National Threatened Species Day







Toolibin Lake

Western Australia



CONSERVATION STATUS

Australian Government:

ENDANGERED

Environment Protection and Biodiversity Conservation Act 1999

Western Australia:

CRITICALLY ENDANGERED

Wildlife Conservation Act 1950

Image credit: Audrey Bird

Introduction

Toolibin Lake, in southwest Australia, is an area of high conservation value being one of the last remaining inland freshwater lakes found there. It is an ecological community, an area of unique and naturally occurring groups of plants and animals, and is the largest remaining wetland of this type in south west Australia.

The Australian Government has listed it as a threatened ecological community and it is internationally classified as a wetland of international importance under the Ramsar Convention.

What does it look like?

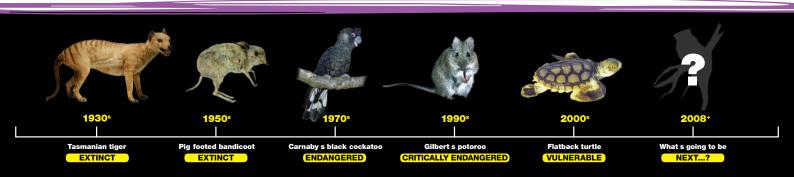
Toolibin Lake is a seasonal wetland, meaning it only has water at certain times of the year. When the wetland is full its woodland trees, sheoak (Casuarina obesa) and paperbark (Melaleuca strobophylla) are partially submerged in water.

The wetland has some of the richest habitat found in the region and provides a home for many kinds of plants and animals including waterbirds. An impressive 41 species of waterbirds have been recorded at the wetland, including rare species like the freckled duck. The threatened red-tailed phascogale also lives there.

Where is it found?

Toolibin Lake is found in the Upper Blackwood River catchment, 200km south east of Perth. It occurs in a low rainfall area of the Wheatbelt with average annual falls between 370mm and 420mm. Some years, rainfall is well below average. Unfortunately, Toolibin Lake is one of only half a dozen wetlands of its type remaining. This type of wetland used to be common throughout the Wheatbelt but most have now become saline.

The Upper Blackwood River catchment is in the Southwest Australia Ecoregion, a biodiversity hotspot. The area is high in plant and animal diversity but has also been severely degraded.



The Wheatbelt has been extensively cleared for sheep grazing and wheat crops so there are now limited areas of native habitat left.

Threats to Toolibin Lake

The Toolibin Lake threatened ecological community has been reduced in size by at least 90 per cent because of a number of threats.

Salinity

Natural vegetation has been removed in the past to make way for agriculture resulting in the water table rising and bringing salt from underground aquifers. This causes the soil and water systems in that area to become saline, which impacts on the health of Toolibin Lake's fragile lake floor vegetation.

Weeds

Weeds change the structure of this delicate ecosystem and in turn decrease natural vegetation available for food and shelter for animals.

Grazing

Grazing by sheep damages the Lake's natural vegetation and compact soil, again changing the natural habitat.

Case Study – Conserving the red-tailed phascogale

The Friends of the Wagin Lakes is a community group dedicated to the conservation of the ecosystem and environment surrounding the Wagin Lakes, including the nearby Toolibin Lake threatened ecological community. The Wagin Lakes provide habitat for the red-tailed phascogale and a number of water birds.

The red-tailed phascogale, known by the Nyoongar people of Western Australia as the Kingo, was once found across Australia from the south west of Western Australia to the Great Sandy Desert and across to the eastern states.



Sadly, it is thought to have disappeared from the eastern states in the late 1800s and is now endangered, being found only in small, scattered populations across the Western Australian Wheatbelt.

With help from a TSN community grant the Friends of Wagin Lakes are conserving habitat for the red-tailed phascogale. The project is developing a better understanding of phascogale ecology, and improving corridors of high quality habitat with the help of landholders and local government. Over 5000 endemic native trees were planted, primarily *Casuarina obesa* and *Eucalyptus wandoo*, and corridors fenced to assist with regeneration.

The Friends of the Wagin Lakes continue to work with Southwest Catchments Council, local government, Wagin Woodanilling Landcare Zone and community partners to protect this unique ecosystem and special animal.

What you can do

 Visit the nature-based recreation area at Toolibin Lake – enjoy the picnic ground and walk trails while learning about the lake from the interpretive signs.

- Visit nearby Taarblin Lake, a neighbouring lake that has been heavily degraded by rising salinity.
 Visitors can see the possible future fate of Toolibin Lake here, if rising salinity is not managed into the future.
- Join the Toolibin Lake Recovery
 Team for their annual field day and
 look at recovery actions at the lake
 and in the surrounding catchment.
- Join the Friends of Wagin Lakes and help with activities such as fauna monitoring, revegetation, fencing, weed control and surface and ground water monitoring, to assist the recovery of Toolibin Lake. Contact the Toolibin Lake Recovery Catchment Officer at the WA Department of Environment and Conservation.

Contacts

TSN Coordinator:

Southwest Australia Ecoregion WWF-Australia

P (08) 9387 6444

E tsnwa@wwf.org.au

W www.wwf.org.au/tsn

References

Department of Environment and Conservation (WA), http://www.naturebase.net/content/view/451/950/.

Department of Environment, Heritage and the Arts, www.environment.gov.au/biodiversity/threatened/communities/toolibin lake.html

Toolibin Lake Recovery Team and

Toolibin Lake Technical Advisory Group (1994) 'Toolibin Lake Recovery Plan.'