



Eastern Barred Bandicoot Recovery Program



Background

The Eastern Barred Bandicoot, *Perameles gunnii*, or the Hamilton Bandicoot is found only in Victoria and Tasmania. The two populations probably represent different subspecies. The Tasmanian population is generally believed to be secure, but recent declines there have caused concern and the wildlife researchers in Tasmania are currently investigating the status of bandicoots there. Within Victoria bandicoots were once widespread across the western plains of Victoria. Their range has been shrinking dramatically over the last few decades. The **only** remaining population in the wild is at Hamilton. Since 1960 the numbers and range, even in that small area, have dropped to a very low level. On mainland Australia, there is a very real chance that in the near future the species will become **extinct** in the wild.

In light of these facts the bandicoot recovery program was begun, which aimed to restore habitat at Hamilton and attempt to establish bandicoot colonies at other places in Victoria.

Giddy, here's the first newsletter just to let you guys know what the Bandicoot Recovery Program is up to. Stay tuned for more info.



So far the program has not been as successful as hoped. In November 1991, monitoring of the wild population indicated that the bandicoot population around Hamilton had declined even faster than predicted. A review of the bandicoot program then took place.

This review identified a number of areas of concern and resulted in the State Recovery Team being disbanded. The State Recovery Team, initially set up to manage the Bandicoot Recovery Program, had no capacity to make decisions; it could only refer recommendations to the Department of Conservation & Environment (DCE). This reporting system meant that delays between recommended actions and implementation could be experienced. A new group, the Core Decision Group, took on the functions of the previous State Recovery Team.

The Core Decision Group has the power, by virtue of its membership and charter, to take immediate decisions and ensure the rapid implementation of those decisions. The Core Decision Group is supported by 4 Working Groups which provide technical information: Captive Management, Re-introduction and Wild Population Management, Human Dimensions and Community Education.

Core Decision Group

Convened by Bob Warneke, Research Manager, Wildlife Section, Flora and Fauna Branch. Other members of the group are:

John Seebeck, Project Leader, Wildlife Branch, DCE; Graham Mitchell, Director, Melbourne Zoo; Andrew Arnold, Assistant Regional Manager, Portland Region, DCE and Mark Winfield, Assistant Regional Manager, Melbourne Region, DCE.

Peter Myroniuk, Melbourne Zoo, is the Secretary and Gary Backhouse, Strategic Planner, Wildlife Section, DCE, provides planning support. The group was formed in November 1991 and has met 6 times since then.

Convenors of the four Working Groups are:

1. **Captive Management Working Group**, convened by Gary Slater, from Healesville Sanctuary.

2. **Reintroduction and Wild Population Working Group**, convened by John Fisher, Portland Region, DCE.

3. **Human Dimensions Working Group**, convened by Jim Crosthwaite, Flora and Fauna, DCE. Anne-Marie Tenni, Land and Catchment Protection, DCE, will be convening this group while Jim is on leave.

4. **Community Education Working Group**, convened by Jane Liefman, Melbourne Zoo.

Goals of the Bandicoot Recovery Program

The goal of the Recovery Program is to re-establish at least 3 viable populations of bandicoots in the wild, within the species' former range, within a 10 year period.

To achieve this goal, a Strategic Recovery Plan has been written. The Plan details a number of objectives, which are considered essential if the recovery program is to achieve its goals over the next 10 years.

The objectives include:

- * Identify and review the social and organisational factors impacting on the Hamilton Bandicoot recovery effort.
- * Determine the most cost-effective way to minimise the risk of complete extinction of the Hamilton Bandicoot.
- * Establish a captive colony of bandicoots to preserve the species and also to provide bandicoots for release back into the wild.
- * The removal from the wild of as many of the remaining bandicoots as is necessary to maximise genetic variability of the captive population.

- * Enhance the management of the semi-wild populations at Gellibrand Hill Park and Hamilton Community Parklands and assess the need for additional locations for semi-wild populations.
- * Develop a detailed reintroduction plan.
- * Commence on-site works at one release site to prepare for reintroductions of bandicoots.
- * Review the current Eastern Barred Bandicoot Management Plan and ensure that the necessary amendments and approvals are incorporated in the Recovery Plan.
- * Support and involve community groups in the recovery effort.

Each objective has a Plan of Action which incorporates a time frame for completion, allots responsibility, identifies key personnel and contains a budget estimate.

Projects in Progress

1 Review of the Eastern Barred Bandicoot (*P. gunnii*) Recovery Program

Tim Clark (visiting American specialist in Conservation Biology who has been associated with the program since 1988) and Rich Reading (post-



Courtesy Toner Express, Melbourne



graduate student in Conservation Biology at Yale University) analysed the Bandicoot Program and suggested that the major problems were organisational. The conclusions of this report were confirmed by results obtained from several workshops held at Hamilton in November 1991. The program was revised to correct these problems. A local action plan is being drafted by the local community to address the involvement of the Hamilton community.

