

Supportive care for possums

Adaptations to fire

Possums and gliders may be burnt traveling across hot ground between trees or from a tree whose lower trunk is burnt. So the commonly burnt area are feet and tail, followed by lower back and face.

The biology of the possum may also play a role. Those living in tree hollows may succumb to smoke inhalation, whereas those living out on the branches in dreys may have an opportunity to move away from the fire.



Left: Small partial and full thickness burns to the limbs of a Brushtail Possum pouch young. Photo courtesy of Mignon McHenry

Right: Greater Glider—burns to ears, tail, lower back and pouch Photo courtesy of Colleen Wood

Treatment of burnt possums

- General anaesthesia is strongly recommended to reduce the stress of handling and address the pain felt when bandages are changed. Masking down with isoflurane will take 2–3 minutes with a recovery time of less than 20 minutes.
- Bandaging possum feet can be challenging due to the small size. Bandage strips need to be cut to only ½–1cm in length. Do not ‘ball bandage’ possum feet. They find it more comfortable to have mitten bandages. This species is at greater risk of digit arthritis and loss of nails.
- Products such as Acticoat 7® may reduce the frequency of bandage changes and thus anaesthetics required.

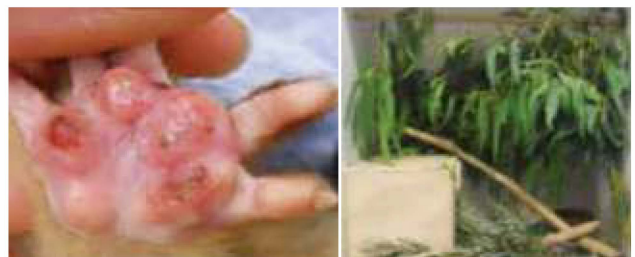
Medications

- **Antibiotics:** enrofloxacin, trimethoprim-sulfa appear to be reasonable choices for treatment of Ringtail possums and the Greater Glider. Brushtail possums appear to tolerate penicillins, as can the small gliders (Sugar, Squirrel, and Feathertail) and Pygmy possums.

- Pain relief can be provided with buprenorphine or meloxicam. Dilution may be required to give accurate dosing.
- Vitamin C and E may be given to promote healing.

Housing for burnt possums

- **Intensive care:** Clean housing is vital. The substrate should be cleaned of faeces and urine at least once daily. Suitable enclosures include vet clinic cat or dog metal/plastic cages; small dog mesh carriers. The enclosure should be small enough to permit easy medication via restraint for the first two to three weeks. The possum should be discouraged from climbing while the feet are bandaged—so no tree branches are offered. A nest box to hide in should be offered. The bedding will require regular changing. Provide food and water containers that cannot be tipped over but are placed at a level where they are accessed easily. Leaf is placed in water (vase, PET bottle, PVC pipe). Leaf and water are changed daily. Possums will stay in this enclosure for 7–14 days, or until bandages are removed.
- **Intermediate care:** small inside aviaries can be used once the skin has healed. A possum may spend a further 2–4 weeks in this enclosure while fur regrows.
- **Pre-release enclosures:** an outside aviary 4 x 2m long with the nest box that will be used to release the possum in are used to build fitness. The possum needs to spend at least two weeks in this setting before release. Tree branches and rope are used for climbing. Leaf is held in PVC pots and at least two pots per possum are placed in the enclosure.



Left: Ringtail possum foot with deep partial thickness burns. Photo courtesy of Dr Anne Fowler

Right: Housing for a Ringtail possum: nest-box, leaf in vase. Photo: Zoos Victoria

Feeding burnt possums

A choice of native browse can be offered. Be aware that animals may not be able to pick the leaves up to eat them if their feet are bandaged.

- Brushtail possums are offered 5–10 species of gum, wattle, tea tree and shrubs
- Ringtail possums and Greater glider are offered 3–5 species of eucalypt daily.

1kg of leaf per kg of possum is offered each day. Each piece is 50–100cm long with a combination of new and mature leaves.

Supplement the browse with fruit and vegetables. To increase the protein content of this food, add 1T of *Wombaroo® High Protein Supplement* to each 300g of fruit and vegetables.

To assist with dehydration and to provide a source of readily available calories and protein, milk should be offered daily. Milk is offered at a minimum of 50ml/kg of possum daily.

Suitable milks include:

- Wombaroo® possum >0.8
- Biolac® M200 (note this is NOT what the manufacturer recommends as the higher protein formula is needed for burns and growth), or
- Divetalact® with Wombaroo® High Protein Supplement at 2.5g per 1 scoop in 40ml of water to increase the low protein of this cow's milk formula.

Fresh water should be available at all times.

Criteria for release

- Demonstrate agility and speed in moving around the aviary
- Able to climb a smooth-barked tree in the aviary quickly and accurately
- No deformities of the hand such as bent digits or lost nails
- Able to maintain weight on a 100% natural diet.