Herald, 10 January 1861.
52 Whether they saw themselves as pioneers, either in this endeavour or in gold mining is, however, another matter, for the personal narratives cited by Shen Yuanfang are not available for these men. The perceptions of the Europeans are discussed in chapter ten. ShenYuangfang, Dragon Seed in the Antipodes: Chinese–Australian Autobiographies, Melbourne University Press, Carlton, 2001, pp.47-64.
54 Registrar General, New South Wales Census of 1871, Sydney, 1873, p.1124, 1126, 1128.
55 Barry McGowan, The Golden South, Barry McGowan, Canberra, 2000, pp.28-33; Barry McGowan, Conservation and heritage overview of the Araluen catchment area, incorporating the Araluen, Bell’s
Anglican cemeteries, which are still in use, and the Merricumbene and Chinese cemeteries at Mudmelong, both of which are now abandoned. In addition, the remains of hut sites can be found in several locations, particularly at Mudmelong, Favourite Flat and Crown Flat. The sites at Mudmelong include the schoolhouse and hotel.

A number of huts were located on embankments cut into the sides of the hills in a similar way to those described by Susan Lawrence at Dolly’s Creek. It is beyond the scope of this thesis to determine whether they were built of wood or calico; however, where there is no evidence of any stone footings or a chimney, obviously the latter was the case. The structure of the diggings, the close clustering of the remaining hut sites and the proximity of the Chinese cemetery suggests that a large number of Chinese were working in the Mudmelong area. The typology of several mining claims and the intimate distribution of the huts, confirms that upper Araluen was also an important area of Chinese settlement. (Appendix One, Map 12)

At Jembaicumbene the population was scattered along the length of the creek, with the main settlements being located at Strike a Light Creek, Bell’s Paddock and the ‘Swamp’ near the main crossing on the Major’s Creek road. In February 1859 a hundred tents were erected in one week at the Swamp. The Chinese were a very important part of these settlements. By 1859 they formed the entire population of Bell’s Paddock, and it was reported that they had ‘formed quite a village’, and appeared ‘to be happy and contented’. The diggers on Maddrell’s land were also mainly Chinese. A great increase in the mining population had taken place at the Paddock by mid 1860. There were tents in all directions, and the Chinese had their stores and butcher’s stalls ‘scattered all around’.

By the latter part of 1860 a great number of buildings had sprung up at Strike a Light Flat, near Belle Vue homestead, including an extensive store adjoining the O’Connell Arms. A store had been erected between Exeter Farm and Durham Hall, and at New Town at the Swamp there was a considerable population, all of whom appeared to be ‘profitably employed’. Several stores had been erected recently at New Town, all of which appeared to be well patronised, and a substantial mill had been erected by Mr.

Creek and Major’s Creek Goldfields, report to the Lower South Coast Catchment Management Committee, 1998, pp.95-96.


57 McGowan, The Golden South, p.31; Conservation and heritage overview of the Araluen catchment area, incorporating the Araluen, Bell’s Creek and Major’s Creek Goldfields, pp.96-97; Mary Herbert (1995) has stated that the area upon which her house was built was the ‘Chinese stables’. Field work has confirmed the existence of extensive stone terracing, on which there would have been buildings. It is more than likely that the joss house was situated in this area as it was located between one of the main areas of workings and the cemetery. Tom McAdoo, When Grandma Was Just A Girl, Landsdowne Press, Sydney, 1983, p.87. The layout of European and Chinese settlements has been discussed by Smith, who has observed that the former were considerably more dispersed than the latter. Lindsay Smith, Cold Hard Cash, A Study of Chinese Ethnicity in Archaeology at Kiandra, New South Wales, M.A., ANU, 1998, pp.184-189.

58 McGowan, The Golden South, pp.22-28; McGowan, Conservation and heritage overview of the Araluen catchment area, incorporating the Araluen, Bell’s Creek and Major’s Creek Goldfields, pp.91-94.

59 Goulburn Herald, 15 February 1859.

60 Sydney Empire, 14 June 1859.

61 Sydney Empire, 25 June 1859.

62 Braidwood Observer and Miner’s Advocate, 20 June 1860.

63 Braidwood Observer and Miner’s Advocate, 25 August 1860.

64 Braidwood Observer and Miner’s Advocate, 3 November 1860.
Dransfield, with a large oven for the bakery.\textsuperscript{65}(Fig.7.1) By December 1860 there were 300 to 400 persons at the ‘Swamp’ and a new crossing had been installed near Summer’s store.\textsuperscript{66} After considerable debate it was decided to locate the post office at his store.\textsuperscript{67}

In early 1861 a large population, the majority of whom were Chinese, was reported along the banks of Jembaicumbene Creek from New Town to Belle Vue, and in response to the great number of children at the swamp a school had been opened.\textsuperscript{68} There was, in addition, a race course, and O’Brien’s establishment near Strike a Light Flat included a hotel, store, bakery and butcher’s shop.\textsuperscript{69}(Appendix One, Map 15) At Strike a light Flat a complete township was gradually rising, and homesteads were being built and the land fenced and planted with crops.\textsuperscript{70} The crops and gardens on the field were described as ‘looking splendidly’.\textsuperscript{71} Of the Chinese it was stated that:

Some of the smartest of them started stores on all these fields, others of them started shanties and gambling dens. On each of those afore mentioned fields there was one or more of those dens. They had two or three places of worship built on Jembaicumbene, where the most religious of them would congregate regularly... \textsuperscript{72}

By 1866 Jembaicumbene was described as having a population of 400, of whom 200 were Chinese, three hotels, a carrying office, and a Chinese coach operating between Major’s Creek, Jembaicumbene and Braidwood.\textsuperscript{73} Another account in 1870 referred to the ‘neat little township which...had a married and settled air about it’. At this time there was only one hotel. However, a crushing plant was under construction near the town, and Dransfield’s mill had been converted into a crushing plant for the Major’s Creek field.\textsuperscript{74} Half time and full time schools were established in 1870, and in 1872 a new school building was erected for the Roman Catholic community.\textsuperscript{75} The 1871 Census placed the population at 837, of whom 212 were engaged in mining, 29 in agriculture, nine in pastoral activities and ten in horticulture. The commercial establishments included 25 storekeepers and merchants, nine persons engaged in the production and distribution of food and drink, such as butchers and bakers, three publicans, and 12 draymen or carriers.\textsuperscript{76} The occupations of the Chinese were not specified, but as there were about 150 of them they were a large percentage of the population.\textsuperscript{77}

\textsuperscript{65\textit{Braidwood Observer and Miner’s Advocate}, 28 November 1860. The power from the machinery was not only used for making flour but sawing timber and cutting firewood.}
\textsuperscript{66\textit{Braidwood Observer and Miner’s Advocate}, 28 November 1860.}
\textsuperscript{67\textit{Summers to GPO}, 7 November 1860, 13 December 1860, 4 January 1861; J. Wilson to GPO, 23 March 1859; H. Moering to GPO, 21 May 1859, SP 32/1, Box 280, NAA, Sydney.}
\textsuperscript{68\textit{Braidwood Observer and Miner’s Advocate}, 28 January 1861.}
\textsuperscript{69\textit{Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 17 August 1907.}}
\textsuperscript{70\textit{Braidwood Observer and Miner’s Advocate}, 13 March 1861.}
\textsuperscript{71\textit{Sydney Morning Herald}, 17 January 1861.}
\textsuperscript{72\textit{Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 30 August 1907. Of the dens he said, ‘I remember one of those dens that was kept by Nip Cue, of Bell’s Paddock, being raided by the police, and old Nip was caught and fined thirty pounds for sly grog selling’.}}
\textsuperscript{74\textit{Town and Country Journal}, 22 January 1870.}
\textsuperscript{75\textit{New South Wales Department of School Education, \textit{Government Schools Of New South Wales 1848 to 1993}}, Southwood Press, Marrackville, 1993.}
\textsuperscript{76\textit{Registrar General, \textit{New South Wales Census of 1871}}, p.1124, 1126, 1128.}
\textsuperscript{77\textit{They would have been encompassed by their listing under the heading of ‘pagans’ in the Census. There were 152 persons so described, of whom only three were females. Registrar General, \textit{New South Wales Census of 1871}}, p.292.}
The combined effects of farm cultivation and dredging have removed much of the physical evidence of the hundreds of miners and their families who lived on the field. However, field surveys and contemporary maps have been of some assistance in confirming the size, spread and composition of Jembaicumbe during these years. (Appendix One, Map 13) At New Town, a village was laid out formally with lots and streets, and a few buildings such as Dransfield’s mill are still standing. (Fig.7.1, Appendix, One, Map 14) Stone footings also remain of several buildings such as a blacksmiths, the public school, the Roman Catholic church and school and the battery site. Other remains include O’Brien’s complex at Strike a Light Flat. (Appendix One, Map 15)

With the exception of the Chinese cemetery, which is located to the north of the main village, the physical evidence of the Chinese settlements is almost non existent. (Fig.7.2) However, some guidance is provided by contemporary maps. For example, one map (undated) shows an area of Chinese gardens to the west of the main village, with a creek frontage of about 200 m. The existence of a large area of Chinese gardens further illustrates the importance of this form of commercial enterprise. An 1877 survey map shows an area of Chinese occupation near the main village. (Appendix One, Maps 16, 17) This area was occupied by You Watt and included a store and three huts, with five other Chinese huts located nearby.78 Evidence from local informants also suggests strongly that the ‘joss house’ was located near these buildings.79

At Mongarlowe a number of separate mining camps were established along the length of the Mongarlowe River and its tributaries. The main village was at Sergeant’s Point, with lesser settlements at Broad Gully, Warrumbucca and Taylors (or Charleyong). By late 1860 three Chinese stores had been erected at the main village, and it is likely that the ‘joss house’ and cemetery had also been built.80 There were 500 Chinese on the field and they formed the majority of the mining population.81 In January 1861 there were additions to one of the two European stores and to one of the hotels, and a new hotel, butchery and store had been opened. The new hotel, the Free Selection Inn, was built by James Garnett, and attached to his store.82 Presbyterian church services were held in his home and the hotel was used as a returning office for elections and as a meeting place. Further hotels were located at Burke’s Crossing and Feagan’s Creek, one of which was owned by a Johanna Elphick.83 She was one of a number of women who ran businesses and other gold fields. A mixed non denominational school had also been opened recently. The total population of the field was estimated at 700.84

---

78 McGowan, Bungonia To Braidwood, pp.109-113; Barry McGowan, Historical Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, Report to the New South Wales Department of Urban Affairs and Planning and the Australian Heritage Commission, 1995, pp.81-83.
80 Braidwood Observer and Miner’s Advocate, 10 October 1860. In 1862 a funeral was held for two Chinese from Flanagan’s Point, which suggests that a cemetery and joss house were in existence by then, if not earlier. Braidwood Observer and Miner’s Advocate, 10 December 1862.
81 Braidwood Observer and Miner’s Advocate, 6 October 1860.
82 Braidwood Observer and Miner’s Advocate, 12 January 1861.
83 K.J. Meldrum, Braidwood District’s Garnett and Meldrum families 1851-1880, private publication, 1997, pp.8-9, p.14. The Digger’s Arms and White Horse Inn, were located at Burke’s Crossing and Feagan’s Creek respectively.
84 A mixed non denominational school was referred to in the Police Returns for 1860. It had 36 pupils at that time. There was no reference in the Returns of the Presbyterian school, and it can be assumed that it had been closed by then. Police, Braidwood, copies of letters received, 1860, p.193, 4/5519 part, SRCNSW, Sydney.
Fig. 7.1. Dransfield's mill, built in 1860, Jembaicumbene.

Fig. 7.2. Chinese cemetery, Jembaicumbene. All the graves appear to have been exhumed. There are no grave markers or headstones.
Fig. 7.3. Chinese hut, Broad Gully, Mongarlowe. Chinese coins have been found at this site.

Fig. 7.4 Mongarlowe village, Chinese huts in foreground, Chinese market gardeners crossing the river bed. The joss house was to the left of the drawing. Illustrated Sydney News, 20 January 1870. Permission of the National Library of Australia.
Fig. 7.5. Shong Foon Nomchong’s stores, the Millhouse and the Premier, Braidwood. Permission of the Braidwood and District Historical Society.

Fig. 7.6. Chee Dock Nomchong’s store, Braidwood, Chee Dock on right. Permission of the Braidwood and District Historical Society.
Fig. 7.7. Chimney of large house site, Taylor’s village, Mongarlowe.

Fig. 7.8. Remains of hut site at Pipeclay diggings (with Kirsty Altenburg), Shoalhaven River field.
Fig. 7.9. Dredge construction, Araluen; workers and their wives. Note large quantities of timber used. Permission of the National Library of Australia.

Fig. 7.10. Dredge construction on the Shoalhaven River. Again, large quantities of timber have been used. Permission of Patricia Grimshaw.
There were two sawmills at the Sergeant's Point village in 1866, and the population of the village and the field were 300 and 500 respectively, of whom half were Chinese. A drawing published in 1871 shows the 'joss house', a number of Chinese huts, and several Chinese crossing the river with merchandise on their shoulders. This drawing provides further important evidence of the Chinese involvement in commercial market gardening. It also shows the main village, with the principal public houses and stores, a school and a police station, all of which were located on the opposite side of the river to the Chinese camp. (Fig. 7.4) The total population, including Chinese, was estimated at 1,000, which suggests that the 1866 estimates were an understatement. A public school was not established until 1869.

One of the foremost Chinese residents at Mongarlowe was Shong Foon Nomchong, who also built several stores at Braidwood. He was naturalised in 1867 and subsequently invited his brother Chee Dock to Australia to help him with his growing businesses. Chee Dock also owned a store in Braidwood and subsequently inherited Shong Foon's estate. Descendants of both men lived in the Braidwood area for many years and established a wide range of businesses both there and elsewhere in the Southern Mining Region. A measure of their commercial prominence can be seen from the size of their Braidwood stores. (Figs. 7.5, 7.6) Quong Tart and the Nomchongs were also involved in the formation of the Oriental Bank, a branch of which was established at Araluen.

Of the other settlements, Broad Gully had at least one hotel and store, and by September 1864 there were four public houses and a number of stores doing a 'roaring trade' at Warrumbucca. An account of Warrumbucca, probably in the early 1870s, described it as a small diggings town with a general store, a post office, a little cottage for the school, which was privately run with about 12 students, and some digger's huts. The settlement at Taylor's served a number of mining and rural communities. For example, a petition for the establishment of a post office was signed by residents of Charleyong, Bentley's Point, Leech'e Point, Mogo Mogo, Spring Creek and elsewhere, and included five Chinese. The post office was opened in 1871. There was also a butcher's shop, store and a Presbyterian church, with seating for a hundred or more, and a cemetery. A provisional school was established in 1871 and conducted in the church. There was also a privately run school to which most of the gold diggers children attended. Half time schools were established at Durran Durrah, Back Creek and Currockibilly.

Field and map evidence has assisted in verifying the size and distribution of the Mongarlowe settlements. The remains of the early settlements at Sergeant's Point, Warrumbucca and Broad Gully have been largely destroyed by subsequent building, cultivation or road construction. Remains of mining camps exist, however, on the more

---

85 Bailliere's Gazetteer, p.363.
87 Discussion with Lionel Nomchong, Canberra, 1996.
88 Braidwood News and General Advertiser, 10 September 1864.
89 Mary Bentley Moore, Journey to Durran Durra, Jeanne Bow, 1984, pp.8-10.
90 J. Olsen, Historical Officer, Postmaster General's Department, to Mrs. F. Saville, 22 March 1971. In the possession of Geoff Saville, Charleyong. Taylor's was also known as Marlow or Charleyong.
91 Bentley Moore, Journey to Durran Durra, pp.13-16; New South Wales Department of School Education, Government Schools Of New South Wales 1848 to 1993, p.98. The school was upgraded to a public school in 1873, but downgraded to a half time school in 1875.
92 New South Wales Department of School Education, Government Schools Of New South Wales 1848 to 1993, p.25, 58, 63, 98.
93 Mcgowan, Bungalow To Braidwood, pp.143-164; Mcgowan, Historical Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp 99-109.
remote parts of the field on the river flats, points and some tributaries, with the population spread over almost the entire length of the river south of Warrumbucca. The isolation of some of these camps has meant that the hut sites are in a much better state of preservation than those at Araluen. Large camps were located at Flanagan’s Point, Half Moon, Bob’s Creek, Newbury’s Point, Sapling Yard Creek and Bentley’s Point. Some of the village remains at Taylor’s, including the cemetery, are still visible. (Fig. 7.7)

At Broad Gully, Bob’s Creek, Bentley’s Point, Feagan’s Creek and Flanagan’s Point, the existence of Chinese camps, gardens and mining sites has been confirmed from field work, and in some instances, by lease maps. (Fig. 7.3; Appendix One, Maps 18-22) The surveys indicate that the Chinese huts were more closely grouped than the European huts, and that several were built without fire places or chimneys, and in some instances were built into adjacent banks or slopes. These features have been identified as predominantly Chinese in character by historical archaeologists such as Lindsay Smith, Neville Ritchie and others. Remains of the Chinese camp opposite Sergeant’s Point include the remains of the 'joss house' site and the cemetery. This camp was obviously an important settlement, but all other features have been destroyed by land reclamation.

At Major’s Creek and Bell’s Creek the archival and field evidence is much less forthcoming. An account on Major’s Creek in 1866 stated that there was a population of 200, a post office, Oddfellows’ Lodge and two hotels. Mining camps were spread along the entire length of the main creek and its tributaries, at Long Flat, and at the main village. (Appendix One, Map 23) Subsequent cultivation, subdivision and building has removed most of the physical evidence for these camps. Two exceptions are the remains of the racecourse and the Chinese market garden, which had a creek frontage of about 150 m. The mining typology near the lower end of the creek near the waterfall suggests that this also was an important area of Chinese occupation. At Bell’s Creek the mining population was scattered over numerous hills and gullies in a series of small mining camps. Most buildings at the main village have long since vanished, but field work has confirmed the location of several small camps and the site of Forsyth’s house and store.

Elsewhere in the Southern Mining Region, the main settlement of consequence was at Brook’s Creek near Gundaroo. Reports in July 1861 referred to tents, slab buildings and the presence of families, one slab building with a calico roof serving as a store. There were 80 on the field that month, rising to 200 later that month, albeit with many departures, and for a few months in early 1862 there was a substantial Chinese population. They erected a ‘joss house’ and ran markets in Gundaroo on Sundays. By late 1863 there were several stores scattered over the diggings and a branch of the

---

94 There are 43 grave sites at the cemetery. Discussion with Patricia Grimshaw, Canberra, 26 March 2001.
95 Other less legible lease maps show Chinese claims and huts on Feagan’s Creek and Newbury’s Point.
97 Bailliere’s Gazetteer, pp.9-10, 332-333.
98 McGowan, The Golden South, pp.9-16; Conservation and heritage overview of the Araluen catchment area, incorporating the Araluen, Bell’s Creek and Major’s Creek Goldfields.
99 McGowan, The Golden South, pp.16-21; Conservation and heritage overview of the Araluen catchment area, incorporating the Araluen, Bell’s Creek and Major’s Creek Goldfields.
100 Golden Age, 4 July 1861; Yass Courier, 10 July 1861.
Gundaroo post office had been established, the tents giving way to substantial bark and slab buildings.\textsuperscript{102} There are few remains of these camps left.\textsuperscript{103}

Most other mining settlements from this period are best described as mining camps, with little or no infrastructure. Some of them were, however, sizeable, particularly on the Big Badja and Shoalhaven River fields. At the latter, the mining typology and the close and haphazard distribution of the hut sites suggests that two large sites were occupied by the Chinese.\textsuperscript{104} On several other fields the mining population was scattered over very considerable distances, often in mountainous hill country. The miners relied on nearby towns and villages for their needs, and it was these non-mining settlements that ultimately benefitted. For example, most miners on the Nerriga diggings would have travelled to the village of Nerriga.\textsuperscript{105} Miners on the Limekils diggings on the Shoalhaven River field would have frequented the nearby settlement of Larbert, and miners at the Big Badja and Numeralla diggings would have ventured to the village of Numeralla.\textsuperscript{106} In other instances the miners were dependent upon nearby landowners for their needs.\textsuperscript{107} This ad hoc process of supplying provisions would have been a feature on almost all mining fields in their infancy, although on some it was more persistent than elsewhere.

\textbf{Decline and abandonment: 1875-1887}

By the mid 1870s the alluvial gold mining settlements were in decline, a consequence of dry weather and a decline in easily won alluvial gold deposits. For instance, public school enrolments at the Araluen and Araluen West schools more than halved between 1870 and 1876. A similar position was reached at Jembacumbene in 1877. At Mongarlowe and Major’s Creek there were smaller declines in enrolments.\textsuperscript{108} In both instances reef mining may have bolstered the enrolment numbers. Subsequently, throughout the Southern Mining Region, the prevailing drought conditions forced many miners to seek work in road and rail construction and other labouring activities. The Chinese were to diversify increasingly into market gardening and rural work, such as dam and well sinking, fence building, ringbarking and land clearing.\textsuperscript{109}

Nevertheless, by the late 1870s, according to \textit{Greville’s Official Post Office Directory}, Araluen was still a large settlement and had a population of about 3,500 and a main

\textsuperscript{102} \textit{Yass Courier}, 25 November 1863.
\textsuperscript{103} McGowan, \textit{Lost Mines Revisited}; p.103; Historic Mining Sites in the Monaro Southern Tablelands Districts of New South Wales, p.106.
\textsuperscript{104} McGowan, \textit{Bungonia To Braidwood}, pp.52-55; Historical Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.50-53.
\textsuperscript{105} \textit{Braidwood Observer and Miner's Advocate}, 26 February, 20 December 1862. In 1862 Nerriga had three stores, a public house and a post office.
\textsuperscript{106} At Larbert a hotel was constructed in 1860 and a post office was established in 1866. Maddrell, \textit{Braidwood & District Post Offices & People}, p. 160. No accounts of infrastructure have come to light for the Big Badja and Numeralla, Colyer’s Creek, Brindabella, Foxlow, Jerrawa Creek, Bungonia, Shoalhaven River, Cumbermurr River or Cunningham’s Creek gold fields, although a postal facility was established at Foxlow station.
\textsuperscript{107} \textit{Goulburn Herald}, 17 February 1858, 5 March 1862.
\textsuperscript{108} Appendix Five, Gold Mining Statistics; Appendix Seven, Public School Statistics.
\textsuperscript{109} Much of the evidence for these activities comes from the Bombala and Tumut areas to the south of the Southern Mining Region. The town of Craigie, south of Bombala, was known as Chinatown and it had a large Chinese population engaged in market gardening and ringbarking. At Tumut large numbers of Chinese were involved in tobacco growing. Discussions with Les Hite, John Walker, Neil Platts, Bombala, 1999 to 2001, and Phyllis Dowling, Tumut April 2001. The involvement of the Chinese in rural activities in the Riverina District, west of the Southern Mining Region, has been discussed at length by Buxton. G.L. Buxton, \textit{The Riverina}, 1861-1891, Melbourne University Press, Carlton, 1967.
street about three kilometres long. There were fourteen hotels, branches of the Oriental, New South Wales and Joint Stock Banks, a hospital described as ‘one of the finest buildings’, Anglican and Roman Catholic churches, a building used jointly by the Wesleyans and Presbyterians and an Oddfellows hall. There was also a wide range of occupations and industries. At middle and lower Araluen, including Redbank, there were 146 miners, eight storekeepers, two grocers, four blacksmiths, eight innkeepers, three carriers, two dealers, seven boot makers, two saddlers, two tailors, two tanners, six engineers, three bakers, five butchers, an undertaker, fruiterer, farrier, veterinary surgeon and tinsmith. Only ten persons were engaged in farming. There were similar occupations at upper Araluen, which included Newtown and Bourketown.

According to Greville’s Directory, at Mongarlowe there were 103 miners, three storekeepers, an innkeeper and storekeeper, three blacksmiths, two boot makers, a baker, butcher, teacher, constable and gardener, with no one listed as a farmer. Further downstream at Charleyong or Taylors, there were 17 miners, three of who were on the Shoalhaven River field and the remainder on the Mongarlowe field, a storekeeper and a teacher. There were also 40 farmers. At Major’s Creek and Long Flat, there were 85 miners, ten storekeepers, of whom two were women, three innkeepers, three boot makers, two gardeners, a baker, butcher, engine owner, drayman, clergyman, policeman, lockup keeper, milliner, restaurant owner, teacher and artist. There were only twelve who were listed as farmers, almost all at some remove from the field.

Jembaicumbene and Bell’s Creek were well into decline by the late 1870s. At Jembaicumbene there were 39 miners, three innkeepers, two of whom were women, two storekeepers, two boot makers, two carriers, a cattle dealer, blacksmith, baker, saddler, teacher and wheelwright. As a sign of the changing face of the community, 18 gave their occupation as either squatter or farmer. At Bell’s Creek there were 24 miners, two carriers, a sawyer, contractor, carpenter and innkeeper, and seven farmers, six of whom were resident at Reidsdale. A school was established in 1875, at which time it was commented that most men were more or less connected with mining and most of them were wealthy. An evening school commenced in 1880, but closed the following year.

By the early 1880s Araluen was also in the doldrums. Only 609 residents were recorded in the 1881 Census, a dramatic decline from the 2,900 recorded 10 years earlier. An official assessment of the town’s prospects in 1883 stated that ‘the population of the town will not increase for many years to come, and its existence in a great measure

110 Much of the evidence for this period comes from Greville’s Official Post Office Directory. The Directory only includes respondents of the post offices and, therefore, only provides partial coverage. For instance, the mining population for Mongarlowe was only about half that recorded by the Mining Registrar. Nevertheless, the Directory provides useful information on the spread of occupations, industries and places of residence.
113 Greville’s Official Post Office Directory, p.156.
117 Application for the Establishment of a Public School, 7 September 1875, 5/14862.2, Department of Public Instruction, SRCNSW, Sydney.
118 Petition for the Establishment of an Evening Public School, 13 August 1880; Inspector Dawson to District Inspector, 18 June 1881, 5/1 4862.2, Department of Public Instruction, SRCNSW, Sydney.
depends upon the continuance of Messrs Blatchford and Johnson’s gold mining claims...’, without which, ‘the town would cease to exist’. This decline is reflected in the school enrolment figures, which by 1883 had fallen substantially for all three schools. By 1885, Redbank was still the main settlement, but Newtown and Bourketown had been reduced to a few houses. There were three public schools, an Anglican and Roman Catholic churches, a Union church used alternatively by Wesleyans and Presbyterians, an Oddfellows hall, branch of the Bank of NSW, three main stores, and three hotels, with a new courthouse under construction, and two evening schools.

At Jembacumbene, the transition from mining to farming appeared to be complete by 1882. In October of that year a contemporary observer, Ann Williams, referred to the Jembacumbene countryside as ‘nice level country’, and although it had ‘been all dug up’, the grass had grown over the holes and tailing mounds. She remarked that after you passed Jembacumbene you could see nothing but cattle and horses. On the Mongarlowe field, there were about a dozen families at Currockbilby, who by 1879 had abandoned the river diggings and were farming as a permanent occupation. Nevertheless, Mongarlowe could still be described as a mining village. Elsewhere in the Southern Mining Region there was little in the way of new community infrastructure apart from the occasional post office or school. For example, at Brook’s Creek a provisional school was established in 1882, and on the Brindabella field in 1886 the school teacher at Franklin Station was appointed as postmaster. The smaller fields were reduced to a few mining camps or pockets of lone prospectors. No field was totally abandoned, although many came close.

There were differences in the occupational structure between towns such as Braidwood and the mining settlements. Together, Greville’s Directory and the 1871 Census indicate that, in proportion to population, Braidwood had much larger commercial and government sectors than the gold mining towns, reflecting its role as an administrative and commercial centre for the district. A much greater proportion of Braidwood’s population was also listed as farmers, squatters or graziers, and there were proportionately far fewer persons who were listed as miners. Otherwise, Braidwood’s occupational structure was broadly similar to that of Araluen, which suggests that the commercial and institutional framework of the larger mining towns and the regional centres elsewhere was broadly similar. In Greville’s Directory the listing of miners as residents of some of the non mining towns and villages such as Braidwood, Nerriga, Bungonia and Corang supports the earlier observation that many miners were dependent upon these towns for their needs.

120 Internal memo from Mr. Moyse 28 March 1883; response of 24 April 1883, Postmaster General’s Department, SP 32/1, Box 9, NAA, Sydney.
121 Appendix Seven, Public School Statistics.
122 Town and Country Journal, 26 September 1885.
123 The diary of Ann Williams, 6 October to 26 October 1882, edited and privately published by Doug Vest, 1971. In possession of John Marlton, Araluen.
124 Inspector, Braidwood District to Secretary for the Council of Education Office, 9 June 1879, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney.
125 Inspector to District Inspector Dwyer, 24 January 1884, SRCNSW, Sydney; C. Blyth to Secretary GPO, Sydney, 9 January 1886, SP 32/1, Box 70, NAA, Sydney.
126 Of the ten persons in Braidwood who were listed as miners, five worked on the Shoalhaven River field. A similar pattern emerged at the villages of Bungonia, Corang, Nerriga, all of which were primarily rural based. At Bungonia there were seven miners, four of whom were on the Shoalhaven River, at Corang there were eight miners, five at distant Timberlight and three on the Corang River, and there were 11 miners listed at Nerriga. Greville’s Official Post Office Directory, pp.115-116, p.187, pp.540-541.
Revival and decline: 1888-1898

Despite the vicissitudes of the 1880s, most towns and villages still retained a basic infrastructure of churches, hotels, stores, post offices and schools. Institutions such as the police, cricket clubs and racing clubs, or at least racing tracks, and lodges also survived. Araluen, for example, still retained its Court of Petty Sessions, Warden’s Court, a police presence and an Oddfellows’ hall, and Major’s Creek retained a Salvation Army barracks and lodge. The economic situation did not automatically improve with the breaking of the drought in 1887, for there was a return, albeit briefly of dry weather conditions in the following year. For instance, at Major’s Creek in 1888 there were a number of requests for exemption from arrears of school fees. The teacher reported that one of the stores had been unable to do any business, and that the other had been labouring under ‘unprecedented difficulties’ in collecting accounts, with many of its best customers ‘totally unable to pay as before’. The recommencement of reef mining and the establishment of the chlorination works in 1889 ushered in a brief period of prosperity, and when these ventures failed, more favourable weather conditions allowed many miners to revert to alluvial mining. A small number of Chinese on the field successfully sold their garden produce to the Captain’s Flat miners.

Araluen had been the most resilient of the mining settlements, but severe flooding led to economic distress on a scale not seen for many years and in 1892 the community was in receipt of government relief money. In a number of instances exemption from school fees was sought. Largely as a consequence of the arrival of the unemployed, there was a subsequent increase in the mining population. This was not reflected in the school enrolment figures, however, suggesting that most of the unemployed were either single men or were travelling without their families. The school enrolment figures continued to fall during the 1890s, prompting one correspondent to describe Araluen as a ‘Sleepy Hollow with empty hotels, stores and houses’.

An ungenerous account by Jonathon Hodgkin in 1896 confirms Araluen’s parlous state. Along the main road there were ‘little cottages and humpies dotted among the partially deserted diggings, and lining the roadside. These houses, most of them tenantless and rapidly falling to pieces, lend a most miserable air to the place, which at its best could

127 Braidwood Dispatch, 13 March 1889, 9 December 1893, 22 September 1894.
128 B. McDonald and P. K. Ruzicka (eds), Majors Creek Memories by Ned Dunshea, Majors Creek Progress Association, 1978, pp.10-43.
129 Mr. Anthes to District Inspector, 13 January 1888; G.Hogg to Chief Inspector, 17 April 1888; G.Hogg to Chief Inspector, 6 November 1888, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney.
130 G. Hogg to Chief Inspector, 6 November 1888, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney. The case of Mr. Johnson was verified by the local storekeeper.
131 Discussion with Pauline Aherne, 8 April 2001.
132 A. Gale to Superintendent, Technical Branch, 1 March 1892, 5/14668, Department of Public Instruction, SRCNSW, Sydney.
133 J. Hyndes to H. Crommelin, 25 February 1888, 5/14668, Department of Public Instruction, SRCNSW, Sydney. In 1891 two breadwinners were out of work following the filling in of their claims by floods; Fees In Arrears Application, 28 August 1891. In 1892 one miner had received no wages for five weeks and prior to that wages had been very poor; Fees In Arrears Application, 30 May 1892. In 1893 one miner was making only 7s to 10s a week fossicking, and was in a ‘very poor way’; Fees In Arrears Application, 3 August 1893. In another case one miner was earning only 10s to 12s a week; Fees In Arrears Application, 29 September 1893, 5/14668, Department of Public Instruction, SRCNSW, Sydney.
134 Appendix Seven, Public School Statistics; Town and Country Journal, 24 November 1900.
only have been a barren wilderness.’ He stated that on the outskirts of the town some Chinese had cultivated little patches of ground on which they grew potatoes and other vegetables, ‘the only pleasant colouring in the whole landscape’. \(^{135}\) This latter reference suggests that the Chinese continued to be important suppliers of garden produce.

Elsewhere in the district the wetter weather encouraged the exploitation of new deposits and the commencement of large scale hydraulic sluicing. The arrival of large numbers of unemployed men was also important, for the newly formed Fossicker’s Board encouraged many of them to travel to the Shoalhaven River. \(^{136}\) These developments had some impact on the size and structure of the settlements. For instance, at Mongarlowe a debating and improvement society was formed in 1894 and there was a move to establish a gymnastics club. \(^{137}\) At Bentley’s Point 15 to 16 families arrived in a two week period during April 1896. \(^{138}\) The fall in school enrolments during the 1890s suggests, however, that most of the unemployed were single or without families. A number of lease maps and some anecdotal evidence confirms that the Chinese were still market gardening at a number of locations along the Mongarlowe River. (Appendix One, Map 21)\(^{139}\) The Chinese settlement identified in the 1870 drawing continued in existence throughout this period. \(^{140}\) One of the main business establishments was Mrs Brice’s hotel. \(^{141}\)

Many of the new arrivals lived in scattered mining camps on the Bungonia, Nerriga, Spring Creek Jacqua and Shoalhaven River fields, which were spread over a considerable distance in rugged and hilly terrain (Fig.7.8; Appendix One, Maps 24-26) On the Bungonia field, field surveys have identified hut sites in almost every gully and creek, but particularly at Spring Creek, New Come Up Ridge and Washed Away Creek. (Appendix One, Maps 25, 26)\(^{142}\) At Spring Creek Jacqua the advent of highly capitalised alluvial mining led to the establishment of a post office at Gegg’s store at Nadgigomar dam in 1892. \(^{143}\) In the same year a hotel was established at Welcome Reef on the Nerriga field and in 1898 a receiving office was established at Inverary Park station on the Bungonia field. \(^{144}\) On the Snowball field the receiving office was converted to a post office in 1894, and a half time school with Krawaree was established in that year. \(^{145}\)

---


\(^{136}\) The Unemployed, 3 October 1893, NSWLA, *Votes and Proceedings*, Part 2, 1893. Of the 1,033 men sent as fossickers to end September 1893, 188 went to Nowra, Marulan, Goulburn and Tarago for the Shoalhaven River.

\(^{137}\) *Braidwood Dispatch*, 11 August, 6 October 1894.

\(^{138}\) *Goulburn Evening Penny Post*, 2 May 1896.

\(^{139}\) The Chinese at Half Moon sold their garden produce in the main village, and the last Chinese inhabitant at Bob’s Creek had a small market garden as late as the 1930s. Oral account, Ted Richardson (deceased), 1995. Other local residents have identified areas that were Chinese market gardens. Oral account, Ross and Helen Pye, Mongarlowe, 1996. While the ethnicity of these sites has not been confirmed, they were clearly used for market gardening.

\(^{140}\) Photographs in the possession of Lionel Nomchong, Canberra, confirm the existence of the huts in the 1920s.

\(^{141}\) *Braidwood Dispatch*, 11 July 1894, 11 August 1894.

\(^{142}\) McGowan, *Bungonia To Braidwood*, pp.81-97; Historical Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp. 68-72.

\(^{143}\) Internal memo, 3 February 1892, Postmaster General’s Department, SP 32/1, Box 389, NAA, Sydney.

\(^{144}\) *Australian Mining Standard*, 23 April 1892; internal memos 5 November 1898, 18 December 1899, SP 32/1, Box 276, NAA, Sydney.

\(^{145}\) Memo from Inspector Tucker, 5 December 1894, Postmaster General’s Department, SP 32/1, Box 478, NAA, Sydney.
This limited infrastructure development was possibly a reflection of the transient and indigent nature of many of the unemployed. At best they were earning wages, but most were earning much less. There would, therefore, have been a lack of cash for the purchase of other than the most basic of goods and services. While large numbers worked initially on the more ambitious hydraulic sluicing projects, these were generally short lived. The miners continued their earlier pattern of dependency on neighbouring rural towns and villages such as Braidwood, Bungonia and Narriga. With the re-emergence of drought conditions several years later and the inevitable depletion of the alluvial gold deposits, the mining settlements soon fell back into an all too familiar slumber or disappeared altogether.

One gold field settlement to visibly thrive briefly during this period was Garangula in the South West Slopes District. In June 1894, at the height of the rush, the Macanish Brothers opened a store and were supplying meat and milk, and a bakery and large boarding house had been established. There were also two police constables and three coaches daily to Harden and Murrumburrah.146 By August the majority of men appeared to have settled down and numbers of them were building humpies with the intention of bringing their wives and families.147 A hotel was established subsequently.

By this time there was a population of about 600, and many businesses such as the store, post office, two boarding houses, and butcher, hairdresser and blacksmith shops were built of galvanised iron. All the miners lived in tents.148 A petition signed later that year included the signatures of 125 miners, four carpenters, two storekeepers, three blacksmiths, a butcher, tobacconist, photographer, dressmaker, farmer and an engineer.149 In February 1895 the population was estimated at about 500, and in June at 350.150 On that latter occasion, Garangula was described as having a ‘more settled appearance than when he [the school inspector] first visited it in September 1894’.151

After considerable agitation a school was built in mid 1895. Prior to that, schooling had been conducted privately by a Miss Johnson. The authorities were reluctant to establish a school until they could be assured that the settlement had some promise of permanence. Later that year the teacher was appointed to a number of positions, one of which was the mining registrar.152 By late 1896, however, the alluvial diggings were worked out, and the owner of the hotel was bankrupt.153 In April of the following year the mining and business portions of Garangula were in such a state of depression through numerous departures that the village was nearly deserted. The storekeeper, Mrs Blackman, who also transacted the postal business, closed her store for good.154

---

146 *Braidwood Dispatch*, 6, 20 June 1894.
147 *Cootamundra Herald*, 29 August 1894.
148 Report from Inspector Sheehy, 17 September 1894, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
149 Petition to Department of Public Instruction, undated, 5/15962.1, SRCNSW, Sydney.
150 Inspector Sheehy to Chief Inspector, 10 December 1894; report from Inspector Sheehy, 17 June 1895, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
151 Report from Inspector Sheehy, 17 June 1895, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
152 P. Kiernan to Chief Inspector, 20 December 1895, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
153 *AR*, 1895, p.21; *Cootamundra Herald*, 10 August 1895.
154 Internal memo, 24 April 1897, Postmaster General’s Department, SP 32/1, Box 216, NAA, Sydney.
Garangula was one of those settlements whose physical disappearance has been almost total, for all vestiges of habitation have long since been obliterated by cultivation.\(^{155}\)

Cunningham’s Creek was another field to benefit from the arrival of the unemployed. A school was established and regular cricket matches were held with McMahon’s Reef. There was also a small Chinese population who were engaged in mining and market gardening, and who sold their produce at Garangula.\(^ {156}\) Other settlements were at Brindabella and Blind Creek. At Brindabella, William Reid, the mine owner, had his boarding house converted into a hotel in 1888, claiming that there were 40 men camped near his house, some of whom were married with families.\(^ {157}\) There were no other establishments apart from the post office and school at Franklin station. In some years there were several hundred miners on the Blind Creek field. However, many would have lived in Harden and those living on the field would have commuted there for their needs.

**Dredging towns: 1899-1914**

By the time of the 1901 Census, the mining fields were again in the grip of a severe drought and the population was declining. For example, At Major’s Creek there were 966 residents in 1891 and 611 in 1901. At Jembaiicumberne the population fell from 336 in 1891 to 294 in 1901, and at Mongarlowe, the population fell from 807 in 1891 to 227 in 1901.\(^ {158}\) At Araluen the increase in population between 1891 and 1901 was due entirely to the commencement of dredging in 1899. Dredging also benefitted a number of other fields, especially Jembaiicumberne. Major’s Creek and to lesser extent, Bell’s Creek, experienced a revival in the 1900s, almost wholly as a consequence of reef mining. They are discussed in the next chapter. To a lesser extent increased activity in reef mining also affected Mongarlowe and Nerriga.

In 1900 Araluen was described as a ‘wide awake, prosperous community’.\(^ {159}\) A report the following year stated that before the dredges came there was

> precious little wealth in Araluen; storekeepers complained they could not get cash for the settlement of their accounts, and altogether matters were in anything but a satisfactory state financially. Now bills are as a rule paid regularly; the business people do a thriving trade... The butcher, bakers and storekeepers carts were always being driven about and four more rooms had been added to one of the hotels, and those establishments as well as the coaches and churches seemed to be thriving.\(^ {160}\)

A subsequent report described Araluen as about ‘50 years behind the times’, and lamented the absence of a school of arts, a football club and a tennis court. It was stated that dredging had made Araluen ‘a little more lively and prosperous’ than it had been for years, and the community was called on to ‘wake up and keep pace with the times’.\(^ {161}\) These desires soon came to pass, for over the next few years Araluen acquired a football club, tennis and racing clubs and recreational associations such as a debating society.

---

\(^{155}\) McGowan, Historical Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, p.205.

\(^{156}\) Oral discussion with Peter Doolan, Harden, 1995.

\(^{157}\) Queanbeyan Age, 2 May 1888.


\(^{159}\) *Town and Country Journal*, 24 November 1900.

\(^{160}\) Braidwood Dispatch, 29 May 1901.

\(^{161}\) Braidwood Dispatch, 1 June 1901.
Most functions were held in the Federal, Young Men’s and Oddfellows halls. A cheese factory was also established in 1901.

Dredging was an important stimulus to the timber and carting industries in the district. The construction of the dredges was a form of ship building and was very labour intensive, one dredge on the Shoalhaven River, for example, employing 12 carpenters and 12 labourers. There was a heavy demand for timber for dredge construction and firewood, and a demand for teams of carters to carry the timber, firewood and heavy machinery such as boilers on site. The activities of the Tewksbury Dredging Company in 1909, which had dredges at Warri, Charleyong and Oallen on the Shoalhaven River, provides a clear account of the flow on effects from dredge construction, leave aside the continuing need for firewood. Each dredge required 100,000 ft of timber for its construction, and the timber was supplied from a number of local sawmills. About 300 tons of machinery was carted from the Tarago railway station to two of the dredge sites, and a like amount was carted to the third. About 12 men were employed in building each dredge. The economic effects of dredging would have been much greater at Araluen and Jembaicumbene than on the Shoalhaven River, as there were many more dredges, almost all of which were successful for a number of years. (Figs. 7.9, 7.10)

Other industries dependent upon the dredges were blacksmithing and engineering. At Araluen a large galvanised iron workshop was constructed in 1901 for the repairing of dredge equipment. By 1905 the workshop covered two acres and employed 16 men. The workshops were the largest outside Sydney, and it was possible to build an entire dredge at them. Agriculture was also very important. Although frequent concerns were expressed at the effect of the prevailing dry weather on farming, corn and other vegetables were grown and there were ten milk suppliers for the cheese factory. Dredging continued to be important until the early 1920s, by which time Araluen was a much smaller, but viable agrarian settlement.

A further illustration of the importance of carters to the mining industry arose with the difficulties experienced in transporting the boilers for the Federal Centrifugal Sluicing Company at Jembaicumbene. There were also concerns about the amount of firewood needed. A local correspondent commented that were it not for the Captain’s Flat teams having been thrown out of work because of the closure of those mines it would have been impossible to obtain sufficient carriers. During these years Jembaicumbene had a store, hotel, post office, hall, school, churches, a cricket club, racing club and blacksmith. A reference in 1905 to the ‘various good looking crops of spuds and the sleek, fat cattle...’, indicates that although the settlement was still benefiting from dredging, it was well poised to once again embrace a quieter and more agrarian existence.

At Mongarlowe there were few changes to the main village, despite a brief flurry of activity associated with centrifugal dredging. The village infrastructure was similar to that at Jembaicumbene. Other alluvial mining settlements in the Southern Mining Region

---

162 Braidwood Dispatch, 25 May 1901, 5 July 1902, 21 July 1906.
163 Braidwood Dispatch, 5 October 1901.
164 Braidwood Dispatch, 4 April 1900.
165 Braidwood Dispatch, 11 December 1909.
166 Braidwood Dispatch, 22 May 1901.
167 Braidwood Dispatch, 8 February 1905.
168 Braidwood Dispatch, 8 March, 12 April 1905, 4 January 1908.
169 Braidwood Dispatch, 1 October 1899.
170 Braidwood Dispatch, 22 February 1905.
never progressed beyond mining camps, albeit sometimes sizeable ones, particularly on
the Shoalhaven River field. There was also a brief flurry of activity on the Nerriga field
at the turn of the century as a consequence of two large centrifugal sluicing projects at
Oallen and a deep lead mining venture at Corang. A receiving office was established at
Corang in 1899 and a store was opened and a receiving office established at Oallen in
1900. However, the further resumption of drought conditions in 1901 eventually
brought this activity to an end, and the mining camps were reduced to pockets of lone
fossickers. It was the end of an era, for never again were alluvial mining and the
settlements that it bore to dominate the landscape as they had in the past.

Conclusion

The alluvial gold settlements were instrumental in helping open up south east New South
Wales. Roads and bridges were built that otherwise would not have been constructed
for many years, if ever. Without this infrastructure the opening up of the land for
agriculture and pastoralism would have been much more difficult. In addition, there was
the unspoken, but ever present, need for food supplies, an activity in which the Chinese
played an important role. The clearing of land for timber and firewood supplies also led
to the development of logging and milling industries and further facilitated the spread of
farming. There was a constant need for labour, which extended to those working in
ancillary occupations such as transport, and large numbers of the unemployed were
sustained during times of economic hardship, especially in the 1890s. The persistent
nature of alluvial gold mining meant that these beneficial effects were felt for many years.

In the case of the larger mining settlements, a broad pattern of development can be
discerned. The first establishments were the stores and butcher's shops, and if the field
was a boom field, sly grog shops, followed by churches, schools and post offices. A
number of these establishments were owned or managed by women. Police were present
only in the most populous settlements, where there was a perceived need for law and
order. Their presence caused an immediate reduction in the number of sly grog shops.
Cultural, recreational and sporting organisations, such as lodges, sporting clubs and
deabting societies took longer to appear and were a feature of the more mature
settlements, though they were not necessarily confined to the more prosperous ones.
Those fields with a large Chinese element often had separate but adjacent Chinese camps,
and additional infrastructure, such as stores, cemeteries, 'joss houses' and market
gardens. Many of the camps were located near areas of European settlement.

It is difficult to attribute a pattern of decline to these settlements, as it was gradual and in
a number of cases extended well beyond the period of study. However, the cultural and
sporting organisations were usually the first to go, followed closely by commercial
enterprises such as shops and hotels. These were followed at some distance by the
schools and post offices. There were understandable flow on consequences for the
surrounding agricultural and pastoral areas, but not all were bad. For instance, during
periods of hardship, such as the droughts, the mining work force provided a labour
source for regional road and rail construction. In the end the settlements either
metamorphosed into rural villages or lesser settlements, or disappeared altogether. As a
general rule, where the land was more arable, the former occurred.

\[171\] Manager, Corang Deep Lead G.M.C. to Under Secretary, P.O., 10 September 1899; T. O'Brien, to
Deputy Postmaster General, 22 November 1899, SP 32/1, Box 146, NAA, Sydney. Internal memo,
Postmaster General's Department, 2 January 1900; F. Styles to Deputy Postmaster General, 29 January
1900, SP 32/1, Box 416, NAA, Sydney.
Chapter 8.
The reef gold settlements

Australian reef mining settlements have not attracted the attention of historians to the same degree as their alluvial gold mining counterparts, and those that have been discussed have tended to be the more obvious and enduring ones, such as Kalgoorlie, Coolgardie, Mount Morgan, Charters Towers and Bendigo.\(^1\) One exception has been June Philipp, who has focussed on the lesser known reef gold, then copper, mining settlement of Bethanga in north east Victoria.\(^2\) Very few historians have, however, written about the smaller reef gold settlements, and even fewer have discussed their material culture.

Within the Southern Mining Region the only historical account of a reef gold mining settlement, apart from those discussed in my own work, has been of Bywong.\(^3\) This chapter investigates the pattern of development of institutions and commercial facilities, the effects on these services when the mining declined and the impact of the settlements and mining enterprises on regional development. Because the reef mining fields were generally more short lived and less prosperous than many of the alluvial mining fields, their impact tended to be less.

The first settlements: 1860-1874

Most of the reef mining settlements during this period were very short lived. The first one of any consequence was Newington, near Gundaroo in the Southern Tablelands. It was the focus of a locally based rush and by November 1865 there were 300 people on the field. Within a few weeks there were several stores, a public house and a butcher’s shop. One report commented that there were ‘all sorts of impromptu dwellings’, some assuming the ‘respectable state of slab and bark buildings’.\(^4\) By December there were up to 400 on the field and plenty of shanties, and by June 1866 a postal and coach service had been established. In addition, a well known store had been relocated from Michelago and a further hotel had been built.\(^5\) A fatal accident in August led to the complete abandonment of the settlement several months later and the site was never reoccupied.\(^6\) The site has since been largely destroyed by road construction and hobby farm development.\(^7\)

A more successful reef mining settlement was at McMahon’s Reef on the South West Slopes. A store was erected in August 1871 and by November a hotel known as the Marshall McMahon had been built.\(^8\) By late 1872 there were about 100 people in the

---

\(^1\) Geoffrey Blainey, *The Golden Mile*, Allen and Unwin, St Leonards, 1993; F. Cusack, *Bendigo: A History*, Heinemann, Melbourne, 1973; Weston Bate, *Lucky City: The First Generation at Ballarat 1851-1901*, Melbourne University Press, Melbourne, 1978. The early focus on mining on these latter two gold fields was on the shallow lead alluvial deposits, but this changed subsequently to deep lead and then reef mining.


\(^4\) *Queanbeyan Age*, 9 November 1865; *Goulburn Herald and Chronicle*, 11 November 1865.

\(^5\) *Goulburn Herald and Chronicle*, 9, 27 December 1865, 19 May 1866; *Queanbeyan Age*, 19 April, 7, 28 June 1866.

\(^6\) *Queanbeyan Age*, 29 November 1866.


\(^8\) *Yass Courier*, 1 August, 14 November 1871.
settlement. A provisional school was established in 1873, and there were 29 children on the rolls in that year. By the end of the year, however, mining had ceased. A reef boom at Major’s Creek in 1869 converted the normally alluvial mining settlement into a reef mining one. The most prominent edifice in the town, St Stephen’s church, was built in late 1870, when there were reported to be ‘plenty of new stores, public-houses and other buildings going up’. (Fig.8.1) In the 1871 Census, there was a population of 1,074, of whom 314 were engaged in mining. Other occupations included a chemist, five school teachers, three police, 24 storekeepers, four provision dealers, four publicans and assistants, ten farmers, five shepherds or hut keepers, four gardeners, one blacksmith, one carpenter, two builders or bricklayers, two needle women and 18 carriers or draymen. By 1872, however, reef mining was well on the wane.

A number of reef mining settlements were located on the Spring Creek Jacqua or Nerrimungah field, as it was sometimes called. The most important ones were Manton’s Reef and Spring Creek. Other mining settlements were located at Fernbank (reef), the Spa (alluvial and reef), Black Springs, Yellow Springs, Broken Creek, Specimen Gully and the Shoalhaven River (alluvial). The field was scattered over an area of several hundred square kilometres and the Shoalhaven River diggings were located 500 m below those on the tableland. (Appendix One, Map 27) The main settlement was at Spring Creek, which was centrally located to serve a number of the tableland settlements.

In July 1869 a petition for a post office at Spring Creek stated that there were 200 people in the neighbourhood, the petitioners including 69 miners, two farmers, four carpenters, a storekeeper, blacksmith, engineer and two publicans. By the following month a twice weekly coach was in operation between Marulan and Spring Creek. In November Spring Creek consisted of stores, butchers, bakeries and public houses, most of them of substantial construction, and there were about 400 adults in the locality and a considerable number of children. Another account later that month described the town as possessing two hotels, two stores, two bakers, two butchers and a post service. A mining registrar was also resident on the field.

There was obviously some decline in the population in 1870, for in May of the following year it was described as ‘again increasing’, and there was a call for the establishment of a bakery. Not long thereafter, hotels were constructed at Manton’s Reef and Spring Creek, the latter owned by a Mrs Kelly. Reference was made subsequently to Woollen’s Commercial hotel, but it is not clear if it was in operation by then. In May 1872 Spring Creek was described as having two stores, two public houses, a butcher and a few other bark huts. The main reef area (Manton’s) was more populous than Spring Creek and had a great number of women and children, a public house and a store.

---

9 Town and Country Journal, 18 August 1872.
12 Registrar General, New South Wales Census of 1871, Sydney, 1873, p.1124, 1126, 1128.
14 Petition to Postmaster General’s Department, 26 July 1869, SP 32/1, Box 278, NAA, Sydney.
15 Goulburn Herald and Chronicle, 11 August 1869.
16 Goulburn Herald and Chronicle, 20 November 1869, 26 February 1870.
17 Goulburn Herald and Chronicle, 20 May 1870.
18 Goulburn Herald and Chronicle, 3 June 1870.
19 Goulburn Evening Penny Post, 8 July 1872.
20 Goulburn Herald and Chronicle, 18 May 1872.
There were a large number of farmers in the area, many of whom supplied food and provisions to the miners. For example, Samuel and Mary Hockey raised cattle for milk and meat, hogs, poultry, vegetables and fruit and also bought gold from the miners, occasionally bringing supplies by wagon from Goulburn.\(^{22}\)\(^{22}\)\(^{22}\)(Fig. 8.2)

Horse racing was popular from the outset, and both impromptu and official race meetings were held.\(^{22}\) There was also a cricket and sports ground. A private school was in operation in 1872, possibly run by Ms. Hockey, and a public school, known as Jacqua Reefs, was opened in October 1873.\(^{23}\) Church services were held at Spring Creek, but there is no report of a dedicated church building, the services probably taking place in a private building.\(^{24}\) There were Anglican and Roman Catholic churches with schools attached at Windellema some 15 km away.

