

Code of Practice for the Private Keeping of Reptiles



With the exception of photographs, the State of NSW and Office of Environment and Heritage are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged.

The Office of Environment and Heritage (OEH) has compiled this code of practice in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. OEH shall not be liable for any damage which may occur to any person or organisation taking action or not on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs. This document may be subject to revision without notice and readers should ensure they are using the latest version.

Published by:

Office of Environment and Heritage 59 Goulburn Street, Sydney NSW 2000 PO Box A290, Sydney South NSW 1232 Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)

Phone: 1300 361 967 (national parks, environmental enquiries and publications

requests)

Fax: (02) 9995 5999

TTY users: phone 133 677 then ask for 131 555

Speak and listen users: phone 1300 555 727 then ask for 131 555

Email: info@environment.nsw.gov.au Website: www.environment.nsw.gov.au

Report pollution and environmental incidents

Environment Line: 131 555 (NSW only) or info@environment.nsw.gov.au See also www.environment.nsw.gov.au

ISBN 978 1 74293 323 8 OEH 2013/0185 March 2013

Preface

The Code of Practice for the Private Keeping of Reptiles (the Code) is intended for anyone licensed by the Office of Environment and Heritage (OEH) to keep reptiles as pets. It has been designed to contribute to the welfare of the reptiles in captivity. The Code contains both mandatory standards and best-practice guidelines for the care of pet reptiles.

An animal's welfare can be thought of as the way an animal's health, safety and wellbeing are affected by its physical and social environment. Health and behaviour indicators provide information about how an animal is responding to a situation, enabling keepers to make informed decisions relating to the animal's welfare.

Compliance with the standards in the Code is a condition of all licences issued under Section 120 of the *National Parks and Wildlife Act 1974* (NPW Act) to keep reptiles as pets. Failure to comply with a licence condition is an offence under Section 133 of the NPW Act and may result in a Penalty Infringement Notice being issued or the commencement of a prosecution.

Compliance with this code does not remove the need to abide by the requirements of the *Prevention of Cruelty to Animals Act 1979* (POCTA Act) and any other laws and regulations, such as the *Local Government Act 1993*.

Keepers should be aware that:

- they must follow the standards in the Code, unless advised by a veterinarian that a
 reptile should be housed or managed in a different way in order to treat a
 particular problem keepers who follow such advice will not be considered to be
 in breach of the Code
- reptiles held under a licence for public exhibition, rehabilitation, education, conservation or scientific purposes are not subject to the Code
- all reptiles are protected under NSW law under the NPW Act it is an offence to buy, sell, possess, import, export, remove from the wild or release into the wild a reptile without the appropriate licence
- the importation of reptiles from overseas for inclusion in private collections is prohibited under Commonwealth law. The possession of illegally imported reptiles, or their offspring, is an offence under the *Environmental Protection and Biodiversity Conservation Act 1999*.

The Code has been prepared in consultation with representatives from the Australian Herpetological Society, Hawkesbury Herpetological Society, Macarthur Herpetological Society, Illawarra Reptile Society, Society of Frogs and Reptiles, North Coast Herpetology Group as well as veterinarians, exhibitors and researchers. It is also supported by the NSW Animal Welfare Advisory Council.

The Code is neither a complete manual on animal husbandry, nor a static document. It will be reviewed as necessary to take into account new knowledge of reptile physiology and behaviour, technological advances, developments in standards of animal welfare, and changing community attitudes about the humane treatment of reptiles. OEH will consult with stakeholders regarding changes to the Code and will give written notice to reptile keepers when the Code is superseded.

Contents

Pre	face			iii
1.	Intro	duction		1
2.	Inter	pretatio	ns and definitions	1
	2.1.	_	etations	
	2.2.	Definition	ons	1
3.	Encl	osure co	onstruction	2
	3.1.	Genera	I requirements	2
		3.1.1. 3.1.2.	Standards	2
	3.2.	Outdoo	r enclosures	3
		3.2.1. 3.2.2.	StandardsGuidelines	
	3.3.	Indoor 6	enclosures	4
		3.3.1. 3.3.2.	StandardsGuidelines	
	3.4.	Danger	ous reptiles	4
		3.4.1.	Standards	
		3.4.2.	Guidelines	5
4.	Encl	osure si	zes	5
	4.1.	Genera	I requirements	5
		4.1.1.	Standards	5
	4.2.	Lizards		6
		4.2.1. 4.2.2.	StandardsGuidelines	
	4.3.	Snakes		6
		4.3.1. 4.3.2.	StandardsGuidelines	
	4.4.	Turtles.		7
		4.4.1. 4.4.2.	StandardsGuidelines	
5.	Encl	osure er	nvironment	10
	5.1.	Temper	rature	10
		5.1.1. 5.1.2.	StandardsGuidelines	
	5.2.	Ventilat	ion	11
		5.2.1.	Standards	11
	5.3.	Humidit	ty	11
		5.3.1.	Standards	11
		5.3.2.	Guidelines	
	5.4.	Lighting	J	12
		5.4.1. 5.4.2.	StandardGuidelines	

	5.5.	UV light	and metabolic requirements	12
		5.5.1.	Standard	
		5.5.2.	Guidelines	13
6.	Enclo	sure fu	rnishing	13
	6.1.	Substra	te	13
		6.1.1. 6.1.2.	StandardsGuidelines	
	6.2.		e	
	0.2.	6.2.1.	Standards	
		6.2.2.	Guidelines	
7.	Food,	water a	and cleaning	15
	7.1.	Food		15
		7.1.1.	Standards	
		7.1.2.	Guidelines	
	7.2.			
		7.2.1.	Standards	
	7.0	7.2.2.	Guidelines	
	7.3.		g	
		7.3.1. 7.3.2.		
8.	Trans	_		
•	8.1.	•	ds	
	8.2.		nes	
9.	Quara	ntine		18
	9.1.	Guidelin	nes	18
10.	Reco	d keepi	ing	19
	10.1.	Standar	rds	19
	10.2.	Guidelin	nes	19
Арр	endix A	A: Repti	ile categories and behaviour	20
Арр	endix l	B: Enclo	osure size calculations	31

1. Introduction

- 1.1. This Code sets the standards for the care and housing of reptiles.
- 1.2. It applies to the welfare of reptiles that are held under an animal keepers licence issued by the Office of Environment and Heritage (OEH).
- 1.3. This Code comprises both enforceable provisions and guidelines. Enforceable provisions are identified by the word 'standards' and they **must** be followed.

2. Interpretations and definitions

2.1. Interpretations

Objectives

The intended outcome(s) for each section of this Code.

Standards

Standards describe the mandatory specific actions needed to achieve acceptable animal welfare levels. These are the minimum standards that must be met. They are identified in the text by the heading 'Standards' and use the word 'must'.

Guidelines

Guidelines describe the best practice agreed at a particular time following consideration of scientific information and accumulated experience. It also reflects society's values and expectations regarding the care of animals. A guideline usually indicates a higher level of care than the minimum standard, except where the standard is best practice.

Guidelines will be particularly appropriate where it is desirable to promote or encourage better care for animals than is provided by the minimum standards. Guidelines are also appropriate where it is difficult to determine an assessable standard. Guidelines are identified in the text by the heading 'Guidelines' and use the word 'should'.

Notes

Where appropriate, notes describe practical procedures to achieve the minimum standards and guidelines. They may also refer to relevant legislation.

