

# SOUTHERN HAIRY-NOSED WOMBATS



notes

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The Southern Hairy-nosed Wombat (*Lasiorhinus latifrons*) is the faunal emblem of South Australia. This is appropriate as the State provides most of its habitat.

Originally the Southern Hairy-nosed Wombat was found fairly continuously west of the Murray in southern South Australia. Now, as a result of European settlement it is restricted to colonies in arid and semi-arid regions of the Nullarbor Plain, Gawler Ranges, upper western Eyre Peninsula and the Murraylands. An isolated population on York Peninsula has only a few animals.

Two other species of wombat are found in Australia. In the forested areas of the southeast of mainland Australia and Tasmania lives the Common Wombat. Though its range has decreased, it is still relatively common probably because of the limited use of its habitat for agriculture. However, the population of the Northern Hairy-nosed wombat has declined

drastically since European settlement mainly because of competition with farmers and graziers. Of the many colonies that existed throughout the inland plains region of Queensland, New South Wales and Victoria only one colony remains in central eastern Queensland. There are less than sixty Northern Hairy-nosed Wombats remaining, making this species one of Australia's most threatened.

To assist the conservation of the Southern Hairy-nosed Wombat, Adelaide Zoo is conducting research to expand its knowledge of the husbandry of the species and to improve breeding outcomes. A co-operative program between the Adelaide and Melbourne Universities and Adelaide Zoo exists to increase the understanding of the species' breeding, behaviour and physiology. Ultimately this knowledge could be applied to the Northern Hairy-nosed Wombat because if the population of this species declines

further, captive breeding may be required to ensure its survival. The Adelaide Zoo will be well prepared in the event that this is necessary.

The Southern Hairy-nosed Wombat is also exhibited at the Adelaide Zoo for education purposes. It is not easily observed in the wild.

Under natural conditions the Southern Hairy-nosed Wombat must survive temperatures that can range from below freezing at night to over 40 degrees Celsius during the day. Nocturnal activity helps to cope with these conditions as the wombat can rest in the cool burrow. This natural behaviour occurs at the Adelaide Zoo and may explain why the wombats are not visible at times.

The habitat of the Southern Hairy-nosed Wombat receives low rainfall and experiences long periods of drought. How can the animal live with little water? It will drink, but water is usually only obtained through its food - spear grass. By observing the dry pellet faeces of the wombat we can see that only small quantities of water are excreted through waste.

In order for there to be sufficient food for a young Southern Hairy-nosed Wombat to reach adulthood there must be a minimum of three consecutive years of rainfall suitable for plant growth. In the Murraylands, this has occurred in only 25 of the past 100 years.

This wombat has the ability to vary its body temperature in the burrow thereby conserving energy and water. Temperatures, both inside and outside the burrow, are important to wombats. In the Southern Hairy-nosed Wombat habitat enclosure you can observe a simulated natural burrow system which hopefully will result in the birth of a young wombat at Adelaide Zoo. Southern Hairy-nosed Wombats dig extensive warren systems, each one inhabited by five to 10 animals.

Aggressive behaviour is seen between males during the mating season, which is from late July to early December. A single young is born after 21 days of gestation. As with all marsupials it is very immature (hairless and about the size of a peanut) and so it climbs into the female's pouch.

Here it will attach itself to a teat and remain for about 6 months. Because of their burrowing nature, female wombats have a peculiarity about their pouch compared to a kangaroo's. The opening of the pouch is at the bottom of the wombat's body, rather than the top. This prevents dirt from entering the pouch while burrowing.

The diet of the Southern Hairy-nosed Wombats at the Adelaide Zoo consists of kangaroo pellets, apple, carrots, lucerne and fresh grass. It is important that they receive tough grass as their teeth do not have roots and grow continuously throughout their lives. This is probably an adaptation to cope with the coarse nature of the grasses they eat in the wild and chewing through rock to expand a burrow, both of which constantly wear the teeth down.

The Southern Hairy-nosed Wombat has not been bred extensively in captivity reflecting a lack of knowledge of this animal's reproductive biology. The Adelaide Zoo's Southern Hairy-nosed Wombats were born in the wild each one having been rescued after the death of its mother. Young wombats rescued at an older age can be returned to the wild. A female, rescued at 18 months, was reintroduced to the wild after being at the Adelaide Zoo for two years. She was fitted with a radio-tracking device, which enabled researchers to measure body temperature and behaviour. This research and other programs are essential parts of the overall effort to conserve this native species and ultimately its relative, the Critically Endangered Northern Hairy-nosed Wombat.

