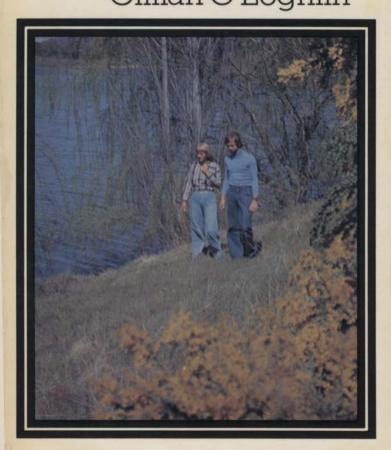


Rambles around Canberra Allan J.Mortlock Gillian O'Loghlin



This book was published by ANU Press between 1965–1991.

This republication is part of the digitisation project being carried out by Scholarly Information Services/Library and ANU Press.

This project aims to make past scholarly works published by The Australian National University available to a global audience under its open-access policy.

Rambles around Canberra

An illustrated collection of short interesting walks in the Canberra region

> Edited by Allan J. Mortlock and Gillian O'Loghlin

National Parks Association of the ACT Inc. Australian National University Press, Canberra 1977

Of all exercises walking is the best. Thomas Jefferson

First published in Australia 1977 Printed in Australia for the Australian National University Press, Canberra © National Parks Association of the ACT, Inc. 1977

This book is copyright. Apart from any fair dealing for the purpose of private study, research, criticism, or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Inquiries should be made to the publisher.

National Library of Australia Cataloguing-in-Publication entry

Rambles around Canberra Bibliography ISBN 0 7081 0543 2. 1. Canberra district — Description — Guide books. I. Mortlock, Allan John, ed. II. O'Loghlin, Gillian Catherine, joint ed. 910.471

Southeast Asia: Angus & Robertson (S.E. Asia) Pty Ltd, Singapore Japan: United Publishers Services Ltd, Tokyo Cover photograph of Walk No. 9, by Mike Finn Designed by ANU Graphic Design Adrian Young TypeGraphics Communications Pty. Limited, 234 Sussex Street, Sydney 2000 Printed by Southwood Press, 80-82 Chapel Street, Marrickville 2204

Foreword

The National Parks Association of the ACT Inc. was formed in 1960 by a group of people interested in the preservation of the environment. They felt that areas of scenic, recreational and scientific value should be allocated for retention in a natural condition for present and succeeding generations to see and use in a manner which would not unduly change the area. The aim a National Park for the National Capital — was, and still is, one of the main interests of the Association. Our other aims and objects are:

promotion of national parks and of measures for the protection of fauna, flora, scenery and natural features, in the ACT and elsewhere, and the reservation of specific areas,

interest in the provision of appropriate outdoor recreation areas,

stimulation of interest in, and appreciation and enjoyment of, such natural phenomena by organised field outings, meetings or any other means, co-operation with organisations and persons having similar interests and objectives,

promotion of, and education for, nature conservation and the planning of land-use to achieve conservation.

Our Association provides members with a program of walks and weekend camps graded to allow people of all ages and capabilities to see and learn about our natural surroundings.

The Association has actively worked towards the preservation of an area including Mt Kelly and Mt Gudgenby, which contains wild and scenic country, and many of the flowers, birds and animals of the ACT. As a result of a submission by the Association in 1963 and subsequent meetings with the then Department of the Interior, the area of this proposed park was increased to allow greater public participation in the enjoyment of the area. The provision of picnic grounds was planned, as well as short walking tracks to points of interest, leaving most of the Park undisturbed by development.

I hope that this book of short walks in the local area will stimulate people, especially family groups, to walk and enjoy being outdoors. I recommend it to all members and to anyone who may wish to see beyond the edge of the road. Canberra, 1976

I. Currie President, National Parks Association

of the ACT

Contents

Foreword Introduction Acknowledgments Bushwalking safety measures The use of the Canberra Nature Park and	iii 1 3 4
Pine Plantations	6
Walks in the Canberra Suburban Area	
I Black Mountain Reserve	10
2 Scrivener Dam and the Green Hills Pine	
Plantation	15
3 The Cork Oaks	24
4 Long Gully Ridge	27
5 Mt Wanniassa	31
6 Mt Taylor	35
Walks to the West of Canberra	
7 Mt Stromlo Forest	39
8 Mt McDonald	45
9 Iron Mine at Paddys River	49
10 Blue Range Hut	54
11 Blundells Flat	59

Walks Further Afield		
12 Kambah Poo	ol to Pine Island	65
13 Mt Tennent		69
14 Easy walk at	Honeysuckle Creek	73
15 Smokers Flat	t	76
16 Mt Jerrabom	iberra	81
17 Molonglo G		85
Recommended	for further reading	90

Walking times

Walking times are given for the return trip at an average to leisurely adult walking pace.

A note of warning

Although every care has been exercised in the writing of this book and the preparation of the maps, the National Parks Association of the ACT, Inc. accepts no responsibility whatsoever for injuries due to accidents and any other untoward incidents that might arise out of its use.

Introduction

The idea for the writing of this book was first raised at a meeting of the committee of the National Parks Association of the ACT during the second half of 1974. The stimulation came from the news that the Federal Government had made a grant to the Association to help with administrative expenses. As it subsequently turned out it was not possible to use this money for the enterprise, but the machine was rolling by then and nobody wanted to draw back. Essentially it was felt that while the more hardy bushwalker was well catered for by the Canberra Bushwalking Club's excellent publication *Bushwalking Near Canberra*, a similar book catering specially to the family group was needed. This then is the aim and object of this collection.

The two principal editors, Allan Mortlock and Gillian O'Loghlin, took on their assigned task with enthusiasm and met regularly for a number of weeks at the ANU Staff Centre to plan the initial operations. A list of possible walks was prepared and the writing began. The individual contributors are listed in the Acknowledgments and to these people our special gratitude must be expressed. Most walks were checked by others subsequently, and many editorial changes were made. We hope that our writers will nevertheless still be able to recognise the bare bones of their contribution.

Towards the last months of the writing, editing and checking it became clear that continued good progress would only be possible if further help could be recruited. We were fortunate that Bernice Anderson, with her earlier editorial experience of *Snowy Moun*-

I

tains Walks, was available and able to take over the majority of the many concluding tasks that needed to be done. Our map drawer Bill Crowle, with his special skills and real personal interest in the project, entered the scene at about this time and once again we felt ourselves fortunate.

Well then, here is the culmination of more than two years of effort. As has already been said, it is aimed at the family bushwalking group, but we of course hope that it will also be used by all those who would like to be guided into some of the more delightful bushland that lies in and near our National Capital. May we wish you no less enjoyment in your outings than we have experienced in preparing this book for you.

Allan J. Mortlock and Gillian O'Loghlin Canberra, August 1976



Some of those who contributed to the writing of this book

Acknowledgments

The following people contributed the initial write-ups of the individual walks:

B. Anderson, J. Andrews, M. Bailey, J. Banks, I. Currie, J. Cusbert (now J. Czhaor), P. Hebbard (two), D. Hawke, K. Hueneke, J. Klovdahl, B. Lee, J. Long, A. Mortlock, G. O'Loghlin, B. Ward and W. Watson.

The photographs used are by:

B. Anderson, J. Cusbert, K. Hueneke, J. Klovdahl and A. Mortlock.

Other acknowledgments are due to: W. Crowle for maps.

K. Smith for the group photograph and a number of enlargements.

H. Hewson-Fruend for botanical drawings.

O. Buckman for Bushwalking Safety Measures.

The Department of the Capital Territory for a note on the use of the Canberra Nature Park and Pine Plantations.

Others who gave useful information include: N. Price and the Forests Branch, Department of the Capital Territory.

3

Bushwalking can be a delightful family activity, and with sensible preparation and proper clothing and equipment it is unlikely that any unpleasant problems will arise.

Most of the walks described in this book are deliberately in the easy category. One or two could be classed as moderate. Some of the precautions described below are consequently really relevant to more extreme conditions than are likely to be met. However, remember Canberra's altitude is 600 metres, and surrounding mountains up to 2000 metres, and in these areas a fine sunny day can easily turn into one of rain, high winds, snow, or swirling mist. In contrast, low lying areas can be a danger in high summer — from sunburn and/or dehydration. A foot caught between rocks, a slip on a wet log, can turn a happy day into a miserable one. Being prepared means that most problems are solved before they occur.

Have a good, detailed map, a compass, and at least three members to a group — or four in mountainous, rocky, or densely timbered country (in case of injury, there is one to stay with the injured, and one or two to seek help). Listen to weather reports. Leave written word of your plans, and estimated time of return, with someone. Don't forget to let them know you are back!

Wear slacks or jeans; several layers of shirts and jumpers are better than one thick one, as they are easily removed and replaced according to weather conditions and activity. Wear long sleeves in exposed sun, and carry a waterproof parka or jacket, preferably with hood, or separate sun-hat. Light walking boots that give ankle support, with rubber serrated soles, and two pairs of socks, preferably pure wool, are best. Good solid lace-up shoes with rubber soles will get you by on an even track, but weak ankles should be supported by an elastic anklet or crepe bandage.

A small 'day pack' is ample for spare clothing, food, and first aid on a day walk. Carry matches in a waterproof container, and compass, map and whistle.

Carry enough food for the day, plus emergency rations (easily carried in health food bars, or mixed nuts, dried fruit, chocolate). Even on a short walk, carry ample water, and basic first aid supplies — a few bandaids (apply at first feel of blister, do not wait), aspirin, anti-sunburn cream, and a three inch crepe bandage and pin.

One member of the party should have some knowledge of first aid and be able to deal with injuries, snake-bite, shock, pressure points, fractures, splinting, bandaging and slings, and methods of carrying an injured person. Especially learn about hypothermia (loss of body heat). Signs and symptoms are not easily recognisable, but if in doubt it must be dealt with immediately — it can be a great danger to any group caught or lost in cold, windy, misty and exhausting conditions. A leaflet 'Survival' is available from National Parks and Wildlife Services, and it is a 'must' for any leader.

On the way, take the pace of the slowest. Constantly check compass bearing, and look back to landmarks. Detail a 'tail-ender' and gather all members together from time to time, especially in dense bush. Rest before becoming too tired, and eat at frequent intervals — food is fuel for warmth and energy.

Do not follow creeks down hill in a mist — although they sometimes take a short route, it could be over a precipice! Scree slopes can often end this way too! If lost, remain calm and avoid panic. Go back to the last known spot, check compass bearing and any landmarks. If still lost, make for high ground, comfort and shelter of rocks or gully. Ration food and water. Light fire. Be prepared to wait twelve to twenty-four hours for help. Stay in group and use emergency signal of three blasts of whistle (or 'coo-ees'), pause, then repeat. Avoid wandering aimlessly and using strength.

By taking these simple precautions, and being prepared for any emergency which may arise, you will ensure that your rambles, whether close to Canberra or further afield, will be pleasant ones.

The use of the Canberra Nature Park and pine plantations

Most of the hills in the Canberra city area are part of the Canberra Nature Park, and have been set aside for nature conservation near the city, recreation and re-vegetation. Planting and management of the Nature Park is under the control of the Conservation and Agriculture Branch of the Department of the Capital Territory.

In general terms, people can walk anywhere at all in the Nature Park, and enjoy a variety of recreational activities — nature study, picnics, sporting activities or just quiet appreciation. However, as the plan relies on the processes of natural regeneration of indigenous vegetation, with some replanting on badly eroded areas, walkers are asked to observe any signs, and to avoid walking on newly planted areas. Large walking groups or individuals using routes on a regular basis are asked to keep to marked tracks or trails. Fires are not permitted in the Nature Park, except in the authorised barbecue areas on Black Mountain, and unauthorised vehicles are not permitted.

Most pine forests in the ACT are open to walkers except for certain areas undergoing establishment or regeneration, where the damage that can be done by fire is very great. In addition, from time to time other parts or the whole of the forest may be closed. This will be because of high winds, or very high fire danger, or some other unusual risk either to the forest or to the people using the forest. If this occurs, warning signs are clearly visible at all access points.

Some pine forest areas are used for grazing sheep, cattle or horses. Walkers should therefore remember to leave gates as they found them.

During the bush fire season a written permit from the Chief Fire Control Officer must be obtained before lighting any fire unless it is in a specified fireplace. L.P. Gas appliances may be used provided that there is no flammable material within two metres of the appliance.

Outside the bush fire season, L.P. Gas appliances and specified fireplaces remain the only types of fires permitted. Open fires or portable solid fuel barbecues may not be used at any time within the forest, or anywhere outside the built-up area.

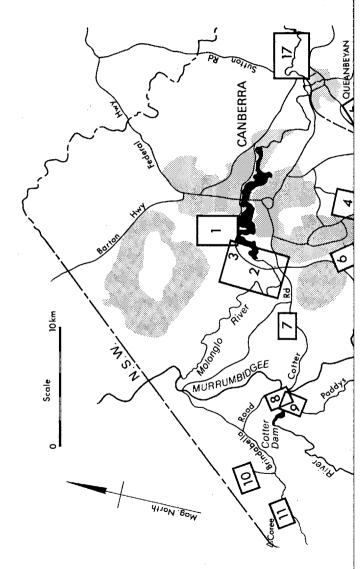
The telephone number 47 0470 is manned twentyfour hours a day for anyone wishing to report a fire.

