

Lesson 4

The Sustainable Forest



Objectives:

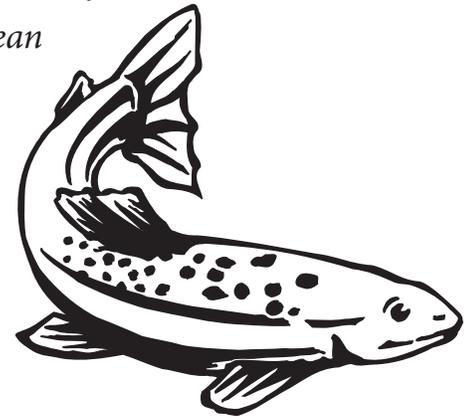
1. To understand that California has the most comprehensive timber harvest regulations in the nation.
2. To understand that California foresters must prepare a timber harvest plan and have it approved by the Department of Forestry before harvesting may take place on private forest land in California.
3. To understand that many different kinds of forest workers cooperate to help a registered professional forester in preparing a timber harvest plan, such as wildlife and fisheries biologists, botanists, geologists, and hydrologists.
4. To understand that sustainable forestry ensures balance between increasing consumer demands for wood products and safeguarding environmental needs.



Focus:

1. Establish the comprehensive nature of laws that protect California's forests and wildlife by asking the students to guess what some of these laws might concern. Put their suggestions on the board. Examples are given below:

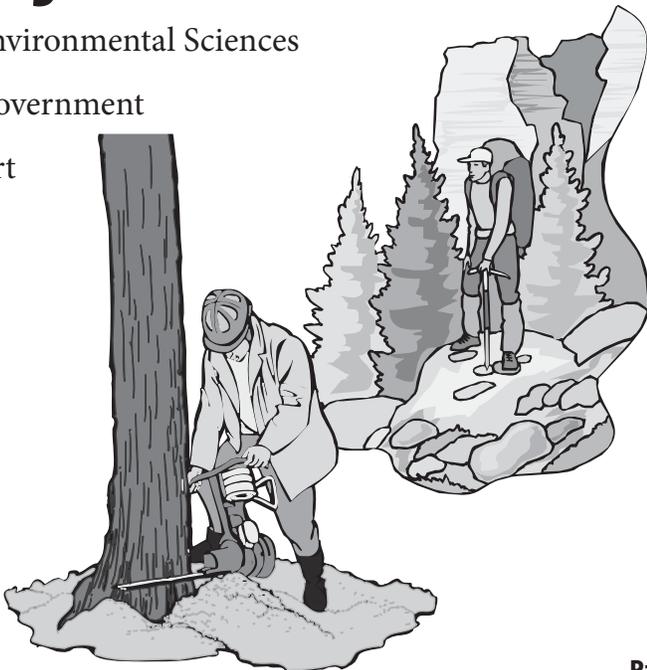
- *protecting wildlife and fish*
- *keeping water clean*
- *keeping the air clean*
- *protecting other plants in the forest*



2. Read together the material in the *Did You Know?* activity sheet on the next page to validate correct answers and to illustrate some of the particular rules that protect forest health and provide protection for wildlife.

Subjects:

1. Environmental Sciences
2. Government
3. Art



Vocabulary:

1. **Artifact:** an object with historic value that has survived from the past.
2. **Hydroelectric Plant:** a place where electricity is produced by the energy of rapidly moving water.
3. **Spawning:** the producing or depositing of eggs by fish.
4. **Erosion:** the wearing away of the soil, usually by wind or water.
5. **Riparian Zone:** the area along a river or a stream.

VOCABULARY

Enrichment Activity:

1. Have the students make a forest panorama display:

- ✓ Make copies of pages 22 and 24. This is the information sheet that will be glued behind the panorama.
- ✓ Color the picture on pages 21 and 23.
- ✓ Cut the information windows along the dotted lines.
- ✓ **EMPHASIZE NOT TO CUT THE TOPS OF THE WINDOWS!**
- ✓ Have the students glue a perimeter along the outside back of the panorama ONLY.

- ✓ Glue the panorama to the information sheet along the outside perimeter.
- ✓ The two pages need to be positioned so that the written information lines up with the windows.

2. Make an optional set of props so that the panorama can stand:

- ✓ Give students two 3x5 index cards.
- ✓ Have them fold each card in half.
- ✓ Have them glue one half of each card, with the fold up, to the back of the finished panorama. The card will act as a prop.



Information for Panorama Windows:

Window #1

Areas may not be harvested near archeological sites, such as those areas containing Native American artifacts.

Window #2

Forests provide multiple recreation opportunities, such as fishing, hiking, horseback riding, camping, motorcycle riding, mountain biking and bird watching.

Window #3

Dams and hydroelectric plants install fish ladders so the fish can reach their spawning grounds.

Window #4

Old methods of logging once blocked streams. Now foresters and other scientists use best management practices that will protect and restore salmon habitat.

Window #5

Forest roads must be built carefully and maintained in order to prevent erosion.

Window #6

Trees alongside waterways are not harvested. These areas next to streams are called riparian zones.

Window #7

Riparian zones need trees to shade the water and keep it cool for fish and other organisms living in the stream.

Window #8

Riparian zones prevent erosion from clogging rivers and streams.

Window #9

All approved harvest operations must protect water quality, wildlife, plants and their habitat. Regulatory agencies inspect harvest areas before, during and after harvest.

Window #10

Openings made by timber harvesting are 20 acres or less on average. Law requires replanting of trees in harvested areas.

