



Eastern Barred Bandicoot Recovery Program



Conservation & Natural Resources

Zoological Board of Victoria

RECENT ACHIEVEMENTS

This year has been very successful for Eastern Barred Bandicoots, with the numbers of animals involved in the recovery program increasing. This has meant increasing the number of release sites for the bandicoots. A vast improvement from 1991, when only 110 animals in total were thought to exist.

A special thank you is extended to all those involved in assisting in the recovery program, in particular, the volunteers from the "Friends" and other groups, and the hard working Zoological Board of Victoria, Department of Conservation & Natural Resources and National Trust staff. There are many others too, who work hard to support the program, thank-you to those people also.

PROGRAM UPDATE

The recovery program is still progressing well and has settled in to a period of relative stability. Captive populations are steadily producing bandicoots for release and the main emphasis recently has been on new reintroductions. Staff movements have been minimal, with one relative 'new-comer' to the program, Steve Smith (CNR) leaving Colac for Alexandra. Before Steve left, he organised the new release at Floating Islands reserve near Colac. Jenny Kingston from Melbourne Zoo is on maternity leave.

After a dry winter, fortunately for bandicoots the rains came in spring, so the new releases went ahead. Bandicoots have been released at two new sites: Floating Islands reserve, near Colac, and Lake Goldsmith reserve, west of Ballarat. A third site, near Hamilton, should be underway at about the time this newsletter goes to press. A combination of captive-bred bandicoots and animals translocated from Gellibrand Hill Park nature reserve have been used for the releases. Initial survival has been good, and the signs look very encouraging.

Monitoring at Mooramong in spring indicates that there is still good survival of bandicoots there. One sobering note was the very low trapping success at Hamilton Community Parklands during the latest monitoring, which almost certainly indicates a decline in bandicoot numbers there. We still need to keep in mind the high-risk nature of recovery efforts and the fact that the Eastern Barred Bandicoot is far from recovered yet. One concern at the moment is the possibility of drought in western Victoria, not only a major problem for our rural friends, but also its potential impact on bandicoots, especially the success of the current releases.

The recovery team held its last meeting at Ballarat, and Dr Kim Lowe, acting manager of the Threatened Wildlife Program for CNR sat in on the meeting. After the meeting the group visited the Lake Goldsmith release site, observing Ballarat CNR staff radio-tracking the released animals. First prize went to Jane Liefman, for finding one bandicoot in its grass nest while surrounded by eight not-too-observant searchers in heavy boots.



Q. What is in there?

A. An Eastern Barred Bandicoot.

Tim Clark, Denise Casey and Cathy Patrick from Northern Rockies Conservation Co-operative (NCR) arrived during October for a short visit. 'Veteran' bandicoot workers will remember Tim and colleagues for the major contribution they have made to bandicoot recovery since 1988. Although they didn't get involved much in bandicoot work during this visit, they were able to catch up with old friends and come up to date with progress in bandicoot recovery efforts. Cathy worked with John Seeback on finishing the bibliography on publications about the bandicoot. Another bandicoot friend, Rich Reading of NRCC, is still in Mongolia assisting locals on conservation projects there.

The draft Action Statement and recovery plan are near finalisation and will be finished soon. The recovery team plans to hold the regular annual review early in 1995. Rob Humphries (Ballarat CNR) will take over as Convenor of the Field Management Working Group early in 1995.

Gary Backhouse & Gary Slater

TASMANIA

It is sometimes easy to forget, amidst the excitement and frustration of our local recovery program, that Eastern Barred Bandicoots are not just found in Victoria. The species (although a form which is genetically distinct from mainland animals) has its numerical stronghold across Bass Strait in Tasmania.

Although generally regarded as secure there, its range and distribution have certainly altered and concerns have been expressed for its future. These concerns include the reduction in range, population decline, lack of reserved areas, disease (Toxoplasmosis is widespread), potential pesticide poisoning, predation by introduced carnivores, lack of knowledge and the lack of an overall conservation plan have been strong enough for ANCA to fund the research phase of a comprehensive recovery plan. Do you recognise any of the factors thought to be operating against the bandicoots in Tasmania? You should. They are precisely those which were present in Victoria, and we all know what happened here.

In 1992, the Tasmanian Parks Wildlife and Heritage Department (now Parks and Wildlife Service) began a five-point research program to investigate habitat, population size, population biology, potential threats and genetic variation among Eastern Barred Bandicoots in Tasmania. Related research into disease and parasites is also being done, by external colleagues. I am a member of the steering committee for this project.

