Survey Method 5.5

Wildlife camera monitoring

Little Penguin toolkit

This section of the toolkit contains standardised survey and monitoring methods for community and land managers.

Survey Methods

- Presence or absence
- Penguin track counts
- Regular counts at designated areas
- Colony count
- Wildlife camera monitoring

Results

The results of these surveys will provide information on the Little Penguin population in Tasmania.

When is this survey method the best to use?

If the site has been previously identified as a Little Penguin colony, this survey method will provide an index of numbers of penguins using runways and may be used to help estimate population abundance.

This method uses wildlife monitoring cameras automatically triggered with passive infrared and motion to record photographs or videos of Little Penguins as they return to the colony after foraging at sea.

Before you start

- Ensure you have permission from the land manager and all the necessary approvals. *If cameras are to be placed within the colony, and not on or directly adjacent to established tracks, Animal Ethics Committee approval may be required.*

Permissions and approvals

- This survey method requires Animal Ethics Committee approval and a DPIPWE Scientific Permit granted to the supervising researcher.

When to survey

- The monitoring should be carried out during the peak of the penguin breeding season.

How to prepare for your survey

- Determine the most appropriate monitoring locations at major runways.
- The installation of monitoring cameras facing runways will need to be co-ordinated in conjunction with the relevant land managers.
- Record the GPS position and mark the runway with a piece of flagging tape.
- Use a wildlife movement detection infrared camera.
- Put the cameras into position and affix to stakes or trees using cable ties.
- Position the camera with an unobstructed view, ideally at a ~45° angle to the penguin runway and at less than one meter off the ground.
- Try to eliminate false triggers due to vegetation moving in the wind, by positioning the camera with a clear space in front.
- Consider the camera locations and how vulnerable they might be to theft. Locks and camera camouflage are available.
- Set the cameras to either take three photos with each trigger, a time lapse or video recording.
- Set the camera to record the date and time on the image.

Analysing the photographs

- Include the GPS coordinates for each camera.
- Review the photographs and count the number of penguins returning to land in the evening and back out to sea in the morning.
- Attempt to isolate any identifying features on individual penguins, these could be anomalies such as patterning, scars/injuries/abnormalities to help monitor individual penguins throughout the camera monitoring.

Record details

- Record the details onto the Wildlife Monitoring Recording form/spread sheet and send a copy to the land manager.
- Researcher to enter the survey details into the Natural Values Atlas.

The information from the Field Survey form is useful to inform the community group and land manager, DPIPWE and researchers on the number of penguins at the site.

Example Wildlife Monitoring Recording Form

Colony name				GPS location				
Monitoring date	Camera name	Recorder name	Number of photos	Number of penguins	Other birds	Other mammals	Number of feral cats	Number of dogs