THE OFFICIAL BIOLOGICAL EMBLEMS OF AUSTRALIA



Reuben C. J. Lim and Hugh T. W. Tan

Lee Kong Chian Natural History Museum National University of Singapore Singapore 2014

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Cover photograph of *Acacia pycnantha* Benth. flowers, Australia's national flower © <u>Team Holdatzky</u> Photography.

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CONTENTS

1.	Intr	oduction	1
2.	Met	thods	3
3.	Aus	stralia	4
4.		te and Territorial Biological Emblems	
	a.	Australian Capital Territory (ACT)	19
	b.	New South Wales (NSW)	23
	c.	Northern Territory (NT)	
	d.	Queensland (QLD)	
	e.	South Australia (SA)	
	f.	Tasmania (TAS)	
	g.	Victoria (VIC)	
	h.	Western Australia (WA)	
5.	Ack	knowledgements	
6.		erature Cited	
7.		ation of this Book	
8.		ices	
•	a.	Scientific Name Index	
	b.	Family Index	
	c.	Common Name Index	
	d.	Emblem Type Index	
	u.		/ 1

INTRODUCTION

The Commonwealth of Australia is an island continent and the world's 6th largest country with a land area of 7,682,300 km² (Australian Government, 2013). It lies between the Indian and Pacific Oceans, and neighbours the Democratic Republic of Timor-Leste, Republic of Indonesia, and Independent State of Papua New Guinea to the north; the Solomon Islands and Republic of Vanuatu to the north-east; and New Zealand to the south-east. Canberra is the capital city of Australia, and is situated in the Australian Capital Territory. Australia is made up of six states and 10 territories.

Official biological emblems are animals, plants, or plant organs (e.g., flowers or fruits) that have been accepted through indirect adoption or declared through legislation or gazettes, by governing bodies to be official representative symbols of these entities (Lim et al., 2013). These do not include human icons. Biological emblems may be found on flags and coats-of-arms, but the converse, where there are biological representations on flags or coats-of-arms, does not mean these biological representations are biological emblems.

Australia, the nation, all its six states, and only two of its territories (each marked with an asterisk), as listed below, have biological emblems (Fig. 1):

- 1. Australian Capital Territory (ACT)*
- 2. New South Wales (NSW)
- 3. Northern Territory (NT)*
- 4. Queensland (QLD)
- 5. South Australia (SA)
- 6. Tasmania (TAS)
- 7. Victoria (VIC)
- 8. Western Australia (WA)

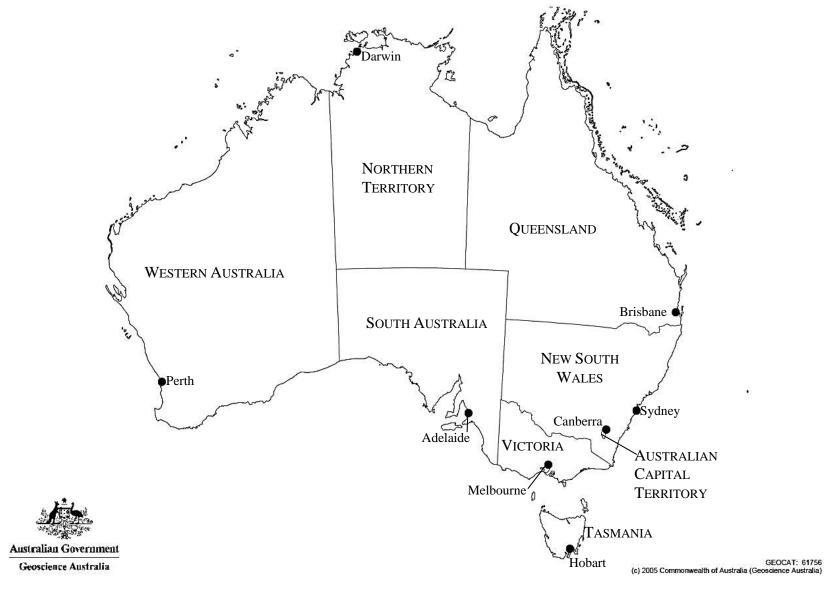


Fig.1. Australian states and territories (capitalized) with official biological emblems. Black circles show capital cities. (Map by: Australian Government).

This book represents the first compilation of all of Australia's official national and state or territory biological emblems accurate to 31 Dec.2013 with information from official sources together with other biological and conservation information. Photographs of biological emblems are also presented. The following information on Australian emblems correct as at 31 Dec.2013 is arranged alphabetically by state or territory but starts with that for the country.

METHODS

The list of states and territories of Australia was obtained from the Australian Government website (Australian Government, 2013). Biological emblems were compiled through official state or territory government websites where located. All relevant institutions and government agencies were contacted by email to confirm the accuracy of information shown on the websites or to obtain missing information. Information such as local and common name, scientific name, and date of selection were compiled. Correspondence was between Jun.2011-Mar.2014. Scientific names and classification systems were based on the most recent scientific literature (taxonomic revisions of the corresponding taxon, relevant floras, monographs, international codes of nomenclature, and online species listing databases; Angiosperm Phylogeny Website [Stevens, 2001 onwards]; Avibase [Lepage, 2012]; Fishbase ver. 12/2013 [Froese & Pauly, 2013]; International Commission on Zoological Nomenclature & International Union of Biological Sciences [1999]; Mammal Species of the World [Wilson & Reeder, 2011]; McNeill et al., 2007; The Plant List, 2013; etc.). Where no scientific name was provided, the relevant government office or institution was contacted for its advice, but if there was no response, a best guess was made as to what its identity could be based on expert opinion or biodiversity databases (Angiosperm Phylogeny Website [Stevens, 2001 onwards]; Avibase [Lepage, 2012]; Fishbase ver. 12/2013 [Froese & Pauly, 2013]; International Commission on Zoological Nomenclature & International Union of Biological Sciences [1999]; ITIS [2012]; Mammal Species of the World Reeder, 2011]; McNeill et al., 2007; The Plant List, 2013; etc.). Information on the selection and use of the emblems was obtained from the official national, state or territory websites. Legislation, where found, is also included for each emblem. Criteria for categorizing possible reasons for selection was taken from Lim et al. (2013):

- 1. **Aesthetic**: Relating to beauty and being pleasant to behold, having a combination of the factors of order, unity, complexity, simplicity, symmetry, form, rhythm, balance, and pattern (Flannery, 1993b). Colours, complexity, mixture of contrast, form, and shape that evoke feelings of pleasure, fascination, and attraction (Flannery, 1993a).
- 2. **Conservation**: Where the taxa are documented as Vulnerable, Endangered or Critically Endangered in the IUCN or National Red Lists (Zoological Society of London, 2010; IUCN, 2011) or listed in the schedules of CITES, CMS or EU Appendices (UNEP, 2014). Protection by national and local laws were also considered. Publications by authorities on taxa, floras, and recent taxonomic revisions that provide such information were also used.
- 3. **Distribution**: Where taxa are listed as endemic by the IUCN Red Lists or GRIN (IUCN, 2011a; USDA, ARS, National Genetic Resources Program 2012). This can also include mentions of nation-wide distributions on national websites. Publications by authorities on taxa, floras, and recent taxonomic revisions that provide such information were also utilised.
- 4. **Economic**: Taxa that have economic value to humans and are of commercial utility (Wickens, 1990). These taxa can be used for agricultural, chemical, forestry, horticultural, medicinal, and pharmacological purposes (Anonymous, 1984).
- 5. **Historical or cultural**: Documented evidence of taxa being part of the history or culture of the country, including indigenous-community and ancient-civilization use.
- 6. **Superlatives**: Outstanding and extreme in terms of size, dimensions, behaviour, and qualities. This category includes descriptions of biological emblems on national websites using superlatives.

AUSTRALIA

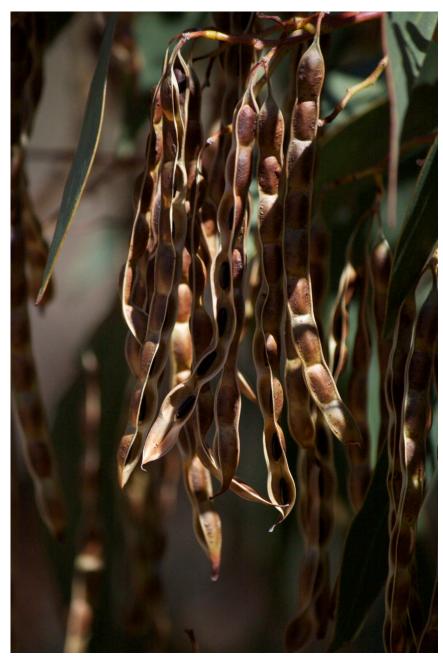
Emblem Kingdom	Designation	Declared Name	Date Declared	Current Scientific Name	Family
Plant	National Flower	Acacia pycnantha (golden wattle)	1 Sep.1988	Acacia pycnantha Benth.	Fabaceae



Tree of *Acacia pycnantha* (golden wattle), the National Flower of Australia. (Photograph by: <u>Arthur Chapman</u>)



Flowers in one head inflorescence of *Acacia pycnantha* (golden wattle), the National Flower of Australia. (Photograph by: Flickr User sunphlo).



Fruits of *Acacia pycnantha* (golden wattle), the National Flower of Australia. (Photograph by: Flickr User sunphlo).



Seeds of *Acacia pycnantha* (golden wattle), the National Flower of Australia. (Photograph by: <u>Steve Hurst, USDA-NRCS PLANTS Database</u>).

Acacia pycnantha Benth. (golden wattle; Fabaceae), also shown on this book's cover, was proclaimed as Australia's national floral emblem in 1988, the year of Australia's bicentenary (Boden, 1985b). This proclamation was signed by the then Governor-General, Sir Ninian Stephen on 19 Aug.1988, and gazetted on 1 Sep.1988. It was first unofficially accepted as the national floral emblem to mark the achievement of Australia's Federation in 1901. When in flower, the golden wattle displays the national colours of green and gold (Australian Government, 2009). The golden wattle can be found across Australia, making it a symbol of unity. It is tolerant of frost, drought, wind, and bushfires, and this represents the rugged spirit of the Australian people (Boden, 1985c; Australian Government, 2009). Australians have celebrated National Wattle Day every 1 Sep. since 1992 by wearing a sprig of wattle, greeting each other, and sharing a meal with family and friends (Wattle Day Association, 2013). The golden wattle is usually depicted in the background of the Coat of Arms of Australia, but is not part of the armorial design and not mentioned in the Royal Warrant of King Edward VII (Department of Foreign Affairs and Trade, 2014). Australia has not adopted any official faunal emblem but by popular tradition, however, the kangaroo and emu are widely accepted as such.

From the official <u>website</u> of Australian National Botanic Gardens (2012a), on the proclamation of *Acacia pycnantha* as the national floral emblem:

"Commonwealth of Australia Gazette, No. S 259 Thursday 1 September 1988

PROCLAMATION

By His Excellency the Governor-General of the Commonwealth of Australia

N.M.STEPHEN Governor-General I, SIR NINIAN MARTIN STEPHEN, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, hereby declare that the flowers of *Acacia pycnantha*, the plant known as Golden Wattle, however depicted, shall be the national floral emblem of Australia.

(L.S.) GIVEN under my hand and the Great Seal of Australia on 19 August 1988

By His Excellency's Command, ROBERT RAY Minister of State for Home Affairs GOD SAVE THE QUEEN"

From the official website of Australian National Botanic Gardens (Boden, 1985b):

"Patriotism

In the spirit of national and patriotic fervour generated by the approach of Federation, achieved in 1901, public interest in the Australian environment was awakened and the search for a national identity brought the desire for national symbols.

Archibald Campbell founded a Wattle Club in Victoria in 1899 to promote a Wattle Day demonstration every September to encourage recognition of the flower as a symbol of patriotism. In 1908 he delivered a lecture entitled 'Wattle Time; or Yellow-haired September' in which he stated that 'by numbers, the Wattle is almost exclusively Australian, and should undoubtedly be our National Flower'. Interest in a national Wattle Day was revived in Sydney in 1909. Victoria and South Australia participated in 1910, and Queensland in 1912."

"The adoption of wattle as the national flower tends to be confirmed by its introduction into the design of the Australian armorial bearings on the recommendation of the Rt Hon. Andrew Fisher, Prime Minister of Australia, when the Commonwealth Armorial Ensigns and Supporters were granted by Royal Warrant on 19 September 1912."

"Proclamation

Acacia pycnantha enjoyed popular acceptance as Australia's national flower for much of this century but it was not proclaimed as the national floral emblem until 1988, the year of Australia's bicentenary. The Gazettal is dated 1 September 1988, signed by the Governor General, Sir Ninian Stephen, on 19 August 1988.

A ceremony was held on 1 September 1988 at the Australian National Botanic Gardens when the Minister for Home Affairs, Robert Ray, made the formal announcement, and the Prime Minister's wife, Mrs Hazel Hawke, planted a Golden Wattle.

Four years later, in 1992, the 1 September was formally declared 'National Wattle Day' by the Minister for the Environment, Mrs Ros Kelly at another ceremony at the Australian National Botanic Gardens. The Gazettal is dated 24 August 1992 and was signed by the Governor General, Bill Haydon, on 23 June 1992."

"Symbolic usage

The first granting of armorial bearings to the Commonwealth of Australia was made in 1908. A new design was granted by Royal Warrant on 19 September 1912. The branches of wattle used as an ornamental accessory to the shield, representing the badges of the six States as they were in 1912, were not mentioned in the blazon, but were depicted in the coloured illustration included in the gazettal of the Australian armorial bearings. The wattle depicted has clusters of spherical

flowerheads coloured yellow and blue-grey, and green phyllodes characteristic of many species of *Acacia*. It is not a botanically accurate representation of *A. pycnantha*. There are conventional versions of the bearings for formal printing and other formal media. Stylised versions are also used."

"Australians representing their country in international sporting events usually wear the national colours, green and gold, said to be based on wattle foliage and flowers."

From the official <u>website</u> of Parliament of Australia (Panter, 1997), on Australia's Wattle Day: "Current Issues Brief 1 1995–96

Rod Panter

Science, Technology, Environment and Resources Group

29 August 1995 (updated 19 August 1997)"

"The national floral emblem

Golden Wattle (*Acacia pycnantha*), the national floral emblem, is a beautiful plant which grows in south-eastern Australia, notably around the ACT, in southern NSW, in the Adelaide Hills and widely in Victoria. There is a large stand situated about twelve kilometres distant from Parliament house, on Mt Jerrabombera just outside the ACT. Golden Wattles are variable in size and take the form of large shrubs or small trees depending on their location. There is also some variation in leaf width across the natural range of the species. In the Adelaide Hills, for example, the leaf is much wider than on the ACT variety [although note that mature wattles do not have true leaves; they are flattened leaf stalks]. Large flower size, on the other hand, is a characteristic of all Golden Wattles. The flowering season is late winter to early spring and so can be suitably associated with 1 September. Like many other members of the family, Golden Wattle has delicately scented blossom. Lifespan for the species is not long, only about ten years.

Wattle-like plants found overseas are often spiny, they tend to have less spectacular flowers and are known as mimosas. In Australia the *Acacias* are our largest plant genus with about 750 species. The Australian name *wattle* is an early colonial term which relates to the use of the springy stems as wattles (i.e., interlaced rods) in wattle-and-daub huts.

Aboriginal people have a strong traditional relationship with a number of wattle species, which have been used by them for food, fuel, medicine and various woodcrafts.

