

The Six Important Native Plants

Grades: 3-4

Focus: At the end of this lesson students will:

1. Be able to identify the three main decreaseers and increaseers found at the Grant-Kohrs grassland.
2. Understand the importance of maintaining these healthy grazing rangeland.

Summary: We tend to take our grasslands for granted. Our children must be aware and mindful of the importance of preserving our ranges.

Exploration:

Teacher: Today we are going to learn about six different types of grazing plants that are found in our valley. We will also discuss the importance of maintaining our lands to preserve our heritage. The Big Sky country may not last if we don't take care of our land today.

Discussion Questions:

1. What would our valley be like if we didn't have ranches?
2. What is the difference between decreaseers and increaseers?
3. How can you identify these different native plants?
4. What is the importance of them?

Materials Needed:

1. Glass-microwave safe plates
2. Microwave oven
3. Paper towels
4. Pictures of plants:
 - a. Bluebunch Wheatgrass at www.montanakids.com
 - b. Sage at www.wisdomoftheelders.org
 - c. Needle and thread at www.westernnativeseed.com
 - d. Lupine at www.meb.uni-bonn.de
 - e. June grass at www.grasslands-bioblitz.org
 - f. Idaho fescue at www.plantsofthewild.com
5. Poster board.
6. Rubber Cement

Activity:

The teacher will define a decreaseer as the most important and nutritious plant for grazing. They are called decreaseers because the livestock eat these plants first and so they decrease in number.

The teacher will define an increaseer as the second choice of the cattle. When the decreaseers are gone, they will eat these. They are shorter and less desirable.

The teacher will provide six colored flashcards with the pictures provided here for each student. Discussion will include the similarities and differences of these plants.

The student will label each card with the plant name and if it is a decreaser or an increaser.

Students will work in pairs to help each other identify the plants in a speedy and accurate fashion.

Optional Activity: Play a flashcard game to reinforce the visual recognition of the six plants.

Application: Organize a field trip to the Grant-Kohrs ranch in the fall when the plants are easily recognizable. Permits to collect samples from the park may be obtained from <http://rprs.nps.gov/research/ac/apps/apply/AppInstructions>

Students will work in pairs to discover and identify all six plants. Discussion will be held on the occurrence of decreaseers and increasers in the field and how that reflects the condition of the rangeland.

Each pair should have an actual sample of each plant to take back to the classroom to *press and mount on poster board. Students may view the herbarium at the Grant-Kohrs Ranch.

**Pressing procedure: Take a plate, place 2 paper towels on it, lay the plant on this, cover with 2 more paper towels and a plate. Cook in the microwave until dried (watch carefully as wattage varies).*

Science Content: End of Grade 4
Standard 1: Benchmark #3, 4, 5.
Standard 2: Benchmark #1, 4.
Standard 3: Benchmark #1, 4, 5.

*Designed by Aleta Forbes and Cindy Holst
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