

2nd Grade - EdZoocational Adventure Guide

Theme: Help Like an Animal

Grade level: 2nd

DESE Standard: 2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Overview: Animals are great at helping their environment. Squirrels bury acorns and often forget where they have stored them. These acorns then grow into new trees. Bees carry pollen from flower to flower which helps the plants grow seeds and fruits. Worms underground create tunnels which allow air and water to flow through the soil. They also break up leaves and other ground material into new soil by digesting it. Bats eat mosquitos and opossums eat ticks. They both help to control the populations of these pests.

Activity: As you tour the zoo, discuss where each animal lives. Review the traits of that habitat and the role each animal plays within it. Discuss what "job" the animal has in its "neighborhood" and how it helps the other animals by doing it. Draw or write responses to these discussions.

Activity Extension: Research different animals within the same habitat such as spectacled owls, king vultures, and macaws. Discuss each as though it was a different employee within a company. Determine aspects of each animals job within that company like shift worked, uniform requirements, daily duties, etc.

2nd Grade Tour Guide

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

- As you enter, head to the left and pass the dome. The lemurs are to the right. Once visited, reverse
 your direction and cross the open entry area. Travel past the playground area and view the red river
 hogs on the right. Continue straight toward the elephants.
- Remind students that calm, quiet guests see more animals. Loud noises send them into hiding making them harder to find.
- **Lemurs:** Our Black and white ruffed lemurs Billy and Casey, are one the world's largest pollinators due to their relationship with traveler's trees. They have a special ability to open that tree's flowers. Our other lemurs, like Bandit the ringtail, also help with pollination and seed dispersal. When Lemurs eat fruit, they cannot digest the seeds so they pass their seeds in their scat providing their very own fertilizer.
- **Red River Hogs:** Harry and Passion Flower wallow when they want to cool down or avoid pests. Wallowing is rolling around or relaxing in mud or water. Once they exit their wallow spot, these holes will collect water which offer new drinking spots and habitats for other animals.
- **Elephants:** Our Asian Elephants Zyna, Sophie, and Babe because of their large size, in the wild would help create pathways in dense forests- which provides access for other wildlife. Our girls also have a big appetite and can eat up to 19 hours a day, leaving behind up to 220 lbs of feces! Since Asian elephants can travel long distances, this helps in seed dispersal, fertilizer, and even food for other animals like the Dung Beetle.
- Alpacas: Cass and Adriana are a very protective species, often used as herd dogs that help against foxes that may attack sheep on homesteads. Alpaca manure can also be used as a rich fertilizer. Alpacas are known to be one of the most eco friendly animals in the world!
- **Heritage Farm:** Farm animals help contribute to the ecosystem with their manure. Manure can be used as a rich fertilizer for crops since. It contains natural nutrients. Manure can even be used to help improve the quality of soil.
- **Pollinator Garden:** More than 150 types of food crops in the United States depend on animal pollination; this includes almost all fruit and grain crops. Pollination also helps with helping reduce soil erosion and to provide even clean air! Without pollinators, the world around us wouldn't be able to survive. Some of our very own Arkansas pollinators include hummingbirds, butterflies, bees, flies, wasps, beetles, and even bats.
- Orangutans: Berani, Bandar, and Kasih are considered Umbrella Species. An umbrella species means a
 species that is selected as a representative when conservation plans are made, which make them very
 beneficial for other animals. Orangutans also eat a lot of fruit, and since the seeds don't digest- they
 disperse and often germinate the seed. This makes Orangutans the gardeners of the forest.

How do animals help their environment?

Animal	Environment Type	Impacts	Importance	INSTRUCTIONS
Opossums	woodlands	Eat fruit and insects, like ticks	Seed disperser and pest control	Use this field journal to explore the ecology of the animal kingdom while on your visit to the Little Rock Zoo!
Lemurs				On your tour, think about what these animals do for their environment
Red River Hogs				For each animal listed, think about what role that animal plays in the wild.
Elephants				2. Write or draw where they live.
Alpacas				3. Write the impacts that animal has on its environment.
Barn Owl				4. Write what the importance of that animal is in its ecosystem.
Bees				CONNECTIONS: How might people impact their environment? What role(s) do we serve in
Orangutans				OUR ecosystem? LITTLE ROCK COMBERVE LEARN CARE

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INSTRUCTIONS

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- For each animal listed, think about what role that animal plays in the wild.
- 2. Write or draw where they live.
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CONNECTIONS: How might people impact their environment? What role(s) do we serve in our ecosystem?

