iNaturalist for the dubious

A step-by-step guide

iNaturalist is an incredible tool, used around the world, that enables you to record your observations for your own and others' use, and helps you learn about the species around you. There are many ways to use it and to combine it with other wonderful apps. You'll discover those. This is a start!

iNaturalist's smartphone (app) features differ from the desktop (website) version. Perhaps start out with your preferred medium, but it's ultimately worth using both. Here's how.

App - via smartphone (or tablet)

Unless your camera has a built-in GPS, you'll benefit from using the smartphone app as well as the website version of iNaturalist. Your smartphone is a fantastic device to quickly record location, time, date and at least a basic photo of your observation in a single click.

Step 1: Download the app and sign up

iPhone Android

Open the App Store



Open Google Play Store



Type iNaturalist in the search box & look for...



GET iNaturalist (it's free)



Install iNaturalist (it's free)

Open the app - (find the iNaturalist icon on your smartphone and tap it)

Sign up

You should get invited to do this automatically, but if not...

Click on 'Me' (bottom, near right)

Click on the three lines ('hamburger') at the top left and click on 'Log in/Sign up'

If you choose to sign up with your email address and a password, don't forget these details - you'll want to use them for the website version, on which you can do some different and useful things.

You'll be invited to give a username. You can just use your own name, or you can use something cryptic like FieldNatX if you prefer. You can change it later.

Questions that may pop up in the process:

- "Would you like to join iNaturalistAU? "- No decide on this later (see section on Projects below).
- "Use your location?" **Yes while using the app** (not all the time, or it will eat up your battery)
- "Use your camera to take pictures or record video?" "Access your photos?" Yes

Step 2: Try recording an observation!

Your first record can be of anything - a coffee mug if you want - but best do it outside, where your phone's GPS will work best. In iNaturalist...

iPhone

Click on the camera icon at the bottom ('Observe')

Android

Click on the green circle with the white + sign ('Make an observation')

(Difficult pop-up questions? See answers above in Step 1)



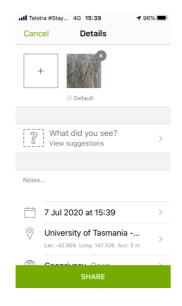
Click on the green button to take a photo*, and click on NEXT

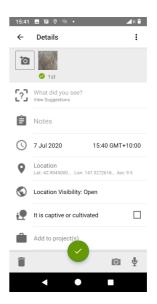
(Don't like the photo? Click Retake - you can then also click the cross in the top left to get out of camera mode)



Click on the green camera 'Take Photo'* and then the central empty circle to take a photo. If you like it, click on the tick ✓ (To retake it, click the recycle button. Click the left-pointing arrow/triangle at the bottom to get out of camera mode)

You'll see all the information that iNaturalist was able to record just from that single step!





*Other options include using photos stored in your smartphone if you prefer; most easily if you allowed 'location' to be recorded when you took the photo. 2022 update: you can record sounds! You can also record an observation without a photo, but a photo enables others to confirm the ID.

Now it's time to check this record and add a bit extra.

Android **iPhone**

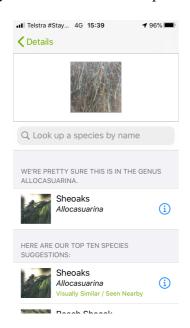
Add more photos... To help others using iNaturalist check what you've seen, it's useful to get photos of both the whole organism and diagnostic parts of it; different angles; perhaps a habitat photo. Click on the + button at the top.

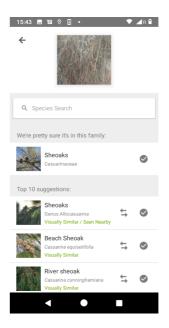
Suggest an identification...

Click on 'What did you see - view suggestions' Click on 'Unknown - view suggestions'

If you are in coverage, iNaturalist will make suggestions from your photo.

This can be amazingly informative - but be careful! It may suggest species from another country, or be unrealistically precise. It's using its computer brain, which is brilliant and ever-improving (and can help spot new invasives...), but can make some really stupid mistakes too. So apply your human brain to help!





Use iNaturalist's suggestions as a guide to the most specific level you're sure of. Perhaps you're initially only sure that it's an insect - but the suggestions may help you realise at least that it's definitely a beetle; and perhaps you may be confident of distinguishing a hemipteran. It's useful to be as precise as possible so that, say, hemipteran experts can find your observation and help with identification - but not so useful if you're frequently very wrong. Don't identify to species level if you don't have expertise in the group. Perhaps there are 30 nearidentical species that can only be distinguished through dissection of their reproductive parts. You may annoy a lot of experts by simply clicking on iNaturalist's first suggestion.

