**EMU: NATIONAL SYMBOLS AND ECOLOGICAL LIMITS**

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**Taking up arms**

One of the most prominent symbols of a nation is its coat of arms. Australia followed a common British tradition when it chose two animals to embrace a shield, a kangaroo and an emu. But the two animals are not as equal as one might expect. The emu is always second to the kangaroo, just as the British unicorn is second to the dominant British lion.¹ The lion is *the* major symbol of Britain and in Australia, the kangaroo takes this role. Australia’s Department of Foreign Affairs lists a
special web page on kangaroos amongst its ‘top eight’ recommended information sites, but does not have a similar one for emus. Even the famously unappreciative early colonial poet and judge, Barron Field regarded the kangaroo as: ‘the spirit of Australia/ that redeems from utter failure/ from perfect desolation/ and warrants the creation/ Of this fifth part of the Earth’.3

Australian nature poses a serious problem for writers seeking poetic resonance with European sensibility. As Judith Wright wrote: ‘there were aspects of nature here – like … the emu … – at which even a dedicated bard might falter in attempting to translate … into terms which might be admired in London’.4 Yet if Australian writers of the 19th century were to be recognised as serious, they needed to engage with the British market, because that was where the readers and the publishers were; London was the cultural reference point. The kangaroo is so much the ‘signature’ animal for Australia that Austrians, anxious to clear up tourist confusion, manufacture T-shirts and caps with a kangaroo enclosed in an international red circle with a bar through it and a slogan: ‘No kangaroos in Austria’. If Tim Flannery’s book had been about emus, he could hardly have called it Country, yet that was the sole title of the first edition of his popular kangaroo book.5 The successful challenge for the America’s Cup by Australia II in 1983 became inexorably entwined with the symbolism of the boxing kangaroo. And Australia’s airline Qantas eschewed the flightless bird in favour of the flying kangaroo in its logo, and ‘The Spirit of Australia’ motto that harks back to Barron Field.6
In Britain, the lion became the essential symbol of the nation, the empire and patriotic pride. It was large and strong, like the Danish elephant and the American bald eagle. Less evident in British imperial rhetoric was the lion’s mythical counterpart, the unicorn. In one sense, both were mythical. Lions have not roamed the British Isles since before the last Ice Age, and certainly not in the era of imperial pomp and ceremony, although there is still enthusiastic searching for large felines in remote places like Dartmoor. Lions (*Panthera leo*) are, however, real animals and live today in countries like South Africa that used to be part of the former British empire. The unicorn is, by contrast, quintessentially fictional. It is probably based on the narwhal (*Monodon monoceros*) of the Arctic, but is more a horse (land animal) than a seal (sea animal). It came via Norse sagas to represent the Scots in the British union. The unicorn is an enigmatic national symbol. It quickly became the ‘optional’ part of the arms. The coat of arms for the British Antarctic Territories, for example, has the lion in its usual prominent place on the left, but the unicorn on the right is replaced with an emperor penguin (*Aptenodytes forsteri*). 

When the Australian colonies bid to come together to make a nation, they sought something for the new Coat of Arms that was authentically southern and separate, but which also embraced Britain in a traditional way. The tension between the old loyalties and the new was apparent in the words of a pro-Federation poster of 1900, where Australians were urged to ‘prove to men of every race that the descendents
[sic] of Britons in AUSTRALIA HAVE NOT LOST THEIR CAPACITY FOR SELF-GOVERNMENT.8 Having voted to federate, the ‘descendants of Britons’ chose a kangaroo and an emu as heraldic emblems for the new nation, to replace the lion and the unicorn of the old country.