2.2. Definitions

In this Code:

- **Enclosure** means the housing in which the reptile spends the majority of its time.
- *Gravid* means carrying eggs.
- Keeper means the licensed owner of the reptile.

- Nocturnal means predominately active by nights.
- Physiological means the functioning of an organism.
- **Reptile** means any lizard, snake or freshwater turtle that may be legally kept in New South Wales under an animal keeper's licence.
- Terrestrial means ground-dwelling.
- **Unauthorised person** means someone who does not have the keeper's permission to access their reptile.

3. Enclosure construction

3.1. General requirements

Objectives

An enclosure constructed to a standard that maintains the security, safety and wellbeing of the reptile being housed.

3.1.1. Standards

- 3.1.1.1 An enclosure must be escape-proof.
- 3.1.1.2 An enclosure must be made safe for the reptile to occupy by excluding hazards that might harm it.
- 3.1.1.3 An enclosure must be designed and/or positioned so as to prevent the reptile from coming into physical contact with wild animals, pests, domestic pets, and unauthorised persons.
- 3.1.1.4 When different species of reptiles are housed together, they must be compatible.

3.1.2. Guidelines

3.1.2.1 An enclosure should be designed so that the keeper can safely work in it and access the reptile.

Notes

Some members of the general public still view reptiles with a degree of fear. Reptiles may be injured or killed should they escape.

Many reptile species (such as pythons) can exert considerable pressure on enclosure fixtures. This may result in the displacement of enclosure furnishings and/or the opening of lids.

The water intake tube of filtration systems may pose a drowning hazard for a turtle as small individuals can get stuck in them.

Rough or sharp edges around a pool can scratch the underside of a turtle's shell leading to a possible infection.

3.2. Outdoor enclosures

Objectives

An outdoor enclosure that is located, designed and managed to account for the full range of seasonal weather variation, risks from domestic and wild predators and potential pest infestations.

3.2.1. Standards

- 3.2.1.1 If a reptile is to be housed in an outdoor enclosure, the temperature, humidity and light regime must be similar to that occurring in its natural range.
- 3.2.1.2 An outdoor enclosure must have sufficient drainage to prevent the accumulation of water.
- 3.2.1.3 An outdoor enclosure must be designed and situated so that the reptile is provided with sufficient sunlight in cooler months and shade in warmer months. For many species at least six hours of sunlight in winter is appropriate.
- 3.2.1.4 An outdoor enclosure must provide locations where the reptile can find shelter from weather conditions such as heat, cold and rain. For terrestrial species this must include a range of shelters or hide boxes which are permanently dry.
- 3.2.1.5 When a mobile mesh cage or plastic tub is used to house a reptile outdoors on a short-term basis (e.g. for a few hours), part of the enclosure must be in shade at all times to prevent overheating.

3.2.2. Guidelines

- 3.2.2.1 An outdoor enclosure should either have walls that extend below ground level or a solid floor to prevent the reptile from burrowing out, and pests and predators from burrowing in.
- 3.2.2.2 An outdoor enclosure should either be fully enclosed or have walls that are sufficiently tall and smooth to prevent the reptile from climbing out. If the enclosure is not fully enclosed, there should be enough space between climbable structures (e.g. branches) and walls to prevent the reptile from escaping.

Notes

Keeping a reptile in an outdoor enclosure is a suitable option when climatic conditions are similar to those in the species' natural range. The reptile may then benefit from access to full-spectrum light (UV) and natural temperature regimes.

An outdoor pond may be a drowning hazard for children. Keepers should contact their local council for information on fencing requirements.

3.3. Indoor enclosures

Objectives

An indoor enclosure that provides appropriate environmental conditions for the reptile being housed.

3.3.1. Standards

- 3.3.1.1 A reptile held indoors must be provided with temperature gradients, humidity levels and light cycles that are appropriate to the species (i.e. allows normal physiological functioning and behaviour).
- 3.3.1.2 Indoor enclosure walls, floors and fittings must be constructed from impervious materials that can be easily cleaned.

3.3.2. Guidelines

- 3.3.2.1 Doors and lids should be fitted with latches, hooks or clasps to securely fasten them.
- 3.3.2.2 Enclosure surfaces, edges and ventilation grates that are accessible by the reptile, should be sufficiently smooth to prevent injury as some species are prone to rubbing themselves against surfaces.
- 3.3.2.3 Ventilation holes should be designed and secured so that the reptile cannot escape.

3.4. Dangerous reptiles

Objectives

To reduce the risks associated with keeping a dangerous snake. This section only applies to the dangerously venomous snakes that can be kept by Class 2 Category 1, 2 or 3 licence holders.

3.4.1. Standards

- 3.4.1.1 A dangerously venomous snake must not be housed in an outdoor enclosure.
- 3.4.1.2 A dangerously venomous snake must be housed in a lockable escape-proof enclosure that is in a lockable escape-proof room.
- 3.4.1.3 An enclosure housing a dangerously venomous snake must remain locked at all times unless it is absolutely necessary to access the enclosure (e.g. for removal or feeding of snake, or cleaning).
- 3.4.1.4 An enclosure housing a dangerously venomous snake must enable the keeper to determine the location of the snake prior to accessing the enclosure. This can be achieved by fitting enclosures with windows or screens.
- 3.4.1.5 An enclosure housing a dangerously venomous snake must be clearly labelled with the words 'DANGER, VENOMOUS SNAKE', as well as the

- species name of the snake being housed and the number of snakes in the enclosure.
- 3.4.1.6 The keeper of a dangerously venomous snake must have and maintain a current first aid certificate.

3.4.2. Guidelines

- 3.4.2.1 The keeper of a dangerously venomous snake should develop practices and procedures that minimise the risks when snake handling and enclosure changes are necessary. This may include not undertaking these activities when alone.
- 3.4.2.2 The shelter for a dangerously venomous snake should be designed and positioned in such a way that the snake can be viewed without needing to open the enclosure.
- 3.4.2.3 The keeper of a dangerously venomous snake should contact their local hospital to determine whether suitable anti-venom is available.
- 3.4.2.4 A first-aid kit, appropriately stocked for the treatment of snake bites, should be easily accessible in the room housing a dangerously venomous snake.
- 3.4.2.5 A room containing a dangerously venomous snake should be clearly labelled as such and should clearly display contact numbers for emergency services.

Notes

The purpose of locks is to prevent access by unauthorised persons.

4. Enclosure sizes

Objectives

To promote the physical health and psychological wellbeing of the reptile by allowing it the opportunity to engage in natural behaviours such as locomotion, basking and hiding.

4.1. General requirements

4.1.1. Standards

- 4.1.1.1 An enclosure must provide the reptile with sufficient space to move about freely, express a range of natural behaviours and avoid cage-mates.
- 4.1.1.2 An enclosures must provide sufficient space for the maintenance of an appropriate temperature gradient (i.e. one that allows the reptile to thermoregulate).
- 4.1.1.3 An enclosure housing a species that normally climbs (see Appendix A) must have sufficient useable vertical space for the reptile to climb.
- 4.1.1.4 An enclosure housing an aquatic or semi-aquatic species (see Appendix A) must have sufficient water volume for the reptile to swim.

