

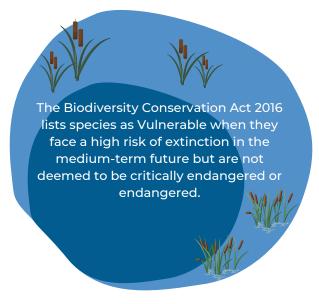
Waterbirds on Toorale: What Have We Seen in 8 Years

to the left is a fledgling from that year's breeding season.

Photo Credit: MER Project Team

Over the eight years of the Long-Term Intervention Monitoring (LTIM) and Flow-MER projects we have monitored the waterbirds of the Toorale State Conservation Area. During this time, we have recorded 57 different waterbird species using the wetlands, channels and dams of Toorale, several have a Vulnerable conservation status as listed by State and Federal governments. This little story highlights three of these listed species: Kularku (Brolga - Grus rubicunda), Freckled Duck (Stictonetta naevosa) and White-bellied Sea-Eagle (Haliaeetus leucogaster).

The Kularku (Brolga) (Figure 1) is important in Kurnu-Baakandji culture since it dances just like the People during ceremonies. A common species in northern Australia with over 100,000 birds, the southern populations have declined to an estimated 1,000 birds.



Traditional Paakantyi Language of the Kurnu-Baakandji nation used in this article. (L. A. Hercus - Paakantyi Dictionary)

This highlights the significance of the Warrego-Darling area, particularly the Western Floodplain, which provides ideal habitat conditions and food resources for the Kularku. Being a partially migratory bird, we hope to see the return of Kularku flocks following the recent wet conditions.

The Freckled Duck (Figure 2) is one of Australia's rarest waterfowl. It breeds in swamps in inland Australia areas. We last recorded freckled ducks in 2015-16 at Boera Dam (Figure 3) and Ross Billabong where two were seen.



Figure 2: The female freckled duck (bottom) retains a dark greyish-brown beak during the breeding season while the males' beaks develop a crimson base (top). Photo credit: WikiMedia.



Toorale provides good habitat, with deep waters and feeding resources such as algae, aquatic grasses and small invertebrates. Hopefully we see more ducks in our next survey.

White-bellied Sea-Eagles (Figure 4) are the second largest eagle in Australia, with a wingspan of 1.8 m to 2 m. This bird of prey mainly feeds on aquatic animals such as fish and turtles, although they will on occasion hunt birds and mammals as well. Recently we have observed a successful breeding pair with two fledging's at Boera Dam during 2020-2021. Previous surveys have recorded Sea-Eagles at Boera Dam and Ross Billabong.

## How environmental water plays into it all

Water for the environment helps to maintain water sources along the Warrego River and the Western Floodplain. Although these systems are classified as un-regulated, water for the environment is an important component of the flow in the Warrego. With less water extracted for irrigation, more water is available for the channel and floodplain areas, meaning it is wetter for longer.







Other listed birds Photo credit: Ben Vincent

Other threatened and significant waterbirds that have been observed at Toorale include the Blue-billed Duck (Oxyura australis), Eastern great egret (Ardea modesta) and Glossy ibis (Plegadis falcinellus). The egret and ibis are both migratory species listed as part of international agreements with Japan, China, Korea and Russia.



Figure 4: White-bellied Sea-eagle sighted within Toorale National Park. Photo credit: UNE.

Managing water for the environment is a collective and collaborative effort, working in partnership with communities, private landholders, scientists and government agencies - these contributions are gratefully acknowledged.

We acknowledge the Traditional Owners of the land on which we live, work and play. We also pay our respects to Elders past, present and emerging.









