Code of Practice

Wildlife

Minimum standards for exhibiting wildlife in Queensland

Code of Practice of the Australasian Regional Association of Zoological Parks and Aquaria Queensland

- Minimum standards for exhibiting wildlife in Queensland

Nature Conservation Act 1992

Environmental Protection Agency
www.epa.qld.gov.au ABN 87 221 158 786

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

General conditions

Ratified by Queensland Parks and Wildlife Association (now known as Australasian Regional Association of Zoological Parks and Aquaria Queensland (ARAZPAQ)) on 6 May 1994.
Approved by the Minister for Environment and Heritage on 24 March 1995.
Prepared by ARAZPAQ and the Environmental Protection Agency (EPA).

Introduction

Under the provisions of the *Nature Conservation Act 1992*, the keeping of wildlife for public display requires prior approval by the Director-General of the EPA.

Applications should be submitted to:

Licences and Permits Co-ordination Unit
Environmental Protection Agency
PO Box 155
Brisbane Albert Street QLD 4002
Enquiries: 1300 368 326
Facsimile: (07) 3115 9600
Email: eco.access@epa.qld.gov.au

Some key EPA requirements in reference to establishing a wildlife park are to be found in Appendix 1.

It should also be noted that some species fall under other Government Department regulations. For further information contact the President of ARAZPAQ .

1. Husbandry

1.1 General requirements

a) Enclosures must be maintained in sufficiently good repair to ensure that they will contain the animals at all times and are to be safe for the animals, for the staff attending them and for the public.

b) Enclosures must be well drained and have either a readily cleanable substrate or be of a material which can be replaced to avoid the accumulation of faeces and urine.

c) Substrate of enclosures shall be cleaned daily. Any fixtures and fittings must be replaced as necessary and be maintained in a clean and hygienic condition, free from the accumulation of faeces and urine.

d) Clean accessible drinking water facilities must be provided. Water must be replaced at least once daily.

e) Suitable isolation facilities must be provided for quarantine of incoming or sick animals.

f) Animals kept in captivity are to be under the supervision of a person who has had practical experience in relevant captive animal management for a period of at least 3 years.

g) Each establishment must develop a relationship with a qualified veterinarian or veterinary practice to provide emergency care, give advice and carry out preventative medicine programs as necessary.

2. Records

2.1 Identification

Each animal must be individually identifiable by an approved method of identification specified in the species specific standards.

a) Establishments must keep records of all animals on an individual basis, as specified in the species specific standards and in a form which can be quickly and easily examined, analysed and compared with those kept by other establishments. (See Appendix 2.)

b) All documents and other information pertaining to each animal, including records from previous locations, must be kept safely.

c) Animals moving to new locations must be accompanied by copies of all records relevant to those animals. (Refer Appendix 2 transfer sheet.)

d) The records must provide for each animal at least the following information:

i) the method of identification, the identification number, scientific name, any personal name and any distinctive markings;

ii) the origin (i.e. details of the wild population or of the parents and their origin, and of any previous location)

iii) the dates of acquisition and disposal, with details of circumstances and addresses;

iv) the date or estimated date of birth, and the basis on which the date is estimated;

v) details of routine weighings;

vi) clinical data, including results of physical examination by a qualified veterinarian and details of and date when any form of treatment was given, together with results of routine health examinations;

vii) breeding and details of any offspring;

viii) the date of death and the results of any post mortem examination.

3. Transport

3.1 General requirements

a) Animals to be transported for the purposes of stocking an authorised display must be brought to the establishment under a movement advice or other relevant permit issued by the EPA.

b) Animals must have access to food and water as required for the length of the journey.

c) Crates or cages used for transferring animals must be large enough to prevent cramping of the animals but not large enough to predispose to injury through excessive movement. (See individual animal recommendations.)

d) All animals being transported by road must be appropriately contained to prevent uncontrolled movement or escape during transfer. Crates or cages should be loaded in a manner which ensures their stability during the journey.

e) During road transport animals must be accompanied by a qualified keeper or veterinarian at all times.

d) The issue of any subsequent Wildlife Exhibitors Licence is to be subject to the incorporation of all or any endorsements made by the Department on the plans and specifications submitted.

Appendix 2 — Suggested animal record keeping system

ARAZPAQ recommended animal record keeping standards

The following record sheets are those formulated for ARAZPAQ to act as a guideline for record keeping. Basically, record keeping does require diligence but the benefits far outweigh the work involved if you are committed to managing your collection properly.

Listed below are the recommended reports. The daily report format is based on the system that has been adopted Australia wide by the major zoos in order to get some consistency in records being kept. The monthly report format will assist with filling in your annual returns for the EPA.

Record types

1) **Daily report:** To be filled in daily by the keepers. It should list all events, observations and notes from that day.
2) **Monthly report:** This is a monthly summary of animal accessions, births, deaths and transactions. It can be used to assist with your annual returns to EPA.
3) **Individual specimen report:** This is a record of the important details for each animal. For some it will need to be updated regularly according to breedings, treatments or weighings.
4) **Species (taxon) report:** This is a summary of all individuals held for each species.
5) **Transaction report:** This report accompanies animals being sent to another institution to provide them with the necessary information on that individual.

Explanatory note: When denoting numbers and sex of a number of individuals it is written showing numbers of males first, numbers of females second and numbers of unknowns third. For example 3 males, 4 females and 2 unknown sex animals is written 3.4.2. One male is written 1.0.0, one female 0.1.0 etc.

1) Daily reports

A sample page with explanatory codes follows. The book can be printed with the codes in the front cover and the park's name on the top. It can be set out so copies of each day's reports can go to the manager or curator while one copy remains in the book. Signature spaces on the bottom helps locate staff and might be used as a staff sign-on procedure.

Institution: Blue Moon Sanctuary
Daily report
Date: 22.1.94

Code	Sex m	f	?	Species	ID	ARKS*	Encl.	Information/notes
INT	0	0	2	Gouldian finch	Red (R)		2-21	To the hospital — Red-faced female. Fluffed and laboured breathing
W/L	1	0	0	Bilby	BQ17		B/H	Weight 2.02kg — very active eating well
DIS	0	0	5	Bearded dragon	R/H			Five released — eggs hatched in tank
BRD	0	0	0	Rose-crown pigeon			4-1	Male chasing female

2) Monthly reports

A sample copy follows. It is fairly easy to set up on your word processor so it can be filled in regularly as relevant things happen.

