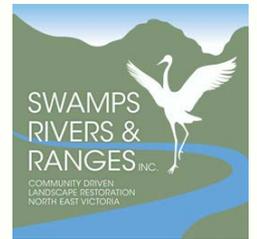


GUIDE TO OBSERVING WILDLIFE



Written by Sophie Enders & Richard Loyn



Photo: Geoff Barrow

Taking time to observe wildlife can be a rewarding experience. You may choose to observe for your own enjoyment or knowledge, it may be on your own property or it may be as a part of a monitoring program.

Observations may be opportunistic such as a by chance sighting or whilst engaging in another activity such as bush walking or they may be systematic, planned surveys organised on a set day and time and target a specific group of wildlife using a structured technique.

Whatever the reason it is important and beneficial to enjoy the time you are spending in the environment.

Get in contact with us to get involved via swampsriversranges@gmail.com or learn more at <http://swampsriversandranges.org.au>

WHAT DO YOU NEED:

- **BINOCULARS**
- **NOTEBOOK + PEN**
- **ZIPLOCK BAG FOR COLLECTING SPECIMENS**
- **CAMERA**
- **SPOTLIGHT OR TORCH FOR NIGHT SURVEYS**
- **RELEVANT FIELD GUIDES**

Why monitor?

Knowledge about the location and occurrence of species can be a valuable record of changes to the local fauna over time. This can contribute to larger data sets and programs which can help inform management and policy.

It is important to note that all native wildlife is protected under the Wildlife Act 1975 and that all surveys must not harm wildlife.



Photo: Swamps, Rivers & Ranges

This guide was produced as a part of our Bushfire Recovery Project, this project has been supported by the Victorian Government as part of the Victorian Landcare Grants Program.



Photo: Richard Loyn

Recording the details

Understanding what details to record can be helpful before going out into the field. These can be recorded in a notebook or spreadsheet so you can review later.

Keeping accurate records is essential to see changes over time. Survey programs may require specific details to be recorded.

Information to collect should include:

- Date and time.
- Location which can include GPS coordinates
- Habitat type (e.g. forest, open grassland).
- Species name, or type of animal.
- Number observed for each species.
- Weather conditions (e.g. fine, raining).

Success in observing wildlife involves many of your senses and good preparation.

- Sight, sound and smell can all be used to help identify species. Look beyond the obvious for clues such as animal tracks, nests or scats (droppings).
- Understand the correct technique to suit the habits and biology of the species you are looking for, such as: is it tree or ground dwelling? When is it most active? What does it eat? For example, a spotlight survey is used to find nocturnal species.
- Information can be found by looking at field guides or speaking to relevant local professionals. Local community groups such as Swamps, Rivers & Ranges can also help to get you involved.
- The weather will also influence the success of your survey. For example, rain after a long dry period will often bring a range of wildlife out of hiding to feed, or even breed.



Photo: Sophie Enders

Where does the data go?

There are a range of data bases which store information regarding faunal surveys including:

- The Atlas of Living Australia - <https://www.ala.org.au/>
- i Naturalist - <https://inaturalist.ala.org.au/>
- ebird Australia - <https://ebird.org/australia/home>
- Nature kit - <https://www.environment.vic.gov.au/biodiversity/naturekit>
- Bird life Australia - <http://www.birdlife.org.au>
- Field naturalist Club of Victoria - <http://www.fncv.org.au>
- Swamps, Rivers & Ranges - <http://swampsriversandranges.org.au>

Survey technique

Planned surveys are usually conducted at the same time each season or year, using standard methods to allow for comparisons about the abundance and variety of wildlife over time or between habitats.

Planned surveys include walking surveys, spotlighting or point surveys. It can be helpful to take photographs or sound recordings for later identification.

- Walking surveys record numbers of all the species seen or heard when following a particular route or searching a particular area for a set period of time. This data is most useful when the chosen area contains a single distinct habitat. If aiming to survey several areas, you can choose different habitats for each one and compare what you find in each. The 20 minute 2ha timed area search is most commonly used for the study of woodland birds over much of Australia. Birds seen or heard outside the search area can be recorded as off-site.
- When spotlighting, be sure to check not just the canopy for arboreal (tree dwelling) animals such as gliders and owls, but also tree trunks and leaf litter for ground-dwelling mammals, reptiles, frogs and invertebrates. Many of these animals are only active at night. A spotlight survey is best done using the same technique as a walking survey. Look for eyeshine to indicate an animal's presence. Holding the light directly in front of your eyes increases your chance of detecting eyeshine. Be careful not to dazzle yourself or the animal: avoid holding the light on the animal for extended periods.