To find out more about the suggestion, click on the 'i'; to choose it, click on the name

To find out more about the suggestion, click on the name; to choose it, click on the tick ✓

Not in coverage? Just type in your best guess at identification, with again the same principles. 'Beetle' is fine for now! You can update it later if you learn more, after checking the relevant guide.

Notes

Examples: how many you saw in the area, the size of the animal or height of the plant, how many are in flower, or explain other details of your photos.

Date, Time, Location

These will appear automatically even if you're not in coverage.

- In coverage? iNaturalist will include address information automatically.
- Important if not in coverage, you'll see 'Unable to find location....' which seems worrying, but it's just referring to the address. You'll see coordinates below and an indication of accuracy.

If you're worried about the accuracy of your location....

- Click on this section to see a map. Move it around until the cross hairs are on your correct location.
- Then choose 'Save' or the tick \checkmark (top right).

If no coordinates are given - check your smartphone settings - do iNaturalist and/or your camera have permission to access your location?

Geoprivacy or Location Visibility

If there are any privacy issues about what's on the land or who's been on it (in particular if the landowner doesn't want you to make the information public!), then choose 'Obscured' (to make the location imprecise) or 'Private' (to hide the location completely) (more on this here https://www.inaturalist.org/projects/city-nature-challenge-2020-garden-route/journal/34066-toobscure-make-private-or-leave-your-observation-public-open and in the Projects section below)

Projects

There are heaps of projects on iNaturalist, set up by particular researchers and interest groups. Some will gather your records automatically. Others - e.g. some BioBlitzes - ask you to join the project* before making your observations. Once you've joined the project, you can enter its name in your record. You will then often automatically be asked a few extra questions relating to the interest of that particular project.

Important privacy note - the curators of a project will be able to see the true locations of the location-obscured/private/threatened species records that you share with it. This is the same for all your records if you join iNaturalist-Australia. You may want first to check with the curators on how your records will be used.

*To join a project...

iPhone: **Android:**

Click on the 3-dot line, 'More', bottom right... Click on the 3-line 'hamburger', top left... **Choose Projects**

Click on the magnifying glass (top right) to search for a particular project - e.g. Fungimap Australia

Save/share Save/share

You can now share or save this record. You can now share or save this record. (click on the green tick).

If in coverage, it will upload immediately. Otherwise, keep recording other observations, and upload them all when you get back in coverage.

Editing your record

Want to alter the information in a record?

First let's make sure you're looking at the list of your records. If you're not already looking at them...

iPhone

Click 'Me', bottom right...

Then -

• Click on the record you want to alter, and 'Edit' in the top right corner - you can now change details - or delete the record (scroll down).

Android

- Click on the three-line 'hamburger' (top left) and then on the top option (your username). Then -
- Click on the record you want to alter, and the edit 'pencil' icon in the top right corner you can now change details - or delete the record (click on the rubbish bin, bottom left corner).

You can also call your record up on the web version and do all sorts of other things with your and other records.

Uploading photos - other ways to record your observations

You can alternatively snap away with your smartphone camera and upload them as iNaturalist records later. Follow the instructions as above, but instead of taking a photo, choose one or more photos from your smartphone photo collection.

Or, you can upload photos from another camera via the website... (see below).

Website - via computer

If you prefer, you can do most of the above and a whole lot more on your computer.

The most valuable aspect of your smartphone is recording your location, but if your camera has its own GPS in action, iNaturalist will pick up the GPS location and date off each photo. Alternatively you can take a quick basic photo with your smartphone and then add better quality photos to your observation via the website.

Paste this link in your browser https://www.inaturalist.org/

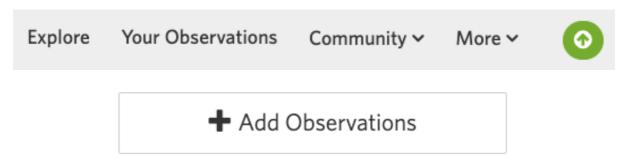
(or https://inaturalist.ala.org.au/ is the Australian equivalent - no difference from our perspective as occasionally-travelling Australians).

You can **register or log on** as for your smartphone - and then... you'll discover a huge number of options!

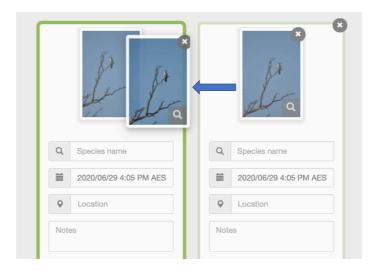
Let's just explore some simple ones for now.

Try recording observations!

