## Nature Conservation (Alpine Tree Frog) Conservation Advice 2019

#### Notifiable instrument NI2019-242

made under the

Nature Conservation Act 2014, s 90C (Conservation advice)

#### 1 Name of instrument

This instrument is the *Nature Conservation (Alpine Tree Frog) Conservation Advice 2019.* 

#### 2 Commencement

This instrument commences on the day after its notification day.

#### 3 Conservation advice for the Alpine Tree Frog

Schedule 1 sets out the conservation advice for the Alpine Tree Frog (*Litoria verreauxii alpina*).

Arthur Georges Chair, Scientific Committee 1 May 2019

### Schedule 1

(see s 3)





### **CONSERVATION ADVICE**

# ALPINE TREE FROG Litoria verreauxii alpina

#### **CONSERVATION STATUS**

The Alpine Tree Frog *Litoria verreauxii alpina* (Fry, 1915) is recognised as threatened in the following jurisdictions:

National Vulnerable, Environment Protection and Biodiversity Conservation Act 1999

ACT Vulnerable, Nature Conservation Act 2014

NSW Endangered, Biodiversity Conservation Act 2016

VIC Threatened, Flora and Fauna Guarantee Act 1988

Critically Endangered, Advisory List of Threatened Vertebrate Fauna in Victoria

#### **ELIGIBILITY**

The Alpine Tree Frog is listed as Vulnerable in the ACT Threatened Native Species List as it is listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) (Department of Environment 2014). It was demonstrated that the Alpine Tree Frog had undergone a dramatic decline throughout its range, had apparently disappeared from the alpine zone and was extremely rare in sub-alpine areas (Hunter et al. 1997, Osborne et al. 1999).

#### **DESCRIPTION AND ECOLOGY**

The Alpine Tree Frog is a relatively small tree frog, growing to about 3 cm long. Colouration is highly variable; there are green, brown and grey forms. They have a black stripe from the nostrils, through the

eyes, to the top of the foreleg, and a (usually divided) broad brown stripe from the eyes and down the back. The distinguishing feature of the Alpine Tree Frog is its warty back, whereas the lowland sub-species, Whistling Tree Frog (*Litoria verreauxii verreauxii*), is generally smooth. The call is a "trilled whistle 'cree...cree...cree...'", heard in late spring and summer. Tadpoles grow to about 4 cm and have a dark olive brown back and a coppery sheen on the sides and underneath (NSW Office of Environment and Heritage (OEH) 2017).



The Alpine Tree Frog does not climb well, and spends much Alpine Tree Frog (David Hunter – NSW OEH) of its time on the ground, where it feeds on a beetles, flies,

spiders and moth larvae (OEH 2017). Breeding occurs in December and eggs are laid in pools, attached to submerged vegetation, with tadpoles metamorphosing into froglets in late summer (OEH 2017). Tadpoles grow to approximately 4 cm and have a dark olive brown back and coppery sheen along the sides and underneath the body (Department of Environment (DOE) 2014).

#### **DISTRIBUTION AND HABITAT**

The Alpine Tree Frog occurs in the alpine and sub-alpine zones of south-eastern NSW and Victoria (ALA 2018), generally higher than 1100 m above sea level (OEH 2017). Most locations are within national parks, and some are near alpine resorts (OEH 2017).

Historical records indicate that the Alpine Tree Frog was widespread and abundant throughout much of alpine and sub-alpine zones of south-eastern Australia (Osborne et al. 1999) and utilised a wide variety of aquatic habitats in woodland, heath, grassland and herb fields (DOE 2014). The species can breed in natural and artificial wetlands including ponds, bogs, fens, streamside pools, stock dams and drainage channels that are slow flowing or still (OEH 2017). Non-breeding habitat and overwintering refuges are poorly known but are likely to include flat rocks, fallen logs, leaf litter and other ground debris (OEH 2017).

Surveys in national parks from 1994 to 1998 were made at 49 locations in Victoria, 92 locations in NSW, and nine in the ACT (Osborne et al. 1999). Frogs identified as *Litoria verreauxii alpina* were found at only seven locations in NSW, and none were found in the ACT, although the subspecies may still occur here (Bennett 1997; Osborne et al. 1999). The subspecies was found in at least ten locations in Victoria, forming several populations (Osborne et al. 1999).

Alpine Tree Frogs were common at Ginini Flats and Snowy Flats in 1979 and Peter Ormay photographed the last specimen known from Ginini Flats in the early 1980's (pers comm. W. Osborne).