By June 1873 the Spring Creek settlement was on the wane. Woollen had removed his Commercial Inn to Fernbank, and the general view was that this place would soon go ahead at the expense of Spring Creek.\(^{25}\) Before long there was a population of about 150 at Fernbank, and there were two hotels, the Commercial and Mr Devery's Globe, two butcher's shops, and a twice weekly horse express to Jacqua.\(^{26}\) By mid 1874, however, the mines at Fernbank had failed and both it and Spring Creek were expected to soon have the appearance of deserted villages.\(^{27}\) The post office at Spring Creek was closed in December 1875; the postmistress advised that the miners had left, businesses and the private school were closed and there were few prospects of renewal.\(^{28}\) Several mining camps lingered on, however. In Greville's Directory there were 34 miners on the field, of whom two were at the Spa, eight at Yellow Springs, three at Fernbank and two at Black Springs, two storekeepers, a mining registrar, and 16 farmers and squatters.\(^{29}\)

Field evidence confirms the size and spread of these settlements.\(^{30}\) Hut sites have been located at Broken Creek, Specimen Gully, Black Springs, Fernbank, the Spa, Mantons Reef and Spring Creek. The most substantial settlements were at the latter four locations. At Mantons Reef 14 hut sites, including the hotel, have been identified and at the Spa diggings four hut sites are located in a cluster near the alluvial workings and another four near the battery site. A number of other hut sites are located at some remove from the main camps.(Appendix One, Map 28) There were three distinct area of settlement at Spring Creek; one at Blanketburn Gully, where the main batteries were located, one at the main village, and another site, which included a hotel, blacksmith's shop and other buildings. This latter area was about two kilometres from the main village.

Almost all the building sites consist of a levelled area and a pile of stones where the chimney once stood.(Fig. 8.3) In most instances the building sites are modest, at the

---

\(^{22}\) Town and Country Journal, 8 January 1870.
\(^{22}\) Goulburn Evening Penny Post, 7 November 1873; Discussion with Stephen Gegg, a descendant of the Hockey family, 26 October 2000.
\(^{24}\) Goulburn Evening Penny Post, 9 September 1873.
\(^{26}\) Goulburn Evening Penny Post, 10 June 1873.
\(^{26}\) Goulburn Herald and Chronicle, 23 July 1873.
\(^{26}\) Goulburn Evening Penny Post, 23 April 1874.
\(^{28}\) Mary Lodge to Secretary, GPO., 1 December 1875, SP 32/1, Box 278, NAA, Sydney.
\(^{30}\) McGowan, Bungonia To Braidwood, pp.251-267; Historic Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, report to the New South Wales Department of Urban Affairs and Planning and the Australian Heritage Commission, 1995, pp.161-166.
most 4 m x 7 m, although the huts would have been smaller than this, and they are
dispersed with more regard to privacy than order and regulation. The largest sites were
for the hotels at Spring Creek, Manton's Reef and Fernbank, the location of which is
easily recognised by the substantial scatter of broken bottles, most of which were hand
made. (Figs. 8.4, 8.5) At the Spa and Manton's Reef, some buildings would have been
reoccupied or the sites rebuilt upon in the 1890s and 1900s. The bottle remnants
suggest, however, that most hut sites relate to the 1870s.

Reefing also occurred at Nanima Reefs, Dalton and Michelago, the latter two
commencing in 1872. Nanima Reefs was the scene of a locally based rush and a
butchery and store were erected, although most miners obtained rations from Nanima
station. By 1874 the field had been abandoned and the miners had returned to farming
and labouring. The Michelago and Dalton fields were much smaller, and the miners
would have obtained provisions from nearby towns. There is little physical evidence to
suggest that any of these three settlements ever rose above a mining camp. Elsewhere in
the region, for example, Mongarlowe, most of the reef mining took place on fields
principally given to alluvial mining.

Towns and villages: 1875-1899

In the early years of this period only two new reefing settlements were established, one at
Captain's Flat and one at McMahon's Reef. Reef mining commenced at Captain's Flat in
1882 and within a short time a store, boarding house and post office were established.
By 1885 a timber yard and produce store, and a butcher's shop and general store were
also established, but by the following year Captain's Flat was a predominantly base metal
mining settlement. Mining recommenced at McMahon's Reef in 1883 and by
November a full time school had been established. In August 1885 building and
commercial transactions were reported to be steadily progressing, with a further store to
be opened by a Chinese merchant. Later that year the storekeeper was appointed as
postmaster. A petition at that time provides some guidance on occupational categories,
the signatories including 15 miners, seven smelter workers, an assayist, three smiths, two
carpenters, three engine drivers, two carriers, four labourers and one bricklayer. By
December there was a mining work force of 100 and McMahon's Reef was described as
'like a small township'.

Early the following year further businesses commenced operations, including a bakery
and a hotel, the publican for which, Mr Cahill, was appointed subsequently as post
master. A money order facility was established at the post office in August 1888.

---

31 Yass Courier, 12, 26 November 1872.
32 Yass Courier, 11 May 1874.
33 For the sake of narrative the two periods, 1875 to 1887 and 1888 to 1899 have been subsumed into
one. There is a dearth of information on the reefing settlements in the earlier period, other than for
McMahon's Reef.
34 Queanbeyan Age, 28 July 1882; John Dean, Captain's Flat, privately published paper, p.6.
35 New South Wales Department of School Education, Government Schools Of New South Wales 1848 to
1993, p.96.
36 Murrumburrah Signal, 8 August 1885.
37 Petition to Postmaster General's Department, 21 November 1885, SP 32/1, Box 343, NAA, Sydney.
38 Murrumburrah Signal, 12 December 1885.
39 F. Murray to Postmaster General's Department, 28 June 1886, SP 32/1, Box 343, NAA, Sydney.
40 Mr Younger to Slattery, MLA, 26 August 1888, SP 32/1, Box 343, NAA, Sydney.
this time there were 112 employees.\textsuperscript{41} Later that year, the other publican, Mr Boniface, added a new and large pise structure to his premises to meet the growing public demand, as the present accommodation was inadequate. There were three stores in the town.\textsuperscript{42}

By 1890, if not earlier, there had been a fall in the fortunes of the mining company, for there were five cases of fees in arrears at the school.\textsuperscript{43} The chlorination plant ceased operations in 1893, but mining recommenced in 1896.\textsuperscript{44} In that year the signatories to a petition by the parents of the school children included four farmers, two labourers, 11 miners, two stockmen, one blacksmith, an engineer fitter, and a hotel keeper.\textsuperscript{45} The school inspector advised that of the 51 children enrolled, the parents of 31 were farmers and labourers, and the parents of the remaining 20 were miners.\textsuperscript{46} This suggests that the transition of McMahon’s Reef to a primarily rural based settlement was well under way by this time. A new school was built in 1896.\textsuperscript{47}

There was a dearth of social institutions. The only social association was the Cunningar Variety Club.\textsuperscript{48} There were no organisations such as the Oddfellows or Good Templars and few halls, with the result that some functions were held on the mine premises. Neither was there a permanent progress association, though one was formed in 1896 to progress matters relating to a new school.\textsuperscript{49} The welfare of the residents was overseen largely by the Murrumburrah Progress Committee.\textsuperscript{50} In addition, there is no record of any churches having been built, although religious services were held on the company’s premises.\textsuperscript{51}

Field work has confirmed the size of McMahon’s Reef and located a number of house sites in and near the town.\textsuperscript{52} Several of the buildings in the town were large, for example, the two hotels and the school. The two hotels were built of pise and part of the wall and chimneys still remain.(Fig.8.6) Most hut sites and the school have, however, been largely demolished by farming. Those houses that were outside the town boundaries were occupied either by those engaged in both mining and farming, or those who were engaged solely in agriculture. An 1898 town plan shows the school, two mine sites, the engine house, the hotel and post office, and fourteen house sites.(Appendix One, Map 29)

\textsuperscript{42} Murrumburrah Signal, 3 November 1888.
\textsuperscript{43} W.Manson to District Inspector O’Byrne, 15 March 1890, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
\textsuperscript{44} Marshall McMahon Progress Committee to Postmaster General’s Department, 15 September 1896, SP 32/1, Box 343, NAA, Sydney.
\textsuperscript{45} R. Ditchburn to Minister for Public Instruction, 19 May 1896, 5/16683, SRCNSW, Sydney.
\textsuperscript{46} Inspector to Chief Inspector, 15 June 1896, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
\textsuperscript{47} W.Corbett to Inspector, 28 October 1896, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
\textsuperscript{48} Murrumburrah Signal, 31 October 1885.
\textsuperscript{49} Corbett to Inspector, 16 May 1896, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
\textsuperscript{50} Murrumburrah Signal, 24 August 1889; Corbett to Inspector, 16 May 1896, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
\textsuperscript{51} Murrumburrah Signal, 11 February 1899.
\textsuperscript{52} McGowan, Historic Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.215-218, Lost Mines Revisited, pp 123-126.
Another important reef mining settlement was Cowra Creek in the Monaro District. The main village was divided by the creek into south camp and north camp. (Appendix One, Map 30) There were also a number of small mining camps near the main village, for instance at the Polar Star and Back Creek, and there were larger camps at Macanally and Fiery Creek, 13 km to the south. In 1888 a nucleus of a township had been established at Cowra Creek, but the nearest mail service was the receiving office at Umeralla. By late 1892 a receiving office had been established at Cowra Creek, and by June the following year the township included brick cottages, the bakery, bark huts and canvas camps. The main town site was at south camp and there were about 12 to 14 huts at north camp. Later that year, the postal service was relocated to the general store and the town acquired a butcher and a blacksmith. A lease map dated December 1893 gives some indication of the size of the town at this time. Eight house sites were identified, together with a site for the post office, Murray’s machine site, (the main battery site), the ‘Gallows Tree’, Thompson’s slaughter yards, and the public school. (Appendix One, Map 31)

Life was more austere at Fiery Creek and Macanally. A correspondent lamented that the miners at Fiery Creek were worse off than in any other reefing places he had been to because of the absence of businesses like storekeepers and butchers who would supply them with provisions on the security of quartz. There was a storekeeper at Numeralla, but he would only take cash, a difficult commodity to come by when there were such long delays in getting stone crushed. Occasionally, Cowra Creek experienced a similar level of austerity, for in early 1894 there was a great scarcity of provisions on the field, and there was no flour or beef, and no store or butchery. By March, a bakery and boarding house had been constructed at south camp, and an assembly hall had been built for Mrs Freebody. Later that year work commenced on the building of a hotel.

Many miners and their families on this field were involved in farming, albeit primarily for their own or neighbour’s consumption on either their own quarter acre blocks or on common land. There were several examples of this. In Spring of 1898 it was commented that the Cowra Creek gardeners were planting their vegetable crops, and in the following year the residents were said to be eagerly awaiting Spring, not only for the warmth, but also the opportunity to sow crops and fatten up livestock. Although there were no explicit references to women and children tending the stock and gardens, it can be safely assumed that this was the case.

Typically, the two most sought after institutions were the post office and school, and an improvement committee was formed in 1893 to progress their establishment and other needs. In 1895 the receiving office was upgraded to a post office, a twice weekly mail

---

53 AR, 1888, p.97; Mr. Newman to Postmaster, Cooma, 7 June 1891, SP 32/1, Box 151, NAA, Sydney.
54 Inspector Tucker to Postmaster General, 12 December 1892, Postmaster General to Inspector Tucker, 13 December 1892, SP 32/1, Box 151, NAA, Sydney; Cooma Express, 2 June 1893.
55 Cooma Express, 2 June 1893.
56 E. Wiseman to Postmaster General, 22 August 1893, E.Kitchingham to Postmaster General, 8 October 1893, SP 32/1, Box 151, NAA, Sydney.
57 Cooma Express, 13 September 1893.
58 Cooma Express, 9 January 1894.
59 Cooma Express, 6 April 1894.
60 Cooma Express, 16 October 1894.
61 Cooma Express, 7 February 1896, 3 September 1898, 10 October 1899.
62 The role of women and children in gardening has been discussed in chapter seven.
Fig. 8.1. St Stephen's church, Major's Creek, built in 1870 during the reefing boom.

Fig. 8.2. Mrs Hockey visiting the Manton's Reef miners, Spring Creek Jacqua field. She supplied them with fresh vegetables. Permission of Ms. Bessie Williams, Windellema.
Fig. 8.3. Hut site, Blanketburn Gully, Spring Creek Jacqua field.

Fig. 8.4. Hotel site, Spring Creek, Spring Creek Jacqua field.
Fig. 8.5 Hotel site, Fernbank, Spring Creek Jacqua field.

Fig. 8.6 Pise built hotel, McMahon's Reef.
Fig. 8.7. Hotel, Cowra Creek.

Fig. 8.8. School building, Cowra Creek.
Fig. 8.9. Schoolmaster's residence, McMahon's Reef, built in 1906

Fig. 8.10. Baker's oven and wall of house, Cowra Creek.
service established, and Mrs Paulsen appointed postmistress at a retainer of £10 per annum. 63 A school was longer in coming and a building was not constructed until September 1895. 64 Even after this date schooling continued to be a concern, for in May 1896 there were reported to be 12 children ‘running wild’ at Macanally, as it was too far for them to travel to either Cowra Creek or Peak View. 65 According to the memoirs of Dorothy Adams, there was no regular medical service. Her mother, Mrs Murray, bore two children at Cowra Creek, one of whom was Dorothy, with no doctor present, ‘only a nurse who somehow always seemed to get there in time’. For other medical attention, Dorothy’s mother, with her knowledge of homoeopathic medicine was called upon. 66

By the mid to late 1890s a number of social and religious institutions had been established, some with their own buildings, some without. The first social body was the cricket club, which was active as early as 1893. 67 Another was the Cowra Creek Dramatic Club. 68 A building for the Roman Catholic congregation was erected by Duffy the storekeeper in 1896, and a building fund for the Church of England congregation was established in 1898, the same year that the Wesleyan congregation purchased land for a church building. 69 However, it is not clear if these latter buildings were erected. Most functions were held in the halls.

There was a rush to Bywong in the Southern Tablelands District in August 1894. A receiving office was established in November, and by February 1895 there was a hairdresser and two butcher’s stores were under construction, with other businesses expected to follow. 70 The nearby town of Gundaroo was reported to be almost deserted, with ‘only the women left’. 71 By March there were 300 men on the field, and stores and dwellings continued to be erected. The buildings were not imposing, however, for the township was described as:

Two slab buildings bearing the inscription “General store”, a brown and white tent with the words “Cheap Grocer” roughly traced across it, half a score of windlasses studding the hilltop and indicating the shafts, one or two slab huts for miner’s dwellings, and numerous tents presenting a weatherworn appearance... 72

In April 1895 the receiving office was converted into a post office. 73 The building in which it was housed was the only permanent and substantial one on the field, and elsewhere, calico tents and bark huts prevailed. 74 By May there were several stores, two butcher shops, including one owned by a local landowner, and a bakery. 75 Later that

---

63 Inspector Tucker to Postmaster General, 30 July 1895, SP 32/1, Box 151, NAA, Sydney.
64 Cooma Express, 17 September 1895.
65 Cooma Express, 29 May 1896.
67 Cooma Express, 15 December 1893.
68 Cooma Express, 19 May 1899.
69 Cooma Express, 12 May 1896, 3 September 1898.
70 Internal memo from Inspector Tucker, 7 November 1894; Postmaster General’s Department, SP 32/1, Box 96, NAA, Sydney; Goulburn Evening Penny Post, 14 February 1895; Queanbeyan Age, 27 February, 13 March 1895. The local member, Mr O’ Sullivan, expected that the population would soon reach 500 and that when this happened he would apply for schools and a courthouse.
71 Goulburn Herald, 20 February 1895.
72 Queanbeyan Age, 20 March 1895.
73 T. Earnshaw to Deputy Postmaster General, 11 April 1895, SP 32/1, Box 96, NAA, Sydney
74 Inspector Tucker to Chief Inspector, 10 April 1895, Postmaster General’s Department, SP 32/1, Box 96, NAA, Sydney.
75 Queanbeyan Age, 22 May 1895.
year a village was officially surveyed and the village of Bywong was proclaimed, with four streets. However, by this time Bywong was already becoming known as Bygone. Although a water well had been dug, it had been intended for a much larger town, and by December there were ‘no bakers, no butchers, and only half a store’.  

By September 1896 the outlook for the town appeared to be a little more optimistic, but by the end of the year only one town allotment had been sold, and in 1897 Bywong was reported to be almost deserted. Due to the prolonged absence of the post master, whose wife had performed his duties in the meantime, the post office was put in charge of Henry Hyles, the storekeeper. The only institution of any real note was the school, which was established late in 1895. Other institutions were the progress association, which was established in March 1895 and the ‘Keep it up’ (KIU) club, which was formed six months later with a Dr Quinn as chairman. Neither body had its own premises. There is no evidence of any churches or sporting clubs.

There was a rush to Nanima on the Southern Tablelands in 1897, and the number of miners was such that the receiving office was converted into a post office. An assay office and store were also erected. The nearby Gooda Creek field was visited regularly by a baker and butcher and a general store was located a short distance away. The nearest hotel was at Murrumbateman and the nearest post office was at Jeir station. At the Colinton mines a store was built, but the children attended the school at Colinton village. There were no stores or other facilities at Kydra Reefs, Bushy Hill and Michelago in the Monaro District or Cullina in the South West slopes District. None of these settlements developed beyond mining camps, and the miners and their families would have travelled to nearby towns for their requirements or alternatively lived in the towns and commuted to the mines.

Gold towns to ghost towns: 1900-1914

Major’s Creek was the main reef mining settlement during this period. By 1901 reefing, rather than alluvial mining, was the economic mainstay of the settlement and many miners were attracted by the prospect of a reasonably regular wage. Prior to 1901 community and commercial life in general were subdued. Major’s Creek was described as ‘slow, slumberous with an almost invisible population...The clang of the anvil of the village smith and the monotonous rotatory ring of the school bell are the only evidences that life exists’. There were, nonetheless, several stores, a butcher, baker, two lodges and a dance hall. As a result of the renewed reef mining activity, some months later everyone was on the ‘tiptoe of expectation’.

---

76 Queanbeyan Age, 10 December 1895.
77 Goulburn Evening Penny Post, 28 December 1895.
78 Queanbeyan Age, 16 September 1896; AR, 1896, p.31; 1897, p.39.
79 Postmaster Bungendore to Deputy Postmaster General, 31 March 1897, H.Hyles to Deputy Postmaster General, 27 April 1897, SP 32/1, Box 96, NAA, Sydney.
80 New South Wales Department of School Education, Government Schools of New South Wales 1848 to 1993, p.44.
81 Queanbeyan Age, 13, 20 March; 19 September 1895.
82 Goulburn Evening Penny Post, 12 October 1897; Discussions with Ellis Butt, Kirkdale, 1993.
83 Discussions with Ellis Butt, Kirkdale, 1993.
84 Yass Courier, 29 November 1898.
85 Discussions with Geoff Povey, 1993; Victor Povey, Family history, privately published, October 1981.
86 Braidwood Dispatch, 5 January 1901.
87 Braidwood Dispatch, 11 May 1901.
This increased level of activity was reflected in the growth and diversification of sporting bodies. By 1902, women’s cricket, rockley, had taken a firm hold and there were junior clubs at both the Creek and Long Flat. An athletics club was formed in 1904 and the following year a tennis club was established. The tennis club was formed by the school teacher and the courts were located in the school grounds. A second race course was constructed at Long Flat in 1906, and the race track for the old club was completed with a grandstand in 1907.

Active reef mining continued for a number of years, but by late 1910 mining matters were described as having been ‘as dead as a door nail’ for some time and many miners, mostly the younger and more active, had left the district to seek employment elsewhere. In 1913 the post office was downgraded in status, and further families were to leave the district, for there was no prospect of improvement. Some of the businesses such as Wiggins’s and Keyte’s stores were built during the reefing period, and there was obviously a demand for food and other products and for carters to transport the ore and concentrates to the railhead at Tarago. However, as the town declined and assumed a more agrarian role, many of the buildings, almost all of which were built of timber, were demolished. At Bell’s Creek the reef mining revival was relatively short lived and in 1909 the school was closed. The village has long since disappeared, with little trace.

For many reefing settlements, the decline did not end in an agrarian metamorphosis, but oblivion. One such settlement was Cowra Creek. By 1900 Cowra Creek was entering its subsistence phase. A census was taken in March of all those using the post office. They included Duffy the publican, four battery operators, a butcher, blacksmith, two teamsters, 22 miners, two schoolteachers, eight selectors and ‘a few young fellows’. The Murray household was described by Dorothy Adams as ‘something only a couple of other people had’, as it possessed a separate kitchen, a vegetable garden and a hen yard. As the miners left the field, the pub, butcher and grocery store lingered on, and when the pub and store were combined the store keeper would lie on the bench in front of the bar waiting for the ‘rare customer’.

These forlorn scenes were mirrored by the continuing dry weather, which combined with the falling gold yields had by 1902 reduced Cowra Creek’s residents to a state not far removed from hunting and gathering. All hopes of vegetable supplies had vanished as it was too expensive to transport them from elsewhere, and potatoes and horse feed were scarce and dear. In addition, the nearby Crown land was over run with sheep, depleting the little supply of grass left and making it difficult for families to keep horse or cows. Bee hunting and wallaby shooting were popular, although the supply of the latter was poor.

88 Braidwood Dispatch, 24 September, 18 October 1902.
89 Braidwood Dispatch, 10 June, 15 November 1902.
90 Braidwood Dispatch, 25 February 1905, 26 June 1906.
91 Inspector to Chief Inspector, 12 August 1905, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney.
92 Braidwood Dispatch, 7 March 1906, 30 January 1907.
93 AR, 1910, p.22.
94 Inspector’s report, 23 December 1913, Postmaster General’s Department, SP 32/1, Box 332, NAA, Sydney.
95 W. Lewis to Inspector Golding, date unclear, but either March or April 1900, Postmaster General’s Department, SP 32/1, Box 151, NAA, Sydney.
96 Adams, Little ghosts in a little ghost town, p.2.
97 Adams, Little ghosts in a little ghost town, p.3.
98 Cooma Express, 12 February, 30 May 1902.
By mid 1903 Cowra Creek was described as ‘absolutely dull and lonely, with nothing to cheer, and no immediate hopes of improvement’. In early 1905 several older residents left, some of whom went to the new gold field at Yambulla on the South Coast, and in 1906 the Department of Mines described the mining population as ‘fast dwindling’. The hotel was abandoned in 1909 and the licence cancelled, and the school and the post office were closed in 1910 and 1912 respectively. In 1912 there were only four people using the post office.

Despite these parlous circumstances the cricket club survived for a few years. For instance, the club was reconstituted in February 1900 and in October of the following year there were moves to erect a shelter shed. In 1902 a concrete pitch was laid and the club continued in existence until at least 1903. Even in its subsistence phase, Cowra Creek had some regional impact beyond the prospect of employment in the mines. Some provisions were still obtained elsewhere, and outside carters were used to carry provisions and transport ore from the mines to the batteries, often over a considerable distance. Almost all mine operators were dependent upon them, and they were always in short supply. In early 1903 there were three carters on the field, but by May of that year they were again hard to come by.

Field work has confirmed the size and spread of Cowra Creek. At the main village at south camp twelve hut sites have been identified, in addition to the bakery and hotel. Most hut remains are modest and comprise the remains of the fireplace and the site itself. Almost all the hut sites are the same dimension, that is, 4 m x 7 m. (Appendix One, Map 32) Some were, however, smaller. Several of the buildings were substantial, for example, the hotel, school, bakery and one of the halls. (Figs. 8.7, 8.8, 8.10) In all four instances the chimneys and part of the stone walls remain. A number of hut sites, one of which was about 10 m x 5 m, have been located at north camp. This was likely to have been the Murray household.

At north camp the ground was flat, relatively fertile and near water, and thus well suited to stock and gardens. It had the added advantage of being at some remove from the hotel, which would have suited some families. Several hut sites are also located at Back Creek and at the Back Creek and Polar Star battery sites. A small cemetery is located near the sports and cricket ground, and the main cemetery is located several kilometres from the town. Both Fiery Creek and Macanally, but particularly the former, were sizeable mining camps. At Fiery Creek there is a cluster of hut sites near the main mining and battery area, and a number of scattered sites, one of which is substantial, are located along the length of the creek.

Another reeding settlement to enter its death throes was Bywong. Although the high point for school enrolments was 32 in 1900, the numbers fell away substantially after to

---

99 Cooma Express, 16 June 1903.
100 Cooma Express, 11 April, 28 July 1905; AR, 1906, p.15.
101 K. Smith to Postmaster General, 4 May 1912, SP 32/1, Box 151, NAA, Sydney; New South Wales Department of School Education, *Government Schools of New South Wales 1848 to 1993*, p.44.
102 K. Smith to Postmaster General’s Department, 4 May 1912, SP 32/1, Box 151, NAA, Sydney.
103 Cooma Express, 20 February 1900, 18 October 1901.
104 Cooma Express, 21 October 1902, 17 April 1903.
105 Cooma Express, 9, 30 September, 7 November 1902.
106 Cooma Express, 16 January, 17 April, 1 May 1903.
14 in 1904.\textsuperscript{108} That same year the post office was relocated about three kilometres from Bywong. Representations were made successfully for the post office to be moved back to Bywong, for there were 40 persons on the field, and this would allow the school children to post and collect the mail.\textsuperscript{109} However, by July 1905 there were only about seven residents who used the post office for mail, and it was closed not long after.\textsuperscript{110} In April 1906 the school closed, reopening later in the year with an attendance of eleven children, and finally closing in 1911.\textsuperscript{111}

Bywong’s regional impact during this period would have been limited, although some food provisions such as meat would have been supplied by local farms. The physical remains at Bywong are of limited use in determining the village size, as many of the sites have been disturbed by subsequent mining and visitor development. It was, however, much smaller than Cowra Creek. Apart from the mines, three batteries and a whim site (reconstructed) the main remains include two pise huts and the footings for several other huts.\textsuperscript{112}

Captain’s Flat met a similar fate. By 1900, base metal mining was finished and Captain’s Flat reverted to gold mining and processing. In May it was stated that things seemed
to be gradually growing worse and worse here. Business is simply paralysed, coach loads of coach loads are leaving almost daily and it is very long time since we saw the Flat in such a low state.\textsuperscript{113}

In 1901 the town was described as ‘dead to the world, people going away in dozens, houses being sold for practically nothing to country people for building purposes are being pulled down on all sides’. To add to the difficulties of the unemployed, there were complaints that the men working on relief had had to wait for their money, some families practically starving or only surviving on credit. The relief work had, in any event, only been for about two to three weeks.\textsuperscript{114}

The closing of the Burraga mine caused a return of some residents late in 1902, but the reopening of these mines led to a further exodus early in the new year.\textsuperscript{115} In February monies were granted for relief work on the local roads, and by May people were being pestered with offers to sell their houses at sacrificial prices.\textsuperscript{116} The total population was about 200.\textsuperscript{117} To add to this gloom the continued dry weather meant that the residents were lucky to get meat once a week, and they were subsisting on hares, rabbits and wallabies, a hunting and gathering state not far removed from that experienced by their colleagues at Cowra Creek.\textsuperscript{118}

\textsuperscript{108} Appendix 7, Public School Statistics, Bywong.
\textsuperscript{109} J. Shepherd to Postmaster General’s Department, 7 January 1904, J. Seymour to E. O’Sullivan, 12 January 1904, SP 32/1, Box 96, NAA, Sydney.
\textsuperscript{110} Postmaster Bungendore to Deputy Postmaster General, 21 July 1905, SP 32/1, Box 96, NAA, Sydney.
\textsuperscript{111} Queanbeyan Age, 24 August 1906.
\textsuperscript{112} McGowan, Lost Mines Revisited, pp.103-106.
\textsuperscript{113} Queanbeyan Age, 12 May 1900.
\textsuperscript{114} Queanbeyan Age, 3 March 1901.
\textsuperscript{115} Queanbeyan Age, 1 October 1902, 7 January 1903.
\textsuperscript{116} Queanbeyan Age, 21 February, 9 May 1903.
\textsuperscript{117} Queanbeyan Age, 9 May 1903.
\textsuperscript{118} Queanbeyan Age, 1 October 1902.
While there was an occasional resurgence of hope with every new, but invariably short lived burst of mining activity, there was an overriding air of pessimism. In 1906 it was stated that the ‘inertness of this place is becoming more and more apparent’, and the following year the town was described as ‘lifeless as it had been for the last few years’. The population had by then gradually dwindled away so that those who were left could generally find enough employment to ‘keep starvation away’. In 1908 the licence for the Miner’s Arms was renewed for a further three years, for it was well patronised and taxed for accommodation at race time and court days. It was estimated that there were about 500 persons within a radius of 15 miles. In 1909 Mrs Hogan, a widow with four young children, was appointed as postmistress.

In 1911 the Flat was described as gradually ‘becoming less and less. One house after another was pulled down and taken away to Queanbeyan or elsewhere for erection’. Despite these parlous conditions, the prospects of renewed mining seemed to be always around the corner, and there remained a handful of commercial enterprises and other institutions. For instance, in 1912 the Flat possessed one hotel, one large and one small general store, a post and telegraph office, court house, police station and public school. Although it had entered its ghost town phase, Captain’s Flat was still one of the larger mining settlements in the Southern Mining Region.

Many of the social institutions formed in the 1890s continued, and some new ones were added despite a dwindling population. For instance, there was a progress association and Anglican, Roman Catholic and Methodist churches. In 1900 there was considerable discussion on the need for a rifle corps and in 1906 the Sino-War led to attempts to form a rifle club. Cricket, tennis and rockley matches were held frequently, with the Britannia Rockley Club active as late as 1904. Horse and bicycle races meetings were also held regularly, a bicycle club having been formed in 1905. Most of the physical evidence for this period of settlement was lost as a consequence of the redevelopment of the town in the 1930s and 1940s.

Elsewhere in the region settlements were developed at the Cullinga and Harden mines on the South West Slopes. There is no record of any infrastructure on the Cullinga field, although there was a provisional school, which was established in 1902 and upgraded to a public school in 1904. The remains of a cricket pitch also indicate the existence of a cricket club. At the Harden mines a post office was established at nearby Aurville and a Methodist church was built in 1909. There was also a brass band and a union presence. However, the close proximity of these mines to Harden suggests that many, if not most, of the miners and their families resided in that town. At McMahon’s Reef a teacher’s residence was built in 1906. The size of the building suggests that the

119 *Queanbeyan Age*, 20 November 1906, 22 February 1907.
120 *Queanbeyan Age*, 22 February 1907.
121 *Queanbeyan Age*, 5 November 1911.
122 *Queanbeyan Age*, 26 March 1912.
123 *Queanbeyan Age*, 4 October 1910, 26 March 1912.
124 *Queanbeyan Age*, 27 February 1900, 27 February 1906.
125 *Queanbeyan Age*, 25 March 1903, 3 June 1904, 20 March 1908.
126 *Queanbeyan Age*, 10 February 1905, 13 March 1906, 2 February 1907, 29 May 1908.
128 McGowan, Historic Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, p.178.
settlement was prosperous. (Fig. 8.9) However, the diminished nature of the mining returns indicates that that this prosperity was based more on farming than mining. 131

**Conclusion**

The reef and alluvial settlements were different in some aspects. On the former there were very few instances of sly grog shops and a permanent police presence was largely absent. Lodges and schools of art were also rare. Other institutions such as schools and post offices fared a little better, although they were even more grudgingly provided for than in the alluvial settlements. Churches, or at least church services, were important, but only a few church buildings were erected. Sporting and cultural associations were, however, well represented. Women ran many of the businesses and were also appointed to positions in the schools and post offices. Although the range of commercial enterprises and institutions was more limited, the pattern of acquisition and development was similar to the alluvial mining settlements.

Unsurprisingly, their smaller size and relative poverty meant that the reefing settlements had a more limited impact on surrounding agricultural and pastoral areas than the alluvial settlements. Nevertheless, roads and bridges were constructed and there was a demand for food and provisions. Carters were also used to carry timber to the mines and heavy equipment and ore to the batteries or to the railheads. Reef mining often helped sustain the predominantly alluvial gold field settlements during hard times and provided for a greater degree of continuity than may otherwise have been the case. Because the ore reserves were less readily predictable than on the alluvial fields, the closure of the reef mines and decline of the reefing settlements was more sudden. Where the quality of the land was poor, and there were few other employment opportunities, the population dispersed quickly. In some instances the settlements faded away to become ghost towns or abandoned mining camps.

---

Chapter 9.

The base metal settlements

Most historians have focussed on the larger more enduring base metal settlements such as Broken Hill, Mt. Lyell and Mt. Isa.¹ Very few historians have written about settlements the size of those in the Southern Mining Region. Two exceptions are Ruth Kerr’s account of Irvinebank and June Philipp’s history of Bethanga.² Apart from my own writings, the main histories of base metal settlements in the Southern Mining Region are those of Susan Pryke on Captain’s Flat and Helen Lloyd on Frogmore.³ With the exception of Greg Drew’s discussion of the copper mining towns in South Australia very few historians have dealt with the physical development and material culture of these settlements.⁴

The pattern of development in the base metal mining settlements in the Southern Mining Region shared some features with the gold mining settlements. However, with their more developed technology, much sharper fluctuations in metal prices, and their reliance almost entirely on wage employees, the base mining settlements differed in some aspects of their institutional structure and had different effects on regional employment and the development of other regional industries. These developments are discussed in this chapter.

The copper towns: 1850-1885

This period falls into two parts. The first ended in about 1865, and included Good Hope, Primrose Valley and Wallah Wallah. There is no evidence that these settlements ever rose beyond relatively small mining camps. Only on the Wallah Wallah site can any remnants still be found in the form of stone footings for the huts and sheds.⁵ There were

³ Barry McGowan, Historic Mining Sites in the Monaro Southern Tablelands Districts of New South Wales, report to the New South Wales Department of Planning and the Australian Heritage Commission, 1993, pp.66-103, 178-194; Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, report to the New South Wales Department of Planning and the Australian Heritage Commission, 1995, pp. 185-204; Lost Mines Revisited, Barry McGowan, Canberra, 1996, pp.68-102; 179-229; Susan Pryke, Boom To Bust and Back Again. Captain’s Flat 1883..., Captain’s Flat Residents & Ratepayers Association, 1996; Helen Lloyd, Boorowa - Over 160 Years of White Settlement, Toveloam; Panania, 1990.
⁵ McGowan, Lost Mines Revisited, pp.215-216; Historic Mining Sites in the Monaro Southern Tablelands Districts of New South Wales, 1993, pp.188-189.
no reports at the time of the establishment of stores or grog shops, and the miners obviously travelled to the nearest town or farm for their supplies.

A second more important period lasted from 1865 until 1884. The Primrose Valley mines were again to the fore in the late 1860s, but the settlement never rose much above a mining camp. Of more significance was Good Hope, or more accurately the neighbouring lead mining field of Woolgarlowe. By 1867 Woolgarlowe was on the verge of developing into a permanent settlement, for a manager’s residence, miner’s huts, blacksmith shop, limekiln and brick making works were constructed. This venture failed, but by 1870 work had recommenced and a substantial settlement was built, which included a store, bakery, boarding house and post office. Anecdotal accounts suggest that a butchery and orchard were owned by a nearby landowner, William Robertson, who also ran the store and post office. (Figs. 9.1, 9.2)

An ancillary industry on the field was the production of bricks and lime using local deposits of fireclay and limestone. The bricks and lime were used in the construction of the furnaces and other buildings, and brick makers and lime burners were employed for this purpose. While there were no churches, there were visits by the clergy. The company had also indicated its intention to build a school and brick cottages, for there was a population of about 90, including a number of families. Extensive flooding in April 1870 caused the mines and the village to be abandoned not long after. Falls in the water level of Burrajuck dam in 1997 exposed the site of Robertson’s property, several hut sites and part of the smelter works, and has confirmed the size and extent of the Woolgarlowe settlement.

The two most significant base metal settlements in the Southern Mining Region were Currawang and Frogmore. Mining commenced at Currawang in 1865 and before long it was mooted that the settlement would soon be a ‘little township’, as buildings of all descriptions were being erected rapidly. Although there was no public school, there was a private school at Kenny’s Point, some three kilometres away, and children from Currawang may have attended that. In 1866 the school had an attendance of 18. There was also a Roman Catholic school and church services were held in a building constructed by local residents at nearby Spring Valley. In 1864 there were 83 children at the school

An account in July 1868 commented on the level of prosperity of the settlement. The working men had a ‘well to do air’, and most seemed to possess a horse and gear. Their huts were neat and clean, with ‘nicely papered walls, clean muslin, window curtains, articles of taste and even luxury on the mantle shelves, china and glass clean and bright’.

---

7 Mr. English to the Postmaster General, 22 January, 26 March 1870, SP 32/1, Box 598, NAA, Sydney
8 Discussions and site visit with Graham Robertson, 1996, and subsequent site visit in 1997. A brine tank and orchard are located several hundred metres above the remains of a large building, which was exposed only in 1997 following a sharp fall in water levels at Burrajuck dam in 1997. The artefact remains, such as bottles, are consistent with a dating from the late 1800s. It is by far the largest house site in the area. Barry McGowan, Canberra Times, 15 February 1997.
9 Yass Courier, 28 January 1870; Town and Country Journal, 12 February 1870.
10 Services were held in makeshift arrangements, which included the enclosure to a mine.
13 Goulburn Herald and Chronicle, 9 August 1865.
15 G.Sykes, The history of the Syke’s family in Australia, private publication, undated, p.21.
To a degree this condition was attributed to the lack of a public house on the mine or within three miles of it, although a licence had only just been granted for one on the mine site.\textsuperscript{16} There were 112 children of school age in 1868 and 32 parenting families, and 125 men and boys employed at the mines and smelters.\textsuperscript{17} Allowing for those employed in other occupations, particularly carting, and non school age children and women, the population in that year would have been between 350 and 400.

By February 1871 the town was well established. A manager’s cottage and numerous huts for the men, some with gardens, had been built, and on the company’s land there were two public houses, four stores and a school.\textsuperscript{18} In the April 1871 Census, there were reported to be only 110 males and 81 females at the settlement, and of the males, only ten were engaged in mining.\textsuperscript{19} These figures indicate an obviously sudden, but short lived decline in mining activity, for by November, there were 14 times this number of miners. In the Census there were nine persons engaged as farmers, three in the provision of food, drink and accommodation, eight carriers and two who were builders, bricklayers or brickmakers. An indication of the size of the town was the school house, which was opened in 1870. At that time it was a bark hut measuring about seven metres by three, into which 60 children were crammed.\textsuperscript{20}

A report in 1872 indicated that the mines were by then fully operational, with this new found vigor reflected in the lack of order or regulation in Currawang’s growth, for the neatness and tidiness apparent in the 1868 account was no longer evident. On the plus side the correspondent spoke highly of the new school building and, despite their fragile appearance, the standard of the hotels. There were about two hundred huts:

scattered about without the slightest regard to rule or regulation, or to streets, each one being at liberty to build in that position he thinks likely to be the most conducive to his own comfort, without considering his neighbour in the least; the natural result is a perfect conglomeration of oddities; and, though there is no more than two hundred buildings, including the hotels, which, like the others, are constructed of bark and slabs, you would find it easier to get astray in Currawang than a much more considerable place.\textsuperscript{21}

The most important institutions in Currawang were the public school, the churches and the Loyal Miners Home Lodge of the Grand United Order of Oddfellows. In 1872 a brick school building capable of accommodating about 150 children was erected.\textsuperscript{22} The Lodge was also established in 1872 and the Lodge functions were held in a separate room at the back of O’Leary’s hotel.\textsuperscript{23} A mutual improvement society was established in 1873 and the meetings were held at the schoolhouse.\textsuperscript{24} Race meetings and cricket

\textsuperscript{16} Goulburn Herald and Chronicle, 18 July 1868.

\textsuperscript{17} New South Wales Council of Education, 1868 Schedule of Applications for the Establishment of Public Schools, NSWLA, Votes and Proceedings, 1868.

\textsuperscript{18} Goulburn Herald and Chronicle, 25 February 1871.

\textsuperscript{19} New South Wales Census, 1871, Sydney, 1871.

\textsuperscript{20} Town and Country Journal, 25 November 1871.

\textsuperscript{21} Town and Country Journal, 15 June 1872.

\textsuperscript{22} Goulburn Herald and Chronicle, 25 February 1871; Goulburn Evening Penny Post, 20 September 1873.

\textsuperscript{23} Goulburn Evening Penny Post, 18 September 1873.

\textsuperscript{24} Goulburn Evening Penny Post, 20 September 1873.
matches were popular. 25 There was no police presence at Currawang and the nearest police station was at Collector, which also had a court of petty sessions.

There were very strong Anglican, Roman Catholic and Wesleyan congregations at Currawang. The Wesleyan church was opened in 1865 and was possibly the first building of substance at the settlement, certainly predating the hotels. 26 Regular Anglican services were not held at Currawang until early 1873. Prior to that services were held on William Cooper's nearby property, Willeroo. 27 The Anglican church of St Matthias was opened in April 1875, Cooper having donated the land on which it was built. 28 The Roman Catholic church was at nearby Spring Valley.

By the late 1870s, Currawang was in decline. An unflattering account in 1878 stated that:

> Seen by day light Currawang is not by any means a beautiful spot. It is situated upon a bare bleak hill, bearing all around evidences of neglect and decay. Its houses are all more or less the worse for wear; and old rags, empty tins, broken bottles, and such like beauties are scattered between them with a beautiful disregard for order and tidiness that at once stamps its inhabitants as of that class which rises superior to the minute details of everyday life, and follow after the one engrossing idea of copper getting. 29

A measure of this decline was the fall in the number of school enrolments. For instance, by 1879, enrolments had fallen to 70 from a peak of 129 in 1873. 30 The Lodge was closed down in 1879 and amalgamated with the Star of the South Lodge, Goulburn. 31 In 1882, following the final closure of the mines, O'Leary the publican moved to Goulburn, where he became a storekeeper. 32 After the mine closure Currawang became a rural village, and St Matthias, the post office and school continued in existence for many years. A new Roman Catholic church was built at Spring Valley in 1883.

Although almost all hut sites have been obliterated by cultivation, road realignment and subsequent mining, the field evidence is of some use in confirming Currawang's extent and size. (Appendix One, Map 34) The St Matthias church, which is still standing (Fig.9.3), the foundations of the school and the physical spread of the village confirm that Currawang was a large town. Further, the election returns for 1880 show that with 177 voters, Currawang had slightly less on the rolls than Tarago, with 203, and considerably more than Bungonia, with 100. 33 These figures suggest that Currawang was one of the larger towns in the Southern Tablelands region in this period.

Currawang had a considerable social and economic influence on neighbouring settlements other than through the employment of persons in mining and smelting. There were many ancillary industries and activities, one of which was brickmaking and the other the cutting and carting of timber for the smelters. The variety of employment and

---

25 Goulburn Herald and Chronicle, March, 19 April 1871.
26 Goulburn Herald and Chronicle, 5 December 1866.
28 Goulburn Herald and Chronicle, 24 April 1875.
29 Goulburn Evening Penny Post, 16 April 1878.
30 Appendix Seven, Public School Statistics, Currawang.
31 Goulburn Herald and Chronicle, 16 May 1879.
32 Mrs Elizabeth Love to Barry McGowan, 16 April 1997.
33 Goulburn Herald and Chronicle, 27 November 1880.
industries at Currawang can be gleaned from information contained in two petitions for the position of postmaster. For example, in a petition in 1874 the occupations listed included labourers, smelter workers, miners, storekeepers, smiths, sawyers, masons, woodcutters, carters, a baker, brewer, hotel-keeper, photographer, engineer and a wheelwright. Thirty four farmers used the post office, and a considerable number of petitioners gave their address as Spring Valley. In a further petition in 1877, the occupations listed included smelter workers, teachers, miners, smiths, a slagdresser, butcher, storekeeper, brewer, innkeeper and publican.

The settlement also provided an important market for local farm produce. This was explicitly referred to by a local landowner in 1868, who commented that ‘the agriculturists had much to thank the miners for … as the miners were their market’. This aspect was also commented upon on the occasion of the first closure of the mines in 1879. At that time it was stated that the stoppage would be severely felt by many in the neighbourhood who had been dependent upon the mine as the only means of support. In addition, the mine and town had provided a profitable market for farm, dairy and garden produce which could not profitably be sent to Goulburn. Wood cutting and drawing had also provided a good livelihood. The Cooper family in particular would have benefitted, as there were two large properties owned by members of the family. George Cooper’s farm (Currawang house) was adjacent to the town and had a dairy and an elaborate pig sty. He supplied both butter and wheat to the miners.

At Frogmore, mining commenced in earnest in 1875 and in March of that year there were 50 persons on the field, including company workers and brick builders, and ten new houses and new brickyards for the smelters had been constructed. The post office was opened in May in the Deer Brother’s store. By August there were 120 residents, but by January 1876 Frogmore was still regarded as in its ‘infancy’, for the public house and general store were still in the course of erection. A money order facility was established at the post office in February 1877, and by August the town possessed two stores, two hotels, a butcher’s store, and a population of about 300. Despite this progress Frogmore did not appeal to all. For instance, the teacher complained that Frogmore was miles from the nearest town and had no church, no drinkable water, no residence fit to live in and the school was just a mud hut. By early 1881, the population had declined pending the financial and physical reconstruction of the mining operations. There were, however, at least 150 persons at Frogmore and the immediate neighbourhood, and the town included one public house, two stores, a blacksmith’s shop and butchery.

---

34 Petition to Postmaster General, undated, but in November 1874, SP 32/1, Box 160, NAA, Sydney.
35 Petition to Postmaster General, 16 November 1877, SP 32/1, Box 160, NAA, Sydney.
36 Goulburn Herald and Chronicle, 14 October 1868.
37 Goulburn Herald and Chronicle, 26 March 1879.
39 Reid’s Flat Postmaster to GPO, 4 April 1875, SP 32/1, Box 214, NAA, Sydney.
40 E. Deer to the Secretary, GPO, 5 June 1875, SP 32/1, Box 214, NAA, Sydney.
41 Frogmore Centenary Committee, Frogmore Public School Centenary, 1875-1975, pp.5-6; Burrowa News, 15 January 1876.
42 Secretary, Money Order and Government Savings Bank Department to the Secretary, GPO, 21 February, 1877, SP 32/1, Box 214, NAA, Sydney; Burrowa News, 7 April 1877.
43 Frogmore Centenary Committee, Frogmore Public School Centenary, 1875-1975, p.7.
44 Burrowa News, 14 March 1881.
The two most important institutions were the public school and the churches. For instance, the school was built in late 1875, well before the store and hotel. The building was described as the equal of any in the village, a statement belied by the unflattering description offered by the teacher in 1877.\(^{45}\) There were continual plans to extend or improve the school and the grounds, and in 1878 a new school building and residence were opened.\(^{46}\) By 1884 the school building was regarded as 'painfully overcrowded' and extension work was carried out in that year.\(^{47}\) Enrolments grew rapidly from 26 in 1875 to 86 in 1878.\(^{48}\)

There were sizeable Wesleyan, Anglican and Roman Catholic congregations at Frogmore, although it took some time for the churches to be built. A Wesleyan church was built by 1877, and by mid 1879 a locally funded Roman Catholic church had been erected.\(^{49}\) Prior to the erection of the church, mass had been held in a private house.\(^{50}\) Other institutions included the Oddfellows Lodge and the Good Templars. The lodge was built in the late 1870s and continued for a number of years.\(^{51}\) In early 1883 it was reported that the Lodge had been 'lingering for some time', although recently a number of new members had joined. By that time, a branch of the Order of the Good Templars had been established with 25 members, and a hall had been built in which social functions by other groups were held.\(^{52}\) There was a police presence at Frogmore, possibly by late 1878, and during the early 1880s a police quarters, court of petty sessions and lock up were progressively built.\(^{53}\) Race meetings were held regularly in January of every year at the local race course. Cricket was also played.\(^{54}\)

At the conclusion of mining in 1891 the town quickly assumed an agrarian profile. The churches, hotel, post office and school and recreation area continued in use for many years, and the courthouse was eventually converted into a store. The size and extent of the early settlement can to a degree be gleaned from the current village, which includes the old court house, police lockup and stables. Many of the house sites have, however, been obliterated by cultivation and road construction. A photo of an early house owned by one of the more affluent families of Frogmore is at Fig.9.4. On nearby Frogmore station there is a very substantial litter of glass, porcelain and metal artefacts over an area of at least 1,000 square metres. This site included the first hotel, with its kitchen, laundry and stables, a dairy and butcher’s shop. A sawmill and bottle shop were located nearby.\(^{55}\)

\(^{45}\) Frogmore Centenary Committee, Frogmore Public School Centenary, 1875-1975, pp.5-6; Burrowa News, 27 May 1876.
\(^{46}\) Burrowa News, 6 September 1878.
\(^{47}\) Frogmore Centenary Committee, Frogmore Public School Centenary, 1875-1975, p.8.
\(^{48}\) Appendix Seven, Public School Statistics, Frogmore.
\(^{49}\) Burrowa News, 22 November 1878, 5 September 1879. The first anniversary of the Wesleyan Sunday school was held in November 1878, which suggests strongly that it was built in November 1877.
\(^{50}\) Burrowa News, 4 October 1878.
\(^{51}\) Burrowa News, 14 January 1881. It was stated that the Lodge had been in existence for some years.
\(^{52}\) Burrowa News, 19 January 1883.
\(^{53}\) Burrowa News, 5 September 1880, 5 October 1882. The exact date the police station was erected is uncertain. However, in September 1880 there was a presentation to the retiring police officer, so the station would have been built before then. The same uncertainty surrounds the police quarters, court of petty sessions and lock up. By 1882 a police quarters and a court of petty sessions had been built, and a lockup had been built by 1884. Burrowa News, 5 October 1882, 13 June 1884.
\(^{54}\) Burrowa News, 27 October 1882.
\(^{55}\) Burrowa News, 2 September 1955; discussions with Kevin O’Neill, 1995; McGowan, Historic Mining Sites Survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.185-186; Lost Mines Revisited, pp.179-181.
The only other base metal mining settlement of note in the Southern Mining Region during this period was at Mulloon, south of Currawang. By 1872 there were two stores, two butchers, several blacksmiths, a post office and half time school, and a regular coach service between Mulloon and Boro.56 Anecdotal evidence suggests strongly that there was an inn at Mulloon owned by the Scott family and another inn halfway between Mulloon and Boro.57 Physical evidence from this era includes the remains of the two hotels and several hut sites located near the smelter site.58

Captain’s Flat: 1886-1899

By 1885 Currawang had been finished as a mining settlement for three years and Frogmore was in the doldrums, the mines closing for the first time in that year. The mines reopened in 1888, and closed again in 1891. During this short period there was a reduced array of institutions, for there was no mention of the Lodge or the Templars. The closure of the mines in 1891 threw 30 men out of work. On the eve of winter it was felt that this would cause a great deal of distress to some families. A good number of the wood carters had farms to depend on and some of the labourers could go shearing and fencing or work on their selections. But for those wholly dependent on mining and smelting it was not good news.59 The effects of the closure would have been seriously exacerbated by the widespread economic depression in the Colony and the recent poor cropping seasons. In 1891, Wigg, the teacher, recommended that arrears of school fees be cancelled for some families, and in 1892 he commented that there was

a vast amount of poverty about Frogmoor...spring grass and improved prices for wool and livestock are needed as things will continue bad. The contract men get barely enough pay for rations, in some cases not even that. 60

Both Currawang and Frogmore survived for many years, but apart from brief interludes when the price of copper was favourable, their future rested with agriculture and farming. Elsewhere in the Southern Mining Region over fifty and one hundred men respectively were employed at the Wallah Wallah and Boro silver mines at their peak. However, the settlements on these fields were never more than large mining camps, and the miners and their families depended for their needs upon other towns and nearby farms.61

By 1886 Captain’s Flat had completed its transition from gold to silver mining, and in May buildings were ‘springing up in all directions’, with building sites scarcely available.62 Until then the homes had comprised a few humpies, but a number of substantial houses had been constructed recently and the place was gradually becoming a

56 Lea Scarlett, Queanbeyan District and People, p.246.
57 Discussions with Michael Scott, Mulloon, 1993.
58 McGowan, Historic Mining Sites in the Monaro Southern Tablelands Districts of New South Wales, pp.95-96; Lost Mines Revisited, p.93-94.
59 Burrowa News, 10 April 1891.
60 H. Wigg to District Inspector Cooper, 4 September 1891. Applications for waiving school fees, 7 October 1891, 8 October 1891 (2), 18 December 1891, 26 March 1892 (9); 24 June 1892 (2), 25 June 1892, 26 June 1892, 28 June 1892; H.Wigg to Inspector Sheehy, 16 May 1892, Department of Public Instruction, 5/15951.2; Frogmore Centenary Committee, Frogmore Public School Centenary, 1875-1975, p.8.
61 McGowan, Historic mining sites in the Monaro Southern Tablelands Districts of New South Wales, p.66, 189; Lost Mines Revisited, p.68, 216. Tungsten mining became important periodically to Frogmore, but this activity took place from 1914 on.
62 Queanbeyan Age, 27 May 1898.
canvas town. A public house, 'the Flat', had not yet acquired the status of a hotel, and there was a sprinkling of very mediocre stores.\textsuperscript{63} By August a new boarding house had been built, and the shops included a baker, butcher and three or four stores.\textsuperscript{64} In August 1887 O'Sullivan, the local MLA, stated that the population was about 350, which included many families. There were two hotels, four stores, two butchers, a police station and a mining registrar.\textsuperscript{65}

Over the next few years the population and infrastructure grew rapidly. By August 1888 the 'rising township' had a population of about 300, and there were six or seven stores, three hotels, besides boarding houses, two baker's shops, two butcher's shops, two private billiard rooms, a barber's shop, tailors and shoemakers.\textsuperscript{66} O'Sullivan had written to the Minister for Public Instruction requesting that a larger school be built.\textsuperscript{67} In February 1889 the postmaster estimated the population to be 530 and increasing daily.\textsuperscript{68} The town was, however, divided into two parts, Newtown and Bogtown, with the latter decidedly down market.\textsuperscript{69} In July O'Sullivan estimated that there were 1,000 living at or near the town, and the Postmaster estimated the town population to be about 800.\textsuperscript{70} A police court and two skating rinks were built during the year.\textsuperscript{71} In the 1889 NSW Department of Mines Annual Report it was estimated that the total population, including children, was 650.\textsuperscript{72}

This prosperity was elusive, for by late 1890 business prospects had deteriorated. An indication of the severity of this downturn was the number of parents whose school fees were in arrears. The teacher reported that none of those in town were in a position to pay, and that several of them were in a state of extreme poverty because of the cessation of work at the mines some five months ago.\textsuperscript{73} At the post office the decline in business was such that the postmaster was removed to another location and the messenger appointed in his stead. The money order and savings bank facilities were retained.\textsuperscript{74}

By December 1891 the postmaster stated that business was increasing very much and likely to continue.\textsuperscript{75} A petition forwarded later that year provides some idea of the range of businesses. Of the 30 signatories, there was a tobacconist, blacksmith, two hotel keepers, a billiard room proprietor, fruiter, bootmaker, grocer, accountant, brewer, baker and three storekeepers.\textsuperscript{76} There was another improvement in mining activity in 1893, an account in August stating that there were three pubs and about as many stores,

\textsuperscript{63} Goulburn Evening Penny Post, 29 May 1886.
\textsuperscript{64} Queanbeyan Age, 24 August 1886.
\textsuperscript{65} E. O'Sullivan to Postmaster General, 17 August 1887, SP 32/1, Box 106, NAA, Sydney.
\textsuperscript{66} Braundwood Dispatch, 29 August 1888.
\textsuperscript{67} E. O'Sullivan to J.Inglis, Minister for Public Instruction, 27 August 1888, 5/15292.2, SRCNSW, Sydney.
\textsuperscript{68} W. Arrowsmith to the Secretary, GPO, 7 February 1889, SP 32/1, Box 106, NAA, Sydney.
\textsuperscript{69} Braundwood Dispatch, 27 July 1889.
\textsuperscript{70} E. O'Sullivan to Postmaster General, 16 July 1889; W. Arrowsmith to the Secretary, G.P.O, 18 July 1889, SP 32/1, Box 106, NAA, Sydney.
\textsuperscript{71} Braundwood Dispatch, 11 May 1889.
\textsuperscript{72} AR, 1889, pp.91-92.
\textsuperscript{73} J. Filshie to the NSW Department of Public Instruction, 29 September 1890, 5/15292.2, SRCNSW, Sydney.
\textsuperscript{74} Inspector Tucker to Secretary, GPO, 4 December 1890, SP 32/1, Box 106, NAA, Sydney.
\textsuperscript{75} T. Stokes to Secretary, GPO, 31 December 1891, SP 32/1, Box 106, NAA, Sydney.
\textsuperscript{76} Petition from Captain's Flat residents to the Minister for Public Instruction, undated, but in July 1892, 5/15292.2, SRCNSW, Sydney.
Fig. 9.1. Woolgarlowe settlement. The dwellings include both tents and huts and there are several women in the foreground. Permission of Graham Robertson, Woolgarlowe.