This combination was not new. In 1804 Robert Knopwood chose it for the arms for Hobart Town. On the left he drew a forester kangaroo (Macropus giganteus, known on the mainland as an eastern grey kangaroo), the largest mammal in Tasmania, and on the right the now extinct Tasmanian emu, currently regarded as an extinct population of the mainland emu (Dromaius novaehollandiae) and then the largest bird in Tasmania. Knopwood added a Latin motto Sic Fortis Hobartia Crevit (‘Thus by Industry Hobart Town Increased’), also typical of the time. James Boyce has argued that the kangaroo and the emu were not merely symbols; they were chosen because they formed a significant part of the diet of Van Diemonians and were therefore regarded as part of the ‘natural bounty’ of the place.9 The Tasmanian emu was driven to extinction before the colonies federated, and the forester kangaroo very nearly followed suit, being now confined to districts far from Hobart, but it is not clear whether this was because of over-hunting or changed land use patterns, or both. A hundred years after Knopwood, the Australian national coat of arms carried a motto in English rather than Latin: ‘Advance Australia’. In 1912, when the States were added to the shield, golden wattle (Acacia pycnantha), a national flower, was added as an additional
feature. In Britain, the rose, thistle and shamrock (for England, Scotland and Ireland) were featured below the shield in the same way.10

In this chapter, I explore the emu’s national symbolism and its stories. I argue that the emu seems to have followed the unicorn in being a creature of myths and abstract ideas rather than understood as a living bird. Status as a national symbol has not helped its treatment under settler Australian rule. At times, national myths have been disadvantageous to its survival. The ‘yeoman ideal’, where land is allocated in small parcels to enable each farming family to own its own land, was transferred from the land of the unicorn to the land of the emu, and underpinned much national pride in the latter. Indeed, the politics of small farms dates back to well before Federation. In New South Wales, the Robertson Land Acts of 1861 were designed to give the land titles to ‘selectors’, people who undertook to live on their properties, rather than the earlier situation where wealthy squatters controlled vast open tracts of country from a distance.11 The coat of arms chosen in 1901 represented a national economy and a nation with pastoralism at its core. But the emu’s nomadic habits were not well suited to the fences and small farms of the yeoman settlement ideal. The emu was unpopular and even deemed to be ‘unpatriotic’ when it threatened nation-building pastoral activities with its nomadic wanderings.

Like the kangaroo, the emu enjoys the favoured pastoral country of ‘Australia Felix’: open grasslands and scattered
tree-cover, in the temperate south. But both our national faunal emblems are, perhaps appropriately, roaming opportunists. Their peregrinations are not limited to the good pastoral country. Each is quick to respond to booming resources wherever they may be and each is prepared to move great distances to avoid bust situations. Emu populations can appear apparently from nowhere and expand rapidly as birds chase down the new resources, especially the ones provided by the developing pastoral and agricultural economy. Taking an emu’s perspective and watching how it adapts to the rhythms of Australia’s boom and bust ecology can provide settler Australians with alternative models for building an Australian economy and way of life that works ecologically in this ancient land.

Distribution, food and movements
The emu occurs naturally throughout the Australian mainland, except in tropical rainforests, big cities and peri-urban areas. It is generally absent from cleared farmland, as it needs good cover to breed. It is relatively uncommon in the uninhabited inland, but after heavy rains, concentrated populations may appear moving in quickly from distant places. CSIRO scientist Stephen Davies, who studied emus extensively in the 1960s and ’70s, reported recapturing emus up to 500 km from where they were banded. In successive aerial surveys of a 2500 km² area conducted over an eight year period, he discovered that their numbers fluctuated between 20 and 576 birds. Although they spread over large ranges, they also have a sense
of ‘territory’ when they are breeding. They do not like other emus nearby. Over his huge study area, Davies found that each breeding pair of emus had approximately a 30 m² territory, and that when they met other emus they tended to disperse. So once they are moving, they tend to keep moving because they all move in the same direction, usually following watercourses, so they keep encountering each other. The watercourses support higher numbers when required, but the birds prefer more territory and less movement if they can find it. The idea that emus are a monogamously pairing species has been challenged in more recent work, which shows that like all other ratites except kiwis, emus exhibit monogamy, polyandry (it is the male that takes primary care of the chicks) and promiscuity depending on circumstances and resources. Davies’ finding that emus prefer a larger, more open territory is consistent with this, as a larger area better supports opportunities for mating beyond the primary pair.

