

AZA Standards for Elephant Management and Care

Approved March 2011

The Standards below are written to focus on a results-based assessment. They will serve as a guide for institutions to measure their success in managing and caring for their elephants and for AZA accreditation inspectors to measure the success of the programs. Thus, in addition to each Standard, there is a Measurement and an Explanation to assist with understanding and meeting each Standard.

These Standards, Measurements and Explanations are based primarily on the compilation of the Elephant Husbandry Resource Guide (Olson et al., 2004) and the information presented in the AZA Principles of Elephant Management (PEM) course. These two resources contain extensive information on all aspects of elephant care and management.

The ultimate goal of these Standards is excellent elephant management and care which will result in excellent overall elephant well-being in our institutions. Ultimately, success in our elephant management and care will allow AZA institutions to contribute to elephant conservation and ensure that elephants are in our future for generations to come.

1. Abiotic Environmental Variables (address both exhibit and off-exhibit holding)

1.1 Temperature

Standard – Outdoor – Daytime: All elephants must have access to shade when they are exposed to direct sunlight. Water suitable for drinking or bathing must be available daily or at greater frequency as needed to meet the elephant's cooling needs in the ambient environment.

Water, mud, dust, soil or sand must be available for elephants to dust themselves to assist with thermoregulation. Sufficient sheltered areas must be provided to protect elephants from adverse weather. When sunlight is likely to cause overheating or discomfort of elephants, sufficient shade by natural or artificial means shall be provided to allow all elephants kept outdoors to protect themselves from direct sunlight. Shade areas must be provided to assure that all individuals can have access to shade when desired and that subordinate elephants are not excluded from the shade. Elephants exposed to temperatures below 40°F (5°C) for longer than 60 minutes, must be monitored hourly to assess the potential for hypothermia. If needed to prevent hypothermia, supplemental heat, an area of direct sunlight protected from wind/precipitation, access to indoor barn stalls or other options for thermal management must be provided for the elephants.

Standard – Outdoor – Nighttime: Elephants kept outdoors when temperatures are under 40° F (5°C) overnight, must be provided with supplementary heat and adequate shelter from adverse weather.

Measurement: No instances of frostbite, heatstroke, sunburn, illnesses or elephant deaths related to environmental temperature/weather exposure.

Explanation: Institutions should consider designing exhibits that allow elephants outdoor access as much as possible – weather, health, and safety permitting. Elephants kept outdoors can tolerate moderate temperature extremes if they have been acclimatized to the ambient conditions. Multiple sheltered areas must be provided to ensure that all elephants have sufficient access to shelter and protection from the elements. Facilities may install outdoor heat sources to extend the amount of time the elephants are able to remain outside. Radiant or forced air heating are examples of acceptable heat. There may be a need to provide supplemental heat for young or compromised elephants at temperatures above $40^{\circ}F$ (5°C).

Standard – Indoor: Indoor holding areas must be able to be heated to a minimum temperature of at least 55°F (13°C) at all times of the year. One room must be capable of maintaining a temperature of at least 70°F (21°C) and be free of drafts for accommodating sick or debilitated elephants.

Measurement: No instances of frostbite, illnesses or elephant deaths related to environmental temperature/weather exposure.

Explanation: Care should be taken to control excessive heat indoors. At elevated indoor temperatures, the use of fans, cross-ventilation, access to water, cool substrate, allowing elephants access to an outside area or other cooling measures must be employed as needed. The key is to provide elephants with the opportunity to thermoregulate themselves as much as possible.

1.2 Humidity and Ventilation

Standard: There are no standards for humidity or ventilation at this time.

Explanation: There are no standards for humidity or ventilation at this time.

1.3 Illumination - Light intensity, spectral, and duration requirements

Standard: Ample lighting must be provided for staff to work safely around the elephants day or night.

Measurement: When staff are working around or interacting with the elephants, the elephants should be able to be clearly seen and their movements/behavior observed at all times within their indoor enclosures. Adequate light must be provided to monitor the safe use of all equipment (ERD) and the movement of all doors and gates.

