

January 11, 2017

Honorable David E. Ryu Los Angeles City Council Room 1010, City Hall 200 North Spring Street Los Angeles, CA 90012

Dear Councilmember Ryu:

With more than sixty accredited members, the Zoological Association of America (ZAA) is the second largest trade association in the zoological sector; counting among its members some of the finest facilities in the United States.

As part of its core mission, ZAA accredits professional zoological facilities. ZAA accreditation is predicated on promoting the highest standards of animal welfare, as well as public and animal safety. Our accreditation standards meet or exceed all accepted industry standards and federal requirements. Our safety record is the best of any of the major zoological trade associations. (As a trusted source of industry information, a ZAA spokesperson was quoted extensively following the tragic incident at the Cincinnati Zoo this last summer.)

We believe that any proposed ordinance banning public showings of animals for the benefit of audiences strikes at the heart of the most effective educational programs about the natural world that have yet been devised, and is poor public policy. It is clearly the agenda of animal rights activists and not that of parents who long for wholesome programs for their children. The people dedicating their livelihoods to display and education of animals are concerned that many endangered species are nearing extinction from poaching and destruction of habitats; and their only salvation is to inspire the citizenry to protect them.

"Jungle Jack" Hanna, clearly one of ZAA's best-known professional members, has been on television in major cities hundreds of times on the Today show, the Tonight show and many others, demonstrating the wide variety of animal life, and mostly with exotic animals. There has been no public outcry over this, and he would not be asked back time and time again if viewers were opposed to these educational offerings.

Animals held by our facilities in their collections are not performing tricks for their audiences, but exhibiting natural behaviors. A generation of school kids will never learn as much about animals on the internet, nor be as interested in conservation, if they are not allowed to see the animals up close.

asmith@zaa.org or, <u>info@zaa.org</u> We do not support in any way people who are not zoological professionals either owning or taking dangerous animals anywhere to perform.

No normal person wants to allow animals to be hurt, but this prohibition works against critical public awareness of the wonders of the animal kingdom. Being around horses is widely understood to be therapy for many persons with mental disability of certain kinds. Although understanding the natural world and the importance of conservation are primary reasons for displaying exotic animals, the therapeutic value is not to be dismissed.

Animal cruelty is already against federal, state and often local law and is enforced every day. We do not tolerate it in our accredited facilities. We think that sound public policymaking dictates a diversity of opportunities with animals and should not affirm the prejudices of activists without evidence that there is a problem. These programs have been going on for decades with no ill effects, and the people who would be impacted most by a ban love animals just as much as the people who go to work every day to try to separate animals from humans.

If a ban is going to happen, we ask you to do at least what is being regularly done in state law and municipal ordinance nowadays - to include ZAA accredited facilities displaying their exotic collections in outreach programs among the specific exemptions that will be drafted for Councilmember Ryu's ordinance. Our accredited facilities have been recognized in enacted or proposed statute or regulation just this last legislative session in Texas, Wisconsin, Kansas, Beaufort County, South Carolina, North Carolina, Maine, Arizona, Pittsburgh, Jersey City, Arkansas, West Virginia and Illinois.

I look forward to discussing this with you or your staff at any time, as the deliberation of the proposed ordinance moves forward. A copy of our animal care policies and guidelines is attached for the file, as are links to our website for ZAA's mission and conservation.

Respectfully,

Peter J. Brewer Arm

Peter J. Brewer, DVM Chairman, board of Directors Zoological Association of America

asmith@zaa.org or, <u>info@zaa.org</u>

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Mission

ZAA promotes responsible ownership, management, conservation, and propagation of animals in both privately funded and publicly funded facilities through professional standards in husbandry, animal care, safety and ethics.

Purpose:

- As a trade organization to serve the needs of our members.
- Protect and defend the right to own exotic and domestic animals, in both privately funded and publicly funded facilities, under proper professional care, husbandry and safety standards which are rigorously observed and maintained.
- Defend our accredited facilities against false allegations, those with political agendas, and mischaracterizations.
- Promote legal and ethical methods for sustaining captive wildlife.
- Encourage responsible conservation of genetics through cooperative breeding programs including both privately funded and publicly funded facilities.
- Promote high standards and ethics through accreditation programs.
- Educate the media, policy-makers and the public through advocacy and adherence to best practices.

Objectives:

- Establish professional standards for husbandry, animal care, and safety.
- Ensure accurate animal and medical records by our members.
- Enhance the survival of species by the use of professional methods.
- Ensure an appropriate, safe, and quality existence for animals in captive environments.

ZAA Members are ethically bound to support and implement the Mission, Purpose, and Objectives of ZAA and to:

- Promote wildlife conservation to our visitors and society at large.
- Cooperate with colleagues and the broader conservation community to assist in animal propagation, husbandry, care and conservation in both the managed and wild populations.
- Possess and abide by all required federal, state, city, county, local, international and any other related permits.
- Act in accordance with all federal, state, city, county, local and international laws and regulations.
- Conduct all affairs ethically and legally with a high degree of professionalism, honesty, integrity and fairness to all concerned.

Zoological Association of America PO Box 511275, Punta Gorda, FL 33951 (941) 621-2021 info@zaa.org (mailto:info@zaa.org)

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ZAA is Conservation

ZAA accredited facilities make significant contributions to global conservation

Beyond NGO support, ZAA members are also heavily involved in reintroduction programs, and rescue and rehabilitation work. Some of the species our members work with include Eastern or mountain bongo, Attwater's prairie chicken, Texas horned lizard, Anegada ground iguana, Kemps Ridley sea turtle, and San Joaquin kit fox.

Sadly, modern-day conservation of threatened or endangered species cannot simply be limited to protecting or reintroducing animals in their native ranges. For many, the "wild" is disappearing as humans encroach on their natural habitats. To ensure a species' long-term survival, captive propagation of wildlife has become an essential part of the conversation and the only insulation against a potential collapse of wild populations. Our managed breeding program at ZAA is named the Animal Management Program (AMP). Through the ZAA AMP, our members are also involved with cheetah, Southern white rhinoceros, mandrill, Schmidt's guenon, lowland tapir, African black-footed penguin, and siamang. Our AMP species management program is coordinated across the family of ZAA accredited members to ensure the greatest genetic variability.



Eastern bongo

Tragelaphus eurycerus

Captive born eastern bongo were released back into the wild with the assistance of ZAA accredited facilities.

ZAA accredited facilities contribute to many in situ conservation organzations

African Predator Conservation program Asian Elephant Support Group Barn Swallow Recovery Boelen's python research Cheetah Conservation Botswana **Cheetah Conservation Fund Cheetah Outreach Trust DeWildt Wildlife Trust** EARTH Ltd. Eastern Bluebird Recovery Program Elephant Endotheliotropic Herpesvirus program Gibbon Conservation Centter **Giraffe Conservation Foundation** Gray Rat Snake Recovery International Crane Foundation International Elephant Foundation International Rhino Foundation International Veterinary Care Island Fox program Jane Goodall Institute Lewa Foundation Masked Bobwhite Quail Recovery Team Mountain Lion Foundation Painted Dog Conservation Pan Africa Sanctuary Alliance Proyecto Titi San Joaquin Kit Fox recovery and treatment center Sahara Conservation Fund Small Cat Alliance Tipton Kangaroo Rat behavioral breeding program Tree Swallow Recovery Waterfowl Propagation Program Nene Geese WCS Mozambique cheetah project Wildlife Alliance Wood duck propagation program

Visit the Hall Family ZAA Conservation Fund (http://www.zaa.org/conservation) to donate to in situ conservation projects

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ZOOLOGICAL ASSOCIATION OF AMERICA

Animal Care & Enclosure Standards and Related Policies

2016 Version

www.zaa.org

Most updated version surpasses all previous versions

Significant Additions and Changes

2015

ZAA Administrative Policies NEW (XV)

2016

ZAA Administrative Policies (XV)

The following guidelines for animal care and housing are minimum standards and ZAA accredited facilities should strive to exceed these standards. Specific alternatives to the standards may be allowed by ZAA on a case by case basis.

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I. Categories of Captive Wildlife.

ZAA hereby establishes the following categories of wildlife for use in the following guidelines:

Class I:

- 1. Chimpanzees (genus Pan)
- 2. Gorillas (genus Gorilla)
- 3. Gibbons (genus Hylobates)
- 4. Drills and mandrills (genus Mandrillus)
- 5. Orangutans (genus *Pongo*)
- 6. Baboons (genus Papio)
- 7. Siamangs (genus *Symphalangus*)
- 8. Gelada baboons (genus Theropithecus)
- 9. Snow leopards (Panthera uncia)
- 10. Leopards (Panthera pardus)
- 11. Jaguars (Panthera onca)
- 12. Tigers (Panthera tigris)
- 13. Lions (Panthera leo)
- 14. Cougars, panthers (Puma concolor)
- 15. Bears (family Ursidae)
- 16. Rhinoceros (family Rhinocerotidae)
- 17. Elephants (family Elephantidae)
- 18. Hippopotamuses (family Hippopotamidae)
- 19. Cape buffalos (Syncerus caffer caffer)
- 20. Crocodiles (except dwarf and Congo) (family Crocodylidae)
- 21. Gavials (family Gavialidae)
- 22. Black caimans (Melanosuchus niger)
- 23. Komodo dragons (Varanus komodoensis)
- 24. Aquatic & Marine Wildlife:
 - a. Cetacea
 - b. Orca (Orcinus orca)
 - c. Pinnipeds
 - d. Walrus (Odobenus rosmarus)
 - e. Northern Elephant Seal (Mirounga angustirostris)
 - f. Leopard Seals (Hydrurga leptonyx)
 - g. Eared Seals (Otaridae)
 - h. Polar bear (Ursus maritimus)

Note: ZAA does not support the keeping of Class I wildlife as pets. Class I wildlife are to be maintained solely in breeding or exhibition facilities. Animals are listed in Class I, II and III categories for the purposes of establishing guidelines on perimeter fencing, caging and other requirements, not for the purposes of establishing whether they are or are not a potential danger to the public.

Class II:

- 1. Howler monkeys (genus Alouatta)
- 2. Uakaris (genus *Cacajao*)
- 3. Mangabeys (genus Cercocebus)
- 4. Guenons (genus Ceropithecus)
- 5. Bearded sakis (genus Chiropotes)
- 6. Guereza monkeys (genus Colobus)
- 7. Celebes black apes (genus Macaca)
- 8. Indris (genus *Indri*)
- 9. Macaques (genus Macaca)
- 10. Langurs (genus Presbytis)
- 11. Douc langurs (genus Pygathrix)
- 12. Snub-nosed langurs (genus *Rhinopithecus*)
- 13. Proboscis monkeys (genus Nasalis)
- 14. Servals (Leptailurus serval)
- 15. European and Canadian lynx (*Lynx lynx*)
- 16. Bobcats (Lynx rufus)
- 17. Cheetahs (Acinonyx jabatus)
- 18. Caracals (Caracal caracal)
- 19. African golden cats (Profelis aurata)
- 20. Temminck's golden cats (*Profelis* temmincki)
- 21. Fishing cats (Prionailurus viverrina)
- 22. Ocelots (*Leopardus pardalis*)
- 23. Clouded leopards (*Neofelis nebulosa*)
- 24. Coyotes (Canis latrans)
- 25. Gray wolves (*Canis lupus*) (including wolf x domestic hybrids which are 25 percent or less domestic dog)

- 26. Red wolves (*Canis niger*) (including wolf x domestic hybrids which are 25 percent or less domestic dog)
- 27. Asiatic jackals (Canis aureus)
- 28. Black-backed jackals (*Canis mesomelas*)
- 29. Side-striped jackals (Canis adustus)
- 30. Indian dholes (Cuon alpinus)
- 31. African hunting dogs (Lycaon pictus)
- 32. Wolverines (Gulo gulo)
- 33. Honey badgers (Mellivora capensis)
- 34. American badgers (Taxides taxus)
- 35. Old World badgers (Meles meles)
- 36. Binturongs (Arctictis binturong)
- 37. Hyenas (all species) (family Hyaenidae)
- 38. Dwarf crocodiles (Osteolaemus tetraspis)
- 39. Alligators, caimans (except American alligator) (family Alligatoridae), large constrictors (see page 32), and venomous reptiles (see page 36)
- 40. Ostrich (Struthio camelus)
- 41. Cassowary (Casuarius spp.)
- 42. Aquatic & Marine Wildlife:
 - a. Sharks/Rays (large pelagic (ocean) sharks, sting rays)
 - b. Venomous Fish (Note special section on venomous species)
 - c. Blue Ringed Octopuses (genus Hapalochlaena)
 - d. Electric eel (*Electrophorus electricus*)

