

RECOVERY TEAM ANNUAL REPORT

THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION

Recovery Team	Gilbert’s Potoroo Recovery Team	
Reporting Period	Calendar year 2010	
Current membership		
Member		Representing
1. Chair	Sarah Comer	Department of Environment and Conservation, South Coast Region.
2. Exec Officer	Stephanie Hill	Department of Environment and Conservation, Science Division.
3.	Tony Friend	Department of Environment and Conservation, Science Division.
4	Peter Mawson	Department of Environment and Conservation, Species and Communities Branch.
5.	Tim Button	Department of Environment and Conservation, Science Division.
6.	Ron Dorn	Gilbert’s Potoroo Action Group.
7.	Val Hack	Gilbert’s Potoroo Action Group.
8.	David Taggart	Research Scientist, Royal Zoological Society of S.A.
9.	Jackie Courtenay	Consultant Wildlife Biologist (corresponding member)
10.	Alan Needham	Edith Cowan University, Applied Science (corresponding member)
11.	Vic Smith	Retired veterinarian, South Coast Community member (corresponding member)
12.	David Edmonds	Veterinarian, Denmark Veterinary Practice.
Dates meetings were held		6 May 2010 and 29 November 2010
One to two paragraph summary of achievements suitable for WATSNU		<p><i>Please note: contact Tony Friend for an update</i></p> <p>The critically endangered Gilbert’s potoroo took further steps towards recovery in 2010, with the strong growth of the Bald Island translocation and the first releases of potoroos into the 380 hectare enclosure in Waychinicup National Park. A two-week monitoring trip to Bald Island in June 2010 resulted in the capture of 49 independent potoroos.</p> <p>In February and March 2010, seven potoroos removed from Bald Island during 2008 and 2009 and held in captivity were released into the Waychinicup enclosure, along with two individuals from Two Peoples Bay. Three months later an adult female potoroo was captured in the enclosure with a female pouch young conceived since release. This pouch young was still present and healthy in August 2010. A further eight potoroos were transferred directly from Bald Island into the enclosure in September 2010.</p>

List of actions undertaken by Recovery Team	
<p>Action 1 Protect the existing wild population and habitat</p>	<p>The Gilbert's potoroo population at Two Peoples Bay exists in long-unburnt bushland on Mount Gardner. During 2009, routine management of the nature reserve included:</p> <p style="padding-left: 40px;">Fox control by following the approved baiting prescription distribution: quarterly aerial baiting complemented by monthly ground baiting along firebreaks,</p> <p style="padding-left: 40px;">Fire management, including maintenance of firebreaks including slashed breaks, maintenance of readiness to respond to reports of fire, wildfire suppression</p> <p style="padding-left: 40px;">Observation of <i>Phytophthora</i> dieback hygiene practices</p> <p style="padding-left: 40px;">Visitor management to restrict access to potoroo areas</p> <p>The Gilbert's potoroo population on Mount Gardner was monitored during 2010 by trapping on traplines running through prime habitat during March, June and November, and by trapping along a road transect in October.</p> <p>A proposal is under development by Albany District staff, in consultation with Nature Conservation and Science Division staff, for a prescribed burn on Mount Gardner, designed to break up the large long-unburnt block and thus reduce the risk of catastrophic wildfire. This burn will not be carried out until a self-sustaining potoroo population has been established within the Waychinicup NP enclosure. Resources are needed to carry out pre- and post-fire studies of the Mount Gardner environment, including fauna, flora and fungi so that a better knowledge of the fire ecology of the threatened species at Two Peoples Bay and nearby areas can be gained.</p>
<p>Action 2 Increase understanding of ecology and population biology of Gilbert's Potoroo to underpin management strategies</p>	<p>The following studies were continued:</p> <p>Population biology of Gilbert's potoroo through four-monthly census on nine regular traplines (March, June, and November) and annual census on Mount Gardner transect (October) (Science Division, Albany).</p> <p>Collaborative study of blood parasites in Gilbert's potoroo and quokkas with Jill Austen (Ph.D. student, Murdoch Uni)</p> <p>Collaborative study of the fungal diet of Gilbert's potoroo, quokka, quenda and bush rat to find the most suitable surrogate (indicator) species for use in determining food resources in potential translocation sites for Gilbert's potoroo (Jon Pridham, Hons student, Charles Sturt Uni).</p>
<p>Action 3 Search for new populations of Gilbert's Potoroo outside Two Peoples Bay</p>	<p>No new searches for Gilbert's potoroos were carried out in 2010.</p>
<p>Action 4 Establish and maintain a captive breeding colony of Gilbert's Potoroo</p>	<p>Following the release of the seven captive potoroos sourced from Bald Island in 2008 and 2009 into the Waychinicup NP enclosure in March 2010, only one potoroo remained at the captive colony. This was a female potoroo that had been separated from her mother as a young-at-heel during trapping and subsequently hand reared. She was moved to the 14 ha Ryedene enclosure in September 2010.</p> <p>Funding is no longer available for a captive breeding program. The captive facility at Two Peoples Bay will continue to have a valuable role in temporarily housing animals during quarantine and parasite removal while being moved between field sites, i.e. Two Peoples Bay, Bald Island and the Ryedene and Waychinicup NP enclosures.</p>
<p>Action 5 Develop techniques to enhance the reproductive potential of Gilbert's Potoroo</p>	<p>Cross-fostering:</p> <p>No transfers of Gilbert's potoroo pouch young to long-nosed potoroo foster females were carried out during 2010. Funding for the cross-fostering program ceased in late 2009 and efforts to raise continuation funding in 2010 were unsuccessful. In April 2010, 21 of the 41 long-nosed potoroos in the facility were moved to the Waite Institute, Adelaide University: in August 2010 the remaining 20 were moved to Cleland Sanctuary (SA).</p> <p>Ryedene enclosure:</p> <p>Use of the Ryedene enclosure was primarily intended for attempts to induce breeding in non-breeding captive potoroos by releasing them into a natural, but protected environment. This did not work, but the project showed that Gilbert's potoroos can thrive in jarrah-sheoak woodland unlike their habitat at Two</p>

