

GRADE

- 2nd Grade

STATE STANDARDS

- 2-LS4-1

MATERIALS

- Clipboards
- Pencils
- Worksheet

Animal Ecosystems

Introduction: Students learn about different ecosystems and how animals help them.

Goal: Students use their observation and critical thinking skills to identify animals in different ecosystems and match the animal to how the animals help their ecosystems.

Instructions: Students will walk through the zoo and read information signs, talk to zoo staff, and observe zebras, river otters, cownose rays, and Sumatran orangutans. On their worksheet, students will determine what ecosystem the animals live in and match the animals to the way they help their ecosystems.

Background Information: Animals do more than just live in their ecosystems; they also help their ecosystems stay healthy. Animals play important roles in their ecosystems. For example, some animals spread seeds through their droppings when they eat grass and fruit. Other animals, like bees and butterflies, help pollinate plants so they can grow fruits and seeds. Some animals help control populations by eating other animals or insects, which keeps the ecosystem balanced. Animals can also help by digging, building nests, or creating burrows. These actions can change the environment and provide homes for other animals. Understanding how animals help their ecosystems can help us recognize why it's important for us to protect habitats and wildlife.

Conservation Message: By observing animals and their ecosystems, we can begin to understand that all living things are connected. Each animal plays a role that helps its ecosystems function properly, and when something changes, it can affect many other living creatures that depend on it. Some ways we can help animals and their ecosystems are by using reusable items instead of single use items, recycling, and picking up trash. The "little" changes we make turns into a big impact on the ecosystem!

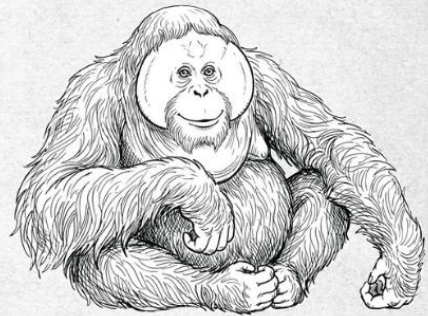
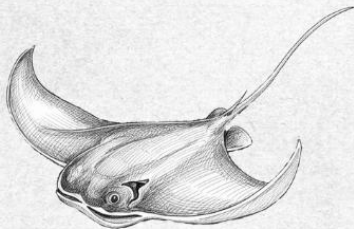
Answer Key:

- Grassland: Zebras help by eating tough, tall grass that other herbivores avoid. They help prevent plant overgrowth and promote biodiversity while also supporting predator populations as primary prey.
- Freshwater: River Otters are a top predator in their ecosystem. They help by regulating prey populations, which helps maintain a healthy balance in the food web.
- Ocean: Stingrays help the ecosystem by flapping their wing-like fins and foraging through the ocean floor moving around the sand, which allows oxygen to penetrate deeper into the sand.
- Rainforest: Orangutans help the ecosystem by acting as seed dispersers for over 500 plants in Sumatra and Borneo. They ingest and spread seeds throughout the canopy, which helps maintain the forests' high biodiversity.

Name _____



Directions:
Observe these animals, their habitats, and read the information signs to determine what ecosystems they live in, then write them.



Directions:
Match the animals to the way they help their ecosystems.

Cownose Ray

Orangutan

Zebra

River Otter

Regulating
prey
populations

Oxygenating
the sea floor

Seed
Dispensing

Preventing
plant
overgrowth