# Woylie Bettongia penicillata (Gray, 1837)

#### Size

Head and body length 300–380 (330) mm

**Tail length** 290–360 (310) mm

## Weight

1.1-1.6 (1.3) kg

## **Subspecies**

Two currently recognised:

- Bettongia penicillata ogilbyi (south western Australia, but reintroduced into parts of South Australia and New South Wales)
- B. p. penicillata (south-eastern Australia, extinct)



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

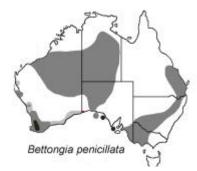
# **Description**

Small nocturnal rat-like kangaroo, yellowish grey above, paler below with a black crest on the tail. When flushed from the nest, it bounds with head held low, back arched and tail almost straight. Woylies have strongly clawed forefeet, used for digging for food and nest making.

#### Other common names

Brush-tailed bettong. Woylie refers to its indigenous (Nyoongar, south-west Australia) name.

## Distribution



Key To Map: Dark grey = present distribution:

Mid-grey = historic (> 30 years); Pale-grey = Fossil

Evidence from Aboriginal people and early explorer records suggest that woylies were once widespread and abundant across Australia south of the tropics, including the central deserts in central Western Australia and into the southern region of the Northern Territory.

Woylie numbers and geographic range have decreased dramatically during this century. By 1975 there were only three known natural populations remaining at Dryandra Woodlands, Tutanning Nature Reserve, Perup Nature Reserve and surrounding areas. It had disappeared from central Australia by 1960. Woylies have been established by translocation at Batalling Forest, Boyagin Nature Reserve, Julimar Forest, Lake Magenta Nature Reserve, and Peron Peninsula at Shark Bay, and more recently, Kalbarri National Park. Woylies have also been translocated to a number of sites in the northern and southern Jarrah forests of Western Australia, and to sites in South Australia and New South Wales.

#### Habitat

Open forest and woodland with a low understorey of tussock grasses or woody scrub. Formerly occurred in a wider range of habitats including spinifex hummock grasslands.

#### **Behaviour**

Woylies are nocturnal. Males and females occupy distinct individual home ranges that include a nesting and a feeding area. Nesting appears to be territorial but the feeding areas of adjacent individuals may overlap considerably. The nest is dome-shaped and is neatly constructed of grass or shredded bark in a shallow depression scraped in the ground and concealed under a bush or other cover. An inner lining, usually of grass, is formed. The woylie spends the day in its nest and forages for food at night. It is a relatively slow moving animal but may hop when disturbed.

#### Diet

Consists largely of the fruiting bodies of underground fungi, supplemented by bulbs, tubers, seeds, insects and resin. The proportion of fungal material in the diet is greatest in summer and autumn. Fruiting bodies from underground fungi are considered to be the major food item throughout the year at Perup in Western Australia.

## **Breeding**

Breeding occurs throughout the year under suitable conditions. In captivity, females first breed at six months of age and approximately every 100 days thereafter. Males breed at nine to 12 months of age. The single young remains in the pouch for 90 days and then accompanies the mother at heel until the next young vacates the pouch.

# Threatening processes

Experimental data implicates the fox as the major threat to woylies in south-west Western Australia. Cat predation, habitat destruction and alteration, altered fire regimes, competition from domestic and feral herbivores, and possibly disease has reduced the distribution and population of woylies in Western Australia. Woylie numbers are only recovering in areas with fox control.

## **Conservation status**

• B. p. ogilbyi

2000 IUCN Red List of Threatened Species Lower Risk (conservation dependent)

Western Australian Wildlife Conservation Act Not listed (Priority 4)

Environment Protection and Biodiversity Conservation Act Not listed

• B. p. penicillata

2000 IUCN Red List of Threatened Species Extinct
Environment Protection and Biodiversity Conservation Act Extinct

# Management in Western Australia

- Monitoring programs will continue, to maintain the woylie at the current status of Lower Risk (conservation dependent) with a view to further improve its conservation status.
- Exotic predator control.

# Other interesting facts

- Research indicates that the woylie does not eat any green plant material, nor does it drink but obtains its water from its food.
- Individuals live for between four and six years.
- Their tail is prehensile (able to grasp things) and is used to carry nesting materials.
- In 1996, the woylie became the first mammal in Australia to be deleted from lists of threatened species as a result of conservation actions.

#### **Selected references**

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#### Website links

http://www.naturebase.net/projects/west\_shield.html http://www.ea.gov.au/biodiversity/threatened/action/marsupials/24.html