



# FrogCensus Handbook



## Get in touch

For any FrogCensus related question, including volunteer training events, contact the ACT FrogWatch Coordinator on 02 6278 3309 or [frogwatch@ginninderralandcare.org.au](mailto:frogwatch@ginninderralandcare.org.au), or check out our webpage: <https://ginninderralandcare.org.au/frogwatch/>

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# Introduction

## Why do we need frogs?

Frogs are environmental indicators for good water quality and high value habitat, and the presence or absence of frogs can tell us a lot about the health of a waterbody. Frog eggs have a soft shell and adult frogs have permeable skin, through which they 'drink' and breathe. This makes them sensitive to any pollutants in the water or on land.

Frogs also play an important role in waterway food chains- it is all about eating and being eaten. Tadpoles keep water bodies clean by consuming large amounts of decomposing plant material and algae. Predators, like water bugs, birds, fish and young turtles, enjoy tadpoles on their menu.

Frogs are meat-eating machines and feed on invertebrates, such as mosquitos and flies, while in turn, they get eaten by birds and reptiles.

Frogs require water to breed and for their tadpole development. Male frogs call to attract a female and to mark their territory. Each species has a specific call, unique in pitch, frequency, duration, and tones. This makes it easy to identify frogs without the need to see them.

Frogs are globally under severe pressures from habitat destruction, water pollution, introduced species and pathogens. Amphibians are predicted to suffer the most of all animal groups from climate change effects.

Frogs are fascinating and an integral part of most wetland habitats. Their global decline threatens our biodiversity. The loss of frogs doesn't just mean no tadpoles to watch and no frog calls in the evening – it also means no natural insect control and no food for frog-hungry birds, reptiles and mammals.

Let's look after our frogs now – before it's too late!

## Become a FrogWatcher!

FrogWatch, run by the Ginninderra Catchment Group since 2002, is a community-based frog monitoring program. The annual FrogCensus covers survey sites throughout the Capital region, from Cooma in the south to Gundaroo in the north and from the Cotter River in the west to Captains Flat in the east.

## The importance of FrogWatching

The collected data is used to:

- track the health of our local frog populations over time
- inform local policies and land management decisions
- conserve natural resources and support environmental sustainability.

Become a citizen scientist and:

- learn new skills and expand local knowledge
- have fun while re-engaging with the environment
- feel empowered to make meaningful contributions.



## But first, get some training

To ensure high data quality, it is vital that all participants attend a training seminar before engaging in frog surveys. This booklet summarises the How, Where, and When of FrogWatching.

If you have any froggy questions, FrogWatch is here to help – send us an email and we will get back to you:

[frogwatch@ginninderralandcare.org.au](mailto:frogwatch@ginninderralandcare.org.au)

## Survey sites

FrogWatch participants monitor established survey sites multiple times during the October FrogCensus following a standardised procedure (see 'FrogWatching – the right way'). This approach tracks changes in frog presence and abundance over time. A list and interactive map of all FrogWatch ACT and Region sites can be found on the Canberra Nature Map website (see 'How to find FrogWatch on Canberra Nature Map').

FrogWatch surveys use auditory methods to determine the species and number of calling frogs. Recording frog calls is easy, using a digital voice recorder or mobile phone. Weather, temperature and habitat observations are also collected during each survey.

All volunteer-submitted data will be available on the Canberra Nature Map, and will be summarised in the annual FrogCensus report, which can be downloaded from the FrogWatch ACT and Region webpage at

[ginninderralandcare.org.au/frogwatch](http://ginninderralandcare.org.au/frogwatch)

## Some more frog facts!

Frogs are amphibians and therefore are specialised in two ways:

- **Two distinct life phases:** frogs start as an aquatic tadpole hatching from an egg, and eventually turn into a land living frog. The period of change from juvenile to adult is called 'metamorphosis'.
- **Weird and wonderful skin:** their very thin and moist skin allows gases and fluids to pass through into a large network of blood vessels.

Most frogs can be found near water sources, especially during the breeding season. Some species live in very dry areas, including deserts. To survive in these harsh conditions, they store water in their bodies, secrete mucus to waterproof their skin and bury themselves deep into the sand.