Explanation: Natural daylight cycles are adequate for elephants, even in temperate regions. When kept indoors for extended periods, fluorescent, or incandescent lights provide a sufficient spectrum of illumination. Skylights, in addition to interior lighting, are effective and recommended.

1.4 Facilities

1.4.1. Space requirements, behavioral repertoire, and complexity

1.4.1.1. Indoor space

Standard: Indoor facilities must provide adequate room for elephants to move about and lie down without restriction. Appropriate space should be available to allow elephants to be separated either through individual stalling or through the use of restraints (See 3.3.2.7). Indoor housing for both males and females must be designed to accommodate an elephant that can reach up to 24 ft (7.3 m) vertically. All ceilings, wire, pipes, etc. must be out of reach or adequately protected.

Measurement: If there are elephant behavioral, social, or medical issues shown to be caused by insufficient space, there must be a program in place (from a programmatic and/or facility perspective) to address the issue.

Explanation: For facilities in climates that require elephants to be indoors for significant amounts of time, it is highly recommended that larger interior common spaces be developed to enhance social interactions and allow for greater movement and diversity of space during inclement weather conditions as well as overnight. Minimum recommended stall space (i.e. temporary holding, overnight, etc) is not less than 600 sq ft (56 sq m) for males or females with calves, and not less than 400 sq ft (37 sq m) for females.

1.4.1.2. Outdoor space

Standard: Outdoor habitats must provide sufficient space and environmental complexity to both allow for and stimulate natural behavioral activities and social interactions resulting in healthy and well-adapted elephants.

Measurement: If there are elephant behavioral, social, or medical issues shown to be caused by insufficient space, there must be a program in place (from a programmatic and/or facility perspective) to address the issue.

Explanation: Space is one of the most difficult measures to standardize. There is no scientific data which clearly indicates the amount of space needed for an elephant to be healthy and well adjusted. It is the quality of the overall programmatic approach to good elephant management and the quality of the space from an elephant perspective that determines adequacy of the facility, not simply the square footage of the environment. Thus, if the elephants are healthy and socially adapted, then whatever is being provided meets the standard. It is inaccurate to say that because a facility has a certain amount of

space, then it has good elephant management. Recommended minimum size for outdoor habitats is not less than 5400 sq ft (500 sq m) per elephant using the habitat.

1.4.1.3. Behaviors

Standard: The facility and program provides a complex physical and social environment which stimulates natural behaviors, social interactions and activity levels resulting in healthy, well-adapted elephants.

Measurement: The elephants are physically healthy and socially well-adapted without aberrant behavior or excessive aggression within the social group.

Explanation: There is no current data to indicate what amount of activity, or what daily walking distance is most appropriate for optimal elephant welfare. The basic needs may be different for each elephant. Since the goal is healthy, socially well-adapted elephants, how it is achieved is less important than that it is achieved.

1.4.1.4 New exhibits and renovations

Standard: All institutions planning new construction for elephants or modifying existing elephant facilities must include holding space for adult males in their construction/renovation plans. All new construction and major renovations must be designed in a manner that minimizes the regular need for tethering.

Measurement: Review the facilities submitted commitment to be either a holding, holding/breeding or breeding facility and review their plans to ensure compliance with the AZA Elephant Vision and Commitment statements.

Explanation: AZA's commitment to elephants will only be successful if all facilities live up to their commitment in the ability to hold males and comply with TAG breeding recommendations.

1.4.2. Minimum inter-individual distances that will influence size of space

Standard: There are no standards for minimum inter-individual distances that will influence size of space at this time.

Explanation: See 2.2.2.2. Facility must have sufficient structures for all elephants to participate in all ranges of natural behaviors. Elephants are a social species and herds often perform activities together, such as feeding, drinking, walking, resting, and wallowing.

1.4.3. Furnishings to accommodate an array of locomotive and foraging behaviors as well as resting and sleeping

Standard: See 1.4.1