# Supportive care for wildlife

# Supportive care for koalas

# **Adaptations to fire**

- Thick fur insulates against radiant heat
- Lives in trees and thus gets access to air with oxygen
- Low surface area per weight means that there is less body water lost
- Large body size means that it is relatively easily located after a fire
- Low metabolic rate: can survive for a period of time with reduced water and food intake.

# **Treatment of burns**

#### **Medications**

- 1. Antibiotics: for 7-10 days for infected burns
- 2. Pain relief: tramadol and buprenorphine can be given for 7–10 days
- 3. Vitamin supplementation may be of some benefit.

Where possible, medications must be given by injection (IM, SC, IV) as there is evidence that some oral medications may be poorly absorbed in this species. Pharmacologic studies have determined that a number of medications that have been frequently administered to koalas (including oral enrofloxacin, oral meloxicam) are poorly bioavailable in this species.

#### Key information:

- 1. Do not use meloxicam as it only lasts 30 minutes if given IV and not at all orally.
- 2. Avoid drugs in the penicillin class (amoxil/clav/ penicillins) or oxytetracycline due to risk of death from dysbiosis. The spectrum of these drugs does not address the pathogens likely to be present in a burn.
- 3. Do not use cortisone.
- **4.** Be cautious with the use of any drug excreted by the kidney as chronic dehydration may have led to mild kidney damage and drugs may precipitate kidney failure.

### Housing burnt koalas

- Intensive care: mesh dog carrier, porta-cot or metal dog cage in vet clinic for up to 7–14 days. Bedding is changed twice daily to avoid sitting in urine and faeces. 5kg of leaf is offered fresh daily divided into two pots (PVC pipe, PET bottle, or bucket). Bowl of fresh water offered and changed daily.
- Intermediate care: 2m x 1m aviary. A low gunyah (horizontal branch that sits between two upright y-shaped tree branches) is offered. 5kg of leaf is offered fresh each day divided into two pots (PVC pipe). Koala remains here until burns are healed i.e. from day 14–28.
- **Pre-release enclosure:** once skin has healed, from day 21 -28 onwards, the koala is moved to a larger enclosure with access to a 10–40m tree. Fresh leaf is still offered daily. The koala has access to weather while some protection is still offered.

# Feeding burnt koalas

5kg of fresh leaf is offered daily from three eucalypt species. This represents 10 x 1m branches. A mix of mature and gum tips is offered, with a preference to more tip than mature leaf. Leaf is rearranged and sprayed at least twice daily to stimulate feeding. The leaf is held in water pots, which may be PVC pipe, PET bottles or buckets. Water is changed daily where leaf is held. Leaf may be held for 1-2 days before being fed if it is kept cool, out of the sun and wind and sprayed twice daily.

Koalas that are not consuming adequate leaf can be offered low lactose milk or paste, depending upon the experience/preference of the carer. *Wombaroo Late Lactation* is designed for koalas eating leaf. 60ml is offered 2–3 times daily to the mouth using a 3ml syringe at 1ml at a time. *Oxbow Critical Care* can be mixed into the milk to create a slurry. This is fed until the burns are healed.

# **Criteria for release**

- Regrowth of burnt nails.
- Skin has returned to normal structure, but pigmentation does not need to be present.
- Can climb 4m up a tree in less than 30 seconds.
- Maintaining weight on leaf only.