

Little Penguin Conservation Project



Little Penguin (*Eudyptula minor*) Survey and Monitoring Toolkit

The development of this Toolkit was overseen by and endorsed by the Tasmanian Penguin Advisory Group on 24 June 2020.

Cover photos courtesy of (from top left): Perviz Marker, Eric Woehler (3), Barry Baker and Fernando Arce Gonzalez

Section 1

Introduction

Little Penguins are found in southern Australia and New Zealand. In Australia, the majority of the population is located along Tasmania's coastline and offshore islands. Previous estimates of Little Penguins in Tasmania have ranged from 110,000 to 190,000 breeding pairs, although the current population is unconfirmed. Colony surveys are a priority to assess population trends and the current status of the Tasmanian population and should be used in conjunction with the methods outlined in this toolkit to monitor populations changes and impacts. Little Penguins are an iconic and charismatic species that the public relates to well. It is recognised that the community has a deep interest in Little Penguin conservation and are in a position to help wildlife managers and experts to gain current knowledge about this species.

Objectives of the Little Penguin Toolkit

- Improving community awareness and understanding of Tasmania's Little Penguin population.
- In consultation with seabird experts, supporting volunteers to undertake community-based penguin surveys and monitoring.
- Increasing the understanding of the threats to Little Penguin colonies which will lead to improved management and the conservation of Tasmania's Little Penguin population.
- Detect changes in Little Penguin distribution and population.
- Detect changes in breeding/moulting timing.

The Toolkit includes the following eight sections and five data recording forms:

1. Introduction to the Little Penguin Toolkit
2. Little Penguin ecology
3. Volunteering
4. Scoping your site*
5. Introduction to survey and monitoring
6. Survey method 1 – Presence or absence
7. Survey method 2 – Penguin track counts
8. Survey method 3 – Regular counts at designated areas
9. Survey method 4 – Colony count
10. Survey method 5 – Wildlife camera monitoring
11. Threat assessment*
12. Habitat site assessment*

Data Sheet: Survey Method 1. Presence or Absence

Data Sheet: Survey Method 2. Penguin Track Counts

Data Sheet: Survey Method 3. Regular Counts at Designated Areas

Data Sheet: Survey Method 4. Colony Count

Data Sheet: Survey Method 5. Wildlife Camera Monitoring

*** These components could be undertaken simultaneously, preferably with input from flora and fauna experts and land managers.**

The whole toolkit can be printed out and stored in a folder. Relevant sections can be printed and laminated as required for field survey work. It is good practice to take additional notes in a field notebook.

Note: This Toolkit is produced for community groups. Data collected from methods provided will supply information on the Tasmanian mainland subset of the population and is unlikely to cover populations on many offshore Islands.

Scientific Approach

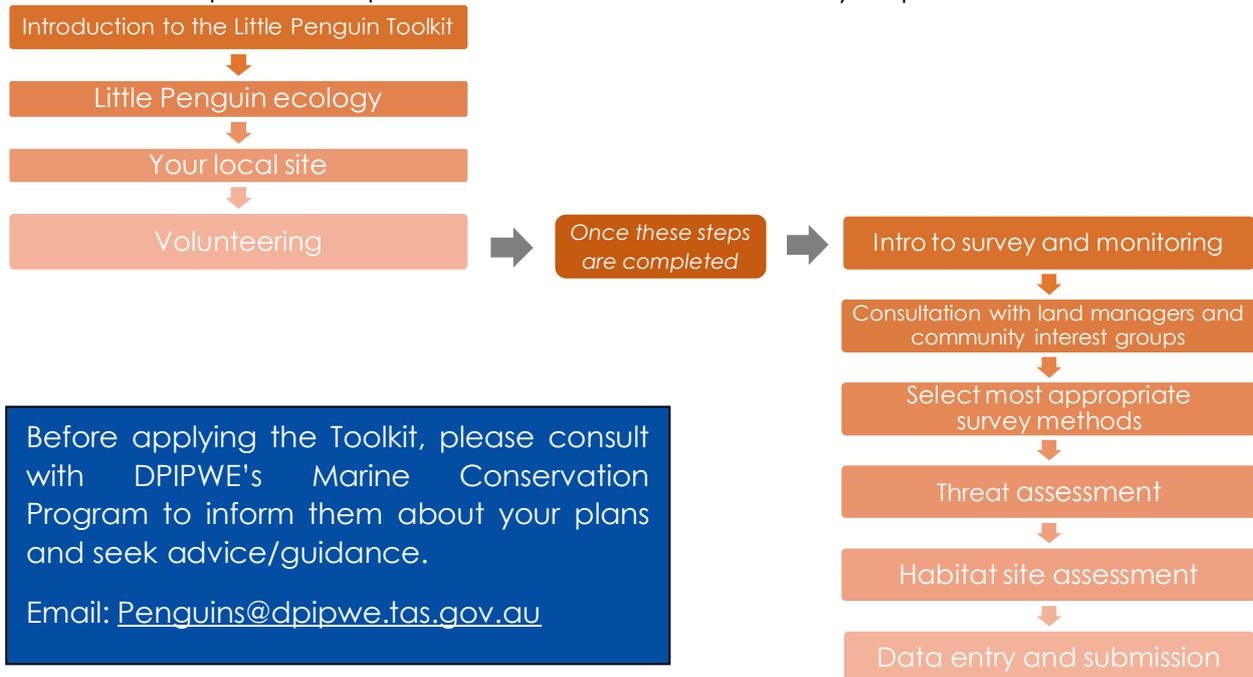
Good scientific monitoring is based on repeatability. The survey methods provided in this toolkit are designed to be repeated either throughout the year, or from year to year, to detect changes over time. Depending on which survey method is applied and how frequently, these methods will provide an index of change in the frequency penguins access surveyed areas. To ensure these changes can be measured, it is important that surveys are done the same way every time. For example, when undertaking a colony count, the same boundaries should be used every time you survey.

It is also important to keep good records of all aspects of your surveys. If you do have to change any aspect of the survey, due to for example, a lack of volunteers, ensure you record that properly to allow more accurate interpretation of the data collected.

Understand the species you are monitoring – a good place to start is Cradle Coast Authority's Little Penguin online education module <https://www.cradlecoast.com/online-learning-packages/>.

Little Penguin Toolkit Flowchart

This flowchart provides a pictorial view and outlines the key steps of this toolkit.



Before applying the Toolkit, please consult with DPIPWE's Marine Conservation Program to inform them about your plans and seek advice/guidance.
 Email: Penguins@dpiwwe.tas.gov.au