

## Atlas of Australian Birds

### Introduction

The Atlas of Australian Birds & Birddata is one of BirdLife Australia's most successful and enduring projects. It collects data from birdwatchers to determine the distribution and abundance of all bird species in Australia. Importantly, it gets people outdoors and builds their experience in birdwatching. Contributing to the Atlas has never been more accessible and user-friendly with our new Birddata web portal and mobile app.

As one of BirdLife Australia's greatest resources, the Atlas allows us to know where birds occur and track changes in bird populations across the country. Atlas data has been the basis for much research and analysis over the years, providing valuable insights into the changes in bird populations over time. All data submitted to the Atlas & Birddata make a valuable contribution to the State of Australia's Birds reporting, threatened species listings and a number of [other conservation applications](#).

The first phase of the project ran between 1977 and 1981, collecting nearly 90,000 surveys, comprising over 2.7 million bird records. By popular demand, the Atlas was brought back in 1998 and since then has had over 7000 registered contributors, submitting well over 600,000 surveys, comprising more than 12 million bird records so far.

With the new Birddata web portal and mobile app, Atlas contributors can submit surveys with ease from in the field or at home. The new Birddata platform tracks the history of your survey locations and all species recorded - easily accessed in the 'My Data' section using the Interactive Map. Birddata is used to help Atlassers identify long-term survey areas by the BirdLife community, areas yet to be surveyed, and locations of specific species. The expanded reporting and data management functionality and interactivity of the new Birddata platform makes contributing to the Atlas more rewarding and exciting than ever!

Anyone with an interest in birds can take part and make an important contribution to our knowledge of Australian birds, simply by getting involved. The Birddata web portal and mobile app are free to access. Click [here](#) to sign up.

### General Information

The broad aims of the Atlas of Australian Birds are to:

- Collect information on the distribution and abundance of Australia's bird species
- Involve the community in monitoring and conservation of birds
- Identify important bird areas

Atlas data is used to:

- Map where birds occur in Australia
- Compare the current distribution and abundance of birds to the previous Atlas
- Monitor long-term changes in habitat and the effect of these changes on birds

## Getting involved

Anyone with a pair of binoculars, a field guide and an interest in birds can take part in the Atlas. All you need to do is sign up [here](#), familiarise yourself with the [Birddata basics](#), make a list of the birds you see or use the handy Birddata mobile app when you're out birdwatching, and/or enter the data into the Birddata web portal.

We encourage you to enter your survey submissions via the Birddata web portal and mobile app to save us large amounts of time and resources. Paper Atlas Record Forms will continue to be available as we transition towards online submissions. Record forms can be posted out to you upon request. Contact us at your nearest BirdLife office [birdlife.org.au/contact](http://birdlife.org.au/contact) to request the forms and an individual Observer Code which you need to include when submitting paper Atlas Record forms.

## What you need out in the field

All observers should have:

- Binoculars
- Smartphone with Birddata app
- Notepad and pen
- Field Guide
- Watch/timer (depending on the survey type)

## Where to go

You can go Atlassing anywhere - your garden, favourite wetland or local park. If you are planning a holiday, do some Atlas surveys while you are away. A network of shared sites to survey are available [here](#) right across the country.

## When to go

You can go Atlassing whenever you like, though it is often a good idea to do your surveys in the morning or late afternoon, when birds are most active. You may wish to do night surveys if you are interested in nocturnal birds. Try to carry out surveys during favourable weather conditions — if it's too hot or too windy, birds often become quiet and secretive, making them difficult to detect.

## Handy tips for atlassers

- Make sure you submit the results for all of your surveys, even if no birds were recorded.
- Record all birds you see or hear in your survey area, but only birds you've definitely identified. Beware of 'mimics' (e.g. starlings, lyrebirds) when recording birds you have heard.
- Beach-washed specimens and road-kills can be included on your list, but a note should be made in the comments section of your survey, indicating that the species was dead.
- Introduced species such as House Sparrows, Common Starlings and Common Mynas, or aviary escapes, should also be recorded, but DO NOT record captive birds.
- Record your bird observations in a notebook or the mobile app. Then enter them into the Birddata web portal or transfer to an Atlas Record Form. Remember to record important information in your notebook — date, time, latitude and longitude — for each survey.
- If it is possible to accurately note the number of individuals observed for each species, we would encourage you to do so.
- Atlas Record Forms are available from BirdLife Australia National Office.