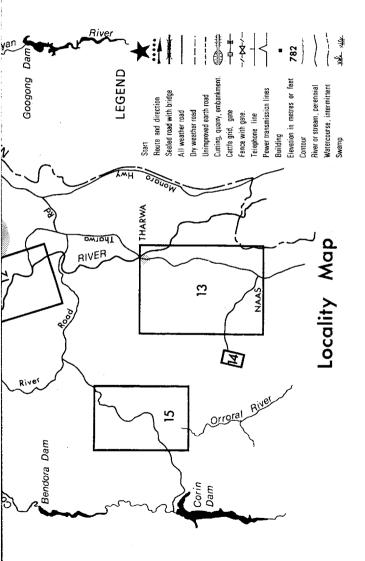
If you are in any doubt about access to a forest area, contact the Officer-in-Charge of the forest on any of the following numbers:

Stromlo	88 1017 or 88 5790
Pierces Creek	88 1094 or 88 1083
Uriarra	36 5131
Kowen	97 2865
Cotter Valley	88 3274

7

Locality map





Walks in the suburban area

1

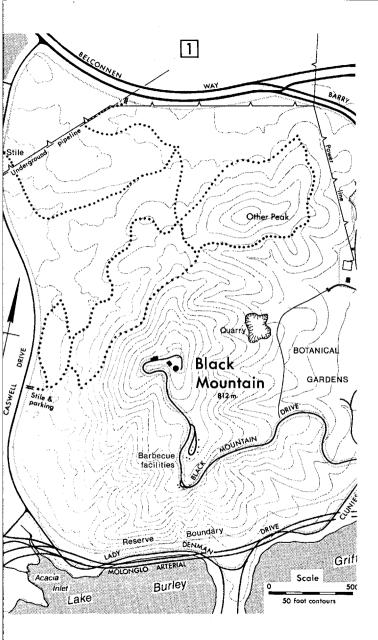
Black Mountain Reserve

Day or half-day walks Maps: Canberra Sheet 8727-111, 1:50,000 Canberra Sheet 8727, 1:100,000

When the site for the city of Canberra was chosen the district had been settled for over 80 years. It was a typical Monaro landscape of grassy flats and tree-clad hills. Burley Griffin used the hills in their natural state as the framework on which to build the formal geometry of the city. Black Mountain defined one end of the water axis and was marked as a 'reservation', although it took nearly 50 years for it to be officially gazetted as a public park.

The name 'Black Mountain' appears on the earliest survey map, made in 1832. No doubt the adjective 'black' refers to its heavy cloak of forest, contrasting with the bleached grassland at its base. This can be described as dry sclerophyll forest. It is dominated by forest trees which have a trunk greater in height than the depth of the crown of foliage. The word sclerophyll means 'hard-leaved', and this refers to many of the plants in this community. 'Dry' in this context is a comparison with 'wet' sclerophyll forest such as occurs in the Brindabella Ranges, where the rainfall would be at least double that of Black Mountain. The dominant tree species are red stringybark (*Eucalyptus macrorhyncha*), scribbly gum (*E. rossii*), brittle gum (*E. mannifera* subspecies *maculosa*), and red box (*E. polyanthemos*), which all occur characteriscally on different aspects of Black Mountain.

10



Botanically, Black Mountain is a unique area, denser and richer in terms of number of species than any of the hills nearby. More than 40 species of orchids can be found on Black Mountain. Many of them are rare or not recorded anywhere else in the ACT. *Grevillea* aff. *alpina* occurs profusely also, while its occurrence elsewhere is very limited.

The reason for the area's botanical richness can be found in its geological peculiarity. Unlike its neighbours, which are igneous, Black Mountain is sedimentary, a fact known to the first settlers, who quarried slate from it to use in building St John's Church, Reid. Until recently Black Mountain Sandstone was thought to be the oldest exposed rock in the ACT but a deposit of State Circle Shale at the southern edge of the reserve, containing Silurian fossils (about 430 million years old), was found to be underlying the Black Mountain Sandstone, instead of overlying it as expected. Black Mountain is now classed as early Silurian. Its present height is due partly to its greater resistance to erosion compared with the deposits around it, and also to the faulting down of the surrounding land on all sides but the north. That is to say, Black Mountain is a small horst in the middle of the Canberra gräben.

In relatively recent times, only three million years ago, scree rolling down the slopes of the mountain choked the flow of the Molonglo River and Sullivans Creek and formed two lakes, one the ancestor of Lake Burley Griffin, the other a swampy expanse covering the present O'Connor and Lyneham.

The soil of Black Mountain is shallow and stony, with an oily surface layer of leaf mould, and it is moderately acidic. In a climate like Canberra's, with fairly severe extremes of temperature and a low rainfall, the vegetation is greatly influenced by the orientation of the land, and this can be noticed in the course of a stroll over Black Mountain. The distribution of many species is the result of a nice balance of their various needs — for sunlight and mild soil temperatures in winter, which they get on slopes facing north; and for moisture and protection from excessive summer heat, which they get on slopes facing south. Shelter from the predominantly westerly winds is a requirement in some cases.

An example of this balance is the scarcity on northerly slopes of shallow-rooted herbaceous plants such as everlastings (*Helichrysum*), trigger plants (*Stylidium graminifolium*), and early Nancys (*Anguillaria dioica*), their places being taken by woody shrubs.



Using a stile to enter the Black Mountain Reserve (Walk No. 1)

Snow grass, which is plentiful on cooler southerly slopes, hardly exists at all on northerly ones, whereas the other common grass, the taller, coarser wallaby grass, flourishes just as well in either situation. At tree level, scribbly gums dominate north-facing slopes but give way to stringybarks on southerly ones. The most spectacular example of this is seen in a steep gully overlooking Acacia Inlet, where the two species are almost completely segregated on opposite sides of the creek bed. It seems that scribbly gums are the most versatile species and can grow fairly well in any situation, whereas stringybarks much prefer a southerly aspect, in which they grow strongly enough to crowd the others out. The pattern of distribution of the trees is quite subtle, and may have something to do with the angle of the bedding of the underlying rock.

Since Black Mountain Reserve is surrounded by a formidable fence, there are stiles provided at four places for access — two off Caswell Drive, one off Belconnen Way, and one near CSIRO (see map). The provision of proper nature trails is still in the planning stage. Nevertheless the present system of tracks has been shown on the map. The size of the reserve and the different access points offer scope for a number of outings to different areas and of longer or shorter duration. With or without a map it is almost impossible to get lost. Walkers are advised to follow existing tracks to avoid trampling the undergrowth. Dogs, horses and trail-bikes are excluded from the reserve, and removal of wildflowers or plants is prohibited.

Numerous species of birds and insects provide great zoological interest on the mountain. Parrots, honeyeaters, flycatchers and other forest birds are numerous, while the reserve supports more than 5000 species of insects. Lizards, snakes and skinks are common in the drier areas, and you can still see the occasional kangaroo, 3 kilometres from the centre of the city.

Scrivener Dam and the Green Hills Pine Plantation

Two walks of three hours each Maps: Canberra Sheet 8729-111, 1:50,000 Canberra Sheet 8727, 1:100,000

The Green Hills Pine Plantation is a subdivision of Stromlo Forest, with the area on the north-east side of the Molonglo River being Green Hills, while on the south-west side is Stromlo proper. Green Hills covers about a 1300 hectare block, 95 per cent of which is planted with *Pinus radiata* and five per cent with other species. It is traversed by the Tuggeranong Parkway and Lady Denman Drive. Lake Burley Griffin borders the forest to the north-east, while the Molonglo flows along the south-eastern, southern and south-western edges. Rolling pasturelands meet the western and northernmost boundaries.

The first conifer plantations in the Territory were established not for timber production but for landscaping and soil conservation purposes. In 1913, T. C. G. Weston, Officer-in-Charge, Afforestation Branch in Canberra, made trial plantings of numerous trees in Westbourne Woods (the area which is now the Royal Canberra Golf Club) and established the first pine forests in the Mount Stromlo region. At that time the land was severely eroded and denuded by rabbits, and early settlers had been clearing away its native vegetation for more than 70 years to provide grazing land for their flocks.

The Monterey pines (Pinus radiata) soon proved to be the hardiest of coniferous trees, as they could withstand the extreme temperatures, high winds and low humidity of the Canberra region, and could also flourish in the relatively poor soil of the Stromlo area. In fact, P. radiata thrived so well there that by about 1927 the forest was developed into a commercial softwood plantation. The volume of wood output for the Green Hills area is approximately 16 cubic metres per hectare per year. To obtain small logs the forest is thinned out intermittently. An annual planting program of 400 hectares on a 40 year rotation basis, implemented in 1967, is still in effect. When the pines are about 18 years old they are thinned, and then again every four or five years thereafter; when they reach maturity at about age 40 they are felled. About three quarters of the total yield from all the pine plantations in the Territory have gone into the building of Canberra and Queanbeyan. Today most of the timber goes into local industry, preserved poles and posts and building materials.

P. radiata itself has several distinguishing features:

I the resinous buds with appressed scales,

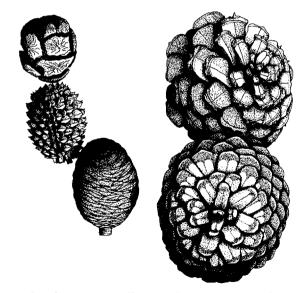
2 the rather bright green foliage (for a pine), and

3 the asymmetric cone due to the expansion on only one side of the basal cone scales.

The tree is planted from seedlings raised in a nursery. It usually grows to a height of over 30 metres and has been widely used for windbreaks and screening where tall growth is required. It is native to three or four limited areas, the main one being the Monterey Peninsula in California, from which it derives its common name. One of the most widely planted forest trees in the southern hemisphere, it often exceeds 150 years in age in the gentle sea coastal fogs of its native haunts, but it cannot be expected to remain a satisfactory tree on the Canberra plains for more than 40 or 50 years.

The name 'Green Hills Pine Plantation' apparently

dates back to about 1930 when Lord Stonehaven, the first Governor General to live in the mansion at Yarralumla, complained of having to look out at bare hills. A grove of Roman Cypress (Cupressus sempervirens) was strategically established on the reserve to improve his view. Indeed, several other groups of trees have been planted in the area over the years. A stand of cedars (Cedrus deodara) can be found on the extreme northern edge of the block, near the cork oak (Quercus suber) forest, while some Western yellow pine (Pinus ponderosa) are more centrally located within the reserve. In addition, on the eastern side of Mount Stromlo natural regeneration of Casuarina stricta has been permitted, as this species had been severely lopped for stock fodder in times of drought. These early plantations now blend in with the native



Cones found in Green Hills Pine Plantation: top to bottom: left: Cupressus sempervirens, Casuarina stricta, Cedrus deodara; right: Pinus ponderosa, Pinus radiata



Looking back at Canberra from a vantage point in the Green Hills Pine Plantation (Walk No. 2)

grass and bushland, providing much of the diverse and attractive scenery of the Scrivener region.

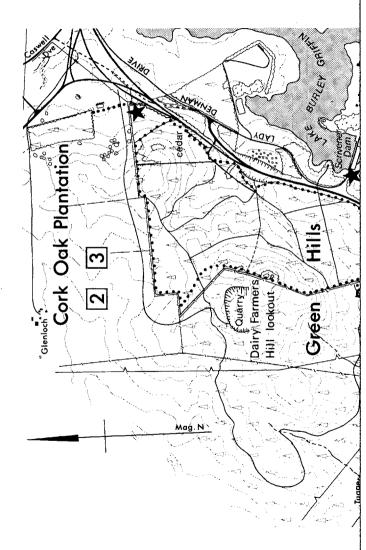
Replacement of indigenous tree cover involves a radical change in the overall composition of the soil and vegetation. Remaining native trees, shrubs and grasses can still persist under pines, often requiring costly removal to lessen competition with the planted trees, but in general terms, once the native woodland is converted it can be returned to its original state only with some difficulty.

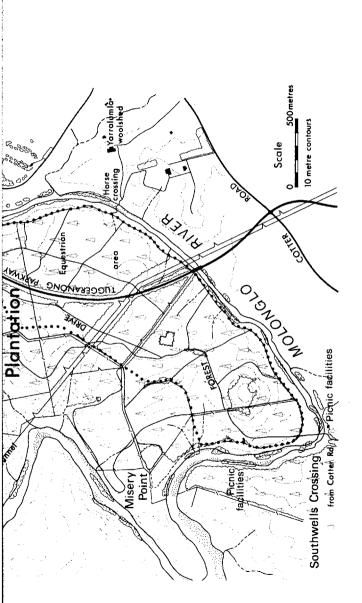
Despite recent conservation measures, native wildlife has ultimately suffered from the clearing of indigenous bush and scrub. Mammals such as kangaroos, wallabies, wombats, rats, mice and echidnas cannot be found in great numbers within the pine plantations, though a surprising variety of birds can be, no fewer than 49 species having been seen and recorded in 1972. Where the pines have been thinned (thus opening up the canopy), where regeneration at all stages is present, and sufficient grass-cover is found, the abundance and variety of birds are at their greatest. If eucalypts and native shrubs are present, birds associated with nectar eating habits can be seen within the plantations. Parrots and rosellas do not actually nest in the pines but come to eat the seeds in the cones there. Insect eating birds, however, such as thornbills, choughs, currawongs and goshawks, often do nest within the reserves.

