

Prairie Connections

Grades 1 – 2

Educational Program Guide

OAS

3-LS3-2 | Science Practices 1, 2, 3, 4, 6, 7, 8 | Core Ideas LS1, LS2
Crosscutting Concepts: Patterns, Structure and Function

Program Overview

The museum educator will introduce students to many native Oklahoma animals and plants who thrive in a grassland ecosystem. Students will learn about some of the amazing adaptations of prairie wildlife and use their new knowledge to discover the connections between different members of the prairie community.

Objectives

After participating in this program, students will be able to:

- Discuss characteristics of a grassland ecosystem;
- Recognize several different plant and animal species native to Oklahoma, including many state symbols of Oklahoma;
- Discuss the types of connections between living things and give examples.

Background

Grassland ecosystems are widespread across North America. However, students often know more about tropical rainforest animals than they know about animals they may actually encounter closer to home. Grasslands occur where there is not enough rain for a forest, but just enough rain to avoid a desert, between 10 and 60 inches per year. These areas tend to be flat or hilly, open expanses of land with occasional water in the form of streams, rivers, springs, and sporadic wetlands. Just as the name indicates, grasslands are dominated by grasses, with many other varieties of wildflowers, shrubs and few trees.

Background, contin-

Prairie animals have several challenges to meet if they are to survive. Water is scarce, and shelter can be hard to find in the absence of many trees. Food can be plentiful or sparse, depending who you are. Grasslands are the most productive areas on the planet, up to twelve times more productive than tropical rainforests. These are the lands that have been plowed for vast fields of wheat, corn, oats, barley, rice, and sugarcane. The available energy in grass makes it perfect for large grazing animals, such as bison, which have been replaced in recent times by cattle. This productivity and use by humans has led to the destruction of most of the native prairie in North America, making it the most endangered ecosystem in the world.

At the Museum

Hall of Natural Wonders

The Mixed Grass Prairie and Short Grass Prairie exhibits feature prairie plants and animals. Challenge students to locate one or more prairie animals or plants and identify their adaptation for prairie life. Discuss how these animals live, what they eat, and how they find food.

Hall of Ancient Life

The Cenozoic Era is characterized by the rise of grasslands and mammals. The large dinosaurs became extinct at the end of the Mesozoic Era, about 65 million years ago. Vast grassy plains become home to many large mammals, such as mammoths, horses, camels, rhinoceroses, sloths, bears, bison, and many more. Ask students to look for the large mammals in the Cenozoic Era gallery. As a class, examine the animals and decide what they ate and which would be considered predators. Make sure to have students use evidence to support their findings.

Vocabulary

<i>Adaptation</i>	a special feature of a living thing that makes it better suited to its particular way of life
<i>Browser</i>	an animal that eats tree leaves, bark, twigs, vines and shrubs
<i>Camouflage</i>	the way animals hide by blending in with their surroundings
<i>Carnivore</i>	an animal that eats only animal matter
<i>Grassland</i>	a habitat or biome type that is covered with grasses and few trees, receives 10 to 16 inches of rainfall annually; pompas, bush, llanos, prairie, savanna, steppes, and veldt are all types of grasslands
<i>Grazer</i>	an animal who eats grass
<i>Habitat</i>	the physical place where an animal lives; it provides all of the resources needed for life
<i>Herbivore</i>	an animal that eats plants
<i>Organism</i>	a living thing that can grow, reproduce and die
<i>Plant</i>	a living thing that makes its own food using photosynthesis, cannot move on its own, and has cell walls
<i>Prairie</i>	the grasslands of North America
<i>Predator</i>	an animal that kills and eats other animals
<i>Resources</i>	substances or objects required by an organism for normal maintenance, growth and reproduction
<i>Prey</i>	an animal that is killed and eaten by another animal