Threatened species of the Northern Territory

Numbat

Myrmecobius fasciatus

Conservation status

Australia: Endangered
Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Endangered Extinct in the NT
Territory Parks and Wildlife Conservation Act 1976

Description

The Numbat is a medium-sized marsupial (body mass of 300–750 g) with a long bushy tail. The head is narrow and flattish, with a pointed muzzle and bold dark eye-stripe. The upper body is distinctly patterned with white transverse bars across the dark brown to black rump and reddish brown back. This pattern is individually unique and can be used to identify individuals. The Numbat has a long slender tongue that can be extended a considerable distance past the end of the snout.

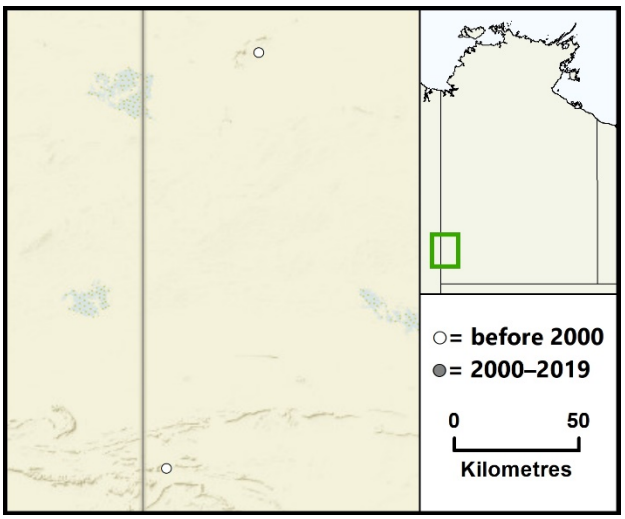
Distribution

The Numbat formerly occurred from far-western New South Wales, through to South Australia and across southern Western Australia. Two subspecies have been described: *Myrmecobius fasciatus fasciatus* in south-western Australia and the more rufous-coloured *M. f. rufus* to the east. However, the validity of these subspecies has been questioned because the historical distribution may have been continuous[1].

Credit: W. Lawler/Australian Wildlife Conservancy

The distribution of the Numbat declined dramatically following European settlement, contracting to two woodland remnants in southwest Western Australia. In the Northern Territory (NT), the species was known to formerly occur only in the far southwest (south of Lake Mackay and west of the MacDonnell Ranges)[2]. The only evidence of its occurrence in the NT is from the accounts of Aboriginal people.

NT conservation reserves where reported: Formerly occurred in areas that are now included within Uluṟu-Kata Tjuṯa National Park.



Caption: Known localities of the Numbat in the NT (nrmaps.nt.gov.au)

Ecology and life-history

In central Australia, the Numbat occupied sand plains, lateritic plains, and sand-dune country[2]. Habitats used by the species included *Acacia aneura* (mulga) woodland, spinifex (*Triodia* spp.) communities and vegetated dunes[2–4].

The Numbat is unique among marsupials in being exclusively diurnal. The species is terrestrial and feeds solely on termites using its long sticky tongue; though some ants are apparently ingested incidentally. Termites are typically intercepted by Numbats in the subterranean galleries they use to travel between their nest and foraging resources. The daily activity patterns of Numbats are closely related to those of termites in the upper soil layer. During the cooler months, Numbats are typically most active in the middle of the day when it is warmest. In contrast, Numbats are most active in the cooler hours of the morning and late afternoon during the hotter months of the year.

Numbats rest at night in fallen logs, hollow trees or burrows that they dig to a depth of up to 2 m. The species is solitary and individuals of the same sex occupy exclusive home ranges of 25–50 ha.

Breeding is strongly seasonal and occurs only once per year, with females rearing litters of up to four young. Generation length is estimated to be 2 years[1].

Threatening processes

The cause(s) of the extinction of the Numbat in central Australia are not known, but predation by the introduced Red Fox *Vulpes vulpes* has been implicated in its decline[3,5]. Altered fire regimes may also have contributed to the extinction of the Numbat in central Australia[3]. The negative impact of predation by the feral Cat *Felis catus* on the Numbat in south-western Western Australia suggests this may also have played a role.

Conservation objectives and management

As the Numbat is presumed to be extinct in the NT, there are currently no conservation objectives for the species within the NT.

Elsewhere in Australia, conservation objectives include: maintaining the two remaining subpopulations in south-western Western Australia; controlling introduced predators; monitoring all subpopulations; maintaining the captive breeding program at Perth Zoo; and continue establishing new subpopulations through translocation[1,6].

References

[1] Woinarski, J.C.Z., Burbidge, A., Harrison, P., 2014. The Action Plan for Australian Mammals 2012. CSIRO Publishing, Canberra.

[2] Burbidge, A.A., Johnson, K.A., Fuller, P.F., Southgate, R.I., 1988. Aboriginal knowledge of animals of the central deserts of Australia. Aust. Wildl. Res. 15, 9–39.

[3] Friend, J.A., Fuller, P.J., Davis, J.A., 1982. The Numbat in central Australia. SWANS 12, 21–26.

[4] Bester, A. J., Rusten, K., 2009. Trial translocation of the numbat (*Myrmecobius fasciatus*) into arid Australia. Aust. Mammal. 31, 9–16.

[5] Finlayson, H.H., 1961. On central Australian mammals, Part IV. The distribution and status of central Australian species. Rec. South Aust. Mus. 41, 141–191.

[6] Threatened Species Scientific Committee, 2018. Conservation Advice *Myrmecobius fasciatus* Numbat. Department of the Environment, Canberra.