Monthly report
Institution Blue Moon Sanctuary
Month of January 1994

Accessions **Page 1**

Accession no	Date	Species	Injury	Treatment & Result
A001	1.1.94	Noisy miner	Fell out of nest	Handraised — released in grounds 20.1.94
A002	3.1.94	Blue tongue lizard	Dog attack	Died
A003	3.1.94	Black duck	No visible injury	Released o pond after observation

Stock acquisitions **Page 1**

Accession no	Date	Species	Acquired from	To enclosure no.
A004 -007	7.1.94	Diamond dove x 4	Dovetown	Grassland aviary
A008	12.1.94	Emu	Emu farm	Kangaroo paddock

Births **Page 1**

Date	Species	No born m	f	?	Individual	Parents	Comments
2.1.94	Grey kangaroo	1	0	0	yellow tag	Lucy and Bo	Top paddock – out of pouch
6.1.94	Red winged parrot	0	0	4		C6 and C8	Breeding aviary 2

Transactions and releases **Page 1**

Date	Species	No and sex m	f	?	Method of disposal	Reason
14.1.94	Boobook owl	1	0	0	To Joe Bloggs	Rehabilitation
20.1.94	Australian ibis	20	20	20	To Currumbin Sanctuary	Excess

Deaths **Page 1**

Date	Species	No and sex m	f	?	History/enclosure	Reason for death/comment/pm results
13.1.94	Red necked	1	0	0	Kangaroo wallaby paddock	Found dead – choked on a paper bag

Species (taxon) report
Institution: Blue Moon Sanctuary **Report date:** 2/12/93
Scientific name: Trichorurus vulpecula
Common name: Common brushtail possum

IDs	House_ name/tatoo/cage/studbook no.	Sex/age	Dates: Birth/in/out	Origin/party:Dam/sire/their ID
4001	Brushy	m 4yrs	Unk 6/6/89	Wild born Gold Coast
4002	Martha	f 2 yrs	Unk 7/8/91	Wild born Brisbane
4003	Joey	f 5 months	5/06/1992	captive born: 4001
			5/01/1993	4002 death

Animal transfer sheet

To: Green lagoon Sanctuary **Date:** 12.12.93
Common name: Pigeon
Scientific name: Columba leucomela **Subspecies:**
Sex: female **Studbook no.:**
Name/tag/distinguishing features: BM23 R

History>>>
Place of birth/origin: Blue Moon **Date:** 25.12.91
Sire/dam/place of birth: Blue Moon **Date:** Unk
Rearing: Parent **Weight:** **Date:**
Reproductive history: None

Diet details: Pigeon mix

Special habits or problems:

Housing, compatibility, comments:

Medical history: Canker treated March 1992

c) The plantation must be partially established prior to the arrival of the koalas and must be capable of sustaining 50% of the colony within 5 years, and aim for total self sufficiency within 10 years.

d) taking the date of promulgation of these conditions as the base date to comply with the 5 year recommended time span.

2. Facilities

The following minimum guidelines will apply to structures used to house koalas for display:

a) Each enclosure is to have a wall with a minimum height of 1.2 metres and is to be constructed of a material with an internal and external surface which will prevent the escape of the koalas (and prevent entry of wild koalas) or such other minimum standard as is determined by Government legislation.

b) Each cage or enclosure is to provide protection for the koalas against interference from other animals and the public.

c) Where a mixed sexes exhibit is proposed, each cage or enclosure with less than 50 square metres of floor space must not contain more than two male koalas thirty months of age or older. This requirement shall apply proportionally to enclosures of up to 500 square metres of confined floor area in size.

d) Enclosures may be of open, semi-enclosed or totally enclosed design.

e) The size and shape of enclosures must provide freedom of movement, both vertically and horizontally.

f) Each cage or enclosure is to be fitted with stout branches and/or tree limbs.

g) Each cage or enclosure is to have reticulated water available for both cleansing and koala drinking purposes.

h) Fresh soil may be provided, but not around the base of vertical supports, to provide for supplementation of mineral intake.

i) There must be a least two resting forks per koala not less than 1.2m above the ground on a vertical support and no closer than 0.9m to the next vertical support.

j) Horizontally aligned limbs at a minimum height of 1.2 metres off the ground may also be used to connect the resting limbs and cleaned.

k) All supports and branches must provide sufficient traction for koalas to climb easily and safely.

3. Diet and feeding

a) An establishment applying for a permit to exhibit koalas must satisfy the EPA that it has guaranteed access to adequate fresh supplies of eucalypt leaves that it has guaranteed access to adequate fresh supplies of eucalypt leaves from at least five suitable koala food tree species.

Known food trees growing naturally in Queensland include the species listed:

E. camaldulensis	River red gum
E. crebra	Narrow-leaved red ironbark
E. drepanophylla	Grey ironbark
E. dunnii	Dunn's white gum
E. exserta	Queensland peppermint

4.3 General

All requirements for maintaining records in the general conditions section must also be compiled with.

5. Transport

5.1 General

All conditions for transport outlined on the document on general conditions will apply.

5.2 Journeys over two hours

a) Koalas must be transported individually in solid framed cages measuring at least 95cm × 75cm × 95cm high.

b) The cages must have removable, leakproof drop trays fitted at the base. The sides and top must be stout mesh and be fitted with light covers of hessian or shadecloth. Each cage must be fitted with a resting fork.

c) For the trip fresh browse leaves must be placed in the cage with the koala, the amount to be determined by the qualified person in charge.

d) Within each transport cage koalas must not be subjected to temperatures greater than 25°C or less than 10°C during the trip.

e) The koalas must not be removed from the cages or handled in transit unless it is considered essential for the well-being of the animal by the veterinarian or accompanying keeper.

f) The person accompanying road transported koalas must provide a detailed report to the receiving institution on the animals behavior prior to and during transport. In the case of air transport, a detailed written report should be forwarded to the receiving institution with the koala.

5.3 Journeys of less than two hours

a) Koalas must be transported individually in solid framed cages measuring at least 55cm × 45cm × 60cm high

b) Solid sided cages must have air holes on all sides and the top

c) Each box must be fitted with at least one vertical support or resting fork

d) Conditions c), d), e), f) of Section 5.2 also apply

5.4 Movement reports

The Executive Officer of ARAZPAQ recommends that a written report be submitted to the Executive Officer within 30 days on transport operations, in particular detailing any problems arising and offering suggestions to avoid future problems.

6. Quarantine

a) Koalas to be transferred between establishments must be subject to a period of 30 days quarantine at either the importing or exporting establishment unless an exemption from the quarantine period is advised and certified by a veterinarian following a thorough physical examination. The certificate must also establish that the koala is not

7.3 Conditions relating to Section 7.1 d) — Types of photographic purposes

a) At no time are the koalas within the enclosure to be disturbed. This includes disturbance by touching, movement of resting forks or by audible distractions.

b) Sufficient numbers of experienced, identifiable employees must be in attendance to protect the koalas from abuse and harassment and to ensure that the koalas are not upset.

8. Death of stock

Under the EPA requirements deaths of koalas must be reported in writing to the Chief Executive of the EPA or to the relevant Regional Director within one month. The report must be accompanied by an autopsy report prepared by a qualified veterinarian.

9. Provisions of other Acts

The above exhibit standards of ARAZPAQ are to be regarded as being the recommended minimum standards for wildlife parks to achieve and are not in derogation of the provisions of the *Nature Conservation Act 1992* and Regulations under the Act.

Where applicable, the Acts and Regulations of other statutory bodies must be complied with.

Appendix 1 — Koala monthly weighing record

Institution name:

Koala weights
Name:
ID number:

Date	Weight	Note

Appendix 2 — Koala handling time records

Institution:

Date:

Koala name	Time out	Time in	Total	Handler

Part B — Macropods (kangaroos, wallabies and allies)

Ratified by Queensland Parks and Wildlife Association (now known as Australasian Regional Association of Zoological Parks and Aquaria Queensland (ARAZPAQ)) on 6 May 1994
Approved by the Minister for Environment 24 March 1995.
Prepared by ARAZPAQ and the Environmental Protection Agency (EPA).

General information

Members of the Macropodoidea are characterised by powerfully developed hind limbs, long feet and an elongated fourth toe. They are such a diverse group that they fill a much broader ecological role than any other family or super family of large mammals elsewhere in the world. Macropod species make up about 40% of the marsupial fauna of Australia.

Macropods are divided into two families, the *Potoroidae* and the *Macropodidae*.

