Snakes (Non-venomous)

Species Information Sheet

Natural History / Behaviour

- Snakes are ectothermic: their body temperature is influenced by their surroundings
- All snakes are independent from time of birth/hatching – there is no such thing as an 'orphaned snake'
- Large non-venomous species (e.g. Carpet Pythons) should be rescued/handled by experienced reptile handlers ONLY and should only be handled in the presence of another experienced snake handler.
- Do not rescue/handle any species unless you are 100% certain of the species and that it is non-venomous.
- Venomous snakes must only be rescued/handled by an appropriately trained and licenced person. Please refer to a Wildcare Reptile Coordinator or licensed snake catcher for assistance.

Common Species of South-east Queensland

Carpet Python	*Morelia spilota McDowelli*	> 3 m
Spotted Python	*Antaresia maculosa*	> 1 m
Common Tree Snake (or Green Tree Snake)	*Dendrelaphis punctualatus*	> 2 m
Freshwater Snake / Keelback	*Tropidonophis mairii*	> 0.75 m

Note: Common non-venomous species listed only.
For a complete list of all lizard species found in South-East Queensland, refer to a reptile field guide such as 'A Field Guide to Reptiles of Queensland' by Steve Wilson.

Basic Rescue Equipment and Emergency Housing

- Snake handling kit including:
  - Hoop and bag
  - Snake hook (suitable for the size/weight of the snake)
- Snake bite first aid kit
- Cotton pillowcase with tie (suitable for small snakes)
- Large cotton bag (~1m x 1m) for very large pythons
- Plastic tub with smooth sides and well-secured lid. Small holes must be drilled in lid sufficient to provide air flow. Place towel on bottom for support.
- Heat source: Snugglesafe heat disk under a towel at one end of the enclosure. Ensure sufficient room so the snake can move onto or away from it freely. If not sufficient room to move away from a heat source, do not include in emergency housing.
- **Note: When using any heat source, the animal MUST be able to move away from the heat source to avoid thermal injury. Please refer to Reptile Species Coordinator before providing a heat source.**

Photo: Karen Scott

OHS Considerations / Zoonoses

Beware of

- Teeth / Mouth
- Misidentification (possibly venomous)
- May wrap around your hand/ arm tightly (watch your fingers). Handle large pythons only in the presence of another experienced rescuer.
- Never put a python over your shoulders, they have the potential to wrap around your neck and constrict.

Known Zoonotic Diseases

- Reptiles known to carry salmonella – ensure excellent hygiene when handling
- No other specific zoonoses

Handling

Use one hand to gently but firmly grasp the snake from behind its head, then hold the rest of the body with the other hand.

Use a snake pinner if you are not confident with restraining.

Photos: CWS (pythons); Kristie Remmert (Green Tree Snake)

Assessment Checklist – Snakes

Clinical Signs	Healthy / Normal	Sick / Injured
Demeanour	• Bright, alert and looking around • Responsive (struggles strongly when handling) • Conscious • Regular tongue flicking	• Quiet / depressed • Distressed • Non-responsive when handled • Not responding to stimuli • Unconscious *(Indicative of shock, dehydration, injury)*
Mobility	• Able to move entire body freely • No bruising or swelling • No obvious abnormalities or lack of symmetry	• Abnormalities in movement (e.g. only using part of the body). • Head tilted to one side • Paralysis *(trauma)* *(Indicative of trauma related injury)*
Body Condition, skin and scales	• Good body condition • Good muscle tone • Scales are shiny and undamaged • Non-odorous smell	• Open wounds • Puncture wounds • Poor body condition *(malnourished)* • Lack of muscle tone • Offensive odour (chronic disease or old wounds) • Dull, damaged scales (chronic disease or shedding) • Flaky, dry skin/scales (chronic illness) *(Indicative of trauma or chronic illness/disease)*
Breathing	• Normal – Slight movement of chest with each breath – no noticeable effort. (Note: handling may result in increased respiration rate)	• Open-mouthed breathing • Laboured (noticeable effort to breath) • Audible breathing sounds (clicking, ticking, gurgling sounds) • Sneezing or coughing *(Indicative of trauma related injury, poisoning)*
Head	• Symmetrical	• Abnormal symmetry • Indentations • Swelling • Crepitation • Lacerations/abrasions
Eyes	• Bright and clear • Shiny • Opaque eyes (if shedding)	• Dull (pain/dehydration) • Sunken (*dehydrated*) • Closed (pain/dehydration) • Protrusion *(trauma)* • Swelling *(trauma)* • *Clear fluid (trauma)* • Nystagmus *(head trauma)* • Unequal pupil(s) *(trauma)* • Unreactive pupil(s) *(trauma)* • Purulent discharge *(infection)*
Nose/snout	• Straight • No discharge or bleeding	• Distorted (*trauma - fracture*) • Blood or other discharge (purulent infection) from nostrils (*trauma*) • Abrasions (*trauma*) • Swelling (*trauma*)

