NON-BINDING GUIDANCE FOR DETERMINING WHETHER A PROPOSED RECIPIENT OF A LIVING SPECIMEN OF AFRICAN ELEPHANT AND/OR SOUTHERN WHITE RHINOCEROS IS SUITABLY EQUIPPED TO HOUSE AND CARE FOR IT

This non-binding guidance has been developed on the basis of the mandate given to the Animals Committee through Decision 18.155 b).

Assessment of whether a proposed recipient of a living specimen of African elephant and/or southern white rhinoceros is suitably equipped to house and care for them should focus on factors related to physical housing, diet, animal care and husbandry, animal well-being, security, long-term sustainability of maintaining the facility and the care of the animals, and breeding\(^1\), as outlined in Section A.

The list of factors in Section A is indicative and can be further developed to reflect local situations.

While not compromising the overall objective of keeping animals in appropriate environment and ensuring their well-being, the values set up for different factors in Section A need to take into consideration the specific situation of each facility, and they need to be considered in their totality. While some factors are mutually interlinked and their values may be interdependent, each factor needs to be evaluated and satisfied in making the determination of suitably equipped to house and care for specimens in captivity. There needs to be care taken not to compromise on a factor due to mutual interlinking, and each individual factor needs to be set up at a level not to cause physical or social suffering to an animal.

All facilities should have a written and regularly reviewed management plan, which should include standards to determine how each of these factors will be implemented by the facility for the lifespan of the animals. This document should build on one or combination of existing best practice guidelines, as outlined in Section B.

While some minimum standards of husbandry are defined by Parties and represent the minimum requirements that each facility is obliged to meet to avoid mistreatment of animals, these non-binding best practice guidelines should not be understood as minimum requirements; they provide guidance for development and further improvements of facilities keeping African elephants and southern white rhinoceros in captivity.

Section A - Factors to be evaluated when considering whether the proposed recipient of a living specimen of African elephant or southern white rhinoceros is suitably equipped to house and care for it

1. Physical housing (indoor and outdoor)

All elements of physical housing (enclosures, doors, barriers, substrates, etc.) are designed and maintained to ensure safety for animals and humans. Elephants have sufficient space to make environmental and social choices, to move about and lie down without restriction in inside enclosures, and to walk appropriate distances on a daily basis in outside enclosures to maintain a healthy body condition, while engaging in natural behaviours such as foraging, feeding, exploring, socializing.

a) Construction

i. professional design of the facility with an emphasis on the needs of the specific animal species to be housed
ii. safety considerations of all construction elements and substrates (including sloped entries, non-slip surfaces, door construction, etc.)
iii. size of the enclosure corresponds to the group composition and dynamics, as well as to climatic conditions
   - indoor - adequate space for each animal to lie down and move around with free access to the outdoor areas day and night, in the absence of adverse weather, safety or health conditions
   - outdoor - sufficient space and environmental complexity to both allow for and stimulate natural behavioural activities and social interactions

\(^1\) While breeding is not a prerequisite to a facility being suitably equipped to house and care for a specimen, it is important to consider protocols established relating to breeding if breeding or not
- interplay between the size of the enclosure and its structural, vertical, and horizontal complexity and furnishing
iv. construction materials suitable for use with elephants and/or rhinoceros, no sharp ends, objects or potentially dangerous components
v. containment barriers - appropriate choice of materials and design, avoiding dry moats with steep slopes
vi. substrate - safe and appropriate due to health implications and its role in enrichment and comfort
vii. drainage to remove excess water
viii. appropriate and safe plantings
ix. Housing design includes structural and other precautions to mitigate against natural disasters such as flooding, hurricanes/typhoons, tornados/cyclones, earthquakes, wildfires, extreme temperatures/drought, etc., which can be reasonably anticipated in a given location
x. shelter from adverse weather (sun/rain/wind)
xi. enclosure furnishing
  - diversity of zones to display species-specific behaviour
  - pools (not necessary for southern white rhinoceros)
  - shade
  - sand bath or wallow (can be mud wallows)
  - scratching posts
  - resting areas
  - other physical enrichment (water features, other varying topography, multiple feeding stations, long term feeding options)
xii. physical arrangement for management of social groups, possibility to hide from the view of other animals and visitors, escape routes to permit animals to safely remove themselves from incidents of aggression by a conspecific
xiii. space to expand as the animal / herd grows / develops
xiv. areas adapted for bulls to separate them from females and calves if needed, in particular during oestrus / musth periods, while providing the same standard of housing to bulls (e.g. appropriate size, complexity, substrate and furnishing of enclosures, shelter, visual barriers and safety)
xv. physical arrangements for isolation / quarantine, avoiding compromising welfare if isolation is prolonged
xvi. enclosure construction designed to accommodate management under protected contact, and availability of area for training in positive Protected Contact\(^2\) handling of elephants
xvii. if breeding, space/arrangements for newborn animals
xviii. if animal is on public display, availability of an off-display area with permanent access
xix. cameras for security and for monitoring animals (pregnant females, elderly individuals, social tensions in a group, etc.)