The geology of the Stromlo-Green Hills area comprises 'mainly massive quartz porphyry with unmapped sediments'. The soil is highly variable in quality, often gritty and low in fertility, with unfavourable moisture characteristics, as it tends either to drain too quickly or to pool above the clay layer. Moist stages alternate with periods of excessive dryness, making the establishment of young plants uncertain. The gravelly terrace soils near the reserve support mainly grassland and savannah woodland vegetation.

As recently as 1967 many gates leading to pine plantations in the ACT were locked. This policy originated in the 1920s with the need to protect forests from fire. However, it is now recognised that a community can derive many advantages from a pine plantation, including educational and scientific benefits and recreational outlets. This multi-purpose concept is the basic principle of European forestry, and has been applied to our Australian environment.

In the Green Hills Pine Plantation the area between the parkway and the river is reserved mainly for horses. The rest of the forest is intended for multi-recreational use, and visitors can travel through it by car, bicycle, trail-bike, horse or on foot. Here they may enjoy such pastimes as picnicking, fishing, orienteering, observing wildlife and collecting cones, feathers, firewood, edible fungi, etc. Horse-riding and long-distance running are sports which benefit from the dense shade





afforded by the pines and from the general absence of long grass. The forest is especially popular for winter and spring use as spaces within it are pleasantly warm.

At the present time Green Hills can be entered at three points (see map). Cars can enter only at the north-eastern corner, from Lady Denman Drive. Pedestrians can gain access at the north side of Scrivener Dam, where a car park is provided. Entry next to the Tuggeranong Parkway Bridge is discouraged as traffic is too busy at that point, and parking there is virtually impossible. The approach from Cotter Road (known as Southwells crossing) is periodically closed during times of major flood reconstruction, but is otherwise open to pedestrians, bikes and horses. The forest is closed to the public in very wet and in very dry weather, while sections are closed during certain forestry operations such as logging and roadmaking.

For the sake of the visitor's convenience, two circuitous routes are indicated on the map. Each, if taken leisurely, should be about three hours in duration, with a stop for lunch. Trail-bike riders must not use the paths labelled 'Horses Only', but hikers may walk on them, exercising reasonable care. It is suggested that for more intimate contact with the forest, the hiker follow the narrower, more secondary tracks. One could easily spend a full day exploring the somewhat extensive network these trails have to offer.

It is not necessary to begin the walks at Scrivener Dam, as either of the other two entry points can be used. If the route along the Molonglo is chosen, one can quickly see where flood waters have been and where erosion has occurred. The places where growing pines have been thinned are also evident. As the visitor walks further along the trail he can look back and see a new angle of the dam, stands of graceful willows, tea-trees and *Casuarina cunninghamii* along the river's edge and the expanse of pastureland in the distance. A few wildflowers are nestled in the tall kangaroo grass, but one must look closely to find them. Ducks and other water birds are also in the area, and their calls are unmistakable. It is not unusual to see crimson and eastern rosellas, king parrots, galahs and bronzewinged pigeons darting about, and the woods continually ring with lovely bird songs, particularly in the spring and autumn. The pines themselves give a mottled, dappled effect in the sunlight, and the tranquil piney sighs offer a sense of oneness with nature. The visitor may use the prepared picnic spots at the southwestern end of the plantation (see map) or stop at some undeveloped place during the walk. A word of caution must be added here. The river area is subject to sudden flooding, as the posted signs indicate, and visitors must watch for rapidly-rising water and listen for warning sirens.

The more challenging, and perhaps more satisfying walk is the one that takes the hiker to the top of Dairy Farmers Hill Lookout. From here he is rewarded with a most unusual 360° panorama of Canberra. To the north and east is a view including Black Mountain, Civic, the National Library, the carillon, Parliament House, some of the Australian National University, Yarralumla, the intersection of Lady Denman Drive and Tuggeranong Parkway, Weston Park, and, of course, the lake. In a south-easterly to a south-westerly direction one can see Woden, Weston and the Brindabella Ranges, and to the west, undulating countryside. In order to take this walk from the dam the visitor must first follow the horse trails to the parkway's underpass. From here he is free to take whichever route he wishes. It must be pointed out, though, that the road from the south up Dairy Farmers Hill is very steep toward the top, and hikers are encouraged to walk along its edge, within the forest. Cars cannot make this grade, and a barrier of

23

logs has been placed across the road to the top.

A few other features of the forest should be mentioned here. A main artery (Forest Drive) cuts through the centre of the plantation and its use is especially recommended to drivers in the area. Also, there are several other high points in the woods with views: one is called Misery Point for unknown reasons (see map); there are two vantage points on the northern edge of the plantation, one affording a view of Black Mountain and the lake, while the other, deep within the cedars, gives views over the tree tops towards the Woden Valley; two others offer views of Canberra which include the Governor General's mansion, but at present they are accessible only from Lady Denman Drive, as the new highway sets them apart from the rest of the plantation.

3

The Cork Oaks

Walking time one hour Map: Canberra Sheet 8727-111, 1:50,000

Even many long-time district residents may not be aware that there is, in Canberra, a plantation of cork oaks. The idea of a plantation of cork oaks first came from Walter Burley Griffin, who, in 1916, sent some seeds of *Quercus suber* to Mr Weston, then Officer-in-Charge, Afforestation Branch, to add variety to the landscaping around the future lake area. A further consignment of acorns from Spain was lost in transit in 1918, when the ship carrying it was torpedoed. However, by 1920 8580 cork oaks and 1006 acorns had been planted at the present site which occupies a rectangle, approximately 500 metres by 200 metres, on the rural lease worked by Mrs Smith and her family.



Inside the plantation of cork oaks (Walk No. 3)

In order to visit the plantation, travel along Lady Denman Drive approximately 0.8 km south of its junction with Caswell Drive or 1.8 km north of Scrivener Dam. Before the construction of the Molonglo Arterial commenced, there was a turn-off labelled 'Forest Drive' at the edge of the Stromlo Pine Forest on the side away from the lake. The construction of a temporary haul road between the Pine Forest and the Cork Oak Plantation about 300 metres to the north was under way at the time of writing. It is therefore not possible to describe with certainty the best means of access.

Park your car in a convenient place, wander across the paddock past a dam and enter the grove of oaks. It is a pleasant walk to stroll among the trees to the far side and return along one of the outer edges. The scars of the only harvest may still be seen and cork is lying all around on the ground.

The trees vary greatly in size, with some fine specimens around the outer rim where close planting, about 2000 per ha., has occurred in a strip about 20 metres wide. In Europe it is customary to plant oaks and other hardwoods at very close spacings (e.g. 1.5 metres apart), and tree form may have been better if planting over the entire area had been closer. Oaks are also sensitive to slight changes in slope, and tree growth is more substantial in the gullies and on the flatter areas where the soil is deeper. Tree size, crown vigour, and foliage colour are distinctly poorer on the slopes and spurs.

The cork has only been harvested once. That was in 1954 when it was sent to Melbourne for processing. However, the Forests Branch of the Department of the Capital Territory is considering managing the stand for the purpose for which it was established, as a source of cork for a range of local craft uses.

The shade of the trees and the plentiful supply of acorns attract cattle into the plantation. These may display curiosity but will not hinder visitors. The surrounding property has been maintained by the Smith family as a sanctuary for all wild animals and birds, which are plentiful in the area.

Returning from this short but interesting excursion, you can see across the paddocks to the large area of Green Hills Pine Plantation, part of the Stromlo Forest, described as a separate walk. You can also cross Lady Denman Drive for a pleasant stroll along the lake shore.

Long Gully Ridge

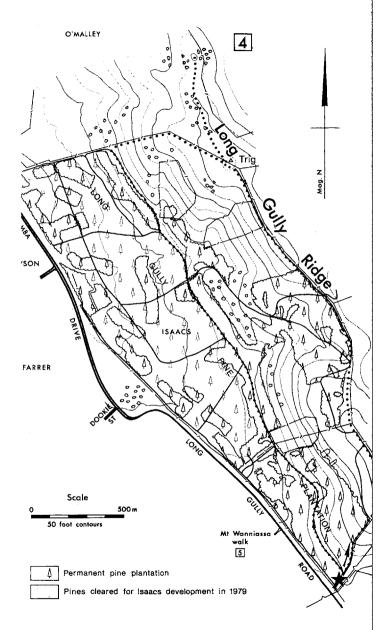
Walking time two hours Maps: Canberra Sheet 8727-111, 1:50,000 Canberra Sheet 8727, 1:100,000

If you do not linger this six kilometre walk can be completed in under two hours. The starting point is a gate on the northern side of Long Gully Road, 1.6 km beyond Dookie Street and Yamba Drive (Dookie Street is the most southerly road branching off Yamba Drive into the suburb of Farrer). Coming from Woden the gate is just short of the Long Gully dump. Drive through the gate and park nearby.

The walk begins up a steep rough track, heading in a north-easterly direction, with a fence on the right and pines on the left. Note that many birds inhabit the borders of the pine forest. Do not follow the track when it swings to the left along the edge of the pines, but continue along the fence line up the cattle track. Near the top of the hill you will meet an old road which you can follow uphill. Pause and regain your wind on the top of the hill and enjoy the all-round view. To the west is Mt Taylor and Tidbinbilla with the Brindabella Ranges beyond.

The hills you are walking on are part of the Deakin volcanics, laid down in the Late Silurian age (about 400 million years ago) when the land was shallowly submerged. These rocks cover most of Woden, part of Weston Creek and Red Hill ridge and through to Belconnen. They are mainly acid lava and tuff (compact volcanic detritus) and minor sandstone.

After these rocks were formed the Yarralumla



formations of shale, limestone, sandstone and tuff were laid down and can be seen in the restaurant area of Red Hill. Soon after that, large earth movements occurred, the land rose above the sea, and as far as we know has never submerged since. There were three of these mountain-building movements. In the pauses between movements, igneous rocks were intruded into the earth's crust, and that accounts for the dark massive porphyritic dacite of Mugga Mugga, which you can see being quarried. Before and after the last movement, volcanoes broke out on the land and poured out lava and ash. We can see the remains of these volcanoes, even after 350 million years, in Mt Ainslie, Mt Majura and Mt Gooroo, the hills in a line somewhat east of north.

The hill that is older than any of those already mentioned is Black Mountain. The sandstone of that hill was laid down in the early Silurian age (440 million years ago). Black Mountain is surrounded by three faults, along which the older rocks were lifted above the surrounding younger rocks by more than 100 metres. So, the hills you can see nearby, in order of age, are Black Mountain, the oldest, this ridge and Mt Taylor, Red Hill, Mugga Mugga, and Ainslie, Majura and Gooroo, the youngest.

The walk is now an easy undulating one along the ridge. Ignore tracks leading off to the left, which would send you into the pine forest. After about three kilometres you will reach a trig point inside the fence on your right. An optional part of the walk is to go through the gate and follow the ridge further, walking over three hillocks, and heading towards Black Mountain. After about one kilometre the ground drops away more rapidly, and the ridge ends. Mugga Mugga with the gaping noisy quarry is across the valley to the right. At this stage we suggest you return to the trigpoint and the gate. On the higher parts of the ridge you will note the unsightly and uncomfortable invasion of exotic weeds, mainly thistles and horehound. These weeds have prospered as a result of the 'stock camp' effect. The animals have preferred camping spots, in this case the tops of hills, but the same effect can be seen under large isolated trees. Their manure causes a nitrogen/ phosphate balance change which kills the native plants and encourages the exotic weeds. It has been reported that even thirty years after grazing has ceased the weeds continue to prosper, partly because fires, which could encourage native growth, do not occur among the dense green weeds.

Resume your walk in a northerly direction on the track heading towards the Phillip offices. The track gradually turns left and eventually peters out. At this stage follow the fence downhill. You are now heading west, and (at least at the time of this book's publication) towards the most northerly end of the Long Gully Pine Plantation. On the edge of the pines you will meet a track. Turn left and head along this track, mainly through the pines. After about three kilometres you will return to your car. Again ignore cross tracks.

After the pine forest is felled a new suburb of Isaacs is to be built here. When that happens it is planned to build a drainage channel above the suburb, and it is expected it will be possible to walk along a track above it for the return journey.

