

Discovering Mahony's Toadlet – a journey to expand the Hunter and Central Coast Roadside Environmental Marker Scheme

COUNCIL NAME

Port Stephens Council

WEB ADDRESS

portstephens.nsw.gov.au

SIZE

858 km²

POPULATION

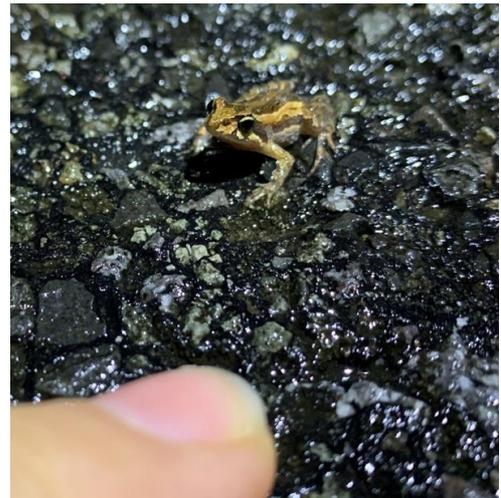
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Overview

Ecological surveys of roadside environments were undertaken in March 2020 to close existing knowledge and data gaps and to identify potential habitat for two threatened frog species known to occur in the Port Stephens area; Mahoney's Toadlet and Wallum's Froglet. To address the potential impacts of Council's roadside maintenance program on the species, this data was then incorporated into its Environmental Management System (EMS) through the development of Environmental Impact Assessments (EIAs) and Standard Operating Procedures (SOPs). The existing Hunter Joint Organisation (HJO) Regional Roadside Environment Marker Scheme was also updated to include a new roadside marker category for amphibians.

Background

Port Stephens Council maintains hundreds of kilometres of roadside reserves, through undertaking vegetation maintenance, biosecurity management and roadside asset maintenance. In 2016, a newly discovered amphibian species, Mahony's Toadlet (*Uperoleia mahonyi*), was identified in the Port Stephens area and was listed as a threatened species the following year under the Biodiversity Conservation Act 2016. The NSW Government's threatened species management action for Mahony's Toadlet is to address key knowledge gaps that can inform effective management of this species.



The overarching objective for this project was to address identified data and knowledge gaps for roadside reserve management in Councils' EMS. This objective is complementary to the NSW Government's threatened species management actions for Mahony's Toadlet.

Implementation

The project was assisted by the NSW Government through its Environmental Trust and supported by LGNSW via its Council Roadside Reserves Environmental Grant Program. Council also partnered with HJO to enable the outcomes to be incorporated into the Regional Roadside Environment Marker Scheme.

The project involved three key steps:

1. Address data and knowledge gaps, including undertaking a desktop assessment and engaging an ecological consultant to undertake:
 - a. Vegetation surveys of roadside reserve environments using the Rapid Assessment Methodology (RAM).
 - b. Ecological surveys for target amphibian species in accordance with the NSW Governments Threatened species survey and assessment guidelines: field survey methods for fauna – Amphibians.

- c. Identification of high value conservation locations for roadside marker categories, which also included the new marker category for Amphibians.
 - d. Development of a Standard Operating Procedure for the new Amphibian marker category that can be applied to a regional context.
2. Integration into Council's Environmental Management System, which relied on the generation of the following outputs:
 - a. Environmental Impact Assessment under Part 5 of the Environmental Planning and Assessment Act 1979.
 - b. Development of Standard Operating Procedures for site control.
 - c. Roadside marker installation at high conservation locations.
 - d. Roadside marker location data points in Councils' Geographical Information System (GIS).
 - e. Staff training on roadside environment marker scheme (construction and maintenance).
3. Integration into the Regional Roadside Environment Marker Scheme, key actions included:
 - a. Updating the Regional Roadside Marker Scheme Field Guide.
 - b. Inclusion of the new Amphibian roadside marker category.
 - c. Inclusion of an Amphibian Standard Operating Procedure.

Outcomes

Amphibian surveys, completed in March 2020, identified 6 roadside locations where threatened amphibian species are likely to be using the site for both breeding and foraging habitat. These 6 sites will be delineated using the new Amphibian marker category. To complement the roadside markers, the data and knowledge gained through this project has been incorporated into Councils' EMS to enhance environmental management practices. This includes the development of 5 new operational EIAs for the following activities:

- Roadside vegetation maintenance
- Road maintenance
- Road verge asset management
- Weed management
- Open drain maintenance.

A SOP for working in these Amphibian roadside marker locations has been completed and incorporated into the HJO's Regional Roadside Environment Marker Scheme.

Key Learnings

Council gained invaluable new ecological data and knowledge from undertaking this project. The incorporation of this data into Councils' EMS will further ensure that the knowledge is not lost and that it is used continuously and consistently throughout Council.

A key challenge for this project was the seasonality of the targeted amphibian species, which restricted surveying to only a few months of the year. This was further restricted due to bushfires early in the program, followed by a lack of rainfall.

Contact

Name: Kirily Sheridan
Position: EMS Manager
Phone: 02 4980 0189
Email: kirily.sheridan@portstephens.nsw.gov.au

This project was the 2020 winner of the Roadside Environmental Management Award at the LGNSW Excellence in the Environment Awards