Golden Wattle is a relatively hardy species and has been planted in all States. Frost-resistant varieties can be chosen for the inland. For example, Canberra's Golden Wattles are unaffected by heavy frosts. Some care may be needed in order to prevent invasion of local bushland in, say, Western Australia where the species is not endemic, which is why the practice of distributing *A. Pycnantha*seed (sic) on Wattle Day may not always be welcome. Such invasion by another popular species, Cootamundra Wattle (*A. baileyana*), has occurred in the ACT.

The first **official** move towards recognising wattle as a national symbol took place on 19 April 1984, when the Governor-General proclaimed Australia's national colours to be green and gold. This was an important step, because blue and gold had also traditionally vied for this status and there had been some confusion and personal preference involved. Blue can still be accepted as an unofficial national colour because blue represents a clear Australian sky as the background to flowering wattle.

On 1 September 1988, Golden Wattle was declared officially as Australia's national floral emblem. While Golden Wattle had long enjoyed that status informally - note its prominent place within the Commonwealth Coat of Arms dating from 1912 (frontispiece) and on the insignia of the Order of Australia - it had taken strong supporters of the emblem, notably Maria Hitchcock and also the Society for Growing Australian Plants (SGAP), to persuade the Federal Government to grant official recognition in the Bicentennial Year.

Another aim of Maria Hitchcock and her fellow enthusiasts was to revive Wattle Day, which traditionally had been celebrated on the first day of Spring in several States although 1 August was the accepted date in NSW. At her urging, and with growing support from others, the Commonwealth and the States agreed in 1992 that Wattle Day would henceforth be the same in all States and Territories, that is, the first day of September. This was a necessary step towards reviving Wattle Day as a **national** celebration."

"A brief history of Wattle Day

Although wattle was associated with Australia from very early days, its significance increased around the time of Federation. The first celebration of Wattle Day was held on 1 September 1910 in Sydney, Melbourne and Adelaide. Plans in 1913 to proclaim the wattle a national emblem and celebrate Wattle Day nationally were interrupted by World War I, but wattle remained a strong symbol of patriotism during the war years. Sprigs of wattle and colourful badges were sold on Wattle Day to raise money for the Red Cross. NSW changed the date to 1 August in 1916 because that allowed the Red Cross to use the earlier flowering and more familiar Cootamundra Wattle rather than Golden Wattle. Wattle was sent overseas in letters during the war and was presented to homecoming service men and women at what must have been an emotional moment.

In the 1920s and 1930s, Wattle Day continued to be celebrated, still associated with raising money for charity but also featuring special activities for children and ceremonies to mark the occasion. Maria Hitchcock states in her book (*Wattle*, AGPS 1991, held in the Parliamentary Library) that Wattle Day was an annual event in NSW, Queensland, Victoria, SA and Tasmania but does not seem to have been recognised in Western Australia or the Northern Territory. Wattle Day was apparently a strong event in NSW schools. Unfortunately, the tradition was virtually lost after World War II. It was only in the 1980s, in prospect of the Bicentennial and in sympathy with rising national concern for Australian flora and the environment generally did a suggestion to revive Wattle Day receive attention.

It has been fortuitous that, just when the revival of Wattle Day seemed to be losing its way, the ACT Division of the Red Cross decided to take it on for fundraising purposes. The initial ACT Red Cross Wattle Day campaign launch was in 1994. Another welcome decision has come from the State and Territory cancer societies and councils to hold Daffodil Day on a Friday in late August, not on Wattle Day as previously."

"Wattle Day? Why?

Many Australians are uneasy with sentimental displays of national feeling so it is reasonable to ask why the traditional Wattle Day should be revived. After all, if this is a genuine folk day, why did it lapse when Anzac Day has not?

The best arguments for Wattle Day need to take into account the present economic and cultural insecurity experienced by a significant number of Australians which needs to be balanced by a celebration of hope and common purpose.

The economic insecurity largely comes from Australia opening itself up to competition with the world in recent years and was less prevalent in the comfortable 1950s, 1960s and 1970s. The need

for increased competitiveness is more-or-less a consensus position of Australian politics, but many people have been adversely affected, at least in the short term.

Another, often unspoken problem is a combination of cultural confusion and erosion. Our children (and the rest of us) have always tried to ignore the chronic cultural disorientation of being 'Down Under', especially in regard to the important national holidays. To illustrate the point, our Easter is full of symbols of early Spring (egg, young rabbits, chicks, etc.) but the symbolism and the season have no correspondence in the Southern Hemisphere. Australia's Christmas is very mixed up, with a warmly wrapped 'Santa' and his sleigh now commonly teamed with waratah and holly leaf decorations on supermarket windows! Australia Day itself is seen by some as a NSW-dominated celebration, as largely an opportunity for a multicultural display, or as a marking of the invasion of the continent by Europeans. The Queen's Birthday Holiday has become controversial. The first day of January marks the start of Federation but is also New Year's Day. There is no national Labor Day. Children know something about an overseas May Day, the may queen and the may pole of the European high Spring but there is no equivalent national Spring festival here. The only national folk day of universal acceptance is Anzac Day.

An example of cultural erosion affecting young and old is the increasing foreign sell-off of traditional Australian company icons.

If we add to the above the invasion of American culture, now accelerating through television and computer networks, together with national confusion over whether we are or should be Asian or Asianised, it can be argued that a celebration of 'Australianness' symbolised by wattle, the popular national floral emblem (which is not for sale) combined with a celebration of the coming of Spring could be a very special occasion every year. An added attraction is that Wattle Day dates back more than eighty years and is a part of Australia's history.

Wattle and Wattle Day can symbolise virtually anything we want, but they relate generally to Spring, being Australian, the Australian environment, and history. Spring has many positive values such as optimism, bounty and abundance, reliability, colour, new life and so on. We can celebrate our 'Australianness' on Wattle Day in quite a different way from Anzac Day, which in recalling past wars glorifies Australian qualities of courage and mateship. Wattle Day, by contrast, looks **forward** (to Spring) and can celebrate the nation's undoubted qualities of good humour, fairness, generosity, informality and democracy."

"What to do on Wattle Day?

Wattle Day should be a simple, sentimental and uncomplicated occasion - the last thing wanted is long, boring ceremonies. In the ACT the Day will certainly be marked by Red Cross badges, book marks and perhaps other merchandise for fundraising promotion by that organisation. This is certain to raise the local profile of the day for adults, and for many this would make it equivalent in status to Poppy Day, Daffodil Day or Red Nose Day. Wattle Day can rise above these in significance, however. For example, Wattle Day could become a favoured occasion for conferral of citizenship. Another possible emphasis is on selling wattles and other Australian plants for home and public gardens; this is already in train at the Australian National Botanic Gardens, which has a Wattle Week associated with Wattle Day. Wattle Day could thus be associated with water conservation and better Australian garden design, plant selection, etc., to develop what is still quite primitive use of native plants for this purpose.

The traditions and sentiments surrounding Wattle Day can translate very well to young children and primary schools. Up to now, education authorities' approach to the revived Wattle Day has been generally disappointing, the Day being left to busy school principals to decide whether to celebrate or not. So as not to intrude on already packed school calendars, it is important that Wattle Day

festivities in the schools last only one day, and **not** have a heavy curriculum input over, say, a week. Some suggested activities for primary schools on Wattle Day are:

- decorating classrooms
- plays/poetry readings/songs
- the teaching of Wattle Day history
- folk dancing
- planting Golden Wattle or other native species on school grounds
- just having a party
- art, posters, etc.

Perhaps each year could feature a new theme such as history, environment, flower arranging and so on. If all this seems a little too much for some boys, perhaps they could be reminded that their sporting heroes carry the colours of wattle!

Traditionally, Wattle Day was strongly associated with planting Australian trees and shrubs. This activity has been largely taken over by conservation initiatives such as Landcare, Greening Australia, Arbour Week and so on. In that case, perhaps Wattle Day could concentrate on the planting of Golden Wattle itself; the species is short-lived and needs to be replaced fairly often. Also, many Australians young and old would not be able to recognise the national floral emblem because it is not as commonly planted as it could be. In the tropics, Golden Wattles could be replaced by more suitable *Acacia* species."

"A role for the Federal Government?

Meaningful support for Wattle Day at Federal level would not have to be costly, and

would mainly involve promoting and distributing literature, and seeing to coordination of related activities.

Wattle, the book written by Maria Hitchcock, has been well produced and needs a much wider circulation. It has often been suggested that the Commonwealth could donate a copy to each primary school library nationwide. Another possible initiative at Federal level could be to commission a similar book meant to appeal to the very young. This could perhaps be given to each child in a particular year of his/her education. The Commonwealth could also distribute carefully prepared Wattle Day kits to schools, in cooperation with State education bodies.

Wattle Day seems to lend itself particularly well to poetry. The Federal Government could hold a regular poetry competition nationwide with an attractive prize.

Citizenship ceremonies were mentioned earlier as being most suitable for Wattle Day. The Government could encourage such timing so that it becomes a tradition.

Lastly, Wattle Day can be made more closely associated with the Order of Australia. For example, past newspaper publicity for entries on 'What it is to be an Australian', in the name of the Order of Australia Association, could have been more closely linked with Wattle Day. One can even conceive of new awards of the Order being made on - Wattle Day."

Federation Flowers. — From the official <u>website</u> of the Australian National Botanic Gardens (2012b):

"The year 2001 is the focus for celebrations marking the Centenary of Federation. Throughout Australia there will be events to commemorate the occasion of our Federation and the achievements of our first 100 years as a nation.

As part of the celebrations each state was asked to nominate a 'federation flower', a plant which would be ready for release for use as an ornamental.

State or	2001 Trade Name	Botanical Name	Common	More
Territory			Name	Information
Australian Capital	Canberra	Rosa 'Canberra	Canberra Rose	<u>information</u>
Territory	Federation Rose	Rose'		
New South Wales	Federation Stars	Actinotus helianthi	Flannel Flower	information
Northern Territory	Federation Lady	<i>Alpinia</i> purpurata hybrid	Pink Ginger	<u>information</u>
Queensland	Federation Gold	Bracteantha hybrids	Everlasting Daisies	<u>information</u>
South Australia	Centenary Starburst	Thryptomene ericaea	Mat Heath Myrtle	information
Tasmania		Phebalium daviesii	St Helens Wax Flower	<u>information</u>
Victoria	Scarlet Blaze	Acacia leprosa form	red flowered form of Cinnamom Wattle	information
Western Australia	Kings Park Federation Flame	Anigozanthos rufus	Red Kangaroo Paw	information

STATE AND TERRITORIAL BIOLOGICAL EMBLEMS

There were 27 biological emblems selected by the six states and two territories (Tables 1A, 1B) as at 31 Dec.2013. The six states and two territories each have one floral emblem. Besides Tasmania, all others have a bird emblem (South Australia's Badge of the State is a bird) and an animal or faunal emblem. Tasmania only has a floral emblem. There are all together eight plant emblems and 19 animal emblems. Out of the 19 animal emblems, there are five aquatic, fish, or marine emblems, and one fossil emblem. The rest are mammal or bird emblems. Most (17) of the emblems were selected between 1960 and 1990.

All 27 Australian state and territorial emblems are of species that are native to Australia, and most (20 or 74.1%) are endemic to the selecting entity's region, or to Australia. There are six species on CITES Appendices, three of which are also listed on Australia's Environment Protection and Biodiversity Conservation Act 1999 (EPBC) and protected by corresponding state or territorial laws. The three are *Dendrobium bigibbum* (Cooktown orchid), *Lichenostomus melanops cassidix* (helmeted honeyeater), and *Rhincodon typus* (whale shark). There are six emblem species listed on the EPBC and also protected by corresponding state or territorial laws.

Seven birds and five fishes were selected as biological emblems, where two of the fishes are seahorses. Six mammals were selected, five of which are marsupials and one is a monotreme. A large number of the world's species of marsupials and monotremes are found in Australia (Kennedy & IUCN/SSC Australasian Marsupial Group and Monotreme Specialist Group, 1992) so it can be reasonably expected that marsupials would be selected. For plant emblems, there are eight plants, consisting of six eudicots and two monocots. Of the eudicots, one is a peripheral eudicot while the other five are core eudicots, including three rosids and two asterids. All the monocots are core monocots.

All biological emblems were selected because of their local distribution, aesthetics and outstanding qualities based on the descriptions included in the emblem descriptions of official sources, with the exception of Western Australia's fossil emblem, which was selected based on its site of discovery. Additionally, all plant emblems besides the ACT's have a historical or cultural aspect to their selection. The species were generally first found and described from Australian specimens, have local or aboriginal significance, and are usually endemic to Australia.

There were five biological emblems that were selected for all six criteria, and four of them are floral emblems:

- 1. Floral Emblem of New South Wales, *Telopea speciosissima* (waratah)
- 2. Floral Emblem of Queensland, *Dendrobium bigibbum* (Cooktown orchid)
- 3. Floral Emblem of Tasmania, *Eucalyptus globulus* (Tasmanian blue gum)
- 4. Floral Emblem of Western Australia, *Anigozanthos manglesii* (red and green kangaroo paw)
- 5. Marine Animal Emblem of Western Australia, *Rhincodon typus* (whale shark).

This is in line with the versatility and ease of use of plant emblems which enables them to be grown by residents, fulfilling identification and recognition purposes such as use in logos and official functions (Lim et al., 2013).

Table 1A. Biological emblems of two territories and the six states of Australia.

S/No.	State or Territory	Designation	Declared Name	Scientific Name	Family	Kingdom	Group	Subgroup	Date Declared
1.	Australian Capital	Faunal	Callocephalon fimbriatum	Callocephalon fimbriatum	Psittacidae	Animal	Bird	Parrot	27 Feb.1997
	Territory	Emblem	(gang-gang cockatoo)	(J. Grant)					
2.	Australian Capital	Floral	Wahlenbergia gloriosa	Wahlenbergia gloriosa	Campanulaceae	Plant	Eudicot,	Asterid	26 May 1982
	Territory	Emblem	(royal bluebell)	Lothian			core		
3.	New South Wales	Animal Emblem	Ornithorhynchus anatinus (platypus)	Ornithorhynchus anatinus (Shaw)	Ornithorhynchidae	Animal	Mammal	Monotreme	1971
4.	New South Wales	Bird Emblem	Dacelo gigas (kookaburra)	Dacelo novaeguineae (Hermann)	Alcedinidae	Animal	Bird	River kingfisher	1971
5.	New South Wales	Fish Emblem	Achoerodus viridis (blue groper)	Achoerodus viridis (Steindachner)	Labridae	Animal	Fish	Wrasse	19 Nov.1998
6.	New South Wales	Faunal Emblem		Aquila audax (Latham)	Accipitridae	Animal	Bird	Diurnal raptor	19 Jun.1975
7.	Northern Territory	Faunal Emblem	Macropus rufus (red kangaroo)	Macropus rufus (Desmarest)	Macropodidae	Animal	Mammal	Marsupial, diprotodont	19 Jun.1975
8.	Northern Territory	Floral Emblem	Telopea speciosissima (waratah)	Telopea speciosissima (Sm.) R.Br.	Proteaceae	Plant	Eudicot, peripheral	_	24 Oct.1962
9.	Northern Territory	Floral Emblem	Gossypium sturtianum (Sturt's desert rose)	Gossypium sturtianum (R.Br.) J.H.Willis	Malvaceae	Plant	Eudicot, core	Rosid	12 Jul.1961 (gazetted), 19 Jun.1975 (confirmed in legislature)
10.	Queensland	Aquatic Emblem	Amphiprion akindynos (anemone fish)	Amphiprion akindynos Allen	Pomacentridae	Animal	Fish	Damselfish	1 Mar.2005
11.	Queensland	Bird Emblem	Grus rubicunda (brolga)	Grus rubicunda (Perry)	Gruidae	Animal	Bird	Crane	Jan.1986
12.	Queensland	Faunal Emblem	Phascolarctos cinereus (koala)	Phascolarctos cinereus (Goldfuss)	Phascolarctidae	Animal	Mammal	Marsupial, diprotodont	14 Apr.1971
13.	Queensland	Floral Emblem	Dendrobium bigibbum var. phalaenopsis (Cooktown orchid)	Dendrobium phalaenopsis Fitzg.	Orchidaceae	Plant	Monocot, core	_	19 Nov.1959
14.	South Australia	Badge of State	Gymnorhina tibicen leuconota (piping shrike, white backed magpie)	Cracticus tibicen (Latham)	Cracticidae	Animal	Bird	Shrike	14 Jan.1904
15.	South Australia	Faunal Emblem	Lasiorhinus latifrons (hairy-nosed wombat, plains wombat)	Lasiorhinus latifrons (Owen)	Vombatidae	Animal	Mammal	Marsupial, diprotodont	27 Aug.1970
16.	South Australia	Marine Emblem	Phycodurus eques (leafy seadragon)	Phycodurus eques (Günther)	Syngnathidae	Animal	Fish	Seahorse	8 Feb.1901

