

Arthur Carhart National Wilderness Training Center's
Wilderness Investigations
A Subject-Integrated Curriculum for Grades 9 – 12
High School

Wilderness Applications/Lesson 6
Mountain Bikes and Wilderness

Goal: Students will be exposed to arguments for and against mountain biking in designated wilderness and begin to connect their basic knowledge of the Wilderness Act to these ideas so that they are able to express informed opinions.

Investigation Objectives

Audience: 9-12 grades

- Students will jigsaw* (see teacher background) articles for and against mountain biking in Wilderness areas. Students will create, distribute, and interpret a survey on mountain biking in wilderness areas. (Behavior)
- Students will be given articles for mountain biking in wilderness and articles against mountain biking in wilderness. Students will be given instructions to make a mountain biking survey. (Condition)
- Students will use the information they have gathered from the articles shared in the jigsaw activity and survey to write a persuasive essay either for or against mountain biking in Wilderness areas. (Degree)

Common Core Standard Connections

NOTE: See Common Core Standards sections to see listed objectives for this and other lessons/activities.

Time Requirement: 50 minutes

Materials/Resources Needed and Pre-Investigation Tasks

Articles expressing opposition to mountain biking in wilderness:

1. <http://www.hcn.org/wotr/mountain-bikes-and-wilderness-dont-mix>
2. <http://www.thewildlifeneeds.com/2014/07/12/why-mountain-biking-is-inappropriate-in-wilderness/>
3. http://wilderness.org/sites/default/files/Mountain-Biking-in-Wilderness_0.pdf

Articles in support of mountain biking in wilderness:

1. <http://www.americantrails.org/resources/fedland/BikeWilderness.html>
2. <http://www.outsideonline.com/outdoor-adventure/biking/mountain-biking/Spurning-Rubber.html>

Teacher Background:

-Before teaching this lesson, be sure to have read through the five articles on mountain biking in wilderness area, while reading the articles you should make a t-chart to record the pros and cons of mountain biking in wilderness areas.

-In addition, before teaching this lesson, be familiar with the “jigsaw” activity. In this lesson, a jigsaw activity occurs when the class is divided into five groups. Each group is given one of the five articles on mountain biking in Wilderness. Each group will read the article together and become an expert group on their given article. They will write a summary of the article and make a list of the arguments and supporting facts. Each individual in the expert group should have the summary and list written down. Then, the groups will rearrange and form five new groups. The new groups will be formed by having one individual from each expert group in the new group. With an expert on each of the articles in the new group, each expert will have a chance to share their summary, arguments, and supporting facts with the other individuals in the group. The individuals, who are not presenting, should be taking notes. The jigsaw activity concludes when each expert has shared their article—and everyone in the group/class has information recorded from each of the five articles.

Step-by-Step Presentation Instructions

- Students will jigsaw (see teacher background) five articles for or against mountain biking in Wilderness areas.
- The teacher will lead a class activity in which the students share the arguments for and against mountain biking in Wilderness areas. The teacher will organize the information into a t-chart on the board.
- The students will create a brief survey about mountain biking in Wilderness areas. The survey should be a mixture of yes/no questions as well as open ended questions. The survey can be given in written or verbal form, so long as students record the data. Here is an example of a verbal survey:

Mountain Biking in Wilderness

1. What is federally designated Wilderness?
2. Have you been to any Wilderness areas? If so, which ones?
3. What outdoor activities do you like to do, if any?
3. Do you think that mountain biking should occur in Wilderness areas? Why or why not?

- **(Out of class)** the students will ask ten individuals from the school and/or community to fill out the survey.

Activity/Assessment:

Students will take a stance and write a persuasive essay either for or against mountain biking in Wilderness areas. Students will use the information they have gathered from the articles in the jigsaw activity and the data they collected in their surveys to support their stance in their essay.

Evaluation:

Grading Scale: 12 total points

	Excellent	Good	Fair	Poor
Stances on issue	4	3	2	1
Support from articles	4	3	2	1
Support from survey	4	3	2	1
Other:				

