

# How Did Their Gardens Grow?

## Hands-on Archaeobotany Activity

**Ages:** 3+

**Time Required:** less than 5 minutes

**Intended Outcomes:** Participants will identify domesticated plants grown by American Indians prior to contact with Europeans. They will also discover some of the ways in which American Indians used these plants.

### Materials:

- Seed identification cards (below)
- Seeds (sunflower, corn, beans, squash, etc.)
- Sand, gravel, and tiny roots to use as a matrix
- Small containers
- Index cards
- Pencils, colored pencils, or crayons
- Transparent tape
- Optional: Display text and instructions (below)

### Instructions:

1. Print seed identification cards and laminate. Attach a few seeds to each card.
2. Mix sand, gravel, and roots to create a “washed” soil sample matrix. Fill the containers about half full with the mixture.
3. Add seeds and mix well.
4. Give each participant a container, index card, pencil, and tape. Ask them to look for seeds in the washed soil sample and tape them to their cards.
5. Have participants compare their seeds to the ones on the seed identification cards. Ask them to label their seeds with the appropriate plant names.
6. Ask participants how they think American Indians used the different plants. How do we use them today?
7. Restock containers regularly.

### Tips:

- When preparing seed identification cards, put seeds in small, self-locking bags. Attach the bag to the back of the card so that the seeds hang beneath it.
- Use quinoa to represent goosefoot.
- Margarine tubs make ideal containers. Participants can place seeds on the lids until they are ready to attach them to their cards. After the event, the tubs can be quickly sealed for transport and reuse.
- Vary the quantity of seeds in the containers depending on the ages of the participants. Just make sure that each container always has at least one seed of each type!

## Seed Identification Cards

1. Laminate this sheet.
2. Cut out cards.
3. Attach seeds to cards.

## Tips

- Put seeds in small bags.
- Use quinoa for goosefoot.

### Maize



**Alternative name:** corn  
**Season of production:** summer  
**Possible uses:** 1. *food* - kernels may be eaten fresh or dried and ground into meal for bread; 2. *fuel* - cobs can be used as fuel for fires or smoking hides

### Squash



**Seasons of production:** summer, early fall  
**Possible uses:** 1. *food* - rind, seeds, flesh, greens, and blossoms are edible; 2. *containers* - when the flesh and seeds are removed, the hard outer rind can be dried and used as a container

Photo courtesy of Gail Wagner

### Bean



**Season of production:** summer  
**Possible uses:** *food* - beans may be eaten fresh or dried for later consumption

### Goosefoot



**Season of production:** fall  
**Possible uses:** *food* - goosefoot seeds and greens are edible

### Sunflower



**Seasons of production:** summer, early fall  
**Possible uses:** 1. *food* - seeds, flowers, and roots are edible; 2. *moisturizer* - oil from the seeds can moisturize hair and skin; 3. *decoration* - sunflower plants can create a purple dye; 4. *shelter* - dried stalks can be used as a building material; 5. *medicine* - parts of the sunflower plant can be used in medicine

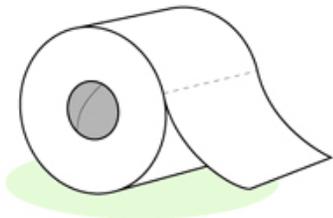
### Oak



**Seasons of production:** fall, spring  
**Possible uses:** 1. *food* - acorns may be eaten fresh or dried for later consumption; 2. *fuel* - acorn shells can be used as fuel for fires; 3. *wood* - the wood of the oak tree can be used for construction and many other purposes

## How do you use plants?

Probably in more ways than you realize! You eat fruits and vegetables, you wear cotton, you write on paper, and you walk on wood floors.



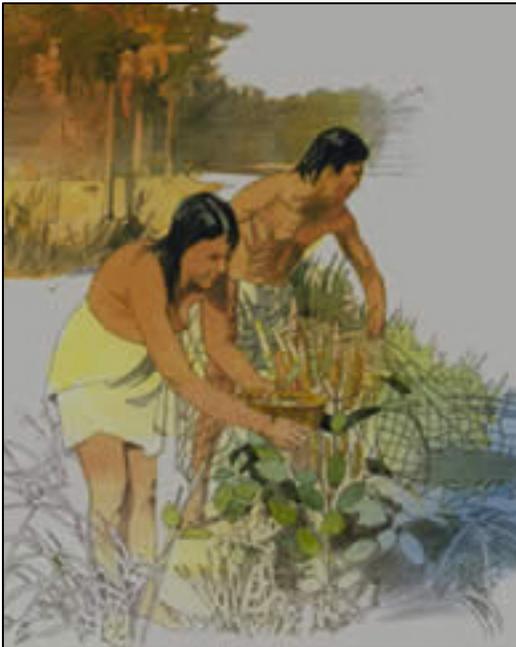
If you think about it, you can probably come up with many more ways you use plants every day!