b) climate conditions, with specific consideration of the local weather conditions
  i. temperature
    - zones with appropriate temperature
    - heating / cooling, for example heavy plastic or rubber curtains for entry doors, as appropriate
    - monitoring / limiting time spent outdoors in cold weather
  ii. light
    - as much natural light as possible, including indoor
    - quality artificial lighting indoor, gradual switch on/off
  ii. air quality (limiting dust, appropriate ventilation, measures to prevent transmission of airborne diseases)

2. Dietary needs

A properly balanced and healthy diet is provided in a stimulating way, based on the needs of each animal. Fresh clean water is available in sufficient quantity and at all times.

a) Nutrition
  i. basic diet designed and regularly reviewed by appropriate staff (veterinarian or nutritionist)
  ii. appropriate quantity of food and energy consumption

\(^2\) Protected Contact is a style of elephant management where all contact with the animal is performed through a protective barrier. Protected contact training is achieved through positive reinforcement techniques using targets, food rewards, body positioning and the voluntary participation by the elephant. Protected contact also includes situations where the elephant is handled through a protective barrier but is also spatially confined by an Elephant Restraint Device (ERD). Similar approach based on Positive Reinforcement Training is also used to perform the necessary procedures on rhinos. See EAZA, GFAS and other standards for more details.
iii. vitamins and minerals
iv. special dietary requirements (pregnancy, lactation, age, etc.)
v. appropriate storage conditions, quality and hygiene of food
vi. variety of food and feeding methods
vii. respecting feeding pattern (in time)
viii. provision of hay with low nutritional quality at all times and browse (for elephants)
ix. ensuring access of all individuals to food
x. avoiding obesity (in particular for elephants) – monitoring body condition scores

b) potable water available at sufficient quality, quantity, and at all times

3. Animal care and husbandry

All aspects of husbandry, including veterinary care, environmental enrichment and diet are designed to optimize the animal’s well-being. All animals are routinely monitored as frequently as needed. Animals are not fearful or aggressive in response to human presence or routine care procedures, and necessary handling and restraint is done safely and appropriately, with minimal distress to animals. Staff are trained in species-specific safe handling techniques/practices.

a) general care
   i. sufficient numbers, training and expertise of staff who care for the animals
   ii. general handling
       • daily checks of each individual
       • periodic health checks (body condition scores / weight, nutritional status), in appropriate frequencies for each individual depending on its age, health condition, etc.
       • regular cleaning of enclosures from manure and left-over food, cleaning / regular maintenance of pools (to avoid contamination and spreading of water-borne diseases)
       • protocol for safe handling (Protected Contact)
       • where possible and appropriate, Protected Contact is used to carry out the necessary procedures and checks of animals; other types of restraint should be limited to the shortest time possible in order to reduce stress
       • overnight visual monitoring techniques (including those capable of recording in low light/night conditions), such as CCTV monitoring to record social relationships and behavioural patterns, with regular review of footage
   iii. safe disposal of faeces and urine in a manner that eliminates pollution and avoids spreading of pathogens
   iv. feasibility of long-term care (for the lifespan of the animal)
   v. regular review of procedures to ensure continued level of care

b) veterinary care
   i. qualified veterinarian care
   ii. regular veterinary care for each animal
   iii. care at birth and death
   iv. preventive medicine
       - regular check-ups
       - vaccination
       - parasite control
       - regular tests to monitor overall health, including blood tests, trunk wash, eye swabs and saliva tests, as appropriate
       - regular testing of elephant calves to identify and subsequently treat active EEHV (elephant endotheliotropic herpesvirus) infections
       - dental and horn care
       - foot care
   v. disease and injury care
   vi. postmortem examination of dead animals
   vii. availability of veterinary medicinal products

c) arrangements for quarantine and isolation

d) transportation
i. availability of a plan for safe transportation
ii. respect guidelines for safe transportation (IATA, CITES, IUCN)
iii. close cooperation between sender and receiver of an animal, including on-site visits, in order to provide a better common understanding and better outcomes for housing and care

e) safety and security measures
- safety of animals
  a) preventing injury
  b) preventing escape
  c) regular inspections and maintenance of physical environment and enclosures, including their furnishing
  d) security to prevent theft and death of specimens
- safety of staff
- safety of visitors
- emergency management plan in the event of a disaster, such as flooding, hurricanes/typhoons, tornados/cyclones, earthquakes, wildfires, extreme temperatures/drought, etc., which can be reasonably anticipated in a given location
- plan for secure and legal maintenance, disposal, or destruction of specimens after death, in particular to prevent entering of dead body parts into illegal commercial trade

4. Animal well-being

Animals are kept in appropriate social groups. They are provided with a complex physical and social environment which stimulates natural behaviours, social interactions and activity. Food is prepared and presented in a safe and appropriate manner to meet health and social needs. The behavioural/psychological well-being of each animal is evaluated and addressed.

