

# LESSON TEN: The Many Uses of Corn

**Time** 30 minutes

## Trunk Resources

### Graphics

- #17 Women gardening
- #18 Wichita Grass lodge, drying rack
- #19 Wichita village scene.

### Book

*Corn is Maize* by Alik.

### Object

Scapula bone.

### Worksheet

#13 Corn.

## Teacher Resources

Photocopy worksheet #13 Corn for each student. Paper, pencils, crayons, and/or markers.

## Objectives

1. Students will recognize that corn is native to the Americas.
2. Students will assess the importance of corn to Indians.
3. Students will identify the many uses of corn.

## Historical background

Corn, beans, squashes, pumpkins, and sunflowers were the principal crops of Native Americans in Kansas. Corn overshadowed the others in importance. Women did most or all of the cultivating except where agriculture was absolutely predominant. They had to struggle with the same difficulties that confronted subsequent European settlers—drought and grasshoppers. They lacked plows, draft animals, and fertilizers, and did not know about rotating crops. However, considering their crude techniques and implements, they obtained creditable results.

Corn was grown widely. Although rich in protein, corn has some nutritional deficiencies. The use of ashes and lime in the preparation of cornmeal and hominy improved its nutritional value. Corn provides excellent nourishment when eaten with beans. Beans are complimentary to the nutrients in corn as they provide B-vitamins, protein, iron, and fiber. The other great advantage of corn and beans is the ease with which they can be dried and stored.

A number of Native American groups living in what is now Kansas combined hunting and gathering with agriculture. Those who lived a nomadic lifestyle depended on trade and stealth to acquire corn and other garden products.

The Pawnees lifestyle demonstrates a horticultural and nomadic combination. Nineteenth-century Pawnee Indians spent about half the year in the river valleys where they gathered natural plants and cultivated their crops. Women planted crops in plots assigned to them by the village chief. They cultivated the staples of Native American agriculture: corn, beans, pumpkins, watermelons, squash, and sunflowers. The horticultural talents of the Pawnee women allowed them to maintain ten varieties of corn as late as the end of the nineteenth century. The Pawnees favored the flour corns, which could be easily crushed or ground.

After the tribe departed for the summer hunt, no one touched the garden plots. Upon their return from the hunt, men, women and children harvested the gardens. The corns (flint, flour, dent, sweet corn, popcorn, and the rare pod corn) were treated in one of two ways during the harvest. Some were gathered while still “in the milk” and were roasted in their husks. The kernels were cut from the cob with a clam shell and dried. Many other varieties, especially the blue flour corn, were allowed to dry on the stalk. After drying, the kernels were pried off with a pointed stick.

The Kansa and Osage Indians generally had two harvests. The earlier one lasted a week to ten days and occurred in the first half of August. At this time, part of the green corn was gathered, boiled or roasted, shelled, dried, put into bags, and stored for future use. Although the corn processed in this way is often referred to as “sweet,” it was not a true sweet or sugar corn, but the common species of soft flour or starch corn. The real sugar corn was allowed to ripen and was made into corn balls. The second and main harvest occurred in September or the beginning of October. The ripe corn was dried and shelled before being stored for later use.

The Wichitas processed their corn in different ways. At times it was roasted or boiled and eaten immediately after harvest. Usually it was roasted then placed on a specially constructed arbor to dry. The dried corn was shelled and used in meat and corn soups or was ground into cornmeal for bread. Shelled corn was also placed in hide bags and stored for future consumption.

Corn was integral to the lives of Native Americans, and was the focus of ceremonies and spiritual beliefs. The Cree Indians in the Northern Plains celebrated with a Green Corn Dance which was held when the flour corn was in the roasting-ear stage in July or August. This ceremony was a New Year rite to renew the entire world and the plants, animals, and human beings who lived in it. This four-day event usually consisted of dancing, games, and feasting.

Sources: Gene Weltfish, *The Lost Universe*; Robert Lowie, *Indians of the Plains*; and Harold Driver, *Indians of North America*.