I visited Tasmania in July 1994, in conjunction with the Australian Mammal Society meeting, and was able to spend several days with Greg Hocking and Stephen Mallick, the researchers involved in this project. We visited Maria Island, wheresome 55 Eastern Barred Bandicoots (together with 25 furred pouch young) were introduced in 1969-70. Initially, results seemed to be satisfactory; the animals settled in and the population increased. Monitoring was mainly done by spotlight surveys rather than trapping, and in September 1971, sixty animals were seen in one hour. Observations were sporadic over the next 15 years, and in 1986, 23 were spotlighted. By 1988 however, numbers were really low - only a couple were seen - and there have been no confirmed reports since.

Southern Brown Bandicoots, *Isodon obesulus*, were introduced to the island at the same time. Their story is almost identical, but the species MAY still survive - just. The habitat for that species is wide spread and reasons for its lack of success are not clear. Habitat appropriate for Eastern Barred Bandicoots is limited and is grazed very heavily by kangaroos, wallabies and pademelons - all introduced as well.

What lessons are there to learn from this, for our program? Clearly, complacency must be avoided. Initial

success is no guarantee that long-term population numbers will remain high. We have a salutary lesson from Hamilton Community Parklands, where the spring monitoring encountered a disturbingly low number of bandicoots. The reasons for this population reduction are not known either. Predation is a possibility but cannot be confirmed. There must be other factors operating and we will have to attempt to discover them, preferably before we think about restocking the site. Many reintroductions have required repeated input before they succeeded. Perhaps the bandicoots are simply following that pattern, but there are few common denominators in those experiments making it very difficult to solve our particular problem by reference to the experience of others. One thing is clear though, and that is that we must program long-term monitoring into the management plans for each reintroduction site.

In Tasmania the population studies being undertaken are based in the Huonville area, south of Hobart. Trapping grids are examined every three months, and results so far reveal that numbers have declined at one site but not at the other. Responsible factors are not known, but the ectoparasite load at the declining site is higher. Is this a cause or an effect? Animals under stress for other reasons may be more susceptible to parasitism, which adds to their stress, a kind of health vortex. Analysis of road kill data has shown that there has been a regional decline in recent years. This is considered to be part of a natural cycle and will be reversed in time. From our experience, I'm not overly comfortable with that interpretation. The population declines in Victoria have certainly not reversed themselves. Caution is needed. George Heinsohn, who studied bandicoots at Smithton in north-western Tasmania 30+ years ago revisited his old sites in mid-1993 and was only able to encounter a handful of animals. Local observations were that they were now most uncommon - and yet there were few obvious changes to the land.

Eastern Barred Bandicoots and their habitat are not well-represented in conservation reserves in Tasmania. I visited Mt. Field National Park, where bandicoots do occur - but only on the periphery of the park, in the river valleys draining the mountains and in adjacent cleared farmland. The overall picture is of a change in distribution from traditional natural range in the midlands and other areas of grassy woodland to areas that were heavy forest but have been cleared for agriculture. All of these changes are the reason that the Parks and Wildlife people are carrying out their studies, so that there are data available to plan ahead and avoid the Victorian experience. We will continue to maintain the links with Tasmanian bandicoot research and management to our mutual benefit.

John Seebeck.

Wildlife Section, Flora and Fauna Branch.

COMMUNITY WORKING GROUP

The year has been very busy for the working group. The community education strategies for Gellibrand Hill Park, Mooramong and Hamilton Community Parkland continue to be implemented at these sites. It is very pleasing to see the work that is occurring by the community in particular the Friends group, CNR and the National Trust to ensure the continued success of the Eastern Barred Bandicoot Recovery Program.

A lot of time and effort goes into informing the community about bandicoots. This can take a variety of forms, working directly with landowners that surround the release sites to develop vegetation corridors or fox control programs, visiting schools, providing information or making sure that an appearance in the media occurs. This all helps to keep the community up to date. Of course this work will continue and, even more things are being considered for 1995, to ensure that the bandicoots survive.

One active participant for the program, has been 'Bertie the Bandicoot'. This animal has travelled to a variety of places to help spread the word about bandicoots and their habitats. See what "Bertie" has been up to lately!

Bertie accompanied grasslands planner, Murray McIntyre who gave a talk on threats to the survival of the bandicoot colony at the nearby National Trust property, Mooramong. Murray's talk was part of the community education strategy for the Eastern Barred Bandicoot Recovery Program.

Bertie (its true identity shall remain anonymous) was a perfectly behaved bandicoot. It foraged on the carpeted floor for insects, was touched on its sensitive snout by inquisitive children, had its fur patted by enthusiastic teachers and had its tail pulled.

Earlier, twelve grade six students visited Mooramong to watch a CNR monitoring program where the animals were weighed, measured and checked for pouch young, before being released back to the wild.