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S/No.	State or Territory	Designation	Declared Name	Scientific Name	Family	Kingdom	Group	Subgroup	Date Declared
17.	South Australia	Floral Emblem	Clianthus formosus (Sturt's desert pea)	Swainsona formosa (G.Don) J.Thompson	Fabaceae	Plant	Eudicot, core	Rosid	23 Nov.1961
18.	Tasmania	Floral Emblem	Eucalyptus globulus (Tasmanian blue gum)	Eucalyptus globulus Labill.	Myrtaceae	Plant	Eudicot, core	Rosid	5 Dec.1962
19.	Victoria	Bird Emblem	Lichenostomus melanops cassidix (Gould) (helmeted honeyeater)	Lichenostomus melanops cassidix (Gould)	Meliphagidae	Animal	Bird	Honeyeater	10 Mar.1971
20.	Victoria	Faunal Emblem	Gymnobelideus leadbeateri McCoy (Leadbeater's possum)	Gymnobelideus leadbeateri McCoy	Petauridae	Animal	Mammal	Marsupial, diprotodont	10 Mar.1971
21.	Victoria	Marine Faunal Emblem	Phyllopteryx taeniolatus (weedy seadragon)	Phyllopteryx taeniolatus (Lacepède)	Syngnathidae	Animal	Fish	Seahorse	31 Oct.1902
22.	Victoria	Floral Emblem	Epacris impressa (common heath)	Epacris impressa Labill.	Ericaceae	Plant	Eudicot, core	Asterid	11 Nov.1958
23.	Western Australia	Faunal (Animal) Emblem	Myrmecobius fasciatus (numbat)	Myrmecobius fasciatus Waterhouse	Myrmecobiidae	Animal	Mammal	Marsupial, dasyurid	25 Jul.1973
24.	Western Australia	Faunal (Bird) Emblem	Cygnus atratus (black swan)	Cygnus atratus (Latham)	Anatidae	Animal	Bird	Swan	25 Jul.1973
25.	Western Australia	Fossil Emblem	Mcnamaraspis kaprios (gogo fish)	Menamaraspis kaprios Long	Order Arthrodira	Animal	Fossil fish	Placoderm	5 Dec.1995
26.	Western Australia	Marine Animal Emblem	Rhincodon typus (whale shark)	Rhincodon typus Smith	Rhincodontidae	Animal	Fish	Shark	12 Nov.2013
27.	Western Australia	Floral Emblem	Anigozanthos manglesii (red and green kangaroo paw)	Anigozanthos manglesii D.Don	Haemodoraceae	Plant	Monocot, core	Commelinid	9 Nov.1960

Table 1B. Biological emblems of two territories and the six states of Australia, with nativeness and conservation status listing, and purpose of selection (continued). IUCN = International Union of Conservation of Nature; CITES/CMS = Convention on International Trade in Endangered Species of Wild Fauna and Flora, Convention on Migratory Species; EPBC Act = Australia's Environment Protection and Biodiversity Conservation Act 1999 species listing, with date of inclusion; QLD NC Act = Queensland Nature Conservation Act 1992; Vic FFG Act = Victoria Flora and Fauna Guarantee Act 1988; WA WC Act = Western Australia Wildlife Conservation Act 1950; + = emblem was selected for such a purpose or because of such qualities.

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S/No.	State or Territory	Designation	Declared Name	Scientific Name	Nativeness	Endemicity	IUCN Red List of Threatened Species Category and Criteria	CITES/CMS Listing	EPBC Act	State or Territory Law	Aesthetic Conservation Distribution Economic History/Culture Superlatives
1.	Australian Capital Territory		Callocephalon fimbriatum (gang- gang cockatoo)	Callocephalon fimbriatum (J. Grant, 1803)	Yes	Yes	-	-	-	-	+ + + +
2.	Australian Capital Territory	Floral Emblem	Wahlenbergia gloriosa (royal bluebell)	Wahlenbergia gloriosa Lothian	Yes	Yes	Least Concern ver. 3.1	CITES Appendix II, EU Listing Annex B	_	_	+ + + +
3.		Emblem	Ornithorhynchus anatinus (platypus)	Ornithorhynchus anatinus (Shaw, 1799)	Yes	Yes	Least Concern ver. 3.1	_	_	_	+ + + +
4.	New South Wales	Bird Emblem	Dacelo gigas (kookaburra)	Dacelo novaeguineae (Hermann, 1783)	Yes	Yes	Least Concern ver. 3.1	_	_	_	+ + + +
5.	New South Wales	Fish Emblem	Achoerodus viridis (blue groper)	Achoerodus viridis (Steindachner, 1866)	Yes	Yes	_	_	_	_	+ + + + + +
6.	New South Wales	Floral Emblem	Telopea speciosissima (waratah)	Telopea speciosissima (Sm.) R.Br.	Yes	Yes	Near Threatened ver. 3.1	_	_	_	+ + + + - +
7.	Northern Territory	Faunal Emblem	Aquila audax (wedgetailed eagle)	Aquila audax (Latham, 1802)	Yes	Yes	_	-	_	-	+ - + + + +
8.	Northern Territory		Macropus rufus (red kangaroo)	Macropus rufus (Desmarest, 1822)	Yes	No	Least Concern ver. 3.1	_	_	_	+ - + +
9.	Northern Territory	Floral Emblem	Gossypium sturtianum (Sturt's desert rose)	Gossypium sturtianum (R.Br.) J.H.Willis	Yes	No	Least Concern ver. 3.1	CITES Appendix II, EU Listing Annex B	-	-	+ - + +

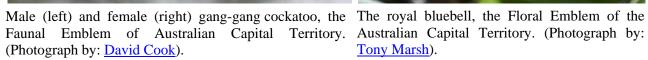
S/No.	State or Territory	Designation	Declared Name	Scientific Name	Nativeness	Endemicity	IUCN Red List of Threatened Species Category and Criteria	CITES/CMS Listing	EPBC Act	State or Territory Law	Aesthetic Conservation Distribution Economic History/Culture Superlatives
10.	Queensland	Aquatic Emblem	Amphiprion akindynos (anemone fish)	Amphiprion akindynos Allen, 1972	Yes	Yes	Least Concern ver. 3.1	_	Vulnerable	Vulberable, QLD NC Act	+ + + + - +
11.	Queensland	Bird Emblem	Grus rubicunda (brolga)	Grus rubicunda (Perry, 1810)	Yes	No	Least Concern ver. 3.1	CITES Appendix II, EU Listing Annex B	_	-	+ + + + - +
12.	Queensland	Faunal Emblem	Phascolarctos cinereus (koala)	Phascolarctos cinereus (Goldfuss, 1817)	Yes	No	_	CITES Appendix II, EU Listing Annex B	Vulnerable, 16-07-2000	Vulnerable, QLD NC Act	+ + + + + +
13.	Queensland	Floral Emblem	Dendrobium bigibbum var. phalaenopsis (Cooktown orchid)	Dendrobium phalaenopsis Fitzg.	Yes	No	-	_	-	-	+ - + + - +
14.	South Australia	Badge of State	Gymnorhina tibicen leuconota (piping shrike, white backed magpie)	Cracticus tibicen (Latham, 1802)	Yes	No	Least Concern ver. 3.1	_	_	_	+ - + +
15.	South Australia		Lasiorhinus latifrons (hairy-nosed wombat, plains wombat)	Lasiorhinus latifrons (Owen, 1845)	Yes	Yes	Near Threatened ver. 3.1	_	_	-	+ + + +
16.	South Australia	Marine Emblem	Phycodurus eques (leafy seadragon)	Phycodurus eques (Günther, 1865)	Yes	Yes		-	-	_	+ - + + + +
17.	South Australia	Floral Emblem	Clianthus formosus (Sturt's desert pea)	Swainsona formosa (G.Don) J.Thompson	Yes	Yes	Least Concern ver. 3.1	-	-	_	+ + + +
18.	Tasmania	Floral Emblem	Eucalyptus globulus (Tasmanian blue gum)	Eucalyptus globulus Labill.	Yes	Yes	_	-	_	_	+ + + + + +
19.	Victoria	Bird Emblem	Lichenostomus melanops cassidix (Gould) (helmeted honeyeater)	Lichenostomus melanops cassidix (Gould, 1867)	Yes	Yes	Least Concern ver. 3.1	CITES Appendix I, EU Listing Annex A	Endangered, 16-07-2000	Threatened, Vic FFG Act	+ + + +

S/No.	State or Territory	Designation	Declared Name	Scientific Name	Nativeness	Endemicity	IUCN Red List of Threatened Species Category and Criteria	CITES/CMS Listing	EPBC Act	State or Territory Law	Aesthetic Conservation Distribution	Economic History/Culture	Superlatives
20.	Victoria	Faunal Emblem	Gymnobelideus leadbeateri McCoy (Leadbeater's possum)	Gymnobelideus leadbeateri McCoy, 1867	Yes	Yes	Near Threatened ver. 3.1	_	_	_	+ + +		. +
21.	Victoria	Marine Faunal Emblem	Phyllopteryx taeniolatus (weedy seadragon)	Phyllopteryx taeniolatus (Lacepède, 1804)	Yes	Yes	Endangered B1ab(iii) ver. 3.1	_	Endangered, 16-07-2000	Threatened, Vic FFG Act	+ + +	+ _	. +
22.	Victoria	Floral Emblem	Epacris impressa (common heath)	Epacris impressa Labill.	Yes	Yes	_	_	_	_	+ - +	- +	+
23.	Western Australia	Animal Emblem	Myrmecobius fasciatus (numbat)	Myrmecobius fasciatus Waterhouse, 1836	Yes	No	Least Concern ver. 3.1	-	-	-	+ - +	- +	+
24.	Western Australia	Bird Emblem	Cygnus atratus (black swan)	Cygnus atratus (Latham, 1790)	Yes	Yes	_	_	-	_	+	- +	
25.	Western Australia	Fossil Emblem	Mcnamaraspis kaprios (gogo fish)	Mcnamaraspis kaprios Long 1995	Yes	Yes	Endangered C1+2a(i) ver. 3.1	_	Vulnerable, 16-07-2000	Vulnerable, WA WC Act	+ + +		. +
26.	Western Australia	Marine Animal Emblem	Rhincodon typus (whale shark)	Rhincodon typus Smith, 1828	Yes	No	Vulnerable A2bd+3d ver. 3.1	CITES Appendix II, EU Listing Annex B, CMS Appendix II	Vulnerable	Other protected fauna, WA WC Act	+ + +	+ +	+
27.	Western Australia	Floral Emblem	Anigozanthos manglesii (red and green kangaroo paw)	Anigozanthos manglesii D.Don	Yes	Yes	-	_	_	_	+ + +	+ +	+

AUSTRALIAN CAPITAL TERRITORY (ACT)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Faunal Emblem	Callocephalon fimbriatum (gang-gang cockatoo)	27 Feb.1997	Callocephalon fimbriatum (J. Grant)	Psittacidae
Plant	Floral Emblem	Wahlenbergia gloriosa (royal bluebell)	26 May 1982	Wahlenbergia gloriosa Lothian	Campanulaceae







Tony Marsh).

From the official website of ACT Legislation Register (2001):

"I, Kate Carnell, Chief Minister for the Australian Capital Territory, hereby give notice of the following resolution passed by the Legislative Assembly for the Australian Capital Territory on Thursday, 27 February 1997:

"That this Assembly:

- 1. having considered the Report of the Standing Committee on Economic Development and Tourism on a bird andlor another animal emblem for the Australian Capital Territory and the Government's response to that Report, adopts the Gang Gang Cockatoo (Callocephalon fimbriatum) (sic) as the faunal emblem for the Territory; and
- 2. formally endorses the Royal Bluebell (Wahlenbergia gloriosa) (sic) as the official floral emblem for the Territory."

From the official <u>website</u> of Australian Capital Territory Chief Minister and Treasury Directorate (2013):

"The ACT also has two emblems with no legislative requirements surrounding their use. These emblems, the Gang-gang Cockatoo and the Royal Bluebell can be used by anyone on their publications, uniforms or websites."

Faunal Emblem. — There was an inquiry for a bird and/or another animal emblem that was conducted by the Standing Committee on Economic Development and Tourism in 1996. There was a survey of existing biological emblems in Australia which were in use at that time, collection of submissions from stakeholders and civil society groups representing various sections of society as well as defining criteria to aid in the selection. The criteria were:

- the emblem should be a native species, indigenous to the Territory;
- the species should be resident in urban and rural areas all-year round;
- the species' meaning and relevance to the local environment should be balanced against its aesthetic qualities;
- the species should be distinctive and easily recognised, as well as easily seen and heard, photogenic and not be an agricultural pest;
- Canberrans should feel a special affinity for the species through familiarity;
- the species should have a special connection with the Territory over other places;
- the species' conservation status, charisma and physical characteristics should be considered;
- advice should be sought from the A.C.T. Parks and Conservation Service on the suitability of the species;
- the community should be involved in the selection process; and
- the emblem should not be used by another State or Territory."

The committee released a report in Oct.1996 recommending that the Government consider one or more of the three most popular nominations which met the selection criteria suggested by the public. The three nominations were the gang-gang cockatoo, Southern lined earless dragon, and corroboree frog (Standing Committee on Economic Development and Tourism, 1996).

From the official <u>website</u> of Australian Capital Territory Chief Minister and Treasury Directorate (2013):

"The Gang-gang Cockatoo (Callocephalon fimbriatum) was adopted as the faunal emblem for the ACT on 27 February 1997. Canberra is the only city in Australia where these distinctive ash-grey cockatoos live. During winter small flocks are common in gardens around the city where they feed on pine cones, firethorn and hawthorn berries. They are often so busy feeding that observers can get close enough to admire their beautiful plumage. In summer most of the flocks return to the

mountain forests to breed in tree hollows. Their call is a distinctive sound resembling the sound of a squeaking gate. The Gang-gang Cockatoo is also the logo of the ACT Parks and Conservation Service."

Floral Emblem. — From the official <u>website</u> of ArchivesACT (2014), on the history of the selection:

"September 2010

Royal Bluebell: Canberra's Floral Emblem

History

By 1962 all Australian States and Territories with the exception of the Australian Capital Territory (ACT) had selected a floral emblem. It wasn't until late 1981 that the Minister for the Capital Territory, Michael Hodgman, called for the establishment of a committee to recommend a suitable floral emblem for the ACT.