Fig. 9.2. William Robertson's homestead, Woolgarlowe. Permission of Graham Robertson, Woolgarlowe.
Fig. 9.3. St. Matthias' church, Currawang.

Fig. 9.4. Simon family's slab hut, Frogmore. Permission of John Wheeler, Wentworthville.
Fig. 9.5. Bullock teams in Foxlow Street, Captain’s Flat, smelters, smoke pollution and denuded landscape. From Susan Pryke, *Boom To Bust And Back Again. Captain’s Flat 1883...*, Captain’s Flat Residents & Ratepayers Association, 1993.

Fig. 9.6. Molonglo Park recreation area, Captain’s Flat, Newtown in background, denuded hills in foreground and background. *Town and Country Journal*, 7 August 1897. Permission of the National Library of Australia.
Fig. 9.7. Mrs Goggin’s hotel, Captain’s Flat. *Town and Country Journal*, 7 August 1897. Permission of the National Library of Australia.

Fig. 9.8. Newtown and main commercial area, Captain’s Flat. *Sydney Mail*, 3 July 1897. Permission of the National Library of Australia.
Fig. 9.9. Coffey’s bakery, Captain’s Flat. *Town and Country Journal*, 7 August 1897. Permission of the National Library of Australia.

Fig. 9.10. Remains of fireplace, pre 1909 hut site, Kangiara.
with Nomchong from Braidwood expected to open a general store soon. However, this revival was short lived, for in March 1894 there were reports of a great exodus to other mining fields, in particular the West Wyalong gold field, and by September the Flat was described as ‘dull, flat and unprofitable’.77

In late 1895 Captain’s Flat entered a new growth phase. Mining and commercial activity was on the increase and the town was crowded with strangers from ‘all parts of the colony’, most of whom were miners and nearly all of who were obtaining employment. The business people were prospering and sites for houses were being taken up gradually, nearly all selecting New Town. Concerns at the chemical smoke and fumes assailing the inhabitants of Bogtown were an indication of this increased level of activity. The extent of this pollution can be gleaned from the photos at Figs.9.5 and 9.6.79 In November 1896 it was commented that ‘the forlornness which was so apparent among the men for the last five months [is] gradually drawing back once more...’ There were ‘fresh faces, announcements of men being given employment and the town becoming busier daily...’80 As an indication of these changes in the level of business activity, school enrolments rose rapidly from 118 in 1895 to 196 in the following year.81

Captain’s Flat reached its zenith in 1897. By May there were three hotels, four stores, three butcher’s shops and two blacksmith’s shops, one correspondent commenting that, although the Flat was nearly dead two years ago, it was now rising in importance.82 A few months later new cottages and business premises were under construction in Newtown, Bogtown and Coppertown. Mrs Goggins, the owner of the Captain’s Flat hotel, had made considerable improvements to the hotel and was building several shops.(Fig.9.7) Another hotel and a large store were also under construction. Her hotel was one of the most important establishments on the field. She was regarded as a ‘mother’ to the miners, many of whom boarded at her hotel, and she was a patron of many sporting clubs. There was a large sprinkling of Braidwood people among the rapidly increasing population.83 Furner’s store was the largest and most commodious of the business places, followed by McDonagh’s, and one of the bakers, Coffey, had opened a confectionery business.(Fig.9.9) The Captain’s Flat hotel had 75 boarders, and there was also a police station and lockup. The population was estimated at about 800.84

In September O’Sullivan estimated that by using a yardstick of four to every family within a two mile radius, there would have been a population of 2,000. If farmers, selectors and wood carters who lived outside this radius were included there would be 2,500. A new town had been laid out at Copper Creek, and a new public court and police station were to be established.85 The postmaster estimated that 2,000 people were on the field, and stated that the town was crowded with speculators.86 In November there were four butchers, two bakers and three hotels, one of which was in the course of erection and another to start shortly. Copper Creek was reported to be turning into a little village, with the buildings appearing to be of a permanent nature, and there were

---

77 Cooma Express, 12 August 1893.
78 Queanbeyan Age, 21 March 1894; Braidwood Dispatch, 15 September 1894.
79 Queanbeyan Age, 12 October 1895.
80 Queanbeyan Age, 5 November 1896.
81 Appendix Seven, Public School Statistics, Captain’s Flat.
82 Cooma Express, 19 May 1897.
83 Braidwood Dispatch, 7 July 1897; John Dean, Captains Flat, unpublished private paper, p.33, 37-38.
84 Town and Country Journal, 7 August 1897.
85 Braidwood Dispatch, 22 September 1897.
86 T. Stokes to Deputy Postmaster General, 30 September 1897, SP 32/1, Box 106, NAA, Sydney.
large numbers from Braidwood, Araluen, Major’s Creek and surrounding districts in the town.87 School enrolments reached a peak on 247 in that year.88

The first closure of the mines was in September 1898.89 Because of earlier laudatory statements about the longevity of the mines many men had spent their savings in making their homes at the Flat and there was much bitterness at the closure. In some quarters there was still an air of optimism, presumably on the basis that the Flat would recover as it had in the past, and many men were delaying their departure in the hope that something would shortly be done to provide employment.90 All storekeepers, butchers and hoteliers were still open, the new post office building was ready for business, and in December construction of the new court house had begun.91 In early to mid 1899 a fresh fish and oyster saloon and a tailoring shop were opened, but later that year the mines and smelters closed for the last time and there was a further exodus.92 Reflecting these wild swings in fortune, the school population fell to 88 in 1898, before rising to 186 in 1899, and then falling again.93

There was a full range of institutions at the Flat, one of the most important of which was the public school, which superseded the house to house school in 1886. A new school was erected in 1889 following representations from O’Sullivan concerning its inadequate size and inappropriate location.94 An evening school was established in the same year, using the existing public school building.95 Religious activity was also important, although there is no record of religious services and other ancillary functions having been held earlier. The first mention of ecclesiastical matters was in 1893, when the Anglican bishop arrived to consecrate the burial ground and lay the foundation stone for the new church.96 Roman Catholic and Wesleyan churches were built in 1897.97 The first mention of the Presbyterians was not until 1899. They held their services in the Wesleyan church.98 A convent was built later that year following a visit by Mother Mary McKillop, Foundress of the Order of the Sisters of St Joseph.99

Sport was also very popular and there was a full array of sporting bodies. There were references to cricket clubs in 1886, 1893 and 1895, which implies that matches would have been held regularly.100 A gymnastic club was formed in October 1893 and in November a preliminary meeting was held of those interested in the formation of a club for holding races at Christmas.101 From thereon the Boxing Day race meetings were a regular sporting feature. The first inter club football match was played at the Flat in
In 1897 a pony and galloway racing club was formed and in the following year the athletics club was reopened in Goggin’s hall. A meeting of the tennis club was held in 1899 to renovate and repair the court.

There were a number of more culturally inclined bodies, most of which used church and hotel halls, such Mrs Goggin’s and Cooper’s. In February 1895 a public meeting was held with the aim of establishing a School of Arts. A progress committee had been formed and a number of books had already been received for the library. In addition, there was a progress association, a branch of the Amalgamated Miners Association (AMA) and a dramatic club, which was subsequently transformed into a social club. The Captain’s Flat Early Closing Association was formed in 1898, and a band and the Band of Hope were established in 1899. A minstrel troupe was also formed in 1899 with the idea of holding entertainments regularly for the benefit of different institutions.

Captain’s Flat had a substantial regional impact on the district, well beyond the provision of employment in the mines and smelters. For example, in 1893 there were complaints concerning the lack of money spent on the road to Braidwood through Harold’s Cross compared to that through Parker’s Gap. There were many selectors in the Harold’s Cross and Ballalaba area, and in the former location there were 30 selectors whose chief market was Captain’s Flat. Extensive use was made of carters, not only for local timber supplies, for which there were a number of sawmills, but for the haulage of supplies and raw materials such as iron, limestone and coke from the rail head at Bungendore. Carters were also needed to transport the ore from the mines to the smelters and to transport the finished product to the rail head. There were 30 teams in operation in 1889 and 25 in 1893.

The direct employment effect was, however, very significant, and it compensated for the lifelessness at other mining settlements in the region in the 1890s, such as Major’s Creek and Araluen. In November 1897 when the Captain’s Flat mines were at their peak, it was commented that many well known faces from Braidwood, Araluen, Major’s Creek and surrounding districts could be seen in the town, all of whom seemed ‘well contented with their lot’. They had had ‘a chance of earning and saving a little money’, something that they had not had a chance to do ‘for some considerable time past in their own immediate districts’. Reference was also made to the presence of four butcher’s shops in the town. The meat supplied was ‘of a first class description’, not only reflecting credit on the butchers, ‘but also on those instrumental in fattening, that is the Braidwood graziers. It was commented that nearly all the Flat market was supplied from these sources, ‘showing that a considerable amount of the Flat money found its way into the Braidwood district’.

---

102 Queanbeyan Age, 15 May 1895.
103 Queanbeyan Age, 20 February 1897, 27 July 1898.
104 Queanbeyan Age, 3 September 1899.
105 Queanbeyan Age, 6 February 1895, 3 September 1899.
106 Queanbeyan Age, 1 July 1886, 6 November 1889, 6, 27 August, 24 September 1898.
107 Queanbeyan Age, 5 October 1898, 28 October 1899.
108 Queanbeyan Age, 21 October 1899.
109 Letter to the Editor, Braidwood Dispatch, 10 May 1893.
110 Braidwood Dispatch, 24 July 1889, Cooma Express, 12 August 1893.
111 Braidwood Dispatch, 10 November 1897.
Conversely, the sudden and unexpected closure of the mines also had a substantial regional impact. The first wave of miners to leave in June 1898 included many from the Braidwood district. There was also 'a great deal of destitution among the families unable to get away...' In October there was 'quite a stampede from the neighbourhood', with everything seeming 'to wear a woe-begone appearance, many leaving for Gundagai, Cobar and the Snowball gold fields'.\textsuperscript{112} As a measure of the regional importance of the mines, and in the hope that the stoppages were temporary, unemployment relief was provided. There were 140 unemployed men, 53 of whom were provided with work on the roads for three weeks at 5s to 6s a day.\textsuperscript{113} In October 1899 road work was again allocated to the unemployed, reports indicating that all had been catered for and that the town now had a busy appearance.\textsuperscript{114}

The photographic and archival evidence confirm that Captain’s Flat was a very substantial settlement in the 1890s. Figures 9.5, 9.6 and 9.8 show the main commercial and residential areas in the boom years, including Newtown and Bogtown. The houses were built of sawn timber and several were large, with room for garden plots, particularly along the Molonglo River. The physical evidence of these years is, however, less forthcoming. The rebirth of Captain’s Flat in the post 1930 period has ensured that almost all building sites have been built upon. Apart from the post office, police station and sports ground there are few other sites that relate to this early period. Another large residential area was located along Copper Creek, and about 30 house sites have been identified in this area. Most of these relate to the 1930s, the new homes having been built on the sites of the old ones.

\textbf{Kangiara and Kyloe: 1900-1914}

The two main base metal mining settlements during this period were at Kyloe and Kangiara. Captain’s Flat’s future now rested with gold mining and processing and it has been dealt with in chapter eight. There was a revival in mining at Frogmore in 1906. However, Frogmore had been a rural settlement for a long time, and it is very doubtful if this increased level of activity led to any consequential changes in the commercial or institutional base of the town. Elsewhere, a number of smaller base metal operations commenced during this period, but few of them progressed beyond mining camps. The miners would have commuted to the nearest village or town for their requirements.

From July 1907 Kyloe grew rapidly, and for a time it was one of the larger towns in the Monaro District. It did, however, take several years for facilities such as a post office and school to be acquired. For example, a receiving office was not established until 1909 and it was not converted into a post office until the following year. Concerns had been expressed earlier at the amount of postal business, particularly postal notes, undertaken by Kyloe residents in Adaminaby.\textsuperscript{115} In 1911 the Kyloe Progress association pressed for additional services, such as money orders, a savings bank and phone. The population was 200. It was considered, however, that the current arrangements were satisfactory, as urgent private business was conducted over the Kyloe mine’s phone line and money

\textsuperscript{112} Queanbeyan Age, 12 October 1898.
\textsuperscript{113} Queanbeyan Age, 15 October 1898.
\textsuperscript{114} Queanbeyan Age, 7, 14, 28 October, 4 November 1898.
\textsuperscript{115} Manager of Kyloe mine to Inspector Brewer, undated; Postmaster Kyloe to Deputy Postmaster General, 9 October 1909; F. Armstrong to Acting Inspector Varley, 15 June 1910; note from Acting Inspector Varley, 23 June 1910, Postmaster General’s Department, SP 32/1, Box 304, NAA, Sydney.
orders could be obtained six days a week at Adaminaby. A school was not established until 1911.

A number of reports in 1912 suggest the existence of other institutions. In May there was a reference to the Kyloe Sunday school, suggesting that there was at least one church. A branch of the AMA and a progress association also existed. Many of Kyloe’s commercial and social needs were obtained in Adaminaby, which was only a few kilometres away. For example, several Kyloe residents were members of the Oddfellows’ Lodge at Adaminaby. One report stated that most of the miners lived in Adaminaby. The post office closed in August 1913, but the school continued for some years, serving a smaller and more scattered rural area.

Kyloe had a substantial regional impact. Extensive use was made of carters to transport plant and equipment, timber and limestone to Kyloe and to transport the ore, matte and concentrates from there to the rail head at Cooma. In 1909 there were 30 teams carrying ore to Cooma and 12 teams belonging to wood contractors, and there were several local sawmills supplying the mines. The carriage of a 23 ton boiler from Cooma in 1909 became almost legendary, for it required two large teams of bullocks and a considerable amount of patience. Despite the obvious size of the settlement, the physical evidence is of limited assistance because almost all of the town was inundated following the construction of Lake Eucumbene. Some guidance, however, is provided by three lease maps, which show a street and the huts and tents of some residents. (Appendix One, Maps 35-37) The existence of tents in the 1909 map shows the persistence of this form of habitation, which is even more remarkable given the usually bleak weather conditions at Kyloe.

Mining commenced at Kangiara in 1903, but there are no archival accounts of the settlement at that time. Following the change in mine ownership in 1909 the population was eventually relocated to a surveyed town site. A report in May estimated that there was an adult population of about 250, four general stores, two baker’s shops, a fish shop and five boarding houses. A post office with a money order facility was established in July following reports that there was a population of between 300 and 400 and that the majority were miners whose families were elsewhere. By September a number of business people had taken up quarter acre leases on an adjoining pastoral property.

---

116 Report by Inspector, 17 June, 9 November 1911, 3 May 1912; internal memo, 8 June 1911, SP 32/1, Box 304, NAA, Sydney.
117 Inspector Dawson to Under Secretary, 7 July 1911, Department of Public Instruction, 5/16527, SRCNSW, Sydney.
118 Cooma Express, 6 May 1912.
119 Cooma Express, 22 December 1912.
120 Cooma Express, 15 November 1912.
121 Report by Inspector, 25 September 1912, SP 32/1, Box 304, NAA, Sydney.
122 Deputy Postmaster General to Postmaster Kyloe, 8 May 1913, SP 32/1, Box 304, NAA, Sydney.
123 F. Armstrong to Acting Inspector Varley, Postmaster General’s Department, 15 June 1910, SP 32/1, Box 304, NAA, Sydney.
124 Cooma Express, 25 March 1910.
126 A. Williams to Inspector Brewer, 8 May 1909, Postmaster General’s Department, SP 32/1, Box 288, NAA, Sydney.
127 Deputy Postmaster General to Secretary, Postmaster General’s Department, 26 July 1909, SP 32/1, Box 288, NAA, Sydney.
128 Yass Courier, 24 September, 8 October 1909.
Later that year it was commented that the houses were not as well laid out or looked after as some other places, and were of a ‘makeshift variety, partly bags, partly iron’.  

The town was at its peak in early 1913 and was described as having two stores, two bakers, a butcher, a public hall and about 50 houses. Helen Lloyd referred to the presence of several green grocers, cool drink shops, four boarding houses and a population of 500. Because of opposition from the Tangmangaroo settlement, however, a hotel was not established. With the closure of the mines in mid 1913 many left for Ardlethan and other mining centres. Most of the houses were sold and pulled down for use on neighbouring farms and some buildings such as the hall were transported to nearby Rye Park. To survive, many men made good wages trapping rabbits.

By the end of June the township presented ‘rather a desolate appearance’, and by November the underground manager’s house had been removed and the manager’s residence sold. Only one store, baker, and church, the school, post office and about 20 houses were left. Attendance at the school had fallen from a peak of 66 to 30 and it was to be staffed by only one teacher. The same month, however, it was announced that mining was to recommence, and that all those who had stayed at the town and who had families would be employed. In 1914 additional labour was obtained from Ardlethan and elsewhere.

There were a number of community and sporting bodies. For example, there were active Roman Catholic, Methodist and Baptist congregations. The Baptist church was officially opened in 1910, and the Anglican community attended the church at Tangmangaroo, about two kilometres to the south. A school was built in 1910 and there was an active parent’s and resident’s association and a progress association. There were branches of both the AMA and the Grand United Order of Oddfellows, both apparently formed in 1909. Sporting associations were also important, and there was a tennis club and a cricket club.

Field surveys have been particularly useful in determining the size of the pre 1909 settlement. Eighteen hut sites, including the hotel site, are located on a hill side opposite the mines. With the exception of the hotel, most of the hut sites measure 4 m x 7 m, and only the stones from the chimneys remain. Many of the house sites in the post 1909 village have been destroyed by farming, but some of the streets and older houses remain, including one of the stores. Despite the unflattering nature of the contemporary descriptions, many of the homes were large and well built.  

---

129 Yass Courier, 21 December 1909.
130 Burrowa News, 14 November 1913.
131 Helen Lloyd, Boorowa-over 160 years of White Settlement, p.108.
132 Burrowa News, 30 April 1909.
133 Burrowa News, 6 June 1913.
134 Burrowa News, 27 June, 14 November 1913.
135 Burrowa News, 14 November 1911.
136 Burrowa News, 28 November 1911.
137 Burrowa News, 20 March 1914.
140 Yass Courier, 8 October 1909; Burrowa News, 6 October 1909, 23 September 1910.
141 Burrowa News, 28 October, 9 December 1910.
Conclusion

Because base metal settlements provided employment for large numbers of miners and other skilled workers and labourers, all of whom were usually paid well and regularly, they provided an important market for local farm produce. These markets were usually larger than on the gold fields, for almost all miners were wage employees and they did not have a miner's right entitlement to land for grazing or crop growing. There was a close link between the viability of these settlements and base metal prices. Metal prices could fall sharply and with little warning, which meant that large numbers of men were suddenly unemployed. Once the smelters closed, there was little prospect that the mines could be profitably worked by working miners or fossickers. The decline in the fortunes of the settlements had an immediate regional effect.

The regional impact was different in other regards as well. Construction of processing plants such as crushers, smelters and refiners required heavy machinery and brick making facilities such as kilns and the furnaces required prodigious amounts of timber or coke for fuel, and iron ore and limestone for fluxes. The demand for timber gave rise to ancillary industries, such as timber felling and sawmilling. These materials and equipment had to be carted to the smelters and the ingots taken away. There was generally, therefore, a greater use of carters than on the gold fields, other than perhaps for the dredges. Adequate roads and bridges were, as a consequence, also more important.

There were also some differences in the structure of the settlements. One was the almost complete absence of sly grog shops in the early days. This was partly determined culturally, for in some settlements there was a large Welsh element, with its Wesleyan connections. Chinese settlements were also absent, and there was a greater recourse to trade unions, which was a reflection of the predominantly wage based nature of employment on these fields. Overall, however, there were far more similarities than differences. There was a similar pattern of growth and development and, with the above cited exceptions, a broadly similar range of institutions and commercial establishments. The role of women in the commercial life of the settlements was also similar.
Chapter 10.

Sly grog and mammom – the alluvial mining communities

In the existing historiography on the culture of alluvial gold mining communities in Australia, there has been an overwhelming focus on the gold rush experience, and in the process the development of a number of conflicting stereotypes. Manning Clark described the gold rush miners as ‘living in a constant state of excitement’, behoven to ‘all kinds of emotional extravaganza, with the black bottle stirring them to “dark deeds”’.1 In a rather different vein Russel Ward referred to the collectivist tendencies of the miners, that is, to the strong ‘levelling tendencies’ of the gold fields and the ‘obliteration of class barriers’. However, he also referred to the digger’s proclivity to ‘gambling, profanity and drunkenness’.2 There continues to be a dichotomy between the depiction of the digger as largely male, profane, drunken and violent and the description of the mass of miners as people who were often family men, and in any case generally ‘law abiding, God-fearing, hardworking and upright’.3

The image of the miner as potentially dangerous and outside the control of the law is understandable, for the events and times of the early gold rushes were indeed often dramatic. David Goodman has commented that the contemporary reaction to gold was pessimistic, and there was great concern about the kind of society that the gold rush was threatening to create. It was not immediately apparent that the early discoveries would lead to unbridled wealth and progress.4 These concerns were as evident in New South Wales as Victoria, if the line of questioning from the Commissioners on the Select Committee on the Management of the Gold Fields in 1852 is any guide.5 On the other hand, alluvial gold fields lasted long after these early rushes, and it is questionable whether the more turbulent image applies very often, even in the early rushes themselves. Increasingly, the presence of women, children and the role of religion in the lives of different ethnic groups is being noted and discussed.6

6 The presence of women and families on the mining fields has been discussed by a number of historians. It has also been referred to in several of my books. Susan Lawrence, ‘After the gold rush: material culture and settlement on Victoria’s central goldfields’, in Gold: Forgotten Histories and Lost Objects of Australia, Iain McCalman, Alexander Cook, Andrew Reeves (eds), Cambridge University Press, Cambridge, 2001, pp.250-266; Dolly’s Creek, Melbourne University Press, 2000, pp.15-16, 38-39, 96-100; Gender and Community Structure, paper delivered to the Australian Mining History Association Conference, Sydney, 5-7 July 1998, pp.2-6; Margaret Anderson, ‘Mrs Charles Clacy, Lola Montez and Poll the Grogseller: Glimpses of Women on the Early Victorian Goldfields’, in Gold: Forgotten Histories and Lost Objects of Australia, Iain McCalman, Alexander Cook, Andrew Reeves
Sometimes these conflicting images of anarchy versus sobriety centre on the question of race, in particular the response of European miners to the Chinese miners amongst them. Historians remain divided on the nature and type of racism on the gold fields. The dominant and popular approach has clearly focussed on the more sensational incidents and has been overwhelmingly preoccupied with violence.\textsuperscript{7} Examples of this approach can be found in the work of Eric Rolls, Russel Ward and Kathryn Cronin.\textsuperscript{8} The other, less heralded approach, exemplified by historians and historical archaeologists such as Andrew Markus, Ann Curthoys, Peter Bell and Rod Lancashire, emphasises other aspects of the Chinese experience such as co-operation, contribution and diversification.\textsuperscript{9} Many local historians have also taken this approach.\textsuperscript{10}

Conflicting


images also centre on the question of religion, with some historians, for example, Michael Cannon and Carey, portraying nineteenth century Australia as sectarian, and others, for example, Walter Phillip, Ann Player and the Rev. Brian Maher stressing cooperation and mutual support.\textsuperscript{11}

The emphasis in the historiography on the perceived social volatility of the alluvial gold mining fields has meant that themes such as class, locality and community have tended to be ignored. Typically, these themes have been pursued by historians such as Erik Eklund and Brian Kennedy, who have written about the base metal communities.\textsuperscript{12} In his study on Port Kembla, Eklund discussed at length the relationship between class and locality, arguing that prior to the 1930s, ‘the different classes were bound together by the sense of a shared destiny that living in the same town created…’\textsuperscript{13} He also referred to the importance of the progress committee in pursuing local concerns, and concluded that locality could in certain cases transcend class.\textsuperscript{14} The applicability of this behaviour for the gold and base metal mining communities in the Southern Mining Region will be discussed in the next three chapters.

Booze and bacchanalia: 1851-1856

The depiction of miners as profane, violent and drunken has its origins in contemporary reports on the very early days on the gold fields. Law and order and the state of society generally were a major obsession with many observers, a good number of whom would have been of that class which viewed even a modest amount of ribaldry and inebriation with disdain, bordering on distress. Certainly, many of those indulging in these declared excesses did so quite openly, and were a ready target for journalists and other observers. In one such instance, sly grog selling at Major’s Creek in October 1851 was described as ‘very prevalent’, and on one day in November nearly half the diggers were reported to have been more or less intoxicated the previous day.\textsuperscript{15} However, even, at this early stage contrary reports of miner behaviour were beginning to emerge, another correspondent stating that grog was not available to the point of intoxication.\textsuperscript{16} The conduct of the diggers was described as orderly, with the Sabbath duly observed, and the congregations numerous and attentive. Many families were in possession of all the moderate luxuries of life, and their huts had the appearance of comfort and their children were well clad.\textsuperscript{17}

---


\textsuperscript{13} Eklund. ‘We are of Age’: Class, Locality and Region at Port Kembla, 1900 to 1940’, p.73

\textsuperscript{14} Eklund. ‘We are of Age’: Class, Locality and Region at Port Kembla, 1900 to 1940’, p.78.

\textsuperscript{15} \textit{Goulburn Herald}, 25 October 1851.

\textsuperscript{16} \textit{Goulburn Herald}, 8 November 1851.

\textsuperscript{17} \textit{Goulburn Herald}, 8, 15 November 1851.
In December the issue of sly grog selling at Major’s Creek and Bell’s Creek was again to the fore, but again there were contrary reports, for divine services were held at both locales, and were well attended. In March 1852 one visitor commented that there were ‘rows and fights involving men and women, with language not fit for...polite men’. By this time the police were on the fields and apprehending the vendors, one correspondent lamenting that most of the outrages were committed by ‘loose and disorderly characters’, who did not form part of the mining population. The sly grog owners were careful to prevent drunkenness and not to encourage ‘idlers and dissolute persons’. Some days later the Gold Commissioners were commended in putting down sly grog selling and gambling.

These contradictions continued for some time. In June it was lamented that at Araluen a ‘sad set of riff raff’ were congregating about, and over the next few months at both Major’s Creek and Araluen there were incidents involving violence and alcohol. But there were also signs of increasing domesticity, for some of those at Araluen had taken their wives and families with them and erected bark huts, and a benevolent society had been formed. The presence of the clergy was regarded as beneficial for it had put a check ‘upon those scenes that in former times were the prominent disgrace of the gold fields in this neighbourhood’. On Sundays no one was drunk and the few who remained away from the services were decently attired and gathered in groups conversing with neighbours or friends. The greater majority of the diggers were ‘imbued with the spirit of religion’, and during the week all were busy at their claims, with not the ‘sound of a wrangle’. For the serious miners excessive inebriation did not appear to be an option.

A similar pattern emerged at Jembaicumbene, which was described at first as a very quiet field. The reason for the orderliness and good conduct was initially the lack of shanties, and a short time later the poverty of the diggers. Religious services were held in tents by the Anglican and Roman Catholic churches. By February, however, it was lamented that sly grog selling was occurring with ‘the most barefaced impudence’, and not long thereafter it was claimed that there were more sly grog outlets than when there were ten times the number of diggers. This was asserted to be a consequence of the poverty of the diggings, the wife of the digger making more from the grog than the husband was making from mining, with little incentive for the Private Commissioner to interfere.

Notwithstanding these excesses, evidence presented to the Select Committee on the management of the gold fields supports a picture of relative moderation. The Gold Commissioner, W. E. King, stated that by November 1852 sly grog selling had almost stopped. He felt that only twenty per cent of the miners would spend all their money on

---

18 *Goulburn Herald*, 6, 13 December 1851.
19 Henry Thomas Fox, Diary, 1819-1891, supplied by Mrs F.G. Marginson, Mitchell Library, Sydney, February to April 1852.
20 *Goulburn Herald*, 6 March 1852.
21 *Goulburn Herald*, 13 March 1852. Previously every second tent at Bell’s Creek had been a grog shop, but by April sly grog selling had almost entirely disappeared from this locality.
22 *Goulburn Herald*, 5 June, 29 August 1852.
23 *Goulburn Herald*, 29 August 1852.
24 *Sydney Empire*, 22 March 1853.
25 Richard Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, *Braidwood Dispatch*, 10 August 1907.
26 *Sydney Empire*, 24 February 1853; Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, *Braidwood Dispatch*, 10 August 1907.
27 *Sydney Empire*, 24 February, 6 April 1853.
grog. Twenty per cent were teetotallers, and the others drank on average three glasses a day. The Rev. W. B. Clarke, who could hardly be expected to be neutral on the subject, stated that through all the diggings, there was a better attitude to religious and secular instruction than was generally supposed, and that he had met with attentive congregations wherever he went. He attributed much of this to the absence of sly grog shops and public houses. Further, in none of these accounts was there any mention of the wife beating and maltreatment of women that was apparently so readily resorted to on the Victorian gold fields.

The only evidence for class conflict concerned the tension between the miners and the landowners upon whose land the gold was found and the villages built. For example, at Bell’s Creek an exorbitant private licence fee of £5 a month was charged in addition to the Government licence, and at a public meeting in January 1852 the diggers resolved not to pay and take forceable possession. The situation further deteriorated when diggers were denied access to parts of the property adjacent to highly payable sections of Crown land. This problem was much more severe at Jembaicumbene, where it effectively destroyed the diggings. Aside from the exorbitant licence fee, the regulations imposed by the private commissioner restricted the digger’s freedom to choose a second claim if the first was unsuccessful. In addition, unlicensed persons, even if they were not digging, were hounded by the commissioner, one correspondent describing proceedings as ‘utterly opposed to the inherited notions of British justice’. At Major’s Creek one of the principal landowners intended to force all gold buyers on the field to be licensed as he considered them his competitors. This issue flared again when a storekeeper delivering goods was fined for trespassing and in two other instances licences to trade were refused. The situation was, however, resolved not long thereafter.

Richard Kennedy’s 1907 account sheds further light on these conflicts and tensions. He claimed that the Major’s Creek diggers drank very heavily and that often there would be good fights, but their principal amusement was quoit playing. At Araluen the first hall built was used as a boxing salon and was very popular, as impromptu fights were a not infrequent way of settling disputes on the field. The hall was also used for dancing twice a week. Armstrong’s hotel also had a dance hall, and there was also a bowling alley, which was a favourite resort of the diggers. As at Major’s Creek quoit pitching was also popular. Other amusements were weight lifting using stones, jumping, foot racing and occasional contests between the barrow men, one such event attracting 500 spectators. Religious services did not commence until 1855 and were held in tents, at first only twice a year. Because of the absence of banks the diggers secreted their

---

30 Goulburn Herald, 10 January 1852.
31 Goulburn Herald, 1, 28 February 1852.
32 Sydney Empire, 24 February, 6 April 1853.
33 Goulburn Herald, 6 December 1851.
34 Goulburn Herald, 26 March, 16, 30 April 1853.
35 Goulburn Herald, 7 May 1853.
36 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 17 August 1907.
37 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 28 September, 19 October 1907.
38 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 28 September 1907.
takings in or near their homes, but there were no incidents of burglary. Kennedy's account confirms the male orientation of the gold field communities during this period, but their attention appears to have been focussed primarily on sports and games rather than pubs and pandemonium.

**Civilizing influences: 1857-1874**

For most of the fields in the Braidwood and Shoalhaven District this period was a second boom. Elsewhere in the region, new fields were opened, all of which were initially prosperous. The level of prosperity was not of the same magnitude as at Bell’s Creek and Major’s Creek in the early years of the decade. However, good wages, and sometimes better than that, were earned, and within a few years the more prosperous communities assumed a settled and mature character. The stand out gold mining community during this period was Araluen. It was the largest, most consistent and most commented upon gold field in the Southern Mining Region.

The focus of community attention shifted visibly during this period. Concerns over inebriation, sly grog and after hours trading still existed but to these were now added more dramatic events such as the depredations of the bushrangers and race relations. The preoccupation of historians with these more dramatic and at times colourful events has tended to overshadow the more mundane, but nonetheless essential concerns of daily life. Derek Carrington has commented, for instance, that the miners were concerned more with 'bread and butter' matters, many of which were debated at public meetings. In the Southern Mining Region these included community access to postal facilities, schools and land, and at Araluen, the tiresome task of coping with the all too frequent flooding. There was conflict and division, but this did not occur to the point of dysfunction. Mutual cooperation and support were more common.

Notions of class and conflict were notable by their absence for most of this period, however, in the 1864 elections, the Araluen miners attempted to get a labourer from their midst named O’Hehir elected to the Assembly. They combined to pay his expense as well as guaranteeing him a salary if he were successful. These efforts paled into insignificance compared to the rough house events of 1869. On this occasion the two main contenders were Edward Greville of Sydney and Michael Kelly, a storekeeper of Braidwood and Araluen who had been elected only a few months previously. Despite a police presence at the polling booths, Kelly’s supporters took possession of the approaches to the entrances and intimidated and physically manhandled opposition voters. One of the booths reopened the following week with the assistance of extra police reinforcements. They were confronted, however, with large masses of men armed with pick and shovel handles and other sticks, who also blockaded the roads. Kelly was elected, but Greville protested and the election was declared null and void. On the occasion of the next election a large force of mounted men was sent to Araluen from Sydney to counter any disturbance and Greville was duly elected.

Margaret Carron has argued that this incident was symptomatic of the emergence of wage based labour and a more uneven spread of earnings, for by 1869 the field was

---

39 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, *Braidwood Dispatch*, 5 October 1907.
41 Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, *Braidwood Dispatch*, 4 January 1908.
dominated by large companies and most miners were working for wages. As some support for this contention, Mr H. Downer, a newspaper proprietor, stated before the Committee on Elections and Qualifications that there was a great increase in the mob and its agitations after the men had ceased work for the day on the claims. In addition, several months earlier there had been a series of disputes over wage claims. The employees on the Little Extended based their demands on the increased returns from the claim. Miners at the Perseverance were next on strike following notice that wages were to be reduced. About 50 men and 30 to 40 children marched about from claim to claim sending some 10 or 12 children into the claims to drag out the small boys who were driving the horses and carts.

These developments tend to support Carron’s position. There is also some indication that there may have been a measure of sectarianism, for not long after the dispute the police broke up a 400 strong meeting of the Protestant Political Association and took possession of 32 revolvers. A branch of the Association was opened in early 1870. While the level of agitation in the 1869 incident may never be fully explained, it is clear that the hitherto optimistic and cooperative mindset of a number of the miners had changed to a more confrontationist class based mode.

Questions of law and order and race, both of which were interrelated, were also important. The new found prosperity of the gold mining communities encouraged a brief return of the sly grog shop. For example, at Jembacumbene in 1859 money was said to be plentiful, as there was a ‘sufficiency of grog to be had’, with some of the diggers ‘preserved in spirits’. The presence of an established authority on most of the fields and a surfeit of licensed premises soon ensured that sly grog selling was generally a thing of the past. However, concerns over inebriation and other licentious behaviour still remained. For instance, Richard Kennedy claimed that there were 40 licensed premises at Araluen, a number of which held dancing five nights a week and hired professional dancing girls. A prominent Araluen resident, Dr Alley, stated that ‘the wholesale and unblushing profligacy and immorality of the place owing to the dancing and music rooms, which were pretences for worse things, was a frightful evil’. Inspector Brennan, in his reminiscences on Araluen, made similar comments. There were also occasional incidents such as the Jembacumbene race skirmishes in 1862.

Accounts in the Illustrated Sydney News in 1866 and the following year shed further light on these indulgences. In the 1866 report the presence of the ‘rowdy element’ at Araluen was acknowledged, as on other gold fields, but it was also stated that the bona

44 Report from the Committee on Elections and Qualifications, p.1.
45 Goulburn Herald, 7 July 1869.
46 Trevor Jenkin, The Alley Story, private paper, Braidwood and District Historical Society, p.25.
47 Goulburn Herald, 5 February 1870.
48 One establishment advertised the employment of 12 attractive barmaids, whose arrival was greeted with great fanfare. There was a very large attendance on the Saturday night, with the more inebriated clients spending the night in police custody. Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 21 December 1907.
50 Martin Brennan, Reminiscences of the Gold Fields, William Brooks & Co. Sydney, 1907, p.39. The police were not entirely blameless, for in 1860 they were accused of taking bribes from hotel owners. Braidwood Observer and Miner’s Advocate, 17 November 1860.
51 Braidwood Observer and Miner’s Advocate, 28 May 1862.
fide diggers were as ‘hardworking and manly a class of men as can be met with anywhere’. There were, nevertheless, ‘a large number of idle loafers roaming about on the look-out for prey’, this class being largely derived from the ‘flash horse and cattle stealers and bad characters that thickly infest the country all round Braidwood…’52 The 1867 report includes an illustration of a dance at Araluen, which depicts a large throng of men and women, the men either drinking and talking or dancing to the accompaniment of a five piece band. (Fig. 10.1) Inside, the hall is large, well lit and decorated, and the attire of both the men and women suggests that they were among the more prosperous in the community. The correspondent commented that

the scene largely represents the ‘Free and Easy’ style, though the music and dancing are generally excellent. Much animadversion has been passed on these dancing saloons on the ‘diggings’-suffice it to say that, though many of them are highly objectionable, there are others where the company is respectable, and visitors behave with decorum. 53

As suggested by the above accounts the concerns of Brennan and Alley need to be put into perspective, for it was hardly realistic to expect the much maligned single male diggers to confine themselves to their tents or huts when other more congenial and warmer surrounds beckoned. This social need would, however, have been lost on the more conservative observers. As the comments in the Sydney Illustrated News suggest, the authorities and leading citizenry were also concerned with the depredations of some of Australia’s more notorious bushrangers, such as Ben Hall and the Clarke gang, and the perceived ineffectiveness of the police and magistrates. In 1865 the Ben Hall gang, which included Tom Clarke, made an unsuccessful attempt to hold up the Araluen escort, during which there was a gunfight.54 The Clarke gang committed many other similar crimes in the district and were also held responsible for the murder of four special constables.

Following these events there was an inquiry into crime in the Braidwood district. One of the magistrates ‘had refrained from taking any open or active part against the bushrangers or their associates to preserve himself and his property from outrage and depredation’. Too much latitude had also been allowed to the public houses, particularly at Araluen. They were ‘kept open on Sundays and at improper hours, and music and dancing entertainments [were] held almost without check, with a very demoralizing effect’. Concerns were expressed at the ‘misconduct and inefficiency on the part of certain members of the police’, and the ‘improper intimacy and familiarity’ which existed between ‘members of the police force and certain connections of the bushrangers’ 55

The presence of large numbers of Chinese ensured that race relations were a standing item of debate. Anti Chinese sentiment was expressed by a number of local correspondents. In 1859 the Chinese were referred to as a ‘barbarous race’, claiming that they were in the habit of committing petty larcenies, and wandering from one diggings to the other, ‘aware that the singular resemblance one has to the other, at oftentimes shields them from detection’.56 In 1863, the Chinese shanties or accommodation houses were referred to as no more ‘than gambling houses and brothels

52 Illustrated Sydney News, 16 July 1866.
53 Illustrated Sydney News, 15 June 1867.
54 N.Ellis, Braidwood, Dear Braidwood, N.N. and N.M. Ellis, Canberra, 1989, p.91.
55 Report of the commissioners appointed to inquire into the state of crime in the Braidwood district, NSWLA, Votes and Proceedings, 1867, pp.7-8.
56 Sydney Empire, 16 July 1860.
of the lowest description'. 57 An even more strident comment in 1864 was directed at their habitation with unmarried European women of doubtful repute. The Chinese were accused of lavishing money upon them only to find that it went in drink, and rows and fights ensued 'in which the most dreadful language is used'. 58

Petty larceny by the Chinese appeared to be a genuine concern. At Major's Creek in 1860 discontent was expressed at the practice of selling off spurious metal as gold. It was commented that the result of the recent acquittals of those charged with this activity was that it had tempted them to persevere in their attempt to defraud. 59 By September residents were asking for increased police protection and the erection of a suitable lock up. It was claimed that the Chinese had been engaged in shoplifting and disposing of spurious gold to storekeepers and to 'every description of petty marauding which can be imagined', including the pillaging of hen roosts. A petition was signed by 236 persons asking for the prohibition of the Chinese into the colony and for their withdrawal from the gold fields. The selling of spurious gold also occurred at Araluen and Mongarlowe. At the former field the bosses had been warned against this practice. 60

In 1860 there was an incidence of violence on the Jembaicumbene field, though it was not on anything like the scale of those at Lambing Flat. On this occasion the Chinese at Bell's Paddock were at logger heads with the agent for the Seymour Estate, and many of them moved to Mongarlowe and Major's Creek where they expected to be better treated. Tents were destroyed, tools taken away and the Chinese hunted off the grounds. 61 Despite this incident they continued to form a large part of the Jembaicumbene field for many years. At Araluen several public meetings were held in 1861 to petition the Government to prevent the Chinese working on the gold fields on Crown lands. One correspondent commented that this was a 'step in the right direction and it was hoped that other districts would follow suit, this likely to be more effective way of dealing with the situation than the actions that took place recently at Lambing Flat'. At a second meeting about 300 persons attended, and Dr. Wilson addressed the meeting and condemned the actions of the Lambing Flat miners. 62

There were other instances of European violence against the Chinese, including the robbing and beating of three Chinese at Major's Creek in 1861 and the murder of a Chinese man on the Araluen road the following year. 63 In 1866 there were two incidents involving the Clarke gang and the Chinese. On the first occasion the gang held up 11 Chinese on the Jembaicumbene road. Later that year they held up Ah How's store at Jembaicumbene, after which the gang proceeded to Major's Creek and held up another Chinese store. At the latter location they were approached by a party of police and a gunfight ensued. 64

While these incidents may suggest rampant racism, there were many instances of forbearance and cooperation between the two races. As discussed in chapter five there were often complimentary comments upon the diligence and perseverance of the

57 Goulburn Herald, 2 May 1863.
59 Braidwood Observer and Miner's Advocate, 11 July 1860.
60 Braidwood Observer and Miner's Advocate, 29 September, 10 October 1860; Goulburn Herald, 13 March 1867; Ellis, Braidwood Dear Braidwood, pp. 86-87.
61 Sydney Empire, 20 April 1860.
62 Braidwood Observer and Miner's Advocate, 3, 10, 21 August 1861.
63 Braidwood Observer and Miner's Advocate, 2 November 1861, 16 August 1862.
64 Sydney Mail, 14 July 1866; Goulburn Herald, 28 November 1866.
Chinese, and there was a degree of co-operation between both races in mining matters. Further, the Chinese had the full protection of the law, and perpetrators of crimes against them were arrested and if found guilty, gaol ed. The Clarke gang, for instance, visited its depredations upon both Europeans and Chinese, and was eventually brought to justice. Interpreters were very important in the police work, and it was considered 'utterly impossible' to proceed without them.  

Furthermore, in the Southern Mining Region, the Chinese were not silent victims of racism, but were well capable of defending their own interests, a point made at some length by Andrew Messner in his recent study of the Chinese at Bendigo. 66 Many mining disputes were resolved through official channels, but some were not. In 1861 a number of Chinese jumped a claim at Jembaicumbene attacking the Europeans on several occasions with shovels and other implements. Some Europeans proposed a roll up to drive the Chinese off the field, but this did not eventuate. 67 In 1866 there was an affray between the Chinese and Europeans at Major's Creek following a decision by a private commissioner in favour of the Europeans. 68 After the commissioner had left, 30 Chinese tried to drive the Europeans off, attacking them with long handled shovels. The Europeans, of whom there were only six, resisted. Two of them were seriously injured and shots were fired in defence, and the European who had fired the shots gave himself up to the police and was held in custody pending trial. In 1868 there was a serious riot between the Chinese and Europeans at Major's Creek, when 16 Chinese attacked three Europeans with long handled shovels after they had turned water onto their claim. 69

They also took matters into their own hands when it came to their own kith and kin. Some of these disputes were resolved in the local courts, but others were not. 70 For example, in 1862 a state of 'civil war' was reported amongst the 'Mongolians of Jembaicumbene'. A dispute had arisen and a pitched battle ensued, in which some had been 'very severely handled'. Several Chinese who 'were more peaceably inclined' provided information on those involved and as a result five were arrested. The incident was dismissed by the court, as it was claimed to be a faction fight. 71 On another occasion a mob of 'celestial malcontents' tried to find out the whereabouts of a well known Chinese interpreter, with the object of shooting him for having given offence to them as an interpreter. He escaped and following a complaint before a JP one of the men was arrested, making a total of nine Chinese in the lock up. 72 In another incident a Chinese storekeeper, Ah How, was stuck up and beaten by three men of 'Mongolian race' in 1864. He subsequently went to the police, who issued a warrant for their arrest. 73 In 1865, a Chinese miner was murdered at Araluen, a crime for which five Chinese were subsequently apprehended. 74

---

67 Braidwood Observer and Miner's Advocate, 28 September
68 Goulburn Herald, 21 October 1865, 11 April 1866.
69 Goulburn Herald, 29 April 1868. With the number of Chinese increasing to between 30 and 40 the Europeans took shelter in a hut until rescued by the police.
70 Braidwood Observer and Miner's Advocate, 17 November 1860, 3 April 1861.
71 Yass Courier, 12 November 1862.
72 Yass Courier, 1 November 1862, Braidwood Observer and Miner's Advocate, 8 November 1862.
73 Goulburn Herald, 24 December 1864.
74 Goulburn Herald, 21 October 1865, 17 January 1866.
In contrast to these incidents there were many indications that the Chinese settled in quickly to their new surrounds. As early as 1859 a report on Jembaicumbene described them as having a cheerful appearance, with their dress and horse riding giving the impression that they were doing well.\textsuperscript{75} There were also many positive elements to their relationships with Europeans. For example, they were involved in two meetings at Mongarlowe in 1866 to protest at the new Goldfields Bill, the first of which attracted 220 people and the second 400.\textsuperscript{76} At Bentley’s Point, probably in the 1870s, the Bentley family taught the alphabet and read the Bible to the Chinese, who in turn invited them to their New Year’s feast.\textsuperscript{77} Another account referred to Mrs Brice, the principal storekeeper at Mongarlowe, supplying them with goods on credit for three years until they had completed building the ten mile race.\textsuperscript{78} They were also very fond of racing and in 1868 they were invited to race their own horses in separate events at the Braidwood and Reidsdale races.\textsuperscript{79} Kennedy claimed that they were often present at the races in their hundreds. At Jembaicumbene large numbers gathered in the shanties and gambling dens, drinking, gambling and smoking opium to ‘their heart’s content’, the most religious of them congregating regularly in the ‘joss houses’.\textsuperscript{80}

In the period after 1870 race relations appear to move onto an even higher note, possibly attributable to the more settled nature of the communities and the increased prominence of several Chinese families, for example Quong Tart and the Nomchongs. Quong Tart was naturalised in 1871 and elected to the Manchester Unity Lodge in the same year, afterwards becoming a Forester and Freemason. He was also a member of the Bell’s Creek School Board and a patron of cricket and horse racing.\textsuperscript{81} (Fig. 10.2) In 1873 he had a major part in organising a joint European Chinese horse race meeting. Although the Government refused to appoint him permanently as the official interpreter, it has been claimed that to a large extent he governed the Chinese in the district, adjusting their disputes, providing employment and generally minimising their difficulties.\textsuperscript{82} The role of the Nomchong family in the commercial life of the goldfields has been discussed in chapter seven.

The overall forbearance between the two races in the Southern Mining Region, particularly in the late 1860s and 1870s, can be attributed to a number of factors. It is unlikely, however, to have been wholly related to their decreasing numbers, for proportionately they were still an important part of most fields, and in some instances

\textsuperscript{75} Sydney Morning Herald, 30 June 1859.
\textsuperscript{76} There were two contradictory reports on these meetings. In extracts published in the Sydney Empire on 3 and 10 September 1866 it was stated that the protest was held because there was no provision ‘to prevent the undesirable encroachment of Chinese’. The second report referred to above was published in the Goulburn Herald on 12 and 15 September and is likely to be the more accurate as the Chinese had been in the majority on the field for over eight years, with no previous accounts of discord emerging. The miner’s protest procession included six Chinese.
\textsuperscript{77} Mary Bentley Moore, Journey to Durran Durra, Jeanne Bow, 1984, pp.8–10.
\textsuperscript{78} Bruce Russell, Mongarlowe and the Little River Goldfields, Braidwood and District Historical Society, 1989, pp.31–34.
\textsuperscript{79} Goulburn Herald, 14 March 1868.
\textsuperscript{80} Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 31 August 1907.
\textsuperscript{81} Goulburn Herald, 8 February 1873.
\textsuperscript{82} Mrs Quong Tart, The life of Quong Tart; or, how a foreigner succeeded in a British community, W.M. MacLardy, Ben Franklin Printing Works, Sydney, 1911; Curthoys, ‘Men of all Nations, except Chinenen’: Europeans and Chinese on the goldfields of New South Wales’, in Gold: Forgotten Histories and Lost Objects of Australia, Iain McCalman, Alexander Cook, Andrew Reeves (eds), p.118.
they still formed the majority of the mining population. Of more significance would have been the physical proximity of many of the Chinese and European settlements and the mining claims, the pre-eminence of several Chinese families, and the importance of the Chinese economic contribution. Jerome Small has commented in a recent study that the increased familiarity between the two races helped the European miners resist the use of Chinese strike breakers at Clunes in 1873. In a separate study, Rod Lancashire has suggested that the absence of strong anti-Chinese feelings in north east Victoria may have been due to the close interaction between the two races, particularly where the economic participation of the Chinese was valued. Within the Southern Mining Region, the increasing familiarity of the two races and the dependence of the Europeans on the Chinese as storekeepers, market gardeners and agricultural workers would have contributed strongly to these sentiments.

Compared to these more dramatic events, incidents such as the flooding of the Araluen valley, the location and staffing of the post offices, access to church and school land and education appear to pale into insignificance. Yet it could be argued that they more accurately reflected the day to day concerns of most gold field residents. The floods, in particular, involved a large proportion of the population, either as victims or benefactors. Possibly the worst flood was in early 1860. On this occasion there was 'death and destruction everywhere', numbers of lives were lost, stores and public houses were flooded, and along the length of the creek every hut or tent within about 50 metres of it was swept away. At a public meeting in Braidwood a relief fund was instituted and it was agreed to approach the Government for assistance, as there were many who were without food and clothing and some who were starving. Collections were also taken up by the Braidwood churches and many storekeepers gave credit.

The April 1864 flood resulted in 300 men losing their jobs. Severe deprivation followed further floods in June, and many had difficulties getting enough to eat, despite the generosity of the storekeepers. Some of the storekeepers had extended credit after the 1860 floods and had been declared insolvent as a result. An application for relief was made to the Government and Mayor of Sydney. Fortunately, there were substantial donations by large landowners. Severe flooding occurred again in 1867, resulting in the establishment of a flood relief committee. The 1871 floods were particularly severe as the claim holders had only just put their claims in order and were buying new equipment. In the great majority of cases they had exhausted their means in combating the earlier floods. The severity of these floods gave rise to an unprecedented level of community support, for the engine owners let their engines at lower rates, and some had given them to the claim holders for stated periods for no charge. Those who owned horses and drays did likewise and let them work in the claims for periods of four to six

---


84 Jerome Small, Unions and anti-Chinese agitation on the Victorian goldfields: The Clunes’ riot of 1873, paper delivered to the seventh National Labour History Conference, Canberra, 19-21 April 2001. He concluded that it was the familiarity between the two races at Ballarat that allowed the European miners at Clunes to be forewarned of the arrival of Chinese strikebreakers.


86 Sydney Empire, 20 February 1860; Braidwood Observer and Miner’s Advocate, 18, 21 February 1860.

87 Braidwood Observer and Miner’s Advocate, 18 February 1860.

88 Braidwood News and General Advertiser, 23 April, 22, 25 June 1864.

89 Goulburn Herald, 29 June, 8, 14 August 1867.
weeks without charge, except for the cost of fodder. The agitations of 1869 appear to have been set aside emphatically.

There were a number of petitions concerning the location of post offices and access to church and school lands. At Araluen two petitions were forwarded in 1863 concerning the relocation of the office to Redbank. The debate at Jembaicumbene was strongly contested and ran from early 1859 until 1861. There were three main contestants for this prize, all of whom were either local storekeepers or hoteliers, and petitions in favour of each were organised and submitted by their supporters. Access to the Church and School lands was also an issue at Jembaicumbene. In 1859 this gave rise to a petition, in conjunction with one from Braidwood, seeking to throw the land open to the miners. These petitions were widely supported by all classes, including the clergy, even though the church was dependent for financial support from the very landowners they were petitioning against. Subsequently, over 2,000 acres was withdrawn for mining purposes. A similar petition was forwarded in 1871 protesting at the proposed sale of the Church and School Lands.