People living in North Carolina in the past used plants a lot like we do. **Archaeobotanists** try to learn what kinds of plants these people grew and ate by studying seeds and other plant materials from archaeological sites.

**Most plant remains rot quickly, but burnt seeds and nuts can last for thousands of years. Burnt plant remains are sometimes found in areas of a site where people cooked or threw away trash.**



**Fragments of burnt corn cobs**

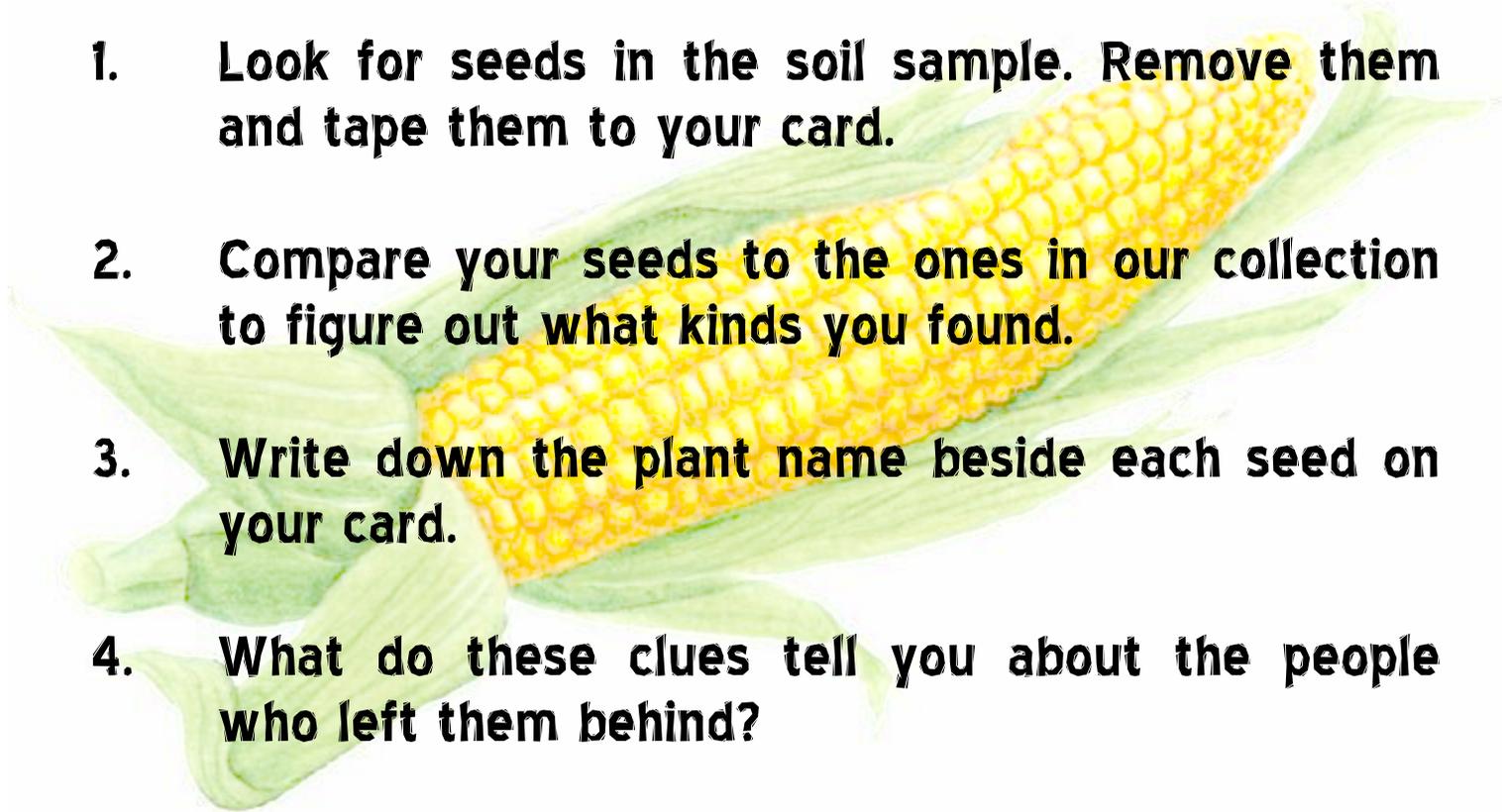


**Archaeobotanists figure out what kinds of plants people used in the past by comparing the archaeological remains with modern seeds and nuts.**

# How Did Their Gardens Grow?

**Find out the same way archaeobotanists do!**

- 1. Look for seeds in the soil sample. Remove them and tape them to your card.**
- 2. Compare your seeds to the ones in our collection to figure out what kinds you found.**
- 3. Write down the plant name beside each seed on your card.**
- 4. What do these clues tell you about the people who left them behind?**



## Sunflower



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