**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) g

**Subspecies**
None recognised.

**Description**
Grey-brown above, flecked with black and dark guard hairs that give it a fluffy appearance, 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-body length, scaly rather than annular, and is bicoloured, dark on top and pale-white underneath. This contrasts with the sparsely haired, annulated tails of the sympatric bush rat (*Rattus fuscipes*) and introduced *Rattus* species.

**Other Common Names**
- Blunt-faced Rat, Blunt-faced Mouse, Shortridge’s Native Mouse, Heath Rat, Dayang.

**Distribution**
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 wheat belt.

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.

For further information regarding the distribution of this species please refer to [www.naturemap.dpaw.wa.gov.au](http://www.naturemap.dpaw.wa.gov.au)

**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 y ears. In contrast, in Victoria they are most common in areas of species-rich dry heathland that has been burnt in the last 5-15 years.

**Behaviour**
Little research work has been done on the behaviour of the Heath Mouse in Western Australia. In Victoria, Heath Mice are known to vary their life history strategies according to the successional stage of the vegetation. In more productive vegetation communities, juvenile dispersal is lower and survival higher compared to mature vegetation communities where young are forced to disperse longer distances. Dispersing young have a better chance of finding suitable nearby habitat if a mosaic of vegetation patches of differing maturity is available in the landscape.
Diet
Dietary information exists for animals from Victoria. In late spring and summer the Heath Mouse feeds on the flowers, seeds and berries. At the end of summer the mice switch 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
Evidence suggests the species forms pair bonds during the breeding season. Breeding occurs in late spring/summer when food is freely available and of a high quality. During the breeding season, one to two litters are produced. The usual litter size is three. As food resources dwindle at the end of summer, growth and breeding cease and juveniles survive only if they have attained adult body weight.

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 Wheat belt. Introduced predators may also have exacerbated the decline.

Conservation status
Western Australian Wildlife Conservation Act 1950
- Schedule 1 – Fauna that is rare or is likely to become extinct (Threatened ranked as Vulnerable)
Environment Protection and Biodiversity Conservation Act 1999
- Vulnerable
IUCN Red List of Threatened Species
- Near Threatened (Version 3.1)

Management in Western Australia
A national recovery plan is in preparation (as at June 2011). Some suggested management actions in Western Australia are as follows:
- 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 Wheat belt sites for additional populations.
- 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
Salinas, M., Bunce, M., Cancilla, D., Alpers, D.L. and Spencer, P.B.s. (2009). Divergent lineages of the heath mouse (Pseudomys shortridgei) are indicative of major contraction to geographically isolated refugia on the eastern and western sides of Australia during the early Pleistocene. Australian Journal of Zoology 57: 41-47.

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