

Wildlife Habitats in Texas



Grades: K-2

TEKS:

K: 1B, 2A, 9A, 9B

1: 1B, 2A, 9A, 9C

2: 1B, 2A, 9A, 9C

Topics:

Basic Needs

Biotic (living)/Abiotic (nonliving)

Food Chains/Webs

Habitats and Ecosystems

Human Activity/Environmental Impacts

Interdependence

Landforms

Natural Resources

Plants

Wildlife

Methodologies:

Critical Thinking

Poster/Visual Aid

Setting: Classroom

Activity Time: 30-45 minutes

Additional Subjects: Art, ELAR, Social Studies

Objective:

Students will identify characteristics of ecoregions, ecosystems, and their habitats. Students will also identify stewardship actions as a way to care for Texas.

Materials:

Provided

PowerPoint

Coloring Pages

Not Provided

Pencils

Crayons or markers

A Log's Life by Wendy Pfeffer

Vocabulary:

basic needs, conservation, ecoregion, ecosystem, food chain, habitat, interdependence, living, nonliving, producer, survive, wildlife

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Background:

An ecoregion is a recurring pattern of ecosystems associated with combinations of landforms, wildlife, and plants that characterize that region. The ecosystems of an ecoregion can be as large as a forest or as small as a puddle of water. All consist of living and nonliving things that interact as an ecological unit. In addition, an ecosystem can be made of more than one habitat. An animal's habitat is the specific place it lives, and the ecosystem it lives in provides homes or habitats for many. All living things must have the basic needs of food, water, shelter, and space to survive. The shelter provides a place for animals to raise their young and hide from danger.

Ecoregions, ecosystems, and habitats throughout Texas need stewards to protect and conserve natural resources. Land stewardship is defined as the responsible planning and management of resources such as land, water, and animals. Therefore, all Texans can become stewards through actions intended to protect and conserve natural resources.

Activity Preparation:

- Make duplicate copies, 3-4 each, of the provided coloring pages. Group members are to receive copies of the same coloring page.

Procedure:

Discussion

1. Engage students by using the provided PowerPoint with examples of habitats found within the ecoregions of Texas. Utilize a few or all of the ecoregion slides along with the provided information and questions to facilitate a discussion on the components of Texas ecosystems.

Another suggestion for further discussion is to read the book, *A Log's Life* by Wendy Pfeffer.

2. Introduce or review the term "wildlife" as animals that live in nature without having caretakers.
3. Texas is a large state and each of its 10 ecoregions has a variety of plants and animals that live within them. Plants and animals are natural resources—living and nonliving things found in nature such as plants, trees, rocks, water, and animals, including people.
4. There can be many ecosystems within each ecoregion. An ecosystem contains living and nonliving things that interact together. Interaction within ecosystems occurs as living things depend upon nonliving things such as water, shelter, and space to meet their basic needs. For instance, water is nonliving, but living things such as animals depend upon it to live as one of their four basic needs. All living things must have food, water, shelter, and space to live. When living things depend on each other to stay alive, it is known as interdependence.
 - How are the ecoregions in Texas similar? How are they different?
 - Can you name some living and nonliving things within the ecosystems?
 - Are there animals or plants that are found in more than one ecosystem?
5. Ecosystems have landforms, such as mountains, valleys, or hills. Ask students:
 - What landforms do you see in the different ecoregions?
 - Are the landforms living or nonliving? How can you tell?

6. Ecosystems have water, which is nonliving, such as streams, lakes, rivers, or oceans.
 - If an ecosystem does not have a visible stream, lake, river, or ocean, how do living things get the water they need?
7. Ecosystems contain habitats. A habitat is a specific place where an animal lives, providing it with shelter. For example, a bird's shelter is its nest. Shelter is also a basic need that an animal must have to live and survive.
 - What are the other three basic needs of all living things?
 - What are some habitats in each of the ecoregion slides?
8. This step discusses food chains, skip if not grade-appropriate. Each ecosystem is made of many food chains. Food chains provide energy for living things, as they depend upon one another. For example, the sun provides energy for a plant. A plant or producer provides energy for a prairie dog, which is an herbivore. A prairie dog or herbivore provides energy for a coyote, which is a carnivore. Animals, such as prairie dogs, are also known as consumers. They eat and or receive energy from other living things. Therefore, animals depend upon plants or other animals for food.
 - Can you identify a food chain in one of the ecosystems?

Activity

1. Arrange students in groups of 3-4 and explain the following directions. Assign each group a different ecoregion and provide each student with a corresponding ecosystem habitat coloring page. The provided ecoregions are the Rolling and High Plains (combined), Edwards Plateau, Pineywoods, Gulf Prairies, and Trans-Pecos.
2. Allow students time to work together and color their coloring pages, using designated colors, for each of the following components. List the following coloring directions on the board or display slide seven of the PowerPoint for student reference.
 - Brown - landforms, such as mountains or hills
 - Blue - water
 - Orange - animals
 - Green - plants
3. As students are working on their coloring pages, check for understanding by visiting each group and asking students the following questions.
 - What are the basic needs of the animals in your ecosystem?
 - Can you identify living and nonliving things?
 - Can you identify the habitats or shelter of any animals in your ecosystem?
 - Which is larger an animal's habitat or the ecosystem in which it lives?
 - Why is it important to keep ecoregions, ecosystems, and habitats free of harmful things, such as litter on your school playground? What can you do as a steward to keep litter away from your school's playground?
 - Why is it important for all Texans to care about the state's ecoregions, ecosystems, and habitats?
 - How does being a steward of the land help wildlife and their habitats?
4. Ask older students to create a basic food chain with a plant or producer, herbivore, and carnivore using at least one living thing from their coloring page.

Wrap-up

1. Initiate a discussion about the meaning of land stewardship. Explain that being a steward of the land is much like being a caretaker and that Texans must take responsibility for the land and water to help living things meet their basic needs now and in the future.
2. Explain the term “stewardship action” as a kind of action people can do to help the land, water, or living things, such as keeping the land free of trash. Point out how stewardship actions can vary depending upon the characteristics and needs of the specific locations.
3. Ask students to imagine an outdoor learning classroom and pond located outside of their school. The pond has nearly dried up because of little rainfall. Some of its fish and plants have died, and it contains trash. Instruct students to talk with a partner to discuss a plan for how stewardship actions might help solve the problem. Allow time for student responses.