

SPECIAL POINTS OF INTEREST:

- Site updates
- French Island
- Conservation Volunteers
- PhD completed

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Bandicoots and Island Views

Amy Winnard

2010 shaped up to be a very exciting year for the EBB with Conservation Volunteers coming on board, the completion of my PhD, Melbourne Zoo researchers becoming more involved and the long awaited French Island vote.

In 2007 Richard Hill proposed that French Island would be a perfect fox free introduction site for the eastern barred bandicoot and set the wheels in motion for this idea to become reality. The problem was, this would be an introduction (outside of the bandicoot's former range) and not a reintroduction. This meant that many hurdles would need to be jumped before any bandicoots could be released onto the island. Firstly, the support of the islanders was essential. Without this support an introduction would surely fail as eastern barred bandicoots are expected to occupy private farming land, like they do in Tasmania.

After discussions with the islanders it was agreed that a vote would take place to decide whether a 12 month trial release of 20 non

and fauna of French Island. Once the trial has been completed, the results will be discussed with residents and it will be back to the polls once more to vote on the introduction of a breeding population of bandicoots. If successful French Island will potentially provide several thousand ha of fox free habitat for the EBB which is far larger than any potential reserve on the mainland. Although there will



Blue Gums: the potential EBB release site on French Island (Photo: R. Reed)

breeding EBBs could occur. In 2010 the residents took to the polls and although the result was close, the majority was in favour of a trial. Understandably many islanders are wary about another introduction onto their island, since koalas were introduced there in the 1870s and have caused problems ever since. Hopefully this trial will set minds at rest that no detrimental effects will be caused by the eastern barred bandicoot such as damage to property or threatening the unique flora

always be some people strongly against introductions, the Recovery Team feels this is the best way to prevent the EBB from becoming extinct, as the battle against foxes on the mainland is difficult, expensive and confines reserves to a small size, resulting in small populations and potential deadly inbreeding effects.

The Recovery Team would like to thank the French Island residents for their support so far and we hope that our relationship will be a long and productive one.

Bandicoots Dig up Town

Amy Winnard



EBB trapping team at Hamilton Community Parklands
(Photo: H. Kiley)

"...the cheeky bandicoot [that] spent many an hour gorging on [the lawns] gourmet delights."

The eastern barred bandicoot population at Hamilton Community Parklands continues to prosper with 39 individuals caught in November 2010.

No fox incursions have occurred in the last 12 months meaning the fence is doing an excellent job as well as everyone involved in fence maintenance. With the unusually high summer rainfall, lush green vegetation and moist soils, usually associated with cooler months, it will be interesting to see if the population

declined slightly this summer as it did the previous two years, presumably due to hard, dry, compact soils making high energy food items difficult to obtain. Quarterly trapping of this population occurs with the help of Conservation Volunteers, if you would like to volunteer please see the conservation volunteers website at www.conservationvolunteers.com.au for upcoming project dates.

Amazingly a resident living close to the reserve made a complaint about eastern barred bandicoots in 2010. It seems that their pristine lawn is now dotted with the sign of an escaped bandicoot in its element.

The finely groomed lawn proved irresistible to the cheeky bandicoot that spent many an hour gorging on its gourmet delights. Any other residents finding eastern barred bandicoots in their gardens are urged to contact the Recovery Team. No eastern barred bandicoots have been deliberately released outside of the reserve but we are aware that some, most likely juveniles, are able to escape. If they are able to survive in the face of many dangers such as foxes, cats and cars then this is very important information and could lead to truly wild reintroductions occurring in the future.

Introducing Angus

Angus Williamson

I am a Masters student at the University of Melbourne working under the supervision of Graeme Coulson (Melb. Uni.), Richard Hill (DSE), and Dan Harley (Melb. Zoo). I have been selected to study the trail release of 20 non-breeding EBBs (10 vasectomised males and 10 non-pregnant females) onto French Island. The two main areas of the trial will investigate if bandicoots will use the cleared pastures and vegetation of French Island, and if they will have any significant

impact, through habitat and/or food competition on the indigenous long-nosed potoroo.