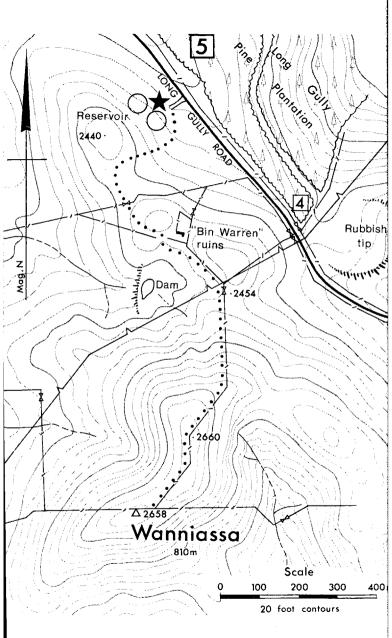
Mt Wanniassa

Distance from reservoir to trig. point: two kilometres Walking time one and a half hours Map: Canberra Sheet 8727-III, I:50,000

Mt Wanniassa, 810 metres high, is situated on the southern boundary of the Woden Valley suburb of Farrer. This is a very pleasant, short, and easy walk, ideally suited for a family outing, and affording rewarding panoramic views through an entire 360°, including the Brindabella Ranges to the west, Black Mountain to the north, Queanbeyan to the east, and to the south the new urban development of Tuggeranong.

Access is from the Long Gully Road, south of Farrer. Leave Canberra via the Woden Valley, following Yamba Drive to its present termination at the junction of Dookie Street. Continue to the left on Long Gully Road. About 1.5 km from Dookie Street there is a turn-off to the right, leading to a concrete water storage reservoir which is clearly visible from the road. There is ample parking space for cars at the reservoir.

After leaving the cars, follow the track up the hill to the left of the reservoir. On reaching the saddle, where a number of tracks converge, you will see a gate to the left. Pass through the gate, and continue straight ahead along the track. A short distance further along you will come to the concrete slab foundation of a house. This was built about 1961 and was called Bin Warren. The government resumed most of the land for subdivision in the late 1960s. At this point



the track turns right and downhill through a gap in the fence. Keep well uphill of the dam until the track again runs alongside the fence, which can be followed all the way from here to the trig point. The property on the eastern side of the fence is Rose Cottage.

The lower slopes of Mt Wanniassa are covered in medium timber, typical of the open woodlands around Canberra. The most common eucalypts are the yellow box (*E. melliodora*). Silver wattle (*Acacia dealbata*) makes a colourful show in the spring. There is also a number of introduced species, an occasional *Pinus radiata*, and a stray cypress. Wildflowers are prolific, especially if there have been good winter rains. In the early spring the white bearded heath (*Leucopogon attenuatus*) covers the slopes, and there are some magnificent clumps of the nodding blue lily (*Stypandra glauca*) among the timber. As the spring advances, the succession of natives includes the guinea flower (*Hibbertia obtusifolia*), parrot pea (*Dillwynia retorta*), purple fringed lily (*Thysanotus tuberosus*), and large colourful patches of Australian bluebell (*Wahlenbergia* species).

Higher up the slope the timber is scattered, and introduced grasses predominate. Walking is easier if you keep close to the fence, because of large patches of thistles, rocky outcrops, loose stones and hidden holes. Geologically, Mt Wanniassa is part of the Deakin Volcanics — a formation of acid volcanic rocks (tuffs, rhyolites) interbedded with tuffaceous sandstone which cover large areas west and south of Canberra. This is a very fine-textured rock of a pink to purplish colour, crowded with intensely rounded and polished grains of quartz and felspar about 2 mm in diameter. The rock is known as 'purple tuff'.

The rock is known as 'purple tuff'. On reaching the top of the ridge, pause at the first survey marker and look back over the Woden Valley. On the right is the Long Gully Pine Plantation, and in the distance beyond this ridge you can see Queanbeyan, the Tralee speedway, and the timber processing plant on the Monaro Highway. Wanniassa trig is a further 300 metres along the ridge.

From the trig point you look south over the broad flat valley known as Tuggeranong, now the site of Canberra's third new town. The Tuggeranong homestead can be located approximately due south at the foot of Tuggeranong Hill on the far side of the valley. It is hidden in a clump of trees beside a redroofed building.

The suburbs of Wanniassa, Fadden and Gowrie will extend close to the foot of Mt Wanniassa where not long ago three properties, each with its homestead, existed. Most of the south-western slopes, including the trig point, were part of Erindale, which was established in 1865. Erindale homestead was demolished in 1975 to make way for a major shopping centre in the suburb of Wanniassa.

A track in front of the Kambah Lane Pine Plantation leads eastwards to Karralika, a modern brick house among the eucalypts. It was built in 1968 and was resumed by the government in 1970, and is at present held by a government department, pending its use for a departmental or community project.

To the south-west the valley of the Murrumbidgee can be most easily located at Pine Island where the pine plantation draws a dark green line of vegetation along the river bank. The historic homesteads of Lambrigg, Lanyon, and Cuppacumbalong are further south up the valley of the Murrumbidgee.

As the north-western slopes of Wanniassa are steep and thickly timbered, it is best to return by the same route.



Mt Taylor

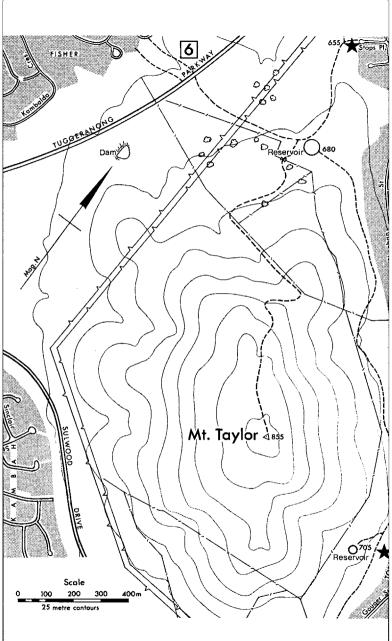
Day or half-day walks Map: Canberra Sheet 8727-111, 1:50,000 Canberra Sheet 8727, 1-100,000

Mt Taylor, with an elevation difference over the surrounding country of 200 metres, is one of the dominant features of the Woden and Tuggeranong Valleys. Its summit provides panoramic views in all directions, especially towards the Brindabellas in the west and Canberra City to the north-east. The mountain's role as an important visual backdrop and recreation area of approximately 160 hectares is significant and will become still more so when the Tuggeranong Valley is fully settled.

Like many of the hills around Canberra, Mt Taylor is a volcanic structure dating back to the Silurian period (400 million years ago). Soils on the mountain are shallow and rocky with limited amounts of organic matter on the surface. Where trees have been removed accelerated erosion has taken its toll in the form of sheet wash, incised gullies and massive slumping.

The mountain was used for grazing sheep and parts of it were first cleared about 1860 with more extensive clearing in 1880. In 1913 the Federal Government took over the property and leased part of it as smaller holdings. This was followed by further clearing. In 1965 the first four-wheel drive track up the northern end was constructed and this was soon followed by the recreational use of the mountain. Walking tracks were developed in 1972 and 1973.

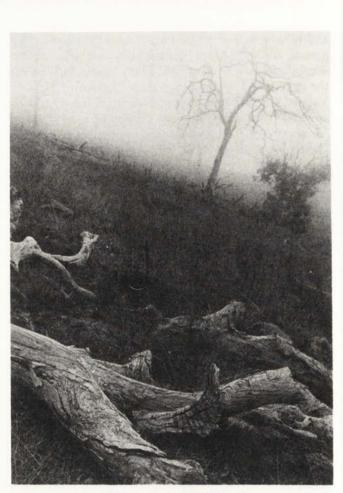
As a result of ringbarking and clearing in the 1860s



and 1880s much of the mountain is now dominated by grasses and herbs and sparsely covered with native shrubs and mature eucalypts. This is particularly so on the eastern and north-eastern slopes facing the Woden Valley. The southern slopes on the other hand are well covered with a discontinuous canopy of mealy bundy (E. nortonii), and broadleaved peppermint (É. dives). Other slopes are covered with open woodland dominated by red gum (E. blakelyi), yellow box (E. mellio-dora) and red box (E. polyanthemos). Tree species with less frequent occurrence are apple box (E. bridgesiana), scribbly gum (E. rossii), kurrajong (Brachychiton populneum) and Casuarina stricta. The last has been a valuable source of fodder in times of drought and is now recolonising some of the open areas. Another vegetation type which can be easily identified is that now growing on old sheep camps. A particularly large area occurs on the flat summit and is now dominated by fleshy weeds such as fat hen (Chenopodium album), hoary mustard (Hirschfeldia incana) and horehound (Marrubium vulgare). In a collection made in April-May 1973 the author identified a total of 136 species from different parts of the mountain. Further sampling at other times of the year might bring this closer to 200 or more.

Numerous walks of different lengths, roughness and direction can be taken on Mt Taylor. For a climb to the summit, cars can be left at either of the large water tanks. Access to the most northerly one is fromWaldock Street and Stops Place, Chifley, and a four-wheel drive roadway leads to the summit from here, although vehicles are no longer permitted to use it. Another interesting climb to the summit begins from Hawker Street, Torrens.

Mt Taylor is an interesting hill to walk on without necessarily aiming for the top. Although there is no particular marked route, a ramble on the south-



Mt Taylor in fog (Walk No. 6)

western slopes will take you through some beautiful and diverse stands of timber and around some fascinating rocky outcrops in the south-west. With time taken out for photography, lunch, rest stops and nature study it could be made into a most interesting and leisurely day walk.

Walks to the West of Canberra

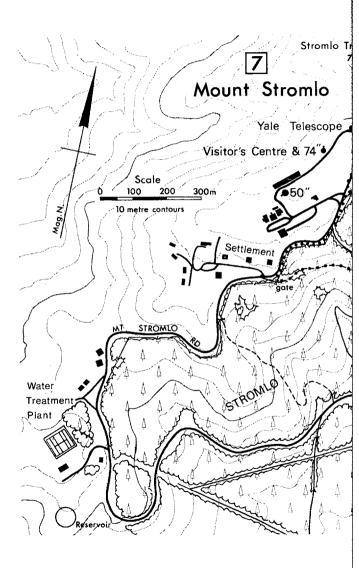
7

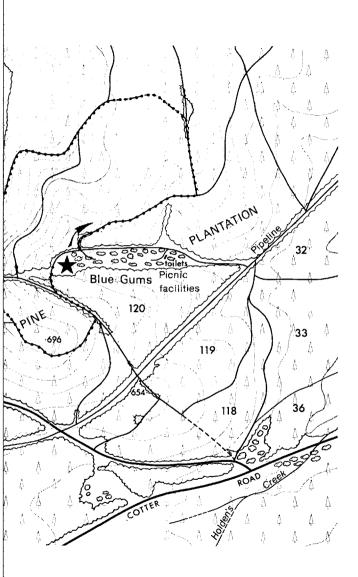
Mount Stromlo Forest

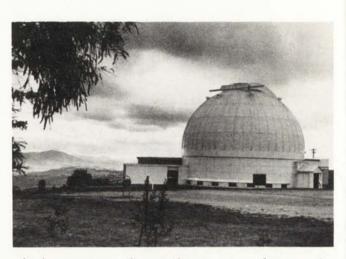
Walking time two hours Map: Canberra Sheet 8727-111, 1:50,000

About 16 kilometres west of the centre of Canberra along the main Cotter Road is the turn-off to Mt Stromlo Observatory. Here is a good starting point for exploration of some of the oldest soft-wood plantations in the ACT. The Mt Stromlo area before 1915 had been extensively cleared by the early settlers for grazing and little of its natural dry sclerophyll forest remained. The Lands Branch of the Federal Capital Commission was originally in control of forestry activities in the Territory and the eroded, rabbit-infested slopes of Stromlo were first planted with Pinus radiata in 1915. In early 1952 over 350 ha. of this experimental plantation were destroyed by bushfires sweeping up from the Molonglo and Murrumbidgee Valleys through the dry grasslands. These 37-year-old trees had provided an ample reservoir of seed for self-generation, which accounts for the thick irregular stands of pines there today. Remnants of the oldest plantings can be seen in Compartments 36, 33 and 32. In the latter two stands in early mornings or the quiet of dusk there are often seen groups of grey kangaroos and swamp wallabies.

In 1967, after the initial thinnings of 1956, a start







The dome containing the 74" telescope on top of Mt Stromlo (Walk No. 7)

was made to open these forests to the public. Walkers had always been welcome but access by vehicles was permitted and encouraged only after swing gates were installed. Three barbecue areas were built in Compartment 120, the corner of 101 and 32, and very recently in the trail-bike area of 141 along the Uriarra Road.

Bird observers may like to concentrate on the more open areas in from the barbecues and along Holdens Creek where there is plenty of understorey cover. Within the older parts of the plantation the pine canopy is thick and birds tend to avoid these parts where only a thick mat of pine needles covers the ground.

