Encouraging Possums

Keywords:	possums, mammals, habitat, management, nest boxes
Location:	southwest
Author:	Emma Bramwell

Possums are delightful and appealing creatures, with their soft downy fur and large innocent eyes. Some may be as small as a mouse while others are the size of a domestic cat.

The western ringtail and common brushtail possums are two of the most commonly seen native animals around urban areas in the southwest of Western Australia. The common brushtail possum in particular has adapted to urban development, and readily takes up residence in human dwellings. With careful planning and management, people can live harmoniously with these creatures and enjoy the close proximity of wildlife.

WHAT IS A POSSUM?

A number of small to medium-sized, tree-climbing Australian marsupial species have been given the common name of possum. The name "possum" is derived from the American word "opossum", meaning the ability to feign death if attacked. Possums are also occasionally called "phalangers" which is derived from a Greek word meaning spider web, describing the webbed toes of the hind feet. A Nyoongar Aboriginal word referring to possums is "goomal", which means to be active at night.

All possums belong to the order Diprotodontia (pair of incisors in the lower jaw), which also includes wombats, gliders, cuscuses, koala, kangaroos, wallabies, potoroos, and bettongs. In Australia there are six families of possum, containing twenty-six species and subspecies.

POSSUMS IN WESTERN AUSTRALIA

Although most people will only ever come across the two larger species, the western ringtail and common brushtail possums, Western Australia is home to seven species, three of which are found exclusively in this State.

Possums can be found in a large range of habitats from the tropical north to the arid northwest and cool lower southwest.

THE SEVEN SPECIES

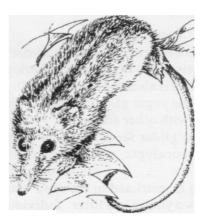
• Honeypossum Tarsipes rostratus

The honey possum is the smallest of the Western Australian possums, and is endemic to (occurring only in) the lower southwest, in heaths with a rich diversity of nectar-producing plants.

Mainly nocturnal, the honey possum sleeps during the day in hollow stems or abandoned bird nests, emerging at night to feed on the nectar and pollen that exclusively make up its diet, probing flowers with its long, pointed snout and brush-tipped tongue. In colder weather the honey possum becomes torpid (semi-hibernates).

The honey possum has no obvious breeding season. Most young are produced when pollen and nectar are most abundant, and females usually raise two or three young at a time.

Provided large areas of habitat are retained, the honey possum's future appears to be secure despite predation by foxes and cats, and occasional drownings in backyard swimming pools. The main threat to the honey possum is dieback (caused by Phytophthora spp. and canker-forming fungi), which can devastate the large areas of shrubland and heathland the honey possum is dependent upon.



Honey Possum

• Western pygymy-possum Cerartetus concinnus

Occationally mistaken for a house mouse, the western pygmy-possum is a small, nocturnal marsupial found in areas of mallee heath and woodlands in the lower southwest. It feeds on insects associated with dense understorey shrubs of banksias, bottlebrushes, melaleucas and grevilleas, and also eats the pollen and nectar of these plants.

Breeding occurs throughout most of the year, and females produce up to six young in a litter. Pygmypossums live for about five years.

Because it lives close to the ground, rolled up in a minute furry ball inside a leaf-lined nest during the day, the pygmy-possum can be affected by predation from cats and foxes.

Western ringtail Pseudocheirus occidentalis

Highly arboreal (tree-dwelling) and now mainly restricted to peppermint woodland and jarrah and marri forest in the lower southwest, the western ringtail is endemic to Western Australia. The western ringtail is the second-largest species found in the southwest, a bit smaller than a domestic cat in size, and is now considered to be rare and endangered.

The western ringtail is nocturnal, spending daylight hours in a tree hollow or specially constructed drey or den, and emerging at night to feed on the leaves and flowers of the tree it inhabits.

Breeding appears to be restricted to winter, with female ringtails bearing one or two young at a time.

The major threats to the survival of the western ringtail, are loss of habitat and predation by foxes.

• Rock ringtail Petropseudes dahlia

This marsupial lives exclusively in rocky outcrops, and in Western Australia occurs in the northern Kimberley region.

The rock ringtail is strictly nocturnal, nesting during the day and climbing trees at night to feed on flowers, fruit and leaves.

Breeding appears to occur at any time of the year, with monogamous pairs producing one or sometimes two young in a litter.

• Sugar glider Petaurus breviceps

In Western Australia the sugar glider is found in open forest habitats in the northern Kimberley region.

Where food is abundant and tree hollows are available for shelter, the sugar glider is locally common and will share a nest with other adults and young.

The sugar glider feeds on nectar, sap and gum from acacias and eucalypts, as well as invertebrates such as beetles.