The trial will commence this year with EBBs sourced from the Hamilton Community Parklands population. All individuals will be held in captivity for at least a month for rigorous health checks before being released onto the island. I will then track all individuals using radio-transmitters and regularly trap them to monitor their health status. This project is expected to take 12

months and will hopefully be an important step in ensuring the long-term



Angus Williamson EBB trapping in Hamilton
(Photo: H. Kiley)

Volunteering up a Storm at Woodlands

Travis Scicchitano



Volunteers from Little Creatures working on the Woodlands fence (Photo: T. Scicchitano)

It has been a very exciting start to the Woodlands Historic Park bandicoot Project. The partnership between Parks Victoria and Conservation Volunteers is running full steam ahead. Conservation Volunteers and Parks Victoria are joining forces to help re-establish the Back Paddock site for the reintroduction of the EBB in a safe, protected 350 ha environment.

The great news is that after a bumper season of rain that fell within the region the grasslands are looking fantastic. Kangaroo and spear grasses are as tall as your chest. It's nearly impossible to see the eastern grey kangaroos! The grasses are spreading naturally and are starting to win the fight against some of the weed species. Increased rainfall is also positive for the huge areas of habitat for the bandicoots, creating softer ground for them to look for tasty insects to feed on.

A new fence line is being

erected by Parks Victoria to eliminate an area which was difficult to manage because of the terrain. This will also enhance the exclusion of foxes from the area. Conservation Volunteers has been maintaining the existing fence by re-clipping the skirt and making sure the fence is connected and supported. Volunteers have also been checking for fox holes and monitoring where there might be any breaches, as well as conducting extensive woody weed removal. They have been removing vast quantities of African Boxthorn along the fence lines, which will potentially harbour rabbit warrens and fox dens.

The addition of a floppy top styled fence is on the way. Plans have been created and trials are on the way to improve pest exclusion in the Back Paddock. Once this trial is completed both Conservation Volunteers and Parks Victoria staff will be busily erecting the floppy top fence and

start working on pest removal, which once completed will allow for the bandicoots to be welcomed into their new home.

So far there has been plenty of on ground works being undertaken by Parks Victoria staff and the Conservation Volunteers project officer, Travis Scicchitano. But the real bulk of the work has been achieved by the excellent help from all the dedicated volunteers. The volunteers have been varied from local residents, international travellers, students and corporate staff members getting out of their office to help the environment. Over the last three months there have been over 150 volunteers working on regular Thursday project days and the occasional mid week project.

We are well and truly off and running, but there is plenty of work still to be done. With all those willing helpers out there I'm sure we will achieve our goals and create a safe home for the wonderful Eastern Barred Bandicoot.



Weed removal at Woodlands by Origin Energy volunteers (Photo: T. Scicchitano)

**“Conservation
Volunteers and
Parks Victoria
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Back Paddock
site for the
reintroduction
of the EBB...”**

New Start at Mooramong

David Coutts



EBBs being transported to their new home at Mooramong

“After many years four female EBBs were released at dusk into the pens at Mooramong ...”

After many years four female EBBs were released at dusk into the pens at Mooramong near Skipton in late October 2010. The pens, unused for many years were constructed to house Mooramong's first re-introduced captive animals. In the months in the lead up to the release a great deal of work was undertaken to ensure the pens were both predator proof and bandicoot friendly. The habitat was enhanced by the addition of new watering points

and feeding stations. Refuges were created by using earthenware pipes covered with soil, hollow logs were added and some plantings of *Poa. labillardieri* (Common Tussock Grass) undertaken amongst the dense *Phalaris* that dominates the pens. The external perimeter of the pens was reinforced by attaching a wire netting apron at ground level to prevent predators digging under the fence. This work was ably done by Conservation Volunteers Australia.

After the release, the bandicoots were fed a supplementary diet of diced vegetables and dog kibble. Good rain ensured an abundance of natural food was readily available and

after two weeks the supplementary food was no longer being eaten. Three weeks post release an attempt was made to capture the animals to monitor their health and progress. While fresh digs in all the pens continued to be observed, only one animal was captured over two nights trapping. She displayed good health and had gained more than 60g.

