

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA

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RECOMMENDATIONS ON DEFINITIONS FOR *IN SITU* CONSERVATION

This document has been submitted by the United States of America at the request of the Association of Zoos and Aquariums in relation to agenda item 18\*.

The Association of Zoos and Aquariums (AZA) is a non-profit, non-governmental organization (NGO) dedicated to the advancement of accredited zoos and aquariums in the areas of animal care and husbandry, conservation, education, science and recreation. With outreach programs that touch over 186 million visitors annually in 231 accredited zoos and aquariums (213 institutions located in US, with others in Canada, Mexico, Bermuda, Bahamas, Hong Kong, Colombia, Argentina, Singapore) and a leading role in wildlife science, zoos and aquariums accredited by the AZA are increasingly important contributors to the conservation of wildlife and natural habitats. An integral component of AZA is participation in conservation by each zoo and aquarium.

AZA fully supports Resolution Conf. 11.20 (Rev.CoP17) and strongly supports *in situ* conservation. AZA zoos and aquariums are agents of conservation. AZA provides skills and funding for wildlife field conservation across the globe. In 2015 alone, AZA zoos and aquariums provided more than \$186 million for wildlife conservation field programs for over 775 species in over 120 countries, including but not limited to, supporting anti-poaching efforts, fighting illegal trade and trafficking, basic research, zoological health and veterinary expertise, reintroduction programs, confiscation initiatives, and reducing human/elephant conflict.

AZA actively tracks its members' contributions to *in situ* conservation. AZA defines the term *in situ* conservation as directly contributing to the long-term survival of species in natural ecosystems and habitats. The following would be considered *in situ* conservation according to AZA's definition:

“1. Direct Action

- a. Field work. Direct costs of institution-sponsored field work including research, community-based programs, population management, translocations, reintroductions, park management, securing of additional park space.
- b. Species Recovery. The direct cost of food, housing, veterinary care, and husbandry of animals in captive breeding programs where the animals are slated to be reintroduced back into the wild within a defined period of time in accordance with an existing recovery program. This includes, but is not limited to:
  - i. The rehabilitation of animals that are part of a managed program and are scheduled to be reintroduced into the wild

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\* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

- ii. The direct cost of a wildlife rescue operation of state, federal, or provincially protected animals that are being reintroduced back into the wild.
  - c. Veterinary Care.
    - i. Direct costs of veterinary care for wildlife disease issues and animal health issues for animals found in the institution's collection if it directly impacts the conservation of species in the wild.
    - ii. Direct costs of veterinary care for wildlife disease issues and animal health issues for animals not found in the institution's collection.
  - d. Conservation Assurance Populations. Direct cost of food, housing and care of animals that are being housed at the institution or in-country facility, either on or off exhibit, which cannot be reintroduced back into the wild at this time because of *in-situ* conditions. The species must be classified as either "Extinct in the Wild" or "Critically Endangered" on the IUCN Red List or if not listed on the IUCN Red List, should meet the criteria for "Extinct in the Wild" or "Critically Endangered". Plus, the institution must be actively working with partners to determine a strategy for reintroduction back into the wild. (An example is a population of frogs that cannot be reintroduced because of the chytrid fungus.)
2. Research
- a. Direct costs of research that takes place outside of the institution and helps protect species in the wild, or protection of species or ecosystems *in-situ*.
  - b. Direct costs of research that takes place inside the institution but is essential to the protection of species in the wild, or protection of species or ecosystems *in-situ*.
3. Field Conservation Education
- a. Awareness-building through informational/educational materials. Direct costs for work done on behalf of an NGO that publicizes conservation and not the institution itself. (ex. Developing and printing guides for customs inspection agents.)
  - b. Outcome-oriented Education. Direct costs of conservation education programs that take place outside of the institution and target an audience that directly impacts the species or habitat of concern. Also includes the direct costs of an in-zoo/aquarium program that is specific to protecting a local species or habitat of concern. Ideally, programs can be shown to improve wild animal numbers or survival. General education program costs do not qualify.
  - c. Training and Building Conservation Capacity. Direct costs of training staff or volunteers not employed by the institution for field conservation work. This may include providing scholarships or sponsoring participation in workshops or conferences and financially supporting local citizens in conservation and research. (ex. Training citizen scientists to participate in field conservation projects as defined above).
4. Advocacy
- a. Direct costs of work done to lobby for or generate support for conservation other than for direct support for the institution (ex. Lobbying to strengthen a law that provides increased protection of animals in the wild.)
5. Fundraising/Direct Grants
- a. Cash grants made to other conservation organizations to support field work that meets the above definitions.
  - b. The value of any goods, equipment or supplies (including educational supplies) donated to field conservation projects as defined above.
  - c. In-kind personnel support if the institution's employee is doing the work that would normally be done by an employee of another conservation organization. This would be direct costs only, not administrative overhead.