- Point surveys record wildlife from fixed points for a set radius and for a set period of time. Point surveys can be useful for densely vegetated areas, and may include the use of technology such as camera traps.



Other clues

- Scats – The shape and size of the animal dropping (scat) may help to identify the species. Be sure to wear gloves and wash your hands thoroughly with anti-bacterial soap if you are collecting scats for later identification.
- Tracks – Some animals, such as kangaroos and goannas, leave distinct and obvious tracks on the right surface (e.g. sand or gravel).
- Nests – Keep an eye out for bird nests, burrows in the ground, hollows in trees, and nests under logs and in rocky crevices. Common Ringtail Possums make distinctive stick nests in some forests, especially where there are dense stands of tea-tree or wattles. By observing nests, you have the opportunity to learn about breeding and parenting activities of adults and their young and may observe defensive behaviour to ward-off predators.

Birds

Most birds are active during the day and have distinctive calls, making them one of the easiest groups of animals to observe and learn to identify. Bird activity can be high in the early morning or late afternoon, but bird surveys can be done at any time of day as long as it is not windy or too hot (>~32 degrees C).

Some birds are migratory and may only be able to be seen in particular areas at certain times of the year. Summer visitors arrive between August and October and most depart in March or April.

Guides to help with birds

- **"The Slater Field guide to Australian Birds"**- Peter Slater, Pat Slater & Raoul Slater, Reed New Holland, 2nd edition, 2009.
- **"The Australian Bird guide"**- P.Menkhorst, D. Rogers, R. Clarke, J. Davies, P. Marsack and K. Franklin, CSIRO, 2017.
- **"Field Guide to Australian Birds"**- M.Morecombe, Steve Parish Publishing, 2003.
- **"The Field Guide to the Birds of Australia"**- G. Pizzey and F. Knight, Harper Collins, 2010.
- **"Birds of Australia"**- K. Simpson and N. Day, 7th edition. Princeton, 2004.



Photo: Sophie Enders



Photo: Swamps, Rivers & Ranges

Mammals

There are numerous diurnal mammals that you may observe by day such as kangaroos, wallabies, koalas, antechinus and echidna. However, most of Australia's mammals, such as native rodents, possums, gliders and quolls are mainly nocturnal (i.e. active at night).

The best chance of spotting these nocturnal species is using the spotlighting technique or camera trapping methods.

Mammals can often be shy of human interaction so moving quietly or keeping still may assist.

Guides to help with mammals

The following guides can be helpful:

- **"A Field guide to the mammals of Australia"** - Peter Menkhorst & Frank Knight, Oxford, Third edition, 2011
- **"Tracks, Scats and other traces- A Field guide to Australian mammals"**- Barbara Triggs, Oxford, Revised edition, 2004
- **"Field Companion to the Mammals of Australia"**- S. Van Dyck, I. Gynther and A. Baker, New Holland Publishers, 2013.

Reptiles

Reptiles are usually found in and around leaf litter, fallen timber and rocks. When looking for reptiles it is important to show caution as many common species of snake in Victoria are highly venomous.

Tips for species distribution and species ID- <https://www.arod.com.au/arod/>

Some great fact sheets and species information -

<https://australian.museum/learn/animals/reptiles/>

"Reptiles of Victoria, a guide to identification and ecology" - Peter Robertson, A. John Coventry, CSIRO, 2019.

Field safety by day

Its important to consider your safety when moving around in the bush particularly at certain times of the year. Ensure you carry sun protection, plenty of water and a snake bandage when accessing remote areas.



Frogs

Frogs are most active at night and after rain. They are usually difficult to see and most easily identified by the calls made. Frogs are most commonly found around water bodies such as dams and creeks.

Frog ID including call ID- <https://www.frogid.net.au/>



Endangered species

Some species which can be seen in the North-East are protected and their sightings may be of special interest to some programs or agencies. Just two examples are the Regent Honeyeater and Swift Parrot.



If you are interested in wildlife surveys, it is worth contacting your local community groups. Some activities such as trapping or handling of animals can be intrusive or dangerous to animals and require a permit.

In the night

Many nocturnal animals are best detected by their calls, or by hearing them move through the forest, so listening is a crucial part of any spotlighting survey.

