

AEC STANDARD OPERATING PROCEDURES

SOP No:	08	
SOP	Snakes	
Scientific Name:	Varies	
Category:	2 only	
Approved activities	Activity	Category
	a. Observation of a particular behaviour of snakes	2
	b. Animals on loan from the Nature Education Centre	2
	c. Measurements of body weight and growth (non-invasive)	2
	d. Organisations bringing animals into schools and school performance by outside agency having animals as part of their exhibits	2
	e. Appropriate care of classroom pet snakes	2
Approval Level:	Where an activity is not listed in this SOP, approval must be sought from the Animal Ethics Committee and confirmed before it can be undertaken.	
Authority:	Government Schools – Department for Education and Childhood Development Animal Ethics Committee Independent and Catholic Schools – Non-Government Schools Animal Ethics Committee (NGSAEC)	
Authority Approval Date:	1 August 2010	
Last Update:	8 October 2018	
Disclaimer:	<i>This document may be updated at any time. You should check the web site regularly to ensure that you are meeting the most recent recommendations. If you note any concerns with the information provided (inadequate, incorrect) please contact the relevant AEC.</i>	
Licensing Requirement:	May apply to some species. Reptiles require a license - 'Basic Keep and Sell' Permit, before keeping or breeding is permitted. Check the Department for Environment and Water web site when considering a reptile. www.environment.sa.gov.au Reptiles must be obtained from a licensed keepers breeding stock.	
Compliance Requirement:	The keeping of this species requires approval from the School Principal. It is recommended that this Standard Operating Procedure be followed as a minimum in the provision of appropriate care and housing for this species.	

General Information:

Snakes are reptiles and, unlike birds or mammals, are cold-blooded creatures whose body temperature changes as the air temperature changes. Snakes are classified into two main groups: venomous and non-venomous. Venomous snakes **MUST NOT** be kept at schools under any circumstances. There are approximately 140 land snakes and 30 sea snakes in Australia. Of these, about 100 are poisonous and 12 of which have bites that can be fatal to humans. Many species are endangered and snakes must not be collected from the wild, as it is illegal without a 'Take' or 'Rescue' Permit.

Reptiles need specialised care including caging and food. The school should consider its capacity to store-frozen mice or rats on site safely and hygienically. **Please remember it is against the Animal Welfare Act 1985 for live mice and rats to be fed to reptiles.** Schools should ensure they can adequately provide for the needs of the species they consider keeping. Various species of pythons are preferred for school activities. Also note the length of the lifespan for reptiles is considerable and means the animal needs care for several decades. They are not a short-term option.

Physical Attributes:

- **Size (adult):** Species dependant. They can vary from 30cms up to several metres in length. (E.g. Children's Pythons up to 1 metre, Carpet Pythons up to 4 metres.)
- **Weight (adult):** Varies with species.
- **Life span:** Species dependant. Many live for 10-15 years (e.g. Carpet Pythons live up to 20 years, Children's Pythons for 30 years).
- **Sexual maturity:** Varies with species. (Carpet Pythons are mature at 3 years).

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Behaviour:

Normal: Species dependant. There are variations in the activity levels of reptiles. They should however appear alert, eat well and have good condition to their body and scales. They should shed their skin at regular intervals. They have no eyelids or external ears.

Socialisation: Species dependant. Many reptiles live solitary lives but some smaller species may live in colonies. Snakes should generally be kept on their own or should have been together from a young age.

Activity levels (hibernation etc.): Species dependant. Many reptiles come out during the heat of the day to warm themselves. Others are nocturnal. Many species hibernate during the cooler winter months. In spring they are particularly active as it is mating season.

Environment:

Space: At a minimum the snake should be able to comfortably move around the enclosure, climb and turn freely. The enclosure should be of a reasonable length and at least half as wide as it is long. The size of the tank will determine the number and type of snakes kept. It is recommended to use a complete glass or glass fronted timber tank, with a ventilated top. The tank should have a light fitted with a UV bulb (for heating and to simulate sunlight). Water and food dishes should also be provided along with landscape materials to mimic the snake's natural environment (e.g. soil, branches and leaf litter).

Movement: Snakes slither along the ground and through tree branches. They can support their weight while seeking out an object to crawl onto or up. They use their tongue to detect smells and can feel vibrations. They can be defensive and bite. They are very food orientated and may attempt to bite anything that moves including fingers.

Water: Clean water must always be available. Although they can get moisture from their food never let the water dish dry out. Water dishes should be shallow large heavy containers as snakes may get into them and tip them over.