Education was also an area of concern, for not everyone welcomed the new initiatives arising from the Public Schools Act 1866, and the teachers often found that they were in a very unfriendly and hostile environment. The half time schools, in particular, were badly supported by the parents, and there was considerable apathy, if not hostility, in complying with the requirements for prompt and regular attendance when there were competing interests such as home duties and farm work. In the more isolated areas education was often left to chance and was of a very indifferent quality. For instance, Mary Bentley Moore recounted that on the Mongarlowe field some children received instruction from a ‘worthy gentleman in the district, who made teaching his only means of subsistence. Most of the gold digger’s children attended his classes... but it was our own dear mother who did most of the laborious work of education...’

These trials and tribulations need to be measured against the increasing focus throughout this period on family, community and sporting life. At Araluen, sports now included foot racing, jumping, bagatelle, skittles and quoits, cricket, billiards, a bowls and handball. Picnics were held on special days such as St Patrick’s Day, New Years Day and Boxing Day, and in 1860 there were about 500 persons at a cricket match on Boxing Day.

---

90 Goulburn Herald, 6, 27 May 1871; Town and Country Journal, 16 September 1871.
91 Letters from Mr. Harrison, 23 August 1864, Edmund Eaton, Crown Flat Postmaster, 20 September 1863, Mr. Moriaty, undated; petition, undated, SP 32/1, Box 9, NAA, Sydney.
92 J. Wilson to GPO, 23 March 1859; Mr O’Brien to GPO, 7 March 1859; H. Moreing to GPO, 21 May 1859; Letters from Mr. Summers, 7 November 1860, 13 December 1860, 4 January 1861; petitions of 7 March 1859, 26 March 1859, SP32/1, Box 280, NAA, Sydney.
94 Petition from the gold-miners of Jembaicumbene, ‘Church and School Lands’, Votes and Proceedings, NSWLA, 1871.
97 She also referred to the ‘barbarous ways of the teacher’, who indulged in heavy canings on the slightest pretext. Mary Bentley Moore, Journey to Durran Durrah, Jeanne Bow, 1984, pp.13-16.
98 Richard Kennedy, ‘The Braidwood gold fields in the 50s and 60s’, Braidwood Dispatch, 21 December 1907, Braidwood Observer and Miner’s Advocate, 17 November 1860, 12 October, 21 December 1861.
'including a large sprinkling of the fair sex'. 99 There were also visits by artists. A Mr Bushell gave a magical entertainment on two occasions in 1860 to crowded halls, with 'nearly the whole of the fair sex' present. 100 Race meetings were also popular, and in 1862 the Boxing Day meeting was attended by over 500 on the two days, with dancing held in the evening. 101

In addition, there were now schools, lodges and churches with their Sunday schools, all of which held occasional functions. (Fig. 10.3) For most of the 1860s the schools were privately owned or denominational and were well run and well attended. Similarly, the churches were well attended. 102 Lectures, public meetings and other more cerebral distractions were also held. In 1861 a choral society was formed, and lectures were held in conjunction with the weekly meetings. 103 The Rev. Dr. Lang gave a lecture on state aid to an audience of about 120 in the Band of Hope hall in 1862. 104 The photo in Fig. 10.3 suggests that the lodge functions were very well attended. In several instances functions were held to raise funds for institutions and causes in Braidwood and elsewhere. In 1861 a bazaar was held to help St Bede's church in Braidwood, and later that year a meeting was held to raise money for the Braidwood hospital. 105 A Wesleyan tea meeting and public meeting were held in 1862 to aid the circuit fund, and in August a well attended meeting was held to raise funds for the relief of 'the present distress in the cotton manufacturing districts in England'. 106

A similar, but smaller range of activities, occurred in other communities. For example, at Jembaiicumbe between 600 and 700 attended the picnic race meeting on Boxing Day 1860. 107 Picnics were also held at Major's Creek, and New Years and Boxing Day races were held at Larbert. 108 St Patrick's Day functions took place at Larbert and Jembaiicumbe in 1862. 109 In 1862 races were held at Jembaiicumbe on the occasion of the Queen's birthday, and in November there were races on the Prince of Wales' birthday, some 300 attending the latter function. 110 Races were also held later that year and on Boxing Day, the latter attracting large numbers who were regaled with a social in the evening and dancing and other amusements in between the races. 111 More cerebral activities also took place in these communities. At Major's Creek in 1861 a Wesleyan tea meeting in aid of the Sunday school was held at which 100 attended, and in 1862 a tea meeting in aid of the circuit followed on from a similar meeting in Araluen. 112 A lecture by the Rev Dr Lang was held at Major's Creek in 1862, following on from a similar meeting in Araluen a few days earlier. 113

99 Braidwood Observer and Miner's Advocate, 17 November, 29 December 1860.
100 Braidwood Observer and Miner's Advocate, 2 January 1860.
101 Braidwood Observer and Miner's Advocate, 21 December 1861, 4 June 1862.
102 Braidwood Observer and Miner's Advocate, 23 March, 21 December 1861.
103 Braidwood Observer and Miner's Advocate, 13 July, 3 August, 4 September, 21 December 1861.
104 Braidwood Observer and Miner's Advocate, 28 May 1862.
105 Braidwood Observer and Miner's Advocate, 18 September, 13 November 1861.
106 On the former occasion the speaker, Rev. Mack, took time out to upbraid the conduct of the sitting member. Braidwood Observer and Miner's Advocate, 22 January, 6 August 1862.
107 Braidwood Observer and Miner's Advocate, 2 January 1861.
108 Braidwood Observer and Miner's Advocate, 29 December 1860, 5 January 1861, 15 March 1862.
109 Braidwood Observer and Miner's Advocate, 15 March 1862.
110 Braidwood Observer and Miner's Advocate, 28 May, 12 November 1862.
111 Braidwood Observer and Miner's Advocate, 6, 31 December 1862.
112 Braidwood Observer and Miner's Advocate, 9 February, 16 March 1861, 8 February 1862.
113 Braidwood Observer and Miner's Advocate, 28 May 1862.
Fig. 10.1. A ball at Araluen, *Sydney Illustrated News*, 15 June 1867. Permission of the National Library of Australia.

Fig. 10.2. Quong Tart with his horse ‘Nobby’ at Braidwood in the 1870s. From an original painting held by Ian Tart, Collaroy.
Fig. 10.3. Procession of the Royal Araluen Lodge, No.46, M.U.I.O.O.F., 1865. Permission of the National Library of Australia.

Fig. 10.4. Light horse troop. Allegedly from Major's Creek, but more likely from Araluen. Permission of the National Library of Australia.
At Mongarlowe, regular church services and community activities were held at the main village, often at Garnett’s hotel and home.\(^{114}\) Mary Moore Bentley’s account of her family’s activities on the field provides a rare insight into social and community life on this field. Her father, George Bentley, was a successful miner at Bentley’s Point and the family attended church at Taylor’s (Charleyong) while resident there and later at ‘Coconella’. Church services were obviously a focal point of the community, for sometimes the building was strained to capacity. Mary only went on rare occasions, for her mother held Sunday school and church services at their home at Bentley’s Point.\(^{115}\)

One aspect which undoubtedly impacted upon the communities was the gender imbalance. At Jembaicumbene, as late as 1871, there were 511 males and 326 females, and in the 30 to 50 age group there were 139 unmarried men and two unmarried women. The data also suggest that the average age of the married men was considerably higher than for the females and that a number of married men resided on the fields without their wives. A similar pattern also emerges at Major’s Creek and Araluen.\(^{116}\) The importance of gender imbalance for European miners may, however, have been overstated, for the statistics also reflected the large number of unmarried Chinese men at that time.\(^{117}\) Nevertheless, it provides some explanation for the popularity of more male base pursuits such as hotel visitations, particularly in the early years on the fields.

**The quiet years: 1875-1898\(^{118}\)**

For much, but certainly not all, of this period there was a general absence of prosperity as a result of the prevailing drought conditions. In the late 1880s there was a general revival arising from large scale investment in ground and hydraulic sluicing, and in the early 1890s there was a further stimulus arising from the 1890s depression. These developments were, however, brought to an abrupt end by the recommencement of dry weather in the mid 1890s. Araluen withstood the impact of the 1880s drought conditions better than most fields, but was laid low by severe and frequent flooding in the early 1890s. With the exception of the highly capitalised ventures, very few alluvial gold miners in the region were earning more than wages, and many were only earning subsistence wages.

The undercurrent of crime and conflict which surfaced occasionally before 1875 was almost entirely absent in this period. Potential bushrangers were discouraged by improved communications and policing and the general lack of anything worth stealing. There was an absence of the ‘bacchanalia’ so enthusiastically reported by Inspector Brennan, and the main fare for the courts was by comparison relatively minor. In a typical day at the Araluen Police Court in September 1894 there were four cases of obscene language, three of the defendants also facing separate charges of drunk and

\(^{114}\) Kenneth J. Meldrum, Braidwood District’s Garnett and Meldrum Families 1851-1880’s, privately published report, Pymble, NSW, p.9.

\(^{115}\) Mary Bentley Moore, *Journey to Durran Durrah*, pp.13-16.

\(^{116}\) Registrar General, *New South Wales Census of 1871*, Sydney, 1873, pp.800-801. At Major’s Creek there were 648 males and 426 females, and in the 30 to 50 age group, 126 unmarried men and one unmarried woman. There was a similar pattern at East and West Araluen. For example, at the former field there were 1,606 males and 1,294 females, and in the 30 to 50 age group, 146 unmarried men and three unmarried women.

\(^{117}\) Registrar General, *New South Wales Census of 1871*, pp.800-801. For the Colony as a whole 11.6 per cent of those in the 30 to 50 age group were unmarried females. There were 377 Chinese males on the Araluen, Jembaicumbene and Major’s Creek fields and only nine females.

\(^{118}\) The periods 1875 to 1887 and 1888 to 1899 have been combined here because of the paucity of records on social conditions in the first period.
disorderly.\textsuperscript{119} Mining disputes continued to be settled in the Warden’s Court. The Chinese were by now a much smaller proportion of the gold field communities, and conflicts arising from cultural or racial misunderstandings were also a thing of the past.

As a reflection of these harder times, tensions and conflicts over land and mining rights emerged. These disputes usually provided a common focus for the communities against either a recalcitrant government or vexatious landowner. For instance, at Araluen in 1890 a public meeting was held to protest at attempts by one of the large landowners to dictate where the locals were to buy their meat. This incident was in response to the recent opening of a butcher’s establishment, which offered lower beef prices, the landowner telling his tenants not to patronize the new shop or risk eviction. The meeting included Father Prendergast from the Roman Catholic Church and many supporters from Braidwood. One speaker described the landowner’s actions as ‘unjust, oppressive, and tyrannical’, and several referred to the need to avoid the ‘tyranny’ of the old world. It was resolved that the new shop would be supported.\textsuperscript{120}

Serious disputes over land and mining rights also occurred at the Bungonia and Garangula fields, both of which were the abode of large numbers of unemployed men during the 1890s. At Bungonia a large area of ground had been monopolised for years by a large and not particularly energetic mining company. Public meetings were held and a deputation of miners visited the Minister of Mines in 1895 to seek an inquiry by a Warden other than the current one. Some of the ground was subsequently opened up for the working miners.\textsuperscript{121} At Garangula the miners and their families objected to the excessive regulations imposed by the private landowners, the Macansh and Osborne families. The original agreement provided that Macansh or his agents had the power to enter any claim and inspect or prospect it, and that the miners could not enter into any other business and could not cut timber without permission. Neither could they build houses and bring their families to live with them, have a school built or improve the water supplies. In early 1895 the progress committee pressed the Government to resume the field under the \textit{Mining on Private Lands Act}. The Government Geologist considered correctly, as it transpired, that the field had a short life and that resumption could not be justified. A Political Labour League was also formed and public meetings were occasionally held.\textsuperscript{122}

The only reports of elections and party politics in the region were in 1894. At Major’s Creek, the day of the election turned out to be a large social occasion, with a considerable number attending the hotel for refreshments. There was extreme jubilation at the victory of the freetraders over the protectionists. At Araluen, the newly elected member, Austin Chapman, was escorted into town by a large cavalcade of persons in buggies and on horseback. He later addressed a well attended meeting and thanked the electors for their support.\textsuperscript{123}

One of the main issues for the Araluen community at this time was the need for a main trunk drainage race. A proposal was forwarded to the Government in 1893 seeking monies for a covered race to drain the east side of the valley to about three kilometres below the post office. By this means it was hoped that large areas of auriferous land

\textsuperscript{119} Braidwood Dispatch, 5 September 1894.
\textsuperscript{120} Braidwood Dispatch, 19 November 1890.
\textsuperscript{121} Goulburn Evening Penny Post, 4 June, 24 October 1895, 16 June 1896.
\textsuperscript{122} ‘The Garangula gold field’, Harden Murrumburrah Society Bulletin, No.3, October 1976, p.3; Cootamundra Herald, 23 March 1895.
\textsuperscript{123} Braidwood Dispatch, 25 July 1894.
would be made available for working, thus restoring the fortunes of the valley. This matter was strongly supported by Araluen residents and the local member. However, it was rejected eventually by the Government.\(^{124}\)

Education was by this time an important focus of the communities, and was the subject of many local representations and official concerns, the latter focussing largely on the problem of attendance. In 1876 less than one half of the students in the Braidwood district were regarded as regular attenders, with many absent for weeks or months at a time, while they were engaged in potato picking, shearing, harvesting, lambing and other occupations.\(^ {125}\) The condition of the schools was an item of consistent community dissatisfaction, not only in the Southern Mining Region, but elsewhere in rural New South Wales.\(^ {126}\)

Problems such as white ant infestation were a constant source of irritation, for there was usually little official response until the buildings were in a state of disrepair sufficient to imperil teachers and students alike. In 1885 the Major’s Creek school was described as unsuitable for a locality which was ‘intensely cold in winter’. The school building was unlined and the children subject to chills and drafts.\(^ {127}\) By 1888 the slabs were only held together by a few nails.\(^ {128}\) There was also community pressure for the establishment of evening schools.\(^ {129}\) Occasional grievances and difficulties with the parents also occurred. At the Araluen West school in 1880 one of the parents complained of the severe treatment of their son by the teacher, Mr Clarke. A subsequent investigation concluded that the objections were unfounded and based more on personal grounds.\(^ {130}\)

Education was also a concern at Garangula and the subject of a number of representations from the progress committee and the Political Labour League.\(^ {131}\) There were two formal representations to the Department within a five month period, in one of

\(^{124}\) *Braidwood Dispatch*, 12 April 1893, 6 January 1897.


\(^{127}\) Edward Knapp to Minister of Education, 24 April 1885, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney.

\(^{128}\) Alex Ryrie to Minister of Education, 24 October 1888, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney. By 1892, the teacher’s residence was in such a decayed state that it also required rebuilding. Inspector Willis to Chief Inspector, 16 April 1892, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney. Extensive white ant damage at the Araluen public school was reported in 1887. Architect to Under Secretary, 14 December 1887, Department of Public Instruction, 5/14668, SRCNSW, Sydney. In 1897 it was reported that the West Araluen school had almost been destroyed by white ants and could be blown down at any time. Inspector Hunt to Chief Inspector, 28 October 1897, Department of Public Instruction, 5/14668.5, SRCNSW, Sydney.

\(^{129}\) In 1882 a request to open a school at Major’s Creek was refused on the grounds that the numbers were inadequate and the evening schools always collapsed in the summer months. Inspector Dawson to District Inspector Dwyer, 5 October 1882, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney. In 1892 the local priest withdrew all the pupils from the West Araluen school at the beginning of 1891 and sent them to a night school at the convent. With the collapse of this school the former evening school was reopened. Inspector Willis to Chief Inspector, 21 May 1892, Department of Public Instruction, 5/14668.5, SRCNSW, Sydney.

\(^{130}\) The parents submitted that the people of Araluen had no confidence in the teacher and were sending their children to the public school at Redbank. Mary Burke to Secretary Wilkins, 21 January 1880; Inspector to Secretary, 17 April 1880, Department of Public Instruction, 5/14668.5, SRCNSW, Sydney.

\(^{131}\) *Cootamundra Herald*, 10 August 1895.
which the children were described as ‘running wild amongst the miners...’ Some months later in May 1895 the police constable commented that there were ‘a great many children running about Garangula gold field that should be at school’. Many parents could not afford to send their children to the private school conducted by a Miss Johnson because the fees were too high. In the circumstances he considered himself ‘powerless’ to enforce attendance. A further application was made by the progress committee later that month and on that occasion it was successful.

Despite these vicissitudes the social and sporting life of the communities continued to thrive, and they appeared to be very little different in character from those in the 1860s. Festivals and other celebratory functions were common, and class or sectarian tensions were noticeable by their absence. The functions were very family oriented, and their success was largely due to the exertions of the women, who were often praised publicly for their efforts. Many of these functions attracted a large number of people from the surrounding districts and indicate that the regional social network was extensive.

At Araluen, cricket was played occasionally with teams from the surrounding districts. St Patrick’s Day was also regularly celebrated, and the function in 1889 included a picnic for the convent school children and an athletic sports carnival. Two hundred and fifty persons were present at the function in 1891, which included an athletic carnival. A large number of women were present, which drew the comment that they always made ‘any gathering of this description more attractive and pleasant’. A concert and dance, which attracted a number of visitors from Braidwood, Major’s Creek and Reidsdale, was held in the evening, the proceeds going to the convent. The Boxing Day races in 1894 attracted between 450 and 500 persons, many of whom were from elsewhere in the district. In 1897 a function was held by the Dramatic club in aid of the public school, and a ‘representative meeting’ of young men agreed to form a social club with regular quarterly meetings.

The churches continued to be important, spiritually and socially. In May 1889 a concert was held by the convent pupils at Araluen on the eve of the Queen’s birthday, and the hall was filled to capacity at least an hour in advance. Later that year the Auxiliary Bishop of Sydney visited Araluen to consecrate part of the new cemetery and formally open the convent. Fund raising activities were an important focus of these functions. For example, in 1890 a concert and dance in aid of the building fund for the Roman Catholic Presbytery was held. The function attracted many people from Braidwood and there was standing room only, with many unable to obtain admission. In addition, in December of each year a tea meeting and dance in aid of funds for the Roman Catholic

---

133 M. Wilson to Officer in charge of Police, Gundagai, 28 May 1895, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
134 Application for the establishment of a public school, 28 May 1895; Inspector Sheehy to Chief Inspector, 17 June 1895, Department of Public Instruction, 5/15962.1, SRCNSW, Sydney.
135 Braidwood Dispatch, 12 November 1890.
136 Braidwood Dispatch, 27 February 1889.
137 Braidwood Dispatch, 2 March 1891.
138 Braidwood Dispatch, 29 December 1894.
139 Braidwood Dispatch, 15, 29 September 1897.
140 Braidwood Dispatch, 1 June 1889.
141 Braidwood Dispatch, 16 November 1889.
142 Braidwood Dispatch, 4 October 1890.
church attracted a large attendance from Braidwood, Reidsdale and the immediate neighbourhood, and fund raising concerts were also occasionally held for the convent. Tea meetings were also held to raise funds for other churches. One such function in aid of the Wesleyan church took place in 1893. The Oddfellows' hall was emptied two or three times to cater for those present, and there was still enough food to provide a social for the Juvenile Templars the following evening.  

At Major’s Creek, occasional cricket matches, usually followed by a social, were also held. An example of another type of function was the supper and dance to celebrate the 26th anniversary of the Rose of Australia Lodge in 1889. Forty couples attended, the supper concluding with a toast to the ‘health of the ladies’. 1894 was a particularly active year socially. In July a performance was held by the amateur minstrel club in aid of the Braidwood brass band, which returned the complement later in the year, by combining with the local minstrel club at a function in aid of the local cricket club. At a tea meeting in aid of the Roman Catholic church there were a large number of visitors from elsewhere in the district, and they were thanked for their attendance. The majority of those attending were from other denominations. Balls were also popular, and the cricketer’s ball in 1897 attracted about 50 couples. Numerous functions were also held over the Christmas and New Year period. Ever since 1874 there had been a New Year’s Day picnic at the recreation ground. On New Year’s Eve in 1894 horse racing was held at Long Flat, followed by a picnic the following day.

A similar pattern of activity occurred at Mongarlowe. In 1889, there were 300 people present at the St Patrick’s Day races. An annual picnic involving horse and foot racing was also held in December of every year at the race course, usually followed by a ball. In 1893, the ‘good ladies of Braidwood’ organised a ball to raise money for the Braidwood hospital. As an interesting aside on gender attitudes, the reporter observed that some of the bachelors at the ball wore the look of loneliness and despondency which spoke deeper than words could tell that they had realised the great void that lies between bachelorism and happiness and some wore the air of resolution which words would inadequately express of their intention to effect a big alteration in their mode of life when opportunity offers.

The opening of the bridge over the River in 1894 was a major event to which about 500 people attended. Festivities commenced with the Braidwood band and the opening by Mr Austin Chapman, MLA, followed by a children’s sports programme, the prizes for which were contributed by Nomchong of Braidwood. One of the principal events was a baby show. Following this event a dinner was held by Mrs Brice at her Rising Sun Inn. In August a meeting was held to consider the formation of a Debating and Improvement Society. Thirty men put their names forward, and Mrs Brice offered her

143 Braidwood Dispatch, 13 December 1890, 6 May 1891, 14 January 1899.
144 Braidwood Dispatch, 21 October 1893.
145 Braidwood Dispatch, 16 November 1889, 19 December 1894.
146 Braidwood Dispatch, 8 June 1889.
147 Braidwood Dispatch, 1 July, 21 November 1894.
148 Braidwood Dispatch, 24 October 1894.
149 Braidwood Dispatch, 6 January 1897.
150 Braidwood Dispatch, 19 December 1894.
151 Braidwood Dispatch, 16 March 1889.
152 Braidwood Dispatch, 30 August 1893.
153 Braidwood Dispatch, 11 July 1894.
hall free of charge for the first two months.\textsuperscript{154} The Society was to meet weekly, and the first debate was held in September.\textsuperscript{155} At the October meeting there was not enough room for those that wished to attend, and those missing out had to stand outside.\textsuperscript{156}

Functions in aid of special or popular causes were also important. For example, at Araluen in 1889 a concert was arranged by a number of ‘gentlemen in the valley’ to assist in the opening up of a new claim. It was expected that this new undertaking would assist in providing employment for a number of ‘breadwinners’ who had been out of work for some time.\textsuperscript{157} In 1891 a concert organised in aid of the Mathison family attracted about 250 persons, most of whom were women.\textsuperscript{158} A social was held in 1893 for the purpose of farewelling Senior Constable McIntosh and his wife, one of the speakers referring to the readiness of both persons to assist in cases of distress or sickness and to provide assistance for charitable purposes.\textsuperscript{159} On a less charitable note, a function held at Jembaicumbene in 1897 to raise funds for a ‘distressed widow’ was very poorly attended.\textsuperscript{160}

Elsewhere in the region social life was less vibrant. At Brook’s Creek on the Southern Tablelands the newly arrived school teacher, Elizabeth Gunter, stated in 1890 that she was ‘appalled by the sight of a cluster of bark roofs where I was kindly greeted and offered tea’. The previous teacher had arrived on a Saturday and having seen the school building and the lodgings left on the Monday. She described life at Brook’s Creek as monotonous; only one child was born there during her five year stay.\textsuperscript{161} At Garangula there was a working men’s club and occasional race meetings. The April 1895 race meeting was attended by about 300 people.\textsuperscript{162}

Socials and suppers: 1899-1914\textsuperscript{163}

For some communities, in particular Araluen and Jembaicumbene, and to a lesser degree Mongarlowe, the commencement of dredging and the re-introduction of hydraulic and centrifugal sluicing brought a last embrace of prosperity. These were highly capitalised ventures and good wages were paid, overturning the previously parlous economic conditions at Araluen and Jembaicumbene in particular. In most other communities the return of drought conditions in 1901 caused a cessation of similar ventures and the miners either left or were reduced to subsistence earnings. These communities attracted little interest by contemporary reporters and the nature and quality of their social relationships can only be speculated.

In several communities, politics and electioneering assumed a much higher profile than in the past. At Araluen, the 1901 election drew considerable attention. One issue was a proposal to change the electoral boundaries to remove Araluen from the Braidwood

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{154} Braidwood Dispatch, 11 August 1894.
\item \textsuperscript{155} Braidwood Dispatch, 19 September 1894.
\item \textsuperscript{156} Braidwood Dispatch, 6 October, 10 November 1894. In addition, there was a Civilian Rifle Club, although it was beset at that time by internal dissension. Moves were also afoot to establish a gymnastics club.
\item \textsuperscript{157} Braidwood Dispatch, 8 June 1899.
\item \textsuperscript{158} Braidwood Dispatch, 25 February 1891.
\item \textsuperscript{159} Braidwood Dispatch, 3 June 1893.
\item \textsuperscript{160} Braidwood Dispatch, 29 September 1897.
\item \textsuperscript{161} E. Gunter, ‘Recollections of Bungendore 1890-1895’, Bungendore Mirror, 17 June 1977.
\item \textsuperscript{162} ‘The Garangula gold field’, Harden Murrumburrah Society Bulletin, No.3, October 1976, p.3.
\item \textsuperscript{163} Major’s Creek and Bell’s Creek are discussed in chapter eleven, for by 1901 they were predominantly reef mining communities.
\end{itemize}
\end{footnotesize}
electorate, and a public meeting was held to protest at the proposed alterations. Later that month there were three visits to Araluen in ten days by prospective candidates, each of whom received a 'fair and impartial' hearing. The reaction to the former local member, Austin Chapman, who was now contesting the Federal seat was of a different calibre, and the meeting was described as the largest and most enthusiastic political meeting at Araluen in the last 20 years. Chapman was duly elected, and his brother, Albert, succeeded him as State member not long thereafter.

On one visit Albert advised the residents to form a progress committee, and not long thereafter a public meeting was held for this purpose. However, the perceived lack of action by the committee became a vexed issue, and by early 1902 it was commented that with so much rain perhaps they had been 'washed away'. The Female Franchise Bill drew some interest, the Braidwood Dispatch correspondent stating ungenerously that the ladies here seem to take little or no interest in politics, and think their sphere is home and not the political arena. ...if we had an election here tomorrow not a dozen females would record their votes, ...they (the legislators) would be better employed in passing more useful bills for the benefit of the country.

Although there was no public riposte to these ungenerous comments, it is likely that they drew some harsh words privately, for there was often a good attendance of women at the election meetings.

State and federal members, but particularly the former, visited Araluen frequently, and aspiring candidates held election meetings. The election in 1910 was slightly reminiscent of the turbulent events of 1869. A number of recruits were won over to the Labour movement and a meeting of the local Labour League, the sixth in as many weeks, was held in June in preparation for the coming State election. Later that month two of the Labor candidates for preselection addressed electors, and the Labor candidate, Mr W. H. Tomkins, addressed electors on two further occasions, the 'burly miners and woodmen from Deep Creek being much in evidence' on the latter. Despite the decisive defeat of the Labor candidate at the elections two Labour League meetings were held not long thereafter. There was a general view that the League was of value in promoting local issues. Less successful were efforts to establish a local branch of the Farmers and Settlers Association. It was considered that Araluen was not a farming district and that there was little prospect for such an organisation.

Political debate also arose at Mongarlowe. A meeting was held in April 1907 to hear an address by the local member, Colonel Ryrie, at which over 130 persons were present, including a large number of women. The meeting was described as one of the largest.
and most enthusiastic ever held at Mongarlowe, and a committee was formed to assist with his election. At the conclusion of the meeting a dance was held. Later that month a Mr Frank Forster, MHR for the Peel River, addressed a meeting in the hall in support of the Labor party, to which there was a 'very fair attendance...the ladies as usual rolling up in considerable numbers'. A meeting was held in June by the Labor candidate, the correspondent commenting that if the committee formed to help Colonel Ryrie existed it must be hibernating, while the labor organisation was as 'active as bees in swarming time'. Political meetings were also held in 1910.

In addition to this heightened level of political awareness and partisanship, most miners at Araluen and Jembacumbene were employees and many would have had union membership. Industrial disputes were, however, almost nonexistent. An incident arose on one of the Araluen dredges in 1912, but it was the first one for many years. This industrial calm was possibly a consequence of the high wages paid and the smaller, more intimate working arrangements on the dredges compared to the paddocking claims of the past. At almost every other field, the working miner predominated and labour disputes were not an issue.

The main topics of community concern continued to be practical ones. One was the prospect of constructing a railway between Tarago and Braidwood. At Araluen class tensions did arise, however, over the proposed cancellation of the east and west commons by several local landowners in 1902. This resulted in a public meeting and the forwarding of a petition to the Minister for Mines. The fate of the lagoon on the Newtown recreation reserve also caused concern, some residents wishing it enclosed and others not, the correspondent stating that it would not be possible to get 'half a dozen persons to agree'. Similar disputes arose in 1909 and 1911. On the former occasion there was a threat to alienate the Newtown common, and on the latter there was a threat to alienate some of the east common.

Community concerns also focussed on the dredges. There was a strong push to reconstruct the Bourketown bridge, which had been dismantled to allow passage of the Redbank dredge. Of more contention was the condition of the main street through Araluen, which had been cut up by the dredge traffic. In 1911 there was a round of acrimonious correspondence on this subject. More vexing was the aftermath of the diphtheria epidemic in that year, for there was considerable community resentment at the continued allegations that Araluen was unsanitary.

Education was another area of community focus and occasional dissension. In 1904 it was proposed to amalgamate the two public schools at Araluen. Objections were raised to this proposal by some of the West Araluen parents, whose children were too young to

175 Ryrie commented that he was aware that his opponents had formed a branch in Mongarlowe and that he was contemplating doing the same. Braidwood and Araluen Express, 30 April, 3 May 1907.
176 Braidwood and Araluen Express, 21 May 1907.
177 Braidwood and Araluen Express 2 July 1907.
178 Braidwood Dispatch, 23 March 1910.
179 Braidwood Dispatch, 24 February 1912.
180 Braidwood Dispatch, 4 September, 26 October 1901.
181 Braidwood Dispatch, 22 March 1902.
182 Braidwood Dispatch, 7 January 1903.
183 Braidwood Dispatch, 4 September 1909, 8 February 1911.
184 Braidwood Dispatch, 29 March, 6, 13 May 1911.
185 Braidwood Dispatch, 9, 12, 23 August 1911.
186 Braidwood Dispatch, 22 May, 1, 15 June, 7 August 1912.
walk the extra distance via the bridge during floods. The inspector stated that although amalgamation would be in Araluen's best interests, he did not wish to force the issue 'upon a people with a strong minority stoutly opposed to it'. 187 Petty grievances also arose, the most notable occurring in 1910, when a number of West Araluen parents complained at the treatment of their children by the teacher. It was proposed to hold an inquiry, but the petitioners objected and it was abandoned. In his report the inspector concluded that the teacher had not at 'all times exercised that tact and sweet reasonableness which establish and sustain harmonious relations between the teacher and his community'. Even though a number of parents had expressed their full satisfaction with the teacher and had petitioned for his retention, it was recommended that he be transferred at the end of the year. 188

Law and order generally was not an issue in these communities any more than it had been in the 1890s, and most of the misdemeanours were of a relatively minor nature. For example, in the Araluen Police Court in May 1900 one person was charged with riotous behaviour, obscene language and drunkenness, and three others for assault. 189 In July 1901 the only two items were one case of drunkenness and bad language and a charge of removing wood from Crown land without a license. 190 Cases before the Court in November 1902 included an alleged assault, two instances by the same person for obscene language and riotous behaviour, two cases of illegal impounding and two for furious riding. 191 In July 1908 the cases before the Court included one of bad language, six for fighting and five for drunk and disorderly. 192 This was hardly the stuff of bacchanalia, riot and rebellion.

Community and social life was very family oriented, and festivals abounded. At Araluen, regular events included the annual concerts of the pupils from the Redbank school, the annual tea meeting and dance in December at Redbank and the New Year's Day and Boxing Day festivities. 193 These functions attracted a large number of visitors from other towns and villages, such as Braidwood, Major's Creek, Krawaree and Moruya. 194 In keeping with the new prosperity of this community there were several additions to the social calendar. The first military sports was held by the Braidwood-Araluen Australian horse troop in 1899 on the occasion of the Queen's birthday, and it was to be a regular feature of the social calendar from thence on. A military ball was held in the evening, the proceeds going to the Braidwood hospital. 195

On Easter Monday 1900 a dance was held with about 40 couples present, and there was a similar function in 1902. 196 In late 1901 steps were taken to hold a race meeting on Boxing Day and to form a pony and galloway club, a decision which was reversed the following year in favour of forming a jockey club. 197 Other functions held in 1902 included an entertainment by a travelling troupe called the Lemmons Company, and a

187 Inspector Walker to Chief Inspector, 7 July 1904, Department of Public Instruction, 5/14668.5, SRCNSW, Sydney.
188 Petition, 2 March 1910; Report of Acting Inspector, 30 July 1910, Department of Public Instruction, 5/14668.5, SRCNSW, Sydney.
189 Braidwood Dispatch, 5 May 1900.
190 Braidwood Dispatch, 17 July 1901.
191 Braidwood Dispatch, 15 November 1902.
192 Braidwood Dispatch, 4 July 1908.
193 Braidwood Dispatch, 18 July 1908, 5 January, 10 December 1910.
194 Braidwood Dispatch, 5 January 1901.
195 Braidwood Dispatch, 27 May 1899.
196 Braidwood Dispatch, 21 April 1900, 12 March, 16 April 1902.
197 Braidwood Dispatch, 7 December 1901, 5 July, 29 November 1902.
ball and supper held by the Cheese Factory Company. In addition, a children’s picnic was held to celebrate the coronation and peace declaration, followed by a dance in aid of the cricket club. The holiday period in 1903 was particularly hectic. On Boxing Day, the first annual meeting of the jockey club was held and it attracted a great number of visitors from outside districts, and included a ball in the evening. This event was to become a regular fixture from thereon. New Year’s celebrations included the military sports, a picnic and dance at Mudmelong on New Year’s Day, and the annual social on New Year’s Eve.

Sport clearly contributed to the development of community cohesion. A football club was formed in 1902 and the first match was with Major’s Creek, after which there was a banquet. The Lawson Cup was instituted in 1903 and became a focal point from thereon, after-match banquets continuing to be a regular feature. Matches occasionally took place between local teams. Sports days and sports meetings were also held frequently. A sports day was held in 1905 and included both foot races and a stepping competition, and a similar event in August included a handicap foot race and a cycle race. Torchlight handicaps (foot races) were also popular. By 1906 tennis and rifle shooting had been added to the agenda, and in 1908 a rifle club was formed and regular local competitions held. Billiard tournaments were also held occasionally.

Two new bodies of a more cultural note were the debating society, which was formed in 1906 with 40 members, and the non-shouting club, which held its second social the same year and attracted 50 couples. A grand ball in aid of the Braidwood hospital held by the non shouting club was described as one of the ‘most brilliant and successful functions’ held for many years. Occasional socials were also held by the tennis club and the Oddfellows’ Lodge, a ball held by the latter organisation attracting upwards of 60 couples in 1908. Empire Day celebrations were held for the first time in 1907 and attracted a large number of people. The children were regaled with addresses by two members of the Public School Board, after which there were songs and recitations. They were then marched around the flag, which was unfurled, saluted and cheered, accompanied by the singing of ‘Rule Britannia’, after which a picnic was held. At the 1908 celebrations over 400 children and adults were present.

The churches continued to be strong socially, and there were many fund raising functions. Two notable aspects of these functions were the extent to which they attracted residents from other towns and villages and the degree to which they were

---

198 Braidwood Dispatch, 15 October 1902.
199 Braidwood Dispatch, 7 January 1903.
200 Braidwood Dispatch, 5 July 1902. There was a certain rough house element in these events, however. In a game between Araluen and Major’s Creek in 1903 several players on both sides were ‘roughly treated’ and the referee was put out of action. Nevertheless the Araluen team, who were the visitors, were very hospitably entertained that evening. Braidwood Dispatch, 10 June 1903. A similar rough house match took place at Jembiacumbene in 1903. Braidwood Dispatch, 22 July 1903.
201 Braidwood Dispatch, 19 August 1903.
202 Braidwood Dispatch, 16 August 1905.
203 Braidwood Dispatch, 29 July, 30 August 1905, 9 June 1909.
204 Braidwood Dispatch, 20 September 1905.
205 Braidwood Dispatch, 11 July, 2, 12 September 1908.
206 Braidwood Dispatch, 7 July 1906.
207 Braidwood Dispatch, 12 September 1906.
208 Braidwood Dispatch, 22 August 1906, 25 April 1908, 2 June, 21 July 1909, 8 June 1910.
209 Braidwood Dispatch, 29 May 1907.
210 Braidwood Dispatch, 30 May 1908, 2 June 1909.
supported by other denominations. Many functions, usually concerts, but sometimes, bazaars, were held in aid of the churches, and special mention was occasionally made of the exertions of the women. A concert was held in 1901 to raise funds for a horse and buggy for the local priest, at which particular mention was made of the support of those who were not Catholics. On another occasion later that year the church was crowded, with people from other denominations present. Concerts in aid of the convent and school were also held. The Anglicans also held functions in support of St John's church. At a concert in 1904, there was not even standing room. It was described as one of the most successful ever. Tea meetings and concerts were also held by the Methodists.

By early 1909 Araluen's social life was on the wane, and the correspondent for the Braidwood Dispatch questioned the whereabouts of the tennis, cricket, football, social debating and race clubs, 'all of which bloomed as bright as the flowers in the spring, and faded away just as rapidly again'. He acknowledged the high level of activity in the rifle club and military, but the former was only in its tentative stages. While the military was 'a fairly strong troop a few years ago... its enthusiasm was gradually diminishing'. Despite these lamentations Araluen's social life was far from dead, and 'regular' functions such as the Empire Day celebrations, the athletics sports and annual tea meetings, dances and Oddfellows' balls were to continue for some years yet. Euchre parties and dances were also popular and there was also a visit by a circus, the first for many years.

Nonetheless, the social scene was clearly fading, along with the fortunes of the dredging companies. Later that year it was lamented that scarcely a week went by 'but the departure of some individual is recorded, and occasionally it is an entire family that packs up and treks towards the city'. Early the following year the lack of social attractions was commented upon on several occasions, one correspondent stating that Araluen was in the 'grip of a powerful inertia'. Nevertheless, there were some new diversions, such as travelling picture shows and a skating rink, and Araluen's social life experienced an unexpectedly strong revival in 1910 and 1911.

A similar but much less varied range of activities occurred at Jembaicumbene and Mongarlowe, many of which attracted visitors from other towns and villages. At Mongarlowe, cricket matches and race meetings continued to be held along with a sports day on Easter Monday. Other occasional functions, such as those in support of the Braidwood hospital, were also held. At Jembaicumbene, sporting activities included

---

211 Braidwood Dispatch, 8 September 1909.
212 Braidwood Dispatch, 10 July, 5 October 1901, 6 August 1902, 30 August 1905, 8 September 1909, 6 April, 22 October 1910.
213 Braidwood Dispatch, 11 May 1901.
214 Braidwood Dispatch, 24 August 1901.
215 Braidwood Dispatch, 26 October 1901, 17 June 1903, 22 August 1906, 19 November 1910; Braidwood and Araluen Express, 3 May 1907.
216 Braidwood Dispatch, 24 September 1902, 23 May 1908, 2 October 1909, 28 September 1910.
217 Braidwood Dispatch, 11 May 1904.
218 Braidwood Dispatch, 1 October 1908, 2 November 1910.
219 Braidwood Dispatch, 10 March 1909.
220 Braidwood Dispatch, 2 June 1909, 5 January 1910.
221 Braidwood Dispatch, 7 August, 3 November 1909.
222 Braidwood Dispatch, 14, 25 August 1909.
223 Braidwood Dispatch, 3 May 1907.
cricket, football, tennis, and foot and bicycle racing on sports days.\textsuperscript{224} Concerts were also held in support of the Braidwood hospital.\textsuperscript{225} The most notable church function was an athletic sports, bazaar and concert held in 1903 in aid of the new St Patrick’s church. This function was very successful, and the members of the committee thanked those from other religious denominations for their ‘liberal support and assistance’. The Rev. D’Arcy expressed his wishes that ‘the spirit of tolerance which existed throughout the district amongst all creeds might long continue’.\textsuperscript{226}

**Conclusion**

The most lawless and licentious periods in the alluvial gold mining communities were also the most prosperous, when there was much to celebrate and plenty of money to do it with. Murder and mayhem did occur, but they were not general, and most lawlessness was largely confined to sly grog trading, drunkenness, bad language, fist cuffs and petty larceny. Religious observance, even at the height of the rushes, was assiduously kept, and most miners observed Sundays with due decorum and consideration for others. In the 1860s there was an increase in crime largely because of the bushrangers, who were from outside the gold fields, and the arrival of the Chinese. There were some incidents of racial violence arising from misunderstandings over water and mining rights, but very few incidents of race based violence based on roll ups or the like. For many European miners the Chinese presence added a sharp competitive edge to life, but the sentiments were not always negative, and there was a strong degree of acceptance and forbearance at the personal level. This may have been a result largely of their important commercial role as bankers, storekeepers and perhaps above all else, as market gardeners.

As the gold rushes passed, the mining communities tended to settle down, and the nomadic and shifting characteristics evoked by some commentators were less evident. Public debate focussed on practical day to day issues, such as attempts to restrict trade or mining, reduce the gold field commons, parent teacher disputes, flood crisis management and the provision of school facilities and postal services. Sometimes, especially when wage levels declined, or company based employment grew, these debates led to more heated political campaigning, industrial disputes and the occasional riot, but these incidents were not common. The main class based antagonisms were reserved for the more recalcitrant landowners on whose land the miners aspired to live and mine, and on these concerns the communities presented a united front. In times of economic hardship the inclement weather possibly provoked more frustration and anger than politics, for the standard of housing and schooling meant that many residents, particularly the school children, were often in serious physical discomfort.

Politics did not dominate the lives of the miners and their families, for their sense of community identity generally overrode notions of class or sectarianism. There were a large number and variety of sporting and social functions, which were enthusiastically attended, both from within the communities and from outside. These functions were all inclusive and very family oriented, and their success was dependent largely upon the exertions of the women, who were praised openly for their efforts. There was a considerable degree of cross denominational support for the church activities. With declining prosperity there was a gradual falling off in the number and range of activities, but this was a gradual process.

\textsuperscript{224} *Braidwood Dispatch*, 12 March 1902, 4 March 1903, 22 June, 8, 26 October 1904, 25 December 1908.

\textsuperscript{225} *Braidwood and Araluen Express*, 14 May 1907; *Braidwood Dispatch*, 13 November 1909.

\textsuperscript{226} *Braidwood Dispatch*, 21 March 1903.
Chapter 11.

A struggling civility – the reefing communities

The existing historiography on gold mining communities has focussed largely on alluvial mining during the gold rush periods, and it is on that experience that most of the stereotypes of gold miners, that is the propensity for profanity, drunkenness and violence, have been largely constructed. Reef miners have been by comparison largely neglected, and their experience on the smaller fields has been left largely to local historians. Some redress to this neglect will be forthcoming soon with the publication of Kerry Cardell and Cliff Cumming’s edited collection, A World Turned Upside Down: Cultural Change on Australia’s Gold Fields 1851-2001. Even in this publication, however, most of the emphasis is on the larger fields.¹

In the Southern Mining Region of New South Wales the reefing communities were the poor cousins of the mining fraternity. There were very few instances of them glimpsing even briefly the prosperity of many alluvial communities, for most miners were either working miners or employees of small syndicates and companies and very few ever earned more than wages. The first flush of success on the reef fields was often very short lived, after which the community faced a more uncertain and usually less affluent future.

With these characteristics it could be expected that the cultural differences between the reefing and alluvial gold mining communities would be greater than the similarities. This chapter investigates whether this was indeed the case, and whether the stereotypes that have been applied to the alluvial miners can also be attributed to the reef miners. Particular attention will be given to concepts of class, locality and community. In this chapter the question of whether there is a distinct mining culture will be investigated from the perspective of the gold mining communities.

‘A quiet lot’: 1860-1874

During this period the most enduring reefing community was Spring Creek Jacqua. The focus of this community was entirely upon local affairs such as the provision of a school and improved postal services. By late 1869 many miners were established with their families. There were a considerable number of children and there were moves to establish a public school and a cricket club. The correspondent hoped that ‘these and similar influences would...tend to modify those undesirable habits which are apt to be indulged in when people are removed from the constraint of a settled state of society’.²

A public school was not built until 1874.³ Prior to that the children attended the private school at Spring Creek village. In 1872 the children at Manton’s Reef had been described as ‘running about wild and unschooled’. The need for adequate postal services was resolved more quickly, but the appointment of postmaster or mistress was divisive. There were three main candidates for this position, Mary Lodge (a former post mistress), Garratt Kelly, a publican, and Mr. Fox, a storekeeper. There was some underhand play,

² Goulburn Herald and Chronicle, 27 November 1869.
³ Goulburn Herald and Chronicle, 18 May 1872.
as Mrs Lodge’s husband was described by one resident as a ‘great rascal’. Despite these ungenerous representations, Mary Lodge was appointed.⁴

Law, order and sobriety were not major concerns. In the early months there were a number of shanties, but these were soon replaced with licensed hotels, and a report in November 1869 referred to the population as of an ‘orderly class’, with no serious offences having been reported. Notwithstanding these observations, it was not long before the local correspondent was lamenting the absence of a constable on the field to serve summonses and keep the rowdier element in check. There had been one instance of assault and a number of disputes over claims and water rights, but these appear to have been isolated incidents.⁵ A report some months later described the residents as a ‘quiet lot’, but he added that they would nevertheless benefit from the occasional presence of the police to intimidate petty thieving and breaches of the *Publican’s Act*.⁶ The closest the community came to political consciousness was in July 1870, when a meeting of miners protested at the requirement that mining claims be registered, and voted for this view to be communicated to the Gold Fields Commission of Inquiry.⁷

Considerable importance was placed upon family oriented activities, and horse races and cricket matches attracted large numbers of residents.⁸ The races were often combined with foot races and well attended, the function on Christmas Eve 1869 attracting 150 people.⁹ Races and athletic sports were also held on St. Patrick’s Day.¹⁰ Picnics were popular, and a contemporary photograph of a picnic at Spring Creek suggests that such events were well attended with men, women and children dressing up for the occasion. (Fig.11.1) A number of functions were also held at the christening of the various crushing machines. A banquet was given at the opening of Mason and Flock’s machine in late 1869, and in early 1870 there was a ‘big spread’ at the christening of May and Langdon’s machine.¹¹ Other social events involved a visit by some photographers in 1872 to take photos of the school children and a visit from a magician.¹² A wedding was also held in 1872. The festivities involved a spread at Mrs Kelly’s hotel, at which the diggers gave a concert with tin dishes and bullock horns for accompaniment.¹³

Religious observance was another priority, but the visits from the clergy declined with the fortunes of the field. In late 1873 it was stated that:

> We had a visit from one of the Roman Catholic clergy the other day, and I noticed that several of our Protestant brethren attended the service, and no wonder either, for we have not seen the face of any Protestant minister at Spring Creek for the last fourteen months, and thus we are left to live without spiritual consolation, and it may be in some cases to perish without hope.¹⁴

---

⁴ Mary Lodge to Postmaster General, 27 July 1869; letter from Fox, 28 August 1869; E. Hill to Postmaster General, August (date uncertain), 14 October 1869; Mr. Mant to E.Hill, 27 September 1869, SP 32/1, Box 278, NAA, Sydney.
⁵ *Goulburn Herald and Chronicle*, 27 November 1869.
⁶ *Goulburn Herald and Chronicle*, 26 February 1870.
⁷ *Goulburn Herald and Chronicle*, 30 July 1870.
⁸ *Goulburn Herald and Chronicle*, 22 March 1871.
¹⁰ *Goulburn Herald and Chronicle*, 22 March 1871, 9 March 1872.
¹¹ *Goulburn Herald and Chronicle*, 4 December 1869, 26 February 1870.
¹² *Goulburn Evening Penny Post*, 17 November 1872.
¹³ *Goulburn Evening Penny Post*, 8 July 1872.
¹⁴ *Goulburn Evening Penny Post*, 9 September 1873.
There was some progress in these matters, however, for in January the following year a service was held by Rev. Hulbert of Goulburn, with the intention of regular monthly services thereafter.\footnote{Goulburn Evening Penny Post, 29 January 1874.}

Several other reeding communities, such as McMahon’s Reef, Major’s Creek, and to a lesser extent Nanima, were to experience brief periods of prosperity, but few accounts have come to hand on their community and social life. For example, in 1870 there were 400 persons present at the laying of the foundation stone for the Church of England building at Major’s Creek, half of whom were later regaled with lunch.\footnote{Town and Country Journal, 19 November 1870.} At Nanima a dancing floor was erected in 1872 and a group called the Nanama minstrels formed. The entertainment for the first show was to be provided by the minstrels, who did not turn up because they were out of practice. The room was nevertheless crowded, although no women attended. Quoit matches were also played.\footnote{Yass Courier, 29 October 1872.}

**Grizzlies and grumbles: 1875-1899\footnote{The two periods 1875-1887 and 1888 to 1899 have been combined because of the paucity of information on social conditions in the earlier period. In the former, McMahon’s Reef was the only community for which such information was available, and it straddled both periods.}**

The main reeding communities in this period were McMahon’s Reef, Cowra Creek and Bywong, the former two of which were prosperous for about six to seven years before entering a period of decline. Initially, most of the miners on these two fields were employed by companies and enjoyed good and reasonably regular wages. Thereafter, they earned wages at best. At Bywong the period of prosperity was only about one year, and after that it is unlikely if more than a handful of miners earned more than wages; most would have earned little more than subsistence wages. The only incident of industrial unrest was at Cowra Creek in the early more prosperous years, for the small and intimate working environment of most of the mines, together with the predominance of working miners, was inimical to industrial unrest.

At Cowra Creek, the overriding community concerns were on practical and immediate matters such as the need for a post office and school. Representations were initially the preserve of a few prominent residents, for example, battery owners such as Messrs Murray, Kitchingham and Lewis and the storekeeper Paulsen. During 1891 and 1892 Kitchingham was particularly active in pressing for a postal service, and on the latter occasion he was supported successfully by the local member, Miller.\footnote{E.Kitchingham to Postmaster General, 11 May 1891; Miller, MLA to Postmaster General, 26 October 1892; W. Mussen to H.Dawson, MLA, 17 November 1892; Bartlett to Inspector Tucker, 30 November 1892, Bartlett to Postmaster General, 6 December 1892; memo from Inspector Tucker, 8 December 1892, SP 32/1, Box 151, NAA, Sydney.} In 1893 a meeting was called concerning the mail route, following which a nine member improvement committee was formed. One of the first tasks of the committee was to write to the Minister for Works asking for a better access road.\footnote{Cooma Express, 27 October 1893.} There were repeated calls for the establishment of a school. One correspondent described the young children as ‘running almost wild and no chance of getting them educated’.\footnote{Cooma Express, 4 January 1895.} The initial application in 1894
was rebuffed by the Inspector in terms which some residents regarded as insulting.22 Messrs Murray, Lewis and Paulsen wrote to Miller the following year complaining of the response, and on this occasion their representations were successful.23

There were some representations on mining matters. In 1895 a deputation of local MPs and unemployed met unsuccessfully with the Premier to argue for more active assistance in mining, in particular for the erection of batteries and the transport of ore.24 Concerns were also expressed at the number of miners who were shepherding and the all too frequent suspensions of labour that were granted. It was commented that there was a need to ‘give the working man a show as well as the rich’.25 Some of the local debate was, however, less edifying. In 1897 there was an altercation between Duffy, the hotel owner, and Newnham, the teacher, in which Duffy made official representations to the Department.26 Poor health was common, and the damp and wet caused much illness and inconvenience, and heightened concerns at the lack of a footbridge. For instance, in 1899 the children could not get to school because of the swollen creeks, and illness caused the school to be closed for several days and the school concert to be deferred.27 The frosts were very severe, with the cold change coming after warm weather, causing many to have neuralgia, influenza and rheumatism.28

At Bywong there was a similar community emphasis on immediate and practical matters. The local member, O’Sullivan made representations in early 1895 for a township to be laid out and for a triweekly mail service, and stated that he would press for a school and courthouse when the population reached 500.29 The progress association held its first meeting near a tree called the ‘tree of liberty’. One of its first tasks was to fence the only water hole to prevent pollution.30 This body was the main forum of debate, but sometimes the discussion was less than vigorous and at other times it was divisive. For instance, in May the local correspondent suggested that the first priority of the new doctor would be a tonic and livener for the committee.31 As if in response to this criticism one week later the association was pushing for a school and a hall.32 There was also dissension over the construction of the hall, with one of the miners taking charge of the fund raising committee and refusing to hand the money over. He was subsequently voted off the committee.33 Little is known of the activities of the ‘Keep It Up’ club.34

---

22 W. Lewis to Inspector Nolan, 6 November 1894; W.Lewis, P.Paulsen and J.Murray to Inspector Nolan, 7 November 1894; Inspector Nolan to Chief Inspector, 12 November 1894, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney; Cooma Express, 1 February 1895.
23 Cooma Express, 26 February 1895; Lewis, Paulsen and Murray to Miller, MLA and the Minister for Public Instruction, 27 November 1894; Inspector Nolan to Chief Inspector, 12 February 1895, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.
24 Cooma Express, 13 September 1895.
25 Cooma Express, 9 January 1894, 5 February 1895.
26 Newnham to Chief Inspector, 17 August 1897, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney. Duffy complained that Newnham was occupying a building that he, Duffy, owned. Newnham replied that he could not afford to stay at the hotel, and had occupied one of four vacant houses in the town, for which Duffy had the key. When he ceased dealing at Duffy’s store, the latter threatened to pull the house down.
27 Cooma Express, 11 August, 19 September 1899.
28 Cooma Express, 1899.
29 Queanbeyan Age, 16 February 1895, Goulburn Evening Penny Post, 14 February 1895.
30 Queanbeyan Age, 20 March 1895.
31 Queanbeyan Age, 8 May 1895.
32 Queanbeyan Age, 15 May 1895.
33 Queanbeyan Age, 15 June 1895.
34 Queanbeyan Age, 19 September 1896.
Bywong does not appear to have been on the political campaign circuit, and was only blessed occasionally with the presence of the local member.

Important areas of conflict within the community concerned the shepherding of mining claims and the relationships between the teacher and some of the residents. The former issue arose in 1895 and the second in 1899. A formal complaint was made against the teacher, John Gunnell, concerning the hours of opening and closing and the non collection of fees. Gunnell replied that he had never heard of any complaints from the parents and that he had collected fees wherever practical, using the storekeeper at Bywong as ‘his informant generally as to the circumstances of the people’. He described the complainant, Maston, as ‘one of those meddlesome individuals who frequently appear on mining fields’. In the following year an inquiry was held in which Maston was very indignant that he had to substantiate his charge. His distress was heightened because his accusations on the non payment of fees had caused the ‘whole of the town’ to be ‘against him’. A petition supporting the teacher had been forwarded by a number of parents and Gunnell was absolved of any wrongdoing.

