

Dams to habitat

Farm dam restoration for the Growling Grass Frog

Fact Sheet No. 2, November 2009

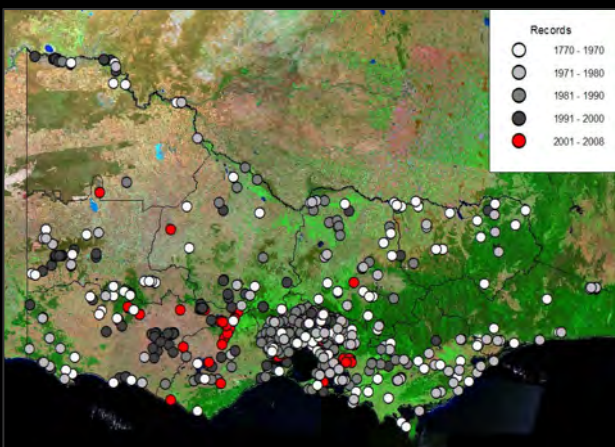
The Growling Grass Frog

The Growling Grass Frog (*Litoria raniformis*) is one of many frog species that has the ability to live in farm dams. While many landowners may have never seen this frog, they may be familiar with their call (crawark-crawark-croc-croc) over the warmer months of the year. You can listen to the frog call at www.frogs.org.au.



An infrequently seen dam resident

The frog is recognised as a threatened species at state, national and international levels. It historically lived in most parts of Victoria, however their population is now in decline. This is most likely because of degraded habitat and the fungal disease chytridiomycosis.



Distribution of the Growling Grass Frog (records since European settlement)

Victorian farm dams provide habitat and drought refuge for these lesser-known farm inhabitants.



A typical farm dam used for stock watering

DSE's Dams to Habitat project

The Department of Sustainability and Environment's Dams to Habitat program is now in its second year and is investigating the potential to increase GGF habitat across Victorian rural areas by encouraging the frogs to use farm dams. This is being done by making simple enhancements.

The program began by determining why frogs were making use of some farm dams but not others. Previous research had shown that frogs were attracted to a dam that provided a mix of underwater and floating aquatic plants, as well as refuge by cover on the banks of the dam.

Why have the GGF in your dam?

The GGF could easily be described as the 'Kermit' or bullfrog of Victorian frogs, being large and green. The frog is an indicator that the dam is healthy and the water quality is good.

By creating dam habitat for 'Growlers', other biodiversity gains are likely which include increased diversity of aquatic invertebrates (including yabbies) and waterbirds.

Restoring farm dams for the Growling Grass Frog

Progress so far

Between October 2008 and January 2009, farm dams and adjacent waters were surveyed for GGF in the Corangamite, Glenelg Hopkins, Wimmera and North Central Catchment Management Authority (CMA) regions. The occurrence of GGF within the Goulburn Broken CMA region is being investigated this year (refer to map on right). Dams were surveyed within two kilometres from a known GGF population.

Dams were surveyed for adult frogs on three occasions using spotlights and call recognition. Tadpoles were trapped on two occasions using a variety of techniques.

Sites chosen for the study in 2008/2009

CMA region	Number of sites	% sites with GGF recorded
Corangamite	28	50
Glenelg Hopkins	30	60
Wimmera	17	47
North Central	13	46
Total	88	52

Landowners were provided with the survey results relevant to their area and information on the frog species detected over the course of the 2008-2009 surveys. Nine frog species were recorded across all regions.



CMA regions covered in the project to date

Where to from here?

The habitat of a number of unoccupied dams will be enhanced to see if the GGF can be encouraged to live and breed in these modified dams. An unoccupied dam in the same area of each enhanced dam will be selected for a comparison (a control site). Control and treatment dams will be surveyed over three years following dam enhancements (refer to diagram next page).

Additional sites will be surveyed over 2009–2010, and subsequent GGF breeding seasons, to allow additional enhancement sites to be established each year.