4.2. Lizards

4.2.1. Standards

- 4.2.1.1 The enclosure's shortest floor dimension must not be less than the snout-vent length of the largest lizard being housed.
- 4.2.1.2 An enclosure housing a single lizard that is less than 6 months old must have a floor area of at least 0.02 m² (e.g. 0.2 m x 0.1 m).
- 4.2.1.3 An enclosure housing a single lizard that is between 6 months and 12 months old must have a floor area of at least 0.03 m² (e.g. 0.3 m x 0.1 m).
- 4.2.1.4 An enclosure housing a single lizard that is more than 12 months old must meet the minimum enclosure size shown in Table 1. For terrestrial species the minimum enclosure size is the floor area. For species identified as requiring climbing space (see Appendix A), the minimum size can be either the floor area or the back wall area.
- 4.2.1.5 An enclosure housing two lizards must be at least 50% larger than the minimum enclosure size (see 5.2.1.2, 5.2.1.3 and Table 1). The enclosure size must be increased by at least 20% for each additional lizard above two (e.g. an enclosure housing four lizards must be at least 90% larger than the minimum enclosure size). If different species are housed together, the calculation must be based on the minimum enclosure size for the largest species.

4.2.2. Guidelines

4.2.2.1 The minimum enclosure sizes specified in Table 1 are based on the average length of a lizard. Some individuals will grow much larger than the average length and should be housed in a larger enclosure.

4.3. Snakes

4.3.1. Standards

- 4.3.1.1 The enclosure's shortest floor dimension must not be less than 20% of the total length of the largest snake being housed.
- 4.3.1.2 An enclosure housing a single snake that is less than 6 months old must have a floor area of at least 0.02 m² (e.g. 0.2 m x 0.1 m).
- 4.3.1.3 An enclosure housing a single snake that is between 6 months and 18 months old must have a floor area of at least 0.06 m² (e.g. 0.3 m x 0.2 m).
- 4.3.1.4 An enclosure housing a single snake that is more than 18 months old must meet the minimum enclosure size shown in Table 2. For terrestrial species the minimum enclosure size is the floor area. For species identified as requiring climbing space (see Appendix A), the minimum size can be either the floor area or the back wall area.
- 4.3.1.5 An enclosure housing two snakes must be at least 50% larger than the minimum enclosure size (see 5.3.1.2, 5.3.1.3 and Table 2). The enclosure size must be increased by at least 20% for each additional snake above two (e.g. an enclosure housing three snakes must be at least 70% larger than the minimum enclosure size). If different species are housed together, the calculation must be based on the minimum enclosure size for the largest species.

4.3.2. Guidelines

- 4.3.2.1 The minimum enclosure sizes specified in Table 2 are based on the average length of a snake. Some individuals will grow much larger than the average length and should be housed in a larger enclosure.
- 4.3.2.2 If multiple snakes are housed in the one enclosure, keepers should remove snakes to a separate feeding area to avoid feeding-related injuries or problems.

4.4. Turtles

4.4.1. Standards

- 4.4.1.1 An enclosure must have sufficient water volume to enable each turtle to simultaneously swim freely or lie submerged.
- 4.4.1.2 An enclosure must have sufficient dry land area for the turtle to bask out of the water. Sufficient area for multiple turtles to bask simultaneously must be provided when multiple turtles are housed together. Enclosures housing only Pig-nosed turtles are exempt from this Standard as they rarely leave the water.
- 4.4.1.3 The enclosure's shortest dimension must not be less than the 150% of the straight carapace length of the largest turtle being housed.
- 4.4.1.4 An enclosure housing up to 20 turtles that are less than 6 months old must have a water area of at least 0.135 m² (e.g. 0.45 m x 0.3 m) and a water depth of at least 0.05 m.
- 4.4.1.5 An enclosure housing one or two turtles that are between 6 months and 24 months old must have a water area of at least 0.18 m² (e.g. 0.6 m x 0.3 m) and a water depth of at least 0.2 m.
- 4.4.1.6 An enclosure housing one or two turtles that are more than 24 months old must meet the minimum enclosure size shown in Table 3.
- 4.4.1.7 The enclosure size must be increased by at least 20% for each additional turtle above two (see 5.4.1.5 and Table 3), (e.g. an enclosure housing five turtles must be at least 60% larger than the minimum enclosure size). If different species are housed together, the calculation must be based on the minimum enclosure size for the largest species.

4.4.2. Guidelines

- 4.4.2.1 The minimum enclosure sizes specified in Table 3 are based on the average carapace length of a turtle. Some turtles will grow much larger than the average length and should be housed in larger enclosures.
- 4.4.2.2 A mature turtle should be housed in an outdoor enclosure due to the difficulty in providing sufficient UV light through artificial means and their requirement for a large volume of water (see Standard 4.2.1.1).
- 4.4.2.3 A nesting female should be provided with a suitable nesting site within the enclosure.

Table 1: Minimum size for an enclosure housing one lizard over 12 months old

Family	Category*	Minimum floor or back wall area (m²) [†]
Gecko	Α	0.030
	В	0.060
	С	0.135
Skink	А	0.030
	В	0.060
	С	0.135
	D	0.240
	Е	0.375
	F	0.540
Dragon	Α	0.060
	В	0.135
	С	0.240
	D	0.375
	E	0.735
Monitor	Α	0.180
	В	0.320
	С	0.980
	D	1.280
	E	2.880
	F	3.920
	G	5.120
	Н	8.000
Flap-footed	Α	0.240
lizard	В	0.540

^{*}See Appendix A for categorisation of species

[†]The minimum area refers to the size of the enclosure measured externally and does not include additional surfaces within the enclosure such as shelves.

Table 2: Minimum size for an enclosure housing one snake over 18 months old

Family	Category*	Minimum floor or back wall area (m²) [†]
Python	Α	0.150
	В	0.225
	С	0.400
	D	0.625
	E	1.225
Elapid	Α	0.038
	В	0.150
	С	0.375
	D	0.600
Colubrid	Α	0.150
	В	0.375
	С	0.600
File snake	А	0.600
Blind snake	Α	0.150

^{*}See Appendix A for categorisation of species

Table 3: Minimum size for an enclosure housing one or two turtles over 24 months old

Family	Category*	Minimum water area (m²) [†]	Minimum water depth (m)
Cheluid	Α	0.32	0.2
	В	0.72	0.3
	С	1.28	0.4
	D	2.00	0.5
Carettochelydid	А	2.88	0.5

^{*}See Appendix A for categorisation of species

[†]The minimum area refers to the size of the enclosure measured externally and does not include additional surfaces within the enclosure such as false floors.

[†]The minimum water area refers to the surface of the aquarium or pool.

Notes

Keepers interested in providing a good quality of life for their reptile are encouraged to use an enclosure that is significantly larger than the minimum size specified above.

Aggression and avoidance are common features of reptile social behaviour. If multiple individuals are housed together, it is critical that they have sufficient space to escape from their cage-mates.

Captive management of snakes is often easier if only one individual is housed in each enclosure. When two or more snakes are housed together there is always the risk that one snake will injure or eat its cage-mate.

5. Enclosure environment

5.1. Temperature

Objectives

To allow the reptile to maintain a preferred range of body temperatures by moving to different parts of its enclosure.

5.1.1. Standards

- 5.1.1.1 A reptile must be provided with a range of enclosure temperatures that allows them to adjust their body temperature to that appropriate for the full range of normal functioning.
- 5.1.1.2 Heat sources must be designed and installed so as to prevent the reptile from being injured by them.
- 5.1.1.3 Where an aquatic or semi-aquatic reptile is housed, the temperature of the water must be maintained at a temperature that it is appropriate for that species.

