

Special Edition



Explorer



PHOTO  **ARK**

JOEL SARTORE

NatGeoPhotoArkExplorer.org

COLUMBUS ZOO AND AQUARIUM



OMAHA'S HEINRY DOBBS ZOO



ESTUARUM IN DAUPHIN ISLAND, AL



KANSAS CITY ZOO

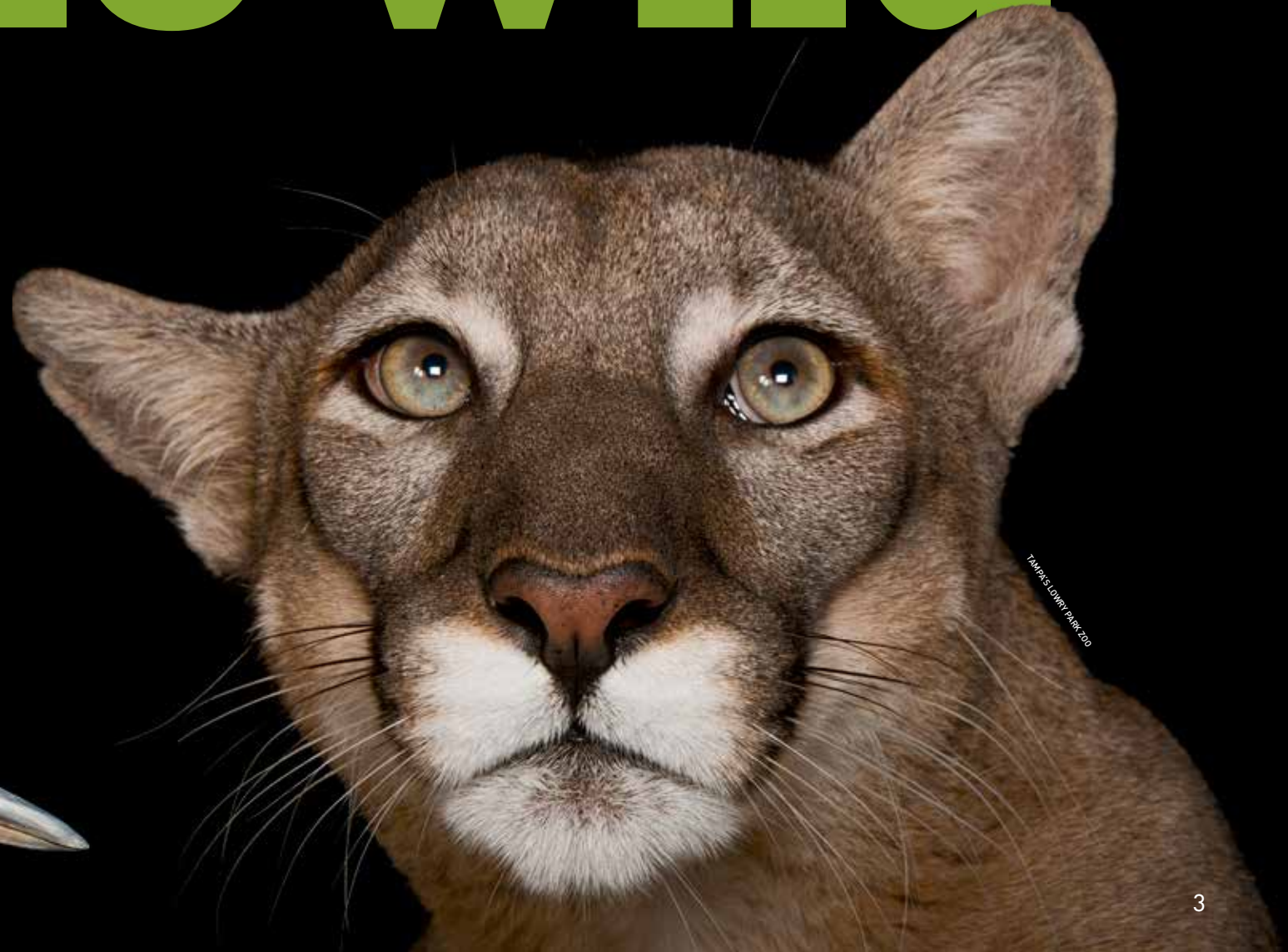
Into the Wild

National Geographic photographer Joel Sartore is trying to save animals. He's doing it one photo at a time.

