

Kansas Prairies

What's It All About?

Kansas Prairies

Reading

Materials

One copy of Worksheet A for each student

Overview

After studying the prairie biome, the lesson in environmental education is necessary to show students the interdependence of animal life with their environment. Students will match the main idea with the word or words in the box on the provided worksheet.

Grade Level: 5-6

Time: 30 minutes

Standards:
Reading

Objective

1. Students will determine the significance of a group of words, phrases, or sentences.

Instant Expert

Exploring Kansas Natural Resources Educator's Guide. Unit 2 – Prairies (13-32). Kansas Foundation for Agriculture in the Classroom. To order, visit www.ksagclassroom.org

Background Information

In Kansas, cropland (cultivated from former grassland) is the leading use of land, followed by pasture and rangeland, which includes both native grasslands and grass stands that have been reestablished on land that was once cultivated. These uses represent over 90 percent of the state's land area.

Names of the Prairie

French explorers and fur traders in the 1700s have been credited with first calling the middle section of America "la prairie," the French word for meadow. The prairie goes by many names.

Rangeland is land on which the native vegetation is predominantly grasses, grass-like plants, forbs and shrubs. It includes desert, tundra, and forested rangeland. Rangeland is most suitable for grazing. There are limiting factors prohibiting cropland agriculture such as rocks, trees or mountains. Surprising to some, rangeland biomes require human and fossil energy to manage and maintain the grassland for many uses. Without proper management, the prairie moves toward a woody vegetation type. Approximately 47 percent of the earth's terrain is rangeland.

Grassland is a generic term that refers to an area covered with vegetation types dominated by grasses. It can include tame pasture, rangeland, and other types.

What's It All About?

Pasture is a unit of grassland which has a fenced perimeter, and it is a modern term that needed definition only after humans began to contain livestock. Often, biologists consider pasture to be made of one or only a few types of grass versus an area containing a wide variety of plant life like the native grass prairie.

Types of Kansas Prairies

The Kansas grassland biome is divided into tallgrass, mixed-grass, and shortgrass prairies. Areas of sand prairie and sandsage prairie grasslands are found in both the mixed-grass and shortgrass prairie regions of Kansas.

Tallgrass prairie – Before settlement, the tallgrass prairie occupied a north-south strip which encompassed the eastern third of Kansas. The tallgrass prairie exists today since much the land is not tillable due to terrain (slope, rock layers, soil depth, etc.). The grasses can grow in excess of six feet tall during moist years if they reside in deep soils. The annual precipitation in this region exceeds 30 inches. The original tallgrass prairie spanned almost 250 million acres. Today, about four percent remains with the largest areas being the Flint Hills of Kansas and the Osage Hills of Oklahoma. Examples of grasses found in tallgrass prairies include big bluestem, indiagrass, switchgrass, and eastern gamagrass.

Mixed-grass prairie – The mixed-grass or midgrass prairie runs through the middle portion of the state. The grasses here often grow to be two to three feet tall. Typically, this region receives 15 to 25 inches of precipitation per year. The primary factors which create mixed-grass prairie in Kansas are precipitation and soil depth. Examples of grasses found in mixed-grass prairies include little bluestem, western wheatgrass and sideoats grama grass.

Shortgrass prairie – The shortgrass prairie lies mainly in the western portion of the middle of the United States, east of the Rocky Mountains. The grasses here are usually less than two feet tall. The westernmost areas receive, at maximum, 15 inches of precipitation per year. Examples of grasses found in shortgrass prairies include blue grama grass and buffalograss.

The Great Plains

The Great Plains is a major ecological region found in the central part of the continent of North America, occupying nearly 1.4 million square miles. The area extends from the Canadian provinces of Alberta, Saskatchewan and Manitoba south into northeastern Mexico and from western Indiana to the foothills of the Rocky Mountains. Approximately 34 million people live in the Great Plains, including 32 million in the U.S. portion of the region.

Across the Great Plains, rainfall decreases from east to west – defining different of types of native prairies. While there are grassland and forest combinations along the eastern edges of the Great Plains, few native trees occur across other areas of the region. The Great Plains is one of the largest farming and ranching regions of the world and agriculture is the most important economic activity of the Great Plains.

What's It All About?

Information adapted from Exploring Kansas Natural Resources Educator's Guide. Unit 2 – Prairies (13-32). Kansas Foundation for Agriculture in the Classroom. To order, visit www.ksagclassroom.org.

Instructional Format

1. Share background information with students.
2. Students will complete Worksheet A.

Procedures

1. Share background information with students.
2. Students will complete Worksheet A by matching the main idea with the word or words in the box provided on the worksheet. They will write the main idea on line above the box.

Resource

Exploring Kansas Natural Resources Educator's Guide. Unit 2 – Prairies (13-32). Kansas Foundation for Agriculture in the Classroom. To order, visit www.ksagclassroom.org

Worksheet A Answer Key

1. C
2. E
3. B
4. A
5. D
6. F



Name: _____

What's It All About
Match the Main Ideas

Match the each main idea listed below with the appropriate box of words or phrases.

Main Ideas

- A. Types of Kansas prairies
- B. Great Plains
- C. Names for prairies
- D. Range plants
- E. Surface area of Kansas
- F. Burning the prairie

1. _____

Rangeland
Grassland
Pastures

2. _____

Pastureland and
Rangeland
Cropland
Forest land

3. _____

Central part of North
America
Large farming and
ranching area
All of Kansas

4. _____

Tallgrass
Mixed-grass
Shortgrass

5. _____

Grasses
Forbs
Woody plants
Wildflowers

6. _____

Prescribed in spring
Improved prairie
American Indians