The file '81/4653 Legislation Branch - Floral Emblem for the ACT' covers the selection and announcement of the floral emblem for the ACT. Folios in this file also raise the issue of copyright and potential misuse of the emblem once it became officially gazetted.

The committee consisted of Dr R.W. Boden (then Director of the National Botanic Gardens), Mr M Gray, Professor L.B. Pryor, Mrs L Ruddock and Mr D.F. Wrigley. They selected three candidate flowers:

Wahlenbergia gloriosa
 Dianella tasmanica
 Parahebe perfoliata
 Royal Bluebell
 Blue Flax Lily
 Blue Veronica

The Royal Bluebell (Wahlenbergia gloriosa) (sic) was selected as the floral emblem for the ACT. This was announced by the Minister for the Capital Territory, Michael Hodgman on the 26th of May 1982 ..."

"After the announcement it was proposed that the Royal Bluebell be formally adopted by gazettal and a proclamation by the Governor General. This also raised legal issues related to inaccurate representations and inappropriate usage of the emblem and the possibility of charging fees for its usage. The Royal Bluebell was formerly endorsed by the ACT Legislative Assembly in the Australian Capital Territory Gazette No.22, 4 June 1997 along with the ACT's Faunal Emblem, the Gang Gang Cockatoo."

"ACT Government Usage

The ACT Government employs the image of the Royal Bluebell on a wide variety of items including the in the ACT Legislative Assembly logo, the ACT Legislative Assembly Mace, the carpet in the ACT Legislative Assembly Chambers, corporate ties and scarf and the postcards reproduced at the top of this page and below. There is also a Bluebell Street in O'Connor named after the flower in 2001."

From the official <u>website</u> of Australian Capital Territory Chief Minister and Treasury Directorate (2013):

"On 26 May 1982 it was announced that the floral emblem for the ACT would be the Royal Bluebell (*Wahlenbergia gloriosa*). The Royal Bluebell is restricted in distribution to the high mountain areas of the ACT, south eastern NSW and eastern Victoria. In cultivation it is a frost-hardy ground cover, flowering in Canberra from late October until February. It does best in light soil enriched by organic material, in a sunny or semi-shaded situation. The soil should be kept moist but not waterlogged. The flower was named in honour of G.G. Wahlenberg, a former Professor of

Botany from Uppsala in Sweden. It should be remembered that the Royal Bluebell is protected in the wild and should not be picked or collected."

From the official website of Australian National Botanic Gardens (Boden, 1985a):

"The Royal Bluebell was announced as the floral emblem of the Australian Capital Territory on 26 May 1982 by the Hon. Michael Hodgman, the Minister for the Capital Territory.

This species was the unanimous recommendation of a committee chaired by Dr Robert Boden, then Director of the Australian National Botanic Gardens. Mr Max Gray and Professor Lindsay Pryor were invited to join the committee to provide botanical advice on local species to be evaluated as potential floral emblems, and Mrs Lorna Rudduck and Mr Derek Wrigley assessed the merits of each species for design purposes. Native occurrence in the Australian Capital Territory was the main criterion accepted by the committee but other desirable features sought in a ranked list of recommendations included horticultural merit and design potential, both in naturalistic and stylised representations.

The genus *Wahlenbergia* was proposed by Heinrich Schrader, a German botanist, in honour of Georg Goran Wahlenberg (1780-1851), Professor of Botany at Uppsala, Sweden, and described by Albrecht Roth in 1821. The species name *gloriosa* is Latin for 'superb' or 'glorious', a reference to superb qualities of a plant worthy of cultivation."

"Royal Bluebell occurs mainly in sub-alpine woodland in the Australian Capital Territory, southeastern New South Wales and Victoria. It is legally protected throughout its occurrence in the wild."

"The announcement of the Royal Bluebell as the floral emblem brought the Australian Capital Territory to a position equal to that of the Australian States and the Northern Territory. Previously, in the absence of official territorial emblems, the armorial bearings granted to the city of Canberra tended to be used, either partly or wholly, by community groups and sporting representatives. Naturally Canberra's armorial bearings are related to its status as the seat of the Australian Parliament but two of the heraldic devices are also botanical in nature, The Rose of York, included at the base of the arms, commemorates the role of the Duke of York in the establishment of the seat of government at Canberra. The Eucalyptus tree, pictured on the mound behind the portcullis, is typically Australian and represents the growth and progress of Canberra and its development as a garden city."

NEW SOUTH WALES (NSW)

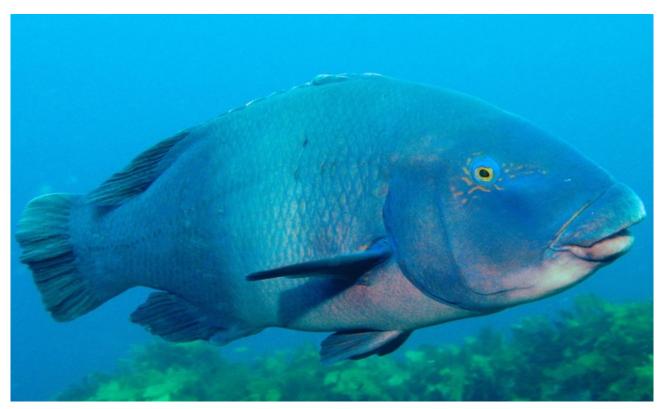
Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Animal Emblem	Ornithorhynchus anatinus (platypus)	1971	Ornithorhynchus anatinus (Shaw)	Ornithorhynchidae
	Bird Emblem	Dacelo gigas (kookaburra)	1971	Dacelo novaeguineae (Hermann)	Alcedinidae
	State Fish	Achoerodus viridis (blue groper)	19 Nov.1998	Achoerodus viridis (Steindachner)	Labridae
Plant	Floral Emblem	Telopea speciosissima (waratah)	24 Oct.1962	Telopea speciosissima (Sm.)	Proteaceae



The platypus, the Animal Emblem of New South Wales. (Photograph by: <u>Stefan Kraft</u>).



The kookaburra, the Bird Emblem of New South Wales. (Photograph by: <u>J. J. Harrison</u>).



Male blue groper, the State Fish of New South Wales. (Photograph by: Richard Ling).



Female blue groper, the State Fish of New South Wales. (Photograph by: Richard Ling).



The waratah, the Floral Emblem of New South Wales. (Photograph by: <u>Tony Rodd</u>).

There are four official biological emblems for NSW, namely an animal emblem, bird emblem, state fish, and floral emblem. These were listed in the State Arms, Symbols and Emblems Act 2004 to confirm the form of current state emblems and to make provision for future changes. State emblems are "any flower, animal, bird or other animate or inanimate object the description of which is set out in Schedule 3" (Parliament of New South Wales, 2004).

Animal Emblem. — From the official <u>website</u> of the Parliament of New South Wales (2004), Schedule 3 of the State Arms, Symbols and Emblems Act 2004:

"The animal emblem of New South Wales is the platypus (Ornithorhynchus anatinus)."

From the official <u>website</u> of the New South Wales Government (2014):

The Platypus (*Ornithorhynchus anatinus*), is the animal emblem of New South Wales. The platypus is a furry creature, about 30cm – 38cm long, it has webbed feet and a large duck-like bill which it uses to gather its food from the bottom of rivers.

From the official website of the New South Wales Office of Environment and Heritage (2012b):

"When the first platypus specimen was sent to England for identification, its appearance was so strange that it was thought to be a hoax. An animal that had a muzzle like a duck's bill and carried a tail like a beaver was said to be an impossibility. Since then, scientists have come to accept that this Australian native is very real. But it's something of a rarity. The platypus and the two species of echidna are the world's only monotremes, or egg-laying mammals. The name 'monotreme' comes from the fact that these animals have only a single opening for reproduction and getting rid of body wastes."

"Platypuses commonly live in the rivers, streams and lakes of eastern Australia, from the Annan River in northern Queensland to the far south of Victoria and Tasmania. They are found in the major permanent river systems in the south of NSW, west of the Great Dividing Range, and occasionally in South Australia. Out of the water, platypuses spend most of their time in burrows which have been dug into the river bank, with their entrances usually above water level. The animals use a number of short resting burrows (three to five metres long) as protection from predators and temperature extremes. Burrows used for nesting tend to be more elaborate, with many side branches."

"Like echidnas and most other native Australian animals, platypuses are protected under the National Parks and Wildlife Act 1974."

From the official website of Education Services Australia (2009):

"The platypus was made the State Animal Emblem of New South Wales in 1971."

Bird Emblem. — From the official <u>website</u> of the Parliament of New South Wales (2004), Schedule 3 of the State Arms, Symbols and Emblems Act 2004:

"The bird emblem of New South Wales is the kookaburra (Dacelo novaeguineae)."

From the official website of the New South Wales Government (2014):

The Kookaburra (*Dacelo gigas*) is the bird emblem of New South Wales. This great brown kingfisher is sometimes called a 'laughing jackass' because of its distinctive territorial laughing call. Meat eaters, they hunt snakes, lizards, fish and insects and live at forest edges, in clearings.

From the official website of the New South Wales Office of Environment and Heritage (2012a):

"The laughing kookaburra is the world's largest kingfisher. It measures up to 46 cm from the tip of its beak to the tip of its tail. When compared to the little kingfisher, which is only 12 cm long, it is truly a giant. Its plumage is shades of whites and browns, which help it to blend easily into its

environment. This makes it more difficult for prey or predators to see the bird. There are 10 kingfisher species in Australia. They are the azure, forest, collared, red-backed, sacred, little, yellow-billed, and buff-breasted paradise kingfishers, and the blue-winged and laughing kookaburras. The first five kingfishers mentioned, and the laughing kookaburra, live in NSW. Although their size differs, all kingfishers look similar. They have stout, squat bodies with large heads and long beaks."

"The laughing kookaburra lives in forests, open woodlands, or on the edges of plains. It requires a large variety of food all year round, and a suitable nesting site."

"Kookaburras are protected in NSW by the National Parks and Wildlife Act."

From the official website of Education Services Australia (2009):

"The kookaburra was made the State Bird Emblem of New South Wales in 1971."

State Fish. — From the official <u>website</u> of the Parliament of New South Wales (2004), Schedule 3 of the State Arms, Symbols and Emblems Act 2004:

"The state fish of New South Wales is the blue groper (Achoerodus viridis)."

From the <u>speech</u> of New South Wales Minister of Fisheries, The Hon. Ron D. Dyer in the Legislative Council (Dyer, 1998):

"......The recognition of fish as an integral part of the environment has never been greater than under this Government. Sound policies to promote the conservation of fish species and the sustainability of the fisheries resource are some of the many hallmarks of this environmentally-aware Government.

It is therefore with great pleasure that I advise the House that the Government has achieved yet another first for New South Wales. The eastern blue groper will be declared the State fish emblem, a first for any State or Territory in Australia. The eastern blue groper joins a select band of flora and fauna chosen as emblems in New South Wales: the platypus, the kookaburra and the waratah. While other States and Territories have animals, birds and flora as emblems, none of them has a fish. The eastern blue groper is an excellent choice for a State emblem. Its distinctive blue colour matches the State's colour."

".......The blue groper lives in estuaries, around rocky reefs and from the intertidal zone down to 50 metres in depth. It has strong crunching jaws and eats a variety of invertebrates, such as sea urchins, crabs, mussels and other molluscs. It manoeuvres slowly using its efficient pectoral fins."

"......The eastern blue groper went through a tough time in the 1970s due to overfishing. After a succession of protective measures groper were finally banned from sale in 1980. There is a bag limit of two fish for recreational anglers and a total ban on spearfishing. As a result of this protection blue groper are now a common sight on most rocky reefs in New South Wales. It is entirely appropriate that a species whose survival was once in doubt has become a symbol of the marine conservation ideal. The Government has an enviable record in the protection of the aquatic habitat and conservation of fish. We believe it is so important that we set up a specific Office of Conservation within New South Wales Fisheries."

"The management plans will specify the rules for development in areas where fish and fish habitat need to be protected. The blue groper emblem will be used to promote an awareness of the need to conserve fish and our aquatic biodiversity, and will form part of our ecotourism campaigns within Australia. The Government hopes that, in time, the eastern blue groper will become as recognisable to the community as the State's floral emblem, the waratah."

From the official website of the New South Wales Government (2014):

"The blue groper (*Achoerodus viridis*) was proclaimed the State fish of New South Wales in 1998. A friendly but powerful coastal fish that often follows divers. It can be up to a metre long and weigh between 2 and 15kg, though some specimens may reach 40kg or more."

Floral Emblem. — From the official <u>website</u> of the Parliament of New South Wales (2004), Schedule 3 of the State Arms, Symbols and Emblems Act 2004:

"The floral emblem of New South Wales is the waratah (Telopea speciosissima)."

From the official website of the New South Wales Government (2014):

"The Waratah (*Telopea speciosissima*) is the floral emblem of New South Wales, a large (10–12cm across) and spectacular scarlet flower growing in the bush in clumps of tall stems. The Waratah is protected by law."

From the official website of Education Services Australia (2009):

"The waratah was made the State Floral Emblem of New South Wales in 1962."

From the official website of Australian National Botanic Gardens (Boden, 1985e):

"Telopea speciosissima, was proclaimed the official floral emblem of New South Wales on 24 October 1962. Robert Brown (1773–1858) named the genus Telopea in 1810 from specimens collected in the Blue Mountains, west of Sydney. Sir James Smith (1759–1828), a noted botanist and founder of the Linnaean Society in England, wrote in 1793:

'The most magnificent plant which the prolific soil of New Holland affords is, by common consent, both of Europeans and Natives, the Waratah. It is moreover a favourite with the latter, upon account of a rich honeyed juice which they sip from its flowers'."

"The generic name *Telopea* is derived from the Greek *telopos*, meaning 'seen from afar', and refers to the great distance from which the crimson flowers are discernible. The specific name *speciosissima* is the superlative of the Latin adjective '*speciosus*', meaning beautiful or handsome. 'Waratah', the Aboriginal name for the species, was adopted by early settlers at Port Jackson."

"The species is fairly widespread on the central coast and adjoining mountains of New South Wales, occurring from the Gibraltar Range, north of Sydney, to Conjola in the south. It grows mainly in the shrub understorey in open forest developed on sandstone and adjoining volcanic formations, from sea level to above 1000 metres in the Blue Mountains. Soils within its range tend to be sandy and low in plant nutrients. Rainfall is moderately high. Waratah plants resist destruction by bushfires, a natural element of their habitat, by regenerating from the rootstock. Flowering recommences two years after a moderate fire."

"Some pruning is achieved by cutting flowers for decoration. It is a spectacular cut flower and lasts well in water."

From the official website of Royal Botanic Gardens and Domain Trust (2013):

"The New South Wales Waratah *Telopea speciosissima* is a large, long-lived shrub or tree that generally grows to about 3 m tall. It may reach 5 m in the absence of the fires - however, fires are common in its natural habitat. After a fire a waratah can regenerate from a 'lignotuber' - a woody swelling of its stem that lies partly or wholly under the ground."

"The common name 'Waratah' was coined by Australian Aborigines and means 'red-flowering tree'. The botanical name 'Telopea' means 'seen from afar', and 'speciosissima' means 'most beautiful'. The Waratah truly is a most beautiful plant, especially when in flower, and was

described by early botanists as the 'most magnificent plant' in New Holland. Now symbolically instated as the floral emblem of NSW, the Waratah has become arguably the most famous and recognisable Australian plant.

The New South Wales Waratah was once abundant in many areas of the Sydney metropolitan area, and the species' survival is now due to its existence in national parks, reserves and relatively inaccessible areas."

From the official website of New South Wales Government (2014):

"The NSW Government logo was adopted in 2009 and is an artistic representation of the Waratah, the floral emblem of New South Wales. The NSW Government logo is used to represent all NSW Government Agencies and their associated representatives."