By Brenna Maloney



BRAMBLE PARK ZOO



TAMPA'S LOWMY PARK ZOO



IMAGE MAN/SHUTTERSTOCK.COM

Joel Sartore was too close. By the time he realized this, it was too late. The mother grizzly bear stared at Sartore. She lowered her head. Then, without a sound, she suddenly charged toward him.

"It looked like she'd been shot out of a cannon,"

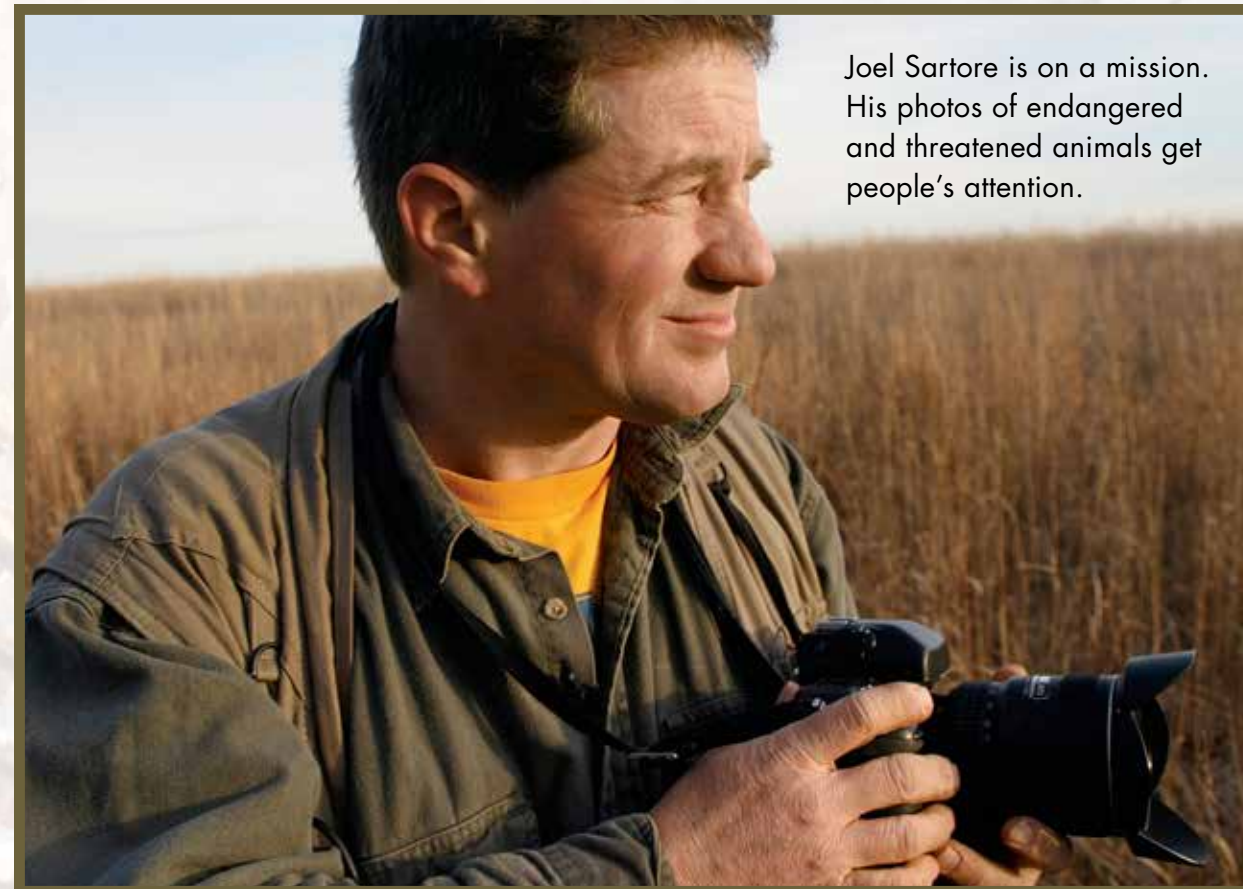
Sartore says. As she bounded forward, her sharp claws dug deep into the ground. The bear was uphill. Sartore was downhill. Her cubs were in between them. The mother bear closed the gap in three leaps.