- A taxonomic list of all Australian bird species, known as the Working List of Australian Birds, can be found [here](#).

## How to conduct a Survey

When completing any Survey Record for the Atlas & Birdata, the "Survey Type" must be specified. This document will help familiarise you with the types of surveys that produce useful and scientifically valued information.

There are six methods of bird surveys categorised as **systematic bird surveys**, **unstandardised bird surveys** and **species lists**. The value of the survey data depends upon the survey type.

Most Valuable



### **Systematic bird surveys (population & occurrence trend value)**

1. 2-ha, 20min Search
  2. Area Search (500m/5km)
- } Embedded Surveys  
(Combined)

### **Unstandardised Bird surveys (occurrence value)**

3. Incidental Search
4. Fixed Route Search

### **Species lists (recreational value only)**

5. Bird lists

Less Valuable

Data from **Systematic Bird Surveys** (2-ha, 20 minute Search, 500m and 5km Area Searches) provide the most beneficial information of bird occurrences and population changes. **Embedded surveys** allow you to combine 2-ha, 20 min Search and an Area Search in one survey. This provides twice the data value in just one survey. **Unstandardised Bird Surveys** (Incidental and Fixed Route searches) provide basic information regarding only the geographical occurrences of species. **Bird lists** have limited scientific value as they are not standardised in observation time or area surveyed.

## Selecting Survey Type

Simply click the drop down box and select the relevant survey type as shown below. Remember to also specify the number of observers helping with the survey. Note\*: Embedded survey is not available in the Birdata app.

Survey type Number of observers

Select survey type...

**Systematic bird survey (preferred option)**  
 2ha, 20 minute search  
 500m area search  
 5km area search

**Embedded survey (two surveys in one)**  
 2 ha, 20 min + 500m area search

**Unstandardised bird survey (useful in certain applications)**  
 Incidental search  
 Fixed route search

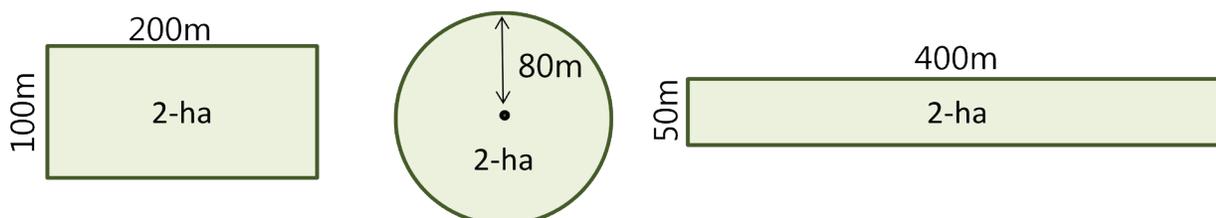
**Bird list (recreational value only)**  
 Bird list

## Systematic Bird Surveys

- 2-ha, 20 min Search
- Area Search (500m/5km)
- Embedded Surveys (Two surveys in one)

### 2-ha, 20 min Search

This involves searching for birds in a two-hectare area for 20 minutes. The recommended shape for the two hectares is 100 m x 200 metres. You can use other shapes, such as a circle with a radius of 80 metres, or a strip 400 m long x 50 m wide. Only record birds within the two-hectare area (though see Embedded Survey below). Birds flying over the search area should be included.



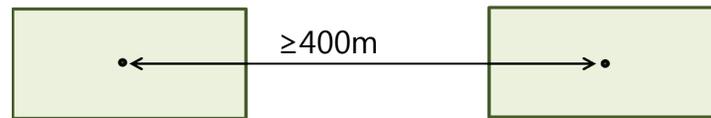
### Choosing a 2-ha search area

Do not automatically choose a site which yields the most birds. On occasion choose a site where birds may not be as prevalent. This provides us with a good cross-section of data.

Try to introduce a degree of randomness into your site selection. A good way to do this is to choose a site on a map before you arrive so your choice will not be influenced by the surroundings. You could also randomly choose from sites with similar habitat and management conditions.

Your site should be representative of the particular habitat you are surveying. As much as possible, avoid mixing habitat types (e.g. half grassland/half forest, or half grazed/half ungrazed) in the same 2-ha search area. If you are surveying two nearby 2-ha areas on the same day make

sure that the centre of the two areas are at least 400 metres apart, so there is no overlap between them.



