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The information supplied in  
this booklet is intended to  
assist veterinary practitioners  
in providing initial care and  
first aid to wild lizards.

The information provided has  
been sourced from and reviewed  
by qualified veterinarians.

Animals requiring ongoing  
hospitalisation will require input  
from experienced rehabilitators  
to address husbandry and  
housing needs. Animals no  
longer requiring veterinary  
care should be transferred to  
an appropriate rehabilitator as  
soon as possible.

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# Lizards Veterinary Triage & Assessment



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# Triage & Assessment of LIZARDS

## Handling

- Lizards are capable of defending themselves using their mouth/teeth, claws, tail or a combination of these.
- Goannas/monitors:** use large thick welding or gardening gloves. Hold away from your body by the base of the head and tail, and include the hind legs (when possible). Secure the tail between your body and the examination table, between your arm and body, or between your legs. These are potentially dangerous and will require an experienced handler (a).
- Dragons** are best restrained with a towel. Watch for the claws and hold the head and body just before the hind legs or restrain the legs holding them back with the tail (b).
- Skinks, legless lizards and geckos** can lose their tails; always handle above the tail region, avoid excess handling and ensure the body is supported (c).



## Fluid therapy

- Warm the fluids to the species' preferred body temperature before administering.
- SC fluids can be given in loose skin in the axillary and inguinal regions.
- Give 3% - 5% (maximum) of body weight at a time.
- Suitable fluids include: 0.45% NaCl and 2.5% glucose, and Hartmann's Solution.

## Be aware

- Skinks/legless lizards and geckos have the ability to drop their tail in self defence; avoid handling any lizard by their tail if you are unable to identify them.
- Legless lizards can be misidentified as snakes – all lizards have external ear openings unlike snakes.
- Juvenile lizards do not require parental care.

## Housing

- For temporary housing use a smooth sided tub with newspaper or towels to line the bottom, a hide (e.g. box, bark), a bowl of water for soaking in and a ventilated enclosed lid. Even terrestrial species can climb and escape (d).
- Lizards are ectotherms, and require a temperature gradient across their enclosure, so that they can heat themselves up to their preferred temperature (which can vary significantly between species) but also cool themselves if required.
- Use a temperature probe that connects to a basking light placed at one end of the enclosure. Alternatively, for a short term in hospital, a heat pad can be placed under their box or plastic tub; covering only one half of the enclosure. Do not leave an exposed heat source inside the enclosure as this can cause serious burns to the lizard.
- Longer term, lizards will require UV light; however animals should be transferred to a qualified wildlife rehabilitator if longer term care is required.
- Dragons require higher humidity levels; this can be achieved by spraying the enclosure once or twice daily with water using a spray bottle.



## Feeding

- Only offer food once rehydrated and warmed.
- Adult lizards can go several days without food if hydrated and not emaciated.
- Australian lizards' diets are varied: skinks are omnivorous, dragons are insectivorous/omnivorous, monitors are carnivorous and geckos/flat footed lizards are insectivorous.
- Fruit or live insects (based on feeding groups above) can be offered as an interim only while expert advice and care is sought. Lizards should be transferred to an experienced wildlife rehabilitator as soon as possible.

## Anaesthesia

- Warming up patient prior to and during anaesthesia speeds up onset of anaesthesia and recovery.
- Fast for 1-2 feeding cycles prior to anaesthesia if possible. Live insects should not be fed for 24 hours.
- Induction can be achieved using alfaxalone (10mg/kg IV in ventral coccygeal vein or 15mg/kg IM) after premedicating 1-2 hours prior (opioid/benzodiazepine combination commonly used).
- Once in a good state of muscle relaxation they can be intubated and provided with isoflurane 1.25-3% to reach a surgical plane of anaesthesia (e).
- IPPV is required throughout the procedure. Only provide a breath large enough for the lizard's chest to rise by 30%, or if using a ventilator, set the Peak Inspiratory Pressure to 10-15cm H<sub>2</sub>O. Ventilating with room air in recovery can help encourage the return of spontaneous ventilation.
- Use a Doppler blood flow monitor during anesthetic (or pulse oximetry if not available – however interpret trends only, values are often inaccurate).
- Analgesia in reptiles is poorly understood – consult an experienced vet and beware of respiratory depression.



## Examination

- Reptiles have evolved to mask their illness to avoid predation. While a thorough physical examination is helpful in characterising certain problems, available diagnostic tests should also be used.
- Always observe a reptile patient from a distance prior to restraining it for a physical examination. Pay attention to mentation, respiration, and locomotion.
- The eyes should be clear with no discharge.
- The mouth should be opened for inspection – mucous membranes should be pale to pink, and free of thick, ropery mucous. The tongue should be evaluated for function. The glottis should be free of discharge, and the teeth and jaw should be inspected for fractures.
- The skin should be checked for parasites, injuries and abscesses.
- Palpation should be performed to assess the coelomic cavity for abnormalities. A thumb or finger can be used to gently palpate the viscera. Any abnormal masses should be further evaluated using appropriate diagnostic tests.
- Most species' hearts are located dorsal to the pectoral girdle, however some species, e.g. monitors have hearts that are caudal to the pectoral girdle.

## Euthanasia

Fauna should be euthanised immediately when:

- Death is imminent or highly likely, regardless of the treatment provided.
- It is suffering from chronic, un-relievable pain or distress.
- It is carrying or is suspected to be carrying an incurable disease that may pose a health risk to wild animals.
- Its ability to find and consume food unaided is permanently impaired (e.g. injured jaw, loss of vision).

Anaesthesia is always recommended prior to euthanasia. This can be from alfaxalone and gas anaesthetic or zoletil. Once deeply anaesthetised, euthanasia is performed by IV, intracardiac or intracoelomic injection of sodium pentobarbitone. The most suitable IV site in lizards is the ventral coccygeal vein. Actual death in reptiles can be difficult to ascertain, and may require use of a Doppler machine or ultrasound. Once unconscious or dead, a second adjunctive method should be used such as decapitation with a sharp knife or pithing of the brain to destroy brain tissue.

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