Zoos Victoria's Fighting Extinction Species **GIANT BURROWING FROG** Heleioporus australiacus Vulnerable

Arguably one of the most striking amphibians in Australia, the Giant Burrowing Frog has always been considered rare in Victoria with limited survey success even from known habitat. The species is considered Critically Endangered in Victoria with

almost all ecological and behavioural data being recorded from populations in the north of its range. It is critical that we gain an understanding of this species ecology in Victoria so we can improve its conservation status.

VICTORIA
Fighting Extinction

Photo: Rohan Bilney



As we develop strategies to halt biodiversity decline in Victoria, some of our lesser known species continue to challenge us. The Giant Burrowing Frog (*Heleioporus australiacus*) remains among Victoria's most poorly understood species. Critical data collection is needed to effectively assess the status of this species in Victoria.

KEY PROGRAM OBJECTIVES

- · Survey known and suitable habitat.
- Establish an effective long term monitoring program.
- · Establish captive husbandry.
- Investigate genetic differences between northern and southern populations.

PROGRAM OUTCOMES

This is a newly prioritised Zoos Victoria Fighting Extinction species, we aim achieve the objectives above and annually report on outcomes through Zoos Victoria communication channels.

THE SPECIES

The Giant Burrowing Frog is a large ground dwelling species with muscular forelimbs growing to around 95mm. Currently it is listed as a single species ranging from Newcastle in NSW, south to Walhalla in VIC, however there is considerable morphological and genetic evidence suggesting it is in fact two species.

It is rarely encountered in Victoria largely due to lack of species knowledge and cryptic habits. Recent 2015 surveys presented 15 records from a total of nine males from the Mitchell River catchment in East Gippsland, with subsequent incidental records from the same area. Survey methods focus primarily on visual detection, auditory (sound records and manual), tadpole and road transects.

Threats to the Giant Burrowing Frog are numerous including feral cat and foxes, land clearing, fuel reduction burning, grazing, timber harvesting and chytrid fungus however all require further investigation.

Over the next five years, we will collaborate with stakeholders to collect population data and establish long term monitoring programs to inform conservation actions for this rare species. We will utilise ground-breaking environmental DNA survey techniques to assess remote habitat in a thorough and cost-effective way. This data will inform critical actions in the later part of the Plan and contribute to developing husbandry knowledge for the Giant Burrowing Frog.

THE PLAN

The first steps towards improving our knowledge of this species are to:

Conduct on-ground curveys

Conduct on-ground surveys in key habitat.	\$160,000
Establish Giant Burrowing Frog husbandry protocols and secure individuals in our care.	\$70,000
Undertake eDNA survey of key streams.	\$140,000
Welcome this new species onto Zoos Victoria's priority list establishing the GBF's presence at our zoos and online as part of our local threatened species commitment.	\$15,000

Total cost over five years \$385,000

How can I help?

We are currently developing survey techniques to effectively monitor this poorly known species in Victoria. Additionally we will learn about its captive biology to answer key knowledge gaps in case a future recovery program is required. You can support our Wildlife Conservation Master Plan 2019-2024 by donating at:

PROGRAM PARTNERS

zoo.org.au/donate

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