



Backyard Species Discovery – Make your observations count

Make sure the observations you upload to iNaturalist become valuable scientific data by understanding what counts as an observation and enabling scientists to correctly identify your discovery.

What is an observation?

An observation records an encounter with an individual organism at a particular time and location. This includes encounters with signs of organisms like tracks, nests, or things that just died. Observations can be of any wild plant, animal or fungus but not a captive animal, pet or cultivated plant e.g. you could submit an observation of a fly on a zebra in a zoo but not the zebra itself!

For your observation to make it into the Atlas of Living Australia it must be 'verifiable' which means it:

- has a date
- is georeferenced (i.e. has lat/long coordinates)
- has photos or sounds

How you can help get the correct ID for your observation

There is a whole community of iNaturalists waiting to identify your discovery but the experts need your help. Your observation will be placed in the 'Needs ID' category and members will try to identify it from your photo or sound recording. You will help your observation end up with the correct ID if you:

1. identify your discovery to a level you are confident of. For example, if you are only sure it is a spider, just name it as a spider. By adding a coarse ID like this you are making it easier for experts to find your observation so they can ID it. It will also help if you:
 - do not 'Agree' with an ID that someone else has made unless you understand how to identify it. If you agree with an ID that is not correct, it is more likely to end up with an incorrect ID.
 - go back and delete your original ID if you later realise it was incorrect.
 - only use the ID suggestion made by iNaturalist if you are confident it is correct - the image recognition software is not perfect.
2. make good quality photographs and sound recordings and include other information that may help with an ID. Here are a few tips. You will find lots of others on the internet.

Photography tips

Sound recording tips

Extra tips for specific groups

Do you need more help?

Further information about using iNaturalist can be found at <https://www.inaturalist.org/pages/help>.

If you have any questions about Bush Blitz or Backyard Species Discovery, please contact us through our social media, iNaturalist account or by emailing bushblitz@awe.org.au.

Photography tips

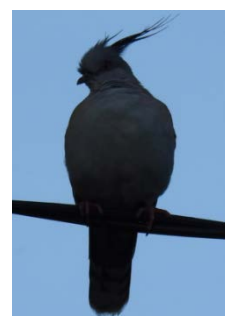
It can be tricky to identify plants and animals from photos. To give our scientists the best chance of identifying your organism down to a genus or species level follow these tips:

1. Take photos with your camera or phone camera app rather than using the camera in the iNaturalist app. This way you can use special features like a macro setting for close-up photos, and you can edit the photos before uploading them to iNaturalist. So, get to know the features of your phone or camera (the manual will have handy tips), set it to take the highest resolution photos possible, and practice taking different shots;
2. Get as close as you can to the subject (but not too close to dangerous animals or nesting birds). With wildlife, exercise patience, stillness and silence to develop trust so they come closer to you, or you can slowly move closer to them;
 - For birds and other large animals don't look or walk directly at them. Walk around normally in the general area (don't stalk - like a predator) and they may get used to your presence and become more relaxed.

3. Ensure photos are sharp and in focus. Check the photo after you've taken it and take more than one photo in case some don't work out. Putting your hand behind the subject can help the camera to focus on the subject rather than the things behind it. It doesn't matter if your hand is in the photo. If you're very close to the subject, you might have to move your camera back away from the subject to get the best focus;



4. Photograph multiple angles. For plants, photograph the whole plant, individual leaves, and any flowers and fruit. For wildlife, take additional closer photos of the head, feet, tail, etc.;
5. Where possible, have the light behind you rather than behind the subject. If it's a bright sunny day some shadow on the subject can soften the photo, but if the light is low, say in the early morning or late afternoon, ensure that your body doesn't cast too much shadow;



6. If photographing a bird up above you, try and angle it so there is something dark behind the bird, like some leaves, a branch or a trunk. Otherwise the bird will be a silhouette against a bright background;

7. Include an object in the photo, such as a ruler, coin or your hand/finger, to show the relative size of the subject;



8. As different species live in different habitats include photos of any plants, rocks or soil around the subject to give more clues to the puzzle;
9. There are some affordable gadgets that you can attach to your phone to take close-ups of plants and animals, such as clip-on macro lenses and USB digital microscopes.

10. Edit your photos using the basic photo editing tools on your phone or computer such as:

- a. cropping - to zoom into the subject;



- b. sharpening; and

- c. adjusting the brightness and contrast.



Sound recording tips

Download a sound recording app

Most smartphones come with a “Voice Memos” app for recording sounds but the quality can be poor. There are dedicated sound recording apps that are free or cost very little. Just make sure they can record wav, mp3, or m4a format sound files.

You can record sounds directly with your sound recording app or, if you have an Android phone, you can record sounds in the iNaturalist app.

Recording sounds

- Make sure you know where the microphone is, so you don't block it with your hand.
- Get as close as you can to the animal.
- Point the microphone at the animal (and away from background noise).
- If possible, rest the phone on a stable surface and keep quiet and still.
- At the end of the recording, state details such as the location, date, time, weather, animal behaviour, number of animals and habitat. Stop the recording and save it.
- Upload the recording to iNaturalist as soon as possible so you don't lose it.

Extra tips for specific groups

Plants

Move other plants and debris away for a clear shot and measure things like leaves, fruit and flowers. Take a photo of the whole plant and close-ups (using a macro setting if your camera has one) of:

- the leaves (both upper and lower surfaces)
- the point where the leaves attach to the plant (this can help distinguish between species that have alternating versus opposite leaves on the stem, and species that have glands on the stem or leaf)
- the flowers (top and side views) and seeds/fruit if present.

Further tips: <https://www.inaturalist.org/projects/abisko-plants-and-phenology/journal/17621-getting-great-plant-photos-for-identification-in-inaturalist>.

Fungi

Move debris away for a clear shot and get as close as you can while keeping the fungus in focus.

Photograph the **underside** (to show lamellae, pores etc.), as well as **side** and **top** views. In this observation <https://inaturalist.ala.org.au/photos/73324816> one of our resourceful members created a reflection of the underside using her phone screen. You could also use a small mirror.

Make a note of what the fungus is growing on (wood, soil, dung, etc.). For species growing under trees, note the tree species in the description or take a photograph of the trees if you're not sure what they are.

Further tips: https://www.youtube.com/watch?v=LKF_plY0Zpc and <http://www.funqioz.com/photographing-fungi.html>

Lichens

It is difficult to ID a lichen from a photo but, for the best chance, take several close-ups (including the underside and fruiting bodies if possible) and show or describe what it's growing on.

Frogs

Frogs can be identified from a good quality sound recording (see Sound Recording Tips above). Frogs call most at night, particularly after rain, and they are quite sensitive to light so you might need to turn your torch off.

Insects, spiders and other arthropods

Although written for North American species, this guide has advice that is useful for photographing Australian arthropods for identification <https://bugguide.net/node/view/258535>.

Snails & slugs

You are most likely to find snails and slugs after rain, sheltering under rocks, logs, vegetation, leaf litter, plant pots etc. If moving objects, wear gloves and put things back where you found them afterwards.

Take three photos of snail shells (top-down, underside and side-on, including one with the opening of the shell facing the camera). Measure the shell width and note this in the description.

Photograph slugs moving, so that their tentacles are visible. Try to get views from the top and side (showing their breathing hole) as well as the tail end.