Exhibited Animals
– Ratite

Public consultation document
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Australian Ministers responsible for Primary Industries
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Taxon preface</td>
<td>7</td>
</tr>
<tr>
<td>Definitions</td>
<td>8</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>9</td>
</tr>
<tr>
<td>Security</td>
<td>10</td>
</tr>
<tr>
<td>Enclosures</td>
<td>11</td>
</tr>
<tr>
<td>Dietary and water requirements</td>
<td>13</td>
</tr>
<tr>
<td>Health and wellbeing</td>
<td>14</td>
</tr>
<tr>
<td>Reproductive management</td>
<td>15</td>
</tr>
<tr>
<td>Euthanasia</td>
<td>16</td>
</tr>
<tr>
<td>Capture and restraint</td>
<td>17</td>
</tr>
<tr>
<td>Training</td>
<td>18</td>
</tr>
<tr>
<td>Interactive programs</td>
<td>19</td>
</tr>
<tr>
<td>Transportation</td>
<td>20</td>
</tr>
<tr>
<td>Animal identification and records</td>
<td>21</td>
</tr>
</tbody>
</table>
Introduction

Purpose
The principal purpose of this document is to describe standards and guidelines that ensure the welfare and security of ratites used for exhibition purposes.

This document promotes measures and conditions that, if implemented, would see exhibited ratites kept to the same standard throughout Australia.

The document considers a broad range of operational issues facing facilities that keep ratites for exhibition purposes. Failure to address these issues could result in adverse animal welfare and security outcomes.

Scope
These standards and guidelines apply to those people and industries responsible for the care and management of:
- ratites kept for exhibition purposes at facilities, i.e. for display, conservation, education and entertainment;
- ratites during their temporary removal from a facility; and
- ratites during their transport to or from a facility.

These standards and guidelines do not apply to:
- wild animals (i.e. free-living and not confined to a facility by an enclosure, a leash or by management practices);
- the keeping of animals solely for the purposes of feeding to other animals at the facility;
- feeding of wild animals;
- animals kept for animal competitions, horse racing and sporting events, wildlife farming and domestic animal farming;
- wildlife rehabilitation of animals that are not displayed to the public at the facility;
- animals at pet shops; or
- circuses and mobile exhibitors.

These standards and guidelines should be considered in conjunction with other requirements for animals kept for exhibition purposes, and related Commonwealth, state and territory legislation for:
- animal welfare;
- exhibiting animals;
- pest control; and
- nature conservation.

Where legislation requires a higher standard than these standards, the higher standard will apply.

Interpretation
- Objective – the intended outcome(s) of a section of the standards and guidelines.
- Standards – the acceptable animal welfare and security requirements designated in this document. They are requirements that must be met under law with respect to animals kept for exhibition purposes.

The standards are intended to be clear, essential and verifiable statements. However, not all issues are able to be well defined by scientific research or are able to be quantified. Standards use the word “must”. Non-compliance with one or more standards will constitute an offence under law.

They are presented in a box and are numbered consecutively with the prefix ‘S’.
• **Notes** – provide background and guidance on interpreting the standards and guidelines.

• **Guidelines** - complement the standards by providing advice and/or recommendations to achieve desirable animal welfare and security outcomes. Non-compliance with guidelines does not constitute an offence under law.

They are numbered consecutively with the prefix ‘G’.

**Document organisation**

These *taxon standards* contain standards and guidelines that apply to the keeping of a specific animal group for exhibition purposes at facilities. They are additional to the standards and guidelines in the *Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General* which apply to all animals kept for exhibition purposes at facilities.

• **Taxon standards must always be read in conjunction with the** Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General.

The *Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General* contain the following sections:

- Introduction;
- Definitions;
- Responsibilities;
- Security;
- Enclosures;
- Dietary and water requirements;
- Health and wellbeing;
- Reproductive management;
- Euthanasia;
- Capture and restraint;
- Training;
- Interactive programs;
- Transportation; and
- Animal identification and records.

The same section headings are used in these *taxon standards*. An additional taxon preface section follows this Introduction. Where a section of these *taxon standards* does not include any standards or guidelines that are additional to those in the *Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General*, the section includes the following statement: 'This section has been deliberately left blank’.

Definitions are given in the Definitions section of this document. These definitions are additional to those in *Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General* that also apply to these *taxon standards* unless otherwise stated. Defined words in this document are italicised.
Taxon preface

Ratites

The Order Struthioniformes includes five Families:

- Apterygidae (kiwis) – five species (Apteryx spp.);
- Casuariidae (cassowaries) – three species (Casuarius spp.);
- Dromaiidae (emus) – one species (Dromaius novaehollandiae spp.);
- Rheidae (rheas) – two species (Pterocnemia pennata and Rhea americana);
- Struthionidae (ostrich) – one species (Struthio camelus).