a) appropriate group size and composition
   i. social structure
   ii. ability to separate the group and individuals within the group when needed
   iii. methods of integration / introduction of new animals into the social structure and for changing group structure

b) possibility to hide from the view of other members of the herd/group, to exercise normal defence reactions and to keep appropriate flight or escape distances

c) proximity of other species / sharing enclosure with other species (consider safe zones and escape routes for other species as elephants and rhinoceros may be dominant)

d) animal behaviour
   i. behavioural enrichment plan
      • diverse nutrition
      • food to stimulate natural grazing conditions, food-based enrichment
      • materials to play
      • materials to scratch (trunks of trees, rocks)
      • enrichment frequency, training programs, etc.

e) exposure to visitors
   i. appropriate distance from visitors, including access to off-display areas
   ii. no touching / riding by visitors of African elephants and southern white rhinoceros
   iii. privacy from visitors (partial visual and sound dampening barriers)
   iv. measures to prevent visitors from discarding objects into enclosure (intentionally or unintentionally)

5. Record keeping

Written policy exists and is followed to maintain complete medical records and appropriate statistics for each individual animal.

a) all animals have permanent identification

b) maintain for each individual, from being acquired / born to the death, and until certain period after the animal’s death, or its transfer from the facility, records of:
i. source, date of acquisition, evidence of legal acquisition, parentage (if known), means of transport to the current facility, health records prior to acquisition (if available), relevant permits etc.
ii. preventive care and veterinary treatment, including weights and/or body condition scores
iii. dietary records
iv. behavioural, enrichment records
v. accidents, uncommon events
vi. breeding
vii. pregnancy and births, if applicable
viii. transportation and transfers, if applicable, when they occurred, for what purpose and how done, including permanent transfer to another facility
ix. death and final disposal, including disposal of body parts requiring specific attention (tusks, horns)

c) records should be made available to relevant government authorities, including to the authorities of the country of origin of a specimen, upon request, or as otherwise required by law

6. Breeding

Written policy exists to determine whether or not breeding occurs in the facility, with sound practices in place to properly care for infants born.

a) If not breeding: preventive measures and contraception (in consultation with the relevant breeding coordinator and veterinarian)

b) If breeding: develop a plan in advance, focusing on
   i. mating
   ii. pregnancy
   iii. birth
   iv. care of young including appropriate setup of enclosures to meet the needs of calves, plans in place for testing for and the treatment of active EEHV (elephant endotheliotropic herpesvirus) infections, should it arise
   v. population and genetic management
   vi. physical space requirements
   vii. participation in a recognised breeding programme

7. Wildlife and animal welfare laws

All relevant international, national and local wildlife and animal welfare conventions, laws and regulations are complied with.

a) compliance with national laws and/or regulations

b) compliance with international commitments
   i. CITES requirements
   ii. other (veterinary laws for international transport, etc.)
   iii. conservation agreements, if applicable

8. Other factors

a) Membership in a recognised Zoo association can provide further reassurance that the destination adheres to the standards and guidelines of that association and helps to exchange males to prevent inbreeding, but it is as such neither a pre-condition for assessment of an appropriate destination, nor a proof that the facility is an appropriate and acceptable destination

b) long-term policy of the facility of continual improvement to the quality of care and husbandry of the animals it maintains

c) arrangements should be made to ensure that any subsequent sale, donation or transfer of the animal (internationally or domestically) or of any animal born in the facility is also only to a facility suitably equipped to house and care for the specimen

d) support to in situ conservation
Section B - Examples of best practice documents for keeping living specimens of African elephant and southern white rhinoceros

Guidelines on keeping African elephants and southern white rhinoceros

EAZA. 2018. EAZA Best Practice Guidelines for the white rhinoceros (Ceratotherium simum). European Association of Zoos and Aquaria.  


BIAZA (British & Irish Association of Zoos & Aquariums Elephant Welfare Group): BIAZA (2019) Guidelines for the management of elephants within BIAZA zoos. These are available on request via the BIAZA office (admin@biaza.org.uk).  

Rhino Husbandry Manual – International Rhino Foundation  

https://assets.speakcdn.com/assets/2332/aza_standards_for_elephant_management_and_care.pdf

GFAS. Global Federation of Animal Sanctuaries Standards for Elephant Sanctuaries.  

GFAS. Global Federation of Animal Sanctuaries Standards For Rhinoceros, Hippopotamus and Tapir Sanctuaries  

Kane, L; Forthman D & Hancock D eds (2005) Optimal Conditions for Captive Elephants: A Report by the Coalition for Captive Elephant Well-Being  

Kane, L; Forthman D & Hancock D eds (2005) Best Practices by the Coalition for Captive Elephant Well-Being  

Secretary of State’s Standards of Modern Zoo Practice - Appendix 8 – Specialist exhibits, Elephants - June 2017  

Other relevant documents

Guidance for appropriate and acceptable destinations: African elephants and southern white rhinoceros  

IUCN. 2014. IUCN guidelines on the use of ex situ management for species conservation. IUCN SSC,  
Caring for wildlife – The world zoo and aquarium animal welfare strategy (WAZA)
https://www.waza.org/priorities/animal-welfare/animal-welfare-strategies/

WAZA code of ethics and animal welfare


EAZA animal welfare resources https://www.eaza.net/about-us/areas-of-activity/animal-welfare/


CITES Website which is regularly updated contains further guidance documents: https://cites.org/eng/imp/appropriate_and_acceptable_destinations