The Potoroidae includes the Musky Rat Kangaroo, Potoroos and Bettongs. These are similar in appearance to Kangaroos but are much smaller in stature. Their diet varies between species but tree roots, tubers and invertebrates tend to be major components. The habitat of Potoroos range from wet sclerophyll forests to heathland while Bettongs are animals of drier country ranging over dry sclerophyll forest and desert sand hills.

The Macropodidae, despite general similarities in appearance, have a wide range of adaptations. The Hare Wallabies, Pademelons, Swamp Wallaby and Quokka are predominantly browsing animals feeding on tender shoots or twigs of shrubs and trees. Kangaroos, typical Wallabies, Rock Wallabies and Nail Tail Wallabies are grazers feeding on herbage and grasses. They are typically inhabitants of open plains but often retire to forest areas to sleep during the day.

Every effort should be made to obtain Macropods from existing captive stocks. Apart from bona fide scientific research or educational purposes, permits to take Macropods from the wild are normally not issued by the EPA.

The standards presented here are to be read in conjunction with the general conditions section of the Code of practice of ARAZPAQ .

1. Husbandry

a) A suitably qualified attendant must be nominated to be in charge of the proposed display. Such an attendant must be capable of:

   i) safely handling and restraining macropods.

   ii) minimising the likelihood of and danger of attacks on keepers and visitors by macropods.

   iii) minimising the stress experienced by macropods resulting from keepers carrying out routine duties.

   iv) providing adequate maintenance diets for the macropods held.

   v) demonstrating their competency in the maintenance and husbandry of macropods.

b) Particular attention should be paid to removing faeces from around feeding stations, watering points and resting areas.

c) Without limiting the generality of (b), suitable ground cover for the following macropod species includes:

   i) Musky rat-kangaroo rocks Bettong/hare wallabies grass tussocks, Nailtails, dorcopsis low plants/bushes Pademelons, quokka small shade trees, solid and hollow logs, dried grass, leaves to make nests, soil deep enough for burrowing species to make warrens.

   ii) Rock wallabies, wallaroos large rocks forming a rock knoll, rock crevices, caves, overhangs, low growing shrubs/bushes, small shade trees.

   iii) Tree kangaroos vegetation on easily climbed branches, elevated hollow logs/boxes.

   iv) Other species shade trees — add smaller trees, bushes for Eastern grey kangaroos.

d) Ground cover must be arranged so as to provide numerous pathways and hiding loci which serve to prevent stereotypic behavior.

e) Enclosures for tree kangaroos must include trees which they can climb or rough-barked naturalistic climbing structures. (These may also be provided for musky rat-kangaroos and rock wallabies.) There must be 15 lineal metres of climbing structure tree for each tree kangaroo. Tree kangaroos must be able to climb to a height of at least 2.5m. Enclosure boundaries must be sufficiently distant from trees and climbing structures to prevent tree kangaroos from jumping out. The requirement for naturalistic climbing structures may be met by providing a selection of stout, forked branches, low vertical logs and inclined branches to ensure a variety of arboreal pathways.

f) All animals must be provided with a means of sheltering from wind, rain and extremes of temperature and sunlight. (This requirement may be fulfilled by providing a combination of ground cover or external plantings.)

g) There must be sufficient soft substrate/bedding to allow all macropods to create a hip-hole for comfortable resting.

2.4 Inter/intra-specific aggression reduction

a) Macropod species noted for interspecific aggression must not be held together in the same enclosure.

b) If an individual macropod is being dangerously stressed by the aggression of other animals in the enclosure, it must be removed from that enclosure.

2.5 Space requirements

The following minimum floor areas will apply to structures used to house macropods for display:

a) Species	Minimum floor area(sq.m) for up to two individuals
Potoroos, bettongs, rat-kangaroos	
Rufous bettong *Aepyprymnus rufescens*	10
Tasmanian bettong *Bettongia gaimardi*	10
Burrowing bettong *Bettongia leseuer*	10
Brushtailed bettong *Bettongia penicillata*	10
Desert rat-kangaroo *Caloprymnus campestris*	10
Musky rat-kangaroo *Hypsiprymnodon moschatus*	10
Spectacled hare-wallaby *Lagorchestes corspicillatus*	10

d) Where there are more than one species per exhibit then the area required is the sum of the areas for each individual species.

e) Where visitors are permitted to go into an enclosure with macropods, there must be an area, which at least meets the minimum size requirements for holding yards, which is designated off limits to the visitors so the enclosed macropods may escape unwanted visitor attention.

2.6 Nocturnal house

As all species of macropod are considered to be predominantly nocturnal and/or crepuscular, they may be exhibited in a reversed lighting enclosure which meets the requirements of section 2.5 a), b), c) and d).

2.7 Capture methods

a) A macropod enclosure should include or have access to a confinement run, or well padded crush. Small macropods may be caught in a race made of nets.

b) Other methods of capture include deep hoop nets, capture bags and darting with an appropriate sedative under veterinary supervision.

3. Diet and feeding

a) Supplementary food must be available in addition to the vegetation growing in the enclosure.

b) Omnivorous species (potoroos, bettongs, Hypsiprymnodon) must be provided with the opportunity to obtain animal-based food appropriate to the species in addition to vegetation-based food.

c) The available space at feed and water receptacles must be sufficient to ensure easy access to food and water by each individual.

d) Suitable fibrous material must be a component of all macropod diets.

e) Dry food containers (pellets must be kept clean, dry and free from pellet dust accumulation.)

f) A water trough must be provided which is sufficiently large to allow each macropod to immerse its forelegs for cooling purposes.

4. Records

4.1 Identification

a) Approved methods of ID include eartags, microchips, tattoos (only where ventral surface of ear or inside of hind leg is relatively hairless)

b) Large numbers of individuals in free-ranging populations need not be individually identified.

5. Transport

5.1 General

For all transport trips, macropods should, whenever possible, be transported individually in a container constructed from fibre board, hardboard, wood/plywood or other appropriate material to the design requirements of section 5.2. The specifications of materials to be used in transport box construction are detailed in appendix 1.

7. Provisions of other Acts

The above exhibit standards of ARAZPAQ are to be regarded as being the recommended minimum standards for wildlife parks to achieve and are not in derogation of the provisions of the *Nature Conservation Act 1992* and the Regulations under the Act.

Where applicable, the Acts and Regulations of other statutory bodies must be complied with.

Appendix 1 — Specifications of materials to be used in macropod transport box construction

Macropod weight	Frame (mm)	Side walls (mm)
Over 20kg	25 × 25	13
Under 20kg	20 × 20	6

References

It is recommended staff caring for Macropods undertake the course Welfare of Kangaroos and Wallabies in Captivity run annually during July at Macquarie University, NSW. Details can be obtained through Professor D.W. Cooper on (02) 805 8214.

b) If raptors are to be tethered, then the person wishing to handle the birds shall have received adequate training in the manufacture and use of the following falconry equipment:

- Aylemerie leather jesses
- gloves
- jess swivels
- hoods
- leashes
- perches

1.3 Diet and food collection

a) General

i) Suitable whole animals shall provide at least 50% of the nutritional and energy requirements of raptors, noting that for piscivorous species at least 25% of the dietary requirements shall be fish and for birds of the Accipiter and Erythrotriorchis genera and bird-hunting species of the Falco genera at least 60% of their diet shall be suitable bird species

ii) Suitable whole animals will depend upon the species and will include: mammals such as guinea pigs (for Condors); domestic mice, rats, rabbits (for mammal eating species); fish (for piscivorous species); insects (for insectivorous species); birds, such as coturnix quail, domestic chickens (for bird eating species) and any natural prey species which can be legally obtained.

iii) An establishment applying for a permit to exhibit raptors must have guaranteed access to adequate fresh and/or frozen supplies of suitable whole animals.

iv) Mammal and bird specimens less than six (6) weeks of age shall not form more than 50% by weight of the diet fed to raptors in any one week

v) Except on starve days, a sufficient quantity of food shall be provided daily so that there is some left over each day.

vi) Raptors may be given no more than one starve day a week and there shall be at least three days between any two starve days.

vii) Food items shall be placed on a non-contaminated surface.

b) Quality of food

i) Food supplied to raptors shall be clean and fresh, obtained from a reliable source and, preferably, bred under laboratory conditions.

ii) Before carcasses are offered as food, they shall be cut open and observed for gross lesions suggestive of disease.

iii) The following shall not be fed to raptors:

- any animal that had died, or is suspected of dying from any toxic material, including insecticides, rodenticides, and euthanasing chemicals (carbon dioxide is acceptable).
- animals showing clinical signs of being infected by disease (especially trichomoniasis protozoa in pigeons and doves).

