

Newsletter of the Friends of the Western Swamp Tortoise

Tortoise number 500 released



Thursday July 10 was a big day for members of the Friends of the Western Swamp Tortoise and for all those involved in working to ensure the survival of this critically endangered reptile.

It was a beautiful sunny winter's morning when 20 group members—accompanied by around 20 children—gathered at the entrance to Twin Swamps Nature Reserve on Warbrook Rd, Bullsbrook. Invited guests included the Minister for the Environment, Albert Jacob, Ray Mooney from the Margaret River Chocolate Company and filmmaker Ian Hakanson, who is documenting our activities for a promotional video. We were met by staff from DPaW and Perth Zoo and various media representatives.

The morning started on a high note as Ray Mooney handed over a sponsorship cheque for \$5000. The Margaret River Chocolate Company promotes the tortoises' recovery through the sale of tortoise-shaped chocolates, donating \$2 from each box sold.

The main event of the morning was the release of tortoises from the zoo's breeding program. Thirty juvenile tortoises had been carefully transported to the site in readiness. Dr Gerald Kuchling gave an overview of the program explaining that these juveniles were 2-3 years old and had been monitored to ensure that they were strong and healthy enough to withstand the rigours of living in the wild. Seasonal factors such as rainfall and the time-frame for the swamp drying out are critical to the survival chances of these tortoises. They rely on the swamp lasting long enough to provide them with adequate food stores in their bodies to survive the long, hot, dry months. As the swamps dry out the tortoises burrow beneath the soil and leaf litter and aestivate until the swamp water returns. At just 10 cm the newly released juveniles are easy prey. Although the fence around the reserve protects them from feral predators such as foxes, cats and dogs they are still vulnerable to native predators who share their habitat including ravens, herons, ibis, bandicoots and raptors.

The morning was even more significant because the 500th tortoise from the zoo program was released by the Minister. After a demo on how to handle the tortoises, family groups were given a tortoise or two to get to know for a few minutes before freeing them in the swamp. To do this we carried them to a tape which marked a long line on the edge of the water. Standing along the tape we carefully placed our tortoises into the water (*right*) and then watched them swim off to explore their new home (*above*). All of the tortoises were released at the same time and when it was clear that they were all okay we carefully moved back and returned to the reserve entrance to share morning tea and talk about our very special experience.



Charlotte – junior fundraiser

We're very proud to have supporters of all ages, including some who are very young—like Charlotte! In her own words from her internet page: **Save the endangered Western Swamp Tortoise.**

'It's not too late to visit and donate.

My name is Charlotte. I am 6 years old and I live in Perth, Western Australia.

I am raising money to help the organisation, Friends of the Western Swamp Tortoise make a video about the critically endangered Western Swamp Tortoise. The video will be used on their website and also in schools to educate kids about the Western Swamp Tortoise.

When the babies first hatch they are the size of a 10 cent piece and they're really cute!

Not many people know that the Western Swamp Tortoise is critically endangered.

Please help me to save the Western Swamp Tortoise. Thank you. Charlotte'



Charlotte is in Year 2 at John Wollaston Community College and has raised **over \$1000** for the tortoise. And this is not her first fundraising venture! In 2013 she raised money for our colleagues at Project Numbat. She has raised money by doorknocking, raffle ticket selling and a Fundrazr page: **Save the endangered Western Swamp Tortoise.**

The filmmaker whose work Charlotte is funding has already started to weave his magic and the Friends look forward to using

the video in schools.

Charlotte was excited to release a juvenile tortoise into Twin Swamps Nature Reserve in July 2014 (*see front page*) and the photo above shows the Minister for the Environment, Albert Jacob, congratulating her.

Revegetating Ellen Brook NR

Twenty adults, four children (and two babies!) helped in our June 2014 planting to begin to revegetate the recently acquired 'Gerald's Swamp' adjoining the current reserve at Ellen Brook. The weather was kind and the constant rain over the preceding fortnight had softened the clay soil so that planting was a breeze. In fact we ran out of guards, stakes and well-developed tube stock, so we stopped and enjoyed a delicious barbecue prepared by DPaW. It was such a bonus to see the kids splashing in puddles and enjoying the natural surroundings. Thanks to Robin for taking so many photos—contact Jan if you want to see the thumbnail images, or look on our website. Thanks also to Ian for documenting the event for our upcoming video. And a BIG THANK YOU to the planters.



Where are they now?

The winter rains have triggered the tortoises' movement into wetland pools, where they're now swimming, basking and feeding on aquatic invertebrates and other prey while there is water in the swamp.

Mimicking natural rhythm key to Zoo's breeding success

Since establishing its Western Swamp Tortoises breeding program in 1989, Perth Zoo has found that one of the key factors in successful breeding is to follow their natural rhythm and allow the tortoises to aestivate (a kind of torpor like hibernation) during summer and autumn.

The Zoo has also developed a special diet for the tortoises which has been an important factor in their breeding success. Over the years, other research has been undertaken to improve the breeding, husbandry and genetic management of the tortoise population at Perth Zoo, and this research has also found application in the husbandry of the species in the wild.

Special 'aestivation tunnels' (half-pipes buried under the soil with just the opening visible) have been successfully used at the zoo for some years, and there is some evidence that tortoises look for these tunnels once released into the wild—where the tunnels have also been installed.

After the tortoises mate and lay their eggs at the zoo, keepers carefully dig up the eggs and place them in incubators for four to six months to increase the hatching success rate. After hatching, the young tortoises are weighed and their shells marked with dots of nail polish to aid identification, which wear off over time (*see below, photo with permission of Perth Zoo*).



When the tortoises reach 100 grams (about two or three years of age), they are released into managed wild habitats by the Department of Parks and Wildlife.

Between 1963 and 2001, the number of Western Swamp Tortoises known to be alive in the wild fluctuated between 40 and 120. But since 1989, Perth Zoo has bred more than 800 Western Swamp Tortoises of which over 500 have been released to boost wild numbers. Perth Zoo's breeding facility is also home to an insurance population of around 150–200 tortoises. Without the Recovery Program and significant efforts to

restock the population, the Western Swamp Tortoise would most likely have become extinct in the wild.

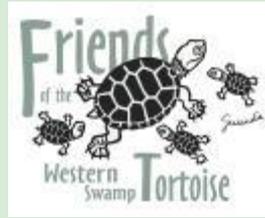
The Western Swamp Tortoise breed-for-release program is run by Perth Zoo in partnership with the Western Swamp Tortoise Recovery Team members, with input from Dr Gerald Kuchling (DPaW) who initiated the breeding program in 1988, the World Wildlife Fund for Nature and Friends of the Western Swamp Tortoise. Work has begun on a second insurance population at Adelaide Zoo to ensure that all the Western Swamp Tortoise's 'eggs' are not in one basket! There may also soon be another zoo with a breeding population.

Information taken from the web page <http://perthzoo.wa.gov.au/conservation/native-species-breeding-programs/western-swamp-tortoise/> Go to this web page for a delightful video of baby tortoises hatching.

And the winner is...

Congratulations to **Anne**, the lucky winner of the **lunch for two at Edgcombe Bros Winery**, Gnangara Rd, Henley Brook. Thanks to everyone who bought a ticket in the raffle.

You can help save an endangered species, right on your doorstep!
Membership of the Friends is **free** and we have lots of great activities.



Join us to help save the tortoise... because EXTINCTION SUCKS!

For further information on any of the group's activities, contact Jan on
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Email: westernswamptortoise@yahoo.com.au
or check out the website
www.westernswamptortoise.com



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