



Eastern Barred Bandicoot Recovery Program



Conservation & Natural Resources

Zoological Board of Victoria

Editorial

Welcome to the second newsletter of the Eastern Barred Bandicoot Recovery Program. Since last July there have been a number of major achievements made in the program: an increased number of bandicoots have been bred in the captive breeding program and the management team of the Recovery Program has been streamlined. The Hamilton Recovery Team has appointed a keen chairperson, Grace James, who has already attended a meeting in Melbourne which reviewed the progress of the program and chaired a couple of meetings in Hamilton.

The newsletter will come out more regularly in 1993 so if there's any questions you want answered please do not hesitate to contact Jane Liefman, Melbourne Zoo Education Service on (03) 285 9355.

Recent Achievements

In 1992 there was a marked improvement in the bandicoot recovery program resulting in a substantial increase in bandicoot numbers. This was the first increase in the species numbers for many years. The upward trend is possibly the first since European settlement in Victoria which initiated the problems of extensive habitat loss and feral predators - problems we are still trying to overcome today.

In late 1991, the mainland subspecies of the Eastern Barred Bandicoot numbered no more than about 150 animals. These animals were spread across a poorly performing captive breeding program, two small re-introduced sub-populations in fenced nature reserves, and a remnant, rapidly declining wild population in Hamilton. By the end of 1992 there are at least 250 bandicoots spread across an upgraded, intensively managed and rapidly increasing captive program, two increasing, confined, semi-wild colonies in the Hamilton Community Parklands and at Gellibrand Hill Park, a newly re-introduced, wild colony near Skipton at Mooramong, and a few surviving wild animals at Hamilton.

Captive breeding

The captive population of Eastern Barred Bandicoots increased from about 45 to over 150 in the 12 months operation of the Captive Management Working Group. A comprehensive manual outlining the techniques and procedures used to breed and handle bandicoots was compiled during this time thanks to Jenny Kingston's efforts. Breeding success has been greatly improved with the switch from extensive management (large pens with groups of bandicoots) to intensive management (small pens and one pair of bandicoots in each pen).

Over 30 captive bred Eastern Barred Bandicoots have been released at Mooramong and GHP.

The Zoological Board of Victoria (ZBV) took on the responsibility for captive breeding, and this was the major success during the year. All three ZBV properties, Healesville Sanctuary, Melbourne Zoo and Werribee Zoological Park are now breeding bandicoots. A number of other organisations have also shown their support by providing facilities for breeding bandicoots. Bandicoots are now being bred at the South Australian National Parks and Wildlife Service captive breeding facility at Monarto in South Australia, Tooronga Zoo in Sydney and Western Plains Zoo at Dubbo in NSW, and also Kyabram Fauna Park in Victoria.

The occasional wild bandicoot from Hamilton is a welcome addition to the captive colony to maintain genetic variability. The most recent was a female which Kay Aldridge, Hamilton, had raised by hand.

Behind the Scenes

Anyone interested in organising a "Behind the Scenes" tour of the breeding facilities at Werribee, Melbourne or Healesville should contact Gary Slater on (059) 62 4022.

Hamilton Community Parklands Wildlife Enclosure (HCP)

Monitoring during November was very successful. A large group of volunteers, ably organised by Portland DCNR officers Peter Goldstraw and Barry Wright, spent a week trapping in the wildlife enclosure. A total of 62 bandicoots

was captured, including 15 females with a total of 39 pouch young.

Population modelling gave estimates of a population of 80 bandicoots in the enclosure. The population is probably increasing to the point where some bandicoots may have to be removed during 1993 to prevent overcrowding, and management will have to address this soon.

In 1993, population monitoring at HCP is planned for 26th April to 1st May, and 1st to 6th November. Contact Peter Goldstraw on (055) 62 4577 if you want to volunteer.

Gellibrand Hill Regional Park (GHP)

The population at GHP is continuing to grow slowly. Only seventeen bandicoots were trapped during monitoring in September 1992, with a population estimate of only 30 bandicoots in the nature reserve. However, subsequent trapping by Eastern Barred Bandicoot Project Ranger, Janine McKay, resulted in the capture of more bandicoots, including a number of unmarked animals which had been bred in the reserve. It appears likely that the actual population is certainly higher than the predicted figure of 30 bandicoots, and an improved monitoring program will be implemented during 1993 to get a better indication of numbers.

During 1992, about 30 bandicoots were released into the nature reserve to supplement the wild population. The pens at GHP will continue to be used as transition, or 'hardening off' pens for bandicoots from other captive breeding facilities prior to their release into the wild.

In 1993 population monitoring at GHP is planned for 29th March to 6th April, and 15th to 20th November. Contact Janine McKay or Graeme Bowley (03) 333 1185 to volunteer.

A major management issue at GHP is the control of rabbits. Many thousands currently exist in the nature reserve. In March 1993 a major control program is planned which will start poisoning and destroying burrows. Readers are assured that the bandicoots will be protected from any poisoning which occurs through the rabbit control program. Control of predators is a major problem, with the recent sighting of a female fox with three young in the reserve.