2.2 Treatment facilities

Suitable low light, warm isolation facilities shall be available for treatment of sick animals.

2.3 Inter- and intra-specific interaction (aggression reduction)

a) Raptor species of similar size and hunting capacity may be held together in the same enclosure if they are not noted for inter-specific aggression.

b) If a raptor is being dangerously stressed by the aggression/presence of other raptor(s) causing the stress

2.4 Enclosure fixtures and fittings

a) The total number of perches and/or ledges shall outnumber the number of birds in an aviary. In addition a number of stumps may also be provided.

b) Perch(es)/ledge(s) in the covered shelter shall be placed so that a raptor resting on one of these may avoid visual contact with raptors in adjoining enclosures. All perches should be placed so that birds in adjoining enclosures cannot perch within reach of each other through cage wire.

c) Perches/ledges should be placed so as to encourage the raptors to make maximum use of the flight possibilities within the enclosure. At least one perch should be no less than two (2) metres from the ground making sure to take into consideration the requirements of section 2.4 (j) and (k)

d) Competition for the highest vantage point shall be avoided by providing a number of perches at that height.

e) Enclosures containing raptors which are incapable of normal flight should include rough-barked branches which permit the birds to climb to perches from the substrate.

f) All perches/ledges/tree stumps shall be placed so that birds can perch comfortably without their plumage coming into contact with walls or fixtures.

g) Perches shall be constructed from uncontaminated natural branches and vary in diameter and cross-section so that at least some shall have circumferences not less than the talon span of the species to be housed.

h) Each nocturnal hole-nesting owl shall be provided with at least a darkened corner to hide from the light and provide roost security. Provision of a suitable hollow log is recommended.

i) Where enclosures contain male and female raptors, sight barriers shall be provided so that the sexes can isolate themselves visually where appropriate to the species.

j) Perches must be no closer to the roof of the enclosure than that distance which is needed for the bird's wing to go through its natural arc during take-off and landing.

k) Perches in breeding enclosures should be positioned so that there is sufficient overhead clearance for copulation.

l) An aviary for the housing of raptors shall contain a bathing pond/container with a diameter sufficient to allow normal bathing behaviour and a depth not greater than 15cm and not less than 5cm.

m) The pond/container shall have a non-slip, cleanable surface and no sharp edges.

n) The pond/container shall be kept filled with clean fresh water or where the length of the legs of the shortest bird is less than 15cm to a depth equal to the length of that bird's legs.

Grass owl *Tyto longimembris*	2	4	2
Sooty owl *Tyto tenebricosa*	2.5	5	2.5

3. Records

a) Each raptor shall be individually identified by an approved method of identification — a leg band or microchip.

b) Normal diet (including supplement) and feeding routine should be recorded in the records.

4. Veterinary care

A veterinary monitoring program must take place and include monitoring for:

- overgrowth of beaks and talons (to avoid bumblefoot)
- the level of internal parasites
- incidence of avian tuberculosis

5. Transport

5.1 General

a) A transport container for raptors shall not allow the entry of light except through ventilation holes. Ventilation holes shall be pierced around the lower half on all sides of the container, about 10cm above the internal floor height and about 7.5cm apart. Two holes shall be pierced on all four sides 10cm below the internal roof height.

b) The dimensions of the transport container shall be at least 30cm longer and wider than the length of the bird from beak tip to tail tip and shall provide at least 15cm head clearance for the bird when standing at rest on the floor of the container or on any perch in the container.

c) A perch consisting of a block of wood of sufficient size to allow the bird a firm grip may be firmly fixed to the floor of the container if desired.

d) If the container includes no perch, the floor of the container shall be lined firmly with a resistant material which will provide grip for the birds' talons. (Non-looped artificial grass is recommended)

e) Access to the container shall be from a hinged or sliding door/lid on the top side of the container. The door/lid shall be well secured during carriage of the bird. The transport container may be constructed of sturdy cardboard, polystyrene, or wood.

f) In situations where the bird will not be accompanied by an experienced raptor handler at all times during its transport, the transport container shall be constructed of wooden sheets and framing sturdy enough to withstand damage in transport.

g) No more than one raptor shall be enclosed in a compartment of a transport container unless all the birds in the container are young fledglings from the same nest.

h) It is recommended that the attending veterinarian or an approved raptor rehabilitator be consulted on conditions of transportation before transporting injured or sick raptors for medical treatment or diagnosis.

i) Raptors must not be subjected to temperatures greater than 30°C or less than 10°C during transport.

Part D — Wombats

Ratified by Queensland Parks and Wildlife Association (now known as Australasian Regional Association of Zoological Parks and Aquaria Queensland (ARAZPAQ)) on 4 November 1994.
Approved by the Minister for Environment and Heritage on 24 March 1995.
Prepared by ARAZPAQ and the Environmental Protection Agency (EPA).

General information

There are three species of wombat found in Australia. These are the common wombat Vombatus ursinus, the southern hairy-nosed wombat Lasiorhinus latifrons and the northern hairy-nosed wombat Lasiorhinus krefftii. Only the common wombat and southern hairy-nosed wombat are found in captivity. The northern hairy-nosed wombat is endangered with only around 70 individuals believed to remain in Epping Forest National Park in central Queensland.

Although similar in build, the hairy-nosed wombats and common wombats are very different in their social habits and preferred habitats. Common wombats have a preference for dry sclerophyll forest of temperate climate which is a fairly moist habitat. The hairy-nosed wombats are adapted to a drier climate and live in semi-arid tussock grassed plains or sparse woodlands. While common wombats are considered to be solitary animals having distinct home ranges, the hairy-nosed wombats are thought to be more communal animals sharing home ranges. They are among the world's largest burrowing animals.

Wombats are grazing animals and eat a wide range of grasses, sedges and rushes. They have the lowest dietary maintenance requirements for energy and protein of any herbivorous marsupial. Both the incisor and molar teeth are rootless and grow throughout the animal's life, an adaptation to the fibrous character of the natural diet.

Every effort should be made to obtain wombats from existing captive stocks. Apart from bona fide scientific research or educational purposes, permits to take wombats from the wild are normally not issued by the EPA.

The breeding of wombats in captivity by persons authorised to keep the species is to be encouraged.

The standards presented here are to be read in conjunction with the general conditions section of the Code of practice of the ARAZPAQ.

