

Bilby

Macrotis lagotis (Reid, 1837)

Size

Head and body length
300–550 mm in males
290–390 mm in females

Tail length

200–290 mm in males
200–278 mm in females

Weight

1.0–2.5 kg in males
0.8–1.1 kg in females



Photo: Babs & Bert Wells/Department of Conservation and Land Management

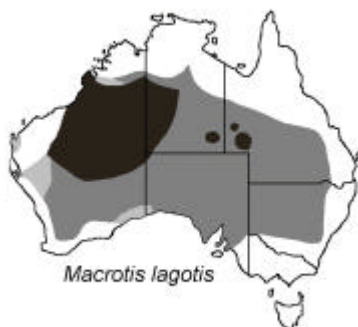
Description

Soft silky-furred bandicoot with long and pointed muzzle, large rabbit-like ears and silky grey hair. The belly fur is cream to pure white. The tail is long with black fur on the proximal half and white fur on the distal half, has a prominent dorsal crest, and is naked on the extreme tip. The forelimbs are robust and have three clawed and two unclawed toes for digging burrows and extracting food from the soil. The hindfoot lacks a first toe. Bilbies are nocturnal.

Other common names

Greater bilby, rabbit-eared bandicoot, rabbit bandicoot, pinkie. Dalgyte, a Noongar name, is one of its many indigenous names. Ninu is a widely-used western desert name.

Distribution



Key To Map: Black = present distribution;
Mid-grey = historic (> 30 years); Pale-grey =
Late-Holocene sub-fossil

The bilby formerly occurred across the arid and semi-arid zones of 70 per cent of continental Australia.

The species is now restricted to 20 per cent of its former range, and survives in parts of the Tanami Desert (Northern Territory), Pilbara and southern Kimberley (Western Australia), and an isolated population in south-west Queensland.

Habitat

Bilbies were formerly known to occupy habitat ranging from *Eucalyptus* and *Acacia* woodlands in the wheatbelt of Western Australia to *Triodia* grasslands in the desert regions. They require sandy or loamy soil in which to burrow. Bilbies are now only found in areas where foxes do not occur or are not abundant; these include the driest and least fertile parts of

their former range. The major habitats they now occupy include sparse grasslands among clayey and stony soils (in south-west Queensland), and mulga scrub and hummock grasslands on sandplains or along drainage or salt lake systems (Western Australia, Northern Territory).

Behaviour

The bilby is a nocturnal marsupial. They live in burrows during the day, and can construct a burrow that may be up to three metres long. Individuals do not construct nest chambers, and may use up to a dozen or more burrows within their home range. The entrance is often against a termite mound, spinifex tussock or small shrub and is left open. Home ranges in the sandy deserts are usually temporary in location and may suddenly shift in response to changing availability of food. Males, females and juveniles occupy overlapping home ranges.

Diet

The diet includes insects, such as termites and ants and their larvae, seeds, bulbs, fruit and fungi, depending on the season and habitat. Feeding areas are usually characterised by numerous excavations up to 10 centimetres deep that exposes the roots and bulbs. Large amounts of soil are consumed with the food, and faeces may contain between 20 and 90 per cent sand.

Breeding

Bilbies live singly or in small groups of between two and four individuals. They can breed throughout the year, although breeding depends on rainfall in the area. Females can commence breeding at six months of age (700 grams) and, in captivity, may continue to breed up to five years. In contrast, males have bred in captivity at eight months of age (800 grams), although breeding seems dependent upon the rank of the male in the social hierarchy. Their pouch opens posteriorly and contains eight teats, but is rarely occupied by more than two young. The oestrous cycle is approximately 21 days, and gestation lasts 14 days (range is between 13 and 16). The young remain in the pouch between 75 and 80 days following birth and are then deposited in a burrow and suckled for a further two weeks before becoming independent. Under ideal conditions, bilbies can produce four litters annually.

Threatening processes

Major threats to the bilby include predation and competition from foxes and cats, and habitat destruction from introduced herbivores (cattle, sheep, rabbits) and pastoralism. Late last century large numbers of bilbies were hunted for their skins. Others were killed by rabbit traps and poison baits. There is a possibility that diseases may also have contributed to their population contractions. Present bilby distribution is related to a low abundance or absence of foxes, rabbits and stock.

Conservation status

2000 IUCN Red List of Threatened Species	Vulnerable
Western Australian Wildlife Conservation Act	Threatened
Environment Protection and Biodiversity Conservation Act	Threatened (Vulnerable)

Management

- Exotic predator control and possibly rabbit control. Also manipulation of habitat diversity using fire.
- Increase population numbers by re-introduction within the former range of the species.
- Monitor bilby abundance and distribution.
- Monitor disease in captive and wild populations.

Other interesting facts

- The bilby is one of the few extant species of medium-sized mammals left in the arid and semi-arid part of mainland Australia.
- It is the sole surviving representative of a unique lineage of burrowing bandicoots. Molecular data suggest that extant bilby populations across Australia are genetically very similar.
- Attempts to dig a bilby out of its burrow have often resulted in the animal making a frantic extension of the end of the tunnel in order to escape.

Selected references

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Johnson, K.A. (1995). Bilby. In R. Strahan (Ed.) *The Mammals of Australia*. Australian Museum and Reed Books. Chatswood, NSW.

Maxwell S., Burbidge A.A, Morris K. (1996). The 1996 Action plan for Australian Marsupials and Monotremes. Wildlife Australia, Canberra.

Anon (1997-98). Bush Telegraph: Quokkas and EasterBilbies - indicators to a success story. *LANDSCOPE* 13(2): 9.

Website links

http://www.naturebase.net/projects/west_shield.html

http://www.naturebase.net/plants_animals/odd_bilby.html

<http://www.ea.gov.au/biodiversity/threatened/action/marsupials/19.html>

<http://www.enchantedlearning.com/subjects/mammals/marsupial/Bilbyprintout.shtml>

<http://www.ea.gov.au/biodiversity/threatened/information/factsheets>

<http://www.westernwildlife.com.au/western/mammals/macrotis.htm>