Class III:

1. All other wildlife not listed herein.

II. Facility Requirements:

- 1. Facility requirements for Class I animals:
 - a. The facility shall not be constructed on less than five (5) contiguous acres of property owned or leased by the applicant. If leased, the lease shall be for a term of not less than 5 years from the date of application. Such lease is subject to initial and annual review and approval by ZAA.
 - b. The facility shall have a perimeter boundary, including access points, to be designed, constructed, and maintained to discourage unauthorized entry and so far as reasonably practical, as an aid to the confinement of all animals within the perimeter of the institution. The perimeter boundary cannot also act as animal exhibit barrier and must be located at least 3 feet from the primary enclosure.
 - c. The facility shall be bounded by a fence of not less than eight (8) feet in height, constructed of not less than 11 1/2 gauge chain link, or equivalent, to prevent escape from the property of any wildlife that may escape the primary caging.
- 2. Facility requirements for Class II animals:
 - a. The facility shall not be constructed on less than two and one-half (2 ¹/₂) contiguous acres of property owned or leased by the applicant. If leased, the lease shall be for a term of not less than 5 years from the date of application. Such lease is subject to initial and annual review and approval by ZAA.
 - b. The facility shall have a perimeter boundary, including access points, to be designed, constructed, and maintained to discourage unauthorized entry and so far as reasonably practical, as an aid to the confinement of all animals within the perimeter of the institution. The perimeter boundary cannot also act as animal exhibit barrier and must be located at least 3 feet from the primary enclosure.
 - c. The facility shall be bounded by a fence of not less than eight (8) feet in height, constructed of not less than 11 1/2 gauge chain link, or equivalent, or, as an alternative, a fence of not less than six (6) feet in height, with a 2-foot, 45 degree, inward angle overhang. The inward angle fencing and vertical fencing shall be constructed of 11 1/2 gauge chain link or equivalent. This fencing is to prevent escape from the property of any wildlife that may escape from primary caging.
- 3. Facilities maintaining Class III wildlife only:
 - a. Facility shall meet same requirements as Class II facilities except that the perimeter fence may be 6 foot high with no overhang.

III. General Regulations of Captive Wildlife.

- 1. No person shall maintain captive wildlife in any unsafe or unsanitary condition, or in a manner which results in threats to the public safety, or the maltreatment or neglect of such wildlife.
- 2. Caging Requirements:
 - a. Enclosures housing captive wildlife shall be sufficiently strong to prevent escape and to protect the caged animal from injury, and shall be equipped with structural safety barriers to prevent any physical contact with the caged animal by the public. Structural barriers may be constructed from materials such as fencing, moats, landscaping, or close-mesh wire, provided that materials used are safe and effective in preventing public contact.
 - b. Class I or Class II wildlife enclosures less than 1,000 square feet shall be covered at the top to prevent escape (except paddocks, reptile enclosures, flightless birds, and habitats specified below).
 - c. For the purpose of this section, the following definitions apply:
 - i. Paddocks
 - 1. Areas enclosed by fencing, railing or other ZAA-approved structures which allow animals to graze or browse.
 - ii. Reptile enclosures
 - 1. Areas encompassed by smooth walls or other ZAA-approved materials which provide safe keeping of venomous and non-venomous snakes, Crocodilians and other reptiles.
 - iii. Open air habitats or moated areas
 - 1. Areas enclosed by ZAA-approved fences, walls, or moats which provide safe keeping of species.
 - d. Caging considered unsafe or otherwise not in compliance herewith shall not be approved by ZAA.
 - e. Unconfined captive wildlife shall be maintained under rigid supervision and control, so as to prevent injuries to members of the public. No captive wildlife shall be tethered outdoors unsupervised. To provide for public safety, all wildlife shall be controlled in such a manner as to prevent physical contact with the public, except as follows:
- 3. Public contact exhibition:
 - a. General: All wildlife that will be used for contact with the public shall have been evaluated by the exhibitor to insure compatibility with the uses intended. All wildlife shall be exhibited in a manner that prevents injuries to the public and the wildlife. The exhibitor shall take reasonable sanitary precautions to minimize the possibility of disease or parasite transmission which could adversely affect the health or welfare of citizens or wildlife.
 - b. Class I wildlife shall only be permitted to come into physical contact with the public in accordance with the following:
 - i. Facilities shall comply with the following Full and Incidental Contact criteria and provide ZAA with:
 - 1. a list of Class I species used in public contact environments; and
 - 2. handling policies, procedures, safeguards, and program safety evaluations for those species.

- ii. Full contact: For the purpose of this section, full contact is defined as situations in which an exhibitor or employee handler maintains proximate control and supervision, while temporarily surrendering physical possession or custody of the animal to another. Full contact with Class I wildlife is authorized only as follows:
 - 1. Carnivora and Crocodylia that weigh not more than twenty-five (25) pounds;
 - 2. Chimpanzees, orangutans, and gorillas that are not less than six (6) months of age and weigh not more than twenty-five (25) pounds;
 - 3. Gibbons and siamangs not less than four (4) months of age and not more than two (2) years of age:
 - 4. Elephants and rhinos as approved.
 - 5. Reptilia other than Class I Crocodylia: Large constrictors (see page 32) not more than ten (10) feet in length or sixty (60) pounds in weight.
- iii. Incidental contact: For the purpose of this section, incidental contact is defined as situations in which an exhibitor or employee handler maintains control, possession and supervision of the animal while permitting the public to come into contact with it. Incidental contact with Class I wildlife is authorized only as follows:
 - 1. Carnivora and Crocodylia that weigh not more than 40 pounds;
 - 2. Chimpanzees, orangutans, and gorillas that are not less than six (6) months of age and weigh not more than 40 pounds;
 - 3. Gibbons and siamangs that are not less than four (4) months of age and not more than two (2) years of age;
 - 4. Elephants and rhinos under direct control of handlers.
 - 5. Reptilia other than Class I Crocodylia: Large constrictors (see page 32) more than ten (10) feet in length or sixty (60) pounds in weight must have two trained handlers plus an additional handler for every additional five (5) feet in length.
- c. Public contact or handling intervals for Class I wildlife shall be limited as to frequency, intensity, and duration so that such handling will not adversely affect the health, welfare, or safety of the animals, nor expose the public to injury.
- 4. Any condition which can result in wildlife escaping from its enclosure, leash, or other constraint, or which could result in injury to any person, shall not be allowed.
- 5. Sanitation and Nutritional Requirements:
 - a. Sanitation, water disposal, and waste disposal shall be in accordance with all applicable local, state, and federal regulations.
 - b. Water: Clean drinking water shall be provided daily. Any water containers used shall be clean. Reptiles and amphibians that do not drink water from containers and those in an inactive season or period shall be provided water in a manner and at such intervals as to ensure their health and welfare. All pools, tanks, water areas and water containers provided for swimming, wading or drinking shall be clean. Enclosures shall provide drainage for surface water and runoff.
 - c. Food: Food shall be of a type and quantity that meets the nutritional requirements for the particular species, and shall be provided in an unspoiled and uncontaminated condition. Clean containers shall be used for feeding.

- d. Waste: Fecal and food waste shall be removed as necessary from inside, under, and around enclosures and stored or disposed of in a manner which prevents noxious odors or pests. Enclosures shall be ventilated to prevent noxious odors.
- e. Cleaning and maintenance: Hard floors within enclosures shall be cleaned a minimum of once weekly. Walls of enclosures shall be spot cleaned daily. The surfaces of housing facilities, including perches, shelves and any furniture-type fixtures within the facility, shall be cleaned weekly, and shall be constructed in a manner, and made of, materials that permit thorough cleaning. Any surface of enclosures that may come into contact with animal(s) shall be free of excessive rust that prevents the required cleaning or that affects the structural strength.

IV. Structural Caging Requirements for Class I, II and III Wildlife.

- 1. In addition to the standard caging requirements set forth above, Class I and Class II animals shall be housed in accordance with the following requirements:
 - a. A fence sufficient to deter entry by the public, which shall be a minimum of eight (8) feet in height, shall be present around the premises wherein Class I or Class II animals are housed or exercised outdoors.
 - b. All enclosures of Class I and Class II animals except paddocks, approved open air habitats, or outdoor reptile enclosures shall be equipped with a safety entrance.
 - i. A safety entrance is defined as a protected, secure area that can be entered by a keeper that prevents animal escape and safeguards the keeper, or a device that can be activated by a keeper that prevents animal escape and safeguards entry.
 - 1. Such entrances shall include: A double-door mechanism, interconnecting enclosures, a lock-down area, or other comparable devices, subject to ZAA approval, that will prevent escape and safeguard the keeper.
 - ii. Safety entrances shall be constructed of materials that are of equivalent strength as that prescribed for enclosure construction for that particular species.
 - c. All enclosures constructed of chain link or other approved materials shall be well braced and securely anchored. For animals that dig or burrow, chain link or equivalent at least one (1) foot below ground and at an angle towards the center of the exhibit must be installed. Enclosures shall be constructed using metal clamps, ties or braces of equivalent strength as the material required for enclosure construction for the particular species.
- 2. Additional requirements for specific species shall be as follows:
 - a. Group I: Chimpanzees (over 50 pounds), gorillas, orangutans.
 - i. Outdoor facilities: Enclosure construction materials shall consist of steel bars, two-inch galvanized pipe, nine (9) gauge chain link fencing, masonry block or their structural equivalent.
 - ii. Indoor facilities: Potential escape routes shall be equipped with steel bars, two-inch galvanized pipe, nine (9) gauge chain link fencing, masonry block or their structural equivalent in rooms where the wildlife is maintained.
 - b. Group II: Chimpanzees (up to 50 pounds), drills, mandrills, baboons, jaguars, tigers, lions, cougars, leopards, snow leopards, bears, clouded leopards, and cheetahs.
 - i. Outdoor facilities: Enclosure construction materials shall consist of not less than nine-gauge chain link or structural equivalent. For digging animals, a dig barrier as appropriate.
 - ii. Indoor facilities: Potential escape routes shall be equipped with wire or grating of not less than nine-gauge or structural equivalent.
 - c. Group III: Rhinoceros, elephants, hippopotamus, Cape buffalo.
 - i. Indoor and outdoor facilities: Construction materials shall consist of steel bars, reinforced masonry block or structural equivalent.
 - d. Group IV: Crocodiles, gavials, alligators, caimans, komodo dragons.

- i. Outdoor facilities: Bounded by a fence at least five feet in height of not less than 11¹/₂ gauge chain link or structural equivalent.
- e. Group V: Gibbons, siamangs, patas monkeys, howler monkeys, uakaris, mangabeys, guenons, bearded sakis, guereza monkeys, celebes black apes, indris, macaques, langurs, proboscis monkeys, spider monkeys, woolly monkeys, and capuchin monkeys, ocelots, servals, lynx, bobcats, caracals, African golden cats, Temminck's golden cats, fishing cats, wolves, coyotes, Asiatic jackals, Indian dholes, African hunting dogs, binturongs, and Old World badgers. For digging animals, a dig barrier as appropriate.
 - i. Outdoor facilities: Construction material shall consist of not less than 11 1/2-gauge chain link or structural equivalent.
 - ii. Indoor facilities: Potential escape routes shall be equipped with wire or grating not less than 11 1/2-gauge or structural equivalent.
- f. Group VI: Wolverines, honey badgers, American badgers, and hyenas. For digging animals, a dig barrier as appropriate.
 - i. Outdoor facilities: Enclosure construction materials shall consist of not less than nine-gauge chain link or structural equivalent.
 - ii. Indoor facilities: Potential escape routes shall be equipped with wire or grating of not less than nine-gauge chain link or structural equivalent.
- g. Group VII: Ostrich, cassowary.
 - i. Outdoor facilities: Bounded by a fence of at least six feet in height of not less than 11 1/2-gauge chain link or structural equivalent.
- h. Group VIII: Class III mammals (except spider, woolly, and capuchin monkeys) and Varanidae (except Komodo dragon, see Group IV).
 - i. Outdoor facilities: Enclosure construction materials shall consist of not less than 14-gauge wire or structural equivalent material.
 - ii. Indoor facilities: Rooms may serve as enclosures provided that:
 - 1. Construction materials equal or exceed the structural equivalent for outside caging.
 - 2. Potential escape routes are secured, or the animal is supervised to ensure against escape.
 - 3. The size of the room(s) equals or exceeds that required for enclosures.

