



## Pathfinder Honour: Trainer's Notes

# Birds 1 (Australia)



### Instructions to Trainers / Instructors of this Honour

Thankyou for being involved with this Honour. These notes have been developed to assist in teaching / instructing this honour. We recognise that there is much more information available and we are grateful that you should share your expertise.

Please remember that Honours are designed to develop our Pathfinders in many ways; their interests, their knowledge and their relationship with their Saviour and Creator. Your enthusiasm and creativity will have a huge impact on those doing the honour.

To complete an Honour, the following (where applicable) must be completed satisfactorily:

- Physical and Practical Requirements.
- Honour Workbook.
- Honour Assessment Sheet. *(On SPD Honour Website but Leader's level access is required)*

### Additional Reference Material

Please see ADDITIONAL REFERENCES on the final page of these notes.

### Acknowledgements

Please refer to citations in the following pages.

# Birds 1 (Australia) Honour

## INTRODUCTION

The South Pacific Division has developed the Birds 1 Honour, taking into account the number of countries and different environments in the Division. The first five Requirements are what we call generic; ie they apply to any country in the Division and, for that matter, the world. These generic Trainer's Notes are called '*Birds 1 Honour Trainer's Notes, Generic.doc*'.

REQUIREMENTS 1, 2, 3, 4, 5, 9: '*Birds 1 Honour Trainer's Notes, Generic.doc*'.

REQUIREMENT 6: The Australian part of this requirement is covered in these notes.

REQUIREMENTS 7, 8: Birds of Australia are covered in these notes. Please note that space permits the inclusion of only a few species of the wonderful birds of Australia

## REQUIREMENT 6: Name five ways by which birds impact on the lives of people. Some of these must relate to people of your country or where you live

This requirement was partially covered in *Birds 1 Honour Trainer's Notes\_Generic* where general information is provided.

The following notes relate to Australia. An intimate knowledge of what follows is far beyond what is expected of those doing the Birds 1 Honour.

Trainers, no doubt you are aware that there is heaps more information available. Why not do some research on your local area?

### Birds used as State and National Emblems

This section is based on [http://en.wikipedia.org/wiki/List\\_of\\_Australian\\_bird\\_emblems](http://en.wikipedia.org/wiki/List_of_Australian_bird_emblems)

#### Kookaburra (*Dacelo novaeguineae*)

The raucous laugh of a group of kookaburras is well known to all Australians. The first European bushman in New South Wales (NSW) used the kookaburra's laugh to wake them up early each morning. Many believe that, due to this early relationship, the kookaburra has been NSW's bird emblem since 1971.

On personal note, there is a 'myth' that, if a group of kookaburras persistently laugh in an urban neighbourhood, there is a pregnant woman around. When my wife was pregnant with our first child, we were very discreet about it. We were visited by kookaburras that provided royal performances while sitting on our backyard clothesline. When our curious neighbours asked the question, we couldn't deny it. Sprung! (John Sommerfeld)

Picture: [http://en.wikipedia.org/wiki/File:Laughing\\_kookaburra\\_dec08\\_02.jpg](http://en.wikipedia.org/wiki/File:Laughing_kookaburra_dec08_02.jpg)



#### Helmeted Honey Eater (*Lichenostomus melanops cassidix*)

This bird has been the emblem for Victoria since 1971. In one sense it seems to be an unusual choice because few people have seen the bird. It is estimated that there are only about 20 breeding pairs in the wild. A recovery program is in place

It inhabits dense vegetation along riverbanks

Picture: Gould, J (1867). The Birds of Australia. Supplement. Pt 4. London: J. Gould. pp. pl.89.

[http://upload.wikimedia.org/wikipedia/commons/2/2f/Lichenostomus\\_melanops\\_cassidix.jpg](http://upload.wikimedia.org/wikipedia/commons/2/2f/Lichenostomus_melanops_cassidix.jpg)



## Birds 1 (Australia) Honour

### Brolga (*Grus rubicunda*)

This bird has been on the Queensland Coat of Arms since 1977 and has been the State's bird emblem since 1986.

The brolga is a very outgoing bird. It is very bold bird through its bowing and dancing and leaping into the air with wings spread gracefully... could this be true representation on how outgoing Queenslanders are?