However, as no kiwis are currently maintained in Australian zoological collections, kiwis are not within the scope of this document. This taxon standard relates only to cassowaries, emus, rheas and ostriches.

The name ‘Ratite’ comes from the large plate-like breast bone which is thought to resemble the shape of a raft. The lack of a prominent keel for deep muscle attachment and poorly developed wings compared to body size prevent the ratites from flying. They compensate for lack of flight by having large powerful legs and can run quickly.

Emus are endemic to Australia and can be found in all habitats on the mainland except rainforest. Three species of cassowary occur in Papua and New Guinea, with the distribution of one subspecies of the southern cassowary (Casuarius casuarius johnsonii) extending to the rainforests of tropical northern Queensland. Emus tend to be gregarious and partly nomadic, while the southern cassowary is a solitary animal and is territorial over an extensive home range.

The ostrich inhabits open and arid plains over most of Africa. It is gregarious and often forms small groups consisting of a single male with several females. Rheas are found in South America and have a loosely cohesive social structure. Both the ostrich and rhea have relatively well developed wings which they use in courtship and aggressive displays.

Diet of ratites vary from the primary grazing/browsing habits of ostriches (eating grass, leaves of shrubs and trees, succulents, seeds and berries), through the more omnivorous emus’ opportunistic selection (including high quality green plant material, seed heads, berries, ripening fruit and insects), to the predominantly frugivorous cassowaries (which will also eat fungi, insects, frogs and other small animals).

Ratites can become defensive during the breeding season. In cassowaries, emus and rheas, the male incubates the eggs and cares solely for the young, while ostriches share this responsibility.
Definitions

Capture myopathy: a syndrome of complex primary and secondary pathological changes in many organs, particularly in skeletal and cardiac muscle, which may:

i. be precipitated by prolonged muscular exertion, e.g. pursuit by predators or during capture and restraint;

ii. sometimes occur as a result of fear and anxiety without overt physical activity; e.g. during close confinement or placement in an unfamiliar environment; and

iii. cause acute death or lead to chronic debility.

Ratite: cassowary, emu, ostrich and rhea.

Wallow: a depression, pool or pit consisting of water, snow, mud, dust, or the like, in which animals can roll or lie.

All Definitions cover the singular, plural and all variations of the word.
1 Responsibilities

Objective

Operators and staff understand their responsibilities and collectively manage the facility to ensure the health, welfare, safety and security of animals.

General

Standards

S1.1 All standards in *Australian Animal Welfare Standards and Guidelines. Exhibited Animals – General* relating to dangerous animals apply to adult cassowaries and male ostriches unless assessed as otherwise by a proficient keeper.

Guidelines

G1.1 A ratite that displays aggressive behaviours towards humans should be considered a dangerous animal.
2 Security

Objective

Animals are held securely to ensure their welfare and prevent pest establishment. Access by unauthorised persons and escape of animals is prevented.

This section has been deliberately left blank.
3 Enclosures

Objective

Enclosures are designed, constructed and maintained to ensure the welfare, safety and security of animals.

General

Standards

S3.1 The operator must ensure ratites are assessed by a proficient keeper as having a suitable temperament prior to being housed in a walk-through enclosure.

S3.2 The operator must ensure a walk-through enclosure housing ratites provides at least one visitor exclusion area where animals are able to withdraw from visitor contact. The visitor exclusion area must be a minimum of 25% of the minimum required enclosure floor area contained in standards 3.7.

S3.3 Unless otherwise approved by the relevant government authority, the operator must ensure enclosures have a fence of at least the following height:

i. ostriches and cassowaries – 1800 mm;

ii. emus – 1500 mm;

iii. rheas – 1200 mm.

Guidelines

G3.1 Walk-through enclosures should be monitored to prevent inappropriate behaviour by visitors or ratites.

Gates and Doors

Guidelines

G3.2 Gates to walk-through enclosures housing ratites should be fitted with self-closing devices.

G3.3 Walk-through enclosures housing ratites should have a double gate entry system to minimise the risk of escape.

Enclosure Furniture

Standards

S3.4 The operator must ensure ratite enclosures include a species appropriate wallow.

S3.5 The operator must ensure that cassowaries are provided with shade.

Guidelines

G3.4 Enclosures housing cassowaries should contain trees and shrubs.

