# Standards for Exhibiting Carnivores in New South Wales

**Exhibited Animals Protection Act 1986** 

A publication of the Director-General, NSW Department of Primary Industries pertaining to the conditions for exhibiting carnivores (pursuant to Clause 8(2) of the Exhibited Animals Protection Regulation 1995)

This standard was last amended on 13 May 2005.

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## Part 1 - General

Clause 1 Scope of Standards

- 1) These standards apply to all species of the eutherian Order Carnivora with the exception of the Dingo *Canis lupus dingo* as this species is included within the Standards for Exhibiting Australian Mammals in New South Wales displayed, or kept for display, by exhibitors authorised under the Exhibited Animals Protection Act 1986 (EAPA) and must be used in conjunction with all other relevant existing standards and NSW Department of Primary Industries policies, where appropriate, including:
  - General Standards for Exhibiting Animals in New South Wales.

#### Note

The Order Carnivora does not include seals or carnivorous marsupials.

2) An applicant may seek the Director-General's approval to any variation of the application of these Standards. Before a variation can be approved an applicant must satisfy the Director-General that the proposed variation is appropriate for the particular species involved. The Director-General if so satisfied may approve a variation in the particular circumstances.

#### Clause 2

## **Purpose of the Standards**

- 1) The standards within this publication have been developed to maximise the welfare of animals in captivity and cover a range of areas including:
  - a) psychological and physical animal welfare;
  - b) educational value of exhibits;
  - c) public safety;
  - d) guidelines for new and existing displays; and
  - e) legal effect.
- 2) All space requirements in this document are <u>minimum</u> requirements. Exhibitors are encouraged to make enclosures larger than those listed in order to further increase the animal welfare benefit to the animals being held.

#### <u>Note</u>

All material found within the document in a box such as this one, is for information only.

# Part 2 - Housing

Clause 3 Enclosure Fences

1) The boundary of a carnivore enclosure must be made secure against escape. Minimum dimensions of some materials that can be used in enclosure boundaries are set forth under Appendix 1. Other materials and dimensions may be approved by the Director-General. Some examples include:

- a) Larger mesh sizes may be used in those parts of the enclosure boundaries that are above the reach of an average adult man adjacent to the fence. The mesh size must not be large enough to allow individuals of the species, including offspring, to escape through the wire.
- b) Solid walls (including glass panels) can be used rather than mesh if the Director-General is satisfied that the walls will be effective in containing the animals to be kept in the enclosure.

#### Note

Appendix 1 indicates that enclosures for some species, such as Red Panda, Binturong and Ferrets do not need a roof if smooth faced unclimbable walls of the prescribed height are used.

- c) Roofless enclosures may be used for species requiring a roof (indicated as "Roof" in the Inhang column of Appendix 1) if the Director-General is satisfied that the walls (in combination with any moats and electric hot wires) will be effective in containing the animals to be kept in the enclosure.
- d) Lower fence/wall or moat heights can be used if the Director-General is satisfied that suitable electric wires have been installed and that this configuration of fence/wall/ moat and electric hot wires will be effective in containing the animals to be kept in the enclosure.
- e) The use of high tensile wire as a modern display technique can be incorporated into enclosures as long as the Director-General is satisfied that they have been rigorously tested, they include secondary barriers such as electric wires to reduce access to the tensile wire, and the configuration will be effective in containing the animals kept in the enclosure.
- 2) Moating systems for carnivore enclosures must incorporate the following safety features:
  - a) installations to prevent stormwater raising the level of the moat and it is recommended that a 50mm float valve be installed to maintain the correct water level at all times; and
  - b) a base of clay or some other impervious material to limit the loss of water through the rock soil subgrade; and
  - c) a barrier (possibly incorporating vegetation) on the viewing side of the moat to reduce the risk of visitors falling into the moat.

## Note

Electric wires are recommended for open top enclosures and moated enclosures used to contain carnivores that have climbing ability.

