

# Forests for People

## Public Lands

### National Science Education Standards

\* Standard F: *Science in Personal and Social Perspectives* — Populations, resources, and environments.



### OVERVIEW

Students devise and conduct a survey of the school to discover how individuals spend their time in forests.

### OBJECTIVES

Students will:

1. Students will understand that people go to forests for a variety of purposes.

### SUBJECTS

Social studies, Math, Language arts

### VOCABULARY

Values

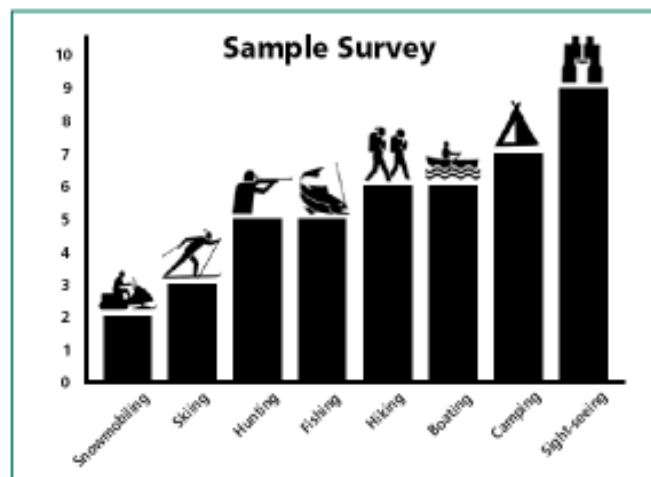
### TIME

3-4 hours

### MATERIALS

Questionnaire devised by students, pencils.

OPTIONAL: tape recorder and cassette tape.



## BACKGROUND

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Just as forests are complex, so is the process of managing them. The purpose of this activity is to encourage **students to obtain information before forming an opinion** and to acquaint themselves with current forest issues. Teachers should stress that there is NO right or wrong opinion about these **dilemmas**.

Opinions about the issues using logic, emotion, or philosophy are valid as long as they are supported by accurate information.

Healthy forests make for a healthy nation. Yet today, many of the nation's forests are threatened by a range of issues. Although logging on National Forests has been a key area of conflict in the past, today the challenges of maintaining healthy forests are different. In 2002, the Forest Service identified four 'threats' that imperil the nation's precious National Forests. Keeping America's forests and grasslands healthy requires restoring and rehabilitating damaged areas to: (1) prevent severe wildfires, (2) stop the introduction, establishment, and spread of invasive species, (3) reduce the conversion of forest and grasslands that leads to fragmentation of rural landscapes through subdivision, and (4) manage impacts of motorized recreation vehicles by restricting use to designated roads and trails. For more information about these issues, visit the Forest Service website at <http://www.fs.fed.us/projects/four-threats/index.shtml>.

### Fire and Fuels

Rehabilitation and restoration treatment priorities are highest where risks are greatest. Estimates are that high priority treatment areas cover 397 million acres across all ownerships, public and private, an area three times the size of France.

### Invasive Species

Of 2,000 nonnative plants found in the United States, 400 are invasive species. The U.S. spends \$13 billion per year to prevent and contain the spread of invasives. For all invasives combined, the price tag is \$138 billion per year in total economic damages and associated control costs. In addition to nonnative plants, 70 million acres of forest in all ownerships (public and private landholdings) are at serious risk of being wiped out by 26 different insects and diseases (e.g., gypsy moth, hemlock woolly adelgid, dogwood anthracnose – the list goes on).

### Loss of Open Space

More than 21.8 million acres of open space were lost to development between 1982 and 1997, about 4,000 acres per day, 3 acres a minute. Of this loss, close to 10.3 million acres are in forestland. It continues today.

### Unmanaged Recreation

Increasing use of the national forests for outdoor activities prompts the need to manage these forms of recreation, including the use of off-highway vehicles (OHVs). OHV ownership has grown from 5 million in 1972 to 36 million in 2002. Depending on the site, unmanaged OHV use in the national forest can have serious impact on the land, among them: (1) damage to wetlands and wetland species, (2) severe soil erosion, and (3) spread of invasive species.

## ACTIVITY

1. Discuss techniques of surveying groups of people to gather information.
2. Introduce the idea of creating a survey about forest use and discuss the merits of such a survey. People spend time in forests for a variety of reasons and place a **value** on forests. Explain that the class will make a survey about Alaska forest use to determine how students and their families use the forest.
3. Explain the difference between open-ended and close-ended questions. The class assignment is to gather information on how students, teachers, and school staff spend time in the forest. Questions could include:
  - (a) Do you go to any forest areas. If so, which ones?
  - (b) If you go to forest areas, did you go in the past year? If so, how often?
  - (c) What kind of activities do you do in a forest area?
  - (d) Do you pay any fees to participate?
  - (e) How do you get to the areas you use?
  - (f) What is your favorite forest area? Why?
  - (g) Do you know who "owns" the forest?
  - (h) What do you think are the most valuable things in forests?
  - (i) Do you think forests have other important values, and if so what are they?
  - (j) How would you measure the value of an acre of forest?
4. As a class, construct a questionnaire using the questions students want answered.
5. Work with students to create a data log or organizational chart that will lend itself to easy information gathering and later tabulation.

*Using a computer to create the log or chart is excellent practice. The chart may include a choice of responses and/or levels of agreement and disagreement.*

6. Practice asking the questions and recording the data in class before going out into the school community to gather actual data.
7. Working in small groups or pairs, conduct the survey of school staff and students. If feasible, conduct part of the survey outside the school to gather information from a wider range of ages. Assign a minimum number of interviews per student team.
8. Ask each team to make a table or graph to show the kinds of answers obtained. A computer works well for this task.
9. Discuss the answers obtained. Were the people interviewed from a variety of backgrounds? How might the answers change if the respondents were from other parts of the state? What kinds of values do people have about forests? What kinds of activities do people do most frequently? How important do forests appear to be to the community surveyed?



## EXTENSIONS

- A. **Calculate outdoor recreation costs.** Use outdoor magazines and catalogs for outdoor gear to calculate the cost of outfitting a family trip to a forest area to go fishing, hunting, backpacking, hiking, camping, wildlife viewing, skiing, snowshoeing, or snowmobiling.
- B. **Invite forest users as guest speakers.** Ask community members who log, carve, fish, hunt, gather plants, backpack, ski, guide, or create forest crafts to speak to the class on forest use.
- C. **Display survey results.** Make a mural or bulletin board display showing the kinds of forest uses students found in their survey.
- D. **Create media announcements.** Students design a public service announcement about using a local forest.
- E. **Debate uses of a forest.** Use the Section 5 Student Activity “Whose Forest? Our Forest” as a follow-up activity.

## ASSESSMENT

Students write 1-3 paragraphs describing the results of the survey as if it were to be published in a newspaper. Use a “compare and contrast” format for their compositions. *If possible, print the best paragraphs* as articles in the school or community paper.

## CREDIT

This activity is adapted with permission from the Alaska Wildlife Curriculum (AWC). AWC is a program of the Alaska Department of Fish and Game. Go to <http://www.wildlife.alaska.gov/education/wilded/awc.cfm> or <http://www.adfg.state.ak.us/> for more information about this award-winning environmental education curriculum.