Picture: [http://upload.wikimedia.org/wikipedia/commons/0/06/Brolga-1-Healesville%2C-Vic%2C-3.1.2008\\_edit.jpg](http://upload.wikimedia.org/wikipedia/commons/0/06/Brolga-1-Healesville%2C-Vic%2C-3.1.2008_edit.jpg)



### Wedge-tailed Eagle (*Aquila audax*)

The Wedge-tailed Eagle (also called the Eaglehawk) was made a Northern Territory emblem in 1975 and has had a place on their Coat of Arms since 1978.

They are highly aerial, soaring for hours on end without wing beat or effort, regularly reaching 1,800 metres (5,900 ft) and sometimes considerably higher. Their keen eyesight extends into the infrared and ultraviolet bands. This helps them spot prey and allows them to see rising thermals, which they can use to gain altitude while expending little energy.

Picture: [http://en.wikipedia.org/wiki/File:Wedge\\_tailed\\_eagle\\_in\\_flight04.jpg](http://en.wikipedia.org/wiki/File:Wedge_tailed_eagle_in_flight04.jpg)



### Gang-gang Cockatoo (*Callocephalon fimbriatum*)

In 1997 this cockatoo was made the official emblem of the Australian Capital Territory (ACT).

The people who live in Canberra know when these birds are around because of their noise! It's loud and is said to sound like a squeaky gate or a cork being pulled from a bottle. It is actually a perfect bird for an emblem of the area because it is the only city in Australia the birds live. The male has a red head

Picture: [http://en.wikipedia.org/wiki/File:Callocephalon\\_fimbriatum\\_\(pair\)\\_-NSW\\_-Australia-8.jpg](http://en.wikipedia.org/wiki/File:Callocephalon_fimbriatum_(pair)_-NSW_-Australia-8.jpg)



### Black Swan (*Cygnus atratus*)

First seen by a Dutch Navigator in the Swan Estuary it was made the State bird of Western Australia (WA) in 1973 and it made its way onto the first WA stamp in 1854.

The black swan is a very important link to WA for the Aboriginal people of WA. Their tales and beliefs are that the original Bibbulman tribe of WA were changed from black swans into men.

Picture:

<http://upload.wikimedia.org/wikipedia/commons/8/82/Cygnus atratus -adult with chicks in Australia-8.jpg>



## Birds 1 (Australia) Honour

### Piping Shrike

The Piping Shrike has been the official badge of the South Australian Government since 1901.

There has always been discussion on whether it is the Common Magpie or the Murray Magpie and why is it called a Shrike. In any case the familiar magpie is resourceful, brave (and daring) in defending its nest and young ones. It has a very sweet song. All are qualities which typify South Australia.



Picture: [http://upload.wikimedia.org/wikipedia/commons/fd/Flag\\_of\\_South\\_Australia.svg](http://upload.wikimedia.org/wikipedia/commons/fd/Flag_of_South_Australia.svg)

### Yellow Wattlebird (*Anthochaera paradoxa*)

The Yellow Wattlebird is considered to be the unofficial bird emblem of Tasmania.

It is the largest of the honeyeaters and is endemic to Tasmania. They are usually 375-450mm long and are named for the wattles in the corners of their mouths.

A favoured food is the nectar from eucalyptus flowers which they pollinate as they go from flower to flower.

Picture:

[http://upload.wikimedia.org/wikipedia/commons/8/87/Anthochaera\\_paradoxa.jpg](http://upload.wikimedia.org/wikipedia/commons/8/87/Anthochaera_paradoxa.jpg)



### **Emu** (*Dromaius novaehollandiae*)

The Emu is a fascinating bird. The following information is way beyond what is expected of those doing this honour. Hope you enjoy it as much as we did when compiling it.

