Gilbert's Potoroo Recovery Team

Annual Recovery Team Report for 2003

Alan Danks For the Gilbert's Potoroo Recovery Team. The Gilbert's Potoroo Recovery Team (GPRT) coordinates and oversees the implementation of recovery actions for the Critically Endangered Gilbert's Potoroo *Potorous gilbertii.*

MEMBERSHIP OF GILBERT'S POTOROO RECOVERY TEAM INCLUDES:

Alan Danks (Chair)	Regional Leader Nature Conservation, CALM Albany
Tony Friend (Project Leader	Principal Research Scientist, CALM Science, Albany
Nicky Marlow	Senior Research Scientist, CALM, Woodvale
Jackie Courtenay	Consultant wildlife biologist, Earth Creations
Ron Dorn	Gilbert's Potoroo Action Group
Raquel Carter	WWF/Threatened Species Network
Dave Taggart	University of Adelaide
Alan Needham	Edith Cowan University
Vic Smith	Retired veterinarian, Albany
Cree Monaghan	Perth Zoo, Director of Research

TEAM MEETINGS

Gilbert's Potoroo Recovery Team met twice in 2003 - on June 20 at Two Peoples Bay and on December 4 at Woodvale in Perth. At the latter meeting it was decided to convene a special meeting to discuss the cross-fostering trial project. This meeting was held at Two Peoples Bay on February 12.

SIGNIFICANT RECOVERY ACTIONS INCLUDE:

Wild Population on Mt Gardner Captive Colony at Two Peoples Bay Cross-fostering trial Surveys Research Projects Gilbert's Potoroo Action Group Recovery Plan

Wild Population on Mt Gardner

The wild population is monitored every four months by trapping. The number of individuals trapped in 2003 were as follows: 17 in March, 21 in July and 21 in November. As the traplines cover more than half of the available habitat on Mount Gardner, this corresponds to a population of less than 40 animals. The population appears to have remained stable since the monitoring was increased to the current level four years ago.

Two radio-tracking projects were carried out in 2003. Young potoroos were fitted with transmitters and tracked several times a week in order to learn more about dispersal and survival. Ten potoroos were tracked during the year and one significant dispersal was followed. No deaths were recorded.

Eight potoroos in Firebreak Valley were tracked during a two-week period in February 2003, with community assistance. Home range, spatial organisation and habitat usage data were collected, to assist in design of reintroduction projects.

Captive Colony at Two Peoples Bay

As at 31 December 2003, the captive colony comprised five animals: three males and two females. One of the females is of breeding age, while the other is very old. No young has been born in the breeding colony since February 2001. In 2003, male-swapping at 10-day intervals was trialled in an attempt to stimulate breeding.

One animal, female #32, died on 13 March 2003, from a long term kidney condition. The general health of the colony has increased over the last year or so, coinciding with the addition of underground fungi to the diet. Truffles collected in plantations are now added to the diet at a level of about 5-10% of total food intake. Truffles collected during the rainy season are dried and fed to the potoroos over the summer.

Cross-fostering trial

A trial to assess the feasibility of cross-fostering wild Gilbert's potoroo pouch young to captive female long-nosed potoroos (*Potorous tridactylus*) commenced in November 2002. In this trial, unfurred pouch young were taken from the pouches of their mothers on Mount Gardner and transported in an incubator by air to Adelaide, where they were placed in the pouches of long-nosed potoroos with suitable-sized pouch young. Three pouch young were transferred between November 2002 and October 2003. The trial was discontinued after three young were lost after two to four weeks surviving in the pouch. The recovery team will decide on the future of cross-fostering in Gilbert's potoroo recovery.

Surveys

Hair arch surveys were carried out to the west of Albany towards Augusta by the Denmark Environment Centre assisted by GPAG and CALM. This work was funded by the Threatened Species Network and the final report has been submitted. No additional Gilbert's potoroo populations were located but valuable information on mammal distributions on the south coast was collected. GPAG is also assisting CALM potoroo project staff with surveys of "peninsula" areas east of Albany.

Research Projects

Phytophthora-truffle study: Julie Whelan, a Murdoch Honours student, studied the effect of *Phytophthora* on the fungal diet of bush rats, which include truffles in their diet. This study found bush rat numbers to be lower in dieback-affected areas. Truffle availability, but not species present, was decreased in dieback-affected areas. This study is relevant to the highly truffle-dependent Gilbert's potoroo.

Two visits to Bald Island were carried out during 2003, in an initial assessment of the site for possible introduction of Gilbert's potoroos. A hair arch survey (for potoroos and other mammals) has been initiated and will be continued during 2004.

Gilbert's Potoroo Action Group

GPAG now has a membership of around 60 people. An information brochure has been prepared with a Lotteries Commission grant. Graphic design students from North Albany Senior High School (NASHS) did the layout as part of their project work. A website is being developed.

Recovery Plan

A draft Recovery Plan was produced in July. This required some adjustment to fit Commonwealth recovery plan guidelines.

Perth Zoo

An application for an ARC Linkage grant involving University of WA, Perth Zoo and CALM to carry out a three-year research project to investigate artificial insemination in potoroos was awarded in October 2003. The grant fell through however, as the prospective postdoctoral fellow had taken a job overseas. Another application will be submitted in 2004.