#### Clause 4

## Gates, Doors and Slides

- 1) Gates/doors/slides and other entry devises in enclosure boundaries must be placed so that there is no direct access to the enclosure from areas that are unable to safely and securely contain the enclosed animals.
  - **Exception** Large gates can be incorporated into the perimeter fence of carnivore enclosures if the Director-General is satisfied that adequate security measures have been incorporated. These include standard operating procedures and physical installations that prevent the gates from being unlocked except by a person who has removed all unrestrained carnivores from the enclosure.
- 2) Design of main enclosures and holding facilities must ensure that the enclosed carnivore can be safely and routinely confined in or out of its main enclosure when access by staff to either section is necessary.
- 3) All gates/doors/slides and other entry devises must be as effective in containing the animals as the enclosure barrier. They must be designed and maintained to prevent the animal from damaging its safe operation and/or unfastening the securing device.
- 4) All gates/doors/slides and other entry devises must be designed and maintained so that they can be safely operated and secured in position as required. The control mechanism must be situated in an area so that the animal is unable to contact the person operating the controls.
- 5) All gates/doors/slides and other entry devises must be securely locked when closed. Locks used in carnivore enclosures must be of the type which only allow removal of the key once the lock is secured.

#### Clause 5 Enclosure Furniture

- 1) Sight barriers must be provided so that animals have the opportunity to withdraw from visual contact.
- 2) A carnivore enclosure must contain a bathing pond/container with a diameter and depth sufficient to allow normal bathing behaviour if the Director-General determines that it is necessary in the circumstances.
- 3) The pond/container must have a non-slip surface and no sharp edges.
- 4) The pond/container must be kept filled with clean drinkable water. Ponds that are not cleaned daily must contain clean drinkable water at all times otherwise an additional water trough filled with clean drinkable water must be available to the enclosed animals.
- 5) Display enclosures and holding facilities for ursids, felids, procyonids and viverrids must

include scratching posts or logs and climbing structures. These species must be able to climb to a minimum height of 1.8 metres, with the following exceptions:

- a) Sun Bears must be provided with climbing structures at least 4.0 metres high.
- b) Clouded Leopards must be provided with climbing structures at least 2.5 metres high.
- 6) Carnivores must have access to an area where they can bask in the sun.
- 7) Structural complexity must be provided within the enclosure, to allow carnivores opportunities to hide, climb and escape aggressive behaviour.
- 8) Fennec foxes, Otters and Meerkats are very active species so they require adequate stimulation to avoid developing stereotypic behaviour. They are known to develop stereotypic behaviour in small enclosures containing insufficient stimulation.

#### Clause 6

## **Spatial Requirements**

- 1) The size and shape of enclosures for carnivores must provide freedom of movement, both vertically and horizontally and must not fall below the minimum requirements set out in Appendix 1.
- 2) Enclosures may have less than the prescribed floor area if the exhibit is for an arboreal species and the additional height provides compensatory living room for the animals and the Director-General determines that it is necessary in the circumstances.
- 3) Small Clawed Otters a water body suitable for swimming must be provided. The water body surface area must be no less than  $25m^2$  (for enclosures holding 1-10 animals). This surface area must be increased by  $2.5m^2$  for each additional animal. The depth of the water must be a minimum of 1.0 metre on display and 0.5m in off display areas that are used for medium or long term holding of animals. At least 50% of the pool area must be at the minimum depth.

## Clause 7

#### **Off-exhibit Holding Enclosures**

- 1) Holding facilities for felids and ursids must include denning facilities so that all individuals in the holding facility may be denned separately.
- 2) Dens must be weatherproof and kept dry.
- 3) Animals held off-exhibit (not including short term holding yards) for periods up to 90 days (medium term holding enclosure) must be held in enclosures that have a surface area no smaller than that indicated for the species by the bracketed figure in the second column of Appendix 1. Animals held off exhibit for periods greater than 90 days must be held in enclosures that meet exhibit size area requirements as outlined in Appendix 1.

# Part 3 – Husbandry and Management

Carnivores must be under the supervision of a person who has been adequately trained and capable of:

- a) safely handling and restraining the carnivores exhibited;
- b) minimising the likelihood of carnivore attacks on keepers, other members of staff, and members of the public;
- c) minimising undue stress experienced by carnivores;
- d) providing adequate diets for the carnivores held;
- e) recognising aberrant behaviour and indicators of ill health in the species under his/her supervision; and
- f) using an adequate firearm in cases of emergency.

Clause 9 Entering Enclosures

- 1) All carnivores must be removed from their enclosure before any person is permitted to enter that enclosure, due to their potential danger to humans.
- 2) The requirements of (1) do not apply where:
  - a) the carnivores are tame specimens of the following animals: domestic dogs *Canis lupus familiaris*, ferrets *Mustela mustela* or domestic cats *Felis catus*; or
  - b) where it is recognised that the animal(s) concerned is (are) at a stage of development (weighing less that 20kg) that presents no risk of serious injury to people; or
  - c) the carnivores weigh less than 20kg; or
  - d) the carnivore(s) is(are) anaesthetised by a veterinarian or other authorised person; or
  - e) the animal(s) is(are) restrained/netted; or
  - f) an experienced keeper enters an enclosure housing only pandas or binturongs; or
  - g) protection is ensured by a vehicle which prevents contact between its occupants and any carnivore; or
  - h) an animal trainer, approved by the Director-General, needs to enter the enclosure for training or performance purposes.