5.1.2. Guidelines

- 5.1.2.1 Temperatures within an enclosure should be checked daily so that the temperature range provided is appropriate for the species being housed. This should be done by placing thermometers at sites where the reptiles spends substantial amounts of time.
- 5.1.2.2 Artificial heat sources should be controlled with a thermostat to assist in the maintenance of an appropriate temperature range.

Notes

Animals that alter their body temperatures through selection of different environmental temperatures are termed ectothermic.

It may also be necessary to provide a diurnal and/or seasonal temperature cycle for some species.

Positioning enclosures in direct sunlight (i.e. near windows) can lead to overheating unless adequate ventilation and shade is provided.

5.2. Ventilation

Objectives

To adequately ventilate the enclosure so as to avoid excessive humidity. A careful balance will need to be achieved between ventilation, humidity and heating requirements appropriate to the species.

5.2.1. Standards

5.2.1.1 Enclosures must be adequately ventilated without causing excessive drafts.

5.3. Humidity

Objectives

To maintain appropriate humidity levels within the enclosure.

5.3.1. Standards

5.3.1.1 The humidity of the enclosure must be maintained at a level that is appropriate for the species being housed.

5.3.2. Guidelines

- 5.3.2.1 Care should be taken when choosing floor coverings as many particulate substrates can substantially lower relative humidity.
- 5.3.2.2 Humidity levels should not be so high that moisture accumulates in the enclosure. Constant contact with damp substrates can lead to infections.
- 5.3.2.3 Where water bowls are placed near heat sources or live plants are used to decorate enclosures, the keeper should not allow the humidity to become excessively high.

Notes

Humidity is an important factor for the successful sloughing of skin in reptiles and problems resulting from dry skin are more common when humidity is too low. Conversely, some species may become susceptible to respiratory infections when humidity is too high.

Most reptile species can be successfully maintained with a relative humidity between 50% and 70%.

Species from arid areas typically seek shelter in areas with a high relative humidity. It should therefore not be assumed that these species can be successfully housed in hot, dry enclosures.

5.4. Lighting

Objectives

To provide the reptile with an appropriate light cycle.

5.4.1. Standard

- 5.4.1.1 A light cycle (i.e. alternation between light and dark periods) must be maintained that is appropriate for the species being housed.
- 5.4.1.2 Where lighting is provided to view nocturnal species (e.g. geckos) during their activity period, this must be from non-white globes, or other products intended for that purpose. Lights must not be left on constantly throughout the activity period.

5.4.2. Guidelines

- 5.4.2.1 The reptile should have access to natural day-night cycles. This may be provided by housing it in areas with natural light.
- 5.4.2.2 An artificial light cycle of 10 hours of light and 14 hours of dark every 24 hours is appropriate when a reptile enclosure does not have access to a natural seasonal day-night cycle.
- 5.4.2.3 A globe linked to an on/off thermostat should not be use as the sole heat and light source. This set-up may create a 'photo-invasive' environment and interfere with physiological processes.

Notes

Excessive light or poorly phased light cycles can disrupt normal sleeping patterns and may lead to health problems if maintained over a long period.

Varying temperature and day-length can be used to stimulate breeding in reptiles.

5.5. UV light and metabolic requirements

Objectives

To provide lighting that meets the reptile's UV requirements. Most reptiles will benefit from exposure to full-spectrum light.

5.5.1. Standard

- 5.5.1.1 A reptile with a known UV requirement (e.g. some dragons, skinks, geckos and turtles) must have access to UV light suitable for meeting its metabolic needs.
- 5.5.1.2 Where artificial UV light sources are provided they must be installed at a suitable distance from basking sites and replaced as indicated by the manufacturers' specifications.
- 5.5.1.3 Glass must not be placed between the UV light source and the reptile as it reflects UV light.

5.5.2. Guidelines

- 5.5.2.1 All diurnal species should have access to UV light.
- 5.5.2.2 If an artificial UV light source is used it should be switched on for at least 6 hours per day.
- 5.5.2.3 Providing regular (i.e. weekly) controlled access to unfiltered (i.e. not through glass or plastic), natural sunlight may be used as a means of UV light provision. This regime should be used for all freshwater turtles housed indoors.

Notes

The ultraviolet (UV) portion of the spectrum assists in the absorption and synthesis of minerals and vitamins such as vitamin D. Failure to provide adequate dietary vitamin D and calcium combined with insufficient access to UV light will have a detrimental effect on some species' health.

A reptile's UV requirements can most easily be met by providing it with regular access to unfiltered sunlight or installing a UV globe in their enclosure.

UV requirements can vary over the life of an individual with rapidly growing juveniles and gravid females typically needing higher levels.

Vitamin D may be sufficient in the diet to meet metabolic needs of species that consume whole vertebrates as their primary food sources (e.g. snakes).

6. Enclosure furnishing

6.1. Substrate

Objectives

To keep the reptile clean and dry by placing an absorbent substrate in their enclosure. Natural substrates such as sand, leaf litter or bark chips can greatly enhance the behavioural enrichment provided to the reptile.

6.1.1. Standards

- 6.1.1.1 An enclosure housing a lizard or snake must contain a substrate or floor which keeps the reptile clean and dry.
- 6.1.1.2 An enclosure housing a species that normally moves through loose substrate (e.g. Sand-swimmer or South-eastern slider) (see Appendix A) must have a substrate of a type and depth in which it can completely bury itself.
- 6.1.1.3 An enclosure housing a species that normally uses fixed burrows (e.g. Central Netted dragon and Desert skink) (see Appendix A) must either provide the reptile with the opportunity to create their own burrows by containing a deep, hard-packed substrate or contain suitable artificial burrows/hides.
- 6.1.1.4 Substrate for an indoor enclosure must be readily replaceable in part or in their entirety when soiled by waste material.

6.1.2. Guidelines

- 6.1.2.1 When choosing a substrate the keeper should consider ease of cleaning, supply and the impacts of the substrate on other environmental requirements of the species being kept (e.g. humidity).
- 6.1.2.2 Care should be taken when choosing substrates that consist of small particles (e.g. bark chips) as it may be eaten during feeding. Digestive problems associated with consuming substrate will usually require veterinary treatment.
- 6.1.2.3 Care should be taken when choosing substrates that stick to moist surfaces (e.g. fine desert sand) as it may accumulate around the reptile's eyes and mouth leading to infections.

Notes

Providing substrate that is too deep may make it difficult for keepers to monitor a burrowing reptile.

The collection of natural substrates (e.g. bush rocks) from the wild is strongly discouraged as it may be removing habitat used by native animals.

6.2. Furniture

Objectives

To offer the reptile the opportunity to exhibit a range of natural behaviours such as climbing, burrowing and hiding.

6.2.1. Standards

- 6.2.1.1 An enclosure must contain a physical barrier within the enclosure, under or behind which the reptile can hide and must be appropriate for the species being housed (i.e. one that facilitates the natural hiding behaviour of the reptile). This shelter is in addition to the enclosure walls or any other standards. Shelters may be designed so that the animal is still visible.
- 6.2.1.2 An enclosure housing a species that normally climbs (see Appendix A) must provide climbing opportunities which are appropriate for the species being housed (i.e. one that facilitates the natural climbing behaviour of the reptile). Climbing opportunities can include branches, bark, rocks, perches, shelves or other suitable surfaces.
- 6.2.1.3 Heavy cage furniture must be situated so that it cannot move and injure the reptile should it attempt to climb on or burrow under it.
- 6.2.1.4 A submerged shelter for a turtle must be large enough so that it is able to turn around inside. This will help to avoid it getting stuck and drowning.

