

Section 6

Threat Assessment

Aim

To help identify and record the threats to a Little Penguin colony to allow subsequent prioritisation of management/mitigation strategies to reduce negative impacts on the colony.

The preference is for the form to be completed in conjunction with the land manager (e.g. Parks and Wildlife Service, local councils, TasRail, Department of State Growth), the Marine Conservation Program, DPIPWE or another appropriate researcher.

How to complete the Threat Assessment

- Review the **List of potential threats to Little Penguins** and tick the column if you believe that threat is relevant to the colony you are assessing. Read the questions and provide details on the threat.
- A site inspection and onsite discussion may be a good first opportunity to discuss issues and management of the site.
- If the community group members are familiar with the site and threats to Little Penguins and have been operating in the area for several years, you could complete much of the form at a meeting with the land manager over coffee and cake! This would be best followed up with an on-site review.
- Send a copy of your completed form to the Marine Conservation Branch, DPIPWE and your land manager.
- Ideally, results from the threat assessment should be written up as a report and community groups use it to guide discussions with land managers and other key stakeholders to develop a threat mitigation strategy outlining actions and timelines to address threats identified.

Site Assessment details		
Name of Little Penguin colony		
Location		
Colony extent description (start and finish)	From:	To:
GPS or Geo-location	Start point:	End point:
Date of assessment (day/month/year)		
Assessor 1: Name & organisation		
Contact details		
Assessor 2: Name & organisation		
Contact details		
Assessor 3: Name & organisation		
Contact details		
Land tenure (e.g. coastal reserve, private land, Crown Land or national park). Provide details		
LISTmap can be used to determine land tenure (<i>refer to Section 4 for more information</i>)		
Land managers (e.g. PWS, Council, TasRail, DPIPWE,		

<p>private landholder – please list all)</p>	
<p>Previous surveys</p>	<p>Please list any known surveys previously undertaken at this site (published and/or unpublished). Provide details including author, survey title and date of survey.</p>
<p>Changes in colony trends</p>	<p>Provide details of colony retraction and extent, reduction in colony size and/or estimated population numbers.</p>
<p>Colony size estimate and year of previous survey report</p>	

Either draw a map here or print and attach a map on a separate page. LISTmap may be useful – see Section 4: Scoping your site

Detail the location of the colony, the area and landmarks

List of potential threats to Little Penguin colonies

Threat Assessment Form					
Number	Classification	Threat	Questions	Provide details	Potential mitigation measures
1.	Housing and urban areas	Disturbance to penguins by trampling of burrows and/or clearing habitat.	Are there houses near the colony? If so, how close to the colony? How large is the housing estate or urban area? Are there overhead lights?		
2.	Commercial areas	Disturbance of habitat and/or to penguins coming ashore or returning to sea.	Is the colony close to shops, restaurants or other commercial activities? Is there excessive lighting? Is there excessive noise?		
3.	Industrial areas	Pollution of waterways Penguins nesting under buildings and infrastructure.	Is the colony close to ports, factories, power lines or other industry? Is there excessive lighting? Is there excessive noise?		
4.	Farmland	Penguin burrows destroyed by machinery and/or trampled by stock.	Are penguins nesting on farmland? Describe the type of farm use/ disturbance. Estimate how many burrows on farmland.		
5.	Roads	Penguins run over by cars. Destruction of penguin burrows/habitat for road infrastructure construction/ management.	Is the colony close to a main road? Have there been recent sightings of dead penguins on the road? Is there a penguin protection fence?		

Threat Assessment Form					
Number	Classification	Threat	Questions	Provide details	Potential mitigation measures
6.	Railway	Penguins run over by trains. Destruction of penguin burrows/habitat for rail infrastructure construction/management.	<p>Is the colony along a railway line?</p> <p>Have there been recent sightings of penguins run over by trains?</p> <p>Is there a penguin protection fence?</p>		
7.	Shipping lanes	Potential threat of oil spills.	<p>Is the colony and penguin feeding ground close to shipping lanes?</p> <p>Are there frequent aquaculture vessel movements?</p>		
8.	Dogs	Dogs killing penguins or leaving their scent that attracts other dogs to penguin burrows.	<p>Are there dogs on the beach? Have dogs been seen in this coastal area? Is there evidence that dogs have been in the area (e.g. paw prints or scats)?</p> <p>Have there been recent dog attacks on penguins at this site within 5 years?</p> <p>Is the colony a declared <i>No Dog zone</i>, with or without signage?</p>		
9.	Cats	Cats attacking penguins and chicks.	<p>Have there been sightings of cats in the penguin colony and when?</p> <p>Have there been previous reports of cats killing penguins?</p>		

10.	Other introduced animals - rats, rabbits etc.	Introduced animals impacting habitat through competing for burrow space and/or preying on penguins and chicks.	Have there been sightings of other introduced animals disturbing or attacking penguins?		
11.	Native animals - water rats, Tasmanian devils, quolls etc.	Native animals preying on penguins and chicks.	Have there been sightings or evidence of native animals attacking penguins or taking eggs? For example: eggs shells outside nests, penguin carcasses.		
12.	Tourism – penguin viewing	Disturbance to penguins. Trampling of burrows.	Is this a designated penguin viewing site with guided tours? Is penguin viewing occurring unsupervised and causing disturbance to penguins?		
13.	Recreational activities – land based. e.g. walking, vehicles on beaches, RV's, camping or other.	Disturbance to penguins, trampling burrows and/or loss of habitat.	Are there any adverse impacts from these or other activities? Please record the activity and the threat.		
14.	Impediments to colony access or expansion.	Preventing or impeding access from water to and from colonies or suitable colony areas adjacent to existing colony.	Are there fences or other infrastructure blocking access? Is this restricting current or potential colony extent?		

15.	Recreational activities – water based. e.g. fishing, boating, jet skis, surfing or other.	Disturbance to penguins, risk of boat strike or hurting a penguin with fishing hooks or drowning a penguin in fishing nets.	Are there regularly utilised recreational fishing spots nearby? What type of fishing takes place locally – fishing lines or nets? Are there areas where recreational vessels travel at high speed? Are there any adverse impacts from these or other activities? Please record the activity and the threat.		
16.	Vegetation removal	Loss of habitat.	Has there been a significant removal of vegetation impacting on available penguin habitat? If so, please describe.		
17.	Weeds and pests	Modification of habitat.	Are there any weeds or pests that are negatively impacting on penguin habitat? Are weeds managed (manually or with poison)?		
18.	Marine debris	Entanglement of birds and ingestion of plastic causing death.	Is marine debris causing a noticeable impact on Little Penguins and how?		
19.	Coastal erosion	Storm surges and extreme high tides can cause loss of habitat and destroy penguin burrows.	Have there been significant erosion events at the site? Detail the most recent events, when they occurred and the impact they had on penguins.		

20.	Severe weather events – droughts and floods	Droughts can cause plants to die and loss of habitat. Floods can impact on penguins nesting in drains or flooding habitat.	Have there been significant weather events at the site? Please describe.		
21.	Inappropriate nest site selection	Breeding failure, juvenile mortality. Penguins nesting in culverts that can flood. Penguins nesting under houses.	Are nest sites exposed to potential flooding? Are nest sites at risk of being blocked off (e.g. renovations to houses blocking access). Are nest sites highly modified?		
22.	Other	Any event that has a negative impact on penguins, habitat or breeding success.	List any other activities that may pose a threat that have been observed at the site.		