Lim & Tan

NORTHERN TERRITORY (NT)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Faunal Emblem, Animal Emblem	Macropus rufus (red kangaroo)	19 Jun.1975	Macropus rufus (Desmarest)	Macropodidae
	Faunal Emblem, Bird Emblem	Aquila audax (wedgetailed eagle)	19 Jun.1975	Aquila audax (Latham)	Accipitridae
Plant	Floral Emblem	Gossypium sturtianum (Sturt's desert rose)	12 Jul.1961 (gazetted), 19 Jun.1975 (confirmed in legislature)	Gossypium sturtianum (R.Br.)	Malvaceae



Male red kangaroo, the Faunal or Animal Emblem of the Northern Territory. (Photograph by: <u>David Cook</u>).



Female red kangaroo, the Faunal or Animal Emblem of the Northern Territory. (Photograph by: Wikipedia Author Bidgee).



The wedge-tailed eagle, the Faunal or Bird Emblem of the Northern Territory. (Photograph by: <u>David Cook</u>).



Sturt's desert rose, the Floral Emblem of the Northern Territory. (Photograph by: Natalie Tapson).

On 19 Jun.1975, Dr. Godfrey Letts (1975), Chief Minister of the Northern Territory, announced the Northern Territory emblems during a <u>debate</u> in the Northern Territory Legislative Assembly. They were:

- (1) the floral emblem of the Territory is Sturt's desert rose (Gossypium sturtianum);
 - (2) the bird emblem is the wedgetail eagle (*Aquila audax*)
 - (3) the animal emblem is the Red Kangaroo (*Macropus rufus*)."

Animal Emblem. — From the official <u>website</u> of the Northern Territory Government (2013b):

"The crest incorporates the floral and faunal emblems of the Northern Territory: the Sturt's Desert Rose, the Red Kangaroo and Wedge-tailed Eagle."

"Two Red Kangaroos hold shells that are found on the northern coast of the Territory; the Chiragra Spider Conch and the True Heart Cockle."

From the official <u>website</u> of the Northern Territory Government (2013c):

"The Red Kangaroo, *Macropus rufus*, is the embodiment of most people's concepts of our unique fauna. It is the largest extant marsupial with adult males standing more than two metres tall and weighing up to 75 kilograms, all this for an animal that weighs only 800 milligrams at birth.

Their long thin limbs give Red Kangaroos the mobility to travel large distances under adverse conditions. Most males are a rusty-brown and females a smokey-grey and both have paler undersurfaces. They have conspicuous white marks on the sides of their muzzles with a black line through them. Their thick pale fur allows these kangaroos to reflect a great deal of radiated heat.

Despite the harshness of their environment Red Kangaroos have one of the widest distributions of any of the macropods. They are found throughout inland Australia wherever the annual rainfall is less than 375 millimetres, an area of perhaps five million square kilometres.

During periods of drought they retreat to the watercourses and to open grassy depressions on the plains where green feed is more readily available. As these areas become restricted it is then that large congregations of several hundred kangaroos may occur. These however are a matter of attraction to a limited resource and, except for mother-offspring interactions, there is little social structure.

These open areas have few shade trees or shrubs under which the animals can rest during the heat of the day. Therefore when good seasons come back around the Kangaroos move to the Mulga tree areas where both food and shade are readily available. It is only under these good conditions that breeding can occur. Females may have one young at foot, one in the pouch and one dormant embryo. During droughts breeding is usually reserved to conserve available food."

Bird Emblem. — From the official website of the Northern Territory Government (2013b):

"The crest incorporates the floral and faunal emblems of the Northern Territory: the Sturt's Desert Rose, the Red Kangaroo and Wedge-tailed Eagle. On the crest the eagle's wings are spread and its talons grasp an Aboriginal Tjurunga stone."

From the official website of the Northern Territory Government (2013c):

"The Wedge-tailed Eagle, *Aquila audax*, with an average wingspan of two and a half metres is Australia's largest raptor.

This bird is clearly recognisable for its huge broad wings and the long wedge-shaped tail. The general colour is dark brown with a chestnut hind neck. Their legs are covered in feathers right down to the feet. Its hooked beak and strong talons clearly mark the Wedge-tailed Eagle as a bird of

prey. They are found throughout Australia. In the Northern Territory they are more common in the arid centre than on the coastal plains of the north.

Eagles form long-lasting pairs which occupy a nesting and breeding territory and defend it against intruders. At sunrise they locate most of the carrion that forms an important part of their diet. Later on, as the sun heats up the air close to the ground, convection currents produce strong updrafts known as thermals on which the Wedge-tailed Eagle soar and glide up to 2000 metres high for much of the middle of the day. It is believed that this high aerial activity acts as a display to warn other eagles of the occupation of a territory.

Before man came to Australia it is probable that the Wedge-tailed Eagles ate a whole range of smaller mammals along with other birds and reptiles which are an important dietary item in arid areas. Since man's arrival, fires, sheep and cattle have destroyed the ground cover in which many of the smaller mammals lived.

Man also introduced the rabbit on which eagles now subsist for a large part of their range. It is also probable that the increased watering points provided by agriculture have led to an increase in kangaroo numbers, a further food source for eagles.

Wedge-tailed Eagles nest in the highest trees and build large platform-like nests out of sticks. These nests may be reused from year to year, after being given a coating of fresh leaves.

Two eggs are laid around June–July, but usually only one of the young survives and is fledged when it is 80 to 90 days old. Both sexes share the incubation and feeding of the young. The surviving young wander for two to three years before establishing their own territory. They attain full adult plumage when around four years old. Under drought conditions eagles may not breed for several years in succession."

Floral Emblem. — From the official <u>website</u> of the Northern Territory Government (2013b): "At the base of the crest is the Sturt's Desert Rose placed upon a grassy sandy mound."

From the official website of the Northern Territory Government (2013a):

"Sturt's Desert Rose was adopted as the floral emblem of the Northern Territory in 1974. The Desert Rose has had many botanical names in the past and was officially called *Gossypium sturtianum* J. H. Willis var. *sturtianum* in 1947. Australian Cotton is probably a more apt name for the Desert Rose as it is actually a member of the Cotton Genus, *Gossypium*, rather than the Rose Genus, *Rosa*.

The Desert Rose is a small bushy plant, growing to a height of one and a half metres, sometimes higher with cultivation. It has dark green, round to oval shaped leaves. The petals of the flowers are mauve with a deep red marking at the base. Its flowers are similar to those of the Hibiscus, which belongs to the same family. The plant's fruit is capsule-shaped and contains small seeds covered in short hair — a characteristic of the cotton family.

The Desert Rose is an arid zone plant which grows best in dry regions on stony or rocky, sloping ground or in dry creek beds. It is found in the southern part of the Northern Territory Residents of Alice Springs often cultivate it as a garden shrub. It is also found in parts of South Australia, New South Wales and Queensland."

From the official website of Australian National Botanic Gardens (Boden, 1985d):

"On 12 July 1961, Sturt's Desert Rose was proclaimed floral emblem of the Northern Territory by the Commonwealth Government which was then responsible for the administration of the Territory.

Proclamation was made using the name *Cienfugosia gossypioides* which is now replaced by the name *Gossypium sturtianum* var. *sturtianum*. In an Executive Statement in June 1975, the Majority Leader in the Legislative Assembly of the Northern Territory confirmed this species as the floral emblem. Since the granting of self-government to the Northern Territory in 1978, Sturt's Desert Rose has been incorporated into various insignia and so become symbolic of the region.

Sturt's Desert Rose has also been known as Darling River Rose, Cotton Rosebush and Australian Cotton. Although less widely used, the vernacular name, Australian Cotton, is appropriate as this species belongs to the genus *Gossypium*, which includes commercial cotton. However the hairs covering the seeds are much shorter than the lint of commercial cotton varieties."

"Sturt's Desert Rose occurs naturally on stony or rocky slopes, or in dry creek beds in the southern part of the Northern Territory, north-eastern South Australia, western Queensiand, western New South Wales and in parts of northern Western Australia.

This drought-tolerant shrub can be cultivated successfully in areas of low to moderate rainfall. Propagation is possible from seeds and cuttings. An advantage with the latter method is that it provides an opportunity to establish superior forms of the shrub in cultivation. Sturt's Desert Rose tolerates light frosts and in cultivation it responds well to supplementary watering and moderate pruning. Pleasing results are obtained when it is grown as a specimen plant in lawn. Like most members of the hibiscus family, the flowers close soon after picking, limiting its suitability as a cut flower."

"The blazon of the armorial ensign assigned to the Northern Territory on 11 September 1978 and recorded in the College of Arms, London, states: 'Growing from a compartment comprising a grassy sandy mound Sturt's Desert Roses (*Gossypium sturtianum*) ... to be borne for the said Northern Territory upon Shields Seals Banners Flags or other-wise according to the Laws of Arms.

As the Northern Territory approached self-government, the appropriateness of a territorial flag was realised. The Northern Territory Government invited members of the public to submit proposals for the design of a flag. Some of these suggestions provided a basis for the design by the Australian artist, Robert Ingpen. It depicts, in the official colours, black, white and ochre, Sturt's Desert Rose in stylised form, together with the Southern Cross constellation. Mounted on an ochre panel, the seven white petals and the seven-pointed black star forming the flower's centre, represent the six Australian States and the Northern Territory. This flag was raised for the first time on 1 July 1978, in a ceremony marking the granting of self-government.

Both the armorial bearings and the stylised form of Sturt's Desert Rose are used widely on official stationery, advertising and publications. The stylised form of the floral emblem is easily identified and readily associated with the Northern Territory, despite the assigning, for symbolic reasons, of an additional two petals to the normally five-petalled flower."

QUEENSLAND (QLD)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Aquatic Emblem	Amphiprion akindynos (anemone fish)	1 Mar.2005	Amphiprion akindynos Allen	Pomacentridae
	Bird Emblem	Grus rubicunda (brolga)	Jan.1986	Grus rubicunda (Perry)	Gruidae
	Faunal Emblem	Phascolarctos cinereus (koala)	14 Apr.1971	Phascolarctos cinereus (Goldfuss)	Phascolarctidae
Plant	Floral Emblem	Dendrobium bigibbum var. phalaenopsis (Cooktown orchid)	19 Nov.1959	Dendrobium bigibbum Lindl.	Orchidaceae



The anemone fish, the Aquatic Emblem of Queensland. (Photograph by: Richard Ling).



The brolga, the Bird Emblem of Queensland. (Photograph by: <u>John O'Neill</u>).



Male koala, the Faunal Emblem of Female koala, the Faunal Emblem of Queensland. (Photograph Queensland. (Photograph by: <u>Wikipedia</u> by: <u>David Iliff</u>). <u>Author Quartl</u>).



The Cooktown orchid, the Floral Emblem of Queensland. (Photograph by: John Hill).

As of 1 Nov.2013, Queensland has four biological emblems as listed in Schedule 4 of the Emblems of Queensland Act 2005 (Office of Queensland Parliamentary Counsel, 2005). There are currently no laws governing the assumption, use or publication of these emblems. These emblems are:

"1 Floral emblem

The Cooktown orchid (*Dendrobium bigibbum* var. *phalaenopsis*) is the State's floral emblem.

2 Faunal emblem

The koala (*Phascolarctos cinereus*) is the State's faunal emblem.

3 Bird emblem

The brolga (*Grus rubicunda*) is the State's bird emblem."

"5 Aquatic emblem

The barrier reef anemone fish (*Amphiprion akindynos*) is the State's aquatic emblem." (Note that the fourth emblem is the gem emblem, which is the sapphire).

According to Campbell Newman, current Premier of Queensland, these four "natural emblems, the koala, brolga, Barrier Reef anemone fish and Cooktown orchid represent those world-famous attractions that have made tourism so important to Queensland"—Newman (2012).

Aquatic Emblem. — From the official website of the Queensland Government (2012b):

"The Barrier Reef Anemone Fish was officially named as Queensland's aquatic emblem in March 2005. The public nominated the species as their preferred representative for Queensland. Queensland is renowned for its association with the coastline and the water, and so it is only fitting that an official emblem symbolises this.

The Australian Underwater Federation originally developed the idea to introduce an official aquatic emblem for Queensland. As a result, a panel of experts, chaired by the Queensland Museum, suggested a shortlist of aquatic species. The public were then invited to have their say on the shortlist during an eight-week consultation process."

"The Anemone Fish (*Amphiprion akindynos*) is well known for its habit of living with large, tropical sea anemones. The species name, *akindynos*, comes from the Greek word meaning safe or without danger. This refers to the condition the fish enjoys while tucked among the tentacles of its host.

The species grows to 12 centimetres in length, and has a brown-orange colour with two white bars surrounded by black edging. The first bar crosses the head, the second crosses the body at the middle of the dorsal fin and the tail is of a pure white colour."

Bird Emblem. — From the official website of the Queensland Government (2012c):

"The brolga has featured on the Queensland Coat of Arms since 1977. It wasn't until January 1986 that it was announced as the official bird emblem of Queensland. Of the 14 species that comprise a worldwide family of cranes, brolgas (*Grus rubicunda*) are the only species native to Australia. Also known as the Native Companions, they can be found in grasslands and swamps along the Queensland coast, from Rockhampton to the Gulf of Carpentaria.

Adult birds are predominantly grey and are characterised by a long thin neck, a bare head and a prominent patch of red skin behind the eye. They stand more than a metre tall on long, slender legs and their outstretched wings can measure up to two metres across. Brolgas are famous for their intricate dancing at mating time. A pair of adult birds will bow to each other with exaggerated dignity, then bob and pirouette and prance back and forth. Sometimes they will jump into the air in

unison. Their huge wings are spread throughout the dance, adding extraordinary grace and smoothness to the movements."

"The brolga is also part of the Queensland Coat of Arms, the oldest State Arms in Australia, granted by Queen Victoria in 1893 (Queensland Government, 2012). In 1977, during the Queen's Silver Jubilee year, the Coat of Arms was given a more modern appearance when Queen Elizabeth II granted the supporting animals, the brolga and the red deer. The brolga is one of Queensland's most distinctive birds and symbolises the native population."

Faunal Emblem. — From the official <u>website</u> of the Queensland Government (2012a):

"The koala was officially named the animal (faunal) emblem of Queensland in 1971, after a newspaper poll showed strong public support for this endearing marsupial.

The Queensland Government introduced the poll due to a proposal by state tourism ministers for all states to adopt a faunal emblem."

"The koala (*Phascolarctos cinereus*) is commonly located throughout eastern areas of Queensland, south of Townsville, although it has been found as far north as Cooktown and as far west as Cunnamulla.

A popular and renowned icon, the species is known to be shy. However, colonies of koalas often thrive near built-up areas if there is sufficient bushland to provide a suitable habitat.

The koala is a marsupial — an animal that carries its young in a pouch. The newborn, less than two centimetres long, crawls through its mother's fur to her pouch, where it is harboured and suckled for about six months.

Normally a gentle creature, the koala spends almost all of its life in the tops of eucalyptus trees, usually dozing during the day and actively foraging for choice leaves at night.

As the species rarely drinks water, the name 'koala' originates from the Indigenous word meaning 'no drink', since it usually gains adequate moisture from dew and oily eucalyptus leaves."

Floral Emblem. — From the official website of the Queensland Government 2012e):

"The Cooktown orchid became known as Queensland's floral emblem in 1959, during celebrations to mark the state's centenary.

Before this, the distinctive native flower had long been popularly considered as Queensland's unofficial floral emblem. This was according to a government-sponsored newspaper public opinion poll taken in the centenary year.

