

Title

Ecological, Geographical, and Cultural Importance of Pipestone, MN: Completing the Circle of Prairie Life.

Grade level

College students (Juniors/Seniors).

Theme

Identify, explain, and connect the ecological, geographical and cultural importance of Pipestone, MN to southwest Minnesota and the Nakota/Dakota people.

Duration

Laboratory exercise will be completed over 3 weeks (2-hr lab once per week).

Goal

Students will:

- Identify Pipestone location using a topographical map.
- Identify the major prairie plants of Pipestone area.
- Identify the major animal species of Pipestone area.
- Compare and contrast the contemporary prairie and animal species with those present during pre-settlement (prior to 1800's).
- Learn significance of Pipestone rock and quarry to Nakota/Dakota and other Plains Indian cultures.
- Learn the ecological and geographical significance of Pipestone, MN.

Objectives

Upon completion of this laboratory exercise, students will be able to:

- Explain the ecological significance (e.g. flora and fauna) of Pipestone National Monument to southwest Minnesota and Nakato/Dakota culture.
 - Explain how flora and fauna were used/valued by Nakota/Dakota culture (eg., identify medicinal qualities of select prairie plants).
- Describe the major geographical features of the landscape encompassed by Pipestone National Monument.
- Describe the cultural significance of Pipestone rock, and quarry to Nakota/Dakota culture.

South Dakota Standards

N/A.

Cultural Concept

- Understand the importance of prairie plants as food, medicine, and spiritual significance to Nakota/Dakota people and to the ecology of southwest Minnesota.
- Understand importance of fauna (e.g., buffalo) to Nakota/Dakota culture and the ecology of the southwest Minnesota.
- Understand importance of pipestone rock to Nakota/Dakota and other Plains Indians and use in cultural ceremonies.

Cultural Background

Pipestone quarry was important in making peace pipes for Nakota/Dakota and other Plains tribes.

Student Activities

Students will use maps to locate Pipestone. Students will generate maps using GPS of significant cultural, ecological and geographical entities that encompass Pipestone National Monument. Students will be divided into small groups (2-3) and assigned a specific research goal (e.g., list of prairie plant species, list of representative fauna, explanation of cultural history). Students will use various references (eg., guide books, select internet sites, historical records) to identify flora and fauna, and determine significance of flora, fauna, and geography to Dakota culture and southwest Minnesota. Students will visit Pipestone National Monument and

- Walk the prairie identifying prairie plants.
- Visit the pipestone quarry.
- Attend a lecture by Native American to describe cultural significance of Pipestone to Nakota/Dakota culture.

Resources

- Topographical maps of southwest Minnesota.
- Bus to Pipestone.
- Numerous resources including guide books and access to internet.
- Fee payment for visiting Pipestone National Monument.

Assessment

- Each student group will present results of his/her specific assignment (e.g., flora list, fauna list, cultural significance of pipestone quarry to Nakota/Dakotas) to the class by the end of the second week. Rubric will be developed to grade quality of presentation.
- Each student will complete to-be-designed worksheets during visit to Pipestone National Monument. Rubric will be developed to grade these worksheets.
- Each student will keep notebook of his/her reflections from guest lecture on importance of Pipestone to Nakota/Dakota culture.
- Students groups will explain the results of their specific assignment to every other groups and answer questions about their research. Each student will then write 3-4 page paper that links and summarizes the ecologically, geographically, and culturally important features of Pipestone to Nakota/Dakota population.
- A grading rubric will be developed to assess the quality of student papers.

References

Gilmore, M. (1991). *Uses of Plants by the Indians of the Missouri River Region*. Lincoln: University of Nebraska Press.

Minnesota Department of Natural Resources. (2009). *Minnesota's Biomes*. Retrieved at www.dnr.state.mn.us/biomes/prairie.html, June 25, 2009.

National Park Service. (2009). Pipestone National Monument. Information retrieved at www.nps.gov/Pipestone, June 25, 2009.

More references will be developed over summer 2009.

Developer

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