If you intend to conduct repeat seasonal surveys in the same 2-ha search area, we would like you to fill out an Atlas habitat form (Habitat Form). These optional forms are issued on request. If a major change occurs at the site, such as a large fire or clearing, a new Habitat Form should be completed. After you complete this form, we will give you a site number for that particular 2-ha search area. You can use this number for each survey at this site to save you time when submitting your results.

## Area Search

There are two scales of Area Searches:

- 500-meter Area Search
- 5-kilometres Area Search

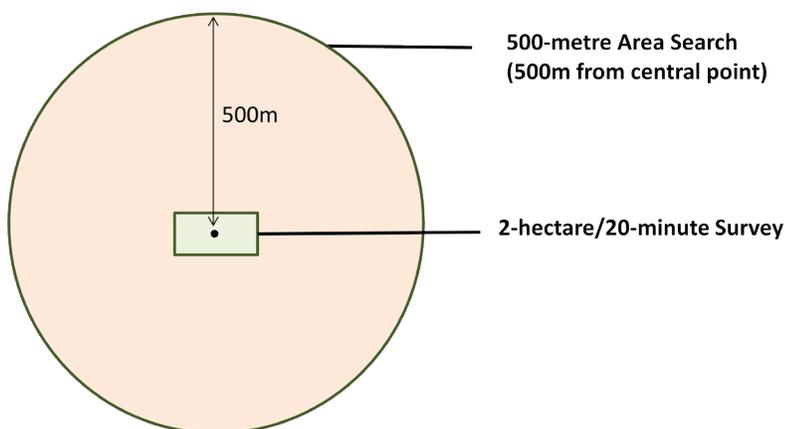
The Area Search is more flexible than the 2-ha search — you can search any area, listing the birds seen around a central point. You may do a small Area Search, within 500 metres of a central point, or a larger one that extends beyond 500 metres but is within 5 kilometres of a central point (you must indicate which size of area you searched when submitting your results). The search area can be any shape. Search for at least 20 minutes, but not more than one week, though you may submit calendar-monthly lists by submitting 12 lists per year, one for each calendar month (this is primarily for people who survey a site continuously).

### Wetland sites

The Area Search method is usually appropriate for surveying wetland sites. You can survey the whole of a wetland if it remains within 5 kilometres of a central point. This method is also useful for conducting seabird surveys, or producing a bird inventory for small islands.

## Embedded Survey

Embedded surveys combine a 2-hectare/20 minute Search and 500-metre Area Search.



### Embedded survey

Begin with a 2-ha, 20 min survey around a central point and extend the search after 20 minutes to a 500m Area Search. Birds observed outside of the 2-ha area in the first 20 minutes must be noted separately to the 2-ha, 20min search observations. Birds should not be double counted.

## Recording an Embedded Survey

When recording observations from an embedded survey, birds recorded within the 2-ha, 20 min survey should be recorded separately to birds outside of the 2-ha area (without double counting). The data entry system will automatically sum counts within and outside the 2-ha area to calculate the 500 m Area Search totals (see example below).

### Entering embedded surveys in Birdata web portal\*

Recording embedded surveys in Birdata separates the 2-hectare/20-minute Search + 500-metre Area Search Surveys. Birdata will automatically combine the 2- ha, 20 min observations and outside 2-ha observations to determine the 500 m Area survey totals.

\*Embedded Survey not available in the Birdata app

$$[\text{individuals within 2-ha, 20min}] + [\text{individuals outside 2-ha}] = [\text{individuals in 500m Area Search}]$$

### Embedded survey record

	Count (within 2-ha, 20 min)	Count (Outside 2-ha)	500 m Area Search Count
Common Myna	2	5	7
Red Wattlebird	1	2	3

### Sightings entry section for an embedded survey in Birdata

PROGRAM LOCATION DETAILS **SIGHTINGS** REVIEW & SUBMIT

Search by species name  SHIFT + RETURN to search

Sort by: [Common Name](#) [Scientific Name](#) [Taxonomy](#) [Order Added](#)

<b>Common Myna</b> <i>Sturnus tristis</i>	Count (in 2ha) <input type="text" value="2"/>	Breeding Activity (in 2ha) <input type="text" value="None"/>	Count (out 2ha) <input type="text" value="5"/>	Breeding Activity (out 2ha) <input type="text" value="None"/>
<b>Red Wattlebird</b> <i>Anthochaera carunculata</i>	Count (in 2ha) <input type="text" value="1"/>	Breeding Activity (in 2ha) <input type="text" value="None"/>	Count (out 2ha) <input type="text" value="2"/>	Breeding Activity (out 2ha) <input type="text" value="None"/>

