

WANNON Eastern Barred Bandícoot Newsletter

ISSUE 17

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SPECIAL POINTS OF INTEREST:

- Site updates
- French Island

Zoo News

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Fit For a Bandicoot

Madelon Willemson

Werribee Open Range Zoo (WORZ) has finalised its feral proof fence and is now

area, therefore guests will hopefully be woken by EBBs snuffling around their tents.

working hard on making the four different release sites for eastern barred bandicoots, rabbit and predator proof. So far we have eliminated almost 3000 rabbits. with baiting alone. Soon

we will be moving onto the removal of harbours and burrows, which will further decrease numbers. It is going to be an ongoing fight against rabbits on site, but it will not only give the released EBBs a fair chance, but also flora (the native grasses the WORZ horticultural team is planting for revegetation of the native grasslands) and our exotic animals (pasture will no longer be eaten by rabbits!). We are hoping to slowly start releasing EBBs in the Australian Journey area in spring 2013. This will provide great opportunities for visitor encounters, as the tents for the overnight slumber safari are in the same



Kilara the hand reared female EBB (Photo: WORZ)

We have also hand reared a male and a female EBB for visitor experience. The female is doing a fantastic job representing her species. The male however is quite wild and doesn't even allow keepers into his territory, so he will be returned to the breeding pool. We are hop-

ing to hand rear a few more females as the response from visitors, VIPs and students are amazing. They are all in awe of the female EBB cruising around a circle of people sitting on the floor, stopping to snuff out their toes or hands. It really is the best way to tell the story of EBBs and the work

> we are all doing to save them.

36 The breeding pens have been slowly filled with animals release for French into Island and are now filling up with breeding pairs for re-

lease into Woodlands Historic Park. Thanks to the species management skills of Peter Courtney, the research of Marissa Parrott and Michael Magrath and of course the fantastic WORZ team, we are able to breed up the numbers and at the same time start mate selection research.



Kat Thompson (keeper) with hand reared bandicoots (Photo: WORZ)

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The new Gellibrand Hill fence (Photo: T. Scicchitano)

It has been a very busy past 12 months out at Woodlands Historic Park. The volunteers have been erecting the floppy top fence with gusto. Around 6.1km's of the existing back paddock fence has

Fenced In Travis Scicchitano

now been modified to the new design. It was definitely a challenge working on such a high fence but after a couple of trials, the system was created, and the fence went up. So many thanks to all the wonderful volunteer hands that played a part.

The new section of fence which excludes the old Gellibrand Hill site has also been built. After contractors put in the posts, volunteers and Parks Victoria staff busily constructed the rest of the fence. So now, around 7km's of fence is up and ready for action.

A few changes to existing

pedestrian and vehicle gates have also been modified to cater for the floppy top design for better pest security. There has been plenty of work done on an ongoing basis to keep an eye on breaches from foxes and rabbits.

Now the time has come for the all important pest control. Parks Victoria are running an extensive rabbit and fox eradication program over winter, which will enable the monitoring plan to start to show a fox free environment. Once this has been achieved the plan is for an EBB release to go ahead in late spring 2012.



Rebecca Groenewegen (Photo: R. Hill)

The recovery of the Eastern Barred Bandicoot shows great potential for success in recovering a critically endangered Australian animal. Exploring French ls-

land as a fox-free habitat offers great possibilities for attaining a large, genetically healthy and self-sustaining wild population. After experiencing many delays

Island Vacation

Rebecca Groenewegen

due to difficulties in fitting transmitters to such small and uniquely shaped creatures, the trial is finally ready to commence this July 2012. Consequently, I have replaced Angus Williamson as the Masters student who will conduct this trial. Twenty (10 females and 10 sterile males) bandicoots sourced from the Hamilton Community Parklands population will be released in two groups of ten animals composed of five females and five males. To share the trial with the French Island community, the students and their enthusiastic

teacher from French Island's primary school will be present at the release. After release, I will undertake monitoring of the bandicoots along with some volunteers. We will be radio-tracking the animals at night and during the day to determine their whereabouts as well as trapping them regularly to ensure they are coping in their new environment. At the end of the trial the bandicoots will return to the mainland. I am looking forward to getting this trial underway and spending time on French Island.

