

GENERAL INFORMATION

OBJECTIVES

Ethnobotany is an interdisciplinary field combining botany, geography, social studies, and economics. It is how people interact with plants and use them for everything from shelter, food, clothes, medicine, culture, and trade. This activity will give an overview of how plants were used in this area by the Native Americans, the pioneers, and the people of today.

QUESTIONS

How do plants affect your life? How are plants used more than for food?

VOCABULARY

Ethnobotany, indigenous, photosynthesis, energy, environment

ACTIVITY MATERIALS

Settlers' cabin and plants

METHODS

INTRODUCTION

Ask: **How have plants have touched your lives in the last 48 hours** (Cloth, dyes, medicine, food, flowers, allergies, housing, paper, makeup, coal-fossil plants)? Ask: **What do you think Ethnobotany means** (ethno-Scottish origin meaning peculiar to that people or nation; botany - Gk. of herbs-plants)?

Walk over to the cabin and give a basic explanation of photosynthesis, the parts of a plant, the transfer of energy from sun to plant to consumer. Explain how all animals (including us) ultimately rely on plants to survive (food chain).

ACTIVITY

Have them imagine living in a time before electricity, which did not reach Dry Creek until 1947, and before cars and good roads. Ask: **Where would the Native Americans (indigenous [Latin: begot in a place] people) or the first pioneers have gotten their food and medicine? From where do we get our food and medicine?** Point out that the cabin was made from local wood, the clay tucking was mud mixed with either straw or hair.

Ask: **How many of you like tomatoes and spaghetti sauce?** Explain how tomatoes were not known in Italy until after Columbus discovered the New World. Ask: **Do you know when Columbus**

Teacher's Corner

Grade Level(s)

4th and 5th

State Performance Indicators

Science

SPI 0507.3.1: Identify photosynthesis as the food manufacturing process in plants.

Social Studies

4.1.spi.1: Identify pre-Colonial Native American groups (i.e., Cherokee, Creek, Chickasaw, Aztec, Mayans, Olmec, Mississippi Mound Builders).

4.1.spi.2: Identify cultural groups who inhabited North America in the 17th century (i.e., Puritans, Quakers, Spanish, French).

4.1.spi.4: Examine how Native American culture changed as a result of contact with European cultures. (i.e. decreased population, spread of disease, increased conflict, loss of territory, increase of trade).

4.5.spi.4: Determine the hardships faced by early Tennessee settlers in the late 1700's (i.e., security, isolated communities, lack of access to goods, natural geography).

4.5.spi.5: Determine the reasons for colonial settlement (i.e., religious, economic, individual freedom).

5.1.spi.1: Recognize components of American culture (i.e., holidays, language, clothing, food, art, music, and religion).

5.1.spi.2: Interpret how culture changes over time as a consequence of industrialization, technology or cultural diffusion (i.e., railroad transportation, telecommunication, building design, varied types of music and the growth of government services).

ACTIVITY

discovered the New World (in 1492, Columbus sailed the ocean blue)?

Point out the following plants as available:

- **Wild foods:** blackberry, elderberry, fox grapes, day lilies (introduced), hickory, walnut, wild onions and garlic, sour clover (high in Vitamin C and helped against scurvy), pokeweed, spicebush for tea and spices.
- **Wild plant medicines:**
 - the Cherokee knew 400 to 600 plants that they used for medicinal purposes.
 - poke root as poultice for skin conditions.
 - dogwood (*Cornus florida*) bark for fever and pinworms.
 - spicebush (*Lindera benzoin*) steam of twigs to clear sinuses, tea for colds, flu, coughs, nausea and flatulence.
 - black willow (*Salix nigra*) bark used as analgesic; source of organic compound salicylic acid from which aspirin was developed.
 - tulip tree or tulip poplar (*Liriodendron tulipifera*) bark used to make baskets and boiled for medicine to help with fevers, diarrhea, rheumatic pain, and to soak for fractures, sprains, and hemorrhoids.
 - mayapple as a cathartic to give you diarrhea and throw up; why would poisoning (except corrosive chemicals) be necessary at times?

DISCUSSION

Ask: **How is farming different today than when Butternut Valley was a farming community?** Discuss the subsistence farming based upon corn. After WWII many local men went to war and saw more of the world where tractors, cars, and chemical agricultural were available. By 1960, Butternut Valley was abandoned. Ask: **Why would these changes lead to that movement and why are people now moving back into the “hollers”?**

WRAP-UP

Ask them to look around their home to see what plants and trees they can find that they have seen today. Encourage them to plant a garden.

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