

# the accreditation standards and related policies

2013 edition



#### ACCREDITATION STANDARDS and Related Policies

#### SIGNIFICANT ADDITIONS & CHANGES 2009-2013

#### 2013

Safety/Security REVISED 11.2.5, 11.7.1 2012 Animal Care, Welfare, & Management NEW 1.4.9, 1.5.1 Animal Care, Welfare, & Management REVISED 1.2.1, 1.3.1, 1.3.2, 1.4.4, 1.5.2, 1.5.4, 1.5.5, 1.5.8, 1.5.10, 1.6.1, 1.7.1 Veterinary Care NEW 2.8.1 Veterinary Care REVISED 2.1.1, 2.4.1, 2.5.1, 2.6.1, 2.6.2, 2.7.3 Conservation REVISED 3.1.1, 3.2.1, 3.2.2, 3.3.2, 3.3.5 Education & Interpretation **REVISED** 4.1.1, 4.2.1, 4.2.3, 4.2.4, 4.3.3 Staff **REVISED** 7.4, 7.5, 7.7, 7.8 Support Organization **REVISED** 8.2, 8.3 Finance NEW 9.5; REVISED 9.4 Physical Facilities NEW 10.1.2, 10.3.4; REVISED 10.1.1, 10.2.1, 10.3.1, 10.3.3 Safety/Security NEW 11.2.2, 11.2.5, 11.7.2, 11.7.3, 11.7.4 Safety/Security **REVISED** 11.1.2, 11.1.3, 11.2.3, 11.3.1, 11.3.2, 11.3.5, 11.3.6, 11.4.1, 11.6.1, 11.8.1 2011 Animal Care, Welfare, & Management REVISED 1.4.4, 1.4.7 Staff NEW 7.11 Support Organization REVISED 8.1 2010 Numbering of Standards Animal Care, Welfare, & Management NEW 1.5.10 2009 Animal Care, Welfare, & Management NEW 1.5.11 Veterinary Care NEW 2.6.2 Research NEW General Considerations box; REVISED 5.2 & 5.3 Safety/Security **REVISED** 11.3.1 Policy on the Presentation of Animals Apes in Media and Commercial Performances Full Participation in the SSP REVISED SSP Reconciliation Policy

#### **Table Of Contents**

ACCREDITATION STANDARDS	5 - 86
Preamble	5
Animal Care, Welfare, & Management	6 - 10
Veterinary Care	10 - 12
Conservation	13 - 14
Education and Interpretation	14 - 16
Research	16
Governing Authority	16 - 17
Staff	17 - 18
Support Organization	18
Finance	18 - 19
Physical Facilities	19 - 20
Safety/Security	20 -24
Guest Services	25
Other Programs/Activities	25
AZA Standards For Elephant Management And Care	26 - 55
<b>Animal Contact With the General Public</b> Reptiles and Amphibians Birds	56 - 58 56 57
Mammals	57 57 - 58
Fish/Aquatic Tanks	58
AZA Program Animal Policy	59 - 60
Program Animal Position Statement	61 - 63
Recommendations for Developing an Institutional Program Animal Policy	64 - 69
Policy on the Presentation of Animals	70
Apes in Media and Commercial Performances	70 - 71
Agreement Between FDA and AZA Regarding Use of Animal Drugs	72
Full Participation In The SSP	73 - 74
SSP Reconciliation Policy	75 - 76
AZA Acquisition / Disposition Policy	77 - 81
AZA Code of Professional Ethics	82 - 86

#### **IMPORTANT NOTES & DEFINITIONS REGARDING THESE STANDARDS:**

**1. Accreditation and certification standards**: These standards are for accreditation applicants and certification applicants alike. In the case of certification, an education program is not required, nor are standards directly related to the presence of the visiting public. However, if the facility has an education program, and/or hosts public groups on a regular basis, all related standards must be met.

**2.** Zoo or Aquarium Definition: For the purposes of AZA's <u>accreditation program</u>, a zoological park or aquarium is defined as: "a permanent institution which owns and maintains wildlife, under the direction of a professional staff, provides its animals with appropriate care and exhibits them in an aesthetic manner to the public on a regular basis. The institution, division, or section shall further be defined as having as their primary mission the exhibition, conservation, and preservation of the earth's fauna in an educational and scientific manner." The Accreditation Commission, and its agents, shall determine whether an institution meets the definition of a zoological park or aquarium.

**3. Related Facility Definition: For the purposes of AZA's <u>certification program</u>, the Related Facility** 

**membership category is defined as:** "organizations holding wildlife that are not commercial entities, and are not open to the public on a regularly scheduled, predictable basis. The facility shall be under the direction of a professional staff trained in animal husbandry, and shall be further defined as having conservation and preservation as part of its mission—a mission that shall have a beneficial, tangible, supportive impact on the zoological and aquarium professions. This includes wildlife ranches, wildlife refuges or rehab centers, research facilities, survival centers, breeding farms, wildlife sanctuaries, and/or similar organizations." The Accreditation Commission, and its agents, shall determine whether a facility meets the definition of a related facility.

#### 4. Other Definitions:

AESTHETIC: pertaining to the beautiful.

CEO/DIRECTOR: The person with the authority and responsibility for the operation of the institution: other titles may include president, chief executive officer, superintendent, supervisor, manager, or other similar title.

CONSERVATION: Conservation is understood to be active stewardship of the natural environment, including wildlife, plants, energy and other natural resources.

GOVERNING AUTHORITY: The agency which has authority for governing the operations of the institution: such may include city, county/provincial, or federal government bodies, or private corporation, foundation, society, or other similar entities.

MODERN ZOOLOGICAL PRACTICES AND PHILOSOPHIES: practices and philosophies that are commonly accepted as the norm by the profession. The word "practices" represents the tangible while "philosophies" refers to an overall perspective.

PERMANENT (cultural institution): an institution founded by an authority which intends it to continue indefinitely.

PROFESSIONAL STAFF: at least one paid full-time employee who commands an appropriate body of special knowledge and has the professional experience and ability to reach zoological park or aquarium management decisions consonant with the experience of peers and who has access to and knowledge of the literature of the field.

REGULAR BASIS: regular hours, so that access is reasonably convenient to the public.

WILDLIFE: non-domesticated animal life.

**5. Authority:** The Accreditation Commission, and its agents, shall determine if a facility is meeting standards, and incorporating modern zoological practices and philosophies. The Visiting Committee is an arm of the Accreditation Commission, however, the Accreditation Commission is the final authority in interpreting these standards.

**6.** Order of Sections: Placement of items in this document has no bearing on importance to accreditation processing as *all* areas are considered pertinent for the operation of a professional institution.

**7. Performance standards versus engineering standards:** With few exceptions, AZA standards are primarily *performance* standards (i.e., measuring the level of achievement considered acceptable to fulfill a performance characteristic, and choice in method for meeting the goal). This differs from *engineering* standards, where exact and precisely measured steps are required to fulfill an engineering characteristic, with little or no variation in method for meeting the goal.

**8. Subjectivity:** Due to the large number of variables existing between institutions, some standards necessarily allow for certain levels of subjectivity by both the Visiting Committee and the Accreditation Commission.

### **Accreditation Standards**

#### **PREAMBLE**

Zoos and aquariums accredited by the Association of Zoos & Aquariums (AZA) are continuously evolving. A primary goal of AZA institutions is to achieve the highest standard of welfare for the animals in our care. Standards are constantly being raised, ensuring that animals in AZA institutions are receiving the best possible care from highly qualified staff, in modern facilities that represent best practice in our profession. 21st century AZA-accredited institutions and certified related facilities are expected to be leaders in the field and to embrace the highest quality facilities, programs, and staff available. Animals must be well cared for and housed in appropriate settings that provide an educational experience for visitors, and meet the animals' physical, psychological, and social needs. Animals must be managed as appropriate for long-term genetic viability of the species, which means careful planning of resource allocation, exsitu breeding, and ex-situ/in-situ conservation and research.

The phrase "modern zoological practices and philosophies" refers to practices and philosophies that are commonly accepted as the norm by the profession. The word "practices" represents the tangible while "philosophies" refers to an overall perspective. AZA-accredited institutions and certified related facilities must be incorporating modern zoological practices and philosophies as basic tenets.

All AZA accredited institutions and Certified Related facilities must follow all local, state, and federal laws and/or regulations. Some AZA standards may be more stringent than existing laws and/or regulations and, in these cases, the AZA standards must be met.

Primarily, AZA standards are *performance* standards (i.e., measuring the level of achievement considered acceptable to fulfill a performance characteristic, and choice in method for meeting the goal). This differs from *engineering* standards, where exact and precisely measured steps are required to fulfill an engineering characteristic, with little or no variation in method for meeting the goal.

#### 1. ANIMAL CARE, WELFARE, & MANAGEMENT

#### **General Considerations:**

Animal care, welfare and management are among the most critical and complex tasks performed by zoos and aquariums. Administration and management must be guided by modern professional principles establishing plans and procedures to execute those functions in addition to sustainable *ex situ* wildlife conservation.

Providing excellent animal care and public education about wildlife results in direct and indirect contact between animals and humans, whether staff, volunteers, or visitors. Benefits of such contact are multifold. They include maximizing quality in healthcare, behavior management, and sanitation, along with the educational value of connecting an increasingly urban public to animals and nature. In doing this there are significant risks to consider as well, such as injury to animals and people, psychological stress, and potential transmission of infectious disease. It is important for all zoos and aquariums to strategically assess the benefits and risks of animal contact throughout their institutions, and to implement the best, most productive and safe human-animal interactions possible. (See pages 56 - 58 of these standards for further information.)

#### 1.1. Local, State and Federal Wildlife Laws

1.1.1. The institution must comply with all relevant local, state, and federal laws and regulations, including those specific to wildlife. It is understood that, in some cases, AZA accreditation standards are more stringent than existing laws and regulations. In these cases the AZA standard must be met.

#### 1.2. Animal Care Manuals

1.2.1. As available, the institution must provide access for all animal care staff to all AZA Animal Care Manuals (ACMs) that have been approved by the AZA Board of Directors and that apply to species at the institution.

Explanation: Institutions should regularly review the guidelines and suggestions within the ACMs, and tailor their animal care programs, protocols, and exhibits accordingly. A listing of Board-approved ACMs is available on AZA's website at: <a href="http://www.aza.org/animal-care-manuals/">http://www.aza.org/animal-care-manuals/</a>. Institutions should check regularly for updates.

#### 1.3. Documents and Policies

1.3.1. The institution must have an Institutional Collection Plan (ICP). The ICP must be reevaluated and updated at minimum every five years.

Explanation: The purpose of an ICP is to thoughtfully assess, on a regular basis, the reason for having each taxon in the collection. The ICP should include a statement of justification for all species and individuals in the institution's planned collection. The ICP should consider such criteria as: •status in the wild, •status in zoos and aquariums, •existence and priorities of cooperative management programs, •ability to maintain the species in a physically, psychologically, and socially healthy environment, •exhibit value, •exhibit suitability (may include climatic considerations), •need for husbandry and other

research, •recommendations stated in AZA TAGs' Regional Collection Plans, and •any other issues specific to the institution's mission and vision.

## **1.3.2.** The institution must have a written acquisition/disposition policy that, at minimum, incorporates all requirements contained in AZA's acquisition/disposition policy. (See pages 77 - 81 of these standards for further information).

Explanation: Animal acquisition/disposition policies (including breeding loans) should be continually reviewed to keep them current with all applicable laws and/or regulations. Such policies must also incorporate all policies and/or resolutions adopted by AZA regarding hunting ranches, animal auctions, research, pets, participation in SSPs, TAGs, and CAPs, and other issues involving the acquisition and disposition of wildlife.

Records must be maintained for all transactions involving acquisition and disposition of animals to and from the institution and must include the terms of the transaction. In making the decision to surplus an animal(s) to a non-AZA accredited facility the AZA institution must document that the receiving institution is willing and able to provide proper care and welfare for the animal(s) and that the disposition is done in accordance with AZA's Acquisition & Disposition Policy.

Copies of all relevant permits, importation papers, declaration forms, titles, and other appropriate documents establishing a paper trail of legal acquisition must be maintained. When such information does not exist (the institution's maintenance of confiscated wildlife) an explanation must be provided regarding such animals.

#### 1.4. Records

- **1.4.1.** An animal inventory must be compiled at least once a year and include data regarding acquisitions and dispositions at the institution.
- **1.4.2.** All species owned by the institution must be listed on the inventory, including those animals on loan to and from the institution. In both cases, notations should be made on the inventory.
- 1.4.3. Animals must be identifiable, whenever practical, and have corresponding ID numbers. For animals maintained in colonies/groups or other animals not considered readily identifiable, the institution must provide a statement explaining how record keeping is maintained.
- 1.4.4. Animal records, whether in electronic or paper form, including health records, must be duplicated and stored in a separate location.

Explanation: The institution must prevent records from being lost or destroyed in a catastrophe. A complete and up-to-date set of animal records must be duplicated and stored in separate locations (e.g., not in the same building, if kept on site). Consideration should be given to physical distance and natural hazards when selecting the separate location. Electronic systems are acceptable.

- 1.4.5. At least one set of the institution's historical animal records must be stored and protected. Those records should include permits, titles, declaration forms, and other pertinent information.
- 1.4.6. A staff member must be designated as being responsible for the institution's animal recordkeeping system. That person must be charged with establishing and maintaining the institution's animal records, as well as with keeping all animal care staff members apprised of relevant laws and regulations regarding the institution's animals.
- 1.4.7. Animal records must be kept current, and data must be logged daily.

Explanation: For keepers and other line staff, animal records must be current; data should be logged daily. Registrars should make every effort to log incoming new

acquisition/disposition and other appropriate data on a daily basis, or within 24 hours of receipt (on Monday, if a Friday). Records must be kept for at least five years (or until the next accreditation cycle is completed). Prior to disposal of any animal record files (e.g., keeper reports), all pertinent information must be transferred to the animal's permanent historical file.

1.4.8. The institution must have a record-keeping system that provides sufficient detail to enhance husbandry, breeding, conservation, and medical health advancements to move forward the critical knowledge of the species through permanent and retrievable documentation.

Explanation: ISIS participation is recommended (not required) for all species, and especially for all endangered, CITES I, SSP, and studbook species.

1.4.9. At least one member of an institution's staff responsible for animal record-keeping should have the proper training, e.g., AZA's Institutional Records-Keeping course.

#### 1.5. Animal Care and Welfare

- **1.5.0.** The animals in the institution should be representative of the mission statement of the institution.
- 1.5.1. Animals should be presented in a manner reflecting modern zoological practices in exhibit design, balancing animals' functional welfare requirements with aesthetic and educational considerations.
- **1.5.2.** All animals must be housed in enclosures and in appropriate groupings which meet their physical, psychological, and social needs. Wherever possible and appropriate, animals should be provided the opportunity to choose among a variety of conditions within their environment. Display of single animals should be avoided unless biologically correct for the species.
- **1.5.3.** If animal demonstrations are part of the institution's programs, an educational/conservation message must be an integral component.
- 1.5.4. A written policy on the use of live animals in programs must be on file. Animals in education programs must be maintained and cared for by trained staff, and housing conditions must meet standards set for the remainder of the animals in the institution, including species-appropriate shelter, exercise, social and environmental enrichment, access to veterinary care, nutrition, etc. Since some of these requirements can be met outside of the primary enclosure, for example, enclosures may be reduced in size provided that the animal's physical and psychological needs are being met.

Explanation: As stated in the AZA Program Animal Policy, the management of program animals requires special consideration. Although the housing conditions for program animals may look different to those provided to exhibit animals, institutions must provide similar social, physical, behavioral and nutritional opportunities to program animals. Providing program animals with control over their environment is essential for effective care and management.

**1.5.5.** For animals used in offsite programs and for educational purposes, the institution must have adequate protocols in place to protect the rest of the animals at the institution from exposure to infectious agents.

Explanation: A veterinary risk assessment should be made when developing and implementing institution protocols to protect animal health in situations where education or institution animals are taken off site.

1.5.6. Institutions with elephants must follow the AZA Standards For Elephant Management And Care.

Page 8

1.5.7. The animals must be protected from weather, and any adverse environmental conditions.

Explanation: Animals not normally exposed to cold weather in their natural habitats should be provided heated enclosures. Likewise, protection from excessive heat should be provided to animals normally living in cold climates.

**1.5.8.** The institution must develop a clear process for identifying, communicating, and addressing animal welfare concerns within the institution in a timely manner, and without retribution.

Explanation: A committee or some other process must be identified to address staff concerns for animal welfare within the institution. The committee or process should include staff with the experience and authority necessary to evaluate and implement any necessary changes. Examples of Institutional Animal Welfare Processes can be obtained at <u>http://www.aza.org/detail.aspx?id=16596</u> (you will be requested to log in using your individual membership user name and password).

**1.5.9.** The institution must have a regular program of monitoring water quality for fish, pinnipeds, cetaceans, and other aquatic animals. A written record must be maintained to document long-term water quality results and chemical additions.

Explanation: Monitoring of selected water quality parameters will provide confirmation of the correct operation of filtration and disinfection of the water supply available for the animals. Additionally, high quality water enhances animal health programs instituted for aquatic animals.

- **1.5.10.** Temporary, seasonal and traveling live animal exhibits (regardless of ownership or contractual arrangements) must meet the same accreditation standards as the institution's permanent resident animals.
- 1.5.11. Animal transportation must be conducted in a manner that is safe, well-planned and coordinated, and minimizes risk to the animal(s), employees, and general public. All applicable laws and/or regulations must be adhered to.

Planning and coordination for animal transport requires good communication among all involved parties, plans for a variety of emergencies and contingencies that may arise, and timely execution of the transport. At no time should the animal(s) or people be subjected to unnecessary risk or danger.

Explanation: Safe animal transport requires the use of appropriate conveyance and equipment that is in good working order. The equipment must provide for the adequate containment, life support, comfort, temperature control, food/water, and safety of the animal(s). Safe transport also requires the assignment of an adequate number of appropriately trained personnel (by institution or contractor) who are equipped and prepared to handle contingencies and/or emergencies that may occur in the course of transport.

#### 1.6. Enrichment

**1.6.1.** The institution must have a formal written enrichment and training program that promotes species-appropriate behavioral opportunities.

Explanation: An enrichment and training program should be based on current information in biology, and should include the following elements: goal-setting, planning and approval process, implementation, documentation/record-keeping, evaluation, and subsequent program refinement. The enrichment program should also apply to animals in quarantine, as appropriate and possible. Further information on the establishment of an enrichment program is available from AZA, and online at <u>http://www.aza.org/detail.aspx?id=16596</u> (you will be requested to log in using your individual membership user name and password).

**1.6.2.** The institution must have a specific staff member(s) or committee assigned for enrichment program oversight, implementation, training, and interdepartmental coordination of enrichment efforts.

#### 1.7. Commercial Collectors

- 1.7.1. Institutions that acquire aquatic animals from the wild will make a good faith effort to determine that collecting procedures are done in a sustainable manner.
- 1.7.2. Institutions dealing with commercial collectors must determine that the collectors are properly permitted to conduct legal collections of animals (including aquatic animals) from the wild.

Explanation: The institution must be proactive in ensuring that any commercial collectors utilized are properly permitted to conduct legal collections of animals from the wild.

#### 2. VETERINARY CARE

#### **General Considerations:**

The institution should adopt the most recent (2009) edition of the *Guidelines for Zoo and Aquarium Veterinary Medical Programs and Veterinary Hospitals* developed by the American Association of Zoo Veterinarians (AAZV). This document is available at

http://www.aazv.org/displaycommon.cfm?an=1&subarticlenbr=839, under Publications, and can also be obtained in PDF format by contacting AZA staff.

#### 2.1. <u>Staff</u>

2.1.1. A full-time staff veterinarian is recommended. In cases where such is not practical, a consulting/part-time veterinarian must be under written contract to make at least twice monthly inspections of the animals and to respond as soon as possible to any emergencies.

Explanation: Because of their size or nature, exceptions may be made to the twice monthly inspection requirement for certain institutions (e.g., insects only, etc.).

2.1.2. So that indications of disease, injury, or stress may be dealt with promptly, veterinary coverage must be available to the animals 24 hours a day, 7 days a week.

#### 2.2. Pharmaceutical

**2.2.1.** Written, formal procedures must be available to the animal care staff for the use of animal drugs for veterinary purposes, and appropriate security of the drugs must be provided.

Explanation: Such procedures should include at minimum the following: those persons authorized to administer animal drugs, situations in which they are to be utilized, location of animal drugs and those persons with access to them, and emergency procedures in the event of accidental human exposure. Outdated drugs must be marked as such and stored separately from all other drugs. All controlled substances must be stored in a securely locked container of substantial construction appropriate for the types of drugs in the inventory. Carfentinel, Etorphine hydrochloride (M99), and Diprenorphine (M50-50) must be stored in a safe or steel cabinet equivalent to a U.S. Government Class V security container. [NOTE: Underwriters Laboratories (UL) listed burglary-resistant safe (UL-TL 15, TL 30, or TL 45 with a Group 1-R lock). The safe or steel cabinet shall have the

following specifications or the equivalent: 30 man-minutes against surreptitious entry, 10 man-minutes against forced entry, 20 man-hours against lock manipulation, and 20 man-hours against radiological techniques.]

2.2.2. The use of drugs in aquariums or aquatic exhibits must comply with FDA Guidelines.

Explanation: The AZA has established an agreement with the Food and Drug Administration (FDA) resulting in a statement from the FDA indicating that it has no objection to the use of drugs in public aquariums under the supervision of a licensed veterinarian. The AZA agreed to implement measures designed to address specific concerns raised by the FDA regarding drug use and possible diversion to use with food fishes and the pet industry. The AZA membership appreciates the fact that the FDA understands that our institutions are primarily education and conservation organizations and that we require the use of drugs to keep our animals healthy. This agreement has been reviewed by AZA Institution directors, curators, and veterinarians and resulted in the procedures on page 72 of this booklet.

#### 2.3. Equipment

- 2.3.1. Capture equipment must be in good working order and available to authorized, trained personnel at all times.
- 2.3.2. Institution facilities should have radiographic equipment or have access to radiographic services.

#### 2.4. Preventative Medicine

2.4.1. The veterinary care program must emphasize disease prevention.

Explanation: Preventative medicine programs (vaccinations, TB testing, parasite exams, etc.) must be in force for all of the institution's animals and must be under the direction of a qualified veterinarian.

