Numbat Fact Sheet

Name: Numbat
Scientific name: *Myrmecobius fasciatus*

Other names: Walpurti, Banded Ant-eater
Conservation status: Endangered

Stats

Size: 20–29 cm long plus a tail 12–21 cm long. Males tend to be bigger than females.
Weight: 478 g (average female), 597 g (average male)
(Source: The Mammals of Australia, ed Van Dyck, S and R Strahan, 2008)

Description

Small slender mammal, with small pointed head and small upright ears, four short legs with long claws and a long bushy tail (resembling a bottle brush). It is grey-brown to reddish in colour with black and white banding on the back and rump, beige underbelly and a long back stripe across its eyes.

Special Features

The Numbat has a long, slender sticky tongue (approx. 10–11 cm long) that it uses to dip into narrow cavities in logs, leaf litter and in small holes in the ground to collect termites.

The Numbat also has a long pointed nose that is useful for getting into small holes in the ground and logs to search for termites. Numbats sense the presence of termites via smell and possibly small vibrations in the ground. They dig small holes in the ground to uncover the passageways (called "galleries") that the termites travel in when they go to and from the nest.

Numbats do not have proper teeth like other mammals. They have blunt "pegs" because they do not chew their food.

Numbats, like other dasyurid (carnivorous) marsupials, do not have a proper pouch for carrying their young. They have skinfolds that cover the babies that are suckling on the mother's four teats. Long guard hairs offer some warmth to young in the pouch.

Diet

Insectivorous. The Numbat eats termites exclusively. Numbats eat many different species of termites but they do not eat ants (except for incidentally when foraging for termites). They eat up to 20,000 termites a day. Numbats do not need to drink water because they get enough water from the termites they eat.

Habitat

Numbats live in Eucalypt woodlands where old and fallen trees provide hollow logs for shelter, nest sites and foraging opportunities. They forage in open areas near the cover of shrubs. The trees provide some protection from birds of prey but there needs to be space between the foliage for the sun to reach the forest floor and warm the ground so the termites are active. The presence of Numbats is determined by the sufficient presence and availability of its prey source, termites. Therefore, they do not occur in areas that are too wet or too cold for termites to flourish.

Distribution

Though the Numbat used to be found across the southern part of Australia, including Western Australia, South Australia and parts of New South Wales, Victoria and the Northern Territory, it is now restricted to isolated pockets of south-west Western Australia.

Two natural populations remain. One at Dryandra Woodlands, near Narrogin and the other at Perup Nature Reserve, near Manjimup.

Some re-introduced populations exist in south-west Western Australia as well as at two fenced sanctuaries, Scotia Sanctuary in NSW and Yookamurra Sanctuary in SA (both managed by the Australian Wildlife Conservancy).

Ecology/Biology

Numbats need a sufficient supply of termites and nesting/shelter sites to survive in the wild. They do not need access to water because they get this from the termites they eat.

Numbats are strictly diurnal, which means they are only active during the day and their activity levels are closely linked to those of termites. Being such small animals, Numbats do not have the strength to break into termite mounds so they must rely on the 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 when the sun rises and forage in the shallow soil layers for termites which are sensitive to temperature and light. When the temperature increases over the day the termites retreat deeper into soil chambers away from the heat. This is also the time when 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 several hours during the warmer part of the day when termites are active.

Only one other Australian marsupial is also strictly diurnal, the Musky Rat Kangaroo which lives in Queensland and feeds on fruits from the forest floor.

Because Numbats are active during the day they are in danger of being taken by birds of prey, snakes and goannas. Their striped fur helps them camouflage against the woodland floor. They also have eyes on opposite sides of their heads (like other prey species e.g. rabbits), which allows them to have good vision of things coming towards them. Numbats sit up like meerkats to get a good look around and if they sense danger, they either freeze (and keep very still until the danger has gone), or they will run under the cover of nearby bushes, trees and logs and hide.

Numbats are solitary animals, which means they do not live with other members of their species. The only times you see Numbats together is when a male and female have come together to mate, or there are young still living with their mother. Because termites are small and hard to find, Numbats can't afford to share them with others, so they live alone.

Male Numbats can be very territorial and fight to protect food sources and females in their home range. They also need to travel large distances to find termites so their home range is between 25 and 50 hectares in size.

Numbats rest in burrows either in hollow logs, trees or underground in chambers that can be 1–2 m long. They use shredded grass, bark, feathers, leaves and flowers to make a nest at the end of their burrow. They can climb logs and trees, using their long, sharp claws, to find shelter.

Life History

Numbats rarely live for more than five years.

Females are able to breed when they are 12 months of age, but males have to be at least two years old to breed. In the lead up to the mating season (December–January), the male Numbat's sternal gland (at the top and middle of the chest) exudes an oily substance which turns the fur red. It is also very pungent. Males rub their chests over surfaces such as logs and rocks to advertise to females that he is looking to mate. It also acts as a warning to other males to stay away from his territory.

Females normally give birth to four young in January or February after a gestation (or pregnancy) of 14 days. This is one of the shortest gestation periods for any mammal and young are born very underdeveloped and must travel up to the mother's nipples and attach if they are to survive.

Baby Numbats suckle from their mother's teat until they are about nine-months-old which is when they learn to forage and eat termites. Until this time, the baby Numbat's snout is flat and snubby so it can be close to the nipple. When it starts eating termites, its snout develops into the long, pointy nose you see on adult Numbats, which is very useful for sticking in the ground and sniffing out termites.

The young stay permanently attached for 6–7 months until they are so big that the mother cannot walk around properly anymore. She then deposits them in the nest and returns often to suckle them. At 8–9 months of age the babies start coming out of the burrow to sit and sunbake around the nest.

Over the next two months they travel further and further from the nest. This is the period that they encounter their first predators. They start eating termites around nine months of age and are weaned from mother's milk at 10–11 months of age. By 12 months of age (about December) they are independent and leave their mother to travel and find a territory of their own.

Threats

Numbats are very vulnerable to predation by introduced predators such as foxes and cats. They are also eaten by native reptiles and birds, but because they have evolved in Australia with these predators, they are more adept at escaping from them.

Foxes and cats are very clever predators and if they live in the same area as Numbats, the Numbats don't stand much of a chance. That is why predator control (by poison baiting and shooting) and predator exclusion (with a fenced sanctuary) are needed to protect Numbats in the wild.

Habitat destruction also threatens Numbats when woodland habitat is cleared for farming, development, mining and for people's homes. If trees and logs are removed, the Numbats have no refuge sites and the termites die out, which leaves Numbats with nothing to eat. Fire can also threaten Numbats, which means land has to be carefully managed to prevent large bushfires.

There are fewer than 1,000 Numbats left in the wild. This is less than the number of orangutans in Sumatra and even less than the number of Giant Pandas in Asia. Numbats need to be protected from becoming extinct through habitat protection, fox and cat control, and land management to ensure the bush is left intact.

Numbats are bred in captivity at the Perth Zoo and every year, juveniles are released back into the wild into areas managed by the Department of Environment and Conservation to boost the wild population.