Monthly monitoring of the bandicoots over the past 18 months has shown that the first bandicoots to be reintroduced into the wild from animals bred in captivity are surviving and breeding well. Monitoring will now take place every six months (see Mooramong report, for latest results).

Thank you to the South-west area, CNR and the author Margaret Hawke for allowing this article to be reproduced.

Antics of Bertie the Bandicoot

Bertie the Bandicoot received a warm response from students when it recently made a guest appearance at Skipton Primary School.



"Bertie", the Bandicoot, makes a guest appearance and receives a warm response from primary school children, July, 1994.

GELLIBRAND HILL PARK (GHP)

With all the day to day conservation work going on to drag the Eastern Barred Bandicoot back from the brink of extinction, it's sometimes easy to forget that the Recovery Program is making history!

Making history is something that is particularly topical with the program out at Gellibrand Hill Park where the National Parks Service is aiming to showcase the park as a living historic landscape. The aim is to restore the landscape to characterise the area as it was in the 1940's when the pastoral expansion to Melbourne's north-west was beginning to gain momentum. The change is forecast in the parks present draft management plan, released last year.

Apart from the new 1840s theme for the park, there are also a few name changes to look out for. In particular, the 400ha, "Nature Reserve" which is home to the bandicoot population is now known as the "Back Paddock". The Back Paddock is an historical reference to the 'wildest' areas of the 1840s pastoral property, where a diverse native ecosystem was still largely intact. The big news, however, is that the Minister for Conservation, The Hon. Mark Birrell MP has announced that the park will soon be renamed Woodlands Historic Park.

No characteristically 1840s Back Paddock would be complete without highlighting the return of the bandicoot, which was observed and recorded in the area by 19th Century Sunbury-District naturalist Isaac Batey, from 1846 to the early 1880's.

Batey noted a "Short Tailed Bandicoot" (believed to be *Perameles gunnii*) as already scarce in the area by the late 1840's and remaining so throughout the 1850s. This may have been a reflection on the rapid expansion of sheep and cattle grazing in the area during that period. Batey recorded a period of abundance around the mid-1860s, before noting the last sighting in 1883. The return of *Perameles gunnii*, in the late 1980s (from foundation stock from Hamilton) may well have marked 100 years since its extinction in the Sunbury area.

Today this 'historic' population of the Eastern Barred Bandicoot is helping the species return to other districts of Victoria, as bandicoots, born wild in the Back Paddock, have already been translocated to help establish two new release sites at Lake Goldsmith (near Ballarat) and the Floating Islands (near Colac). It is also planned that bandicoots will soon be sent from the Back Paddock to a new site near Hamilton (see Program Update).

References

Batey, I., 1907, *The Animal Life of the Sunbury District Sixty Years Ago*, in *The Victorian Naturalist*, August, Vol. 24., pp. 69-74.

Greg Thorpe

CAPTIVE MANAGEMENT WORKING GROUP

The last couple of months has seen a slight change of direction for the institutions involved in captive breeding. All holding animals suitable for release have been released at the new sites. There are now several interstate bred animals roaming the country side. In total now 21 breeding pairs are being held at seven institutions and breeding continues to be successful.

The husbandry manual for Eastern Barred Bandicoots has been revised by Jenny Kingston and has been sent out to each institution involved. A valuable document for those caring for bandicoots. It includes such facts as the diet, housing, how to transport them, health problems and even how to trim a bandicoots tail.

A direct release of six bandicoots into Gellibrand Hill Park (GHP) will occur in December. All animals will have radio transmitters attached so that their progress can be monitored. Usually all bandicoots are kept for some time in the pens at GHP and provided with supplementary food. This trial will tell us if it is feasible to release bandicoots directly from the intensive captive facilities to the wild. Prior to release, animals will be encouraged to forage for their food by having half of their nightly feed being spread around the enclosure.

The latest in bandicoot statistics for the captive population is as follows:

Total number of animals registered in studbook (live, dead, released)	547
Current captive population @ 31 October 1994	68
Wild captures for the period 31/8/93 to 31/10/94	4
Births for the period 31/8/93 to 31/10/94	56
Total number of births recorded	404
Released for the period 31/8/93 to 31/10/94	64
Total number of releases from the captive population	207
Number of releases to:	
Hamilton Community Parklands	11
Hamilton wild	9
Gellibrand Hill Park	97
Mooramong	68
Lake Goldsmith State Game Reserve	11
Floating Island Nature Reserve	11
Deaths for the period 31/8/93 to 31/10/94	40

Peter Myroniuk

Species Management Officer, Melbourne Zoo
& EBB Studbook Manager



Mooramong Team, September, 1994. (Photo by John Seebeck).

