

Zoos Victoria's Priority Species

SPOTTED TREE FROG

Litoria spenceri

Critically Endangered



Photo: Raelene Hobbs

The Spotted Tree Frog is listed as Critically Endangered and, like many other amphibians, populations have declined to crisis point. Zoos Victoria has been involved in the Recovery Program for Spotted Tree Frogs since 1991. Zoos Victoria has conducted

critical research to identify the factors linked to the species decline in order to identify potential management approaches to protect this frog and work to raise public awareness and support for this beautiful species.

ZOOS
VICTORIA
Fighting Extinction

Zoos Victoria is committed to Fighting Extinction

We are focused on working with partners to secure the survival of our priority species before it is too late.



Threatened by a fatal fungal disease and predation from introduced predatory fish, this little tree frog is struggling to survive in its rocky stream habitat. Zoos Victoria is committed to securing a future for this charismatic little frog. We are working closely with the Spotted Tree Frog Recovery Team and community groups to protect the remaining wild populations. Concurrently, we are maintaining a captive population to raise awareness of the Spotted Tree Frog and its plight.

KEY PROGRAM OBJECTIVES

- Monitor wild populations to assess the frog's ongoing conservation status and gain knowledge of the species' population dynamics.
- Work with partners to protect the Spotted Tree Frog in wild safe havens.
- Increase community awareness of the plight of Spotted Tree Frogs and secure support for their conservation.
- Breed captive frogs for release into wild sites.

PROGRAM OUTCOMES

- Release of tadpoles into wild study sites to aid research.
- Assessment of all historic sites at which the species has previously been detected.
- PhD research completed into key threats and modelling to assist conservation actions.
- Population monitoring enabling us to develop a better understanding of the threatening processes at work.
- Community engagement to assist conservation outcomes for the Spotted Tree Frog.
- New Spotted Tree Frog displays at Healesville Sanctuary and Melbourne Zoo.

THE SPECIES

Spotted Tree Frogs are found in fast-flowing streams littered with large rocks and boulders on the north-west side of the Great Dividing Range. They have a fragmented distribution across this area and occur in both Victoria and New South Wales. Spotted Tree Frogs can live for more than 12 years and lay between 50-1000 eggs during each breeding season. Males are sexually mature at 3-4 years, however females can take up to six years to mature. Of the few populations remaining, all are considered vulnerable to extinction from a variety of threats including:

- Predation by introduced fish species such as Redfin, Carp and Trout.
- Habitat disturbance from forest management, road works and recreational activities in mountain catchments, causing damage to riparian habitat and weed invasion.

- Chytridiomycosis (caused by Amphibian Chytrid Fungus) which infects the skin of frogs, causing damage to the keratin layer resulting in fatalities. Chytridiomycosis is thought to be responsible for the decline of many amphibian species in Australia and around the globe.

As the remaining populations of Spotted Tree Frogs are small and isolated, they are also vulnerable to catastrophic events like wildfire, with little chance of re-colonisation.

THE PLAN

The following critical next steps will enable Zoos Victoria, along with our partners to move forward knowing that we are doing everything we can to prevent the extinction of this species:

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| Annual monitoring to support key management actions in partnership with the Threatened Species Hub of The National Environmental Science Program (NESP). | \$685,000 |
| Establish new wild safe havens and bolster populations through reintroduction or translocation. | \$125,000 |
| Use ground breaking scientific techniques such as eDNA and acoustic recording, to secure the Spotted Tree Frog. | \$205,000 |
| Maintain captive population to support recovery objectives. | \$286,000 |
| Assist our allies to run community projects in and around critical habitat - aiming to increase care for and knowledge of the species and facilitate individual behaviours that protect the frogs and waterways. | \$10,000 p.a |
| Creation of wild safe havens via non-native fish management in partnership with recreational fishing industry and broader community. | \$315,000 |
| Total cost over five years | \$1,666,000 |

How can I help?

We are working on increasing community awareness and working with partners, but we still need all the support we can get. You can support our Wildlife Conservation Master Plan 2019-2024 by donating at: zoo.org.au/donate

PROGRAM PARTNERS

Amphibian Research Centre
frogs.org.au/arc

Department of Environment and Energy
environment.gov.au

Department of Environment, Land, Water and Planning
delwp.vic.gov.au

Office of Environment and Heritage (NSW)
environment.nsw.gov.au

Parks Victoria
parkweb.vic.gov.au

Threatened Species Recovery Hub of the National Environmental Science Program
nespthreatenedspecies.edu.au

University of Melbourne
unimelb.edu.au