1. Husbandry

a) Common wombats are naturally solitary and diligent observations is required when introducing more than one animal to an enclosure irrespective of enclosure size. If fighting occurs, individuals should be removed from an enclosure before any substantial wounds are inflicted.

b) No enclosure should contain more than one mature male unless a free range area exists of sufficient size for each male to establish its own territory. It is unlikely that this can be achieved in an area of less than one hectare in size.

c) Where wombats are housed with other species, diligent observation is required to ensure compatibility. Wombats have been known to be aggressive to other species.

2. Facilities

The following minimum guidelines will apply to structures used to house wombats for display:

a) Enclosures may be of open, semi-enclosed or totally enclosed design.

5. Transport

a) Wombats must be transported individually in solid framed cages measuring at least the length of the individual and with enough width to allow the animal to lie comfortably on it's side.

b) The cage must have removable, leak proof trays fitted at the base.

c) Wombats must not be subjected to temperatures greater than 25°C or less than 5°C during transport.

6. Quarantine

Wombats transferred between establishments must be subjected to a 30-day quarantine period at either the importing or exporting establishment unless an exemption from the quarantine period is advised and certified by a veterinarian following a thorough physical examination.

This certificate must establish that the wombat is not:

i) in a weakened or emaciated condition,

ii) is free from clinical signs of disease, and

iii) is free from internal and external parasites including sarcoptic mites.

7. Provisions of other Acts

The above exhibit standards of ARAZPAQ are to be regarded as being the recommended minimum standards for wildlife parks to achieve and are not in derogation of the provisions of the *Nature Conservation Act 1992* and Regulations under the Act. Where applicable, the Acts and Regulations of other statutory bodies must be complied with.

Note: In the following information, the general terms crocodile/s refers to all three species of crocodilian covered in this document. Information about particular species will be stated as such — freshwater crocodile, estuarine crocodile, American alligators or alligators.

In this document, where reference is made to adequate experience, knowledge or competency, this will be deemed adequate in the opinion of the Chief Executive of the EPA, on advice of the Executive Officer of ARAZPAQ.

In this document, reference is made to the Division of Workplace Health and Safety Guide For The Crocodile Industry. This was produced by the Department of Training and Industrial Relations under provisions of the *Workplace Health and Safety Act 1995* and is administered by that department.

1. Husbandry

1.1 Keeper qualifications

A suitably qualified wildlife keeper must be nominated to be in charge of displays, and must have a demonstrated knowledge of the Division of Workplace Health and Safety Guide For The Crocodile Industry, and must have the following minimum experience and skills:

(For definitions of hatchling, juvenile, sub-adult and adult crocodiles, see Appendix 3 of the Division of Workplace Health and Safety Guide For The Crocodile Industry.)

a) To be in charge of hatchlings or juvenile crocodiles, a wildlife keeper must have:
   i) at least 12 months' full-time work with a reptile display and a demonstrated knowledge of heating and/or basking requirements, and basic reptile husbandry;
   ii) a knowledge of the relationship between air and water temperatures and crocodile digestion; and
   iii) experience and competency in safe handling methods, minimising danger to attendants and stress to animals.

b) To be in charge of sub-adult crocodiles, a wildlife keeper must have:
   i) at least six months' full-time work with a crocodile display;
   ii) experience and competency in heating and/or basking requirements and basic reptile husbandry;
   iii) a knowledge of the relationship between air and water temperatures and crocodile digestion;
   iv) experience and competency in the capture and transportation procedures for crocodiles, and a demonstrated knowledge of the safety zones specified in the Division of Workplace Health and Safety Guide For The Crocodile Industry.

c) To be in charge of adult crocodiles, a wildlife keeper must have:
   i) at least 12 months' full-time work with a crocodile display;
   ii) experience and competency in the heating and/or basking requirements, basic reptile husbandry and territoriality and aggression in adult crocodiles;
   iii) a knowledge of the relationship between air and water temperatures and crocodile digestion;
   iv) a demonstrated ability to identify obese, emaciated or stressed specimens; and

c) The number and ratio of adult *C.porosus* or *A.mississippiensis* housed in an enclosure depends on the size of the enclosure and the aggressiveness of the individual animals within the enclosure. The enclosure must be designed to reduce aggressive interaction between adult males and other males, as well as adult females and other females by the appropriate use of complex habitat, visual and/or physical barriers.

d) Only one species of crocodile should be housed in each enclosure.

2. Facilities

2.1 Ponds

a) Crocodile ponds can be built using earth, concrete, fibreglass or other suitable material which is non-damaging to crocodile health.

b) All ponds must be built of smooth non-abrasive materials to prevent injury to the feet of animals.

c) Ponds must be designed such that escape is not possible via excavation (such as digging or tunneling)

d) Design of ponds must allow the animals easy access to and from water.

e) The length of crocodile ponds must be at least twice as long as the longest crocodile's snout-vent length.

f) The width of crocodile ponds must be sufficient to permit the crocodiles to turn around in the water area.

g) When totally submerged, the largest crocodile must be covered by at least 15cm of water.

h) All specimens in the enclosure must be able to submerge simultaneously without touching each other.

i) Ponds should have a supply of water piped directly into the pond. The delivery pipe should be visible above the high water level of the pond or contain a non-return valve.

j) Each pond should have a flow and discharge control.

k) Enclosures should be serviced by a tap and hose, or other suitable mechanism for cleaning purposes.

l) Water flow to and from the pond should be controlled by a valve/tap situated outside the enclosure, or at least 4m from the pond edge.

m) Ponds must have overflow provisions to prevent enclosure flooding from heavy rain or pond overflow. Overflow points should be designed to prevent blockage by debris.

2.2 Water quality

a) Crocodile pond water should be aesthetically pleasing and must be maintained to a quality which promotes animal health and welfare.

b) Crocodile pond water can be turbid unavoidably in earth ponds.

c) As required, all crocodile ponds should be significantly flushed or dropped and refilled to maintain good animal health. All pond water should be free from:

   i) floating debris, oil and any other objectionable matter;

c) Enclosure fence lines must be solidly built, not easily lifted and must follow the contour of the land. They should be secured in the ground to a depth of 60cm, or attached to a concrete wall 10cm wide and 30cm below ground level.

d) All fences must be built from robust materials — concrete block, timber, wire or other suitable material — to securely contain the animals.

e) Wire fences enclosing crocodiles less than 2.4m must be no less than 2mm gauge wire. Wire fences enclosing crocodiles greater than 2.4m must be at least 2.5mm gauge wire.

f) Minimum fence heights are:

   i) Crocodiles (less than 1.2m)— 1m high with a 300mm internal return or overhang, or 1.2m non-climbable internal wall.

   ii) Crocodiles (more than 1.2m)— 1.5m high.

g) All crocodile enclosures must be built so that no part of the body of any visitor can be put within reach of any crocodile.

h) An inward return or barrier is not required where the viewing public are on a fenced walkway which is higher than half the total length of the longest crocodile above ground or water level.

i) All glass incorporated into an enclosure must be certified by an engineer to withstand water pressure and impact pressure from any crocodiles to be housed in the enclosure.

j) Crocodile enclosures can be indoor and/or outdoor. Indoor enclosures must have adequate UV lighting. All animals must be able to share such lighting at the same time. In the case of fluorescent blacklights, access to within 35cm–40cm of lights is necessary, particularly for hatchlings and juveniles.

k) Keeper access points into any crocodile enclosure containing adult and sub-adult crocodiles should be a minimum of 2m from any pond edge, and should be placed in such a way as to eliminate the risk of surprise attack. Where possible, exhibit access points should be located at the shallow end of the pond.

