



## Pathfinder Honour: Trainer's Notes

# Birds 1 – Generic Notes



### 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

Based on the most useful site. [http://en.wikibooks.org/wiki/Adventist\\_Youth\\_Honors\\_Answer\\_Book/Nature/Birds](http://en.wikibooks.org/wiki/Adventist_Youth_Honors_Answer_Book/Nature/Birds)  
See the following notes for any other citations. Please be aware that material on Wikibooks or any other site is beyond the control of the SPD.

# Birds 1 Honour (Generic Notes)

## 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: These are covered in these notes.

REQUIREMENT 6: General information is covered. See *Birds 1 Honour Trainer's Notes\_More Info.doc* and the Trainer's notes for your country.

REQUIREMENTS 7 & 8: Please see the Trainer's Notes which relate to your country.

If the Birds 1 Honour Trainer's Notes for your country or area has not been completed yet, it would be helpful to other people if you could do so. Please use the SPD Trainer's Notes template which is found on this website: <http://honours.adventistconnect.org/templates>

## REQUIREMENT 1: Give five characteristics which set birds apart from all other creatures.

It is often useful to compare features of groups of creatures to see what is the same as other creatures, but in order to identify them, it is useful to find the differences as well.

There are five classes of creatures with a backbone. These classes include the fish (*Agantha*), amphibians (*Amphibia*), reptiles (*Reptilia*), birds (*Aves*), and mammals (*Mammalia*).

All of the vertebrata have a backbone, but birds have a number of unique characteristics such as:

1. Flight
2. Hard shelled eggs
3. Warm blooded
4. Covered with feathers
5. Hollow bones
6. Bone structure in the eye
7. Keen eyesight
8. Musical voices
9. Ability to sense magnetic fields
10. Very colourful

Each of these things seems quite unique, but as we look at the other classes of vertebrata, we find that birds are not the only creatures that can fly. There are flying fish, gliding snakes, gliding frogs and bats. Each class of vertebrates has the capability of crude flight, and bats at least can match the flight ability of the birds.

We must also note that not all birds are capable of flight (penguins, ostriches and others are incapable of flight).

Mammals are warm blooded, so that is not unique to birds. Whales, frogs and some of the primates have very musical voices, although few can compare to the Lyrebirds of New Guinea. Many of the mammals such as meerkats have good eyesight, so this is not unique, and most fish have the ability to sense electro-magnetic fields.

## Birds 1 Honour (Generic Notes)

When we have compared the various classes, we find that there are only a few things that are unique to the class Aves.

- They all lay hard-shelled eggs which they incubate using their body temperature (although there are some exceptions such as the Australia's Mallee Fowl and Scrub Turkey).
- They all are covered with a feather structure that differs greatly from scales and fur.
- Hollow bones allow them to fly almost effortlessly.
- A ring bone in the eyes of birds is what allows them to focus so well and have such keen eyesight.

All of these characteristics give us an idea of what makes birds unique and also an idea as to why we are so drawn to these colourful, flying creatures.

**REQUIREMENT 2: Name three flightless birds, tell what their diet consists of and name the country or continent in which each one lives.**

### Cassowary

Cassowaries are native to the tropical forests of New Guinea and north-eastern Australia. Fallen fruit and fruit on low branches are the mainstay of their diet. They also eat fungi, snails, insects, frogs, snakes and other small animals.

Pictured: Southern Cassowary *Casuarius casuarius*

<http://en.wikibooks.org/wiki/File:Kasuaris.jpg>



### Emu

The Emu is the largest bird native to Australia. They eat a variety of plant species; the type of plants eaten depends on seasonal availability. They also eat insects, including grasshoppers and crickets, lady beetles, soldier and salt bush caterpillars, cotton-boll moth larvae and ants. See Trainer's Notes for Australia.

Pictured: Emu *Dromaius novaehollandiae*

<http://upload.wikimedia.org/wikipedia/commons/c/c4/Emoe.jpg>



### Kiwi

Kiwis are from New Zealand. They eat small invertebrates, seeds, grubs, and many varieties of worms. They also may eat fruit, small crayfish, eels, and amphibians. Their long beaks, with nostrils at the end of them, help them to catch prey.

Pictured: Kiwi *Apteryx*

<http://en.wikibooks.org/wiki/File:Kiwifugl.jpg>



## Birds 1 Honour (Generic Notes)

### Ostrich

Ostriches live in the savannas of Africa. They mainly feed on seeds and other plant matter; occasionally they also eat insects such as locusts. Lacking teeth, they swallow pebbles that help as to grind the swallowed foodstuff in the gizzard. An adult ostrich typically carries about 1 kg (2.2 lb) of stones.

