

FROGS – IDENTIFICATION

Background

Frogs can be found almost anywhere in Australia in many different types of habitats. Most frog species have their own preferred niche e.g. in and around vegetation, on the edges of ponds, swamps and dams, under stones and logs, in trees and foliage, in puddles where water occurs only occasionally, under the eaves of buildings and around water tanks. In order to identify frogs the following methods may be used;

- Record frog calls that you hear and then play the calls back to the same frogs. They often respond to the recording enabling you to make a visual identification
- Take photos for verifying identifications
- Use 'triangulation', a method involving 3 people. To pinpoint the frog's location, participants surround the frog, keeping roughly equal positions from each other. Each person approaches, carefully and slowly, pointing as they move closer to where the frog can be heard in order to locate the frog. The same procedure can be used at night with torches
- Listen to the frog's call and compare it with known frog calls in your region. Every species has a distinct mating call which only the male emits
- Survey frogs at night when they are most active. Some frogs such as the Growling Grass Frog may be seen basking during the day in sunny spots near the edge of water.

Aim

The aim of this session is to:

- Use an on-line frog identification key to develop skills in identifying the key features of frogs
- Use the internet to investigate frog calls
- Conduct a survey of frogs in the local area.

Materials

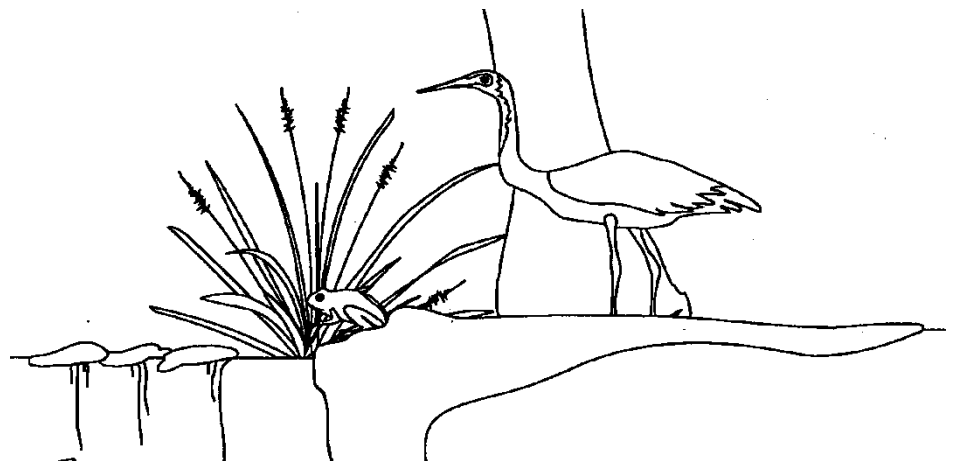
- Access to computers and the internet
- Key to Victorian frogs website <http://frogs.org.au/frogs/key.html#key>
- The frogs of Victoria <http://frogs.org.au/frogs/of/Victoria/>
- Melbourne Water <http://www.melbournewater.com.au/frogs>

Notes for teachers

- This activity requires internet access for students to the above websites.
- The introductory activity involves students using an on-line frog identification key to identify the Growling Grass Frog. Each key feature is recorded by the student.
- Key features include:
 - Pads present on digits (fingers and toes)
 - Pupils horizontal
 - Tympanum (ear) distinct
 - A distinct dorso-lateral fold. Frog predominantly green
 - Back distinctly warty.
- Students then access the Melbourne Water Frogs website to determine the frog species within their local Council or suburb from past surveys. They access information relating to distribution, habitat and calls for each species.
- Finally, students may plan to conduct their own local survey using information supplied via Melbourne Water. The best time to conduct a local survey is when frogs are breeding and this information can be gained from the previous activity. You may decide that students should register to participate in one of Melbourne Water's Autumn or Spring Census activities so that they can contribute their own data to the database.

Estimated Duration

- Introduction: 20 mins
- Using the internet to investigate frog calls: 30 mins
- Conducting your own local survey (Optional extension activity)



FROGS - IDENTIFICATION

Introduction

In order to complete this activity, view the powerpoint presentation 'Frog Identification' and one of the many web-sites providing information about frog identification e.g. <http://frogs.org.au/frogs/key.html#key>

Wherever possible it is preferable to identify a frog by its call, however only male frogs call, most frogs call at night and only during a defined breeding season. Photographs can be useful however frog coloration is extremely variable. A frog identification key that focuses on the important features of each species draws attention to the unique features of each species. Keys usually provide two alternatives. Choose the alternative which best describes your frog. This will then lead to a further question until the frog is identified.

1. Use the on-line frog identification key to identify the species below. Keep a record of the choices you make at each alternative.

2. Which frog have you identified using the on-line key?



Using the internet to investigate frog calls

Melbourne Water has set up a unique website detailing the results of a community-based frog monitoring program within greater Melbourne. In this activity you will focus on frog life cycles to discover when, why and where frogs call.

3. Use the internet to access the following website

<http://www.melbournewater.com.au/frogs>

Click on the Frog Census Results to find the species which have been located within your local Council or suburb.

Which species have been found within your local Council or suburb?

4. Click on each species name to see a photo and some information about each species.

Record this information below.

5. For more information about the distribution, habitat and distinct call of each frog, click on the link to

The Victorian Frog Group as indicated on the website <http://www.frogs.org.au>

Locate each of the frog species listed in Question 3 and go to the **detailed field guide**. Use the life cycle diagram for each species and listen to each call to complete the table below.



Example: Growling Grass Frog (*Litoria raniformis*)

Melbourne Water <http://www.melbournewater.com.au/frogs>

Type of frog	Months of the year calling	Months of the year breeding	Season calling and breeding	Call sounds like.....
e.g. Growling grass frog	August – April	August – April	Summer, Autumn, Late Winter and Spring	'Crawark-crawark-crok-crok'

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Conducting your own local survey

Melbourne Water conducts two community frog census activities in Autumn and Spring each year, however you can conduct your own local survey at any time using the **step by step guide** available from the Melbourne Water website www.melbournewater.com.au/frogs

6. Click on the **step by step guide** to access various information sheets relating to conducting a frog survey including how to record frog calls digitally.

Use the following data sheet from Melbourne Water to record the frog species that you find.

You may wish to participate in one of the Melbourne Water frog census activities so that your data is included in the database.

Observer's Name:		
Postal Address (include postcode):		
Email Address:		
Telephone:	(Home)	(Mobile)

SITE INFORMATION

Site name: _____

Melways Reference (Required): _____

Page Number: _____ Grid Reference: _____

Site description (e.g. nearby street names, suburbs/towns, parks/reserves etc) _____

HABITAT (please select one habitat type that best reflects the major habitat at the site)

Dam Drain Pond River Lake or Reservoir Spring
Wetland Stream Swamp Other

Date of Recording (e.g. 11/10/2008) _____

Starting Time (e.g. 20:30) _____

FROGS HEARD CALLING

(Please indicate the estimated number of frogs you heard calling, please note if you heard no frogs)

How many types of frog did you hear calling?

Estimated total number of frogs you heard calling?

What species of frog(s) did you hear calling? (optional)

COMMENTS (optional)

Tell us about any interesting things that happened during your survey, or general comments and suggestions. You may also note sound interference on your recording.