Breeding is restricted to the dry season, with females producing two young in a litter. Individuals may live for up

to nine years: the main threat to the survival of the sugar glider is habitat loss and predation by cats.

Scaly-tailed possum Wyulda squamicaudata

Resembling the common brushtail possum in some respects and cuscuses in others, the scaly-tailed possum is found in low woodland in rugged country (often with rainforest elements) in the northern Kimberley region, and is endemic to Western Australia.

The scaly-tailed possum gets its name from the rough outer layer of skin on its tail, allowing the animal to grip the branches of tree in which it feeds.

It is nocturnal, living in dens constructed in rock piles, slabs and crevices during the day, and climbing trees or foraging on the ground at night to feed on leaves, blossoms, fruit, nuts and insects.

The scaly-tailed possum is solitary by nature, and defends a home range (containing several dens) of about a hectare, although there may be some extent of overlapping with home ranges of other possums.

Females give birth to one young at a time, mainly in the dry season between March and August. Young are weaned after eight months and may live for several years.

• Common brushtail possum Trichosurus vulpecula

The common brushtail possum has a number of subspecies across Australia, and in Western Australia is found mainly in open forests and woodland in the lower southwest and Kimberley region. It has a diverse range of habitats, and previously occurred over much of the southern two- thirds of the State. It is the most frequently encountered of the possums, often cohabiting with humans, and is also the largest species in Western Australia, being about the size of a domestic cat.

Whilst it will travel on the ground, the common brushtail is arboreal, climbing trees with the help of sharp claws. It is territorial (the males more so than the females), defending dens and home ranges with a range of guttural noises and by marking boundaries with scent from glands on the chin, chest and near the anus. The common brushtail is solitary by nature, although a male may share a home range of up to half a hectare with a number of females and juveniles. Within a home range are a number of dens, ranging from tree hollows, hollow logs or termite nests, to the roof space of buildings in urban areas.

Generally nocturnal, the common brushtail spends daylight hours in its den, emerging at night to feed on a variety of foods including leaves, flowers, fruit, insects and occasionally birds' eggs.

Breeding occurs mainly during autumn in the southwest, with females producing one young at a time.

The major threat to the common brushtail possum is predation by the fox. In favourable habitat where foxes are controlled, the species occurs in high densities, and individuals may live for up to eleven years.

Threats to possums in Western Australia

The survival of possum species in Western Australia is threatened mainly by two factors: introduced predators, and habitat destruction.

Introduced predators, such as the cat, dog and fox, have the potential to decimate populations of small native mammals. An adult common brushtail possum has sharp claws and teeth with which to defend itself, however the tiny honey possum is unable to do so against a much larger predator.

The clearing of bushland to make way for urban and agricultural development adversely affects populations of native animals, however as people become more environmentally aware, areas of bushland around developments are being left for the benefit of wildlife.

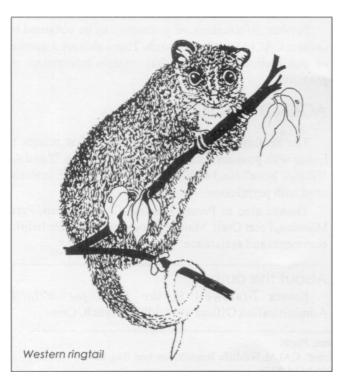
ENCOURAGING POSSUMS IN YOUR AREA

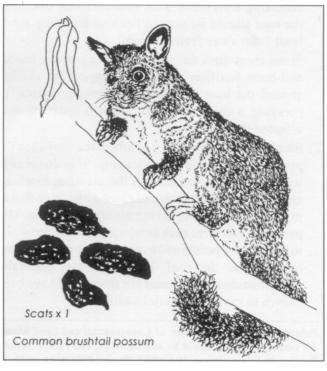
The most frequently encountered possums around urban areas in southwest Western Australia are the common brushtail, and to a lesser extent the western ringtail. Occasionally other possums are encountered by humans, although not frequently in urban areas. If you are fortunate enough to have possums living in your area or on your property, you need only to make sure that the habitat remains as suitable as possible for them to stay. This means restricting activities in the bushland, and making sure that these arboreal creatures have safe access to trees, suitable den sites and a natural source of food. As possums occur naturally in woodland habitats, understorey and suitable trees are necessary for their survival .

Nest boxes can be purchased or constructed to provide a possum with a home (specifications are given in "Wildlife Notes" No.3, Nest Boxes for Wildlife), and secured in a suitable position. Make sure that the nest box is mounted at least three metres above the ground, and faces south away from the sun. The antics of a possum can be quite amusing when watched by torchlight at night. A pest strip taped to the inside of the nest box lid during spring will help to prevent any swarming bees from taking up residence.

