



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 create tunnels underground 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, helping 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. An example within Arkansas could be turtles, beavers, and herons. Discuss each as though it was a different person in a home, working to keep that home safe and clean. Determine aspects of each animal's job within that home, like cooking or cleaning.

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 right towards Penguin Pointe.
- Remind students that calm, quiet guests see more animals. Loud noises send them into hiding, making them harder to find.
- **Red River Hogs:** Hogs like to 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 offers new drinking spots and habitats for other animals. Look for Harry and Passion Flower in their exhibit, and you might even see them covered in mud, which acts as sunscreen and insect repellent on their skin.
- **Elephants:** Our Asian elephants Zina and Babe would help create pathways in dense forests because of their large size, 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 pounds of poop! Since Asian elephants can travel long distances, this helps with seed dispersal, fertilization, and can even provide food for other animals like the dung beetle.
- **Alpacas:** Alpacas are a very protective species, often used as herd animals that help protect against foxes that may attack sheep on homesteads. Lily, the dwarf miniature horse that shares their exhibit, is a great example of the sheep they may be protecting - the alpacas are much taller than the sheep and can see danger approaching much earlier. Alpaca manure can also be used as a rich fertilizer, making them excellent gardeners. Our alpaca girls are Cass and Adrian.
- **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 the soil. Grazing livestock also help to stimulate vegetation growth, which helps maintain healthy ecosystems.
- **Pollinator Garden (by orangutan viewing window):** More than 150 types of food crops in the United States depend on animal pollination, including almost all fruit and grain crops. Pollination also helps with reducing soil erosion and providing clean air. Without pollinators, the world around us would not be able to survive. Some of our native Arkansas pollinators include hummingbirds, butterflies, bees, flies, wasps, beetles, and even bats.
- **Orangutans:** Berani, Bandar, Kasih, and Kota, Bornean orangutans, are considered an umbrella species. An umbrella species is a species that is selected as a representative when conservation plans are made, which make them very beneficial for other animals that live in the same habitat. Orangutans also eat a lot of fruit, and since the seeds don't digest in their stomachs, they disperse and often germinate the seed. This is why orangutans are known as the gardeners of the forest.

Name: _____



Animals and Their Environments

Instructions: Use this field journal to explore the ecology of the animal kingdom while on your visit to the Little Rock Zoo. Write or draw the environment they live in and their importance to that environment.

Animal:	Habitat:	Importance:
Opossums 	Woodlands 	Seed dispersal and pest control
Red River Hogs 		
Elephants 		
Alpacas 		
Geese 		
Goats 		
Bees 		
Orangutans 		

Connection: How might changes impact an animal's environment or habitat?