

ZOOS: FIGHTING TO SAVE ENDANGERED SPECIES

“Responsible zoos and aquariums are leading efforts to rebuild the disappearing animal species of our planet, while at the same time educating and cultivating the world’s populations of inspired conservationists.”

—Robin Ganzert, Ph.D.,
President,
American Humane Society

The lemur inspired Dr. Tara Harris to pursue a career in animal conservation.

by Christine Graf

A fascination with lemurs led Dr. Tara Harris to a career in conservation biology. Lemurs belong to the primate family and are the most endangered animals on the planet.

"They are so unusual and were unlike any animal I had ever seen or heard about," she says. "It inspired me to learn more."

Harris studied wild primates at Yale University. During that time, she spent four years in the jungles of Uganda doing research on the colobus monkey.

"The monkeys I studied weren't endangered and didn't need my help," she says. "I wanted to use the skills I learned to help animals that were endangered."

Harris took a job as a conservation biologist at the Minnesota Zoo. This zoo is known for its wild tiger conservation program. Because of poaching and habitat loss, the world's population of wild tigers has declined from 100,000 to fewer than 4,000. They are classified as highly endangered, and some species are critically endangered.

The Tiger Conservation Campaign that Harris started in 2012 has raised \$1 million. The money is used to fund programs at the zoo and out in the field. "A lot of people don't know that zoos have conservation biologists who work out in the wild to help save endangered species," says Harris.

She has made several trips to Russia, where the Minnesota Zoo operates tiger conservation projects. As part of their efforts, they have convinced Russian logging companies to destroy old logging roads. The roads were being used by tiger poachers.

In 2017, U.S. zoos and aquariums provided more than \$220 million in financial support to conservation biologists who work independently. Harris is proud of that number. "That makes zoos one of the

biggest conservation movements on the planet," she says.

Some of the money raised by the Tiger Conservation Campaign has been used to fund the Minnesota Zoo's captive breeding program of Amur (Siberian) tigers. In the 1940s, there were only 20 to 30 Amur tigers left in the world. Thanks to breeding programs such as this one, there are now about 500. Five of these tigers live at the Minnesota Zoo.

Zoos with captive breeding programs participate in the AZA Species Survival Plan (SSP) that began in 1981. Five hundred plans operate in the United States. All plan participants must follow strict program guidelines.

Participating zoos and aquariums breed endangered and threatened species in captivity and later release some of them into the wild. Captive breeding programs have been successful in saving species such as the black-footed ferret, California condor, red wolf, and Arabian oryx from extinction.

Breeding threatened and endangered animals in captivity is challenging. "We have to figure out how to breed a species that is next to extinct in the wild," she says. "It's risky, but sometimes it is the best option available. But it's better to figure out how to help a species before it gets to the brink of extinction."

Black-footed ferrets are part of the breeding program at the Phoenix Zoo, where Harris now works as the director of conservation. "There were only a handful left when the decision was made to bring them into zoos to breed them," she says. Thanks to the success of the breeding program, there are now more than 1,000 living in the wild.



Tara Harris is a conservation biologist at the Minnesota Zoo.

In addition to operating breeding programs, zoos are helping to save endangered species through education. "Zoos and aquariums reach so many people," says Harris. "We educate people so they can recognize what endangered species face in the wild. Having people who care and who are knowledgeable is really important and is something zoos contribute to."

Many zoos promote programs that encourage people to "shop smart" when

purchasing products that contain palm oil. Palm oil production is the largest cause of rainforest deforestation in areas where many endangered species live. Only products marked with a sustainable palm oil seal have been harvested responsibly.

"We want to educate people so they make that connection of how their everyday actions can help endangered species," says Harris.

Zoos also provide mentorship opportunities for students who are interested in careers that will help save wildlife. Harris was mentored by many people during her career and is now mentoring others. "I have learned the power zoos have to create the next generation of conservation biologists," she says.

Despite the challenges faced by those working to save endangered species, Harris remains optimistic about the future.



The Al Ain Zoo is known for its successful Arabian oryx breeding program.

"I've been inspired by kids who have held creative fundraisers and even used their birthday money to help endangered animals," she says. "When they do that, they inspire others too. It gives me hope for the future. I believe in the power of change, and I believe we have the power to do better."



FAST FACTS

- Three of the original nine subspecies of tigers have become extinct in the last 80 years.
- Captive breeding programs are often unsuccessful, and some species have not done well when released into the wild. The survival rate varies greatly by species.
- Kings and other wealthy people had private zoos, called menageries, as early as 2500 B.C.
- Palm oil is found in packaged goods, cosmetics, laundry detergents, and other household products.
- More than 700 million people visit zoos and aquariums each year.

THE EUROPEAN ENDANGERED SPECIES PROGRAM

Zoos and aquariums around the world are committed to saving threatened and endangered species. Zoos in 34 European countries participate in the European Endangered Species Program (EEP). The EEP provides zoos with strict guidelines for breeding endangered animals in captivity. European zoos have also invested in preserving habitats and researching infectious diseases that threaten endangered species.

The European bison, Europe's largest mammal, was saved from extinction because of the EEP. After the species went extinct in the wild in the early 1900s, 54 European bison were bred in captivity. More than 3,000 of these animals now live in the wild.

The World Association of Zoos and Aquariums (WAZA) has asked its 280 member organizations to devote at least three percent of their budgets to conservation work. WAZA is based in

Switzerland and wants zoos to become "conservation powerhouses."

Another organization, the International Zoo Educators Association (IZE), brings together zoo educators from around the globe. Members share ideas and discuss issues related to conservation. Their 2018 annual meeting was held at Al Ain Zoo in United Arab Emirates. Representatives from more than 40 countries attended the conference.

The Al Ain Zoo is known for its successful Arabian oryx breeding program, which began in 1968. There were only six of these antelopes living in the wild in 1972. There are now more than 6,000.

Those who attended the IZE conference were able to visit the zoo's Arabian oryxes. The animals serve as a reminder that zoos play a vital role in saving endangered species.

—C.G.