

Chances with Wolves

Summary

Students study a selection of materials in groups and discern between observations and inferences. Students use the material to prepare to debate as environmentalists or ranchers on the reintroduction and protection of wolves in Yellowstone and the surrounding intermountain region. Small groups then debate the subject.

Time Frame

2 class periods of 90 minutes each

Group Size

Small Groups

Life Skills

Thinking & Reasoning, Communication, Social & Civic Responsibility

Materials

9 prepared sheets. See attachments.

Background for Teachers

Wolves were reintroduced into the Yellowstone and surrounding regions in about 1995. As of 2010, the wolf population in the Rockies is fairly steady at about 1600, and their territory is spreading. In spring 2009, the Fish and Wildlife Service agreed to delist wolves as endangered in Idaho and Wyoming. These states allowed some hunting this year. In 2010, a federal judge ruled that the Fish and Wildlife Service overstepped its bounds by delisting the wolves as endangered in two states, thus overturning the decision. As of October 2010, gray wolves are listed as endangered in the Rocky Mountain region, and politicians from Utah and Idaho are attempting to delist wolves by going through congress. In 2013, the wolf population had reached to about 1691 with 320 packs. As of 2014, the law has resubmitted them as endangered.

Intended Learning Outcomes

1. Use Science Process and Thinking Skills
 - f. Distinguish between factual statements and inferences.
4. Communicate Effectively Using Science Language and Reasoning
 - a. Provide relevant data to support their inferences and conclusions.
 - d. Use reference sources to obtain information and cite the sources.
5. Demonstrate Awareness of Social and Historical Aspects of Science
 - a. Cite examples of how science affects life.

Instructional Procedures

Day 1

The teacher shows either or both of the videos to show background information on the wolves and current situation in Yellowstone and Rocky Mountain Region and to model determining the difference between an observation, fact, and inference with the students.

Students are split up into an even number of small groups. Each group receives one copy of the 9 attached sheets. Individual students list observations and inferences in a T chart for the articles.

Then, the students regroup into larger groups where each group has an representative of the articles to share what they learned and delineated between observations and inferences.

Day 2

Half of the groups are assigned as ranchers, the other half as environmentalists. Groups then study the papers again to prepare arguments for a debate.

Review proper debate etiquette. Opposing groups debate on current issues surrounding wolves in the rockies. The issue of the debate is whether wolves should be taken off the endangered species list, and whether states should be allowed to manage their own wolf populations.

Assessment Plan

Students will be assessed on their recognition of inference versus observation, on their drawing out the main points of each article, and their use of class content in the debate.

Bibliography

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T. Adam Switalski et al., **Wolves in Utah: An Analysis of Potential Impacts and Recommendations for Management**, Utah State University NY Times Article

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Video on Wolves <http://vimeo.com/86466357>

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Authors

[Holly Godsey](#)

[Matthew Smith](#)

[Paul Staten](#)