

How Do Zoos Help Endangered Animals?

From *Scientific American*

<http://www.scientificamerican.com/article/how-do-zoos-help-endangered-animals/>

Dear EarthTalk: Do zoos have serious programs to save endangered species, besides putting a few captives on display for everyone to see?

-- Kelly Traw, Seattle, WA

Most zoos are not only great places to get up close to wildlife, but many are also doing their part to bolster dwindling populations of animals still living free in the wild. To wit, dozens of zoos across North America participate in the Association of Zoos and Aquarium's (AZA's) Species Survival Plan (SSP) Program, which aims to manage the breeding of specific endangered species in order to help maintain healthy and self-sustaining populations that are both genetically diverse and demographically stable.

The end goal of many SSPs is the reintroduction of captive-raised endangered species into their native wild habitats. According to the AZA, SSPs and related programs have helped bring black-footed ferrets, California condors, red wolves and several other endangered species back from the brink of extinction over the last three decades. Zoos also use SSPs as research tools to better understand wildlife biology and population dynamics, and to raise awareness and funds to support field projects and habitat protection for specific species. AZA now administers some 113 different SSPs covering 181 individual species.

To be selected as the focus of an SSP, a species must be endangered or threatened in the wild. Also, many SSP species are "flagship species," meaning that they are well-known to people and engender strong feelings for their preservation and the protection of their habitat. The AZA approves new SSP programs if various internal advisory committees deem the species in question to be needy of the help and if sufficient numbers of researchers at various zoos or aquariums can dedicate time and resources to the cause.

AZA's Maryland-based Conservation and Science Department administers the worldwide SSP program, generating master plans for specific species and coordinating research, transfer and reintroductions. Part of this process involves designing a "family tree" of particular managed populations in order to achieve maximum genetic diversity and demographic stability. AZA also makes breeding and other management recommendations with consideration given to the logistics and feasibility of transfers between institutions as well as maintenance of natural social groupings. In some cases, master plans may recommend not to breed specific animals, so as to avoid having captive populations outgrow available holding spaces.

While success stories abound, most wildlife biologists consider SSP programs to be works in progress. AZA zoos have been instrumental, for instance, in establishing a stable population of bongos, a threatened forest antelope native to Africa, through captive breeding programs under the SSP program. Many of these captive-bred bongos have subsequently been released into the wild and have helped bolster dwindling population numbers accordingly.

Of course, for every success story there are dozens of other examples where results have been less satisfying. SSP programs for lowland gorillas, Andean condors, giant pandas and snow leopards, among others, have not had such clear success, but remain part of the larger conservation picture for the species in question and the regions they inhabit.