

Department of Environment and Conservation

Our environment, our future

SUMMARY ANNUAL REPORT

THREATENED SPECIES OR COMMUNITY RECOVERY TEAM

PROGRAM INFORMATION Recovery Team name Gilbert's Potoroo Recovery Team **Reporting Period** Calendar year 2008 (Financial/Calendar Year) **Current membership** Member Representing 1. Chair Alan Danks **DEC South Coast Region** 2. WWF Australia (Vacant) 3. Jackie Courtenay Consultant Wildlife Biologist 4. Ron Dorn Gilbert's Potoroo Action Group 5. Helen Robertson Perth Zoo 6. **Tony Friend DEC Science Division** 7. Peter Mawson **DEC Species and Communities Branch** 8. Alan Needham Edith Cowan University, Applied Science 9. Vic Smith Retired veterinarian, South Coast Community member 10. David Taggart Research Scientist, Royal Zoological Society of S.A. Dates meetings were held No meetings were held in 2008. One to two paragraph Please note: please contact Tony Friend for an update summary of The Gilbert's potoroo program again made great progress in 2008, achievements suitable for with great success of the Bald Island translocation and completion of WATSNU the construction of a 380-hectare enclosure in Waychinicup National Park.

	Trapping on Bald Island proved that the population had grown from 10 founders to at least 21 animals by July 2008. The Waychinicup NP enclosure fence was closed in June 2008 and final touches were added during the last months of the year. In September 2008 five potoroos were removed from Bald Island and into captivity for later release in the mainland enclosure.	
List of actions undertaken by Recovery Team (from actions in Recovery Plan)		
Action 1 Protect the existing wild population and habitat	The Gilbert's potoroo population at Two Peoples Bay exists in long- unburnt bushland on Mount Gardner. During 2008, routine management of the nature reserve included:	
	Fox control by following the approved baiting prescription distribution: quarterly aerial baiting complemented by monthly ground baiting along firebreaks,	
	Fire management, including maintenance of firebreaks including slashed breaks, maintenance of readiness to respond to reports of fire, wildfire suppression	
	Observation of Phytophthora dieback hygiene practices	
	Visitor management to restrict access to potoroo areas	
Action 2 Increase understanding of ecology and population biology of Gilbert's Potoroo to underpin management strategies	The Gilbert's potoroo populations at Mount Gardner and Bald Island were monitored by trapping at regular intervals – three times during 2008 on Mount Gardner and four times on Bald Island.	
	The following studies were continued:	
	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).	
	Collaborative study of potoroo diet at Mount Gardner, Bald Island and potential translocation areas with Dr Neale Bougher	
	Collaborative study of blood parasites in Gilbert's potoroo and quokkas with Jill Austen (Murdoch Uni)	
Action 3 Search for new populations of Gilbert's Potoroo outside Two Peoples Bay	During 2008, hair-arch and hair-funnel surveys for Gilbert's potoroos were carried out in parts of Two Peoples Bay NR other than Mount Gardner. Areas targeted included dense vegetation west of Lake Gardner, along the near Rocky Point Track and at the south-eastern end of the nature reserve. No potoroo hairs were recovered.	
Action 4 Establish and maintain a captive breeding colony of Gilbert's Potoroo	The Gilbert's potoroo captive colony was maintained, involving daily feeding, three-weekly catch-up and checks and quarterly sand change. Animals are paired up regularly but no young were born. The captive facility has a valuable role in housing animals for quarantine and parasite removal while being moved between field sites, i.e. Two Peoples Bay, Bald Island and the Ryedene enclosure.	
Action 5 Develop techniques to enhance the reproductive potential of Gilbert's Potoroo	Cross-fostering: The cross-fostering trial continued in 2008 with only one transfer of a pouch young from a wild Gilbert's potoroo to a captive long-nosed	
	potoroos in the cross-fostering facility in Lower Kalgan. This transfer was carried out on 31 th January 2008. This transfer was not successful (the pouch young did not survive to pouch exit). This project is run in collaboration with Dr David Taggart of the Royal	