Nocturnal Mammals

Sugar Gliders favour foothill gullies with abundant wattles. They have a quiet yapping call with an upward inflection.

Squirrel Gliders favour box-ironbark woodlands at low elevations. They are bigger and fluffier than Sugar Gliders, with longer tails, and are mostly silent but are said to give a quiet honking call.

Greater Gliders favour gullies with tall gums and peppermints in wet forest in the ranges. They are usually silent, but easily seen by their bright eyeshine in spotlight surveys.

Yellow-bellied Gliders favour extensive mature foothill forests in the ranges. They give a weird long gargling shriek, fading in intensity.

Koalas can be found in various forest and woodland types, mainly at lower elevations. They have a gruff growling rhythmic call.

Common Ringtail Possums are fairly common in gardens and forest with dense understorey. They have a quiet, hard to hear call (“sisisisisi”).

Common Brushtail Possums are common in gardens, wooded farmland and forest edges. They have a gruff rattling call (“ruff ruff ruff...”).

Mountain Brushtail Possums are mainly found in more extensive wet forests in the Great Divide. Their call is a series of short grunts or coughs, deeper and less rattling than Common Brushtail Possum.

Long-nosed Bandicoots are found in some forests, mainly in the lower ranges such as the Warbys and sometimes in adjacent farmland or gardens. They have a quiet twanging call like an elastic band.

Introduced Red Foxes are sadly common, especially in farmland. They give a high-pitched yelping bark.

Dingoes are found mainly in steep country in the ranges, and they give an eerie resonant howl (and rarely bark).

Feral dogs are found mainly on the edge of farmland.

Kangaroos, wallabies and introduced deer can often be identified by the sounds they make as they bound through the bush. Sambar Deer also give a loud coughing call.



Photo: Sophie Enders

Safety at night

When moving around in areas at night it is important to plan for your safety.

Ensure you have appropriate clothing and torches are well charged.

It can be helpful to have someone with you and have a contact who knows where you will be going and when you'll be back.

Nocturnal Birds

Southern Boobooks are the most common owl in north-east Victoria (despite recent declines), and their pleasant two-tone call (“boo book!”) can be heard especially in spring.

Barking Owls are found mainly in box-ironbark forests at low elevations. They have a double call “woof woof!” like a dog, and a weird tremulous shriek (which sounds very human).

Barn Owls are the ghostly white owls that feed on mice in farm paddocks (though they have become scarce). They have a harsh shrieking call, often repeated many times in quick succession.

Masked Owls are very rare in north-east Victoria, and mainly found in wooded lowlands. They are bigger than Barn Owls, and have a single very harsh shriek and some strange twittering calls, sometimes given in courtship flights above the treetops.

Sooty Owls inhabit wet forests in the Great Dividing Range, in very low numbers. They have an amazing loud whistling scream, dropping in pitch, and various trilling calls.



Photo: Richard Loyn

Tawny Frogmouths can be seen around gardens and in woodland mainly at low elevations, sometimes perching on roadside wires or posts. They have a monotonous burring call like an engaged phone.

Australian Owlet-nightjars are thinly distributed through our forests. They have a churring call with a downward inflection, and sometimes call in the day also.



Photo: Swamps, Rivers & Ranges

Powerful Owls inhabit foothill forests in low numbers. They have a deep two-tone call (hooo hooo!), slower and deeper than the call of a Boobook.

White-throated Nightjars are scarce summer visitors to north-east Victoria (Oct-Apr), favouring dry forest and granite outcrops. They have a wild cackling call.

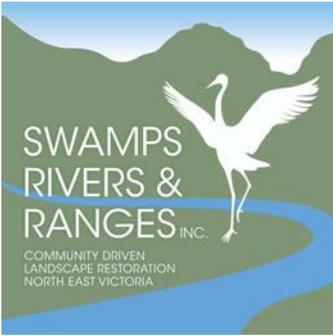
Note that many diurnal birds sometimes call at night (e.g. Willie Wagtail and Australian Reed-Warbler).

Cuckoos make a habit of it, especially Shining Bronze-Cuckoo, which often gives a single upward whistle at night, different from its daytime call.

Eastern Koels and Brush Cuckoos often call at night when they visit in spring and summer. Koels go “co-ee!” and do some manic repeated calls. Brush Cuckoos give a slow series of descending notes, and at night a manic three-note call repeated in a rising crescendo.



Photo: Sophie Enders



Most importantly, enjoy your time spent in our beautiful environments.



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