G3.5 Provision of wallowing opportunities may include:

i. dust baths;

ii. shallow water ponds; and

iii. mud pools.
Spatial Requirements

Standards

S3.6 The operator must ensure that the minimum enclosure floor area for adult ratites is:

i. ostriches – 400 square metres for up to two specimens, plus 150 square metres for each additional adult; and

ii. emus, cassowaries and rheas – 200 square metres for a single specimen, plus 100 square metres for each additional adult.
4 Dietary and water requirements

Objective

Animals are provided food and water of an appropriate quality and quantity to maximise their health and wellbeing.

Food

Guidelines

G4.1 Ratite diets should contain or be supplemented with adequate amounts and appropriate ratios of calcium and phosphorous (for skeletal growth and egg development) and vitamins.

Water

Standards

S4.1 The operator must ensure ratite enclosures provide a source of drinking water in addition to the wallow.
5 Health and wellbeing

Objective
The health and wellbeing of animals is maximised, and disease and disease transmission is prevented.

General
Guidelines
G5.1 Juvenile ratites should be encouraged to exercise daily.

Enrichment
Guidelines
G5.2 Enrichment for ratites includes:
   i. age and species appropriate opportunities for social interaction with conspecifics;
   ii. foraging and grazing opportunities; and
   iii. scatter feeds.

Quarantine
Standards
S5.1 The operator must ensure newly acquired ratites undergo a minimum 30 day period of quarantine unless advised otherwise by a veterinarian.
6 Reproductive management

Objective

*Animal* breeding is managed to maintain the genetic integrity, sustainability and/or diversity of the species and to prevent the production of unplanned surplus *animals*.

<table>
<thead>
<tr>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>S6.1</td>
</tr>
<tr>
<td>S6.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>G6.1 Where <em>ratites</em> are nesting close to a fence in public viewing areas, visitors should be excluded from the area and/or visual barriers should be erected to reduce disturbance to the <em>animals</em>.</td>
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</tbody>
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7 Euthanasia

Objective
If an animal is to be killed, it is done humanely.

Guidelines
G7.1 The recommended method of euthanasia for ratites is barbiturate overdose.
8 Capture and restraint

Objective
Animals are captured and restrained in a manner that ensures animal safety and minimises negative impacts on the animal.

Standards
S8.1 The operator must ensure a proficient keeper is present during, and supervises the capture and restraint of an adult ratite.
S8.2 The operator must ensure written procedures for capture and restraint of ratites deal with minimising the risk of capture myopathy.

Guidelines
G8.1 Acceptable methods of ratite capture and restraint may include the use of:
   i. capture bags, and/or hoods;
   ii. deep hoop nets;
   iii. a race made of hessian or similar material; and
   iv. pole syringe or dart administration of an appropriate sedative or anaesthetic agent by or under the direction of a veterinarian.
G8.1 Manual restraint usually involves approaching the bird from behind and applying enough downward pressure to cause the bird to sit with both legs folded directly underneath.
G8.2 During manual restraint ratites should be sternally recumbent to minimise the risk of injury to the animal.
G8.3 The potential for ratites to cause serious injury to themselves by kicking or jumping and flailing their legs should be considered during capture and restraint procedures.
G8.4 While capturing ratites, shields or herding boards should be readily available.
9 Training

Objective

*Animal training* is humane and beneficial to the *animal’s* health, safety, behavioural and management needs.

This section has been deliberately left blank.
10 Interactive programs

Objective

*Animal* welfare, safety and security are maintained during *interactive programs* so that people have a positive experience and have an enhanced appreciation of *animals*.

This section has been deliberately left blank.
11 Transportation

Objective
Animal welfare, safety and security are maintained during transport.

Guidelines
G11.1 Prior to the journey ratites should be conditioned to accept the confinement of transport.
12 Animal identification and records

Objective

Animals are identified by standardised means and have a detailed written history.

Animal Identification

Standards

| S12.1 | Ratites younger than 3 months of age are exempt from the requirement to have *individual permanent identification*. |

Guidelines

| G12.1 | A passive integrated transponder (PIT) is the recommended form of *individual permanent identification for ratites*. |
| G12.2 | The standard location for PIT insertion in *ratites* is: |
|       | i. adults – lateral left neck; and |
|       | ii. chicks – the pipping muscle located on the anterodorsal portion of the neck. |

Records

Guidelines

| G12.3 | Records kept for *ratites* used in demonstrations and *interactive programs* should include: |
|       | i. *interactive handling* rotation schedule; |
|       | ii. feeding; and |
|       | iii. behavioural issues. |