If there was one community in the region which fitted the dysfunctional description of miners so beloved of some historians, then McMahon’s Reef would be it. Why this should have been so is less clear, for initially most of the miners were company men and they were paid well and regularly. However, much of the agitation occurred in 1889 and 1890, at a time when the early optimism was clearly fading. In contrast to almost all other mining communities in the Southern Mining Region, there was almost complete indifference to matters of community welfare, which were left to the Murrumburrah Progress Committee and a few individuals such as the teacher. In 1885 the Committee made representations to the local MP for the establishment of a post office, and in 1889 it pressed for the erection of a new school house and teacher’s residence. A local progress committee was not formed to deal with this latter issue until 1896. The only other reference to a community body was in 1890, when a public meeting was held to elect the trustees of the Marshall McMahon temporary common.

The most blatant area of conflict and indifference was between the residents and the teachers. Ms Halloran, who was the teacher between 1886 and 1889, was in constant dispute with the parents, as well as receiving the occasional critical report from the

---

35 Goulburn Herald, 3, 8 October 1895.
37 J. Gunnell to D. Cooper, District Inspector, Department of Public Instruction, 5/515225.2, 1 January 1900, SRCNSW, Sydney.
38 D. Cooper to Chief Inspector, late January 1900 (exact date uncertain), Department of Public Instruction, 5/515225.2, SRCNSW, Sydney.
39 W. Maston to Department of Public Instruction, 18 January 1900, 5/16683, SRCNSW, Sydney.
40 D. Cooper to Chief Inspector, Department of Public Instruction, late January 1900; Petition from residents to Minister for Education, 19 January 1900, 5/516683, SRCNSW, Sydney.
41 W. Manson to Inspector Lawford, 21 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
42 Progress Committee to Slattery M.P., 12 March 1885; petition of 21 November 1885, SP 32/1, Box 343, NAA, Sydney; Murrumburrah Signal, 24 August 1889.
43 W. Corbett to Inspector, Department of Public Instruction, 16 May 1896; W. Ditchburn to Minister for Public Instruction, 19 May 1896, 5/16683, SRCNSW, Sydney.
44 Murrumburrah Signal, 12 July 1890.
inspectors.\textsuperscript{45} On one occasion she stated that the parents would not send the children at regular hours because their services were needed at home until a certain hour on account of their father's employment at the mines.\textsuperscript{46} At another time she attempted to combat the punctuality problem by refusing to open the school door to any latecomers. The Inspector noted that this move would cause inevitable friction with half the parents, if that had not already occurred.\textsuperscript{47} In response to a complaint from a parent she replied that the complainant's main motive was to get even because she had discontinued to board with them.\textsuperscript{48} She responded subsequently that she was 'continually tantalised' because she was a female by a 'class of cowardly ignorant parents who when I have punished their children as they deserved, have sent me insulting notes and messages, accusing me of cruelty and kept their children from school'. The Department considered her conscientious enough but felt that she had shown a lack of tact in dealing with parents and had inadequate teaching skills. She was subsequently removed.\textsuperscript{49}

The new teacher, Manson, also had problems with his standard of accommodation and the parents. Originally he had boarded at Cahill's hotel for a week, but said that he could not afford to continue to do so. He had rented a small two roomed house from Cahill, but felt that it too was unsuitable as a residence, for water had to be carried from a well a quarter a mile distant, and he was concerned for his family's health, particularly in summer.\textsuperscript{50} A correspondent in August 1889 wrote that:

Should the buildings noted be erected the thanks of this neglected community for such a blessing will be due to the Murrumburrah Progress Committee who although thoroughly disinterested took the matter up with much spirit and energy. As for the majority of parents at Cunningar Reef, I am extremely sorry to have to acknowledge that they take no more interest in school matters, or in fact any local want, than would a habitation of beavers.\textsuperscript{51}

Manson was also in direct conflict with some residents, particularly the publican Cahill, who organised a petition and complained about Manson's treatment of his children.\textsuperscript{52} In reply, Manson stated that some parents, including the complainants, had, despite requests, persisted in sending children late with no excuse. Cahill had accused him (Manson) of spite because he had not signed the petition for a teacher's residence, which if built would have deprived him of one of his boarders. Another resident referred to those who had signed the counter petition in support of Manson as 'a parcel of

\begin{itemize}
  \item \textsuperscript{45} M. Halloran, to Chief Inspector, 25 July 1884; Chief Inspector to District Inspector, 6 August 1887; Halloran to Inspector Lawford, 6 July 1888, 21 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
  \item \textsuperscript{46} Chief Inspector to Halloran, 12 July 1888; Halloran to Chief Inspector, 21 July 1888, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
  \item \textsuperscript{47} Halloran to Chief Inspector, 22 August 1888; Inspector Lawford to District Inspector, 28 August 1888, Department of Public Instruction, 5/16683, SRCNSW.
  \item \textsuperscript{48} B. Olden to Inspector Lawford, 21 November 1888; Halloran to Inspector Lawford, 28 November 1888; Inspector Lawford to District Inspector, 1 December 1888, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
  \item \textsuperscript{49} Halloran to Chief Inspector, 15 April 1889; Inspector Lawford to District Inspector, 27 April 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
  \item \textsuperscript{50} W. Manson to Inspector Lawford, 4 June 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
  \item \textsuperscript{51} Murrumburrah Signal, 24 August 1889.
  \item \textsuperscript{52} C. Cahill to Inspector Lawford, 7 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney. Ten of the eighteen parents with children old enough to go to school ten had signed a petition requesting the teacher's removal.
\end{itemize}
undoubtedly ignorant people', even though one of the signatories was the manager for the Cunningar Works. Manson stated that undue influence was used to get signatures to the publican’s petition, including plying several of the parents with liquor. He described Mr Cahill as the ‘head and that the others simply follow where he leads’, and stated that he would not be surprised if the Department was inundated with complaints, as judging by the number of meetings the locals were ‘busy at something’. A possible source of annoyance was that he was not a Roman Catholic, this comment suggesting that there may have been a certain degree of sectarian animosity in the community.53

Manson commented that it was obvious from the first day that discipline at the school would require special attention. When he had arrived he found the children split into opposing parties and to promote unity he had encouraged games, opened a school library and held picnics and prize distributions. Attendance was now good, the defaulters few and long standing arrears of fees had been collected. The Inspector agreed with the teacher’s account, stating that ‘They are a disagreeable lot at the reef and Mr Manson is a teacher who does his duty. All they allege against him is unpleasantness to the children’.54

In early 1890 Manson sought leave on health grounds as both he and his wife were ill. He complained that his house was unhealthy, that the landlord refused to do anything to make it thoroughly tenable and that he could no longer risk the health and lives of his family by staying there.55 Later that month a correspondent wrote to the Murrumburrah Signal expressing disappointment that there had not been improvements to the school and that a teacher’s residence had not been provided.

A teacher’s life is not a happy one. It appears to me the Education Department are quite careless whether the teachers have a residence or a hole in the ground like a wombat. Our teacher, Mr Manson, has had a lot of trouble since he came here, his wife, ever since Christmas had been under Dr Heeleys hands and his children have also been ill; so he has had a hard time living in a building like I have described, not fit for a dog kennel. I think that it is quite time the department made some move in the matter. If the parents do not see that their teacher is well treated, they cannot expect him to do his work with good heart... 56

Not long after, Manson departed to Burragong on exchange with another teacher. It was recognised locally that he had laboured under many difficulties and that his loss

53 Manson to Inspector Lawford, 23 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney. One of the signatories was related and the others were to a degree dependent on him for credit at his store, butcher’s shop and bar. Several signatories had problems with school fees, and one was to be sued for arrears. Manson stated that a further reason for Cahill’s annoyance arose from the fact that, for cost reasons, he bought his goods in Harden, including everything for the school picnic.
54 Manson to Inspector Lawford, 21 December 1889; Inspector Lawford to District Inspector, 23 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
55 Manson to Minister for Education, 4 February 1890; Manson to Chief Inspector, 28 February 1890, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
56 Murrumburrah Signal, 15 March 1890. He stated that the parents could not have much respect for their children or they would have moved together and have had a teacher’s residence. ‘In the first place, when he came here, he was in so small a place that he could hardly turn round in it, and he moved to a more convenient place... There is a cellar in one room, the stench from which would sicken a dog on account of the damp, and I believe, a portion of the wall fell down last night’.
would be felt as the children were ‘greatly attached to him for his kindly forbearance and anxiety to promote their welfare’.  

Illness appears to have been a problem for adults and children alike, and may have contributed to the generally bad humour of the community. Sandy blight was particularly prevalent in the dry and dusty summer months, and at one time every child at school was infected. Influenza and whooping cough were common in the winter and spring. In July 1898 only four of the 50 school children were fit to attend school because of influenza, of which there was a serious epidemic in the district, especially around McMahon’s Reef. Although outside the period under discussion, in 1900 the teacher was ill with whooping cough, as with one exception, were all other families. This resulted in the closure of the school for over a month.

The sense of community identity evident at least at Cowra Creek was emboldened by a fulsome social calendar, with its focus on family, welfare and fund raising events. Sobriety was not normally an issue, a visitor in 1893 commenting that the miners were ‘a fine manly lot, without the slightest sprinkling of the larrikin element’. In 1895 an event was held for a severely injured miner and a committee was set up to raise money for his family through various functions. There was an overwhelming response from the Cowra Creek miners and support from elsewhere in the district was sought.

A large number of fund raising functions were held for the churches. In 1896, a ball and supper, with about 30 couples present, was held to raise money for the hall which had been recently built for the Roman Catholic community by Duffy the storekeeper. A further fund raising social was held in 1898, with over 45 couples present, some from as far as Cooma and Numeralla. It was regarded as one of the most successful functions held to date. The same year a concert was held by the school children in aid of the Church of England building fund, to which over 120 people were present, after which there was a dance at Duffy’s hall. The Wesleyan Minister stayed over the weekend, visiting members of the congregation and holding a meeting of the trustees of the newly acquired property to discuss ways of erecting the church hall. In 1899 the newly formed Cowra Creek Dramatic Club held a major concert, the purpose of which was to help pay off the Cowra Creek hall.

Not all functions were connected with fund raising. For instance, in 1893 the christening of John Murray’s battery was held, to which over 200 persons attended from all parts of the district, a large feast following later in the day. A banquet was also held for Murray in 1897 after his visit to Sydney on mining matters, at which the local member of Parliament, Miller, attended. Special days such as St Patrick’s Day, Boxing Day and

57 Murramburrah Signal, 5 April 1890.
58 Halloran to Chief Inspector, 25 July 1887, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
59 Government Medical Officer to Chief Inspector, 25 July 1898; Corbett to Inspector Sheehy, 23 March 1899, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
60 Corbett to Inspector Sheehy, 5 August 1900, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
61 Cooma Express, 25 August 1893.
62 Cooma Express, 13, 17 September 1895.
63 Cooma Express, 12 May 1896.
64 Cooma Express, 10 July 1898.
65 Cooma Express, 3 September 1898.
66 Cooma Express, 19 May 1899.
67 Cooma Express, 2 June 1893.
Empire Day were also celebrated. The first reported St Patrick’s Day function was in 1894, some of the women having ridden over 32 km for the function. In 1898, in contrast to earlier years, there were no sports organised on Boxing Day, although many residents attended the horse racing organised by the Bredbo publican. The cricket club was active as early as 1893, for in October a cricketer’s ball was held, and in December the match was followed by a ball and supper in the new hall. Between 15 and 20 couples attended, some of whom were from Umeralla, Bunyan and Bredbo.

1896 appears to have been a particularly active year socially. For example, in May there was a picnic for the school children followed by an evening dance at the hotel, to which about 20 couples attended. In August a function involving dancing, songs and recitations was held for the Koppman’s of Colinton, to which about 30 couples attended. As they were unable to depart the next day, a further function was held the following night, at which 40 couples were present. In September a conveyance was sent by the hotel proprietor to bring a number of local residents to the Coursing ball. Comments on the dresses worn by the women are frequent in these reports and emphasise the family oriented nature of almost all of these activities, and convey at this point in time, a picture of a reasonably prosperous community. Mrs Murray was an important contributor to these events, and her piano was transported across the creek on such occasions. In 1899 a few of the younger people organised a surprise party for one of the older residents, with musical entertainment and dancing until the early hours. A hospital ball was also held.

By contrast, Bywong’s social life was much more limited, which was probably a reflection of its relative poverty. There are only two reports to hand, but they indicate a strong family orientation. One function was held in 1895 was attended by 200 adults and about 50 children, many of whom came from Bungendore, Sutton, Gundaroo and Brook’s Creek. The other function was held on Arbour Day in 1896 and attracted between 200 and 300 people, including 25 children, from neighbouring towns. The children were each given a tree to plant, the first of which was an English oak, ‘the emblem of unity between this and the mother country’. Games and a tea were held, with a social in the evening.

At McMahon’s Reef the dysfunction evident in parent teacher relationships was occasionally reflected in its social life. For instance, in 1884 invitations to a ball were issued to all parts of the district, but it was lamented that the event was not blessed by the presence of ‘those young ladies who had this special honour done them’. By contrast, in 1885 a ball held in the ‘furnace shed’ under the auspices of the Cunningar Variety Club attracted about 25 couples, and a feast to celebrate the christening of the

68 Cooma Express, 6 April 1894.
69 Cooma Express, 30 December 1898.
70 Cooma Express, 3 November, 15 December 1893, 10 November 1899.
71 Cooma Express, 29 May 1896.
72 Cooma Express, 21 August 1896.
73 Cooma Express, 15 September 1896.
74 Cooma Express, 12 May 1896, 10 July 1898.
75 Cooma Express, 3 September 1898.
76 Cooma Express, 10 October 1899.
77 Cooma Express, 3 November 1899.
78 Queanbeyan Age, 18 September 1895; Goulburn Evening Penny Post, 14 September 1895.
79 Queanbeyan Age, 12 August 1896; Goulburn Evening Penny Post, 11 August 1896.
80 Murrumburrah Signal, 17 May 1884.
plant attracted a large number of visitors. At a dance organised on a valedictory occasion in 1886, it was again lamented, however, that most of the ladies, who were ‘of a too domesticated turn of mind’, did not ‘grace the ballroom with their presence, putting a dampener on the affair’. The poor response by the women to some of these social events, suggests that they were not strongly involved in their organisation. Prospective inebriation and other unpleasantness may also have been important contributory factors. For example, in 1885 it was commented that the ‘sugee bag structure’ was as ‘lively as ever’ and that some of the men on the reef were a bit ‘off their onion’.

The only other entertainment recorded was a fight organised under the Marquis of Queensberry rules, with both individuals described as ‘having a thirst for each other’s blood’. There are no accounts of functions involving children other than those organised by the much maligned school teacher, Mr Manson. Church services would have been held occasionally, for McMahon’s Reef was on the circuit of the Murrumburrah Methodist church, and presumably of other churches as well. There is, however, no report of any fund raising events. The only reference to religious matters was in February 1899, when divine service was held in the engine shed at the mine, notwithstanding some ‘disrespectful behaviour from two females in the congregation’.

Elsewhere in the region there are only a few comments on community life. At Gooda Creek, despite the lack of anything approaching a village, a gala day was held in June 1897 and a large number of people attended, including visitors. The entertainment included foot races and games for adults and children, the correspondent commenting that there had been several parties at the mines lately, and that the people seemed to enjoy themselves immensely. In 1898 a progress committee was formed at Nanima, but its inactivity led some residents to question its existence. At Colinton much of the mining community’s social life took place at Colinton village, which was several kilometres distant. For example, in March 1890 there was a report of an annual school picnic and a foot race between the shareholders in the Colinton Quartz Crushing Company. This was a large function, with over 250 persons present, some of whom came from over 97 km away. It can surmised that similar events took place in other small mining communities.

Lost tribes: 1900-1914

For most of the reefing communities, this was a period of decline, in some cases of terminal proportions. With the exception of Major’s Creek, which enjoyed a period of relative prosperity for about six years, most miners were earning little more than wages, and in many cases not much more than subsistence wages. As the mines declined, the communities became poorer and more isolated, and descended to a tribal, almost peasant

---

81 Murrumburrah Signal, 12 December 1885.
82 Murrumburrah Signal, 31 October 1885.
83 Murrumburrah Signal, 4 July 1885.
84 Murrumburrah Signal, 20 February 1886.
85 Manson to Inspector Lawford, 21 December 1889, Department of Public Instruction, 5/16683, SRCNSW, Sydney.
86 Murrumburrah Signal, 11 February 1899.
87 Yass Courier, 4 June 1897.
88 Goulburn Evening Penny Post, 5 February, 29 December 1898.
89 Cooma Express, 21 March 1890.
Fig. 11.1. Sports day and picnic at the cricket ground, Spring Creek Jacqua. Permission of Ms. Bessie Williams, Windellema.

Fig. 11.2. Races at Major's Creek, 1908. Permission of the National Library of Australia.
Fig. 11.3. Cricket pitch, Cunningham’s Creek, with Peter Doolan. Matches against McMahon’s Reef would have been played on this ground.

Fig. 11.4 The boys in the band, Harden mines, 1900s. Permission of the Harden and Murrumburrah Historical Society.
like status in the process. For the most part the miners were self employed as working miners or worked as employees of small syndicates.

Cowra Creek’s strong community identity was threatened by petty bickering and squabbling. For example, in 1907 Mrs Murray wrote a letter of complaint to the Department, demanding a full investigation into the appointment of Mrs Duffy, the store and hotel keeper’s wife, as post mistress. There was a sequence of acrimonious correspondence on the subject lasting for some months, but no inquiry was held.\(^90\) The most notable altercations were between Mrs Murray and the teacher, Newnham, against whom she lodged several complaints in 1900. In one response Newnham stated that Mrs Murray’s children were nearly always late for school and that the homework was always done in a very careless manner. It had been necessary, therefore, to take stern measures to keep them to their work, as their mother was encouraging them in every way to get out of it. He stated that, ‘from the opening of the school I have had trouble with the Murray family, and they are the only ones who have ever given any’. The Murray family was described as in ‘very poor circumstances’.\(^91\)

On another occasion Newnham stated that Mrs Murray would not rest until she had him moved from Cowra Creek. He requested an inquiry into the matters raised by her, stating again that she had given him a great deal of trouble in scholastic matters, the children always attending school late, irregularly, and in a dirty state.\(^92\) The Inspector visited Cowra Creek, but both Mr and Mrs Murray declined to add anything further and the inquiry did not proceed. It was concluded that the claims were frivolous and showed vindictiveness.\(^93\)

In February 1902, McDonnell, the new teacher, requested an exchange with another teacher. He stated that since he had taken charge of the school he could not get on friendly terms with the parents, ‘some of whom were very bitter towards him as a teacher’. In addition, the climate did not agree with his health. These comments suggest that the compliant parents were not confined to Mrs Murray, and that the bickering was more widespread than before.\(^94\) McDonnell was replaced by a new teacher in September 1902, who in turn was replaced by a new teacher, Mr Faulks, in July 1903.\(^95\)

Faulks was obviously unimpressed with his new habitat, for in December he requested an exchange with a Mr Darmody. The Inspector annotated the request thus,

This school is in a very rough locality where it is difficult to obtain suitable accommodation, and where the conditions of life are hard and trying. During the past 2 years there have been 4 teachers a state of affairs destructive of progress in

\(^90\) Mrs E. Duffy to Postmaster General 1 April 1907; Mrs M. Murray to Deputy Postmaster General, 11, 17 April 1907; W. Lewis to Deputy Postmaster General, 13 April 1907; internal memo, Postmaster General’s Department 24 April 1907; Mrs M. Murray to Postmaster General, 4 May, 5 June, 24 July 1907; Inspector to Deputy Inspector, 1 August 1907, SP 32/1, 151, NAA, Sydney.

\(^91\) H. Newnham to Inspector Baillie, 18 December 1900, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.

\(^92\) Newnham to Inspector Baillie, 20 February 1901; Inspector Baillie to Chief Inspector, 8 March 1901, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.

\(^93\) Inspector Baillie to Chief Inspector, 8 March 1901, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.

\(^94\) W. McDonell to Chief Inspector, 26 February 1902, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.

\(^95\) E. McIntosh to Accountant, Department of Public Instruction, 7 September 1902; A. Faulks to Inspector Walker, 21 July 1903, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.
school work. It is not improbable that Mr Darmody is not fully aware of the character of the place to which he desires to go as he may in consequence if the exchange be sanctioned in his turn ask for an early removal.

His application was declined.\textsuperscript{96}

The humour of Cowra Creek's residents would not have been helped by the weather, for by 1902 the continuing dry seasons and poor gold yields had reduced Cowra Creek's residents to a state not far removed from hunting and gathering.\textsuperscript{97} Ill health was also a problem and largely attributable to the continued dry weather. In March 1903 two long time residents passed away and their loss was keenly felt.\textsuperscript{98} Several months later there were two other deaths and three other residents were ill enough to end up in the Cooma hospital, some 32 km distant.\textsuperscript{99} So prevalent was sickness that a number of residents were leaving for other places.\textsuperscript{100} Heavy rains later that year allowed the residents to 'enjoy a drink of clean water for a long time to come, a luxury that was hardly obtainable during the drought'.\textsuperscript{101}

Law and order were again unremarkable. There were no police stationed at Cowra Creek, and there were only occasional visits. On one occasion, the police were on the lookout for those who may have been growing poppies for opium which they would sell to an Indian hawker, Mr Singh, in exchange for a few shillings or a bright piece of print for a dress. Mr Singh supplied the seeds and anyone who had a small piece of unused land was glad to oblige. Drunkenness does not appear to have been a general problem, possibly as a consequence of the lack of money in the community. However, the cricket matches between Peak View and Cowra Creek usually ended in a fight between both teams and any onlookers who cared to join. Afterwards they would all repair to the hotel.\textsuperscript{102}

The reminiscences of Dorothy Adams provide some insight into the general social environment during the latter part of the Cowra Creek's existence. She stated that there had been

Life and hope...when the mines were yielding gold and there was work for the men on the farms with their teams of horses or bullocks. But as with a lot of the early day fields hope for a fortune died and the men moved on...always poor. My father was one of them, he left a good business when he heard the call and like all the others he took his wife and family into the wilderness.\textsuperscript{103}

Of the family she said

\textsuperscript{96} Faulks to Inspector Walker; Walker to Chief Inspector, 8 December 1903, Department of Public Instruction, 5/15558.1, SRCNSW, Sydney.
\textsuperscript{97} Cooma Express, 12 February, 30 May 1902.
\textsuperscript{98} Cooma Express, 17 March 1903.
\textsuperscript{99} Cooma Express, 29 May, 16 June 1903.
\textsuperscript{100} Cooma Express, 16 June 1903.
\textsuperscript{101} Cooma Express, 3 November 1903.
\textsuperscript{102} Dorothy Adams, Little ghosts in a little ghost town, privately published paper, pp.8-9.
\textsuperscript{103} Adams, Little ghosts in a little ghost town, p.1.
For the younger members of the family it was all fun...but for the older ones as the years went by it was almost a prison, yet they never openly rebelled, maybe dad had a persuasive tongue, or maybe they too believed in the pot of gold.¹⁰⁴

Dorothy stated that her parents did what they could to help the poorer people, but that when the mine began to fail, they themselves were not very far from being poor. She recounted that when the family first moved to Cowra Creek the priest held his bimonthly mass at the hotel and the hall was used by the Anglican minister. Gradually, as the miners left so did the visitations from the clergy. She also recalled that when there was a concert her mother’s small piano, her most precious possession, was borrowed and carried over Cowra Creek to the hall by four men. Sometimes her mother would play and when it was time to leave, the piano would be carried back over the creek again.¹⁰⁵

A novel by Max Murray, one of Dorothy’s brothers, confirms some of these observations and adds some new ones.¹⁰⁶ The young boy in the story refers to the close knit family with ‘little but nature to distract them’. They were a village under one roof, ‘a tribe’. He also refers to the over bearing presence of the battery upon which all their hopes rested. For the father, the noise from the battery was a ‘proclamation of lost hope’, for there was ‘less gold yesterday than the day before, less today than yesterday...but tomorrow’. It seemed recently that ‘the bush was creeping back furtively into the little corner he had carved from it’, but ‘tomorrow all his hope would be vindicated...’¹⁰⁷

The boy describes his ‘sense of vague insecurity’, the ‘voices of his parents suddenly lowered when he was near’, and his father’s ‘sudden unreasoning rages’, which were ‘violent and unpredictable’. There were ‘other times when it seemed that the whole family were about to come to blows’.¹⁰⁸ After a time the small community became more remote. ‘Not so many people were coming through and dossing down for the night and sharing a meal and paying for it with their gossip from outside, and then moving on’.¹⁰⁹ A fictitious travelling collector of folklore and bushlore observes that he had at last found the people he had been looking for, ‘people who were said no longer to exist...but he had found them as an explorer finds a lost tribe.’¹¹⁰

Community relations at Bywong were mixed. In 1904 the post office was relocated some distance from Bywong. This provoked complaints from residents and the decision was reversed and the office relocated to Bywong.¹¹¹ The following year criminal proceedings were instituted against John Shepherd, who was one of the leading miners and the postmaster. In 1905 he was sentenced to six years jail for incest, leaving his ten children to fend for themselves, with the task of child raising falling upon the elder children and the neighbours. A close reading of the trial proceedings and anecdotal evidence suggests that the impetus for the prosecution came from another local miner, Seymour, who may have had a relationship with the daughter in question and who

---

¹⁰⁴ Adams, Little ghosts in a little ghost town, p.2.
¹⁰⁵ Adams, Little ghosts in a little ghost town, pp.2-6.
¹⁰⁶ Max Murray, Twilight at Dawn, Max Joseph, London, 1957. The novel is unmistakably written about Cowra Creek from the perspective of the various members of the Murray family and their friends.
¹⁰⁷ Murray, Twilight at Dawn, pp.8-10.
¹⁰⁸ Murray, Twilight at Dawn, pp.8-10.
¹⁰⁹ Murray, Twilight at Dawn, p.147.
¹¹⁰ Murray, Twilight at Dawn, pp.166-167.
¹¹¹ J. Shepherd to Postmaster General’s Department, 7 January 1904, J. Seymour to E. O’Sullivan, 12 January 1904, SP 32/1, Box 96, NAA, Sydney.
intended to obtain Shepherd’s mining leases upon conviction.\textsuperscript{112} Shepherd’s sons ensured that the leases were renewed in their names prior to conviction.\textsuperscript{113}

By late 1907 Bywong was exhibiting all the characteristics of a fast fading and forgotten community. The teacher, Mr. Remmington, complained that he had read a circular to the parents abolishing the fees, and they had never paid any since.

I had twelve children paying 3d, and this averaging 2/6 per week. That made all the difference to me betwixt poverty and misery. I could exist in poverty on 12/6 per week, but for twelve months I have been struggling in misery on 10/- ... No minister of religion, none of the local magistracy (with the exception of Mr J J McJannett) and none of the neighbouring gentry have visited this school or the locality for over eighteen months. The morals and the immortal souls of these children, as well as the healthy development of their bodies and the intellectual expansion of their reasoning powers are entrusted to the teacher.\textsuperscript{114}

Political issues aroused little interest and only surfaced at Captain’s Flat and Major’s Creek. At the Flat there were occasional visits by Captain Millard and Dr Blackall, and subsequently by Colonel Ryrie, who was very popular with all classes.\textsuperscript{115} In 1906 he visited the Flat to give thanks for his election to the Legislative Council, and was enthusiastically received by a large audience. At a subsequent banquet he queried why the squatter, farmer, shearer and labourer could not live together in harmony, and severely denounced bigotry in any shape or form. He also passed high praise on the ladies.\textsuperscript{116} In 1907 it was commented that many of those who had thrown their lot with him had hitherto voted ‘Labour’.\textsuperscript{117} The lack of visits by Messrs Chapman and Millard was an occasional concern.\textsuperscript{118} At Major’s Creek some interest was shown at election time. For instance, in early 1906, the local member, Captain Millard, made one of his rare visits and was so besieged with questions that he looked very much ‘as if he was very sorry he had come at all’.\textsuperscript{119}

The main concerns at these two communities were local. At Captain’s Flat the dry weather was as trying as at Cowra Creek, and there were food shortages and occasional concerns at the numbers of pigs, horses, goats and sheep that were depleting the grass in the vicinity of the town. Concerns were also expressed at the fate of the town common.\textsuperscript{120} Serious reservations were also expressed at the ease with which the mining company was continually granted a suspension of labour. The only other debate of note concerned the fate of the school piano in 1914. This issue seriously divided the town, but it was the only one which seriously involved parent teacher conflict.\textsuperscript{121} There were a number of incidents of petty larceny and other relatively minor misdemeanours, and

\textsuperscript{112} Queanbeyan Age, 4 July 1905, 14 July 1905; oral interview with Norman Moore, 1993.

\textsuperscript{113} Oral interview with Norman Moore, 1993.

\textsuperscript{114} Queanbeyan Age, 22 November 1907.

\textsuperscript{115} Queanbeyan Age, 3 June 1904, 22 February 1907.

\textsuperscript{116} Queanbeyan Age, 1 June 1906.

\textsuperscript{117} Queanbeyan Age, 22 February 1907.

\textsuperscript{118} Queanbeyan Age, 27 February, 20 November 1906.

\textsuperscript{119} Queanbeyan Age, 17 February 1906.

\textsuperscript{120} Queanbeyan Age, 1 October 1902, 19 March 1907, 17 March 1908.

\textsuperscript{121} J. Pola to G. Miller, MP, 17 February 1914; petition to Minister for Public Instruction, undated; W. Ballard to G. Miller, MP, 15 September 1914; W. Ballard to Minister for Public Instruction, 16 September 1914; G. James to Chief Inspector, 17 October 1914, 4 November 1914, Department of Public Instruction, 5/15292.2, SRCNSW, Sydney.
occasionally crimes of a more serious nature, but the pattern differed little from that in other mining communities in the Southern Mining Region.\textsuperscript{122}

At Major’s Creek the main concern was a proposal for the establishment of a smelting works to offset the high cost of transporting the refractory ore to Cockle Creek for processing. Also of concern was the cost of processing the free ore locally.\textsuperscript{123} In 1902 a committee was formed to seek government assistance for the establishment of the smelting works. A deputation was introduced to the Minister for Mines by the local member, and a petition was presented which was signed by nearly 800 persons.\textsuperscript{124} After investigation the proposal was rejected.\textsuperscript{125} Another issue of community concern was the use of the gold field reserve as a common, and a very large public meeting was held in 1902 to discuss this.\textsuperscript{126}

Parent teacher relations were an issue during 1905, when a Mr Berg brought charges against the teacher, Mr Lange. Following an inquiry the teacher was exonerated on the most serious charges and cautioned on others. The Department refused to communicate the details of the decision to Berg because of the need for the teacher to maintain ‘his influence in the school and town’.\textsuperscript{127} A further complaint was made by Berg later that year, in response to which Lange described him as ‘having been at enmity for years with the last teacher’, and seeming to relish making ‘the place as uncomfortable for the teacher as he possibly can’. There are some indications that Berg was motivated by religious animosity.\textsuperscript{128} No other residents were implicated in these incidents, which appear to have been isolated.\textsuperscript{129}

Despite these signs of decline, division, and occasionally despair, the social and sporting calendar of the mining communities was vigorous and to a degree this offset some of the more negative sentiments. For instance, at Cowra Creek in 1900 an athletic day was held on St Patrick’s Day, with a ball a few days later to which 20 couples attended.\textsuperscript{130} A school concert was held shortly afterwards.\textsuperscript{131} In 1901 there was a picnic for the children, followed by a ‘solid program’ of activity and a luncheon for the adults, after which a large number of young folk repaired to Mrs Thurbon’s for an evening of dancing and singing until the early hours.\textsuperscript{132} A return social by the ‘ladies of Cowra Creek’ was held in 1905 in Duffy’s hall, when some sixteen couples took the floor, those present including visitors from Peak View. The social was followed by a feast at the hotel and a musical soiree, the guests departing the next day.\textsuperscript{133} At the 1908 Empire Day functions a ceremony was held at the school involving children from Peak View, and afterwards a picnic was held at the recreation ground, with a display of fire works later that night.\textsuperscript{134}

\textsuperscript{122} Queanbeyan Age, 4 April, 9 May, 3 June 1903, 17 March 1908.
\textsuperscript{123} Queanbeyan Age, 16 April 1902.
\textsuperscript{124} Queanbeyan Age, 14 June 1902.
\textsuperscript{125} Queanbeyan Age, 3 September 1902.
\textsuperscript{126} Queanbeyan Age, 15 November 1902.
\textsuperscript{127} Inspector Walker to Chief Inspector, 7 October 1905, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney.
\textsuperscript{128} M. Lange to Inspector Walker, 7 November 1905; Inspector Walker to Chief Inspector, 18 November 1905, Department of Public Instruction, 5/16713.4, SRCNSW, Sydney.
\textsuperscript{129} Inspector Walker to Chief Inspector, 12 August, 7 October, 18 November 1905, Department of Public Instruction, 5/16713.4, SRCNSW.
\textsuperscript{130} Cooma Express, 20 March 1900.
\textsuperscript{131} Cooma Express, 27 April 1900.
\textsuperscript{132} Cooma Express, 12 April 1901.
\textsuperscript{133} Cooma Express, 19 May 1905.
\textsuperscript{134} Cooma Express, 5 June 1908.
The cricket team went through several revivals, with matches continuing to be played against teams from neighbouring communities until at least 1903.\footnote{Cooma Express, 20 February 1900, 18 October, 22 November 1901, 15 August, 21 October 1902, 17 March, 17 April 1903.}

Bywong’s social life also continued much as before. In 1903 a gramophone and magic lantern entertainment held at the school attracted between 130 and 140 adults and children, a number of whom were from the surrounding districts.\footnote{Queanbeyan Age, 16 October 1903.} A surprise party was also held with 15 couples present, the numbers only limited by the accommodation. Mr Vidler, the school teacher, was present at both activities, and took a major role in organising the former.\footnote{Queanbeyan Age, 16 October, 4 December 1903.} In 1906 a report referred to ‘a series of small excitements’ which had ‘occurred lately to break up the monotony which prevails as a rule in our little settlement’. The events were an address by one of the candidates for the Yarrowumla Shire and a function at the school on the King’s birthday.\footnote{Queanbeyan Age, 23 November 1906.} In 1907 a social was organised by Mr Remmington, the teacher, with about 40 adults and 20 children attending. Dancing was kept up until daylight.\footnote{Queanbeyan Age, 3 September 1907.}

Captain’s Flat’s social life was very active. An ironic impetus over the next few years was the increasing number of farewell functions for the more prominent local residents.\footnote{Queanbeyan Age, 10 February, 17 March, 22, 29 September 1900.} For example, in 1900 a function was held for a Mr Fraser, a mine official who had ‘been associated with every movement having for its object the welfare of the community both sporting and otherwise’.\footnote{Queanbeyan Age, 17 November 1900.} At a function held in 1903 for one of the storekeepers, Mr McDonald, it was stated that he was to the ‘forefront of charity’, and that the welfare of the town and district always had his attention and co-operation.\footnote{Queanbeyan Age, 20 July 1903.}

Other functions included balls on St Patrick’s Day, benefit socials, juvenile dances and the occasional celebration.\footnote{Queanbeyan Age, 17 March 1900, 23 June 1905, 11 August 1908.} In 1900 a function was held in honour of Baden Powell at Mafeking. Children from the public school and the convent formed a procession headed by the band and marched through the streets to the hall. At night a torchlight procession was formed, at the conclusion of which an impromptu concert was given with speeches, patriotic songs and recitations. Later in the year a social in aid of the Queanbeyan hospital, with a juvenile ball to be held the following evening, was held by some of the Flat’s ‘energetic young ladies’\footnote{Queanbeyan Age, 18 October 1900.} In 1901 there was a complimentary social evening for Mrs Goggin. It was commented that, ‘the Flat being so low down at present things must necessarily be done on a small scale’... the few who were left, however, still had ‘sufficient energy to knock out a fair share of amusement, consequently socials have been recently quite the order of the day’.\footnote{Queanbeyan Age, 7 September 1901.}

The public school, churches and convent continued to be the primary source of the town’s social life. School activities included prize days, concerts and the sports and annual school children’s picnic.\footnote{Queanbeyan Age, 29 December 1903.} Empire Day celebrations were also held. In 1906 the Empire Day celebrations attracted a ‘good attendance’ of parents and others, and
involved various patriotic activities such as a speech on Clive of India.¹⁴⁷ At the 1914 function an address was given by the Anglican minister from Bungendore, who was “immensely popular with all classes here”.¹⁴⁸ There were only a few reports on activities at the Anglican and Wesleyan churches.¹⁴⁹ However, the former church was still active as late as 1910, for in that year a fund raising ball was held at which 55 couples were present, followed by a juvenile dance the next night.¹⁵⁰

Two important sources of social interaction were the convent and Roman Catholic church. In late 1900 the convent held two very well attended concerts, one of which included an art union and dance and attracted visitors from Hoskintown and other neighbouring places.¹⁵¹ A further social was held in 1902.¹⁵² One hundred and fifty persons were present at a concert on Easter Monday in 1903, with visitors from Bombala, Bredbo and Jerangle.¹⁵³ At the church ball on Easter Monday in 1904, 55 couples were present, including people from Bungendore, Jingera, Harold’s Cross and Hoskintown.¹⁵⁴ On the occasion of the closure of the convent in 1906 it was stated that during their stay the Sisters had made themselves very popular as was ‘evidenced by the cooperation of all classes in promoting any benefits on their behalf”.¹⁵⁵ In 1908 a euchre tournament and social were held in aid of the church, to which about 50 couples attended, including visitors from Jingera, Queanbeyan, Ballalaba and Rossi. The following evening a juvenile ball was held.¹⁵⁶ The large attendance at these functions implies that many of those attending were from other denominations.

Sporting events continued to be popular, and often attracted very large crowds, which included both women and children. There were frequent cricket matches and socials, race meetings of the Pony and Galloway club, and races on Boxing Day and Easter Monday, following which a ball was usually held.¹⁵⁷ The last report of a race meeting was in 1906, when 200 attended, many fewer than previous years.¹⁵⁸ Occasional athletic sports meetings and the New Year’s Day sports and balls were also held, five hundred people attending on New Year’s Day in 1903.¹⁵⁹ Christmas 1903 was regarded as the quietest held in the town, but the public picnic, athletic sports and bicycle racing still attracted between 300 and 400 people.¹⁶⁰ Other regular sports activities included tennis, rockley and cycling. The Britannia rockley club was active for a number of years, and occasionally organised socials.¹⁶¹ Cycling was particularly popular. Between 400 and 500 people attended the Easter Monday function in 1904, and at a function in 1905 riders came from Bungendore, Major’s Creek, Queanbeyan, Hoskintown and Jingera.

¹⁴⁷ Queanbeyan Age, 1 June 1906.
¹⁴⁸ Queanbeyan Age, 5 June 1914.
¹⁴⁹ Queanbeyan Age, 15 February 1902.
¹⁵⁰ Queanbeyan Age, 2 July 1910.
¹⁵¹ Queanbeyan Age, 29 September, 15 December 1900.
¹⁵² Queanbeyan Age, 22 February 1902.
¹⁵³ Queanbeyan Age, 22 April 1903.
¹⁵⁴ Queanbeyan Age, 12 April 1904.
¹⁵⁵ Queanbeyan Age, 27 February 1906.
¹⁵⁶ Queanbeyan Age, 20 March 1908.
¹⁵⁷ Queanbeyan Age, 10 January 1900, 27 December 1901, 1 January, 16 April 1902, 25 March, 22 April 1903.
¹⁵⁸ Queanbeyan Age, 13 March 1906.
¹⁵⁹ Queanbeyan Age, 7 January 1903.
¹⁶⁰ Queanbeyan Age, 8 January 1904.
¹⁶¹ Queanbeyan Age, 13 June, 18 July 1900, 22 April, 3 June 1904.
There were 65 couples at the club ball. The last recorded bicycle meeting and the first tennis tournament were held in 1908.

At Major's Creek, the main social events continued to be held during the Christmas New Year period, for example, the annual picnic on New Year's Day and the annual race meeting of the Major's Creek Turf Club in late January. At the race meeting in 1900 there were a large number of women present, and both it and the 1901 meeting took on a picnic air, attracting many people who 'were not all that interested in the racing'. There were 800 present at the 1901 meeting, including those from Braidwood and elsewhere in the district. The 1901 New Year's Day picnic and dance was blunted a little by the absence of many adults in Sydney for the Federation celebrations. It was commented, however, that the congested gathering at the picnic contrasted with the lifeness generally experienced on ordinary days.

Other functions were of a more ad hoc nature, and occasionally involved fund raising and benefits. In 1903 a social was held by the 'young ladies of the Creek' and between 30 and 40 couples were present, including some from Araluen, Jembaicumbene, Bell's Creek and Ballalaba. A concert was also held by the pupils of the school to raise funds for the annual prize awards. In 1904 a function was held by Mr and Mrs Flack to celebrate their daughter's 17th birthday, at which about 20 couples were present. A social benefit was also held in aid of Miss Julia Dunshea, who had been through a very severe and protracted illness. The attendance of the newly formed Elrington Minstrel Company was a highlight of the evening, and the hall was crammed, with dozens not gaining admission. In 1906 a magic lantern display and a hospital social were held, with about 40 couples present at the latter.

The churches also continued to hold an important social role, much of which was concerned with fund raising. In 1901 a concert was held to raise funds for renovations to the Roman Catholic Presbytery at Araluen, to which 70 couples from Major's Creek and elsewhere attended, including those from other religious denominations. In 1904 the Church of England was crowded for Rev. Dobson's farewell sermon. He was described as universally liked, not only by members of his own church, but by those of other religious denominations. Archdeacon D'Arcy from the Roman Catholic church and the Rev. Dobbie from the Presbyterian church attended the Braidwood presentation and expressed their gratitude at their mutually long and fruitful co-operation. Both churches were crowded, with only standing room.

Sport was very important in the life of the community in the early 1900s, and the various meetings were often attended with a social function. By 1902 football and rockley were becoming more popular, and regular matches were held between teams from Major's Creek, Long Flat and neighbouring towns and villages such as Jembaicumbene,

162 Queanbeyan Age, 22 April 1904, 28 April 1905.
163 Queanbeyan Age, 29 May, 8 December 1908.
164 Braidwood Dispatch, 4, 31 January 1900, 30 January 1901.
165 Braidwood Dispatch, 5 January 1901.
166 Braidwood Dispatch, 30 May 1903.
167 Braidwood Dispatch, 23 December 1903, 29 June 1904.
168 Braidwood Dispatch, 21 September 1904.
169 Braidwood Dispatch, 17 February, 13 October 1906.
170 Braidwood Dispatch, 30 October 1901.
171 Braidwood Dispatch, 29 June 1904.
Braidwood, Araluen, Back Creek and Captain’s Flat. In 1902 functions included a juvenile ball in aid of the Long Flat club, and a concert in aid of the Major’s Creek club, with a number of visitors from Araluen, Ballalaba and other districts. In 1903 a presentation and an exhibition match between Long Flat and Major’s Creek was held, and a senior rockley club was formed. The last mention of rockley was in 1904, when a match was played against Captain’s Flat, followed by a social in the evening.

In 1904 it was lamented that sport in all phases was dead, and the race club was in difficulties owing to internal dissension. Over the next few years, however, there was a flourish of sporting activities. The second annual gathering of the athletics club in 1905 attracted a crowd of 205 people, and in 1906 the first anniversary social of the tennis club was held. In 1906 a social was held to raise funds for the football club, and a game was played between representatives of the Braidwood and local football teams. Race club matters also appeared to have been resolved. The Major’s Creek New Race Club was formed and an initial meeting held at the Long Flat race course, the old club securing a new course and erecting a grandstand in preparation for the following year.

In 1907 the annual race meeting held by the old club attracted a large crowd of over 1,000 persons, many of whom were from other places. (Fig. 11.2)

The most prosperous mine in the region was at Harden. However, as noted earlier, all the indications are that most of the miners lived elsewhere than at the mines, more likely in Harden itself. There was a church, post office, a band and a strong union presence at the mine site, and there would have been a certain amount of social discourse centred around these institutions. (Fig. 11.4) However, no accounts of such activities are available, other than a strike in 1908 over the employment of non union labour. At McMahon’s Reef a ball in aid of the cricket club was held in 1905, when 40 couples attended a fund raising ball held in a woolshed owned by a resident of Cunningham’s Creek. Matches were played against teams from Cunningham’s Creek and elsewhere. (Fig. 11.3) Cricket was also played at Cullina.

Conclusion

Notwithstanding the cultural differences between the alluvial and reef mining communities, the similarities are greater, and most of the stereotypes equally inapplicable. Politics, industrial relations and unionism took a decided back seat to community based activities and concerns, a reflection of the small and intimate nature of the working unit and the predominance of the working miner. There was, for example, a considerable degree of co-operation in the acquisition of facilities such as post offices and schools. Class based antagonism was usually concerned with the actions of landowners, on whose land the miners were often either mining and sometimes living, and the actions of syndicates and companies which did not fulfil their lease conditions or

---

172 Braidwood Dispatch, 22 March 1902.
173 Braidwood Dispatch, 24 September, 18 October 1902.
174 Braidwood Dispatch, 10 December 1902, 18 February 1903.
175 Braidwood Dispatch, 29 June 1904.
176 Braidwood Dispatch, 10, 31 December 1904.
177 Braidwood Dispatch, 10 June 1905, 20 June 1906.
178 Braidwood Dispatch, 25 July, 8 August 1906.
179 Braidwood Dispatch, 7 March 1906.
180 Braidwood Dispatch, 30 January 1907.
181 Australian Mining Standard, 1 April 1908.
182 Murrumburrah Signal, 20 May 1905.
overcharged for cartage and plant hire. This was a strong sense of community in these exchanges.

In a similar vein to their alluvial mining colleagues, the residents of the reefing communities aspired quickly to a settled and domesticated existence. There was more recourse to petty bickering and divisiveness, but this occurred generally when the mines were failing and poverty prevailed. Some of this conflict centred on parent teacher relations, for at such times the cost and inconvenience of schooling was regarded as a curse rather than a blessing. With the exception of the latter conflicts, which were in some instances a tilt at authority, it is difficult to ascribe these to class tensions, for the prevailing poverty affected manager and worker alike. Possibly a more important factor was the weather. Poor health and sickness was more prevalent than in the alluvial mining communities and was related to the excessively hot or wet weather conditions, and the generally poorer quality of housing, food and water. Lawlessness and violence was not resorted to on any scale, either in times of prosperity or poverty, and the proclivity to inebriation was not excessive.

The cultural similarities are perhaps no better illustrated than by reference to the social life of the communities. One striking similarity was the importance of the churches and the priority given to festivals and sporting and other outdoor recreational pursuits. Race meetings and cricket matches were a top priority. In both types of communities the same sports were played and holidays were celebrated in the same way, with races, picnics and sports days. Religious services were usually well attended, and there were fund raising activities and concerts, dramatic and debating clubs and minstrel troupes. These functions were very family oriented, and the women played a critical role in their organisation. There was little differentiation or discrimination based on class or creed, and they attracted visitors from elsewhere in the region. The combined importance of alluvial and reef gold mining during the nineteenth century in particular meant that these cultural influences were disseminated widely throughout the region.
Chapter 12.

Benevolence and beatitudes – the base metal communities

There were important income and employment differences between the gold and base metal mining communities in the Southern Mining Region. The vast majority of base metal miners were employees of large highly capitalised mining companies, and from the 1890s on they were often members of the Amalgamated Miners’ Association (AMA). For as long as the mines were operative the employees were well paid. They had a security of employment that was matched only by those working on the large sluicing and dredging claims and those employed by the large reef mining companies.

In addition, many base metal mining communities had a strong ethnic and benevolent tradition, which bordered upon the paternalistic. Blainey, for instance, has commented on the prevalence of these characteristics in the Cornish mining communities of South Australia. He referred to Burra as a ‘small welfare state’, and described William Hancock, the company manager at Moonta, as ‘king of glory’. Hancock was very prominent as a civic leader, and ‘watched over his employees in work and sickness and leisure’. In a similar vein, Patricia Lay has referred to the Cornish community at Cobar, and Ruth Kerr has discussed extensively the life and times of the ‘modest Scot’, John Moffat at Irvinebank in north Queensland. John Moffat’s kindness to his employees was such that children were taught to ‘mouth his name in bedtime prayer’. In his study on the twentieth century industrial community of Port Kembla, Erik Eklund has also referred to the ‘paternalistic framework, common in the base metals industry’.

The importance of ethnicity in the gold mining communities has been discussed extensively by a number of historians in Cliff Cummings and Kerry Cardell’s forthcoming compilation, A World Turned Upside Down: Cultural Change on Australia’s Goldfields, 1851-2001. At least two of the larger base metal communities in the Southern Mining Region had a strong Welsh tradition and the importance of ethnicity and paternalism will be also investigated in this chapter. The predominance of community and locality over class has been seen at work on the gold fields in the Southern Mining Region. In this chapter it will be discussed from the perspective of the base metal fields. The principal question, however, is whether it is possible to identify a broad mining culture incorporating gold and base metal communities?

2 Blainey, The Rush That Never Ended, p.121
5 Erik Eklund, ‘We are of Age’: Class, Locality and Region at Port Kembla, 1900 to 1940’, Labour History, May 1994, No.66, p.77.
The Welsh connection: 1851-1884

The main communities during this period were Currawang, Woolgarlowe and Frogmore, and in all three the miners were paid well and regularly while the mines and smelters were in operation. There were stoppages and production slow downs, some of which were serious, but they were generally infrequent. The miners were employed by companies, although in the final two years at Currawang the mines were worked by a co-operative of working miners. Both Currawang and Frogmore, but particularly the former, had large Welsh populations and a strong Wesleyan influence.  

A striking difference between Currawang, Frogmore and the gold mining communities was the overarching presence of the various mining managers, in particular, Eynon Deer and his brothers. They occupied a strikingly similar position to the Cornish captains in South Australia. The Deer family were of Welsh extraction and had been involved in copper mining and smelting elsewhere in New South Wales. In the late 1860s Eynon Deer had a leading role in saving many of the Currawang miners and their families from dire poverty as a consequence of the previous management defaulting on their payments to him. A function was held in 1869 in his honour, at which it was recalled that at that time many mine employees had to depend ‘for a subsistence upon the kindness and obligingness [sic] of some Christian friends in this locality’. Their condition was described as ‘bordering on destitution and starvation’. 

The Miner’s Lodge was the most important social institution at Currawang, and its welfare and social role transcended considerations of class and creed. Various mine managers, including Eynon Deer, were strong supporters of the Lodge, and the tenor of the speeches at the Lodge functions suggests that there was a considerable degree of harmony and welfare support in the community. For example, at a Lodge function in 1873, Eynon Deer stated, ‘it is a pleasing thought that if anything happened to you - that if your family were to be deprived of your support that they would not be entirely destitute; but they would receive the sympathy and benefit due to them from the society’. 

At another function in 1874, Captain Trevarthan stated that the object of the Miner’s Lodge was to assist members in times of trouble, disease and accident and to support the widows of deceased members. He also stated that

What could there be more noble or grand than the fact that people of all shades and climes, and of varied thoughts and creeds, could meet together upon the same level...their object was to train men in the greatest and highest state of morality...to teach men, when they joined their society that they were all brethren, that they were all derived from one common father...and endeavour to implant into the minds of men the necessity of not thinking that because they were elevated in that world a little above their fellows that they were in any degree superior to their fellow creatures.

Eynon Deer was succeeded as manager by Mr Williams, who also gave his strong support to the Miner’s Lodge. At his farewell in 1875, he stated that it gave him ‘great

---

7 Appendix Seven, Public School Statistics, Currawang and Frogmore.
8 Joan and John Wheeler to Barry McGowan, 9 February 1995.
10 Goulburn Herald and Chronicle, 31 March 1869.
pleasure also to see that in this meeting all classes living around Currawang are represented, showing that all can join in doing honour to a cause that they believe to be right'. Williams also drew favourable comments as someone who had 'always shown himself ready to give practical assistance to the sick, and always ready with the helping hand and the kind word of advice to those requiring them'. He was also 'kind and considerate yet firm and always using his influence in a reasonable way to elevate the moral character of those over whom he had control'. Charity was not confined to the mine management, for in the following year, Mr Martyn, the Anglican licensed lay reader, also drew 'well merited praise from all classes irrespective of all denominational predilections'. He had relived 'the destitute, widows, and sick and others while suffering under affliction'.

Politics only surfaced at election time, when Currawang was visited by the various candidates for the seat of Argyle. The issues raised were of a national rather than local nature and were probably very similar to those debated elsewhere in New South Wales. Class, wages or working conditions were not on the agenda. There was no union at Currawang, only the Miners Lodge, and it eschewed issues of wages and working conditions. In addition, there were no reported instances of labour disputes at the mine and smelters. The only strike was by the wood carters in 1877 in support of a new weigh-bridge. There was no progress association at Currawang, for the community’s needs were catered for by the concerted actions of the mine managers and other leading citizenry such as the neighbouring landowners.

There were several observations on the behaviour and demeanour of the miners in the early years of Currawang’s existence, all of which were complimentary. Thus, in 1868 an observer commented that the men did not ‘drink beer or spirits, like their fellows in the old country; but as yet they find they can keep up their health and strength on water alone’. At a farewell dinner to the assayer in the same year, the mine manager personally thanked the men for their sober demeanour, and on another occasion in 1872 an observer described the miners ‘as a body, as homely and manly as any other body of men in the colony’.

Possibly as a reflection of the harder times then befalling the community, subsequent comments were less favourable. For instance, in 1880 the teacher, Mr Walsh, who was boarding at the hotel, complained that he had been ‘insulted frequently at his meals and other times by drunken men’. His rest had ‘repeatedly been broken throughout the night by the noise caused by a “bush ball” going on in an adjoining room to my bedroom and on other occasions by the fighting and shouting of a drunken mob’. The general meeting of the company later that year was far from harmonious. There were a number of points of order and at one stage a threat to call the police. One concern was that no money had been obtained for the ore because the man in charge had been drinking all week and had not been found in time. In 1882 there was a report of obscene language

---

12 *Goulburn Herald and Chronicle*, 22 September 1875.
13 *Goulburn Herald and Chronicle*, 30 August 1876.
14 *Goulburn Herald and Chronicle*, 24 October 1877, 15 September, 13 October 1880.
15 *Goulburn Herald and Chronicle*, 6 October 1877.
16 *Goulburn Herald and Chronicle*, 18 July 1868.
18 W. Walsh to Under Secretary, 29 May 1880, Department of Public Instruction, 5/15631.1, SRCNSW, Sydney.
outside Payne’s public house at Currawang. There may have been other such instances, but the lack of a police presence ensured that most cases would have gone undetected. Indeed, the absence of a permanent police presence at a settlement the size of Currawang was in itself a testament to the remarkable order in that community.

