

Choctaw Farming

Objective

Students will read about farming among the Choctaw. Students will examine contributions of different cultures to Choctaw agriculture. Students will work together to develop imaginary bean hybrids.

Background

Before they were farmers, the Choctaw people lived by hunting and collecting wild plants. They set fire to woods and prairies to increase the variety of edible plants and to make better habitat for the animals they hunted. This ancient land management practice was a forerunner to agriculture.

They became a true agricultural society when they began to domesticate plants and animals. They began to select plants with the most desirable qualities, save their seeds, and then plant them. Over time, this human selection changed the plants, creating new domesticated varieties with characteristics that made them better foods. Wild gourd became today's summer squash. Other domesticated plants included sunflowers, marsh elder, chenopod, goosefoot, sumpweed, little barley, knotweed, and maygrass.

Around AD 1000, corn from Mexico was introduced and became the most important food for Native Americans in the Southeast. At this time, many communities abandoned old settlements and moved to fertile floodplains that would make the best corn fields. They also changed their village layout to make best use of these fertile soils.

Around AD 1000, corn from Mexico became the most important food. Many communities moved to fertile floodplains that would make the best cornfields. Beans and pumpkins arrived from Mexico a century later.

The Spanish introduced *Shukha* (pigs), *Wak* (cattle), *Takkon* (peaches), and *Shukshi* (watermelons) as well as onions, garlic, tomatoes and peppers. African slaves brought okra and field peas. By the late 1700s Choctaw farmers were also raising leeks, garlic, cabbage, chickens and ducks.

Choctaw communities maintained three types of agricultural fields—small family gardens planted between houses, large community fields in the bottom land nearby, and patches of pumpkins and melons, located at some distance from the village. Sometime in the early 1700s, Choctaw farmers quit maintaining community fields and began growing and harvesting crops as separate families, like their Euro-American neighbors.

By the 1770s many Choctaws moved from their old towns into unsettled land to graze cattle. By the start of their removal to Indian Territory, the Choctaw had more cattle per person than their Anglo-American neighbors.

After years of use, the fertility in Choctaw fields would begin to diminish. At that point, locations for new fields would be selected. The old fields would be allowed to revert back to a natural state. It would be many years before the forest canopy would return to the state it was in before field clearing began. In the meantime, the old fields supported crops of blackberries, strawberries, and other

Oklahoma Academic Standards

GRADE 3

Economics: 1. Oklahoma
History: 3, 11
Life Science: 1-1; 3-1,2;
4-3,4. Earth Science: 3-1

GRADE 4

Regions: 2D,3,4,5;
Impact of European
Exploration and
Settlement on Native
American Groups: 1,3,4
Life Science: 1-1

Plant breeding

The Choctaw were successful plant breeders. Plant breeding has been practiced for thousands of years, since near the beginning of human civilization. It involves deliberate interbreeding (crossing) of closely or distantly related individuals to produce new crop varieties or lines with desirable properties. Plants are crossbred to introduce traits/genes from one variety or line into a new genetic background. For Choctaw farmers this was probably achieved by controlled pollination, followed by artificial selection of offspring with the desired characteristics.

Preserved Heirloom Choctaw Crop Varieties

- *Tanchi Tohbi*—a white corn that Choctaw people used for making cornmeal and grits. This is the corn that *Banaha* bread was originally made from.
- *Tanchi Hlimishko*—a yellow flint corn has been found that matches the description of the variety used by Choctaw people to make hominy dishes like *Tanchi Labona*.
- *Isito*—the Choctaw sweet potato squash, a variety of pumpkin that grows as large as 30 pounds, will keep for up to nine months indoors, and has a very sweet taste.

wild edibles that grow in areas of disturbed soil.

Today the tribe continues using ancient land-management practices to grow and harvest large crops of pecans, hay, cattle and buffalo from thousands of acres of tribally-owned and -cultivated land

The Choctaw Nation’s Historic Preservation Program also works to preserve Choctaw heritage crops by distributing seeds to tribal families and teaching recipients how to cultivate them. These unique varieties represent centuries of work by Choctaw farmers, tending crops and selecting the best seeds each year. Some of these ancient varieties survive by only a few hundred seeds.

