

# About Frogwatch



## What is Frogwatch?

Frogwatch is a community frog monitoring program that involves large numbers of volunteers of all ages to undertake frog monitoring and protect frog habitats.

In National Water Week, the 3rd week of October each year, over 250 Frogwatch participants monitor frog populations at approximately 140 sites around the ACT and Region. Frogwatch participants attend a training seminar where they learn all about the fascinating world of frogs, how to monitor them, and ways to help protect them and their habitats. Frogwatch monitoring can be done all year round, but the focus is on National Water Week in October each year. This is when the majority of ACT frog species tend to be actively calling and mating.

## Why monitor frogs?

Frog species are widely recognised as indicators of environmental health and their presence can indicate good water quality and the availability of high quality habitat. Conversely, the absence or decline of frog populations can indicate unhealthy or degraded catchments.

Frogs are useful as a monitoring focus for a number of reasons:

- Frogs are sensitive to high concentrations of pollutants such as pesticides, detergents and industrial chemicals.
- Their eggs are 'naked' (i.e. they do not have a shell), and adult frogs have permeable skin, through which they 'drink' and breathe. This means that any toxic substances polluting a waterway or landscape will easily penetrate into the frogs' system.
- As frogs require water to breed, we can assume that a waterway inhabited by frogs is relatively free of toxic pollutants.
- Each species has a distinctive mating call that is relatively easy to learn and recognise. This means we can easily get an indication of the diversity and approximate abundance of breeding frog populations, without disturbing them.

## Frogwatch Census Information

The Frogwatch program generates important information about the presence and approximate abundance of frog populations in the ACT and Region, and includes observations about habitat, vegetation and weather conditions.

The Frogwatch monitoring strategy has been developed in collaboration with expert staff from the ACT Government and the University of Canberra, and has been designed to compliment their existing professional monitoring program. All Frogwatch data is verified by the Frogwatch Coordinator using audio recordings, and any unusual, rare or difficult identifications are also verified by our expert technical advisors.

The data that we generate is used by a number of groups including:

- Community and Catchment Groups;
- ACT Government Wildlife Research and Monitoring Unit;
- Teachers and Students;
- ACT Commissioner for the Environment - State of the Environment Reporting.

# The Community Frogwatch Census Report

An annual report is produced that presents the results of each spring census. The report includes simple maps of presence or absence of frog species along with an estimate of abundance.

Analysis of the data is currently limited to describing the occurrence and estimated abundance of each species. As a bank of information is built up, a more rigorous analysis of the data will be possible and trends may be able to be identified.

You can download copies of our past Frogwatch Reports from: [www.ginninderralandcare.org.au](http://www.ginninderralandcare.org.au)

## Frogwatch Training Events

Frogwatch training events are held in September and October in the lead up to the National Water Week Frogwatch Census, each year. Training events encompass the “Introductory Seminar” and “Field Trip”.

In an **Introductory Seminar**, participants are introduced to:

- Frog species of the ACT and their habitat requirements;
- Mating calls of local frog species and identification techniques;
- Procedures for preventing the spread of frog pathogens;
- Procedures for undertaking and recording Frogwatch observations; and
- Basic safety guidelines.

Seminars also include a short walk to a nearby pond, to practice our frog identification skills.

Frogwatch **Field Trips** are aimed at experienced Frogwatchers, who would like to further develop their identification and monitoring skills. Participants in the field trips will have the opportunity to investigate important components of frog habitat, build on their monitoring skills, and talk with expert ecologists in the field.

Details of the training events are posted to the Frogwatch email list and the Ginninderra Catchment Group website as they are arranged. To add your name to the Frogwatch email list, contact the Frogwatch Coordinator.

## The Frogwatch Kit

This Kit contains all the information you need to participate in the annual Census. It is available to participants at all Frogwatch Training Events, and from the Frogwatch Coordinator on request.

The Kit includes information about procedures for participating in the Frogwatch Census, and about our local frog species and how to identify them. The Kit includes an audio CD of the mating calls of local frog species, and a thermometer which is used to take Frogwatch observations.

You will need to make an audio recording of the frog calls you hear. Most portable tape recorders or digital MP3 players with a voice record option will make a good enough recording. If you don't have either of these, you may be able to borrow one from the ACT Frogwatch Coordinator.

## Frogwatch in the Classroom

The Ginninderra Catchment Group also conducts a Frogwatch Education Program for school and community groups. To find out more information, contact the Frogwatch Coordinator.

# About the Ginninderra Catchment Group and the ACT NRM Network

The Ginninderra Catchment Group is an incorporated umbrella group of community volunteers working in the water catchment of the Ginninderra Creek.