2.4.2. Keepers should be trained to recognize abnormal behavior and clinical signs of illness and have knowledge of the diets, husbandry (including enrichment items and strategies), and restraint procedures required for the animals under their care. However, keepers should not diagnose illnesses nor prescribe treatment.

#### 2.5. Necropsy

**2.5.1.** Deceased animals should be necropsied to determine the cause of death. Cadavers must be stored in a dedicated storage area. Disposal after necropsy must be done in accordance with local/federal laws.

Explanation: Necropsies performed on animals in the institution provide critical information as to the cause of death as well as underlying pathology that may be related to nutritional status or other aspects of husbandry. Causes of mortality, including necropsy data, should be reviewed on a regular basis in order to reveal any group health implications or necessary changes to animal management. In general, all animals that die in the institution should be necropsied. However, certain cases (e.g., mortalities of a group of individuals) may only require the examination of a smaller number of representative individuals.

2.6. Nutrition

- 2.6.1. Animal food preparation and storage must meet all applicable laws and/or regulations.
- 2.6.2. The institution should have a written nutrition program that meets the behavioral and nutritional needs of all species, individuals, and colonies/groups in the institution. Animal diets must be of a quality and quantity suitable for each animal's nutritional and psychological needs.

Explanation: Nutrition programs should be developed using the recommendations of appropriate AZA TAGs or SAGs, and the AZA Nutrition Advisory Group <u>http://www.nagonline.net/Feeding%20Guidelines/feeding\_guidelines.htm.</u> Diet formulation criteria should include each animal's individual history and natural history, feeding ecology and behavioral needs. Meat processed on site must be processed following all USDA (or federal) standards.

**2.6.3.** The institution should assign at least one person to oversee appropriate browse material for the animals.

Explanation: If the institution uses browse plants as part of the diet or as enrichment items for its animals, the items must be identified and reviewed for safety. The responsibility for approval of browse items and oversight of the program should be assigned to at least one qualified individual. The program should identify what plants are safe to feed and to which species, which parts of the plant are safe, whether the browse plants have been treated with any chemicals or if they are near any point sources of pollution. If animals have access to plants in and around their exhibits, there should be a staff member responsible for ensuring that the animals are not exposed to toxic plants.

2.6.4. If not in separate buildings, animal food preparation areas must be physically separated from other functions such as the animal hospital (including animal treatment, isolation, holding, deceased animal storage) and employee lounges. Animal food must not be stored in the same area as animal drugs. Animal food and human food must not be stored in the same location (refrigerators, freezers, etc.).

#### 2.7. Quarantine

- **2.7.1.** The institution must have holding facilities or procedures for the quarantine of newly arrived animals and isolation facilities or procedures for the treatment of sick/injured animals.
- 2.7.2. Written, formal procedures for quarantine must be available and familiar to all staff working with quarantined animals.
- 2.7.3. Quarantine, hospital, and isolation areas should be in compliance with standards/guidelines contained within the *Guidelines for Zoo and Aquarium Veterinary Medical Programs and Veterinary Hospitals* developed by the American Association of Zoo Veterinarians (AAZV), which can be obtained at:

http://www.aazv.org/associations/6442/files/veterinary\_standards\_2009\_final.docx.

#### 2.8. Pest Control

2.8.1. Pest control management programs must be administered in such a manner that the animals, staff, and public are not threatened by the pests, contamination from pests, or the control methods used.

#### 3. CONSERVATION

#### General Considerations:

Conservation efforts have been identified as a priority for AZA-accredited institutions. These include interpretive materials and programs, participation in AZA animal management programs, in-situ efforts, and resource support for cooperative conservation programs. Participation in conservation programs, to the extent appropriate, must be demonstrated.

#### 3.1. Mission

3.1.1. Conservation must be a key component of the institution's mission.

Explanation: Conservation is understood to be active stewardship of the natural environment, including wildlife, plants, energy, and other natural resources.

#### 3.2. Conservation Program

**3.2.1.** The institution must have a written conservation action plan/strategy in proportion to the size and scope of the organization.

Explanation: Each institution must participate in conservation activities that implement its conservation action plan. These may include:

- Participation in regional conservation alliances (regional conservation efforts with other AZA institutions, agencies, conservation organizations).
- Participation in regional, national, or international conservation programs or projects through staff or resources. Conservation programs should aim to be multidisciplinary and involve at least some of the following: applied research, species recovery, conservation awareness and education, local community participation, establishment of protected areas, habitat restoration.
- Grants programs for field conservation.
- Participation in recovery plans for endangered and threatened species.
- Involvement in capacity building, training, and technology transfer for field conservation efforts.
- Conservation education programming for public awareness and public participation in conservation activities. (This alone would not be sufficient for a conservation action plan/strategy.)

3.2.2. Each institution should evaluate/measure the impact of its conservation program/activities.

Explanation: Some form of regular evaluation of conservation efforts should occur. Measurement of impact can include assessment of achievement of programmatic goals, actual measure of impact on species and habitat conservation, and/or some other quantitative measure of success.

#### 3.3. Participation/Support

- 3.3.1. The institution must participate in every SSP that pertains to an animal belonging to the institution. The institution may indicate at what level it desires to participate in each SSP.
- 3.3.2. The institution must actively support and participate in AZA wildlife conservation programs, and cooperate in providing pertinent information on its animals in a timely fashion to sources such as studbook keepers, SSP species coordinators, TAGs, and CAPs.

Explanation: To meet AZA's primary goal of cooperative animal management and conservation, accredited facilities must participate in SSPs (see 3.3.1.), and should

participate in other appropriate AZA programs. Such programs include the Taxon Advisory Groups (TAGs), Conservation Action Plans (CAPs), Scientific Advisory Groups (SAGs) and regional/international studbooks. Accredited facilities should encourage staff members to assume leadership roles in these programs.

3.3.3. The institution must support wildlife conservation programs and AZA Animal Programs.

Explanation: Such programs <u>may</u> include AZA's Taxon Advisory Groups (TAGs), Conservation Action Plans (CAPs), Scientific Advisory Groups (SAGs), regional/international studbooks, the World Association of Zoos and Aquariums (WAZA), the Species Survival Commission (SSC), and the Conservation Breeding Specialist Group (CBSG), local universities, conservation organizations, etc.

3.3.4. The institution must have involvement in regional or international conservation programs through staff or resources.

Explanation: Conservation programs should aim to be multidisciplinary and involve at least some of the following: applied research, species recovery, conservation awareness and education, local community participation, establishment of protected areas, habitat restoration.

3.3.5. The institution must demonstrate responsible energy and natural resource conservation through such activities as waste minimization (e.g., recycling, composting, etc.), water conservation initiatives, reduced energy consumption, use of other alternative energy sources, and other "green" practices. Resource conservation efforts should be in proportion to the size and scope of the organization.

#### 4. EDUCATION AND INTERPRETATION

#### **General Considerations:**

This section includes all questions related to education and interpretation. Collectively, education and interpretation refer to: programming on-site and offsite for targeted audiences such as school groups, teachers and families, as well as all types of interpretive methods for guests, for example, graphics, exhibits, program animal use, and docent/keeper talks. Institutions may differ organizationally in how they accomplish these tasks (e.g., some institutions may have an Exhibits Department, or graphics may be coordinated by the Art Department). What is key is the role of the education staff in the accomplishment of these tasks. Institutions are encouraged to share educational and interpretive programming, materials, and evaluation techniques with other AZA institutions.

#### 4.1. Mission

4.1.1. Education must be a key component of the institution's mission.

Explanation: Education is an important component in the conservation mission of each institution. Effective educational programming is a proven method of increasing awareness and participation in stewardship of the natural world.

#### 4.2. Education Program

4.2.1. The institution must have a written education plan that matches current industry standards, and that includes goals and objectives.

Explanation: The institution's education plan must include a copy of its education vision/mission, as well as strategic goals and objectives. The plan may include a copy of the organizational chart, and description of how the education department interacts with other departments on issues such as exhibit and graphics' development, keeper presentations, *in situ* conservation programs, etc. The plan should include the institution's conservation messages (preferably referencing the AZA Conservation Education Messages).

- 4.2.2. The education department must be under the direction of a paid staff person who is trained or has experience in educational programming. Education personnel should be involved in the development of exhibits, graphics, and interpretation, as well as all structured programs for the visiting public.
- 4.2.3. Institutions should participate in active, ongoing collaborative partnerships with organizations and individuals that can contribute to the expansion of their educational dimension. Such partnerships may include community groups, other informal education institutions (museums, science centers, nature centers, etc.), school districts, institutes of higher learning, other conservation organizations and government agencies.
- 4.2.4. Institutions should provide staff access to informational resources with the goal of supporting excellence in programs, animal management, and exhibits. These resources may include a facility library, access to an offsite library or electronic access to internet resources.
- 4.3. Evaluation/Interpretation
  - 4.3.1. Exhibits, interpretive programs and other education programs should be evaluated on a regular basis for effectiveness and content. Programs should be updated with current scientific information. These programs should assess more than participant satisfaction, looking also at program impact (ideally including impact on conservation-related knowledge, attitudes/affect, and behavior). Results from evaluations should be used to improve the existing programs and to create new programs.
  - **4.3.2.** The institution should have a thorough understanding of the needs of its audiences and as such provide programs to meet these needs.

Explanation: Zoo and aquarium education can be accomplished by programs offered to a wide variety of audiences and staff through an assortment of programmatic methods: publications, exhibit interpretation, on-site presentations, tours, summer camps, speaker's bureau, outreach programs, teacher training, etc. The institution need not reach ALL audiences equally, but a thoughtful approach to audience selection should be evident – e.g., a clear understanding of their audience's needs, including the needs of under-represented groups and groups with special abilities. Similarly, not all types of programming must be used equally, but a thoughtful approach to program development must be evident. Programming should include local/global conservation issues and topics, the role of zoos and aquariums in conservation, information on AZA and other conservation-oriented organizations; as well as ways that the institution acts as a resource in its community for wildlife conservation education and related issues. Programming should clearly address cognitive, affective, and behavior outcomes (i.e., options for individual action that encourages stewardship in conserving the environment).

4.3.3. The exhibit graphics and other interpretive devices should be in good condition and functioning, and be based upon current scientific knowledge and reflect current interpretive methods.

Explanation: The interpretive program must be based on the thoughtful development of conservation messages for the institution, preferably including reference to the AZA Conservation Education Messages. Exhibit interpretation may include information regarding the animal's natural history, conservation, care and welfare, ecology, relation to humans, correct taxonomic identification and current status (i.e. endangered or

threatened), as well as botanical collections, and specific environmentally responsible behaviors visitors are being encouraged to take. In particular, inclusion of interpretation on AZA's cooperative management programs (e.g., SSPs and TAGs) is strongly encouraged.

#### 5. RESEARCH

#### **General Considerations:**

Contemporary animal management, husbandry, veterinary care and conservation practices should be based in science. A commitment to scientific research, both basic and applied, is a trademark of the modern zoological park and aquarium. An AZA accredited institution must have a demonstrated commitment to scientific research that is in proportion to the size and scope of its facilities, staff and animals. There must be a formal written research policy including a process for the evaluation and approval of scientific research project proposals.

- **5.1.** Research activities must be under the direction of a person qualified to make informed decisions regarding research.
- **5.2.** The institution must have a written policy that outlines the type of research that it conducts, methods, staff involvement, evaluations, animals to be involved, and guidelines for publication of findings.
- 5.3. The institution should maximize the generation of scientific knowledge gained from the animals. This might be achieved by participating in AZA TAG/SSP sponsored research when applicable, conducting original research projects, affiliating with local universities, and/or employing staff with scientific credentials.

#### 6. GOVERNING AUTHORITY

6.1. The governing authority must be supportive of the institution abiding by the AZA Accreditation Standards, Code of Professional Ethics, and Bylaws.

Explanation: The Commission must be assured that the institution's governing authority understands and is supportive of the institution abiding by the AZA Accreditation Standards, Code of Professional Ethics, and Bylaws.

- 6.2. The governing authority must recognize and support the institution's goals and objectives.
- 6.3. The governing authority has the responsibility for policy matters and oversight of the institution. The CEO/Director must be responsible for the day-to-day management of the institution, including animal acquisitions/dispositions, staff, and programs.
- 6.4. While the governing authority may have input, the decisions regarding the institution's animals must be made by the professionals who are specifically trained to handle the institution's animals, staff, and programs.

6.5. The lines of communication between the CEO/Director and the governing authority must be clearly defined. Additionally, the governing authority should be structured so that its relationship to the professional staff is clearly understood and followed.

Explanation: If clear lines of communication do not exist, a breakdown in the operation of the institution and care of the animals could occur. It is essential to have a good working relationship between the governing authority, CEO/Director, and staff.

6.6. The CEO/Director should be an ex officio member of the governing authority board or have the opportunity to attend meetings that would affect operations of the institution.

#### 7. STAFF

- 7.1. The institution must be under the direction of a compensated CEO/Director. The CEO/Director should be available to the institution on a full-time basis.
- 7.2. In the event a CEO/Director has several "jobs" (i.e., also directs other areas of a park system), clear priorities must be established, with each job having separate and distinct descriptions.
- 7.3. There must be an adequate number of trained staff to care for the animals and to conduct the institution's programs.

Explanation: Although there is no set formula for prescribing the size of the staff, the number and type of species within the institution, the general condition of the animals and exhibits, and past staffing practices may be used to define what is considered "adequate."

7.4. Staff compensation should be competitive with other similar organizations in the local/regional/national market, as appropriate.

Explanation: Institutions must be able to recruit and retain qualified staff. Competitive compensation is a key component in staff recruitment and retention. Some positions can be successfully recruited for locally, while others are competitive on a more regional or national basis (e.g., animal care specialists).

7.5. Staff members should receive opportunities for continuing education and training programs.

Explanation: All staff members institution-wide should be provided opportunities for training and professional development. Funding should be provided for travel, meeting/conference participation, tuition, on-line training, and other professional opportunities when possible. Staff may receive outside training from professional conferences and professional development courses, including taxon-specific training offered by various AZA TAGs, SSPs, advisory groups, and other professionals. The institution should be certain that outside professionals are wellinformed and in agreement with best-practices established by AZA's professional taxon-specific specialist groups. Continuing education opportunities can also be offered by qualified staff within the institution.

- 7.6. A professional attitude in the working relationship between staff members should be maintained so as to enhance the operations of the institution.
- 7.7. Staff members should be encouraged to actively participate in AZA programs, as well as other programs developed by conservation-oriented organizations, including through virtual means such as email, teleconference, etc.
- 7.8. Staff members must be provided access to the latest edition of the AZA accreditation standards and related policies (available at <u>http://www.aza.org/accred-materials/</u>)

prior to processing for accreditation. The standards and related policies should be reviewed by institutional leadership annually to maintain continued compliance between accreditation visits.

Explanation: It is also important that staff understand the significance of accreditation and what to expect during the accreditation process and Visiting Committee inspection.

- 7.9. The institution should have a staff diversity statement or program.
- 7.10.Programs utilizing volunteers/docents should also include provisions for recruitment, interviewing, retention, and training, and periodic evaluation. This process must be under the supervision of a staff member(s) charged with overseeing volunteer programs.
- 7.11. The institution's CEO/Director must hold individual membership in AZA at the Professional Fellow level.

Explanation: In applying for accreditation, AZA-accredited institutions, along with their staff and their governing authority, agree to abide by AZA's accreditation standards, Code of Professional Ethics, Bylaws, Acquisition & Disposition Policy, all duly adopted resolutions, and to support AZA's objectives. To fulfill this commitment it is expected that an institution's senior executive (at minimum, i.e., zoo or aquarium CEO/Director) should participate in AZA at the Professional Fellow level. The CEO/Director of an institution that is not AZA-accredited at the time application is made must obtain individual membership as a Professional Fellow at such time as accreditation of the institution is granted.

#### 8. SUPPORT ORGANIZATION

8.1. The support organization must recognize the overall authority of the institution's CEO/Director for the management of the institution and its programs.

Explanation: The institution's CEO/Director must have final authority over the support organization regarding the animals, exhibits, staff, programs, long-range plan, and any matters affecting the institution.

8.2. A support organization must share the institution's goals and objectives and provide resources/support for same.

Explanation: A support organization must have a good working relationship with the institution and share its objectives.

**8.3.** A formal agreement must be in place that delineates the roles and responsibilities of the support organization. This agreement must be kept up to date, reflecting the most current relationship, and be adhered to in practice.

#### 9. FINANCE

9.1. The institution, regardless of whether operating on a profit or nonprofit basis, must provide sufficient evidence of its financial stability by submitting complete financial reports, including an operating budget indicating that the financial support from the governing authority and/or support organization meets the needs of the institution.

Explanation: Proof of financial support includes the submission of an operating budget reflecting sources of income, as well as expenses. In the case of financial reports other than

audited statements, the Primary Reviewer or the Commission shall determine what constitutes *sufficient evidence*.

- **9.2.** The financial information must include a breakdown of salaries or salary ranges for all full-time staff members.
- **9.3.** Insurance coverage, via independent carrier or internal means, must be provided for visitors, staff, volunteers/docents, and physical facilities.
- 9.4. The institution should indicate sources of funding for capital improvements, maintenance, and major repairs and replacements.

Explanation: Capital improvements, maintenance, and major repairs include renovations, maintenance of buildings/grounds/exhibits, new construction, and demolition of outdated structures.

9.5. The institution, regardless of whether operating on a profit or nonprofit basis, must have a written contingency plan in the event that significant decreases in operating income should occur.

#### **10. PHYSICAL FACILITIES**

#### **General Considerations:**

While the Commission is interested in the institution's future plans, accreditation will be based upon operations and facilities existing at the time of the Visiting Committee inspection.

All United States institutions should comply with the Americans with Disabilities Act.

10.1. <u>Housekeeping, Improvements, and Maintenance</u>

10.1.1. Good housekeeping must be regularly practiced.

Explanation: Pest control, proper drainage, clutter in work areas, excessive use of extension cords, "permanent" extension cords, and other housekeeping activities require continuous attention.

10.1.2. The institution should have a capital improvements, maintenance, and major repair and replacement program.

Explanation: Capital improvements, maintenance, and major repairs include renovations, maintenance of buildings, grounds, exhibits, new construction, and demolition of outdated structures.

#### 10.2. Equipment

10.2.1. Critical life-support systems for the animals, including but not limited to plumbing, heating, cooling, aeration, and filtration, must be equipped with a warning mechanism, and emergency backup systems must be available. All mechanical equipment must be kept in working order and should be under a preventative maintenance program as evidenced through a record-keeping system. Special equipment should be maintained under a maintenance agreement, or a training record should show that staff members are trained for specified maintenance of special equipment.

Explanation: Facilities such as aquariums, tropical rainforest buildings, or other exhibits which rely on climate control for life-sustaining conditions must have emergency backup

systems and a mechanism for warning if those systems are malfunctioning. The lifesupport assessment and warning mechanisms may be automated systems or may be monitored by qualified staff.

10.2.2. Alarms for fire, security, and other safety alerts must be in place and in working order. Routine maintenance records that detail safety checks of the equipment should be kept current.

#### 10.3. Animal Enclosures

- 10.3.1. Lighting must be sufficient in all indoor facilities, including night houses, so that maintenance can be accomplished and animals can be observed. If animals are housed either long-term or permanently in indoor facilities, the appropriate UV spectrum for the species (based on the knowledge available to date) should be provided in these enclosures. A means for emergency lighting must be available.
- 10.3.2. Ventilation must be sufficient in all indoor facilities, including animal holding.
- 10.3.3. All animal enclosures (exhibits, holding areas, hospital, and quarantine/isolation) must be of a size and complexity sufficient to provide for the animal's physical, social, and psychological well-being; and exhibit enclosures must include provisions for the behavioral enrichment of the animals. AZA housing guidelines outlined in the Animal Care Manuals should b e followed.
- 10.3.4. When sunlight is likely to cause overheating of or discomfort to the animals, sufficient shade (in addition to shelter structures) must be provided by natural or artificial means to allow all animals kept outdoors to protect themselves from direct sunlight.

#### 10.4. Public Areas

- 10.4.1. Lighting in public areas must be sufficient for the safe maneuvering of the visiting public.
- 10.4.2. All walkways must be kept in good repair.

#### 11. SAFETY/SECURITY

#### 11.1. <u>General</u>

- 11.1.1. The institution must be in compliance with all applicable laws and/or regulations regarding employee training for safety in the workplace.
- 11.1.2. Training and procedures must be in place regarding zoonotic diseases.

Explanation: Diseases that can be transmitted between animals and humans (Zoonotic disease, zoonoses) present a potential risk for both zoo staff and the visiting public. The institution should design facilities, develop animal care protocols and present animals for public contact in ways that minimize this risk. Institutions must train appropriate staff in methods to prevent zoonotic disease. The National Association of State Public Health Veterinarians (NASPHV) has prepared a Compendium of Measures to Prevent Disease Associated with Animals in Public Settings which should be followed by institutions presenting animals for public contact.

http://www.nasphv.org/documentsCompendiumAnimals.html

11.1.3. A tuberculin (TB) testing/surveillance program must be established for appropriate staff in order to ensure the health of both the employees and the animals. Each institution must have an employee occupational health and safety program.

Explanation: An effective occupational health and safety program is based on hazard identification and risk assessment. The nature of the program will depend upon animal species, potential hazards, facility design, and workplace activities. The extent and level of employee participation (e.g. vaccinations, TB testing, parasite exams, immunizations, personal protective equipment, etc.) will vary depending upon potential hazard exposure and risk management.

- 11.1.4. A written policy for the handling of toxic/hazardous materials must be available to all staff working with those materials, and staff must be trained in the proper handling of those materials.
- 11.1.5. Material Safety Data Sheets (MSDS) must be located in areas for easy access by employees.

#### 11.2. Emergency Procedures

- 11.2.1. The institution should have an automated emergency defibrillator (AED) and provide training to appropriate staff.
- **11.2.2.** The institution should have appropriate alarms and fire extinguishers readily available and provide training to appropriate staff.
- **11.2.3.** The institution must have a written plan available to staff for first-aid and other various health emergencies and provide training to appropriate staff.
- 11.2.4. All emergency procedures must be written and provided to staff and, where appropriate, to volunteers. Appropriate emergency procedures must be readily available for reference in the event of an actual emergency.
- 11.2.5. Live-action emergency drills must be conducted at least once annually for each of the four basic types of emergency (fire; weather/environment appropriate to the region; injury to staff or a visitor; animal escape). Four separate drills are required. These drills must be recorded and evaluated to determine that procedures are being followed, that staff training is effective, and that what is learned is used to correct and/or improve the emergency procedures. Records of these drills must be maintained and improvements in the procedures documented whenever such are identified. (See 11.5.2 and 11.7.4 for other required drills.)