The State Parliament endorsed the popular choice in the now repealed Badge, Arms, Floral and Other Emblems of Queensland Act 1959.

The orchid was commemorated in 1968 on the 25-cent stamp and, more recently, on the \$1.20 stamp in 1998."

"The Cooktown orchid (*Dendrobium bigibbum*) is native to Queensland's northern tropics and is named after the northern Queensland town of Cooktown. It grows on trees and rocks in well-watered areas of the Cape York Peninsula.

Each plant flowers for up to six weeks in autumn and winter, with individual flowers reaching between three and six centimetres in width. Similar to the state colour of maroon, the Cooktown orchid is usually purple in colour, although varieties with white or white-spotted flowers have also been found. The Cooktown orchid is relatively easy to cultivate as a garden specimen in frost-free areas of coastal Queensland. It requires a well-drained, sunny position, protected from cold winds. A bed of loose charcoal or bark is suitable for growing it, and it can also be cultivated on tree trunks or branches."

From the official website of Australian National Botanic Gardens (Boden, 1985f):

"When Queensland prepared for its Centenary in 1959, it sought advice on native species suitable as a floral emblem. The species suggested were Cooktown Orchid (then thought to be *Dendrobium bigibbum*), Red Silky Oak (*Grevillea banksii*), Umbrella Tree (*Brassaia* (now *Schefflera*) actinophylla), and Wheel of Fire (*Stenocarpus sinuatus*). A Brisbane newspaper, the Courier-Mail, sought additional suggestions from its readers and finally compiled a list of thirteen species. In a public poll for the most popular choice as floral emblem, 10,917 entries were submitted and according to the organiser 'the Cooktown Orchid, Queensland's own world-famous hybrid [sic] orchid came out thousands ahead in the count of votes'. *Grevillea banksii* was second, and third was *Euphorbia pulcherrima*, Poinsettia, a Mexican species already used as the floral emblem of the capital city, Brisbane.

On 19 November 1959 the Cooktown Orchid, under the botanical name of *Dendrobium bigibbum* var *phalaenopsis*, was proclaimed as the floral emblem of Queensland. It conformed with the Government's criteria in being an easily cultivated native species confined to Queensland, decorative and distinctive in appearance, and coloured close to the State colour, maroon."

"It occurs naturally in northern Queensland, from Johnston River to Iron Range. Although it is found in tropical districts with very high summer rainfall, it is not a rainforest species but grows in exposed situations, usually attached to tree trunks such as paperbark melaleucas in savanah woodland or in vine thickets. Habitat alteration and indiscriminate harvesting by some commercial plant collectors have made this species rare or extinct in some places within its range, especially in the southern part."

"Cooktown Orchid is considered one of Australia's showiest orchid species and has been successfully cultivated in heated glasshouses in England since the latter part of the nineteenth century. In recent years they have been exported from Australia to New Zealand, USA, Papua New Guinea and Fiji."

SOUTH AUSTRALIA (SA)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Badge of the State	Gymnorhina tibicen leuconota (piping shrike, white backed magpie)	14 Jan.1904	Cracticus tibicen (Latham)	Cracticidae
	Faunal Emblem	Lasiorhinus latifrons (hairy- nosed wombat, plains wombat)	27 Aug.1970	Lasiorhinus latifrons (Owen)	Vombatidae
	Marine Emblem	Phycodurus eques (leafy seadragon)	8 Feb.2001	Phycodurus eques (Günther)	Syngnathidae
Plant	Floral Emblem	Clianthus formosus (Sturt's desert pea)	23 Nov.1961	Swainsona formosa (G.Don) J.Thompson	Fabaceae



The piping shrike or white backed magpie, the Badge of the State of South Australia. (Photograph by: Wikipedia Author Gnangarra).



The hairy-nosed wombat or plains wombat, the Faunal Emblem of South Australia. (Photograph by: <u>Susan Renee</u>).



The leafy seadragon, the Marine Emblem of South Australia. (Photograph by: <u>Derek Ramsey</u>).



Sturt's desert pea, the Floral Emblem of South Australia. (Photograph by: Bill and Mark Bell).

From the official <u>website</u> of the Department of Premier and Cabinet, Government of South Australia (2013):

"The State emblems of South Australia are unique representations of our State. They are:

- Floral Emblem: Sturt's Desert Pea (Swainsona Formosa) (sic)
- Faunal Emblem: Hairy-nosed wombat
- Gemstone Emblem: Opal
- Marine Emblem: Leafy Seadragon."

Badge of the State. — From the official website of the Government of South Australia (2014): "The State Badge is described heraldically as:

the Rising Sun Or (gold) with thereon an Australian Piping Shrike displayed proper, and standing on a staff of a gum tree raguly (bough), gules (red) and vert (green)

The State Badge was notified by a proclamation gazetted on the 14th January, 1904. This proclamation declares the Badge of the State to be a Piping Shrike, the original drawing of which was carried out in 1904 by Robert Craig of the School of Arts and a later drawing in 1910 by Harry P Gill, who was the Principal of the School of Arts.

The Piping Shrike or White Backed Magpie (*Gymnorhina tibicen leuconota*) is found in open timbered country in South Eastern Australia and has been introduced into New Zealand."

From the official website of the Parliament of South Australia (2014):

"The Piping Shrike, or white backed magpie (Gymnorhina tibicen leuconota) (sic) is the South Australian bird emblem. Present in virtually every backyard, park and street in South Australia, this irrepressible bird was ready made. The State's symbol of resourcefulness and bravery. Easily recognisable by its strong black and white colouring, the Shrike also has a sweet, melodious song.

The natural habitat of the Shrike is open woodland, although the birds have adapted well to urban and agricultural living, and they feed on insects - including many harmful pests - lizards and carrion. They build cup-shaped nests in trees or bushes and lay three to five greenish-blue or reddish-grey eggs between August and October. Fearless in defending her nest and young, the female shrike is well-known for swooping and diving at potential intruders during the nesting season.

In 1901, Governor Tennyson in his despatch to the Secretary of State for the Colonies said "I herewith forward a flag with the new device upon it - the South Australian Shrike in the rising sun of the Commonwealth, and hope that as it is a fine design and one which has been favourably received here." This symbol represents South Australia today and is used by many Government agencies and departments as a corporate logo."

Faunal Emblem. — From the official website of the Government of South Australia (2014): "The hairy-nosed or plains wombat (*Lasiorhinus latifrons*) was adopted by the government as the faunal emblem of South Australia on 27 August 1970.

It is a marsupial indigenous to Australia and totally protected in South Australia. The generic name, *Lasiorhinus*, means hairy-nosed and the specific name, *latifrons*, means broad-fronted. The hairy-nosed wombat is a thick-set powerful mammal with a broad blunt head, small pointed ears, short muscular legs, strongly clawed feet and a rudimentary tail. It has soft grey-brown silky fur.

Adults are up to 30 cm high, 75 to 95 cm long, and weigh between 18 and 32 kilograms. The animal is adapted to life in semi-arid and arid zones and apart from some small colonies in the south-east of Western Australia, is confined to South Australia.

It is most abundant on Eyre Peninsula, the Gawler Ranges and the Nullarbor Plain. Smaller colonies occur on the west bank of the Murray River and on Yorke Peninsula. The hairy-nosed wombat is essentially a plains dweller inhabiting many combinations of soils and vegetation, especially open woodlands and shrub lands.

It is a very powerful digger—only deterred by soft sand and unbroken sheet limestone—and excavates deep cool, humid burrows which are essential for survival in its hot, waterless environment. The wombat feeds exclusively on plant material which often is its only source of water.

A single young measuring only 2 cm in length, is born between September and January and remains entirely confined to its mother's backwardly directed pouch for the next five months.

After this, the young ventures out for increasing periods, continuing to suckle while accustoming itself to adult food. Young wombats continue to live in their mothers' burrows for a further two years before being driven out."

Marine Emblem. — From the official website of the South Australian Government Gazette (2014): "Department of the Premier and Cabinet Adelaide, 8 February 2001

MARINE EMBLEM OF THE STATE OF SOUTH AUSTRALIA

IT is hereby notified for public information that the Leafy Seadragon (*Phycodurus eques*) has been adopted as the marine emblem of the State of South Australia.

Given under my hand at Adelaide, 8 February 2001.

J. W. OLSEN, Premier"

From the official website of the Government of South Australia (2014):

"The leafy sea dragon (*Phycodurus eques*) was adopted by the Government as the marine emblem of South Australia on 8 February 2001.

The leafy sea dragon's distribution is centred on South Australian coastal waters, ranging from Geraldton in Western Australia, along the southern Australian coastline, to Wilsons Promotory in Victoria. Under the *Fisheries Act 1982* the leafy sea dragon is a protected species in South Australian waters.

The leafy sea dragon or 'leafy' as it is popularly known, is a relative of the seahorse and belongs to the pipefish family *Sygnathidae*. It is a unique and spectacular fish, being the only species of the genus *Phycodurus*. It is one of only two species of seadragons in southern Australia, the other being the weedy seadragon (*Phyllopteryx taeniolatus*).

Their distinguishing and elaborate leaf-like appendages help to camouflage leafy sea dragons among the seaweed. They can change their colour depending on age, diet, location or stress, although most adults are green to yellow-brown with thin, bands or stripes across the body. Being slow moving, they rely heavily on camouflage for survival, however they are also equipped with several long sharp spines along the side of the body which are thought to be used as a defence mechanism against attacking fish.

A unique characteristic of the seahorse, including the leafy sea dragon, is the parenting role of the males. After male and female seadragons pair up in late winter, the female develops around 300 orange coloured eggs in her lower abdominal cavity and the male develops about 120 small pits or 'egg cups' on his tail. The eggs are transferred from the female to the male and fertilized, then carried by the male for an incubation period of about four weeks before young seadragons hatch over several days.

At birth the young are around 20 mm long and so highly susceptible to predation from fish, crustaceans and sea anenomes. The hatching itself is staggered to assist with dispersal and avoid competition for food amongst the young. The young dragons are fast growing, reaching 20 cm after one year and attain mature length after about two years. It is not known how long wild sea dragons live. While they can reach up to 43 cm in the wild, the average size is closer to 30 cm.

The leafy sea dragon inhabits rocky reefs, seaweed beds, seagrass meadows and structures colonised by seaweed. They are highly susceptible to pollution and disturbance and loss of habitat is a major threat to their survival.

Fish such as the sea dragon highlight the high degree of uniqueness or endemism of species that exists in southern temperate waters. Many Australians are not aware of the immense marine biodiversity present off the southern coast."

Floral Emblem. — From the official website of the Government of South Australia (2014):

"The government adopted Sturt's desert pea (*Swainsona formosa*) as the floral emblem of South Australia on 23 November 1961.

The plant formerly known as *Clianthus dampieri* was first collected by William Dampier when he visited the north-western coast of New Holland in the seventeenth century. The specimens he collected are now in the herbarium at Oxford University. Sturt's desert pea is found over a greater range of South Australia than almost any other plant and is probably the most striking and distinctive of all the plants of inland Australia. The major portion of the state receives less than 381 millimetres of rain per annum and it is in these regions that Sturt's desert pea thrives.

The nearest points to Adelaide that it grows naturally are Burra, and Orroroo. Sturt's desert pea is a member of the legume family and because of its habit of growth and distinctive long and curiously shaped flowers it is highly ornamental. The flowers are usually coloured a scarlet or blood red with a central blue-black blotch or 'boss' in clusters of up to six or eight which are held erect on a short stem above the plant. Variations in colouring are recorded from pure white to pink and through to purple. Such flowers may or may not possess the black blotch.

The plant is picturesque and most attractive with its soft grey foliage produced on the many prostrate stems often up to one to one and a half metres in length. Flowers are produced every 10 to 15 centimetres along these stems and the plant in flower is beautifully set off by the attractive grey pinnate foliage. Sturt's desert pea can be grown readily in a very well draining potting mix or soil mix. The seed should be sown in September or October but because the coating of the seed is impermeable, it should be rubbed between sand-paper or a file or the seed nicked with a knife or soaked in hot water (not boiling) to aid germination. The plant needs a warm, well drained position and it should not be disturbed after planting.

The remarkable outline, shape, and startling colour of the flowers and the leaves of Sturt's desert pea lend themselves to be easily incorporated into design emblems representing South Australia."

From the official <u>website</u> of the Australian National Botanic Gardens (Boden, 1985g): "Sturt's Desert Pea, *Swainsona formosa*, was adopted as the floral emblem of South Australia on 23 November 1961, using the name *Clianthus formosus*.

This species, a member of the pea family, Fabaceae, is confined to Australia, where it occurs in all mainland States except Victoria."

"Sturt's Desert Pea occurs in arid woodlands and on open plains, often as an ephemeral following heavy rain. It is able to withstand the marked extremes of temperature experienced in inland deserts, and light frosts are tolerated by established plants.

Sturt's Desert Pea is protected in South Australia. The flowers and plants must not be collected on private land without the written consent of the owner. Collection on Crown land is illegal without a permit."

"The armorial bearings of South Australia include two crossed branches of wattle at the base of the shield. These bearings, which were granted in 1936, the Centenary Year, do not include the floral or faunal emblems of the State."

TASMANIA (TAS)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Plant	Floral Emblem	Eucalyptus globulus (Tasmanian blue gum)	5 Dec.1962	Eucalyptus globules Labill.	Myrtaceae



The Tasmanian blue gum, the Floral Emblem of Tasmania. (Photograph by: Anthony Mendoza).

The <u>proclamation</u> of *Eucalyptus globulus* as Floral Emblem of Tasmania on 5 Dec.1962 (Tasmanian Parliamentary Library, 2003a) reads:

"I, The Right Honourable THOMAS GODFREY POLSON CORBETT, Baron Rowallan of Rowallan, Knight of the Most Ancient and Most Noble Order of the Thistle, Knight Commander of the Most Excellent Order of the British Empire, upon whom has been conferred the Decoration of the Military Cross, Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia, acting with the advice of the Executive Council of the said State, do by this my Proclamation, declare that the Tasmanian Blue Gum, *Eucalyptus globulus* Labill., be adopted as the Floral Emblem of the State of Tasmania.

GIVEN under my hand and the Seal of the State of Tasmania as aforesaid at Hobart in Tasmania this twenty-seventh day of November One thousand

nine hundred and sixty-two.

ROWALLAN, Governor.

By His Excellency's Command, ERIC REECE, Premier."

"The Tasmanian Blue Gum is widespread and locally abundant in southern and eastern Tasmania and in the middle reaches of the River Derwent; it attains its maximum size in well-drained soils and in sheltered valleys. The tree occurs, although in restricted areas, near the west and south coasts and also in King and Flinders Islands and in Victoria at Wilson's Promontory and at Cape Otway. Of all the Australian eucalypts *E. globulus* is the species which has been most widely introduced overseas.

The tree has been established throughout the Mediterranean region and in highlands of the tropics in many parts of Africa and in India; it is widespread in California and in parts of Chile, Argentina and New Zealand. In addition to its ornamental value the Tasmanian Blue Gum is of considerable economic importance in many of these regions and is extensively used for pit props and as a source of fuel and for paper-pulp; oil is also extracted. The seasoned timber is especially valuable for heavy construction work such as wharves, bridges and railway sleepers, being very durable both in the ground and in water."

From the official <u>website</u> of the Department of Premier and Cabinet, Tasmanian Government (2013):

"The Tasmanian blue gum, *Eucalyptus globulus* Labill, was collected from the south-east coast of Tasmania in 1792-93 by the French naturalist J. J. H. de Labillardiere and was described and illustrated by him in 1799. Labillardiere was a member of an expedition, which, under the command of Bruny d'Entrecasteaux, sailed to the Southern Hemisphere in search of the missing explorer J. F. G. de La Perouse.