Based on <http://en.wikipedia.org/wiki/Emu>

The Emu has had quite an impact on Australian culture:

- The Emu is popularly but unofficially considered as a faunal emblem—the national bird of Australia.
- It appears as a shield bearer on the Coat of Arms of Australia with the Red Kangaroo and, as a part of the Arms, it also appears on the Australian 50 cent coin.
- It has featured on numerous Australian postage stamps, including a pre-federation New South Wales 100th Anniversary issue from 1888, which featured a 2 pence blue Emu stamp, a 36 cent stamp released in 1986, and a \$1.35 stamp released in 1994.
- The hats of the Australian Light Horse (of the Australian military) are famously decorated with an Emu feather plume.
- There are around 600 gazetted places named after the Emu in Australia; mountains, lakes, creeks, and towns.
- During the 19th and 20th centuries, many Australian companies and household products were named after the bird; for example, in Western Australia, Emu branded beer has been produced since the early 20th century.
- Emu - Austral Ornithology is the quarterly peer-reviewed publication of the Royal Australasian Ornithologists Union, also known as Birds Australia.
- It gives its name to activities such as the 'Emu Parade', the systematic way of using a large group of people to clean up large areas of rubbish

# Birds 1 (Australia) Honour

## Fascinating Emu Facts

The Emu is the largest bird native to Australia. These soft-feathered, brown, flightless birds reach up to 2 metres (6.6 ft) in height. The Emu is common over most of mainland Australia, although it avoids heavily populated areas, dense forest, and arid areas.

Emus can travel great distances at a fast, economical trot and, if necessary, can sprint at 50 km/h (31 mph) for some distance. Its name is Latin for '*fast-footed New Hollander*'.

Emus will sit in water and can also swim.



Picture: [http://upload.wikimedia.org/wikipedia/commons/1/19/Emu\\_showing\\_feet.jpg](http://upload.wikimedia.org/wikipedia/commons/1/19/Emu_showing_feet.jpg)

Their calls consist of loud booming, drumming, and grunting sounds that can be heard up to 2 kilometres (1.2 miles) away.

Emus predominately travel in pairs and they may form enormous flocks arising from the common need to move towards food sources.

Though an Emu will be cautious when approaching civilisation, they are well known for approaching small groups of humans in the wild when prompted by food. Even if the food is not offered to them, they can be rather persistent in helping themselves.

Emus eat a variety of native and introduced plant species. They also eat insects. They may travel long distances to find food and have been known to go for weeks without food.

Emus serve as an important agent for the dispersal of seeds which contributes to floral biodiversity.

Emus require pebbles and stones to assist in the digestion of the plant material. Individual stones may weigh 45g (1.6 oz) and they may have as much as 745 g (1.64 lb) in their gizzard at one time.

Emus form breeding pairs during the summer months of December and January and may remain together for about five months. Mating occurs in the cooler months of May and June. Males lose their appetite and construct a rough nest in a semi-sheltered hollow on the ground from bark, grass, sticks, and leaves. The female lays an average of 11 (and as many as 20) very large, thick-shelled, dark-green eggs. The number of eggs varies with rainfall. The eggs are roughly equivalent to 10–12 chicken eggs in volume and weight.

The male becomes broody after his mate starts laying and begins to incubate the eggs before the laying period is complete. From this time on, he does not eat or drink and stands only to turn the eggs which he does about 10 times a day. Over the eight weeks of incubation, he will lose a third of his weight and will survive only on stored body-fat and on any morning dew that he can reach from the nest.

Newly hatched chicks are active and can leave the nest within a few days. They stand about 120 mm (5 ins) tall and have distinctive brown and cream stripes for camouflage which fade after three months or so. The male stays with the growing chicks for up to seven months, defending them and teaching them how to find food. Chicks grow very quickly and are full-grown in 5–6 months. They may remain with their family group for another six months before they split up to breed in their second season. In the wild, Emus live between 10 to 20 years; captive birds can live longer.

# Birds 1 (Australia) Honour

## The Emu in Australian Aboriginal Culture

The Emu has an important role in Aboriginal culture. It was an important source of meat to the Aborigines in the areas to which it was endemic. They used a variety of techniques to catch the bird. This included spearing them while they drank at waterholes, poisoning waterholes, catching Emus in nets and attracting Emus by imitating their calls or dangling a ball of feathers from a tree.

Emu fat was used as bush medicine and was rubbed on the skin. It also served as a valuable lubricant. It was mixed with ochre to make the traditional paint for ceremonial body adornment as well as to oil wooden tools and utensils.

