

AEC STANDARD OPERATING PROCEDURES

SOP No:	04
SOP:	Lizards – Geckos and Skinks, Large and Small Dragons
Scientific Name:	<i>Varies with species</i>
Category:	2 or 3
Approval Level:	Category 2: School Principal may delegate Category 3: School Principal may NOT delegate
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:	18 December 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 licence - '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:

Lizards are reptiles and, unlike birds or mammals, are cold-blooded creatures whose body temperature changes as the air temperature changes. Most of the larger lizards tame relatively easily and respond well to handling. Other types require a dedicated keeper and specialised facilities and should not be attempted.

Lizards are very diverse in size and form. They have scales and feed on a diet of live food.

Many species are endangered and lizards must not be collected from the wild as it is illegal without a 'Take' or 'Rescue' Permit.

They are tolerant of human handling but are not affectionate animals. They should not be carried around. They can be defensive and bite. They are very food orientated and may attempt to bite anything that moves – including fingers! Never spray chemicals or fumes near lizard enclosures.

Reptiles need specialised care – caging and food. The site should consider its capacity to store frozen mice or rats on site safely and hygienically. Please be aware it is against the Animal Welfare Act to feed live mice or rats to reptiles. Check the species thoroughly that you are interested in keeping to ensure you can provide for its needs. 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. The information in this fact sheet is generic.

Small Geckos:

Includes species such as Beaded, Bynoe's Prickly, Eastern Stone, Wood, Western Stone or Wheat-belt Geckos. They like to shelter under bark and leaf litter, under rocks and in small burrows. They eat crickets, grasshoppers, beetles, spiders, insects and other geckos, cockroaches, termites, ants, slaters, mealworms and larvae. They are very active at night. They lay 2 eggs per clutch. Geckos do not have moveable eyelids so they lick their eyes to clear them of dust. (Source: Nature Education Centre Fact Sheet)

AEC STANDARD OPERATING PROCEDURES

Large Geckos:

Includes species such as Thick-tailed, Barking, Knob-tailed or Starred Knob-tailed Geckos. These species can be identified by the different tails they have, being wider, flatter and leaf shaped. They like to shelter under bark and leaf litter, under rocks and in small burrows. They eat crickets, grasshoppers, beetles, spiders, insects and other lizards, cockroaches, termites, ants, slaters, mealworms and larvae. They are very active at night. They lay 2 eggs per clutch. Geckos do not have moveable eyelids so they lick their eyes to clear them of dust. (Source: Nature Education Centre Fact Sheet)

Small dragons:

There are approx 22 species in 4 main groups – crevice (flattened bodies), sand, burrowing or ground and bicycle dragons. . Most are small and have long tails twice the length of their bodies. They are usually camouflaged to the colour of their environment. Dragons eat invertebrates such as ants, termites, centipedes, scorpions, snails, spiders, beetles, moths etc. as well as leaves, flowers, fruits and carrion. (Source: Nature Education Centre Fact Sheet)

Bearded dragons:

There are about 6 species of Bearded Dragons. In the wild they live in desert arid to semi arid regions. They have strong legs and sharp claws. They are omnivorous and eat a variety of foods – flowers, fruits, green shoots, insects, spiders, eggs, small lizards and small mammals. When alarmed they face the threat with their beard extended. Females lay 10-20 eggs in a burrow. (Source: Nature Education Centre Fact Sheet)

Skinks:

This is the largest family of lizards in Australia. They range from a few cms to 40 cms in length. They are mostly diurnal and possess shiny tight scales. They include Sleepy, Eastern Bluetongue, Conningham's, Gidgee, Broad-banded and Narrow-banded Skinks. They commonly produce live young from 1-25 depending on species which are self sufficient from birth. They hiss and mouth gape when startled. They are omnivorous and eat a variety of foods – flowers, fruits, berries, green shoots, insects, snails, spiders, eggs, small lizards and small mammals. (Source: Nature Education Centre Fact Sheet)

Physical Attributes:

- **Size (adult):** They can vary from a few cms to 50cms – nose to tail tip.
- **Weight (adult):** Varies with species.
- **Life span:** Varies with species. Bearded Dragons live for 10-15 years in captivity.
- **Sexual maturity:** Varies with species.
- **Gestation period:** Many reptiles lay eggs but some birth live young.
- **Number of offspring:** Varies but 2-3 is common. Some species may lay up to 20 eggs or birth 25 live young. Size (adult): They can vary from a few cms to 50cms – nose to tail tip.
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Behaviour:

- **Normal:** Depending on the species there will be 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 skins at regular intervals.

AEC STANDARD OPERATING PROCEDURES

- **Socialisation:** Many reptiles live solitary lives but some smaller species may live in colonies. Lizards should have been together from a young age and of the same sex to avoid breeding. Males together may fight.
- **Activity levels (hibernation etc):** Many reptiles come out during the heat of the day to warm themselves. Others are nocturnal, such as Geckos. Many species hibernate during the cooler winter months. In spring they are particularly active as it is mating time.