Frog skin is a chemical treasure house – bright colours warn of nasty flavoured and maybe deadly toxins! Some chemicals are powerful drugs, used by humans as weapons and to combat illnesses, like heart disease.

## Frogs in the ACT region

Approximately 15 frog species call the ACT region their home. Eight of these are commonly found in our suburbs, backyards, and nature parks. Others occur only in isolated locations, are rare or have experienced population declines.



You can find the description of the common ACT frogs and their calls in the included *Glove box guide: Frogs of the ACT region*, also available online.

The majority of our local frog species breed during the warmer, wetter months of spring to summer. They prefer water bodies with little or no water flow, such as swamps, marshes and ponds, for breeding and tadpole development. Our few stream specialists have tadpole adaptations like broad fins and sucker-like mouths to cope with changing water levels and fast flows.

Ephemeral wetlands with an annual wet/dry cycle often have the highest frog diversity. They provide standing water for tadpole development and have lower numbers of predatory fish and invertebrates.

Outside the mating season frogs live in terrestrial areas, sometimes well away from the breeding sites. To escape dehydration, extreme temperatures and predators, frogs seek shelter in deep cracks in the soil, abandoned burrows, tussock grasses and other thick native vegetation, fissures in bark or fallen timber and underneath rocks.

Therefore, only a whole-catchment approach to land management can protect frogs and their different habitats.

You can find out more about creating or protecting frog habitat from the included leaflet, *Creating a Frog Friendly Habitat in the ACT Region*, also available online.



An example of one of the designated survey points. Choose from the list on Canberra Nature Map.



We want you to be safe while doing FrogWatch activities. Please read the safety procedures carefully and follow instructions as closely as possible.

## Safe FrogWatching

1. Get your **training** prior to any FrogWatch volunteer activities. **This is compulsory!**
2. **Visit** your chosen site(s) **in daylight** to map site access and potential hazards.  
Avoid high risk weather conditions, such as storms.
3. Get a **buddy!** Never monitor alone. Provide your destination and activity details to a third person and stick to your plan!  
Monitor with another trained FrogWatch volunteer, if possible. A survey team needs at least one person with adequate training.
4. Carry a **first aid kit**.
5. Wear **appropriate clothing and footwear** for fieldwork (enclosed, sturdy shoes and long pants, extra clothes for cold conditions).
6. Equipment:
  - Carry a **good torch**, preferably a head torch, and spare batteries.
  - Ensure your **mobile phone** or alternate recording device is fully charged.
  - Have your **field data sheets, pen and thermometer** ready.
7. **Parking** is best done away from moving traffic and access routes.
8. **Keep your distance** from the water. Measure the water temperature at the safest possible spot.
9. **Hands off!** Frogs have very sensitive skin and pathogens may be transmitted very easily. Some frogs can also secrete toxins that may harm you.
10. **Keep out!** Never access private land without prior permission.



# FrogWatching – the right way

1. **First things first – complete your compulsory training** if you haven't already.
2. **Choose your FrogWatch survey site(s).** Identify the exact location using information provided on the FrogWatch survey webpage on [canberra.naturemapr.org](http://canberra.naturemapr.org) (instructions on following pages). Keep survey locations consistent.

Let us know where you go – enter your plans into the online booking sheet at [ginninderralandcare.org.au/frogwatch](http://ginninderralandcare.org.au/frogwatch) or email [frogwatch@ginninderralandcare.org.au](mailto:frogwatch@ginninderralandcare.org.au)

3. **Day visit:**

Prep your form(s): Prefill your habitat observations on a separate Field Data Sheet for each site and visit. Detailed instructions are on the back of the sheet.

Snap a site photo: Capture the water level and vegetation condition.

4. **Night survey preparation:**

Get ready: Prefilled Field Data Sheets, thermometer, torch, recording device, pen.

Test your device: Ensure it picks up frog calls amongst ambient noise.

Choose wisely: Survey on still, mild nights, preferably after rainfall. Avoid heavy rain, wind and temperatures below 12°C. Check the Bureau of Meteorology website before heading out: [www.bom.gov.au](http://www.bom.gov.au)

Repeat yourself: Visit your site(s) at least twice in October during the first three hours after full dark. Additional monitoring during the year is encouraged.

5. **Night survey:**

Shhhh... Approach the site quietly and hold the torch away from the water.