6.2.2. Guidelines

- 6.2.2.1 If natural logs and rocks are to be placed in an enclosure they should be cleaned prior to use. This includes items being transferred from one enclosure to another.
- 6.2.2.2 A shelter constructed from light material (e.g. cardboard or paper) should be used in an enclosure housing a small lizard or snake. This will help to avoid crush injuries.

- 6.2.2.3 Keepers should provide multiple shelters for a species that is an ambush predator. This will help them to engage in their natural hiding behaviour.
- 6.2.2.4 Enclosures housing a lizard species that basks in the open (e.g. a bearded dragon) should have a log, rock or platform underneath an overhead heat source so that it can engage in natural basking behaviour.

Notes

Items such as rocks and logs are often used by reptiles to assist in skin sloughing.

For young reptiles the provision of hiding opportunities can assist with maintaining regular feeding behaviour.

7. Food, water and cleaning

7.1. Food

Objectives

A diet that maintains the good health of the reptile.

7.1.1. Standards

- 7.1.1.1 A reptile must be provided with a balanced and sufficient diet that supports its growth, development and normal physiological functioning.
- 7.1.1.2 Frequency of feeding and meal size must be appropriate to the species, sex, age and season.

7.1.2. Guidelines

- 7.1.2.1 A food container should be made of a non-toxic material that can be easily cleaned and disinfected. A disposable container may also be used if regularly replaced.
- 7.1.2.2 A snake should not be handled for two days after feeding to avoid the regurgitation of food items.
- 7.1.2.3 Food for an omnivorous or insectivorous species (e.g. some lizard and turtle species) should be varied and periodically enriched with vitamins and calcium. Care should be taken so that an appropriate calcium/phosphorus balance is maintained to avoid overdosing.
- 7.1.2.4 When more than one individual is housed in a single enclosure, the keeper should ensure that all reptiles are getting sufficient food.
- 7.1.2.5 A reptile should not be fed when it is unable to maintain a high enough body temperature for the proper digestion of food. For example, a turtle will generally be unable to digest food when water temperatures fall below 16°C.

Notes

Both under and over feeding can lead to disease and other health problems.

Refer to the *Prevention of Cruelty to Animals Act 1979* for information on the prohibition of live vertebrates as prey.

7.2. Water

Objectives

To provide a source of hydration for the reptile that meets its physiological requirements. Water not only provides a source of hydration for a reptile but it also assists in maintaining appropriate humidity levels within the enclosure.

7.2.1. Standards

- 7.2.1.1 Clean water must be provided to the reptile at all times, at a quality that meets its physiological needs and in a location that it can readily access.
- 7.2.1.2 Water in an aquatic enclosure must be adequately filtered or regularly changed so that waste does not affect water quality.

7.2.2. Guidelines

- 7.2.2.1 If water is provided in the form of a natural pool, the keeper should follow practices to maintain the quality of this water.
- 7.2.2.2 A water container should be made of a non-toxic material that can be easily cleaned and disinfected. A disposable container may also be used if regularly replaced.
- 7.2.2.3 A water container should be stable and heavy or otherwise secured so that the reptile cannot tip it over.
- 7.2.2.4 If a species that prefers to lap water droplets is kept (e.g. some tropical and desert-adapted species), the keeper should follow practices such as misting to facilitate this behaviour.
- 7.2.2.5 The volume of water should be adjusted to assist with the maintenance of appropriate humidity levels for the species being housed.

Notes

An authorised officer may consider exceptions to the permanent provision of water, provided an appropriate routine of water supply is documented and adhered to.

Some reptile species will only drink fresh water and may go for many days without drinking.

7.3. Cleaning

Objectives

To maintain good hygiene standards so that the reptile remains healthy.

7.3.1. Standards

- 7.3.1.1 Faeces, urine, uneaten food and other waste materials must not be allowed to build up in an enclosure.
- 7.3.1.2 A shelter must be cleaned or replaced immediately if its interior becomes soiled with waste.

- 7.3.1.3 Food and water containers must be cleaned immediately if they become contaminated with waste.
- 7.3.1.4 An enclosure, cage furniture, food container and water container must be cleaned before being used for a different reptile.

7.3.2. Guidelines

- 7.3.2.1 The keeper should wash or disinfect their hands before and after handing any reptile, food or enclosure. Disposable gloves can provide an additional layer of protection.
- 7.3.2.2 An enclosure should be regularly cleaned, disinfected and rinsed to remove any build up of waste material moved about by the reptile.
- 7.3.2.3 The keeper should take care when maintaining live plants in an enclosure so that soil does not become a source of bacterial or fungal infection.

Notes

Some diseases carried by reptiles may be transmissible to humans and may pose severe health risks. It is strongly advised that young children only handle reptiles and associated equipment when supervised by an adult and with good hygiene practised.

A small amount of faeces may be left in the enclosure following cleaning as scent marking helps some species (e.g. pythons) to recognise their home range.

8. Transport

Objectives

To keep the reptile safe and secure during transport. Reptiles will typically be transported over short distances when attending veterinary surgeries or society shows. At other times reptiles may be transported long distances within or between states. The principles of transporting a reptile are the same regardless of distance.

8.1. Standards

- 8.1.1 A reptile must not be fed during transport.
- 8.1.2 A reptile must have access to water prior to transport to avoid dehydration.
- 8.1.3 The transport container must be secured so that the reptile cannot escape.
- 8.1.4 The transport container must be adequately insulated from noise, heat and vibration.
- 8.1.5 The transport container must be adequately ventilated.
- 8.1.6 The transport container must protect the reptile from injuries such as crushing and scratching.
- 8.1.7 The transport container must not be placed in direct sunlight.
- 8.1.8 A transport container used by a carrier, other than the keeper, must be clearly labelled 'LIVE ANIMALS HANDLE WITH CARE' and 'THIS SIDE UP'.

8.1.9 Aquatic and semi-aquatic species must not be transported in water-filled containers as they may drown.

8.2. Guidelines

- 8.2.1 Snake and monitor species should not be transported unless they have had sufficient time to digest any food. This will help to prevent regurgitation of food.
- 8.2.2 A reptile may be transported within soft, lint-free bags secured within a Styrofoam box. Care should be taken to remove loose threads which may entangle the reptile
- 8.2.3 A turtle should have access to a damp surface during transport.
- 8.2.4 Keepers should seek the services of a transport company that has relevant small animal handling experience when transporting a reptile over a long distance.

Notes

It is illegal to ship live reptiles via Australia Post (see the Dangerous and Prohibited Goods and Packaging Post Guide).

Transport of a reptile between NSW and other states/territories requires an import/export licence issued by OEH.

9. Quarantine

Objectives

Practices that reduce the spread of disease between captive reptiles. It is good practice to quarantine a new reptile (isolate them from other reptiles) for a period, before introducing them to a collection. There are a number of reptile-specific diseases that have long incubation periods and can be very difficult to diagnose.

