



FROGWATCH

ACT and Region
National Water Week
Community Frogwatch Census Report

October 2005

Produced by the Ginninderra Catchment Group



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The Australian Capital Territory 2005 National Water Week Community Frogwatch Program was carried out by the Ginninderra Catchment Group with the assistance of funds made available by the ACT Government under the ACT Government Environment Grants Program.

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1. ABOUT FROGWATCH

The ACT and Region National Water Week Community Frogwatch Program is a community frog monitoring program which conducts a Frogwatch Census in spring each year. This report presents the results of the 2005 Frogwatch Census.

ACT Frogwatch was initiated by the Ginninderra Catchment Group in 2002, when over 40 volunteers monitored frog calls at 29 sites. Since then the program has expanded dramatically to provide an annual snapshot of frog species and abundance in the ACT and surrounding NSW region. In 2005, over 200 volunteers participated in the Census, monitoring at over 140 sites. An amazing total of 276 field data sheets were completed and submitted in 2005.

Frogs 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.

The information collected will help to identify future community monitoring and action priorities that will create a more frog friendly Upper Murrumbidgee Catchment.

The aim of the program is: To conduct an ACT and Region Community Frogwatch Census that will generate significant information about the presence and abundance of frog populations in the region.

Census Information Objectives

- Increase understanding of frog distribution and abundance;
- increase knowledge and understanding about the health of our wetlands and 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 Environment ACT Wildlife Research and Monitoring Unit professional frog monitoring program; and
- 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 CAMPFIRE (Community Assessment Monitoring Program for Fire Impacted River Ecology) and Waterwatch groups with 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, and provide support for the protection and creation of high quality habitat; and
- ensure that Frogwatch participants do not contribute to the spread of frog pathogens.



2. METHODOLOGY

Frogwatch participants attended a Frogwatch Seminar in the lead up to the Frogwatch Census. Two introductory seminars were held where volunteers learnt about the different frog species in the region, their mating calls, basic safety and site selection guidelines, procedures for preventing the spread of potential frog pathogens, frog identification techniques and procedures for undertaking and recording Frogwatch observations.

Approximately 40 Frogwatchers attended a field trip to Mulligans Flat Nature Reserve where they gained experience in identifying frog calls, where up to seven species were able to be observed calling at the various sites we visited. Experts from Environment ACT and the University of Canberra were present to assist with identification techniques, estimating abundance and identifying important habitat components.

All participants received a Frogwatch Kit, which contained:

- The Frogwatch monitoring plan;
- a list of frog species of the ACT and region, with descriptions of habitat and calls;
- pathogen control guidelines;
- frog facts;
- a list of available frog resources;
- procedures for monitoring frog calls;
- Frogwatch field data sheets;
- contact details and feedback forms;
- an audio CD - "Frog Calls of the ACT and South East NSW" by Ederic Slater;
- a Frogwatch thermometer; and
- a blank cassette tape.

Each participant or group then registered their Frogwatch site(s). Participants were encouraged to monitor at the same site as previous years, or to select useful sites that had intrinsic value to the program. For example, a Waterwatch monitoring site, a newly constructed wetland area, and environmentally sensitive or bushfire affected area, proposed restoration sites, farm dams or a site in which they have a particular interest.

Frog calls and other observations were then observed and recorded at sites across the ACT and region according to the guidelines shown in Figure 1. Participants were encouraged to conduct their monitoring on more than one occasion at the same site to increase the statistical reliability of the data.

Figure 1. Frogwatch Monitoring Guidelines

| | Season | Dates | Time of Day | How Often | Duration |
|--------------------|--------|--|--|---|--|
| Minimum monitoring | Spring | 16-23 October (National Water Week) | During the 2 hours after dark (ie between about 7:30 - 9:30 pm during October) | On at least one evening during National Water Week | Tape recording of frog calls for 2 - 5 minutes |
| Extra Monitoring | Spring | 6 October - 2 November | During the 2 hours after dark (ie between about 7:30 - 9:30 pm during October) | Monitoring at the same site on a number of evenings during the specified dates is desirable | Tape recording of frog calls for 2 - 5 minutes |



At each site Frogwatchers recorded details about:

- Site location;
- habitat;
- vegetation;
- weather conditions; and
- frog species observed.

These details were recorded onto field data sheets. Participants took tape recordings of the sounds present during the early evening at their site. Even if there were no frogs calling, the data were collected and submitted. This information was then sent to the Frogwatch Coordinator for confirmation and processing. Photographs of Frogwatch sites were also submitted to the Frogwatch Coordinator.

All audio tapes were checked for accuracy of identification by the Frogwatch Coordinator. A number of the tapes were also checked by staff from Environment ACT Wildlife Research and Monitoring and the University of Canberra to confirm unusual species or calls that were difficult to identify.

3. QUALITY ASSURANCE AND QUALITY CONTROL

The data collected for the 2005 ACT and Region National Water Week Community Frogwatch Census has undergone a strict process that ensures the quality of the data is very high. The quality control procedures employed include:

- Monitoring of calls at all sites was undertaken during the specified dates between 6 October - 2 November 2006, during the first 2 hours after dark. Observations taken outside of these specified times are highlighted in *italics* in the results section of this report; and
- Audio recordings were taken at all monitoring sites. These recordings were then used to confirm identification of species and the number of frogs calling. This data was assessed by the Frogwatch Coordinator. Unusual or difficult results were investigated by the Environment ACT Wildlife Research and Monitoring Unit and University of Canberra staff. Any data that has not been confirmed is not included in this report.