Explanation: Emergency drills determine if institution staff are aware of emergency procedures, and understand their respective duties and responsibilities. Emergency drills enable the institution to identify potential areas that could cause problems in the case of an actual emergency. The institution must have in place appropriate emergency procedures to handle the four basic types of emergencies identified above, and procedures for additional types of emergencies to which the institution may be particularly vulnerable. Staff must be trained in these procedures, and records of such training must be maintained.

A drill is defined as a training exercise that physically re-creates an emergency situation and response outside the circumstances of an actual emergency. Results stemming from an actual emergency are of interest, and should be appropriately analyzed, but cannot be counted as a drill for accreditation purposes. These live-action drills may be supplemented (not replaced) with table-top drills or other emergency preparedness scenarios. 11.2.6. The institution must have a communication system that can be quickly accessed in case of an emergency.

Explanation: There should be immediate access to designated persons in case of an emergency via walkie/talkie, pager, mobile telephone, intercom, telephone, alarm, or other electronic devices.

**11.2.7.** A written protocol should be developed involving local police or other emergency agencies and include response times to emergencies.

#### 11.3. Facilities/Animal Exhibits

11.3.1. All animal exhibits and holding areas must be secured to prevent unintentional animal egress.

Explanation: Particular attention must be given to shift doors, gates, and keeper access doors (as well as double-door safe entry systems), and exhibit barrier dimensions and construction, to provide for staff and public safety. Locking or latching mechanisms are necessary to meet this standard for dangerous animals.

- 11.3.2. All exhibit service areas must be safely lighted, free of debris and other hazards, and provide space to allow for safe servicing. Also, service exit doors must be clearly marked and in good working order. All locks and shift doors must be in good working order.
- 11.3.3. Special attention must be given to free-ranging animals so that no undue threat is posed to either the institution's animals, the free-ranging animals, or the visiting public. Animals maintained where they will be in contact with the visiting public must be carefully monitored, and treated humanely at all times.
- 11.3.4. Electrical service in all wet environments, aquatic exhibits, and associated service areas must be equipped with ground fault circuit interrupters (GFI).
- 11.3.5. All public access areas must be equipped with exit signs. Doors must be unobstructed, open outward, and be equipped with emergency hardware.
- 11.3.6. In areas where the public is not intended to have contact with animals, some means of deterring public contact with animals (e.g., guardrails/barriers) must be in place.

#### 11.4. Risk Management

11.4.1. A written risk management plan must be developed and implemented.

Explanation: Risk management is defined as identification and assessment of potential risk for injury/harm to the visiting public and employees, and mitigating or preventing injury or harm via best-practice methods. Examples of risk to employees include potential contact with any of the institution's animals, wet floors and poor lighting and ventilation in work areas, poorly constructed/planned exhibit service areas, cluttered work space, inadequate training, animal shift mechanisms not in proper repair, and potential contact with narcotic drugs and used hypodermic needles.

Examples of risk to the visiting public include human-animal contact, wet floors, poor lighting, insufficient barrier fencing, cracks and/or holes in visitor walkways, condition of handrails, steps and walkways, rotted wood, etc. Such potential hazards must be minimized whenever possible.

While recognizing potential benefits of human-animal contact, the institution's risk management plan should follow best practices to protect humans (staff, visitors, etc.) from potential injury or disease resulting from physical contact with animals. The plan should include an assessment, and determination of those species and individual animals with which staff, volunteers, and visitors may, or must not, have direct or indirect contact.



#### 11.5. Dangerous Animals

11.5.1. Institutions maintaining venomous animals must have appropriate antivenin readily available, and its location must be known by all staff members working in those areas. An individual must be responsible for inventory, disposal/replacement, and storage of antivenin.

Explanation: It is the responsibility of the institution to verify that appropriate antivenins are available locally for all venomous species maintained at their institution, and for which antivenin is produced. Institutions may rely on the antivenin supply of local hospitals and treatment facilities, but it is also the institution's responsibility to guarantee that these inventories are maintained adequately. Such arrangements must be documented.

- 11.5.2. All areas housing venomous animals, or animals which pose a serious threat of catastrophic injury and/or death (e.g. large carnivores, large reptiles, medium to large primates, large hoofstock, killer whales, sharks, venomous animals, and others, etc.) must be equipped with appropriate alarm systems, and/or have protocols and procedures in place which will notify staff in the event of a bite injury, attack, or escape from the enclosure. These systems and/or protocols and procedures must be routinely checked to insure proper functionality, and periodic drills must be conducted to insure that appropriate staff members are notified. (See 11.2.5 and 11.7.4 for other required drills.)
- 11.5.3. Institutions maintaining potentially dangerous animals (e.g. large carnivores, large reptiles, medium to large primates, large hoofstock, killer whales, sharks, venomous animals, and others, etc.) must have appropriate safety procedures in place to prevent attacks and injuries by these animals. Appropriate response procedures must also be in place to deal with an attack resulting in an injury. These procedures must be practiced routinely per the emergency drill requirements contained in these standards. Whenever injuries result from these incidents, a written account outlining the cause of the incident, how the injury was handled, and a description of any resulting changes to either the safety procedures or the physical facility must be prepared and maintained for five years from the date of the incident.

#### 11.6. Security/Firearms

11.6.1. Adequate security systems must be provided on a 24-hour, year-round basis.

Explanation: The Commission recognizes that all institutions may not be able to provide security personnel on a 24-hour basis; however, every attempt should be made to provide security when the institution is closed to the visiting public. Security responsibilities should include regular rounds of the entire institution to detect problems. If it is impractical to provide security personnel, the Commission may approve the use of electronic systems or other security measures.

- 11.6.2. Security personnel, whether staff of the institution, or a provided and/or contracted service, must be trained to handle all emergencies in full accordance with the policies and procedures of the institution. In some cases, it is recognized that Security personnel may be in charge of the respective emergency (i.e. shooting teams).
- **11.6.3.** Stored firearms must be in a locked cabinet of sufficient construction and design to impede unauthorized entry, and located in a secure area and accessible only to authorized personnel trained in their use.

Explanation: Personnel authorized to utilize firearms should have professional training and regular practice.

#### 11.7. <u>Diving</u>

11.7.1. Institutions which utilize underwater diving with compressed air (SCUBA or surfacesupplied) as a part of regular operations and/or maintenance shall meet minimal operational safety standards for such diving. Such institutions must comply with applicable laws and regulations for their location and follow standards mandated by the Federal Occupational Safety and Health Administration (OSHA).

Explanation: Underwater diving programs range in complexity from intermittent exhibit maintenance to bona fide in situ scientific diving. Additionally, recreational diving in the form of "pay to dive with..." programs may be offered to zoo and aquarium visitors. Institutions should make an assessment of their individual underwater diving components in order to determine which OSHA standard (commercial diving, scientific diving, recreational diving) is most appropriate for that aspect of the institution's underwater diving program.

11.7.2. Institutions which utilize underwater diving with compressed air (SCUBA or surfacesupplied) as a part of regular operations and/or maintenance must appoint a dive safety officer with the credentials, responsibilities, and authority to fulfill that role.

Explanation: Underwater diving programs vary in their complexity, work load, size, and function from institution to institution. The qualifications of the dive safety officer must be commensurate with the nature of the institution's dive program. The dive safety officer's responsibilities must be structured such that she/he is familiar with and capable of assessing dive safety.

- 11.7.3. Institutions which utilize underwater diving with compressed air (SCUBA or surfacesupplied) as a part of regular operations and/or maintenance must have a dive manual which has, as one of its components, a section on diving safety.
- 11.7.4. Institutions which utilize underwater diving with compressed air (SCUBA or surfacesupplied) as a part of regular operations and/or maintenance must conduct at least one liveaction emergency dive safety drill annually. These drills must be recorded and evaluated to ensure that procedures are being followed, that staff training is effective, and that what is learned is used to correct and/or improve the emergency procedures. Records of these drills must be maintained and improvements in the procedures duly noted whenever such are identified. (See 11.2.5 and 11.5.2 for other required drills.)

Explanation: at least one live-action drill is required annually. Additional practice exercises may consist of a variety of activities, including discussions, tabletop simulations, or actual drills. A drill is defined as a training exercise that physically re-creates an emergency situation and response outside the circumstances of an actual emergency. Results stemming from an actual emergency are of interest, but may not be counted as a drill for accreditation purposes.

#### 11.8. Perimeter Fence

11.8.1. Perimeter fencing must be separate from all exhibit fencing or other enclosures, and be of good quality and construction. All facilities must be enclosed by a perimeter fence which is at least 8' in height or by a viable barrier. The fence must be constructed so that it protects the animals in the facility by restricting animals outside the facility and unauthorized persons from going through it or under it and having contact with the animals in the facility, and so that it can function as a secondary containment system for the animals in the facility.

Explanation: There are rare instances where the terrain surrounding the facility provides a viable barrier. However, most facilities must be enclosed by a perimeter fence. Facilities located in rural areas and which are PPEQ-approved must meet special USDA standards for fencing. Institutions which are entirely enclosed within a building may be exempt from this requirement.

#### 12. GUEST SERVICES

#### **General Considerations:**

All United States institutions should comply with the Americans with Disabilities Act.

12.1. The institution must provide basic accessibility and public amenities for all visitors, and should address the needs of both children and adults.

Explanation: Each institution must consider accessibility for all visitors as improvements are made.

- 12.2. The institution must have certain basic facilities to accommodate guests, including restrooms, drinking fountains, food facilities, and rest areas.
- 12.3. The institution should have common conveniences for guests, including sufficient parking, gift facilities, institution trail maps, unobstructed and visible directional signage, etc.
- 12.4. The institution must present to the visiting public a positive, professional, and aesthetically pleasing environment.

#### 13. OTHER PROGRAMS/ACTIVITIES

- 13.1. The institution should have a strategic master plan to guide the institution in its development.
- 13.2. The institution should have a facilities master plan to guide the institution in its development.

Rev: 09/12

NOTE: For general administrative policies of the AZA Accreditation Commission, please refer to the 2013 "Guide To The Accreditation Of Zoological Parks And Aquariums".

#### **AZA Standards for Elephant Management and Care**

Approved March 2011, Revised April 2012

This revision of the Standards includes new information from AZA's policy on Maximizing Occupational Safety of Elephant Care Professionals at AZA-accredited and AZA-certified Facilities which was distributed on August 15, 2011. At the time of this revision, there are several pending objectives on which the AZA Elephant TAG/SSP Steering Committee and the AZA Professional Development Committee are currently working. Over the next four years as these objectives are completed, the Standards will be reviewed annually and, if necessary, revised to include new information and new standardized protocols and forms.

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.

The ultimate goals of these Standards are to provide the safest work environment for elephant care professionals and to provide the highest quality of elephant management and care which will result in excellent overall elephant well-being in our institutions. Ultimately, the success of AZA's elephant care programs 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.

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

**Explanation:** 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 protection 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  $40^{\circ}$ 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, 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  $55^{\circ}F(13^{\circ}C)$  at all times of the year. One room must be capable of maintaining a temperature of at least  $70^{\circ}F(21^{\circ}C)$  and be free of drafts for accommodating sick or debilitated elephants. 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.

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

**Explanation:** Elephants should be provided 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.

**Measurement:** Not applicable

**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. Behavior

**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.

Measurement: Not applicable.

**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

#### Measurement: See 1.4.1

**Explanation:** A key consideration in the design of elephant habitats is the promotion of speciesappropriate behaviors. Enrichment opportunities should be integral parts of both indoor and outdoor enclosures. Outdoor areas should encourage locomotion for exercise and natural footwear. Rocks, tree stumps, or large sturdy objects must be provided in the exhibit so that the elephants may use them for rubbing and scratching. The use of both wet and dry wallows is encouraged to assist with skin care and protection against the sun and biting insects. The AZA Elephant Exhibit Design Resource has extensive information on facility design and enrichment activities.

#### **1.4.4.** Visual, acoustic, and olfactory barriers within the space

**Standard:** The design of indoor and outdoor enclosures must contain areas where elephants can exercise and socialize together, and avoid socializing if/when desired.

**Measurement:** Determine the level of choice the elephants have to join or separate themselves from other elephants.

**Explanation:** Barriers within and between exhibits should allow some degree of auditory, olfactory, and tactile contact between separated herd members as appropriate at their choice.

#### 1.4.5. Substrates and nesting/bedding materials

#### 1.4.5.1. Outdoor

**Standard:** Outdoor habitat surfaces must consist primarily of natural substrates (e.g., soil, sand, grass) that provide good drainage. Enclosures must be made up of a variety of substrates.

**Measurement:** Elephant feet are in good condition and need only periodic pad and nail trimming. Excessive buildup of dead skin is not apparent and dusting materials are available for the elephants.

**Explanation:** Providing a variety of soft substrates will promote behaviors, such as foraging, wallowing, bathing, digging, and resting. The use of both wet and dry wallows is encouraged to assist with skin care and protection against the sun and biting insects. Elephants can lie on mounds of earth. Providing a combination of hard substrates to promote normal wear of footpads and soft substrates, such as earth and sand, to promote dust bathing is preferred.

#### 1.4.5.2 Indoor

**Standard:** Substrate must be able to be cleaned daily and must be quick to dry. Hard floor surfaces must be relatively smooth to prevent excessive pad wear, but not so smooth that they become slippery when wet.

**Measurement:** Interior floors are cleaned daily and dry within two hours of cleaning. No excessive pad wear due to floor roughness and no elephant injuries due to slipping on the floors.

**Explanation:** Many institutions are experimenting with the use of sand in place of some cement stall floor surfaces. Some institutions use barn stall mats, straw, or shavings for insulation and/or to provide a softer surface for elephants to stand or lie on. In new construction and renovations, consideration should be made for incorporation of natural, changeable substrates indoors.

#### **1.4.6. Provision of change and variation in the environment**

**Standard:** All holding institutions must have a written environmental enrichment plan for their elephants and show evidence of implementation (See 4.3). An effective enrichment program includes the rotation of exhibit furniture and enrichment initiatives on a regular schedule, and based on the elephants' behavior, maximizes the stimulation offered by these exhibit features (See 1.4.5.1).

**Measurement:** Enrichment plan and records of daily enrichment activities should be reviewed (See 1.4.5.1 and 4.3).

**Explanation:** A varied terrain provides more complexity in the environment as well as exercise opportunities, such as walking, turning, reaching, stretching, climbing, bending, digging, pushing, pulling, and lifting. Providing a variety of soft substrates will promote behaviors such as foraging, wallowing, bathing, digging, and resting.

### 1.4.7. Cleaning related to issues like scent-marking, that may influence how and how often space is cleaned.

**Standard:** There are currently no scent-marking issues identified for elephants that influence cleaning.

**Measurement:** Not applicable.

**Explanation:** Enclosures, both indoor and outdoor, must be cleaned of excrement daily. Frequent daily manure removal is recommended and may be necessary for both sanitary and aesthetic reasons.

#### 1.4.8. Air or water changes/hour required

Standard: See 1.2 and 1.5.2

Measurement: See 1.2 and 1.5.2

**Explanation:** Indoor ventilation systems for elephants should provide enough fresh air to meet the respiration needs of the elephants, control moisture build-up within the structure, and move enough air to dilute airborne disease organisms. The recommended ventilation for indoor housing for elephants is 4-6 air changes per hour.

#### 1.4.9. Identify necessary measures for safety and containment

#### 1.4.9.1 Containment

**Standard:** Elephant containment barriers must be sufficient to prevent elephant escapes.

**Measurement:** There should be no failure of barriers.

**Explanation:** A recommended minimum height of walls, cables and horizontal railings for adult elephants is 8 ft (2.4 m). The use of electric fences is not sufficient as a primary containment barrier. A wide variety of building materials can be used for elephant containment barriers. The barriers must be safe for the elephants, must be able to withstand an elephant's strength, must contain the elephant in a specific space, and must prohibit direct contact between elephants and the visitors. Recommended materials for barriers include solid concrete, rock walls or horizontal steel rails, pipe or cable.

#### **1.4.9.2** Barriers (Standard applicable beginning September 1, 2014)

**Standard:** All institutions must have in place and be implementing adequate infrastructure to manage and care for elephants with barriers and/or restraints in place to increase employee safety. If a facility cannot meet this standard, it must apply for a variance after describing its plan to meet the standard to the Accreditation Commission. No variances shall be granted after January 1, 2016.

**Measurement:** Adequate infrastructure exists and is used by elephant care providers to care for their elephants without sharing the same unrestricted space with the elephants, except in certain, well-defined circumstances.

**Explanation:** AZA is committed to maximizing the safety of elephant care staff.

#### 1.4.9.3 Dry moats

**Standard:** The use of dry moats with steep sides and hard bottoms as primary containment should be limited.

**Measurement:** A written elephant extraction protocol must be in place for facilities employing moats out of which an elephant cannot easily climb.

**Explanation:** Dry moats can pose a substantial threat to elephants, especially those out of which an elephant cannot easily climb. Where present, moats should be wide enough for an elephant to turn around, have a soft, dry bottom, and should include a gradually sloped ramp so that the elephant can easily climb out of the moat or ditch.

#### 1.4.9.4 Doors and gates

**Standard:** Doors and gates must be in good condition and must be engineered to withstand an elephant's strength.

**Measurement:** All doors and gates must operate properly and contain elephants. No elephant injuries or keeper injuries because of hydraulic or electrically-powered door operation.

**Explanation:** Door and gate design is extremely important to ensure the safety of both elephants and keeper staff. If hydraulic or electrically powered drives are used to operate doors or gates, there must be a manual back-up system or a back-up generator in place in case of failure. Door operation must be continually monitored with a direct line of sight or with video the entire time the door is in motion in order to prevent elephant or keeper injury.

#### 1.4.9.5 General exhibit considerations

**Standard:** Ceiling and fixture heights (e.g., lights, heating units, plumbing, etc.) must be built so that elephants do not harm themselves or damage the facility.

**Measurement:** There should be no elephant injuries due to poor design or insufficient heights of ceilings and fixtures.

**Explanation:** Mature elephants can reach a vertical height of 24 ft (7.3 m).

#### 1.4.9.6 Safety assessment program

**Standard:** Each elephant-holding institution must have an established method of regularly evaluating its elephant facility and program safety. The institution must document and be able to demonstrate how this established program assesses safety on a regular and consistent basis and how safety issues are resolved. Facilities shall conduct safety evaluations at least semi-annually.

Between August 15, 2011 and January 1, 2012, each institution must have performed one semiannual program safety assessment. **Between August 15, 2011 and January 1, 2012**, each institution must have specifically addressed its elephant program in the risk management policy required by AZA Accreditation Standard 11.4.1.

**Measurement:** Program and facility safety evaluations and safety issue resolutions are documented. All identified safety issues are resolved or are in the process of resolution.

**Explanation:** Each facility should establish a Safety Assessment Program based on its own needs and resources. A Safety Assessment Program may include a safety assessment team, including elephant staff, management staff, animal health care staff and experts in the area of risk management and safety.

#### 1.4.10. Transport (in accordance with IATA)

**Standard:** All applicable Federal regulations and/or IATA requirements must be met.

**Measurement:** Elephant transports have been accomplished safely and in an appropriate manner.

**Explanation:** The method of transport, as well as preshipment health screening protocols, should follow TAG/SSP guidelines. Other resources for the transport of elephants include the Elephant Husbandry Resource Guide and Fowler (1995).

#### 1.4.10.1. Type of transport container

Standard: See 1.4.10

Measurement: See 1.4.10

**Explanation:** Elephants are typically transported in custom semi trailers, specifically designed for moving elephants. On occasion, elephants are moved in crates, most commonly for overseas shipments.

#### 1.4.10.2. Appropriate size of transport container

Standard: See 1.4.10

Measurement: See 1.4.10

**Explanation:** The crate or trailer compartment used for shipping should be sized so that the elephant can stand up comfortably, but not turn around. The elephant should not be compressed by the containment front or back. The crate should be equipped with tethering options as needed.

#### 1.4.10.3. Provision of food and water during transport

Standard: See 1.4.10

Measurement: See 1.4.10

**Explanation:** Elephants should be provided with food (e.g., hay) and water at regular intervals during the transport.

#### 1.4.10.4. Provision of bedding or substrate in transport container

See 1.4.10

#### 1.4.10.5. Mechanism(s) for separating animal from urine and feces during transport

See 1.4.10

#### 1.4.10.6. Temperature range during transport

See 1.4.10

#### 1.4.10.7. Light levels and how to minimize noise during transport

See 1.4.10

#### 1.4.10.8 Group size or need for separation of individuals during transport

See 1.4.10

#### 1.4.10.9 Handler/veterinarian access to animal during transport

See 1.4.10

### **1.4.10.10** Duration of transport allowable before temporary transfer to "normal housing" is required

See 1.4.10

#### **1.4.10.11** Timing of release, size and type of enclosure at transport destination

See 1.4.10

#### 1.5 Water

#### **1.5.1** Acceptable water quality parameters

**Standard:** Water suitable for drinking must be made available daily. Frequent drinking opportunities throughout the day may be necessary to meet the elephant's needs in the ambient environment.

**Measurement:** Water sources for exhibit and barn are identified and method of delivery determined to meet the standard.

**Explanation:** Most facilities provide either continually running or automatic watering devices in outdoor enclosures and barns. If these are not present, the method of providing water must be identified and written protocols in place to ensure appropriate water availability to the elephants.

#### **1.5.2 Presentation of water, and water sources**

**Standard:** While outdoors and weather permitting, elephants must have regular access to water sources, such as a pools, waterfalls, misters/sprinklers, or wallows that provide enrichment and allow the elephants to cool and/or bathe themselves.

**Measurement:** Outdoor water sources are present in sufficient quantity to accommodate all elephants at one time.

**Explanation:** It is recommended that pools be constructed with rounded edges, and without corners. Artificial pools should have either multiple or lengthy gently sloping exit and entrance areas, with non-slip surfaces, and at an angle no greater than 30°. Vertical sides on pools should be avoided in areas where elephants have direct access to the pool side. Steps should be wide enough for elephants to place more than one foot on at a time and small enough for baby elephants to step up or down. There should be more than one entry/exit point to the pool in order to prevent one elephant from inhibiting the exit or entrance of other elephants into or out of the pool.