The primary focus of the Group is advancing the health of the Ginninderra Catchment through effective engagement with government, agencies, business, schools and the catchment community. We have a strong commitment to community education and capacity building and seek to create diverse opportunities for people to become involved in catchment management, decision-making and on-ground action.

We are one of three Catchment Groups operating in the ACT region, alongside the Molonglo Catchment Group and the Southern ACT Catchment Group.

## Our Goals

The Ginninderra Catchment Group works with all catchment stakeholders to:

- Create ecosystems that accommodate human settlement but reduce the impacts and their effects on environmental systems;
- Restore and maintain as much of the natural setting as possible within an urban environment; and
- Ensure more systematic, catchment wide sustainable environmental outcomes from the activities of volunteers.

## Get Involved!

You can make a difference and help our environment. The ACT Natural Resource Management Network provides a wide range of volunteering opportunities for people from all walks of life, with different interests and skills. A range of flexible volunteering roles exist such as:

- Landcare;
- Waterwatch;
- Frogwatch;
- and more - let us know what you would like to do!

## Find out More - Contact your local Catchment Group for more information:

### **Ginninderra Catchment Group – Belconnen, Gungahlin, Hall and Wallaroo**

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

- Julie Palmer, Catchment Coordinator, 02 6278 3309, [landcare@ginninderralandcare.org.au](mailto:landcare@ginninderralandcare.org.au)
- Dr Beth Mantle, Waterwatch Coordinator, ACT & Region Frogwatch Coordinator, 6278 3309, [waterwatch@ginninderralandcare.org.au](mailto:waterwatch@ginninderralandcare.org.au)

### **Southern ACT Catchment Group – Woden, Weston Creek, the Cotter, Tuggeranong and Tharwa**

[www.sactcg.org](http://www.sactcg.org)

- Steve Welch, Catchment Coordinator, 6296 6400, [info@sactcg.org](mailto:info@sactcg.org)
- Dr Stephen Skinner, Waterwatch Coordinator, 6296 6400, [waterwatch@sactcg.org](mailto:waterwatch@sactcg.org)

### **Molonglo Catchment Group – Mitchell, Canberra Central (inner north and south), Queanbeyan, and region**

[www.molonglocatchment.com.au](http://www.molonglocatchment.com.au)

- Catchment Coordinator, 6128 3376, [coordinator@molonglocatchment.com.au](mailto:coordinator@molonglocatchment.com.au)
- Waterwatch Coordinator, 6242 1191, [waterwatch@molonglocatchment.com.au](mailto:waterwatch@molonglocatchment.com.au)

# The Frogwatch Monitoring Strategy



## What is Frogwatch?

Frogwatch provides training, education, resources and monitoring support for community volunteers to undertake frog monitoring. The data collected by Frogwatch volunteers is verified, collated and reported back to the community and other stakeholders, to provide valuable information about frog populations in the ACT and Region.

## 1. WHY ARE WE MONITORING?

**AIM:** To conduct a community Frogwatch Census in the ACT and Upper Murrumbidgee Region that will generate significant information about the presence and abundance of frog populations.

### OBJECTIVES

#### Census Information Objectives

- Increase understanding of frog distribution and abundance;
- Increase knowledge and understanding about the health of our wetlands, waterways;
- Monitor the impacts of bushfires and drought on our local ecosystems and catchments;
- Monitor the impacts of bushfires on local wildlife and track recovery rates;
- Provide supplementary information to the ACT Government's Wildlife Research and Monitoring Unit's professional frog monitoring program;
- Continue the collection of important frog monitoring data to enhance previous studies.

#### Community Capacity Building Objectives

- Provide an exciting, hands-on opportunity for community members to engage in natural resource management (NRM);
- Provide opportunities for community involvement in wildlife monitoring;
- Provide Waterwatch and CAMPFIRE (Community Assessment Monitoring Program for Fire Impacted River Ecology) groups the opportunity to broaden their monitoring activities;
- Increase community capacity to understand a range of important environmental issues such as biodiversity, problems of introduced species, water quality, habitat loss and other impacts on natural ecosystems;
- Facilitate community monitoring and evaluation of NRM on-ground works, e.g. wetland development, willow removal and revegetation projects;
- Increase awareness of frog populations and their habitat requirements;
- Ensure that Frogwatch participants do not contribute to the spread of frog pathogens.