In favourable situations the Tasmanian blue gum grows into a tree up to about 60 metres high. The trunk is smooth and greyish-white in the upper part where the bark peels in long reddish-brown ribbons; at the base the bark is often persistent, rough and deeply furrowed.

The name "blue gum" refers to the bluish appearance of the juvenile leaves, which are borne in opposite pairs on square stems.

Flowering occurs fairly regularly each year in early summer. Bees collect both pollen and nectar and a characteristic amber-coloured honey is produced. The large woody fruit is almost flat-topped and opens by four or five valves through which numerous small seeds are shed."

"Tasmania does not have an official fauna emblem, although the Tasmanian devil and the Golden wattle bird have been regarded as unofficial emblems. The Latin term for the Golden wattle bird is *Anthochaera Paradoxa* (sic)."

From the official website of the Tasmanian Parliamentary Library (2003b):

"The Tasmanian Flowering Blue Gum (*Eucalyptus globulus*) was identified and named by a French naturalist, Labillardiere, in 1799. It may grow to over 60 metres in height and is most common in southern and eastern Tasmania although some examples are found on the Bass Strait islands and in southern Victoria. Its timber is highly valued for its strength and durability.

Official Biological Emblems of Australia

The Tasmanian Blue Gum is protected in areas under State control, such as national parks and crown land, and may not be removed without permission. It was proclaimed as the State floral emblem on 5 December 1962."

From the official website of the Australian National Botanic Gardens (Boden, 1985h):

"Eucalyptus globulus subsp. globulus occurs in tall open forest in south-eastern Tasmania and to a lesser extent along the eastern coast of the State. It also occurs on King and Flinders Islands in Bass Strait. Outside Tasmania it is confined to Wilson's Promontory and the Cape Otway district in southern Victoria. The climate throughout its range is cool to mild, with wet winters and reliable summer rainfall. Within parts of its range, light frosts and snowfalls occur.

Tasmanian Blue Gum is protected in conservation areas such as Maria Island National Park, Freycinet National Park, Tasman Arch Nature Reserve and St Mary's Pass Nature Reserve. Outside State reserves it occurs in reserves managed by the Department of Lands and the Forestry Commission. Both authorities have regulations prohibiting the taking of native flora from Crown Land and State forests respectively without prior permission of the managing authority."

"Although Tasmanian Blue Gum is the official floral emblem it seems to be seldom used for either official or popular purposes. This neglect may be due in part to the fact that, while it is a handsome tree of considerable economic importance, it is not as familiar to many Tasmanians as other indigenous species."

Lim & Tan

VICTORIA (VIC)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Faunal or Bird Emblem	Lichenostomus melanops cassidix (Gould) (helmeted honeyeater)	10 Mar.1971	Lichenostomus melanops cassidix (Gould)	Meliphagidae
	Faunal Emblem	Gymnobelideus leadbeateri McCoy (Leadbeater's possum)	10 Mar.1971	Gymnobelideus leadbeateri McCoy	Petauridae
	Marine Faunal Emblem	Phyllopteryx taeniolatus (weedy seadragon)	31 Oct.2002	Phyllopteryx taeniolatus (Lacepède)	Syngnathidae
Plant	Floral Emblem	Epacris impressa (common heath)	11 Nov.1958	Epacris impressa Labill.	Ericaceae



The helmeted honeyeater, the Faunal or Bird Emblem of Victoria. (Photograph by: Nick Bradsworth).



Leadbeater's possum, the Faunal Emblem of Victoria. (Photograph by: Peter Halasz).



The weedy seadragon, the Marine Faunal Emblem of Victoria. (Photograph by: Richard Ling).



The common heath, the Floral Emblem of Victoria. (Photograph by: <u>J. J. Harrison</u>).

Official Biological Emblems of Australia

Victoria has four biological emblems as listed on the official <u>website</u> of the Department of Premier and Cabinet, Victoria Government (2013e).

From the official <u>website</u> of the Victoria Government Gazette (2014a): "FAUNAL EMBLEMS FOR THE STATE OF VICTORIA.

PROCLAMATION

By His Excellency the Governor of the State of Victoria and its Dependencies in the Commonwealth of Australia, &c., &c., &c.

I, THE Governor of the State of Victoria, in the Commonwealth of Australia, by and with the advice of the Executive Council of the said State, do by this my Proclamation declare that the Helmeted Honeyeater, *Meliphaga cassidix* (Gould), and the Leadbeater's Possum, *Gymnobelideus leadbeateri* McCoy, be adopted as the Faunal Emblems for the State of Victoria.

Given under my Hand and ,the Seal of the State of Victoria aforesaid, at Melbourne, this second day of March, in the year of our Lord One thousand nine hundred and seventy-one and in the twentieth year of the reign of Her Majesty Queen Elizabeth II.

(L.S.) ROHAN DELACOMBE.

By His Excellency's Command,

HENRY BOLTE, Premier.

GOD SAVE THE QUEEN!"

Faunal or Bird Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Victoria Government (2013b):

"Victoria's bird emblem is the Helmeted Honeyeater (*Lichenostomus melanops cassidix*), the largest and most brilliantly coloured of the Yellow-tufted Honeyeaters.

Pure populations of this attractive honeyeater are now restricted to a small area on Woori Yallock Creek near Yellingbo on the outskirts of Melbourne. The Yellingbo State Wildlife Reserve was established to protect the few remaining colonies of 100–150 birds.

The Helmeted Honeyeater is particularly vulnerable to habitat disturbances as it requires a combination of manna and swamp gums, with tea-trees and shrubby bushes alongside grass-lined watercourses.

The birds are about 20 cm in total length and the sexes are similar. The upperparts of the body are olive-grey with the outer wing and tail feathers greenish-yellow. Underparts are yellowish-green with dark streaks.

The sides of the head are glossy black with golden ear-tufts and a yellow throat. Crown and fore-head are golden yellow, with plush-like feathers projecting slightly over the base of the bill and forming a distinctive helmet."

From Menkhorst (2008):

"In March 1971 the Helmeted Honeyeater was declared one of Victoria's State Faunal Emblems (with Leadbeater's Possum) and its struggle to survive over the ensuing 35 years has remained a topical subject in the mass media."

Faunal Emblem. — From the official website of the Department of Premier and Cabinet, Victoria Government (2013a):

"Victoria's animal emblem is the Leadbeater's Possum (Gymnobelideus leadbeateri McCoy) (sic).

It is found only in Victoria and is confined to the mountain ash forests of the central highlands, from Healesville and Marysville to Mt Baw Baw.

Even in the days of the early naturalists in Victoria, this possum was regarded as one of the rarer members of our fauna. It was thought to be extinct from 1909 until the species was rediscovered near Marysville in 1961.

The wellbeing of Leadbeater's Possum seems to be closely associated with the botanical succession within mountain ash forests. It is important that adequate provision be made for it among the diverse demands on our hardwood forests.

The possum is about 40 cm from nose to tail tip. Half the animal's length is taken up by the tail. Soft, dense fur covers the body, becoming progressively longer on the distinctively club-shaped tail. The colour of the animal is a dark greyish-brown with whitish under-parts. The face is quite beautifully marked.

Unlike some possums of its size, it does not have gliding membranes. It is a nimble species, which jumps from branch to branch.

It feeds on insects living on the foliage and under the bark of eucalypts, plant exudates, honey-dew from insects and some sap and gum.

Leadbeater's Possum breeds from February to November, producing one to two young in a litter.

The future of this species lies heavily in the hands of those governing management processes in its native habitat."

From Menkhorst (2008):

"In March 1971 the Helmeted Honeyeater was declared one of Victoria's State Faunal Emblems (with Leadbeater's Possum) and its struggle to survive over the ensuing 35 years has remained a topical subject in the mass media."

Marine Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Victoria Government (2013d):

"The Common Seadragon was chosen as Victoria's marine emblem in 2002, after a selection process designed to raise awareness about Victoria's unique marine environment.

These beautifully coloured, dainty and timid animals are part of the Syngnathidae family. They swim slowly and gracefully over kelp forests and seagrass meadows where they shelter. They grow up to 45 cm. Long leaf-shaped appendages along the top and bottom of the body provide perfect camouflage.

The new Victoria marine emblem can be found hovering around piers and seagrass beds around the state. With a mask and snorkel, you can see them in many of the new Marine National Parks and Marine Sanctuaries along the coast. They are very delicate and easily damaged if handled.

Common Seadragons are declared Protected Aquatic Biota under the Victoria Fisheries Act 1995."

Floral Emblem. — From the official website of the Victoria Government Gazette (2014b): "FORESTS DEPARTMENT.
WILD FLOWERS AND NATIVE PLANTS PROTECTION ACT 1958.

PROCLAMATION

By His Excellency the Governor of the State of Victoria and its Dependencies in the Commonwealth of Australia, &c., &c., &c.

WHEREAS by section 4 of the *Wild Flowers and Native Plants Protection Act* 1958 it is enacted that the Governor in Council may notify by Proclamation published in the *Government Gazette* that any wild flower or native plant specified in the Proclamation is protected under the said Act in any part or parts of Victoria specified in the Proclamation and that such protection may be for a limited or unlimited period as is specified in the Proclamation:

Now therefore I, the Governor of the State of Victoria, In the Commonwealth of Australia, by and with the advice of the Executive Council of the said State, and in pursuance of the powers conferred by the said Act, do by this my Proclamation notify that on. and after the twentieth day of March, 1963, the wild flower specified in the Schedule hereunder shall be and the same is hereby protected in all parts of the State of Victoria throughout every month in each year.

SCHEDULE.

Botanical Name; Vernacular Name. Epacris impressa; Common Heath.

Given under my Hand and the Seal of the State of Victoria aforesaid, at .Melbourne, this nineteenth day of March, in the year of our Lord One thousand nine hundred and sixty-three and in the twelfth year of the reign of Her Majesty Queen Elizabeth II.

(L.S.) DALLAS BROOKS.

By His Excellency's Command,

L. H. S. THOMPSON, Minister of Forests.

GOD SAVE THE QUEEN!"

From the official <u>website</u> of the Department of Premier and Cabinet, Victoria Government (2013c): "Victoria's floral emblem is the Common (Pink) Heath, (Epacris impresa Labill.).

It was first documented by the French explorer Labillardière who found it in Tasmania in 1793.

It is a slender shrub, usually 0.2 to 1 metre high, with a few erect branches and with bell-like flowers ranging in colour from white through pink to red. Frequently all flowers point in the same direction.

The Common (Pink) Heath is frost-hardy and flowers through winter and spring, although some flowers have been recorded as early as March.

These attractive flowering plants make a colourful display in many of Victoria's winter gardens. They attract the Eastern Spinebill, which hovers in front of the flowers and is well-adapted to their pollination."

From the official website of the Parliament of Victoria (2010):

"However, in 1958 the Pink Heath (*Epacris impressa* Labill.) was formally proclaimed as the floral emblem of Victoria. This in turn led to a desire that it be included somewhere in the Armorial Ensigns of the State. To this end, correspondence was entered into with Garter King of Arms. The obvious solution was to have the plant shown growing from a grassy mound which would in turn supply a firm base for the two Supporters. Such a mound is called a Compartment in heraldry.

Accordingly, on the 28th March, 1973 Queen Elizabeth II signed a further Royal Warrant which added the desired component out of which the State flower was shown growing."

From the official website of the Australian National Botanic Gardens (Boden, 1985i):

"Representatives of interested Victoria government departments, societies and individuals met on 18 September 1951 and unanimously agreed on Common Heath as the State floral emblem. The pink form of Common Heath, *Epacris impressa*, was proclaimed the floral emblem of Victoria on 11 November 1958. Victoria was the first Australian State to give official recognition to such an emblem."

"Common Heath occurs in coastal heathlands as well as in montane and sub-alpine areas. It is distributed from Clyde River, New South Wales to the Mt Lofty Ranges in South Australia. In Victoria it occurs in coastal regions and adjoining foothills, the Grampians and the Little Desert. It is also common in Tasmania."

"Common Heath is depicted in the armorial ensign granted to Victoria on 28 March 1973 and recorded in the College of Arms, London. The current armorial ensign includes additions made to the earlier one, granted on 6 lune 1910, from which the floral emblem is absent. The more recent blazon, the description of the bearings in heraldic terms, states: 'upon a Compartment of Grass springing there from ... a representation of the Floral Emblem for the said State of Victoria that is to say the Pink Form of the Common Heath, Epacris impressa Labill' (sic)."

WESTERN AUSTRALIA (WA)

Emblem Kingdom	Designation	Declared Name	Date or Year Declared	Current Scientific Name	Family
Animal	Animal Emblem	Myrmecobius fasciatus (numbat)	25 Jul.1973	Myrmecobius fasciatus Waterhouse	Myrmecobiidae
	Bird Emblem	Cygnus atratus (black swan)	25 Jul.1973	Cygnus atratus (Latham)	Anatidae
	Fossil Emblem	Mcnamaraspis kaprios (gogo fish)	5 Dec.1995	Mcnamaraspis kaprios Long	Order Arthrodira
	Marine Animal Emblem	Rhincodon typus (whale shark)	12 Nov.2013	Rhincodon typus Smith, 1828	Rhincodontidae
Plant	Floral Emblem	Anigozanthos manglesii (red and green kangaroo paw)	9 Nov.1960	Anigozanthos manglesii D.Don	Haemodoraceae



The numbat, the Animal Emblem of Western Australia. (Photograph by: Martin Pot).



The black swan, the Bird Emblem of Western Australia. (Photograph by: Dick Daniels).



The gogo fish, the Fossil Emblem of Western Australia. (Photograph by: Government of Western Australia).



The whale shark, the Marine Animal Emblem of Western Australia. (Photograph by: Zac Wolf).



The red and green kangaroo paw, the Floral Emblem of Western Australia. (Photograph by: Sean Mack).

There are five biological emblems listed on the official <u>website</u> of the Department of Premier and Cabinet, Government of Western Australia (2013ab). The proclamations for each emblem in the state gazette can be viewed at the official website of the State Law Publisher of Western Australia.

Animal Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Government of Western Australia (2014a):

"Although it was once widespread across southern Australia, the Numbat has become extinct throughout most of its range and today survives only in small patches of forest in the south-west of Western Australia.

The destruction of its habitat through clearing for farming and the introduction of foxes with European settlement led to the decline of the species. While the Numbat is still endangered, listed as vulnerable, the outlook is gradually improving. Following fox control, new populations have been established in nature reserves and forests. As part of its Native Species Breeding Program, the Perth Zoo is breeding Numbats for release into protected habitat. To date more than 60 Numbats have been released back into the wild.

The Numbat is a unique pouchless marsupial with a distinctive appearance. It is a small animal with a slender body and reddish-brown coat that has prominent white bands, and a long bushy tail. The adult Numbat is about 41 centimetres long (including the tail) and has a narrow, pointed snout and dark stripes across the eyes.

Its preferred habitat is woodland, with thick undergrowth and littered with fallen branches. It shelters in hollow logs, trees and burrows and searches during daylight hours for termites. In the wild, the Numbat eats an exclusive diet of termites. Since it is not strong enough to break into termite mounds themselves, the Numbat waits for termites to be out in their shallow feeding galleries (the underground 'highways' that termites travel in from the nest to feeding areas). With its sharp claws it digs insects out of logs and sub-soil down to the termite galleries and uses its long tongue to flick the termites into its mouth. An adult consumes up to 20,000 termites per day, the equivalent of ten per cent of its body weight.