3. Diet and feeding

3.1 General

a) The diet of crocodiles should be nutritionally adequate to maintain health and vitality.

b) Wherever possible, the diet should be regularly varied.

c) Fresh food is to be provided in the form of whole food items. Fur, feathers, bone and entrails are essential for healthy crocodiles and should be included in the diet as often as possible. Rancid food items should never be offered.

d) Uneaten food items must be removed from the enclosure after feeding, when it is safe to do so.

e) Live food items must never be offered, except in the case of small live crustaceans or insects being offered to hatchling crocodiles to stimulate feeding behaviour.

f) All diets should be as lean as possible. As a general rule, fat should not exceed 9 percent. Suitable diet items could be chickens (whole or parts), kangaroo steaks, fish, feral pig, beef or horse.

b) Crocodile eggs need to be incubated under conditions of high humidity (99%+),but should never be incubated in direct contact with water.

c) Availability of air to the eggs should not be restricted. Regular gas exchange in the incubator is a necessity.

4.3 Hatchling care

a) To optimize metabolic rate, hatchling should be held at temperatures between 30°C–34°C.

b) Obvious stress factors, such as fluctuating temperatures, dehydration, noise, movement and handling, should be avoided. Simple, low, wooden structures, pieces of floating matting, or other forms of shelter should be provided for security.

5. Transport

The restraint of crocodiles for transport can be achieved using a variety of methods, some of which are listed below. Which ever method is chosen, the principles stated in section 5.1 must be followed.

All staff involved in crocodile capture and transport must be fully aware of the Division of Workplace Health and Safety procedures for crocodile capture, specified in its Guide For The Crocodile Industry.

5.1 General

a) Crocodiles are adept at escape and great care must be taken during transport to prevent escape and injury to the animal and/or attendants.

b) Persons who are boxing, restraining and preparing animals for transport must have an understanding of blindfolding, drug administration and regurgitation before any transportation.

c) Stress levels and thermoregulation must be considered. Crocodiles in transport must not be subjected to temperatures below 15°C or higher than 35°C. The optimum transport temperature is 20°C–25°C.

d) Crocodiles should not be transported with food in their stomachs. A fasting/starvation period of approximately three days should be imposed before an animal is transported to allow the crocodile's stomach to empty. Where an emergency situation arises and this is not possible, a block should be placed in the animal's mouth if the animal's jaws are to be tied.

e) During transport, crocodiles should have their eyes covered or be contained in such a way as to restrict vision.

f) A written description of the restraints in place on each crocodile which is transported must be placed in a prominent position on the outside of the box and marked **IMPORTANT**.

g) Removal of the crocodile must be by a suitably qualified wildlife keeper as specified in section 1.1.

h) Road transport longer than six hours or along bumpy roads is not recommended. If this has to occur, then the animal must be accompanied by a suitably qualified wildlife keeper as specified in section 1.1.

i) Containers used to transport crocodiles must be labelled with instructions clearly stating KEEP OUT OF DIRECT SUNLIGHT, THIS WAY UP, LIVE ANIMAL, HEAD END and similar advices.

6. Demonstrations and handling

Wildlife parks play a valuable role in educating their visitors about crocodiles and their habitat, especially the dangers associated with living in or visiting areas where crocodiles occur.

a) During a demonstration for the public, a crocodile's natural behavior such as feeding behavior, thermoregulation, locomotion, mating and nesting should be emphasized at all times.

b) Hand-feeding of crocodiles of any size for educational shows should be undertaken only by an accredited wildlife keeper as specified in the Division of Workplace Health and Safety Guide For The Crocodile Industry.

c) Over-dramatisation and sensationalism of crocodile behaviour has a negative impact on community perceptions of crocodiles and is not to be undertaken.

d) Basic ecological and biological information is necessary to present an accurate picture of a crocodile's life history and how it interacts with its environment.

e) Information about the risks associated with living in or visiting a crocodile habitat is essential to help visitors behave safely.

f) Park visitors should not be presented with examples of inappropriate behaviour that might be copied by some people. Explain that the presenter is an experienced handler and that it would be unsafe for a member of the public to copy the actions of the presenter.

g) Only crocodiles under 1.2m in total length should be used in mobile displays. The crocodile must at all times be under the supervision of an experienced crocodile keeper and, when not being used in a demonstration, must be returned to its display or transport box.

h) At no time can a park visitor be granted access to a crocodile enclosure, or be permitted to feed a crocodile over a fence.

i) Entry to crocodile exhibits by authorised people other than keepers is permitted, provided the following conditions are observed:

   i) In the opinion of the employer, the risk of crocodile attack has been minimised;

   ii) The person is accompanied at all times by a guard;

   iii) The person has been instructed in relevant safety issues and has indicated that the or she understands the instructions and agrees to conform to all safety directions given by the employer or company representative while in the enclosure; and

   iv) Entry follows all procedures stated in the Division of Workplace Health and Safety Guide For The Crocodile Industry.

7. Health and safety

Refer to the Division of Workplace Health and Safety Guide For The Crocodile Industry.

8. Provisions of other Acts

The above exhibit standards of the ARAZPAQ are to be taken as the recommended minimum standards for wildlife parks to achieve, and are not in derogation of the provisions of other relevant Acts and Regulations including the Nature Conservation Act and Workplace Health and Safety Act.

1. Husbandry

1.1 Supervisor qualifications

a) A suitably qualified supervisor must be nominated to be in charge of displays, and must have the following minimum experience and skills:

   i) At least 12 months' full-time work with a bird display or section, or six months' full-time work as a keeper working with ratites.

   ii) Experience and competency in safe handling methods, minimising danger to attendants and stress to animals.

   iii) Experience with and knowledge of the social requirements of the species he/she is in charge of and the ability to identify abnormal behaviour or behaviour indicating a sick or stressed individual.

   iv) A working knowledge of the dietary requirements of the ratites he/she is responsible for.

   v) A clear working knowledge of this code of practice and all other documents referred to within this code of practice.

1.2 Keeper qualifications

A wildlife keeper working with ratites should have a clear working knowledge of this code of practice and all other documents referred to within this code of practice. He/she must also be fully aware of the potential danger that all ratites pose to keeper and/or visitor safety and must have an intimate working knowledge of the institution's safety procedures.

1.3 Stocking requirements and sex ratios

a) All ratite species are territorial, with varying intensity depending on the age, species and size of the animal. Territorial behaviour will be influenced by the size, design and environment of the enclosure.

b) The following stocking rates are recommended for each species:

   i) Cassowaries: Single animals or a maximum of one pair per enclosure.

   ii) Emus: Single animals, pairs, trios (one male to two females) or communal groups with equal numbers of both sexes in large enclosures.

   iii) Ostriches: Single animals, one breeding pair or a communal group of one mature male to several females per enclosure.

   iv) Rheas: Single animals, pairs, trios (one male to two females) or communal groups with equal numbers of both sexes in large enclosures.

c) Large groups of juveniles can be housed together until the birds reach sexual maturity. This age varies for each species and is described in section 6 of this document.

d) All ratite species can be housed with other compatible species of animal but must be closely observed for inter-species aggression.

iii) Ostriches: Sparsely planted enclosure with low shrubs or grasses. Large open areas for running.

d) Enclosures must be designed to reduce aggressive interactions between individuals by the appropriate use of complex habitat, visual and/or physical barriers.

e) Floors and substrates of enclosures for ratites of all ages must be designed, constructed and maintained so that they are non-slip, provide support and minimize the risk of injury and disease.

f) Shelter must be provided in enclosures to protect the animals from climatic extremes and to provide adequate shade and protection from the elements.

g) Enclosure fittings and fixtures must be of such style and position as to prevent the likelihood of injury.

h) No ratite other than quiet emus are to be housed in a public walk through exhibit. Emus that show any form of aggression must be removed from an exhibit that has public access.