"There's no outrunning a bear," Sartore says. "Nor should you try to." He didn't move. He was terrified. "Running never occurred to me. I didn't even realize I had legs," he says.

The bear stopped in front of him. "I just stood there and lowered my eyes," he says. "I said, 'I'm sorry' a couple of times and backed down the trail."

The mother bear saw Sartore moving away. She knew the possible threat to her cubs was over. She went back to her cubs, leaving a shaken Sartore behind. For Sartore, it was just another close call.

BACKGROUND | JOEL SARTORE/NATIONAL GEOGRAPHIC CREATIVE



Joel Sartore is on a mission. His photos of endangered and threatened animals get people's attention.

JOEL SARTORE—JIM WEBB/NATIONAL GEOGRAPHIC CREATIVE

a grizzly bear



JOEL SARTORE/NATIONAL GEOGRAPHIC CREATIVE

Risky, Not Reckless

Sartore has had many close calls. Wolves have chased him. Musk oxen have charged him. Mosquitoes have swarmed him.

For Sartore, it's worth the risk. He knows his photos can make a difference. They tell stories. They also show a problem that many people ignore.

Many of the animals Sartore takes pictures of are endangered and threatened animals, like the grizzly bear. These animals are at risk of dying out. A species, or group of animals, is extinct when there are none left.

Some endangered animals, like the leatherback turtle, are well known. Others, like the yellow-blotched map turtle, are not. "I like photographing small creatures no one has ever heard of," Sartore says.

"Good photographs of rare plants and animals can be used to give them a voice," he says. Sartore's photos make people aware of animals that are in trouble.

Getting the Job Done

The job isn't easy. It means going to remote places. It means looking for animals that are hard to find. "Most of the time, the animals I'm photographing don't want me close to them," Sartore says.

He spends a lot of time preparing. "To get good photos of any animal, doing your homework is critical," he says. He learns about an animal's habits as well as its habitat. He finds out how close he can get to an animal and still be safe.

Doing the job also requires strength. Sartore doesn't pack lightly. He can't. He needs a lot of gear. "I'm usually carrying about 23 kilograms (50 pounds) of gear," he says. He brings cameras, lenses, and tripods. He carries his gear through good weather and bad.

Sartore goes wherever the animal goes. It's rarely comfortable. "It's always too hot or too cold or too dry or too wet or too buggy or too dusty or too sandy," he says.

Meeting Martha

Sartore has always been interested in animals. He remembers reading a lot of books about them when he was a kid. One book was about birds. This book had a chapter about extinct birds. That's when Sartore first learned about Martha.

Martha was a passenger pigeon living in a zoo. At one time, passenger pigeons were one of the most numerous birds in the world. There were billions. By 1913, Martha was the only one left. Passenger pigeons became extinct when she died a year later.

Sartore read and reread this chapter. He wondered how there could be billions of birds and then only one. He learned that these birds were easy to hunt because they flew in such big flocks.

Over time, people cleared the forests where the birds lived to build farms and cities. The birds lost their habitat. Sartore knew that passenger pigeons were not the only animals to go extinct. Many others had, too. It bothered him. "I didn't want it to happen again," he says.

On Assignment

Martha was not the only bird Sartore thought about. Many years later, National Geographic sent him to a swamp. He was looking for the ivory-billed woodpecker there.

Scientists thought this bird was extinct. Yet a handful of people claimed to have seen it. Many scientists didn't believe the reports. Sartore was told he would never find it.

He never did. He spent weeks looking, and he was not alone in his search. Teams of scientists covered more than eight U.S. states trying to find this bird. Even today, no one knows if it's extinct or not.

Sartore says this assignment was a turning point for him. He didn't find the woodpecker, but he saw something else. He saw people caring about an endangered animal. He saw people trying to make a difference.

He knew that he could, too. He knew his photos could spread the news about endangered animals.

Finding the right animals was Sartore's first challenge. He made a list. Then he went looking for them.