Be scientific: Take the air temperature, and then the water temperature (at arm's length and the thermometer at approximately 10cm depth).

Noteworthy: Add date, time, temperatures, and weather conditions to your sheet.

Eavesdrop: Turn off your torch and start recording – even if you hear no frogs. Clearly state the name of observers, site code, date, time, and all observations (a great insurance for lost Field Data Sheets) and then record for a full 3 minutes.

To be or not to be: Recording the absence of frogs is as useful as their presence when it comes to monitoring frog populations (just not quite as much fun).

Distance yourself: Stay 5m-10m away from the loud chorus to avoid species calling at close range drowning out species further away. Position your back to any traffic noise and block air movement over the mic by sheltering the recording device from the breeze.



Give it a go: Test your frog ID skills and write down the frog species you can hear. Estimate how many frogs are calling as indicated on the field data sheet.

6. **Back home:**

Submit your data: Enter all your data and upload the recording (and site photo) at [canberra.naturemapr.org](http://canberra.naturemapr.org) (instructions on following pages) by 15th November.

Let's party! Come to the FrogWatch Christmas party to celebrate your contributions!

## How to record and report frog calls for the FrogTober Census in the Capital Region

1. Survey your site(s) at least twice in October
2. Survey on still, mild nights in the first 3 hours after dark, at least 30 mins after sunset
3. Measure air temp and then water temp (at arm's length, about 10cm deep)
4. Turn off torch and wait for a few minutes for frogs to become accustomed
5. Start recording by stating site code, date, time, observer names and all data from field sheet
6. Then record for 3 mins, even if you think no frogs are calling

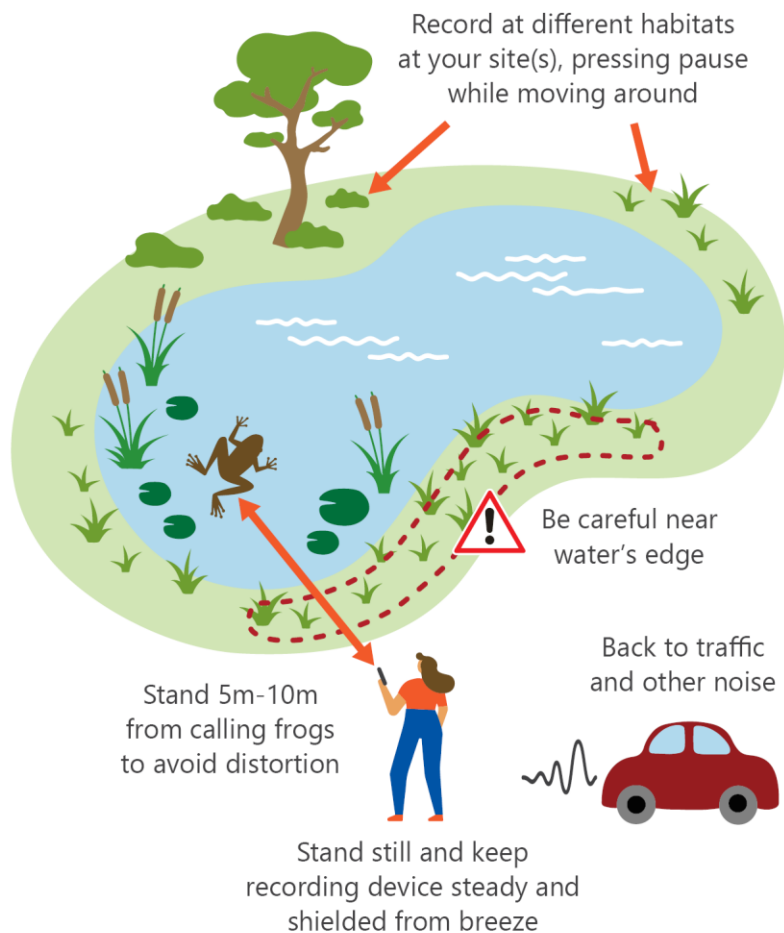
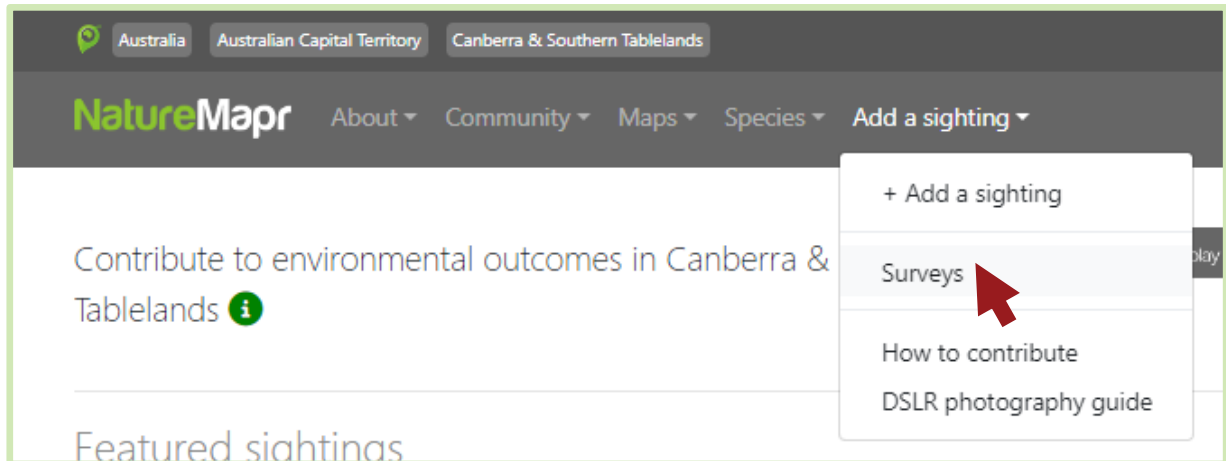


