

## Assisting aestivation

by Kaitlyn Height

Around this time of year, as the swamps are filling up, Western Swamp Tortoises are leaving their summer hideout and returning to the water to feed. Over the summer the tortoises remained inactive by aestivating, but what does this mean?

Throughout winter and spring the tortoises need to fatten up on their favourite aquatic foods. During November, as the swamps are drying up, so is the supply of food for the tortoises! To avoid the problem of having no food, swamp tortoises leave the swamps to aestivate, which means they remain dormant over summer and autumn. Depending on their environment, the tortoises may choose to aestivate under leaf litter, in cracks in the clay or in holes dug by other animals (such as rabbit burrows).

Aestivation is very similar to hibernation during winter. The tortoises spend the summer essentially sleeping and moving very little. They rely on the fat stores they built up over spring to provide them with all of their energy, and so

will lose weight over the summer. Tortoises that remained hidden in the soil over the summer will usually move up into leaf litter or hide under shrubs for the end of autumn. They will remain here until there has been enough rain to begin filling up the swamps and there is enough food for them again. Here they can start eating and the cycle begins all over again.

At Twin Swamps and Mogumber Nature Reserves the tortoises will often aestivate under leaf litter or vegetation, which provide little protection from fire. 'Aestivation tunnels' at these reserves provide extra aestivation sites and protect the tortoises within them from fire. These aestivation tunnels are simply a semi-circular piece of PVC pipe around 1 m long that is dug into the ground on a gentle slope. Tortoises at Perth Zoo are able to aestivate in these tunnels each summer, and it is hoped this will improve survival on release. FoWST and DEC have plans to install more tunnels later in the year and we hope that you will join us in this important activity.



Aestivation tunnels at Perth Zoo

## Kids love learning about their WA tortoise!

We have had several requests for information sessions about the Western Swamp Tortoise and Jan has roamed far and wide to tell the tortoise's story. Some home-schooled children, whose parents teach them during the week, get together for environmental lessons, and were very curious about the tortoise at a recent session at Naregebup, near Rockingham.

A group of Armadale home-schoolers also enjoyed playing the Swampland Adventure Game and learning about the WST. Mirrabooka Pre Primary students made a wetland picture to put their tortoises in, and 80 children at the Baldvis Children's Forest also learned about why the tortoise is threatened. Several other schools are booked for this term, and we are also attending the Perth Zoo School Holiday activities to present some sessions.

Children seem to be very environmentally aware these days, and our education program, hand in hand with our on-ground works, will help ensure the Western Swamp Tortoise still exists for their children and their children's children.



# Recovery Team Report for FOWST

Some interesting and some sad developments from the Recovery Team meeting.

- Possible new site to be investigated for tortoise habitat in the longer term – Bengier Swamp.
- One male tortoise in the new captive breeding colony at Adelaide Zoo has died. Investigations as to why.
- Possibility of some scholarships for University Research Projects being instigated for Semester 2 and onwards.
- Extension of WST site at Zoo secured. Concept plans for development in progress.
- 4000 seedlings were planted at Ellen Brook Nature Reserve in 2007. Further 4000 were repotted.
- 20/25 bandicoots were translocated from EBNR. Successful program will be repeated at end winter 2008. Bandicoots dig up and eat the WST eggs.
- No nests were found at Twin Swamps Nature Reserve last season. Possible bandicoot problem here as well.

- 25 WST released at Mogumber doing very well.
- Moore River Nature Reserve trial release of 10 animals. 7 retrieved and brought back to Zoo, 3 still out there. All 7 put on weight in the 55 days. Trial bunding successful. Area needs aestivation tunnels.
- Gerald has noted that more than half WST are using artificial aestivation tunnels and thinks it must be due to the zoo training.
- Ellen Brook numbers of WST generally trending up, but at Twin Swamps there appears to be no recruitment, even though some of the animals are now more than 110mm carapace length, which is the criteria for an adult animal. Still less than 50 adults in the wild.
- Problem at Zoo (daylight saving?) that some females are laying late in the day after zoo staff go home. The eggs are therefore not collected and housed. The baby tortoises may have some difficulty getting through the grass when hatching.

## News and Events

### Reserve in focus!

Twin Swamps Nature Reserve, Warbrook Rd, Bullsbrook, was first declared a reserve in September 1966. Extra land was purchased in 1968 and the reserve is now 155 ha.

The predator-proof perimeter fence is approx 5km and protects about 10 adult tortoises and the total estimated population is 30, plus or minus 12! Release of captive tortoises commenced Sept 1994 and supplementary water is now from a new bore.



### Proposed Meeting dates for 2008 - usually third Monday of the month

- Mon 16th June
  - Mon 21st July
  - Mon 18th August
  - Mon 15th September
  - Mon 20th October
  - Mon 17th November
  - AGM - Saturday 7th December
- Please note venues and dates of meetings subject to change for special activities. Maximum possible notice will be given.



### Where are they now???

By Helen Pitman

During winter the tortoises enter swamps once there is a couple of centimetres of water in them. They only live in temporary shallow swamps with a clay base, where much of the surrounding and is predominantly sand. They sense the time has come to leave their aestivation tunnels and begin to feed on small crustaceans and insect larvae to build up their body mass.

## MONEY MATTERS

By Bob Height, Treasurer

The Group has been very active since last April, with several large donations coming in to help the Tortoises.

As Treasurer I prepare a financial report for each meeting. Under the Articles of Incorporation, any member of the Group can request these reports at any time.

### Major Income & Expenditure for past 12 months to April 2008

#### INCOME

- Community Conservation Grant \$5,280
- Donations - ANZ \$10,680
- Donations - others \$1,300
- Threatened Species Grant \$6,300

#### EXPENDITURE

- Perth Zoo tanks \$5,280
- Seed collection (TSN Grant) \$1,490
- Cash on hand end of April 2008 \$18,000

#### Future Expenditure

- Trackers (approx) \$5,000
- Balance of TSN Grant (approx) \$5,000
- Aestivation Tunnels (approx) \$4,000
- Planting requirements \$1,060

For more information on any of the group's activities contact Jan Bant on 08 9344 2872, 0408 024 800, [westernswamptortoise@yahoo.com.au](mailto:westernswamptortoise@yahoo.com.au) or check out the website [www.westernswamptortoise.com](http://www.westernswamptortoise.com)