A research project has been initiated in conjunction with Deakin University which will look at the social factors affecting responsible pet ownership.

2 Review of the Hamilton Recovery Team

Workshops have been held at Arthur Rylah Institute and at Hamilton to present the Recovery Plan to the community and to receive comment. The roles of the State Recovery Team and the Hamilton Recovery Team have been reviewed. The Hamilton Recovery Team has prepared a series of recommendations which will, when implemented, increase its effectiveness in working towards the conservation of the bandicoot in and around Hamilton. The revised composition of the Team will reflect greater community involvement.

After a review of the Hamilton Recovery Team a special meeting was held the roles of the Team were defined as follows:

- * Provide information to the Hamilton community on the Bandicoot Recovery Team.
- * Initiate, co-ordinate and monitor community activities related to bandicoot conservation and recovery in Hamilton and to facilitate the involvement of a wide range of community groups.

- * Make recommendations to the Expert Working Groups of the Core Decision Group, the Core Decision Group itself and the Portland Regional Manager of DCE, member organisations and other interested participants on bandicoot conservation and recovery in Hamilton.

- * Take a leading role in developing the section of the Hamilton action plan which will set priorities for community involvement in the recovery effort in Hamilton.

- * To identify and promote good practices by responsible authorities and others in the vicinity of the wild bandicoot populations around Hamilton together with the Human Dimensions Working Group.

The Hamilton Recovery Team will regularly report its activities to the Core Decision Group, the DCE Regional Manager of Portland and member organisation. An annual review of its membership, activities and effectiveness will be conducted. The first review will be held at the end of 1992.

3 Captive Management Working Group

This group has reviewed past practices and recommended a number of strategic changes to procedures to achieve their goal of a captive colony of 175 bandicoots by the end of 1992. Budget estimates have been prepared for several options.

The Zoological Board of Victoria now carries the principal responsibility for the captive breeding program. A Project Officer has been appointed (Jenny Kingston). Substantial new holding facilities have been obtained, and based on breeding

successes at Healesville Sanctuary, a regime of intensive husbandry has begun.

Captive bandicoots are currently held at Melbourne Zoo, Healesville Sanctuary, Werribee Zoological Park, Gellibrand Hill Park, "Mooramong" at Skipton and at the South Australian National Parks and Wildlife Service facility at Monarto, South Australia. At 1st June 1992, 110 animals were in captivity. Population modelling and routine genetic evaluation in conjunction with the Studbook (a computer-based stock management facility) are used to monitor progress and performance. Veterinary monitoring, assessment and treatment are routinely carried out.

Some additional trapping in the Chatsworth Road area has been done to provide animals of specific genetic stock to the captive colony. Further intensive trapping has been halted as it is costly and will not add significantly to the genetic diversity in the colony. Occasional *ad hoc* collection of bandicoots will continue such as that which occurred recently when a female with pouch young was obtained as the property owners disturbed the family of bandicoots whilst tidying up a pumpkin patch!

Transport of animals to Melbourne has been made easier by the use of Kendell Airlines as the transport agency. Bandicoots can now be at Melbourne Zoo undergoing veterinary assessment within about 2 hours of leaving Hamilton. Flying is a cheaper form of transport and has also dramatically reduced travelling time for the animals.

A trapping grid covering the whole of the Hamilton Community Parklands has been set up, and the first monitoring was done in May 1992. The results are still being analysed.

A number of potential reintroduction sites have been identified and reviewed, according to criteria established by the Reintroduction Working Group. The site that best fits the criteria is Cobra Killuc State Wildlife Reserve, and preliminary planning to make this a suitable for the release of bandicoots has begun.

Previous radio-telemetry projects have been reviewed and a revised program drafted.

Social factors relevant to the program have been reviewed, and mechanisms to improve local involvement and ownership of the program have

been set up. Planning for studies of community attitudes by Deakin University has almost been completed. A joint project between DCE and the Australian Bureau of Statistics concerning public attitudes to cat management will commence soon.

4 Community Education Working Group

This group has recently been convened, and will be developing a strategic plan for public education. It is reviewing the range and effectiveness of past media coverage and education activity.

The Hamilton Recovery Team will play a major role in keeping the local community informed about the progress of Eastern Barred Bandicoot (*P. gunnii*) Recovery Program.

5 Budget Analysis

The Core Decision Group has analysed the existing budget commitments to various components of the program, and revised expenditure as appropriate. Budget estimates for the next financial year have been prepared (and revised!). The provision of additional captive breeding facilities has been arranged through the Zoological Board of Victoria, in part with funds from DCE.

Population Viability modelling and Decision Analysis have been used to set goals and directions for the captive management group.

6 Captive Bandicoots

These are now established at 6 sites (see above), and the colony's performance is being closely monitored. Animals are kept under intensive husbandry conditions until they are independent, and then transferred to Gellibrand Hill Park to acclimatise to the real world. Improvements in the diet are being made, to improve health and maximise productivity.