The EBB captive breeding program continues to be highly successful! We have bred many animals at Melbourne Zoo in particular; with further future breeding plans at Serendip Sanctuary and Mooramong and a long term breeding pair at Kyabram Fauna Park. There have been a number of reintroductions to the wild and moves to partner institutions in the past year. We are holding adult male and female bandicoots for release and will be wishing them bon voyage in the coming months as they start an exciting new adventure on French Island. Once those animals are on their way, we will have more room at Melbourne Zoo, plus 36 new enclosures at Werribee Open Range Zoo (WORZ), to breed more young bandicoots for coming releases at Woodlands Historic Park and in new

Breeding Up a Storm

Marissa Parrott & Peter Courtney

predator proof fenced areas at WORZ. In anticipation of the extra holding capacity and to ensure we have animals to release at these sites during the best times for release, spring, we have set 11 pairs together. Six pairs have been placed together at WORZ using genetic relatedness followed by mate choice selection for five pairings and one pairing based on genetic relatedness alone. All the pairings at Melbourne were based on genetic relatedness. We are hoping that we will have around twenty juveniles for release at the end of September!

There is a variety of exciting captive research underway. Projects include trials to determine the optimum way to attach radio-transmitters so we can monitor the bandicoots after release to the wild,



EBB in transportation box (Photo: M. Parrott)

an examination of reproductive behaviours using state-ofthe-art infrared remote monitoring systems and the first of a series of mate choice research trials (mentioned above) to investigate female and male mate preferences and if their choices may improve breeding success and the quality of young produced.

Mt Rothwell's EBBs have recently had some testing times. The abundant rainfall received from the previous year's summer has brought on an amazing, lush nagrass tive cover across the landscape, therefore providing ideal conditions for not only the Eastern Barred Bandicoot but also the European Rabbit.





EBB at Mt Rothwell (Photo: A. Rypalski)

Unfortunately, the rabbits being social animals that live in large family groups and being twice the size, had become too overbearing for the shy solitary bandicoot in the past year.

In the last few months we have noticed the rabbits seem to be

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responding to the integrated management methods being used with fewer



EBB eating a wallaby (Photo: K. Chang-Kum)

rabbits sighted and more carcasses found. It seems rabbits are preyed on by our healthy raptor populations, with help from our Eastern Quolls

With a clean record of absolutely no fox or cat breaches since the feralproof fence went up in 2002, the battle against exotic pests is now in the natives' favour. While raptors hit rabbits hard from the sky's, quolls are discovering their bunkers underground and an army of very dedicated staff and volunteers is doing an excellent job fumigating, removing warrens, maintaining the feral proof fence and keeping the weeds at bay. Eastern Barred Bandicoot sightings are returning to the figures recorded a year and a half ago when populations were estimated in excess of 300 and once again they are becoming a common species when spotlighting.

In the mean-time, we are quickly discovering exactly

how resilient our little Eastern Barred Bandicoots really are, we are very fortunate to watch Victoria's largest self-sustainable wild population, which has the ability to intermingle and compete with various other species. So when Mt Rothwell staff member Kwai Chang-Kum came across not only one bandicoot but several feeding on a fresh wallaby carcass it had us confused. We have not found any records of carnivorous bandicoots, so this is one sighting that still has us stumped and we can only put it down to their opportunistic behaviour. Then only a few months later we observed another bandicoot regurgitating its food and re-ingesting it to which we assume was to ensure all the nutrients are absorbed and gut flora is maintained. This behaviour is quite common in herbi-

vores such as kangaroos and koalas but apparently not so commonly seen in an omnivorous bandicoot. There is still so much to learn about these elusive little creatures and good to have our team doing our best to provide the best conditions possible for them to thrive.