#### 1.5.3 **Pool depth and need for variation in depth**

**Standard:** There are no standards for pool depth and variation in depth at this time.

#### **Measurement:** Not applicable

**Explanation:** It is recommended that one body of water or pool be deep enough to allow for buoyancy, as this can allow for non weight-bearing exercise and that it be deep enough to allow an adult to be fully immersed when laying on its side, or at least six feet deep. However, shallow wading and splashing pools are also excellent activity areas for elephants and are to be encouraged. Recycled water over a waterfall or spraying out over the pool is an excellent activity stimulant.

#### 2. Biotic Variables

#### 2.1 Food and Water.

#### 2.1.1. Containers and protocols for the provision of food and water

#### 2.1.1.1 Water

**Standard:** See 1.5.1. When water containers are used, drinking water must be cleaned and refreshed daily. Containers must also be cleaned daily.

Measurement: Water sources are clean and water is fresh.

**Explanation:** The ability to monitor water consumption by the elephants may be important in sick or compromised elephants.

#### 2.1.1.2 Food

See 3.1. Other resources include the Elephant Husbandry and Resource Guide, Appendix 1, Nutrition Advisory Group Handbook, "Elephants: Nutrition and Dietary Husbandry" (Ullrey et al. 1997).

#### 2.1.1.3 Food items - Variability in food type

**Standard:** Elephants must be offered a balanced diet composed of an appropriate variety of food items provided in quantities that are sufficient for each elephant to maintain appropriate body condition. Diets must be developed under the direction of the institution's nutritionist or veterinary staff. Consideration must be given to recommendations provided by the Elephant TAG/SSP Nutrition Advisor, as they become available.

**Measurement:** Diet sheets and written feeding protocols must be maintained and meet the Elephant TAG/SSP Nutrition Advisor recommendations. For the purpose of this section, elephant weights and/or body condition scores should be recorded three times a year.

**Explanation:** Nutritional content is a critical tool for assessing overall nutritional well-being. Daily intake records may also be valuable to maintain. Elephants have evolved to be generalist feeders. Recommended food items include hay (e.g., meadow or timothy), supplemented with fruits, vegetables, a pelleted supplement or grain. Fresh browse should be made available daily, if possible. Overall energy content of the diet must be assessed in relation to the body condition scores for each elephant and diet composition adapted as needed.

### 2.1.1.4 Feeding schedules - Variability food presentation (e.g. spatial and temporal dispersal of food resources)

**Standard:** Varied feeding schedules dispersed both spatially and temporally throughout the day and night are required.

**Measurement:** Written feeding protocols and schedules must be maintained.

**Explanation:** Mechanisms to deliver food to elephants during the day and night should be implemented (e.g., changing animal care staff schedules, automated feeders, hanging feeder nets, etc.). Feeders should be located in multiple locations to discourage undue competition or aggression over feed items.

### 2.1.1.5 Provision of opportunities for elephants to process food in ways similar to their wild counterparts and mechanisms that enable animals to work for food

**Standard:** Opportunities must be provided for elephants to acquire food using multiple foraging behaviors. Food must be provided in areas where it is less likely to be soiled. Excess or waste food must be removed daily.

**Measurement:** Written feeding and enrichment protocols must be maintained.

**Explanation:** Opportunities for searching, browsing, grazing, reaching, opening, etc. can be provided by scatter-feeding, hiding foods in crevices and substrates around the exhibit, or by using elevated feeders such as hanging hay nets that encourage an elephant to reach for and manipulate its trunk to gain access to the food. Mechanisms that promote physically active feeding behaviors can be incorporated into a comprehensive enrichment plan for the elephants.

#### 2.2 Social Considerations

#### 2.2.1 Group Composition

#### 2.2.1.1 Suggested age and sex structure of social group

**Standard:** Each zoo holding elephants must hold a minimum of three females (or the space to hold three females), two males or three elephants of mixed gender. If a zoo cannot meet this standard, they must apply for a variance. Before the variance can be issued by the Accreditation Commission the zoo (a) must describe their plan to obtain additional elephants or describe their plan for deacquisitioning their elephants and (b) must describe what will occur if they experience the loss of one elephant. In most cases where an institution has one remaining elephant, the remaining elephant will receive a recommendation for relocation at another AZA institution from the Elephant TAG/SSP.

By 1 September 2016, no further variances will be issued.

Adult males (6 years and older) may be housed alone, but not in complete isolation. Opportunities for tactile, olfactory, visual, and/or auditory interaction with other elephants must be provided (Rasmussen et al. 1982).

**Measurement:** The institutional commitment to elephants must be reviewed if the institution is not in compliance with the Standard. Plans for meeting the Standard and a timeline must be submitted to the Elephant TAG/SSP and to the Accreditation Commission. The Elephant TAG/SSP will determine acceptable animal welfare and plans.

**Explanation:** Due to multiple species differences and possible disease transmission issues, when forming new herds, Asian and African elephants should not be placed together in the same enclosure.

### 2.2.1.2 Temporary individual care of parturient females and young or of males, and corresponding adequate and appropriate space for animals when removed

**Standard:** All facilities must include the ability to flexibly manage the elephant herd, allowing the separation of groups or individuals as required.

**Measurement:** Each institution must be able to demonstrate and/or describe how they would successfully isolate individuals or groups as needed for elephant management or care.

**Explanation:** The ability to adapt to changing conditions and situations is critical to the success of any elephant program.

#### 2.2.1.3 Male elephant socialization

**Standard:** If males are housed, separate facilities for isolation must be available, and a program of social contact in place.

**Measurement:** Each institution must be able to demonstrate and/or describe how they would successfully isolate and socialize males.

**Explanation:** Males (six years and older) may be housed alone, but not in complete isolation; opportunities for tactile, olfactory, visual, and/or auditory interaction with other elephants must be provided (Rasmussen et al. 1982). In the wild adult males are primarily solitary. However, they do have regular contact with other elephants.

#### 2.2.1.4 Nursery groups (groups of mothers with most recent young)

**Standard:** Isolation facilities for birth and postpartum management must be available.

**Measurement:** Each institution must be able to demonstrate and/or describe how they would successfully isolate mothers and calves during birth and postpartum period. Written protocols must be in place for births and reintroductions of mothers/calves to herd.

**Explanation:** First time mothers in particular may require significant management. Initial protection of the calf and control of the mother are critical to a successful birth. Introduction of the new calves and mothers to the herd must be accomplished both cautiously and expeditiously. Reintroduction of the calves and mothers to the natal group or herd should be accomplished as quickly as possible.

#### 2.2.1.5. "Emigration" of adolescents

**Standard:** Offspring should remain with their mothers until they are weaned and mother and calf are acclimated to separation.

**Measurement:** Offspring must remain with their mothers until they are at least three years old.

**Explanation:** Some flexibility is necessary in cases of health challenges, maternal rejection and/or when infants cannot be re-established in their social group. In cases of maternal rejection, calves should be introduced to other conspecifics as soon as possible. Males are generally separated from the herd during adolescence due to natural age-related behavioral changes. There is no specific age when this may occur. Indicators that males may need to be separated include aggression, play-fighting or reproductive behavior that causes disruption within the herd or risk of injury to individuals in the herd.

#### 2.2.1.6 Multigenerational groups

**Standard:** When possible, multigenerational groups should be maintained.

**Measurement:** Multigenerational groups are maintained when possible.

**Explanation:** Multigenerational groups are a goal of the TAG/SSP breeding program. Much of the behavioral repertoire of elephants is learned, rather than innate. A multi-generational group allows the transfer of species-appropriate behaviors within a herd through experience and observational learning. **2.2.1.7** Groups deriving from cohorts

See 2.2.1.8

#### 2.2.1.8 All male groups

**Standard:** There are no standards for all male groups at this time. **Measurement:** Not applicable

**Explanation:** Guidelines for the creation and long-term management of all-male elephant groups will need to be developed as this may become increasingly more important with increased breeding success and the production of more male calves.

#### 2.2.1.9 Daily and life stage variation in patterns of social affiliation

**Standard:** A behavioral profile must be maintained for each individual elephant and updated annually.

**Measurement:** Protocols and profiles in place and up-to-date.

**Explanation:** Staff must be aware of each elephant's social compatibility and the dominance hierarchies of the herd. Institutions must have the ability to manage social compatibility as well as dominance and aggression among an elephant group. Institutions must have the ability to manage introductions and separations of elephants, including; a new female to an existing herd, females to males for breeding, calves to their mothers, and calves and mothers to the herd. Elephant enclosures must be designed to allow for separate and group housing during periods of social incompatibilities, without interfering with the normal movement of elephants in and out of enclosures.

#### 2.2.2. Group Size

#### 2.2.2.1 Minimum and optimum group sizes

See 2.2.1.1

#### 2.2.2.2 Inter-individual distances required

**Standard:** Facility must be designed, and resources provided, to allow for ample feeding, shade, water, and wallowing locations.

**Measurement:** Facility must have sufficient structures for all elephants to participate in all ranges of natural behaviors.

**Explanation:** Elephants are a social species and herds often perform activities together, such as feeding, drinking, walking, resting, and wallowing.

# 2.2.3. Conspecific groups, the need for/influence of adjacent groups, similar taxa, or territorial species

More research is needed to develop guidelines for this section.

#### 2.2.3.1 Key environmental elements for each species

More research is needed to develop guidelines for this section. 2.2.3.2 Identify inter-specific inter-animal distances require

More research is needed to develop guidelines for this section.

#### 2.2.3.3 Address appropriateness of single-sexed groups

More research is needed to develop guidelines for this section.

#### 2.2.4 Introductions

**Standard:** Institutions must have the ability to manage elephant introductions and separations.

**Measurement:** There must be appropriate facilities and protocols in place for all phases of elephant introductions.

**Explanation:** All institutions must have the staff and the appropriate facilities to be able to manage both elephant introductions and separations, including introductions/separations of a new female to a herd and, if the institution is a breeding facility, females to males for breeding, newborn calf to its mother, and calf and mother to the herd.

#### 3. Health and Nutrition

#### 3.1 Diet - Standards for nutrient requirements for all life stages

See 2.1.1.3, 2.1.1.4 and 2.1.1.5. Other resources include Food, the Elephant Husbandry and Resource Guide, Appendix 1, Nutrition Advisory Group Handbook, "Elephants: Nutrition and Dietary Husbandry" (Ullrey et al. 1997).

**Standard:** Elephant weights and/or body condition scores should be recorded three times a year. For Asian elephants, the Wemmer body condition index (BCI) can be used (see Appendix 2) and body condition index scores in the 6 to 10 range should be maintained. (See Appendix 2). Diet and/or exercise programs must be in place for elephants.

**Measurement:** Weight records and/or body condition scores should be reviewed. Diet and exercise programs modified as needed to maintain elephant physical well-being.

**Explanation:** Elephants may be outside the normal body condition score range and still be healthy. These individuals may not need to have specialized diet or exercise plans in place.

#### 3.2 Influence of the following variables on dietary requirements

#### **3.2.1** Age (infant, juvenile, reproductive adult, senescent adult, etc.)

See Appendix 1

**Explanation:** Obesity is a health concern for all animals, including elephants, and excessive weight gain should be avoided through proper diet and exercise. For infants, a normal growth rate should be 1 to 2 lbs per day over the first three years. Excess weight early and too rapid growth may cause long-term harm to the elephant's physical well-being. Significant exercise and limiting the high-energy supplements will help control weight gain in calves and elephants of all ages.

#### 3.2.2 Body size

See 3.1

#### 3.2.3 Reproductive status

**Standard:** Elephants' diets should be carefully monitored during pregnancy, and elephants should engage in a prenatal exercise program to control excessive weight gain during pregnancy.

**Measurement:** Weight records and/or body condition scores should be reviewed.

**Explanation:** Elephants should be prevented from significant weight gain during pregnancy.

#### 3.2.4 Seasonal changes in ambient temperature

Not a significant factor for elephants.

#### 3.2.5 Seasonal changes in body condition

Generally, not an issue with our elephant population.

#### 3.2.6 Seasonal changes in nutritional requirements

**Standard:** Elephants should be fed in accordance to the recommendations of the Elephant TAG/SSP Nutrition Advisor.

**Measurement:** Diet sheets and nutritional/intake records should be reviewed.

**Explanation:** If changes are made to diets as a result of seasonal availability of items, then care should be taken to implement changes gradually (over 1-2 weeks) to avoid digestive upsets (Ullrey et al. 1997).

#### 3.2.7 Activity levels

**Standard:** Activity levels should be sufficient to maintain the physical and psychological well-being of the elephant.

**Measurement:** Diet sheets, weight records, body condition scores, exercise protocols and nutritional/intake records should be reviewed.

**Explanation:** In the absence of scientific data to indicate the precise amount of activity needed to maintain good physical and psychological well-being of an elephant, activity levels, weight, BCI and diet composition should be frequently reviewed to maintain appropriate overall health parameters.

#### 3.2.8 Health status

**Standard:** Diets should be flexible and should be adaptable to a wide range of individual elephant needs and various health issues, while adhering to the recommendations of the Elephant TAG/SSP Nutrition Advisor.

**Measurement:** Diet sheets, weight records, health records and nutritional/intake records are reviewed.

**Explanation:** The elephant team must work closely with the veterinary and nutrition teams to balance medical and nutritional requirements with behavioral components and activity levels for each elephant.

# **3.2.9** Palatability, texture, processing, etc. that will encourage species-appropriate appetitive behaviors

**Standard:** Every institution must have a browse program/protocol as a part of their elephant management program.

**Measurement:** Browse protocol and elephant health/dental records should be reviewed.

**Explanation:** Elephants must be provided with browse material large enough to avoid molar impaction and rotation. Since elephant teeth migrate forward (not vertically), it is important that the right type of food is offered to promote dental health and allow for the natural progression of each molar.

#### 3.3 Medical management

**Standard:** A veterinarian with experience in large mammal medicine must be on call at all times to deal with routine elephant health evaluation and treatment and medical emergencies.

**Measurement:** Records of annual medical exams and other treatments must be on file. Copies of AZA Elephant TAG/SSP medical protocols should be on file and utilized at the institution.

**Explanation:** Guidelines for routine exams, quarantine, preshipment testing and necropsy are available from the AZA Elephant TAG/SSP Veterinary Advisor.

#### 3.3.1 Quarantine and hospitalization

**Standard:** Quarantine protocols, periods and parameters for elephants must be in place.

**Measurement:** AZA Elephant TAG/SSP protocols available along with institutional written protocols.

**Explanation:** Due to the size, strength, and social nature of elephants, it may be logistically difficult to maintain isolation from other animals during arrival and quarantine. The Recommended Preshipment Protocol for Elephants lists a comprehensive battery of tests to detect disease prior to shipment. It is important that the receiving institution work closely with the sending institution to ensure that all (or as many as possible) of the listed tests are conducted and results reviewed. Following the preshipment protocol may help compensate for some of the quarantine compromises that may be required. Regardless of preshipment test results, every attempt should be made to maintain some degree of physical separation from the resident elephants after arrival.

Current quarantine practices recommend a minimum 30-90 day quarantine period for most species found in zoos and aquaria. Social concerns, physical facility design, and availability of trained elephant staff may dictate a modified quarantine protocol. The final decision for specific quarantine protocols at each institution should be made by the veterinary staff in consultation with the elephant management staff. For additional information, refer to the Elephant Husbandry Resource Guide, AZA Quarantine Guidelines, and the AAZV Preventive Medicine Recommendations.

#### 3.3.1.1 Problems arising from isolation of social taxa

**Standard:** Every institution should have the ability to introduce, manage and maintain social groupings of elephants.

**Measurement:** Daily records of social groupings should be reviewed. Introduction protocols/records should be reviewed.

**Explanation:** As a highly social species, female elephants must be returned to their social group as soon as possible. Although interaction between elephant care staff and elephants can be beneficial, they are not a sufficient substitute for species-appropriate elephant-to-elephant interactions.

#### **3.3.2 Preventive medicine (testing, vaccinations, parasite control, etc.)**

**Standard:** Each elephant must be given a thorough annual physical examination (Mikota et al. 1994). Elephant weights and/or body condition scores should be recorded three times a year.

**Measurement:** Written documentation of the exams and their results, the weights and/or the body condition scores taken at the time of each weight must be reviewed. Written protocols are in place for all preventative elephant medicine and AZA Elephant TAG/SSP guidelines available.

**Explanation:** Institutions must adhere to USDA Animal and Plant Health Inspection Service (APHIS) requirements for testing and treatment of tuberculosis. A veterinarian or trained veterinary technician must perform fecal examinations to look for parasites and other problems on a regular basis (Samuel et al., 2001). Results must be recorded. Body weights and/or body condition must be assessed and recorded at least three times a year, through actual weighing or through the use of standardized body measurement tables, photographs, or similar, previously validated techniques (e.g., Sreekumar and Nirmalan, 1990). These results must be reviewed after each measurement is taken. Regular vaccinations, as determined by the veterinary staff in concert with the Elephant TAG/SSP Veterinary Advisor, must be given. Annual vaccinations may include rabies and tetanus.

#### 3.3.2.1. Daily care

Standard: All elephants must be visually inspected and behaviorally assessed on a daily basis

**Measurement:** Daily records and reports must be reviewed.

**Explanation:** An assessment must be made and any unusual behavior (including instances of aggression), physical characteristics or activities should be immediately reported to the supervisor, and recorded in a daily log. Specifically, reports should include observations such as condition of urine and feces, eating and drinking patterns, administration of medications (if any), and general condition and behavior.

#### 3.3.2.2 Foot care

**Standard:** The elephants should be free of foot injuries or foot disease. Staff must be trained to provide foot care and the elephants must be trained to accept that care. Each elephant facility must have a written protocol for foot care. If foot injuries or foot disease are present, a current treatment regimen must be in place.

**Measurement:** Elephant feet are in good condition and need only periodic pad and nail trimming. Records and protocols on file and foot care and/or treatment protocols in place. Implementation of the protocols/treatment is evident in condition of the elephant's feet.

**Explanation:** An institution's foot care protocol should include daily cleaning and inspection of all elephants' feet. If foot injury or disease is present, evidence should be documented of the institution's review of the potential cause or causes of the foot injury or foot disease. Where causes are identified, changes made to address these causes must be documented. Taking baseline foot radiographs or thermographs of all adult elephants and keeping them on file is suggested. In some cases, it may be appropriate to annually monitor selected elephants (i.e., those that have a history of chronic foot problems).

#### 3.3.2.3 Skin care

**Standard:** Elephants must be trained to accept regular skin care and staff must be trained to provide that care.

**Measurement:** Each elephant facility must have a written protocol for routine skin care and show evidence of its implementation. These records and protocols should be reviewed.

**Explanation:** An elephant's skin must be thoroughly inspected on a daily basis and cared for as needed through bathing, removal of dead skin, and treatment of dry skin or other skin problems. The elephant's skin should be supple, free of dead skin buildup, not cracked or dry and free of folliculitis.

#### 3.3.2.4 Daily exercise

**Standard:** An exercise program must be in place for the herd as a whole or for each individual elephant.

**Measurement:** Each elephant facility must have a written protocol for routine exercise and show evidence of its implementation. These records and protocols should be reviewed.

**Explanation:** Elephant weights and/or body condition scores should be recorded three times a year. For Asian elephants, the Wemmer body condition index (BCI) can be used (see Appendix 2) and body condition index scores in the 6 to 10 range should be maintained. Exercise protocols should be in place for maintaining good body condition and exercise should be increased for elephants over the optimal body condition score. True exercise levels required for elephants, measured in distances walked per day, are not known. Recent data collected from radio collared wild elephants indicates much shorter daily travel distances than previously reported. Current studies are in progress on distances traveled daily by elephants by several research groups and in several AZA institutions. The weight and/or the body condition score, combined with the absence of disease, foot and leg problems are the indicators that the amount of exercise is sufficient for the elephant on their specific diet in their specific situation. As with humans or any other species, overall health is a combination of factors, including exercise, diet and psychological factors.

#### 3.3.2.5 Husbandry training

**Standard:** All elephants must be trained to reliably present the behaviors listed on the AZA Standard Elephant Program Behavioral Components checklist. All elephants must be trained to permit a complete body exam daily and to allow successful completion of all necessary care and husbandry procedures.

**Measurement:** The AZA Standard Elephant Program Behavioral Components checklist should be completed by the institution annually, and maintained for review at accreditation.

**Explanation:** The key to keeping elephants healthy and treating them when they are sick relies on the ability to monitor, test and administer health care and treatment. Proactive training makes monitoring elephant health possible and makes diagnostic testing and therapeutic treatment in times of compromised health less stressful for the elephant and the elephant care team.

#### Checklist of AZA Standard Elephant Program Behavioral Components

If individual elephants vary, please note the number of elephants that fall into each category.

BEHAVIOR	NOT TRAINED	IN TRAINING	COMPLETE & RELIABLE
Bathe / scrub skin			
Treat skin			
Trim all feet			
Eye exam			
Ear exam			
Mouth exam			
Tooth exam			
Tusk exam			
Tusk trim			
Blood collection (note frequency of collections)			
Urine collection			
Vaginal exam			
Rectal palpation			
Enema			
Transrectal ultrasound			
Accepts injections			
Accepts oral medications			
Enters chute (remains inside with doors closed)			
Allows chute walls to move			
Allows husbandry procedures to be performed by staff			
Allows veterinary procedures to be performed by vet			
Trunk wash for TB testing			
Foot x-ray			
Separation			
Leg restraint			
Reproductive assessment completed			

#### 3.3.2.6 Elephant Restraint Devices (ERD)

**Standard:** All elephant facilities should have an ERD. If a facility does not have an ERD, staff must demonstrate a method of restraint that allows necessary husbandry, veterinary, and reproductive procedures to occur in a safe and efficient manner for all elephants in their collection. Use of the ERD must not be weather dependent.

**Measurement:** ERD in place and functional. All elephants trained to use the ERD, or the institution demonstrates its protocols and ability to do ERD functions without the ERD.

**Explanation:** ERDs must effectively restrict the movement of an elephant while simultaneously allowing elephant care staff access to the elephant for veterinary procedures. ERDs must be able to comfortably contain an elephant for prolonged veterinary or husbandry procedures

#### 3.3.2.7 Restraint

**Standard:** All elephants must be trained to allow restraint using ERDs, rope, chain, or other materials of sufficient strength. Elephants must not be subjected to unnecessary prolonged restraint. Any planned restraint over two hours must be approved by the institution's administration, elephant management committee, and veterinarian. The institution's safety committee and/or the institutional animal welfare committee should be included in the decision making process. All new construction and major renovations must be designed in a manner that minimizes the regular need for tethering.