9.1. Guidelines

- 9.1.1 The OEH *Hygiene Protocol for the Prevention of Disease in Captive Snakes* should be followed (www.environment.nsw.gov.au/wildlifelicences/HygieneProtocolSnakes.htm).
- 9.1.2 A quarantine period not less than 30 days should be employed for a newly acquired lizard or turtle. (The keeping of accurate records as outlined in Section 11 can assist with tracking any health issues).
- 9.1.3 A newly acquired snake should be kept in a separate enclosure away from existing reptiles for between 6 and 12 months because of the high risk of disease transmission.
- 9.1.4 Keepers should satisfy themselves that they are purchasing a healthy reptile from a disease-free source. A new reptile should be examined carefully for mites and treated accordingly prior to them being exposed to existing reptiles.

9.1.5 Keepers should clean their hands or change disposable gloves after handling a quarantined reptile and its enclosure contents to reduce the risk of transmitting diseases to other reptiles in their collection.

10. Record keeping

Objectives

To maintain accurate records of the reptile. This will provide a valuable tool in identifying sources of health problems.

10.1. Standards

10.1.1 The keeper must maintain records as specified in their licence conditions.

10.2. Guidelines

- 10.2.1 The keeper should keep records for each reptile covering the following matters, as these can be of significant help when diagnosing health problems:
 - feeding and refusal of food (particularly for snakes and other species not fed daily)
 - skin sloughing events and any associated issues (particularly for snakes)
 - veterinary treatment, medication and observations on health issue (e.g. diarrhoea and regurgitation)
 - unusual behaviour.
- 10.2.2 A reptile should be micro chipped by a veterinarian with relevant experience, as this enables ownership of the reptile to be established. In the event of the reptile being stolen or escaping, it can be identified by the local council and returned to its rightful owner. Micro chipping is not recommended for juveniles and very small species.

Notes

It may be useful to record reproductive activities and changes in weight and length of the reptile.

A card attached to the outside of an enclosure is a convenient way of recording information.

Appendix A: Reptile categories and behaviour

Key: (CI) climbing species, (Bur) burrowing species, (SS) sand-swimming species, (Aq) semi-aquatic and aquatic species, unlabelled species are terrestrial

Table A1: Gecko categories

Category (area)	Name	Category (area)	Name
А	Gibber	А	Jewelled (CI)
(0.03 m ²)	Diplodactylus byrnie		Strophurus elderi
Α	Fat-tailed	В	Marbled Southern (CI)
	Diplodactylus conspicillatus	(0.06 m ²)	Christinus marmoratus
Α	Helmeted	В	Top-end Dtella (CI)
	Diplodactylus galeatus		Gehyra australis
Α	Wheat-belt Stone	В	Dubious Dtella
	Diplodactylus granariensis		Gehyra dubia
Α	Box-patterned	В	Centralian Rough Knob-tailed
	Diplodactylus steindachneri		Nephrurus amyae
Α	Crowned	В	Prickly Knob-tailed
	Diplodactylus stenodactylus		Nephrurus asper
Α	Tessellated	В	Pale Knob-tailed (Bur)
	Diplodactylus tessellatus		Nephrurus laevissimus
Α	Centralian Dtella (CI)	В	Smooth Knob-tailed (Bur)
	Gehyra montium		Nephrurus levis
Α	Variegated Dtella (CI)	В	Northern Rough Knob-tailed
	Gehyra variegata		Nephrurus sheai
Α	Asian House (CI)	В	Starred Knob-tailed (Bur)
	Hemidactylus frenatus		Nephrurus stellatus
Α	Prickly	В	Banded Knob-tailed
	Heteronotia binoei		Nephrurus wheeleri
Α	Cave Prickly	В	Northern Velvet (CI)
	Heteroonotia spelea		Oedura castelnaui
Α	Beaded	В	Northern Spotted Velvet (CI)
	Lucasium damaeum		Oedura coggeri
Α	Beaked	В	Fringe-toed Velvet (CI)
	Rynchoedura ornata		Oedura filicipoda

Category (area)	Name	Category (area)	Name
В	Lesueur's Velvet (CI)	В	Southern Spiny-tailed (CI)
(0.06 m ²)	Oedura lesueurii		Strophurus intermedius
В	Marbled Velvet (CI)	В	Golden Spiny-tailed (CI)
	Oedura marmorata		Strophurus taenicauda
В	Ocellated Velvet (CI)	В	Eastern Spiny-tailed (CI)
	Oedura monilis		Strophurus williamsi
В	Robust Velvet (CI)	В	Thick-tailed
	Oedura robusta		Underwoodisaurus milii
В	Southern Spotted Velvet (CI)	В	Granite Belt Thick-tailed
	Oedura tryoni		Underwoodisaurus sphyrurus
В	Giant Cave (CI)	С	Chameleon (CI)
	Pseudothecadactylus lindneri	(0.135 m ²)	Carphodactylus laevis
В	Broad-tailed (CI)	С	Ring-tailed (CI)
	Phyllurus platurus		Crytodactylus louisiadensis
В	Southern Leaf-tailed (CI)	С	Northern Leaf-tailed (CI)
	Saltuarius swaini		Saltuarius cornutus
В	Granite Leaf-tailed (CI)	С	Rough-throated Leaf-tailed (CI)
	Saltuarius wyberba		Saltuarius salebrosus
В	Northern Spiny-tailed (CI)		
	Strophurus ciliaris		

Table A2: Skink categories

Category (area)	Name	Category (area)	Name
А	Cream-striped Wall (CI)	В	Tryon's
(0.03 m ²)	Cryptoblepharus virgatus		Eulamprus tryoni
Α	Dark-flecked Garden	В	Prickly Forest
	Lampropholis delicata		Gnypetoscincus queenslandiae
А	Pale-flecked Garden	В	South-eastern Slider (SS)
	Lampropholis guichenoti		Lerista bougainvillii
Α	Common Dwarf	С	Three-clawed Worm
	Menetia greyii	(0.135 m ²)	Anomalopus verreauxii
Α	South-eastern Morethia	С	She-oak Slender Blue-tongue
	Morethia boulengeri		Cyclodomorphus casuarinae
В	Red-throated	С	Eastern Striped
(0.06 m ²)	Acritoscincus platynotum		Ctenotus robustus
В	Short-necked Worm	С	Hosmer's Spiny-tailed
	Anomalopus brevicollis		Egernia hosmeri
В	Coen Rainbow	С	Ranges Rock
	Carlia coensis		Egernia margaretae
В	Leopard Ctenotus	С	Eastern Crevice
	Ctenotus pantherinus		Egernia mcpheei
В	Pale-rumped Ctenotus	С	Eastern-ranges Rock
	Ctenotus regius		Egernia modesta
В	Copper-tailed	С	South-western Rock
	Ctenotus taeniolatus		Egernia pulchra
В	Pygmy Spiny-tailed	С	Black Crevice
	Egernia depressa		Egernia saxatilis
В	Unadorned Desert (Bur)	С	Gidgee Spiny-tailed
	Egernia inornata		Egernia stokesii
В	Eastern Water	С	Tree
	Eulamprus quoyii		Egernia striolata
В	Bar-sided Forest	С	White's Rock
	Eulamprus tenuis		Egernia whitii