Mt Rothwell is a 450 ha property and holds a population of approximately 250 bandicoots that have recently recovered from an extremely difficult challenge by going up against one of Australia's most threatening exotic pest the rabbit. Having shown great resilience against the challenges brought upon them, and coming out on top, brings hope to the hard work we are all doing on site. The work is completely justified when you see a large healthy female with bright white stripes across her back with two little mouse sized juveniles with those same distinct bright white stripes at foot, racing to keep up with mum, learning the tricks to survive in front of our very own eyes. It's so unfortunate that not everyone has the privilege of seeing this across the Victorian landscape any more, but with Recovery Team support and our important conservation effort, there is new hope for the species.



EBB at Mt Rothwell (Photo: A. Rypalski)

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-free over the past 12 months and EBBs have remained common across the 100 ha reserve. Trapping is carried out quarterly for two nights and the results this year reiterate a trend with the lowest numbers caught in late summer, and total captures increasing through the year with the November trapping yielding the highest number of captures. Capture success is high with invariably more than 20 and up to 30 animals caught each night of trapping across the 120 traps set. The summer drop in trapping success either means that total numbers of EBBs are lower at this time, or that they are harder to trap; it's hard to say. Nevertheless the population is extremely healthy, and total size is sitting somewhere between 60 and 100 animals within the reserve.

Hamilton Parklands has remained fox

Conservation Volunteers Australia volunteers are regular assistants at

No Vacancies

Richard Hill

trapping, with two groups coming from Melbourne in the past 12 months through CVA's 'Wild Futures' program. In addition to assisting with trapping, local CVA teams have been controlling environmental weeds within the reserve and surveying for EBBs outside the fenced reserve. EBBs are now routinely sighted outside the reserve.

DSE staff patrol the fence 2-3 times each week to ensure that the fence remains intact. Foxes are constantly on the prowl along the outside of the fence, checking for weak points to get in, so this job just has to be done to keep foxes out.

In August 2011 we removed 20 EBBs from Hamilton to Melbourne and Werribee Zoos to be used in a trial release of EBBs onto French Island. Immediately following this we released 20 EBBs from the captive



Justine Smith and a volunteer weighing a Hamilton bandicoot (Photo: R. Hill)

breeding program back into Hamilton. Interestingly in two subsequent trapping events since, we have recaptured very few of these zoo animals. This seems to indicate that the parklands has so many bandicoots present, that it is a hard place to establish yourself as a newcomer. All of which points to the Hamilton Parklands being a great success as an EBB reintroduction site. Long may it last!



Camera trap photo of an EBB digging at an irrigation point

While the successful predator work continues at Mooramong, the exciting news has been the recent introduction of a male bandicoot to join vironment has managed the

Man About the Pens David Coutts

the four captive females already resident in the pens. The male was selected by Peter Courtney at Zoos Victoria, and has been released as part of a trial to determine the most reliable method of capturing sub-adult Eastern Barred Bandicoots.

Sub-adult bandicoots have proved difficult to capture during the regular monitoring that has been undertaken

over a 20 year period at Mooramong. Jim O'Brien, Senior Wildlife Officer, Department of Sustainability and En-

Mooramong program over this time. He has found that animals under 12 months old are difficult to capture. A range of trap types, sizes and baits will be employed in an attempt to capture sub-adult bandicoots. Members of the Field Naturalists Club of Ballarat are keen to assist with the intensive monitoring that will be required over the coming months.

Capturing sub-adults is important as the mainland population of EBBs is currently housed at a number of sites across the state; because of this there is a need to move animals between sites to maintain genetic diversity.



Further Information

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For more information on the captive program and conservation of the EBB at Zoos Victoria, please visit us at: <u>http://www.zoo.org.au/eastern-barredbandicoot</u> and watch our bandicoot conservation video starring WORZ's beautiful hand-raised female, Kilara, at: <u>http://www.actwild.org.au/animals/ bandicoot/</u> 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 know 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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