

ENVIRONMENTAL AND CULTURAL FLOWS PROJECT

Frog survey results 2024

During the 2024 environmental and cultural water releases, frog surveys were conducted on the Baroota Creek and Crystal Brook Creek systems to determine which frog species were present.



Water releases

More than a billion litres of water from two water releases flowed into Baroota and Crystal Brook creeks in 2024 to improve the resilience of river red gums and refresh habitat for frogs, fish, birds and waterbugs. Our team set out to record the responses of frogs to the water releases.

Why are frogs important?

Frogs are key indicators of aquatic ecosystem health because of their sensitivity to pollution, temperature and water availability, particularly in ephemeral creeks (creeks that only flow seasonally or occasionally). There are also several serious diseases, such as chytrid fungus, that pose a serious threat to Australia's native frogs, so it is important to monitor populations.

Frogs play a vital role in freshwater ecosystems, as important predators of insects and other bugs, as well as being significant prey sources for birds like kookaburras, and the Mid North's venomous snake species. The

Mid North is home to numerous threatened frog species including Bibron's toadlet, and the Southern Flinders Ranges froglet.

How do we survey for frogs?

Our team attended the creeks during the environmental water releases on multiple occasions throughout August, September and early October 2024.

Using the free FrogSpotter smart phone application, site and weather details were recorded, before capturing audio recordings of calls (3 to 5 minutes in length). Each frog species has its own unique call, meaning users of the FrogSpotter app can work out which frogs are present from a safe (and dry) location.

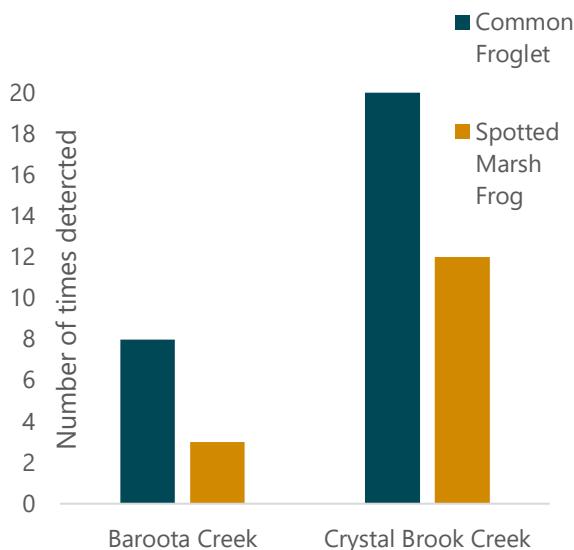
The recordings were uploaded to FrogWatch SA and checked by expert frog call identifiers.

Survey results

The Baroota Creek was surveyed eight times, while Crystal Brook Creek was surveyed 20

times. The common froglet was the most frequently recorded frog in both systems, while the spotted marsh frog was also commonly heard, with the numbers of both frogs estimated at between 10 to 50 on most occasions.

In one survey at Crystal Brook Creek it was estimated that more than 50 frogs were actively calling.



Common froglet (*Crinia signifera*)

Common froglets make up for their small size with their loud calls! These little frogs reach a maximum of 3 cm long, and despite being one of Australia's most widespread and common frogs, are difficult to spot due to their shyness and small stature. Their call is similar to a cricket's, a continual "crick, crick, crick".



The most heard frog across our surveys, the Common Froglet. Credit: Steve Walker

Spotted marsh frog (*Limnodynastes tasmaniensis*)



The spotted marsh frog has been detected in both creek systems on FrogWatch SA. Credit: Steve Walker

The second most common frog in our creek systems, the spotted marsh frog is a medium-sized frog (5 cm long), brown to olive in colour with a cream stripe under its eye to the top of its arm. In the Southern Flinders Ranges we have the western race, which has a different call pattern and egg laying matrix to its eastern cousins. Its call in South Australia is either a high pitched "uk, uk, uk" or a short "click".

Get involved

FrogWatch SA is open to citizen scientists, with significant contributions already occurring on these creeks. One citizen scientist has identified a third species in the area - the Mount Lofty Ranges tree frog (*Rawlinsonia calliscelis*). Every recording submitted contributes to our knowledge of frog populations, including their range and which species are present.

More information

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