#### *Note*

A keeper should ordinarily remove a small carnivore from its enclosure prior to entering that enclosure.

#### Clause 10

- 1) Carnivores weighing more than 20kg must not be enclosed in walk-through enclosures.
- 2) An exhibitor must not cause or permit a member of the public to handle or touch a carnivore except where this occurs under the strict supervision of a suitably experienced member of the exhibitor's keeping staff, the animal weighs less than 20kg and the exhibitor believes, on reasonable grounds, that the animal presents no risk of injury to people.
- 3) An exhibitor must not cause or permit a carnivore weighing more than 20 kg to be removed from an enclosure for the purposes of allowing a member of the public to handle or touch it.
- 4) A safety fence must be provided to keep members of the public from coming into contact with enclosed carnivores.
- 5) The requirements of (1), (2) and (3) do not apply where the carnivores are tame specimens of the following animals: domestic dogs *Canis lupus familiaris*, Ferrets *Mustela mustela* or domestic cats *Felis catus*.

Clause 11 Feeding Routine

If carnivores are to remain in an enclosure while food is being provided in the enclosure, it must be possible for the keepers to carry out this task from a position where they cannot be reached by the animal. Exemptions to this Clause are found in Cause 9(2)(a), (b), (c), (f), (g) and (h).

## Clause 12 Animal Service Areas

- 1) Animal service areas adjacent to carnivore enclosures must contain well-marked danger zones and appropriate warning signs.
- 2) A high-pressure water hose or fire extinguisher (CO<sub>2</sub> type) for animal control must be available at all times for use in these areas.

Clause 13 Recapture Plans

- 1) An exhibitor must not cause or permit a carnivore species to be exhibited until the Director-General is satisfied that the exhibitor has a suitable plan for recapture of individuals of that species that have escaped (a) from an enclosure, and (b) from an enclosure and from the exhibitor's establishment.
- 2) Adequate firearms must be kept on the premises for use in case of emergency by appropriately trained staff. Firearms must be safely used and stored at all times in accordance with the Firearms Act, 1996.

## Part 4 – Health

An exhibitor must not cause or permit a carnivore species to be exhibited until the Director-General is satisfied that the exhibitor has established a program by which the exhibitor's veterinarian will:

- a) vaccinate that species for viral diseases; and
- b) monitor and control the level of internal and external parasites of that species; and
- c) be able to safely anaesthetise individuals of that species when required.

Clause 15 Panleucopenia

Due to the possibility of transmitting panleucopenia exhibitors must be able to demonstrate that they have taken all reasonable steps to exclude stray cats (*Felis catus*) from establishments exhibiting felines, mustelids or procyonids.

## Part 5 – Behaviour

#### Clause 16

#### **Inter- and Intra-specific Interaction**

- 1) Enclosures must contain no more than one species of carnivore except where the enclosure allows space sufficient to ensure the avoidance of inter-specific aggression or stress. Carnivore species that hybridise must not be kept in the same enclosure.
- 2) If a carnivore is being unduly stressed by the aggression/presence of another carnivore(s) in the enclosure, then it, or the other carnivore(s), must be removed from the enclosure.
- 3) Felids are to be housed in any one of the following ways:
  - a) alone (except lions) or as a female with her sub-adult offspring;
  - b) as a compatible pair, with or without sub-adult offspring;
  - c) as a single sex group (only in the case of lions and cheetahs);
  - d) as a juvenile group while all animals remain under breeding age; or
  - e) as a pride in the case of African lions.
- 4) Canids are to be housed in one of the following ways:
  - a) as a pack;
  - b) as a lone female with her sub-adult offspring;
  - c) as a compatible pair, with or without sub-adult offspring; or

- d) as a single sex group.
- 5) Meerkats are to be housed as groups or pairs due to their highly social nature.

#### Note

The off-exhibit medium-term holding enclosures for meerkats should preferably adjoin the exhibit. This is particularly valuable for managing breeding groups as it allows new animals to be introduced more safely.