The emu is generally regarded as a winter breeding species, while most specialist arid-zone birds (slightly) favour spring. But emus also have the capacity to breed at other times and in both semi-arid and temperate places. Studies of the arid zone, often conducted after heavy rain, have lent support to the idea that arid zone birds breed ‘erratically’ – like the zebra finches discussed in Chapter 4. Generally this is not true, but there appears to be an option for birds like emus that move in and out of the unpredictable and variable outback to take advantage of unexpected good resources at times other
than their preferred breeding times. As early as 1908, one of the closest observers of emus in Mallee country in Victoria, Charles M’Lennan, commented:

they seemed to have some strange foreknowledge of the weather ... because I have noticed that in seasons which have turned out very wet the bird frequently builds its nest on high ground ... before the winter and spring rains have fairly set in ... but in seasons which afterwards turned out to be exceptionally dry, I have found the nest on low ground, even in depressions.

Emus feed on different things at different times of year, depending on seasonal abundance. In Western Australia, Stephen Davies observed that: ‘they ate fruits, flowers, seeds, succulent green shoots of grass, herbs and shrubs and also took insects’. He also commented that other studies showed that they ate different foods in different parts of Australia. Although the range of food is wide, ‘all the types represent concentrated sources of nutrient materials when contrasted with the mature or dry grass and browse taken by many herbivores’. This was consistent with other ratite birds, such as rheas and ostriches. It is also a pattern evident from studies based on fossil egg shells from 45 000–55 000 years ago, a transitional time when the landscape was changing fairly rapidly.

At a time when most of Australia’s largest mammals became extinct, including over a hundred species of kanga-
roo, the emu survived. The landscape was changing quite rapidly at this time, possibly because of similarly changing natural rainfall patterns or possibly because of regular fires lit by the first wave of humans as they colonised the continent. The mosaic of drought-adapted trees, shrubs and rich grasslands shaped by the seasonal rainfall that was typical of 60,000 years ago converted to fire-adapted grasslands and chenopod desert scrub over a period of about 10,000 years. Recent studies have shown that in the river systems of the south-eastern arid zone where emus and the extinct Genyornis co-occurred, there was a major reduction in the plants that used the C4 photosynthesis path before this change and that the C4 plants that remained after this time (for example, spinifex) were much less nutritious. Palaeobotanists can tell what the class of plants various animals ate by looking at the C3 and C4 traces in eggshells (for birds) and teeth (for mammals). While Genyornis specialised on the nutritious C4 synthesising plants of the earlier era died out (see Chapter 8), generalists like emus adapted from a mixture of C3 and C4 plants to a diet dominated by C3 (woody shrubs) and survived. Such adaptability has been documented more recently in different ways, in the emu’s ability to make ‘specialties’ of newly available food sources such as the pest plant, prickly pear (Opuntia spp.) as well as farmers’ crops, such as wheat. Their ability to move around quickly and eat and breed opportunistically makes emus a classic boom and bust species. They are a symbol of Australia in more than one sense.
Emu myths at the time of federation

From the start emus were a significant feature of Australia. An emu was shot within a few weeks of the first British settlement, less than two miles from Sydney Cove. It was dissected carefully and finally eaten by Watkin Tench, who described the flesh as tasting ‘like beef’. The skin was sent to Lord Sydney by Governor Arthur Phillip who thought it a significant bird, meriting attention. The Tasmanian emu and the much smaller King Island emu and Kangaroo Island emu (D. baudinianus) lived in similar country to that preferred by the mainland emu. They were shy and much more difficult to hunt than kangaroos, according to Baudin’s 1803 account of Kangaroo Island emus but despite this – or perhaps because of it – they were prized as meat. After the arrival of Europeans, extensive clearing and hunting caused their quick demise, particularly in smaller islands where there was little alternative country where they could re-establish populations.

Settler Australians were drawn to emu stories round the time of Federation when the emu became formally part of the arms, perhaps because the unicorn had such a strong status as a mythical animal in Britain. Katie Langloh Parker (later Catherine Stow) actively promoted stories about emus as part of her work on Aboriginal ideas about the Australian environment. She was one of Australia’s earliest female ethnologists, an author of children’s books and of a magazine of Aboriginal myths and culture based on the tales she heard from local Noongahburrah people in and around Walgett in western New
South Wales.\textsuperscript{25} She grew up a fluent speaker of Noongahburrah. When she was six, an Aboriginal girl saved her and two of her sisters from drowning in the Darling River. As an adult, an isolated wife on Bangate station for over 20 years, Catherine Stow had several Aboriginal women working in her home and found opportunities to talk about all sorts of stories. In \textit{Wog-gheeguy} she relates the story of Dinewan, the emu who was tricked by Goomblegubbon (wild turkey) into having her wings cut off, and how this taught the Laughing Jackass (kookaburra) to laugh.\textsuperscript{26} These stories were more about the social relations between the birds than their ecological niches, but as Deborah Rose showed in Chapter 9, there were also many Aboriginal stories that explicitly considered the ecological relations between birds and their environments.