The Emu features in numerous stories told across a number of Aboriginal groups. Included is a creation story of the Yuwaalaraay and other groups in NSW who say that the sun was made by throwing an Emu's egg into the sky.

The Kurdaitcha man of Central Australia is said to wear sandals made of Emu feathers to mask his footprints.

Many Aboriginal language groups throughout Australia have a tradition that the dark dust lanes in the Milky Way represent a giant emu.

Many aboriginal rock engravings depict Emus.

## Economic value of the Emu

Today, Emus are farmed primarily for their meat, leather, and oil.

Emu meat is said to be a low-fat meat. Emu fat is rendered to produce oil for cosmetics, dietary supplements and therapeutic products. There is some evidence that the oil has anti-inflammatory properties.

Emu leather has a distinctive patterned surface due to a raised area around the feather follicles in the skin. The leather is used in such small items as wallets and shoes, often in combination with other leathers.

The feathers and eggs are used in decorative arts and crafts.

## The so-called 'Great Emu War'

Based on: [http://en.wikipedia.org/wiki/Emu\\_War](http://en.wikipedia.org/wiki/Emu_War)

### Background

Following World War I, government schemes were introduced to encourage ex soldiers to take up farming. Subsequently, large numbers of ex-soldiers from Australia and a number from Britain took up farming within Western Australia, often in more marginal areas. With the onset of the Great Depression in 1929, wheat prices fell drastically.

Around 1932, the difficulties facing the desperate farmers were increased by the arrival of about twenty thousand Emus. (Emus regularly migrate after their breeding season, heading to the coast from the inland regions).

The Emus loved the cleared land and additional water supplies that were made available for livestock by the farmers. They began to foray into farm territory – in particular the marginal farming land approximately 300km east of Perth. The Emus consumed and spoiled the crops as well as leaving large gaps in fences through which livestock and rabbits could enter and cause further problems.

A deputation of ex-soldier farmers met with the Australian Minister of Defence. Having served in World War 1, they were well aware of the effectiveness of machine guns and they requested their deployment.

## Birds 1 (Australia) Honour

The Minister readily agreed and stipulated that the machine guns were only to be used by military personnel. The Minister considered that the birds would make good target practice and provide a positive publicity opportunity.

The 'War'

Military involvement began in late 1932 under the command of a Major of the Royal Australian Artillery with soldiers armed with two Lewis Automatic Machine Guns and 10,000 rounds of ammunition. They were ordered to collect 100 Emu skins so that their feathers could be used to adorn the hats of the light horsemen.

Initially the engagement was delayed by a period of rainfall which caused the Emus to scatter over a wider area.

The first engagement finally commenced when some 50 emus were sighted. As they were out of range of the guns, the local settlers attempted to herd the emus into an ambush, but the birds split into small groups and ran so that they were difficult to target. The first fusillade from the machine guns rang out and the alarmed birds scattered. A second round of gunfire rang out and only a few unfortunate birds were slain.

The next significant engagement was when an ambush was carefully established near a local dam as over 1,000 emus were spotted heading towards the ambush position. This time the gunners waited until the birds were at point blank range before opening fire. A gun jammed and only several ill-fated birds were killed. Alarmed by the noise no doubt, the survivors scattered before any more could join their fallen comrades. No more birds were sighted that day.

In the following days several more engagements occurred, even where the birds were "reported to be fairly tame", but there was only limited success in spite of all efforts. As a trial, one of the guns was mounted on a truck. This proved to be ineffective as the truck was unable to catch up with the fleeing birds and the ride was so rough that the gunner was unable to fire any shots.

After about a week, 2,500 rounds of ammunition had been fired. The number of poor birds dispatched was uncertain. One account claimed just 50 birds but other optimistic accounts put the number between 200 and 500. On the plus side, the Major's official report noted that his men had suffered no casualties.

Summarizing the culls, ornithologist Dominic Serventy commented:

*"The machine-gunners' dreams of point blank fire into serried masses of Emus were soon dissipated. The Emu command had evidently ordered guerrilla tactics, and its unwieldy army soon split up into innumerable small units that made use of the military equipment uneconomic. A crestfallen field force therefore withdrew from the combat area after about a month."*

So the Great Emu War (as it was dubbed by the snickering press) ground to a close. After several more forays; after much talk by political aspirants and after much ridicule by the press and the informed public, the machine guns were silent.. A bounty system was implemented.