The Nature Reserve Committee at Mooramong is currently working toward initiating a student project to monitor both predators and the associated control work. It is hoped the project will facilitate continued wild releases of EBBs at Mooramong.

Captive Breeding

Peter Courtney

The Captive Breeding program has been extremely successful in the last few months with a large number of EBB births occurring. The captive holding capacity has now been reached and we have had to cease breeding until some animals are released. Serendip Sanctuary has come back on board by taking eight bandicoots from Melbourne Zoo to help with holding the extra numbers produced. Mooramong has

also helped by revamping the pens located there and taking four females, housing them for the foreseeable future. Animals have now been earmarked for the upcoming research project on transmitter attachment which is part of the planning for our French Island trial, which is due to occur later this

year. The French Island trial will see the release of twenty animals, which will free up some space and allow us to resume our breeding program.



EBB bred at Melbourne Zoo



EBB at Serendip Sanctuary
(Photo: M. Zabinskas)

Conservation Volunteers through the support from the *Vision for Werribee Plains* fund have been engaging the wider community in a project at Serendip Sanctuary to restore and manage the natural temperate grasslands of the Volcanic Plains. The project will provide habitat for EBB populations before release into larger

predator proof environments around Victoria.

Through the efforts of dedicated volunteers, Conservation Volunteers through a partnership with Parks Victoria have restored captive holding pens at Serendip Sanctuary and are currently holding 11 EBB. The next stage is to establish larger pens at Serendip to provide a more natural grasslands environment.

Working with Mt Rothwell Biodiversity Interpretation Centre, Conservation Volunteers have been assisting to improve the grasslands through weed removal and fencing activities and will aid Mt Rothwell in supplying and setting up camera monitoring systems to gain vital informa-

tion on the health and status of the EBB population in the reserve.

The project will not only directly assist in the recovery of EBBs and other threatened species but will also enhance the environmental educational opportunities in the Western Plains region.



Volunteers at Serendip Sanctuary
(Photo: M. Zabinskas)

How to tag a coot

Dan Harley

Zoos Victoria are re-visiting the vexed question of how to reliably attach radio-transmitters to EBBs for periods of eight weeks or more. Radio-collars offer the simplest solution, however past tests using several alternative collar designs have all met with limited success.

The current radio-collaring trials will be conducted on captive bandicoots held at Melbourne Zoo, where the study animals, five males and five females, can be monitored on a nightly basis via remote cameras. The challenge is to get the collar tight enough to pre-

vent animals getting their feet caught, without causing any neck abrasion. Animals will be anaesthetized for the precise fitting of collars. A durable rubberized collar will be tested first, that should be conducive to long-term attachment (> 12 months) if they stay on successfully for the first few weeks. Should these prove unsuccessful, leather will be trailed, which should permit a more precise initial fit, but has a more limited lifespan in the field (possibly 2 – 10 months) due to gradual stretching over time. Failing that, the implantation of transmitters in the body cavity may offer the only

means of attaching radio-transmitters to bandicoots for extended periods to monitor their fate and movements post-release.

The prompt for the current research is the 12-month trial release of bandicoots scheduled to occur on French Island later this year. Radio-tracking will be a key monitoring technique employed to monitor the movements and survival of animals post-release. Angus Williamson, a MSc student from the University of Melbourne, will undertake the monitoring component of this study.

“Zoos Victoria are re-visiting the vexed question of how to reliably attach radio-transmitters...”

Mt Rothwell's Flourishing Fields

Annette Rypalski

*"With the
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How much a place can change in 12 months. Those who have been following the progress of Mt Rothwell over the last few years will definitely agree that the site has never looked better. With the copious amount of rain, the vegetation has indeed flourished to the degree we are actually finding it quite difficult to put estimates on animal populations. However, if we were to go by the sightings on our paths and tracks we can confidently say that EBB sightings are still the most prevalent.

Despite the newly formed wetlands in our Basalt Plains many species populations on site continue to be on the increase, including the smaller local amphibian and invertebrate species. It's very exciting for all staff, volunteers and regular visitors to walk through the Basalt native grasslands to see waves of



Flooded track at Mt Rothwell (Photo: A. Rypalski)

various cricket, moth and butterfly species flying out to safety, and while the mosquito's have been a bit of a pain, the dragonfly's will gather in their hundreds around frog ponds and waterholes to feast on them. No doubt the eastern quoll and EBB are benefitting from the high abundance of food and perhaps feeding on species they've never tried before.