Assessment Checklist – Snakes (continued)

Clinical Signs	Healthy / Normal	Sick / Injured
Mouth	• No discharge • Symmetrical • Teeth and tongue undamaged	• Mal-aligned jaw (*trauma*) • Broken teeth (trauma) • Blood (*trauma*) • Swelling (*trauma*) • Crepitation (*trauma*) • Slow capillary refill time *(shock/dehydration)*
Cloaca (vent)	• Clean • Free from discharge • Hemipenes not exposed	• Blood • Lacerations • Swelling • Hemipenes prolapsed (trauma) *(Indicative of trauma related injury)*
Tail	• Straight • Missing tail (old injury) • Good grip (in prehensile tails)	• Swelling • Lacerations • Lack of movement • Missing tail (fresh injury) *(Indicative of trauma related injury)*
Parasites	• Some ticks are normal	• Over abundance of *ticks (chronic illness)* • Fly blown / Maggots (*trauma)*

Assessment Parameters

Vital Signs

Heart Rate	Variable between species
Respiration Rate	Variable between species
Core Body Temperature	Variable between species

Preferred Ambient Temperature

Carpet Python	29°C - 33°C
Green Tree Snake	32°C

Source: Caring for Injured Native Reptiles and Frogs (Dr. A. Fowler)

Signs of Stress

- Attacking/striking/defensive strike position
- Urination, defecation

Signs of Pain

- Non-responsive
- Not seeking cover
- Writhing with mouth open
- Not moving from or to heat source
- Aggressive behaviour
- Constant movement

Signs of Dehydration

- Thick mucous in mouth
- Dull eyes
- Sunken eyes
- Lack of skin elasticity/skin tenting
- Lethargy
- Excessive sloughing of skin

Assessment of Body Condition

Spine – feel for good muscle coverage over backbone
Skin/Scales – should be in good condition

Emergency Diet

Do not offer any food or water to an animal suffering from injury (e.g. vehicle hit, dog/cat encounter etc). Injured wildlife must be presented to a veterinarian for treatment before offering food or water. Alternatively, please consult with your relevant Species Coordinator.

Adults

- **Thawed frozen rats/mice**
- **Fresh water**

Note: Do not offer food until instructed by the Reptile Coordinator.

Snakes can go for lengthy periods without food if in good body condition and well hydrated.

Common Injuries, Diseases and Conditions

Adults

- **Road trauma injuries** (head injuries, jaw and skull fractures, internal injuries, eye injuries)
- **Dog or cat attack** (puncture wounds, open wounds, evisceration, internal injuries) ***Note***: cat attack injuries often difficult to visualise
- **Entanglement** from fruit netting, discarded netting, wire netting (lacerations, soft tissue damage)
- **Lacerations from lawn mowers or brush cutters**

Drug Administration (preferred routes)

Oral	Not appropriate for snakes
Intramuscular	Lumbar muscle parallel to the spine, cranial 2/3 of snake
Subcutaneous	Loose skin on either side of the spine, cranial 2/3 of snake
Intravenous	Ventral coccygeal (tail) vein

Euthanasia (preferred methods)

Euthanasia methods stated to assist veterinary staff.
Wildlife volunteers must not euthanise unless trained to do so or they hold appropriate approvals.

- Injection of sodium pentobarbitone (Lethabarb) after induction with Alfaxan CD-RTU preferred):
  - Intravenous
  - Intracardiac (must be anaesthetised first)
  - Intraperitoneal (dilute with water 50:50)
- Blunt force trauma to the head (small snakes only) – **only if trained to do so**
- **Euthanasia by placing in freezer is NOT ACCEPTABLE and is INHUMANE.**

Suggested Drugs and Dose Rates

This information is provided for **VETERINARY USE ONLY** to assist veterinary staff with the **initial assessment** and **emergency treatment** of sick, injured and orphaned wildlife. Suggested drugs and doses are those commonly used by the wildlife hospitals in South-east Queensland and are for routine treatment only. Recommendations may vary between individual veterinarians. Culture and sensitivity results would indicate the most appropriate antibiotic regime. Most drugs are used off-label.

Anaesthetic

Drug	Composition	Dose Rates
Isoflurane ®	Isoflurane 100%	5% for induction and 2-3% for maintenance with oxygen flow rate of 1-2 litres per minute.
Alfaxan CD RTU ®	Alphaxalone	5mg/kg (IV) 10mg/kg (IM) Patient should be warmed to ensure effective anaesthetic induction.