**Measurement:** Protocols in place for tethering guidelines are reviewed.

**Explanation:** Tethering is an acceptable method of temporary restraint for elephants. Prolonged tethering may be necessary for transport and for veterinary treatment. Elephants can be easily trained to accept tethering.

#### 3.3.2.8 Immobilization

**Standard:** Veterinary protocols must be established for potential immobilization of an elephant, either for standing or full sedation.

**Measurement:** Veterinary immobilization protocols are reviewed.

**Explanation:** The Elephant TAG/SSP Veterinary Advisor can be consulted for the most current and effective sedation and immobilization techniques.

#### 3.3.2.9 Management of neonates and geriatric animals

**Standard:** Neonatal exam and hand-rearing protocols must be part of the written birth protocols. Management and treatment plans for each geriatric elephant should be developed by the elephant management team and veterinarian and revised regularly as the elephant ages.

**Beginning January 1, 2013**, institutions must use the standardized annual reporting process to report all elephant births and mortalities and provide a description of the specific practices and protocols used during each event (See 5.4).

**Measurement:** Birth protocol is reviewed, including plans for neonatal exam and hand-rearing. Geriatric management and treatment plan is reviewed. After January 1, 2013, annual reports of births and mortalities are reviewed.

**Explanation:** Specific treatment for geriatric elephants will be developed with coordination of the veterinary and management teams. There are no current specific standards. The Elephant Husbandry Resource Guide includes a chapter on hand-rearing and can be a useful resource in the development of a facilities hand-rearing protocol.

#### 3.3.2.10 Management during pregnancy

**Standard:** Pregnant elephants must have a written diet and exercise program to prevent excessive weight gain during pregnancy.

**Measurement:** Birth protocol is reviewed, including plan for exercise and diet management during pregnancy.

**Explanation:** An elephant that is overweight at time of parturition significantly increases the risk of dystocia and other parturition complications. Elephants in good body condition should gain no more than 5% of their body weight during pregnancy.

Nulliparous females over age 24 years have had limited success delivering calves and have experienced dystocias and retained fetuses. Institutions should take all factors into account and research the potential challenges and options available when considering breeding elephants in this reproductive class.

#### 3.4 **Reproduction**

# **3.4.1** Seasonal changes in physiology and behavior associated with reproduction and management implications of such changes.

**Standard:** Each male and female elephant of potential reproductive age must have an initial reproductive assessment and follow-up assessments on a regular basis by transrectal ultrasound, and all female elephants of potential reproductive age must have their progesterone cycle monitored to verify current reproductive status and assess overall reproductive health.

**Measurement:** Samples for reproductive assessment for females taken and analyzed at least annually. Semen samples collected from bulls regularly (annually where practical) document current viability. AZA Elephant TAG/SSP recommendations followed.

**Explanation:** Exceptions for reproductive assessment include elephants with known reproductive problems, actively breeding elephants, or those with documented medical/behavioral conditions that preclude them from breeding.

# 3.4.2 Facilities for parturition and management of females during parturition and calf introductions

**Standard:** Breeding facilities must have a birth protocol in place, which provides for care of the mother during pregnancy and parturition and safety of the calf immediately after birth.

**Measurement:** Birth protocol is reviewed.

**Explanation:** In order to avoid incidents of calf injury or unsuccessful births due to lack of a plan or lack of preparedness, a detailed birth protocol must be written for all pregnant elephants. For first time mothers, this protocol must include the ability to restrain the mother and retrieve the calf at parturition if necessary. The protocol must include methods of care of the mother in case of birth complications requiring veterinary intervention. There are several excellent birth protocols available from successful breeding institutions. The Elephant Husbandry Resource Guide can be a useful resource for developing the institutional birth protocol.

#### 3.4.3 Hand-rearing and reintroduction protocols

**Standard:** Written hand-rearing and reintroduction management plans should be included as a part of the birth protocol.

**Measurement:** Birth protocol is reviewed, including plans for hand-rearing and reintroduction management.

**Explanation:** Protocols must be in place and supplies on hand well in advance (at least 30 days) of earliest expected parturition date in case hand-rearing is necessary. Every attempt should be made to reunite an elephant calf with its mother as soon as possible following birth.

#### 3.4.4 Recommended means and duration of contraception

**Standard:** There are no standards for contraception with elephants at this time.

Measurement: Not applicable.

**Explanation:** Currently, there is not a need for contraception with either African or Asian elephants in human care. Contraception information is available on-line at the AZA Wildlife Contraception Center's web site at <a href="http://www.stlzoo.org/contraception">www.stlzoo.org/contraception</a>.

#### 4. Behavior management

**Standard:** All institutions must have an elephant training program in place which allows elephant care providers and veterinarians the ability to accomplish all necessary elephant care and management procedures. A training program must be consistent with the industry standard to assure interinstitutional consistency.

**Measurement:** Review training and health records and observe elephant/staff interactions to determine if elephant training program is successful and that elephant care needs are being successfully met.

**Explanation:** Elephant training terminology and descriptions of specific behaviors are outlined in the PEM course curriculum. The PEM-recommended list of commands and their corresponding behaviors are ones that every elephant and elephant keeper must know so that basic husbandry and veterinary practices can be accomplished.

#### 4.1 Daily behavioral assessment (Standard applicable beginning January 1, 2013)

**Standard:** A daily behavioral assessment will be conducted for each elephant and all unusual behavior or any instances of aggression should be documented in the daily report and/or in an incident report form, if appropriate.

**Measurement:** Daily records and reports are reviewed.

**Explanation:** A daily assessment should be made and any unusual behavior (including instances of aggression) should be immediately reported to the supervisor, and recorded in a daily log.

**By September 1, 2012**, the Elephant TAG/SSP will provide guidance to institutions on elephant aggression in the form of a widely applicable scale/index so that there is consistent understanding regarding implementation of this Standard.

#### 4.2 Successful methodologies for managing elephants

#### 4.2.1 Training methods

**Standard:** All institutions must have an elephant training program in place which allows elephant care providers and veterinarians the ability to accomplish all necessary elephant care and management procedures. Each institution will adopt and implement an institutional training methodology that promotes the safest environment for elephant care professionals and visitors and ensures high quality care and management of the elephants for routine husbandry, medical management, physical well-being and overall elephant welfare. By 1 September 2013, institutions must train their elephant care professionals to manage and care for elephants with barriers and/or restraints in place that provide employee safety.

**Measurement:** Institutions must be able to demonstrate that all AZA Standards for Elephant Management and Care are met. **By 1 September 2013**, institutions must demonstrate that elephant care professionals are trained to manage and care for elephants with barriers and/or restraints in place.

**Explanation:** Appropriate elephant training may employ several training aids or tools. If properly executed training procedures are ineffective in eliminating aggressive or inappropriate behavior in a given elephant, institutions should consider other alternatives, including bringing in a consultant and/or transferring to a facility with more experienced staff or a different management system.

#### 4.2.2 Elephant management policy

ASSOCIATION OF ZOOS AQUARIUMS

**Standard:** Each AZA member institution and related facility that holds elephants must have a written elephant management policy. This policy must be consistent with AZA standards for elephant management and care, and must support the Board mandate that **as soon as possible and no later than September 1, 2014**, elephant care providers at AZA facilities with elephants shall not share the same unrestricted space with elephants, except in certain, well-defined circumstances (outlined in d. below).

An institution's elephant management policy must, at minimum, include a description of the following key components.

- a) Elephant management program's missions and goals.
- b) Elephant management policies, including guidelines for handling, training, and transport.

c) Plan to separate elephants from each other, safely manage elephants that are aggressive towards other elephants, safely move elephants from one location to another, and safely manage elephants that are aggressive toward humans.

d) Clear protocols for frequency and duration when elephant care professionals and elephants may share the same unrestricted space for the specific purposes of required\* health and welfare procedures, transport, research, active breeding and calf management programs, and medical treatments and testing. \*The word "required" is intended, first, to allow for a degree of flexibility, recognizing the wide array of conditions that occur in managing animals and, second, to indicate that a decision to engage in any specific exceptions should involve more than a single individual and must be approved by the facility director.

e) Staff management policies, including guidelines for keeper safety.

f) Individual elephant profiles and incident reports for all cases in which elephants show aggression toward keepers or the public, regardless if any injury actually resulted.

g) Emergency response protocols. Institutions must be able to demonstrate readiness to respond to an emergency situation, such as a keeper injury, an elephant escape, or to natural disasters.

- h) Written protocol for routine foot care and evidence of its implementation
- i) Written environmental enrichment plan and evidence of its implementation
- j) Written exercise plan and evidence of its implementation

**Measurement:** An updated institutional Elephant Management Policy exists and all records and annual reports pertaining to elephant care and or management are reviewed.

**Explanation:** This policy should be developed with input from many parties, including elephant keepers, managers, curators, veterinarians, safety experts and directors. It should follow a thoughtful process taking into account the animals, staff and facility.

# 4.3 Procedures successful in facilitating introductions, including separation of individuals from group, stationing, tolerance while feeding, cooperative feeding, "howdy" units, visitation gates, etc.

**Standard:** Protocols must be in place for safe and effective introductions and control of potential social issues.

**Measurement:** Institution must be able to demonstrate their ability to introduce and separate elephants.

**Explanation:** Gradual introductions generally follow a pattern of increasing familiarity as follows: olfactory and auditory contact, visual contact at a distance, close proximity visual contact, tactile contact over or through a barrier that allows for either individual or group to move at choice out of tactile contact range, and finally full unfettered introduction. Each phase should be observed and evaluated before moving to the next introductory phase. When doing full introductions, it is important to maintain the ability to intervene in any aggressive escalation and be able to either provide sufficient open or barrier enhanced space for one elephant to avoid another, or multiple gates to facilitate safe separation of the introductory stages and may become frustrated or increasingly aggressive if the introduction moves too slowly. Hence, continual behavioral assessment of the introduction is important.

#### 4.4 Enrichment programs

**Standard:** All institutions must have a written environmental enrichment plan for their elephants and show evidence of implementation (See 1.4.6).

**Measurement:** Enrichment plan and records of daily enrichment activities should be reviewed.

**Explanation:** An effective enrichment program should promote species-appropriate behaviors. Two useful resources on enrichment programs for elephants include the Elephant Husbandry Resource Guide and <u>www.animalenrichment.org</u>.

#### 5. Management Structure, Safety and Program Assessment

#### 5.1 Management structure, technical skills and competencies

**Standard:** Each institution must demonstrate a management structure which provides (1) staff training; (2) program development and maintenance; and (3) communication with others about the elephant program. The elephant program's manager(s) and keepers must demonstrate knowledge about all emergency protocols and continually improve elephant management techniques as the industry standards evolve. Overall responsibility for the program must be clearly defined.

By November 2016, all elephant care professionals, managers and directors must complete PEM.

By November 2016, all elephant managers must complete the facilities-based PEM-II course.

**Measurement:** Institutional elephant management responsibility is clearly defined and understood by elephant manager(s) and keepers. By November 2016, all elephant care professionals, managers and directors have attended PEM I and are knowledgeable in institutional safety and elephant care protocols. By November 2016, all elephant manager(s) have attended PEM II.

**Explanation:** Most institutions typically assign one person to be the Elephant Manager, however, some institutions have more than one person sharing the duties described above.

#### 5.1.1 Keeper safety proficiency (Standard applicable beginning June 1, 2013)

**Standard:** Each institution must implement the standardized methods and protocols to evaluate and maintain records of each elephant care professional's safety-proficiency, in a manner that integrates his/her experience level with the specific behavior profiles of the elephants in his/her care.

**Measurement:** Written evaluations of each elephant care professional's safety-proficiency exist and are up to date.

**Explanation:** An elephant keeper training and safety proficiency program should include regular checkins with the elephant manager(s) and should assess the progress of all employees in safely handling the elephants at his or her facility.

#### 5.2 Animal and keeper safety

**Standard:** A minimum of two qualified elephant keepers must be present within visual and auditory contact during any contact with elephants (any time a keeper is within trunk's reach of an elephant).

**Measurement:** Related keeper injuries should be reported annually (See 5.4).

**Explanation:** A qualified elephant keeper is a person the institution acknowledges as a trained, responsible individual, capable of and specifically experienced in the training and care of elephants.

#### 5.2.1 Elephant aggression

**Standard:** Any elephant that displays aggression towards an elephant care provider(s) must be immediately documented and evaluated by the elephant management team and, as soon as possible, should be managed with barriers or restraints in place between the elephant and that care provider(s).

**Measurement:** Daily reports and incident reports should be reviewed. **By January 1, 2013**, daily behavioral assessments should be available and should be reviewed.

**Explanation:** AZA is committed to maximizing the safety of elephant care staff while continuing to advance the care and welfare of the elephants. Individual elephants occasionally display aggression toward a particular keeper which may warrant managing with barriers or restraints in place when that particular keeper is present. If properly executed training procedures are ineffective in eliminating aggressive or inappropriate behavior in a given elephant, institutions should consider other alternatives, including bringing in a consultant and/or transferring to a facility with more experienced staff or a different management system.

#### 5.3 Visitor safety and acceptable forms of human/animal interaction

**Standard:** Elephant enclosures must be designed to ensure that no physical contact is possible between the visitors and the elephants that is not directly supervised and under the control of trained elephant staff.

**Measurement:** No incidents of visitor injury or inappropriate contact with elephants.

**Explanation:** All elephant/human interaction must be supervised by institutionally qualified elephant staff. Where elephant rides are done, or elephants are walked in public areas or outside their normal exhibit containment, protocols, assessments and reviews must be documented to ensure staff and public safety.

#### 5.4 **Program assessment**

**Standard:** Each institution must perform an annual review of its overall elephant management program, including any elephant related injuries or safety incidents, elephant management policies and procedures, elephant containment parameters and structures, staff performance and program goals.

**Beginning January 1, 2013, Standard 5.4 will change to read:** Each institution must perform an annual review of its overall elephant management program including:

- The circumstances under which elephant care professionals share unrestricted space with elephants versus when barriers and/or restraints are in place.
- The number of workplace injuries or fatalities, if any, that occurred in the care and management of elephants and the specific conditions under which each occurred.

- The number of elephant births and mortalities and a description of the specific practices and protocols used during each event.
- Elephant management policies, procedures and protocols
- Elephant containment parameters and structures
- Staff performance and program goals

**Measurement:** Written report of the annual program assessment with recommendations for actions to be taken where appropriate. After January 1, 2013, this report shall be submitted to the Accreditation Commission, the AZA Elephant TAG/SSP and the AZA Staff.

**Explanation:** Elephant management continues to evolve as new information, knowledge and technologies become available. An annual review of the entire program will assist in identifying areas of unwanted change, assessing programs strengths and needs, and developing action plans to meet the goals of the program.

#### 6. Conservation, Education, and Research

#### 6.1 Conservation and research activities

**Standard:** AZA Zoos should contribute to in situ and ex situ conservation and research efforts.

**Measurement:** Records of participation in situ and ex situ conservation and research efforts should be reviewed.

**Explanation:** AZA zoos that currently exhibit or desire to exhibit elephants should make every effort to maintain elephants in their collections so that they can contribute to conservation through public education, scientific research, and the support of field conservation. Elephants are an important flagship species and the cornerstone of many members' African and Asian exhibit areas. (Board of Directors 3/21/00). Every institution should contribute in some way to in situ conservation of elephants and their habitats (EMA 1999, Hutchins and Smith, 2000). AZA members are strongly encouraged to provide financial, personnel, logistical, and other support for priority research and conservation initiatives listed in the AZA Elephant TAG/SSP Strategic Plan. Every institution should contribute in some way to elephant research activities (Keele and Dimeo-Ediger 1997, EMA 1999, Hutchins and Smith, 2000). Involvement in one or more of the following disciplines is strongly recommended: behavior, cognition, reproduction, communication, enrichment, health (disease/pathology, nutrition), and education.

#### 6.2 Education programs

**Standard:** Every institution should institute a program to educate zoo visitors about elephant and elephant conservation issues (EMA 1999, Hutchins and Smith, 2000).

**Measurement:** Records of elephant education program should be reviewed.

**Explanation:** Assistance is available from the Elephant TAG/SSP Education Advisor. Every institution should have up-to-date educational graphics and/or information about elephants on display to the public.

#### 7. Cooperative management

**Standard:** All acquisition, disposition, transfer or breeding of elephants in AZA institutions is subject to approval of the AZA Elephant TAG/SSP. All breeding, management and transfer recommendations of the AZA Elephant TAG/SSP should be followed. The success of cooperative breeding programs depends on all institutions supporting TAG/SSP recommendations.

If differences regarding TAG/SSP recommendations occur between the TAG/SSP Steering Committee and a member institution, the AZA SSP Handbook clearly articulates the process that both parties must utilize to resolve these differences prior to engaging in the Animal Management Reconciliation Policy.

**Measurement:** Records of participation and cooperation with the Elephant TAG/SSP should be reviewed.

**Explanation:** The goals and mission of the Elephant TAG/SSP will only be met if each AZA institution managing elephants honors its commitment as either a holding or breeding facility. Each institution must make every effort to abide by Elephant TAG/SSP breeding and transfer recommendations.

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#### **Appendix 1 - Nutrition**

Nutrient	Maintenance, Breeding	Late pregnancy	Lactation	Juvenile growth
Crude Protein, %	8-10 <sup>a</sup>	12	12-14 <sup>b</sup>	12-14 <sup>c</sup>
Lysine, %	0.3	0.4	0.4-0.5	0.5-0.6
Calcium, %	0.3	0.5	0.5	0.5-0.7
Phosphorus, %	0.2	0.3	0.3	0.3-0.4
Magnesium, %	0.1	0.1	0.1	0.1
Potassium, %	0.4	0.4	0.5	0.4
Sodium, %	0.1	0.1	0.1	0.1
Sulphur, %	0.15	0.15	0.15	0.15
Iron, ppm	50	50	50	50
Copper, ppm	10	10	10	10
Manganese, ppm	40	40	40	40
Zinc, ppm	40	40	40	40
Cobalt, ppm	0.1	0.1	0.1	0.1
Iodine, ppm	0.6	0.6	0.6	0.6
Selenium, ppm	0.2	0.2	0.2	0.2
Vitamin A, IU/kg	3000	3000	3000	3000
Vitamin D, IU/kg	800	800	800	800
Vitamin E, IU/kg	100	100	100	100
Thiamine, ppm	3	3	3	3
Riboflavin, ppm	$\frac{3}{0$ CD has dia a hall	3	$\frac{3}{(1 \text{ st true thirds})}$	3

 Table 1 - from Nutrition Advisory Group Handbook, "Elephants: Nutrition and Dietary Husbandry" (Ullrey et al. 1997).

<sup>a</sup>Adult maintenance, 8% CP, breeding bull, pregnant cow (1st two-thirds of pregnancy), 10% CP.

<sup>b</sup>First year of lactation, 14% CP, 2nd year of lactation, 12% CP

Weanling, 14% CP; 3-year old, 13% CP, 4-year old to year old, 12% CP.

Deficiencies in vitamin E in elephants in human care has lead to a range of symptoms, including necrotizing myopathies, anemia, reproductive failure (Kenny 2001), capture myopathy (Dierenfeld and Dolensek 1988; Barnett 1990), and white muscle disease (Dierenfeld and Dolensek 1988). Levels of circulating  $\alpha$ -tocopherol in wild elephants have been recorded at 0.77 µg/ml; circulating levels in elephants in human care showing no clinical signs of vitamin E deficiency had an average level of only 0.43 µg/ml (Dierenfeld 1989). In order to increase circulating levels of  $\alpha$ -tocopherol, supplementation of elephant diets with natural and artificial sources of vitamin E is recommended.

Grass hay with an ADF of > 30% should be provided to elephants (Ullrey et al., 1997), and can be mixed with legume hays. All hay fed should be of high quality, properly dried and cured, and regularly assessed for nutritional content (Oftedahl and Allen, 1996). To provide a more nutritionally complete diet, concentrated pellets can be offered in addition to hay. These pellets should be high-fiber and low in starch. Providing browse for elephants increases foraging time, can add important nutritional benefits, and can promote dental health. As with other food items offered to elephants, it is important to have browse nutritionally analyzed.

Page 54

#### **Appendix 2** – **Body Condition Index**

Criteria and point scores used to assess body condition in Asian elephants (Elephas maximus). When a particular body region is intermediate between two criteria, an intermediate point score (i.e. 0.5, 1.5 points) should be assigned.

- A. Head temporal depression (view from several angles)
  - 2 points: full and convex in outline when viewed from behind (at the level of the neck or shoulder); frontal ridge vaguely outlined at best.
  - 1 point: slightly to moderately concave; frontal ridge defined.
  - o points: deeply concave; frontal ridge forms a crater-like rim around the temporal depression.
- B. Scapula (shoulder blade) (view from side)
  - 2 points: spinous process of the shoulder blade not visible, or slightly visible when the foreleg is in certain positions.
  - 1 point: spinous process visible as a vertical ridge with a concavity between the ridge and the posterior edge of the scapula.
  - o points: spinous process pronounced and bladelike with the acromial process pronounced as a knot.
- C. Thoracic region (view from side)
  - 2 points: ribs not visible, barrel smooth.
  - 1 point: some ribs visible, but the extent and demarcation not pronounced.
  - o points: many ribs strongly demarcated (even behind the scapula) with pronounced intercostal depressions.
- D. Flank area immediately in front of pelvic girdle (view from side and behind)
  - 1 point: no depression visible; flank bulges outwards in front of the pelvis.
  - o points: depression visible as a sunken area immediately in front of pelvis.
- E. Lumbar vertebrae behind ribs and in front of pelvis (view from behind, an elevated vantage point may be necessary)
  - 2 points: not visible, lower back smooth and rounded.
  - 1 point: visible as a ridge; skin slopes away from the top of the ridge; height of the vertebrae does not exceed width.
  - o points: visible as a knife-like blade; sides of spinal ridge almost parallel, and the height equal to or exceeds the width.
- F. Pelvic bone external angle of the ilium (view from several angles)
  - 2 points: not visible (or slightly visible); rump region between the ilium and caudal vertebrae filled with tissue (and not forming a depressed zone).
  - 1 point: visible but not pronounced; the rump is a slightly depressed zone between the ilium and the caudal vertebrae.
  - o points: visible as a jutting bone; rump is a pronounced sunken zone between ilium and the caudal vertebrae.