V. Standard Caging Requirements for Captive Wildlife.

- 1. No captive wildlife shall be confined in any enclosure which contains more individual animals, or is smaller in dimension, than as specified in this section, or is not equipped as specified in this section, or as authorized in accordance with the following:
 - a. Requests for deviations from standard caging or enclosure requirements may be granted to allow for different size configuration (length, width and height) if the required square footage is present and if the locomotory needs of the animal(s) are not compromised. Wet or dry moats may be substituted for the required fencing for retaining some species of wildlife. Any proposed deviations from the standard caging or enclosure requirements, or proposals to use wet or dry moats to substitute for fencing, must be approved in writing by ZAA.
 - b. Deviations to the above regulations may include provisions for husbandry, veterinary care, transport, and educational/performing wildlife.
- 2. Definitions: Where specified in this section, wildlife enclosures shall be equipped to provide for the protection and welfare of the animals. Such equipment includes, but is not limited to:
 - a. Shelter, nest box or den
 - i. A structure that protects captive wildlife from the elements (weather conditions). Such structures may vary in size depending on the security and biological needs of the species. They are particularly described as follows:
 - 1. The structure shall provide protection from the elements and from extremes in temperature that are detrimental to the health and welfare of the animal. When vegetation and landscaping is available to serve as protection from the elements, access to a shelter shall also be provided during inclement weather conditions. Such shelter shall be attached to or adjacent to the paddock, habitat, or enclosure.
 - 2. Nest box or den: An enclosed area that provides a retreat area within, attached to, or adjacent to an enclosure of specified size, which shall provide protection from the elements and from extremes in temperature that are detrimental to the health and welfare of the animal.
 - b. Elevated platform or perching area
 - i. A surface or structure, either natural or manmade, positioned above the floor, or above the grade level of the enclosure, that will provide a resting area for the animal(s).
 - c. Original floor area
 - i. The total square footage required for the initial number of animals specified. For example, this is calculated by finding the new total area required for 4 squirrel monkeys when the original floor area equals 36' for 1 or 2 animals (6'x 6'x 8' high). For each additional animal, there is an increase in enclosure size by 25 percent of original floor area. For two additional monkeys: 25% x 36'x 2 animals=18'; add 18'to 36'=54 total square feet of floor area required for 4 monkeys. New enclosures can be 6'x 9'x 8' high, or any width/length dimension that equals or exceeds the increased enclosure space.

- d. Gnawing and chewing items
 - i. Natural or artificial materials that provide for the health of teeth, so as to keep teeth sharp, wear down enamel and promote general oral hygiene. Gnawing items include, but are not limited to, logs and trees. Chewing items include, but are not limited to, woody stems, knuckle bones, and rawhide objects; suitability dependent upon species.

Primates

Additional enclosure requirements for primates: In addition to requirements of this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, boxes, balls, mirrors or foraging items. Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.

- 1. Prosimians:
 - a. Small (e.g., loris, potto, angwantibo, tarsiers, and mouse, dwarf, forked, marked, and sportive lemurs).
 - i. For one or two animals, an enclosure 3 feet by 3 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and nest box(es) that will accommodate all animals in the enclosures simultaneously. Each enclosure shall also have climbing apparatus.
 - b. Medium (e.g., bush babies, lemurs: ruffed, cata, true, gentle, avahi, aye-aye).
 - i. For one or two animals, an enclosure 8 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and nest box(es) that will accommodate all animal(s) in the enclosure simultaneously. Each enclosure shall also have climbing apparatus.
 - c. Large (e.g., sifakas, indris).
 - i. For one or two animals, an enclosure 8 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and nest box(es) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall also include climbing apparatus.
- 2. New World Monkeys:
 - a. Tamarins and Marmosets.
 - i. For one or two animals, an enclosure 4 feet by 4 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and nest box(es) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall also include climbing apparatus.
 - b. Squirrels, titis, owls, talapoins and similar sized monkeys.
 - i. For one or two animals, an enclosure 6 feet by 6 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching areas and nest box(es) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall also have climbing apparatus.
 - c. Medium-sized New World monkeys (e.g., capuchins, sakis, uakaris).
 - i. For one or two animals, an enclosure 8 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase

enclosure size by 25 percent of original floor area. b. Each enclosure shall have perching area(s) and shelter(s) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall also have climbing apparatus.

- d. Large arboreal monkeys (e.g., howlers, spiders, woolly).
 - i. For one or two animals, an enclosure 8 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and shelter(s) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall also have horizontal climbing apparatus.
- 3. Old World Monkeys:
 - a. Macaques, guenons, mangabeys, patas, languars, colobus, proboscis, simakobu, snub-nosed, and similar sized monkeys.
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 9 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and shelter(s) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
 - b. Baboons, mandrills and drills.
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and shelter(s) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
- 4. Apes:
 - a. Gibbons and siamangs.
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and shelter(s) that will accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
 - iii. Wet or dry moats may be substituted for the required fencing provided ZAA written approval has been obtained. For island exhibits, wet moats shall be used that are no less than 16 feet wide depending on structures and vegetation, with 50 percent of the water having a depth twice the height of the tallest animal.
 - b. Chimpanzees and orangutans.
 - i. For one animal under 50 pounds, an enclosure 8 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal double the original floor area. For one or two animals over 50 pounds, an enclosure 20 feet by 12 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 50 percent of original floor area.

- ii. Each enclosure shall have perching area(s) and shelter(s) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
- iii. Wet or dry moats may be substituted for the required fencing provided ZAA written approval has been obtained. For island exhibits, wet moats shall be used that are no less than 20 feet wide, with 50 percent of the water having a depth twice the height of the tallest animal.
- c. Gorillas.
 - i. For one or two animals, an enclosure 28 feet by 24 feet, 10 feet high. For each additional animal, increase enclosure size by 50 percent of original floor area.
 - ii. Each enclosure shall have a platform(s) large enough to accommodate all animals simultaneously; such platform(s) shall be elevated three feet. Each enclosure shall also have shelter(s) large enough to accommodate all animals in the enclosure simultaneously.
 - iii. Wet or dry moats may be substituted for the required fencing provided ZAA written approval has been obtained. For island exhibits, wet moats shall be used that are no less than 20 feet wide, with 50 percent of the water having a depth twice the height of the tallest animal.

Carnivores and Certain Omnivores with Similar Requirements:

- 1. Wild Felines.
 - a. In addition to requirements of this section, each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously. Each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, boxes, balls, bones, barrels, drums, rawhide, pools, etc.
 - b. African and Asian lions and Asian tigers.
 - i. For one or two animals, an enclosure 24 feet by 15 feet, 8 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animal(s) simultaneously. Each enclosure shall have a claw log, unless the animal(s) front claws have been removed.
 - iii. Outdoor exhibits (uncovered) shall have vertical jump walls at least 14 feet high, plus a 2-foot, 45 degree, inward angle overhang with a hot wire, or a 36" overhang without hotwire or vertical jump walls at least 16 feet high, without an overhang. The inward angle fencing shall be made of the same material as the vertical fencing. Wet or dry moats may be substituted for the required fencing provided ZAA written approval has been obtained.
 - c. Jaguars, leopards, snow leopards, and cougars.
 - i. For one or two animals, an enclosure 20 feet by 20 feet, 8 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a claw log, unless the animal(s) front claws have been removed.
 - iii. Leopards, jaguars, snow Leopards, and cougars shall not be kept in uncovered enclosures except in facilities with wet or dry moats, which have been ZAA approved in writing or applied for and received a waiver for specified reasons.
 - d. Lesser cats (e.g., bobcats, lynx, ocelots, caracal, serval, margay, fishing cats, jungle cats, Teminick's cats, golden cats).
 - i. For one or two animals, an enclosure 15 feet by 8 feet, 6 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area. Open top enclosures by ZAA approval only.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a claw log, unless the animal(s) front claws have been removed.
 - e. Small cats (e.g., Geoffroy's cats, jaguarundis, leopard cats, wildcats (*Felis silvestris*), mountain cats, pampas cats, marbled cats, pallas' cats, sand cats, oncilla/tiger cats, black-footed, cats, flat-headed cats, kodkods, rusty-spotted cats).
 - i. For one or two animals, an enclosure 8 feet by 12 feet, 6 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.

- ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a claw log, unless the animal(s) front claws have been removed.
- f. Cheetahs.
 - i. For one or two animals, an enclosure 40 feet by 20 feet, 8 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously.
- 2. Bears.
 - a. In addition to requirements of this section, each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously. Each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, boxes, balls, bones, barrels, drums, climbing apparatus, foraging items, etc.
 - b. Black bears, Asiatic, sloth, spectacled.
 - i. For one animal, an enclosure 20 feet by 20 feet, 8 feet high with a roof, or 12 feet high with 45 degree overhang. For each additional animal, increase enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have an elevated platform(s) for resting. Each enclosure shall have a 4 foot by 6 foot pool of water, 3 feet deep.
 - c. Sun bears.
 - i. For one animal, an enclosure 20 feet by 10 feet, 8 feet high with a roof, or 12 feet high with 45 degree overhang. For each additional animal, increase enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have an elevated platform(s) for resting. Each enclosure shall have a 3 foot by 4 foot pool of water, 2 feet deep.
 - d. Brown bears (e.g., European, grizzly, Kodiak) and polar bears.
 - i. For one animal, an enclosure 24 feet by 32 feet, 8 foot high with a roof, or 12 feet high with 45 degree overhang. For each additional animal, increase enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have an elevated platform(s) for resting. Each enclosure shall have a 6 foot by 10 foot pool of water, 4 feet deep, except for polar bears which must conform to marine mammal protection Act standards.
- 3. Pandas (red).
 - a. In addition to the requirements for this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, climbing apparatus, foraging/browse items, pools of water, etc. Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.
 - b. For one animal, an enclosure 10 feet by 10 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.

- c. Each enclosure shall have perching area(s) that will accommodate all animals in the enclosure simultaneously.
- d. Shelter must be provided at all times to protect animals from excessive heat.
- 4. Wild Canids.
 - a. In addition to the requirements of this section, each enclosure shall be equipped with a shelter(s)/den(s) that shall accommodate all the animals in the enclosure simultaneously. Each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to boxes, balls, bones, barrels, drums, rawhide, pools, etc.
 - b. Foxes, small (e.g., Fennec, kit).
 - i. For one or two animals, an enclosure 10 feet by 8 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously.
 - c. Foxes, (e.g., red, grey, Arctic, bat eared, bush dogs).
 - i. For one or two animals, an enclosure 10 feet by 8 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously.
 - d. Wolves (e.g., gray wolf, except red wolf), maned wolf, hyenas, African wild dogs, Cape hunting dogs.
 - i. For one or two animals, an enclosure 20 feet by 10 feet, 6 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously.
 - iii. Outdoor enclosures over 1,000 square feet (uncovered) shall have vertical jump walls at least 8 feet high, with a 45 degree inward angle overhang 2 feet wide with a hot wire or 3 feet wide without a hot wire, jump walls 10 feet high without an overhang.
 - e. Coyotes, jackals, Asian wild dogs, red wolf, dingoes.
 - i. For one or two animals, an enclosure 20 feet by 8 feet, 6 feet high. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an elevated platform(s) that shall accommodate all animals in the enclosure simultaneously.
 - iii. Outdoor enclosures over 1,000 square feet (uncovered) shall have vertical jump walls at least 8 feet high with a 45 degree, inward angle overhang 2 feet wide with a hot wire or 3 foot overhang without a hot wire, jump walls 10 feet high without an overhang.
- 5. Raccoons, coati-mundis, olingos, kinkajous, ringtail (cacomistles).
 - a. In addition to the requirements for this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may

include, but is not limited to, boxes, balls, mirrors, climbing apparatus, foraging items, etc. Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.