Upon reflection, there were no winners of this war. The struggling farmers and the Emus both suffered when the environmental equilibrium was disturbed.

## Birds 1 (Australia) Honour

**REQUIREMENT 7: Make a list of at least twenty (20) species of birds, that you personally have observed and positively identified by sight.**

Note. It is OK to include birds seen in Requirements 8 and 9.

For the best experience, students should witness birds from a number of different ecosystems to get experience in determining different features; for example the structure of bills, feeding methods, flocks, colours etc.

There are masses of resources available for identifying birds ranging from the internet to bird identification books. Please see ADDITIONAL REFERENCES on the final page of these notes.

For those with an interest in birds, details shown in the following examples will be compiled. For the Bird's 1 Honour, only the Common Name, Date Seen and Location Seen are mandatory. Pictures are not provided in order to limit the file size of the document

### **Common Name: Emu**

Scientific Name: *Dromaius novaehollandiae*

Date Seen: 2nd July 2010

Location Seen: Mount Moffit Section of the Carnarvon Gorge National Park, Qld

Bird Size: 1.5 – 2m tall (the female can be slightly larger)

Description: Australia's largest native bird: plumage is loose, pale grey-brown to almost black, bare skin on neck white to blue, eye yellow, grey brown to reddish; legs dark grey.

Voice: Male: deep growling grunts; Female: loud thudding drumming of 10-12 sequences.

Habitat: Plains, scrublands, woodlands, heaths, deserts and pastoral areas

Breeding: April-October, 5-11 large dark green eggs; male alone broods.

Range/Status: Covers most of mainland Australia/Common

### **Common Name: Southern Cassowary**

Scientific Name: *Casuarius casuarius*

Date Seen: Day, Month, Year

Location Seen: Daintree Rainforest

Bird Size: 1.5 – 1.8m (Female larger)

Description: Second largest native bird, black and shaggy with a horn helmet about 17cm high, bare skin on the head a pale blue, neck a darker blue and purple, crimson wattles.

Voice: Deep thunderous booming and guttural coughing.

Habitat: Dense Rainforest, especially near streams, edges and clearings.

Breeding: Jun-Nov, 3-5 very large pale green eggs, male broods.

Range/Status: Coastal NE Queensland/common where habitat remains.



## Birds 1 (Australia) Honour

**Common Name:** Australian White Ibis

Scientific Name: *Threskiornis molucca*

Date Seen: 11 August 2010

Location Seen: Everywhere!

Bird Size: 65 – 76cm; Span to 1.25m

Description: White with bare black head and ibis bill; black tips to feathers.

Voice: Harsh barks, shouts

Habitat: Freshwater wetlands/watercourses, irrigated areas, lawns, garbage tips and public areas.

Breeding: June – Dec. nests in colonies; 2-4 white dirty eggs.

Range/Status: Most areas of Australia avoiding arid areas/excessive numbers.

**Common Name:** Wedge-tailed Eagle

Scientific Name: *Aquila audax*

Date Seen: 2nd July 2010

Location Seen: Injune (Queensland)

Bird Size: 90 cm – 1.1m; span to 2.8m (female larger)

Description: Huge, dark eagle with whitish bill, closely feathered legs and diamond shaped tail; older birds tend to be darker with varying shades of chestnut.

Voice: Feeble, high pitched ‘pseet-you, pseet-you’; screams in conflict.

Habitat: From forested Mountains to desert plains

Breeding: June-Oct; Pairs can have several huge nest throughout their territory; most couples will only raise one chick at a time.

Range/Status: Potentially all States of Australia and PNG/Endangered in Tasmania.

**Common Name:** Bush Stone Curlew

Scientific Name: *Burhinus grallarius*

Date Seen: 7 August 2010

Location Seen: Day Dream Island

Bird Size: 55-59cm, Span 80cm-1m

Description: Buff white below; strongly streaked; bill blackish, forehead whitish, broad white eyebrow.

Voice: A far carrying, eerie whistling call, starts with a low drawn out ‘wee-eeer’ to a high pitched drawn out ‘keelleeoo’ and often ends in a chorus of ‘wee-wiff’.