#### ANIMAL CONTACT WITH THE GENERAL PUBLIC

Nearly every contact with other living organisms, whether it be with humans or other animals, carries some risk of disease transmission. Diseases that are spread from animals to humans are called zoonoses (adj. = zoonotic diseases). Responsible zoos should and do make reasonable attempts to limit the risk of the spread of disease from the animals in their care to their employees and to the general public. <sup>4,9</sup> For the general public, the risk of contracting disease from most zoo animals is minimal to nonexistent due to their distance and isolation from the animals. However, contact areas for the general public can present increased risks that can be controlled with reasonable precautions. For this paper, contact areas refers to those areas in which there is direct physical contact between animals and people. These precautions are most effective when they are part of an overall preventative medicine program for the zoological park. <sup>5,8</sup>

Risks of zoonotic disease can be markedly reduced by avoiding direct animal contact. However, this forgoes many valuable educational experiences and the establishment of a direct relationship between animals and the public. A reasonable alternative is adequate hand washing for those in direct contact with the animals. Hand washing is perhaps the single most effective personal hygiene procedure for reducing the risk of infection. <sup>4</sup> Given that fact, all areas in which the public has direct contact with animals should have access to hand washing facilities that are in the immediate vicinity of the contact (or an equivalent; e.g., bacteriocidal hand-wipes).

As outlined by the AZA and the USDA's Animal Welfare Act, animal contact areas should always be supervised by a trained zoo representative. Obviously, animals that are ill, should not be used. Human food consumption should not occur in the immediate area of contact. Additionally, zoological institutions should be aware that the Centers for Disease Control (CDC) standards advise additional precautions may be necessary for humans that they classify as at increased risk of disease, including those that are immunocompromised. When a reportable disease is identified, all appropriate local, state, and federal regulatory officials should be contacted.

More detailed information on zoonotic diseases may be obtained from a variety of veterinary and medical textbooks and journals, <sup>1,6</sup> and from public health officials. Additionally, the AZA's Quarantine Protocol provides further testing recommendations. <sup>7</sup> Also referenced at the end of this report is a review of some of the risks associated with animals and immunocompromised humans. <sup>3</sup> Following is a list of disease considerations and control programs recommended for animals commonly used in contact programs. Depending on the disease and history of the animals, testing protocols may vary from an initial or incoming quarantine test, to yearly repetitions. This protocol should be at the discretion of the institutional veterinarian.

#### Reptiles and Amphibians

Most notable among the disease risks presented by reptiles is the transmission of *Salmonella* sp. Salmonellosis is a common and often nonpathogenic infection of reptiles (in one survey, according to species, the infection rate ranged from 3 to 55 percent). <sup>2</sup> Diagnosis may be difficult. A cloacal swab or other sample positive on culture for *Salmonella* sp. is diagnostic for infection. However, due to intermittent fecal shedding of these organisms, false negative cultures frequently occur. So it is difficult, if not impossible to ascertain with certainty that an animal is *Salmonella* "negative". Therefore, all reptiles should be treated as *salmonella* carriers. Attempts to eliminate *Salmonella* carriers with antibiotic therapy have been unsuccessful and may be contraindicated as they can lead to chronic carrier states and increased resistance of these bacteria to antibiotics. Risks of transmission can be reduced in two ways: 1) avoid all direct contact with reptiles or surfaces with which they have come in contact, or, 2) allow only supervised contact followed by hand washing as previously described.

Reptiles can also transmit a variety of other organisms, mostly gastrointestinal in origin, and the same procedures described above should be effective in reducing the risks of transmission to those in contact. These other risks include other gram negative bacterial infections. Reptiles used in contact areas should be free of snake mites and pentastomids (e.g., *Armillifer* sp.).

Amphibians may present several of the same zoonotic risks as reptiles, so again, contact should be followed by hand washing.

#### Birds

Birds used in contact areas should be free of chlamydiosis and zoonotic parasites (e.g., giardia). Chlamydiosis testing is appropriate for members of the orders *Psittaciformes, Galliformes*, and *Columbiformes*. As in reptiles, salmonellosis can be present and difficult to diagnose and so, birds should be treated as suspects. In the general human population, avian tuberculosis is generally considered to have very low zoonotic potential, however, it can present significant risks for immunocompromised individuals. Care should be taken to avoid public contact with known infected flocks.

#### Mammals—General

All mammals are considered at risk for infection with rabies. Current rabies vaccines are licensed for use in only six domestic species: dogs, cats, ferrets, sheep, horses, and cows. For wild-caught individuals of most species, a prolonged (three-six month) quarantine is necessary to reduce the risk that they are infected with the virus. Even then, some species such as skunks, foxes, raccoons, and bats may still represent a greater risk.

Any skin lesions compatible with dermatomycosis ("ringworm") should be carefully evaluated in order to prevent transmission to those in direct contact with them.

#### Mammals-Primates

Unless extensive testing has been performed for a variety of viral, parasitic, and bacterial diseases, all direct public contact with primates should be avoided. Public contact also places the primates at considerable risk of contracting diseases from humans.

#### Mammals—Small Ruminants/Neonatal Ruminants

All small ruminants; e.g., pygmy goats, sheep, dwarf cattle, llamas, etc., that are greater than six months of age and used in contact areas should be tested for tuberculosis, brucellosis, and leptospirosis. Obviously, any animals with lesions compatible with sarcoptic mange (mange mite = *Sarcoptes scabeii*) should be removed from contact. Any animals with lesions compatible with contagious ecythema ("orf" in man) should be tested and removed from contact until proven negative. Calves should be checked and found free of *Cryptosporidium* sp. and other infections with protozoa. Other diseases of a potential zoonotic nature include infection with *Coxiella burneti* (Q-fever) in endemic areas. Additionally, recent reports indicate that infection with Johnes disease (*Mycobacterium paratuberculosis*) may present zoonotic concerns, primarily in goats.

#### Mammals—Swine

These animals should be checked for gastrointestinal infection with *Balantidium* sp. efforts made to control this infection. Additionally, consideration should be given to regular vaccination for the bacterial disease, *Erysipelothrix rhusipathae* ("diamond skin disease").

#### Mammals—Small Carnivores

In general, due to the potential for bites, small carnivores should be used in contact areas only with extreme caution. Due to the risk of bites, small felids are generally not used in direct contact. If they are, care must be taken that such animals are negative for infection with *Toxoplasma gondii*. All carnivores should be tested for and be free of zoonotic species of roundworms such as *Baylascaris* sp. Small carnivores (e.g., raccoons and skunks) obtained from the wild may present a greater risk of rabies and their use should be avoided in contact areas.

#### Mammals—Rodents and Lagomorphs

When using rodents and lagomorphs in contact areas, consideration should be given to the risk of bites, past history, and exposure to hantavirus, salmonella, and tularemia.

#### Mammals—Chiroptera

At the present time, CDC regulations effectively prohibit the use of bats in direct contact areas.

#### Fish/Aquatic Tanks

Due to the potential for infection with atypical mycobacteria, *Vibrio* sp., *Erysipelothrix rhusiopathae*, and a variety of gram negative bacteria, contact with fish or touch tanks should also be followed by hand washing.

#### Summary

It is important to evaluate the risks of zoonotic diseases in a rational context. Contact animals can provide a valuable educational experience for visitors and participants in public programs to zoological parks and aquariums. Most zoonotic diseases of concern in public areas can be prevented with reasonable testing and quarantine programs and proper hand-washing techniques.

These are intended to be general guidelines and the risk of diseases can vary by area, so each zoological institution should develop its own zoonoses control program. Two excellent resources for reviewing testing and preventative procedures for many of these diseases are the American Association of Zoo Veterinarians= *Infectious Disease Notebook*, <sup>1</sup> and the American Veterinary Medical Association's *Zoonoses Updates*. <sup>6</sup> In summary, the most effective method for disease prevention is a complete and thorough veterinary program and common sense sanitary measures.

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# **Program Animal Policy**

Originally approved by the AZA Board of Directors – 2003 Updated and approved by the Board – July 2008 & June 2011

The Association of Zoos & Aquariums (AZA) recognizes many benefits for public education and, ultimately, for conservation in program animal presentations. AZA's Conservation Education Committee's *Program Animal Position Statement* summarizes the value of program animal presentations (see pages 61-63).

For the purpose of this policy, a Program Animal is defined as "an animal whose role includes handling and/or training by staff or volunteers for interaction with the public and in support of institutional education and conservation goals". Some animals are designated as Program Animals on a full-time basis, while others are designated as such only occasionally. Program Animal-related Accreditation Standards are applicable to all animals during the times that they are designated as Program Animals.

There are three main categories of Program Animal interactions:

- 1. On Grounds with the Program Animal Inside the Exhibit/Enclosure:
  - i. Public access outside the exhibit/enclosure. Public may interact with animals from outside the exhibit/enclosure (e.g., giraffe feeding, touch tanks).
  - ii. Public access inside the exhibit/enclosure. Public may interact with animals from inside the exhibit/enclosure (e.g., lorikeet feedings, 'swim with' programs, camel/pony rides).
- 2. On Grounds with the Program Animal Outside the Exhibit/Enclosure:
  - i. Minimal handling and training techniques are used to present Program Animals to the public. Public has minimal or no opportunity to directly interact with Program Animals when they are outside the exhibit/enclosure (e.g., raptors on the glove, reptiles held "presentation style").
  - ii. Moderate handling and training techniques are used to present Program Animals to the public. Public may be in close proximity to, or have direct contact with, Program Animals when they're outside the exhibit/enclosure (e.g., media, fund raising, photo, and/or touch opportunities).
  - iii. Significant handling and training techniques are used to present Program Animals to the public. Public may have direct contact with Program Animals or simply observe the indepth presentations when they're outside the exhibit/enclosure (e.g., wildlife education shows).
- 3. Off Grounds:
  - i. Handling and training techniques are used to present Program Animals to the public outside of the zoo/aquarium grounds. Public may have minimal contact or be in close proximity to and have direct contact with Program Animals (e.g., animals transported to schools, media, fund raising events).

These categories assist staff and accreditation inspectors in determining when animals are designated as Program Animals and the periods during which the Program Animal-related Accreditation Standards are applicable. In addition, these Program Animal categories establish a framework for understanding increasing degrees of an animal's involvement in Program Animal activities.

Program animal presentations bring a host of responsibilities, including the safety and welfare of the animals involved, the safety of the animal handler and public, and accountability for the

take-home, educational messages received by the audience. Therefore, AZA requires all accredited institutions that make program animal presentations to develop an institutional program animal policy that clearly identifies and justifies those species and individuals approved as program animals and details their long-term management plan and educational program objectives.

AZA's accreditation standards require that education and conservation messages must be an integral component of all program animal presentations. In addition, the accreditation standards require that the conditions and treatment of animals in education programs must meet standards set for the remainder of the animals, including species-appropriate shelter, exercise, appropriate environmental enrichment, access to veterinary care, nutrition, and other related standards. In addition, providing program animals with options to choose among a variety of conditions within their environment is essential to ensuring effective care, welfare, and management. Some of these requirements can be met outside of the primary exhibit enclosure while the animal is involved in a program or is being transported. For example, free-flight birds may receive appropriate exercise during regular programs, reducing the need for additional exercise. However, the institution must ensure that in such cases, the animals participate in programs on a basis sufficient to meet these needs or provide for their needs in their home enclosures; upon return to the facility the animal should be returned to its species-appropriate housing as described above.

# **Program Animal Position Statement**

LAST REVISION 1/28/03 Re-authorized by the Board June 2011

#### THE CONSERVATION EDUCATION COMMITTEE (CEC) OF THE ASSOCIATION OF ZOOS AND AQUARIUMS SUPPORTS THE APPROPRIATE USE OF PROGRAM ANIMALS AS AN IMPORTANT AND POWERFUL EDUCATIONAL TOOL THAT PROVIDES A VARIETY OF BENEFITS TO ZOO AND AQUARIUM EDUCATORS SEEKING TO CONVEY COGNITIVE AND AFFECTIVE (EMOTIONAL) MESSAGES ABOUT CONSERVATION, WILDLIFE AND ANIMAL WELFARE.

Utilizing these animals allows educators to strongly engage audiences. As discussed below, the use of program animals has been demonstrated to result in lengthened learning periods, increased knowledge acquisition and retention, enhanced environmental attitudes, and the creation of positive perceptions concerning zoo and aquarium animals.

### **Audience Engagement**

Zoos and aquariums are ideal venues for developing emotional ties to wildlife and fostering an appreciation for the natural world. However, developing and delivering effective educational messages in the free-choice learning environments of zoos and aquariums is a difficult task.

Zoo and aquarium educators are constantly challenged to develop methods for engaging and teaching visitors who often view a trip to the zoo as a social or recreational experience (Morgan and Hodgkinson, 1999). The use of program animals can provide the compelling experience necessary to attract and maintain personal connections with visitors of all motivations, thus preparing them for learning and reflection on their own relationships with nature.

Program animals are powerful catalysts for learning for a variety of reasons. They are generally active, easily viewed, and usually presented in close proximity to the public. These factors have proven to contribute to increasing the length of time that people spend watching animals in zoo exhibits (Bitgood, Patterson and Benefield, 1986, 1988; Wolf and Tymitz, 1981).

In addition, the provocative nature of a handled animal likely plays an important role in captivating a visitor. In two studies (Povey, 2002; Povey and Rios, 2001), visitors viewed animals three and four times longer while they were being presented in demonstrations outside of their enclosure with an educator than while they were on exhibit. Clearly, the use of program animals in shows or informal presentations can be effective in lengthening the potential time period for learning and overall impact.

Program animals also provide the opportunity to personalize the learning experience, tailoring the teaching session to what interests the visitors. Traditional graphics offer little opportunity for this level of personalization of information delivery and are frequently not read by visitors (Churchman, 1985; Johnston, 1998). For example, Povey (2001) found that only 25% of visitors to an animal exhibit read the accompanying graphic; whereas, 45% of visitors watching the same animal handled in an educational presentation asked at least one question and some asked as many as seven questions. Having an animal accompany the educator allowed the visitors to make specific inquiries about topics in which they were interested.

### **Knowledge Acquisition**

Improving our visitors' knowledge and understanding regarding wildlife and wildlife conservation is a fundamental goal for many zoo educators using program animals. A growing body of evidence supports the validity of using program animals to enhance delivery of these cognitive messages as well.

- MacMillen (1994) found that the use of live animals in a zoomobile outreach program significantly enhanced cognitive learning in a vertebrate classification unit for sixth grade students.
- Sherwood and his colleagues (1989) compared the use of live horseshoe crabs and sea stars to the use of dried specimens in an aquarium education program and demonstrated that students made the greatest cognitive gains when exposed to programs utilizing the live animals.
- Povey and Rios (2002) noted that in response to an open-ended survey question ("Before I saw this animal, I never realized that . . . "), visitors watching a presentation utilizing a program animal provided 69% cognitive responses (i.e., something they learned) versus 9% made by visitors viewing the same animal in its exhibit (who primarily responded with observations).
- Povey (2002) recorded a marked difference in learning between visitors observing animals on exhibit versus being handled during informal presentations. Visitors to demonstrations utilizing a raven and radiated tortoises were able to answer questions correctly at a rate as much as eleven times higher than visitors to the exhibits.

### **Enhanced Environmental Attitudes**

Program animals have been clearly demonstrated to increase affective learning and attitudinal change.

- Studies by Yerke and Burns (1991) and Davison and her colleagues (1993) evaluated the effect live animal shows had on visitor attitudes. Both found their shows successfully influenced attitudes about conservation and stewardship.
- Yerke and Burns (1993) also evaluated a live bird outreach program presented to Oregon fifth-graders and recorded a significant increase in students' environmental attitudes after the presentations.
- Sherwood and his colleagues (1989) found that students who handled live invertebrates in an education program demonstrated both short and long-term attitudinal changes as compared to those who only had exposure to dried specimens.
- Povey and Rios (2002) examined the role program animals play in helping visitors develop positive feelings about the care and well-being of zoo animals.
- As observed by Wolf and Tymitz (1981), zoo visitors are deeply concerned with the welfare of zoo animals and desire evidence that they receive personalized care.

### Conclusion

Creating positive impressions of aquarium and zoo animals, and wildlife in general, is crucial to the fundamental mission of zoological institutions. Although additional research will help us delve further into this area, the existing research supports the conclusion that program animals are an important tool for conveying both cognitive and affective messages regarding animals and the need to conserve wildlife and wild places.

### Acknowledgements

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#### RECOMMENDATIONS FOR DEVELOPING AN INSTITUTIONAL PROGRAM ANIMAL POLICY

LAST REVISION 2003 Re-authorized by the Board June 2011

### Rationale

Membership in AZA requires that an institution meet the AZA Accreditation Standards collectively developed by our professional colleagues. Standards guide all aspects of an institution's operations; however, the accreditation commission has asserted that ensuring that member institutions demonstrate the highest standards of animal care is a top priority. Another fundamental AZA criterion for membership is that education be affirmed as core to an institution's mission. All accredited public institutions are expected to develop a written education plan and to regularly evaluate program effectiveness.

The inclusion of animals (native, exotic and domestic) in educational presentations, when done correctly, is a powerful tool. CEC's **Program Animal Position Statement** describes the research underpinning the appropriate use of program animals as an important and powerful educational tool that provides a variety of benefits to zoo and aquarium educators seeking to convey cognitive and affective messages about conservation and wildlife.

Ongoing research, such as AZA's Multi-Institutional Research Project (MIRP) and research conducted by individual AZA institutions will help zoo educators to determine whether the use of program animals conveys intended and/or conflicting messages and to modify and improve programs accordingly and to ensure that all program animals have the best possible welfare.

When utilizing program animals our responsibility is to meet both our high standards of animal care and our educational goals. Additionally, as animal management professionals, we must critically address both the species' conservation needs and the welfare of the individual animal. Because "wild creatures differ endlessly," in their forms, needs, behavior, limitations and abilities (Conway, 1995), AZA, through its Animal Welfare Committee, has recently given the responsibility to develop taxon- and species-specific animal welfare standards and guidelines to the Taxon Advisory Groups (TAG) and Species Survival Plan® Program (SSP). Experts within each TAG or SSP, along with their education advisors, are charged with assessing all aspects of the taxons' and/or species' biological and social needs and developing Animal Care Manuals (ACMs) that include specifications concerning their use as program animals.

However, even the most exacting standards cannot address the individual choices faced by each AZA institution. Therefore, each institution is required to develop a program animal policy that articulates and evaluates program benefits. The following recommendations are offered to assist each institution in formulating its own Institutional Program Animal Policy, which incorporates the AZA Program Animal Policy and addresses the following matters.

### **The Policy Development Process**

Within each institution, key stakeholders should be included in the development of that institution's policy, including, but not limited to representatives from:

- the Education Department
- the Animal Husbandry Department
- the Veterinary and Animal Health Department
- the Conservation & Science Department

- the Behavioral Husbandry Department
- any animal show staff (if in a separate department)
- departments that frequently request special program animal situations (e.g., special events, development, marketing, zoo or aquarium society, administration)

Additionally, staff from all levels of the organization should be involved in this development (e.g., curators, keepers, education managers, interpreters, volunteer coordinators).

To develop a comprehensive Program Animal Policy, we recommend that the following components be included:

### I. Philosophy

In general, the position of the AZA is that the use of animals in up close and personal settings, including animal contact, can be extremely positive and powerful, as long as:

- 1. The use and setting is appropriate.
- 2. Animal and human welfare is considered at all times.
- 3. The animal is used in a respectful, safe manner and in a manner that does not misrepresent or degrade the animal.
- 4. A meaningful conservation message is an integral component. Read the AZA Board-approved Conservation Messages.
- 5. Suitable species and individual specimens are used.

Institutional program animal policies should include a philosophical statement addressing the above, and should relate the use of program animals to the institution's overall mission statement.

### **II. Appropriate Settings**

The Program Animal Policy should include a listing of all settings both on and off site, where program animal use is permitted. This will clearly vary among institutions. Each institution's policy should include a comprehensive list of settings specific to that institution. Some institutions may have separate policies for each setting; others may address the various settings within the same policy. Examples of settings include:

- I. On-site programming
  - A. Informal and non-registrants:
    - 1. On-grounds programming with animals being brought out (demonstrations, lectures, parties, special events, and media)
    - 2. Children's zoos and contact yards
    - 3. Behind-the-scenes open houses
    - 4. Shows
    - 5. Touch pools
  - B. Formal (registration involved) and controlled settings
    - 1. School group programs
    - 2. Summer Camps
    - 3. Overnights
    - 4. Birthday Parties
    - 5. Animal rides
    - 6. Public animal feeding programs
- II. Offsite and Outreach
  - 1. PR events (TV, radio)
  - 2. Fundraising events
  - 3. Field programs involving the public

- 4. School visits
- 5. Library visits
- 6. Nursing Home visits (therapy)
- 7. Hospital visits
- 8. Senior Centers
- 9. Civic Group events

In some cases, policies will differ from setting to setting (e.g., on-site and off-site use with media). These settings should be addressed separately, and should reflect specific animal health issues, assessment of distress in these situations, limitations, and restrictions.

### **III. Compliance with Regulations**

All AZA institutions housing mammals are regulated by the USDA's Animal Welfare Act. Other federal regulations, such as the Marine Mammal Protection Act, may apply. Additionally, many states, and some cities, have regulations that apply to animal contact situations. Similarly, all accredited institutions are bound by the AZA Code of Professional Ethics. It is expected that the Institution Program Animal Policy address compliance with appropriate regulations and AZA Accreditation Standards.

### **IV. Collection Planning**

All AZA accredited institutions should have a collection planning process in place. Program animals are part of an institution's overall collection and must be included in the overall collection planning process. The AZA Guide to Accreditation contains specific requirements for the institution collection plan. For more information about collection planning in general, please see the Collection Management pages in the Members Only section.

The following recommendations apply to program animals:

- 1. Listing of approved program animals (to be periodically amended as collection changes). Justification of each species should be based upon criteria such as:
  - o Temperament and suitability for program use
  - Husbandry requirements
  - o Husbandry expertise
  - Veterinary issues and concerns
  - o Ease and means of acquisition / disposition according to the AZA code of ethics
  - o Educational value and intended conservation message
  - o Conservation Status
  - Compliance with TAG and SSP guidelines and policies
- 2. General guidelines as to how each species (and, where necessary, for each individual) will be presented to the public, and in what settings
- 3. The collection planning section should reference the institution's acquisition and disposition policies.

### V. Conservation Education Message

As noted in the AZA Accreditation Standards, if animal demonstrations are part of an institution's programs, an educational and conservation message must be an integral component. The Program Animal Policy should address the specific messages related to the use of program animals, as well as the need to be cautious about hidden or conflicting messages (e.g., "petting" an animal while stating verbally that it makes a poor pet). This section may include or reference the AZA Conservation Messages. Although education value and messages should be part of the general collection planning process, this aspect is so critical to the use of program animals that it deserves additional attention. In addition, it is highly recommended to encourage the use of biofacts in addition to or in place of the live animals.