Category (area)	Name	Category (area)	Name
С	Narrow-banded Sand-	E	King's
(0.135 m ²)	swimmer	(0.375 m ²)	Egernia kingii
С	Broad-banded Sand-	E	Centralian Blue-tongue
	swimmer		Tiliqua multifasciata
D	Mainland She-oak	E	Blotched Blue-tongue
(0.24 m ²)	Cyclodomorphus gerrardii		Tiliqua nigrolutea
D	Mainland She-oak	E	Western Blue-tongue
	Cyclodomorphus michaeli		Tiliqua occipitalis
D	Cunningham's Spiny-tailed	E	Shingleback
	Egernia cunninghami		Tiliqua rugosus
D	Major	E	Common Blue-tongue
	Egernia frerei		Tiliqua scincoides
D	Yakka	F	Land Mullet
	Egernia rugosa	(0.54 m ²)	Egernia major

Table A3: Dragon categories

Category (area)	Name	Category (area)	Name
Α	Painted (Bur)	С	Gilbert's (CI)
(0.06 m ²)	Ctenophorus pictus	(0.24 m ²)	Amphibolurus gilberti
Α	Eastern Two-lined	С	Swamplands (CI)
	Diporiphora australis		Amphibolurus temporalis
Α	Robust Two-lined	С	Crested
	Diporiphora bennetti		Ctenophorus cristatus
Α	Mountain Heath	С	Southern Forest (CI)
	Rankinia diemensis		Hypsilurus spinipes
А	Lined Earless	С	Downs Bearded
	Tympanocryptis lineata		Pogona henrylawsoni
В	Burns' (CI)	С	Kimberly Bearded (CI)
(0.135 m ²)	Amphibolurus burnsi		Pogona microlepidota
В	Jacky (CI)	С	Dwarf Bearded (CI)
	Amphibolurus muricatus		Pogona minor
В	Nobbi (CI)	D	Long-nosed (CI)
	Amphibolurus nobbi	(0.375 m ²)	Amphibolurus longirostris
В	Tawny	D	Boyd's Forest (CI)
	Ctenophorus decresii		Hypsilurus boydii
В	Peninsular	D	Eastern Bearded (CI)
	Ctenophorus fionii		Pogona barbata
В	Military Sand	D	Central Bearded (CI)
	Ctenophorus isolepis		Pogona vitticeps
В	Central Netted (Bur)	E	Frilled (CI)
	Ctenophorus nuchalis	(0.735 m ²)	Chlamydosaurus kingii
В	Red-barred	Е	Water (CI)
	Ctenophorus vadnappa		Physignathus lesueurii

Table A4: Monitor categories

Category (area)	Name	Category (area)	Name
А	Short-tailed Pygmy (Bur)	D	Kimberly Rock (CI)
(0.18 m ²)	Varanus brevicauda	(1.28 m ²)	Varanus glauerti
А	Northern Ridge-tailed	D	Black-headed (CI)
	Varanus primordius		Varanus tristis
В	Stripe-tailed	Е	Mangrove (CI) (Aq)
(0.32 m ²)	Varanus caudolineatus	(2.88 m ²)	Varanus indicus
В	Pygmy Mulga (CI)	Е	Merten's Water (Aq)
	Varanus gilleni		Varanus mertensi
В	Pygmy Rock	E	Yellow-spotted
	Varanus kingorum		Varanus panoptes
В	Storr's	Е	Spencer's
	Varanus storri		Varanus spenceri
С	Spiny-tailed	F	Sand
(0.98 m ²)	Varanus acanthurus	(3.92 m ²)	Varanus gouldii
С	Black-spotted Spiny-tailed	F	Heath
	Varanus baritji		Varanus rosenbergi
С	Mitchell's Water (Aq)	G	Lace (CI)
	Varanus mitchelli	(5.12 m ²)	Varanus varius
С	Spotted tree (CI)	Н	Perentie
	Varanus scalaris	(8 m ²)	Varanus giganteus

Table A5: Flap-footed lizard categories

Category (area)	Name	
А	Southern Scaly-foot	
(0.24 m ²)	Pygopus lepidopodus	
Α	Western Scaly-foot	
	Pygopus nigriceps	
Α	Eastern Hooded Scaly-foot	
	Pygopus schraderi	
В	Burton's Snake-lizard	
(0.54 m ²)	Lialis burtonis	

Table A6: Python categories

Category (area)	Name Category (area)		Name
Α	Children's	D	Water
(0.15 m ²)	Antaresia childreni		Liasis mackloti
Α	Spotted	D	Centralian Carpet (CI)
	Antaresia maculosa		Morelia spilota bredli
Α	Pygmy	D	South-western Carpet (CI)
	Antaresia perthensis		Morelia spilota imbricata
А	Stimson's	D	Coastal Carpet (CI)
	Antaresia stimsoni		Morelia spilota mcdowelli
В	Green (CI) D		Inland carpet (CI)
(0.225 m ²)	Morelia viridis		Morelia spilota metcalfei
С	Woma D		Diamond (CI)
(0.4 m ²)	Aspidites ramsayi		Morelia spilota spilota
С	Rough-scaled (CI)	D	North-western Carpet (CI)
	Morelia carinata		Morelia spilota variegata
С	Jungle Carpet (CI) E		Olive
	Morelia spilota cheynei	(1.225 m ²)	Liasis olivaceus
D	Black-headed	Е	Scrub
(0.625 m ²)	Aspidites melanocephalus		Morelia kinghorni

Table A7: Colubrid categories

Category (area)	Name
A (0.15 m ²)	Macleay's Water (Aq) Enhydris polylepis
A	Keelback Tropidonophis mairii
В	Green Tree (CI)
(0.375 m ²)	Dendrelaphis punctulata
В	Slaty-grey
	Stegonotus cucullatus
С	Brown Tree (CI)
(0.6 m ²)	Boiga irregularis

Table A8: File snake categories

Category (area)	Name	
A	Arafura (Aq)	
(0.6 m ²)	Acrochordus arafurae	

Table A9: Blind Snake categories

Category (area)	Name	
А	Blackish (Bur)	
(0.15 m ²)	Ramphotyphlops nigrescens	

Table A10: Elapid classes

Category (area)	Name Category (area)		Name
А	Eastern Shovel-nosed (Bur)	В	Pale-headed (CI)
(0.038 m ²)	Brachyurophis australis		Hoplocephalus bitorquatus
А	Southern Dwarf Crowned	В	Broad-headed (CI)
	Carcophis krefftii		Hoplocephalis bungaroides
А	Eastern Small-eyed	В	Variable black-naped
	Cryptophis nigrescens		Parasuta dwyeri
Α	White-lipped	В	Ringed Brown
	Drysdalia coronoides		Pseudonaja modesta
Α	Mustard-bellied	В	Curl
	Drysdalia rhodogaster		Suta suta
Α	Red-naped	В	Rough-scaled
	Furina diadema		Tropidechis carinatus
Α	Whip-hooded	В	Eastern bandy-bandy
	Parasuta flagellum		Vermicella annulata
Α	Spectacled Hooded	С	Highland's Copperhead
	Parasuta spectabilis	(0.375 m ²)	Austrelaps ramsayı
В	Southern Death Adder	С	Lowlands Copperhead
(0.15 m ²)	Acanthophis antarcticus		Austrelaps superbus
В	Northern Death Adder	С	Yellow-faced Whip
	Acanthophis praelongus		Demansia psammophis
В	Desert Death Adder	С	Stephen's Banded (CI)
	Acanthophis pyrrhus		Hoplocephalus stephensii
В	Golden Crowned	С	Black Tiger
	Cacophis squamulosus		Notechis ater
В	De Vis' Banded	С	Eastern Tiger
	Denisonia devisi		Notechis scutatus
В	Orange-naped	С	Collett's
	Furina ornate		Pseudechis colletti
В	Marsh	С	Spotted Black
	Hemiaspis signata		Pseudechis guttatus