Frogmore was, like Currawang a relatively harmonious community, and an important influence on this was again Eynon Deer, who joined his sister and his brothers, James and John, at Frogmore in 1874. He was at the helm of all the early community activities. For example, in 1875 Eynon formerly requested the establishment of a post office. The Reid’s Flat Post Master reported that the Deer Brother’s store was the most suitable place and that they were the only ones responsible enough to conduct the business. Eynon was also instrumental in pressing for the establishment of a school. He wrote to the Council of Education in 1875 and asked that a teacher be sent immediately to open the school, which was in a temporary building provided by the residents. The Deer brothers submitted that the attendance rate would be high because, unlike farming, the children would not be called on to assist with their parent’s work. The school was established later that year, with Eynon appointed as Chairman of the School Board.

In 1878 a meeting was convened by the Deer Brothers to consider the various needs of the district. The meeting was well attended by the inhabitants of Frogmore, Hovell’s Creek, Phill’s Creek and the Boorowa River. Three petitions were passed for lodgement with the local member and during the week following the meeting over 140 signatures were placed on each. One petition concerned the building of two bridges across the Boorowa River, and the second was for repairs of the road from the mines to Boorowa. The third petition was for the establishment of a court of petty sessions with local magistrates, and the establishment of a police magistrate at Boorowa, who would attend the court at Frogmore monthly.

The Frogmore Local Wants Committee was established in 1881, with Eynon Deer as president and secretary. On this occasion there were concerns over the construction of a bridge over the Boorowa River, road repairs, the establishment of police quarters and a lockup, the appointment of a police magistrate to attend a court of petty sessions, and the construction of a weather shed for the public school. The proposal to remove the local police officer brought a howl of protest from the community, and was vigorously opposed at a meeting of the Wants Committee, with the sub inspector coming in for ‘well deserved abuse’. Eynon Deer wrote to the local member, who passed the matter to Sir Henry Parkes. Some weeks later it was reported that the police authorities had

---

22 E. Deer to Postmaster General, 15 March 1875; internal memos of 6, 7 April, 7 May, SP 32/1, Box 214, NAA, Sydney.
23 This certainly appears to have been the case in the early years, for in March 1876 every child was in attendance, although this fell away subsequently. The high attendance rate was unusual, for even at Currawang, attendance never rose much above 75 per cent of enrolments and was often as low as 60 per cent. The Deer brothers informed the Inspector that the mine was certain to work for four years, and probably many more, and that their policy was to employ married men, who were considered more reliable workers.
26 Burrowa News, 14 January 1881.
reconsidered the matter and had decided to let matters rest for the present. In 1882 and 1883 concerns were expressed at the lack of a reliable water supply with the prospect that water would need to be carted again in summer. An application had been made some time ago by the Wants Committee to sink dams for a water supply.

Other than the occasional representation to the local member and the Premier, the wide world of politics attracted little attention at Frogmore, and the focus of public debate was entirely on local affairs. There were no reported visits by local politicians or political candidates, and there were no unions at Frogmore and no incidents of industrial unrest. Little is known of the activities of the Oddfellows’ Lodge as a worker’s organisation. Arrangements were made in late 1878 for a doctor to visit the mines weekly to attend to the workers and their families for a stated sum per man to be paid monthly. This arrangement, however, appears to have been made independently of the Lodge.

Despite, or perhaps because of this harmony, there was a preoccupation, bordering on the obsessive, with law and order and the suppression of petty crime, much of which was probably committed by people who did not live in Frogmore. For example, in 1877 the community was ‘in some state of excitement lately through the depredations of some cattle stealers who were impudent enough to take cattle almost from the very door of one of the butchers’. A later report referred disparagingly to a recent statement in the Burrowa News that at Frogmore there were ‘no drunkards, no larrikins, no police, no politics’. A reference was made to the stealing and apparently brutal destruction of a draught horse some 14 months ago, an event, which if not preventable by a police presence, would ‘surely have been punished by the same’. In 1878 another call was made for police protection. A short time previously Mr Bensusan’s smelting shed had been burnt to the ground, probably deliberately, and there had been a number of petty larcenies, including the stealing of a windlass rope.

The eventual presence of the police may have had the desired effect, for at the Senior Constable’s retirement function in 1880 he stated that he was afraid when he was appointed to Frogmore that he should have some very unpleasant duties to perform, the place had such rowdy name. But now on his leaving the police force, he was glad to bear testimony that Frogmore was one of the most orderly places he ever lived in.

Petty crime did not disappear, however, for in 1881 horse stealing and petty thefts were frequent, though often undetected by the police. A court of petty sessions was eventually established and the first cases were held in 1882. They involved a person who was drunk and disorderly, a bullock driver using obscene language in a public place and a person accused of ill using a horse. As this was the first court day the defendants were let off with a caution. In 1884 there was a case heard of assault on the constable by a

28 Burrowa News, 14 March, 8 April 1881.
30 Burrowa News, 6 September 1878.
31 Burrowa News, 4 August 1877.
32 Burrowa News, 10 November 1877.
33 Burrowa News, 9 February 1878.
34 Burrowa News, 5 September 1880.
35 Burrowa News, 14 March 1881.
36 Burrowa News, 27 October 1882.
prisoner, but the charge was dismissed. Court proceedings were reported regularly, but most were for petty breaches of the law.

The social life at both communities was very family oriented and centred around institutions such as the schools, churches and lodges. At Currawang there was a particularly strong emphasis on Wesleyanism and Welsh traditions. The first anniversary of the Miner’s Lodge was in 1873, and it attracted visitors from all over the district. A procession, replete with banners and flags and led by the Bungendore Brass Band, passed around the town and mine, finishing up at a place called ‘The Tree’, where there was dancing on the green for an hour. That evening a supper was held for 150 guests, of whom about half were women. Those present also included members of visiting lodges. Following the supper, a ball was held. The next day the children were entertained under ‘The Tree’ with leftovers from the function. With the adults present, dancing on the green was indulged in for several hours. A similar function was held in 1874, with music dispensed by the Goulburn Volunteer Band, and a procession to ‘The Tree’. In the afternoon an athletic sports carnival for all ages and sexes was held with a supper and ball later in the evening. The Lodge function held in December 1875 was much less grandiose, with the poorer attendance reflecting the departure of many of the miners.

At Currawang the churches were even more prominent, socially and spiritually, than on the gold fields. The Wesleyan church at Currawang was involved in a ‘wide range of socially entertaining and supportive activities’ similar to those held at Ballarat by Jan Croggon’s Cornish Methodists. For the Wesleyans at Currawang the church was an important part of their ethnic and cultural identity, and they appeared to have had rather more success in maintaining their Welsh identity than their compatriots on the Victorian gold fields. There was, in addition, a notable degree of co-operation between the different denominations, and a ‘happy absence of sectarian animosities’.

The first reported church activity was a Wesleyan tea meeting in December 1866 to celebrate the church anniversary and to help raise funds to pay off the debt. There were a number of visitors from the country and distant places, and the miners were represented by Captain Richards and many employees, a number of whom had formed themselves into an amateur choir. At the supper, every denomination in the neighbourhood was well represented. A public meeting was held afterwards, with the Reverend Waterhouse from Goulburn speaking of the sympathy and kindness he had received from all denominations. Anniversary services of the Wesleyan Sabbath school were also held regularly. In June 1874 about 200 persons were present at the public tea, not all of whom would have been Wesleyans. At the 1876 anniversary it was reported

---

37 Burrowa News, 13 June 1884.
38 Goulburn Evening Penny Post, 20 September 1873.
39 Goulburn Evening Penny Post, 17 December 1874.
40 Goulburn Evening Penny Post, 18 December 1875.
43 Goulburn Herald and Chronicle, 12 October 1872.
44 Goulburn Herald and Chronicle, 5 December 1866.
45 Goulburn Herald and Chronicle, 10 June 1874.
that the majority of the teachers at the school were Welshmen and that the proceedings were conducted after the character of Sunday school festivals in Wales.\footnote{Goulburn Herald and Chronicle, 22 March 1876.}

Anglican church services were held on William Cooper’s nearby Willeroo station until the opening of the St Matthias church in 1875. At the laying of the corner stone in 1874 the manager of the mine gave the men a half day off, and it was reported that there were many Wesleyans and Catholics present. The proceedings began with a long procession with banners, and about 450 people, including visitors from Collector and Tarago, were present at the supper.\footnote{Goulburn Herald and Chronicle, 25 February 1874.} As an interesting commentary on the level of wealth in the district, 80 per cent of the total cost of the building had been paid off by that stage, most of the funds coming from local people.\footnote{Goulburn Herald and Chronicle, 24 April 1875. The total cost was £400, of which all but £80 had been paid off at that stage. Almost all the funds had been contributed by persons living within a few miles radius of the church.} At the annual tea party at the Roman Catholic church in 1878 it was stated that amongst those present were many ‘visitors from Goulburn and other places, as well as others who did not belong to the same church’. It was commented that this attendance helped measurably in aiding the school, which had no government assistance.\footnote{Goulburn Herald and Chronicle, 16 February 1878.} As another illustration of the lack of sectarianism a number of children from Roman Catholic families attended the Currawang public school rather than the Catholic school at Spring Valley.\footnote{NSW Council of Education, Schedule of application for the establishment of public schools, NSW LA, Votes and Proceedings, 1868. The numbers of children that intended to enrol at the new public school included 38 Anglicans and 44 Catholics.}

Some of the more important social functions were the farewells for various mine managers and officials. Two farewells were given to the Deer family on their imminent departure from the district. The first function in 1872 was attended by about a hundred persons, and the second was held in 1873 on the eve of their departure.\footnote{Goulburn Herald and Chronicle, 12 October 1872, 25 October 1873.} In 1875 there was a farewell for Mr Williams, who had followed Mr Deer as manager.\footnote{Goulburn Herald and Chronicle, 22 September 1875.} Race meetings were also held frequently and often accompanied with a ball and supper afterwards. Following the completion of the school building in 1872 a ‘big spread’ was put on by the wives of the Currawang notables, such as the Deer’s and Kenny’s. There were 150 children present, with a further 250 parents and friends attending a musical melange later that evening. The band was formed from employees of the mine.\footnote{Goulburn Herald and Chronicle, 10 April 1872.}

A large number of these functions had a distinct family flavour and very specific attention was given to the needs of the children. The women had a very visible role in these activities, and they were referred to, almost reverently, as the ‘ladies of the mine’.\footnote{Goulburn Herald and Chronicle, 12 October 1872, 17 December 1874.} For example, in a report on a picnic in 1871 there was a reference to the ‘happy, healthy faces of the children and the care of the ladies’. Reference was also made to the success of two recent amateur entertainments, with a third in the pipeline.\footnote{Goulburn Herald and Chronicle, 1 February 1871.} In 1872 a function was held on the banks of Lake George by a Mr Price, who was ably assisted by the ‘ladies of the mine’.\footnote{Goulburn Herald and Chronicle, 23 September 1872.} On at least two occasions tea treats were given by Mrs Deer on the anniversary of her children’s birthdays, over 350 people attending the function in
1873. 57 There were also laudatory comments on the role of women in contributing
generally to the level of decorum in the community. On one occasion they were
exhorted to persuade their prospective husbands to join the Lodge on the threat of non
marriage. 58

Although outside the Southern Mining region and of another era, Leanne Blakely has
pointed out that the women of Wollongong worked tirelessly at these functions and their
association with the family and home did not always mean that they were powerless.
Instead this special link with family and home gave them a degree of authority on issues
in these areas. 59 One of the clearest expressions of this process in the Southern Mining
Region appears to have been at Currawang. Their role appears to have been rather more
prominent than that of the Port Kembla women, who were described by Eklund as being
involved in ‘behind the scenes work’. 60

At Frogmore, there was a similar emphasis on the family and a similar lack of
sectarianism. Many functions were the province of institutions such as the school,
churches, Oddfellows’ Lodge and the Good Templars, and in some of them there was a
heavy involvement by Eynon Deer and his brothers. In 1876 a Wesleyan tea meeting
was held, at which 150 persons from the district attended, many of whom were from
other denominations. 61 At the 1878 anniversary of the Wesleyan Sabbath school, the
children were, as usual, marched through the village and then regaled with tea, cake and
fruit. Later the public tea commenced and in the evening a public meeting was held,
presided over by Eynon Deer. 62 Anniversaries in subsequent years always included a
public tea and meeting. 63 Wesleyan Sabbath school picnics were also held. 64

Many of the church functions focussed on fund raising activities, a matter in which there
was considerable collaboration between the various denominations. In October 1878 it
was reported that for some time subscriptions had been collected towards the building of
a church for the Roman Catholic community, for which the Protestant community had
also lent a helping hand. 65 A bazaar was held in January 1883 by Father Fallon at the
time of the annual race meeting, with the aim of reducing the debt on the Frogmore and
Hovell’s Creek Roman Catholic churches. The bazaar was a big success, and Father
Fallon thanked profusely the Catholic community and those from other denominations
who had assisted ‘so cheerfully and liberally’. 66 Benevolence was not only the province
of the Deers, for John Sheedy, who was a mine owner and publican, was an important

57 Goulburn Herald and Chronicle, 12 October 1872, 11 October 1873.
58 Goulburn Herald and Chronicle, 12 October 1872; Goulburn Evening Penny Post, 18 September
1873.
59 Leanne Blakely, ‘You didn’t admit that you were hard up—Working Class Notions of Moral
community in Wollongong’, in Labour and Community, Raymond Markey (ed), University of
60 Erik Eklund, ‘We are of Age’: Class, Locality and Region at Port Kembla, 1900 to 1940’, p.79.
61 Burrowa News, 15 January 1876. A comment in April 1877 that there was no religious service of any
description taking place appears odd, and was possibly made because of the absence of a visiting
clergyman on the day. Goulburn Herald and Chronicle, 1 September 1877.
62 Burrowa News, 22 November 1878.
63 Burrowa News, 12 December 1879.
64 Burrowa News, 28 December 1883.
65 Burrowa News, 4 October 1878.
66 Burrowa News, 2 February 1883. The gross amount reached £145, which left a surplus for future
contingencies. A sum of £70 had already been contributed from both communities through a
subscription list.
benefactor of the Roman Catholic community. He provided a suitable site and a liberal donation of money for the establishment of a Roman Catholic church.\textsuperscript{67}

School functions were also held. At the opening of the new public school and residence in 1878, the local School Board gave the school children and their parents, together with any others that wished to attend, a picnic on the school ground. About 65 children attended, marching through the village singing and waving colourful flags.\textsuperscript{68} The first school anniversary was held in 1879, with a picnic for the children and an evening entertainment of recitations and a drama for the adults.\textsuperscript{69} School picnics were held in 1882 and 1883, the former followed by an amateur entertainment.\textsuperscript{70}

The Good Templars held monthly meetings, one correspondent commenting in 1883 that the Order would be more popular if the meetings were open to the public and all persons were invited, whether total abstainers or not.\textsuperscript{71} These functions were, however, only for the true believers. Following a picnic in 1883 an adjournment was made to the lodge room, where a public meeting was held with hymns, prayers, recitations and addresses, including one on the history of total abstinence. It was concluded that Good Templary had taken a firm hold of the people of Frogmore and that it was of great benefit to the neighbourhood.\textsuperscript{72}

While many of these functions were very family oriented, there were considerably fewer reports of compliments paid to the women than at Currawang. At the Good Templars’ 1883 function, there was a strong hint of misogyny, the correspondent stating that:

\begin{quote}
if the good ladies of Frogmore were not experts at getting up picnics well they ought to have been for they had had lots of practice lately ... when the women and girls of a place are exceptionally pretty that picnics and other out door sports are almost as numerous as the days in the year. Thus it is in Frogmoor we have a number of pretty women and girls who on the slightest provocation get up a picnic straight away and there are some lads and old bachelors here who are wicked enough to say that although they get these picnics up ostensibly for some good purpose, their chief end is to show off their own charms, and I must say that I am not at all sure but that the lads and old bachelors are not right in this case. However, whatever the aim of the ladies may be they do get these things up very nicely here.
\end{quote}

The only other base metal mining community for which there are accounts of social life is Woogarlowe. These comments, like the community itself, were brief, but show certain similarities to Currawang and Frogmore. In 1870, Archdeacon Lillingston, on one of his periodic visits, preached in the drive of the Emma Belle, which was also used occasionally for picnics.\textsuperscript{74} At a subsequent function attended by some of the directors, the Rev. Gibson, Archdeacon Lillingston and the employees, the latter spontaneously cried out ‘Mr English’s health’ and broke into song. The manager, Mr English, responded heartily of his regard for his employees, referring to a strong commonality of

\begin{itemize}
\item \textsuperscript{67} Burrowa News, 4 October 1878.
\item \textsuperscript{68} Burrowa News, 6 September 1878.
\item \textsuperscript{69} Burrowa News, 5 September 1879.
\item \textsuperscript{70} Burrowa News, 27 October 1882, 28 December 1883.
\item \textsuperscript{71} Burrowa News, 19 January 1883.
\item \textsuperscript{72} Burrowa News, 28 December 1883.
\item \textsuperscript{73} Burrowa News, 28 December 1883.
\item \textsuperscript{74} Yass Courier, 28 January 1870.
\end{itemize}
interest and the absence of class tensions. Archdeacon Lillingston said he did not consider himself a visitor, but rather a portion of the Woolgarlowe establishment.75

Debate and discussion: 1886-1899

During this period the largest base metal community by far was Captain’s Flat, followed at some distance by Frogmore. Community relations, in the form of discussion and debate, had a sharpness to them at Captain’s Flat that was absent at Currawang and Frogmore. Most employees were members of the AMA and were generally more class conscious and politically expressive than their mining colleagues elsewhere in the region. As an example of this heightened consciousness, national as opposed to purely local matters were discussed occasionally.

For instance, in 1888 there was a visit by the local member, O’Sullivan, Garvan MLA and a Dr Fitzpatrick, at which a crowd of about 45 miners asked for and received an address by the member on the topics of protection, mining claims, the land bill and general politics.76 The Mining on Private Property Bill was another important topic, as it was elsewhere in major mining centres throughout New South Wales. In 1893 a well attended meeting ‘of all classes in the community’ was held to elect delegates to represent the Flat at the forthcoming conference in Sydney.77 At a subsequent report on the conference residents were advised of the necessity of communicating with other leagues to agitate for a fair and equitable bill.78 In another debate later that year James McInerney, Secretary of the Goulburn branch of the Shearer’s Union, accompanied by W.G. Spence, addressed electors at a public meeting.79

Possibly, the most famous meetings concerned the fate of the Lucknow miners. On one occasion in 1897 a large public meeting heard Messrs Hughes MLA and Brown MLA, speaking on behalf of the Lucknow miners. Money was collected and the men agreed to pay 2s 6d a week from their wages.80 A much awaited debate on this issue was held the following year between O’Sullivan and Hughes, who was accompanied by Griffiths, the Labor member for Waratah, before an audience of 500. The motion put by O’Sullivan that the actions of the Labor party had been against the wishes of the miners was heavily defeated.81 Federation was an important issue at the Flat. In 1898 O’Sullivan addressed a large gathering of miners on this subject.82 In 1899 those in favour of the bill held a torchlight procession on the night of voting, and there was much excitement caused by the victory of the federal cause.83

Industrial conflict surfaced occasionally. The Flat was not, however, a hot bed of industrial unrest. For example, there was disputation over wages in 1886 and 1893, and in 1896 three working bullocks of Elizabeth Hanson were shot because they were used to cart coke in defiance of a strike by local unionised carriers. In 1897, a mass meeting

75 Yass Courier, 15 April 1870.
76 Queanbeyan Age, 15 February 1888.
77 Braidwood Dispatch, 2 September 1893.
78 Braidwood Dispatch, 27 September 1893.
79 Braidwood Dispatch, 9 December 1893.
80 Queanbeyan Age, 21 August 1897.
81 Braidwood Dispatch, 9 February 1898.
82 Queanbeyan Age, 18 September 1897.
83 Queanbeyan Age, 28 June 1899.
of miners was held to discuss the inadequacy of the medical services provided by the company.  

Consistent with this level of political awareness, there were frequent visits by the sitting member, O'Sullivan, and other aspirant politicians, particularly at election time. In January 1897 he visited the Flat specifically to inquire into local needs. Issues raised by the residents included the bad state of water supplies, and the need for public buildings, such as a police barracks, court house and post and telegraph office. O'Sullivan did not have it all his own way, for while he won the 1898 election, there were a number of other candidates and Allen, the Free Trade candidate, obtained a majority at the Flat. He also came in for direct criticism, and in 1892 dissatisfaction was expressed on the way he had voted on the Broken Hill affair. In September 1893 he addressed a large meeting to explain his views on the Mining on Private Lands bill and other matters, including criticism of his infrequent visits. He raised the matter of mineral lease usage in Parliament on at least two occasions.

The various progress committees were the main vehicle for addressing local issues. A committee was formed in 1886 and almost immediately approached O'Sullivan on a number of matters of local importance, for example, the establishment of a better mail service, a public school, better roads and the presence of a mining registrar and a permanent policeman. The selection of a site for the school was a vexed question, for the temporary school site was very close to the hotel and in swampy ground with diggers holes all around. A much more suitable site had been selected by the committee, but the Inspector had refused to look at it. A police station and petty sessions court were established shortly thereafter. A new progress committee approached the authorities in 1887 requesting the establishment of a money order office. The request was refused, and the matter was subsequently taken up by O’Sullivan following a public meeting of residents.

Unlike the Frogmore community, however, the various progress committees were also the focus of dissenion as well as unity, and they provide one of the few glimpses of class tension between the residents. For instance, in 1889 a public meeting was held for the purpose of forming a new progress committee, but there was a very poor attendance and a deal of opposition by the Bogtowners, who felt that the failure of the previous committee through party feeling would be repeated. A further meeting was held, and some of the candidates were elected, but not long thereafter, another public meeting was convened to protest at the alleged unrepresentative nature of the committee. After considerable discussion it was decided to appoint delegates from those parts of the district that were not represented on the committee to consult and devise a remedy. Even after this process a satisfactory arrangement could not be arrived at, and a public

84 Queanbeyan Age, 21 December 1886, Braidwood Dispatch, 29 November 1893; John Dean, Captains Flat, privately published paper, 2001, p.14, 17.
85 Queanbeyan Age, 16 January 1897.
86 Queanbeyan Age, 27 July, 3, 6 August 1898.
87 Queanbeyan Age, 8 October 1892.
88 Braidwood Dispatch, 27 September 1893.
89 Queanbeyan Age, 4 April 1888, Braidwood Dispatch, 26 October 1898.
90 Queanbeyan Age, 27 May 1886.
91 Queanbeyan Age, 24 August 1886.
92 J. McDonagh to Postmaster General, 2 February 1887, SP 32/1, Box 106, NAA, Sydney.
93 E. O’Sullivan to Postmaster General, 17 August 1887, SP 32/1, Box 106, NAA, Sydney.
94 Braidwood Dispatch, 27 July 1889.
meeting was called where it was decided to reconstruct and elect a representative committee. A poll was taken and the results were presented at a public meeting where they were accepted unanimously.95

One explanation for these tensions was the prevalence of health and sickness and the generally poorer living conditions at Bogtown. In 1895 influenza was very prevalent and there was also a shortage of vegetables, and in 1897 there was an attack of scarlatina, which caused the school to be closed until the end of the following week.96 Many people were struck down by influenza in 1898, and by early 1899 there was a deal of sickness in the town through want of water.97 Later that year sickness among the children was very prevalent. Whooping cough and other ailments were widespread and several young children died.98 Pollution would have contributed to some of these illnesses, for in 1893 some residents were forced to shift their homes because of fumes from the calciners and in 1895 concerns were expressed at the effect of the smoke and fumes on the residents of Bogtown.99 Fortunately, for most of this period the Flat was at least blessed with the services of one, and sometimes two, resident doctors.

Law and order issues were relatively minor. For example, in 1886 concerns were expressed at the effect that bad language from the hotel would have on the children's morals.100 At one court session in 1889 there were five cases of abusive, insulting and indecent language. The main and only other case was against the headmaster for assaulting an eleven year old boy.101 In a session in 1892 most of the charges before the magistrate were for bad language, and in a session in 1893 there were three small debts cases and fines for butchers for not giving notice of the killing of two bullocks.102 John Dean, a descendant of the Goggins' family, has noted that a number of summonses were served in response to sworn accusations by individuals against fellow residents. On other occasions, however, individuals often declined to give evidence against other residents. He also noted that the authorities were very vigilant in their suppression of illegal gambling.103 The court day following the final closure of the smelters in 1899 was one of the heaviest days ever, as some 47 cases were dealt with. These included 31 Small Debts Court cases, one for breach of the Public Instruction Act for not sending children to school and seven for obscene language or riotous behaviour.104 There were so many departures that the business people were having a hard time catching up with their debtors and were often seen on horses or bicycles patrolling the roads as the coaches were leaving.105

There were no instances of parent teacher conflicts at Captain's Flat, but at Frogmore they were the main topic of community dispute. For example, in 1886, the teacher, Charles Beardow, was fined and reprimanded by the Police Magistrate for punishing a boy, an outcome which displeased the Inspector, who considered that the teacher had

---

95 *Braidwood Dispatch*, 6 November 1889.
96 *Queanbeyan Age*, 23 November 1895; E. Keys to W. Cooper, District Inspector, 29 March 1897, Department of Public Instruction, 5/15292.2, SRCNSW, Sydney.
97 *Queanbeyan Age*, 27 August 1898, 11 March 1889.
98 *Queanbeyan Age*, 27 September, 7 October 1899.
99 *Braidwood Dispatch*, 11 October 1893, *Queanbeyan Age*, 12 October 1895.
100 *Queanbeyan Age*, 3 August 1886.
101 *Braidwood Dispatch*, 26 October 1889.
102 *Queanbeyan Age*, 19 October 1892, 2 September 1893.
103 John Dean, Captain’s Flat, privately published paper, 2001, pp.40-42.
104 *Queanbeyan Age*, 1 October 1898.
105 *Queanbeyan Age*, 15 August 1898.
been harshly dealt with. Later that year Beardow requested a transfer, stating that he did not have the support and sympathy of the parents of the children, and was subject to complaint and abuse from most of them if he tried to correct an 'indolent or disorderly pupil'. In 1887 false allegations by one of the parents again saw Beardow before the court, but on this occasion the case was dismissed.

His successor did not fare much better. In early 1890 a parent complained about Wigg's 'unmerciful beating' of his son and in October some parents protested at dancing being held at the school. Matters came to a head in January 1891 when eight parents signed a petition asking for his removal. He was accused of 'harsh conduct to children', and being 'overbearing' and 'haughty' towards those parents who remonstrated with him. Following further complaints in 1892 he was removed, despite a petition from 17 parents asking for his reinstatement. It is no coincidence that these incidents occurred when the mines were closed or failing, and many residents were under economic pressure.

At Captain's Flat there are only a few accounts of social and sporting life in the years between 1886 and 1892. The first recorded function was in 1886, when the first furnace was opened by O'Sullivan. In 1888, a ball and supper was held in aid of an injured man, and a proposed concert was postponed so that it did not clash. A Bachelor's Committee was formed in 1889, and later that year preparations began for a grand bachelor's ball and supper, which was to be the largest such function yet held. In late 1892 two boxing tournaments and a lecture on the single tax were held. There were also several balls and a visit from an amateur minstrel company from Goulburn expected shortly.

By 1893 family oriented activities such as variety concerts, debating and drama were becoming more frequent. For instance, in 1893 a variety entertainment was held consisting of boxing, club swinging, step dancing and comic songs. Visits by other community groups were also important. In 1895 there was a call to the Queanbeyan Debating Club to visit the Flat, a concert by the dramatic club and a visit by Shepherd's Opera Company. Functions in 1896 included a plain and fancy dress ball and a performance over two nights by the Criterion Burlesque Company. In one month in 1898, following pay day, concerts by travelling troupes were announced for every night of the week. The Captain's Flat hotel book is dotted with the names of these

---

106 M. Halloran to the Under Secretary, 5 March 1886; C. Beardow to District Inspector Dwyer; Inspector Lawford to the District Inspector, 16 March 1886; Inspector Lawford to the Chief Inspector, 20 April 1886, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney.
107 Beardow to the Under Secretary, 25 September 1886, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney.
108 Beardow to Dwyer, 28 July 1887, 15 August 1887, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney.
110 Queanbeyan Age, 27 May 1898.
111 Queanbeyan Age, 3 August 1888.
112 Queanbeyan Age, 24 August 1889.
113 Queanbeyan Age, 8 October 1892.
114 Braidwood Dispatch, 11 November 1893.
115 Queanbeyan Age, 21 August, 12 October 1895.
116 Queanbeyan Age, 6 June, 5 November 1896.
117 Queanbeyan Age, 10 August 1898.
groups. Fund raising activities were also important. For example, in 1895 a concert in aid of the proposed School of Arts was given by the Captain’s Flat Dramatic club, and a farewell function was given to Captain Hoskins, who had been instrumental in revitalising the Kohinoor mine and establishing the school. In 1897 a very successful minstrel and dramatic entertainment was held to raise funds for the school. A children’s picnic and ball in aid of a cottage hospital were also held in that year.

Public school functions such as concerts would have been held regularly, although there are only a few accounts of them. There were two such functions in 1896. One was a lecture and concert in aid of a library at the school and the other a concert to raise money for book buying. A concert was also held in 1898. A similar observation can be made concerning church functions. Nevertheless, there is the distinct impression that this aspect of the Flat’s life was considerably less to the fore than at Currawang and Frogmore. The first report on the Anglican congregation was in September 1893, when there was a consecration of the burial ground and the laying of the foundation stone, after which there was a concert and tea meeting to which over 200 people attended.

In a similar vein, the first report on the Roman Catholic congregation’s activities was not until 1895, when a committee was elected to carry out a bazaar to raise funds for repairing and enlarging the church. Fund raising activities for the church and school in subsequent years included balls, bazaars and socials. In 1899 Mother Mary of the Cross, foundress of the Order of the Sisters of St Joseph, visited the Flat with a view to establishing a convent. Two fund raising concerts were held not long thereafter, one of which attracted a very large audience, including many visitors from neighbouring districts. John Dean has speculated that the interest shown in the town by the Order was consistent with its charter to serve only the poor and underprivileged.

The first report on the Wesleyans was not until 1897, when a bazaar was held in aid of the church. In late 1899 there were two limelight entertainments, with the funds on the latter occasion going to the Queanbeyan parsonage. On both occasions there was a musical contribution from the Band of Hope and the minstrel troupe. Other functions in that year included a combined Wesleyan and Anglican annual school picnic, with the left over food distributed to those in poor circumstances, and a concert to raise funds for the Queanbeyan parsonage. Explicit reference was made to the efforts of the women. Reports on the Presbyterians were not forthcoming until 1899, when an entertainment was held at which over 200 people were present. Gratitude was expressed to the

---

119 Queanbeyan Age, 12 October, 23 November 1895.
120 Queanbeyan Age, 13 March 1897.
121 Queanbeyan Age, 2 June 1897.
122 Queanbeyan Age, 29 April, 6 June 1896.
123 Queanbeyan Age, 27 August 1898.
124 Braidwood Dispatch, 16 September 1893.
125 Queanbeyan Age, 5 October 1896.
126 Queanbeyan Age, 5, 27 May 1897, 14 September 1898, 15 November 1899.
127 Queanbeyan Age, 29 April 1899.
128 Queanbeyan Age, 16 September, 14 October 1899.
129 John Dean, Captain’s Flat, privately published paper, 2001, p.45.
130 Queanbeyan Age, 20 February 1897.
131 Queanbeyan Age, 3 September, 28 October 1899.
132 Queanbeyan Age, 25 November, 18 December 1899.
Wesleyans, who had offered the use of their church for services and to the members of other denominations. From thence on Presbyterian services were to be held at the Flat every fortnight.\textsuperscript{133}

The closure of the mines in 1898 and 1899 did not cause a cessation of social functions. Benefits and farewells were now more important, although the farewell to the mine manager and his wife was commented on less than graciously.\textsuperscript{134} Other social events included a recital in the park by the band, which was ‘improving almost out of recognition’, a surprise party for the Postmaster, a variety entertainment and Arbor Day.\textsuperscript{135} This latter event attracted 200 people, and refreshments were provided for the children and their parents.

Sport, in particular, cricket and football were very popular. Games against clubs from neighbouring towns were almost always followed in the evening by a social and dinner, and there were associated functions such as trophy presentations and balls.\textsuperscript{136} In 1886 the Silver Age Cricket Club played a return match against a combined Hoskingtown and Bungendore team, but it was not until 1893 that another match was reported.\textsuperscript{137} The cricket matches were family affairs. For instance, at a cricket match against Braidwood in 1895 a picnic was held for the children and parents in the adjoining paddock. The function involved a parade by 200 to 250 children carrying small flags behind a large banner.\textsuperscript{138} In the summer of 1897, however, only one cricket match had been played up until January, and in 1899 the Queanbeyan club was advised that the preference was for friendly rather than competition games.\textsuperscript{139}

The first inter club football match was played at the Flat in 1895, after which a dinner and dance was held at one of the Flat hotels, a format which was held to rigorously over the next few years.\textsuperscript{140} An athletic sports and social were held by the football club in 1895, the first such event for three years. A large number of women were present.\textsuperscript{141} Dinners, balls and concerts were also held, and there were 40 couples present at the annual ball in 1897.\textsuperscript{142} By the following year there were four football teams in the town.\textsuperscript{143} In 1897 a committee was formed to organise an athletic sports on the Queen’s birthday.\textsuperscript{144} An athletics club was duly constituted and a variety entertainment held the following year.\textsuperscript{145} Horse racing was another popular recreational activity, and the main races were on Boxing Day and usually followed by a ball on New Year’s eve.\textsuperscript{146} The

---

\textsuperscript{133} Queanbeyan Age, 5 April 1899.
\textsuperscript{134} Queanbeyan Age, 14 January 1899. It was suggested that the present for the manager’s wife be raffled and the money given to a more deserving cause. Other farewells were held in September.
\textsuperscript{135} Queanbeyan Age, 17 May, 3, 9 September 1899.
\textsuperscript{136} Queanbeyan Age, 27 May 1893, 14 January 1899.
\textsuperscript{137} Queanbeyan Age, 21 December 1886, Braidwood Dispatch, 11 October 1893.
\textsuperscript{138} Queanbeyan Age, 16 November 1895.
\textsuperscript{139} Queanbeyan Age, 16 January 1899.
\textsuperscript{140} Queanbeyan Age, 15 May 1895, 6 August 1898.
\textsuperscript{141} Queanbeyan Age, 21 September 1895.
\textsuperscript{142} Queanbeyan Age, 2 June 1897.
\textsuperscript{143} John Dean, Captains Flat, privately published paper, 2001, p.39.
\textsuperscript{144} Queanbeyan Age, 5 May 1897.
\textsuperscript{145} Queanbeyan Age, 18 June 1898.
\textsuperscript{146} Queanbeyan Age, 16 January 1897.
Pony and Galloway Race club held its annual meeting and ball on Easter Monday. Sixty couples attended the ball in 1899.\textsuperscript{147}

Other than the annual races there are no accounts of social functions at Frogmore until 1889. In that year there was the annual picnic and entertainment held to celebrate the Prince of Wales’ birthday and a concert in aid of an injured man.\textsuperscript{148} The following year the school teacher, Wigg, held a concert to raise money for a school library and the Good Templars’ annual picnic was held.\textsuperscript{149} There were occasional visits by the clergy, although it was commented that the Wesleyan minister was seldom seen.\textsuperscript{150} A tea and concert were held in one of the churches (probably Church of England) in early 1891, and was attended by visitors including the Rye Park choir, and several months later there was an entertainment at the school. In 1892 Wigg held a school concert and limelight exhibition to raise funds for tree planting, and the grand sum of £2 was contributed, a far cry from the bazaar days of Father Fallon!\textsuperscript{151} A serious diphtheria epidemic in 1893 led to the deaths of several children.\textsuperscript{152}

\textbf{Eight hour days and telephones: 1900-1914}

With the reversion of Captain’s Flat to gold mining and processing, the two main base mining communities during this period were Kangiara and Kylo. By 1909 both could be described as modern and progressive. The men were paid well and regularly and there was a strong presence by the AMA, both industrially and socially. Consistent with this union presence there was a strong interest in political matters, particularly at Kangiara. The first political candidate to speak there was Mr. Neilson in 1907. Kangiara was described as the strongest Labor centre in the Yass Electorate, and a number of men and women formed a committee to ensure Nielsen’s return with a subscription list opened to help defray expenses.\textsuperscript{153} The Labor candidate addressed a meeting in the town in 1913.\textsuperscript{154} There were no reports of industrial action.

There was also a strong community focus on local issues. A progress association was formed in 1909 and immediately sought the establishment of a polling booth and the conversion of the Stock Reserve into a Mining Reserve. The residents were prevented from building on the Stock Reserve.\textsuperscript{155} A public meeting was held in 1909 to press for

\begin{footnotes}
\footnotetext{147} Queanbeyan Age, 20 February 1897, 19 April 1899.
\footnotetext{148} Burrowa News, 15 November, 6 December 1889.
\footnotetext{149} Burrowa News, 12 December 1890; H Wigg to Inspector Sheehy, 4 June 1890, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney.
\footnotetext{150} Yass Courier, 13 February 1891; Burrowa News, 10 April 1891.
\footnotetext{151} Frogmore Centenary Committee, Frogmore Public School Centenary 1875-1975, 1975, p.8.
\footnotetext{152} Mr. Adkins to Slattery, MLA, 7 April 1893; J Smith to Chief Inspector, 13 March 1893; W. Hunt to J. Smith, 22 March 1893, Department of Public Instruction, 5/15951.2, SRCNSW, Sydney. The school was closed for six weeks, and a temporary hospital was organised in an empty house and staffed by two nurses and visited each day by the medical officer from Boorowa. Wigg was replaced by William Hunt late in 1892. Hunt was unhappy at Frogmore, which he described as a ‘decaying place’ and made his first application for removal in 1893. Obviously matters improved only slowly thereafter, for in 1898 he wrote that ‘with the exception of five families all the rest are miserably poor. Children come to school poorly clad and wretchedly fed. Those from three families I have relieved more or less during the whole term of my residence here - nearly six years. I cannot see children in want - this state of semi starvation reacts upon the school work, as everyone connected with education knows that when the body is starved, the brain is also...I have no doubt Mr Inspector Smith will fully endorse what I have said as to the wretchedness of the inhabitants and the isolation of the locality’.
\footnotetext{153} Yass Courier, 6 September 1907.
\footnotetext{154} Burrowa News, 28 November 1913.
\footnotetext{155} Yass Courier, 26 January, 24 September 1909.
\end{footnotes}
the establishment of a school and post office. Many of the men on the field were married and were sending remittances to their wives and families, for which they needed access to money orders.\textsuperscript{156} Road conditions were also important, for not only were heavy loads and machinery affected, but also ordinary coach traffic. In 1909 representations were made by the company and the residents of Tangmangaroo.\textsuperscript{157} However, a year later the road was still a subject of lamentation, the passengers often needing to help extract the coach from the bog holes.\textsuperscript{158}

Local issues were also dealt with by the Parent’s and Resident’s Association. In the twelve months to June 1911 it had organised educational classes, provided a good library for the school, fenced in the school grounds and obtained an assistant teacher for the school.\textsuperscript{159} It had also held a school picnic and concert to raise funds for the purchase of school equipment and had organised a joint Coronation day picnic with the parents of the Kangiara Creek (Tangmangaroo) school.\textsuperscript{160} This latter event was very well attended with about 350 persons present.\textsuperscript{161}

Despite a large degree of co-operation between Tangmangaroo and Kangiara, some of the main areas of tension were the occasional conflicts of interest between the two communities. The other concerned the post office. Archaeological and anecdotal evidence suggests strongly that there was a hotel at Kangiara, at least until 1909. However, in that year a vote was taken in the district as to whether a hotel should be allowed at the mines, a matter on which the Tangmangaroo Progress Committee had taken up a strongly hostile attitude. Both sides polled over 60 votes, with the majority narrowly against. There were also concerns at Tangmangaroo that it would lose both its polling booth and school to Kangiara.\textsuperscript{162} There was competition for the position of postmaster, with the aspirants not above engaging in personal slights to get their way. Upon the engagement of Mrs Johns a local resident immediately requested a private bag as he considered that the office was not safe or particularly well managed.\textsuperscript{163}

At Kyloe, the most active community organisation was the progress association, which was formed in 1909. The association was successful in seeking the establishment of a school, and active, albeit unsuccessfully, in seeking additional services, including money orders, a savings bank and phone.\textsuperscript{164} A branch of the AMA was established, but there were no reports of industrial action. In 1912 the branch members agreed to strike a levy of five shillings a member to aid those affected by the recent fire at Mount Lyell. It was also proposed to open a branch of the Political Labour League.\textsuperscript{165}

Many of the social functions at Kangiara were the province of institutions such as the churches and sporting bodies, and they were mainly concerned with raising funds to provide recreational, religious and educational facilities. Family participation was

\textsuperscript{156} Burrowa News, 21 May 1909.
\textsuperscript{157} Yass Courier, 16 March, 8 June, 17 August, 21 December 1909.
\textsuperscript{158} Yass Courier, 1 April 1910.
\textsuperscript{159} Burrowa News, 23 June 1911.
\textsuperscript{160} Yass Courier, 23 December 1910; Burrowa News, 23 September, 28 October, 9 December 1910, 30 June 1911.
\textsuperscript{161} Burrowa News, 30 June 1911.
\textsuperscript{162} Yass Courier, 16 March, 10 August 1909.
\textsuperscript{163} R. King to Postmaster General's Department, 10 November 1911, SP 32/1, Box 288, NAA, Sydney
\textsuperscript{164} p. Armstrong to Postmaster General, 15 June 1910; Kyloe Progress Association to Miller, MLA, 20 January 1911; Kyloe Progress Association to Postmaster General, 9 May 1911, memo from Inspector, 17 June, 9 November 1911, SP 32/1, Box 304, NAA, Sydney.
\textsuperscript{165} Cooma Express, 22 December 1912.
important. In 1910 a ball and supper was held to raise funds for the erection of a Roman Catholic church, and there was a juvenile ball the following evening. Later that year, the Baptist church was officially opened, followed by a tea meeting and concert, and a ball and supper in aid of the Yass hospital. In 1911 a function was held to raise funds for the Roman Catholic church. A fancy fair and concert held over two days by the Methodists attracted a large crowd, and was supported by other denominations. The Tangmangaroo community’s Anglican church (All Saints) was used by residents of both settlements, and there was a degree of friendly sporting rivalry between the Kangiarra and Tangmangaroo schools.

On the sporting side a function was held in 1910 to raise funds for the Waratah tennis club, with about 25 couples participating, and later that year the first cricketer’s social was held in the local hall with about 30 couples present. In 1913 several tennis matches were held, including a match and picnic on Empire Day. The AMA had an important social role. In 1909 the first regular holiday enjoyed by the mining community occurred when the union organised the eight hour day celebrations. These activities involved a procession consisting of members of the AMA and the newly formed branch of the Grand United Order of Oddfellows, headed by the Boorowa band. Following the procession a sports function was held with a banquet in the Kangiarra mine change room, and later that night a grand ball was held at which 37 couples were present. A large number attended from Boorowa. The picnic in 1911 attracted over 300 people.

At Kylooe the only accounts of social events were in 1912, a number of which took place at nearby Adaminaby. A very successful concert was held in aid of the organ fund of the Kylooe Sunday school, and a benefit sports meeting to assist a local resident was held at the Adaminaby recreation ground. This latter event attracted many Kylooe residents. Many Kylooe men were also members of the Adaminaby Oddfellows’ lodge. Eight Hour day sports were also held, presumably by the local branch of the AMA, and occasional games of cricket against neighbouring communities such as Jindabyne were also organised.

Conclusion

Currawang, Frogmore, and to a lesser extent the Woolgarlowe mining communities, mirrored very closely the benevolent and paternalistic traditions evident at a number of other base metal mining communities in Australia. The two overriding contributing factors were ethnicity; in this instance, a Welsh tradition with its emphasis on Wesleyanism, and the paternalistic hand of the mine managers and their families, most of whom were Welsh. As illustrated by these examples and in the discussion by historians such as Blainey, Cardell, Cumming, Curthoys, Markus and many others, ethnicity was very important in a large number of early gold and base metal mining communities. It

167 Burrowa News, 9, 23 September 1910.
168 Burrowa News, 23 June 1911.
170 Yass Courier, 7 December 1909; Burrowa News, 23 June 1911.
172 Burrowa News, 18 April, 6 June 1913.
173 Burrowa News, 6 October 1909.
174 Burrowa News, 13 October 1911.
175 Cooma Express, 6 May, 15 November 1912.
176 Cooma Express, 15 November 1912.
was, however, not as evident in later years. The importance of ethnicity was diluted by, on one hand the departure of the Chinese, and on the other, the gradual assimilation of ethnic values into the wider Australian community. For the base metal mining communities, the paternal hand of management was replaced by a more diverse number of organisations, in particular, the trade unions.

The base metal communities were generally more structured and organised than those on the gold fields, for they had more active progress associations, lodges and unions. To an extent these differences may have been technologically driven, for the base metal miners worked by necessity in a more hazardous and, therefore, more tightly regulated environment. They may have more readily seen this form of work place organisation as part of the natural order of life elsewhere. Notwithstanding these structural differences, however, there were strong similarities between the two types of communities. Both had the same challenges in wresting much needed facilities and concessions from government bureaucracies, and displayed the same degree of social initiative and self reliance in organising their social and sporting life. Breaches of law and order were relatively minor and the communities were more decorous than they were unruly. The more notable incidents of dissolute and anti social behaviour were related almost entirely to bursts of unemployment and poverty or to outrageous prosperity.

Furthermore, while notions of class were more evident at the base metal towns, these were not over-riding, and the trade unions, for one, were far more notable for their strong community contribution than their displays of industrial muscle. Occasional outbursts of class based agitation were clearly overshadowed by considerations of community and locality. Sectarianism was also absent. Politics were occasionally discussed and debated, but the prime focus of the ordinary man and woman was the welfare of their community and family. The miners and their families had a considerable intelligence on the benefits of town and village life elsewhere, and they were keen to acquire and enjoy the same. Festivals and sporting activities were an essential part of these processes. The importance of this cultural identity lay in its ubiquity, for mining was not then a peripheral industry, and this culture was disseminated well beyond the confines of the mine shaft.
Epilogue.

An overview of mining, settlement and community: 1915 to 1945.

Although by 1914 a large number of mining fields in the Southern Mining Region had vanished or faded into near oblivion, some mining remained, and several fields, for example, Captain’s Flat, Cowra Creek and Cullina, were to experience a major rejuvenation as a result of improved technology. Gold fields such as Araluen, Bungonia, Nerriga, Mongarlowe, Cowra Creek, McMahon’s Reef, Nanima and Dalton were revitalised by the Great Depression, when mining again provided a resource to the region in times of hardship. These developments again illustrate the relationship between downturns in the business cycle and mining activity.

The succession of global conflicts beginning in 1914 and ending in 1953 were both a stimulus and deterrent to mining. War increased the demand for strategic minerals such as iron ore and tungsten. However, in 1942 explosives were no longer available for gold mining, and all reef mining ventures throughout Australia ceased operations. The onset of post war prosperity in 1945 ensured that many of them remained closed. This chapter allows for a brief overview of these developments. Most of the cultural patterns and connections explored throughout this thesis persisted during this period. The reasons for this persistence are discussed. Much of the evidence for this period is derived from field surveys and oral accounts, which again demonstrates the usefulness of such material.

Working miners were particularly prevalent on the alluvial gold fields between 1915 and 1939. While much reduced in numbers, they displayed the same degree of independence, resolution and versatility as their forebears. On the Mongarlowe field, there were large numbers of unemployed in the 1930s, many of whom were living in primitive humpies without roofs or coverings and were dependent upon local charity for their subsistence.1 Many families also lived on this field and fossicked, kept gardens, ran stock and shared meat on a roster system.2 Field surveys confirm that for the most part these people lived in slab huts at locations such as Broad Gully, Tantulean Creek, Flanagan’s Point and Half Moon.3 The surveys indicate that similar, albeit smaller, settlements existed along the Shoalhaven River and that many men were also engaged in eucalyptus distilling.4 Local informants also advised that numbers of unemployed miners lived and fossicked along the banks of Araluen Creek during the 1930s.5

Perhaps the most significant of the 1930s alluvial mining communities was Bungonia. In 1931 there were about 100 men in the various tableland gullies and on the Shoalhaven River 500 metres below.6 A field survey has identified the remains of at least seven huts at one site, referred to locally as the Depression village. All of the huts

1 *Braidwood Review*, April 1931.
2 Discussions with the late Ted Richardson, Braidwood, 1995.
4 McGowan, Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.46-55; McGowan, *Bungonia To Braidwood*, pp.41-61.
5 Discussions with the late Ned Wisbey, 1998.
6 *Goulburn Post*, 15 July 1931.
were sizeable and there is a substantial artefact scatter, which includes children’s toys. (Ep.2) This suggests that families lived in this area. Field surveys have located huts in almost every gully and creek area on this field. In some instances the hut sites relate to the 1890s, but the artefact scatter in others suggests strongly that they were more recent. One account of this era describes the solitude of many of the miners. They lived in huts made from improvised materials and cemented with ant bed mortar, and slept on bunks made of chaff bags. The food rations were supplemented by rabbits, and where possible by kangaroos, the skins also serving as rugs. There was a strong emphasis on community living and mateship. After World War Two began, the humpies were deserted as the men flocked to another calling.

Smaller settlements were located at Spring Creek and Timberlight on the Nerriga field. The former locality was worked by both hydraulic sluicing and dredging, with similar environmental consequences to those in the 1890s and early 1900s. Houses were built of timber covered with wool packs dipped in concrete and sand, and had galvanised iron roofing. Gardens were planted and maintained. At Timberlight, the claims were worked primarily by hydraulic sluicing. There were five houses in the small settlement and a garden and orchard. (Ep.1) Field surveys have identified the house sites and a large artefact scatter, which includes ovens and bed frames. The last resident left in 1939 to join the Australian Volunteer Defence Corp in Sydney.

Other accounts from Cunningham’s Creek and Dalton shed light on the role of women and children in these communities, and suggest again the remarkable versatility and adaptability of the mining and rural workforce. At Cunningham’s Creek families supplemented their farm income by fossicking. A local informant has discussed how the rabbit traps were set on Saturdays and the catch gathered in the morning, cooked and taken to the gullies for a prospecting picnic. All members of the family, including his mother and eight year old sister, fossicked by pan, cradle or sluice. In a similar vein, a local resident on the Dalton field recalled that during the 1930s her mother in law panned successfully for gold in the house paddock. These accounts indicate that the role of women and family in mining was far greater than the written record suggests.

The working miner was also evident, though nowhere near to the same extent, on the reef and base metal mining fields, particularly on the former. Most of the reef mines were only partly profitable, and most miners were dependent upon aid from the Prospecting Vote. At McMahon’s Reef mining commenced in 1931 and two crushing plants were erected. (Ep.3) The remnants of the village included a post office and a school. The mining at Dalton was more successful and at one stage there were three

7 McGowan, Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.68-72; McGowan, Bungonia To Braidwood, pp.81-97; field excursion with John Walshaw, August 1988.
8 Goulburn Post, 23 September 1981.
9 Oral discussions with Dallas Ford during 1995; McGowan, Bungonia To Braidwood, pp.208-209, 239-241
10 McGowan, Historic mining sites survey of the Shoalhaven and South West Slopes Districts of New South Wales, pp.134-137; McGowan, Bungonia To Braidwood, pp.202-205.
12 Discussions with Peter Doolan, Harden, 1995.
13 Discussions with Phil Thorn, Gunning, November 1996.
batteries on or near Merrill Creek and one near Jerrawa Creek. All mines were initially worked by small parties of working miners, the most successful of whom was John Hodgkinson, who erected a substantial crushing and processing plant in 1936. At Cowra Creek the date stamps on discarded beer bottles suggest that intermittent reef mining by small groups of working miners also occurred in the early 1930s well before any mention of this activity in the mining reports. (Appendix One, Maps 41-43) At Nanima there were also several small parties of working miners, and two small crushing plants were erected in the mid 1930s.

Small parties of working miners also conducted base metal operations at Kangiara, Breadalbane, Mulloon, Boro and Wallah Wallah in the 1920s and 1930s. For example, the Kangiara mines were worked until 1920 by a small company and parties of 12 to 13 men working on tribute. From 1921 to 1939 the mines were mainly worked by a small local party. Mining at the Breadalbane copper mine was undertaken by a succession of small companies, several of which processed the ore. In the 1920s the mine was worked primarily for iron ore. The mine was eventually acquired by BHP and from 1941 to 1945, large quantities of iron ore were raised. At Wallah Wallah, the silver lead mines were worked for several years by a small party for small but payable yields. Mining was conducted at the Mulloon copper mines until 1923, firstly by a small party and secondly by a large syndicate. Both operations were unsuccessful. The Boro silver mines were worked briefly and unsuccessfully in the mid 1920s.

In a number of instances mining was conducted by larger, more highly capitalised companies. At Froghmore, tungsten was mined from 1914 to 1920, and in two of those years over 30 men were employed. The mines were reopened in the 1930s and a large processing plant was constructed. Mining continued at least until 1942, and in one year up to 55 men were employed. While outside this period, tungsten mining recommenced in 1951 following the outbreak of the Korean War. These operations

---

16 McGowan, _Lost Mines Revisited_, pp.177-175.
18 Barry McGowan, Historic mining sites in the Monaro Southern Tablelands Districts of New South Wales Districts of New South Wales, report to the NSW Department of Planning and the Australian Heritage Commission, 1993, pp.40-41.
19 Barry McGowan, final report on mining sites at Hillview, Murrumbateman, 21 August 2000; _AR_, 1936, p.53.
21 _AR_, 1915, p.50; 1916, p.49; 1917, p.42; 1918, p.39.
22 Astley Consolidated Holdings, _Base Metal Prospect_, Breadalbane, GS 1967/131, Department of Mines, Sydney.
23 _AR_ 1915, p.45; 1916, p.43; 1917, p.38; 1918, p.37; 1919, p.40.
25 G.F. Whitten, Boro lead zinc prospect, Braidwood Division, NSW Geological Survey No.11, June 1952; internal memos, 11, 12 March 1926; Bartlett to shareholders, 16 October 1924, MR 8010, NSW Department of Mineral Resources, Sydney.
Ep.1. 1930s hut site at Timberlight, Nerriga gold field.

Ep.2. Hut site, 1930s Depression village, Spring Creek, Bungonia gold field.
Ep. 3. Two head crushing plant, Cunningham’s Creek, McMahon’s Reef gold field. This type of plant was often used in the 1930s by small parties of working miners.

Ep. 4. Captain’s Flat township, 1940s. Permission of the National Library of Australia.
Ep.5. Mullock heaps and settling ponds of Lake George Mines Company at the end of operations. This area has now been reclaimed. From Susan Pryke, *Boom to Bust And Back Again....Captain's Flat 1883*. Captain's Flat Residents & Ratepayers Association, 1993.

