

## Brush-tailed Possum (*Trichosurus vulpecula*)

### Conservation Status

Although relatively common in urban areas the numbers of Brush-tailed Possum are declining across the country and are listed as regionally extinct in a number of areas including the South Australian Outback (including the Flinders Ranges).



### Description

The Brush-tailed Possum is the second largest possum species in Australia. It is the most widely distributed Possum and probably the most familiar one for city-dwellers. Found throughout the eastern and northern parts of the continent, as well as some western regions, Tasmania and a number of offshore islands, such as Kangaroo Island and Barrow Island the size and colour of the Brush-tailed Possum varies considerably across its range. The smallest possums occur in arid areas and larger, darker coloured possums occur in the denser, wetter areas. Males are often larger than females and often have a reddish stain on their chest, indicating an active scent gland. Possums communicate using sound and scent glands located on the chest, under the chin and near the anus. Direct aggression between possums is rare as scent markings and vocalisations are used to effectively mark and defend dens.

### Habitat

Brush-tailed Possums are nocturnal. They spend the day in tree hollows, fallen logs, rock cavities, termite mounds and even burrows and large hollow-bearing trees are an important part of preferred habitat of Brush-tailed Possums. Brush-tailed Possums are largely solitary but will share dens when shelters are in short supply. Urban Brush-tailed Possums will utilise a wider variety of den sites including roof spaces and share dens more often. Each possum uses a range of den sites within their home range with home ranges varying from less than one hectare to nine hectares depending on location, habitat and food availability. However, home ranges of up to 77 ha have been recorded in central Australian desert populations.

### Diet

Brush-tailed Possums eat a variety of leaves, flowers and fruits. The possum plays an important role in maintaining a healthy ecosystem by helping to spreading the seeds of plants such as the native orange and by eating mistletoe, a parasitic plant which in areas like the Flinders Ranges is causing significant stress to the Red Gums.

### Breeding

Breeding in the Brush-tailed Possums varies considerably throughout its range and is largely affected by availability of food. In arid areas they breed opportunistically and can breed continuously if conditions are favourable. In temperate areas breeding occurs in autumn and spring but possums in south west Western Australia only breed once the autumn rains begin.

Females begin breeding at about one year of age, giving birth to a single young after a gestation period of 16 to 18 days. Young spend four to five months in the pouch and after leaving the pouch remain with their mother for one to two months. After weaning the young disperse and establish their own territory - a stage is associated with a high level of mortality for possums.

### Threats

The general decline in Brush-tailed Possums in Australia has been attributed to predation from introduced predators (particularly foxes), removal of large hollow bearing trees by clearance or fire, and widespread loss of natural foods through habitat clearance and degradation from introduced herbivores. Possums were also extensively hunted for their fur in the late 1800's and early 1900's. Between June and September 1920 more than 100 000 possums were killed for their skins in South Australia alone!

### Recovery Plan

FAME is working with the South Australian Department of Environment, Water and Natural Resources to reintroduce the Brush-tailed Possum to the central Flinders Ranges in 2014.

**Acknowledgement:** The Brush-tailed Possum is known as *virda* to Adnyamathanha peoples of the Flinders Ranges. It is an important spiritual animal to them was also hunted extensively for food. As the Traditional Owners of the country known as the Flinders Ranges National Park, the Adnyamathanha jointly manage this area through the Flinders Ranges Co-management Board and through members of Adnyamathanha being employed as park managers. The Reintroduction Project Team is grateful for the support and goodwill of representatives from the Adnyamathanha community for this reintroduction.