Analgesic

Drug	Composition	Dose Rates
Torbugesic ®	Butorphanol Tartrate	1-2mg/kg SC or IM BID
Metacam ®	Meloxicam	0.4 mg/kg SC or IM EOD

Antibiotics

Drug	Composition	Dose Rates
Fortum ®	Ceftazidime	20 mg/kg Q3D IM
Baytril ®	Enrofloxacin	5-10mg/kg EOD (IM or SC – must be diluted at least 50:50 with sterile water)

Anatomy

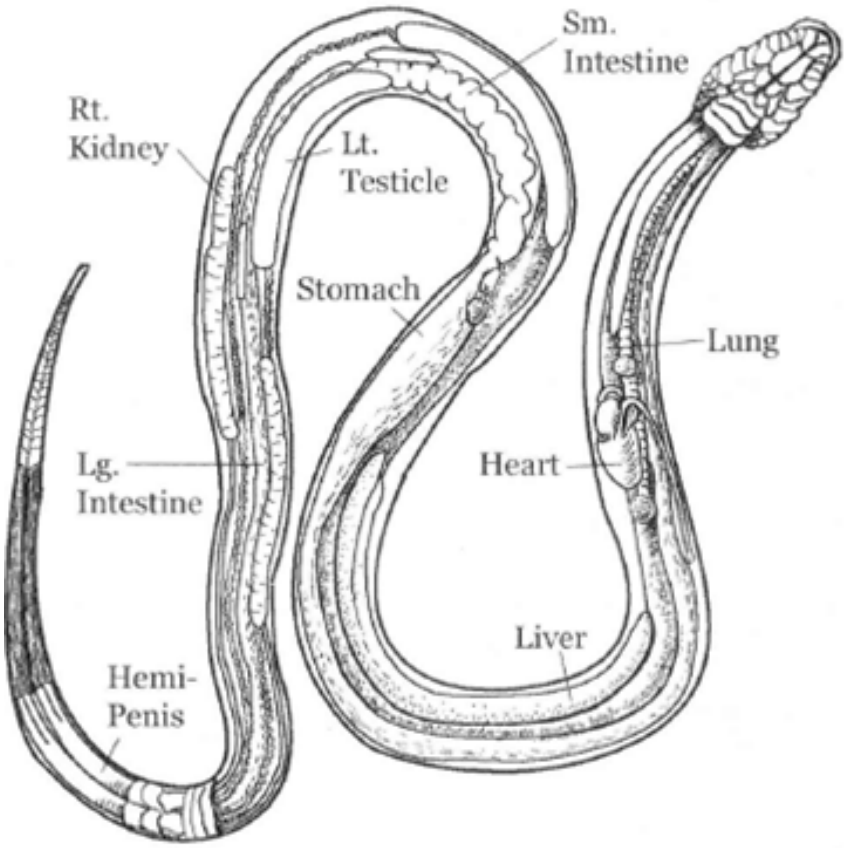

Diagram Above: Visceral anatomy

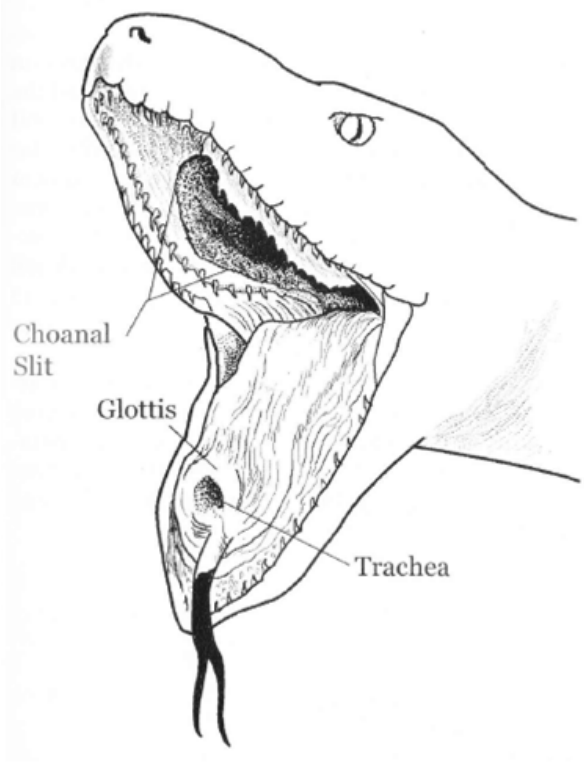

Diagram Right: Oral cavity

Source: *Exotic Animal Medicine for the Veterinary Technician* (Ballard & Cheek)