

Beargrass Basket: A Metaphor for Ecology

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Grade Level: 9-12

Time: 1-2 Weeks

“Among our people, both men and women were basket makers. Everything in our lifestyle was connected to those baskets. Our lives are bound the way baskets were bound together.” *Susan Billy, Ukiah Pomo*

Focus: At the end of the lesson the students will:

- Be able to demonstrate a basic understanding of the interdependent nature of the ecological landscape as it relates to fire, the Grant-Kohrs Ranch, and the Beaverhead-Deerlodge National Forest.
- Have created their own “Beargrass Basket” which depicts the relationship between fire and the natural environment, as well as how people have utilized the environment to their benefit. Students should have a positive understanding of how fire benefits the environment and how individuals have benefited from fire.
- Understand how Native Americans and United States citizens have utilized the resources available to them and how they have managed those resources.
- Be able to provide a solid understanding of Beargrass, Ponderosa Pines, rhizome, Indian Basketry, Lodgepole Pine, interdependence, Ecology and other terms as a teacher sees fit.

Summary: Students should develop and demonstrate an appreciation and understanding of the interdependent relationships within the ecological landscape of Grant-Kohrs Ranch and the Beaverhead-Deerlodge National Forest. Their basket will be a reflection and rendering of what they have learned and understood.

Exploration and Anticipatory Set:

Teacher: Ask questions and receive answers about students’ understanding of fire as a way of introducing them to its benefits. Suggested questions include:

- What do you know about fire?
- What starts fire?
- Have you ever seen a forest fire?
- In what ways is a forest fire harmful?
- In what ways is a forest fire beneficial?
- To whom or what is a forest fire harmful?
- To whom or what is a forest fire beneficial?

Teacher: Provide students with examples of natural and man-made items found in, and from, the Beaverhead-Deerlodge National Forest. Suggested items include:

- Beargrass
- Pictures of Jack fences (lodgepole rails)
- Elk/Deer Antlers
- Elk/Deer Photos
- Ponderosa Pine

- Wood Stove
- Log Cabin
- Clark's Nutcracker
- bunch grasses
- Blackback Woodpecker
- Bluebunch wheatgrass
- Smooth brome
- Timothy
- 2x4 (Plywood, Wood Pellets, Hog Fuel)

From our discussion about our hometown and your viewing of these items before you, you have come to develop a basic understanding of some components of the ecological landscape of the Beaverhead-Deerlodge National Forest.

Materials Needed:

Pen/Pencil and Paper (Preferably a notebook or journal)
 Construction Paper: Colored, and/or White
 Tape or Glue Stick (Preferable)
 Colored Pencils, Markers, Watercolors, Stencils (Letters and/or shapes)
 Paint Brushes
 Scissors
 Internet Access
 Optional: Field trip to the Grant Kohrs/ Beaverhead-Deerlodge National Forest
 Fireworks Presentation
 Microsoft PowerPoint

Procedure:

Using the Fireworks program, students will receive an initial exposure to the positive effects of fire on the natural environment.

The teacher will then use the PowerPoint provided to reinforce and further solidify students understanding of how fire has benefited the natural landscape of the Beaverhead-Deerlodge National Forest. The PowerPoint also discusses how man has benefited from the resources of the Forest, both prior to and after fire.

If available, an instructor may schedule a fieldtrip to the Grant-Kohrs Ranch/Beaverhead Deerlodge National Forest and experience firsthand the effects of fire.

Students must take notes and study the information provided to them. Daily Quizzes and a journal reflecting on each day's personal learning is a must.

Student Application:

1.) Once the teacher feels students have grasped, or started to grasp, the information presented over the previous days, he/she should introduce the artistic project which the students will use to demonstrate their understanding.

2.) The teacher will reuse the PowerPoint provided to show the important information presented during the week, and will also spend extra time discussing and presenting the Beargrass baskets

which were designed by Native Americans. The included images will serve as “models” for the students to emulate.

3.) Students will design a basket which will contain the important information from the previous week. The basket must show how various parts of the landscape are interdependent and woven together. (*Beargrass* was used by Native Americans to weave baskets. Beargrass was the first plant to appear after *fire* because its *rhizomes* could escape the high heat. Beargrass is the first plant Elk and Deer consume in the early spring: Deer and Elk are consumed by human beings and wolves and Mtn. Lions, etc.)

4.) Students should draw or paint important images onto the strands of construction paper which will be used to “weave” the basket. Students may also use photos or words to help get across their understanding. Each strand of paper could contain a few ideas, but not too many—horizontal depictions could work. Or, a few ideas can be drawn across a few strands in a vertical fashion.

5) Students will write a short paper which explains their basket and their understanding of the material presented to them.

Assessment:

Students will be graded on the quality of their artwork, the neatness and clarity of the images on or in their basket, and their demonstrated understanding of material presented. The students’ basket must demonstrate that they have a solid understanding of the interdependence upon which all of nature thrives.

Montana Standards:

Art: 1,2,4,6

Science: 1,2,3,5

Social Studies: 1,3,4,6