Left to right: Marcia, Jim, Jo, Rob, Karyn, Dare, Jodie, Angus, Claire, Nicole and Micheal

MOORAMONG

Since the last newsletter, monitoring activities have been reduced at Mooramong. A further 18 animals were released into the reserve in June 1994, bringing to 85 the total number of animals released since December 1992. Eight of these animals were directly translocated from Gellibrand Hill Park. The group as a whole has survived exceptionally well. The experimental release at Mooramong has now reached the 24 month stage and no further releases are planned until additional habitat areas are fenced and included in the reserve management area.

A three-day monitoring session in September captured 35 bandicoots in the Mooramong Nature Reserve. This result was considerably lower than the number of animals captured in April, considering the additional 18 animals released since the last monitoring, and is of concern to the recovery team. Possible reasons for this apparent decline include the shorter trapping periods and hence less opportunities to capture animals, the reduced breeding activity noted in April, the prolonged dry spell or increased predator activity. Predator control is continuing and the ranger at Mooramong has not noted any apparent increases in fox activity. In fact, our poisoning stations indicate the opposite. Low intensity monitoring will continue over the summer period to clarify population trends.

Intensive predator control activities are continuing on the property. Tym Barlow, the National Trust Ranger at Mooramong, has been busy spotlighting two to three nights per month. The number of foxes seen has declined

over recent months, as has fox activity at bait stations. Forty foxes have been shot on the property since October 1993.

The next major monitoring of animals will be during the 1995 Easter School Holidays. For further information on bandicoots at Mooramong or forthcoming monitoring activities, please contact Fisheries and Wildlife Officer Jim O'Brien at Ballarat on (053) 336 782 or Tym Barlow at Mooramong on (053) 406 558.

LAKE GOLDSMITH WILDLIFE RESERVE NEAR BEAUFORT

Following discussions with the Ballarat and Ararat branches of the Victorian Field and Game Association and Lake Goldsmith Land Care group, Eastern Barred Bandicoot reintroduction commenced at Lake Goldsmith in October 1994. The wildlife reserve contains approximately 120 hectares of dense 'stony rise' grasslands and associated wetlands, surrounded by Lake Goldsmith. It is anticipated that up to 50 bandicoots from captive and semi-wild populations will be released over a 12 month period. So far 33 bandicoots have been released in three groups. These animals will be monitored fortnightly until Christmas and, depending on establishment patterns, will then be monitored three or four times during 1995.



Jim O'Brien, CNR Ballarat, tracking Eastern Barred Bandicoots.

Prior to releases commencing, a local hunting group swept the release site over two weekends and shot five foxes. The area is a popular spot for local hunters and fox numbers are rumoured to be quite low. However, the Department is taking no risk so permanent poisoning stations have been established throughout the reserve and are baited with 'Foxoff' continuously. To date, the amount of fox activity at these stations has been considerably lower than at Mooramong which is only 15km to the south-west.

Following a one-night monitoring session in October and a two-night session in November, the reintroductions seem to be establishing well, with 14 of the 21 released animals being recaptured so far and all animals judged to be in fair to good condition. Two of the females released in October are already carrying pouch young. No deaths have been reported.

If you would like any further information on the Lake Goldsmith project or would like to assist with monitoring programs, please contact Wetland and Wildlife Reserves Ranger Marcia Johns at Ballarat on (053) 336 782.

FRIENDS GROUP

Local Friends have again been active in Hamilton, especially since the mid October monitoring of the Hamilton Community Parklands. Four male bandicoots were trapped. The predator program has been stepped up inside the Parklands. An organised daylight shoot was held and spotlighting has been on-going, with encouraging

Members have been busy supplying information to local and university students. Hamilton was again visited by 40 students and four teachers from Langwarrin Secondary College and Padua College, in November. They were involved in tree planting, hard shelter construction, Parklands fence inspection and maintenance. Their continued support is greatly appreciated.

The wild Bandicoot population is still surviving in and around Hamilton. With the breaks in the Parkland fence, bandicoots have been seen around the perimeter. It is thought some breeding is also occurring. Sightings of bandicoots on private property along Boundary Road and Hensley Park Road have been received. Residents around these areas are encouraged to be "BANDICOOT AWARE"

The Annual General Meeting of the Friend's group occurred on Friday 25th November. At this meeting a new committee was elected:

Alan Jamieson	Chairman
Kay Aldridge	Secretary
Bob Korlowski	Treasurer
Grace James & John Langford	

Thanks were given to outgoing chairman Cor Lenghous. We are also grateful to Rob Humphries for driving down to address our group as guest speaker.

Merry Christmas and a Happy New Year for 1995

Lets make a New Year Resolution to continue to help save the Eastern Barred Bandicoot from extinction.