For the more mobile, take the first turn to the right on the Mt Stromlo road, passing through the white swing gates. At 0.2 km take the left fork and proceed for another 0.5 km then at the signpost 'Fireplaces' turn left between Compartments 119 and 124. At approximately 0.3 km from the last turn you will see the start of the picnic area where there is a new toilet block and two widely separated barbecue fireplaces and two tables and bench seats. Adjacent to the fireplaces there are usually stacks of cut timber or pine cones for the fires. The surrounding swampy area and soak from the creek ensures a grassy picnic spot with willows nearby but care is needed to park on higher ground to avoid being bogged. This is the place to leave the cars and proceed on foot. In the late afternoon you may see speckled warblers or scarlet robins feeding among the fallen branches near the willows and clumps of coppiced eurabbie (*Eucalyptus bicostata*).

From the cars walk along the road through the blue gum stand and take the right hand road up the slope for about five minutes, keeping to the curving road till you turn left between the trees marking Compartments 123 and 128. This road goes sharply uphill for about four minutes when it forks. Take the left fork (still climbing) beside Compartment 129. There is no sound but the wind in the pines as you stroll along this road for five to six minutes to a T-junction.

Turn left and follow this road for about four minutes ignoring the downward fork at left. There is a glimpse of Canberra through a gap in the trees. Another seven minutes walk further on you will be rewarded with a view through the tree gap to Duffy and Weston Creek. Continuing upward along the same path brings you to a gate and the fence of the Mt Stromlo Observatory Reserve — just forty minutes from the cars at a 'family 'pace.

Here you meet the main Observatory road leading to the Administrative Offices (Duffield Building) and the six observatory domes running for about a kilometre along the ridge lying roughly north and south, at an elevation of 760 metres.

Adjacent to the building housing the 74 inch telescope there is a Visitors' Centre with an excellent display of panels giving the history of the observatory and some details of the scientific work carried out both there and at the Siding Springs Observatory in the Warrumbungle Range. This centre is open from 9.30 am to 4.00 pm each day.

From the visitors' car park beside these buildings there are magnificent views of the western and southern ranges and the Murrumbidgee Valley.

Extensive planting of native shrubs by the Mt Stromlo staff has resulted in attracting the native birds to this elevated ridge with honeyeaters, white-winged choughs, magpies, scarlet and flame robins, grey fantails, white-browed scrub wrens and kookaburras being readily seen.

On the way down along the sealed road, take in the view of the Woden Valley and Greater Canberra from the road junction beside the Yale telescope.

Instead of returning through the same gate and down the same track, proceed further along the main road to the next track and gate on the left. This track leads down hill beside Compartment 121 for about seven minutes. Take the first road leading off to the left and this leads shortly down and back to the barbecue picnic spot and the cars.



Forest road leading to the top of Mt McDonald

Mt McDonald

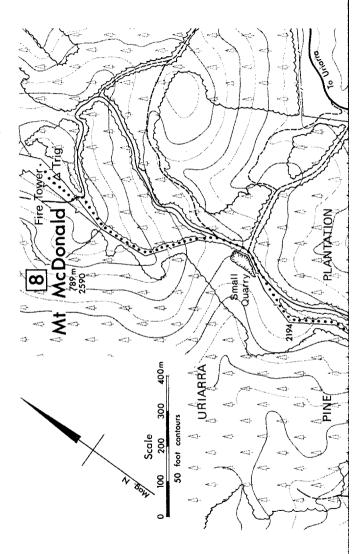
Walking time two hours Map: Cotter Sheet 8627-11, 1:50,000

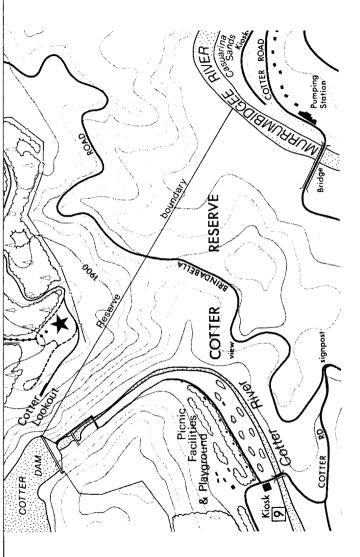
The summit of Mt McDonald is 789 metres above sea level and 2 kilometres up a steep track. There are a few gentler grades and curves, and a reasonably fit person would enjoy the walk. The flanks of the mountain are covered with *Pinus radiata* planted in 1959.

If you come early in the morning — and if you are quiet — you may easily catch a glimpse of a kangaroo or wallaby. There are birds in the exotic forests too. Crimson rosellas seem to have adapted to the unnatural surroundings, but of course they prefer native forests and are difficult to see in the dark pine woods.

To reach Mt McDonald, leave Canberra via the Cotter Road. About a kilometre past the bridge over the Murrumbidgee River, turn right at the signpost which indicates Uriarra, Brindabella, Bulls Head, and Mt Franklin. Follow this road, which winds fairly steeply up the eastern flank of Mt McDonald. There is an attractive view of the Cotter Dam and valley on the left, but as there is no room for a car to pull off the road here, it is better to take in this view on the return journey. Keep climbing for 2.3 km when you will come to a turn-off on the left and a notice that directs you to the Cotter Dam Lookout. Take this track, which leads into the Uriarra forest. A kilometre further on, follow the first turn to the right. Immediately upon taking this turn you will see, on the left, a cleared area where there is room to leave your car.

Continue on foot up the forest road. About halfway





up the climb to the summit there is a small quarry on the left just off the road where gravel is obtained for mending forest tracks. Just short of the summit you come to an open gate. You have now left the trees behind. A little above you on the right is the original trig point, a cairn of rocks with a weathered pole in the middle. In front of you is the fire tower, a whitepainted landmark with a big stone hanging from a wire through a hole in the middle of the floor.

The door of the lookout is kept locked for obvious reasons. Inside, all around the walls, 360 degrees are marked. If the lookout man sees smoke he sights the wire against the smoke, marks the bearing point on the wall in line with the smoke, and reports to headquarters. This bearing only gives the direction of the fire. If a cross-bearing can be had from another tower this gives the exact position of the fire. The stone is hung from the wire to keep it taut.

Although you may not go into the tower, you can console yourself with the thought that you too have a 360 degree panorama below you. If you look back in the direction you came, you will see a reach of the Murrumbidgee River, with little rapids when the river is flowing fast, and a sandy beach just beyond. The river runs along the base of the Bullen Range, and farther to the south-west is the Tidbinbilla Range. The dish of the Tidbinbilla Space-tracking Station is visible to the south-east, low in a fold of a hill.

Close below you to the north-west is the Uriarra Forestry Settlement, a little way in from the Brindabella Road. Just beyond it, where the Uriarra Road runs into the Brindabella Road, is Uriarra homestead, only its green roof visible behind old trees. At least three generations of McDonalds may have owned this property, and it is assumed that Mt McDonald was named after this family.

48



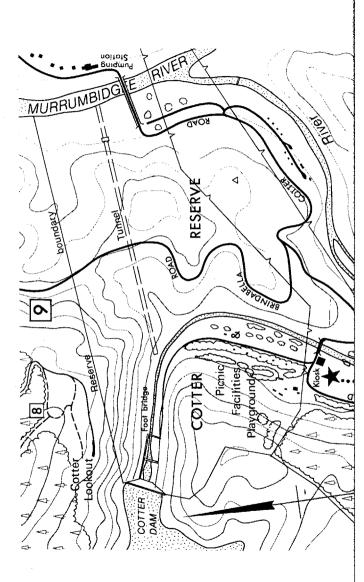
Iron Mine at Paddys River

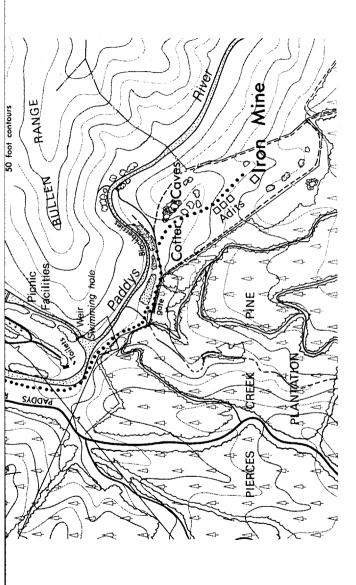
Walking time two hours Map: Cotter Sheet 8627-11, 1:50,000

Leave Canberra via the Cotter Road and travel 20 km until you reach the Cotter Reserve.

Park cars at car park immediately adjacent to Cotter Kiosk. Walk through the picnic area along a track which parallels the Cotter River as it flows downstream towards its junction with Paddys River. At the point just past where the Cotter River begins to make its U-bend down towards the weir you will be confronted by a fork in the now narrow track. Take the right hand fork which leads sharply upward. You will now be on a broad path which has a fence line on its right. Proceed along fairly evenly and then down for a distance of approximately 60 metres to a small creek which lies directly across the path. Cross this and continue upwards for 20 metres until you come out on an unmade forest road.

Walk along this road for about 200 metres paralleling Paddys River and passing large clumps of blackberry bushes on your left. This would be a fine place to be during February-March so take some containers if that is the time you will be there. You will now have a gully on your right which is almost at right angles to the road. On the left side of this gully is a limestone outcrop which contains the well known Cotter Caves. These are fenced off and can only be entered by special arrangement. A notice is fixed to one of the fences and explains details. The caves themselves are not of great







Entrance to the iron mine at Paddys River (Walk No. 9)

interest compared to others but perhaps could be visited on a later occasion.

Walk into the gully along a track which follows at first the slightly rising well-grassed floor. This track then begins to diverge to the right and rises sharply. Follow it for perhaps 200 metres from its road-side starting point and you will find yourself in the area of the mines.

First notice the lack of grass and often rusty-looking rocks. These contain the magnetite ore. You will also observe three shallow adits or simple surface mines close to you on the right hand upper side of the gully. Watch your footing here as the ground is rough and loose and a tumble down might be less than funny. A hand compass will fluctuate wildly in this region and some rock samples will behave as quite powerful bar magnets.

Proceed past the three adits which lie on your right on a more or less downward going track for about 40 metres. The track is now faint but do not despair and follow it through screens of bushes and you will see in front of you after another 40 metres the railway track of the main mine. Follow this to the entrance and peep in.

There is a gate at this entrance which should be locked. If it is not then you will be able to look in without difficulty. The mine is about 200 metres in depth into the hill and is considered **unsafe**. While properly timbered at the entrance this is not so further in. Also, there is a story of a deep vertical shaft about half way along the track which represents a considerable hazard. It is not therefore advisable to go any distance into this mine.

The deposit, which also contains small quantities of lead, silver, zinc, copper and gold, was first prospected in 1895 when Thomas Coyle raised 60 tons of ore containing \$300 worth of copper and \$200 of silver. A company was formed in 1897 to develop the area but nothing further was reported until 1907, when another company was stated to be prospecting there. In 1908 it proved the existence of a large low-grade ore deposit, but too complex to permit cheap treatment.

In 1946 Broken Hill South Ltd applied for a mining lease of the area; the deposit was mapped by the Bureau of Mineral Resources and one of the adits sampled. It is also believed that officers of the Coal Board examined the area as a possible source of magnetite for coal washing.

Both because mining is now not allowed in the ACT and for economic reasons no commercial exploitation has taken place. For this we can be grateful.

The new timber work at the entrance to the main mine is believed to be due to the BMR, who were thinking of using it as a demonstration mine for students and perhaps the public. However, this has not been proceeded with because of the high further cost of making the mine totally safe.

10

Blue Range Hut

Walking time two hours Map: Brindabella Sheet 8627, 1:100,000

Although quite removed from the normal wellfrequented riverside areas, this beautiful spot with its large grassy play area is recommended for family outings and picnics, with ample space available to park cars while exploring the forest on foot in several directions from the hut.

Follow the Cotter Road out of Canberra until the road divides, about one kilometre after the single lane bridge which crosses the Murrumbidgee River. The upper or right hand road leads to the Brindabella Ranges. Turn off the bitumen here and follow the road up around Mt McDonald, passing the Uriarra Forest Settlement on the left and arriving at the T-junction in front of the Uriarra homestead - a distance of about eight kilometres. At this point turn left and continue through the forested area, passing the Old Cotter Road turnoff on the left. After five kilometres turn right on to a sharply rising track which leads under the high tension power lines after a few metres. Approximately two kilometres later there is a large well-grassed clearing in the forest where stands the Blue Range Hut.

This hut is the last remaining structural evidence of the camp established for the detention of Italian nationals at the beginning of World War II. Over twenty two-man huts were erected in the cleared area, as well as many larger huts and tents. The remaining



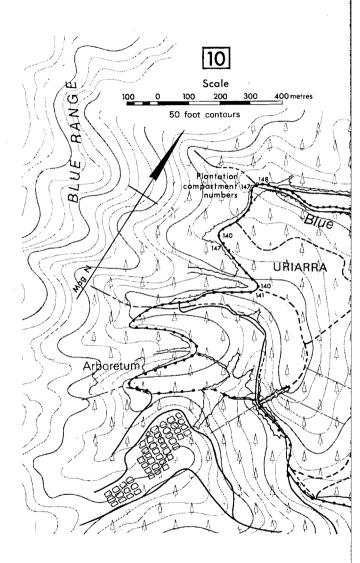
The Hut at Blue Range (Walk No. 10)

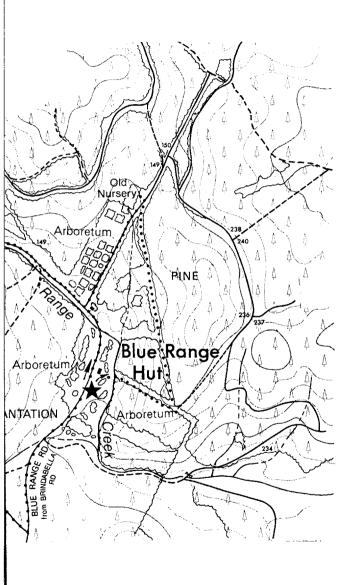
iron building was the galley, or kitchen, and services area for the whole camp. The men were working for the Forestry and Timber Bureau re-planting trees and keeping down the scrub in the forested area. As we look around we can see fruit trees and other exotic shrubs as evidence that many of the men attempted to re-create their domestic gardens during the ten or so years the area was occupied.