2.3 Enclosure sizes

a) Hatching ratites (0-90 days) being artificially raised, have no minimum cage size. However, to promote leg muscle development, daily exercise should be given to animals from at least 7 days of age.

b) Juvenile ratites (3-6 months) can be housed in groups or individually with a minimum floor space of 20 square metres per animal.

c) Sub-adult ratites (6-18 months) can be housed in groups or individually in enclosures with a minimum floor space of 60 square metres per animal.

d) The minimum enclosure sizes for adult ratites are:

i) Cassowaries: 200 square metres for an individual animal with 100 square metres added for each additional animal.

ii) Emus: 200 square metres for an individual animal with 100 square metres added for each additional animal.

iii) Ostriches: 1000 square metres for an individual animal with 500 square metres added for each additional animal.

iv) Rheas: As for emus.

e) Where ratites are housed with other compatible species, the above minimum enclosure sizes are cumulative to the minimum enclosure sizes required for the other species.

2.4 Fencing

a) All fences must be constructed from robust materials and must be free of obstacles protruding out from the fence line or loose wire which may snag birds' legs or necks.

b) Fences must follow the contour of the land with the bottom of the fence secured in such a way that the bird's feet or toes cannot get caught between the fence and the ground.

c) Changes in the angles of ratite fences must be clearly marked so that they are visible to the birds within the enclosure.

c) The protein component of the diet can be in the form of mice, rats, insects, fish, lean meat and mince.

3.3 Emu diet

a) Emus are omnivores feeding on almost any organic item they encounter.

b) A suitable diet for emus includes a mix of commercial chicken pellets, lucerne hay, chopped vegetables and greens (lettuce) and grains.

c) Emus can be maintained solely on commercial ratite pellets. These pellets should have a protein content of 16-22 percent and a fibre content of 5-10 percent.

d) Rodents, day old chicks and insects are not essential for the well-being of emus but can be fed occasionally as a treat.

3.4 Ostrich and rhea diet

a) Ostriches and rheas are primarily foragers and grazers of grasses. They will consume succulent plants, fruits and any insects or small vertebrates that they encounter.

b) A suitable diet for ostriches and rheas includes commercial ratite pellets, chopped greens, vegetables, wheat and other grains.

c) Ostriches and rheas can be maintained solely on commercial ratite pellets. These pellets should have a protein content of 16-22 percent and a fibre content of 5-10 percent.

d) Rodents, day-old chicks and insects are not essential for the well-being of these birds but can be fed occasionally as a treat.

4. Capture and restraint

a) Manual restraint of ratites is potentially dangerous to both the handler and the bird. All species of ratite can kick forward and to the side when frightened, and will jump flailing their legs.

b) Personnel involved in the manual restraint of ratites must have clear instructions as to the procedures to be followed during capture and escape routes if required.

c) The manual restraint of ratites must only occur under the direct supervision of a suitably qualified person as described in section 1.1.

d) Manual restraint of ratites usually involves jumping the bird from behind and applying enough downward pressure to make the bird sit down with it's legs folded directly underneath it. Boards or padded shields can be used to manoeuvre the bird into a suitable position for capture.

e) Birds should never be allowed to jump up or fall to one side while being held.

f) Where necessary, hoods should be used to cover the bird's head during restraint.

g) Chemical immobilisation and sedation must only be administered under the direction of a registered veterinarian.

h) As much as possible, young ratites should be conditioned to being handled by keepers. This may make capture and restraint easier when the birds become larger.

6.2 Cassowaries

a) The breeding season for cassowaries is traditionally June to December.

b) Sexual maturity is reached around three years of age.

c) The male usually starts incubation after the fourth egg is laid. The standard clutch size is four eggs with a maximum of eight. There is usually a 4-5 day period between eggs being laid. Incubation periods are 49-57 days.

6.3 Emus

a) The breeding season for emus is from May to September.

b) Sexual maturity is reached from 18 months to three years of age.

c) Eggs are laid every 3-4 days with an average clutch size of 7-10 eggs. It is possible for a female to lay 30 eggs in a season. The male alone incubates. Incubation periods for emus are 46-56 days.

6.4 Ostriches

a) The breeding season for ostriches is from September to April.

b) Female ostriches reach sexual maturity at two years of age. Males can take 4-5 years.

c) Eggs are laid every other day with 12-15 eggs being a typical clutch. The incubation period is 40-42 days. Both sexes incubate the eggs with the male sitting of a night and the dominant female during the day.

6.5 Rheas

a) The breeding season for rheas is from September to April.

b) Rheas reach sexual maturity from 18 months to two years of age.

c) Eggs are laid every other day. The incubation period for rheas is 30-43 days with an average of 37-38 days. Males totally dominate the breeding process and alone incubate the eggs.

6.6 Artificial incubation

a) Artificial incubation of ratite eggs require specialist bird incubation skills and should only be attempted if natural incubation of the eggs cannot occur. As a guide, incubation settings for ratite eggs are:

i) Cassowaries:Temperature (35.8-36°C);

Relative humidity incubation (55%)

Relative humidity hatching (55%)

ii) Emus:Temperature (35.25-36. °C);

Relative humidity incubation (50%);

Relative humidity hatching (75-80%)

Part G — Self-assessment

Ratified by Queensland Parks and Wildlife Association (now known as Australasian Regional Association of Zoological Parks and Aquaria Queensland (ARAZPAQ)) on 10 December 1998.
Approved by the Minister for Environment and Heritage on 7 January 1999.
Prepared by ARAZPAQ and the Environmental Protection Agency (EPA).

Background

At the then Queensland Parks and Wildlife Association conference at Sea World in November 1995 and Port Douglas in October 1996, members participated in workshops with the objective of finding a consensus as to how we as an Association might meet standards set in the code of practice for exhibiting wildlife in Queensland.

The outcome of the 1995 conference the role of wildlife parks in the conservation of our habitat was that members considered the then Queensland National Parks and Wildlife Service would act as the policing agency and the members' role would be one of peer encouragement and assistance should a situation occur.

On reviewing this outcome, the Executive Committee considered this a reactive approach. Rather than put out fires, the Association required procedures to prevent damaging situations from occurring. An internal mechanism for setting priorities for our goals and operations with a view to upgrading all exhibits where practical over time was thought to be a better solution.

At the Port Douglas conference Striving for tomorrow, the matter was discussed further in a workshop Self-assessment and how we achieve it. The code of practice presented in Part 1 - Minimum standards for exhibiting wildlife in Queensland has been formulated from this conference's recommendations.

Self-assessment or self-administration ultimately might form part of the Queensland Parks and Wildlife Service (QPWS) wildlife licence renewal system. From the QPWS perspective, this would be a most suitable outcome by helping alleviate its role in zoological management and reducing any tendency for confrontation between institutions and QPWS staff.

Foreword

The self-assessment code of practice has been designed by ARAZPAQ for holders of a wildlife exhibitor licence issued by QPWS.

The code is designed to use as an internal mechanism for setting priorities for the goals and operations of all wildlife parks.

A major ARAZPAQ objective is to encourage all members to upgrade wildlife exhibits to comply with the general and specific codes of practice — under the definition of code in the *Nature Conservation Regulation 1994* — within a reasonable period of time.