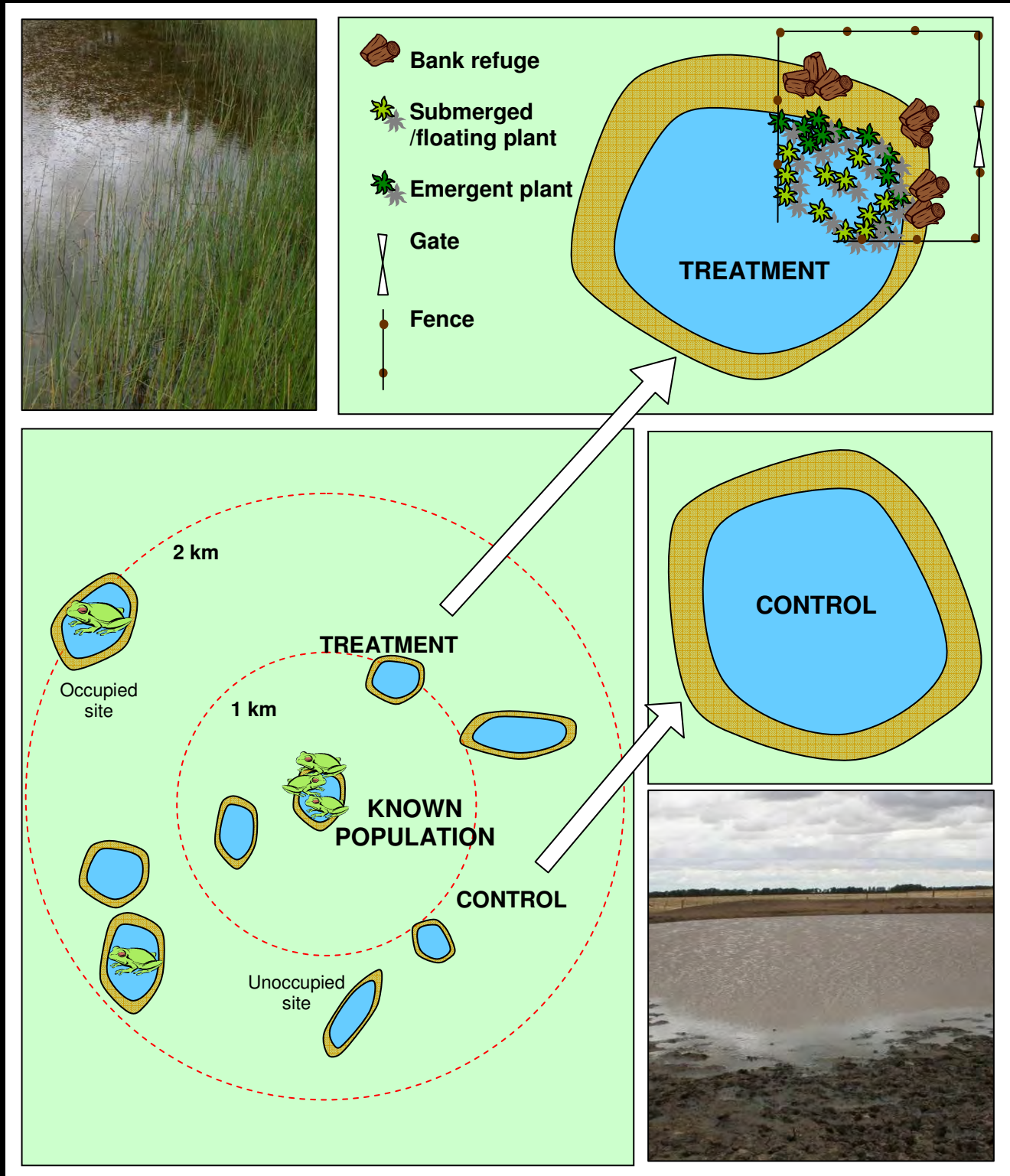
A young landowner's nervous first encounter with a Growler on a night survey



Restoring farm dams for the Growling Grass Frog

Enhancing farm dams

Each dam will be enhanced by adding emergent and submerged/floating aquatic plants and will also include the creation of refuge habitat on the banks of the dam. Fences will be erected around the specified treatment area, to keep stock away from the newly vegetated areas, allowing the plants to grow. Stock will still be able to use the dam for watering.



Diagrammatic representation of the study site and dam habitat enhancements

Restoring farm dams for the Growling Grass Frog



Dam habitat not favourable for Growling Grass Frog



Dam habitat supporting a breeding population of Growling Grass Frogs

Project partners



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Authorised by the Victorian Government, 8 Nicholson Street, East Melbourne.

Printed by NMIT Printroom, Preston

ISBN 978-1-74242-336-4 (print)
ISBN 978-1-74242-367-1 (online)

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