\section*{The emu’s symbolism}

Why was the emu chosen to represent ‘nationalist’ ventures? It was not just part of the coat of arms, but a national symbol in a range of places at the time of Federation. For example, the Australasian Ornithologists’ Union, founded in 1901, adopted \textit{Emu} as the name of their learned journal.\textsuperscript{27} Its almost dinosaur-like head is strongly suggestive of the ‘primitive’, a concept of Australia popular at the turn of the 20th century. Indeed, evolutionary biologists still regard the ratites, including the emu, as having particular interest. Recent studies have shown that the ratites are among evolutionary lineages that date back to Gondwanan times. In the early 1900s classifications were not based
on cladistics and today’s genetic technologies of course, but on Eurocentric ideas based on form (morphology). Nonetheless biologists were very concerned with the idea of what was ‘primitive’ in the system. The emu was part of the discourse where so-called primitive life-forms were regarded as inferior, or only ‘halfway developed’ towards the better-developed forms of other places. Australia was seen as something of a ‘continental museum’ and the emu was one of the animals regarded as more a ‘curiosity’ than a functional animal. Taxonomy, founded in Europe, was written in a Eurocentric language, as Stephen Jay Gould has observed:

Prototheria (monotremes) were ‘premammals’; Metatheria (marsupials) were ‘middle mammals – not quite there’; and ‘Eutheria’ (the warm-blooded animals of the North) were the ‘true mammals’.28

Australia, the continental museum, had curious ‘missing links’ that supported some theories of progressive evolution. It was also ‘a place of refuge for mediaeval types’. This particular idea, put forward in 1910 by passing English journalist Joseph McCabe, became part of the mythology that justified an active campaign of ‘improvement’ as part of nation-making.29 This was a land where the development of the natural creatures had stalled. It was a land of ‘missing parts’ in need of new and useful biota from elsewhere as well as new technologies that could to guide it into modernity and participation in international markets.
Misunderstanding the emu

The emu was not famously noble like the lion or the unicorn, but it did gather a reputation for being fast and difficult to catch. Emu feathers were sought-after symbols of riding competence, especially among mounted infantry units during the years of the First World War. The Australian soldiers in the Australian Fourth Light Horse Brigade wore emu feathers in their hats with pride, but only one year after the end of the war, some Western Australians began to find the bird a nuisance in the new wheat and sheep country being opened up by returned soldiers.

In 1919, the Upper Chapman Road Board at Nanson requested that the emu be removed from the protected list and by 1923, emus north of latitude 30ºS were classified officially as ‘pests’. As the farmers in Western Australia battled to make a new life for themselves in the post-war years on new blocks in the ‘wheat belt’, emu numbers expanded rapidly, especially around the Number 3 Rabbit-proof Fence running east-west from just south of Kalbarri to join up with the earlier Number 2 north-south Fence (see Figure 12.1). The Number 3 Fence increasingly became known as the Emu Fence, as bird numbers increased exponentially. From 1923, district vermin boards started to levy a bounty on emu heads from about 300 km north of Perth – between latitude 30ºS and the fence at 28ºS. The birds were no longer protected by the Game Act, and this area was being rapidly developed for sheep farming. Dominic Serventy estimated that in 1928, 3000 to 4000 emus were destroyed in just one district. He had a report from a
Figure 12.1 Western Australian wheatbelt, showing the vermin fences constructed in the early years of the 20th century. (Illustration by Clive Hilliker)
farmer stating that ‘he had seen a heap of dead emus 16 ft (3 m) high and 4 ft (1.3 m) square’. The next year, in response to an outbreak in the Northampton district, the Government subsidised the bounty, and 2/6 (25 cents) per head was paid on 2148 birds.32