'Mooramong'

The first release of Eastern Barred Bandicoots to the wild occurred at the National Trust of Australia (Victoria) property 'Mooramong', near Skipton, in south-western Victoria. 'Mooramong' was chosen as the first wild release site for a number of reasons:

- a) It is well away from the nearest town which reduces problems of wandering cats and dogs,
- b) It has transition pens and bandicoots on site
- c) It has a 200 ha nature reserve as part of the property
- d) There's a resident ranger for the reserve.

Releases were made in early December 1992 and February 1993. While the cool wet weather we experienced late last year might not have been everyone's cup of tea, it undoubtedly helped the release, with dense grass growth, moist soil and plenty of grubs and other invertebrates the Eastern Barred Bandicoots rely on for food. Fifteen Eastern Barred Bandicoots were released on 8 December, 1992. All had been acclimatised in the pens on site.

The vets from Melbourne Zoo arrived with a portable 'surgery', and five bandicoots were anaesthetised and had radio-transmitters glued to their backs. Regrettably, one female died from release-related trauma on the first night out. The five 'radio-tagged' bandicoots were followed regularly for up to two weeks, until all the transmitters fell off. The 14 survivors did very well. All established territories and most of the animals released maintained or increased weight.

Monitoring during January 1993 revealed what we had all hoped but not expected so soon - we retrapped 13 bandicoots, and eight females had pouch young! At least 12 bandicoots were still surviving during February 1993, with some bandicoots increasing their release weights by 100 grams. Several females had young in nests, so we are looking forward to independent young showing up during the trapping in the next few months.

Ten more bandicoots were released during February 1993, but unfortunately one animal was killed on the first night out - probably by a fox or dog. This is a sobering reminder that re-introduction will be a long, difficult and risky process.

Ballarat Region and National Trust staff are involved in a heavy predator control program at 'Mooramong'. Using the new 'Foxoff' baits, the control program now includes the neighbouring properties, which are part of a local Landcare group.

Recovery Program for 1993

Based on a review of the recovery program for 1992, the organisation has been further modified to build on the successes achieved last year and improve other aspects that weren't so successful.

The recovery program is now managed by two program leaders; Gary Backhouse from the Department of

Conservation and Natural Resources (DCNR) and Gary Slater from Zoological Board of Victoria (ZBV). The Working Groups will continue, with the Captive Management Working Group convened by Gary Slater, a new Field Management Working Group convened by Gary Backhouse, and a Community Working Group, convened by Jane Liefman, Zoo Education Service.

A Conveners Group, comprising the program leaders, Working Group conveners and a 'Friends' representative will meet regularly to review and plan for the implementation of the recovery program. Pam Thomas has been elected to represent the community on this group.

1993 Recovery Plan

A new Recovery Plan, which will detail program directions for the next three years, is being prepared to replace the 1992 Recovery Plan. A draft will be available for comment in the near future. Contact Gary Backhouse for further details on (03) 450 8600.

The Future

Captive management will continue to be a major component of the recovery effort for Eastern Barred Bandicoots. A captive population of about 100 bandicoots, based on a group of 18 breeding pairs, will be maintained across all the properties currently involved in breeding bandicoots. This will produce about 70 bandicoots per year for re-introductions. The Captive Management Working Group will continue to look for opportunities to increase the breeding population of bandicoots.

Re-introductions at 'Mooramong' will continue, with further releases and regular monitoring scheduled during the year.

Based on the early successes at Mooramong, we will be looking for possible release sites, probably in Portland Region, but also elsewhere within the bandicoot's former range, to possibly take excess bandicoots from the HCP.

Friends of the Eastern Barred Bandicoot

The Friends held their Annual General Meeting in November 1992. The newly elected committee comprises:

President: Dr Cor Lenghaus

Secretary/Treasurer: Bob Korlowski

Committee: Kay Aldridge, Grace James and Pam Thomas.

This year the Friends plan to host more on-ground activities in which members can really help save the Bandicoot.

If you want to be a FRIEND

If you want to become more involved with the Friends contact Bob Korlowski on (055) 734 574 AH or (055) 710 222 BH (ask for Bob in pathology) or write to him at RMB 8640, Hamilton Vic 3300. Joining is \$5 for individuals, \$7 for family or groups and \$15 for overseas members.

Grants

A \$3 000 grant has been received from Tree Victoria. It will be for habitat restoration work in the Chatsworth Road area.

The Friends are seeking funding from the National Landcare Program for further fencing and habitat enhancement works to better enable future local reintroductions of bandicoots.