- b. For up to two animals, an enclosure 8 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor space.
- c. Each enclosure shall have perching area(s) and nest box(es) that will accommodate all animals in the enclosure simultaneously.
- 6. Badgers, weasels and polecats, skunks, fishers, ferrets, otters, wolverines, minks, martins, civets, genets, mongoose, and binturong.
 - a. In addition to the requirements for this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, boxes, balls, PVC tubing, etc. Each enclosure shall have a shelter(s)/den(s)/nest box(es) that will accommodate all animals in the enclosure simultaneously.
 - b. Small (e.g., ferrets, weasels, polecats, skunks).
 - i. For up to 4 animals, an enclosure 5 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall be equipped with chewing items.
 - c. Arboreal (e.g., martins, fishers, genets, small or medium civets).
 - i. For one or two animals, an enclosure 6 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall be equipped with perching areas, climbing apparatus, and chewing items.
 - d. Medium (e.g., badger).
 - i. For one or two animals, an enclosure 8 feet by 8 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have an area of sufficient depth to provide for digging.
 - e. Large (e.g., wolverine, binturong, African civet).
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - f. Aquatic (e.g., common river otters, sea otters, giant river otter). For sea otters, specifications will be as required by Federal regulations.
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have a 8 foot by 4 foot pool of water, 2.5 feet deep. For each additional animal, increase pool size by 25 percent of original pool area. Dry resting areas shall be provided.

Hoofstock

Odd-and even-toed animals.

- 1. In addition to the enclosure requirements for this paragraph, each enclosure shall have a shelter(s).
- 2. Equids (e.g., zebras, asses) and large non-cusorial bovids (e.g., wild cattle, African buffalo, bison).
 - a. For one or two animals, a paddock enclosing 1,250 square feet, 6 feet high. For each additional animal, increase paddock by 25 percent of the original footage.
- 3. Cervids (deer family) and cursorial bovids (antelope).
 - a. Large (e.g., elk, sambar, red deer, sable antelope, eland, wildebeest, and deer and antelope of similar size).
 - i. For one or two animals, a paddock enclosing 1,250 square feet, 8 feet high.
 - ii. For each additional animal, increase paddock by 25 percent of the original footage.
 - b. Medium (e.g., white-tailed, fallow, axis, sika, pronghorn, deer and antelope of similar size).
 - i. For one or two animals, a paddock enclosing 800 square feet, 8 feet high. For each additional animal, increase paddock by 25 percent of the original footage.
 - c. Small (e.g., roe, dikdik, muntjac, brocket, pudu, Chinese water deer, musk deer, deer and antelope of similar size).
 - i. For one or two animals, a paddock enclosing 450 square feet, 5 feet high. For each additional animal, increase paddock by 25 percent of the original footage.
- 4. Camelids (e.g., vicuna and guanaco).
 - a. For one or two animals, a paddock enclosing 800 square feet, 6 feet high. For each additional animal, increase paddock by 25 percent of the original footage.
- 5. Giraffes, okapi.
 - a. For one or two animals, a paddock enclosing 1500 square feet, 8 feet high. For each additional animal, increase paddock by 25 percent of the original footage.
- 6. Tapirs.
 - a. For one or two animals, a paddock enclosing 500 square feet, 4 feet high except Malayan which shall be 5 foot high. For each additional animal, increase paddock by 25 percent of the original footage.
 - b. Each enclosure shall have a pool of water, 60 square feet, 3 feet deep, equipped with a ramp or steps. For each additional animal, increase pool surface area by 25 percent of original area.
- 7. Wild swine (Suidae) and peccaries.
 - a. For one or two animals, a paddock enclosing 200 square feet, 4 feet high. For each additional animal, increase paddock by 25 percent of the original footage. Exhibit floor shall have an area of sufficient depth for digging. Dig barriers as required.
- 8. Wild goats/sheep, (Caprinae) (e.g., musk ox, goral, serow, takin).
 - a. For one or two animals, a paddock enclosing 500 square feet, 8 feet high. For each additional animal, increase paddock by 25 percent of the original footage.

9. Elephants

NOTE: ZAA has adopted the Elephant Husbandry Resource Guide used by the Elephant Managers Association and the International Elephant Foundation as our husbandry standards. ZAA's policy on "Protected Contact" is as follows:

- a. While ZAA does not promote "protected contact", we believe that decision regarding protected contact with elephants should be left to the governing body of each organization. As a husbandry guide, ZAA defers to the Elephant Husbandry Resource Guide as the recognized standard for maintaining elephants.
- 10. Rhinos.
 - a. For one animal, a paddock enclosing 1,500 square feet, 5 feet high. For each additional animal, increase the paddock by 50 percent of original paddock area.
 - b. Access to a shelter shall be provided at all times.
- 11. Hippopotamus (e.g., Nile and pygmy).
 - a. Nile.
 - i. For one animal, a paddock enclosing 1,500 square feet, 5 feet high, with a pool of water, 120 square feet, 5 feet deep, equipped with a ramp or steps. For each additional animal, increase paddock and pool surface area by 50 percent of original area.
 - ii. Access to a shelter shall be provided.
 - b. Pygmy.
 - i. For up to two animals, a paddock enclosing 600 square feet, 4 feet high, with a pool of water 80 square feet, 3 feet deep, equipped with a ramp or steps. For each additional animal, increase paddock and pool surface area by 25 percent of original area.
 - ii. Access to a shelter shall be provided.

Other Mammals

- 1. Rodents.
 - a. In addition to the requirements for this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, boxes, balls, PVC tubing, browse, etc. Each enclosure shall have shelters or nest box(es) that will accommodate all animals in the enclosure simultaneously. Dig barriers as required. Enclosure floors shall have an area of sufficient depth that provides for digging. A four foot non climbable wall can eliminate the need for a six foot tall barrier.
 - b. Small aquatic rodents (e.g., Florida water rat, muskrat).
 - i. For one or two animals, an enclosure 5 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have a pool of water, 2 feet by 2 feet, 1 foot deep.
 - iii. Each enclosure shall have gnawing items.
 - c. Medium aquatic rodents (e.g., nutria, beaver).
 - i. For one or two animals, an enclosure 8 feet by 10 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have a pool of water, 6 feet by 4 feet, 2 feet deep.
 - iii. Each enclosure shall have gnawing items.
 - d. Large aquatic rodents (e.g., capybara).
 - i. For one or two animals, an enclosure 10 feet by 10 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor space.
 - ii. Each enclosure shall have a 6 foot by 8 foot pool of water, 3 feet deep. For each additional animal, increase the pool size by 25 percent of original floor area.
 - iii. Each enclosure shall have gnawing items.
 - e. Large rodents (e.g., porcupines, cavies, paca, pacarana, agoutis).
 - i. Cavies, paca, pacarana, agoutis and similar sized ground dwelling rodents.
 - 1. For one or two animals, an enclosure 6 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have gnawing items.
 - ii. South and North American porcupines.
 - 1. For one or two animals, an enclosure 8 feet by 6 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have gnawing items, perching areas and climbing apparatus.
 - iii. Old World porcupines (e.g., crested, bush tailed, and similar sized animals).
 - 1. For one to two animals, an enclosure 8 feet by 8 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.

- 2. Each enclosure shall have gnawing items and browse. Each enclosure shall also have perching areas and climbing apparatus except for crested porcupines.
- 2. Squirrels and tree shrews.
 - a. Arboreal squirrels/tree shrews.
 - i. For up to four animals, an enclosure 5 feet by 5 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have climbing apparatus and gnawing items.
 - b. Terrestrial squirrels.
 - i. Small prairie dogs, chipmunks.
 - 1. For up to two animals, an enclosure 4 feet by 5 feet, 4 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have gnawing items.
 - ii. Large (e.g., marmots, ground hogs).
 - 1. For up to two animals, an enclosure 5 feet by 5 feet, 4 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - 2. Enclosure floors shall have an area of sufficient depth that provides for digging. Each enclosure shall have gnawing items.
- 3. Wild rabbits, hares, and picas.
 - a. For up to two animals, an enclosure 6 feet by 4 feet, 5 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - b. Each enclosure shall have gnawing items.
- 4. Marsupials.
 - a. In addition to requirements of this section, each enclosure shall be equipped with a shelter(s) or nest box(es) that shall accommodate all the animals in the enclosure simultaneously. When vegetation or landscaping is available to serve as protection from the elements, access to a shelter shall also be provided during inclement weather conditions. Such shelter shall be attached to or adjacent to the paddock, habitat, or enclosure. Each paddock, habitat, or enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be non-injurious, and may include, but is not limited to, browsing and grazing material. Enclosure floor shall be of sufficient depth to provide for digging. Dig barriers as required.
 - b. Kangaroo, Wallaroos (e.g., red, grey).
 - i. For one or two animals, a paddock enclosing 625 square feet, 5 feet high. For each additional animal, increase the enclosure by 25 percent of original floor area.
 - c. Wallabies (e.g., rock wallabies, and similar sized species).
 - i. For one or two animals, a paddock enclosing 500 square feet, 4 feet high. For each additional animal, increase the enclosure by 25 percent of original floor area.
 - d. Hare wallabies, forest wallabies (e.g., dama, potorros, rat kangaroos, and similar sized species).
 - i. For one or two animals, a paddock enclosing 100 square feet, 4 feet high. For each additional animal, increase the enclosure by 25 percent of original floor area.

- e. Tree kangaroos (arboreal).
 - i. For one or two animals, an enclosure 10 feet by 8 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
- f. Ringtail opossums, gliders, pygmy possums, brushtail possums, cuscus, bandicoots
 - i. Small (e.g., pygmy opossums).
 - 1. For one or two animals, an enclosure 3 feet by 3 feet, 4 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor space.
 - Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a horizontal climbing apparatus.
 Bliders (e.g., sugar glider, Family Petauridae).
 - 3. For up to six animals, an enclosure 4 feet by 4 feet, 4 feet high, or dimensional equivalent volume. For each additional six animals, increase enclosure size by 25 percent of original floor area.
 - 4. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a horizontal climbing apparatus.
 - ii. Ringtail possums (Family Pseudocheiridae).
 - 1. For one or two animals, an enclosure 4 feet by 3 feet, 3 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a horizontal climbing apparatus.
 - iii. Cuscuses and brushtail possums (Phalangeridae).
 - 1. For one or two animals, an enclosure 4 feet by 4 feet, 4 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have a horizontal climbing apparatus.
 - iv. Bandicoots.
 - 1. For one or two animals, an enclosure 4 feet by 3 feet, 3 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
- g. Marsupial carnivores (Dasyuridae).
 - i. Small (e.g., 3 striped marsupial mouse).
 - 1. For one to four animals, a covered enclosure 1 foot by 2 feet, 1 foot high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.

- ii. Large (e.g., Tasmanian devil, tiger quoll).
 - 1. For one or two animals, an enclosure 4 feet by 6 feet, 4 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
- h. American (New World) opossums/possums and honey possum.
 - i. Small (e.g., mouse opossums, honey possum: Tarsipes rostratus).
 - 1. For one to four animals, an enclosure 3 feet by 3 feet, 3 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
 - ii. Large (e.g., American, yapok, four-eyed, woolly, bushy-tailed, and similar sized animals).
 - 1. For one to four animals, an enclosure 4 feet by 5 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - 2. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have horizontal climbing apparatus.
- i. Wombats.
 - i. For one or two animals, an enclosure or paddock 10 feet by 10 feet, 6 feet high, or dimensional equivalent volume. For each additional animal, increase enclosure size by 25 percent of original floor area.
- j. Koalas.
 - i. For one or two animals, an enclosure, 8 feet by 10 feet, 8 feet high, or dimensional equivalent volume. A four foot non climbable wall can eliminate the need for an 8 foot barrier. For each additional animal, increase enclosure size by 25 percent of original floor area.
 - ii. Each enclosure shall have perching area(s) and horizontal climbing apparatus.
 - iii. Shade must be provided at all times and such animals must be protected from the heat.
- 5. Hedgehogs, tenrecs, and solendons.
 - a. For one to four animals, an enclosure 2 feet by 2 feet, 2 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure length by 25 percent.
 - b. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously.
- 6.
- 7. Edentates (e.g., armadillos, pangolins, anteaters, sloth).
 - a. Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.
 - b. All armadillos except giant armadillo.
 - i. For one or two animals, an enclosure, 4 feet by 4 feet, 4 feet high, non climbable barrier. For each additional animal, increase the enclosure length by 25 percent.
 - ii. Enclosure floors shall include an area of sufficient depth to provide for digging.