Today the Choctaw Nation of Oklahoma has thriving agriculture, teaching and historic preservation programs. The Agriculture Outreach program uses resources from Oklahoma Ag in the Classroom and works with Head Start, daycare and public school students to teach and promote agriculture education. Working with tribal Extension agents, Agriculture Outreach works with the USDA and Oklahoma Cooperative Extension Service, assists with local livestock shows and works with tribal members on their agriculture needs.

Background sources: Choctaw Nation Historic Preservation Department, Choctaw Nation Agriculture Outreach Program

Materials

- dried beans in a variety of shapes and colors
- regular sized blank, clean paper
- markers, crayons or other drawing materials

Procedures

1. Read and discuss background and vocabulary.
2. Ask students to list the different cultures that contributed to Choctaw agriculture, based on the reading.
 - Students will locate the origins of the listed foods on a world map and use yarn and pins to connect them to the Choctaw in Oklahoma.
 - Discuss the influence of different cultures on common foods we eat today. Students will list the foods and research their origins.
3. Bring dried beans in a variety of shapes and colors to class for students to examine and handle.
 - Discuss hybridization and the meaning of the word “selection” as it relates to hybridization. How might the different varieties of beans have been developed, based on their appearance. Can students find examples of bean combinations that might have resulted in another variety?
 - Students will design imaginary hybrids as follows:
 - Place a clean sheet of paper on a flat surface in the landscape (horizontal) position.
 - Fold the left edge into the center and crease.
 - Fold the right edge into the center and crease. This will create two flaps.

—Students will each draw the outline of a bean on one of the flaps and then decorate it in any color and/or pattern desired.

—Students will then exchange their designs with a partner to create a different design on the opposite flap.

—When both flaps have been designed students will work with their partners to design a “hybrid” of their two designs by opening the flaps to the center and drawing what they think the “hybrid” of the two beans would look like.

—To illustrate the way Choctaw varieties changed over hundreds of years, students may work with other pairs to combine their designs into further hybrids.

—Discuss the activity as a group. What other qualities besides appearance would ancient farmers have tried to develop? (taste, resistance to insects and disease, resistance to cold or heat, shelf life, etc.)

Extra Reading

Bruchac, Joseph, and Murv Jacob, *The Circle of Thanks: Native American Poems and Songs of Thanksgiving*, Troll, 2003.

Burnie, David, *Plant*, Eyewitness Books, DK, 2011.

Desonie, Dana, *Geosphere: The Land and Its Uses (Our Fragile Planet)*, Chelsea House, 2008.

Edom, Helen, *Science With Plants*, Usborne, 2007.

Glatzer, Jenna, *Native American Festivals and Ceremonies*, Mason Crest, 2002.

Juettner, Bonnie, *The Seed Vault (Great Idea)*, Norwood House, 2009.

Tingle, Tim, and Jeanne Rorex Bridges, *Crossing Bok Chitto: A Choctaw Tale of Friendship and Freedom*, Cinco Puntos, 2006.

Vocabulary

agriculture— the science or occupation of cultivating the soil, producing crops, and raising livestock

bottomland— lowland along a river

communities— groups of people with common interests and shared ownership or participation

cultivated— prepared land for the raising of crops

diminish— to become gradually less

distribute— to divide among several or many

domesticate— to adapt to living with human beings and to serving their purposes

edible— fit or safe to be eaten

Euro-American— of mixed European and American origin

floodplain— a plain built up from earth left by floodwaters

fertility— producing vegetation or crops plentifully

forerunner— something that comes before something else

forest— a dense growth of trees and underbrush covering a large area

forest canopy— the aboveground portion of a forest community, formed by the tops of the trees

habitat— the place or type of place where a plant or animal naturally or normally lives or grows

harvest— the gathering of a crop

heritage— something acquired from the past

hybrid— an offspring of parents with different genes especially when of different races, breeds, species, or genera

natural state— the state or condition in which something occurs without human care or intervention

prairie— a large area of level or rolling grassland

preserve— to keep or save from injury, loss, or ruin

revert— go back

tribal— of, relating to, or characteristic of a tribe (a social group made up of many families, clans, or generations that share the same language, customs, and beliefs)

selection— any natural or artificial process that tends to favor the survival and reproduction of some individuals but not of others with the result that only the inherited characteristics of the favored individuals continue to be passed on