Diagram inspired by Melbourne Water's *Frog Census Handbook*, p. 4.



## How to find FrogWatch on Canberra Nature Map

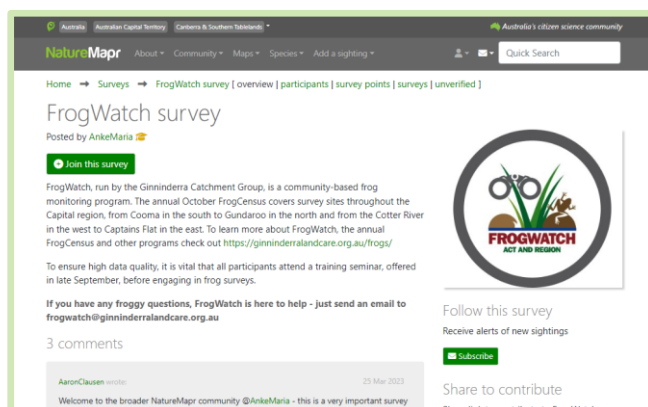
1. Go to [canberra.naturemapr.org](http://canberra.naturemapr.org) using a web browser.
2. In the top horizontal menu, click on **Add a sighting**, then in the dropdown click **Surveys**.



3. You will now see a page with tiles for each survey-based project on the website. Click the **FrogWatch survey**.



4. Now you are in the FrogWatch survey section of the Canberra Nature Map website. From here you have various options to explore, such as survey locations (called 'survey points') and previous survey results, and you can enter your survey data.

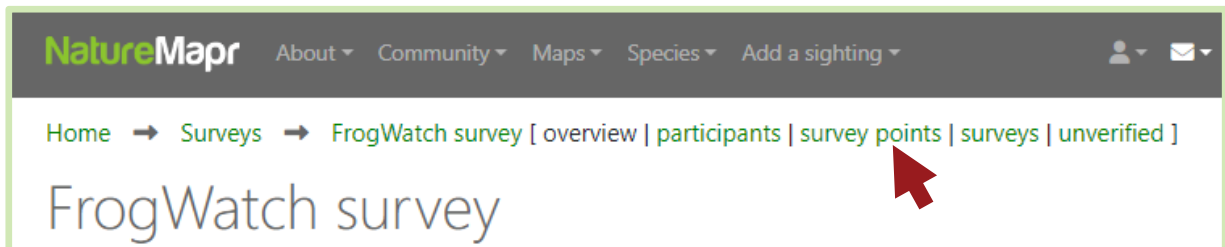


Please read on for how to use Canberra Nature Map to choose your survey points and input your data.