Temperature: Snakes like to soak up heat from their environment and can often be found 'sunning' themselves. Once the tank has been landscaped, attach the heater within a cage to the lid at one end of the tank, over the rocks or branches. This provides a 'hot spot' at one end and a cooler area at the other. The air temperature in the tank should be 28 - 32°C with hotspot at 36°C. Keep the tank away from direct sun, which will increase the temperature. A thermostat should be used to set the tank temperature and ensure that heating is provided 24 hours a day.

Humidity: It is important to ensure that the environment is not too moist as although the humidity is not high in South Australia, skin infections can occur if not monitored. An additional water bowl can be provided to aid with keeping the humidity at the right level to prevent difficulty shedding.

Lighting: Snakes like to be in darkness for at least 10-12 hours a day. Two different lights should be provided, one for heat and one for light in a tank. This maintains appropriate lighting and tank temperatures. The heat source should not produce excessive light as it is being left on 24 hours a day.

Covering: All enclosures must have a glass or mesh covering to prevent snakes from escaping.

Shelter: The enclosure should provide an area for refuge from heat, lights, noise and other snakes. This can be created with plants, logs and rocky overhangs.

Cleaning: Uneaten food should be removed the day of feeding. Water should be changed daily. Remove faeces or clean soiled areas every few days. The whole enclosure should be cleaned once every three months. Firstly remove the snake and ensure it is contained in a safe container and location. Soils and items used in creating a natural environment should be cleaned and changed at this time. Creating a 'new' design in the space will stimulate the snake to re explore. Never spray chemicals or allow fumes near snake enclosures.

Feeding:

Diet: When keeping snakes they require recently killed frozen food such as mice or rats. Frozen mice and rats need to be thawed and warmed gently in warm water before feeding. **It is against the Animal Welfare Act 1985 for live mice and rats to be fed to reptiles.** This is for the welfare of both the snake

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who can be injured from bites and the welfare of the rats and mice. Invertebrates can be fed live to young snakes (e.g. crickets). In the wild they feed on a diet of live food and kill their prey by squeezing it. Once their prey is dead they swallow it whole.

Daily requirements: Snakes eat a large amount of food at a time and then take a long time to digest it. Some species can unhinge their jaws to consume very large prey. Talk to a reptile expert to determine feeding needs for the species you are keeping. Young snakes can be fed once a week. Juvenile snakes can be fed every 7-10 days. Adult snakes can be fed every 2-3 weeks. Allow the snake a few undisturbed days to digest its food.

Supplementary feeding: Should not be required.

Equipment: Large flat heavy water bowls. Tongs to hold food. Snake hook. Feeding container.

Breeding:

- **Gestation period:** Species dependant. Carpet Pythons incubate their eggs for 10-15 weeks.
- **Number of offspring:** Species dependant. Carpet Pythons lay up to 18 eggs per clutch and Children's Pythons lay 7 eggs per clutch.

Mating: Snakes will mate when both sexes are ready in spring with birth occurring in early summer.

Pregnancy: The female python lays eggs in hollow logs or dens where she curls around the eggs to incubate them.

Handling:

Although they are tolerant of human handling, snakes are not affectionate animals and don't crave human contact. They can be defensive and bite. They are very food orientated and may attempt to bite anything that moves – including fingers. Most of the varieties of pythons sold in licensed outlets respond well to handling.

Humans: Adults should supervise any children when handling snakes. Avoid touching the head area. To pick up a snake, scoop up the snake gently from its enclosure. Use one hand to hold its head and the other to support its body. Larger snakes may need two adults to support their bodyweight. Ensure they are handled in an enclosed area to avoid them escaping. Children should not tap on the tank.

Equipment: A snake hook and large rectangular soft bag should be used for capture or moving snakes. This allows the snake to be visualised in the bag and the head to be identified more easily for capture and restraint. This also reduces their stress and chance of injury from trying to escape through a net that they can see and even potentially squeeze through.

Transport: Snakes should be moved in ventilated carry boxes, bags or cages from which they cannot escape. Transport quickly and do not leave unattended or allow the snake to overheat. Schools must ensure that the welfare of snakes is not compromised during transport.

Hygiene:

Thoroughly wash hands with soap and running water for at least 15 seconds after working with or handling snakes. Dry hands with clean paper towel or an air dryer. Turn off the tap with the paper towel if possible.

All reptiles have the potential to transmit diseases. Keeping their enclosures clean and using good hygiene should assist with this. A range of protozoa and bacterial infections such as Salmonella sp. can be contracted from reptiles. Follow first aid procedures should a bite occur.

