



Endangered South African Penguins Find Safety at California Academy of Sciences

by Jaymi Heimbuch, San Francisco, California

October 8, 2010



Photos by [Jaymi Heimbuch](#)

The [South African penguin](#) is a much less well known species than the penguins adapted to cold climates like those of *March of the Penguins* status, the Emperor penguins. But for a rather unfortunate reasons, they're hopefully about to get much more well known. The South African penguin species is now on the endangered species list. Their numbers have dipped down to just 52,000 left in the wild, and while the exact cause is still unknown, it is primarily thought that it's because their food source -- sardines and anchovies -- are being overfished. But what is the impact of the loss of the penguins on other species? And what is being done to bring back their numbers? We spoke with Pam Schaller, Senior Aquatic Biologist at the California Academy of Sciences who heads up the penguin breeding program to find out.



Schaller let us know that there are breeding programs for the species all over the US and globe that is working hard to keep a self-sufficient and highly diverse gene pool going while the numbers in the wild are studied and hopefully brought back up. Right now, any capture of penguins from the wild is avoided at all costs, and no penguins are reintroduced at this point. Instead, the breeding programs work together to pair up penguins and ensure that the captive birds are as genetically diverse and strong as their wild counterparts.

A significant cause of their drop in numbers also seems to be a drop in, well, droppings. The penguins adapted to nesting in deep, deep layers of guano. They would burrow in to the guano to create safe nests for their eggs and hatchlings. However, as the guano has been harvested over the last 100 years or so, they now have nearly none to nest on, creating surface nesting conditions. Surface nesting means harsher weather on the eggs and a greater loss of the eggs themselves or chicks that can't make it once hatched out. Part of the research of breeding programs goes toward creating nesting boxes that can be used by wild penguins for safer, more successful breeding.



At the California Academy of Sciences, there are 20 penguins ranging in age from just a couple years old to Pierre, who is an amazing 27 years old (the species tends to live to between 10-15 years in the wild). There are several breeding pairs and the newest generation has already started showing signs of successful breeding. However, the success of the program is only part of the story. The loss of penguins in the wild is the real focus.

Schaller noted that the primary cause seems to be a loss of food. Because penguins are both predators and a prey species, they're a perfect sentinel for the health of marine systems. The Academy takes a systems approach to research -- preferring to look at how all the components of a system work together rather than focusing entirely on singular causes and effects of a species -- and realize that as penguin numbers dip, so too could the numbers of their primary predators, cape fur seals, which were once on the brink themselves.

By looking at the entire system, the Academy hopes to help discover all the ways the penguins are being impacted, and assist in creating programs and regulations that will help bring the numbers back up to a safe level. The species has [just been listed by the US as an endangered species](#), which could help it get additional support that it wouldn't otherwise have.



Right now, the program at the California Academy of Sciences is focused on educating the public that the species exists at all, since few people realize that there are penguins adapted to such warm climates as that of South Africa. Schaller stated that with hope, more people's interest will be piqued and they'll want to go visit the penguins in South Africa, boosting the tourism of a country who's economy is struggling. As more people visit the country to see the penguins, the birds will become more valuable and could receive more funding for study and protection.

You can [watch webcams of the California Academy's penguins](#) to check them out while they feed, swim, and waddle back and forth stealing nesting materials. They really are an amazing bunch.

<http://www.treehugger.com/files/2010/10/endangered-south-african-penguins-find-safety-at-california-academy-of-sciences.php>