## **Vocabulary**

Arbor – A shelter of vines, branches, or lattice work.

Digging stick – Pointed stick used to produce a hole in the dirt. Seeds were planted in the

hole. A scapula hoe was first used to loosen dirt and build hills. Then seeds were dropped into holes created by the pointed end of this stick.

Maize – Indian corn

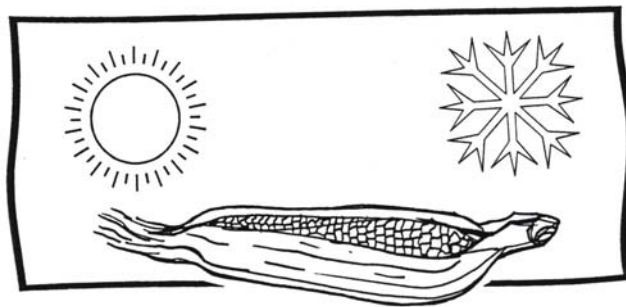
Scapula hoe – A gardening tool made with a buffalo’s shoulder blade lashed onto a long pole.

Shelling sticks – A short pointed stick used to remove kernels from dried ears of corn.

## Activities

1. Show students worksheet #13 Corn. Ask them what the picture shows, what do they already know about corn, where does it come from, what is it used for? Tell students that corn is native to the Americas. Europeans did not have corn until they came here. Native Americans throughout this country, including Kansas, grew corn. Tribes that did not grow corn obtained it through stealth or trade with other tribes.
2. Read the book *Corn is Maize: The Gift of the Indians* by Aliko. Ask students the following questions about the book:
  - a. Name three elements that help corn grow. (Good earth, sunshine, and rain in the springtime.)
  - b. Name two ways the farmer helps corn grow. (The farmer plants corn seeds. The farmer weeds the earth around the plant.)
  - c. Name the country where scientists found tiny ears of ancient corn. (Mexico.)
  - d. Name some foods the Indians made out of corn. (Corn on the cob, popcorn, tortillas, tacos, tamales, dry cornmeal, misickquatash.)
  - e. Where did some Indians store corn during the winter? (In the ground. In a cache, storage pit.)
  - f. Who did the Indians thank for their corn? (The corn gods.)
  - g. How did the Indians celebrate at planting time and at harvest? (With a festival including music, songs, and a corn dance.)
  - h. What did Christopher Columbus call corn? (Maize.)

- i. The pilgrims used corn in some other ways. Name some of their uses of corn. (Husks used for mattresses, cobs for fuel, corncob pipes, corn shuck or husk dolls.)
  - j. Name six types of corn. (Pop, sweet, flour, flint, dent, pod.)
  - k. Name some uses of corn today. (Corn flour, cornmeal, cornstarch, corn oil, corn syrup, baby powder, glue, soap, alcohol, medicine.)
3. Allow students to complete worksheet #13 Corn by coloring it.
  4. Let students handle the scapula bone and see if they can guess what it is and how it was used. Show students graphic #17 Women gardening. Point out the tool she is using. The blade is made from a scapula bone and used as a hoe. Compare it with the tools used today in gardening. Note that this tool is made from a natural object (buffalo) that would have been available to tribes in Kansas. An important point to mention is that with the start of trade with Europeans many chose to use the tools obtained from European traders. Metal hoes tended to last longer and were less time consuming to obtain than those made from bone.
  5. Using the graphics #18 Wichita Grass lodge and drying rack, and #19 Wichita village scene, discuss the importance of drying corn to preserve it for winter, periods of drought, and other times when fresh corn was not available.



### **Extended Activity: Corn Recipes**

#### **Trunk Resources**

Recipes (located in the back of the manual)

#### **Teacher Resources**

Will depend on the recipes chosen

#### **Activity**

- a. Make one or more of the corn recipes included in this manual. These include corn and bean soup, parched corn, roasted corn, shuck bread, and pumpkin dumplings.

## **Cross References**

Have students attempt the Food Preservation and Storage lesson on page 66, and Ceremonies: The Green Corn Dance lesson on page 77.