

## Western Ringtail Possum *Pseudocheirus occidentalis* (Thomas, 1888)

### Size

Head and body length  
300–400 mm

### Tail length

300–400 mm

### Weight

0.82–1.13 kg

### Subspecies

None recognised

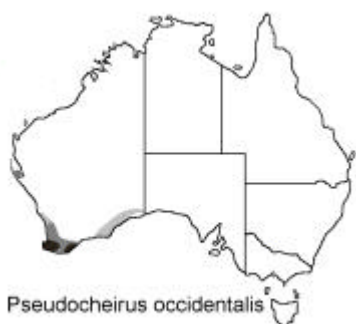


Photo. Babs & Bert Wells/Department of Conservation and Land Management

### Description

Usually very dark brown above, occasionally dark grey, with cream or grey fur below. Ears short and rounded. Tail slender, strongly prehensile with terminal white tip of variable length.

### Distribution



*Pseudocheirus occidentalis*

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

Nineteenth century surface cave deposits show that the western ringtail possum was widely distributed throughout the south-western forests of Western Australia from 120 kilometres south-east of Geraldton to the southern edge of the Nullarbor Plain, with inland records as far as Tutanning Nature Reserve. It was first reported to be in decline in 1909. The pattern of decline has been local and patchy. Local extinctions have been most extensive in inland areas, occurring as recently as 1950-1970.

Most populations are now restricted to near coastal areas of peppermint (*Agonis flexuosa*) woodland and peppermint/tuart associations from the Australind/Eaton area to the Waychinicup National Park. It is relatively common and abundant in a small part of the lower Collie River valley and the proposed Perup Nature Reserve and surrounding forest blocks near Manjimup - viable groups also live in some parts of urban Busselton. The western ringtail possum is thought to have become locally extinct at all former inland locations except at Perup and surrounding forest blocks - the only location where the ringtail is now found in the absence of peppermint.

### Habitat

The western ringtail possum was once located in a variety of habitats including, Coastal Peppermint, Coastal Peppermint-Tuart, Jarrah-Marri associations, Sheoak woodland, and eucalypt woodland and mallee. Present populations mostly inhabit Coastal Peppermint-Tuart associations from Bunbury to Albany. Along the Swan Coastal Plain near Busselton the highest densities occur in habitats with dense, relatively lush vegetation, usually associated with vegetation lines. Where protection from introduced predators is provided, a wide range of nest sites on or near the ground has been recorded, including low shrub thickets, sedges, rushes, and grass trees. Where predator control is absent, tree hollows and dreys in tree canopies are usually used.

## Behaviour

The western ringtail possum is highly arboreal, feeding, resting and socialising in the canopy as much as possible and rarely being seen on the ground. In coastal areas, dreys are the usual daytime rest site, but populations occurring more than four kilometres from the coast rely mainly on eucalypt hollows that provide cool rest sites on hot summer days. Adults usually rest alone, though young may accompany females. The western ringtail possum has a relatively small and stable home range. In dense, coastal Peppermint forest, home ranges are about 0.5 hectares to 1.5 hectares and in eucalypt forests about 2.5 hectares. In contrast, in the northern jarrah forests, home ranges are larger and have been recorded to at least 5.6 hectares. Regardless of forest type, individuals use three to eight different nest sites (dreys or hollow trees) in the course of a year. Adjacent home ranges overlap as much as 70 per cent. Social activity occurs at night, primarily by investigation of scent trails on tree limbs (marked with urine) and males may visit adjacent female home ranges. In some populations, most young disperse to home ranges adjacent to the natal range but in high-density groups, young travel across at least several home ranges.

## Diet

Diet is variable. Peppermint (*Agonis flexuosa*) leaves form the basis of the western ringtail possum diet in coastal areas, but when unavailable, the dominant myrtaceous species are preferred. In the inland forest, Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) are the main food source. In urban areas such as Bunbury and Busselton, ringtails will often feed on a variety of garden species including rose bush leaves and flowers, and a variety of cultivated fruits.

## Breeding

Births are mostly in winter, but some populations breed throughout the year. Young emerge from the pouch at about three months (weighing about 125 grams) and suckle until six to seven months (550 grams). Females usually give birth to only one young, however litters of two or three are not uncommon.

## Threatening processes

The major factors thought to be contributing to the decline of the ringtail include habitat loss and/or modification, predation by introduced predators, and changing fire regimes. In most coastal populations the fox is the main predator of the western ringtail possum as shown by monitoring of re-introduced populations. Clearing of coastal Peppermint in the Bunbury-Augusta and Albany areas is contributing to habitat fragmentation while prescribed burning of these areas needs to be managed to maximize population survival and enhancement.

## Conservation status

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

## Management in Western Australia

Strategies for the recovery of the western ringtail possum include:

- Conserving existing populations within public lands managed by the Department of Conservation and Land Management.
- Improving the species conservation status, through habitat management (including fox control) and translocations to increase their numbers.
- Minimising the impact of land developments through in-situ conservation and translocations.
- Ensuring that derelict (injured, orphaned or nuisance) animals are rehabilitated where possible and released into the wild where chances of survival are maximised.

- Ensure the primary criterion for successful management (downlist the current species status from Vulnerable) is met.

### **Selected references**

Jones, B. (1995). Western Ringtail Possum. In R. Strahan (Ed.) *The Mammals of Australia*. Australian Museum and Reed Books. Chatswood, NSW.

Maxwell S., Burbidge A.A, Morris K. (1996). The 1996 Action plan for Australian Marsupials and Monotremes. Wildlife Australia, Canberra.

Burbidge A.A, de Tores P. (1997). Western Ringtail Possum Interim Recovery Plan 1997-1999. Department of Conservation and Land Management, Perth Western Australia.

Burbidge, A. (1997-98). Endangered: Western Ringtail Possum. *LANDSCOPE* 13(2): 49.

de Tores, P., Rosier, S. and Paine, G. (1998). Conserving the Western Ringtail Possum. *LANDSCOPE* 13(4): 28.

### **Website links:**

[http://www.naturebase.net/projects/west\\_shield.html](http://www.naturebase.net/projects/west_shield.html)

<http://www.ea.gov.au/biodiversity/threatened/action/marsupials/23.html>

<http://www.nre.vic.gov.au/animals/possums/>