## How to choose your survey point(s) online

1. Navigate to the FrogWatch Survey section of the Canberra Nature Map website (see instructions on previous page).
2. Below the top horizontal menu, click on **survey points**.



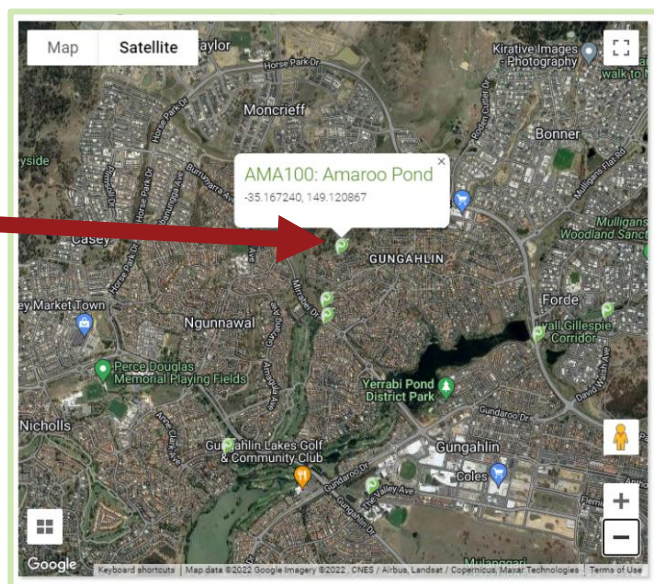
You will now see the Current FrogWatch Sites page. There are three ways you can find survey points from here:

### Option 1: Site map

1. Use the map like any Google map by dragging it along or by zooming in and out with your mouse.
2. Click on the icon  representing a survey point to reveal the point code and name.

#### Find out more about a survey point:

Left click on the code/name to go to the survey point's webpage. Here you will find information such as coordinates, location, best access route and previous surveys.

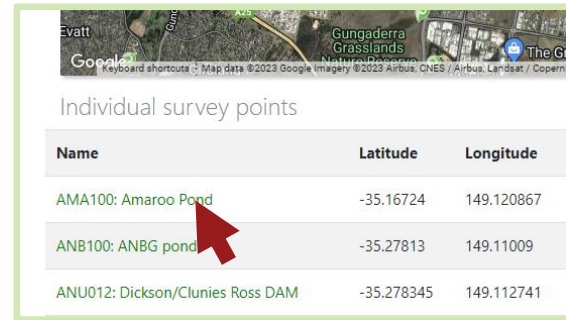


**Compare multiple survey points:** On the map, right click on a survey point's code/name and open the point's webpage in a new browser tab. Repeat for the points you are interested in, then you can switch between browser tabs to compare.



## Option 2: Browse the survey point list

1. If you know the survey point code, you can use the alphabetical list below the map.
2. Scroll through the list to find your survey point, then click on the code/name to open the point's webpage for more information.

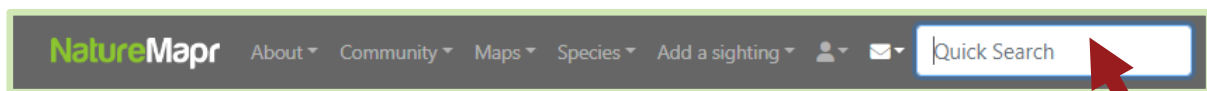


Individual survey points

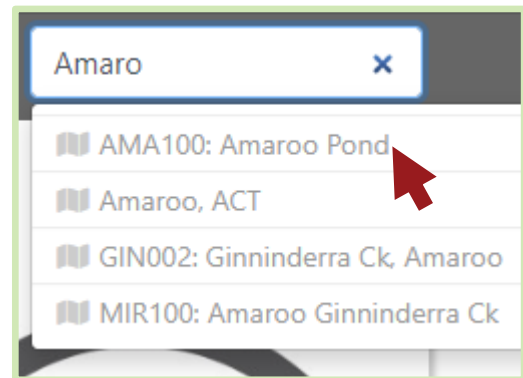
Name	Latitude	Longitude
AMA100: Amaroo Pond	-35.16724	149.120867
ANB100: ANBG pond	-35.27813	149.11009
ANU012: Dickson/Clunies Ross DAM	-35.278345	149.112741

## Option 3: Quick search using name or code

1. If you know part of the site name or code, you can use the **Quick Search** field at the top right of the page to find your survey point.