- 6) A carnivore which, in the opinion of the Director-General, is of a social species (social group "G" and "P" in Appendix 2) must not be exhibited alone except as required for veterinary reasons or where the exhibitor is arranging for acquisition of a mate or disposal of the animal to another establishment. Signage for such a lone animal must explain the normal social grouping of the species and advise of the intended acquisition of a mate or its intended disposal to another establishment.
- 7) The breeding of carnivores may be required to follow a program recommended by the Australasian Regional Association of Zoological Parks and Aquaria.
- 8) Except as the Director-General otherwise authorises, transportation of a carnivore within Australia by NSW exhibitors must comply with the IATA (International Air Transport Association) regulations for that carnivore species.

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# **Acknowledgments**

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# **APPENDIX 1 – Enclosure Dimensions and Materials**

- Figures in brackets (second column) represent the minimum surface area for medium-term holding enclosures for one pair.
- Mesh fence height is from ground level to the point where the inhang or roof starts.
- \*\*\* in columns 6,7,8 means these animals must not be enclosed by a moat or an unroofed mesh fence.
- All moats must be wet with the exception of the bears, which can have wet or dry moats.
- Roof unroofed, mesh-fenced enclosures, even with an inhang, are not permitted for this species.
- A roof not needed if perimeter walls are not climbable.

NAME	SURF. AREA (SQ.M)	MAX. NO. ANIMALS FOR ENCLOS. SIZE	ADDIT. AREA FOR EACH EXTRA ANIMAL IN EXHIBIT (m²)	ADDITION. AREA FOR EACH EXTRA ANIMAL IN MEDIUM TERM HOLDING YARD (m²)	HEIGHT ABOVE WATER OF WALL ADJOIN. MOAT (M)	MOAT WIDTH (M)	MOAT DEPTH (M)	SMOOTH FACED UNCLIM- BABLE WALL (M)	MESH FENCE HEIGHT (M)	WIRE MESH DIAM. (MM)	MESH SPAC. (MM)	DEPTH OF INHANG (M)	INHANG (Degrees above horiz)
FAMILY Canidae													
New Guinea Wild Dog Canis lupus hallstromi	200(25)	2	15	10	1.0	2.5	1.8	-	2.5	3	75 x 50	0.7	45
Maned Wolf Chrysocyon brachyurus	200(25)	2	15	10	1.0	2.5	2.0	-	2.0	3	75 x 50	0.5	45
Dhole Cuon alpinus	200(25)	2	15	10	***	***	***	-	2.5	3	75 x 50	0.7	45
Fennec Fox Fennecus zerda	60(10)	2	5	5	1.0	2.5	1.0	-	2.0	2	50 x 50	0.3	45
African Wild Dog  Lycaon pictus	400(50)	2	15	15	1.0	3.5	2.0	-	2.0	3	75 x 50	0.5	45
European Red Fox Vulpes vulpes	100(25)	2	10	7	***	***	***	-	2.4	3	50 x 50	Roof	Roof

NAME	SURF. AREA (SQ.M)	MAX. NO. ANIMALS FOR ENCLOS. SIZE	ADDIT. AREA FOR EACH EXTRA ANIMAL IN EXHIBIT (m²)	ADDITION. AREA FOR EACH EXTRA ANIMAL IN MEDIUM TERM HOLDING YARD (m²)	HEIGHT ABOVE WATER OF WALL ADJOIN. MOAT (M)	MOAT WIDTH (M)	MOAT DEPTH (M)	SMOOTH FACED UNCLIM- BABLE WALL (M)	MESH FENCE HEIGHT (M)	WIRE MESH DIA. (MM)	MESH SPAC. (MM)	DEPTH OF INHANG (M)	INHANG (Degrees above horiz)
FAMILY Ursidae	,			,				1		Γ	·		
American Black Bear Ursus americanus	300(30)	2	20	15	2.0	3.0	4.0	-	4.0	5	75 x 50	1.0	45
Syrian Brown Bear Ursus arctos syriacus	300(30)	2	20	15	2.0	3.0	4.0	-	4.0	5	75 x 50	1.0	45
Kodiak Bear Ursus a. middendorffi	300(30)	2	20	15	2.0	3.0	4.0	-	4.0	5	75 x 50	1.0	45
Malayan Sun Bear Helarctos malayanus	200(20)	2	15	10	2.0	3.0	2.5	3.5	2.8	5	75 x 50	1.0	45
FAMILY Mustelidae	1			-				1		•			
Small-clawed Otter Amblonyx cinerea	100(10)	10	5	5	-	-	-	1.3	1.5	2	50 X 50	0.3	45
Ferret Mustela mustela	15(3)	3	1	1	***	***	***	1.2	1.5	1	10 X 10	Roof <sup>A</sup>	Roof <sup>A</sup>
FAMILY Procyonidae						,		1					
Red Panda Ailurus fulgens	100(10)	2	5	5	***	***	***	1.5	3.6	2	75 x 50	Roof <sup>A</sup>	Roof <sup>A</sup>
FAMILY Viverridae													
Binturong Arctictis binturong	100(10)	2	5	5	***	***	***	1.4	3.6	3	75 x 50	Roof <sup>A</sup>	Roof <sup>A</sup>

