

OVERVIEW

Students explore various types of recreation that occurs in forests and the environmental impacts of each. Students will then plan a recreational weekend in the forest.

BACKGROUND**Outdoor Recreation**

The fact that forests provides wildlife habitat is not only important to the wildlife, but also to Pennsylvanians. In Pennsylvania, more than 60 percent of all adults participate in some form of recreation related to wildlife, such as birding, wildlife photography or wildlife observation of other types.

Most of Pennsylvania's state symbols are forest plant and animal species: the white-tail deer is the State Mammal, the ruffed grouse the State Bird, the mountain laurel is the State Flower and the eastern hemlock is the State Tree.

Twenty-six percent of Pennsylvania's forestland is publicly owned. Most of it is owned by the state (primarily the Department of Conservation and Natural Resources [DCNR] Bureau of Forestry and Bureau of State Parks, and the Pennsylvania Game Commission). One of the purposes of Pennsylvania's DCNR's state forestlands is to provide opportunities for healthful outdoor recreation to the public. Providing these opportunities is especially important today, as Pennsylvanians and others tend to have more time and disposable income for leisure activities. In order to provide such opportunities, state forest lands have an extensive system of roads, trails, picnic areas and areas where primitive camping is permitted (See Table 1).

Trails are used for a variety of activities such as hiking, birdwatching and wildlife viewing, hunting, mountain biking, horseback riding, and in winter for cross-country skiing and dog sledding. Trails have also been developed for motorized recreational vehicles including all-terrain vehicles (ATV) and snowmobiles. All state forest roads (including gated timber sale roads after the timber harvest is completed) are also available to hikers and people riding mountain bikes and horses.

Hunting and fishing are important to a great number of Pennsylvanians. Each

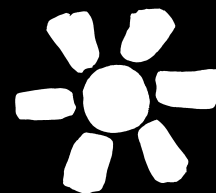
year more than a million hunters take to the field and forest. Pennsylvania leads the nation in number of hunters and is fifth in the number of sport anglers.

Pennsylvania's forests are home to the three wildlife species most sought after by hunters in the Eastern United States: white-tailed deer, black bear and wild turkey. There are several million acres of public land open to hunting on State Game Lands, State Forests, State Parks and in the Allegheny National Forest.

All of these things can be done in conjunction with timber harvesting. Timber harvesting creates a more diverse forest, which in turn increases food for wildlife and birds.

PROCEDURES

1. Ask students for their definition of the word "recreation" (activities that people do to have fun and/or to restore their spirits). Ask the students to share some examples of recreational activities that they enjoy.
2. Divide students into small groups and give each group a sheet of large newsprint paper and a marker. Have students fold the newsprint in half vertically. Give students time to brainstorm a list of as many recreational activities as they can think of and have the students list these activities in the left-hand column of the newsprint.
3. When the groups are done with their lists, ask them to discuss where these activities are most likely to take place and which of them might be done in a forest setting. Have the students' circle the recreational activities that they agree are likely to occur in the forest.
4. Have students discuss the environmental impacts (impacts on vegetation, the wildlife and/or other natural resources) of those recreational activities that take place in the forest and

**GRADE LEVELS:**

Grades 5–8

OBJECTIVES: Students will (1) distinguish between recreation that is damaging and not damaging to the forest environment and (2) plan a weekend of recreation in the forest that has minimal environmental impact on the forest.

PENNSYLVANIA PROPOSED ENVIRONMENT & ECOLOGY STANDARDS ADDRESSED:**4.8.7**

- A. Describe how the development of civilization relates to the environment.
C. Explain how human activities may affect local, regional and national environments.

4.8.10

- A. Analyze how society's needs relate to the sustainability of natural resources.
B. Analyze the relationship between the use of natural resources and sustaining our society.

ESTIMATED DURATION: One to two 50-minute class periods.

MATERIALS NEEDED: Large newsprint paper and markers.

to note them in the right-hand column of the paper. Remind students that all recreational activities have some impact on the environment, but for now they are to focus on the types of recreation that takes place in forests.

5. When the groups are finished, ask each group to share one of its forest recreational activities and the environmental impacts (if any) associated with it.
6. Finally, have students work in the same small groups to plan a weekend of “playing lightly in the forest.” Have them use the back of the same piece of newsprint paper to develop their plan. Students should include lists of equipment or other materials that will be needed for each recreational activity in their plan. This weekend plan can include their families and/or their friends, but students should attempt to choose recreational activities that have minimal environmental impacts on the forest.
7. Ask students to also think about meal and sleeping accommodations for the weekend. Will they camp in the forest or return home to sleep? Will they return home to cook some or all of their meals, eat in a restaurant or have a cookout? Have students discuss the environmental impacts of each of these choices.
8. Have students take the weekend plans home with them to share with their families and encourage them to discuss the philosophy of “playing lightly” in Pennsylvania’s forest.

EXTENSION

- If possible, have students follow some or all of the weekend recreation plan with their family and/or friends. Have them take photos and develop an illustrated reflection or poster presentation of the weekend.

ASSESSMENT

Have students work together in small groups to invent a game that has little environmental impact. Students could also try to invent games that could improve the environment in some ways. Ask each group to present its game to the other students, then have the class participate in playing the game.

State Forestland Infrastructure		
Hiking Trails	1700 miles	
Cross-Country Ski Trails	300 miles	
Snowmobile Trails	2500 miles	
Horse Trails	65 miles	
ATV Trails	150 miles	
Total Trails:	4705 miles	
Roads 2500	miles	
Boundary Lines	5000 miles	
Buildings	650	
Leased Campsites	4032	
Picnic Areas	26	
Bridges	379	
Wild Areas	16 acres	145,359 Acres
Natural Areas	61 acres	69,182 Acres

Table 1. Infrastructure of DCNR State Forestland in Pennsylvania (From Penn’s Woods, p.23)