



Giant Barred Frog Habitat Restoration

Mixophyes iteratus

Improving endangered frog habitat in south-east Queensland

WetlandCare Australia and WWF-Australia are undertaking weed control and bush regeneration works to remove Giant Reed (scientific name) from endangered Giant Barred Frog (*Mixophyes iteratus*) habitat in the Numinbah Valley, south-east Queensland.

Funding for this project has been provided by the Threatened Species Network Community Grants, a joint initiative of WWF-Australia and the Australian Government.

The project involves collaboration between: private landholders; Gold Coast City Council; WetlandCare Australia; Queensland Frog Society; Griffith University; and, Permaforest Pty Ltd to collect information on the Giant Barred Frog and other frog species in the area. This information will be distributed to key management and community awareness organisations and individual landholders in the region.



Giant Barred Frog (*Mixophyes iteratus*) (Photo: Steve McEwan www.reptileworld.net.au)

Population numbers and distribution

Giant Barred Frogs are the second largest species of Australian frog, up to 115 cm in length. Having disappeared from much of their former distribution along the humid east coast of Australia, they are now a critically endangered species with an estimated 5,000 – 10,000 adult individuals remaining in the entire species population.

Did you know?

Giant Barred Frogs are good travellers and when not breeding can disperse hundreds of metres from streams

What does the Giant Barred Frog look like?

Mixophyes iteratus are large frogs, growing up to 115mm in length. This frog is dark olive to black on its back, with irregular dark brown blotches starting between the eyes and running down the back. There is also a thin stripe running from the snout through the eye. The arms and legs have wide, dark bars which distinguish them from other barred frogs. There is also a broad band of dark spots and blotches down the sides of the body. The iris is golden above and dark below. The belly is smooth and white. The toes are fully webbed and the back is finely granular (Frogs Australia Network, 2005).

Habitat

Giant Barred Frogs live in deep, damp leaf-litter in rainforests, moist eucalyptus forest and nearby dry eucalyptus forest at elevations below 1000m (National Parks and Wildlife Service, 2002). Breeding is prevalent during late spring and summer when females lay eggs onto moist streambanks from where tadpoles drop into the water upon hatching. The tadpoles grow up to 80mm in length and can take up to 14 months before becoming frogs. Large insects and spiders are their primary food source.

Why is the Giant Barred Frog threatened with extinction?

A number of potential impacts have occurred within the species' range which may have contributed to the decline in population numbers and its endangered status including:

- Weed invasion and the spraying of herbicides close to streams
- Vegetation clearance
- Pollution and sedimentation of water bodies
- Changes in water flows, either increasing or decreasing
- Reduction of leaf litter and fallen log debris as a result of burning and timber clearance through forestry harvesting
- The chytrid fungus (capable of causing sporadic deaths in some amphibian populations)
- Predation of eggs and tadpoles by introduced (exotic) fish such as *Gambusia holbrooki*



Project site, Numinbah Valley (Photo: Nicola Sheard, WetlandCare Australia)

Project Objectives

- to increase the area of habitat suitable for the Giant Barred Frog and to improve existing Giant Barred Frog habitat through controlling invasive weeds and replanting native species
- to increase community awareness of the Giant Barred Frog in the Numinbah Valley including: their habitat needs; potential threats facing their survival; and, the remedial actions required to mitigate those threats
- to build upon the conservation efforts already undertaken in the area with the long-term goal of establishing habitat corridors between sites, thereby increasing population sustainability

Long term conservation

Long term conservation of the Giant Barred Frog is reliant upon vital habitat protection and rehabilitation to improve conservation management.

What can you do to help protect the Giant Barred Frog?

- Maintain vegetation and deep leaf litter around streams
- Minimise stock access to creeks to reduce bank trampling and maintain water quality
- Stay out of creeks – you may crush egg masses and metamorphosing tadpoles if walking up a creek bed
- Avoid handling frogs
- Minimise run-off from agricultural chemicals
- Resist the temptation to swim in rainforest creeks – remember sunscreens and insect repellents introduce chemicals which kill frogs
- Keep frog habitat clean – soap, shampoo and detergents should never be used in streams
- Avoid burning close to streams to maintain moist leaf litter and healthy stands of native vegetation
- Keep your garden free of chemicals including fertilisers, pesticides and insecticides
- Report any Giant Barred Frog sightings to your local National Parks and Wildlife Service office

For further information about this project please contact:

Simone Haigh
WetlandCare Australia
PO Box 114 Ballina NSW 2478
T: (02) 6681 6169
E: simoneh@wetlandcare.com.au
W: www.wetlandcare.com.au



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australia

Prepared by Nicola Sheard
WetlandCare Australia
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Threatened
Species
Network



Australian Government



WWF

The Threatened Species Network is a community-based program of the Australian Government and WWF-Australia.

References:

Frogs Australia Network (2005) **Australian Frog Database**.
www.frogsaustralia.net.au/frogs/display.cfm?frog_id=50

NSW National Parks and Wildlife Service (2002). **Threatened Species of the Upper North Coast of New South Wales – Fauna**. NPWS