NAME	SURF. AREA (SQ.M)	MAX. NO. ANIMALS FOR ENCLOS. SIZE	ADDIT. AREA FOR EACH EXTRA ANIMAL IN EXHIBIT (m²)	ADDITION. AREA FOR EACH EXTRA ANIMAL IN MEDIUM TERM HOLDING YARD (m²)	HEIGHT ABOVE WATER OF WALL ADJOIN. MOAT (M)	MOAT WIDTH (M)	MOAT DEPTH (M)	SMOOTH FACED UNCLIM- BABLE WALL (M)	MESH FENCE HEIGHT (M)	WIRE MESH DIA. (MM)	MESH SPAC. (MM)	DEPTH OF INHANG (M)	INHANG (Degrees above horiz)
FAMILY Felidae													
Puma Puma concolor	200(30)	2	20	15	***	***	***	-	3.0	5	75 x 50	Roof	Roof
Serval Leptailurus serval	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Asiatic Golden Cat Catopuma temminckii	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Fishing Cat Prionailurus viverrinus	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Jaguarundi Felis yagouarandi	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Caracal Caracal caracal	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Bobcat Lynx rufus	85(15)	2	15	10	***	***	***	-	3.0	3	75 x 50	Roof	Roof
Cheetah Acinonyx jubatus	400(30)	2	20	15	1.8	6	1.8	-	2.5	3	75 x 50	0.5	45
Clouded Leopard Neofelis nebulosa	85(15)	2	15	10	***	***	***	-	3.6	3	75 x 50	Roof	Roof
Lion Panthera leo	300(30)	2	20	15	1.8	8	1.8	-	4.5	5	75 x 50	1.0	45

NAME	SURF. AREA (SQ.M)	MAX. NO. ANIMALS FOR ENCLOS. SIZE	ADDIT. AREA FOR EACH EXTRA ANIMAL IN EXHIBIT (m²)	ADDITION. AREA FOR EACH EXTRA ANIMAL IN MEDIUM TERM HOLDING YARD (m²)	HEIGHT ABOVE WATER OF WALL ADJOIN. MOAT (M)	MOAT WIDTH (M)	MOAT DEPTH (M)	SMOOTH FACED UNCLIM- BABLE WALL (M)	MESH FENCE HEIGHT (M)	WIRE MESH DIA. (MM)	MESH SPAC. (MM)	DEPTH OF INHANG (M)	INHANG (Degrees above horiz)
Jaguar Panthera onca	200(30)	2	20	15	***	***	***	-	3.6	5	75 x 50	Roof	Roof
Leopard  Panthera pardus	200(30)	2	20	15	***	***	***	-	3.6	5	75 x 50	Roof	Roof
Tiger Panthera tigris	300(30)	2	20	15	1.8	8	1.8	-	4.5	5	75 x 50	1	45
Snow Leopard Uncia uncia	200(30)	2	20	15	***	***	***	-	3.6	3	75 x 50	Roof	Roof
FAMILY Herpestidae													
Meerkat Suricata suricatta	60(10)	6	5	2	1.0	1.5	0.75	1.2	Roof*	2	3 x 3	-	-

<sup>\*</sup> A roof is required if mesh fencing is used to contain meerkats.

# **APPENDIX 2 – Carnivore Biology and Exhibit Guide**

Solid walls advised – means that the species is able to climb typical wire fences and may be able to climb over wire inhangs.

