

Bilby

Common names:

greater bilby, dalgyte, ninu, walpatjirri

Scientific name:

Macrotis lagotis

National conservation status:

vulnerable



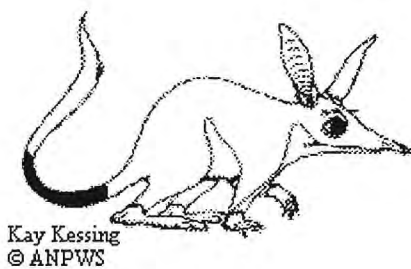
The greater bilby is a small mammal with large 'rabbit-like' ears and a distinctive banded tail. Once common in many areas of Australia, the greater bilby is now classified as nationally vulnerable. The only other bilby species, the lesser bilby, *Macrotis leucura*, is thought to be extinct.

Bilbies are members of a group of ground-dwelling marsupials known as bandicoots. They have long, pointed snouts and compact bodies. The greater bilby (referred to as 'bilby') is the largest of the bandicoots in Australia with a body length, excluding the tail, of between 29 cm and 55 cm. Males are usually twice as large as females and can weigh up to 2.5 kg. Bilbies differ from other bandicoots by their larger ears, long silky fur and long tails (20 to 29 cm). They also have different burrowing habits and a specialised diet.

The bilby's soft fur is mainly blue-grey, with white or cream on the belly and two fawn stripes on each hip. The tail is black with a crest of white hairs towards the end. Bilbies have slender hindlimbs with a large middle toe

like a kangaroo, and very strong forelimbs and claws which they use for burrowing and digging for food. They are remarkable burrowers and each bilby may use as many as twelve burrows within its home range.

Bilbies are active at night and shelter in burrows during daytime. The burrows spiral downwards for about two metres, with the entrance often hidden by a small bush, grass tussock or termite mound. If threatened, bilbies rapidly retreat into their burrow and may extend them to escape danger.



The large, almost hairless ears of bilbies are important for keeping

them cool, as well as for hearing predators. Although they have poor vision, their smell and hearing senses are very good.

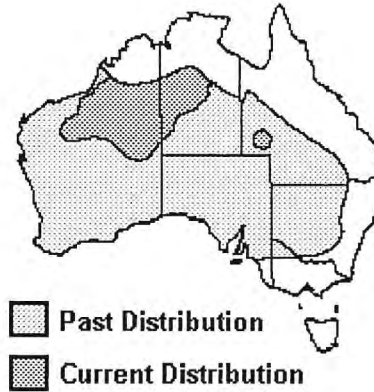
Bilbies have long slender tongues, which they use for licking food such as seeds from the ground. They also dig for insects and insect larvae, bulbs, fruit and fungi. As surface water is often scarce in arid areas, bilbies obtain water from their food.

While bilbies are mostly solitary, they sometimes live in small groups of two to four. They breed throughout the year, possibly depending on rainfall and food availability. As with other bandicoots, bilbies have a short gestation period of only 14 days. Young are carried in the

pouch for 75 days following birth and become independent quickly. In ideal conditions, females produce four litters of one to three young every year. Bilbies live for up to seven years in captivity although their life span in the wild is unknown.

Habitat and distribution

Early this century, bilbies were common in many habitats throughout Australia, from the dry interior to temperate coastal regions. Since then much of the bilby's habitat has changed, and bilby numbers have been greatly reduced. They now occur in fragmented populations in mulga shrublands and spinifex grasslands in the Tanami Desert of the Northern Territory; in the Gibson and Great Sandy Deserts and the Pilbara and Kimberley regions of Western Australia; and the Mitchell grasslands of south-west Queensland.



Threats

While many factors are contributing to the dramatic decline of bilby populations, the most important are habitat loss and change, and competition with introduced animals. Late last century large numbers of bilbies were hunted for their skins. Others were killed by rabbit traps and poison baits. Bilbies are now protected by legislation.

Their habitat has changed rapidly as agricultural activities extend over the more fertile regions of Australia. Changing fire patterns also affect the type and abundance of food plants.

Competition with introduced animals is a major threat to the bilby. Domestic stock such as cattle and sheep eat the same plants. Rabbits reduce native vegetation cover, prevent natural revegetation and compete with bilbies for their food and burrows. Other introduced animals such as foxes and feral cats prey on bilbies.