- iii. Each enclosure shall be provided with a den(s) that shall accommodate all animals in the enclosure simultaneously.
- c. Giant armadillo.
 - i. For one or two animals, an enclosure 10 feet by 12 feet, 6 feet high. For each additional animal, increase the enclosure length by 25 percent.
 - ii. Enclosure floors shall include an area of sufficient depth to provide for digging.
 - iii. Each enclosure shall be provided with a den(s) that shall accommodate all animals in the enclosure simultaneously.
- d. Pangolin.
 - i. For one or two animals, an enclosure 10 feet, by 10 feet, 8 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - ii. Enclosure floors shall include an area of sufficient depth to provide for digging. Climbing apparatus shall be provided for arboreal species. A pool or tub of water shall be provided that shall accommodate the animal(s). Each enclosure shall be provided with a den(s) that shall accommodate all animals in the enclosure simultaneously.
- e. Anteaters and aardvarks.
 - i. Small anteaters.
 - 1. For one or two animals, an enclosure 8 feet by 8 feet, 6 feet high. For each additional animal, increase the enclosure length by 25 percent.
 - 2. Enclosure floor shall include an area of sufficient depth to provide for digging. Climbing apparatus shall be provided for arboreal species. Each enclosure shall be provided with arboreal nest box(es) that shall accommodate all animals in the enclosure simultaneously.
 - ii. Giant anteaters and aardvarks.
 - 1. For one or two animals, an enclosure 10 feet by 20 feet, 6 feet high. For each additional animal, increase the enclosure size by 25 percent of original floor area.
 - 2. Enclosure floor shall include an area of sufficient depth to provide for digging. Climbing apparatus shall be provided for arboreal species. Each enclosure shall be provided with a den(s) that shall accommodate all animals in the enclosure simultaneously.
- f. Sloth (e.g., two-toed and three-toed).
 - i. In addition to the requirements for this section, each enclosure shall have enrichment devices to provide physical and mental stimulation or manipulation compatible with the species. Such devices shall be noninjurious, and may include, but is not limited to, natural or artificial trees, tree limbs, etc. Each enclosure shall have a shelter(s) or den(s) or nest box(es).
 - ii. For one or two animals, an enclosure 5 feet by 6 feet, 8 feet high, or dimensional equivalent volume. For each additional animal, increase the enclosure length by 25 percent.
 - iii. Each enclosure shall have perching area(s) and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure

shall have horizontal climbing apparatus large enough to accommodate all animals in the enclosure simultaneously.

- 8. Bats.
 - a. Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.
 - b. Bats with a wingspread from 2-6 feet.
 - i. For up to 6 animals, an enclosure 20 feet by 20 feet, 6 feet high. Each enclosure shall be designed to encourage uninterrupted flight by incorporating a center structure to impede cross flights. The available flight area shall be no less than 1.5 times the wingspread of the largest bat in the enclosure. The center structure may incorporate nest boxes, feeding stations, trees, resting shelves, perches, columns, etc. For each additional animal, increase the enclosure size by 15 percent of the original floor area.
 - ii. Each enclosure shall have perching areas and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have climbing apparatus.
 - c. Bats with a wingspread less than 2 feet.
 - i. The enclosure shall be large enough to permit aerial maneuvering within the enclosure.
 - ii. Each enclosure shall have perching areas and nest box(es) that shall accommodate all animals in the enclosure simultaneously. Each enclosure shall have climbing apparatus.

Birds

Perching birds shall be provided with a perch of a diameter sufficient to prevent the meeting of the bird's claws, and of sufficient height to prevent floor contact. Perches and perching areas shall be sufficient to accommodate all birds in the enclosure simultaneously. Perches shall be constructed in a manner and of materials that provide for effective cleaning or replacement to insure the health of the birds. Enclosures shall be provided with shelter(s). Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.

- 1. Psittacine and Passerines.
 - a. Large (e.g., large cockatoos, large macaws, including palm cockatoos, greenwinged macaws and similar sized birds).
 - i. For one or two birds, an enclosure providing space sufficient to permit perching without the tail feathers touching the floor and provide for head clearance with normal posturing, with a minimum enclosure dimension to allow full extension of both wings. These measurements shall be based on the largest bird in the enclosure. For each additional bird, increase perimeter by 25 percent.
 - b. Medium (e.g., medium-sized parrots, lories and large conures including Amazons, Patagonian and similar sized birds)
 - i. For one or two birds, an enclosure 18 inches by 18 inches, 2 feet high. For each additional bird, increase perimeter by 25 percent.
 - c. Small (e.g., parrots, cockatiels, lories and parakeets)
 - i. For up to four birds, an enclosure 1 foot by 2 feet, 10 inches high. For each additional bird, increase perimeter by 25 percent.
 - d. Very-small (e.g., canaries, finches, and similar-sized birds (except hummingbirds)
 - i. For up to 2 birds, an enclosure 8 inches by 8 inches, 8 inches high. For each additional bird, increase perimeter by 25 percent.
 - e. Hummingbirds and sunbirds.
 - i. For up to 5 birds, an enclosure 4 feet by 2 feet by 2 feet. For each additional bird, increase original floor area by 10 percent.
 - f. Small and medium passerine birds (e.g., jays, doves, pigeons, starlings and other similar-sized birds).
 - i. For up to two birds, an enclosure 3 feet by 2 feet, 3 feet high. For each additional bird, increase original floor area by 25 percent.
 - g. Large passerine, (e.g., ravens, crows, magpies, small hornbills and similar-sized birds).
 - i. For up to two birds, an enclosure 4 feet by 4 feet, 6 feet high. For each additional bird increase original floor area by 25 percent.
 - ii. Ground hornbills, Indian great hornbills, crowned pigeons and similar sized birds.
 - 1. For up to three birds, an enclosure having 144 square feet of floor area, 6 feet high, with a perch elevated 4 feet above the floor.
 - 2. For each additional bird, increase enclosure original floor area by 25 percent.

2. Waterfowl.

a. Small to Medium (e.g., green-winged teal, mallard and similar sizes ducks, geese)

- i. For up to four birds, an enclosure with 75 square feet of land area and 7.5 square feet of water area.
- ii. For each additional adult bird, increase enclosure and pool size by 25 percent.
- b. Large (e.g., geese, swans, and similar size).
 - i. For up to four birds, an enclosure with 150 square feet of land and 15 square feet of water area.
 - ii. For each additional adult bird, increase enclosure and pool size by 25 percent.
- 3. Eagles, hawks, owls, vultures, toucans and toucanets.
 - a. For each bird, an enclosure 2 wingspreads by 3 wingspreads. The roof shall be of sufficient height to permit bird to perch erect on the highest perch.
 - b. For each additional bird, increase enclosure length by 50 percent and width by 25 percent.
 - c. Birds of prey used for falconry demonstrations shall be kept as ZAA directs.
- 4. Large ground-dwelling (e.g., Congo peafowl, Javan peafowl, curassows, wild turkeys, brush turkeys (moundbuilders), large grouse, capricali, and sage hen) (exhibit only).
 - a. For up to five birds, an enclosure having 144 square feet of floor, 6 feet high, with the perch elevated 4 feet above the floor.
 - b. For each additional bird, increase original floor area by 10 percent.
- 5. Lesser game birds (e.g., pheasants, wild guinea fowl, tragopans, snowcocks, partridge, grouse, chachlachas, guans (exhibit only).
 - a. For up to five birds, an enclosure having 100 square feet of floor, 6 feet high, with the perch elevated 30 inches.
 - b. For each additional bird, increase original floor area 10 percent.
- 6. Quail (e.g., bob-white quail, scaled quail, button quail, and other species exhibit only).
 - a. For a pair, an enclosure 2 feet by 2 feet, 1 foot high.
 - b. For each additional animal, increase original floor area by 10 percent.
- 7. Wading birds, (e.g., flamingos, ibises, spoonbills, herons, egrets, cranes, storks and their allies) and certain shore birds (plovers and sandpipers).
 - a. For up to five birds, an enclosure of 144 square feet, with a wading pool of water covering 14 square feet.
 - b. For each additional bird, increase original floor area by 25 percent.
- 8. Diving, skimming fish-eaters (e.g., pelicans, cormorants, anhinga, frigate birds, gannets, boobies, albatrosses, sheerwaters, petrels, sheepbills).
 - a. For up to two birds, an enclosure of 144 square feet, one half of which will be a pool of water, 18 inches deep.
 - b. For each additional bird, increase original floor area by 25 percent.
- 9. Penguins (e.g., Humboldts, Emperor, King, Jackass, etc.), puffins, murres, auks a. Puffins, murres, auks.

- i. For up to two birds, an enclosure of 100 square feet, one half of which shall be a pool of water, three feet deep. For each additional animal, increase original floor area and pool size by 25 percent.
- b. Penguins-large (e.g., Emperor, King, and southernmost species).
 - i. For up to two birds, an enclosure of 100 square feet, one half of which shall be a pool of water, three feet deep with flowing water, 55-degree Fahrenheit or less. For each additional animal, increase original floor area and pool size by 25 percent.
- c. Penguins-small (e.g., Humboldts, blackfoot and northernmost species).
 - i. For up to two birds, an enclosure of 80 square feet, one half of which shall be a pool of water, two feet deep. For each additional bird, increase original floor area and pool size by 25 percent.
- 10. Ratites (e.g., ostrich, rhea, emu, cassowary).
 - a. For one or two birds, a paddock enclosing 500 square feet, four feet high (six feet for ostriches) with an attached shaded, protected area.
 - b. For each additional bird, increase original paddock area by 25 percent.

Reptiles & Amphibians

In addition to requirements of this section, enclosures shall be provided with an environment that allows for temperature regulation necessary to insure the well-being of the species. The environment or devices shall be non-injurious. Each enclosure shall be provided with a non-injurious substrate that is species appropriate. Such substrate shall be disposed of or sanitized at intervals sufficient to insure the health of the animal(s). Each enclosure shall be equipped with a shelter(s) large enough to accommodate all the animals in the enclosure simultaneously.

1. Reptiles

- a. Snakes
 - i. The following species are considered to be "large constrictors:"
 - 1. Large constrictors:
 - 2. Indian or Burmese python (python molurus)
 - 3. Northern African Rock python (python sebae)
 - 4. Southern African Rock Python (python natalensis)
 - 5. Reticulated Python (python reticulatus)
 - 6. Boa constrictor (Constricor constrictor)
 - 7. Green anaconda (Eunectes murinus)
 - 8. Bolivian Anaconda (Eunectes beniensis)
 - 9. De Schauensee's Anaconda (Eunectes deschauenseei)
 - ii. Enclosures for large constrictors shall be constructed of a variety of materials, all or any of which must securely, effectively, and safely contain the animal.
 - 1. Exhibit front or viewing area must use laminated glass, acrylic, or double paned glass (where the glass on the viewer's side is laminated or tempered).
 - a. Glass for viewing area can be single paned tempered glass when an escape proof exhibit is kept behind the glass: an example would be a glass aquarium behind a viewing area.
 - 2. The minimum size of the exhibit shall be based upon the length of the longest specimen in the enclosure and shall allow for the thorough cleaning of the container or exhibit by staff.
 - a. For up to two specimens, an enclosure having a perimeter 25% greater than the length of the longest specimen; the width of the enclosure shall not be less than 20% of the length of the longest specimen.
 - b. For each additional specimen, increase the perimeter by 25%.
 - 3. The minimum height shall be 6.5 feet tall.
 - 4. Environmental enriching furniture such as varied substrates, logs, and rocks should be available. All species should have access to a water tub or pool large enough for complete submersion.
 - iii. Enclosure sizes for all snakes (other than large constrictors) shall be based upon the length of the longest specimen in the enclosure.
 - 1. For up to two specimens, an enclosure having a perimeter at least as great as the length of the longest specimen; the width of the enclosure shall not be less than 20% of the length of the longest specimen. For each additional specimen, increase perimeter by 10%.

