

Designing a Native Plants Garden

Overview:

In this lesson, students will compare native vegetation in [different parts of the United States](#). They will then explore Web sites to learn about native plants in their own region, and design gardens containing those local plants.

[Note: In order to make this lesson as accessible as possible for very young students who may have limited computer skills, it is written with the assumption that you can project Web sites to the class. If this is not possible, you may direct students to use the computer on their own with your assistance.]

Connections to the Curriculum:

Geography, life science

Connections to the National Geography Standards:

Standard 8: "The characteristics and spatial distribution of ecosystems on Earth's surface"

Time:

Two to three hours

Materials Required:

- Computer with Internet access
- Drawing materials
- (optional) Blank [Xpeditions outline map of the United States](#)

Objectives:

Students will

- discuss the types of plants they have seen around their homes;
- discuss differences between vegetation in different parts of the United States, using a Web site that shows U.S. landscape and vegetation pictures;
- create "native plants scrapbooks" based on native plants they learn about on a Web site; and
- design native plant gardens that contain the plants they have learned about.

Geographic Skills:

Acquiring Geographic Information

Organizing Geographic Information

Analyzing Geographic Information

S u g g e s t e d P r o c e d u r e

Opening:

Ask students to think about the types of plants they have seen around their homes, near school, in local parks, or in nearby natural areas. Ask them to describe what the plants look like. Are there many flowers? If so, what colors are they? Are there many different types of grasses? What do the trees look like?

You may want to take students on a short "tour" of school grounds or a nearby park so they can see some of the local plants first-hand.

Development:

Project National Geographic's [Wild World: Terrestrial Ecoregions](#) site to the class. Click and drag a rectangle over the United States to zoom in on the country.

Click on three to five different colors in various parts of the country, including your own region. Each color represents a different ecoregion. A new window will open, and students will see pictures of the landscape and vegetation in each location.

Have students list or discuss the differences between the landscapes and plants they see. Older students can label the locations they have looked at on a [blank outline map of the United States](#) and draw pictures of the landscape and vegetation on their maps.

Discuss the reasons why different places have different plants. Ask students to contribute their ideas as to why this is the case. Explain that the amount of rain, the temperature, and the elevation have a lot to do with what types of plants will grow in a location.

Give students two pieces of blank paper to make their "native plants scrapbooks."

Show students eNature.com's [Nature and Wildlife Field Guides page](#). Click on the "wildflowers" category and select your region from the drop-down menu. Have students look at the pictures on this page, and ask them if they have ever seen any of these wildflowers.

Ask a student volunteer to choose one type of wildflower, and click on its name to find out more about it and see a larger picture.

Have students draw pictures of this plant on the first page of their "scrapbooks," and, if their writing skills are developed enough, ask them to write its common name next to their picture. Older or more advanced students can write the plant's preferred exposure level, site preference, and soil preference.

Return to eNature.com's [Nature and Wildlife Field Guides page](#) and repeat the above process for trees, shrubs, and grasses. If you have time, you may focus on more than one type of plant from each category. For each type of plant students choose, have them draw its picture and write its name (and, optionally, its other features).

Closing:

Ask students to imagine that they have been asked to design a garden of local plants in their town. Discuss how students would set up the gardens. Which plants should be in the "front row" for visitors to see? Which plants might like shady areas? Which plants would prefer sunny areas? What types of things besides plants would students like to place in the garden for people to enjoy (e.g., benches, pathways, or lights)?

Suggested Student Assessment:

Have students, either individually or in pairs, design gardens containing local plants, sketching them and coloring them in on paper. Their gardens should include the plants they have already drawn. They may include more plants from the eNature.com Web site if you have more time for them to look at that site.

If students have recorded the exposure, soil, and site preferences for the plants, they should consider these factors when they design their gardens. For example, they should place a plant that requires a lot of sunlight in an area that will receive ample sunlight rather than in a shady spot.

Students may also draw paths, benches, or other places in the garden that will help people enjoy it.

Extending the Lesson:

- Plan a field trip to a local botanic garden. Have students sketch and list the types of plants they see there. Are any of these plants the same ones they learned about in this lesson?
- Plant an outdoor garden in a school courtyard or a potted garden in the classroom. Allow students to design the garden and suggest plants that should be included. Have them take turns maintaining the garden. If possible, ask around and see if you can find local businesses or parents to donate supplies for the garden.