Category (area)	Name	Category (area)	Name
С	Red-bellied Black	D	Mulga
(0.375 m ²)	Pseudechis porphyriacus		Pseudechis australis
С	Dugite	D	Spotted Mulga
	Pseudonaja affinis		Pseudechis butleri
D	Fierce	D	Gwardar
(0.6 m ²)	Oxyuranus microlepidotus		Pseudonaja nuchalis
D	Taipan	D	Eastern Brown
	Oxyuranus scutellatus		Pseudonaja textilis

Table A11: Cheluid turtle categories (all native turtles are primarily aquatic)

Category (area)	Name Category (area)		Name
А	Steindachner's	В	Northern Yellow-faced
(0.32 m ²)	Chelodina steindachneri		Emydura tanybaraga
А	North-west Red-faced	В	Victoria/Northern Red-faced
	Emydura australis		Emydura victoriae
А	Macleay River	В	Fitzroy River
	Emydura macquarii dharra		Rheodytes leukops
В	Sandstone Long-necked	С	Oblong
(0.72 m ²)	Chelodina burrungandjii	(1.28 m ²)	Chelodina oblonga
В	New Guinea Snake-necked	С	Northern Long-necked
	Chelodina canni		Chelodina rugosa
В	Eastern Snake-necked	С	Northern Snapping
	Chelodina longicollis		Elseya dentate
В	Bell's C		Irwin's/Yellow-headed
	Elseya belli		Elseya irwini
В	Saw-shelled C		Lavarack's/Gulf Snapping
	Elseya latisternum		Elseya lavarackorum
В	Sydney Basin	С	Mary River
	Emydura macquarii dharuk		Elusor macrurus
В	Hunter River	С	Murray River
	Emydura macquarii		Emydura macquarii macquarii

Category (area)	Name	Category (area)	Name
В	Kreft's	С	Emmott's/Cooper Creek
	Emydura macquarii kreffti		Emydura macquarii emmotti
В	Brisbane River	D	Broad-shelled
	Emydura macquarii signata	(2.0 m ²)	Chelodina expansa
В	Jardine River/Worrell's	D	Southern Snapping
	Emydura subglobosa		Elseya albagula

Table A12: Carettochelydid turtle categories

Category (area)	Name	
А	Pig-nosed (Aq)	
(2.88 m ²)	Carettochelys insculpta	

Appendix B: Enclosure size calculations

Table B1: Lizards

Family	Category	Average adult total body length (m)	Enclosure size calculation (m)
Gecko	А	0.05 – 0.1	3(0.1) x 1(0.1) = 0.3 x 0.1
	В	0.1 – 0.2	1.5(0.2) x 1(0.2) = 0.3 x 0.2
	С	0.2 – 0.3	1.5(0.3) x 1(0.3) = 0.45 x 0.3
Skink	А	0.05 – 0.1	3(0.1) x 1(0.1) = 0.3 x 0.1
	В	0.1 – 0.2	1.5(0.2) x 1(0.2) = 0.3 x 0.2
	С	0.2 – 0.3	1.5(0.3) x 1(0.3) = 0.45 x 0.3
	D	0.3 – 0.4	1.5(0.4) x 1(0.4) = 0.6 x 0.4
	E	0.4 – 0.5	1.5(0.5) x 1(0.5) = 0.75 x 0.5
	F	0.5 – 0.6	1.5(0.6) x 1(0.6) = 0.9 x 0.6
Dragon	А	0.1 – 0.2	1.5(0.2) x 1(0.2) = 0.3 x 0.2
	В	0.2 – 0.3	1.5(0.3) x 1(0.3) = 0.45 x 0.3
	С	0.3 – 0.4	1.5(0.4) x 1(0.4) = 0.6 x 0.4
	D	0.4 – 0.5	1.5(0.5) x 1(0.5) = 0.75 x 0.5
	E	0.6 – 0.7	1.5(0.7) x 1(0.7) = 1.05 x 0.7
Monitor	А	0.2 – 0.3	2(0.3) x 1(0.3) = 0.6 x 0.3
	В	0.3 – 0.4	2(0.4) x 1(0.4) = 0.8 x 0.4
	С	0.6 – 0.7	2(0.7) x 1(0.7) = 1.4 x 0.7
	D	0.7 – 0.8	2(0.8) x 1(0.8) = 1.6 x 0.8
	E	1.1 – 1.2	2(1.2) x 1(1.2) = 2.4 x 1.2
	F	1.3 – 1.4	2(1.4) x 1(1.4) = 2.8 x 1.4
	G	1.5 – 1.6	2(1.6) x 1(1.6) = 3.2 x 1.6
	Н	1.9 – 2.0	2(2.0) x 1(2.0) = 4 x 2
Flap-footed	А	0.3 – 0.4	1.5(0.4) x 1(0.4) = 0.6 x 0.4
Lizard	В	0.5 – 0.6	1.5(0.6) x 1(0.6) = 0.9 x 0.6

Table B2: Snakes

Family	Category	Average adult total body length (m)	Enclosure size calculation (m)
Python	А	0.5 – 1.0	0.5(1.0) x 0.3(1.0) = 0.5 x 0.3
	В	1.0 – 1.5	$0.5(1.5) \times 0.2(1.5) = 0.75 \times 0.3$
	С	1.5 – 2.0	0.5(2.0) x 0.2(2.0) = 1.0 x 0.4
	D	2.0 – 2.5	0.5(2.5) x 0.2(2.5) = 1.25 x 0.5
	E	3.0 – 3.5	0.5(3.5) x 0.2(3.5) = 1.75 x 0.7
Elapid	А	0.3 – 0.5	0.5(0.5) x 0.3(0.5) = 0.25 x 0.15
	В	0.5 – 1.0	$0.5(1.0) \times 0.3(1.0) = 0.5 \times 0.3$
	С	1.0 – 1.5	0.5(1.5) x 0.3(1.5) = 0.75 x 0.45
	D	1.5 – 2.0	0.5(2.0) x 0.3(2.0) = 1.0 x 0.6
Colubrid	А	0.5 – 1.0	$0.5(1.0) \times 0.3(1.0) = 0.5 \times 0.3$
	В	1.0 – 1.5	$0.5(1.5) \times 0.3(1.0) = 0.75 \times 0.45$
	С	1.5 – 2.0	0.5(2.0) x 0.3(2.0) = 1.0 x 0.6
File snake	А	1.5 – 2.0	0.5(2.0) x 0.3(2.0) = 1.0 x 0.6
Blind snake	А	0.5 – 1.0	$0.5(1.0) \times 0.3(1.0) = 0.5 \times 0.3$

Table B3: Turtles

Family	Category	Average adult straight carapace length (m)	Enclosure size calculation (m)
Cheluid	А	0.1 – 0.2	4(0.2) x 2(0.2) = 0.8 x 0.4
	В	0.2 – 0.3	4(0.3) x 2(0.3) = 1.2 x 0.6
	С	0.3 – 0.4	4(0.4) x 2(0.4) = 1.6 x 0.8
	D	0.4 – 0.5	4(0.5) x 2(0.5) = 2.0 x 1.0
Carettochelydid	А	0.5 – 0.6	4(0.6) x 2(0.6) = 2.4 x 1.2