2. Start typing the survey point's name or code into the Quick Search field. Matching options will appear in a dropdown list below the field. Keep typing until the list results narrow down and you see your survey point.
3. Click the code/name of the survey point in the dropdown to open the point's webpage for more information.



Once you are on a survey point's webpage, you can start exploring.

**NatureMapr** About Community Maps Species Add a sighting Quick Search

Home → Surveys → FrogWatch survey → Survey points → AMA100: Amaroo Pond [ sightings | surveys | field guide ]

## AMA100: Amaroo Pond

Large constructed pond - constructed 2005. Survey site at eastern side of dam wall. Access via Evalla Cct, Amaroo

Moderators

Become the first moderator for AMA100: Amaroo Pond

[Become a moderator](#)

Page 1 of 1 - all surveys

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	AMA100: Amaroo Pond	louneil10	30 Oct 2022
	AMA100: Amaroo Pond	louneil10	18 Oct 2022
	AMA100: Amaroo Pond	louneil10	12 Oct 2022
	AMA100: Amaroo Pond	RobynB	17 Oct 2021
	AMA100: Amaroo Pond	RobynB	12 Oct 2021
	AMA100: Amaroo Pond	RobynB	28 Oct 2020

[View map](#)

Location information

Coordinates: 149.120867, -35.167240

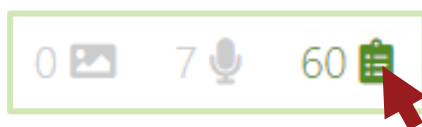
Biodiversity index

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[What is biodiversity index](#)

The initial view is the point's **surveys** <sup>1</sup> page. On the left it shows the site code and name, and a list and total number of all surveys. On the right it shows a site **map** <sup>4</sup>. Clicking on the map will open a page with a more detailed map and species list.

Below the horizontal menu at the top, you can click on **sightings** <sup>2</sup> to open a page with a list of all individual frog sightings recorded for this survey point. On the sightings page,



ensure the little worksheet icon in the top right corner of the sightings list is selected to show all sightings, rather than only the ones that include photos or audio.

Clicking the **field guide** <sup>3</sup> will open a page with an overview of every frog species observed during a FrogWatch survey at this site.



## How to enter your data online – the right way

**There is NO APP for FrogWatch surveys.  
The NatureMapr app cannot be used to input FrogWatch data.**

**All data must be entered via the website using a browser on your mobile device or computer:  
[canberra.naturemapr.org](http://canberra.naturemapr.org)**

1. On Canberra Nature Map [canberra.naturemapr.org](http://canberra.naturemapr.org), navigate to the FrogWatch Survey section by clicking **Add a sighting** > **Surveys** > **FrogWatch survey** (for a step-by-step walkthrough, see previous instructions 'How to find FrogWatch on Canberra Nature Map').
2. Click the **Add a survey** button. If you aren't already logged in, the system will ask you to.

**Don't already have an account?** Please register for one now and log in.

3. The online field data sheet will show, and you can now **start entering your data**:

**Media:** Upload your recording by clicking on the big grey box on the top of the page and follow the prompts. If your file is too large to upload, please email it to [frogwatch@ginninderralandcare.org.au](mailto:frogwatch@ginninderralandcare.org.au) instead.

**Location:** In the **Location group** dropdown, select **Current FrogWatch sites**, and then in the **Point of interest** dropdown select your survey point code.

**Date & time:** Click on the date field to show a calendar and the time. Click on the survey date and change the time to reflect the time of the survey. Ensure you click PM!

**Observed species:** Click the **Add a species** button and add all species that you observed or thought to have heard, including estimated abundance range, or exact abundance where possible.

**Additional information:** Use the provided dropdowns and fields to enter your data as per your written data sheet.

**Description:** Please add any interesting and relevant information, like weather patterns or disturbances at the site. Also please add the names of all involved volunteers so that their names can be included in our hall of fame!

**Report this survey:** When finished, click this button to submit the survey.

