



SAVING OUR SPECIES

Booroolong frog

Litoria booroolongensis
Endangered

The Booroolong frog (*Litoria booroolongensis*) is a medium-sized frog, which grows to about 5 centimetres in length. Their body colour may be grey, olive or brown, with indistinct black markings and a white abdomen. The skin usually has a slightly warty appearance. This frog's fingers and toes have well developed discs, and the toes have obvious webbing. Unlike many other species, males lack a vocal sac and their call sounds like a soft, purring 'craww craww craww'.

The Booroolong frog lives along permanent rocky streams that only ever dry to pools. Adults are found within stream margins on or near banks of cobble stones and bedrock that provide crevices.

The Booroolong frog can experience large annual fluctuations in abundance, depending on stream flows.

Individuals shelter under rocks and sometimes bask in the sun on exposed rocks during summer.

Breeding occurs in spring and early summer, when males call from rocks to attract females. Fertilised eggs are deposited in submerged rock crevices (see image on p.2). Tadpoles develop in slow-flowing connected or isolated pools and metamorphose in late summer to early autumn. Generally, males only survive for one year.

This species once occurred throughout the slopes and ranges of New South Wales and north-eastern Victoria, mainly along the western-flowing streams of the Great Dividing Range. As a result of a worldwide pandemic disease in the 1970s and 80s (caused by the amphibian chytrid fungus), the species has now disappeared from more than half its range.

Support local action and help save the Booroolong frog



Researcher monitoring the Booroolong frog (*Litoria booroolongensis*).

Photo: Stuart Cohen/DPIE



Mating Booroolong frogs (*Litoria booroolongensis*) showing female depositing eggs in shallow rock crevice.

Photo: David Hunter/DPIE

The Booroolong frog is endangered in New South Wales, mainly because of the chytrid fungus, in concert with habitat loss and modification. The frog's short life means that failed increase in the natural population over one or two years can cause local extinctions, which makes them vulnerable to extreme droughts and climate change.

Other threats to the species include:

- modification of stream channels and loss of rocky habitat caused by stock, erosion and sedimentation
- weed invasion along streams, particularly by willows and blackberry, which choke rocky habitats and promote the chytrid fungus
- loss of native streamside vegetation
- predation of eggs and tadpoles by introduced fish
- high density of fossicking and the illegal use of powered sluices
- alteration to stream flows and to water quality through sedimentation and use of herbicides or pesticides near streams.

The Booroolong frog takes its name from the Booroolong Creek near Armidale, a stream where it once thrived, but is now locally extinct.

Both spellings are found in the literature.

Saving our Species (SoS) is working in partnership with the Local Land Services, National Parks and Wildlife Service and a wide range of other organisations and private landowners to save the Booroolong frog. There are six priority management sites in New South Wales to protect this species.

The recovery effort aims to:

- retain riparian native vegetation
- maintain natural stream channel morphology
- protect streams and streamside vegetation from disturbance by stock
- control weeds, particularly willows, and rehabilitate streamside habitats
- minimise the use of herbicides and pesticides adjacent to streams.

You too can help

If you want to support managers in looking after the Booroolong frog or in caring for other threatened species, you can find out more about volunteering and research projects related to threatened species at environment.nsw.gov.au/SOS

SoS is a NSW Government flagship program targeting on-ground action to secure threatened plants and animals from extinction. The program aims to increase the number of species that can survive securely in the wild.

SoS can only succeed if we work together. We need your support to ensure that today's actions help to secure the future of NSW's threatened species.

Find out more about threatened species in New South Wales and the SoS program at environment.nsw.gov.au/SOS