## 2. WHO WILL USE OUR DATA AND HOW WILL IT BE USED?

<b>Secondary Users</b>	ACT Government - Wildlife Research and Monitoring	<ul style="list-style-type: none"> <li>To provide supplementary data to existing professional frog monitoring programs.</li> </ul>
	Teachers and Students	<ul style="list-style-type: none"> <li>To provide research and learning opportunities for primary, secondary and tertiary students.</li> </ul>
	ACT Commissioner for the Environment	<ul style="list-style-type: none"> <li>To contribute to State of the Environment Reporting.</li> </ul>
<b>Main Users</b>	Regional community natural resource management groups eg. Catchment Groups.	<ul style="list-style-type: none"> <li>To generate knowledge and understanding about local frog populations, water quality and catchment health;</li> <li>To track changes in frog populations on a regional scale;</li> <li>To facilitate on-ground projects, particularly with respect to developing or restoring frog habitats; and</li> <li>To evaluate the effectiveness of these projects.</li> </ul>

## 3. WHAT WILL WE MONITOR?

Parameter	How will this fulfill our objectives?	Importance?
Frog species detected	<ul style="list-style-type: none"> <li>Provide indication of presence or absence of particular species of breeding frog populations.</li> <li>Establish records to identify medium term (5 to 10 years) changes in frog populations.</li> </ul>	Critical
Number of frogs present	<ul style="list-style-type: none"> <li>Provide indication of abundance of each species.</li> <li>Establish records to identify medium term (5 to 10 years) changes in frog populations.</li> </ul>	Critical
Habitat	<ul style="list-style-type: none"> <li>Provide explanation or context for above results</li> </ul>	Background
Vegetation	<ul style="list-style-type: none"> <li>Provide explanation or context for above results</li> </ul>	Background
Weather	<ul style="list-style-type: none"> <li>Provide explanation or context for above results</li> </ul>	Background
Site Drawing	<ul style="list-style-type: none"> <li>Provide explanation or context for above results</li> <li>Enable correct location of the monitoring site from year to year</li> </ul>	Background
Site Photograph	<ul style="list-style-type: none"> <li>Provide explanation or context for above results</li> </ul>	Background

## 4. WHAT DATA QUALITY DO WE WANT?

The program requires a high level of data confidence for assessing frog diversity and abundance. For Frogwatch data to be considered of high quality, the following measures are enforced.

- All volunteers participate in an annual Frogwatch Training Seminar.
- Monitoring should take place at some time during the 2 hours after dark.
- For comparable results monitoring at all Frogwatch sites should occur on at least one evening during **National Water Week, 19 - 25 October 2008**. It is also recommended that for Key Sites, monitoring should occur on at least three evenings during this week.
- Extra monitoring dates should occur during the month of October.
- If monitoring at an existing Frogwatch site, monitoring should occur at the exact same location as in previous years.
- Audio recordings of frog calls are to be taken. These recordings along with **completed Field Data Sheets are to be submitted to the Frogwatch Coordinator by Friday 14<sup>th</sup> November, 2008**.
- All audio recordings will be checked by the Frogwatch Coordinator for accuracy of identification. Any difficult or unusual recordings will be referred to expert technical staff for verification.

## 5. WHAT METHODS WILL WE USE?

Frog calls will be monitored by community volunteers at locations across the ACT and Region during October. Frog calls will be recorded using a portable audio tape recorder or digital MP3 voice recorder, and other relevant observations will be recorded onto the specified Field Data Sheets. Volunteers will then **return both the audio recordings and Field Data Sheets to the Frogwatch Coordinator by Friday 14<sup>th</sup> November 2008** for confirmation of results and data storage.

## 6. WHERE WILL WE MONITOR?

There are 30 Key Frogwatch Sites that have been prioritised to ensure consistent and comprehensive monitoring of these sites from year to year. Frogwatch monitoring can also be conducted at over 100 other sites around the ACT and Region.

**Participants are encouraged to monitor at one of the *Key Frogwatch Sites* if possible, in order to ensure that they are monitored effectively each year.**

A list of the Key Frogwatch Sites is available from the Frogwatch Coordinator.

Frogwatch participants may also choose a site that has an intrinsic value to the program. For example a Waterwatch monitoring site, a newly constructed wetland or backyard pond, an environmentally sensitive area, waterway restoration site or proposed restoration site, farm dam, local creek or waterway, or a site of personal interest.

Participants are encouraged to monitor at the same site each year, or at one of the established Frogwatch sites if possible.