	Zoological Society of South Australia.
	Ryedene enclosure:
	No young have been produced in the captive breeding colony since 2001. Breeding occurred in the early years of the colony but has not been sustained. In an attempt to get long-term captive animals breeding, a 14-hectare enclosure has been built on private property near Two Peoples Bay Nature Reserve. Two animals (a captive-bred male and a hand-reared female taken from the wild) were released into a cage within the enclosure on 4 th October 2007. Both were fitted with transmitters and the gate opened into the main enclosure on 23 rd November so that they could come and go. On 20 th March 2008, the male was found dead. He had been losing weight despite having access to supplementary food. The captive-bred male was replaced on 9 May 2008 by a wild male from the Two Peoples Bay population. Both the male and the female have been monitored by radio-tracking and by motion-activated cameras at the gate and food. The experiment was interrupted from September - December 2008 by the harvesting of a blue-gum stand within the enclosure, which necessitated the removal of both animals to the captive facility and the 24-hour monitoring of the gateway by volunteers for 2.5 days until it could be closed again. By the end of 2008, no young had been produced by the female. Regular provision of food will cease in autumn 2009.
Action 6 Enhance the breeding capacity of Gilbert's Potoroo	The methods to enhance breeding capacity in the last section are still regarded as under trial. If and when they have been proven action will be taken to implement the methods on an ongoing basis.
Action 7 Extend the range of Gilbert's Potoroo through translocation of animals to suitable habitat outside Two Peoples Bay.	Bald Island: The translocation of Gilbert's potoroos to Bald Island commenced in 2005 and the population has been steadily growing. Four extended monitoring trips and two day-trips to Bald Island were carried out during 2008. A total of 92 person-nights were spent on the island. Monitoring activities mainly comprised trapping and radio-tracking.
	During the July 2008 trip, a total of 21 independent potoroos were captured, including seven of the original 10 founders transferred to the island over the previous three years. The goal set in the translocation proposal was to achieve a population of 20 independent animals before potoroos could be removed for other translocations.
	Having satisfied this condition for removal, in order to supply stock for the upcoming mainland translocation five potoroos, including a female with a pouch young, were transferred in September 2008 to captivity at Two Peoples Bay. One of the animals was a female with a large pouch young. By the end of 2008, this young animal was weaned and independent.
	Norman's Beach enclosure: In 2006, funding through DEC's Saving Our Species program was secured to establish a second mainland population of Gilbert's potoroos by building a fox- and cat-proof enclosure in Waychinicup National Park near Norman's Beach. A project officer, Geoff Young, was employed to carry out the approvals and construction phase of the project. All approvals were completed and signed off by the end of January 2008 and the main elements of construction were completed by late May 2008, including the closing of the fence. During the second half of 2008 most finishing touches were completed, a hair-arching survey for resident native mammals

	was carried out within the enclosure and a series of sand-pads set up around the perimeter in order to monitor fox and cat tracks. Foxes appear to be absent but at least one cat is present. In November 2008, a major rain event occurred and the two culverts, built on the major creek running through the enclosure, were unable to cope with the flow and serious damage to the culverts and the adjacent roadway occurred. Gaps have been patched up and we have applied for funding for repairs under WA Natural Disaster Relief funding.
Action 8 Secure ongoing funding for the implementation of the Recovery Actions	In 2008, the Gilbert's potoroo recovery program again received major funding from the Natural Heritage Trust through South Coast NRM, providing staff for maintenance of captive breeding and cross- fostering facilities and operation funds for monitoring the Two Peoples Bay population. Major funding was also received for two projects under the Saving Our Species Program: 1) the Gilbert's potoroo enclosure and 2) the Bald Island translocation. Funding will be a major issue after June 2009 as it seems likely that both of these major sources of funding will cease. It will be a challenge to keep any Gilbert's potoroo recovery work going unless funding is gained from a new source.