- b. Lizards
 - i. The following species are considered to be "large lizards:"
 - 1. Crocodilians
 - 2. Varanus subspecies of monitors (3 species)
 - 3. Komodo dragon (varanus komodoensis)
 - 4. Crocodile monitor Varanus salvadorii
 - 5. Water monitor Varanus salvator
 - 6. Nile Monitor Varanus niloticus
 - ii. Enclosures for large lizards shall be built of reinforced brick or steel walls, with top and doors of steel or half-inch $(\frac{1}{2})$ or thicker plywood on a 2"x4" (wooden stud) or better framework.
 - 1. Exhibit front or viewing area must use laminated glass, acrylic, or double paned glass (where the glass on the viewer's side is laminated or tempered).
 - a. Glass for viewing area can be single paned tempered glass when an escape proof exhibit is kept behind the glass: an example would be a glass aquarium behind a viewing area.
 - 2. The minimum size of the exhibit shall be based upon the length of the longest specimen in the enclosure and shall allow for the thorough cleaning of the container or exhibit by staff.
 - a. Lizards 25 to 36 inches in length
 - i. For one or two lizards an enclosure 36 inches by 12 inches, 16 inches high. For each additional lizard, increase enclosure size by 10 inches or 25 percent in length and width.
 - b. Lizards 37 inches to 6 feet in length
 - i. For one or two lizards, an enclosure 6 feet by 3 feet,
 4 feet high. For each additional lizard, increase the enclosure by 25 percent of the original floor area.
 - c. Lizards over 6 feet in length
 - i. For one or two lizards, an enclosure 9 feet by 6 feet,4.5 feet high. For each additional lizard, increase the enclosure by 25 percent of original floor area.
 - 3. Environmental enriching furniture such as varied substrates, logs, and rocks should be available. All species should have access to a water tub or pool large enough for complete submersion.
 - 4. Enclosures should allow for all the normal activities of the species (e.g. swimming, climbing, burrowing, running, hiding, and, especially, sunning).
 - 5. This environment should also be sufficiently environmentally enriched to exceed the minimum husbandry requirements for sustained long life and reproduction, if desired, of the species.
 - iii. Enclosures for all other lizards should be an environment large enough to allow for all the normal activities of the species (e.g. swimming, climbing, burrowing, running, hiding, and, especially, sunning).
 - 1. This environment should also be sufficiently environmentally enriched to exceed the minimum husbandry requirements for sustained long life and reproduction, if desired, of the species.

- 2. When more than one animal occupies the same unit, additional space and environmental enrichments should be added in a direct ratio to the number of individuals, their ages, sexes, and needs demand.
- c. Turtles (other than tortoises and box turtles)
 - i. In addition to requirements of this section, each enclosure shall have a pool of water that will allow for the immersion of the largest turtle. For all turtles with soft carapaces, a non-abrasive pool bottom is required.
 - ii. Enclosure sizes for all turtles shall be based upon the size of the largest specimen in the enclosure.
 - 1. For one or two turtles, an enclosure with an area at least five times the shell length, by two times the shell width of the largest turtle. The pool area shall equal no less than two times the shell width, by two times the shell length of the largest turtle. A dry resting area equal to the size of the shell of the largest turtle shall be provided. For each additional specimen, increase resting and pool area by 25 percent of the original floor area.
- d. Tortoises and box turtles
 - i. Enclosure sizes for all tortoises and box turtles shall be based upon the size of the largest specimen in the enclosures.
 - 1. For one or two tortoises or box turtles, an enclosure with a floor area 10 times the shell size of the largest specimen in the enclosure. For additional specimens, the floor area available for movement shall be twice the floor area covered by the combined body mass of all animals in the enclosure.
- e. Crocodilians
 - i. For one animal, an enclosure of sufficient size to permit moving and turning both on a dry area and in a pool of water, the water being of sufficient depth to permit submersion. For additional animals, the combined area covered by all their bodies shall not exceed 50 percent of enclosure area.
- 2. Amphibians
 - a. Aquatic amphibians shall be kept in water filled tanks or aquaria. Semiaquatic and terrestrial amphibians shall be kept in enclosures, tanks or aquaria with a water area and a dry area that shall permit moving and turning. Both the dry area and the water area shall provide room to accommodate all animals in the enclosure simultaneously.

VI. Possession, Exhibition and Caging Venomous Reptiles:

Venomous reptiles shall be kept enclosed in cases, pits, or enclosures of the following specifications:

- 1. Enclosure may be constructed of a variety of materials, all or any of which must securely, effectively, and safely contain the animal. Enclosures and doors to enclosures shall be sealed.
 - a. Enclosures shall be securely locked with two separate locking mechanisms to lessen unauthorized intrusion, keeper error, or lock failure, through one of two methods:
 - i. The immediate door to the enclosure shall have two separate latches, clamps, slide bolts, or similar, each with its own key-required lock.
 - ii. The immediate door to the enclosure shall have at least one latch, clamp, slide bolt, or similar, with at least one having its own key-required lock, and the access door or gate to the service area shall have its own key-required lock.
 - b. Enclosures which include glass (such as for viewing) must use safety or laminated glass, acrylic or double-paned glass (where as glass on the viewer's side is laminated or tempered).
 - i. Glass for viewing area can be single paned tempered glass when an escape proof exhibit is kept behind the glass: an example would be a glass aquarium behind a viewing area.
- 2. A room may contain venomous reptiles in enclosures that are not locked provided that such a room is locked with two separate key-required locking mechanisms to prevent unauthorized intrusion, is inaccessible to unauthorized personnel, and is constructed and maintained as to be escape-proof.
- 3. Outdoor open-topped enclosures
 - a. For venomous reptiles native to the United States:
 - i. The floors of outdoor enclosures shall be of concrete or masonry construction at least two inches in thickness. Sides shall be of similar construction, at least eight inches in thickness, or strength equivalent, and extend no less than four feet above the highest accessible point of the enclosure. Outdoor enclosures need not have concrete or masonry flooring if the enclosure meets the following additional specifications:
 - 1. The enclosure shall have concrete or masonry walls, at least eight inches in thickness, or strength equivalent.
 - 2. The enclosure shall have footers made of concrete, or strength equivalent, extending not less than three feet below the grade level.
 - 3. The corners of enclosure shall be designed or guarded to prevent the escape of reptiles by climbing.
 - 4. All landscaping of the enclosure shall be arranged to insure that vegetation or other structures do not allow for the escape of reptiles.
 - ii. Entrance doors shall be kept securely locked on all outdoor enclosures to prevent escape and unauthorized intrusion and the enclosure shall be

equipped with barriers to prevent visitors from falling into enclosures that are constructed below ground level or viewing level.

- b. For venomous reptile species not native to the United States:
 - i. In addition to the requirements for venomous reptiles native to the United States, all outdoor enclosures shall be topped with close-meshed wire or an equivalent barrier to provide additional security.
- c. All outdoor, open top enclosures shall have two separate key-required locking mechanisms to prevent unauthorized intrusion, is inaccessible to unauthorized personnel, and is constructed and maintained as to be escape-proof.
- 4. Transportation
 - a. Venomous reptiles may be transported only in the following fashion:
 - i. They shall be placed in a stout, closely woven cloth sack, tied or otherwise secured and, then, double bagged in the same fashion.
 - ii. This sack shall then be placed in a container which shall be of strong material, such as solid plywood sheets, metal or thick plastic containers constructed to withstand crushing and physical abuse.
 - 1. Air holes should be less than 1/3 the diameter of the smallest reptile contained within and shall be screened inside with quarter inch (1/4") or smaller wire.
 - 2. Boxes containing venomous snakes or lizards shall be prominently labeled "DANGER Venomous Reptiles."
- 5. Facilities housing, owning, or otherwise maintaining venomous reptiles shall have proper "snake bite" protocols in place.
 - a. Sufficient protocols must cover every venomous species in the collection, take in to account multiple specimens of the same species, and deal with situations that may include multiple victims or multiple bites to one victim.
 - b. Sufficient protocols should be consulted through a medical doctor and collaborate with at least one local hospital that offers emergency services.
 - c. A sufficient protocol shall be properly implemented by following three steps:
 - i. Training: all staff authorized to work with (both directly and indirectly) venomous specimens, as well as at least one other person, shall be fully trained on the protocol.
 - ii. Written: the protocol must be written down and included as part of the required duties of all staff authorized to work with (both directly and indirectly) venomous specimens and prominently posted in the room or area containing the venomous specimens.
 - iii. Supervision: the owner or manager must ensure adherence to the protocol through supervision or other appropriate means, to include enforcement.
- 6. All enclosure access points, containers, sacks, and any other containment for venomous specimens shall have venomous labels in place.
- 7. Specimens considered to be in an "off public display" situation must be maintained in manners consistent with the above standards.

VII. Exceptions to Standard Caging Requirements for Captive Wildlife.

Wildlife may be temporarily housed in enclosures smaller than the sizes set forth above only under the following circumstances:

- 1. For transport and for performing and non-performing animals as approved by ZAA.
- 2. Wildlife being held for sale by those persons properly licensed or for veterinary care or quarantine may be temporarily housed in smaller enclosures for a period not to exceed 60 days. With written notification to ZAA, this period may be extended in circumstances where a licensed veterinarian has certified that a longer holding period is medically necessary in the interests of the health, safety and welfare of the subject animals or the public. Medical records concerning all animals for which an extension of the 60-day period is obtained shall be maintained at the facility and shall be made available for inspection, upon request, by ZAA. The caging or enclosure of all wildlife temporarily held under this section shall not be smaller than that required for the caged animal to stand up, lie down, and turn around without touching the sides of the enclosure or another animal. All wildlife thus housed shall be permanently marked or their enclosures shall be permanently marked, so as to be traceable to written records indicating the date the wildlife was placed in temporary holding. Such records shall be maintained and made available for inspection by ZAA.
- 3. The standard caging requirements shall not apply to facilities possessing ratites (ostriches, rheas, emus, and cassowaries) for propagation purposes only and not for public exhibition.
- 4. Newborn and juvenile mammals may be temporarily kept in enclosures below the standard caging requirements and are exempted from the land requirements and structural strength requirements as follows:
 - a. Newborn mammals may be kept in incubation and rearing facilities. Nursing young may be maintained with their parents with no increase in required enclosure size for the adult animal for up to twelve weeks, provided that documentation is available to show the age of the young. Such time may be extended with a veterinarian's statement, showing that such size enclosure is required for the continued health and welfare of the animals until a certain date.
 - b. Juvenile mammals may be kept in enclosures that do not meet or exceed the size specification in subsection (2) of this section provided that:
 - i. Written documentation is available to verify the age of the animal.
 - ii. The animal is marked or otherwise identifiable.
 - iii. The animal shall be provided space for exercise on a daily basis.
 - iv. Enclosures that meet the standard caging requirements shall be provided for Class I and Class II carnivores when they reach 25 pounds or six months of age, whichever comes first. Class III carnivores shall be provided enclosures that meet the standard caging requirements at six months of age. Class I, II, and III primates shall be provided enclosures that meet standard caging requirements at twelve (12) months of age.
- 5. Hatchling/fledgling birds and newborn reptiles and amphibians may be held in enclosures that allow for normal postural movements and social adjustments that ensure the health and sanitary needs of the animals.

- 6. Birds held temporarily for exhibit only and not for sale, may be kept in show enclosures, provided that, such birds have sufficient space for perching without touching the sides, top, or bottom of the enclosure and the health and sanitary needs of the birds are met. Water shall be available in the show enclosures at all times.
- 7. Reptiles and amphibians held temporarily for herptile shows, expositions, and exhibits may be kept in enclosures that allow for normal postural movements and social adjustments and that ensure the health and sanitary needs of the animals.
- 8. Enclosures for mobility impaired animals shall meet standard caging requirements, unless it can be demonstrated that such enclosure, or its required accessories, are detrimental to the health or welfare of the animal. In such cases, written documentation by a veterinarian confirming the need for such exemption shall be maintained by the permittee and made available to ZAA upon request.
- 9. Mammals held temporarily for shows, expositions, and exhibits may be kept in enclosures that allow for normal postural movements and social adjustments and that ensure the health and sanitary needs of the animals.

