



8th Grade EdZoocational Adventure Guide

Theme: Conservation Connection

Grade level: 8th

DESE Standard: 8-LS4-5 Gather and synthesize information about the technologies that have changed the way humans influence inheritance of desired traits in organisms.

Overview: The Little Rock Zoo supports numerous conservation organizations around the world, including Wildlife SOS (sloth bear rescue in India), the Southern African Foundation for the Conservation of Coastal Birds (supports African penguins like ours), and the International Rhino Foundation. These organizations monitor and protect wild populations which is often the key to the survival of the species. The Zoo also participates in the Species Survival Plan (SSP); a program that identifies population goals for a species and then recommends animal pairings for breeding. They even help to facilitate the transfer of these individuals between zoos to bring the pairs together. This allows for the sustaining of healthy populations that are genetically diverse and demographically varied. This helps to prevent the breeding of related individuals which could produce genetic defects. This also allows them to plan for future generations of offspring to vary enough for continued reproduction. Simply put, the program controls the breeding of individuals within a species in order to avoid negative traits and foster positive traits.

Activity: Complete an "interview" about a selected species at the zoo. Much of the needed information can be found on signage around the exhibit or online. Research the answers to the questions provided. Have students determine their connection to the species and how they can help it.

Activity Extension: Humans also impact genetic adaptations in animals by altering their environment. A ground-dwelling species that is being hunted by humans may have a few individuals with the ability to climb nearby trees for protection. As more of the ground-dwelling individuals disappear, more of the tree-climbing individuals survive to produce offspring. Eventually, it is possible that only the tree-climbing species remains. How else do humans influence the adaptive traits of a species?

8th Grade Tour Guide

This self-guided tour takes your class along a path to exhibits with animals that have conservation plans active within the zoo. This path does not cover the entirety of the zoo, but is meant to accentuate the lesson narrative.

- As you enter the zoo, head past the dome to the left. Go past the lorikeets and lemurs to Great Apes.
- Remind students that calm, quiet guests see more animals. Loud noises send them into hiding making them harder to find.
- **Orangutans:** Bornean orangutans face many threats in the wild that make them critically endangered. These include deforestation for palm oil, mining, illegal logging, and illegal hunting. They are a part of the SSP (Species Survival Plan) and SAFE (Saving Animals From Extinction). Kasih, the baby orangutan, is evidence of how these organizations help to grow the population of species, creating strong healthy communities. Organizations like WWF (World Wildlife Fund), currently assist by monitoring orangutan populations, providing community support on orangutan conservation, and working on ecotourism.
- **Collared Lizards:** One of the issues for collared lizard populations is the excess of shrubs that have invaded the Ozark Everglades. This is the result of fire suppression in forests. This alters the landscape enough that the collared lizard has difficulty regulating its body temperature while foraging and breeding. Little Rock Zoo has partnered with Arkansas Game and Fish Commission and University of Arkansas for a breed and release program, which will conserve and grow the collared lizard population as they are deemed threatened.
- **Fossa:** Copper's species is vulnerable due to the depletion of its habitat in Madagascar. Fossa rely heavily on trees in the wild, but due to growing human populations, the trees get taken down for agriculture and housing. Fossa prey primarily on lemurs, whose numbers are also diminishing with the loss of habitat. Copper is approved by the SSP but has not yet been matched. The Zoo also supports the Madagascar Diversity Fund which aims to establish protected areas for this species.
- **Black Rhinoceros:** Jahari and Andazi are critically endangered in the wild due to illegal poaching, hunting, and habitat loss. Often, they are killed only for their horn which is thought to possess medicinal properties. With about two wild rhinos killed daily, our rhinos are a part of our SAFE program and the SSP program, which have resulted in our baby rhino, Kevin! The International Rhino Foundation operates on-ground in Africa and Asia and helps support the viable populations in the wild. They also provide funding to and collaborate with other rhino support groups.
- **Malayan Tigers:** Jaya and Asmara are a part of this critically endangered species due to habitat loss, poaching, and the illegal pet trade. With the assistance of the SSP program, we have already had a successful pairing and 3 tiger cubs have been born here! Our tiger conservation campaign supports the Wildlife Conservation Society's efforts to increase the effectiveness of anti-poaching patrols to strengthen the anti-poaching laws in Malaysia.
- **Reptile House:** Reptiles face many threats in the wild including habitat loss, poaching and illegal pet trade which diminishes the population numbers greatly. Lizards, including the Chinese crocodile lizard and prehensile tailed skink, are a part of the SSP programs to help their populations. Even snakes, like the Aruba Island rattlesnake- are supported by the SSP. Turtles like the black breasted leaf turtle are also protected by the SSP and TSA (Turtle Survival Alliance). Look for these species and more here.
- **Penguins:** African penguins are endangered from many threats which include habitat loss, prey depletion, garbage pollution, oil spills, climate change, and even car strikes. African penguins are a part of the SSP and SAFE programs. The Little Rock Zoo has had multiple chicks successfully raised here, like Dory, with her curved spine. African penguins are also a part of SANCCOB- which is a non profit organization whose goal is to rescue, rehabilitate, and release seabirds in need of help!

Conservation Connection

An Interview with the _____

Where is this animal from?

What role do they play in their habitat?

What are their threats?

What are AZA zoos and organizations doing to help them here and abroad?

What can you do to help them?

INSTRUCTIONS

Use this field journal to "interview" an animal of your choice while on your visit to the Little Rock Zoo!

Pick an animal that you saw on your tour today that you are interested in learning more about:

1. In the blank space in the title box, write the name of the animal, i.e. Bornean Orangutan.
2. Write the countries or ranges where the animal is from.
3. Write what role they play in their environment, i.e. seed disperser.
4. Write what their threats are.
5. Write what zoos are doing to help them here and at their homes.
6. Write what is being done to help them?

CONNECTIONS:

What animals from your area could you learn more about? What can you do to help native local animal populations?



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