7 Computer Models

To enable best estimates of the population of bandicoots at the Hamilton Community Parklands, the sampling technique has been changed. A 100m grid has been established and this will be trapped 3 times each year. The data will be analysed using a computer model (called CAPTURE) and from the results we will be able to

follow the changes in population numbers and structure. A management strategy has been prepared and this will be modified as circumstances warrant. Predator control efforts on both foxes and cats is continuing. A similar population monitoring program for Gellibrand Hill Park is to be implemented in the near future.

8 Identification of Release Sites

Formal identification of appropriate release sites has been difficult so only preliminary work has been done to address the issue of improvements at priority release sites. A number of offers of private land as release sites have been made which will be followed up.

9 The Eastern Barred Bandicoot (*P. gunnii*) Management Plan

First published in 1989, this Plan has been reviewed. The Recovery Plan sets the targets and precise goals that were lacking in the Management Plan, and the Minister has been advised that these two documents now form a complementary Recovery Program brief for the Eastern Barred Bandicoot (*P. gunnii*) in Victoria.

Copies of the Recovery Plan are available on request from Gary Backhouse, Arthur Rylah Institute, 123 Brown St, Heidelberg 3084, telephone (03) 450 8600.

10 Recovery Plan Workshop

The workshop was held in Hamilton to inform the community of changes to the management of the bandicoot recovery strategy. The Hamilton Recovery Team has been reviewed and reconstituted to reflect greater community involvement. The Team will act as a co-ordinating body for the various community groups. The elected Chairperson will be a representative from the community.

Friends of the Eastern Barred Bandicoot

The Friends Group was formed in November 1991 and have recently distributed their first newsletter. They have been organising predator control in the Chatsworth Road area, in conjunction with the Coleraine Field and Game Association.



Road kills, predators and habitat loss are major threats facing the bandicoot today. Look around and see how you can help reduce these threats.

The Core Decision Group now provides a closer link to the Friends through the Secretary, Peter Myroniuk, who is also a Vice-Chairman of the Friends and will present a Core Decision Group report to future meetings of the Friends. Several members of the Friends (Merryl Robson, Pam Thomas, Kay Aldridge, Doug Ward) are members of Working Groups. Other community involvement will occur as the Hamilton Action Plan is developed locally.

The Future

Within the Recovery Plan, a timetable has been set for the implementation of the Plan. For most actions we are on schedule. It is essential that we continue to carry out all the aspects of this complex integrated program if our aim of the conservation of the Bandicoot (*Perameles gunnii*) in Victoria is to be achieved.

HIRL

The Hamilton Institute of Rural Learning has made preservation of the Hamilton Bandicoot a prime focus. The Wildlife Enclosure and community education in general comprise a major part of

HIRL's activities. The HIRL Wildlife Enclosure refers to the area which has been set aside for the Hamilton Bandicoot. Extensive predator control and revegetation works have taken place within this enclosure. DCE documents often refer to this area as the Hamilton Community Parklands (HCP), however the parklands also include the Golf Club and the Motorbike track. The Wildlife Enclosure provides a major educational focus for visits by school groups and other organisations who can be readily shown the issues surrounding the protection of our native wildlife, flora and wetlands.

Several newspaper articles raising awareness about the Hamilton Bandicoot have appeared recently in the Hamilton Spectator. On World Environment Day an educational kit - The Cat Kit, protect your cat, your wildlife was jointly launched by Ian Christie Acting Regional Manager of DCE, the Mayor Cr Trimmell from the City of Hamilton and the Shire of Dundas President's representative Cn Walkenhorst. The kit, developed by DCE, details

the threats posed to wildlife by both feral and domestic cats which are allowed to roam freely. Merryl Robson is pleased to report that talks are continuing with the Dundas Shire regarding the tightening up of cat controls. Domestic cats would be kept inside at night and both feral cats and foxes would be controlled. This measure can only increase the survival chances of the Hamilton bandicoot.

Next year the Zoo Education Unit in conjunction with HIRL is considering the possibility of hosting an Easter Bandicoot Festival which will celebrate bandicoots rather than rabbits - a proclaimed vermin species. So let's all get behind this one!

Hamilton contact:

If you would like to find out more about what's happening with the Hamilton bandicoot and HIRL in general, call Merryl Robson at Hamilton Institute of Rural Learning (HIRL) on (055) 723 699.

Help save the Bandicoot!

Let's all hop to it!

This is the first newsletter in a regular series of quarterly reports. The Community Education Working Group will produce future newsletters. IF you have any ideas, comments or contributions contact Merryl Robson at Hamilton (055) 723 699 or Jane Liefman at the Zoo (03) 285 9355. Authors: John Seebeck on behalf of the Core Decision Group and Anne-Marie Tenni, Landcare Services.