The Depression years made margins tight and bounties valuable, but it appears that many birds perished on the Fence before they made it into populated areas where bounty hunters awaited them. According to a local vermin inspector in November 1930, ‘they are all lying dead along the fence between Ajana and the junction of the No. 2 and No. 3 fences … the farmers on the south side of the fence are jubilant’.33

The bounty system had also been adopted in the late 1920s in Queensland. The issue here was not emus but the noxious prickly pear, and because emus consumed the fruit, they were rightly regarded as a major vector, spreading the plant as they roamed. The consequences for emus were just as bad as in the West; bounties were paid on 330 000 birds and eggs of the emu, crow and even the cassowary in Queensland.34

The Emu Fence did not hold the birds for long in Western Australia. In 1932 an outbreak was reported further south and further inland, in the north-eastern wheatbelt country not far from the town of Southern Cross. This angered farmers who resented the ‘invasion’ and its effects on the important new wheat economy.

The Commonwealth Minister for Defence, Sir George Pearce, was persuaded by the complaints of Western Australian
farmers to send in the Army. He thought the emu was a scourge to be routed, and that this would make excellent military target practice. Pearce declared an ‘emu war’. The Seventh Heavy Battery of the Royal Australian Artillery brought two Lewis guns and 10 000 rounds of ammunition to the ‘war’, which was conducted without discussion with the local Department of Agriculture, which was the main promoter of the wheat belt development. Fifty local settlers organised a 35 km drive of emus to an ambush point on the No. 1 Rabbit Proof Fence. But they had not reckoned on the response of the emus. Alas for the settlers and the honour of the Army, the birds knew how to split into small parties and ran zigzagging across the country completely foiling the stationary and inflexible ambush. A ploy to trap about 1000 emus at a watering point just before daylight on 4 November 1932 resulted in just 12 birds being shot before the gun jammed. Two days later the Army managed 50 birds, but at a total cost of more than 2500 rounds of ammunition. The miss rate was spectacular, and when this was mentioned in speeches in the House of Representatives in Canberra, the Minister ignominiously withdrew the Lewis guns on 8 November, just four days after the ‘war’ had begun. As the emu war became an evident failure, the Western Australian Department of Agriculture quickly distanced itself from the venture, leaving the Minister with the ignominy.

The Western Australian government continued to prefer a bounty system, which effectively outsourced the problem and was popular with farmers and itinerant farm workers. Even at
just a shilling a head for emus, skilled emu-catching was a bonus in tough times and the slaughter of emus provided extra income to workers on the edge. In 1935, bounties were paid on 57,034 birds in six months. Small mobile parties and emu drives were much more ruthlessly effective than the Army’s heavy-duty attack, which failed to engage with the way emus run across country. Both Aboriginal people and rural settlers had developed better methods for catching emus and had employed them with some success for many years. But even with the bounty-hunters, emu populations continued to be considered a problem for the farming economy. In 1944, at a time when the bounty fund had become permanent and centrally funded (rather than the separate initiatives of local boards), the Western Australian Minister for Agriculture FJS Wise declared the emu ‘vermin throughout the state’. It took naturalists until 1947 to get the message across that that it was a localised pest and quite rare in the southwest corner, where it was ultimately restored to the protected list.36

New science for an old land
The emu’s status as a pest eventually became a blessing of sorts. Its biology and behaviour would have remained poorly understood if it had simply been regarded as a curiosity. There has traditionally been little funding for non-rare species that are not of economic value – either positively or negatively. The Agriculture Protection Board of Western Australia in 1958 approached Francis Ratcliffe, head of the CSIRO Wildlife
Section, about studying the control and ‘bionomics’ of pest species including emus and black-cockatoos (now Baudin’s black-cockatoo *Calyptorhynchus baudinii* and Carnaby’s black-cockatoo *C. latirostris*). The thinking was that if its biology were better understood, methods to control numbers and behaviour of problem birds would be more effective.