Look for a friendly green 'Upload' button, (or it may just be a pointing-up arrow), or the option to 'Add Observations'. Click on either and you will be invited to upload photos.



For each, an iNaturalist record will appear. To put two photos into the same record, drag one of them on top of the other.



There are many alternative ways to upload multiple photos and records - explore to find your favourite.

Location

If you don't have the GPS coordinates for the photo, you can still find them on the map that pops up when you click on Location. Click on the right position on the map, and then 'Update Observations' at the bottom of the window.

Other details

You can work through the various details in a similar way to that described above for the smartphone version, except for Projects which for some reason, at least currently, you have to add afterwards, using Edit... (this is an example of the sort of thing that will probably evolve with time).

When you're done, it's time to head to the top right of your screen to click on...



A lovely list of observations...

You'll accumulate a list of your observations, which you can see and manage via Your Observations (top centre on the iNaturalist webpage when you're logged in) - on a map, in a grid or in a list.

To alter the information, click on the relevant observation, then 'Edit' (top right)

You'll see (top right) a 'Filters' option - click on this and you'll see ways to see all your observations of Coleoptera, or in Tasmania, or recorded in 2018...

Once uploaded... others might suggesting identifications!

Lots of fantastic experts (among others...) pitch in to help identify, or confirm identification, of your photos on iNaturalist. They tend to be very focussed on that job, so you'll rarely get admiring comments about the quality of your photo, but they may explain how they did the identification. (Sometimes they may follow up with more questions about your observation for their research!)

There are various ways you'll see these identifications (either on your smartphone or your computer). One is clicking on the little 'comments' icon in the top right of the window.



If you reckon their identification is more likely to be correct than yours, and if your original suggestion is different, then withdraw yours (needs to be done on the computer - choose edit, and click on the little downward pointing arrow to the top right above your identification). This tidies up the record of what you actually found.

Helping out with identifications yourself

If you click on Explore (from bar across the top), you'll then see Filters near the top right. Now you can choose 'Verifiable' 'Spiders' from 'Hobart, Tasmania' or whatever group you have expertise in. You have an option (top left) to view all the photos in grid form. Click on one you recognise and you can either agree with someone's identification or suggest an identification.

You'll notice that the Filters box also has a 'download' button at the bottom right... You can download any data you like from this database!

To help improve the science and the process, avoid agreeing with someone's identification just because you reckon they're cool - agree with it (or not) because you know your stuff! And share your expertise - explain why.

FAQs

Here are a few answers to some particularly frequently asked questions.

Is the location recorded off my smartphone correct?

Like any GPS, if a smartphone is required to commit too quickly to a location, or if you're in heavy cover (thick trees or a roof), there can be errors - but in general modern smartphones are really reliable at recording locations. As you get used to using iNaturalist, just check where it thinks you are and that'll give you a feel for likelihood and degree of error.

However it's really important to know that iNaturalist may sometimes 'fuzz' locations - where the species is listed at threatened on the IUCN Red List, or if you've stipulated geoprivacy. It may then appear to others that the observation is in a very different place from where you recorded it.

Isn't iNaturalist full of incorrect records which will confuse everyone?

With so many contributors of such a mixture of abilities, this database can certainly be expected to include incorrect records - and yet its contents are uploaded into the Federal Government's database, the Atlas of Living Australia. A sensible scientist will do a lot of filtering and errorchecking before using the data from any such database.

However, a record classed by iNaturalist as Research Grade has been identified to the same species by at least two thirds of those who suggested an identification. While this doesn't guarantee correct identification, these records are likely to include photos good enough for this to be checked. Both the identification and the taxonomy can be adjusted repeatedly over time, and the records on the Atlas of Living Australia are updated accordingly.

Furthermore, with every new agreement on identifications, iNaturalist improves its ability to recognise more species automatically. In other words, it comes up with increasingly sensible suggestions even prior to any human assistance for that record. It's quite spectacular at this in the US, where there are the most iNaturalist users.

Your careful assistance with identifications can make a great contribution to data quality.

I would like to record everywhere I went during my excursion, not just where I recorded plants and animals

You might like to await another step-by-step guide to the Ramblr app!

Other questions

Numerous tutorials can be found here: https://inaturalist.ala.org.au/pages/video+tutorials iNaturalist is used widely across the world, so if you Google your question, including 'iNaturalist', you have a good chance of finding an answer. Locally, there are many very keen iNaturalist users in Tasmania, including some curators who can help with specialist taxonomic questions.

Your feedback

This little guide was written in 2020. Apps and websites change all the time, and so an updated version of the guide will be required at some stage. If the guide describes something that's clearly different now, or you found anything else confusing, it would be wonderful if you could report the details to hello@naturetrackers.com.au