Habitat: From open woodlands, sand plains, golf courses, mangrove fringes, timber remnants through to resort areas.

Breeding: Aug-Jan; usually 2 eggs (stone coloured and blotched) on bare ground.

Range/Status: Coastal Islands, more abundant in sub tropics avoiding arid areas/mainly extinct in built up areas esp. coastal SE Australia

## Birds 1 (Australia) Honour

### **REQUIREMENT 7: Make a list of five species of birds that you personally have positively identified by sound.**

Trainers, if you are not an expert in this area, it is worthwhile finding someone who is.

For those with a limited knowledge of birds, this is probably one of the most challenging parts of this honour. Sometimes it can be difficult to demonstrate and/or describe a bird's song. Bird books often have well developed descriptions of bird calls and it is a fun way to describe these calls with your students putting these worded descriptions into voice.

If you are having trouble with these calls, check out the Internet to help you as a starting point. While these are fantastic, they are no substitute for a real outdoor experience.

The first is a link from a publication associated with the organisation *Birds Australia*, which in itself will be one of the best resources you will come across on the net, it is *Birds in Backyards*. Within this website you will find a list of 40 species of birds and their song compiled by Fred van Gessel. <http://birdsinbackyards.net/>

There are also recordings on the Birds Australia Website [www.birdsaustralia.com.au](http://www.birdsaustralia.com.au)

Another resource can be found at the website for the Australia National Botanic Gardens: <http://www.anbg.gov.au/sounds/>

Further resources which can be considered are [www.youtube.com](http://www.youtube.com), there are many birders on this site now and can be valuable resources for this requirement and others.

Do not limit your searches to these sites only. There are many more if you look, but remember actual experience in the outdoors is expected of this honour. Remember, getting out in the outdoors in God's nature is what this honour is all about!

### **REQUIREMENT 8: Do at least one of the following:**

Please see '*Birds 1 Honour Trainer's Notes, Generic.doc*'

- a. **Set up a feeding station and report on the bird visitors observed for a period of seven days.**
  
- b. **Find an 'occupied' bird's nest, identify the species of the bird that built it, describe the nest in detail, observe the nest for five days, and report what happened at the nest on each of the days.**
  
- c. **Make at least three visits to a bird habitat in the wild. Make a brief report on the number of birds observed, the number of different birds observed and any interesting things you saw.**

# Birds 1 (Australia) Honour

## ADDITIONAL REFERENCES

Following is a small sample of information available on Australian birds.

### Books

The Field Guide to the Birds of Australia by G Pizzey & F Knight, Harper Collins, Australia, 8<sup>th</sup> edition 2007.

The Slater Field Guide to Australian Birds (360pp); by Peter Slater, Pat Slater & Raoul Slater, New Holland Publishers, 2nd edition, 2009

Field Guide To Australian Birds (448pp); by Michael Morcombe, Steve Parish Publishing 2002

The Great Australian Birdfinder: Where & How to Find Australian Birds (432pp); by Michael Morcombe, Lansdowne Press, Dee Why, Sydney, 1986.

Field Guide to the Birds of Australia, by Ken Simpson & Nicolas Day, Penguin Books, 8<sup>th</sup> edition 2010 (Comment: over 500,000 copies sold)

### Internet

Birds Australia: <http://www.birdsaustralia.com.au/>

- A national organisation working for the conservation and protection of Australia's native birds and their habitats. This site has a wealth of information.

Wikipedia: Birds of Australia: [http://en.wikipedia.org/wiki/Category:Birds\\_of\\_Australia](http://en.wikipedia.org/wiki/Category:Birds_of_Australia)

- An extensive listing of

Wikipedia: List of birds of Australia: [http://en.wikipedia.org/wiki/List\\_of\\_birds\\_of\\_Australia](http://en.wikipedia.org/wiki/List_of_birds_of_Australia)

- Eight hundred and forty-two extant species are listed

List of Australian Bird Emblems: [http://en.wikipedia.org/wiki/List\\_of\\_Australian\\_bird\\_emblems](http://en.wikipedia.org/wiki/List_of_Australian_bird_emblems)

Please see notes on Requirement 7 for Internet sites for Australian Bird Calls.