Environment:

- **Space:** At a minimum the lizard should be able to comfortably move around the enclosure, climb and turn freely. The enclosure should be several times the lizards length and at least as wide as the lizards length.
 - A glass or glass fronted timber tank.
 - Ventilated top for tank.
 - Light fitting and UV bulb (for heating and to simulate sunlight).
 - Thermometer.
 - Water and food dishes.
 - Landscape materials, eg soil, branches, leaf litter and rocks.
 - The size of the tank will determine the number and type of lizards kept.
- **Movement:** Lizards have strong legs with toes and claws and a long tail. They can move and climb very rapidly. Most run and sprint across the ground. Many are good climbers. Geckos have sticky pads on their feet, which enables them to climb and adhere to most surfaces.
- **Water:** Clean water must always be available. Although they can get moisture from their food never let the water pot dry out. Water dishes should be shallow containers like lids from glass jars, hence they can dry out quickly.
- **Temperature:** Lizards like to soak up heat from their environment – and can often be found ‘sunning’ themselves. Once the tank has been landscaped, attach the lamp 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 24 - 27°C. Keep the tank away from direct sun, which will increase the temperature.
- **Lighting:** A low wattage globe should be on at all times unless the weather is extremely hot. A UV light should be used if the reptiles do not have access to direct sunlight. This is important for calcium metabolism.
- **Covering:** All enclosures must have a mesh covering.
- **Shelter:** The enclosure should provide an area for refuge from lights, action and other lizards. This can be created with plants, logs and rocky overhangs.
- **Cleaning:** Uneaten food should be removed the day after feeding. Water should be changed daily. Any faeces or soiled areas should be removed every few days. The whole enclosure should be cleaned once a term. Soils and items used in creating a natural environment should be cleaned and changed at this time.

Feeding:

- **Diet:** When keeping larger skinks, eg sleep lizards or blue-tongues, a mixture of chopped up fruits and vegetables, insects and small amounts of dog food (eg canned dog food) will be acceptable food. Larger dragons will also eat the above food but prefer more insects. Smaller dragons prefer all live food. Geckos also prefer live food. Jar lids can contain the live food in the enclosure.
- **Daily requirements:** To maintain good healthy animals, feed them regularly during the warmer months but slow down in winter. Feed each lizard 2-3 times a week in summer and 1-2 times a week with smaller quantities in winter. Quantities for dragons and skinks would be 2 heaped teaspoons of finely chopped fruit/veg, 1 teaspoon chopped hard boiled egg or Pal dog food, 1 heaped teaspoon of insects eg mealworm. Quantities for Geckos would be 2-3 insects per meal.

AEC STANDARD OPERATING PROCEDURES

- **Supplementary feeding:** Should not be required if a varied diet as stated above is provided.
 - **Equipment:** Food and water bowls.
- Breeding:**
- **Mating:** Lizards will mate when both sexes are ready in spring with birth occurring in early summer.
 - **Pregnancy:** Eggs are laid or live young birthed approx 4-6 weeks after fertilisation. The temperature of the incubation of the eggs determines the gender of the young.
 - **Fate planning:** Breeding stock must be re homed. They must NEVER be released into the environment, as this may not be their suitable habitat.
- Handling:**
- **Human:** Grip the lizard firmly around the body, using fingers to trap two legs if possible. The thumb and forefinger can be used to hold the head still if the creature attempts to bite. Do not grasp the lizard's tail as it may come off! Small geckos are very fragile and should not be handled. Ensure they are handled in an enclosed area to avoid them escaping.
 - **Equipment:** A large soft net should be used for capture or moving lizards. A towel can be used to cover larger lizards.
 - **Transporting:** Lizards should be moved in ventilated carry cages. Transport quickly and do not leave unattended or allow the lizard to over heat. Do not transport on days that are over 32 degrees.
 - **Children:** Should not handle lizards however they can touch them gently avoiding the head area. Observation only, particularly for fragile species. Children should not tap on glass.
- Hygiene:**
- Thoroughly wash hands with soap and running water for at least 10-15 seconds after working or handling any animals. Dry hands with clean paper, cloth towel or 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 occur. Follow first aid procedures should a bite occur.
- Signs of illness:**
- Indicators:** Lizards of about the same size should be kept together because larger lizards may eat the smaller ones. The following list of diseases, pests and some cures may assist:
- Rickets – needs sunlight and multivitamins.
 - Ticks – remove from body.
 - Snout abrasions.
 - Mite infestation – place a pest strip in the cage but out of the lizard's reach.
 - Appears lethargic, weight loss, lumps or swellings, difficulty walking, skin changes, infections, wounds.
 - Not drinking or eating.
 - Vomiting.
 - Shedding problems.
- Treatments:**
- Assistance from a veterinarian should be sought for confirmation of conditions and treatment options. Treatments must be documented in the appropriate records.
- Euthanasia:**
- When an illness or injury is such that recovery is unlikely then the animal must be euthanised by a veterinarian. Any death must be reported to the Animal Ethics Committee using the appropriate form (see section relating to ADVERSE EVENTS). Forms are available on the relevant websites.

AEC STANDARD OPERATING PROCEDURES

Disposal/fate planning:	When no longer required lizards must be re homed. They must NEVER be released into the environment. Bodies must be disposed of correctly in accordance with local council regulations.
Holiday and weekend care:	<p>Lizards in cages generally cope with being rostered to responsible carers. They need to be checked daily and fed regularly over weekends and holiday periods if they remain on site.</p> <p>Records must be kept of 'off site' care. Cages and feeding equipment and supplies must be provided to carers, with contact details for emergencies.</p>
Approved activities:	Observation
Resources:	www.abc.net.au www.australiazoo.com.au www.museumvictoria.com.au