

The Numbat: Western Australia's animal emblem under threat

Vicki Power, Founder of Project Numbat Incorporated

"Do you know what a Numbat is?" If you asked your students this question, what kind of response do you think you would get? It's a question that Project Numbat finds few people are able to answer. This is part of the reason why Project Numbat exists: to ensure that people are able to answer it, and care enough so the question doesn't become, "Do you know what a Numbat was?"

Let's start with the basics. The Numbat is an Australian marsupial and one of only two that are active during the day (diurnal). The vast majority of Australia's marsupials are either nocturnal or crepuscular (active at dawn and dusk). The reason for the Numbat's unusual—by comparison—activity pattern is its highly specialised diet. It eats only termites.

A day in the life of a Numbat begins with synchronising its pattern of activity with that of the termites. Being such small animals, Numbats are not strong and so must rely on termites being within easy reach, usually just below the soil surface or high up in the termite mound chambers.

During the hot summer months, Numbats emerge from their underground burrows around 6:00 am and forage in the shallow soil layers for termites, which are sensitive to temperature and light. When the temperature increases during the day, the termites retreat deeper into soil chambers away from the heat. Numbats return to their hollow logs or underground nests to escape the heat for several hours.

During the afternoon, the Numbats once again forage for termites until late in the evening. Conversely, during the colder winter months Numbats rise late to feed and are active for only a few hours during the warmer part of the day when termites are active.

So now you know two things about Numbats: they're active during the day and they only eat termites.

Thirdly, they give birth after a gestation period of just 14 days to four young. They are approximately 6–7 mm long at birth. They attach to the mother's four teats and stay enclosed in a rudimentary pouch. This is not a true pouch like a kangaroo's but a fold of skin that fattens during this time to provide some protection. They remain here for about six months. Weaning occurs at 10–11 months of age and they are fully independent at around one-year-old.

There are many other facts about the Numbat that people would find interesting. For example, if a Numbat senses danger from natural predators such as birds of prey or pythons, they are likely to either freeze to avoid detection, run, or run and hide. Apart from having somewhere to sleep and raise young, this is another reason why hollow logs are so important to the Numbat and



Photo courtesy Project Numbat Inc.

this is where the Numbat species faces trouble.

Preserving Numbat habitat is vital as their life cycles and ecology are so dependent on the availability of termites, an ample supply of hollow logs and a large enough area to establish a territory. The clearing of suitable habitat and the presence of foxes and cats in once pristine areas of eucalypt forest have reduced the number of Numbats in the wild to fewer than 1000.

From once being found across much of southern Australia, the Numbat is now only found in small areas in the south-west of Western Australia.

In an effort to save the Numbat from extinction, the Numbat Recovery Team was formed in 1993. The recovery team is a group of organisations, including the Department of Environment and Conservation, Perth Zoo, Australian Wildlife Conservancy and Project Numbat Incorporated, that work together to rebuild the Numbat population with the use of captive breeding, feral predator control, habitat protection and raising community awareness.

Feral baiting programs have been implemented to reduce predators in areas where Numbats exist, or where populations have been re-established. Numbats bred at Perth Zoo are released into these managed areas and monitored by DEC to track the progress of the population. Without this type of conservation action, and more, the Numbat may become extinct.

Community-based, not-for-profit organisation Project Numbat has worked tirelessly over the past five years with the government agencies responsible for the management and the recovery actions needed to save the Numbat from extinction. Collaborations with DEC, Australian Wildlife Conservancy, Malleefowl Preservation Group, Perth Zoo and World Wildlife Fund have enabled the group to provide productive outcomes in Numbat conservation.

Project Numbat has been supportive of and involved in many recovery plan actions, including supply of volunteers to assist with monitoring Numbats in the wild, fundraising for radio collars that are fitted to Numbats prior to their release, and financial support for aerial surveillance flights to monitor Numbats.



In support of Project Numbat's vision to raise awareness about the Numbat and its plight, a comprehensive education program for junior (K-3) and middle/upper (4-7) primary school students has been recently developed.

The Project Numbat primary school education program is a useful resource for teachers that instils in their students an understanding of our State animal emblem and engenders a love of this special marsupial.

The program includes a presentation with accompanying lesson plan and a teacher and student resource package. Teachers can use the detailed lesson plan provided to deliver the presentation component themselves or request for a Project Numbat volunteer to visit the school, deliver the presentation and interact in person with the student group.

The resource package includes a variety of cross-curricular tasks for use before and after the presentation and ensures key learning concepts are developed over a range of varied learning experiences.

Teachers can register on the Project Numbat website to download the education materials for free. As this is a new program, we are very keen to have teacher's trial these materials and provide feedback on how it has been implemented.

We are also developing a package for secondary school students and would love to hear ideas from secondary teachers on how best we can support their students' learning. For further information about the education program, contact <schools@numbat.org.au>.

The road to Numbat recovery is long but there is hope. Getting involved in raising awareness about this unique animal is one way among many that can work to bring it back from the brink of extinction. If you are interested in learning more about Project Numbat, visit <www.numbat.org.au> for more information.



The **Science Teachers' Association of Western Australia (STAWA)**, invites primary and secondary students to participate in the 52nd **Science Talent Search (STS)** competition. Science Talent Search aims to promote science teaching and learning through creative project work.

This year the STS will again link with the **BHP Billiton Science Awards** and for the first time this year six entries will be selected from the STS as finalists in the **WA Innovator of the Year Schools Competition**.

Important Dates

Monday 20 April – Friday 13 August
Friday 27 August

Saturday 4 September

Saturday 18 September

Online registration – Register online at www.stawa.net

Submission of entries – Entries to be delivered to STAWA by Appointment
Phone: 9244 1987

Judging

Awards Ceremony – To be held at Scitech