Ep.6. Power plant and stack in background, store and grease house in foreground, Cowarra, 1940. Permission of BHP Archives, BHPA/GG 133.

Ep. 9. Clothes boiler made from 44 gallon drum, Cowarra.

Ep. 10. Stone terracing for hut site and remains of hut, Cowarra.
were highly capitalised and over 40 men were employed. At Cullinga there was a substantial investment in plant and equipment in 1920 and 1926. In the early 1930s and again in 1937 there was further investment in gold recovery plant and equipment to allow treatment of the increasingly refractory ore. Thirty men were employed in 1937.

The two largest mining operations during the 1930s were at Captain’s Flat and Cowra Creek, which was renamed as Cowarra. These latter two mining fields illustrate further the point made at length in my thesis concerning the benefits arising from the development of settlements and infrastructure such as roads, bridges and railways. Cowarra was significant regionally, but at the end of its mining life, it became a ghost town, and Captain’s Flat was eventually reborn as an important feeder town for the Queanbeyan region. They also allow further observations to be made on the nature of social relationships on the fields and the persistence of a mining culture. Despite the recourse to wage labour, unions, better remuneration and the motor vehicle, both communities displayed the same propensity for improvisation and self help as their predecessors some 30 to 40 years earlier.

Captain’s Flat developed into a mining centre of national importance. Large scale Development work, including the construction of a pilot treatment plant began in 1928. The test results were satisfactory, but the fall in metal prices during the Great Depression caused the mines to be placed on a care and maintenance basis for six years. Large scale mining and processing commenced in 1937. These operations were extremely profitable, and the net value of output rose from about £0.5 million from 1939 to 1941 to almost three times that from 1943 to 1945. The settlement was substantial and included schools (including a convent school), churches, postal facilities, police and courts, a picture theatre, golf course, swimming pool, bowling club, hotel, worker’s club, hospital, ambulance, bank and a substantial shopping centre. A railway was also built and at the closure of the mines the road was upgraded to allow the remaining residents to commute to Queanbeyan or Canberra. During and after this period environmental problems posed an even larger challenge than before. The slime dams collapsed in 1939 and 1942 and in 1945 floods swept the tailings further downstream. At the end of mining operations in 1959 the waste dumps were 40 metres high and covered 15 hectares of land, the environmental threat resulting in a $2.5 million reclamation project.

The main impetus for community infrastructure came from the union, community representatives and the company, which provided fibro cottages, lamp lit streets, company electricity and water. In addition, the company built a large hostel for the single men and donated funds to the bowling club and the swimming pool. Electric power was not extended from the mine to the town until 1942 and a reliable water supply was not instituted until 1947. By 1940 the town had a population of 1,700.

---

30 *AR*, 1928, p.15.
32 *AR*, 1937, p.61.
34 Pryke, *Boom To Bust-And Back Again*, pp.75-77.
35 Pryke, *Boom To Bust-And Back Again*, pp.31-35.
However, the Shire did not see the town as a permanent fixture and was reluctant to spend money. The exigencies of World War Two forced the curtailment of some services from the Shire funds, and street maintenance, a children’s playground and public swimming baths, garbage and sanitary disposal were only paid for by an increased levying of a local rate.36

At Cowarra a substantial mining plant, together with a power station was built by BHP, after the purchase of the leases in 1936.(Ep.6) At its peak in the early 1940s the town had a population well in excess of its predecessor in the 1890s. Despite the presence of the motor vehicle, however, the residents still had to cope with the same degree of isolation and official neglect that had existed in the 1890s and early 1900s. The main road was so rough that the gold was still sent by horseback rather than motor vehicle, and it took until late 1937 for a butcher’s shop and a mess hall to be erected, and until late 1939 for a store to be built.37 Despite constant representations a post office was not established until late 1940, and there were continued concerns at the lack of a telephone connection, the poor state of the two access tracks and the absence of a school.38 At this late stage the settlement had over 300 residents, 30 of whom were of school age.39 By late 1940 Cowarra had acquired a branch of the Bush Nursing Association, and in early 1941 a school was built, but only as a result of continued pressure from both the progress association and the company. The site for the school was cleared by voluntary labour, with the company contributing to the cost of cartage.40 A branch of the Red Cross Society had been established by mid 1941.41

Cowarra’s social life was as varied and active as before. By 1937 a cricket club had been formed, the old recreation reserve cleared, and the cricket pitch repaired.42 The tennis court was completed in 1940.43 A progress association was formed in 1937 and by the following year a hall had been built in which regular sociales were held.44 In late 1939 the progress association arranged for weekly card parties and social evenings, with the funds going towards the tennis club and the purchase of a piano. Many of these functions involved visitors from Bredbo and Cooma.45 In response to war time petrol rationing the Cowarra Joint Entertainment Committee was formed to hold regular euchre parties, with the proceeds going to the Red Cross.46 The period November to December 1941 was particularly active, with a jumble fair, fancy dress ball, school concert and a picnic and sports day. Proceeds from these functions went to the war effort.47

This recourse to self help extended to the provision of housing facilities. With the exception of the mine management and salaried staff, such as engineers and fitters and turners, other employees had to prepare their own hut sites and build their homes with

37 Discussion with Darren Powell, Cowra Creek, October 2000; Cooma Express, 11, 23 October 1937.
38 Cooma Express, 15 January, 4 March, 15 April 1940.
39 Cooma Express, 4 November 1940, 8 August 1941.
40 Cooma Express, 4 November 1940, 28 March 1941.
41 Cooma Express, 14 July 1941.
42 Cooma Express, 4 October 1937.
43 Cooma Express, 15 January 1940.
44 Cooma Express, 23 August 1937, 18 February 1938.
45 Cooma Express, 6, 9, 23 October 1939, 13, 17 November, 1 December 1939.
46 Cooma Express, 14 July 1941.
47 Cooma Express, 16 February 1942.
whatever material was available, that is, timber slabs, galvanised iron, stone and occasionally brick. A large number of huts were built on embankments cut into the side of a ridge, and where possible, the miners and their families had small gardens and animal enclosures. (Ep. 10) Field surveys and contemporary photos have verified that the house sites were not dissimilar in size to those that were built 30 or 40 years earlier, though some were larger. (Ep. 7, 8; Appendix One, Maps 41–43) In addition, while artefacts left on site included many modern items, such as stoves and the occasional car chassis, there was a good deal of improvisation and items such as clothes boilers made from 44 gallon drums, home made cake and bread baking tins and lamps can also be found. (Ep. 9)

Captain’s Flat and Cowarra displayed the same non sectarian, largely non class based inclusiveness as their predecessors. The wider world of politics took a distinct back seat in favour of local issues, and the inebriation and wantoness so beloved of some historians was again notable by its absence. There was a lack of parent teacher dissent, but this was possibly a consequence of improved remuneration and better attention to heath and welfare matters. Both the pre and post 1915 communities were, if not part of the same era, at least part of the same social processes. These processes occurred within a 30 to 40 year gap of each other, and suggest a remarkable cultural persistence in the face of the enormous technological and social changes that were taking place elsewhere.

In other communities the harsh reality of the 1930s Depression caused a stronger casting back to the past, and there was recourse to a previous knowledge of economic survival and mining technology. Imperatives and opportunities provided by a nation at war changed this perspective, with many of the miners and their families abandoning the bush for other callings. Full employment and the widespread use of motor vehicles, radio and telephones and a greater degree of social security finally engulfed the isolation and ever present prospect of hardship and poverty that had been the lot of these communities for so many years. For most of these men and their families the modern era had just begun.

---

48 Oral discussions with Ted Hayden, April 1993.
49 Cooma Express, 18 February, 4, 18 March 1938; AR, 1938, pp.52-54.
Conclusions

In my thesis I have demonstrated that a regional approach to mining history has much to recommend it. Working with a largish geographic unit has allowed me to compare and contrast a wide range of mining fields, with their differing technologies and capitalisation and their different economic, political and social relationships. Importantly, it has enabled a fuller discussion of the smaller, more ephemeral mining communities, and allowed for a more sensitive appraisal of their relationships with the wider region, and a clearer appreciation of the environmental impact of mining. Such an approach would work well for other regions in Australia and perhaps for other industries. I have also demonstrated clearly the importance to the historian of material evidence in verifying and illuminating the past.

The impact of mining was substantial and complex, and its economic contribution went well beyond that identified by the official statistics. Mining changed the landscape, in many instances permanently. Forests were cleared, the hills and valleys scoured, and rivers and streams were silted up and diverted. Technology was introduced, adapted and sometimes abandoned to meet the realities of this perfidious continent, with its droughts, floods, and its plentiful, but often complex mineral resources. Mining contributed significantly to the development of rural industries and communities and to the development of a skilled and very versatile work force, but at a cost to the environment.

There was a substantial regional impact through the provision of employment opportunities, the construction of infrastructure such as roads, and the stimulus offered to farming by the clearing of the land and the demand for farm produce. Many towns grew to a substantial size, and in some instances they were largest in their respective districts. But many did not survive the last blow of the pick and shovel, and along with the mining camps they were slowly reclaimed by an encroaching bush. The piles of stone and fragments of metal are often the only evidence that there was once a greater ambition. Other towns and villages survived to adopt a more subdued agrarian profile, and they eventually became the quiet home of the retiree or those seeking refuge from the more hurried pace of the modern cities and towns. Here too, the occasional tumbledown building or scarred mining landscape suggests a more vigorous past.

A major question in my thesis has been the extent to which it is possible to talk of a distinct mining culture. Part of the discussion has focussed on the miners themselves, for persistence and perseverance and the dream of gaining an independence were two constant hallmarks of mining. There was always some mining. Occasionally, as in the first rushes, it was substantial, at other times it was subdued; but it was a resource, not just for the companies and syndicates, but for the working miners and, when hard times called, the poor and indigent. In the hard times, successive generations cast back to a memory of the past to allow them to survive the present, a process which continued well into the modern era.

Part of the discussion has focussed on the material culture of the mining fields and their pattern of growth and decline. The main focus, however, has been on their social
development, in particular, the role of politics and debate, family and community and race relations. This has involved a critical appraisal of many of the stereotypes applied to mining societies, in particular the alleged propensity of the miners for disorderly and footloose behaviour and racism.

There were many differences between the various mining communities, for instance in the composition of the work force, standards of living, racial and ethnic composition, and the proportions of women and children. Some communities experienced prolonged bursts of prosperity; others barely knew it. In some instances there was a strong union presence, and in others neither unions nor lodges were anywhere to be seen. Racial tensions and ethnic differences were important in some communities, particularly where there were large numbers of Chinese miners, but in others neither race nor ethnicity were important. In some communities there was also, at times, an indulgence in behaviour which many observers found discomforting, if not threatening.

However, there were also many similarities. Notions of class and sectarianism were generally subdued, and a high value was placed on inclusiveness and mutual cooperation. Official neglect ensured that these communities developed a degree of ingenuity and doggedness unknown to those living in more settled and certain environs. Basic facilities such as schools and post offices and the occasional presence of the police could not be taken for granted and were often hard fought for. Progress committees and petitions were common. Not even the spiritual well being of the populace could be assumed, for the clergy was often more notable by their absence than their attendance.

Sporting activities, festivals and church functions were the mortar that bound these communities. Women played an important role, economically and socially, but it was in the latter area that their contribution was particularly important. While the great issues of the day were occasionally discussed and debated, the prime focus of both men and women was their family and community. Ultimately, they sought to achieve a state of material and social well-being close to that experienced elsewhere in rural and country town Australia. Excessive indulgence in unruly, licentious and racist behaviour were not common, and racial sentiments were not always negative, for there was often a strong degree of acceptance at the personal level.

This broadly defined mining culture was clearly underpinned by the considerable mobility and versatility of the mining fraternity. While the miners could also be farmers, shearsers and labourers, the reverse could equally apply, and the independent working miners could become the employees of the syndicates and companies. Miners and their kin were clearly part of a wider rural society, which embraced all types of mining and labouring work, and which tended to discourage the persistence of strong cultural differences. The importance of their cultural identity lay in its ubiquity, for it was disseminated well beyond the tailing mounds and the confines of the mine shaft. When the inevitable decline in mining forced the miners and their families to leave, they took their culture with them, and by so doing they helped further shape the development of a broader Australian community.
Bibliography

PRIMARY SOURCES

(1) Government documents

(a) Official documents and Parliamentary papers


New South Wales Parliamentary Debates.


Report of the Board appointed by his Excellency the Governor in Council to inquire into the sludge question. Presented to both houses of Parliament, Melbourne, 1887.


Report of the Commissioner. Southern Gold Fields in the Colony of New South Wales, Gold Commissioner’s Office, Young, 1868.


**(b) Legislation**

*Church and School Lands Dedication Act (No.2) 1880.*

*Church and School Lands Mining Act 1888.*

*Crown Lands Act 1884.*

*Crown Lands Alienation Act 1861.*

*Crown Lands occupation Act 1861.*

*Gold and Mineral Dredging Act 1899.*

*Gold Fields Act 1861.*

*Gold Fields Act 1866.*

*Gold Fields Management Act 1852.*

*Gold Fields Management Act 1853.*

*Gold Fields Management Act 1857.*
Mining Act 1874.

Mining Act 1889.

Mining Act further Amendment Act 1884.

Mining Laws Amendment Act 1896.

Mining on Private Lands (Amendment) Act 1902.

Mining on Private Lands (No.2) 1894.

(2) Books, diaries, reminiscences


Bailliere’s New South Wales Gazetteer and Road Guide. Sydney, 1866.


Kennedy, Richard. ‘The Braidwood Gold fields in the 50s and 60s’. *Braidwood Dispatch*, 10 August 1907-13 June 1908.

Lang, J.D. *An historical And Statistical Account Of New South Wales: From The Founding Of The Colony In 1788 To The Present Day*. vol.ii, Sampson Low, Marston, Low & Searle, London, 1875

Mossman, Samuel, Thomas Banister. *Australia Visited and Revisited, a Narrative of Recent Travels and Old Experiences in Victoria and New South Wales*. Ure Smith in association with the National Trust of Australia (NSW), Sydney, 1974.


Quong Tart, Mrs. *The life of Quong Tart; or, how a foreigner succeeded in a British community*. W.M. MacLardy, Ben Franklin Printing Works, Sydney, 1911.


(3) Newspapers and journals

*Australian Mining Standard*, 1890-1914.

*Braidwood and Araluen Express*, 1900-1907.

*Braidwood Dispatch*, 1888-1914.

*Braidwood News and General Advertiser*, 1864.

*Braidwood Observer and Miner's Advocate*, 1860-1864.

*Braidwood Review* 1908-1940.

*Burrowa News*, 1874-1914.

*Cooma Express*, 1882-1914.

*Cootamundra Herald*, 1878-1914.

*Golden Age*, 1861-1863.

*Goulburn Evening Penny Post*, 1874-1914.


*Goulburn Herald*, 1850-1865.

*Goulburn Post*, 1930-1940.

*Illustrated Sydney News*, 1866-1870.

*Manaro Mercury*, 1879.

*Murrumburrah Signal*, 1882-1914.

*NSW Agriculturist and Grazier*, 1881.

*Perkins Papers*. 
Queanbeyan Age, 1865-1914.
Queanbeyan Observer, 1897.
Sydney Empire, 1853-1870.
Sydney Mail, 1880.
Sydney Morning Herald, 1865-1870 and selected issues.
Yass Courier, 1865-1914.
Yass Tribune-Courier, 1930-1940.

(4) Archives

(a) National Library of Australia
Various journals, newspapers, photographs and other images.

(a) National Archives of Australia
SP 32/1 (Postmaster General’s Department)

Box 9 (Araluen), Box 96 (Bywong), Box 70 (Brindabella), Box 106 (Captain’s Flat), Box 146 (Corang), Box 151 (Cowra Creek), Box 160 (Currawang), Box 214 (Frogmore), Box 216 (Garangula), Box 276 (Inverary), Box 278 (Jacqua), Box 280 (Jembacumbene), Box 288 (Kangiara), Box 304 (Kyloe), Box 332 (Major’s Creek), Box 343 (McMahon’s Reef), Box 389 (Nadgigomar), Box 416 (Oallen), Box 478 (Snowball), Box 598 (Woolgarlowe).

(b) New South Wales Department of Mineral Resources
Various lease maps and town plans.

(c) New South Wales Department of Urban Affairs and Planning
Various lease maps and town plans.

(d) State Library of New South Wales


(d) State Records Centre of New South Wales

5/1 (Department of Public Instruction)

4668 (Araluen), 4668.5 (Araluen West), 4862.2 (Bell’s Creek), 5225.2 (Bywong), 5292.2 (Captain’s Flat), 5558.1 (Cowra Creek), 5631.1 (Currawang),
5951.2 (Frogmore), 6373.3 (Jacqua Reefs), 6419 (Kangiara), 6527 (Kyloe),
6683 (McMahon’s Reef), 6713.4 (Major’s Creek)

4/5519 part (Police, Braidwood, copies of letters received)

SECONDARY SOURCES

(1) Books


Alford, Katrina. *Production or Reproduction? an economic history of women in

Annear, Robyn. *Nothing but Gold, The Diggers of 1852*. Text Publishing, Melbourne,
1999.

Averill, C.V. *Placer Mining For Gold In California*. Bulletin 135, Department of
Natural Resources, Division of Mines, San Francisco, 1946.

Barcan, Alan. *A Short History Of Education In New South Wales*. Martindale Press,
Sydney, 1965.

Bate, Weston. *Lucky City: The First Generation at Ballarat 1851-1901*. Melbourne


Birmingham, Judy, Ian Jack, Dennis Jeans. *Australian Pioneer Technology: Sites and


Robertson, Sydney, 1960.


1978.

Jacaranda Press in association with the Australian National University, Canberra, 1963.

Bolton, Geoffrey. *Spoils And Spoilers: A history of Australians shaping their


Clark, D. *Australian Mining and Metallurgy*. Critchley Parker, Melbourne, 1904.


Davies, Mel. *A Bibliography of Australian Mining History.* Australian Mining History Association, Department of Economics, University of Western Australia, Nedlands, 1997.


Hancock; W.K. *Australia.* Ernest Bean, London, 1930.


Jeans, D.N. *An Historical Geography Of New South Wales To 1901.* Reed Education, Sydney, 1972.


Pryke, Susan. *Boom To Bust—And Back Again, Captain’s Flat From 1883 .... Captain’s Flat Residents & Ratepayers Association, 1996.

Ritchie, John. *Australia as once we were*. Heinemann, Melbourne, 1975.


(2) Correspondence to author

Cowling, Maisie. 17 October 1996.


Grimshaw, Patricia. 24 March 1997.


Liardet, Rose. 11 February 1998.

Littlejohn, D. 25 August 1996.

Love, Mrs Elizabeth. 16 April 1997.

McPherson, Mary. 26 August 1996.

Meldrum, Ken. undated.

Shoebridge, John. 16 September 1996.


(3) Mining and heritage reports


Harper, R.L. 'Tungsten deposits near Frogmore', *New South Wales Department of Mines Annual Report*, 1918, pp.159-161


McGowan, Barry. Conservation and heritage overview of the Araluen, Bell's Creek and Major's Creek gold fields. Report to the Lower South Coast Catchment Management Committee, August 1998.


NSW Department of Mineral Resources. *Traditional Prospecting Equipment*. Information Sheet Number 193, Sydney, undated.


Whitten, G.F. Boro lead zinc prospect, Braidwood Division. NSW Geological Survey No.11, June 1952.


(4) Published papers and articles


Eklund, Erik. ‘We are of Age’: Class, Locality and Region at Port Kembla, 1900 to 1940.’ *Labour History*, May 1994, No.66, pp.72-89.

Fahey, Charles. ‘Abusing the horses and exploiting the labourer, the Victorian agricultural and pastoral labourer, 1871-1911’. *Labour History*. No.65, November 1993, pp.54-74.


(5) Unpublished papers


Gillespie, Lyall. Letter c.1898, Canberra.


(6) Family histories and private papers


Cameron, Robert. Robert Cooper of Juniper Hall. A Family history. R. S. Cameron, Woollahra, undated.


(7) Theses


(8) Interviews and access to mining and village sites

Aherne, Pauline. Major’s Creek, April 2001.


Boates, Harry and Myrtle. Peak View, during 1996.


Butt, Ellis, Gordon and Lindsay. Nanima, during 1993.


Chambers, Narelle. Brook’s Creek, during 1993.


Corcoran, Stan. Frogmore, during 1996.


Doolan, Peter and Win. Harden, during 1995.
Grimshaw, Pat. Canberra, during 1997 and 23 March 2001
Harding, Allan. Canberra, during 1996.
Harris, Stewart (deceased). Braidwood, during 1995.
James, Brian and Christine. Major's Creek, 2000.
Lewis, Claire. Canberra, during 1993.
Lewis, Ken. Major's Creek, during 1995.
McDonald, Brian and Deidre. Major's Creek, during 2000.
McKenzie, David, Canberra, during 1993.
Murphy, Ingrid and David. Colinton, during 1993.


Rowlands, Andrew and Anne. Currawang, during 1996.


Thorn, Phil and Phillip. Gunning, November 1996.


Wilson, Glen. Gunning, during 1996.


(9) Photographs

Braidwood and District Historical Society.

National Library of Australia.

State Library of New South Wales.

Grimshaw, Pat.

Williams, Bessie.

Robertson, Graham.

BHP Archives.

Omeo and District Historical Society.
Appendices

Appendix One. Maps

Legend

1. Tailing mound pattern showing small area of workings, tail races and possible camp site, Deep Creek, Araluen. 291
2. Ground sluicing claim, showing network of races, sluicing points, dams, tail races and huts, Pipeclay 1 workings, Shoalhaven River field. 292
3. Hydraulic sluicing claim, showing water races, tail races, tailing mounds, culverts and huts, Spa South workings, Spring Creek Jacqua field. 293
4. Hydraulic sluicing claim, showing water races, dams, tailing mounds, huts and height of face, Araluen field. 294
5. Hydraulic sluicing claim, showing water races, dam tailing mounds, tail races and height of face, Limekilns workings, Shoalhaven River field. 295
6. Dam, hut and battery site, Macanally, Cowra Creek field, 1897. Department of Mineral Resources, Sydney. 296
7. William’s house and paddock, old plant and battery sites and cyanide vats. Dams are in the gully. Cowra Creek field, 1902. Department of Mineral Resources, Sydney. 296
8. Location of workings along Mongarlowe River and tributaries. Chinese workings marked with asterisk. 297
9. Location of workings in Bombay area of Shoalhaven River field. Chinese workings marked with asterisk. 298
10. Village of West Araluen, showing blacksmith’s shop, butcher’s shop and stables, 1870. Department of Mineral Resources, Sydney. 299
11. Araluen, showing Newtown and Redbank stores and houses, Roman Catholic chapel and telegraph office, 1869. Department of Mineral Resources, Sydney. 300
12. Chinese workings and camp site, north Araluen. 201
13. Mining sites and camps. Jembaicumbene gold field. 302
14. Portion of town plan for Jembaicumbene, showing some streets, residential and farm lots, undated. Department of Mineral Resources, Sydney. 303
15. Village reserve and Chinese gardens, Jembaicumbene Creek, undated. Department of Mineral Resources, Sydney. 304
17. You Watt’s lease, Jembaicumbene Creek, showing store and Chinese huts, 1870. Department of Mineral Resources, Sydney. 305
18. Area occupied by Chinese plus water race, Bob’s Creek, Mongarlowe gold field, 1900. Department of Mineral Resources, Sydney. 306
19. Chinese mining claim and huts, Bob’s Creek, Mongarlowe field. Located in same lease area as that shown in Map 18. Department of Mineral Resources, Sydney. 307
20. Chinese and European huts and claims, Bentley’s Point, Mongarlowe field, 308
22. Chinese and European hut and mine sites, Flanagan’s Point, Mongarlowe field.
23. Major’s Creek gold field.
24. Mining camp, Pipeclay workings, Shoalhaven River gold field.
26. Huts and mining sites, Nuggety Ridge-Spring Creek, Bungonia field.
After Bonwick, 1984.
27. Spring Creek Jacqua gold field.
28. Hut sites, Manton’s Reef, Spring Creek Jacqua field.
30. Cowra Creek gold field.
32. Main village at south camp, Cowra Creek.
33. Bywong village and mining area.
34. Village and mine site, Currawang.
38. Hut sites, north camp, Kangiara, pre 1909 village.
40. Kangiara, post 1909 village.
41. Town site, lower ridge, Cowarra, map 1.
42. Hut sites, Cowarra, map 2, adjoins map 1.
43. Hut sites, Cowarra, map 3, adjoins map 2.

Appendix Two. Timelines

Alluvial gold mining.
Reef gold mining.
Base metal mining.

Appendix Three. Mineral production and prices

Copper 1858-1914.
Gold 1851-1914.
Silver 1882-1914.

Appendix Four. Wages, 1853-1900

Wages - NSW, 1853-1900.
Appendix Five. Gold mining statistics

Araluen. 338
Braidwood. 339
Cooma Division. 340
Cullinga. 341
Dredging production: Araluen, Jembaicumbene, Shoalhaven River, 341
Mongarlowe and Nerriga.
Harden 342
Major’s Creek. 343
Mongarlowe. 344
Murrumburrah. 345
Nerriga. 346

Appendix Six. Base metal mining statistics

Captain’s Flat. 347
Currawang. 347
Frogmore. 348
Kangiara. 348
Kylene. 348

Appendix Seven. Public school statistics

Araluen 349
Araluen Upper 350
Araluen West 351
Bywong. 352
Captain’s Flat. 352
Currawang. 353
Frogmore. 353
Jembaicumbene 354
Major’s Creek 355
McMahon’s Reef. 356
Mongarlowe 357
Spring Creek Jacqua. 358
Appendix One. Maps

Legend

- embankment or face of workings.

[grid] area of alluvial workings.

[bullet] concrete foundations.

[mine shaft] mine shaft.

== water races.

[area of settlement] area of settlement.

[*] Chinese camps.

[site] hut site.

[vertically packed] vertically packed tailing mounds.

[horizontal lines] bottles.

(L) laundry.

(T) toilet.

(G) garden.

(B) boiler.
Appendix One. Maps

Map 1. Tailing mound pattern showing small areas of workings, tail races and possible camp site, Deep Creek, Araluen
Map 2. Ground sluicing claim, showing network of races, sluicing points, dams, tail races and huts, Pipeclay 1 workings, Shoalhaven River field.
Appendix One. Maps

Map 3. Hydraulic sluicing claim, showing water races, tail races, tailing mounds, culverts and huts, Spa South workings, Spring Creek Jacqua field
Map 4. Hydraulic sluicing claim, showing water races, dams, tailing mounds, huts and height of face, Araluen field.
Map 5. Hydraulic sluicing claim, showing water races, dam, tailing mounds, tail races and height of face, Limekilns workings, Shoalhaven River field.
Appendix One. Maps

Map 6. Dam, hut and battery site, Macannally, Cowra Creek field, 1897. Department of Mineral Resources, Sydney.

Map 8. Location of workings along Mongarlowe River and tributaries. Chinese workings marked with asterisk.
Map 9. Location of workings in Bombay area of Shoalhaven River field. Chinese workings marked with asterisk.
Map 12. Chinese workings and camp site, north Araluen.
Map 13: Mining sites and camps, Jembaicumbene gold field

Appendix One. Maps
Appendix One. Maps


Map 17. You Watt’s lease, Jembaicumbene Creek, showing store and Chinese huts, 1870. Department of Mineral Resources, Sydney.
Appendix One. Maps

Total Area 84a. Or Op

Map 18. Area occupied by Chinese plus water race, Bob's Creek, Mongarlowe gold field, 1900. Department of Mineral Resources, Sydney.
Map 19. Chinese mining claim and huts, Bob's Creek, Mongarlowe field. Located in same lease area as that shown in Map 18. Department of Mineral Resources, Sydney.
Diagram

Scale 1 Chs. to an Inch

Map 22. Chinese and European hut and mine sites, Flanagan’s Point, Mongarlowe field.
Map 23. Major's Creek gold field
Appendix One. Maps

Map 24. Mining camp, Pipeclay workings, Shoalhaven River gold field.
Map 27. Spring Creek Jacqua gold field
Map 28. Hut sites, Manton’s Reef, Spring Creek Jacqua field.
Map 29. Village of McMahon's Reef, 1898. Redrawn from original town plan, Department of Mineral Resources Sydney.
Map 30. Cowra Creek gold field.
Map 32. Main village at South Camp, Cowra Creek.
Map 33. Bywong village and mining area
Map 34. Village and mine site, Currawang.
Appendix One. Maps


Appendix One. Maps

Map 38. Hut sites, north camp, Kangiara, pre 1909 village.
Appendix One. Maps

Map 40. Kangiara post 1909 village
Map 41. Town site, lower ridge, Cowarra, map 1.
Map 42. Hut sites, Cowarra, map 2, adjoins map 1.
Map 43. Hut sites, Cowarra, map3, adjoins map 2.
### ALLUVIAL GOLD MINING: TIME LINE

<table>
<thead>
<tr>
<th></th>
<th>1850</th>
<th>1860</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
<th>1900</th>
<th>1910</th>
<th>1920</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Braidwood &amp; Shoalhaven District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Araluen</td>
<td>1851</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1914</td>
</tr>
<tr>
<td>Bell’s Creek</td>
<td>1851</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1914</td>
</tr>
<tr>
<td>Bungonia</td>
<td>1857-62</td>
<td>1887</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1902</td>
</tr>
<tr>
<td>Jembaicumbene</td>
<td>1852</td>
<td></td>
<td>1878</td>
<td></td>
<td>1889</td>
<td></td>
<td></td>
<td>1914</td>
</tr>
<tr>
<td>Major’s Creek</td>
<td>1851</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1914</td>
</tr>
<tr>
<td>Mongarlowe</td>
<td>1852</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1914</td>
</tr>
<tr>
<td>Nerriga</td>
<td>1856</td>
<td>1874</td>
<td></td>
<td>1889</td>
<td></td>
<td></td>
<td></td>
<td>1907</td>
</tr>
<tr>
<td>Snowball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1890</td>
<td></td>
<td>1906</td>
</tr>
<tr>
<td>Spring Creek Jacqua</td>
<td>1869-1877</td>
<td></td>
<td>1891-96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoalhaven River</td>
<td>1860</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1909</td>
</tr>
<tr>
<td><strong>Monaro District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Badja/ Numeralla</td>
<td>1858</td>
<td>1871</td>
<td></td>
<td></td>
<td>1892</td>
<td></td>
<td></td>
<td>97</td>
</tr>
<tr>
<td>Colyer’s Creek</td>
<td>1862-68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Tablelands District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brindabella</td>
<td>1864</td>
<td></td>
<td></td>
<td>1882</td>
<td></td>
<td></td>
<td></td>
<td>1903</td>
</tr>
<tr>
<td>Brook’s Creek</td>
<td>1861-65</td>
<td>1875</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1897</td>
</tr>
<tr>
<td>Foxlow</td>
<td>1858</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1884</td>
</tr>
<tr>
<td>Jerrawa Creek</td>
<td>1859-62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanima</td>
<td>1859-61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1898-1903</td>
</tr>
<tr>
<td><strong>South West Slopes District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind Creek</td>
<td>1879</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1905</td>
</tr>
<tr>
<td>Cumbermurra River</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1871-73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cunningham’s Creek</td>
<td>1862</td>
<td></td>
<td></td>
<td>1871-72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garangula</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1894-95</td>
</tr>
</tbody>
</table>
## REEF GOLD MINING: TIMELINE

<table>
<thead>
<tr>
<th>Year</th>
<th>1850</th>
<th>1860</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
<th>1900</th>
<th>1910</th>
<th>1920</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Braidwood &amp; Shoalhaven District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bell’s Creek</td>
<td>1869</td>
<td>1882</td>
<td>1892</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major’s Creek</td>
<td>1869</td>
<td></td>
<td></td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongarlowe</td>
<td>1869</td>
<td>1872</td>
<td>1884</td>
<td>1896</td>
<td>1900</td>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nerriga</td>
<td>1872</td>
<td>1888</td>
<td></td>
<td>1905</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snowball</td>
<td></td>
<td></td>
<td></td>
<td>1896</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Creek Jacqua</td>
<td>1869</td>
<td>1908</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monaro District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Badja</td>
<td></td>
<td></td>
<td></td>
<td>1888</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bushy Hill</td>
<td></td>
<td></td>
<td>1897</td>
<td>1907</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colinton</td>
<td>1888</td>
<td></td>
<td>1898</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cowra Creek</td>
<td>1888</td>
<td></td>
<td></td>
<td>1910</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kydara</td>
<td></td>
<td>1881</td>
<td>1896</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michelago</td>
<td>1872</td>
<td></td>
<td></td>
<td>1892</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Tablelands District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brook’s Creek</td>
<td>1878</td>
<td>1881</td>
<td></td>
<td></td>
<td>1894</td>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bywong</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1894</td>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captain’s Flat</td>
<td></td>
<td>1882</td>
<td>1886</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalton</td>
<td>1874</td>
<td></td>
<td>1890</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gooda Creek</td>
<td></td>
<td></td>
<td></td>
<td>1896</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mac’s Reef</td>
<td>1865</td>
<td>1866</td>
<td>1880</td>
<td>1883</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanima</td>
<td></td>
<td></td>
<td></td>
<td>1896</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>South West Slopes District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cullina</td>
<td>1892</td>
<td>1894</td>
<td></td>
<td></td>
<td></td>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garangula</td>
<td></td>
<td>1895</td>
<td>1896</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1903</td>
<td>1912</td>
<td></td>
</tr>
<tr>
<td>Kangaroo Reef</td>
<td>1872</td>
<td>1873</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMahon’s Reef</td>
<td>1871</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1907</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix Two. Timelines

**BASE METAL MINING: TIME LINE**

<table>
<thead>
<tr>
<th>Year</th>
<th>1850</th>
<th>1860</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
<th>1900</th>
<th>1910</th>
<th>1920</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COPPER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Braidwood &amp; Shoalhaven District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolwong</td>
<td>1907</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monaro District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kyloe</td>
<td>1907</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Tablelands District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breadalbane</td>
<td>1906</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captain’s Flat</td>
<td>1896</td>
<td>1899</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cullulla</td>
<td>1893</td>
<td>1906</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curra Creek</td>
<td>1890</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currawang</td>
<td>1865</td>
<td>1882</td>
<td>1894</td>
<td>1906</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mulloon</td>
<td>1869</td>
<td>1874</td>
<td>1899</td>
<td>1906</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paddy’s River</td>
<td>1895</td>
<td>1897</td>
<td>1912</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>South West Slopes District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frogmore</td>
<td>1875</td>
<td>1885</td>
<td>1891</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Hope</td>
<td>1863</td>
<td>1865</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallah Wallah</td>
<td>1850</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SILVER, LEAD, IRON ORE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Braidwood &amp; Shoalhaven District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyambene</td>
<td>1888</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monaro District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bredbo</td>
<td>1886</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Tablelands District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boro</td>
<td>1888</td>
<td>1893</td>
<td>1908</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captain’s Flat</td>
<td>1886</td>
<td>1895</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primrose Valley</td>
<td>1851</td>
<td>1868</td>
<td>69</td>
<td>1897</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>South West Slopes District</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bogolong</td>
<td>1873</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kangiara</td>
<td>1901</td>
<td>1914</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallah Wallah</td>
<td>1889</td>
<td>1906</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woolgarlowe-</td>
<td>1866</td>
<td>71</td>
<td>1886</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix Three. Mineral Production and Prices

**MINERAL PRODUCTION AND PRICES – COPPER**

**1858-1914*1**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity tons</th>
<th>Value £</th>
<th>Value per ton £</th>
<th>Year</th>
<th>Quantity tons</th>
<th>Value £</th>
<th>Value per ton £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1858-1869</td>
<td>2,408</td>
<td>108,833</td>
<td>45</td>
<td>1895</td>
<td>3,683</td>
<td>136,623</td>
<td>37</td>
</tr>
<tr>
<td>1870-1874</td>
<td>1,536</td>
<td>125,932</td>
<td>82</td>
<td>1896</td>
<td>4,393</td>
<td>197,739</td>
<td>45</td>
</tr>
<tr>
<td>1875</td>
<td>1,979</td>
<td>171,229</td>
<td>87</td>
<td>1897</td>
<td>6,355</td>
<td>282,323</td>
<td>44</td>
</tr>
<tr>
<td>1876</td>
<td>591</td>
<td>45,968</td>
<td>78</td>
<td>1898</td>
<td>5,489</td>
<td>271,847</td>
<td>50</td>
</tr>
<tr>
<td>1877</td>
<td>1,860</td>
<td>144,441</td>
<td>78</td>
<td>1899</td>
<td>5,485</td>
<td>392,309</td>
<td>72</td>
</tr>
<tr>
<td>1878</td>
<td>3,058</td>
<td>208,180</td>
<td>68</td>
<td>1900</td>
<td>6,145</td>
<td>418,207</td>
<td>68</td>
</tr>
<tr>
<td>1879</td>
<td>3,441</td>
<td>210,623</td>
<td>61</td>
<td>1901</td>
<td>6,087</td>
<td>407,039</td>
<td>67</td>
</tr>
<tr>
<td>1880</td>
<td>3,951</td>
<td>268,058</td>
<td>68</td>
<td>1902</td>
<td>5,472</td>
<td>282,120</td>
<td>52</td>
</tr>
<tr>
<td>1881</td>
<td>4,123</td>
<td>267,859</td>
<td>65</td>
<td>1903</td>
<td>7,966</td>
<td>438,733</td>
<td>55</td>
</tr>
<tr>
<td>1882</td>
<td>2,783</td>
<td>182,473</td>
<td>66</td>
<td>1904</td>
<td>6,501</td>
<td>361,441</td>
<td>56</td>
</tr>
<tr>
<td>1883</td>
<td>6,545</td>
<td>472,982</td>
<td>72</td>
<td>1905</td>
<td>7,962</td>
<td>522,276</td>
<td>66</td>
</tr>
<tr>
<td>1884</td>
<td>6,311</td>
<td>362,279</td>
<td>57</td>
<td>1906</td>
<td>8,964</td>
<td>781,645</td>
<td>87</td>
</tr>
<tr>
<td>1885</td>
<td>3,734</td>
<td>170,612</td>
<td>46</td>
<td>1907</td>
<td>8,963</td>
<td>716,759</td>
<td>80</td>
</tr>
<tr>
<td>1886</td>
<td>2,896</td>
<td>121,873</td>
<td>42</td>
<td>1908</td>
<td>8,679</td>
<td>496,564</td>
<td>57</td>
</tr>
<tr>
<td>1887</td>
<td>2,597</td>
<td>112,369</td>
<td>43</td>
<td>1909</td>
<td>6,857</td>
<td>423,642</td>
<td>62</td>
</tr>
<tr>
<td>1888</td>
<td>3,508</td>
<td>246,725</td>
<td>70</td>
<td>1910</td>
<td>8,435</td>
<td>450,491</td>
<td>53</td>
</tr>
<tr>
<td>1889</td>
<td>2,422</td>
<td>120,288</td>
<td>50</td>
<td>1911</td>
<td>10,618</td>
<td>578,198</td>
<td>54</td>
</tr>
<tr>
<td>1890</td>
<td>1,442</td>
<td>74,333</td>
<td>62</td>
<td>1912</td>
<td>8,990</td>
<td>560,025</td>
<td>62</td>
</tr>
<tr>
<td>1891</td>
<td>2,362</td>
<td>114,003</td>
<td>48</td>
<td>1913</td>
<td>9,153</td>
<td>595,826</td>
<td>65</td>
</tr>
<tr>
<td>1892</td>
<td>2,673</td>
<td>111,790</td>
<td>42</td>
<td>1914</td>
<td>5,081</td>
<td>258,845</td>
<td>51</td>
</tr>
<tr>
<td>1893</td>
<td>2,148</td>
<td>72,204</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>1,569</td>
<td>62,207</td>
<td>40</td>
<td><strong>Total</strong></td>
<td></td>
<td>205,530</td>
<td>12,347,913</td>
</tr>
</tbody>
</table>

MINERAL PRODUCTION AND PRICES – GOLD
1851-1914*1

<table>
<thead>
<tr>
<th>year</th>
<th>oz crude</th>
<th>value £</th>
<th>price £</th>
<th>year</th>
<th>oz crude</th>
<th>value £</th>
<th>price £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1851</td>
<td>144,120</td>
<td>468,336</td>
<td>3.25</td>
<td>1884</td>
<td>107,403</td>
<td>396,059</td>
<td>3.69</td>
</tr>
<tr>
<td>1852</td>
<td>818,751</td>
<td>2,660,946</td>
<td>3.25</td>
<td>1885</td>
<td>103,736</td>
<td>378,665</td>
<td>3.65</td>
</tr>
<tr>
<td>1853</td>
<td>548,052</td>
<td>1,781,172</td>
<td>3.25</td>
<td>1886</td>
<td>101,416</td>
<td>366,294</td>
<td>3.61</td>
</tr>
<tr>
<td>1854</td>
<td>237,910</td>
<td>773,209</td>
<td>3.25</td>
<td>1887</td>
<td>110,288</td>
<td>394,578</td>
<td>3.58</td>
</tr>
<tr>
<td>1855</td>
<td>171,367</td>
<td>654,594</td>
<td>3.82</td>
<td>1888</td>
<td>87,541</td>
<td>317,240</td>
<td>3.62</td>
</tr>
<tr>
<td>1856</td>
<td>184,600</td>
<td>689,174</td>
<td>3.73</td>
<td>1889</td>
<td>119,949</td>
<td>434,784</td>
<td>3.62</td>
</tr>
<tr>
<td>1857</td>
<td>175,949</td>
<td>674,477</td>
<td>3.83</td>
<td>1890</td>
<td>127,760</td>
<td>460,284</td>
<td>3.60</td>
</tr>
<tr>
<td>1858</td>
<td>286,798</td>
<td>1,104,174</td>
<td>3.85</td>
<td>1891</td>
<td>153,583</td>
<td>559,230</td>
<td>3.64</td>
</tr>
<tr>
<td>1859</td>
<td>329,363</td>
<td>1,259,127</td>
<td>3.82</td>
<td>1892</td>
<td>158,502</td>
<td>575,298</td>
<td>3.62</td>
</tr>
<tr>
<td>1860</td>
<td>384,053</td>
<td>1,465,372</td>
<td>3.82</td>
<td>1893</td>
<td>179,288</td>
<td>651,285</td>
<td>3.63</td>
</tr>
<tr>
<td>1861</td>
<td>465,685</td>
<td>1,806,171</td>
<td>3.88</td>
<td>1894</td>
<td>324,787</td>
<td>1,156,717</td>
<td>3.56</td>
</tr>
<tr>
<td>1862</td>
<td>640,622</td>
<td>2,467,779</td>
<td>3.85</td>
<td>1895</td>
<td>360,165</td>
<td>1,315,929</td>
<td>3.65</td>
</tr>
<tr>
<td>1863</td>
<td>466,111</td>
<td>1,796,170</td>
<td>3.85</td>
<td>1896</td>
<td>296,072</td>
<td>1,073,360</td>
<td>3.63</td>
</tr>
<tr>
<td>1864</td>
<td>340,267</td>
<td>1,304,926</td>
<td>3.83</td>
<td>1897</td>
<td>296,416</td>
<td>1,104,314</td>
<td>3.73</td>
</tr>
<tr>
<td>1865</td>
<td>320,316</td>
<td>1,231,242</td>
<td>3.84</td>
<td>1898</td>
<td>328,840</td>
<td>1,201,742</td>
<td>3.65</td>
</tr>
<tr>
<td>1866</td>
<td>290,014</td>
<td>1,116,403</td>
<td>3.85</td>
<td>1899</td>
<td>459,800</td>
<td>1,623,320</td>
<td>3.53</td>
</tr>
<tr>
<td>1867</td>
<td>271,886</td>
<td>1,053,578</td>
<td>3.87</td>
<td>1900</td>
<td>309,884</td>
<td>1,070,920</td>
<td>3.46</td>
</tr>
<tr>
<td>1868</td>
<td>255,662</td>
<td>994,665</td>
<td>3.89</td>
<td>1901</td>
<td>213,689</td>
<td>737,164</td>
<td>3.45</td>
</tr>
<tr>
<td>1869</td>
<td>251,491</td>
<td>974,148</td>
<td>3.87</td>
<td>1902</td>
<td>190,316</td>
<td>684,970</td>
<td>3.60</td>
</tr>
<tr>
<td>1870</td>
<td>240,858</td>
<td>931,016</td>
<td>3.87</td>
<td>1903</td>
<td>295,778</td>
<td>1,080,029</td>
<td>3.65</td>
</tr>
<tr>
<td>1871</td>
<td>323,609</td>
<td>1,250,484</td>
<td>3.86</td>
<td>1904</td>
<td>324,996</td>
<td>1,146,109</td>
<td>3.53</td>
</tr>
<tr>
<td>1872</td>
<td>425,288</td>
<td>1,644,176</td>
<td>3.87</td>
<td>1905</td>
<td>328,747</td>
<td>1,165,013</td>
<td>3.54</td>
</tr>
<tr>
<td>1873</td>
<td>362,104</td>
<td>1,396,374</td>
<td>3.86</td>
<td>1906</td>
<td>302,556</td>
<td>1,078,866</td>
<td>3.57</td>
</tr>
<tr>
<td>1874</td>
<td>271,166</td>
<td>1,041,614</td>
<td>3.84</td>
<td>1907</td>
<td>289,043</td>
<td>1,050,730</td>
<td>3.63</td>
</tr>
<tr>
<td>1875</td>
<td>230,882</td>
<td>877,693</td>
<td>3.80</td>
<td>1908</td>
<td>261,683</td>
<td>954,854</td>
<td>3.65</td>
</tr>
<tr>
<td>1876</td>
<td>167,411</td>
<td>613,190</td>
<td>3.66</td>
<td>1909</td>
<td>238,047</td>
<td>869,546</td>
<td>3.65</td>
</tr>
<tr>
<td>1877</td>
<td>124,118</td>
<td>471,448</td>
<td>3.80</td>
<td>1910</td>
<td>224,815</td>
<td>802,211</td>
<td>3.57</td>
</tr>
<tr>
<td>1878</td>
<td>119,710</td>
<td>450,200</td>
<td>3.59</td>
<td>1911</td>
<td>215,274</td>
<td>769,353</td>
<td>3.57</td>
</tr>
<tr>
<td>1879</td>
<td>109,649</td>
<td>407,218</td>
<td>3.71</td>
<td>1912</td>
<td>200,243</td>
<td>702,129</td>
<td>3.51</td>
</tr>
<tr>
<td>1880</td>
<td>119,322</td>
<td>444,252</td>
<td>3.72</td>
<td>1913</td>
<td>183,773</td>
<td>635,703</td>
<td>3.46</td>
</tr>
<tr>
<td>1881</td>
<td>151,512</td>
<td>573,581</td>
<td>3.79</td>
<td>1914</td>
<td>148,934</td>
<td>328,873</td>
<td>3.55</td>
</tr>
<tr>
<td>1882</td>
<td>140,469</td>
<td>526,521</td>
<td>3.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>123,811</td>
<td>458,530</td>
<td>3.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MINERAL PRODUCTION AND PRICES – SILVER

1882-1914*1

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (tons)</th>
<th>Value (£)</th>
<th>Price per ton (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To end of 1881</td>
<td>191</td>
<td>5,025</td>
<td>26.3</td>
</tr>
<tr>
<td>1882</td>
<td>11</td>
<td>360</td>
<td>30.1</td>
</tr>
<tr>
<td>1883</td>
<td>105</td>
<td>1,625</td>
<td>15.4</td>
</tr>
<tr>
<td>1884</td>
<td>4,668</td>
<td>123,174</td>
<td>26.4</td>
</tr>
<tr>
<td>1885</td>
<td>2,286</td>
<td>107,626</td>
<td>47.1</td>
</tr>
<tr>
<td>1886</td>
<td>4,802</td>
<td>294,485</td>
<td>61.3</td>
</tr>
<tr>
<td>1887</td>
<td>12,529</td>
<td>541,952</td>
<td>43.2</td>
</tr>
<tr>
<td>1888</td>
<td>29,851</td>
<td>1,075,737</td>
<td>36.0</td>
</tr>
<tr>
<td>1889</td>
<td>81,545</td>
<td>1,899,197</td>
<td>23.3</td>
</tr>
<tr>
<td>1890</td>
<td>131,040</td>
<td>2,667,144</td>
<td>20.4</td>
</tr>
<tr>
<td>1891</td>
<td>147,780</td>
<td>3,484,739</td>
<td>23.6</td>
</tr>
<tr>
<td>1892</td>
<td>133,355</td>
<td>2,420,952</td>
<td>18.2</td>
</tr>
<tr>
<td>1893</td>
<td>214,260</td>
<td>2,953,589</td>
<td>13.8</td>
</tr>
<tr>
<td>1894</td>
<td>180,326</td>
<td>2,195,339</td>
<td>12.2</td>
</tr>
<tr>
<td>1895</td>
<td>219,380</td>
<td>1,560,813</td>
<td>7.1</td>
</tr>
<tr>
<td>1896</td>
<td>286,936</td>
<td>1,758,933</td>
<td>6.1</td>
</tr>
<tr>
<td>1897</td>
<td>289,018</td>
<td>1,681,528</td>
<td>5.8</td>
</tr>
<tr>
<td>1898</td>
<td>398,568</td>
<td>1,644,777</td>
<td>4.1</td>
</tr>
<tr>
<td>1899</td>
<td>444,626</td>
<td>1,993,744</td>
<td>4.5</td>
</tr>
<tr>
<td>1900</td>
<td>438,837</td>
<td>2,513,874</td>
<td>5.7</td>
</tr>
<tr>
<td>1901</td>
<td>417,027</td>
<td>1,803,979</td>
<td>4.3</td>
</tr>
<tr>
<td>1902</td>
<td>381,058</td>
<td>1,334,819</td>
<td>3.5</td>
</tr>
<tr>
<td>1903</td>
<td>349,064</td>
<td>1,387,648</td>
<td>4.0</td>
</tr>
<tr>
<td>1904</td>
<td>397,220</td>
<td>1,942,284</td>
<td>4.9</td>
</tr>
<tr>
<td>1905</td>
<td>441,447</td>
<td>2,441,856</td>
<td>5.5</td>
</tr>
<tr>
<td>1906</td>
<td>371,938</td>
<td>2,826,542</td>
<td>7.6</td>
</tr>
<tr>
<td>1907</td>
<td>434,078</td>
<td>3,658,632</td>
<td>8.4</td>
</tr>
<tr>
<td>1908</td>
<td>358,729</td>
<td>1,906,275</td>
<td>5.3</td>
</tr>
<tr>
<td>1909</td>
<td>269,306</td>
<td>1,484,641</td>
<td>5.5</td>
</tr>
<tr>
<td>1910</td>
<td>317,697</td>
<td>1,685,704</td>
<td>5.3</td>
</tr>
<tr>
<td>1911</td>
<td>338,468</td>
<td>2,265,669</td>
<td>8.7</td>
</tr>
<tr>
<td>1912</td>
<td>345,307</td>
<td>3,229,614</td>
<td>9.4</td>
</tr>
<tr>
<td>1913</td>
<td>391,261</td>
<td>3,563,804</td>
<td>9.1</td>
</tr>
<tr>
<td>1914</td>
<td>337,018</td>
<td>2,934,065</td>
<td>8.7</td>
</tr>
</tbody>
</table>

## Appendix Four. Wages

### WAGES – NSW, 1853-1900 (£) *1

<table>
<thead>
<tr>
<th>year</th>
<th>carpenter</th>
<th>blacksmith</th>
<th>bricklayer</th>
<th>farm labourer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>country</td>
<td>town</td>
<td>country</td>
<td>town</td>
</tr>
<tr>
<td></td>
<td>p.a.</td>
<td>weekly</td>
<td>p.a.</td>
<td>weekly</td>
</tr>
<tr>
<td>1853</td>
<td>n.a.</td>
<td>3</td>
<td>n.a.</td>
<td>3</td>
</tr>
<tr>
<td>1854</td>
<td>n.a.</td>
<td>3.15s</td>
<td>n.a.</td>
<td>2.15s</td>
</tr>
<tr>
<td>1855</td>
<td>n.a.</td>
<td>3.15s</td>
<td>n.a.</td>
<td>3.15s</td>
</tr>
<tr>
<td>1856</td>
<td>n.a.</td>
<td>3.3s</td>
<td>n.a.</td>
<td>3.4s</td>
</tr>
<tr>
<td>1857</td>
<td>n.a.</td>
<td>3</td>
<td>n.a.</td>
<td>3</td>
</tr>
<tr>
<td>1858</td>
<td>n.a.</td>
<td>2.15s</td>
<td>n.a.</td>
<td>2.13s</td>
</tr>
<tr>
<td>1859</td>
<td>n.a.</td>
<td>2.5s</td>
<td>n.a.</td>
<td>2.5s</td>
</tr>
<tr>
<td>1860</td>
<td>n.a.</td>
<td>2.15s</td>
<td>n.a.</td>
<td>2.15s</td>
</tr>
<tr>
<td>1861</td>
<td>n.a.</td>
<td>2.10s</td>
<td>n.a.</td>
<td>2.10s</td>
</tr>
<tr>
<td>1862</td>
<td>n.a.</td>
<td>2.10s</td>
<td>n.a.</td>
<td>2.10s</td>
</tr>
<tr>
<td>1863</td>
<td>65-80</td>
<td>2.3s</td>
<td>65-80</td>
<td>2.10s-3s</td>
</tr>
<tr>
<td>1864</td>
<td>50-80</td>
<td>2.2-5s</td>
<td>50-80</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1865</td>
<td>50-80</td>
<td>2.2-5s</td>
<td>50-80</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1866</td>
<td>50-70</td>
<td>2.2-5s</td>
<td>50-70</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1867</td>
<td>50-70</td>
<td>2.2-5s</td>
<td>50-70</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1868</td>
<td>50-70</td>
<td>2.2-5s</td>
<td>50-70</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1869</td>
<td>60-80</td>
<td>1.15s-2.5s</td>
<td>60-70</td>
<td>1.15s-3</td>
</tr>
<tr>
<td>1870</td>
<td>60-80</td>
<td>2-3</td>
<td>70-80</td>
<td>2-3</td>
</tr>
<tr>
<td>1871</td>
<td>50-70</td>
<td>2-2.5s</td>
<td>50-70</td>
<td>2-2.5s</td>
</tr>
<tr>
<td>1872</td>
<td>60-80</td>
<td>2-2.5s</td>
<td>60-80</td>
<td>2-2.15s</td>
</tr>
<tr>
<td>1873</td>
<td>80-100</td>
<td>2-10s</td>
<td>80-100</td>
<td>2-10s</td>
</tr>
<tr>
<td>1874</td>
<td>60-80</td>
<td>2-2-10s</td>
<td>60-80</td>
<td>2-10s-3</td>
</tr>
<tr>
<td>1875</td>
<td>60-80</td>
<td>2.5s-2.10s</td>
<td>60-80</td>
<td>2.5s-2.17s</td>
</tr>
<tr>
<td>1876</td>
<td>104</td>
<td>2.5s-2.15s</td>
<td>80-90</td>
<td>2.5s-3</td>
</tr>
<tr>
<td>1877</td>
<td>80-104</td>
<td>2.10s-2.15s</td>
<td>75-100</td>
<td>2.5s-2.10s</td>
</tr>
<tr>
<td>1878</td>
<td>78</td>
<td>2.10s</td>
<td>78</td>
<td>2.5s</td>
</tr>
<tr>
<td>1879</td>
<td>n.a.</td>
<td>n.a.</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1880</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1881</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1882</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1883</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1884</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1885</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>75-80</td>
<td>n.a.</td>
</tr>
<tr>
<td>1886</td>
<td>n.a.</td>
<td>2.15s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1887</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1888</td>
<td>n.a.</td>
<td>2.10s-2.15s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1890</td>
<td>n.a.</td>
<td>2.2-15s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1891</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>2.3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1893</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>2.8s-3.5s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1895</td>
<td>n.a.</td>
<td>2.8s-3.5s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1896</td>
<td>n.a.</td>
<td>2.3s</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1897</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>2.10s-3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1899</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1900</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