Pictured: Ostrich *Struthio camelus*

[http://en.wikibooks.org/wiki/File:Strauss\\_m\\_Tanzania.jpg](http://en.wikibooks.org/wiki/File:Strauss_m_Tanzania.jpg)



### Penguin

Penguins are aquatic birds living exclusively in the Southern Hemisphere. Most penguins feed on krill, fish, squid, and other forms of sea life caught while swimming underwater. They spend half of their life on land and half in the oceans.

Pictured: Emperor Penguin *Aptenodytes forsteri*

[http://en.wikibooks.org/wiki/File:Emperor\\_penguins.jpg](http://en.wikibooks.org/wiki/File:Emperor_penguins.jpg)



### REQUIREMENT 3: Give the day of the week when birds were created. Find in the Bible the names of five birds and be able to name them from memory.

Birds were created on the Fifth day. See Genesis 1:20-23

Birds mentioned in the Bible are as follows:

- Pelican, Raven, Owl - Isaiah 34:11
- Chicken ie hen - Matthew 23:37, Luke 13:34
- Eagle - Isaiah 40:31, Jeremiah 4:13, Job 9:26, Deuteronomy 28:49, Job 39:27-29
- Ostrich - Job 39:13-18
- Dove - Genesis 8:8-13, Matthew 10:16, Psalms 55:6
- Eagle, Buzzard, Kite, Falcon, Raven, Ostrich, Owl, Sea Gull, Hawk, Little Owl, Cormorant, Great Owl, White Owl, Pelican, Vulture, Stork, Heron, and Hoopoe - Leviticus 11:13-19
- Peacock - 1 Kings 10:22
- Raven - I Kings 17:4-6
- Partridge - Jeremiah 17:11

### REQUIREMENT 4: Give three ways in which God's love and purpose is shown in the creation of birds.

The Christian author, Mrs Ellen G White on page 46 of her book Child Guidance expresses it beautifully:

*"Children should be encouraged to search out in nature the objects that illustrate Bible teachings, and to trace in the Bible the similitudes drawn from nature. They should search out, both in nature and in Holy Writ, every object representing Christ, and those also that He employed in illustrating truth. Thus may they learn to see Him in tree and vine, in lily and rose, in sun and star. They may learn to hear His voice in the song of birds, in the sighing of the trees, in the rolling thunder, and in the music of the sea. And every object in nature will repeat to them His precious lessons."*

## Birds 1 Honour (Generic Notes)

1. God created the birds for our enjoyment. Their cheerful songs and bright colours can lead us to thank God for His goodness.
2. Birds teach us about God. (Job 12:7-9)
  - God says he will protect us like the mother hen protects her chicks. (Matt. 23:37)
  - Jesus said God sees the sparrow fall, and much more He sees us. (Matt. 10:29-31)
  - He will give us strength like that of the eagle. (Isa. 40:31)
3. The adaptations of birds (especially their beaks, their legs and feet) show us God's creative power.
4. We ought to trust God totally just as birds do. (Matt 6:26)
5. Jesus loves everybody and every thing and he wants us to love animals also.

### **REQUIREMENT 5: Describe how you and your family can attract wild birds into your home environment in a long-term sustainable way.**

It is all well and good that we may have built a bird feeder in our backyard to attract birds into our home environment, but what happens when we stop feeding the birds or if move away? Who is going to provide the seed the birds have become accustomed to?

One way we can overcome this problem is to plant trees and shrubs which can both attract but also provide habitat for birds (and other wildlife). By feeding the birds this way they will continue to be fed for years to come after the seed has stopped being provided. You then have the advantages of still having God's beautiful creatures around you!

The plants that you decide to grow should be from your local area for the best results! The birds and other wildlife will know all about the trees already and won't have to taste test!

Following is a rough guide on what types of plants you can think of using:

- Trees / shrubs with foliage will attract possums, birds and insects, which are a good food source for some bird species. The foliage can provide security for birds so that they have safe place to retreat to when needed.
- Trees with fruits and nuts will attract parrots, figbirds and other wildlife like flying foxes and possums
- Trees and shrubs that produce nectar such as grevilleas and banksias will attract bees, honeyeaters, butterflies.

For only a small amount of work you will be able to get years of enjoyment from inviting birds into your garden! For more information about which plants to grow in your area your local council will be the best place to start. Happy gardening!

## Birds 1 Honour (Generic Notes)

### **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**

Birds impact everyone, even if they don't realise it. This requirement can be made easier by completing it as a group.

