



Tortoise Tales

No 17, 2013

Newsletter of the Friends of the Western Swamp Tortoise

The Friends of the Western Swamp Tortoise (FoWST) began nine years ago to help save Australia's most critically endangered reptile *Pseudemys umbrina*.

The group was an initiative of the Threatened Species Network, through WWF. After some groundwork by Greencorps, the group formed to aid local, national and international awareness of the critically endangered status of Australia's rarest reptile by providing information and educational resources. One of our primary purposes is to encourage the public to assist in Western Swamp Tortoise recovery activities that move us towards a sustainable population in Western Australia, and to complement the work of the Western Swamp Tortoise Recovery Team.



Tortoises on display at Perth Zoo. (With permission of Perth Zoo)

Early meetings identified the necessity of raising public awareness of the plight of the tortoise. Habitat issues were under the control of DEC (formerly the Department of Conservation and Land Management) Swan Region, and the Perth Zoo was making great strides in captive breeding, but public knowledge of the possibility of extinction for this iconic reptile was sadly lacking. Since our inception we have presented informative talks about the tortoise to approximately 8000 people, and held displays seen by many more. In addition we have worked with sponsors to broaden the message, and released over 200 juvenile tortoises into the wild.

Anniversary: 50 years of study

In September 2013 we celebrate 50 years of field study of the tortoise (mark and recapture). Recovery Team Chief Scientist Gerald Kuchling has written an article on 50 years since its rediscovery. Here are the details of the tortoises first marked by Andrew Burbidge in 1963:

No. 1 female. 13 September 1963 NW Swamp, Twin Swamps NR

No. 2 juvenile. 25 September 1963 Ellen Brook NR

No. 3. female 2 October 1963 EBNR

No. 4 female. 2 October 1963. EBNR

No. 5 male. 2 October 1963. EBNR

(No more were marked until 1964)



Adult tortoise in captive breeding facility. (With permission of Perth Zoo.)

Did you know?

- ✚ Western Swamp tortoises live in swamps that only fill during winter and spring.
- ✚ While the swamps have water, the tortoises swim around and feed on aquatic invertebrates, small fish, tadpoles and frogs. They are entirely carnivorous.
- ✚ Turtles have been around since the time of the dinosaurs – nearly 200 million years.
- ✚ Tortoises lay their eggs on land and don't care for their hatchlings.
- ✚ Tortoises can't chew as they have no teeth.
- ✚ Researchers estimate that 1 in 5 reptiles faces extinction, with 12% already listed as critically endangered. The biggest threats are habitat loss, predators and illegal trading.
- ✚ September 2013 will be the 50th anniversary since the first Western Swamp Tortoise was marked in the wild after being rediscovered.



Friends group members releasing juveniles at Twin Swamps NR, 2011.

What's the difference between turtles and tortoises?

Most turtle species spend their lives in or near water and have webbed feet for swimming. Almost all tortoise species are land-dwelling animals. They have stubby feet with claws for traction.

Both use the sun to warm themselves as they are 'cold-blooded'.

Some of our group's activities:

- ✚ Education, including addressing school and community groups, displays at events, generating media releases and speaking on radio and TV.
- ✚ Release of captive-bred tortoises.
- ✚ Fieldwork such as revegetation and seed collecting, installing aestivation tunnels, assisting with earthworks, etc.
- ✚ Sourcing grants for ongoing groundwork such as revegetation of release sites.
- ✚ Assisting in installation of permanent information displays.
- ✚ Liaising with corporate entities that wish to support Western Swamp Tortoise recovery.
- ✚ Fundraising events such as lunches, cocktail parties, wine launches and movie nights.
- ✚ Bi-monthly committee meetings and six-monthly Recovery Team meetings.

Recovery Team report—from meeting in March 2013

- Report on March fire near Ellen Brook Nature Reserve. Dept of Environment & Conservation attended to prevent fire trucks entering the reserve. Fire was controlled by DEC personnel. It has been 15 years since EBNR has had a fire and it was quite overgrown. Tortoises were underground aestivating.
- Unless ARC research project finds a location, there is no place to release captive bred animals in 2014. The zoo may have to hold hatchlings over until somewhere is found.
- Regarding the possible purchase of 5.4 ha of land adjacent to EBNR, the Recovery Team has first option to purchase.
- Perth Zoo presently has 162 animals—20 breeding males and 19 breeding females, but experienced a poor success rate in hatching eggs across all incubators in 2012. Chief scientist Gerald Kuchling and head keeper Bradie Durell are concerned and will be going through protocols—particularly relating to feeding.

What are we protecting?



Newly released tortoise at Twin Swamps, August 2011

Scientific Name:

Pseudemydura umbrina

Other names:

Short-necked Tortoise, Yakkin or Yakiny (Noongyar language)

Body Length: 11–15 cm (fit easily in your hand)

Weight: 300–550 g

Incubation: 6 months

Number of eggs: 3–5

Conservation Status: Critically endangered. Around 500–550 animals (wild and captive) of which less than 50 are wild, breeding adults.

Distribution: Swan Valley, Western Australia

Habitat: Swamps (ephemeral), which are shallow and clay-based.

Description

Western Swamp Tortoises have a brown or black shell, a short neck covered by **tubercles** (knobbles), webbed toes with five claws on each foot and they are yellow with black dots underneath. The males are larger than the females.

Diet

Western Swamp Tortoises are **carnivores** and eat small aquatic vertebrates like frogs, tadpoles and fish, as well as aquatic invertebrates.

In the wild

Tortoises live in shallow clay-based swamps that only fill during the winter and spring. While the swamps contain water, the tortoises swim around and feed on small aquatic invertebrates, tadpoles and frogs. When the swamps are dry they **aestivate** (summer equivalent of hibernation) in holes in the ground or under deep leaf litter.

Threats

The Western Swamp Tortoise is the most

endangered Australian reptile. Western Swamp Tortoises are threatened by habitat destruction. Most of the original habitat has been lost to agriculture, housing, and mining. They are only found in a few places in the Swan Valley and if these swamps were filled in, the tortoises would not survive. Feral predators like cats, rats and foxes also eat tortoises and tortoise eggs.

This species is also at high risk from global warming and decreasing rainfall impacting on its seasonal wetlands.

At Perth Zoo

Perth Zoo's Native Species Breeding Program has been breeding Western Swamp Tortoises since the 1990s. Over 400 have been successfully released into the wild. You can see Western Swamp Tortoises in the **Australian Wetlands exhibit**.



Hatchling at Perth Zoo, with identifying marks. (With permission of Perth Zoo.)

Did you know?

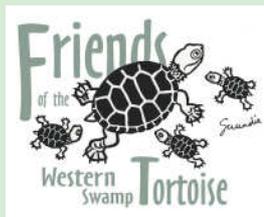
The Western Swamp Tortoise was feared extinct for over 100 years. By chance they were rediscovered in 1953 and found to still live in two small habitats in the Swan Valley. A current research project is looking at potential new habitats for the tortoise.



Their future: in our hands!

You can help save an endangered species, right on your doorstep!

Membership of the Friends is **free** and we have lots of great activities (see previous page).



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



Some founding members of the Friends of the Western Swamp Tortoise.

For further information on any of the group's activities, contact Jan on
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or check out the website

www.westernswamptortoise.com



Department of
Environment and Conservation



Other sponsors and recovery partners include:

Margaret River Chocolate Company, Edgecombe Bros Winery, World Wide Fund for Nature (Threatened Species Unit), University of Western Australia, Curtin University, Adelaide Zoo, ANZ Bank, United Community, Australian Association of Practice Managers, Long Road Website Development and Metro Towbars.