Most possums are basically vegetarian (except for the species who enjoy an occasional invertebrate), with foliage, fruit, flowers or nectar making up the bulk of their diet. The temptation to hand feed native animals should be resisted, as although people derive pleasure from feeding them, it does not benefit the animals and it is not necessary for their survival. Supplementary feeding is not harmful providing it is restricted to occasional small doses of suitable foods, as this will prevent the animal from becoming solely dependent on an artificial (and often unbalanced) diet. Common brushtails can be tempted with pieces of fruit such as apples and strawberries, or rose petals, and even cat and dog biscuits. Possums will eat what they can pick up easily in their forepaws, so make sure that fruit is chopped into small, manageable pieces as larger pieces will probably be ignored. A feeding platform can be constructed and placed within view of the house, providing there are no roaming dogs in the area that may disturb the possum.

Be aware that occasional supplementary feeding may encourage more than one possum into an area, so be prepared for a few disagreements between adults. If you are really lucky, you may even be graced with a visit from a female possum with a youngster on her back





LIVING WITH POSSUMS

Five species of Western Australian possums have relatively specialised habitat needs, and are not commonly seen outside of these habitats. However with their apparent boldness and variable diets, the two largest species of possum, the common brushtail and western ringtail, have adapted to living in urban areas.

Under natural circumstances a possum would prefer to make its daytime den in a tree hollow, however in urban areas where natural hollows may be scarce, roof spaces are an ideal alternative.

As it wakes and moves around at night before leaving to feed, a possum may cause some annoyance to people sleeping in the room below, and it may be necessary to discourage the possum from living in the roof. However, rats and mice may also inhabit a roof and cause a similar disturbance, especially during winter months. Before attempting to discourage residence, check to see what the visitor is or efforts may be wasted. The easiest way to determine whether the animal is a possum, rat or mouse is to find some droppings in the roof. Those of a possum are by far the largest, being about 2cm long and about 1 cm wide, while in comparison, those of a rat or mouse are between 0.5 and 1.5cm long. Alternatively, the lingering smell of rats and mice is quite different to that of a possum, and rats and mice may chew on electrical wiring.

Stop possums (and other native mammals such as brushtailed phascogales and bats) from reaching the roof space by ...

- 1) Placing sheet metal collars around the trunks of trees near the house. The sheet metal should be about two feet wide and long enough to wrap around the tree trunk, and placed at a height of about two feet from ground level to prevent jumping and climbing. This method is also useful for preventing possums accessing fruit trees. Tree branches that overhang the roof should be pruned back so that they are at least 1.5m away from the roof. Some short-term deterrents include placing bloodand-bone fertiliser or finely chopped hot chillies around the base of ornamental garden plants, or spraying a solution of hot English mustard onto affected fruit or foliage.
- 2) Blocking all known entry points to the roof once the possum has been observed leaving. If in doubt as to whether the possum has left the premise, block all entry points except one, and place a one-way flap of metal or perspex over the remaining entry point. Use permanent fixtures such as wire, sheet metal or wood to block entry points and to prevent the possum from returning to the roof. Bricks are not generally recommended, as possums are strong and have been known to move loose bricks aside.

3) Providing alternative dens for the possum, in the form of nest boxes mounted in trees near the house.

Possums may be trapped in the roof, but must be released on the same property as soon as possible. Contact your nearest Department of Conservation and Land Management (CALM) office for advice.

Removing possums and relocating them to another area is not recommended, as the survival rate of translocated possums is generally poor. Possums released into another area may displace other wildlife from nesting hollows. They may cause too much pressure on food resources, and may become victims of predation by foxes and dogs, or hit by vehicles as they attempt to establish a new territory. Besides that, hours of potential pleasure watching their antics outside the house will be lost!

Legislation

Note that all possums, like other native animals, are protected under the Wildlife Conservation Act. 1950, and must not be harmed in any way, or retained without an authority from CALM. The trapping and removal of possums by the general public is not permitted.

If there appears to be no other alternative than to have the possum removed from the roof and property, contact your nearest CALM office for advice.

It is worth bearing in mind that possums are territorial, and the removal of one possum from the roof will leave a possum-smelling space for another possum to take up residence in, if access points are not dealt with at the same time.

FOR FURTHER INFORMATION

Further information on possums can be obtained by contact CALM Wildlife Branch. There also are a number of publications available that contain information on possums.

ACKNOWLEDGEMENTS

The section of this "Wildlife Note" that relates to living with possums is based on the Victorian "Land for Wildlife Note" No.14, Nest Boxes for Wildlife; material used with permission.

Thanks also to Penny Hussey, Cherie Kemp, Peter Mawson, Peter Orell, Matt Warnock and others for helpful comments and assistance.

About the author

Emma Bramwell is the *Land for Wildlife* Administration Officer at Wildlife Branch, Como