Please see the Trainer's Notes for your country if available. Here are some examples from '*Birds 1 Honour Trainer's Notes \_ More Info*'. It's a fascinating account.

1. Birds and their music which inspires
2. Birds used to hunt and fish
3. Birds as companions
4. Birds in entertainment
5. The contributions of birders to the science of ornithology
6. Feeding wild birds and the pleasure and knowledge of birds it creates
7. Birds as vectors (ie carriers) of human disease
8. Ornamental uses of bird feathers and bills
9. Birds as religious symbols
10. Birds in myths, literature, and art

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

Please refer specific notes for your country. If they are not available, many people will be blessed if you could compile them. See the Introduction to these notes.

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.

For those with an interest in birds, details shown in the following example of the Wedge-Tailed Eagle will be compiled. For the Bird's 1 Honour, only the 'Common Name', 'Where It Was Seen' and 'Date Seen' are mandatory

<b>Common Name:</b>	<b>Wedge-tailed Eagle</b>
Scientific Name:	<i>Aquila audax</i>
Date Seen:	2 <sup>nd</sup> 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 TAS.

## Birds 1 Honour (Generic Notes)

### **REQUIREMENT 8: Make a list of five (5) 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.

Please refer specific notes for your country. If they are not available, many people will be blessed if you could compile them. Please see the Introduction to these notes.

### **REQUIREMENT 9: Do at least one of the following:**

#### **a. Set up a feeding station and report on the bird visitors observed for a period of at least seven days.**

Generally by nature, birds are nervous creatures. A huge elaborate feeder that complements your home décor might look fantastic, but more than likely, it won't help at all when it comes to attracting your feathered friends.

There are many simple designs of bird feeders which can be made out of household items and instructions for these can be found on the internet. Some of these include a Toilet Paper Roll Bird Feeder, Plastic Jug Bird Feeder, Pine Cone Feeder and a Cup Bird Feeder.

These feeders are simple enough and would make a great craft for the Pathfinders, but given the time that they will need to be in the open, they will not last in the weather

A bird feeder initially will work a lot better when in the open and not protected by a deck or veranda. Often when a new feeder is introduced into a backyard it can take a couple of weeks before it is noticed and checked out by the resident birds before they start to visit. Therefore a sturdier and weather proof structure may be required.

A fence is a great place start in the construction of a sturdy weatherproof feeder; this simple yet durable option is easy and simple to make

1. Purchase two plastic flower pot bases/trays.
2. Attach one of the flower pot bases/trays to the top of a fence post with three self tapping screws.
3. Place the second base/tray into the one attached to the fence post and fill with seed.

The reason for using a second base/tray for the seed is simple. If the seed gets wet, it is best that the base/tray be removed from the fence for cleaning. If you only used only one, it would be attached to the fence which makes cleaning difficult and far more labour intensive.

Once the feeder is up and in an open position, as noted earlier it may take a couple of weeks before you get your first visitor. While this wait might feel a little frustrating, it is worth it because once you get one bird arriving for the feast of a lifetime, it does not take the others long to see what they are missing out on. Here is your chance to start documenting (or photographing!) what birds you see.

## Birds 1 Honour (Generic Notes)

- 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.**

This option for the requirement is a little harder to complete unless you already know where there is an occupied bird’s nest. Here are a couple of hints to help you out.

- You can watch out for birds that appear to be gathering items such as twigs etc that could be used to build a nest.
- You can look throughout trees around your home for any nest structures.
- If you see a mum and dad bird flying back and forth along the same path to and from an area, there could be a nest with young they are feeding,
- You can also keep a listen out for continual chirping or noise coming from one particular area for an extended period of time there could be a nest in the area.

- c. Make at least three visits to a wild-bird habitat. Make a brief report on the number of birds observed, the number of different birds observed and any interesting things you saw.**

For this requirement it is most useful to use local knowledge. Bird watching is a very popular hobby, so ask these people for advice. Some hints:

- Many Councils / National Parks have created bird hides / observatories, so check these out.
- It is best to go in very small groups and to keep very still and quiet.
- Be observant. Many folks have been pleasantly surprised by the wealth of bird life in places that they had passed regularly. They were so focused on their lives and other issues to notice what God has provided.

### ADDITIONAL REFERENCES

**Birds of the Bible:** <http://leesbird.com/bb/>

- An interesting site developed by Christians of the Baptist faith

**List of National Birds:** [http://en.wikipedia.org/wiki/List\\_of\\_national\\_birds](http://en.wikipedia.org/wiki/List_of_national_birds)

- A list of national birds, most official, but some unofficial