The rivulet flowing behind the hut is Blue Range Creek, which goes on to join Uriarra Creek which fills the dams at the Uriarra homestead, and its water is considered to be 'crystal clear, pure and drinkable'.

The Department of the Capital Territory built the stone walls and other improvements to the area immediately around the hut in about 1971 in an endeavour to encourage Canberra residents to visit this very attractive and peaceful setting. The track leading to the hut from the Brindabella Road goes on through the forest to Mt Coree — a journey of about thirteen kilometres — and, as Two Sticks Road, joins the Brindabella Road again at Picadilly Circus.

The area around the Blue Range Hut, when developed in 1940-2 by the Forestry and Timber Bureau based at Yarralumla, was intended as an experimental area for exotic conifers. The principal aim of the





project was the establishment of a forest for the production of timber, but many pines, firs and spruces were planted, with the idea of having some flow-on to farm planting and horticulture, particularly with the adornment of the Canberra city area in mind.

Of the pines planted in the three arboreta close to the hut, *Cupressus arizonica* and *Pinus ponderosa* from the USA, and *P. canariensis* from the Canary Islands appear to have been the most adaptable to the local conditions. In the trial area to the left of the road, opposite the hut, may be seen Lawson's cypress, ridgepole pine (*P. contorta*), juniper, with behind the juniper a Douglas fir and *P. canariensis* forming a back-drop to them all.

The elevation of this area is around 800 metres and it is on the boundary of wet and dry sclerophyll forest. The original vegetation includes ribbon gum (E. viminalis), narrow leaved peppermint (E. robertsonii), broadleaved peppermint (E. dives) and red spotted gum (E. mannifera subspecies maculosa), while the ground cover vegetation consists mainly of bitter pea (Daviesia species), Olearia, Veronica, blackwood (Acacia melanoxylon) and silver wattle (A. dealbata).

A short stroll through the pine forest begins behind the hut where near the creek is blackwood (Acacia melanoxylon) and ribbon gum (Eucalyptus vimimalis). Cross the creek and climb to the top of the ridge through a series of trial plots of Cupressus arizonica, Pinus strobus and P. canariensis. Walk to the left along the top of the ridge for about one kilometre, returning downhill to again cross the creek and so back to the hut.

Another walk — a little longer and more energetic — begins at the hut by going on up the road which follows the Blue Range Creek. At one point the creek crosses the road and here a short walk up the gully, along a poorly defined track, will lead to an area where lyre birds may be heard. In this area are several varieties of ferns including two tree ferns — *Dicksonia* with a thick trunk and *Cyathea* with a thinner trunk and rough prickly bases to the fronds.

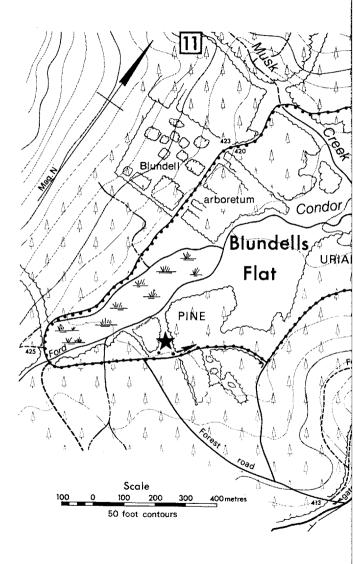
Retracing the path to the road, again continue on to a curve in the road where there is a group of selfseeded pines. Turning left off the road the gully is followed along a small creek with a rocky bed. This part of the walk is quite rough but continue along until another creek joins this one at a point where a forest track crosses it. For much of the way there is a track to the right of the creek leading downhill among native plants which persist along the creek between the pine compartments. The track will rejoin the road to the hut, at a point part way between the watershed gate and the hut itself.

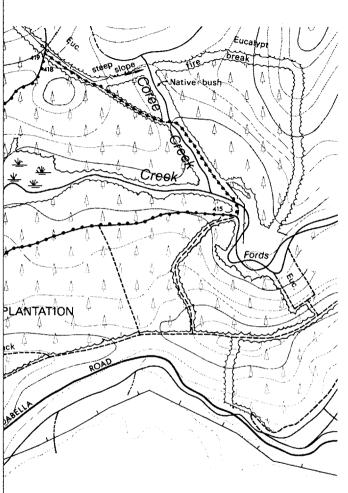
U

Blundells Flat

Walking time two and a half hours Map: Brindabella Sheet 8627, 1:100,000

In the late afternoon the Brindabella and Blue Ranges are silhouetted on the skyline to the west of Canberra and Coree Mountain is readily distinguishable by its rounded hump. At its base lies Blundells Flat, surrounded by conifers on the lower slopes and eucalypt forest above. Blundells Flat is worth a visit any time of the year, but autumn is perhaps best since the deciduous hardwoods in the valley are in collour and the blackberries in fruit.









Blundells Flat (Walk No. 11)

Blundells Flat is reached by leaving Canberra via Adelaide Avenue and the Cotter Road. About a kilometre beyond the single lane bridge over the Murrumbidgee River take the road off to the right where the signpost says to Uriarra, Brindabella, Bulls Head and Mt Franklin. Follow this road for 7.5 km and take the left-hand turn at Uriarra homestead. The road soon enters the pine forest, with Radiata pine on the right and Ponderosa pine on the left. The road now rises over a low saddle which marks the boundary of the Cotter River catchment. It then passes Black Springs with road junctions to Blue Range on the right and Lees Creek via Warks Road on the left. Six and a half kilometres from Uriarra homestead it crosses Condor Creek at Thompsons Corner, a favourite picnic spot. The road now winds its way around the southern slopes on Condor Creek, passing through lower peppermint forest, while glimpses of a delightful stand of ribbon gum can be seen in the

creek. The road passes some younger stands of pines before crossing Wombat Creek and re-entering a moister type of forest. At the top of the rise it enters the pine plantation once again, about four kilometres from Thompsons Corner. At this point a road leads off to the right and through a gate. This is the access route to Blundells Flat.

Driving down, ignore the first right turn; a few hundred metres further along the road forks. The road to the right leads out into an open space where a large grassed area provides an ideal picnic spot, bounded on two sides by forest, and on the others by an overgrown orchard. The dense thicket of cherry trees usually abounds in wildlife. The distance from Canberra is about 45 kilometres.

Blundells Flat was settled by the Blundell family last century. Extensive clearing along the lower slopes provided pasture for grazing for local flocks and passing stock. Evidence of this can be seen in the regrowth forests along the northern slopes. The flats were an important resting ground for travelling stock moving between the Murrumbidgee and Goodradigbee Valleys. Permanent occupation of the area ceased with the completion of the Cotter Dam, Canberra's sole water supply until recent years, although travelling stock continued to use the flats until the 1930s. Since the 1920s extensive pine plantations have been established on the surrounding lower slopes. The old homestead and outbuildings were destroyed by fire to prevent their use when the catchment was proclaimed.

The walking route shown on the map begins at the southern end of the flat and follows the forest road in an anti-clockwise direction. There is also a foot track leading along the flat, but this route is likely to be swampy, and it is advisable to stay close to the plantation edge.

From the flat you can see to the northwest Mt Coree,

its top crowned with snow gum, upper slopes with large wider spaced trees of brown barrel which grade into peppermint forest and eventually pine plantation on the lower slopes. In the foreground the flats are grassed and Condor Creek is willow-lined. As the walk proceeds along the flat, Devils Peak, with its rocky top, appears immediately ahead, and to the right Blue Range. On the left, just over the creek, is a poplar arboretum established during the period 1959-63. It contains about a dozen species and many hybrids.

The walk soon re-enters the plantation and joins a well defined road to an old fence line. At the fence line a track leads off to the left, dipping steeply into Condor Creek. Stepping stones are usually plentiful. The track now leads along a corridor of eucalypt forest to cross Coree Creek (a tributary of Condor Creek) and re-enter the plantation. From here there is a gradual climb to the plantation edge, and Coree Creek is immediately below, on the right. The track now follows the plantation edge, with a fence on the right, until it again meets the road. Turn left and follow the road downhill. It soon enters a pine arboretum which contains a large number of species planted over the period 1929-60. For those who wish to see some of these exotic species — they include Californian redwoods, larches, spruces, pines and Douglas fir, to name but a few — a short detour here is well worthwhile.

To return to the starting point, the route continues along the road, passes an old tin hut on the right, recrosses Condor Creek, and curves back to the grassed flat. If the return journey is taken at dusk kangaroos are frequently seen coming through the plantations to graze on the flats. They are also common along the roadside near Black Springs.

Walks Further Afield

12

Kambah Pool to Pine Island

Walking time four hours Maps: Canberra Sheet 8727-111, 1:50,000 Canberra Sheet 8727, 1:100,000

This pleasant walk involves a route of about six kilometres along the Murrumbidgee River. The countryside is gently undulating with no major climbs or descents and for the most part the going is easy. Unless you wish to do the trip there and back it is essential to go in a party of at least two cars. One car is left at Pine Island and then everyone returns to Kambah Pool for the start of the walk.

Descending the hill to the pool, turn left along the river, travelling in a south-easterly direction. In the first section of the walk there is a path through some dead scrub very near to the river; when the river is high it may be necessary to keep higher up. Just before the point where a power line crosses the river turn left and follow a pipeline up the hill away from the river. A cart-track under the power line leads up a gentle slope into more open country. The path becomes clearly defined to the right of the track as it traverses round Allens Creek and crosses the stream near a little pool. In the gully can be heard the sound of running water from a small waterfiall before Allens Creek flows into the Murrumbidgee.

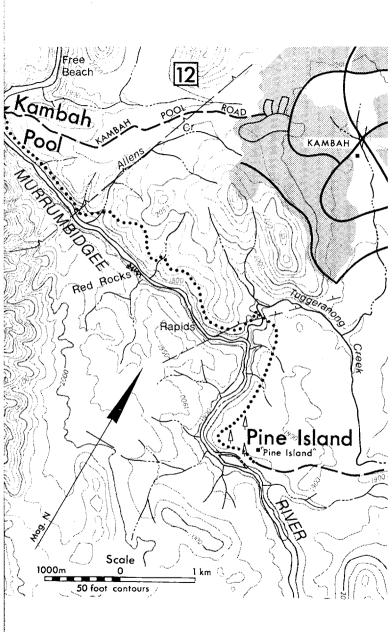
The crest of the hill is a good ressting place as the



The Murrumbidgee River between Pine Island and Kambah Pool (Walk No. 12)

view down the river is most rewarding. On the far side of the river can be seen the formation known as Red Rocks, with the Bullen Range stretching southwards. At this point the countryside is open and the path is bordered by rosehip bushes and grevilleas. Restless flycatchers can be seen darting here and there. It is an easy walk along the top, then downhill across a small creek. At this point you will meet a fence and climb up a rocky hill which can be passed on either shoulder. Opposite Red Rocks there is a rocky horizontal slab. This is an ideal place for lunch.

Descending to the river there are some flat meadows with a reedy creek in the middle. It is best to turn left up a grassy hill rather than trying to push through the dense bush at the far end. Along the stretch by the fence can be seen many spikes of *Verbascum thapsus* (commonly known as 'lamb's ears', 'rabbit's ears', or



'wild tobacco') which produce yellow flowers. Keeping to the fence and crossing yet another creek the going becomes harder as there is a heavy covering of thick scrub. This consists mainly of the woolly teatree, *Leptospermum lanigerum*. The path, though difficult to follow, is there and it is advisable to keep to it. However, scrambling through the bush towards the river at the rapids is a worthwhile diversion. The point to leave the path is marked by a tall dead tree stump.

From this point on the tree and scrub cover becomes progressively less until you reach Pine Island. Keeping along the fence, you will notice a sharp bend in the river as the direction becomes more southerly. Just before the bend go through a gate on the left and cross Tuggeranong Creek. One end of the Tuggeranong sewage tunnel can be seen here. A pleasant walk through the fields by the river leads to the pine plantations of Pine Island. The island can be seen at the bend where the river broadens. In these fields can be seen flowers of early Nancy (Anguillaria dioica) in springtime. As you walk round the pine plantation, keeping the pines to the left, the picnic area at the end of the walk comes into sight.