Bilbies no longer occur in areas densely populated by rabbits and foxes, or on land intensively grazed by livestock. They now occur in small, isolated populations in the driest and least fertile regions of arid Australia. Each population is at risk from predation, disease, drought or inbreeding.

Recovery action

The bilby is protected throughout Australia where it occurs. A national recovery plan is being developed which aims to ensure the survival of bilbies. It outlines recovery actions needed to bring bilby populations back to a secure status in the wild. Part of this process involves understanding the habitat requirements and distribution of bilbies, and identifying the processes causing the bilby's decline.



The plan sets out key recovery actions. These include managing the bilby's habitat so that populations can expand, breeding bilbies in captivity, and eventually re-establishing bilbies in areas of suitable habitat where they previously occurred.

Northern Territory

In the Tanami Desert of the Northern Territory, factors affecting the survival of bilbies are being assessed so that habitats can be managed appropriately. This work includes monitoring bilby numbers and distribution, and studying predator populations at selected sites in consultation with Aboriginal owners. At each study area, other factors such as rainfall, fire, vegetation and food availability, and the relationships between them are also being examined.

The mining community at Granites Gold Mine is also involved in protecting the bilby and its habitat.

Western Australia

In Western Australia, monitoring of bilby populations near Broome is in progress.

Queensland

The bilby population in south-west Queensland is being closely monitored. A research and management program underway involves pastoralists in livestock and predator control to determine ideal conditions for the expansion of bilby populations.

Captive colonies

A species management plan has been developed to manage the captive bilby colonies. This plan aims to retain the genetic diversity of the colonies as well as maintaining a stable population structure. Captive bred colonies are held by the Conservation Commission of the Northern Territory, Western Plains Zoo in NSW and Monarto Zoological Park in SA. These sites will provide bilbies for release into the wild at suitable protected sites in the near future.

It is hoped that in the future, wild bilby populations will be successfully re-established in South Australia and New South Wales.

Desert Aborigines and the bilby

The bilby is an important part of traditional culture in the deserts of Central Australia. It is known as *ninu* by Aboriginal groups such as the Pintupi, Pitjantjatjara, Ngaanyatjara, and *walpajirri* by the Warlpiri. Aboriginal people recount stories from the dreaming and perform ceremonies about the bilby. They also contribute their traditional knowledge to assist with the conservation of the bilby.

Definitions of status terms:

extinct:

has not been reliably sighted in the wild in 50 years, or after 10 years of thorough searching.

endangered:

likely to become extinct if threats continue.

vulnerable:

likely to become endangered if threats continue.

Further Reading

Flannery T (1990) *Australia's Vanishing Mammals*. RD Press, Sydney.

Stoddart E (1992) *Bandicoots and Bilbies of Australia*. Bimberi Books, ACT.

Strahan R (1983) *Complete Book of Australia's Mammals*. Australian Museum. Angus & Robertson.

Walton, D & Richardson, B (eds) (1989). *Fauna of Australia*. Vol. 1B: Mammalia, AGPS, Canberra.

Bilbies are exhibited to the public at Currumbin Sanctuary, Taronga Zoo and Adelaide Zoological Gardens. There is a popular movement to adopt the bilby as the symbol of Easter in Australia. In this context the bilby represents the concerns of many Australians for the survival of our native plants and animals.

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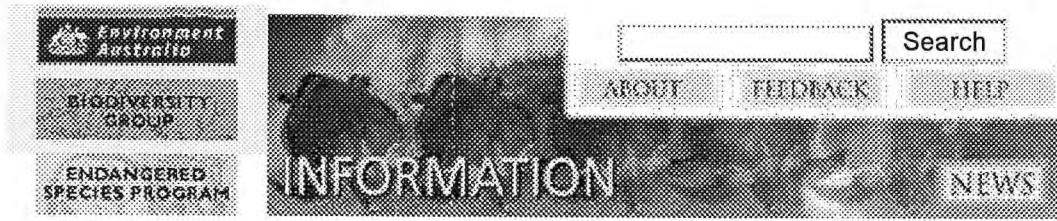
A cooperative project of the
Greater Bilby Recovery Team

Parks & Wildlife Commission of the NT;
SA Department of Environment & Natural Resources;
WA Department of Conservation and Land Management;
QLD Department of Environment & Heritage;
Environment Australia;
participating zoos of the Australasian Regional Association of
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World Wide Fund for Nature and
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