### Review page of an embedded survey

#### SIGHTINGS

Species	Count (in 2ha)	Breeding activity (in 2ha)	Count (area)	Breeding activity (area)
 Common Myna	2	None	7	None
 Red Wattlebird	1	None	3	None

## Unstandardised Bird Surveys

### Incidental Search

Records of one-off sightings of uncommon or unusual species, surveys of a specific group of birds such as waders or waterfowl, or surveys of less than 20 minutes duration should be recorded as Incidental Searches. If you see an unusual bird, you may be asked to complete an Unusual Record Report Form, so take a note of how you identified the bird and how you eliminated similar species.

### Fixed-Route Monitoring

This method allows you to conduct repeat surveys at your favourite birding spot. It doesn't matter where it is —your local park, a wetland, a patch of forest or a paddock. All you have to do is register your survey site, establish a birdwatching route through it and count the birds that you see along the way.

It's easy, but there are a few simple rules to keep your surveys consistent:

- Make sure you keep to the same route on each survey (it can be as long as you like)
- Conduct your surveys at the same time of day
- Take the same amount of time to do each survey
- Ideally, conduct your surveys once a month

### Bird list

Bird lists are simply the list of bird species observed at a location. This survey type has limited scientific value as they are not standardised in duration or area surveyed, preventing useful comparisons between surveys. These lists can be used for recreational purposes regarding the general occurrence of bird species.

### Shared Sites (Group Atlas Sites)

We are looking to set up a network of shared survey sites around the country which other birdwatchers can visit, to optimise the amount of data that can be generated at individual sites.

If you want to get involved, you can visit an existing Shared Site, or with the help of the Birdata team, you can establish your own. Click [here](#) to see existing Shared Sites. Click on an individual site to view all the information you need to know — the site's co-ordinates, a map with the site's boundaries, directions of how to get there, instructions on the preferred method of surveying (e.g. 2-ha, 20 min search), and a list of the species recorded there. If you'd like to set up and register your own Shared Site, please contact Atlas & Birdata program manager, Andrew Silcocks at [birdata@birdlife.org.au](mailto:birdata@birdlife.org.au)

## Completing a Survey Record using Birdata

Everyone is encouraged to enter Survey Data via the web portal [birdata.birdlife.org.au](http://birdata.birdlife.org.au) or mobile app. See the [Easy Guide to Birdata](#) for more information.

**PROGRAM** – Conservation programs are listed (more will be added in future), select the one you're collecting data for. It's possible that you may have collected data for more than one program, select the main one you've collected data for. Note: all program data are stored in Birdata, so there's no need to enter a survey more than once.

**LOCATION** – In this tab you specify the location of your survey. This can be a repeat survey at one of your existing survey points, a new survey point or at an existing shared site which has already been set up for observers to use.

If you have an existing personal survey point you can either:

- Start typing the survey point into the search box
- Zoom in on the map and click on an existing survey point to choose your survey location

To create a new survey point you can either:

- Click "Enter GPS coordinates" and enter the coordinates of your survey location
- Zoom into your survey area and click on the centre of your survey site.

To enter a survey at a Shared Site (previously called Group Atlas Site), simply choose a point within the Shared Site polygon. To refine what Shared Sites you can view go to the "Display shared sites on map" drop down menu underneath the 'Enter GPS coordinates' button and choose the appropriate selection.

**DETAILS** – Enter survey details – survey date, start time, duration, survey type and comments.

Survey date – defaults to today's date. You can either overwrite or click in box and select from calendar.

For surveys of greater than one day, select the box "Survey conducted over multiple days". Then you can enter the finish date of the survey.

"Incomplete survey" – It's assumed that you recorded all species within your survey area, if you didn't, check this box

For a "General Birdata Survey" the 'Survey type' options are the traditional Atlas methods, however they include an 'Embedded Survey' option which allows users who have conducted a '2ha 20 min Search' to also record additional species seen outside the 2ha area, as well as before and after the 20 minute period. That will be classified as a '500m Area Search'.

**SIGHTINGS** – Enter the species you recorded on the survey here.

Species are added by typing the species common name into the "Search by species name" box. The lookup is predictive and refines the search as letters are entered. Once your species name appears, click to select. To remove the species, click the X on the right side of the page. If you are entering a species which is out of normal range, a message

“Species out of current estimated range” appears. If you’re sure it was this species, leave it on your list and enter a comment in the Notes field to support your record.