VIII. Transportation Requirements for Wildlife; Caging Requirements for Performing and Non-Performing Animals.

- 1. General requirements for transporting wildlife in vehicles. No vehicle shall be used in transporting any wildlife except as follows:
 - a. Vehicles shall be equipped to provide fresh air without injurious drafts and adequate protection from the elements to all animals.
 - b. The animal traveling area shall be free of engine exhaust fumes.
 - c. Fecal and food wastes shall be removed from the animal quarters as necessary.
 - d. Animal enclosures shall have openings for emergency removal of wildlife.
 - e. Wildlife in transport shall be protected from extremes in temperature that could be detrimental to the health and welfare of the animal.
 - f. Wildlife transported in the same enclosure area shall be in compatible groups.
 - g. The animal's enclosure shall be of sufficient strength and security to prevent escape. The enclosure shall be large enough to ensure that each specimen has sufficient space to turn, stand erect, and lie naturally. Provided, however that certain species may be restricted in their movements according to professionally acceptable standards when such freedom of movement would constitute a danger to the animals, their handlers, or other persons.
 - h. Elephants shall be tethered during transport (except nursing young).
 - i. Wildlife shall not be placed in enclosures over other specimens unless each enclosure is fitted with a floor which prevents excreta from entering lower enclosures.
 - j. Wildlife shall be watered twice daily and fed daily.
- 2. Mobile Exhibits -- Performing Animals.
 - a. No mobile exhibit shall utilize the performing animal caging dimensions prior to approval by ZAA. To obtain such approval, the permittee shall provide written schedules to ZAA of wildlife exercise intervals and scheduled performances. The exercise intervals shall be of such frequency, intensity and duration as to provide for the health and welfare of the animal over an extended period, provided that the animals shall not be caged without exercise or performances for more than a 72-hour period. Performing and exercise information shall be verifiable by ZAA through inspections.
 - b. Performing animals used in mobile exhibits shall not be confined in any enclosure that is smaller in dimension; or is not equipped as follows:
 - i. Class I and Class II Carnivores (i.e., lions, tigers, jaguars, leopards, pumas, bears, hyenas, wolves)
 - 1. For a single animal, an enclosure which shall permit the animal to turn or stand on all-fours with head clearance, and confined in such a manner so that no animal can injure another. For Class I animals, enclosures shall be constructed of steel, case hardened aluminum, alloy, or strength equivalent material. If bars are used, bars shall be spaced no more than 2 inches apart. For Class II animals, enclosure construction shall not be less than 11 1/2 gauge chain link or strength equivalent material. Enclosures of Class I and Class II animals that the public can access shall be equipped with a physical barrier, which is made of a material to prevent the public

from coming in contact with the animals. All enclosures shall have secure locking devices.

- ii. Primates, Class I and Class II animals.
 - 1. For a single animal, an enclosure which shall permit the animal to turn and stand erect with head clearance, confined in such a manner so that no animal can injure another. For Class I animals, enclosures shall be constructed of steel, case hardened aluminum, alloy or strength equivalent material. If bars are used, bars shall be spaced no more than 2 inches apart. For Class II animals, enclosure construction shall not be less than 11 1/2 gauge chain link or strength equivalent material. Enclosures of Class I and Class II animals that the public can access, shall be equipped with a physical barrier, which is made of a material to prevent the public from coming in contact with the animals. All enclosures shall have secure locking devices.
- iii. Elephants:
 - 1. See Elephant Husbandry Resource Guide.
- iv. Class III Animals.
 - 1. For a single animal, an enclosure which shall permit the animal to turn and stand on all fours, or stand erect, with head clearance, confined in such a manner so that no animal can injure another.
 - 2. For performing wildlife possessed by traveling zoos and other traveling acts, wildlife can be housed in enclosures that do not meet or exceed the specifications as provided by ZAA.
- 3. Mobile Exhibits -- Non-Performing Animals.
 - a. Non-performing wildlife in mobile exhibits shall not be confined in any enclosure that is smaller in dimension or is not equipped as follows:
 - i. Class I and Class II Carnivores (i.e., lions, tigers, jaguars, leopards, pumas, bears, hyenas, wolves).
 - For a single animal, the enclosure length shall be double the body length (excluding tail), with a width that is equal to the body length, and a height that permits the animal to stand on all-fours with head clearance. For two or more animals kept together, add one-third more enclosure length for each additional animal. For Class I animals, enclosures shall be constructed of steel, case hardened aluminum, alloy or strength equivalent material. If bars are used, bars shall be spaced no more than 2 inches apart. For Class II animals, enclosure construction shall not be less than 11 1/2 gauge chain link or strength equivalent material. Enclosures of Class I and Class II animals that the public can access, shall be equipped with a physical barrier, which is made of a material to prevent the public from coming in contact with the animals. All enclosures shall have secure locking devices.
 - ii. Primates.
 - 1. All enclosures shall be well ventilated and shall have secure locking devices. Each enclosure shall have an overhead pull bar and a seat. For two or more animals kept together, add one-third

more enclosure length for each additional animal. For Class I animals, enclosures shall be constructed of steel, case hardened aluminum, alloy or strength equivalent material. If bars are used, bars shall be spaced no more than 2 inches apart. For Class II animals, enclosure construction shall not be less than 11 1/2 gauge chain link or strength equivalent material. Enclosures of Class I and Class II animals that the public can access, shall be equipped with a physical barrier, which is made of a material to prevent the public from coming in contact with the animals.

- 2. Gorillas.
 - a. For a single animal, an enclosure 8 feet by 8 feet, with a height at least 2 feet over the standing height of the animal.
- 3. Orangutan.
 - a. For a single animal, an enclosure 7 feet by 7 feet, with a height at least two feet over standing height of the animal.
- 4. Adult chimpanzee.
 - a. For a single animal, an enclosure 6 1/2 feet by 6 1/2 feet, with a height at least two feet over standing height of the animal.
- 5. Chimpanzees up to 50 pounds and macaques.
 - a. For a single animal, an enclosure 5 feet by 5 feet, with a height at least two feet over standing height of the animal.
- iii. Class III animals (except reptiles).
 - 1. For a single animal, the enclosure length shall be double the body length (excluding tail), with a width that is equal to the body length, and a height that will permit the animal to stand on all fours, or stand erect, with head clearance. For two or more animals kept together, add one third more enclosure length for each additional animal.
- b. Time limitation on smaller travel caging allowed for housing non-performing animals.
 - i. For non-performing wildlife possessed by traveling zoos and other traveling acts, wildlife shall be housed in standard enclosure specifications as provided by ZAA whenever such wildlife is present in such travel enclosures for more than 45 days. Non-performing wildlife shall not be kept in enclosures below the size required by the standard caging requirements for more than a total of 45 days out of each 90 day period. Such mobile exhibits shall provide an itinerary of planned exhibition times and locations with annual renewal applications.

IX. Aquatic & Marine Wildlife.

Aquatic and marine wildlife species are categorized in to the appropriate Classes (Class I, II, & III) in the *Categories of Captive Wildlife* section.

- 1. Documents and Policies
 - a. The institution should clearly define its Marine Mammal goals and purpose (show, exhibit, breeding, or all three. Each definition has different requirements which affects housing, staffing, and management)
 - b. Explanation: The document should include a statement of justification for all species and individuals in the institution's planned collection. The document should consider such criteria as:
 - i. Status in the wild
 - ii. Status in zoos and aquariums
 - iii. Existence and priorities of cooperative management programs
 - iv. Ability to maintain the species in both a physically and psychologically healthy environment
 - v. Exhibit value
 - vi. Exhibit suitability (may include climatic considerations)
 - vii. Need for husbandry and other research recommendations
- 2. Water Quality
 - a. The institution must have a regular program of monitoring water quality for collections of fish, pinnipeds, cetaceans, and other aquatic animals. A written record must be maintained to document long-term water quality results and chemical additions.
 - b. 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 collection. Additionally, high quality water enhances animal health programs instituted for aquatic collections.
- 3. Transport
 - a. 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 local, state, and federal laws must be adhered to.
 - b. Planning and coordination for animal transport requires good communication among all affected 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.
 - c. 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.

- 4. Commercial Collectors
 - a. Institutions dealing with collectors of aquatic animals must determine that the collection procedures used do not cause environmental abuse (e.g., cyanide poisoning and reef blasting).
 - b. Explanation: The institution is encouraged to pursue and develop environmentally friendly and responsible working relationships with all of its collection suppliers. 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.
 - c. 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. If your institution is an aquarium or has significant aquarium facilities, include a detailed description of how your institution determines that the collection procedures used by outside collectors are not causing environmental damage (reef blasting, cyanide poisoning, etc.).
- 5. Equipment
 - a. Critical life-support systems for the animal collection, 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 should be under a preventative maintenance program as evidenced through a recordkeeping 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.
 - b. 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.
 - c. Alarms for fire, security, and other safety alerts must be in place and in working order. Routine maintenance records should be kept, detailing safety checks of the equipment. Electrical service in all wet environments, aquatic exhibits, and associated service areas must be equipped with ground fault circuit interrupters (GFI).
- 6. Dangerous Animals
 - a. 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.
 - b. Explanation: It is the responsibility of the institution to ensure 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 formally documented relationships.
 - c. All areas housing venomous animals, or animals which pose a serious threat of catastrophic injury and/or death (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.

d. Institutions maintaining potentially dangerous animals (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.

7. Fish

- a. Quarantine General
 - i. 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. Written, formal procedures for quarantine must be available and familiar to all staff working with quarantined animals.
 - ii. Quarantine, hospital, and isolation areas should be in compliance with standards/guidelines adopted by the ZAA.
 - iii. Quarantine standards for other zoo and aquarium animals cannot always be applied to fish, and adaptations must be made to the proposed procedures as they apply to fish populations. Proper and appropriate fish quarantine is a vital component of any successful health management program for fish. Quarantine procedures must be tailored to individual species and require greater variation than quarantine for other zoo and aquarium animals. It is in the interest of accredited institutions to carry out quarantine procedures that are both effective and practical, leading to improved animal health. Fish are usually acquired as populations, not as individuals, and individual identity may be impractical to establish. Few aquariums have the facilities and/or space to properly maintain large fish in separate life-support systems, making individual quarantine of these specimens difficult. Aquariums may operate as open or semi-open systems, and animals acquired from the surrounding waters of these institutions may not benefit from rigid quarantine procedures due to constant introduction of potential disease organisms. Veterinarians may be part of the team supervising the quarantine, but the institution should appoint the staff it feels has the best expertise to supervise and operate the quarantine program. It is appropriate to note that state and federal hatcheries do not often employ veterinarians, yet have well-established and internationally recognized fish health programs of which quarantine is an important factor.
- b. Quarantine Specifics
 - i. Where appropriate, separate life-support systems (LSS) with the ability to quarantine fishes should exist. The LSS should be operated in such a way as to preclude disease transfer from one system to another and/or

introduction into natural waters. Quarantine tanks should have viewing that is adequate to observe the fish for behavior and signs of pathology; the LSS should be adequate to maintain the health of the quarantine population. If an aquarium does not have a separate LSS, it should have the ability to divert flow through the quarantine systems, bypass the common filter, and discharge the water. Disinfection of the discharge water prior to release is advisable. In addition, discharge of this water must comply with federal, state, and local environmental regulations.

- ii. Quarantine Length
 - 1. A quarantine period of 30 days is an adequate standard; however, it must be recognized that certain species or disease problems may require more or less time.
- iii. Quarantine Personnel
 - 1. The institution will appoint the staff it feels has the most expertise to supervise and operate the quarantine program. All equipment (boots, nets, cleaning equipment, etc.) should be confined to the quarantine area. Access to and from the area should be restricted so as to minimize cross-contamination. Precautions must be taken to minimize the risk of zoonotic disease to personnel.
- iv. Quarantine Protocol
 - 1. Each institution must have a written quarantine protocol. During quarantine, appropriate prophylactic measures should be instituted. Complete medical records should be maintained for the animals during the quarantine period. Fish that die during quarantine, or a representative sample thereof, should be necropsied. Care must be taken that all equipment used with quarantined fish is separate from other systems. (If this is not possible, adequate disinfection procedures must be employed before equipment is used for post-quarantine fish.)
- v. Required Quarantine Procedures
 - 1. Because of the great diversity of fish, required quarantine procedures are difficult to establish. The institution should follow the guidelines stated in the above sections to fashion a quarantine program best suited to their needs.
- 8. Fish & Aquatic Tanks
 - a. 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.
- 9. Diving
 - a. Institutions which utilize underwater diving with compressed air (SCUBA or surface supplied) as a part of regular operations and/or maintenance shall meet minimal operational safety standards for such diving. Such institutions must comply with the applicable laws for their location and size of institution and should follow the standards mandated by the Occupational Safety and Health Administration (OSHA) for commercial diving.

b. Alternatively, such institutions may elect to claim an exemption from the OSHA standards for "scientific diving". If such an exemption is claimed, the institution must operate under the auspices of a diving manual commensurate with the consensual standards of the scientific diving community (modeled after or approved by the American Academy of Underwater Sciences [AAUS]), and under the control of a diving safety board or committee which has full Institutional authority to ensure compliance with diving safety standards.