Whenever possible, evaluation of the effectiveness of presenting program animals should be built into education programs.

### VI. Human Health and Safety

The safety of our staff and the public is one of the greatest concerns in working with program animals. Although extremely valuable as educational and affective experiences, contact with animals poses certain risks to the handler and the public. Therefore, the human health and safety section of the policy should address:

- 1. Minimization of the possibility of disease transfer from non-human animals to humans, and viceversa (e.g., handwashing stations, no touch policies, use of hand sanitizer)
- 2. Safety issues related to handlers' personal attire and behavior (e.g., discourage or prohibit use of long earrings, perfume and cologne, not eating or drinking around animals, smoking etc.)

AZA's Animal Contact Policy provides guidelines in this area; these guidelines were incorporated into accreditation standards in 1998.

### VII. Animal Health and Welfare

Animal health and welfare are the highest priority of AZA accredited institutions. As a result, the Institutional Program Animal Policy should make a strong statement on the importance of animal welfare. The policy should address:

- 1. General housing, husbandry, and animal health concerns (e.g. that the housing and husbandry for program animals meets or exceeds general AZA standards and that the physical, social and psychological needs of the individual animal, such as adequate rest periods, provision of enrichment, visual cover, contact with conspecifics as appropriate, etc., are accommodated).
- 2. Where ever possible provide a choice for animal program participation, e.g., retreat areas for touch tanks or contact yards, evaluation of willingness/readiness to participate by handler, etc.)
- 3. The empowerment of handlers to make decisions related to animal health and welfare; such as withdrawing animals from a situation if safety or health is in danger of being compromised.
- 4. Requirements for supervision of contact areas and touch tanks by trained staff and volunteers.
- 5. Frequent evaluation of human / animal interactions to assess safety, health, welfare, etc.
- 6. Ensure that the level of health care for the program animals is consistent with that of other animals in the collection.
- 7. Whenever possible have a "cradle to grave" plan for each program animal to ensure that the animal can be taken care of properly when not used as a program animal anymore.
- 8. If lengthy "down" times in program animal use occur, staff should ensure that animals accustomed to regular human interactions can still maintain such contact and receive the same level of care when not used in programs.

### VIII. Taxon Specific Protocols

We encourage institutions to provide taxonomically specific protocols, either at the genus or species level, or the specimen, or individual, level. Some taxon-specific guidelines may affect the use of program animals. To develop these, institutions refer to the Conservation Programs Database.

Taxon and species -specific protocols should address:

- 1. How to remove the individual animal from and return it to its permanent enclosure, including suggestions for operant conditioning training.
- 2. How to crate and transport animals.
- 3. Signs of stress, stress factors, distress and discomfort behaviors.

Situation specific handling protocols (e.g., whether or not animal is allowed to be touched by the public, and how to handle in such situations)

- 1. Guidelines for disinfecting surfaces, transport carriers, enclosures, etc. using environmentally safe chemicals and cleaners where possible.
- 2. Animal facts and conservation information.
- 3. Limitations and restrictions regarding ambient temperatures and or weather conditions.
- 4. Time limitations (including animal rotation and rest periods, as appropriate, duration of time each animal can participate, and restrictions on travel distances).
- 5. The numbers of trained personnel required to ensure the health and welfare of the animals, handlers and public.
- 6. The level of training and experience required for handling this species
- 7. Taxon/species-specific guidelines on animal health.
- 8. The use of hand lotions by program participants that might touch the animals

### IX. Logistics: Managing the Program

The Institutional Policy should address a number of logistical issues related to program animals, including:

- 1. Where and how the program animal collection will be housed, including any quarantine and separation for animals used off-site.
- 2. Procedures for requesting animals, including the approval process and decision making process.
- **3**. Accurate documentation and availability of records, including procedures for documenting animal usage, animal behavior, and any other concerns that arise.

### X. Staff Training

Thorough training for all handling staff (keepers, educators, and volunteers, and docents) is clearly critical. Staff training is such a large issue that many institutions may have separate training protocols and procedures. Specific training protocols can be included in the Institutional Program Animal Policy or reference can be made that a separate training protocol exists.

It is recommended that the training section of the policy address:

- 1. Personnel authorized to handle and present animals.
- 2. Handling protocol during quarantine.
- 3. The process for training, qualifying and assessing handlers including who is authorized to train handlers.
- 4. The frequency of required re-training sessions for handlers.
- 5. Personnel authorized to train animals and training protocols.
- 6. The process for addressing substandard performance and noncompliance with established procedures.
- 7. Medical testing and vaccinations required for handlers (e.g., TB testing, tetanus shots, rabies vaccinations, routine fecal cultures, physical exams, etc.).
- 8. Training content (e.g., taxonomically specific protocols, natural history, relevant conservation education messages, presentation techniques, interpretive techniques, etc.).
- 9. Protocols to reduce disease transmission (e.g., zoonotic disease transmission, proper hygiene and hand washing requirements, as noted in AZA's Animal Contact Policy).
- 10. Procedures for reporting injuries to the animals, handling personnel or public.
- 11. Visitor management (e.g., ensuring visitors interact appropriately with animals, do not eat or drink around the animal, etc.).

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### **XI. Review of Institutional Policies**

All policies should be reviewed regularly. Accountability and ramifications of policy violations should be addressed as well (e.g., retraining, revocation of handling privileges, etc.). Institutional policies should address how frequently the Program Animal Policy will be reviewed and revised, and how accountability will be maintained.

### **XII. TAG and SSP Recommendations**

Following development of taxon-specific recommendations from each TAG and SSP, the institution policy should include a statement regarding compliance with these recommendations. If the institution chooses not to follow these specific recommendations, a brief statement providing rationale is recommended.

# Policy on the Presentation of Animals Approved by the Board of Directors – July 2008

The Association of Zoos & Aquariums (AZA) is dedicated to excellence in animal care and welfare, conservation, education, research, and the presentation of animals in ways that inspire respect for wildlife and nature. AZA's position is that animals should always be presented in adherence to the following core principles:

- Animal and human health, safety, and welfare are never compromised. 1.
- Education and a meaningful conservation message are integral components of the presentation.
- The individual animals involved are consistently maintained in a manner that meets their social, 3. physical, behavioral, and nutritional needs.

### Apes in Media and Commercial Performances

Apes, including chimpanzees, gorillas, bonobos, orangutans, and gibbons, are intelligent, sensitive, longlived and highly social animals. As humans' closest living relatives, they are fascinating, and ape infants are magnetically appealing. These attributes have made apes popular as performers in commercial entertainment and advertising programs. But this popularity and attractiveness masks the often cruel and dangerous practices commonly required to make apes compliant in such appearances.

This White Paper presents a brief summary of the justification for:

- Eliminating the use of apes as performers in commercial entertainment.
- Establishing standards to ensure that public presentations and interpretive programs portray apes respectfully and accurately represent the biology and conservation status of apes.

#### Rationale

1. An ape infant normally remains with its mother for several years in a group environment, learning social skills essential for development of normal adult behaviors. But apes destined to be performers or photographic props are typically removed from their mother shortly after birth and, thus, are denied opportunities for normal social and psychological development. This has several commercial advantages to an owner. Infants removed in this manner will be appealing and remain submissive for handling by humans for several years. Mothers whose infants are removed will resume sexual cycling and produce another profitable infant quickly.

But apes raised by humans in the absence of other members of their species will not normally acquire the skills to be socially and sexually competent as juveniles and adults. They may never readjust to life in a normal social group, and thus they are usually relegated to social and sexual isolation, which often leads to abnormal behaviors such as self-mutilation. For these reasons, it typically is not feasible to involve these individuals in conservation-based breeding programs.

2. Although endearing as infants, apes generally become physically powerful and unpredictable as they near adulthood. Their continued use as performers or props is potentially very dangerous to their handlers and audiences. Thus, handlers of ape performers often must use food deprivation, physical abuse, continuous tranquilization, or even electric shock to maintain control. Additionally, the animals may be modified to reduce their ability to cause harm, for example by removing their teeth. It should be noted that the apparent "smile" of a performing chimpanzee is actually a well-documented expression of fear. Such physical and psychological effects are difficult to alleviate even if the ape is rescued and placed in a caring environment. More often however, when ape performers become too difficult to handle, they lose their commercial value and are sold to roadside menageries with inexpert

handlers and often inhumane conditions.

- 3. Dressing apes in human clothing, or training them to engage in unnatural (usually human) behaviors, while entertaining to some, inaccurately portrays their biology and conservation status. Since conservation efforts rely on informed public opinion, these practices serve to undermine communications vital to achieving conservation. The use of apes in advertisements and other commercial performances can lead people to conclude falsely that apes make good pets.
- 4. Because apes and humans are genetically so similar, both are susceptible to many of the same communicable diseases. Close and unprotected contact between performing apes, their handlers, and audiences can threaten all with viral, bacterial, and parasite infection.

In summary, the use of apes in media and commercial performances should be eliminated.

#### AGREEMENT BETWEEN FDA AND AZA REGARDING USE OF ANIMAL DRUGS

- 1. The drug administration programs at AZA accredited zoos and aquariums will be overseen by a licensed veterinarian and drugs administered by trained personnel.
- 2. Drugs will not be purchased for or diverted to the food fish aquaculture industry.
- 3. Approved drugs will be used wherever possible and extra label use of approved drugs will follow FDA Compliance Policy Guidelines.
- 4. Clinical records will reflect source and quantity of medication, medication used, dosage or concentration, duration and dates of treatment, and disease and animal treated.
- 5. Visitors to aquariums and aquatic zoo exhibits will not be exposed to drugs used to treat fish.
- 6. Occupational Safety and Health Administration (OSHA) guidelines will be followed to protect staff from exposure to drugs used to treat fish.
- 7. Disposal of drugs used to treat fish diseases will follow applicable federal and state environmental guidelines.
- 8. Fishes treated with non-FDA-approved drugs for food fish will not be released into the wild without appropriate depuration.
- 9. The AZA will monitor its member institutions regarding these matters through its rigorous accreditation process.



### Policy for Full Participation in the Species Survival Plan® Program Adopted by the AZA Board of Directors March 26, 2009

Cooperative animal management and conservation are among the primary goals of the Association of Zoos & Aquariums (AZA). These goals are best exemplified by the Association's shared commitment to its cornerstone animal management and conservation program: the Species Survival Plan® (SSP). The AZA Board of Directors recognizes that: 1. Cooperative animal management is vital to the long-term survival of professionally managed zoological parks and aquariums and their valuable and often irreplaceable live animal collections; and 2. All AZA-accredited institutions and Certified Related Facilities should be fully committed to the animal management, conservation, and public education goals as well as the collaborative spirit of the SSP partnership. Therefore, in 2000, the Board adopted the first policy of Full Participation in the SSP program by all AZA member institutions.

An SSP Master Plan articulates long- and short-term goals for a population. It plans the "family tree" of each managed population to minimize the rate of loss of genetic diversity and maintain the long-term demographic stability of the population. Breeding and other population management recommendations are made for each animal with consideration of logistical feasibility, animal welfare, and other factors that can improve SSP outcomes. In addition to breeding recommendations, Master Plans also include a recommendation not to breed certain animals for sound husbandry reasons and the betterment of the population. The Board recognizes that, in the collaborative process of managing the SSPs, the responsibility of each SSP Management Group is to make sound Master Plan recommendations, and also recognizes that, at times, these may conflict with a member institution's plans.

The Board emphasizes the responsibility of all institutions to cooperate in SSP Master Planning. If differences occur between an SSP's recommendations and a participating institution, the SSP Coordinator and the IR have a joint responsibility to work collaboratively to resolve it. When an SSP recommendation is fundamental to the collaborative management of the *ex situ* population, then the SSP recommendation should take precedence. In this process, all institutions' clearly stated and reasonable needs will be considered. If an SSP recommendation is not fundamental to the collaborative management of the *ex situ* population, then the SSP Management Group may elect to change it before the Master Plan is finalized. Thus, when an SSP Master Plan is approved its animal management recommendations will accurately reflect the vital needs of both the SSP and the participating institutions.

The Policy for Full Participation in the SSP Program ensures that AZA Accredited Institutions and Certified Related Facilities have input into the SSP Master Planning process and that they fully comprehend, agree to, and follow the final SSP recommendations. The Board now further defines Full Participation in the SSP program, and the processes used to achieve Full Participation, as follows:

- The Institutional Liaison (IL) at AZA Accredited Institutions or Certified Related Facilities will ensure that an Institutional Representative (IR) is appointed for each SSP species the institution/facility owns or holds, or for which the institution selects to support as defined by the SSP Management Group.
- Each IR must serve as the primary point of contact for all matters relating to their assigned SSP and will ensure that their institution responds to SSP needs for information during Master Planning.
- Periodically and regularly, the SSP Coordinator will ask each participating institution's IR how their institution will participate in the SSP: breeding, non-breeding (where an institution cannot breed due to space, or other factors), or support.
- Prior to the Master Plan development, at the request of the SSP Coordinator, each IR will provide all relevant data regarding individual SSP animals to the corresponding SSP Coordinator and Studbook Keeper in a timely manner. Further, IRs *must* ensure that all proposed acquisitions or dispositions of the SSP species are included in the SSP Master Plan or, if the Master Plan is already published, are

approved in advance by the SSP Coordinator or, preferably the SSP Management Group. SSP Coordinators and IRs must work collaboratively to develop an SSP Master Plan that strives to meet the needs of the SSP program and the needs of participating institutions.

- A draft of the SSP Master Plan, which must include a written record of all animal management recommendations, will be published on the AZA web site for a 30-day comment period and the SSP Coordinator will notify all IRs as soon as the Plan is available for comment. IRs at all participating institutions must inform the SSP Coordinator during the comment period that they will adhere to the Master Plan recommendations, or why they cannot, which will initiate the resolution discussions described below. If all participants agree with the recommendations, the final Master Plan will be published and implemented.
- Each IR must ensure that their institution's Director and IL are aware of the Master Plan and its recommendations and must initiate a collaborative discussion with the SSP Coordinator to resolve differences regarding Master Plan recommendations during the comment period. All involved should maintain accurate records of all related communications and discussions.
- If a resolution with no change to the SSP recommendations is found, then the final Master Plan will be published and implemented.
- If a resolution that causes changes in the SSP recommendations is reached, the edited Master Plan will be re-posted for a final 30-day comment period. IRs at institutions affected by the edited recommendation(s) must respond to the SSP Coordinator during the final comment period regarding their agreement to adhere to the recommendations; institutions not affected by the changes will not need to respond again. At this stage, the finalized Master Plan will be published and all institutions agreeing to adhere to the Master Plan's recommendations will commence implementing the Plan.
- If no resolution is found through direct discussion between the SSP Coordinator and the IR(s), they must work cooperatively with the IL, institutional Director, and corresponding TAG Chair to find one. If necessary, the discussion can extend for an additional 30 days, during which time the institution disputing a recommendation must not engage in any breeding or acquisitions and / or dispositions of species that run counter to the SSP recommendations.

If differences are not resolved by the steps outlined above, then the SSP Coordinator and / or any other involved parties must request that AZA's Wildlife Conservation Management Committee (WCMC) mediate the situation as defined in the AZA Animal Management Reconciliation Policy and, again, the institution disputing the recommendation must not engage in any breeding, acquisitions and / or dispositions that run counter to the SSP recommendations until the mediation and, if necessary, the reconciliation process is complete. Emergencies or other extraordinary circumstances will be considered for the health and welfare of the animals. Institutions not affected by the disagreement will continue carrying out their recommendations. (See: <a href="http://www.aza.org/board-policies/">http://www.aza.org/board-policies/</a>).

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### Species Survival Plan® – Animal Management Reconciliation Policy Adopted by the AZA Board of Directors March 26, 2009

The success of cooperative breeding programs depends on all institutions supporting Species Survival Plan<sup>®</sup> (SSP) recommendations. Therefore, the Board emphasizes the crucial nature of the cooperative process in the development of SSP Master Plans to ensure that animal management recommendations accurately reflect the vital needs of both the SSPs and participating Accredited Institutions and Certified Related Facilities.

If differences regarding SSP recommendations occur between the SSP Management Group and a member Institution, AZA's Full Participation Policy clearly articulates the process that both parties must utilize to resolve them prior to engaging in the Animal Management Reconciliation process. However, if such differences cannot be resolved, then the parties involved must request that AZA's Wildlife Conservation Management Committee (WCMC) mediate the situation.

- WCMC will (1) determine if all efforts to resolve differences have been exhausted and, (2) determine if the recommendations in question are fundamental to the cooperative management of the *ex situ* population. If both situations are true, then WCMC will notify all parties and appoint a Mediation Task Force which includes the WCMC Chair / designee, one member of WCMC selected by each party to represent them, the SSP Coordinator, the institution's Director and two other institutional representatives, and AZA's VP of Animal Conservation.
- The Mediation Task Force will conduct a confidential review of the situation in less than 30 days. Within 2 weeks of the completed review, the WCMC Chair / designee will draft a mediation report describing a consensus decision, which will be reviewed by the participating parties. Comments on the draft report must be returned within a week of distribution. The WCMC Chair / designee will consider all comments and produce a final mediation report. Assuming a resolution is reached, the report will be submitted to all participants involved in the process and the matter will be closed.
- If the mediation process yields no resolution, WCMC must notify all parties and initiate the reconciliation process, during which the institution in question must not engage in any breeding, acquisitions and / or dispositions that run counter to the SSP until a resolution is found. The Reconciliation Committee, over which the WCMC Chair / designee presides, will include the institution's Director or designee, the WCMC Board Liaison, and AZA's Sr. VP of Conservation, VP of Animal Conservation, and Executive Director. The Reconciliation Committee will consider the Mediation Task Force report and determine if additional information is required.
- In its call for greater accountability, the AZA Board holds that action by the Accreditation Commission and / or the Ethics Board can be taken against a member institution that: (1) demonstrates a pattern of a failure to participate and / or (2) demonstrates an action contrary to an SSP program recommendation which threatens the short- or long-term management of the *ex situ* population. Therefore, the Reconciliation Committee will specifically consider if either of these instances is found to be valid.
- If it is determined that the member institution's action is not detrimental to the cooperative management of the *ex situ* population, then the Master Plan will be changed accordingly and the results of these findings will be incorporated into a reconciliation final report submitted to the AZA Conservation Office.
- If it is determined that the member institution's action is detrimental to the cooperative management of the *ex situ* population, and / or is part of a pattern of a failure to participate, then the Master Plan will stand as is and the Reconciliation Committee will notify the institution that they must comply with

it. If the institution refuses this directive, the Reconciliation Committee will note this in the reconciliation final report filed with AZA's Conservation Office and provide the report to the Accreditation Commission and the Ethics Board for consideration.



### AZA ACQUISITION / DISPOSITION POLICY

Adopted by the AZA Board of Directors July 29, 2006

### I. INTRODUCTION

The Association of Zoos and Aquariums (AZA) was established, among other reasons, to foster continued improvement in the zoological park and aquarium profession. One of its most important roles is to provide a forum for debate and consensus building among its members, the intent of which is to attain high ethical standards, especially those related to animal care and professional conduct. The stringent requirements for AZA accreditation and high standards of professional conduct are unmatched by similar organizations and also far surpass the United States Department of Agriculture's Animal and Plant Health Inspection Service's requirements for licensed animal exhibitors. AZA member facilities must abide by a Code of Professional Ethics - a set of standards that guide all aspects of animal management and welfare. As a matter of priority, AZA institutions should acquire animals from other AZA institutions and dispose of animals to other AZA institutions.

AZA accredited zoological parks and aquariums cannot fulfill their important missions of conservation, education and science without living animals. Responsible management of living animal populations necessitates that some individuals be acquired and that others be removed from the collection at certain times. Acquisition of animals can occur through propagation, trade, donation, loan, purchase, capture, or rescue. Animals used as animal feed are not accessioned into the collection. Disposition occurs when an animal leaves the collection for any reason. Reasons for disposition vary widely, but include cooperative population management (genetic or demographic management), reintroduction, behavioral incompatibility, sexual maturation, animal health concerns, loan or transfer, or death. The AZA Acquisition/Disposition Policy (A/D) was created to help (1) guide and support member institutions in their animal acquisition and disposition decisions, and (2) ensure that all additions and removals are compatible with the Association's stated commitment to "save and protect the wonders of the living natural world." More specifically, the AZA A/D Policy is intended to:

- 1. ensure that the welfare of individual animals and conservation of populations, species and ecosystems are carefully considered during acquisition and disposition activities;
- 2. maintain a proper standard of conduct for AZA members during acquisition and disposition activities; and
- 3. ensure that animals from AZA member institutions are not transferred to individuals or organizations that lack the appropriate expertise or facilities to care for them.
- 4. support the goal of AZA's cooperatively managed populations and associated programs [Species Survival Plans (SSPs), Population Management Plans (PMPs), and Taxon Advisory Groups (TAGs)].

The AZA Acquisition/Disposition Policy will serve as the default policy for AZA member institutions. Institutions may develop their own A/D Policy in order to address specific local concerns. Any institutional policy must incorporate and not conflict with the AZA acquisition and disposition standards.

Violations of the AZA Acquisition/Disposition Policy will be dealt with in accordance with the AZA Code of Professional Ethics. Violations can result in an institution's or individual's expulsion from membership in the AZA.

### **II. GROUP OR COLONY BASED IDENTIFICATION**

For some colonial, group-living, or prolific species, such as certain insects, aquatic invertebrates, schooling fish, rodents, and bats, it is often impossible or highly impractical to identify individual specimens. These species are therefore maintained, acquisitioned, and disposed of as a group or colony.

Therefore, when this A/D Policy refers to animals or specimens, it is in reference to both individuals and groups/colonies.

### III. GERMPLASM

Acquisition and disposition of germplasm should follow the same guidelines outlined in this document if its intended use is to create live animal(s). Ownership of germplasm and any resulting animals should be clearly defined. Institutions acquiring or dispositioning germplasm or any animal parts or samples should consider not only its current use, but also future possible uses as new technologies become available.

