

## **Species Survival Plans – Myths, Misconceptions, and Realities ...and how we can incorporate them into our conservation education messages**

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In order for docents to be the best conservation advocates and educators possible, it is imperative that they fully understand the practices and initiatives they discuss with visitors. Given the fact that the term Species Survival Plan (also known as SSP) is one of the most frequently used terms in many docent dialogues with the public, it is perhaps not surprising that it is also a conservation initiative that is frequently misunderstood by docents and visitors alike.

The most common misperception is that SSPs have been developed in order to save species from extinction. While this can, and often is, a side benefit of effective SSP management, it is not the primary goal of any SSP. So what then is their purpose? Are they designed to save species in the wild? This is rarely the case, although there are a few species to which this applies, such as Giant Pandas and California Condors. Many people assume that the purpose of an SSP is to conserve highly endangered species, which is sometimes true. A case in point would be the mountain gorilla.

If those goals are not the primary purpose of Species Survival Plans, what is? The primary purpose of SSPs is to establish SUSTAINABLE, CAPTIVE populations of species within AZA institutions. The wants and needs of these institutions are taken into consideration when decisions are made as to which species will be managed by an SSP. The selected species fall into one of four categories – green, yellow, red, and candidate species.

Green species are the most sustainable species over time. They are species that are currently projected to have more than 90% genetic diversity over the next 100 years. There must be at least 50 individual animals in AZA facilities. While Green SSPs cannot work with animals outside of AZA, they do receive the most resources from AZA. Green SSP species include red pandas, Ring-tailed lemurs, African penguins, and Golden Lion Tamarins.

Yellow species consist of those that are potentially sustainable, but that will need more effort from organizations. This added effort may include more and/or better husbandry, increased breeding expertise, and more research. As with Green species, Yellow category species must also have at least 50 individuals in AZA facilities, but their genetic diversity does not currently meet the 90% mark. AZA facilities can partner with institutions that are non-AZA in order to increase efforts. This category can also include groups that have never been formally planned, or groups where planning was five or more years ago. Current SSP species in this category include Giant Anteaters, Tamar Wallabies, Fishing Cats, Maned Wolves, Red-Ruffed Lemurs, and Prehensile-Tailed Porcupines.

Red species are those that are (a) currently unsustainable, with little genetic diversity, and (b) in critical need of increased breeding, more holders, and likely imports. These imports may be captive animals from outside AZA, or wild imports. This group receives the least support from AZA. Animals in this category include the Hairy Screaming Armadillo and the Bolivian Grey Titi Monkey.

The last official category is Candidate Species. In these cases, these are species that have a designated "champion," and there is at least one facility that is successfully maintaining and breeding them. There must also be interest from other facilities to house these species. New candidate species are selected as some SSPs are phased out over time. Future candidate species may include a greater variety of taxonomic groups, as some groups have historically been unrepresented (fish, invertebrates, and amphibians). These groups are just beginning to collect data, and it may be that some of these species will become SSP species in the future. Current Candidate SSP species include the Bat-eared Fox, the Mexican Box Turtle, the Bactrian Camel, and the American Bison.

There are special cases within the SSP world. These may be species that do not have enough regional interest or support, or species whose genetics are so poor that they have to be managed on an international scale. Other special cases may be species that are globally popular to all AZA institutions. These special cases are managed under what are called Global Species Management Plans, or GSMPs. They are administered by the World Association of Zoos and Aquariums (WAZA), with regional representatives from AZA, EAZA, CAZA, etc. Two prime examples of GSMPs are Javan Gibbons and Red Pandas (which are also a Green SSP species).

With the basic knowledge in place of exactly what an SSP is and what the primary purpose of the program is, it becomes easier to understand the other purposes and goals affiliated with SSPs. They are used to establish management, research, and conservation priorities, and to serve a specific role in conflict resolution issues that may arise. SSPs enhance the abilities of AZA facilities to collaborate with other institutions/agencies to ensure integrated conservation initiatives. They are ideal tools to increase public awareness of wildlife conservation issues. They are also valuable in the development and implementation of ex situ and in situ education strategies. On rare occasions, they are used to develop in situ reintroduction programs when possible. SSPs provide a discussion forum for topics applicable to the species, which can be especially helpful in government lobbying for regulations. The management of SSPs also provides species-specific information in development of the Animal Care Manuals.

It is important to note that all AZA facilities MUST fully participate in Species Survival Plans as that is a required part of accreditation. Accredited facilities must have a designated institutional liaison and an institutional representative for each animal program, and must respond to wants/needs surveys and cooperate with population management recommendations (breeding; moving animals; contraception; refraining from obtaining non-recommended species). SSP plans must also be incorporated into the institution's Master Plan.

Even when visitors understand the importance of Species Survival Plans, there are often comments or questions to the effect that there should be more focus on conservation in the wild instead of in zoos. The fact of the matter is that AZA zoos are participating in at least 14 in-situ conservation efforts in the United States alone. These include Manatee Rescue, Rehabilitation, Rescue and Research in Florida, the Attwater's Prairie Chicken Recovery and the Houston Toad Recovery Programs in Texas, the International Elephant Foundation (encompassing many zoos in the U.S.), the Mexican Wolf Reestablishment and Recovery (also involving numerous zoos in the U.S.), and the Hellbender Conservation Center in Missouri. Other species being focused on in the wild here in the U.S. include the American Burying Beetle, the Oregon Silverspot Butterfly, the Pygmy Rabbit, the Western Pond Turtle, and the Puerto Rican Crested Toad.

Teaching visitors about the goals behind SSPs provides a great springboard for volunteers to foster community awareness and public involvement. As visitors become better educated and more aware of the efforts being put into conservation initiatives by zoos around the country, many of them ask that all important question – “What can I do to help?” This is the perfect opportunity to expand upon the newest AZA conservation initiative – SAFE. AZA’s community engagement strategies include working with partners to help people make sustainable seafood choices, partnering with Unite for Literacy to create a series of picture books (each focusing on one of the 10 SAFE signature species), and partnering with Frito-Lay to encourage the public to visit local zoos and aquariums by providing free admission with the purchase of Frito-Lay products. These visits are the cornerstone of docent interaction wherein volunteers have the opportunity to educate the public on the hazards animals face in the wild, and how the general public can get involved. A good example of that includes the citizen science project FrogWatch USA. Another example includes educating the public on the difference between sustainable and non-sustainable palm oil production – and yes, there’s an app for that! For those visitors who want to learn more about the wide variety of animals on our planet, AZA has a free app that’s fun for all ages – Tails Up! Perhaps one of the best lessons that docents need to focus on getting across to the public is the one that never goes out of style – Reduce, Reuse, and Recycle!!

#### Sources/References

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