

Heath Mouse

Pseudomys shortridgei (Thomas 1907)

Size

Head and body length
90–120 (110) mm

Tail length

80–110 (95) mm

Weight

55–90 (70) grams

Subspecies

None currently recognised.



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

Description

Grey-brown above, flecked with buff and black, and paler underneath. Has bulging eyes and ears covered with fine hairs. Feet are brown but paler than the body. The tail is shorter than the head to body length, scaly rather than annular, and is bicoloured, dark on top and pale-white underneath.

Other common names

Blunt-faced rat, blunt-faced mouse, Shortridge's native mouse, heath rat.

Distribution



Key To Map: Black = present distribution; Mid-grey = historic (> 30 years)

Before European settlement the heath mouse was found through coastal heath and mallee in the south west of Western Australia, from Jurien Bay to Bremer Bay. It was first described from a specimen collected in 1906 in the central Western Australian wheatbelt.

This species is presently known to occur in two discrete, widely separated populations, one in south-west Victoria and the other in south-western Western Australia. The species is reasonably common in sandy heaths between the Lower Glenelg River and Grampians National Parks in Victoria. Until 1987 it was thought to be extinct in Western Australia, where it is now known to occur in the Ravensthorpe Range, Fitzgerald River National Park, and Dragon Rocks and Lake Magenta Nature Reserves.

Habitat

The heath mouse is known to occupy variable habitats. In Western Australia it prefers mature stands of scrub mallee and mixed scrub with *Banksia* on loamy soils, unburnt for at least 30 years. In contrast, the heath mouse is found to occupy recently burnt areas in sandy heaths and heath woodlands in Victoria.

Behaviour

Little research work has been done on the heath mouse in Western Australia. In Victoria, the heath mouse prefers areas of recently burnt habitat, its behaviour reflects its survival needs of dispersing and finding newly burnt areas to colonise. As vegetation matures and conditions deteriorate adults cling to their home ranges and young born each year must search

for unoccupied habitat. Adults survive for up to four years. Forcing the young to disperse increases the chance of at least some of their offspring finding new suitable habitat.

The heath mouse in Victoria is assumed to live in burrows and has been found to use lizard and rabbit burrows for shelter. Evidence suggests that the species forms some pair bonds during the breeding season. High day-time captures in the Grampians (Victoria) suggests the species may be diurnal (day active).

Diet

Dietary information exists for animals from Victoria. The heath mouse feeds on the flowers, seeds and berries and new vegetation in recently burnt areas. Its diet changes as the vegetation in the area matures and the animal turns to the stems and leaves of grasses, sedges and lilies. After the autumn rains, the heath mouse feeds on truffle-like fungi which remain until the flowers and seeds become available again.

Breeding

Breeding occurs in late spring, early summer when food is freely available and of a high quality. During the season, one to two litters are produced. The usual litter size is three and the young do not appear to be reproductively mature until nearly one year old. As food resources dwindle at the end of summer, growth and breeding cease and juveniles survive only if they have attained adult body weight. Soon after dispersing into an area where conditions are favourable, offspring survive particularly well, however adults start to disappear during or after the first breeding season.

Threatening processes

The most likely cause of decline of the heath mouse in Western Australia is habitat loss as a result of clearing in the Wheatbelt. Introduced predators may also have exacerbated the decline.

Conservation status

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

Management in Western Australia

- Fire exclusion regime maintained in the Fitzgerald River National Park until habitat requirements are defined.
- Fox control program and research into the impact of feral cats.
- Surveys of Western Australian wheatbelt sites for additional populations for possible translocation if necessary.
- Research into the conservation biology of the species.

Other interesting facts

- The scales on the tail of the heath mouse do not occur in ring formation, which distinguishes it from species of *Rattus*.

Selected references

Watts, C. H. S. and Aslin, H. J. (1981). The rodents of Australia. Angus and Robertson, Sydney.

Strahan R. (1995). The Mammals of Australia. Australian Museum and Reed Books. Chatswood, NSW.

Lee, A. K. (1995). The action plan for Australian rodents. Australian Nature Conservation Agency, Endangered Species Program Project Number 130.

Braithwaite, R.W., Morton, S.R., Burbidge, A.A. and Calaby, J.H. (1995). Australian names for Australian rodents. Australian Nature Conservation Agency in association with CSIRO Division of Wildlife and Ecology.

Website links

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

<http://www.ea.gov.au/biodiversity/threatened/action/rodents/rodap5.html#Heath>