**Safe access at night time is essential when choosing a Frogwatch site!**

## 7. WHEN AND HOW OFTEN WILL WE MONITOR?

To be included in the 2008 Frogwatch Census Report, monitoring must take place during the following time period:

	Season	Dates	Time of day	How often	Duration
<b>Key Frogwatch Sites</b>					
Minimum monitoring	Spring	19 - 25 October (National Water Week) 2008	During the 2 hours after dark.	On at least THREE evenings during National Water Week.	Audio recording of frog calls for 2 - 5 minutes.
Extra monitoring	Spring	1 - 31 October 2008	During the 2 hours after dark.	Monitoring at the same site on a number of evenings during the specified dates is desirable.	Audio recording of frog calls for 2 - 5 minutes.
<b>Other Frogwatch Sites</b>					
Minimum monitoring	Spring	19 - 25 October (National Water Week) 2008	During the 2 hours after dark.	On at least one evening during National Water Week	Audio recording of frog calls for 2 - 5 minutes.
Extra monitoring	Spring	1 - 31 October 2008	During the 2 hours after dark.	Monitoring at the same site on a number of evenings during the specified dates is desirable.	Audio recording of frog calls for 2 - 5 minutes.

### IMPORTANT NOTES REGARDING MONITORING TIMES:

- It is desirable for monitoring to take place 1 - 3 days prior to, during or following rainfall, if possible.
- Volunteers will be encouraged to monitor during the specified time period where possible, to ensure consistency and comparability. However, data collected outside of the specified monitoring times is still valuable, and is encouraged. This data will be stored and analysed separately and may not be included in the Frogwatch Census Report.

## 8. WHO WILL BE INVOLVED AND HOW?

Organisation	Partnership Roles
Ginninderra Catchment Group - ACT & Region Frogwatch Coordinator	<ul style="list-style-type: none"> <li>• Coordination of the Frogwatch program and support for participants.</li> <li>• Preparation of monitoring plan, ensuring consistency with professional monitoring programs.</li> <li>• Development, production and distribution of Frogwatch resources.</li> <li>• Coordination of Frogwatch training seminars.</li> <li>• Collation and storage of Frogwatch data.</li> <li>• Verification of audio recordings.</li> <li>• Data analysis and production of the annual Frogwatch Report.</li> </ul>
Community Participants	<ul style="list-style-type: none"> <li>• Attendance at a Frogwatch training seminar.</li> <li>• Conducting Frogwatch monitoring in accordance with the Frogwatch monitoring strategy and procedures.</li> <li>• Record accurate Frogwatch observations.</li> <li>• Submission of records of Frogwatch observations to the ACT Frogwatch Coordinator.</li> <li>• Have fun!</li> </ul>
ACT Government staff - Wildlife Research and Monitoring	<ul style="list-style-type: none"> <li>• Provide technical advice relating to monitoring strategy and guidelines.</li> <li>• Provide expert presentation at Frogwatch training events.</li> <li>• Assist with confirmation of results.</li> </ul>
University of Canberra staff - AERG Academic staff	<ul style="list-style-type: none"> <li>• Provide technical advice relating to monitoring strategy and guidelines.</li> <li>• Provide expert presentation at Frogwatch training events.</li> <li>• Assist with confirmation of results.</li> </ul>
ACT NRM Network - Molonglo Catchment Group, Southern ACT Catchment Group, ANU Green, and other groups	<ul style="list-style-type: none"> <li>• Assistance with promotion and recruitment of participants and other advice.</li> </ul>
ACT Government - NRM Technical Support Officer	<ul style="list-style-type: none"> <li>• Production of Frogwatch abundance and distribution maps.</li> </ul>
Australian National Botanic Gardens	<ul style="list-style-type: none"> <li>• Provision of venue for Frogwatch training events.</li> </ul>

## 9. TRAINING OUTLINE

A number of training opportunities are available to Frogwatch participants.

### **Introductory Frogwatch Training Seminar**

This seminar covers all participants need to know to participate in the National Water Week Community Frogwatch Census. Essential for the first time Frogwatcher, and a good refresher for those who have participated in previous years.

Participants will learn about:

- Basic safety guidelines;
- Procedures for preventing the spread of frog pathogens;
- Frog species of the ACT and region and their habitat requirements;
- Frog call identification techniques; and
- Procedures for undertaking and recording Frogwatch observations.

This seminar includes a short walk to a nearby pond to practice frog identification skills.