Count – Default is P (Present). To add the number of birds, enter a number into the ‘Count’ box.

Breeding Activity – Select from the drop down menu, if applicable. Note that there are different breeding categories which we haven’t used before.

Notes – Add comments if you think they would be useful. Useful comments may refer to flying over, heard only, interesting behaviour or a comment which will help with data vetting.

**REVIEW & SUBMIT** – This screen allows you to review the data you’ve entered. If changes are required then the “ISSUES” are clearly listed. To correct these or other errors you’ll need to go back to the appropriate tab and make the alterations. Once you’re happy with everything and have met the survey requirements, click “Submit Survey”.

## What else does the Birdata web portal do?

The Birdata web portal allows you to access other parts of the Atlas database including an interactive map. You can view:

- Distribution maps of each species recorded during surveys
- General or customised bird lists
- Shared (Group Atlas) sites and Important Bird Areas
- Details of your own data:
  - locations of your submitted survey records
  - the birds you’ve seen
  - lists of birds seen at shared sites
  - vital statistics, and much more

## Completing an Atlas Record Form

While submitting survey data via Birddata portal will be the future focus of the Birdlife Atlas, hardcopies of Atlas record forms will still be available as users transition to online submissions. Records submitted to Birdlife will be entered into the portal system, allowing users to benefit from the Birddata Portal by providing the same access portal submitting users have to their survey history locations and species lists via the interactive portal map.

There is only one type of Atlas Record Form and it should be used for all methods of data collection. The Record Form has been designed so your bird lists can be scanned into a computer. Please do not photocopy the Record Form, as we will not be able to scan it.

Most of the fields are self-explanatory, but a few points may need clarification:

- The **Site Number** field (in the 'Site Details' section) should only be filled in if you have completed a Habitat Form for the site for a 2-ha search and a unique number has been allocated to the site  
need to record date finished  If the survey is finished  If the survey is not finished
- Only record the **Time Finished** if the survey was completed within a single 24-hour period
- The '**Total Time Spent Surveying**' is the actual time spent surveying
- If using a GPS unit to determine the latitude and longitude of your site, make sure the display shows **degrees, minutes** and **seconds** (NOT decimals)
- If you do not have a GPS, you can work out the co-ordinates of your sites by using Google Earth — move the cursor over the site, and the co-ordinates will appear at the bottom of the screen (Google Earth uses WGS 84)
- Providing details of the **Distance** and **Direction** of the site from the **nearest town/location** allows us to check your positional data Recording Bird Species Indicate only the birds present WITHIN THE SEARCH AREA (seen or heard) by locating each bird on the list. Use a pencil (preferably 2B) to fill in the 'oval' marked "P" left of the bird's name. If the bird was breeding\* fill in the oval marked "B".
- It is best not to use the Record Form in the field while conducting your survey — record the birds in a notebook, and transfer them to the Record Form as soon as possible. If you make a mistake when filling out a paper Record Form, try to erase the pencil mark, but if it is not removed completely, attach a note to tell us.
- **Counts** are optional but provide valuable data, particularly for 2-hectare Searches and Fixed Route Surveys. The number or an estimate of the number of birds recorded can be written on the Record Form after the species name.
- Species are considered to be breeding if:
  - A nest with contents (eggs, young or brooding bird) is found
  - A bird carrying food is seen to make repeated visits to a nest or hollow. Birds seen carrying nest-material and courtship rituals are insufficient evidence for a record of breeding.
  - Newly-fledged young are seen with a parent. Young must be fledglings or very young juveniles, and it must be obvious they are near the nest. Non-flying dependent young of waterbirds (ducklings or 'runners') are also evidence of breeding.
- If you can't find a bird on the Record Form, check the list of 'Species Names and Atlas Numbers'. If there is an asterisk after the bird's name, the species is listed on the Record

Form; if not, write the bird's Atlas number and name in the 'Birds Not Listed' section. If the bird was breeding, mark the oval beside the Atlas number. If you recorded more than 12 extra species, add them to the 'Comments' section, indicate whether they were breeding, and fill in the oval marked 'Extra birds seen'.

- All completed Atlas Record Forms need to be returned to the BirdLife Australia National Office.

## FAQ

Need help with anything? Check out our frequently asked questions [here](#) for quick answers.

**Happy birdwatching!!!**

**BirdLife Australia**

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