Farewell to 'Bandicoot Friends'

A number of people who have made major contributions to bandicoot conservation have moved on in recent months. Professor Graham Mitchell has resigned from Melbourne Zoo to take up a position with Commonwealth Serum Laboratories as Director of Research. After over 30 years with the Department, Bob Warneke (Wildlife Research) and Barry Wright (Hamilton) have resigned and are enjoying a well earned retirement. Lawrie Lees, the ranger for the Claire and Scobie MacKinnon Nature Reserve at 'Mooramong' has also resigned after nine years, to manage a cut-flower nursery. Lawrie's work on predator control at 'Mooramong' has been central to the success of the re-introductions there. The new ranger at Mooramong is yet to be announced. Janine McKay the bandicoot project ranger at GHP will be leaving in April to take up a temporary position in the Melbourne Regional office as a Fisheries and Wildlife Technical Officer. She is being replaced by Graeme Bowley. Welcome Graeme! Hopefully we'll see Janine back at GHP later in the year. Merryl Robson has gone to Sydney for a year to do some genetics research and lecturing at Sydney University. Jenny Kingston's position finished at the end of 1992 and she has now returned to her keeper's position at the Zoo. Jenny produced the Husbandry Manual which will be invaluable for future bandicoot captive breeders!

The recovery program will sorely miss the enthusiasm, guidance and endeavour of this key group of experienced people. A big thank-you to all those whose efforts have been tireless in raising the profile of Hamilton and the Eastern Barred Bandicoots. Best of luck in the future Merryl and we look forward to your continued involvement even if from afar.

Release site assessment

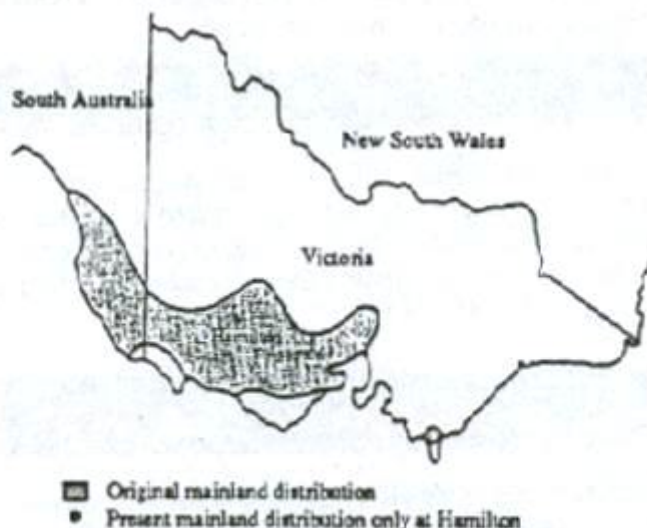
Depending upon the outcome of the re-introduction trials at "Mooramong", we may be looking for other properties on which to release bandicoots. The trials so far have given us valuable information on conditions and habitat which will be refined as the program progresses. Some draft guidelines have been produced to assist in assessment of potentially suitable properties. Please start thinking now about potentially suitable sites - maybe yours or someone you know. Later in the year, as the guidelines are refined, we will be establishing a register of properties and starting inspections. Subsequent newsletters will have more information on this potentially exciting project.

DRAFT CRITERIA

for selection of private land sites for releases of Eastern Barred Bandicoots

- 1) Within former range in Victoria (see map).
- 2) Suitable size:
100 ha minimum property area.
20 ha minimum habitat area.
- 3) Suitable habitat:
shelter: remnant habitat (eg woodland with ground cover); shelter belts or tree plantations with dense shrubs or rank grasses providing ground cover.
water: creeks, drainage lines, dams with shallow flooded areas, drip lines to trees, irrigated pasture.
feeding areas: preferably a diversity, including remnant habitat, shelter belts, woodlots, pasture with minimal cultivation.
- 4) Minimal land use conflict: e.g. no felling of shelterbelts for timber, no clearing or grazing of remnant habitat.
- 5) Demonstrated commitment to predator control: by fencing, regular shooting, poisoning, destruction of harbour/dens.
- 6) Secure ownership: Resident private owner, or property owned or managed by conservation organisation e.g. National Trust of Australia, Victorian Conservation Trust.
- 7) Demonstrated commitment to sustainable land use and maintaining or improving nature conservation values: e.g. Land for Wildlife registration, conservation covenant, part of Landcare group.

- 8) Little or no (recent) pesticide application.
- 9) Distant (>10 km) from a town or rubbish tip.
- 10) Effective pet management: no roaming dogs or cats.
- 11) Preferably sympathetic neighbours: with suitable or complementary habitat.
- 12) DCNR will be involved in ongoing monitoring and management of re-introduced populations to facilitate their survival.
- 13) DCNR reserves the right to trap and remove Eastern Barred Bandicoots should property management change to the detriment of the population.



Big Thanks to CSR Hume

A saving of over \$2 000 was recently made when John Anstee of CSR Humes Pipes donated 40 concrete pipes to Gellibrand Hill Park for use in the bandicoot pens. The pipes will form a fire refuge for bandicoots within their pens. Thanks John!

Companion Animals Bill

The government's current legislative program includes companion animal legislation. The coalition's policy seeks an effective identification system for pet cats and a legislative basis for local government to control stray feral cats. Let's hope it can all be implemented soon.