



THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION

Recovery Team Gilbert's Potoroo Recovery Team

Reporting Period Calendar year 2011

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 Fellow, University of Adelaide.
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 9 May 2011 and 31st October 2011

One to two paragraph summary of achievements suitable for *WATSNU*

Please note: contact Tony Friend for an update

The critically endangered Gilbert's potoroo took further steps towards recovery in 2011, with the strong growth of the Bald Island translocation and the further releases of potoroos into the 380 hectare enclosure in Waychinicup National Park. A two-week monitoring trip to Bald Island in June/July 2011 resulted in the capture of 58 independent potoroos.

Twenty-six potoroos from Bald Island and three from Two Peoples Bay Nature Reserve have been released into the Waychinicup National Park enclosure to date. October 2011 saw twelve more potoroos removed from Bald Island and released into the Waychinicup enclosure. Potoroo releases into the enclosure also occurred in February/March 2010 (six potoroos from Bald Island and three from Two Peoples Bay) and September 2010 (eight potoroos from Bald Island). Breeding has been recorded in the enclosure and three enclosure-bred potoroos have been captured so far. The translocation has not been without

	<p>drawbacks, commencing with the flood that damaged the culverts and fences and resulted in at least two fox incursions. At least one of these incursions caused significant loss of potoroos. The enclosure is in better shape now, although the complete repair of the damage will have to wait until early 2012 when it is dry enough to get heavy machinery and concrete trucks in to the valley culvert.</p>
<p>List of actions undertaken by Recovery Team member/s</p>	
<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 2011 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 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 2011.</p>
<p>Action 4 Establish and maintain a captive breeding colony of Gilbert's Potoroo</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>The DEC Animal Ethics Committee's 5-yearly review of captive facilities was conducted in January 2011: the potoroo facilities at Two Peoples Bay, Gull Rock and Ryedene were inspected despite the lack of animals in the first two. It unlikely that the Gull Rock facility will be used in the future.</p>
<p>Action 5 Develop techniques to enhance the reproductive potential of Gilbert's Potoroo</p>	<p>Cross-fostering: Funding for the cross-fostering program ceased in late 2009 and with the success of the Bald Island translocation, development of this technique for Gilbert's potoroo is no longer required.</p> <p>Ryedene enclosure: Use of the Ryedene enclosure was primarily intended for attempts to induce breeding in</p>

	<p>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 Peoples Bay. At the end of 2011, one female potoroo was present in the Ryedene enclosure. She is monitored by trapping and motion-activated cameras and is doing well despite the cessation of supplementary feeding in July 2011.</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 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. Two extended trips, one short trip and a day-trip to Bald Island were carried out to monitor the population during 2011, involving a total of 44 person-nights spent on the island. Monitoring activities comprised of trapping, radio-tracking and searching for diggings and scats.</p> <p>During these three trips, a total of 67 independent potoroos were captured, including eight of the original 10 founders transferred to the island between August 2005 and December 2007. This high tally was achieved despite the removals of individuals mentioned earlier.</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 was 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 until a dead fox was found in the enclosure in May 2011. Since then the baiting regime has been improved with monthly baiting inside the enclosure and quarterly ground baiting outside the fence. Baiting outside has been facilitated by the transfer of the bait allocation for the unsuccessful dibbler reintroduction site in the Stirling Range NP.</p> <p>Twelve potoroos from Bald Island were released into the enclosure in October 2011. Intensive monitoring through trapping and radio-tracking during 2011 showed that small colonies have established.</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 the Western Shield Translocation Plan to carry out site selection work to prepare for a future translocation to a non-fenced area (\$5,500).</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: 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 has increased from around 35 in 2004 to around 100 in 2011. This was due to the successful reintroduction to another location, Bald Island, where numbers have been as high as 60. In 2010 another translocation was carried out, to an enclosure close to Mount Manypeaks in Waychinicup NP.</p>
<p>Assessment against criteria for failure (from Recovery Plan)</p>	<p>The criterion for failure of the Gilbert's Potoroo Recovery Plan (Courtenay and Friend 2004) is as follows: 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>