It is hard enough to catch an emu, but to catch it so it can then be released and followed, especially in the years before the advent of satellite tracking, posed a particular problem. In 1969, 154 fast-running emus were ‘noosed’ by the enterprising Stephen Davies and his CSIRO colleagues, one of whom was sitting on the bonnet of a moving land rover. These birds were then banded and released. Such ‘mark-recapture’ studies allow scientists to monitor individual characteristics as well as their movement and behaviour. Thirty bands were recovered over the next year, two on emus more than 400 km from where they were banded, showing the extent of movement of individual birds. Davies reported accounts from farmers and other observers of particular emus with distinguishing marks moving up to 800 km in a matter of a few days.

**The idea of nomadism**

Nomadism has been closely studied by biologists internationally, particularly since the technique of radio tracking has allowed more detailed mapping of movements. It is common in places where rainfall and resources are highly variable. Some migrations are also ‘nomadic’ where birds travel to
breed or survive on wintering grounds, and where their breeding is constrained by a resource pulse. Craig Allen and Denis Saunders define nomadism as ‘unpredictable movements in space and time that track unpredictable changes in resource distribution and abundance’, and they noted that ‘nomadic species tend to occur disproportionately in arid or semi-arid ecosystems’. Americans Robert Bennett and Wiley Kitchens, reviewing the literature of nomadism, commented that it can be a response to a local depletion of food or other resources, but this is not always the case. Some animals ‘exhibit exploratory movements during time of high resource abundance’. That is, nomadism can be a response to bust conditions or it can equally be facilitated by boom. While not moving when there is no food is clearly a ‘cost’ for an animal, it is also an effort to move and extra resources can make this possible. Emus move in times of scarcity, but they also respond to unexpected resources. They responded quickly and abundantly to the unexpected opening up of the Western Australian wheat belt: the planted crop in 1932 supported 20,000 emus in an area of about 40 square miles near Southern Cross, something we know because the birds frustrated struggling farmers. So while nomadism is a boom and bust phenomenon, it is not always clear which motivation drives which movements, particularly for opportunistic feeders like emus. The international literature is however, agreed that uncertainty of resources is a major factor in nomadism. The Australian interior’s highly unpredictable ecosystems with boom and bust cycles set off by
irregular rain and fire make nomadism, not sedentary behaviour, an evolutionarily advantageous strategy for many creatures, including emus.

**A new symbolism based on the real emu**

The demise of the smaller emus in Tasmania and Kangaroo Island in the 19th century showed that populations can collapse suddenly, especially under pressure from hunting and habitat loss. Even on the mainland, habitat loss and restricted movement can threaten emus. Emus can also be adaptable survivors, sometimes the first animals to recolonise a landscape after disaster, moving quickly to take advantage of places where competition has been eliminated. Nomadism has a cost however, and emus may be particularly vulnerable to other pressures when they are moving. For example, many emus still perish at the Emu Fence in Western Australia on their spring migration coastward after winter breeding in the inland. This Fence, originally built in 1908, was still being extended by the Western Australian Department of Agriculture in the late 1950s as farming expanded into new country.42

In the 21st century mainland emu populations appear to be on the decrease again. Only half the population of the 1984 *Atlas of Australian Birds* was reported in the *New Atlas of Australian Birds* published in 2003, but this figure may be complicated by the different sampling techniques used in the two surveys, and the different environmental conditions that prevailed at the time each was undertaken.43 There is still only limited
understanding of the problems posed by fences, roads and other obstacles to cross-country movement for emu populations. Nomadic strategies dictate that a ‘home country’ should have fluid edges. Rigid barriers like fences and highways will always pose a challenge to a nomadic animal like an emu. A typical emu population will spread its net as widely as possible across country to gain advantage in movement, rather than in investing in defending a single territory. Nomadism is a diametrically opposite strategy of settled yeomanry, the European ideal for settler Australia. Yeoman farmers develop small areas intensively, settle close to each other and create their society quickly and definitively. They need fences to set legal and territorial limits. By contrast, emu groups prefer not to live too close to each other or in fixed places. They need to be free to move quickly to take advantage of resource opportunities as they arise. From an emu’s perspective, a fence is major obstacle to a survival strategies developed over many generations of living within the limits imposed by arid country with a highly variable climate.