	<p>Peoples Bay. At the end of 2010, one female potoroo was present in the Ryedene enclosure. At that stage she was being fed a supplementary diet three times a week. Her situation will be reviewed once the 2011 winter rains come, when it is likely that the supplementary feeding will be reduced, then cease. Should she successfully transfer to a natural diet, she will be moved to the Waychinicup NP enclosure.</p>
<p>Action 6 Enhance the breeding capacity of Gilbert's Potoroo</p>	<p>The success of the Bald Island translocation and subsequent rapid growth of the new potoroo population there has dramatically reduced the importance of other methods under development to increase the global population of Gilbert's potoroos, especially those involving captive breeding and artificial breeding enhancement. It is possible, however, that the development of such methods will be supported in future as an insurance policy against the failure of translocations.</p>
<p>Action 7 Extend the range of Gilbert's Potoroo through translocation of animals to suitable habitat outside Two Peoples Bay.</p>	<p>Bald Island: The translocation of Gilbert's potoroos to Bald Island commenced in 2005 and the population has been steadily growing since then. One extended monitoring trip and two short trips to Bald Island were carried out during 2010, involving a total of 38 person-nights spent on the island. Monitoring activities comprised trapping, radio-tracking and searching for diggings.</p> <p>During these three trips, a total of 56 independent potoroos was captured, including nine of the original 10 founders transferred to the island between August 2005 and December 2007. This high tally was achieved despite the removals that occurred in September 2008, January 2009 and September 2010 of a total of 21 Gilbert's potoroos (including a male pouch young that subsequently emerged from his mother's pouch and achieved independence in captivity). These potoroos were released into the Waychinicup NP enclosure and at Mermaid Point.</p> <p>Waychinicup NP enclosure: Construction of this 380 ha enclosure was completed in 2008 and cat trapping was carried out in the enclosure over an 18 month period. Fox baiting has been carried out every two months since construction was completed and apart from a short-lived incursion by a fox via a hole in the fence in March 2010, no signs of foxes or cats were seen in 2010. Six potoroos from Bald Island and three from Two Peoples Bay were released in February-March 2010. In September 2010, eight more potoroos were flown from Bald Island and released in the enclosure. Intensive monitoring through trapping and radio-tracking during 2010 showed that small colonies have established in two areas within the enclosure and a pouch young has been recorded, born since the release.</p> <p>Mermaid Point: On 30th September 2010 four female and two male potoroos were removed from Bald Island and released in habitat judged suitable for potoroos at Mermaid Point, Waychinicup National Park. This translocation was funded through the Threatened Fauna Ark program, a DEC project with WA NRM funding. The potoroos were monitored in the early stages by radio-tracking on a daily basis. On the 2nd, 3rd, and 6th of October 2010, three of the potoroos were found dead and cached, presumably by a fox. On the 7th October two tail transmitters were found chewed. The sixth potoroo had moved to an area of vegetation very similar to that found on Bald Island. This potoroo was radio-tracked for four weeks until she dropped her tail transmitter back in the release area, where the three cached potoroos were found. This potoroo has not been located since. While it failed to establish a new potoroo colony, this exercise showed the importance of detailed predator monitoring and careful selection of suitable habitat.</p>
<p>Action 8 Secure ongoing funding for the implementation of the Recovery Actions</p>	<p>Funding for Gilbert's potoroo recovery was again secured for one year through the Special Nature Conservation Projects Program, for the amount of \$120,000. This covers the employment of Technical Officer Tim Button and provides operational funding for the monitoring of the potoroo populations at Two Peoples Bay, Bald Island and the Waychinicup NP enclosure. Funding was also secured through Threatened Fauna Ark, a DEC WA NRM project, to carry out a trial translocation to the mainland, at Mermaid Point near Bald Island (\$19,540).</p>
<p>Assessment of progress towards meeting criteria for success (from Recovery Plan)</p>	<p>The criteria for success of the Gilbert's Potoroo Recovery Plan (Courtenay and Friend 2004) are as follows:</p> <p>This Recovery Plan will be deemed successful if:</p> <ul style="list-style-type: none"> • the number of individuals known to be alive in the wild remains stable or increases and • the species is found at, or successfully reintroduced to, other locations. <p>Both of these criteria were met in the 5 years following the release of the plan. The estimated number of Gilbert's potoroos increased from around 35 in 2004 to well over 70 in 2010. This was due to the successful reintroduction to another location, Bald Island, where numbers have been as high as 50. In 2010 another translocation was carried out, to an enclosure close to Mount Manypeaks in Waychinicup NP.</p>

Assessment against criteria for failure (from Recovery Plan)	<p>The criterion for failure of the Gilbert's Potoroo Recovery Plan (Courtenay and Friend 2004) is as follows:</p> <p>This Recovery Plan will be deemed to have failed if:</p> <ul style="list-style-type: none"> • the estimated total number of mature individuals declines by more than 20 per cent within five years. <p>This criterion has not been met, and in fact the global population has increased dramatically since the Bald Island translocation in 2005.</p>
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