Closer to Home

Many endangered animals depend on captive breeding programs to survive. They can be found in zoos and aquariums. So Sartore began looking there. He met a rabbit named Bryn in one zoo. She wasn't just any rabbit. Bryn was one of two Columbia Basin pygmy rabbits left in the world. Sartore wondered how many people even knew there was a pygmy rabbit. He doubted most people knew that there were so few left.

"Our photo session was one of the last chances Bryn had to be noticed," Sartore says. "She died a few months later." Soon after, the last of these animals died, too.

It was sad news. Another species was gone. Sartore made a decision. It was time to move beyond birds and bunnies. He would take photos of as many endangered animals as he could.

Sartore began a project called "Photo Ark." His goal is to take photos of every species in captivity. He hopes his photos will get people to care about the animals while there is still time to save them.

a Coquerel's
sifaka



THE HOUSTON ZOO

a young mandrill



MALABO, EQUATORIAL GUINEA, AFRICA

yellow-streaked lorries



CLEVELAND METROPARKS ZOO

National Geographic Photographer Joel Sartore is working to photograph every species in captivity. This project is called the National Geographic Photo Ark. The goal is to inspire people to care about these species and take action to protect those in most critical need.



Antilles pinktoe tarantula
OMAHA HENRY DOORLY ZOO AND AQUARIUM



mealy Amazon parrot
PARQUE ZOOLOGICO NACIONAL



Auckland green gecko
WELLINGTON ZOO



Tabasara robber frogs
EL VALLE AMPHIBIAN CONSERVATION CENTER



Siamese fighting fish
LINCOLN, NEBRASKA



jaguarundi
BEAR CREEK FELINE CENTER



pink oblong-winged katydid
OMAHA HENRY DOORLY ZOO AND AQUARIUM



fringed tree frog
ATLANTA BOTANICAL GARDENS



Buckley's giant glass frog
CATHOLIC UNIVERSITY OF ECUADOR



upland burrowing crayfish
MEADOW RIVER VALLEY, WEST VIRGINIA



lined seahorse
DALLAS WORLD AQUARIUM



rose sea star
ALASKA SEALIFE CENTER



Eastern tailed-blue butterfly
BUTLER COUNTY, NEBRASKA



giant crab spider
EQUATORIAL GUINEA, CENTRAL AFRICA



yellow longnose butterflyfish
OMAHA HENRY DOORLY ZOO AND AQUARIUM



red fox
LINCOLN, NEBRASKA



red fody
PLZEN ZOO



powder blue surgeonfish
OMAHA HENRY DOORLY ZOO AND AQUARIUM



emerald starling
PLZEN ZOO



rufous mouse lemur
TSIMBAZAZA ZOO



diablito frog
CALI ZOO



Halloween crab
AUDUBON ZOO



white-collared kingfisher
JURONG BIRD PARK



Parson's chameleon
HOUSTON ZOO



white-lipped island pit viper
WOODLAND PARK ZOO



Bengal tiger
ALABAMA GULF COAST ZOO

NATIONAL GEOGRAPHIC

PHOTOARK

JOEL SARTORE
#SaveTogether

A Helping Hand

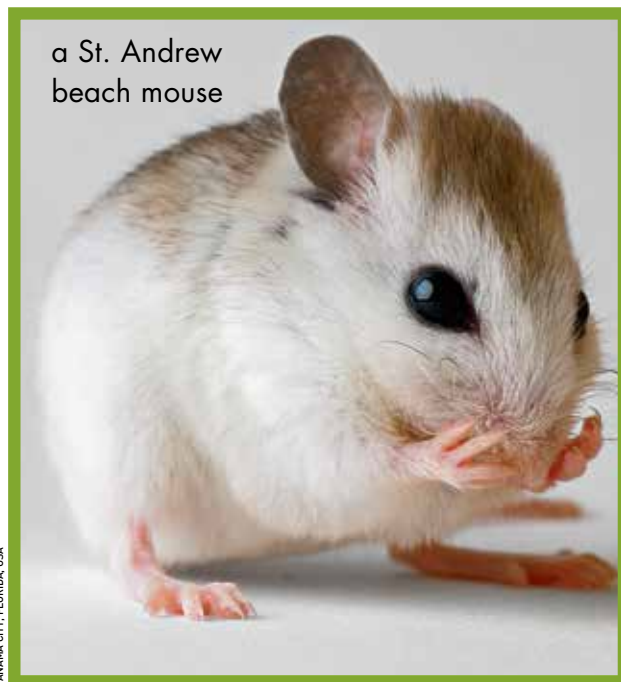
It's important to Sartore to help as many animals as he can. The animals don't always want to cooperate, though. He remembers that the St. Andrews beach mouse gave him a lot of trouble.