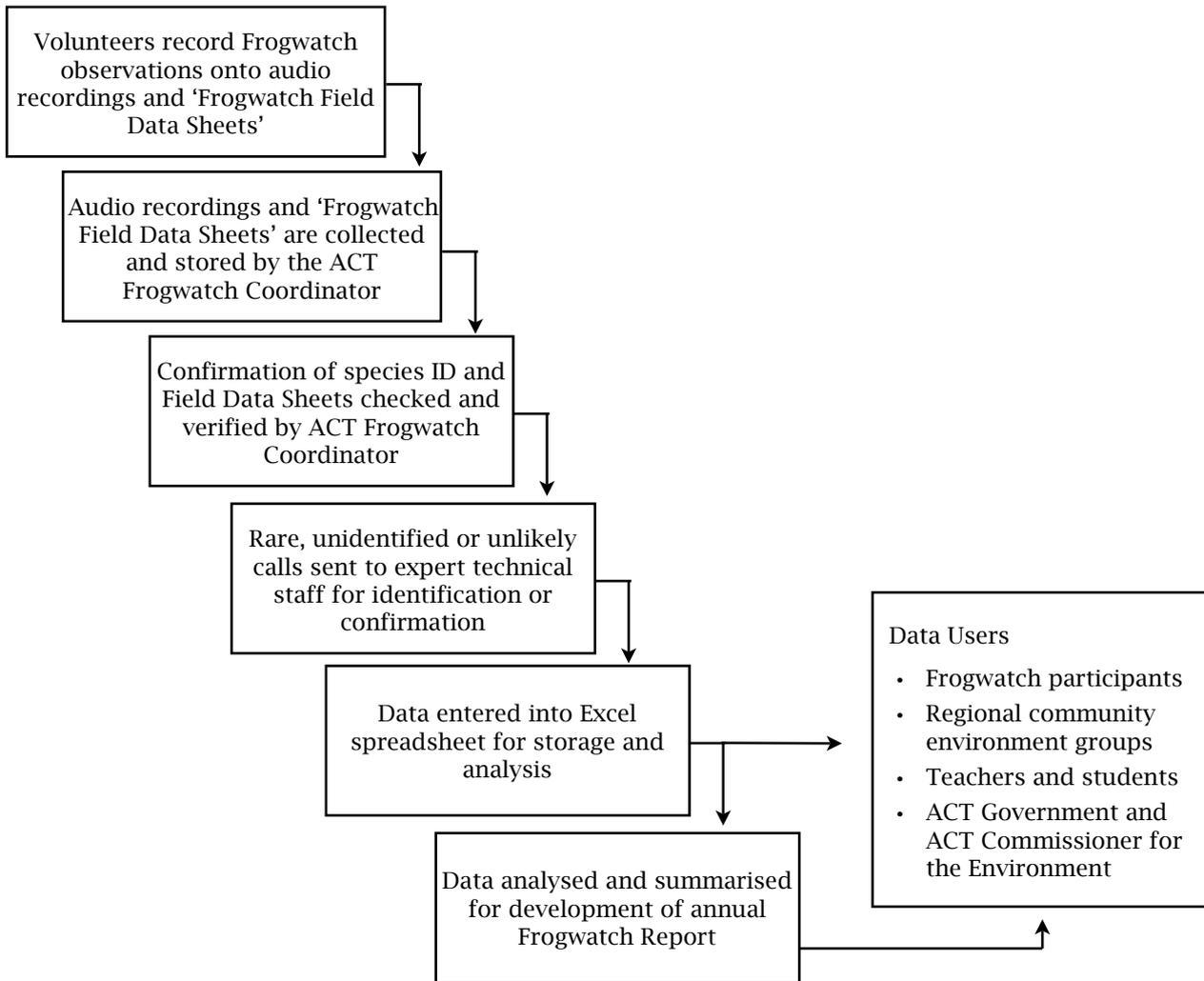
### **Frogwatch Field Trip**

This field trip is aimed at experienced Frogwatchers who would like to further develop their frog identification and monitoring skills. Participants will have the opportunity to investigate important components of frog habitat and talk with expert ecologists in the field.

The field trip will include:

- Reminder of basic safety guidelines and pathogen control guidelines;
- Visit various frog sites and observe habitat types and frog requirements;
- Habitat requirements of specific species; and
- Advanced identification training - identifying multiple calls at one site and estimating abundance.

## 10. HOW WILL THE DATA BE MANAGED AND REPORTED?



Data collected as part of the ACT and Region Community Frogwatch Census will be used to develop the annual Frogwatch Census Report that outlines the distribution and abundance of frogs in the region. It is expected that data analysis will be limited to describing the occurrence and estimated abundance of each species for the first few years of the monitoring program. As a bank of information is built up, a more rigorous analysis of the data will be possible.

A annual ACT and Region National Water Week Community Frogwatch Census Report is distributed to all participants, relevant Government staff and other interested people. Past Frogwatch Reports are available at: [www.ginninderralandcare.org.au](http://www.ginninderralandcare.org.au)