This document has been produced by ARAZPAQ members and QPWS staff in consultation.

The key to success for self-assessment lies with the integrity of all personnel and operators of wildlife parks in Queensland and their willingness to commit to strive for excellence.

A trial period of three years has been set to evaluate the procedures and outcomes of this document. Following this trial, a workshop will be conducted to review and finalise any amendments.

When reading the code, please understand this is an industry document and therefore an appreciation of ownership must be recognised.

Our future lies within our grasp to meet the changing attitudes and expectations of our guests.

3. Facility summary sheet

a) Every second year to coincide with peer review of the institution, a facility summary sheet is to be completed by the chief executive officer or authorised executive officer of the institution.

b) The facility summary sheet is an opportunity for the chief executive officer or authorised executive officer to give an executive summary of the operational progress of the institution and to outline remedial action and time frames for enclosures which do not meet ARAZPAQ standards as outlined in codes of practice.

c) The completed facility summary sheet is to be sent to the ARAZPAQ Management Committee with the self-assessment forms.

d) The facility summary sheet will remain a confidential document. On request, the sheet can be viewed by QPWS Regional officers with 48 hours' written notice to the relevant institution and the ARAZPAQ Management Committee. Note: A court can subpoena documents.

4. Licence renewal

a) The facility summary sheet and the self-assessment forms might assist the process of QPWS licence renewal of that park.

b) Before approving the renewal of a wildlife exhibitor licence for a particular institution, QPWS might write to the ARAZPAQ Management Committee requesting confirmation that self-assessment forms and facility summary sheets for that institution have been filled out correctly.

c) Subject to necessary amendments to the *Nature Conservation Regulation 1994* being approved by the Governor in Council, all wildlife exhibitor licences will be due for renewal at the same time each year.

d) ARAZPAQ membership forms and self-assessment forms will be forwarded to ARAZPAQ members at the same time each year.

e) QPWS staff will assess all institutions in accord with a common standard.

5. Conflict resolution

a) QPWS has a legislative mandate to conduct facility inspections of any wildlife exhibitor licensee at any reasonable time.

b) If a problem is continually recognised through self-assessment, public complaint or a QPWS officer, notification must be given to the ARAZPAQ Management Committee and QPWS Regional centre. Note: Irrespective of this document, a conservation officer or another authorised person might decide to take action in particular circumstances.

c) (Subject to any rule of law and client confidentiality, the institution involved is to refer matters of concern to QPWS in relation to any wildlife park to the ARAZPAQ Management Committee before corrective action is begun by QPWS. The time allowed for a response to QPWS is to be negotiated and agreed on by the institution, QPWS and the ARAZPAQ Management Committee.

d) Action to be taken and the time allowed will be dealt with on a case by case basis considering the nature and severity of the issue.

e) To the greatest extent possible, action to rectify the situation within a suitable time must be agreed to by the three parties.

ARAZPAQ Self-assessment form

(Trial period)

Institutional summary

(To be filled out only ONCE each year.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

• Drinking water supplied to all enclosures: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Boundary fences in good condition: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Qualified veterinarian on staff or consultant: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Adequate quarantine/off-display facilities: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Suitable hygienic food preparation area: Yes ☐ No ☐

Comments/Improvements: _____

_____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits without a specific code of practice

(To be filled out for each enclosure holding animals not covered by a specific code of practice.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Species within enclosure: _____

_____

_____

- Drinking water supplied and changed daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure fences in good condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure substrate clean and free of faeces: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is the enclosure supervisor suitably qualified: Yes ☐ No ☐

Comments/Improvements: _____

_____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Fresh leaf provided daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Records kept of handling for photo opportunities: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure substrate clean and free of faeces: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is sufficient shelter provided: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure free of vermin/pests: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure size suitable for number/sex of animals: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Two forks per animal 1·2m off ground: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits for Macropods

(To be filled out for each enclosure holding macropods.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Species and number in enclosure: _____

_____

- Enclosure size suitable for number of animals: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Drinking water supplied and changed daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure fences in good condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Are all species in enclosure identified by suitable signs: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is enclosure supervisor suitably qualified: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Enclosure substrate hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is sufficient shelter provided: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure free of vermin/pests: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Facilities available off-display: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Feed provided in hygienic condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- All animals free from illness or injury: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- If injured animals on display, are explanatory signs present: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits for Wombats

(To be filled out for each enclosure holding wombats.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Species in enclosure: _____

_____

Number of animals in enclosure: _____

_____

- Enclosure size suitable: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Drinking water supplied and changed daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- If injured animals on display, are explanatory signs present: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Are all species in enclosure identified by suitable signs: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is enclosure supervisor suitably qualified: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Pond water quality meets standards: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure fences in good condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure substrate clean and free of faeces: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Land area large enough: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is sufficient shelter provided: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Feed provided in hygienic condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- All animals free from illness or injury: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits for Primates

(To be filled out for each enclosure holding primates.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Date enclosure was built/primates first displayed: ___ / ___ / ___

Other species in enclosure: _____

_____

• Drinking water supplied and changed daily: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Enclosure fences in good condition: Yes ☐ No ☐

Comments/Improvements: _____

_____

* Fresh food provided daily: Yes ☐ No ☐

Comments/Improvements: _____

_____

- Suitable signs on enclosure: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is enclosure supervisor suitably qualified: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Do all staff working in section have current vaccinations: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Is sufficient shelter provided: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure can be serviced with birds isolated: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure free of vermin/pests: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Facilities available off-display: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Feed provided in hygienic condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- All animals free from illness or injury: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- If injured animals on display, are explanatory signs present: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits for Ungulates

(To be filled out for each enclosure holding ungulates.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Species in enclosure: _____

_____

- Drinking water supplied and changed daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure fences in good condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure size meets standards: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Are all species in enclosure identified by suitable signs: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is enclosure supervisor suitably qualified: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Any sick, injured or dead fish on display: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Waste food and faeces removed daily: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Tank general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is lighting adequate and appropriate for the species held: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is food type and quality appropriate for species held: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is food stored in an hygienic condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Are sufficient niches provided for all individuals: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Suitable signs present for all species: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

ARAZPAQ Self-assessment form

(Trial period)

Exhibits for Cetaceans

(To be filled out for each enclosure holding cetaceans.)

Institution: _____

Licence no: _____ Date of assessment: ___ / ___ / ___

Name of person/s conducting assessment: _____

Position/organisation: _____

Summary statement: (overview of enclosure/areas needing attention)

_____

_____

_____

_____

_____

Enclosure ID/name: _____

Species and number in enclosure: _____

_____

- Enclosure size and stocking suitable: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Pool water quality maintained at optimum recommended level: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Pond water quality test results maintained: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

• If injured animals on display, are explanatory signs present: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Suitable signs present: Yes ☐ No ☐

Comments/Improvements: _____

_____

• Is enclosure supervisor suitably qualified: Yes ☐ No ☐

Comments/Improvements: _____

_____

Signed CEO: _____ Date of assessment: ___ / ___ / ___

- Enclosure substrate and general appearance hygienic: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure fences in good condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Are off-display facilities available: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is enclosure constructed from suitable material: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is food type and quality appropriate: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Is food provided in hygienic condition: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- Enclosure has sufficient shelter and ventilation: Yes ☐ No ☐

  Comments/Improvements: _____

  _____

- All animals free from illness or injury: Yes ☐ No ☐

  Comments/Improvements: _____

  _____