There are only a couple thousand of these mice left. People have destroyed much of their habitat.

Photographing them became almost as hard as saving them from extinction. "These mice never stop moving," Sartore says. He tried to follow the scurrying mice with his camera. The mice were nothing but a blur! It was hard to capture a good image. Only when one mouse stopped to groom itself was Sartore able to get the shot.

He had better luck with another animal. A male woodland caribou seemed to be in no hurry at all. He didn't seem to mind having his picture taken. "He was willing to stand stock still, wherever we liked," Sartore says. All Sartore had to do was feed the caribou a steady supply of grape leaves. "I wish everything were that easy."

Other animals weren't interested in posing for photos. The southern three-banded armadillo is rather shy. So, it just curled up into a ball.



a St. Andrew beach mouse

Finding Answers

Sartore has had a lot of interesting moments with animals. Yet he fears that time could be running out for many creatures.

Some scientists say up to half of the world's plant and animal species are in trouble. They will be threatened with extinction in the next century. That's why they need protection.

Sartore doesn't see this as an unfixable problem. He thinks everyone—including you—can help. Endangered animals can be helped when we take care of our planet. "Each of us has the power to change the world," he says. "Small things can add up to a big difference."

On the Rise

Sartore has seen this first hand. Not all animals on the brink of extinction die out. There have been some success stories. He has photographed many of them.

The Karner blue butterfly is an example. It's no bigger than your pinkie. Yet it plays an important role in its ecosystem. An ecosystem is made up, in part, of all the plants and animals that live together in an area. Often they rely on each other to survive.

This butterfly eats and lays its eggs on only one type of wildflower. These wildflowers were disappearing. Farmers cleared the land where these plants grow. The butterflies had no food to eat.

To save the butterfly, the land had to be saved. Limits on farming now protect the wildflowers. This, in turn, protects the butterflies. It also helps other plants and animals living there. Protecting one butterfly shields the entire ecosystem.

The Mexican gray wolf is another example. At one time, it was one of the most numerous mammals on Earth. Yet people trapped, poisoned, and shot the gray wolf almost to extinction.

Sartore wanted to know more about them. He followed these wolves day and night. He saw them hunt. He heard them howl. He watched them play.

Working Together

Being close to the gray wolf left an impression on Sartore. He saw an animal that was loyal and intelligent. He also saw an animal that he hoped would be saved.

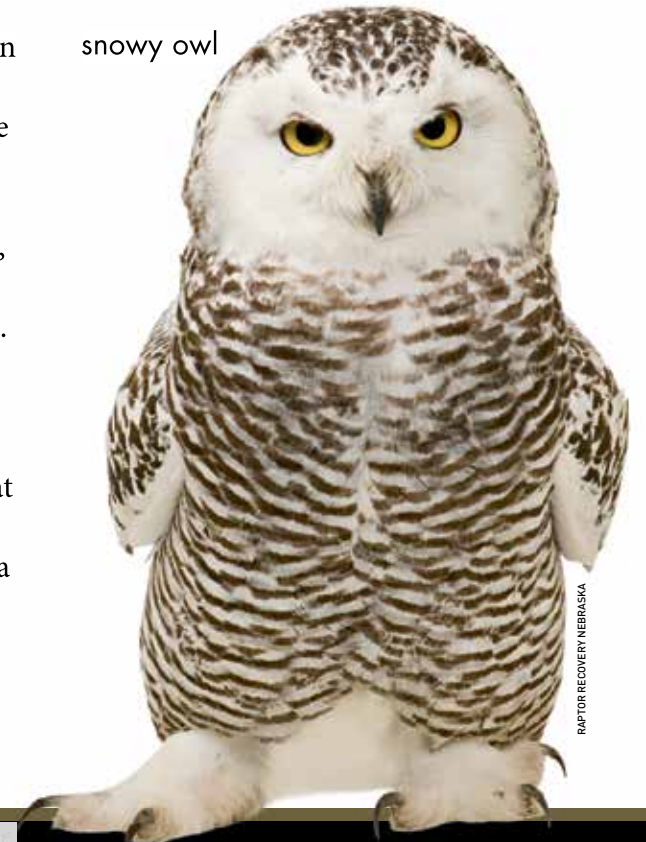
People have passed laws to protect this wolf. It has made a comeback in some places, but not all. Its future still remains uncertain.