*1 Statistics derived from the *NSW Statistical Register, 1851-1900*
# Appendix Five. Gold Mining Statistics

## GOLD MINING STATISTICS, ARALUEN *1

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Miners</th>
<th>No of Miners</th>
<th>Production Oz</th>
<th>Total Oz</th>
<th>Value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>Alluvial</td>
<td>Quartz</td>
<td></td>
</tr>
<tr>
<td>1870</td>
<td>n.a.</td>
<td>n.a.</td>
<td>18,719</td>
<td></td>
<td>18,719</td>
</tr>
<tr>
<td>1871</td>
<td>1,000</td>
<td>1,000</td>
<td>17,542</td>
<td></td>
<td>17,542</td>
</tr>
<tr>
<td>1872</td>
<td>650</td>
<td>650</td>
<td>22,414</td>
<td>600</td>
<td>23,014</td>
</tr>
<tr>
<td>1873</td>
<td>295</td>
<td>275</td>
<td>9,032</td>
<td>90</td>
<td>9,122</td>
</tr>
<tr>
<td>1877</td>
<td>229</td>
<td>92</td>
<td>4,846</td>
<td>253</td>
<td>5,099</td>
</tr>
<tr>
<td>1878</td>
<td>321</td>
<td>92</td>
<td>5,100</td>
<td>358</td>
<td>5,458</td>
</tr>
<tr>
<td>1879</td>
<td>337</td>
<td>92</td>
<td>4,403</td>
<td>124</td>
<td>4,527</td>
</tr>
<tr>
<td>1880</td>
<td>328</td>
<td>81</td>
<td>6,460</td>
<td>153</td>
<td>6,613</td>
</tr>
<tr>
<td>1881</td>
<td>336</td>
<td>74</td>
<td>6,076</td>
<td>174</td>
<td>6,250</td>
</tr>
<tr>
<td>1882</td>
<td>290</td>
<td>71</td>
<td>6,867</td>
<td>153</td>
<td>7,020</td>
</tr>
<tr>
<td>1883</td>
<td>289</td>
<td>60</td>
<td>3,740</td>
<td>84</td>
<td>3,822</td>
</tr>
<tr>
<td>1884</td>
<td>212</td>
<td>35</td>
<td>4,732</td>
<td>93</td>
<td>4,825</td>
</tr>
<tr>
<td>1885</td>
<td>235</td>
<td>48</td>
<td>4,962</td>
<td>225</td>
<td>5,187</td>
</tr>
<tr>
<td>1886</td>
<td>214</td>
<td>47</td>
<td>5,500</td>
<td>20</td>
<td>5,520</td>
</tr>
<tr>
<td>1887</td>
<td>233</td>
<td>44</td>
<td>4,200</td>
<td>44</td>
<td>4,244</td>
</tr>
<tr>
<td>1888</td>
<td>230</td>
<td>34</td>
<td>4,100</td>
<td>28</td>
<td>4,128</td>
</tr>
<tr>
<td>1889</td>
<td>210</td>
<td>39</td>
<td>2,861</td>
<td>159</td>
<td>3,020</td>
</tr>
<tr>
<td>1890</td>
<td>190</td>
<td>40</td>
<td>2,600</td>
<td>75</td>
<td>2,675</td>
</tr>
<tr>
<td>1891</td>
<td>180</td>
<td>632</td>
<td>2,169</td>
<td>31</td>
<td>2,200</td>
</tr>
<tr>
<td>1892</td>
<td>200</td>
<td>28</td>
<td>3,001</td>
<td>199</td>
<td>3,200</td>
</tr>
<tr>
<td>1893</td>
<td>210</td>
<td>29</td>
<td>2,940</td>
<td>260</td>
<td>3,200</td>
</tr>
<tr>
<td>1894</td>
<td>212</td>
<td>36</td>
<td>3,165</td>
<td>135</td>
<td>3,300</td>
</tr>
<tr>
<td>1895</td>
<td>238</td>
<td>27</td>
<td>2,840</td>
<td>167</td>
<td>3,007</td>
</tr>
<tr>
<td>1896</td>
<td>271</td>
<td>20</td>
<td>2,698</td>
<td>75</td>
<td>2,773</td>
</tr>
<tr>
<td>1897</td>
<td>281</td>
<td>30</td>
<td>2,800</td>
<td>12</td>
<td>2,812</td>
</tr>
<tr>
<td>1898</td>
<td>244</td>
<td>26</td>
<td>2,100</td>
<td>n.a.</td>
<td>2,100</td>
</tr>
<tr>
<td>1899</td>
<td>245</td>
<td>27</td>
<td>1,330</td>
<td>21</td>
<td>1,351</td>
</tr>
</tbody>
</table>

## GOLD MINING STATISTICS, BRAIDWOOD*1

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Miners</th>
<th>Alluvial oz</th>
<th>Quartz oz</th>
<th>Total oz</th>
<th>Value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>170</td>
<td>4,000</td>
<td>n.a.</td>
<td>4,000</td>
<td>n.a.</td>
</tr>
<tr>
<td>1873</td>
<td>150</td>
<td>3,250</td>
<td>n.a.</td>
<td>3,250</td>
<td>n.a.</td>
</tr>
<tr>
<td>1877</td>
<td>100</td>
<td>1,040</td>
<td>n.a.</td>
<td>1,040</td>
<td>3,850</td>
</tr>
<tr>
<td>1878</td>
<td>110</td>
<td>1,176</td>
<td>n.a.</td>
<td>1,176</td>
<td>4,500</td>
</tr>
<tr>
<td>1879</td>
<td>110</td>
<td>860</td>
<td>n.a.</td>
<td>860</td>
<td>3,200</td>
</tr>
<tr>
<td>1880</td>
<td>150</td>
<td>1,512</td>
<td>n.a.</td>
<td>1,512</td>
<td>5,700</td>
</tr>
<tr>
<td>1881</td>
<td>150</td>
<td>1,100</td>
<td>n.a.</td>
<td>1,100</td>
<td>4,180</td>
</tr>
<tr>
<td>1882</td>
<td>100</td>
<td>1,166</td>
<td>n.a.</td>
<td>1,166</td>
<td>4,292</td>
</tr>
<tr>
<td>1883</td>
<td>58</td>
<td>739</td>
<td>n.a.</td>
<td>739</td>
<td>2,864</td>
</tr>
<tr>
<td>1884</td>
<td>60</td>
<td>528</td>
<td>n.a.</td>
<td>528</td>
<td>2,000</td>
</tr>
<tr>
<td>1885</td>
<td>72</td>
<td>700</td>
<td>n.a.</td>
<td>700</td>
<td>2,598</td>
</tr>
<tr>
<td>1886</td>
<td>70</td>
<td>310</td>
<td>n.a.</td>
<td>310</td>
<td>1,162</td>
</tr>
<tr>
<td>1887</td>
<td>68</td>
<td>500</td>
<td>n.a.</td>
<td>500</td>
<td>1,875</td>
</tr>
<tr>
<td>1888</td>
<td>94</td>
<td>727</td>
<td>n.a.</td>
<td>727</td>
<td>2,708</td>
</tr>
<tr>
<td>1889</td>
<td>55</td>
<td>1,100</td>
<td>n.a.</td>
<td>1,100</td>
<td>4,125</td>
</tr>
<tr>
<td>1890</td>
<td>45</td>
<td>1,241</td>
<td>n.a.</td>
<td>1,241</td>
<td>4,964</td>
</tr>
<tr>
<td>1891</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1892</td>
<td>96</td>
<td>101</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1893</td>
<td>45</td>
<td>49</td>
<td>n.a.</td>
<td>59</td>
<td>228</td>
</tr>
<tr>
<td>1894</td>
<td>60</td>
<td>935</td>
<td>n.a.</td>
<td>935</td>
<td>3,546</td>
</tr>
<tr>
<td>1895</td>
<td>70</td>
<td>800</td>
<td>n.a.</td>
<td>800</td>
<td>3,080</td>
</tr>
<tr>
<td>1896</td>
<td>140</td>
<td>775</td>
<td>n.a.</td>
<td>775</td>
<td>2,862</td>
</tr>
<tr>
<td>1897</td>
<td>50</td>
<td>920</td>
<td>n.a.</td>
<td>920</td>
<td>3,481</td>
</tr>
<tr>
<td>1898</td>
<td>180</td>
<td>650</td>
<td>n.a.</td>
<td>650</td>
<td>2,500</td>
</tr>
<tr>
<td>1899</td>
<td>181</td>
<td>54</td>
<td>n.a.</td>
<td>54</td>
<td>200</td>
</tr>
</tbody>
</table>

* Statistics are from the mining registrar reports, NSW Department of Mines Annual Report, various years. Statistics for 1872-1873 are derived from the Report of the Commissioner, Southern Gold District, in the Colony of New South Wales, (for 1872), Southern Gold Field Office, Young, 13 January 1873; Report of Commissioner, Southern Goldfields, for 1873, Young, Southern Gold Fields Office, 21 February 1874, Votes and Proceedings, NSWLA, vol.2, 1871-1872. After 1899 the Braidwood data includes production figures from a number of other fields. It also includes dredging for those fields. The dredging figures are set out in the table, Dredging production, Araluen, Jembiecumbene, Shoalhaven River, Mongarlowe and Nerriga.
Appendix Five. Gold Mining Statistics

GOLD MINING STATISTICS, HARDEN*1

<table>
<thead>
<tr>
<th>year</th>
<th>output tons</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1903</td>
<td>165</td>
<td>n.a.</td>
</tr>
<tr>
<td>1904</td>
<td>843</td>
<td>n.a.</td>
</tr>
<tr>
<td>1905*</td>
<td>692</td>
<td>1,624</td>
</tr>
<tr>
<td>1906</td>
<td>5,256</td>
<td>14,259</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,355*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,113**</td>
</tr>
<tr>
<td>1907</td>
<td>12,258</td>
<td>25,690</td>
</tr>
<tr>
<td>1908</td>
<td>11,068</td>
<td>44,682</td>
</tr>
<tr>
<td>1909</td>
<td>11,231</td>
<td>41,276</td>
</tr>
<tr>
<td>1910</td>
<td>9,853</td>
<td>21,278</td>
</tr>
<tr>
<td>1911</td>
<td>9,942</td>
<td>8,921</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,273*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7,860**</td>
</tr>
<tr>
<td>1912</td>
<td>n.a.</td>
<td>18,366</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,040**</td>
</tr>
</tbody>
</table>

*1 Figures taken from Mining Registrar’s reports and from D.S. Clift, The Harden Murrumburrah Gold Field, Geological Survey Report, GS1970/678, November 1970. From 1905 the returns are from the Harden Gold Mining Company
* Concentrates
** Tailings
### Appendix Five. Gold Mining Statistics

#### GOLD MINING STATISTICS, COOMA DIVISION*1

<table>
<thead>
<tr>
<th>year</th>
<th>no of miners</th>
<th>no of miners</th>
<th>production oz</th>
<th>total oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>alluvial</td>
<td>quartz</td>
<td>alluvial</td>
</tr>
<tr>
<td>1886</td>
<td>20</td>
<td>n.a.</td>
<td>20</td>
<td>n.a.</td>
<td>104</td>
</tr>
<tr>
<td>1887</td>
<td>n.a.</td>
<td>n.a.</td>
<td>8</td>
<td>n.a.</td>
<td>110</td>
</tr>
<tr>
<td>1888</td>
<td>n.a.</td>
<td>165</td>
<td>6</td>
<td>21</td>
<td>150</td>
</tr>
<tr>
<td>1889</td>
<td>92</td>
<td>85</td>
<td>12</td>
<td>80</td>
<td>110</td>
</tr>
<tr>
<td>1890</td>
<td>72</td>
<td>6</td>
<td>16</td>
<td>60</td>
<td>106</td>
</tr>
<tr>
<td>1891</td>
<td>82</td>
<td>4</td>
<td>16</td>
<td>70</td>
<td>50</td>
</tr>
<tr>
<td>1892</td>
<td>80</td>
<td>n.a.</td>
<td>10</td>
<td>68</td>
<td>584</td>
</tr>
<tr>
<td>1893</td>
<td>130</td>
<td>n.a.</td>
<td>20</td>
<td>110</td>
<td>214</td>
</tr>
<tr>
<td>1894</td>
<td>132</td>
<td>n.a.</td>
<td>12</td>
<td>120</td>
<td>634</td>
</tr>
<tr>
<td>1895</td>
<td>30</td>
<td>5</td>
<td>35</td>
<td>138</td>
<td>1,075</td>
</tr>
<tr>
<td>1896</td>
<td>90</td>
<td>n.a.</td>
<td>20</td>
<td>70</td>
<td>602</td>
</tr>
<tr>
<td>1897</td>
<td>179</td>
<td>n.a.</td>
<td>21</td>
<td>158</td>
<td>308</td>
</tr>
<tr>
<td>1898</td>
<td>165</td>
<td>n.a.</td>
<td>21</td>
<td>144</td>
<td>300</td>
</tr>
<tr>
<td>1899</td>
<td>170</td>
<td>n.a.</td>
<td>20</td>
<td>150</td>
<td>300</td>
</tr>
<tr>
<td>1900</td>
<td>248</td>
<td>30</td>
<td>178</td>
<td>100</td>
<td>164</td>
</tr>
<tr>
<td>1901</td>
<td>125</td>
<td>8</td>
<td>48</td>
<td>85</td>
<td>299</td>
</tr>
<tr>
<td>1902</td>
<td>83</td>
<td>8</td>
<td>30</td>
<td>61</td>
<td>485</td>
</tr>
<tr>
<td>1903</td>
<td>90</td>
<td>n.a.</td>
<td>28</td>
<td>62</td>
<td>251</td>
</tr>
<tr>
<td>1904</td>
<td>72</td>
<td>n.a.</td>
<td>27</td>
<td>45</td>
<td>450</td>
</tr>
<tr>
<td>1905</td>
<td>109</td>
<td>n.a.</td>
<td>91</td>
<td>18</td>
<td>676</td>
</tr>
<tr>
<td>1906</td>
<td>43</td>
<td>n.a.</td>
<td>40</td>
<td>3</td>
<td>170</td>
</tr>
<tr>
<td>1907</td>
<td>18</td>
<td>n.a.</td>
<td>10</td>
<td>8</td>
<td>74</td>
</tr>
<tr>
<td>1908</td>
<td>43</td>
<td>4</td>
<td>18</td>
<td>25</td>
<td>159</td>
</tr>
<tr>
<td>1909</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>111</td>
</tr>
<tr>
<td>1910</td>
<td>24</td>
<td>n.a.</td>
<td>22</td>
<td>2</td>
<td>102</td>
</tr>
<tr>
<td>1911</td>
<td>10</td>
<td>n.a.</td>
<td>3</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>1912</td>
<td>10</td>
<td>n.a.</td>
<td>5</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>1913</td>
<td>9</td>
<td>n.a.</td>
<td>9</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1914</td>
<td>2</td>
<td>n.a.</td>
<td>2</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

*1 Statistics are from the mining registrar reports, NSW Department of Mines *Annual Report*, various years.
## Appendix Five. Gold Mining Statistics

### GOLD MINING STATISTICS, CULLINGA

<table>
<thead>
<tr>
<th>Year</th>
<th>Tildens &amp; Christmas Gift Output oz</th>
<th>Christmas Gift Extended** Output oz</th>
<th>Democrat Output oz</th>
<th>Number of Employees (excluding Democrat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1894</td>
<td>921</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1898</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1899</td>
<td>1,200</td>
<td>n.a</td>
<td>n.a</td>
<td>23</td>
</tr>
<tr>
<td>1900</td>
<td>3,256</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1901*</td>
<td>1,627</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1902*</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1903</td>
<td>3,688</td>
<td>n.a</td>
<td>n.a</td>
<td>40-50</td>
</tr>
<tr>
<td>1904</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1905</td>
<td>541</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1906*</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1907*</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1908</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1909</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1910</td>
<td>80</td>
<td>n.a</td>
<td>n.a</td>
<td>27</td>
</tr>
<tr>
<td>1911</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>211</td>
</tr>
<tr>
<td>1912</td>
<td>n.a</td>
<td>2,300 oz 1912-1916</td>
<td>353</td>
<td>n.a</td>
</tr>
<tr>
<td>1913</td>
<td>n.a</td>
<td>1,019</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1914</td>
<td>n.a</td>
<td>345</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>

* Later Christmas Gift Gold Mining; **Tailings and slimes production.

### GOLD MINING STATISTICS, DREDGING PRODUCTION:
ARALUEN, JEMBAICUMBENE, SHOALHAVEN RIVER, MONGARLOWE, AND NERRIGA*1

<table>
<thead>
<tr>
<th>Year</th>
<th>Araluen oz</th>
<th>Jembaicumbene oz</th>
<th>Shoalhaven River, Mongarlowe and Nerriga oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>2,833</td>
<td>952</td>
<td>198</td>
</tr>
<tr>
<td>1901</td>
<td>9,713</td>
<td>1,991</td>
<td>2,472</td>
</tr>
<tr>
<td>1902</td>
<td>11,406</td>
<td>1,882</td>
<td>133</td>
</tr>
<tr>
<td>1903</td>
<td>12,415</td>
<td>2,033</td>
<td></td>
</tr>
<tr>
<td>1904</td>
<td>11,898</td>
<td>4,972</td>
<td></td>
</tr>
<tr>
<td>1905</td>
<td>13,111</td>
<td>3,247</td>
<td></td>
</tr>
<tr>
<td>1906</td>
<td>11,436</td>
<td>2,628</td>
<td></td>
</tr>
<tr>
<td>1907</td>
<td>8,520</td>
<td>3,063</td>
<td></td>
</tr>
<tr>
<td>1908</td>
<td>9,482</td>
<td>3,078</td>
<td></td>
</tr>
<tr>
<td>1909</td>
<td>9,711</td>
<td>1,024</td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>10,360</td>
<td>1,369</td>
<td>1,760</td>
</tr>
<tr>
<td>1911</td>
<td>8,860</td>
<td>1,344</td>
<td>1,621</td>
</tr>
<tr>
<td>1912</td>
<td>7,950</td>
<td>654</td>
<td>429</td>
</tr>
<tr>
<td>1913</td>
<td>10,348</td>
<td>499</td>
<td>212</td>
</tr>
<tr>
<td>1914</td>
<td>11,310</td>
<td>938</td>
<td></td>
</tr>
</tbody>
</table>

### GOLD MINING STATISTICS, MAJORS CREEK*1

<table>
<thead>
<tr>
<th>year</th>
<th>no of miners</th>
<th>no of miners</th>
<th>production oz</th>
<th>total oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>alluvial</td>
<td>quartz</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>1870</td>
<td>882</td>
<td>882</td>
<td>1,970</td>
<td>7,506</td>
<td>9,476</td>
</tr>
<tr>
<td>1871</td>
<td>226</td>
<td>226</td>
<td>4,000</td>
<td>465</td>
<td>4,465</td>
</tr>
<tr>
<td>1872</td>
<td>315</td>
<td>300</td>
<td>2,290</td>
<td>384</td>
<td>2,674</td>
</tr>
<tr>
<td>1873</td>
<td>84</td>
<td>49</td>
<td>1,828</td>
<td>287</td>
<td>2,115</td>
</tr>
<tr>
<td>1877</td>
<td>75</td>
<td>8</td>
<td>639</td>
<td>1,158</td>
<td>1,797</td>
</tr>
<tr>
<td>1879</td>
<td>99</td>
<td>7</td>
<td>1,581</td>
<td>117</td>
<td>1,698</td>
</tr>
<tr>
<td>1880</td>
<td>56</td>
<td>9</td>
<td>1,310</td>
<td>337</td>
<td>1,647</td>
</tr>
<tr>
<td>1881</td>
<td>61</td>
<td>3</td>
<td>1,097</td>
<td>233</td>
<td>1,330</td>
</tr>
<tr>
<td>1882</td>
<td>70</td>
<td>n.a.</td>
<td>1,091</td>
<td>27</td>
<td>1,118</td>
</tr>
<tr>
<td>1883</td>
<td>64</td>
<td>n.a.</td>
<td>658</td>
<td>54</td>
<td>712</td>
</tr>
<tr>
<td>1884</td>
<td>59</td>
<td>6</td>
<td>594</td>
<td>37</td>
<td>631</td>
</tr>
<tr>
<td>1885</td>
<td>50</td>
<td>10</td>
<td>266</td>
<td>48</td>
<td>314</td>
</tr>
<tr>
<td>1886</td>
<td>45</td>
<td>4</td>
<td>500</td>
<td>129</td>
<td>629</td>
</tr>
<tr>
<td>1887</td>
<td>61</td>
<td>6</td>
<td>512</td>
<td>337</td>
<td>849</td>
</tr>
<tr>
<td>1888</td>
<td>57</td>
<td>6</td>
<td>450</td>
<td>95</td>
<td>545</td>
</tr>
<tr>
<td>1889</td>
<td>20</td>
<td>4</td>
<td>478</td>
<td>256</td>
<td>734</td>
</tr>
<tr>
<td>1890</td>
<td>45</td>
<td>10</td>
<td>546</td>
<td>1,036</td>
<td>1,584</td>
</tr>
<tr>
<td>1891</td>
<td>66</td>
<td>7</td>
<td>n.a.</td>
<td>1,262</td>
<td>1,262</td>
</tr>
<tr>
<td>1892</td>
<td>92</td>
<td>9</td>
<td>1,065</td>
<td>n.a.</td>
<td>1,065</td>
</tr>
<tr>
<td>1893</td>
<td>96</td>
<td>12</td>
<td>1,145</td>
<td>50</td>
<td>1,195</td>
</tr>
<tr>
<td>1894</td>
<td>115</td>
<td>8</td>
<td>1,340</td>
<td>180</td>
<td>1,520</td>
</tr>
<tr>
<td>1895</td>
<td>124</td>
<td>7</td>
<td>995</td>
<td>821</td>
<td>1,816</td>
</tr>
<tr>
<td>1896</td>
<td>171</td>
<td>7</td>
<td>2,783</td>
<td>946</td>
<td>3,729</td>
</tr>
<tr>
<td>1897</td>
<td>117</td>
<td>7</td>
<td>1,751</td>
<td>359</td>
<td>2,110</td>
</tr>
<tr>
<td>1898</td>
<td>111</td>
<td>4</td>
<td>2,100</td>
<td>70</td>
<td>2,170</td>
</tr>
<tr>
<td>1899</td>
<td>103</td>
<td>7</td>
<td>1,340</td>
<td>200</td>
<td>1,540</td>
</tr>
<tr>
<td>1900</td>
<td>60</td>
<td>20</td>
<td>1,471</td>
<td>353</td>
<td>1,824</td>
</tr>
<tr>
<td>1901</td>
<td>45</td>
<td>2</td>
<td>584</td>
<td>1,074</td>
<td>1,658</td>
</tr>
<tr>
<td>1902</td>
<td>30</td>
<td>2</td>
<td>657</td>
<td>2,750</td>
<td>3,407</td>
</tr>
<tr>
<td>1903</td>
<td>55</td>
<td>n.a.</td>
<td>952</td>
<td>1,295</td>
<td>2,247</td>
</tr>
<tr>
<td>1904</td>
<td>20</td>
<td>21</td>
<td>604</td>
<td>1,973</td>
<td>2,577</td>
</tr>
<tr>
<td>1905</td>
<td>67</td>
<td>68</td>
<td>401</td>
<td>2,115</td>
<td>2,516</td>
</tr>
<tr>
<td>1906</td>
<td>54</td>
<td>55</td>
<td>685</td>
<td>1,375</td>
<td>2,060</td>
</tr>
<tr>
<td>1907</td>
<td>48</td>
<td>52</td>
<td>97</td>
<td>2,412</td>
<td>2,509</td>
</tr>
<tr>
<td>1908</td>
<td>56</td>
<td>60</td>
<td>600</td>
<td>1,109</td>
<td>1,709</td>
</tr>
<tr>
<td>1909</td>
<td>67</td>
<td>68</td>
<td>510</td>
<td>1,174</td>
<td>1,684</td>
</tr>
<tr>
<td>1910</td>
<td>40</td>
<td>40</td>
<td>415</td>
<td>881</td>
<td>1,296</td>
</tr>
<tr>
<td>1911</td>
<td>14</td>
<td>25</td>
<td>422</td>
<td>442</td>
<td>864</td>
</tr>
<tr>
<td>1912</td>
<td>14</td>
<td>14</td>
<td>531</td>
<td>349</td>
<td>880</td>
</tr>
<tr>
<td>1913</td>
<td>24</td>
<td>3</td>
<td>533</td>
<td>348</td>
<td>881</td>
</tr>
<tr>
<td>1914</td>
<td>18</td>
<td>2</td>
<td>534</td>
<td>375</td>
<td>909</td>
</tr>
</tbody>
</table>

### Appendix Five. Gold Mining Statistics

#### GOLD MINING STATISTICS, MONGARLOWE*1

<table>
<thead>
<tr>
<th>year</th>
<th>no of miners</th>
<th>no of miners</th>
<th>production oz</th>
<th>total oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>alluvial</td>
<td>quartz</td>
<td>alluvial</td>
</tr>
<tr>
<td>1870</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>9,100</td>
</tr>
<tr>
<td>1871</td>
<td>350</td>
<td>n.a.</td>
<td>6,350</td>
<td>1,333</td>
<td>7,683</td>
</tr>
<tr>
<td>1872</td>
<td>410</td>
<td>400</td>
<td>2,200</td>
<td>n.a.</td>
<td>2,200</td>
</tr>
<tr>
<td>1873</td>
<td>280</td>
<td>280</td>
<td>5,400</td>
<td>n.a.</td>
<td>5,400</td>
</tr>
<tr>
<td>1877</td>
<td>130</td>
<td>118</td>
<td>248</td>
<td>n.a.</td>
<td>2,400</td>
</tr>
<tr>
<td>1878</td>
<td>129</td>
<td>97</td>
<td>226</td>
<td>n.a.</td>
<td>1,904</td>
</tr>
<tr>
<td>1879</td>
<td>110</td>
<td>93</td>
<td>203</td>
<td>n.a.</td>
<td>2,262</td>
</tr>
<tr>
<td>1880</td>
<td>104</td>
<td>87</td>
<td>175</td>
<td>16</td>
<td>2,863</td>
</tr>
<tr>
<td>1881</td>
<td>110</td>
<td>80</td>
<td>165</td>
<td>25</td>
<td>2,192</td>
</tr>
<tr>
<td>1882</td>
<td>115</td>
<td>40</td>
<td>115</td>
<td>40</td>
<td>1,900</td>
</tr>
<tr>
<td>1883</td>
<td>80</td>
<td>60</td>
<td>140</td>
<td>n.a.</td>
<td>1,651</td>
</tr>
<tr>
<td>1884</td>
<td>90</td>
<td>70</td>
<td>120</td>
<td>40</td>
<td>1,200</td>
</tr>
<tr>
<td>1885</td>
<td>75</td>
<td>60</td>
<td>125</td>
<td>10</td>
<td>900</td>
</tr>
<tr>
<td>1886</td>
<td>80</td>
<td>65</td>
<td>145</td>
<td>n.a.</td>
<td>999</td>
</tr>
<tr>
<td>1887</td>
<td>82</td>
<td>45</td>
<td>117</td>
<td>10</td>
<td>740</td>
</tr>
<tr>
<td>1888</td>
<td>95</td>
<td>43</td>
<td>85</td>
<td>55</td>
<td>650</td>
</tr>
<tr>
<td>1889</td>
<td>80</td>
<td>40</td>
<td>70</td>
<td>50</td>
<td>833</td>
</tr>
<tr>
<td>1890</td>
<td>85</td>
<td>45</td>
<td>85</td>
<td>45</td>
<td>859</td>
</tr>
<tr>
<td>1891</td>
<td>80</td>
<td>45</td>
<td>105</td>
<td>20</td>
<td>1,000</td>
</tr>
<tr>
<td>1892</td>
<td>80</td>
<td>43</td>
<td>113</td>
<td>10</td>
<td>1,234</td>
</tr>
<tr>
<td>1893</td>
<td>108</td>
<td>35</td>
<td>133</td>
<td>10</td>
<td>1,350</td>
</tr>
<tr>
<td>1894</td>
<td>203</td>
<td>40</td>
<td>220</td>
<td>23</td>
<td>2,123</td>
</tr>
<tr>
<td>1895</td>
<td>150</td>
<td>50</td>
<td>180</td>
<td>20</td>
<td>1,569</td>
</tr>
<tr>
<td>1896</td>
<td>142</td>
<td>40</td>
<td>170</td>
<td>12</td>
<td>2,120</td>
</tr>
<tr>
<td>1897</td>
<td>174</td>
<td>60</td>
<td>234</td>
<td>n.a.</td>
<td>2,000</td>
</tr>
<tr>
<td>1898</td>
<td>110</td>
<td>40</td>
<td>150</td>
<td>n.a.</td>
<td>1,692</td>
</tr>
<tr>
<td>1899</td>
<td>135</td>
<td>40</td>
<td>175</td>
<td>n.a.</td>
<td>1,861</td>
</tr>
</tbody>
</table>

## Appendix Five. Gold Mining Statistics

### GOLD MINING STATISTICS, MURRUMBURRAH*1

<table>
<thead>
<tr>
<th>year</th>
<th>no of miners</th>
<th>no of miners</th>
<th>production oz</th>
<th>total oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>alluvial</td>
<td>quartz</td>
<td>alluvial</td>
</tr>
<tr>
<td>1885</td>
<td>90</td>
<td>n.a.</td>
<td>50</td>
<td>40</td>
<td>252</td>
</tr>
<tr>
<td>1886</td>
<td>130</td>
<td>n.a.</td>
<td>60</td>
<td>70</td>
<td>460</td>
</tr>
<tr>
<td>1887</td>
<td>84</td>
<td>n.a.</td>
<td>12</td>
<td>72</td>
<td>143</td>
</tr>
<tr>
<td>1888</td>
<td>150</td>
<td>n.a.</td>
<td>20</td>
<td>130</td>
<td>218</td>
</tr>
<tr>
<td>1889</td>
<td>84</td>
<td>n.a.</td>
<td>20</td>
<td>64</td>
<td>234</td>
</tr>
<tr>
<td>1890</td>
<td>50</td>
<td>n.a.</td>
<td>50</td>
<td>n.a.</td>
<td>620</td>
</tr>
<tr>
<td>1891</td>
<td>40</td>
<td>6</td>
<td>40</td>
<td>n.a.</td>
<td>236</td>
</tr>
<tr>
<td>1892</td>
<td>44</td>
<td>n.a.</td>
<td>50</td>
<td>n.a.</td>
<td>221</td>
</tr>
<tr>
<td>1893</td>
<td>40</td>
<td>n.a.</td>
<td>40</td>
<td>n.a.</td>
<td>252</td>
</tr>
<tr>
<td>1894</td>
<td>560</td>
<td>n.a.</td>
<td>510</td>
<td>50</td>
<td>3,192</td>
</tr>
<tr>
<td>1895</td>
<td>450</td>
<td>n.a.</td>
<td>415</td>
<td>35</td>
<td>6,295</td>
</tr>
<tr>
<td>1896</td>
<td>140</td>
<td>n.a.</td>
<td>90</td>
<td>50</td>
<td>1,609</td>
</tr>
<tr>
<td>1897</td>
<td>6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>6</td>
<td>n.a.</td>
</tr>
<tr>
<td>1898</td>
<td>77</td>
<td>n.a.</td>
<td>70</td>
<td>7</td>
<td>1,663</td>
</tr>
<tr>
<td>1899</td>
<td>97</td>
<td>n.a.</td>
<td>70</td>
<td>27</td>
<td>863</td>
</tr>
<tr>
<td>1900</td>
<td>56</td>
<td>6</td>
<td>36</td>
<td>26</td>
<td>403</td>
</tr>
<tr>
<td>1901</td>
<td>35</td>
<td>n.a.</td>
<td>20</td>
<td>15</td>
<td>181</td>
</tr>
<tr>
<td>1902</td>
<td>138</td>
<td>4</td>
<td>124</td>
<td>18</td>
<td>57</td>
</tr>
<tr>
<td>1903</td>
<td>147</td>
<td>n.a.</td>
<td>12</td>
<td>135</td>
<td>884</td>
</tr>
<tr>
<td>1904</td>
<td>99</td>
<td>n.a.</td>
<td>70</td>
<td>29</td>
<td>673</td>
</tr>
<tr>
<td>1905</td>
<td>40</td>
<td>n.a.</td>
<td>16</td>
<td>24</td>
<td>462</td>
</tr>
<tr>
<td>1906</td>
<td>100</td>
<td>n.a.</td>
<td>20</td>
<td>80</td>
<td>120</td>
</tr>
<tr>
<td>1907</td>
<td>114</td>
<td>n.a.</td>
<td>12</td>
<td>102</td>
<td>52</td>
</tr>
<tr>
<td>1908</td>
<td>151</td>
<td>n.a.</td>
<td>20</td>
<td>131</td>
<td>40</td>
</tr>
<tr>
<td>1909</td>
<td>146</td>
<td>n.a.</td>
<td>n.a.</td>
<td>146</td>
<td>n.a.</td>
</tr>
<tr>
<td>1910</td>
<td>147</td>
<td>n.a.</td>
<td>27</td>
<td>120</td>
<td>17</td>
</tr>
<tr>
<td>1911</td>
<td>76</td>
<td>n.a.</td>
<td>76</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1912</td>
<td>94</td>
<td>n.a.</td>
<td>18</td>
<td>76</td>
<td>100</td>
</tr>
<tr>
<td>1913</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1914</td>
<td>44</td>
<td>n.a.</td>
<td>38</td>
<td>6</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

* Statistics are from the mining registrar reports, NSW Department of Mines, *Annual Report*, various years.
GOLD MINING STATISTICS, NERRIGA*1

<table>
<thead>
<tr>
<th>year</th>
<th>no of miners</th>
<th>no of miners</th>
<th>production oz</th>
<th>total oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Chinese</td>
<td>alluvial</td>
<td>Reef</td>
<td>alluvial reef</td>
</tr>
<tr>
<td>1878</td>
<td>16</td>
<td>20</td>
<td>36 n.a.</td>
<td>374</td>
<td>374 1,042</td>
</tr>
<tr>
<td>1879</td>
<td>20</td>
<td>15</td>
<td>35 n.a.</td>
<td>520</td>
<td>n.a. 1,950</td>
</tr>
<tr>
<td>1880</td>
<td>42</td>
<td>18</td>
<td>60 n.a.</td>
<td>830</td>
<td>n.a. 3,130</td>
</tr>
<tr>
<td>1881</td>
<td>80</td>
<td>10</td>
<td>90 n.a.</td>
<td>1,245</td>
<td>1,245 4,781</td>
</tr>
<tr>
<td>1882</td>
<td>90</td>
<td>8</td>
<td>98 n.a.</td>
<td>1,350</td>
<td>1,350 5,130</td>
</tr>
<tr>
<td>1883</td>
<td>45</td>
<td>8</td>
<td>53 n.a.</td>
<td>1,320</td>
<td>1,320 5,016</td>
</tr>
<tr>
<td>1884</td>
<td>35</td>
<td>8</td>
<td>43 n.a.</td>
<td>1,100</td>
<td>1,100 4,180</td>
</tr>
<tr>
<td>1885</td>
<td>40</td>
<td>8</td>
<td>48 n.a.</td>
<td>500</td>
<td>500 1,937</td>
</tr>
<tr>
<td>1886</td>
<td>46</td>
<td>4</td>
<td>50 n.a.</td>
<td>400</td>
<td>400 1,560</td>
</tr>
<tr>
<td>1887</td>
<td>60</td>
<td>6</td>
<td>60 n.a.</td>
<td>320</td>
<td>320 1,240</td>
</tr>
<tr>
<td>1888</td>
<td>65</td>
<td>6</td>
<td>46 25</td>
<td>450</td>
<td>450 1,743</td>
</tr>
<tr>
<td>1889</td>
<td>80</td>
<td>8</td>
<td>65 15</td>
<td>430</td>
<td>161 2,293</td>
</tr>
<tr>
<td>1890</td>
<td>100</td>
<td>8</td>
<td>88 12</td>
<td>200</td>
<td>150 1,347</td>
</tr>
<tr>
<td>1891</td>
<td>90</td>
<td>8</td>
<td>80 10</td>
<td>320</td>
<td>40 1,400</td>
</tr>
<tr>
<td>1892</td>
<td>78</td>
<td>8</td>
<td>70 8</td>
<td>340</td>
<td>30 1,484</td>
</tr>
<tr>
<td>1893</td>
<td>120</td>
<td>8</td>
<td>110 10</td>
<td>470</td>
<td>470 1,833</td>
</tr>
<tr>
<td>1894</td>
<td>106</td>
<td>6</td>
<td>100 12</td>
<td>1,042</td>
<td>105 1,148</td>
</tr>
<tr>
<td>1895</td>
<td>120</td>
<td>10</td>
<td>110 10</td>
<td>700</td>
<td>90 3,061</td>
</tr>
<tr>
<td>1896</td>
<td>135</td>
<td>15</td>
<td>120 15</td>
<td>919</td>
<td>52 3,767</td>
</tr>
<tr>
<td>1897</td>
<td>138</td>
<td>18</td>
<td>120 18</td>
<td>500</td>
<td>423 3,632</td>
</tr>
<tr>
<td>1898</td>
<td>142</td>
<td>45</td>
<td>97 45</td>
<td>375</td>
<td>375 1,315</td>
</tr>
<tr>
<td>1899</td>
<td>140</td>
<td>45</td>
<td>95 45</td>
<td>385</td>
<td>385 1,532</td>
</tr>
<tr>
<td>1900</td>
<td>125</td>
<td>25</td>
<td>100 25</td>
<td>387</td>
<td>387 1,709</td>
</tr>
<tr>
<td>1901</td>
<td>125</td>
<td>20</td>
<td>115 10</td>
<td>613</td>
<td>69 2,741</td>
</tr>
</tbody>
</table>

* Statistics are from the mining registrar reports, NSW Department of Mines, Annual Report, various years. Series ends in 1901. Thereafter the Nerriga statistics are included in the Braidwood series.
Appendix Six. Base Metal Mining Statistics

### BASE METAL MINING STATISTICS, CAPTAINS FLAT*1

<table>
<thead>
<tr>
<th>year</th>
<th>silver oz</th>
<th>gold oz</th>
<th>lead tons</th>
<th>copper tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881-2</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td></td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td></td>
<td>360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td></td>
<td>239</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td></td>
<td>300</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>45,705</td>
<td>377</td>
<td>125</td>
<td>21</td>
</tr>
<tr>
<td>1888</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1889</td>
<td>116,963</td>
<td>1,400</td>
<td>377</td>
<td>70</td>
</tr>
<tr>
<td>1890</td>
<td>33,857</td>
<td>1,425</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>1891</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1892</td>
<td>91,874</td>
<td>939</td>
<td></td>
<td>1,227</td>
</tr>
<tr>
<td>1893</td>
<td>118,002</td>
<td>784</td>
<td></td>
<td>137</td>
</tr>
<tr>
<td>1894</td>
<td>32,464</td>
<td>817</td>
<td></td>
<td>149</td>
</tr>
<tr>
<td>1895</td>
<td>137,951</td>
<td>2,164</td>
<td>64</td>
<td>350</td>
</tr>
<tr>
<td>1896</td>
<td>69,600</td>
<td>1,251</td>
<td>36</td>
<td>205</td>
</tr>
<tr>
<td>1897</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>1898</td>
<td>206,459</td>
<td>5,765</td>
<td></td>
<td>978</td>
</tr>
<tr>
<td>1899</td>
<td>70,379</td>
<td>1,990</td>
<td></td>
<td>406</td>
</tr>
<tr>
<td>1900-14</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>


### BASE METAL MINING STATISTICS, CURRAWANG*1

<table>
<thead>
<tr>
<th>year</th>
<th>output tons</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866</td>
<td>947</td>
<td>n.a.</td>
</tr>
<tr>
<td>1867</td>
<td>2,500</td>
<td>13,750</td>
</tr>
<tr>
<td>1868</td>
<td>3,000</td>
<td>9,750</td>
</tr>
<tr>
<td>1869</td>
<td>120</td>
<td>200</td>
</tr>
<tr>
<td>1870</td>
<td>297</td>
<td>20,058</td>
</tr>
<tr>
<td>1871</td>
<td>282</td>
<td>21,150</td>
</tr>
<tr>
<td>1872</td>
<td>280</td>
<td>25,000</td>
</tr>
<tr>
<td>1873</td>
<td>150</td>
<td>14,500</td>
</tr>
<tr>
<td>1874-82</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

*1. Statistics derived from the *NSW Statistical Register*, various years. Output from 1866 to 1867 was copper ore, and from 1869 to 1873 was copper matte and regulus.
Appendix Six. Base Metal Mining Statistics

BASE METAL MINING STATISTICS, FROGMORE*1

<table>
<thead>
<tr>
<th>year</th>
<th>output tons</th>
<th>Value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875-76</td>
<td>32</td>
<td>2,600</td>
</tr>
<tr>
<td>1876-78</td>
<td>300</td>
<td>20,000</td>
</tr>
<tr>
<td>1879</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1880</td>
<td>50</td>
<td>3,400</td>
</tr>
<tr>
<td>1881</td>
<td>50</td>
<td>3,250</td>
</tr>
<tr>
<td>1882</td>
<td>118</td>
<td>7,788</td>
</tr>
<tr>
<td>1883</td>
<td>127</td>
<td>8,255</td>
</tr>
<tr>
<td>1884</td>
<td>101</td>
<td>5,757</td>
</tr>
<tr>
<td>1885</td>
<td>6</td>
<td>276</td>
</tr>
<tr>
<td>1886-7</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1888</td>
<td>100</td>
<td>1,100</td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1890</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1891</td>
<td>100</td>
<td>1,500</td>
</tr>
</tbody>
</table>


BASE METAL MINING STATISTICS, KANGIARA*1

<table>
<thead>
<tr>
<th>year</th>
<th>copper tons</th>
<th>lead tons</th>
<th>silver oz</th>
<th>gold oz</th>
<th>value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900-07*</td>
<td>n.a.</td>
<td>450</td>
<td>45,000</td>
<td>375</td>
<td>17,000</td>
</tr>
<tr>
<td>1908</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1909</td>
<td>172</td>
<td>936</td>
<td>91,847</td>
<td>1,075</td>
<td>34,504</td>
</tr>
<tr>
<td>1910</td>
<td>294</td>
<td>2,863</td>
<td>133,777</td>
<td>510</td>
<td>68,806</td>
</tr>
<tr>
<td>1911</td>
<td>108</td>
<td>729</td>
<td>40,268</td>
<td>115</td>
<td>32,656</td>
</tr>
<tr>
<td>1912</td>
<td>250</td>
<td>1,177</td>
<td>93,088</td>
<td>233</td>
<td>45,536</td>
</tr>
<tr>
<td>1913</td>
<td>101</td>
<td>151</td>
<td>12,620</td>
<td>162</td>
<td>12,220</td>
</tr>
<tr>
<td>1914</td>
<td>12</td>
<td>266</td>
<td>22,210</td>
<td>149</td>
<td>8,964</td>
</tr>
</tbody>
</table>


BASE METAL MINING STATISTICS, KYLOE*1

<table>
<thead>
<tr>
<th>year</th>
<th>Ore</th>
<th>Matte</th>
<th>Concentrate</th>
<th>Total Value £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tons</td>
<td>value £</td>
<td>tons</td>
<td>value £</td>
</tr>
<tr>
<td>1901</td>
<td>30</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1905</td>
<td>88</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1906</td>
<td>105</td>
<td>904</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1907</td>
<td>n.a.</td>
<td>3,750</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1908</td>
<td>n.a.</td>
<td>n.a.</td>
<td>558</td>
<td>19,014</td>
</tr>
<tr>
<td>1909</td>
<td>n.a.</td>
<td>n.a.</td>
<td>934.5</td>
<td>29,996</td>
</tr>
<tr>
<td>1910</td>
<td>2,949</td>
<td>33,933</td>
<td>582</td>
<td>17,197</td>
</tr>
<tr>
<td>1911</td>
<td>2,341</td>
<td>27,076</td>
<td>n.a.</td>
<td>3,235</td>
</tr>
<tr>
<td>1912</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>3,243</td>
</tr>
<tr>
<td>1913</td>
<td>134.5</td>
<td>1,417</td>
<td>n.a.</td>
<td>389</td>
</tr>
<tr>
<td>1914</td>
<td>20</td>
<td>100</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

## Appendix Seven. Public School Statistics

### PUBLIC SCHOOL STATISTICS, ARALUEN*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>272</td>
<td>178</td>
<td>156</td>
<td>27</td>
<td>46</td>
<td>26</td>
</tr>
<tr>
<td>1871</td>
<td>284</td>
<td>196</td>
<td>160</td>
<td>24</td>
<td>50</td>
<td>26</td>
</tr>
<tr>
<td>1872</td>
<td>261</td>
<td>177</td>
<td>132</td>
<td>49</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>1873</td>
<td>187</td>
<td>132</td>
<td>98</td>
<td>42</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>1874</td>
<td>176</td>
<td>133</td>
<td>87</td>
<td>40</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>1875</td>
<td>213</td>
<td>146</td>
<td>93</td>
<td>76</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>1876</td>
<td>126</td>
<td>88</td>
<td>82</td>
<td>17</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>1877</td>
<td>126</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>107</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>112</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>119</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>128</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>129</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>109</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>84</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>95</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>81</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>73</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>81</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>65</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>57</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>59</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>50</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>56</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>41</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>30</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>44</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## PUBLIC SCHOOL STATISTICS, ARALUEN UPPER*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>42</td>
<td>28</td>
<td>27</td>
<td>6</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>1873</td>
<td>57</td>
<td>37</td>
<td>38</td>
<td>14</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>1874</td>
<td>45</td>
<td>32</td>
<td>31</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>1875</td>
<td>46</td>
<td>35</td>
<td>27</td>
<td>13</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1876</td>
<td>53</td>
<td>36</td>
<td>27</td>
<td>22</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>1877</td>
<td>47</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>44</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>54</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>58</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>61</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>53</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>46</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>39</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>32</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>26</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>27</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>17</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Appendix Seven. Public School Statistics

### SCHOOL STATISTICS, ARALUEN WEST*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>129</td>
<td>93</td>
<td>56</td>
<td>34</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1871</td>
<td>113</td>
<td>86</td>
<td>52</td>
<td>22</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>1872</td>
<td>124</td>
<td>88</td>
<td>55</td>
<td>47</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>1873</td>
<td>156</td>
<td>116</td>
<td>61</td>
<td>64</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>1874</td>
<td>158</td>
<td>n.a.</td>
<td>67</td>
<td>68</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>1875</td>
<td>112</td>
<td>68</td>
<td>54</td>
<td>50</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>1876</td>
<td>65</td>
<td>38</td>
<td>47</td>
<td>11</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>1877</td>
<td>64</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>57</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>50</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>75</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>73</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>48</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>49</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>56</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>40</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>58</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>50</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>45</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>56</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>51</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>52</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>43</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>40</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>52</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>57</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>32</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PUBLIC SCHOOL STATISTICS, BYWONG*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1895</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>1896</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>1897</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>1898</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>1899</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>1900</td>
<td>32</td>
<td>22</td>
</tr>
<tr>
<td>1901</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>1902</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>1903</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>1904</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>


### PUBLIC SCHOOL STATISTICS, CAPTAIN’S FLAT*1

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887</td>
<td>53</td>
<td>38</td>
</tr>
<tr>
<td>1888</td>
<td>59</td>
<td>40</td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1890</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1891</td>
<td>101</td>
<td>64</td>
</tr>
<tr>
<td>1892</td>
<td>88</td>
<td>57</td>
</tr>
<tr>
<td>1893</td>
<td>92</td>
<td>69</td>
</tr>
<tr>
<td>1894</td>
<td>96</td>
<td>68</td>
</tr>
<tr>
<td>1895</td>
<td>118</td>
<td>88</td>
</tr>
<tr>
<td>1896</td>
<td>174</td>
<td>118</td>
</tr>
<tr>
<td>1897</td>
<td>246</td>
<td>168</td>
</tr>
<tr>
<td>1898</td>
<td>88</td>
<td>47</td>
</tr>
<tr>
<td>1899</td>
<td>186</td>
<td>125</td>
</tr>
<tr>
<td>1900</td>
<td>92</td>
<td>77</td>
</tr>
<tr>
<td>1901</td>
<td>70</td>
<td>51</td>
</tr>
<tr>
<td>1902</td>
<td>64</td>
<td>47</td>
</tr>
</tbody>
</table>

Appendix Seven. Public School Statistics

PUBLIC SCHOOL STATISTICS, CURRAWANG*1

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>78</td>
<td>58</td>
<td>13</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>1871</td>
<td>80</td>
<td>55</td>
<td>13</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>1872</td>
<td>122</td>
<td>75</td>
<td>34</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>1873</td>
<td>129</td>
<td>83</td>
<td>32</td>
<td>53</td>
<td>35</td>
</tr>
<tr>
<td>1874</td>
<td>105</td>
<td>66</td>
<td>38</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>1875</td>
<td>104</td>
<td>64</td>
<td>35</td>
<td>54</td>
<td>13</td>
</tr>
<tr>
<td>1876</td>
<td>83</td>
<td>46</td>
<td>22</td>
<td>44</td>
<td>15</td>
</tr>
<tr>
<td>1877</td>
<td>99</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>90</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>70</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>83</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>82</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>78</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>70</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>56</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>60</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


PUBLIC SCHOOL STATISTICS, FROGMORE*1

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875</td>
<td>26</td>
<td>25</td>
<td>8</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>1876</td>
<td>63</td>
<td>52</td>
<td>14</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>1877</td>
<td>64</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>86</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>52</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>55</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>78</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>77</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>82</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>60</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>51</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>48</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>51</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>52</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>61</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>66</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>44</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SCHOOL STATISTICS, JEMBAICUMBENE*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>57</td>
<td>36</td>
<td>33</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>1871</td>
<td>52</td>
<td>42</td>
<td>33</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>1872</td>
<td>46</td>
<td>32</td>
<td>40</td>
<td>4</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1873</td>
<td>48</td>
<td>32</td>
<td>40</td>
<td>7</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>1874</td>
<td>48</td>
<td>34</td>
<td>41</td>
<td>6</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>1875</td>
<td>35</td>
<td>25</td>
<td>28</td>
<td>5</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1876</td>
<td>33</td>
<td>23</td>
<td>26</td>
<td>4</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>1877</td>
<td>25</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>26</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>31</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>35</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>30</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>32</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>85</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>80</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>79</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>75</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>63</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>54</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>52</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>53</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>47</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>41</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>49</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>41</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>38</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>43</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix Seven. Public School Statistics

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>religion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Church of England</td>
</tr>
<tr>
<td>1872</td>
<td>79</td>
<td>50</td>
<td>16</td>
</tr>
<tr>
<td>1873</td>
<td>96</td>
<td>55</td>
<td>38</td>
</tr>
<tr>
<td>1874</td>
<td>123</td>
<td>83</td>
<td>66</td>
</tr>
<tr>
<td>1875</td>
<td>88</td>
<td>59</td>
<td>42</td>
</tr>
<tr>
<td>1876</td>
<td>87</td>
<td>47</td>
<td>46</td>
</tr>
<tr>
<td>1877</td>
<td>83</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>86</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>75</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>119</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>117</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>132</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>124</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>116</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>109</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>102</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>101</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>103</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>124</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>136</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>122</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>147</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>157</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>153</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>145</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>129</td>
<td>109</td>
<td></td>
</tr>
</tbody>
</table>

Appendix Seven. Public School Statistics

**SCHOOL STATISTICS, McMAHON'S REEF**

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>religion</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1873</td>
<td>29</td>
<td>16</td>
<td></td>
<td>9</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>1874</td>
<td>18</td>
<td>14</td>
<td></td>
<td>7</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>1883</td>
<td>25</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>26</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>26</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>22</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>38</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>43</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>37</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>35</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>30</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>28</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>39</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>65</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>68</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>76</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>59</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 Statistics derived from NSW Council of Education, *Annual Report*, various years. Religion statistics unavailable after 1876. The school was closed until the reopening of the mines in 1883.
Appendix Seven. Public School Statistics

SCHOOL STATISTICS, MONGARLOWE*1 -

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
<th>Wesleyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>87</td>
<td>43</td>
<td>47</td>
<td>19</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>1871</td>
<td>87</td>
<td>49</td>
<td>47</td>
<td>23</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>1872</td>
<td>71</td>
<td>44</td>
<td>30</td>
<td>20</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>1873</td>
<td>88</td>
<td>46</td>
<td>39</td>
<td>19</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>1874</td>
<td>74</td>
<td>50</td>
<td>31</td>
<td>17</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>1875</td>
<td>58</td>
<td>41</td>
<td>23</td>
<td>13</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>1876</td>
<td>60</td>
<td>30</td>
<td>25</td>
<td>13</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>1877</td>
<td>60</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>43</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>45</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>62</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881</td>
<td>58</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td>59</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1883</td>
<td>49</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1884</td>
<td>49</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>41</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>62</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1887</td>
<td>68</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>65</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td>89</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>53</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>52</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1892</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>44</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1894</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>47</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>47</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1897</td>
<td>45</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>38</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>48</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix Seven. Public School Statistics

PUBLIC SCHOOL STATISTICS, SPRING CREEK JACQUA*1

<table>
<thead>
<tr>
<th>year</th>
<th>enrolments</th>
<th>attendances</th>
<th>Church of England</th>
<th>Roman Catholic</th>
<th>Presbyterian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1873</td>
<td>30</td>
<td>28</td>
<td>5</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>1874</td>
<td>29</td>
<td>24</td>
<td>9</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>1875</td>
<td>27</td>
<td>21</td>
<td>20</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>1876</td>
<td>22</td>
<td>19</td>
<td>12</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>1877</td>
<td>23</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1878</td>
<td>27</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>