Unlike most marsupials, the Numbat is active during the day, with its lifestyle being closely linked to termite movements. In summer, termites are out early in the day but retreat deeper into the soil as the day becomes hot. During that part of the day, Numbats retreat to a cool hollow log and wait for later in the cooler part of the afternoon when termites are close to the surface again. In winter, the termites are not active until late morning when the soil begins to warm but remain active until dusk. The Numbat stays out at the same time to feed.

The Numbat is basically a solitary animal, each with its own home range, the boundaries of which are fairly flexible. In summer, before the breeding season, the male Numbats roam a long way from their home range in search of females. Four young are usually born between January and March. They are carried or nursed by the mother through winter. When they grow fur, they are placed in a small underground chamber lined with grass and leaves, at the end of a one to two metre long burrow, while their mother hunts for termites. They are quite active and will play near the nest during her absence. The young are able to fend for themselves by October and disperse by the end of the year.

The Numbat was proclaimed the animal emblem of Western Australia on 25 July 1973."

Bird Emblem. — From the official website of the Department of Premier and Cabinet, Government of Western Australia (2014b):

"Although the Black Swan is found in wetlands throughout Australia, this graceful bird has had a special association with Western Australia from the earliest times. Aboriginal lore tells how ancestors of the Nyungar people, the indigenous Australians living in the south west of the State, were once Black Swans who became men.

However, it was not until the voyages of Dutch explorers to the Great South Land in the 17th century that the existence of Black Swans was reported to the rest of the world. Until then people in Europe believed that all swans were white.

In 1697, Dutch explorer and navigator Captain Willem de Vlamingh explored and named the Swan River where the capital of Western Australia, Perth, now stands – on account of the flocks of Black Swans he sighted in the estuary. Some 130 years later, Captain James Stirling, investigating the area as a future British colony, also reported a flock of over 500 Black Swans flying over the river.

As a result, the original European settlement in Western Australia was named the Swan River Settlement (or Colony) and the Black Swan became a recognised symbol of the new Colony, appearing on government papers, bank notes, postage stamps and other publications such as the *Swan River Guardian*.

The Black Swan was also used on the original State Crest, which was used prior to the granting of the Warrant for the State Coat of Arms. This Crest sometimes incorporated the motto: "Cygnis insignis", which means "noted for swans". Subsequently the Black Swan was incorporated into the design of the State Badge, the State Seal, the State Coat of Arms and Commonwealth Coat of Arms.

It is not surprising therefore that the Black Swan was the obvious preference when consideration was being given to the selection of a State bird emblem. It was proclaimed as the bird emblem of Western Australia on 25 July 1973.

The bird is similar in size and shape to the European species, but its plumage is black, often tinged with brown, and with white wing tips. The scientific name for the species "atratus" means "dressed in black" The beak is red with a white band near the tip.

A Black Swan stands about 106–140 centimetres with a wingspan of almost two metres. It ranges over wide expanses of water (both fresh and salt) and builds a bulky nest in swamps and lakes.

Males and females are similar in size and appearance but males can be identified in flight by their larger neck and, when swimming, they hold their neck more erect. The female lays between four and eight eggs which take about 40 days to hatch. Both parents care for the young fluffy beige-grey swans, called cygnets. Black feathers start to appear on the young after about 3–4 weeks. Cygnets begin to fly at about two months of age but stay with the parents until the next breeding season. Swans mate for life, sometimes living 40 years."

Fossil Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Government of Western Australia (2014d):

"The initiative for Western Australia to adopt a fossil emblem and for that emblem to be *Mcnamaraspis kaprios* came from pupils of a Perth primary school – Sutherland Primary School in Dianella. Following a campaign the school initiated in 1994, a State Fossil Emblem Committee was formed in 1995 to provide advice to the then Minister for the Arts regarding appropriate fossil emblems for Western Australia.

Following public consultations and consideration of public submissions, the Gogo fish was recommended to Cabinet as the fossil emblem of Western Australia and was proclaimed on 5 December 1995."

From the official website of the Australian Heritage Places Inventory (2014):

"One of the major groups of extinct fishes that dominated the seas in Devonian times is a group known as the placoderms. Placoderms were primitive jawed fishes that had bony shields covering the head and front of the body. A diverse array of over 25 species of placoderm have been found at Gogo. Many of the species illustrate adaptations of interest in the understanding of the evolution of vertebrates. One species of placoderm found here is MCNAMARASPIS KAPRIOS. This fish was proclaimed in 1995 as Western Australia's official State fossil emblem."

Marine Animal Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Government of Western Australia (2013a):

"In the dappled light of the ocean, *Rhincodon typus* – the Whale Shark – can swim past almost unnoticed despite its size, due to its grey skin with yellow markings that act as camouflage. This pattern is unique to each animal and, much like a human fingerprint, can be used to identify them. These markings and its large mouth, up to 1.5 metres wide, distinguish the Whale Shark as a striking inhabitant of the ocean.

The Whale Shark is in many ways an animal of contradictions. Although it is the largest living fish at a length of up to 12 metres, it is a docile and gentle giant that eats the tiniest organisms of only millimetres in size. While it breathes through its gills like a shark, it filter feeds like a whale by pulling plankton, krill and crustaceans through mesh-like screens in its gills. Although it has thousands of tiny teeth placed in rows within its enormous mouth, it does not use them for feeding.

The species was identified and described in April 1828 by English doctor, Andrew Smith, who was living in Cape Town and watched as fishermen harpooned the giant creature. Over the years tall tales have been told about intrepid encounters on the sea with these enormous fish, with some unconfirmed stories of Whale Sharks up to 20 metres long.

The species originated approximately 60 million years ago and represents a link to the prehistoric past. Whale Sharks live for 70–100 years and do not reproduce until they reach approximately nine metres long. It takes a Whale Shark pup up to 30 years to reach this size. Scientists in Western Australia are working to discover more as there is still much we do not know about the Whale Shark.

Although they are found in tropical and warm oceans across the equator, Whale Sharks have become famous for their gathering during Autumn and Winter in Western Australia and have been seen as far south as the Kalbarri cliffs. Whale Sharks are capable of diving to depths of 1,286 metres but usually spend their time swimming and surface feeding. This makes Western Australia one of the best places in the world to see these spectacular creatures.

The Whale Shark was recommended by the students of Forest Crescent Primary School following a State wide competition. Whale Sharks are a vulnerable species and in Western Australia they are respected and protected.

The Whale Shark was proclaimed the marine animal emblem of Western Australia on 12 November 2013."

Floral Emblem. — From the official <u>website</u> of the Department of Premier and Cabinet, Government of Western Australia (2014c):

"The striking flower of the Red and Green Kangaroo Paw, found naturally only in Western Australia, is the State's floral emblem.

Announcing the choice in November 1960, the then Premier of Western Australia, David Brand, said: ".... the Kangaroo Paw is so outstanding that it was the logical choice. It has grace and beauty, striking colour and distinctive outline – and it grows naturally only in Western Australia".

It was considered that the emblem would heighten tourist interest in the State's wildflowers and was recommended by Premier Brand on the advice of the State's Tourist Development Authority.

The Red and Green Kangaroo Paw is one of eleven species of *Anigozanthos*. The name *Anigozanthos*, meaning "irregular flower" came from botanist J.J.H. de Labillardiere who, as part of a French scientific expedition, sheltered near Esperance, on the south coast of Western Australia, in 1792 and was the first European to collect the Kangaroo Paw. The common name comes from the appearance of the unopened cluster of flowers that resembles the forepaw of a kangaroo.

From the early days of the Swan River Colony, botanists were intrigued by the unique plants of Western Australia. With encouragement from government naturalist James Drummond, settlers sent seeds and specimens back to England. Prominent among these was the Red and Green Kangaroo Paw, which was introduced to England in 1833 and described in 1835 by a British botanist, David Don.

Several members of the Mangles family (of whom, Ellen, the wife of the colony's first Governor, Captain James Stirling, was one) were plant enthusiasts and promoted the cultivation of Swan River seeds in England. The family was honoured in an earlier name for this species – the Mangles Kangaroo Paw.

The Red and Green Kangaroo Paw is the best known and most famous of all the Kangaroo Paws. It is found in many areas of remnant bushland near Perth and is common in the sandy coastal plains of the south-west of the State.

This stunning plant has long flattened leaves at its base and brilliant red and green flowers that appear in spring and summer in fan-like clusters at the end of red felted stems. The sturdy metre high stems provide a ready-made perch for honeyeaters or wattlebirds, which are often seen clinging precariously to the stem, drinking nectar from each of the flowers in turn and helping in pollination.

The Red and Green Kangaroo Paw was proclaimed Western Australia's floral emblem on 9 November 1960 and was subsequently incorporated into the State Coat of Arms."

The <u>proclamation</u> of *Anigozanthos manglesii* as Floral Emblem of Western Australia on 9 Nov.1960, extract from Government Gazette (No. 95) of 18 Nov.1960 (Australian National Botanic Gardens, 2012c):

"By His Excelency The Honourable Sir John Patric Dwyer, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Liutenant-Governor in and over the State of Western Australia and its Dependencies in the Commonwealth of Australia.

WHEREAS it has been made appear to me, the Lieutenant-Govenor, desirable that a floral emblem be adopted as an emblem of the State of Western Australia and further that such emblem ought to be the flower of the plant known as the Kangaroo Paw and more fully described as *Anigosanthos* (sic) *Manglesii* D. Don: NOW THEREFORE I, the Liutenant-Governor, acting with the advice and consent of the Executive Council do hereby declare that the flower of the plant known as the

Kangaroo Paw and more fully described as *Anigosanthos* (sic) *Manglesii* D. Don be adopted and recognised as the floral emblem of the State of Western Australia.

Given under my hand and the Public Seal of the said State at Perth, this 9th day of November, 1960.

By His Excellency's Command, DAVID BRAND, PREMIER.

GOD SAVE THE QUEEN !!!"

From the official website of the Australian National Botanic Gardens (Boden, 1985j):

"Red and Green Kangaroo Paw, *Anigozanthos manglesii* was proclaimed the floral emblem of Western Australia on 9 November 1960.

It is one of about twelve species of the genus *Anigozanthos* which is restricted to the south-west of Western Australia. The family Haemodoraceae to which it belongs occurs in Australia, Papua New Guinea, South Africa and the Americas."

"In its natural habitat Red and Green Kangaroo Paw flowers between August and October, depending on seasonal conditions and locality. It occurs naturally in heath on sandy soil from the Murchison River in the north to Busselton and Mount Barker in the south and Lake Muir to the east. In the Darling Range it occurs in heath on gravelly soils of lateritic origin.

The species is classed as protected flora. Collectors of any whole plants and flowers must be licensed."

"The State floral emblem is incorporated in the armorial bearings of Western Australia, granted by Royal Warrant on 17 March 1969, and in this form appears on stationery of all government departments and many government publications. The blazon of the arms includes:

'And for Crest: On a Wreath Or and Sable The Royal Crown between two Kangaroo Paw (Anigosanthos [sic] Manglesii) flowers slipped proper'."

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INDICES

1.	Scientific Name Index	70
2.	Family Index	71
3.	Common Name Index	71
4.	Emblem Type Index	71

SCIENTIFIC NAME INDEX

Page numbers of photographs are in **bold**.

Achoerodus viridis 14, 16, 23, 24 , 25 , 27, 28	Dendrobium bigibbum var. phalaenopsis	
<i>Amphiprion akindynos</i> 14, 17, 35 , 38	14, 17, 35, 37 , 38	
Anigozanthos manglesii	<i>Dendrobium bigibbum</i> 14, 17, 35, 37 , 38	
	Epacris impressa	
<i>Aquila audax</i> 14, 16, 30, 31 , 32	Eucalyptus globulus	
<i>Callocephalon fimbriatum</i> 14, 16, 19 , 20	Gossypium sturtianum. 14, 16, 30, 31 , 32, 33, 34	
<i>Clianthus formosus</i> 15, 17, 41, 43 , 46	<i>Grus rubicunda</i> 14, 17, 35, 36 , 38	
<i>Cracticus tibicen</i> 14, 17, 41 , 43	Gymnobelideus leadbeateri	
<i>Cygnus atratus</i> 15, 18, 57, 58 , 60		
Dacelo gigas 14, 16, 23, 24 , 26	Gymnorhina tibicen leuconota	
Dacelo novaeguineae		

Official Biological I	Emblems of the World
Lasiorhinus latifrons	Phascolarctos cinereus 14, 17, 35, 37 , 38, 39 Phycodurus eques 14, 17, 41, 42 , 45
	Phyllopteryx taeniolatus 15, 18, 45, 50, 52 , 54
<i>Macropus rufus</i> 14, 16, 30 , 32	Rhincodon typus 12, 13, 15, 18, 57, 59 , 62
Mcnamaraspis kaprios 15, 18, 57, 58 , 61, 62	Swainsona formosa
Myrmecobius fasciatus 15, 18, 57 , 60	<i>Telopea speciosissima</i> 13, 14, 16, 23, 25 , 28
Ornithorhynchus anatinus 14, 16, 23 , 26	<i>Wahlenbergia gloriosa</i>
FAMIL	Y INDEX
A paimitui dan 14.20	Myumaaahiidaa 15.57
Accipitridae	Myrmecobiidae
Alcedinidae	Myrtaceae
Anatidae	Orchidaceae
Arthrodira*	Ornithorhynchidae
Campanulaceae	Petauridae
Cracticidae	Phascolarctidae 14, 35
Ericaceae	Pomacentridae
Fabaceae	Proteaceae
Gruidae	Psittacidae
Haemodoraceae	Rhincodontidae
Labridae	Syngnathidae
Macropodidae	Vombatidae
Malvaceae	* Order
	NAME INDEX
COMMON No Page numbers of photographs are in bold .	NAME INDEX
COMMON No Page numbers of photographs are in bold . anemone fish	piping shrike 14, 17, 41 , 43, 44
COMMON No. 14, 17, 35, 38 black swan	piping shrike
COMMON No. 14, 17, 35, 38 black swan	piping shrike
COMMON No. 14, 17, 35, 38 black swan	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 14, 17, 35, 38 black swan 15, 18, 57, 58, 61 blue groper 14, 16, 23, 24, 25, 27, 28, 67 brolga 14, 17, 35, 36, 38, 39 common heath 15, 18, 50, 52, 55, 56 Cooktown orchid	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 20 Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold. anemone fish	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold. anemone fish	piping shrike
COMMON Note that the property of photographs are in bold. Anemone fish	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 2015. Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 2009 Page numbers of photographs are in bold. anemone fish	piping shrike
COMMON No. 2015. Page numbers of photographs are in bold . anemone fish	piping shrike
COMMON No. 2014	piping shrike
COMMON No. 2014	piping shrike
COMMON No. 2011 Page numbers of photographs are in bold. anemone fish	piping shrike
COMMON No. 2015 Page numbers of photographs are in bold. anemone fish	piping shrike

Lim & Tan

SA	41 , 43	NSW	23, 25 , 28
Bird Emblems		NT	30, 31 , 33
NSW	23, 24 , 26	QLD	35, 37 , 39
QLD	35, 36 , 38	SA	41, 43 , 45
VIC	50 , 53	TAS	47
WA	57, 58 , 60	VIC	50, 52 , 55
Faunal Emblems		WA	59 , 62
ACT	19 , 20	Fossil Emblem	
NT (bird)	31 , 32	WA	57, 58 , 61
NT (mammal)	30 , 32	Marine Animal Emblem	
QLD	35, 39	WA	57, 59, 62
SA	41, 42 , 44	Marine Emblem	
VIC	50 , 54	SA	41, 42 , 44
Fish Emblem		Marine Faunal Emblem	
NSW	23, 24 , 25 , 27	VIC	50, 52 , 54
Floral Emblems			
ACT	19 , 21		