Species	Social group	Peak Activity	Level	Mesh o/hang needed	Roof Needed	Wire under substrate	Solid walls advised	Piano wire permissible	Glass front permissible	Moat	Water feature advised
FAMILY Canidae	1						_				
New Guinea Wild Dog Canis lupus hallstromi	G	С	Т	yes	-	Pe	-	yes	yes	wet	-
Maned Wolf Chrysocyon brachyurus	S/P	C/N	Т	yes	-	Pe	-	yes	yes	wet	-
Dhole Cuon alpinus	G	С	Т	yes	-	Pe	-	yes	yes	no	yes
Fennec Fox Fennecus zerda	P	N	Т	yes	-	E	-	-	yes	-	-
African Wild Dog  Lycaon pictus	G	С	Т	yes	-	Pe	-	yes	yes	wet	-
Red Fox Vulpes vulpes	P	N	Т	-	yes	E	-	yes	yes	-	-
FAMILY Ursidae											
Black Bear Ursus americanus	S	D/C	T/A	yes	-	S	-	-	yes	wet/dry	yes
Syrian Brown Bear Ursus arctos syriacus	S	D/C	Т	yes	-	S	-	-	yes	wet/dry	yes
Kodiak Bear Ursus a. middendorffi	S	D/C	Т	yes	-	S	-	-	yes	wet/dry	yes
Sun Bear Helarctos malayanus	S	N/C	T/A	yes	-	S	yes	-	yes	wet/dry	-

Species	Social group	Peak Activity	Level	Mesh o/hang needed	Roof needed	Wire under substrate	Solid walls advised	Piano wire permissible	Glass front permissible	Moat	Water feature
FAMILY Mustelidae	_										
Small-clawed otter Amblonyx cinerea	G	D	T/Aq	yes	-	S	yes	-	yes	-	yes
Ferret Mustela mustela	S	D/C	T/B	yes	-	S	yes	-	yes	-	-
FAMILY Procyonidae											
Red Panda Ailurus fulgens	S	N	A	-	-	-	yes	yes	yes	-	-
FAMILY Viverridae											
Binturong Arctictis binturong	S	N	A	-	-	-	yes	yes	yes	-	-
FAMILY Felidae											
Puma Puma concolor	S	C/N	T/A	-	yes	S	-	yes	yes	-	-
Serval Leptailurus serval	S	С	Т	-	yes	S	-	yes	yes	-	-
Asiatic Golden Cat Catopuma temminckii	S	N	T/A	-	yes	S	-	yes	yes	-	-
Fishing Cat Prionailurus viverrinus	S	C/N	Т	-	yes	S	-	yes	yes	-	yes
Jaguarundi Felis yagouarandi	S	D/C	Т	-	yes	S	-	yes	yes	-	-
Caracal Caracal caracal	S	N	Т	-	yes	S	-	yes	yes	-	-

Species	Social group	Peak Activity	Level	Mesh o/hang needed	Roof needed	Wire under substrate	Solid walls advised	Piano wire permissible	Glass front permissible	Moat	Water feature advised
Bobcat Lynx rufus	S	С	Т	-	yes	S	-	yes	yes	-	-
Cheetah Acinonyx jubatus	S/G	D	Т	yes	-	S	-	yes	yes	wet	-
Clouded leopard Neofelis nebulosa	S	C/N	T/A	-	yes	S	-	yes	yes	-	-
Lion Panthera leo	G	C/N	Т	yes	-	S	-	-	yes	-	-
Jaguar Panthera onca	S	C/N	T/A	-	yes	S	-	-	yes	-	-
Leopard Panthera pardus	S	N	T/A	-	yes	S	-	-	yes	-	-
Tiger Panthera tigris	S	C/N	Т	yes	-	S	-	-	yes	wet	yes
Snow Leopard <i>Uncia uncia</i>	S	N	Т	-	yes	S	-	yes	yes	-	-
FAMILY Herpestidae											
Meerkat Suricata suricatta	G	D	Т	yes	-	E	yes	-	yes	-	-

Table 1 - Abbreviations used in the table are:-

**Social Group** - S = solitary G = group/family P = bonded pairs

**Peak Activity** - C = crepuscular N = nocturnal D = diurnal / = denotes a combination of active periods

**Activity Level** - T = terrestrial A = arboreal Aq = aquatic B = Burrows / = denotes a combination of levels

Wire Under Substrate -  $Pe = perimeter^1$   $S = sink into ground^2$  E = entire floor area must be lined with subterranean wire

- 1 Perimeter means the wire needs to only go across the surface of the ground at least 1m around the perimeter.
- 2 Perimeter means the wire needs to only go into the ground at least 1m around the perimeter.