

CASE STUDY

Feasibility study - eradicating feral cats from Tasman Island, Tasmania

Background

Located just off the south-eastern coast of Tasmania within Tasman National Park, the spectacular 120 hectare Tasman Island is one of Australia's most important seabird islands. Large numbers of fairy prions, sooty shearwaters and short-tailed shearwaters breed there. Until recently the island was also home to a population of feral cats that colonised about 70 years ago. It was estimated that the cats – the only introduced mammal on the island, were killing more than 50,000 fairy prions annually. Following an unsuccessful eradication attempt in the early 1980s a more recent report recommended the urgent eradication of the cats to protect not only seabirds, but also endemic reptiles (Bryant & Shaw, 2006).

While eradicating invasive species involves significant risks, important advances had been made and considerable expertise has been developed in eradicating cats from islands (Nogales et.al, 2004). The Tasmanian Parks and Wildlife Service engaged Invasive Species International to draft a plan, in association with local staff, to eradicate the cats. Following a visit to the island and meetings with various agencies in Tasmania, Alan Saunders and Grant Norbury of Landcare Research prepared a draft plan in March 2009.



An aerial view of Tasman Island with the Tasman Peninsula in the background

The planned approach

The plan involved a mix of toxic baiting, trapping and shooting through which eradication would be achieved. This project presented a good opportunity to test the efficacy of a recently-developed toxin, para-aminopropiophenone (PAPP), delivered in a sausage bait. Following consultation with stakeholders, including the 'Friends of Tasman Island', it was determined to proceed and a detailed operational plan was prepared. A local tourism operator, Pennicott Wilderness Journeys, contributed \$65,000 to the \$250,000 overall cost of the operation.

The eradication operation

The eradication operation was initiated in May 2010. PAPP baits were distributed by hand in accessible areas, and from a helicopter around the steeper boulder fields and cliffs. Unfortunately, due to technical problems with encapsulation of the toxin, only 5 of the 15 radio-collared cats died from poisoning. Bait uptake, however, was very good. The baiting phase was followed by trapping using cage traps and padded leg-hold traps, which removed another 27 cats. The final phase involved rifle hunting by skilled marksmen, but no shooting was required. The last of the island's feral cats was trapped 12 days after baiting began.

After intensive monthly searches, including the use of permanently-positioned remote cameras and highly-trained cat-detecting dogs between June 2010 and May 2011, Parks and Wildlife Service staff are confident that no cats remain on Tasman Island, although ongoing vigilance will be required.

Project outcomes

Recent breeding surveys indicate that shearwater hatching success has jumped from just under 8% before the eradication, to over 40%. The number of prions caught on remote cameras has also increased. Longer term trends look very promising, indicating a rapid recovery of seabird populations here.

Tasman Island was declared cat-free by the Minister for Environment, Parks and Heritage, Brian Wightman on 1 June 2011. Mr Wightman congratulated those involved for a job well done and suggested the project was a positive model for future community-supported conservation programs. He indicated that departmental staff have learnt a great deal about eradication – from this and the Macquarie Island Pest Eradication Project, and that the possibilities of future island eradication projects in Tasmania are being investigated.



A cache of cat-killed fairy prions, prior to the Tasman Island eradication operation

References

- Bryant SL, Shaw J. (Editors) (2006). Tasman Island: 2005 flora and fauna survey. Hamish Saunders Memorial Trust, New Zealand and Biodiversity Conservation Branch, DPIW, Hobart, Nature Conservation Report Series 06/01.
- Nogales M, Martin A, Tershy BR, Donlan J, Veitch D, Puerta N, Wood B, Alonso J. 2004. A review of feral cat eradication on islands. *Conservation Biology* 18, 310–319.

For further information contact:

Alan Saunders
Invasive Species International
Ph: +64-7-859 3720
saundersa@landcareresearch.co.nz

Luke Gadd
Parks & Wildlife Service
Ph: +61- 6233 0450
Luke.Gadd@parks.tas.gov.au