Signs of illness:

Indicators:

- not flicking its tongue.
- parasites (e.g. mites)
- lethargy,
- weight loss or not eating or drinking
- lumps or swellings,
- difficulty moving,

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- infections, abrasions or wounds.
- vomiting.
- shedding problems or
- skin changes (a dull appearance to their skin)

Treatments: Schools are encouraged to develop relationships with Veterinarians and your local reptile suppliers. These contacts can be used for disease diagnoses, treatment options and dietary, husbandry and welfare advice. Veterinarians can also assist with advice for emergencies, particularly where euthanasia is needed. Good husbandry practices are extremely important when caring for reptiles. Treatments must be documented in the appropriate records.

Euthanasia: When an illness or injury is such that recovery is unlikely then the snake must be euthanised by a Veterinarian. Schools should contact their local Veterinarian to discuss emergency treatment options prior to an event occurring when keeping snakes. Any adverse event including death must be reported to the AEC using the ADVERSE EVENTS form. Forms must be returned to the AEC within 7 days of the event occurring.

Disposal/fate planning: When no longer required snakes must be rehomed. They must **NEVER** be released into the environment. Bodies must be disposed of correctly in accordance with local council regulations.

Holiday and weekend care: Snakes can be sent home for weekends or holiday care with students providing consent is received from the school Principal and the parents. Staff should provide carers with animal care and record-keeping instructions, emergency contacts and provide appropriate equipment and food. Snakes must be checked daily, records kept and any problems reported to the school immediately whether kept onsite or taken offsite.

Approved activities: **Where an activity is not listed in this SOP, approval must be sought from the Animal Ethics Committee and confirmed before it can be undertaken.**

Activity: **a. OBSERVATION OF A PARTICULAR BEHAVIOUR OF SNAKES**

Category: Category 2

Objective: To instruct students on the observation of a particular behaviour (e.g. feeding) in snakes

Handling must be kept to a minimum and staff must primarily undertake the activities (e.g. feeding) with students supervised where involved.

Activity: **b. ANIMALS ON LOAN FROM THE NATURE EDUCATION CENTRE**

Category: Category 2

Objective: To provide adequate care for animals on loan from the Nature Education Centre.

When borrowing snakes from this Centre, schools must ensure that they have resources and experienced staff available to provide adequate care and welfare for the snakes they are planning to use in activities. Schools are recommended to contact the Nature Education Centre prior to commencing any activities to discuss the needs to a particular species they are interested in. Teaching kits are also available that may provide an alternative to using live animals in the classroom.

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Activity:	c. MEASUREMENTS OF BODY WEIGHT AND GROWTH IN SNAKES (NON-INVASIVE)
Category:	
Objective:	Category 2 To demonstrate the collection of measurements of body weight and growth of snakes Bags or boxes of appropriate size are recommended for holding snakes when weighing them. Photographs or string can be used for comparison of growth rates in snakes. Ensure all equipment is ready prior to commencing weighing. Keep handling to a minimum and schools should aim to use breeds and individual snakes that are familiar with handling.
Activity:	d. ORGANISATIONS BRINGING SNAKES INTO SCHOOLS OR SCHOOL PERFORMANCE BY OUTSIDE AGENCY HAVING SNAKES AS PART OF THEIR EXHIBIT
Category:	Category 2
Objective:	To demonstrate the care of snakes through the utilisation of external organisations. Any schools having other organisations visit, must ensure that they provide a suitable, adequately sized space for the organisation where snakes cannot escape from. Hygiene practices must be maintained where students are handling or touching any snake. Schools are responsible for the safety of all staff, students and visitors during their visits.
Activity:	e. THE APPROPRIATE CARE OF CLASSROOM PET SNAKES
Category:	Category 2
Objective:	To instruct students on the appropriate care of classroom pet snakes. Handling must be kept to a minimum and staff must primarily undertake the activities (e.g. feeding) with students supervised where involved. Feeding and cleaning regimes must be recorded as well as any treatments provided.
Resources:	Snakes – Department of Environment and Water www.environment.sa.gov.au/topics/plants-and-animals/Living_with_wildlife/Snakes Reptiles as pets including fact sheet for 41 types australianmuseum.net.au/learn/animals/reptiles/ Pet care – Pythons – Sydney Exotics and Rabbit Vets www.exoticvet.com.au/pet-care Caring for snakes – Northern Territory Government nt.gov.au/environment/animals/caring-for-wildlife/caring-for-snakes Wildlife Permits – Department of Environment and Water SA www.environment.sa.gov.au/licences-and-permits/wildlife-permits Basic Permit to Keep and Sell Protected Animals – Business Govt. ablis.business.gov.au/service/sa/basic-permit-to-keep-sell-protected-animals/671