Zoos Victoria's Priority Species

# **GUTHEGA SKINK**

Liopholis guthega

Endangered



Guthega Skink populations are particularly vulnerable to extinction due to their isolation and restricted distribution in limited alpine habitat. Zoos Victoria is committed to ensuring the survival of this alpine skink species. We are working to establish the first-ever captive population

of Guthega Skinks and investigate the feasibility of increasing genetic diversity of the Victorian population. This will enable us to develop species-specific expertise and successfully intervene if wild populations are at imminent risk of extinction from catastrophic disturbances such as bushfires.

ZOOS
VICTORIA
Fighting Extinction



Recent research has discovered extremely low genetic diversity of Victorian Guthega Skink compared to those found in NSW. This may have a detrimental long term effect on this highly restricted population. Additionally the threat of habitat decimation by bushfire would have a drastic impact on Guthega Skinks – potentially killing many individuals and rendering any survivors highly vulnerable to predators such as foxes and birds of prey. With the only other population on a different mountain plateau nearly 100km away, there would be little hope of natural re-colonisation. Luckily for these skinks, Zoos Victoria knows a thing or two about safekeeping the wealth of Victoria's fauna, and is working to implement a strategy to save this Endangered species.

#### **KEY PROGRAM OBJECTIVES**

- Develop captive husbandry protocols and a breeding action plan.
- Investigate the feasibility of genetic rescue of Victorian Guthega Skink.
- Maintain wild populations across their current range.
- Raise community awareness of the Guthega Skink and the conservation of alpine environments.
- Install a new climate controlled facility at Healesville Sanctuary.
- Scope the micro-climate requirements of alpine species as well as the potential to establish outdoor enclosures during winter.

#### **PROGRAM OUTCOMES**

- Permits for collection of Guthega Skinks have been obtained.
- · Captive born Guthega Skink.
- · Purpose built captive facility.

Guthega Skinks are being cared for and displayed at Healesville Sanctuary. Our reptile specialists are developing suitable husbandry and breeding techniques for this unique species, as we continue to learn more about them.

### THE SPECIES

Guthega Skinks are only found in rocky alpine tussock grasslands, heathlands and snow-gum woodlands at sites more than 1,600m above sea level. Until recently little was known about this elusive skink, they live in family groups, hiding in burrows dug under rocks and vegetation where females give birth to live young. They hibernate through the cold and often snowy winter period, and may live for at least eight to ten years.

Their restricted and fragmented distribution means that Guthega Skinks are particularly vulnerable to catastrophic disturbances such as bushfires. As a species dependent on alpine environments, their ecosystem is also likely to be affected by climate change.

Other threats to the Guthega Skink include:

- The construction and maintenance of ski resorts and roads.
- Grazing and trampling by exotic herbivores such as feral horses and cattle.
- · Predation by feral species such as foxes.

#### 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:

Wild monitoring plus targeted collection of animals for the captive breeding program. \$270,000

\$300,000

\$466,000

\$110,000

\$10,000

\$1,156,000

Determining through captive trials whether 'genetic rescue' is a viable option to enhance the extremely low genetic diversity observed in the Victorian Guthega Skink population.

Maintaining the captive population.

Developing and implementing a plan to build numbers of skinks in the wild.

Activations at our zoos and online that aim to increase community care and knowledge of the skink and generate support for the conservation projects.

Total cost over five years

How can I help?

We are currently developing husbandry and breeding techniques for this species, 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

Arthur Rylah Institute ari.vic.gov.au

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

Falls Creek fallscreek.com.au

La Trobe University

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