A probable recent sighting (October 2017) at Mount Clear in Namadgi National Park was recorded in Canberra Nature Map (Canberra.naturemap.org 2018).

Surveys indicate that the Alpine Tree Frog has undergone a dramatic decline throughout its range, and the extent of occurrence has also declined (Osborne et al. 1999; NSW OEH 2002).

#### **THREATS**

The main identified threats to the Alpine Tree Frog in the Commonwealth Conservation Advice (DOE 2014) are:

- infection with amphibian chytrid fungus (Batrachochytrium dendrobatidis)
- trampling by feral horses and cattle
- invasion of alpine bogs and fens by exotic weeds
- pollution
- changes to natural water flows
- climate change including increased UV-B radiation
- habitat loss through fire, construction and development.

#### MAJOR CONSERVATION OBJECTIVES

The priority management objective in the ACT is to reduce the broad landscape threats that contributed to its local decline.

## CONSERVATION ISSUES AND PROPOSED MANAGEMENT ACTIONS

Should the species be found in the ACT, the following actions would be relevant (OEH 2018):

- protect breeding pools from pollution
- minimise the use of herbicides and pesticides in and adjacent to habitat
- · retain fallen timber, rocks and other debris near wetlands and creeks
- protect breeding pools from clearing or disturbance
- maintain natural water flows.

#### OTHER RELEVANT ADVICE, PLANS OR PRESCRIPTIONS

- Commonwealth Conservation Advice Alpine Tree Frog (TSSC 2017)
- Ginini Flats Complex Wetland Ramsar Site Management Plan (ACT Government 2017)
- ACT Conservation Advice High Country Bogs And Associated Fens (Scientific Committee 2019)
- Namadgi National Park Plan of Management 2010 (ACT Government 2010)

#### LISTING BACKGROUND

The Alpine Tree Frog was initially listed as Vulnerable on 19 January 2000 under the *Endangered Species Protection Act 1992* (Cwlth) and eligibility for listing carried over to the *Environment Protection and Biodiversity and Conservation Act 1999* (EPBC Act) on 16 July 2000. In 2019, under the *Nature Conservation Act 2014*, the ACT Scientific Committee recommended that the Alpine Tree Frog be listed in the Vulnerable category in the ACT Threatened Native Species List to align with the EPBC Act listing.

#### REFERENCES

- ACT Government 2010. *Namadgi National Park: Plan of Management 2010*. Land Management and Planning Division, Department of Territory and Municipal Services, Canberra.
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- Bennett R 1997. *Reptiles and frogs of the Australian Capital Territory*. National Parks Association of the ACT Inc., Canberra.
- Department of Environment (DOE) 2014. *Approved Conservation Advice <u>Litoria verreauxii alpina</u> (Alpine Tree Frog).* Department of the Environment, Canberra.
- Fry DB 1915. Herpetological notes. Proceedings of the Royal Society of Queensland 27: 60–95.
- Hunter D, Osborne WS and Smith MJ 1997. *Distribution and Abundance of the Alpine Tree Frog (Litoria verreauxii alpina) in the Australian Alps National Parks: Report on the First Seasons Survey (1996-97)*. New South Wales National Parks and Wildlife Service, Hurstville.
- Office of Environment and Heritage (OEH) (2002). Alpine Tree Frog endangered species listing NSW Scientific Committee final determination.
  - http://www.environment.nsw.gov.au/determinations/AlpineTreeFrogEndSpListing.htm
- Office of Environment and Heritage (OEH) 2017. Alpine Tree Frog profile. OEH NSW, Sydney. http://www.environment.nsw.gov.au/threatenedspecies/
- Osborne W, Hunter D and Hollis G 1999. Population declines and range contraction in Australian alpine frogs. In: A Campbell, *Declines and Disappearances of Australian Frogs* (145–157). Environment Australia, Canberra.
- Scientific Committee 2019. *Conservation Advice High Country Bogs and Associated Fens Ecological Community*. Environment Planning and Sustainable Development, ACT Government Canberra.

#### **FURTHER INFORMATION**

Further information on this or other threatened species and ecological communities can be obtained from Environment, Planning and Sustainable Development Directorate (EPSDD).

Phone: (02) 132281, EPSDD Website: <a href="http://www.environment.act.gov.au/cpr">http://www.environment.act.gov.au/cpr</a>