This walk is especially pleasant in spring when the wattles are blooming. The hillsides are then bright with yellows and greens. Signs of wild life are all around. On one occasion the author disturbed a sleepy kangaroo not four metres from the track. There are also many birds to be seen, especially in the bushes near Pine Island. The fairy blue wren, the scarlet robin, the eastern spinebill and the New Holland honeyeater are among those most commonly observed. On the river black cormorants and wood ducks can be seen.

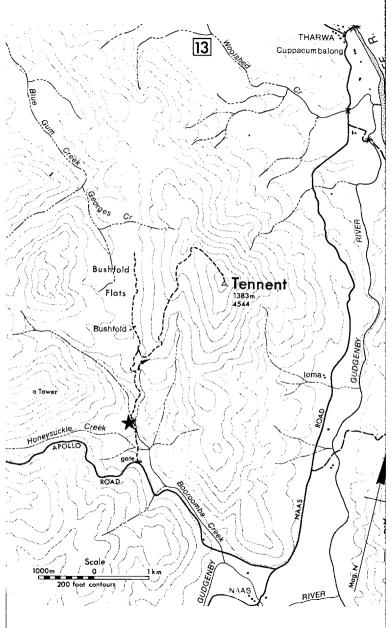
The development of the new town of Tuggeranong in close proximity to this stretch of the Murrumbidgee includes plans to preserve the area as a natural parkland for Tuggeranong residents and people from other parts of Canberra. The plan is to provide a variety of recreational opportunities in the park, from the more formal kind such as golf, to hiking, swimming and horse-riding. The diversity of landscape means that wilderness areas can be retained in the Red Rocks Gorge area while playing fields, formal parkland, sandy beaches, and landscaped picnic and barbecue areas will be developed for more intensive use elsewhere. Tens of thousands of native trees are being planted as a first stage of the park's development, which is expected to be completed by 1990. At present, the original properties known as Kambah and Urambi, which extend to the fence line along the river, are grazed under leasehold, and will eventually be incorporated in the Tuggeranong Town Centre.

13

Mt Tennent

Walking time five hours Map: Michelago Sheet 8726 1:100,000

The rounded outline of Mt Tennent is a familiar feature on the skyline to the south of Canberra. It rises steeply behind the village of Tharwa to a height of 1383 metres with a modern fire-wastching tower on the summit. Enthusiastic bushwalkers may choose to



start close behind the village and proceed directly to the top, choosing their own way. However, a well defined route can be found on the west side of the mountain. This is a road used by the forestry service for access to the fire-watch tower and suitable for four-wheel drive vehicles.

To reach this track take the Naas-Honeysuckle Creek road which turns south after crossing the singlelane bridge over the Murrumbidgee at Tharwa. This takes you around the base of Mt Tennent to Apollo Road, which leads to Honeysuckle Creek Trackingstation. Turn right and follow Apollo Road for 3 km, passing two farmhouses on the right. Watch for a break in the double lines where the road turns 90° to the left, and the fire track starts almost straight ahead. Care is needed at this point because of the blind corner. The track falls quite steeply to Booroomba Creek, and most cars will negotiate the ford without any trouble. Continue on through the first gate, and park in some convenient place before you meet the next gate from where the track begins to rise steeply.

Although not excessively steep at any point, the



Mt Tennent viewed from the road leading to Lanyon Homestead

walk to the top provides a good day's outing. The round trip is about sixteen kilometres, and with average walkers takes about five hours.

Be sure to carry adequate drinks as there is only one small stream which may not run in dry weather.

In spring the forest is colourful with the acacias in flower. The walk takes one through typically dry sclerophyll forest with occasional samples of gully flora. The lower part of the walk passes through an almost pure stand of apple box (Eucalyptus bridgesiana). With increasing altitude other Eucalyptus species to appear are broad leaved peppermint (E. dives), scribbly gum (E. rossii), narrow leaved peppermint (E. robertsonii), candle bark (E. rubida) and snow gum (E. pauciflora). Common shrubs to be seen are Australian blackthorn (Bursaria spinosa) while less common shrubs include several species of tea-tree (Leptospermum) and wattle (Acacia). Among the smaller shrubs are Melichrus urceolatus, Brachyloma daphnoides, and numerous members of the Papilionaceae. There are a number of climbing and twining plants --- clematis (Clematis microphylla), hovea (Hovea heterophylla) and twining glycine (Glycine clandestina). Ground cover plants are dominated by biddy biddy (Acaena anserinifolia) and prickly starwort (Stellaria pungens), and species of snow grass (Poa) and wallaby grass (Danthonia). Other groups of plants worthy of observation include the Lichens and Bryophytes. These are obvious on the boulders and road cuttings.

It is suggested that you make use of *Flora of the* A.C.T. by Burbidge and Gray to identify the flowering plants for yourself. You will find that you can expand the list enormously — particularly if you take the walk at different times of the year.

After leaving the cars, continue on up the track. There is only one divergence to the left which leads to Bushfold Flats, but to reach the top of Mt Tennent leave this for another day. As you ascend some delightful vistas of surrounding slopes and valleys appear, and it needs little persuasion to take time to admire these views. At last the top is reached and the magnificent panorama spread out below is ample reward for the 800 metre upward climb. To the south is the Tinderry Range, the Brindabellas to the west, Canberra to the north and the coastal ranges to the east. The poplars along the Murrumbidgee near Tharwa stand out clearly, as does the river itself as it meanders along the valley in the foreground.

There are four gates along the track — be sure to leave them as found — and you may see a small flock of sheep or hear their bells. There is also plenty of wildlife about: kangaroos, wombats and many varieties of birds and insects.

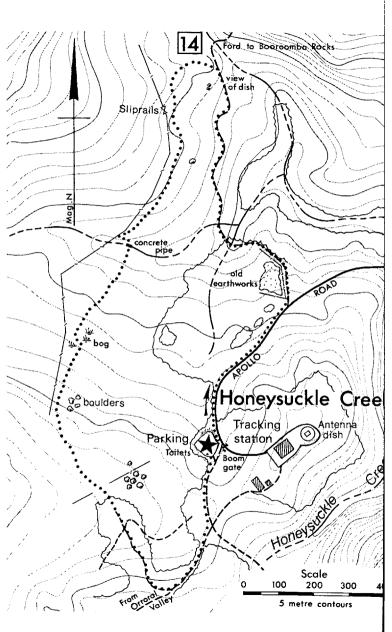
14

Easy walk at Honeysuckle Creek

Walking time one and a half hours Map: Tantangara Sheet 8626, 1:100,000

Here is a walk suitable for even the youngest in the family. You can combine it with a visit to the Honeysuckle Creek Space-tracking Station. It is an easy walk and the author has in fact pushed a one-year-old right the way round in a stroller. The walk is a little over five kilometres in length in open woodland. It is shady in summer, and sheltered from the bleak winter westerly winds.

To get there, proceed to the Honeysuckle Creek



Space-tracking Station via Tharwa (follow the signposts from there). Park in the tracking station car park just outside the gate. Begin by walking away from the tracking station down the bitumen road back towards Canberra. You pass a small grassy plain on your left. Take the first dirt track to the left, after about 500 metres. It goes off by an old, burnt-out, charcoalcovered tree that is lying down beside the road. In a few metres you come to a four-way cross road of tracks just after passing a yellow PMG marker post. Veer right, and follow the dirt track down the hill through saplings of cucalypt regrowth until you come to a ford over a small stream at the edge of uncut woodland.

The only place you might go wrong comes shortly, so read this paragraph carefully. Walk another 500 metres up the hill on the other side of the stream until you reach the top of the rise. You will then see a grassy track that goes off at 90° to the left: follow it. The track is quite easy to miss. It passes through fairly mature woodland consisting mainly of snow gum. It undulates for a short distance, and then falls away down to a stream, which you cross by walking over a culvert. (If you miss the turn-off, you will come to a steep-sided stream, which you have to ford. On the other side the track goes up a long, very steep hill.)

Assuming that you have found the right track and have reached the little culvert over the stream, you can stop for a moment and take courage from the thought that you're about half way round! The next kilometre will be gently uphill. Follow the track up the slope on the other side of the stream, and go on till you come to a small bog covered with tussocks of snow grass and tea-tree. The bog is wet only after heavy rain and you should be able to get through without any difficulty. Continue to climb gently.

Just after leaving the bog, you may notice some

bushes of the local highland Banksia (Banksia serrata) on your right over the other side of an old wire fence. Depending on the time of year, you may see quite a few wildflowers too. About a hundred metres later, the track passes through an area strewn with big granite boulders. About 1.5 km after crossing the stream, you finally come to the top of the rise, and emerge from the forest into a clearing. Rocks, dead trees and young gum suckers litter the clearing. From here you get a spectacular view eastwards of the precipitous, bare rock-face on the hill opposite.

Follow the track through the clearing and on for a short distance until it meets a dirt road. Turn left, and walk along the road towards the tracking station (you will be able to hear the throb of its power generator, and its dish comes into sight after a short distance). The road leads into the tracking station car park less than a kilometre away, and hence back to your car.

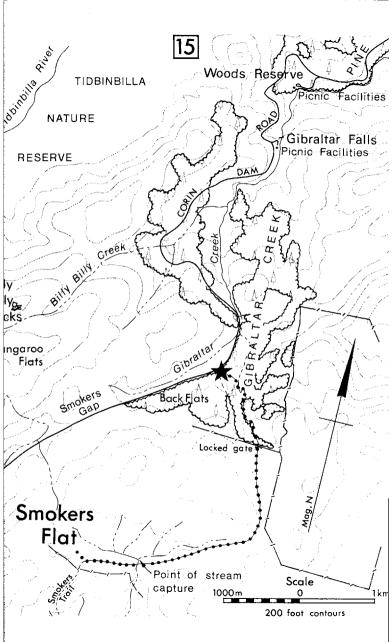
15

Smokers Flat

100 km by car, 6.5 km on foot Walking time three hours Maps: Bimberi Sheet 8626-1, 1:50,000 Tantangara Sheet 8626, 1:50,000

Intending visitors are advised to telephone the Ranger at Corin Dam (73 2808) before leaving Canberra, as access is restricted.

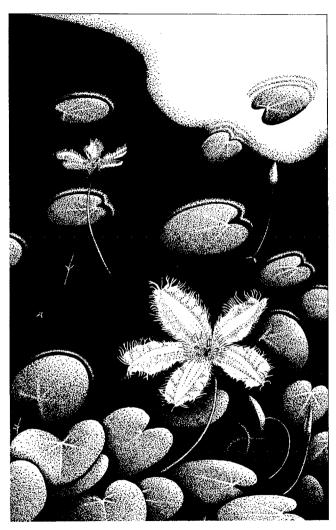
To reach this little known area, drive through the Cotter reserve past the kiosk on to the Tidbinbilla road, continuing past the turn-off to the Tidbinbilla



Nature Reserve on the right. About three kilometres on, take the Corin Dam road on the right. Pass the Gibraltar Falls picnic reserve and continue for about three kilometres to cross Gibraltar Creek, then turn left on to a dirt track about 0.6 km from the creek crossing. The track is one of several which can be followed through the Gibraltar Creek Pine Plantation, which is now mostly cleared. Keep uphill until the track reaches a gate on the southern edge of the plantation (see map). At this point there are good views of Canberra through the valley of Gibraltar Creek. Cars arc left here and the track (road) followed through intermediate sclerophyll eucalypt forest characteristic of this altitude (c. 1300 m). The eucalypts are mainly mountain gum (E. dalrympleana), snow gum (E. pauciflora) and candle bark (E. rubida), with occasional black sally (E. stellulata) along the gullies.

After about three kilometres the forest quite suddenly opens out into a series of frost-pocket meadows, surrounded by snow gum on the slightly higher and drier ground. This is Smokers Flat. The open, snow grass-dominated herbfields are relatively poorly drained owing to granite bedrock close to the surface and the pockets of heathy bog and fen communities which result are of considerable botanical interest, though non-botanists may have to look carefully to see many of the species, especially when they are not in flower.

The area contains some uncommon plant species such as the fringed waterlily (Nymphoides geminata), the potato orchid (Gastrodia sesamoides), and the alpine greenhood (Pterostylis alpina). The shrubs and herbs depend on a delicate balance of factors for their survival. The dense cushions of sphagnum moss-protect the soil from freezing, and the spongy nature of the moss helps to hold water in the swamp. The habitats are fragile, and visitors are requested to be careful not



Nymphoides geminara (R. Br.) Kuntze, 'Fringed water-lify', by H. J. Hewson-Fruend

to disturb the margins of pools, the boggy areas and the sphagnum hummocks.

Some of the more obvious and recognisable shrubs and plants to be seen on this walk are various pea flowers (usually brown, yellow, and orange) such as *Daviesia oxylobium*, everlastings (*Helichrysum*), daisy bush (*Olearia*), tea-tree (*Leptospermum*), heath (*Epacris*) and many smaller herbs, including ground orchids, trigger plants, buttercups, violets, geraniums, and the rare and attractive yellow native waterlily. Signs of kangaroos, wallabies and wombats may be seen, and many holes in the swampy areas are caused by crayfish.