- i. This may include salary and benefit costs of person(s) managing field conservation grants, reflecting percentage of time spent doing so.”

In sum, AZA and its member zoos and aquariums, fully support Resolution Conf. 11.20 (Rev.CoP17). AZA strongly believes that its members are meeting the letter, spirit and intent of the resolution through their extensive *in situ* conservation projects (as defined above).

The entire list of AZA *in situ* conservation projects, which meet the above definition, includes over 3,360 projects. Below is a representative list reflective of the variety of *in situ* projects undertaken by AZA zoos. This list includes *in situ* conservation projects that have been undertaken on behalf of Southern white rhino and populations of African elephants listed on Appendix II (populations in Botswana, Namibia, South Africa and Zimbabwe) — populations all subject to the annotation “acceptable and appropriate” destinations.

AZA and its members are pleased to offer their expertise and experience if there are further efforts to refine and clarify what qualifies as *in situ* conservation within the context of CITES.

#### Examples of *In-Situ* Conservation Projects by AZA Member Zoos for African Elephant Populations listed on Appendix II

Elephants for Africa (EfA), a UK registered charity, is dedicated to elephant research, conservation, and education. Utilizing ground-based monitoring techniques, EfA researchers study the social and behavioral ecology of elephants in the world renowned wetland around the Boteti River in Northern Botswana. Focusing mainly on bull elephants, this project has been up and running since 2002 and has identified close to 900 individual elephants. In addition to wild population studies, EfA has been monitoring the movements and behavior of seven elephants (six males and one female) that have been released from the Elephant Back Safaris’ herd, a local eco-tourism company, back into the wild. Through these projects, and other research, EfA has gained better understanding of elephant’s social and ecological requirements and developed new and innovative approaches to conservation and management of African elephants in the wild. Utilizing this experienced research team, one AZA zoo sent its elephant staff to participate in the data collection, analysis, and interpretation, while gaining knowledge of wild elephant ecology.

Another AZA member zoo sent its elephant care professional to Botswana to participate with Elephants for Africa staff on research and data collection that included individual identification of male elephants in the field, collecting dung samples to extract testosterone and cortisol as well as documenting the distribution, habitat utilization and movement of elephant populations.

Through its Quarters for Conservation program, an AZA member zoo supported the African Wildlife Foundation (AWF). AWF works with communities that live in close contact with elephants to recruit, train, and equip wildlife scouts. Scouts monitor elephants and can prevent them from destroying crops, thereby preventing farmers from viewing them as pests, and instead assisting in the deterrence of poachers. This project involved building a scout training camp in southern Kenya to enable AWF to prepare more community scouts to prevent poaching and serve as liaisons between wildlife and local communities.

#### Examples of *In-Situ* Conservation Projects by AZA Member Zoos for Southern White Rhino

An AZA member zoo facilitates analysis of 4 years of rhino location and poaching data from radio-tagged rhinos in Balule Nature Reserve, South Africa. This allows the development and validation models of black and white rhino habitat selection and poaching risk.

The management of white rhinos often requires chemical anesthesia in the field. An AZA member zoo worked on a project to advance success of field immobilization by improving the chemical drug combinations/doses utilized with South African National Parks rhinos. The end goal would be fewer complications and less potential for loss of these endangered animals. Immobilization of white rhino is completed with potent opioid narcotics which often have negative side effects such as decreased respiration, a potentially serious complication for the patient. Recent trials in white rhino administered one of two different drugs, butorphanol or diprenorphine (safer anesthetics), resulting in an increase in respiration. This study will look at physiological changes produced by both butorphanol and diprenorphine given to immobilize white rhinos in a controlled setting.

One zoo joined forces with other leading rhino conservation organizations in KwaZulu-Natal, to create a unified and comprehensive strategy called PROJECT RHINO KZN to stop further escalation of rhino

poaching kills in the province. Two *in-situ* interventions urgently need support: 1) To equip 12 anti-poaching teams that are protecting and monitoring +400 rhino in nine game reserves in northern KwaZulu-Natal, and 2) the Pongola Game Reserve Rhino Security programme: no accurate count of rhino in this reserve has ever been done, but at the same time, they have been classified as 'acutely vulnerable' to poachers and urgently need improved protection.