10. Standards

a. ZAA has adopted and endorsed the manuals and protocols as minimum required standards for certain fish and marine mammal species. These will be enforced along with all other standards. See Appendix B for manuals and protocols.

As always, these standards will be updated as new information becomes available.

X. Euthanasia.

ZAA has adopted AVMA euthanasia standards as our protocol on euthanasia. A copy can be obtained from the ZAA office or downloaded from this web site. <u>https://www.avma.org/KB/Policies/Documents/euthanasia.pdf</u>

XI. Risk Management

Facilities shall develop, implement, and enforce sufficient risk management practices and policies that include all relevant aspects of the facility.

Facilities meeting any of the following criteria must have, at least, the associated procedure:

- 1. Owns, houses, or otherwise maintains live specimens (regardless of public viewings)
 - a. Animal escape procedure
 - i. Must include means of resolving the escaped animal situation
 - ii. Include specifics for facilities containing Class I and/or Class II species
 - b. Other
- 2. Open to the public (public visit the facility)
 - a. Accident (animal and non-animal) procedure
 - b. Incidents involving an animal or animal exhibit (such as, if a person enters an exhibit)
 - c. Other
- 3. Subjected to unpredictable or devastating acts of nature (such as tornadoes, hurricanes, flooding, fires, etc.)
 - a. Appropriate protocol to plan for, exist through, and recuperate after (animal related)
 - b. Other
- 4. Employs staff
 - a. Training manuals and protocols (to include safety requirements)
 - b. Other
- 5. Other
 - a. Trespassers
 - b. Security
 - c. Burglary
 - d. General Safety
 - e. Other

Sufficient protocols must cover all applicable aspects of the facility.

- 1. A sufficient protocol shall be properly implemented by following three steps:
 - a. Training: all relevant staff shall be fully trained on the protocol.
 - b. Written: the protocol must be written down and included as part of the required duties of all relevant staff and prominently posted in the relevant area.
 - c. Supervision: the owner or manager must ensure adherence to the protocol through supervision or other appropriate means, to include enforcement.

XII. Closing.

These standards are dynamic in nature and will be amended as needed to meet or keep up with newly identified or recognized animal keeping standards.

Owners and maintainers of captive wildlife are encouraged to notify ZAA of any innovative programs that help establish a system of better care for animal populations.

Statement of Intent

The ZAA Animal Care & Enclosure Standards detailed above are intended to provide for a safe and healthy environment for animals and people. Obvious typographical or other grammatical errors are not a means or justification for deviating from the intended meaning or requirement.

If any mistakes or omissions are noted in these standards please advise the ZAA Board of Directors or the Accreditation Chairman as soon as possible so they can be corrected.

XIII. Appendix A: Professional Animal Presentation Standards

These standards are designed to guide the presentation of all ZAA members and ZAA accredited facility staff working with tractable, trained, and contact animals in venues both inside and outside of their immediate holding areas. These standards apply to all ZAA member facilities. It is the responsibility of all ZAA members and those working at ZAA accredited facilities who train, handle and present animals to be familiar with this document. This is a living document and will be reviewed and amended by the ZAA Board as deemed appropriate.

These standards were developed with all applicable guidelines and requirements of the following US law and US governmental agencies: USDA, Center for Disease Control, Food and Drug Administration, Fish and Wildlife Service, USDA (Animal Welfare Act), Marine Mammal Protection Act. Additional restrictions and provisions may be required depending upon local city, county or state law. It is incumbent upon each facility to know and abide by local city, county and state law.

Each ZAA accredited facility shall have a written SOP (Standard Operating Procedure) for protecting the health and safety of the animal participants as well as for protecting safety of the staff and audience during interpretative programs.

The SOP must include observance of all ZAA standards, USDA AWA standards, USF&W standards, local state, county, and city laws and ordinances. SOP'S will address and include the following :

Section I. ANIMALS

1.1 General Health:

a. Health Status:

Evaluation of animal health. Animals exhibiting obvious signs of illness or injury will not be used for presentations.

1. Guidelines for when an animal should be quarantined.

b. Husbandry Schedule:

- 1. Schedule for daily feed and watering of animals.
- 2. Schedule for daily cleaning and inspection of animal exhibits.
- 3. Safety guidelines for animal ensuring containment.
- 2. Guidelines and restrictions for public feeding of animals.

1.2 Behavior - General:

Training should be based on positive reinforcement.

a. Evaluation of Animal Disposition:

- 1. Recognizing animal stress.
- 2. Avoiding aggression (redirection).
- 3. Making animal substitutions.

b. Operant Conditioning:

- 1. Facility approved training plans and program.
- 2. Documentation of training records.

1.3 Control:

a. Animal Containment:

1. Guidelines for safe and proper crating, trailer & transport of animals. For safety of both the animals and transporter.

b. Animal Restraint: (attending to animals during transport and handling).

- 1. Who is approved and responsible for primary control/restraint?
- 2. Guidelines and duties of back-up handlers.
- 3. Equipment needed for safe handling and restraint (leashes, jesses etc.).

c. Exhibit Barriers/Safety

1. Guidelines for ensuring public safety during public feedings to include barrier and stanchion plan to separate animals from public during programs. Guidelines must observe all ZAA standards, USDA AWA standards, USF&W standards, local state, county, and city laws and ordinances.

1.4 Animal/Handler Interactions

a. Professional Image:

- 1. Facility approved appearance and uniform guidelines.
- 2. Facility approved "talking points" and messaging.
- 3. Guidelines for staff and volunteers about what language to use/avoid.

1.5 Animal Ambassadors:

- a. Animal Acquisition
- b. Animal Disposition

Section II. STAFF

2.1 Staff Eligibility:

a. Animal Handling experience.

- 1. Minimum criteria.
- 2. Approval process.
- 3. Documentation of staff training and approval.

b. Species specific animal training experience.

- 1. Minimum criteria.
- 2. Approval process.
- 3. Documentation of staff training and approval.

c. Interpretive experience.

d. Demonstrates an understanding of customer service.

e. Media talking points and experience.

Section III. TRANSPORTATION

3.1 Program Animal away from primary enclosure.

- a. Approved vehicle(s) for transport.
- b. Emergency Plans.
- c. Co-mingling Policy.
 - 1. Co-mingling with animal handlers and their animals from another facility.
- c. Hand Sanitizers
 - 1. Providing hand washing or sanitizer following hands-on contact with animals.

Section IV. PUBLIC CONTACT

4.1 Public Touching/Handling Animals:

- a. Appropriate circumstances
- b. Required animal handler control
- c. Public feeding procedure
- d. Interpretive message
- e. Photo opportunity procedure
- f. Public hand sanitizing

Section V. MEDIA

5.1 Media Appearances:

a. Identify facility PIO (Public Information Officer)

1. May be Marketing, Management or experienced animal handler.

b. Procedure for assessing physical set-up and situation.

- 1. Physical set-up.
- 2. Interviewer and crew proximity.
- 3. Contact restrictions.

c. Crisis Management

- 1. POI
- 2. Talking points

d. Maintain Professional Image

- 1. Dignity of Animal participants
- 2. Appearance
- 3. Language

XIV. Appendix B: Manuals, Protocols, and Husbandry Guidelines

- 1. Standards
 - a. ZAA has adopted and/or endorsed the following manuals and protocols as minimum required standards. These will be enforced along with all other standards.

The Elasmobranch Husbandry Manual: Captive Care of Sharks, Rays and their Relatives The Shark supplement – special edition #2

Elephant Husbandry Resource Guide, International Elephant Foundation

AVMA euthanasia standards : https://www.avma.org/KB/Policies/Documents/euthanasia.pdf

2. Husbandry Guidelines

European Association of Aquatic Mammals: Standards and Guidelines for the management of bottlenose dolphins

Husbandry Manual for California Sea Lion: Western Sydney Institute of TAFE, Richmond - Compiled by Melissa Grainger

Polar Bear International: Polar Bear Nutrition Guideline

XV. Appendix C: ZAA Administrative Policies

- 1. The ZAA Animal Care & Enclosure Standards and Related Policies are minimum standards and ZAA accredited facilities should strive to exceed these standards. Specific alternatives to the standards may be allowed by ZAA on a case by case basis.
- 2. Animals are listed in Class I, II and III categories for the purposes of establishing guidelines on perimeter fencing, caging and other requirements, not for the purposes of establishing whether they are or are not a potential danger to the public.
- 3. ZAA does not support the keeping of Class I wildlife as pets. Class I wildlife are to be maintained solely in breeding or exhibition facilities. ZAA is against having Class I animals and non-human primates as pets.

Parental care in primates is a learned behavior; therefore primate young should be kept with the parents until weaning and in social groups as much as possible. For this reason, primates shall not be pulled from their mothers unless the life of the baby is at stake.

- 4. Exotic animals in mixed herds or flocks may hybridize from time to time. However, breeding hybrids is not encouraged and purposeful breeding of hybrids is strongly condemned by ZAA.
- 5. ZAA accredited facilities must comply with all applicable laws and regulations.
- 6. Currently accredited facilities will be required to comply with any changes in the standards for re-accreditation. If there is an established risk factor, changes in the standards may need to be implemented within a given time frame.
- 7. If an accredited facility, which has been approved with only Class III animals, acquires a Class I or II animal or has been approved with only Class III and II animals, and acquired Class I animals, they must be in compliance with the accreditation standards prior to bringing in the animal. The facility must notify the accreditation chairman prior to the acquisition.
- 8. If the operations, practices, and/or offerings at the currently accredited facility change or grow to such a degree that the institution is now subjected to standards not previously applicable, the facility is obligated to notify the Accreditation Chairman in writing of the change and implement compliant status before the change or update is effective. *Example: Facilities that undergo major operations changes, i.e., a facility that has been previously accredited as a breeding or educational facility that was not open to the public shifts its operations and begins to allow public visitation, must notify the Accreditation Chairman prior to these changes to insure the facility meets the additional requirements for public visitation such as public barriers.*
- 9. New facility members (non-accredited) must meet accreditation standards for Class I animals.

- 10. Non-accredited facilities must reach accredited status within five years of the membership approval. If not met within five years, the facility may appeal to the board.
- 11. If your facility membership dues have lapsed and you are accredited, your accreditation will also lapse and you will have 30 days upon expiration to reapply for accreditation before you lose your ZAA accreditation. Your dues must be current to maintain your ZAA accreditation.
- 12. Facility members are required to have at least one professional member connected with the facility.
- 13. Only ZAA accredited facilities may use the ZAA logo on their website or display at their facility and people who do this, who are not accredited, are subject to disciplinary action which may include ejection from the organization.
- 14. In the case of a change in ownership or the installation of a new director <u>and</u> upper management, the facility must re-apply for accreditation within six months of the change.
- 15. ZAA does not support the breeding or acquisition of Class I animals for the sole purpose of photo opportunities.
- 16. Policy on Usage of Class I Carnivores and All Primates for Public Encounters: No ZAA professional member or accredited facility shall participate in intentionally supplying or acquiring non-domestic baby or juvenile animals to be used on a temporary basis for brief encounters and/or photos with the general public. ZAA does acknowledge that there may be circumstances in which a facility can present a baby, juvenile or program animal to the public for photos and encounters in a reasonable, but intermittent manner. Those animals would be a part of the facility's management collection plan and would not be part of a revolving door business of animal encounters/photos for a fee.
- 17. ZAA's position on de-clawing cats specifically for the purpose of handling is not condoned as an acceptable husbandry technique. ZAA does however recognize that occasional medical necessities may arise in which de-clawing one or more digits on an animal is required for the purpose of health of the animal and is acceptable.
- 18. An Institutional Collection Plan (ICP) is not mandatory, but it is strongly encouraged.
- 19. Facilities that are accredited and move their operations or parts of their operation including collection animals to a new location shall notify the Accreditation Chairman in writing, stating the physical address of the new location, prior to the physical move. Existing accreditation, regardless of term of cycle shall remain effective for 6 months from the date of change of location notification.

A new accreditation inspection shall be conducted within that 6 month period of the new location to attain institutional accreditation.

Where the relocation transitions for periods longer than 6 months the facility would have to maintain membership with facilities at 2 locations both of which would have to be accredited.

Updated 29 December 2015