The Flat is also of geomorphological interest as the swamp is thought to be an example of a captured stream. The drainage of the area probably flowed originally to the north-west, into Kangaroo Creek, a tributary of the Cotter River. A headwater tributary of the Orroral River has cut its way northward, into the ridge bounding the Flat on the south side, broken into the west-flowing stream and reversed much of the drainage, which now flows east and into the Orroral River system. On the 1:50,000 map the characteristic pattern of stream capture is clearly evident where the streams draining Smokers Flat on the south-cast converge at a point resembling a T-junction. This is the original point of capture. The small streams are already becoming entrenched below the level of the original drainage basin floor, because of the lowered watertable.

·

It is suggested that visitors make a leisurely day of this outing, to allow time to stop and examine the scenery and plants. Lunch could be carried and eaten at Smokers Flat. Sufficient liquid should be carried as there may be no fresh water available.

Mt Jerrabomberra

Walking time three hours Map: Canberra Sheet 8727, 1:100,000

About 1.6 km south of Queanbeyan's city centre lie the dark woodlands of Mount Jerrabomberra. Road access to the mountain is gained from the west at a point approximately halfway along the road connecting Queanbeyan to the Monaro Highway. The signpost is currently missing and until replaced the cue is a large white mail box inscribed 'The Poplars'. No one need be deterred by this or the cattle grid which is immediately negotiated, as the road is a public right of way. Two hundred metres south of the cattle grid the summit road is seen to the left heading due east. Drive I km along this road until you reach a grassy knoll at the base of the main mountain horst. There is an area of open parking space at the end of a long horseshoe bend.

Botanically and geologically Mt Jerrabomberra is a sister mountain to Black Mountain which is visible with its tower from the higher slopes of Jerrabomberra. The two mountains are so similar that their slight differences are of interest. Like Black Mountain, Jerrabomberra consists of a fault-bounded block of Black Mountain Sandstone raised above the younger rocks of the surrounding region. This merges into the Muriarra complex (an alternating succession of phyllites and quartz-rich micaceous sandstones). Overlying this succession is the Acton Shale which has a grey-banded shale in the lower parts of the formation and fissile blue-grey slate near the top. Graptolites (fossils) are present in the shale.

Mt Jerrabomberra possesses some 500 species of plants, which account for the beautiful floral display in spring. It is this unusual concentration of plant species, together with the scenic beauty of the mountain, which make a visit worthwhile.

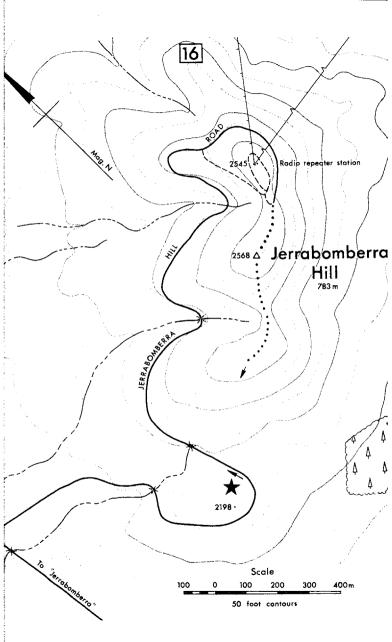
One species of flower growing on the mountain, *Grevillea ramosissima*, is localised to an area of about 1 ha. As yet this grevillea has not been observed in the ACT and no other occurrence has at present been recorded. It can be seen growing on the lower slopes of the mountain 300 metres from the earlier mentioned horseshoe bend. This one-metre high shrub has prickly leaves which divide twice into threes.

Australia's floral emblem the golden wattle (Acacia pycnantha) is found on the mountain but for some reason does not occur on Black Mountain. Flowering in late winter, many a hiker has been surprised by the floral profusion of this tree after the dark skies of a drab winter.

Unfortunately, no checklist of plant species is available for Mt Jerrabomberra. However, the similarity of the mountain to Black Mountain would make the CSIRO publication A List of Vascular Plants occurring on Black Mountain and Environs, Canberra, ACT a useful basis for comparison.

There are no clearly defined walking tracks on the mountain, hence it is best on a first visit to walk along the rough summit road which is infrequently used. Walking distance to the summit is about two kilometres.

The profile of Mt Jerrabomberra from the Canberra side has the appearance of three humps. From the grassy saddle the road follows the contour of each hump in turn, first outwards and then inwards, crossing the two creeks between them. The second



main creek is noteworthy for the large number of introduced Cootamundra wattles (*Acacia baileyana*) which seem so much at home in these surroundings.

The view from the peak closest to Queanbeyan, the end of the road, is magnificent. Before is the entirety of Queanbeyan with the Molonglo Gorge and Kowen Forest in the background. On the western side is a different view of Canberra and on the other, the Queanbeyan River and Wickerslack Lane. On this peak there is a high aerial with a shed alongside containing equipment for a radio repeater station for the Police Department and Southern Tablelands County Council.

A suitable return route is to follow the top of the ridge climbing each of the peaks in turn. The centre peak is Mt Jerrabomberra proper, the summit being recognised by the trig station which crowns the highest point.



Road tracks on top of Mt Jerrabomberra (Walk No. 16)

Molonglo Gorge

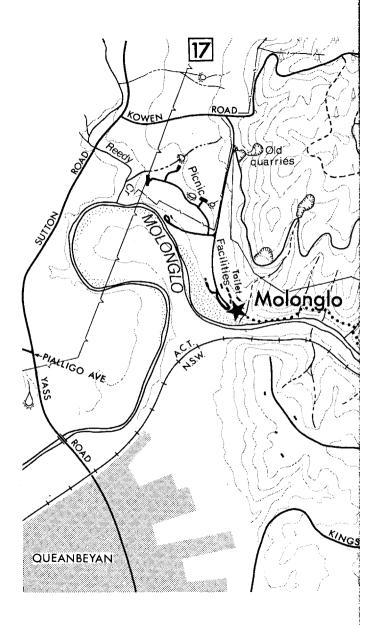
Walking time three hours Map: Canberra Sheet 8727, 1:100,000

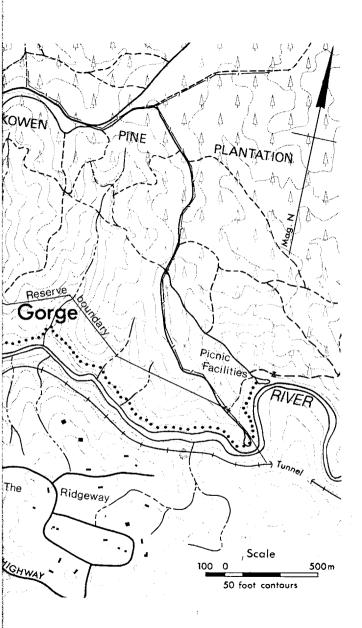
To reach the lower end of the gorge, which is where the walk starts, leave Canberra by way of Fairbairn Avenue and continue past the Airport. Turn left into Sutton Road, then right into Kowen Road at the fork encountered soon after the Reedy Creek bridge. This leads to the Molonglo Gorge picnic area, which is provided with fireplaces, toilets and a tank for drinking-water. Water from the river is polluted by mineral waste from the old mine dumps at Captains Flat and is not suitable for drinking or swimming. This pollution has also significantly decreased the abundance and diversity of aquatic life in the upper reaches of the river below Captains Flat.

The track is clearly defined and well graded for most of the way and the going is generally quite easy. About 2 kilometres from the beginning of the walk the track forks. Take the upper (left) path. The return trip can be covered in three hours without difficulty.

Following the track the sound of rushing water from the river can be heard. Beyond the river is the railway line. Mossy outcrops of rock can be glimpsed and from time to time there are lovely views of the river. As the track climbs the hill to bypass the rocky outcrops jutting into the river, the sound of waterfalls can be heard.

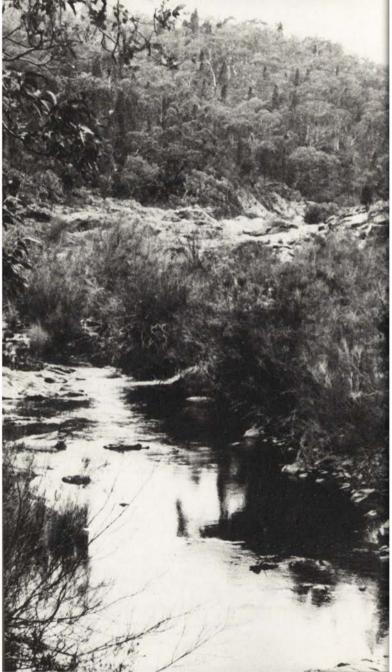
The geology of the gorge is of special interest and has two possible explanations. One is that earth move-





87

.



ment along the Queanbeyan fault dislocated the land so that the Cullarin Range was raised above the level of the Canberra plain, giving the Molongo River power to cut its bed down quickly right across the trend of the rocks. Alternatively, the faulting is very much older geologically and its direct effects on rivers and landforms have long ago been removed. However, there may be indirect effects such as the bringing together of weaker and stronger rocks which has resulted in the Canberra area being lowered more than the rocks in the Cullarin range. Where the river drops from the higher to the lower part, it has had the power to cut this narrow valley.

The majority of the birds in the gorge are those whose normal habitat would be classified as 'forest', 'open forest' or 'grassland'. As the river is rapid and the gorge deep, water birds, with the exception of black ducks, are not usually seen.

There are a number of different kinds of gum trees including red box (E. polyanthemos,) broad leaved peppermint (E. dives), stringybark (E. macrorhyncha), yellow box (E. melliodora) and brittle gum (E. mannifera subsp. maculosa), and among the smaller trees Australian cypress (Callitris endlicheri), Cootamundra wattle (Acacia baileyana) and other shrub species of Acacia. Shrubs include Australian indigo (Indigofera australis), sweet briar, hop bush, Australian blackthorn (Bursaria spinosa), tea-tree (Leptospermum), common reed and bulrush, willow, heaths, pea-flowers, ferns and a number of different types of wattle.

The Molonglo Gorge (Walk No. 17)

VY COST. CREAN

Recommended for further reading

For those who would like to read in greater detail about the vegetation, geology, or history of the Canberra region, the following list of publications, though not by any means exhaustive, is a guide to further reading in these areas. They are available either from the departments concerned, the A.G.P.S. Bookshop, the A.N.U. Libraries, or the Canberra Public Library Service.

- Burbidge, Nancy T. and Max Gray: Flora of the A.C.T. Canberra. A.N.U. Press. 1970.
- Chippendale, Thelma and George: Wildflowers of the Australian Capital Territory. Milton, Qld. Jacaranda Press. 1972.
- Forestry in the A.C.T. Canberra. A.G.P.S. 1976. (Pamphlet available from Information Centres.)
- Forwood. Report of Forestry and Wood-based Development Conference. Authorised by the Forestry Council, Canberra, 1974. Report of Panel Two — Forest Resources. Report of Panel Three — Multiple Use of Forest Resources. A.G.P.S. 1975.
- Gray, M. and H. S. McKee: A List of Vascular Plants occurring on Black Mountain and Environs, Canberra, A.C.T. CSIRO. 1969.
- Hall, N., R. D. Johnston, and G. M. Chippendale: Forest Trees of Australia. Canberra. Forestry and Timber Bureau. A.G.P.S. 1970.
- Handbook on Forestry in the Australian Capital Territory. Prepared for the Seventh British Commonwealth Forestry Conference, Australia and New Zealand. 1957.
- Opik, A. A.: The Geology of the Cauberra City District. Canberra. Department of National Development. 1958.
- Pryor, L. D.: Trees in Canberra. Canberra. Department of the Interior. 2nd ed. 1968.
- Smith, Ethel M.: Notes on Prospecting and Mining in the A.C.T. and Environs. Bureau of Mineral Resources. (Pamphlet, no date.)
- Townley, K. A. and J. J. Veevers: *Rocks and Fossils around Canberra*. Department of National Development. Rev. ed. 1974. (Available from the Bureau of Mineral Resources.)

Wright, C. Davis: Canberra. Sydney. John Andrew. 1923.

Here are details, carefully mapped and described, of seventeen walks in the Canberra area. The walks are stimulating but not strenuous. Most have been chosen with the family group in mind and are deliberately in the easy category. As well as a clear description of the route the reader's attention is drawn to interesting physical features and to details of the flora and fauna likely to be encountered. The text is illustrated with appropriate photographs and botanical drawings.

The book is published in association with the National Parks Association of the A.C.T., Inc.

Canberra Companions are published by the Australian National University Press as a contribution to the cultural, educational and recreational life of the immediate area served by the University. Titles available or in preparation include:

Fishing around Canberra by Bryan Pratt Birds in your Canberra Garden by Henry Nix Street Trees in Canberra The Canberra Handbook The ANU Campus — A photographic study History Tours around Canberra by Jill Waterhouse Episodes of old Canberra by G. E. D. Martin Your Canberra Garden Month by Month

Australian National University Press Canberra

ISBN 0 7081 0543 2