Postscript
The emu is a diurnal creature and Western science has concentrated on its daytime activities. For Aboriginal people, the emu is very important; indeed it is kin for some people. And it is not just a bird of the day. It is also a story of the night. The emu is closely associated with Aboriginal astronomical ideas. Australia has glorious night skies, with an extraordinary
number of stars brilliantly visible in the Milky Way. You need a Gestalt switch, however, to find the emu. Instead of looking at the stars, you have to look at the black between them and there you will find, silhouetted by stars, a very large blue-black emu. The emu in the sky complements the emu-hunting of the day.

The idea of putting the emu and kangaroo together on the Australian coat of arms also perhaps has origins in Aboriginal ideas. As Bluey Roberts, a Ngarrindjeri Kukutha boomerang artist, from the region between the Murray and the Coorong in South Australia, explained it:

Emus and kangaroos always eat together – they look out for each other and they protect each other and give warning to each other – they are always on watch always looking around.45

Where booms and busts can change country dramatically, a nation needs watchful guardians, day and night.

Endnotes


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6 There was an Emu Airlines, however. One of its principal routes was to Kangaroo Island.


8 Poster ‘To the Australian Born’ (for vote for Federation), William Brooks and Co. Printers, Sydney, 20 June 1900.


10 The first arms (drawn in 1908) were just the St George Cross on the shield with the kangaroo and emu, but the 1912 version with a division for each State was much more elaborate, and has persisted. The wattle under the shield is optional, as is design of rose, thistle and shamrock in Britain. See Robin L (forthcoming 2009) Wattle. (Eds. M Harper and R White) Australian Symbols.

11 Strictly these were The Crown Land Acts 1861 (NSW) – and the Premier who introduced them was John Robertson – but they are generally referred to as the Robertson Land Acts.


14 S Davies, interview with the author, 3 October 1998, Tape 1, side 1; Transcript, p. 14.


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17 [Report from the *Australasian* 21 March 1908] ‘The ways of the emu’. *Emu* 8, 42.

18 Davies SJJF (1976) p. 111.


23 Whittell HM (1954) p. 68.

24 One of the earliest reported sightings of the King Island emu was by Captain Péron of the *Géographe*. It was one of ‘five or six’ on a ‘type of butcher’s hook’ in a sealers’ camp. See Whittell HM (1954) p. 66.


26 Stow C (1930) *Woggheeguy: Australian Aboriginal Legends*. F.W. Preece and Sons, Adelaide, pp. 1–6. (Illustrations by Nora Heysen.) The story goes on to relate the revenge of Dinewan on Goomblegubbon and her friend Bralgah (brolga), and that this is why these birds are still enemies.


31 Fence No. 1, built in 1901–1907 went from just west of Esperance due north to the coast of the Pilbara, but before it was complete the rabbits had broken through, and fence No. 2 was started in 1905, beginning from Bremer Bay, just west of Albany northwards, marking the edge of the wheat belt.

32 The Ajana district, near Kalbarri was where the 1928 estimate and the farmer’s report came from. Ajana is right on the fence-line. Serventy DL and Whittell HM (1962) *Birds of Western Australia*. Paterson Brokensha: Perth, p. 66.

33 Serventy DL and Whittell HM (1962) p. 66.


36 Serventy DL and Whittell HM (1962) p. 68.

37 Ratcliffe to GK Baron Hay (Chairman of the Agriculture Protection Board), ‘Emus and black cockatoos’, 27 March 1958. Ratcliffe letters (private collection of the estate of JM Calaby). The later division into short and long billed black cockatoos was the result of the work of Denis Saunders. See Saunders DA and Ingram JA (1998) Twenty-eight years of
monitoring a breeding population of Carnaby’s cockatoo. *Pacific Conservation Biology* 4, 261–70.

38 This story is told by Rowley, ‘Nomads of the inland’, in *Bird Life*. The technical report on the study is Davies, Beck and Kruiskamp, ‘The Results of Banding 154 Emus…’.

39 See David Roshier, this volume, Chapter 5.


42 The Lake Moore Emu Fence was constructed between 1957 and 1959. Serventy DL and Whittell HM (1962) pp. 39, 367.