For Sartore, these are important examples. They show what can happen when people work together to protect wildlife.

For now, Sartore continues his mission. He wants people to learn about the animals at risk. He wants his photos to inspire others to get involved. And he hopes his photos show a world worth saving.

To see more of Joel Sartore's work, go to www.NatGeoPhotoArkExplorer.org

snowy owl



RAPTOR RECOVERY NEBRASKA

Photo Ark Hero

"Every hour, Florida loses 20 acres of wildlife habitat to development. If we do what is needed to save migration corridors for black bears and panthers, we can still save wild Florida." —Carlton Ward Jr.

Like Joel Sartore, Carlton Ward Jr. is a Photo Ark hero. He's a conservation photographer. His photos tell the stories of Florida's wild places. He has a plan that calls for the conservation of thousands of acres of ranchlands and forests across Florida. Preserving this habitat can help save the Florida panther.

CARLTON WARD/NATIONAL GEOGRAPHIC CREATIVE

Search and Rescue

As you tour the zoo, see if you can spot the Photo Ark displays that focus on these animals. Then write about them on the next page.

NATIONAL GEOGRAPHIC

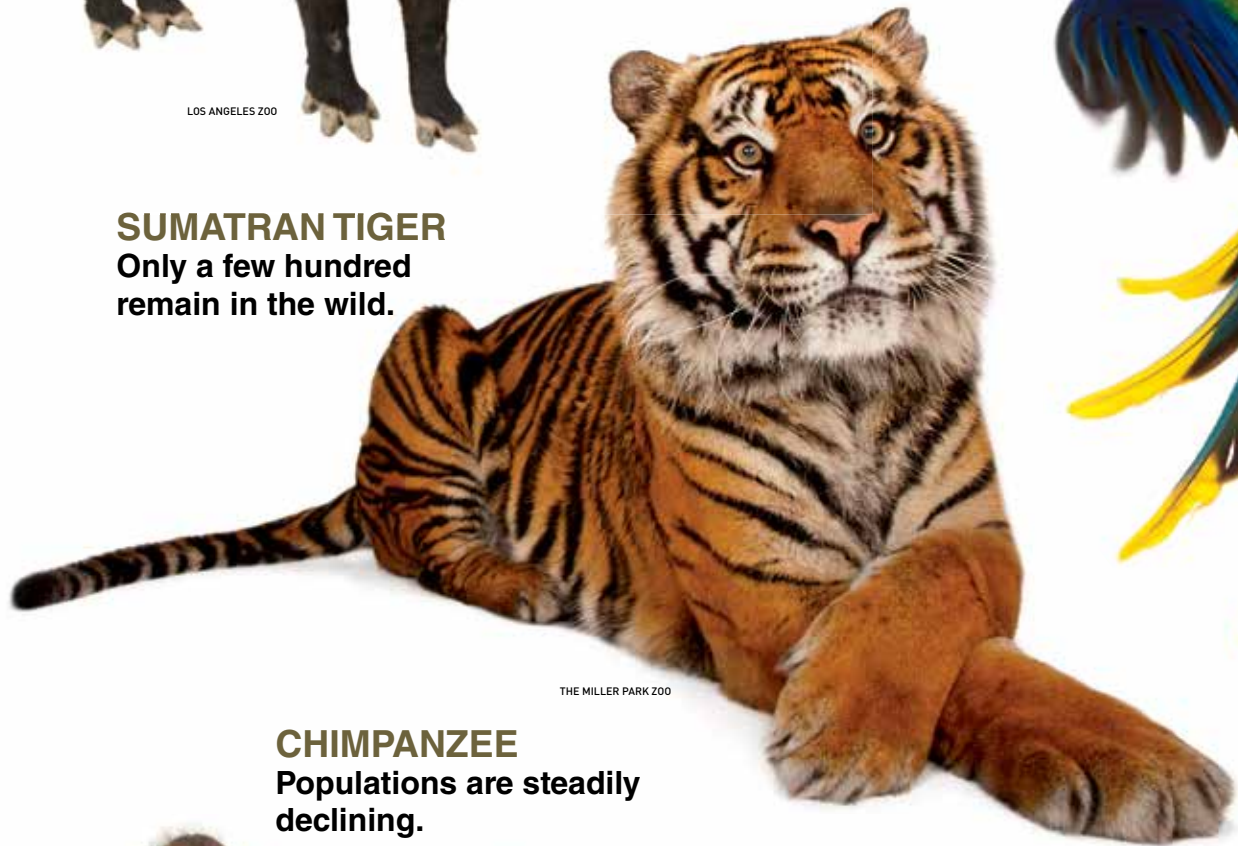
PHOTOARK
JOEL SARTORE



MOUNTAIN TAPIR
There are only 10 in captivity worldwide.

LOS ANGELES ZOO

SUMATRAN TIGER
Only a few hundred remain in the wild.



THE MILLER PARK ZOO

CHIMPANZEE
Populations are steadily declining.



TAMPA'S LOWRY ZOO



HEALESVILLE WILDLIFE SANCTUARY

ORANGE-BELLIED PARROT
Only about 200 birds remain in the wild.

WHITE-RUMPED VULTURE
Fewer than 10,000 remain in the wild.



KAMLA NEHRU ZOOLOGICAL GARDEN



GLADYS PORTER ZOO

PHILIPPINE CROCODILE
Fewer than 200 adults are believed to live in the wild.

RED WOLF
The species was once extinct in the wild. Raised in captivity, then reintroduced to the wild, the total wild population is now about 150 wolves.



GREAT PLAINS ZOO



Search and Rescue

See if you can answer these questions about the animals in Joel Sartore's photos that you've seen in the zoo:

1. The orange-bellied parrot is one of how many species of parrots that migrate? _____

2. Chimpanzees share _____ percent of human DNA.

3. What three threats does the Sumatran tiger face?

4. What did the U.S. Fish and Wildlife Service do to keep the red wolf from extinction?

5. There are _____ species of Philippine crocodile.

6. The mountain tapir is related to which two animals?

7. The white-rumped vulture is classified as a _____ because it eats dead things.

ANSWERS: 1. 3 species; 2. 98 percent; 3. illegal trade in tiger parts, habitat fragmentation, and human conflict; 4. bred them in captivity; 5. 2 species; 6. horses and rhinoceroses; 7. scavenger.

BE A PHOTO ARK HERO

PANAMERICAN CONSERVATION ASSOCIATION



PHOTO ARK By the Numbers

Species photographed:
more than 6,400
(over halfway there!)

Zoo partners:
300

Countries visited:
more than 40

Time spent so far:
10 years
(over 30,000 hours!)

Cameras used:
up to 15

THINGS YOU CAN DO AT SCHOOL

- ✓ Search National Geographic's Animal Database to learn more about species in the Ark at www.natgeo.com/exploreanimals
- ✓ Hold a fundraiser for a threatened species in the Photo Ark in need of protection, and donate the proceeds to the National Geographic Society's conservation work or an organization like the zoo you visited.

THINGS YOU CAN DO AT HOME

- ✓ Being pollinator friendly is saving butterflies, bees, and other pollinators. These animals work hard to provide up to 30 percent of the foods we eat. You can help them by planting local plants and milkweed in your gardens at home.
- ✓ Reduce, reuse, recycle!
- ✓ Compost.

THINGS YOU CAN DO WITH A CAMERA

- ✓ Be a photographer like Joel Sartore! Take 5 photos of animals at the zoo and share them with your friends. Then go to www.NatGeoPhotoArkExplorer.org to learn more about Photo Ark.

What is your favorite animal in the Photo Ark?

Draw the animal. Show your picture to someone.

Think about how you can help this animal.



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This exhibition is organized in partnership with Omaha's Henry Doorly Zoo & Aquarium.