



Celebrate
Plant Conservation Day
on May 18th!

Learn more at
www.plantconservationday.org

Plants for Life Discovery Cart

The Big Idea

We rely on plants every day for our health and happiness. Plants give us the food we eat, the air we breathe, the water we drink, the materials for our homes, and the medicines that protect us. Yet despite our reliance on plants, nearly one in three is threatened with extinction in the wild. *Note: This guide is intended to help you plan a set of discovery cart activities at your site; please feel free to use and adapt it as necessary to make it work for your situation.*

Key Concepts

- Plants are important to all life.
- Plants are endangered both locally and globally.
- Individual actions can help save plants.

Activity #1: Plants for Life Challenge

Overview

Match products made from plants with their real plant sources.

You Will Need

- Cotton balls
- A small bag of coffee or coffee beans
- A small package of ginger snap cookies
- A small can of pineapple
- Chopsticks
- Aloe vera lotion
- A banana
- Cotton plant (*Note: Photos of each of these plants may be used if real plants are not available.*)
- Coffee plant
- Ginger plant
- Pineapple plant
- Bamboo plant
- Aloe plant
- Banana plant
- *Plants for Life Challenge* Activity Cards (available at www.bgci.org/files/UnitedStates/DiscoveryCartCards.pdf)
- Copies of BGCI's *A Plant Conservation Checklist for Gardeners*

To Prepare

Arrange the products in one area of the cart, and the plants in another. If the plants are large, you may place some of them on the ground next to the cart. Place the corresponding activity card in front of each plant.

Conduct the Activity

1. Use the plants, the products, or a warm greeting to attract visitor attention to the discovery cart.
2. Explain the object of the *Plants for Life Challenge*: to match the products made from plants with their real plant sources.
3. As visitors make a match, you may offer additional information about the plant or human reliance on it for food, shelter, clothing, medicine, etc.
4. If more than one visitor is engaged with activities at the cart, you can instruct the visitor to turn over the activity card accompanying each plant to see if they have made a successful match.
5. Distribute copies of BGCI's *A Plant Conservation Checklist for Gardeners* to adults for further information.

Activity #2: Threatened Plants Around the World

Overview

We depend on plants to support all life on earth. Some plants are in danger of extinction. Explore some of these endangered plants up close.

You Will Need

- Golden Barrel Cactus (*Echinocactus Grusonii*)
- Queen Victoria's Agave
- Venus Flytrap
- Tennessee Coneflower (*Echinacea Tennesseeensis*)
- Ginkgo Biloba
- Other threatened or endangered plants relevant to your region or collection
- Plant information cards (available at www.bgci.org/files/UnitedStates/DiscoveryCartCards.pdf)
- Hand lenses
- Copies of *A Plant Conservation Checklist for Gardeners*

To Prepare

Place the plants, hand lenses and the accompanying information cards on the cart.

Conduct the Activity

1. Ask the visitor if she or he has ever seen an endangered species. If so, ask the visitor to describe his or her experience. What did she see and where? (An endangered species is a species that is in danger of extinction in the near future throughout all or most of its range. Endangered, however, also means there is still time! Source: U.S. Fish and Wildlife Service.)
2. Explain to the visitor approximately 100,000 plant species are threatened with extinction around the world. Show the visitor the endangered plants on the Discovery Cart and highlight parts of the plants' conservation stories. Encourage the visitor to use the hand lenses to view the plants up close.
3. Distribute copies of BGCI's *A Plant Conservation Checklist for Gardeners* to adults for further information.

Further Information

- **Golden Barrel Cactus:** The golden barrel cactus is the most widely cultivated cactus in the world. In its native habitat in Mexico, however, just 50 of these plants remain in the wild! This makes the golden barrel cactus one of the most endangered plants in the world. It is threatened by both habitat destruction and collection from the wild. Much of the plant's original habitat was destroyed during the construction of a major dam in Mexico, and this plant, along with other cacti, remain attractive targets for wild plant poachers.
- **Queen Victoria's Agave:** Agaves are important commercial plants. They are used for fiber, sap and landscaping. The Queen Victoria's Agave is endangered in the wild in its native Mexico, but it is a common garden plant, with millions of plants in cultivation around the world.
- **Venus Flytrap:** Carnivorous plants are the vampires of the natural world! The Venus flytrap captures unsuspecting insects to obtain extra nitrogen for survival. The popularity of these plants has led to overcollecting in its native habitat in North Carolina and South Carolina. Habitat loss has also put pressure on this species in the wild. Many people think that carnivorous plants are only found in the tropics, but the Venus flytrap is native to the wet pine savannas and pocosins of coastal North and South Carolina. The word pocosin comes from an Algonquin Native American word that means "swamp on a hill."
- ***Echinacea tennesseensis*:** The Tennessee Coneflower was the first plant in the U.S. to be placed on the federal Endangered Species List. The Tennessee coneflower thrives in barren, rocky open areas where many other plants cannot survive. These areas are called *cedar glades* because they are usually surrounded by small Eastern red cedar trees. The soil is extremely thin, and the ground is often covered with natural gravel or larger rocks known as flagstone. Plants in the cedar glades need to be able to survive in bright sun and without a lot of water because the ground dries out quickly. Over the past century, the plant's native habitat in middle Tennessee has become more and more suburban. Human impacts such as roads, dams, and new houses may have destroyed some populations—making habitat loss a serious threat to its survival. This coneflower is also threatened by overcollection, both for people's gardens and for making medicines. Fortunately, most of the remaining plants are either on protected land or in places where the landowners cooperate with conservation efforts.
- ***Ginkgo biloba*:** Ginkgo biloba is possibly the most ancient of all living trees. Nearly identical leaves to the Ginkgo have been found in 200 million year old fossils! Today in the wild, the Ginkgo is an endangered tree due to habitat loss in its native China. However, the Ginkgo is a very common street tree in the United States.