### **IV. ACQUISITION REQUIREMENTS**

#### A. General Acquisitions

Animals are to be acquisitioned into an AZA member institution's collection if the following conditions are met:

- 1. Acquisitions must meet the requirements of all applicable local, state, federal and international regulations and laws.
- 2. The Director or Chief Executive Officer of the institution is charged with the final authority and responsibility for the monitoring and implementation of all acquisitions.
- 3. Acquisitions must be consistent with the mission of the institution, as reflected in its Institutional Collection Plan, by addressing its exhibition/education, conservation, and/or scientific goals.
- 4. Animals that are acquired for the collection, permanently or temporarily, must be listed on institutional records. All records should follow the *Standards for Data Entry and Maintenance of North American Zoo and Aquarium Animal Records Databases*<sup>©</sup>. (http://www.aza.org/uploadedFiles/Animal\_Care\_and\_Management/Animal\_Management/Popula tion\_Management\_Centers/standards-data-entry-na-databases.pdf)
- 5. Animals may be acquired temporarily for reasons such as, holding for governmental agencies, rescue and/or rehabilitation, or special exhibits. Animals should only be accepted if they will not jeopardize the health, care or maintenance of the animals in the permanent collection or the animal being acquired.
- 6. The institution must have the necessary resources to support and provide for the professional care and management of a species, so that the physical and social needs of both specimen and species are met.
- 7. Attempts by members to circumvent AZA conservation programs in the acquisition of SSP animals are detrimental to the Association and its conservation programs. Such action may be detrimental to the species involved and is a violation of the Association's Code of Professional Ethics. All AZA members must work through the SSP program in efforts to acquire SSP species and adhere to the AZA Full Participation policy.
- 8. Animals are only to be acquired from sources that are known to operate legally and conduct their business in a manner that reflects and/or supports the spirit and intent of the AZA Code of

Professional Ethics as well as this policy. Any convictions of state, federal, or international wildlife laws should be reviewed, as well as any previous dealings with other AZA accredited institutions.

- 9. When acquiring specimens managed by a PMP, institutions should consult with the PMP manager.
- 10. Institutions should consult AZA Wildlife Conservation and Management Committee (WCMC)approved Regional Collection Plans (RCPs) when making acquisition decisions.

### **B. Acquisitions From the Wild**

The maintenance of wild animal populations for education and wildlife conservation purposes is a unique responsibility of AZA member zoos and aquariums. To accomplish these goals, it may be necessary to acquire wild-caught specimens. Before acquiring animals from the wild, institutions are encouraged to examine sources including other AZA institutions or regional zoological associations. When acquiring animals from the wild, careful consideration must be taken to evaluate the long-term impacts on the wild population. Any capture of free-ranging animals should be done in accordance with all local, state, federal, and international wildlife laws and regulations and not be detrimental to the long-term viability of the species or the wild or captive population(s). In crisis situations, when the survival of a population is at risk, rescue decisions are to be made on a case-by-case basis.

### **V. DISPOSITION REQUIREMENTS**

### A. Living Animals

Successful conservation and animal management efforts rely on the cooperation of many entities, both within and outside of AZA. While preference is given to placing animals within AZA member institutions, it is important to foster a cooperative culture among those who share the primary mission of AZA accredited facilities. The AZA draws a strong distinction between the mission, stated or otherwise, of non-AZA member organizations and the mission of professionally managed zoological parks and aquariums accredited by the AZA. An accredited AZA member balances public display, recreation, and entertainment with demonstrated efforts in education, conservation, and science. While some non-AZA member organizations may meet minimum daily standards of animal care for wildlife, the AZA recognizes that this, by itself, is insufficient to warrant either AZA membership or participation in AZA's cooperative animal management programs. When an animal is sent to a non-member of AZA, it is imperative that the member be confident that the animal will be cared for properly.

Animals may only be disposed of from an AZA member institution's collection if the following conditions are met:

- 1. Dispositions must meet the requirements of all applicable local, state, federal and international regulations and laws.
- 2. The Director or Chief Executive Officer of the institution is charged with the final authority and responsibility for the monitoring and implementation of all dispositions.
- 3. Any disposition must abide by the Mandatory Standards and General Advisories of the AZA Code of Professional Ethics (see Appendix I). Specifically, "a member shall make every effort to assure that all animals in his/her collection and under his/her care are disposed of in a manner which meets the current disposition standards of the Association and do not find their way into the hands of those not qualified to care for them properly."
- 4. Non-domesticated animals shall not be disposed of at animal auctions. Additionally, animals shall not be disposed of to any organization or individual that may use or sell the animal at an animal auction. In transactions with AZA non-members, the recipient must ensure in writing that neither the animal nor its offspring will be disposed of at a wild animal auction or to an individual or organization that allows the hunting of the animal.

- ASSOCIATION OF ZOOS &
- Animals shall not be disposed of to organizations or individuals that allow the hunting of these 5. animals or their offspring. This does not apply to individuals or organizations which allow the hunting of only free-ranging game species (indigenous to North America) and established long-introduced species such as, but not limited to, white-tailed deer, quail, rabbit, waterfowl, boar, ring-necked pheasant, chukar, partridge, and trout. AZA distinguishes hunting/fishing for sport from culling for sustainable population management and wildlife conservation purposes.
- 6. Attempts by members to circumvent AZA conservation programs in the disposition of SSP animals are detrimental to the Association and its conservation programs. Such action may be detrimental to the species involved and is a violation of the Association's Code of Professional Ethics. All AZA members must work through the SSP program in efforts to deacquisition SSP species and adhere to the AZA Full Participation policy.
- 7. Domesticated animals are to be disposed of in a manner consistent with acceptable farm practices and subject to all relevant laws and regulations.
- 8. Live specimens may be released within native ranges, subject to all relevant laws and regulations. Releases may be a part of a recovery program and any release must be compatible with the AZA Guidelines for Reintroduction of Animals Born or Held in Captivity, dated June 3, 1992 (http://www.aza.org/AboutAZA/reintroduction/).
- Detailed disposition records of all living or dead specimens must be maintained. Where applicable, 9. proper animal identification techniques should be utilized.
- 10. It is the obligation of every loaning institution to monitor, at least annually, the conditions of any loaned specimens and the ability of the recipient to provide proper care. If the conditions and care of animals are in violation of the loan agreement, it is the obligation of the loaning institution to recall the animal. Furthermore, an institution's loaning policy must not be in conflict with this A/D Policy.
- 11. If live specimens are euthanized, it must be done in accordance with the established policy of the institution and the Report of the American Veterinary Medical Association Panel on Euthanasia (Journal of the American Veterinary Medical Association 218 (5): 669-696, 2001). [Renamed "The AVMA Guidelines on Euthanasia", current edition June 2007].
- 12. In dispositions to non-AZA members, the non-AZA member's mission (stated or implied) must not be in conflict with the mission of AZA, or with this A/D Policy.
- 13. In dispositions to non-AZA member facilities that are open to the public, the non-AZA member must balance public display, recreation, and entertainment with demonstrated efforts in conservation, education, and science.
- 14. In dispositions to non-AZA members, the AZA members must be convinced that the recipient has the expertise, records management practices, financial stability, facilities, and resources required to properly care for and maintain the animals and their offspring. It is recommended that this documentation be kept in the permanent record of the animals at the AZA member institution.
- 15. If living animals are sent to a non-AZA member research institution, the institution must be registered under the Animal Welfare Act by the U.S. Department of Agriculture Animal and Plant Health Inspection Service. For international transactions, the receiving facility should be registered by that country's equivalent body with enforcement over animal welfare.
- 16. No animal disposition should occur if it would create a health or safety risk (to the animal or humans) or have a negative impact on the conservation of the species.
- 17. Inherently dangerous wild animals or invasive species should not be dispositioned to the pet trade or those unqualified to care for them.

- ASSOCIATION OFZOOS AQUARIUMS
- 18. Under no circumstances should any primates be dispositioned to a private individual or to the pet trade.
- 19. Fish and aquatic invertebrate species that meet ANY of the following are inappropriate to be disposed of to private individuals or the pet trade:
  - species that grow too large to be housed in a 72-inch long, 180 gallon aquarium (the largest tank commonly sold in retail stores)
  - species that require extraordinary life support equipment to maintain an appropriate captive environment (e.g., cold water fish and invertebrates)
  - species deemed invasive (e.g., snakeheads)
  - species capable of inflicting a serious bite or venomous sting (e.g., piranha, lion fish, blue-ringed octopus)
  - species of wildlife conservation concern
- 20. When dispositioning specimens managed by a PMP, institutions should consult with the PMP manager.
- 21. Institutions should consult WCMC-approved RCPs when making disposition decisions.

# **B. Dead Specimens**

Dead specimens (including animal parts and samples) are only to be disposed of from an AZA member institution's collection if the following conditions are met:

- 1. Dispositions of dead specimens must meet the requirements of all applicable local, state, federal and international regulations and laws.
- 2. Maximum utilization is to be made of the remains, which could include use in educational programs or exhibits.
- 3. Consideration is given to scientific projects that provide data for species management and/or conservation.
- 4. Records (including ownership information) are to be kept on all dispositions, including animal body parts, when possible.
- 5. SSP and TAG necropsy protocols are to be accommodated insofar as possible.

### VI. TRANSACTION FORMS

AZA member institutions will develop transaction forms to record animal acquisitions and dispositions. These forms will require the potential recipient or provider to adhere to the AZA Code of Professional Ethics, the AZA Acquisition/Disposition Policy, and all relevant AZA and member policies, procedures and guidelines. In addition, transaction forms must insist on compliance with the applicable laws and regulations of local, state, federal and international authorities.

# **CODE OF PROFESSIONAL ETHICS**

### **PREAMBLE**

The continued existence of zoological parks and aquariums depends upon recognition that our profession is based on the respect for the dignity of the animals in our care, the people we serve, and most importantly, for each other. Members of the American Association of Zoological Parks and Aquariums (known as American Zoo and Aquarium Association or "AZA") have an important role in the preservation of our heritage. To fulfill this role, we must understand the relationships we share with the public, the animals under our care, and with each other. A consequent obligation of membership is to maintain high standards of ethical conduct. Members must have the courage and foresight to live up to their responsibilities within principles of professionalism.

A code of ethics provides standards by which we can judge our professional conduct. We must find in our consciences the point against which to test our actions. It is our desire to maintain the respect and confidence of fellow members and the public that ought to provide us with incentive for the highest degree of ethical conduct. The possible loss of that respect and confidence numbers among the severest sanctions possible.

So long as our profession is guided by these principles, ours will continue to be a respected profession.

### **CODE OF PROFESSIONAL ETHICS**

The following Code of Professional Ethics of the American Zoo and Aquarium Association (AZA) shall form the basis for all disciplinary actions of the Association.

Deviation by a member from the AZA Code of Professional Ethics or from any of the rules officially adopted by the Board of Directors supplemental thereto, or any action by a member that is detrimental to the best interest of the zoo and aquarium profession and the AZA, shall be considered unethical conduct. The member shall be subject to investigation by the AZA Ethics Board and, if warranted, to disciplinary action by the Ethics Board and/or the AZA Board of Directors. The Code is intended as an inspirational guide for members and as a basis for disciplinary action.

This Code cannot apply to nonmembers, except as they have agreed to follow the Code in a signed agreement to participate in an AZA program. This Code defines the type of ethical conduct the public has a right to expect, not only of staff members of an institution but also of their nonprofessional employees and associates in all matters pertaining to professional zoological park and aquarium employment. The director and/or governing authority of a member institution should ultimately be responsible for the conduct of their employees and others affiliated with the member institution.

The Obligations of Professional Ethics set forth are aspirational in character and represent the objectives towards which every member should strive.

The Code's Mandatory Standards, unlike the Obligations of Professional Ethics, are mandatory in character and, if violated, may result in disciplinary action. The Mandatory Standards, to be uniformly applied to all members, establish a level of conduct below which no member may fall without being subject to disciplinary action. The Code makes no attempt to prescribe either disciplinary procedures or penalties for violation of Mandatory Standards. The severity of judgment against a member found to be in violation of a Mandatory Standard shall be determined by the character of the offense and the attendant circumstances. The Ethics Board, in applying the Mandatory Standards, may find interpretive guidance in the basic principles embodied in the standards and objectives reflected in the Obligations of Professional Ethics.

The Board of Directors and Ethics Board shall be responsible for interpreting the Code of Professional Ethics, subject to all provisions of the Charter and Bylaws. The Ethics Board shall investigate allegations, render decisions, and prescribe subsequent actions and/or penalties. An appeal may be made to the AZA Executive Committee within thirty (30) days of the date of mailing the Ethics Board decision to the complainant and defendant. Appeals may be granted if the Executive Committee concludes that the complainant or defendant appealing the Ethics Board decision has demonstrated that (1) there are new facts, not known at the time of the Ethics Board investigation, which the Executive Committee believes may have changed the outcome; or (2) the Ethics Board did not follow relevant AZA procedures; or (3) the penalty recommended by the Ethics Board was excessive under the circumstances. An appeal shall be granted upon a majority vote of the AZA Executive Committee. If the request for an appeal is granted, the Board of Directors shall hear the appeal at its next regularly scheduled meeting. The appellate decision of the Board of Directors shall be final and cannot be appealed.

# I. OBLIGATIONS OF PROFESSIONAL ETHICS

In order to promote high standards of conduct in our profession, the AZA has formulated the following basic principles for the guidance of its members:

#### AS A MEMBER OF THE AZA, I PLEDGE TO:

- A. Realize that I have moral responsibilities not only to my professional associates, my fellow employees, and the public, but also to the animals under my care.
- B. Display the highest integrity, the best judgment or ethics possible, and use my professional skills to the best interests of all.
- C. Deal fairly with members in the dissemination of professional information and advice.
- D. Use only legal and ethical means when seeking to influence governmental legislation or regulations.
- E. Promote the interests of wildlife conservation, biodiversity, and animal welfare to the public and to colleagues.
- F. Maintain high standards of personal, professional, and business conduct and behavior.
- G. Promote the interests of AZA and do my full share of work in support of the concepts and ideals of AZA.
- H. Cooperate with qualified zoos/aquariums and other qualified persons/organizations in breeding programs of endangered and other species.
- I. Aid the professional development of those who enter the zoological park and aquarium profession by assisting them to understand the functions, duties, and responsibilities of the profession.
- J. Seek opportunities to be of constructive service in civic affairs and, to the best of my ability, advance the understanding of all nature to the community in which I live.
- K. Encourage publication of significant achievements in breeding husbandry, medical technology, architecture, etc., in the appropriate publications generally familiar to members.
- L. Endeavor at all times to improve zoos and aquariums.

### II. MANDATORY STANDARDS

- 1. MAINTAINING INTEGRITY AND COMPETENCE OF THE ZOOLOGICAL PARK AND AQUARIUM PROFESSION
  - a. A member shall make no materially false statement or deliberately fail to disclose a material fact in connection with an application for membership or accreditation in AZA.
  - b. A member shall not endorse the application for membership in AZA of a person known by that member to be unqualified in respect to character, education, length of service, or some other relevant factor.
- 2. MISCONDUCT
  - a. A member shall not violate a Mandatory Standard.

- b. A member shall not solicit the aid of another individual to circumvent, or assist another to violate, a Mandatory Standard.
- c. A member shall not knowingly engage in activities contrary to local, state, federal, or international laws as such laws relate to our profession; and a member will, to the best of his or her ability, cooperate with governmental agencies regulating animal welfare and animal transactions.
- d. A member shall not engage in conduct that adversely affects, or is prejudicial to, the concepts and ideals of the AZA.
- e. A member shall make every effort to assure that all animals in his/her collection and under his/her care are disposed of in a manner which meets the current disposition standards of the Association and do not find their way into the hands of those not qualified to care for them properly.
- 3. DISCLOSURE OF INFORMATION
  - a. A member shall not knowingly misinform others regarding animal records or specimen disposition, professional information, and advice.
  - b. A member shall not alter animal records or alter the facts concerning age, condition, or other material information about any animal in order to affect the sale, trade, loan, or other transaction with respect to such animal.
  - c. A member shall immediately bring to the attention of the Ethics Board of the AZA any information concerning a clear violation of a Mandatory Standard.
  - d. A member shall issue no statement to the public which he/she knows (or should know) to be false or misleading.

#### **GENERAL ADVISORIES**

The policies outlined below have been previously adopted by the AZA Board of Directors and are considered to expand the interpretation of the AZA Code of Professional Ethics that was developed to guide ethical conduct of all members. Amendments can be proposed by the AZA Board of Directors, the Ethics Board, and/or AZA members. Any proposed changes shall be reviewed by the Ethics Board and, as appropriate, by legal counsel. Proposed changes shall be submitted to the AZA Board of Directors for action.

#### **Animal Auctions (1981)**

AZA members offering wildlife for sale at auctions attended by the general public are in violation of the AZA Code of Professional Ethics, specifically Mandatory Standards, 2-e, which states, "As a member of AZA, I pledge to...make every effort to assure that all animals...do not find their way into the hands of those not qualified to care for them properly."

### Use of Animal Exchange (1984)

Individuals may utilize Animal Exchange to purchase specimens if the following criteria are followed: the individual should, during the initial contact, identify his or her intentions and make the seller aware if the specimen(s) will go to the purchaser's private collection and not the zoo in question (adopted by the Ethics Board at the direction of the AZA Board).

### Notification of Ethics Code Violations (1986-revised 1993)

Copies of all final actions (the denial of an appeal to the Executive Committee or notification to the complainant and defendant of the appellate decision) regarding violations of the Code of Professional Ethics shall be sent to the Director, Chief Executive Officer, or Governing Authority of the institution of the defendant(s) involved. Such final actions shall be published in Communiqué, including a brief and factual statement of the action, including the name(s) of the defendant(s) involved in the violation and a listing of the sections of the Code which were violated to provide guidance for AZA members. **Procurement of SSP Animals (1986-modified 1990-revised 1993)** 

Attempts by members to circumvent AZA conservation programs in the procurement and/or disposition of specimens of SSP animals are detrimental to the Association and its conservation programs. Such action may be detrimental to the species involved and could be construed as a violation of the Association's Code of Professional Ethics. All Association members should work through SSP species coordinators and appropriate propagation groups in efforts to procure or dispose of specimens of SSP species.

### **ETHICS BOARD**

The Ethics Board, elected by the membership, has separate duties from the AZA Board of Directors. The Ethics Board shall consist of nine (9) members. The Ethics Board proposed guidelines on the function of the Ethics Board for consideration during the San Diego Annual Conference in 1977. The AZA Board of Directors unanimously adopted these guidelines and revised them in 1993:

All Ethics Board matters shall be handled in accordance with the objectives and standards of the Association's Code of Professional Ethics.

Matters called to the attention of the Ethics Board must be in writing and addressed to the Chairman or any member of the Ethics Board. The ethics charge must be signed by the complainant and must contain a full statement of the matter to be reviewed by the Ethics Board.

An individual filing an ethics complaint shall be advised that full disclosure of the complaint shall be made available to all parties concerned. At this time, the complainant has the right to withdraw the complaint; and thus, the matter will be closed.

The Ethics Board, the complainant, and the defendant shall at all times during the investigation maintain strict confidentiality regarding the case.

The initial responsibility of the Ethics Board is to determine the validity of the charge(s). If the charge(s) appears to be valid, the Ethics Board shall initiate a full investigation. Once a full investigation is initiated, the Ethics Board must determine if an Ethics Code violation has occurred and what action and/or penalty is necessary. In making its determination, the Ethics Board shall consult, where necessary or appropriate, with AZA legal counsel. The Ethics Board has the responsibility and authority to issue a judgment and determine disciplinary actions. The AZA Board of Directors serves as an appellate board.

The AZA Board of Directors may also direct the Ethics Board to perform additional duties as needed.

The following procedures are hereby established:

The Chairman of the Ethics Board will distribute copies of all duly received ethics complaints to members of the Ethics, Board, the AZA President, Executive Director, Deputy Director, and the AZA Board Liaison to the Ethics Board. All correspondence pertaining to the case shall be marked "Confidential." The Chairman shall request each Ethics Board member to render an opinion as to the validity of the complaint and make a recommendation on how to proceed and action to be taken.

The Chairman shall review all recommendations, suggest an Ethics Board action and, if necessary, arrange an appearance before the Ethics Board and/or a site visitation.

The Ethics Board may dismiss any charge for which there is insufficient evidence to pursue the investigation or for which there is no apparent violation of the Ethics Code. The complainant, defendant, and the Board of Directors shall be notified by the Ethics Board of the decision, for which there is no appeal.

The Ethics Board may determine that there is no clear violation or proof of a violation but that there is concern about the conduct of a member. The Ethics Board may issue a letter of concern. If the Ethics Board determines that a violation of the Code has occurred, the following options shall be considered: (A) Letter of Reprimand from the Ethics Board. (B) Letter of Reprimand from the Ethics

Board and the AZA Board of Directors. (C) Censorship and suspension of certain membership privileges (up to 2 years), to be determined on a case-by-case basis. (D) Expulsion from AZA membership for a minimum of two years. The Ethics Board may function as an investigative body as it determines whether or not a violation has occurred. The Ethics Board shall make its determination based upon the greater weight of the evidence presented to it. Ethics matters often do not involve legal matters but are founded on moral values and industry standards and practices. Where necessary or appropriate, the Ethics Board shall consult with AZA legal counsel.

The Ethics Board shall deliberate, during a meeting or conference call, on the final determination and action to be taken. Actions by the Ethics Board shall require a two-thirds (2/3) vote of its members. When a two-thirds (2/3) majority vote of guilty is not received the issue shall be dropped.

The Chairman of the Ethics Board shall submit a report to the President, Executive Director, Deputy Director, AZA Board Liaison Representative, and legal counsel, if necessary, with the Ethics Board's findings and course of disciplinary action to be taken prior to advising the complainant and defendant.

The Chairman of the Ethics Board shall advise the complainant and the defendant of the findings and action taken by the Ethics Board.

An appeal may be made to the AZA Executive Committee within thirty (30) days of the date of mailing the Ethics Board decision to the complainant and defendant. Appeals may be granted if the Executive Committee concludes that the complainant or defendant appealing the Ethics Board decision has demonstrated that (1) there are new facts, not known at the time of the Ethics Board investigation, which the Executive Committee believes may have changed the outcome; or (2) the Ethics Board did not follow relevant AZA procedures; or (3) the penalty recommended by the Ethics Board was excessive under the circumstances. Appeals shall be granted upon a majority vote of the AZA Executive Committee. The AZA Board of Directors shall hear the appeal at its next regularly scheduled meeting. The appellate decision of the Board of Directors shall be final and cannot be appealed.

At least one member of the Ethics Board shall be present during the appeal.

The Ethics Board shall notify the complainant and the defendant of the final action of the AZA Board of Directors once the appellate decision has been rendered.