

LESSON #6: ENDANGERED PLANTS

Objective: To learn the five main reasons why plants are endangered. To research locally endangered plants and create a gallery to educate others.

Materials Needed:

- Poster board in various colors
- Markers
- A list of endangered plants that students can choose from (You will need to make this list—see “Introduction to Activity” below.)
- Access to computers to do internet research

Introduction to Activity: The previous reading assignment (“Why Plants Are Endangered”) will have introduced your students to the five main reasons why plants are endangered: habitat loss, alien species, over-harvesting, climate change, and pollution. This activity is designed to help your students learn about specific endangered plants and the reasons they are endangered. Students will each create a poster about one endangered plant, and the posters will be exhibited to make a gallery of endangered plants from which others can learn.

You will need to decide which plants students may choose. We recommend starting with local plants so that students can learn about them, but this is not a necessity. Some states have many endangered plants (Hawaii has close to 400!), while others have only a few. If your state has only a few endangered plants, you might want to include endangered plants from other states. You can also call your contact person at your local botanic garden to find out what endangered or threatened plants from around the world they have in their collection, and these can be added to your list. Or if your students are studying a particular part of the world in their history class, you can choose plants from that region. Students can work individually or in pairs. However, we recommend individual posters if students will be doing work outside of class. This will also make your gallery more extensive. Make a list of endangered plants in advance and make copies that can be passed out to your students so they can choose a plant to research from the list. Every student or pair should choose a different plant. Below you will find a list of websites that you visit in order to create a list of plants for your class.

1. U.S. Fish and Wildlife Service (www.fws.gov/endangeredwildlife.html). Click “How many and which species are listed in each state?” Below the map of the U.S., you will see a written list of states. Select a state and click it. Scroll through the list to get to endangered plants in the state. (Mammals are listed first.) This is the best site for endangered species in the United States.
2. World Conservation Union (IUCN) (www.iucnredlist.org). Click “Search” and you can search by country, region, and even major habitat type. The

list will include plants and animals combined, but the common names will help you select plants. This list is best for globally threatened species.

Activity:

Begin by reviewing the five main reasons why plants are endangered, which were described in “Why Plants Are Endangered.” Explain to the students that they will be researching an endangered plant and creating an informational and decorative poster about the plant. All of the posters will be exhibited in a gallery of posters in your school so that other people can learn about these important plants. Therefore, the students should make their posters look really good!

You will want to make a list of the topics they should address on their poster. Their poster should include:

- plant name
- photo or photos; students may also draw their plant
- the plant’s former range and current range (Map must be labeled.)
- the reasons it is endangered or threatened
- interesting facts about the plant including the habitat in which it lives
- ways humans or other species rely on this plant (if applicable)
- any actions that people are taking to protect the plant
- a list of resources used in research, including web sites

Your students will generally find it easiest to locate information on their plant using the internet. You may want to use one class period to introduce the project, review the criteria for the posters, and have students select the plant upon which they will focus. (You will need to keep a list on the board for all to see to prevent duplication.) If you have time and computers are available in your school, you could provide class time for students to conduct research and to work on their posters. Otherwise, students will need to work on their projects outside of class. (Two or three days should be enough time.) As always, you will need to be sensitive to students who don’t have computer access at home. Perhaps these students can choose plants using resources from your school library, or perhaps they can print information during school and work on their poster at home.

Once the posters are complete, exhibit them in a hallway or other exhibit area. Then put the posters to use! Give each student a copy of the “Endangered Plants Gallery Tour” worksheet. Ask them to wander through the gallery of posters and read the information presented to answer the questions. (Please note that you may want to adapt the gallery worksheet depending on the plants that your class researched.)

After everyone has looked the posters over, wrap up the activity by asking students to summarize their conclusions. What are the most frequent causes threatening plant diversity? What habitats are most at risk? Where are alien species most significant? What should people do about this situation? Is there anything we can do?

Worksheet: Endangered Plants Gallery Tour

Student Name: _____ Class or section: _____

List the plants that are endangered primarily due to loss of habitat. What habitats are being lost?

List the plants that are endangered primarily due to alien species.

List any plants that are endangered due to climate change.

List the plants that are endangered due to pollution (for example pesticides).

List the plants that are endangered due to over-harvesting. Why are people over-harvesting them?

List the plants that are endangered for reasons not yet mentioned and give the reason.

List the plants that are endangered for unknown reasons.

Of the plants that your class researched, which of the five threats is the most common threat?

Which of the plants did you find particularly interesting and why?