Various methods of surveys are currently being experimented with, including spotlighting, trapping and sensor cameras. Mt Rothwell is excited with anticipation for the arrival of various styles of camera traps for trial to detect and record quantities, behaviours, health and condition of the EBB. Successful cameras will be purchased and kindly gifted to Mt Rothwell from CVA. The information gathered will be provided

to the Recovery Team and may hold the key to the establishment of the species at other sites.

With the rains forecast to continue and winter approaching quickly, access to more than half the site will remain difficult to near impossible. So while the bandicoots learn to swim and adjust to the new menu they seem to be easing to their new living conditions and diet quite well.

The development and achievements continue with another new employee joining the Mt Rothwell team for the management of the new 800ha site named Tiverton. Brett Barnes will begin within the next two weeks and we look forward to introducing him to all our programs as he becomes a part of all the conservation efforts and successes Mt Rothwell will bring to the community within the near future.



Female with young at foot,
Mt Rothwell (Photo: A. Rypalski)

Research for Recovery

Amy Winnard



Amy radio-tracking at Mt Rothwell (P. Mervin)

In 2005 I commenced my PhD supervised by Graeme Coulson, University of Melbourne. It took me five enjoyable years to complete and in the end it was a race to see which would be born first, my thesis or my son. Thankfully, my thesis won by a mere 1.5 weeks! As with any PhD mine transformed and morphed over time into something completely different due to the unfortunate loss of bandicoots at Woodlands and the decline of bandicoots at Mooramong. Despite these declines both Hamilton and Mt Rothwell had populations that were performing well and with the use of historic bandicoot capture data I was able to pull together a thesis that will hopefully be indispensable to the recovery effort.

The six main chapters of my thesis are as follows: 'Sixteen years of eastern barred bandicoot *Perameles gunnii* reintroductions in Victoria: a review', 'An assessment of three techniques for monitoring a rare, cryptic grassland marsupial', 'Living with the enemy: dynamics of a declining population of

gered eastern barred bandicoot *Perameles gunnii*', 'The foraging habitat use and movements of reintroduced eastern barred bandicoots *Perameles gunnii* into an unoccupied reserve', 'Habitat selection of a critically endangered species in a predator-free but degraded reserve'. The final chapter, entitled 'Management' is a synthesis of my management recommendations. In summary, these include only releasing bandicoots into fox free areas in the short term, releasing bandicoots in the cooler months and on the fringe of grassland and woodland ecotone, habitat revegetation is not essential prior to releases and a strict monitoring routine should be employed at least quarterly at every reserve.



**Juvenile EBB at Hamilton Community Parklands
(Photo A. Winnard)**

the critically endangered eastern barred bandicoot *Perameles gunnii*', 'Fenced in: dynamics of a newly reintroduced population of the critically endan-

I would like to thank the Alfred Nicholls Award, Department of Sustainability and Environment, Department of Zoology (The University of Melbourne), Drummond Award, Glenelg-Hopkins CMA and Parks Victoria for supplying funding and scholarship money and all past and present members of the Recovery Team for their support and help over the years, especially Graeme Coulson and Richard Hill.

"...I was able to pull together a thesis that will hopefully be indispensable to the recovery effort."



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The Eastern Barred Bandicoot Recovery Team was founded in 1989 after a continual decline was noted in the wild population. Bandicoots have since been reintroduced into eight sites but are now only known to be present at Hamilton Community Parklands, Mooramong and Mount Rothwell. Eastern Barred Bandicoots are considered critically endangered in Victoria and the population is estimated to be around 200 animals.

'Warron' is the Kirrae Whurrong word for the Eastern Barred Bandicoot. This newsletter was named 'Warron' in honour of Wayne Drew after his passing in 2001. Wayne was the 'Bandicoot Ranger' for Woodlands Historic Park and a member of the Kirrae Whurrong people from the western district of Victoria.

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