

Cherokee Farming

Objective

Students will read about farming among the Cherokees and compare farming before and after the removal. Students will make a timeline of the foods adopted by the Cherokee. Students will research to learn more about the Cherokee. Students will conduct experiments with heirloom seeds.

Background

The Cherokee Nation of Oklahoma is the largest tribal nation in the US. With more than 317,000 citizens, over 8,000 employees and a variety of tribal enterprises, Cherokee Nation's economic impact in Oklahoma and surrounding areas is more than \$1.5 billion annually. They are one of the largest employers in northeastern Oklahoma.

Before they were removed to Oklahoma on the Trail of Tears, the Cherokee held territory covering parts of eight present-day states in southern Appalachia: North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Virginia and West Virginia.

The Cherokee claim to be the original agriculturists of southern Appalachia. They cleared woodlands for cultivated fields in a practice called "slash and burn" or "swidden" agriculture. This involved felling larger trees and burning lower shrubs and grasses. New fields would be cultivated with a digging stick. These fields would be used until the soils became depleted. Then the depleted fields would be left alone to lie fallow and new fields would be cleared.

Cherokee society was matrilineal. In matrilineal societies, the clan and tribal memberships are traced through the mother rather than the father. The women were the farmers and were in charge of the fields and gardens.

Cherokee villages were surrounded by vast cornfields. From the earliest times in Cherokee history, the raising of corn was interwoven with the spiritual beliefs of the people. Indeed, the Cherokee name for corn—"selu"—is also the name of the First Woman in Cherokee creation stories.

Smaller gardens were planted beside rivers and streams. The entire community, women and men, participated in communal gardening in the cleared fields further from the settlements.

In 1836 and 1839, for a combination of reasons, the Cherokee were removed from their lands in the east and forced to move west on what came to be known as the Trail of Tears. Many Cherokee died on the journey. Most of those who died were women and children. Although they lost many of their tools, horses and livestock on the journey, the Cherokee took up farming again when they got to the new land.

Economically the Cherokee benefited from the good soil of the new territory. By 1859 there were over 100,000 acres in cultivation, and Cherokee farmers were averaging over 35 bushels of corn an acre. The tribe had over 240,000 head of cattle and were exporting 50,000 head a year, worth over \$1,000,000, to eastern markets. Flatboats and steamboats connected Cherokee towns with centers of US trade as far south as New Orleans.

Oklahoma Academic Standards

GRADE 3

Speaking and Listening:
R.1,2,3. Fluency: 1.
Reading and Writing Process: R.1,2,3. Critical Reading and Writing: R.6,7. Vocabulary: R.1,3,5. Research: R.1,2,3,4; W.1,2,3. Geography: 3.1CE, 2A. Oklahoma History:1,2,3,5,11 Life Science: 1-1; 3-1,2; 4-2,3. Earth Systems: 2-2

GRADE 4

Speaking and Listening:
R.1,2,3. Fluency: 1.
Reading and Writing Process: R.1,2,4. Critical Reading and Writing: R.6,7. Vocabulary: R.1,3,5. Research: R.1,2,3,4; W.1,2,3. Geography: 1A,2D,3,4,5. Exploration and Settlement: 1,4 Life Science.1-1

Vocabulary

agriculturist— someone involved in the science or occupation of cultivating the soil, producing crops and raising livestock

climate— the average weather conditions of a particular place or region over a period of years

communal— of or relating to a community

community— shared ownership or participation

cultivated— to loosen or break up the soil

depleted— reduced in amount by using up; exhausted, especially of strength or resources

economic— of, relating to, or based on the production, distribution, and consumption of goods and services

enterprise— a business organization

export— to carry or send abroad especially for sale in another country

extinct— no longer existing

fallow— land for crops allowed to lie idle during the growing season

fertile— producing vegetation or crops plentifully

flourish— to grow well

impact— to have a strong effect on

loom— a frame or machine for weaving threads or yarns to produce cloth

matrilineal— relating to, based on, or tracing descent through the maternal line

nitrogen— a colorless tasteless odorless element that occurs as a gas which makes up 78 percent of the atmosphere and that forms a part of all living tissues

nitrogen-fixing— a process of combining atmospheric nitrogen with other elements to form useful compounds

swidden— an area of land cleared for cultivation by slashing and burning vegetation

tribal— of or belonging to a social group made up of many families, clans, or generations that share the same language, customs, and beliefs

yield— to bear as a natural product

Procedures

1. Read and discuss background and vocabulary.
 - Discuss the difference between matrilineal and patrilineal society.
2. Provide copies of the Reading Page included with this lesson for students to read independently, in groups or as a class.
 - Students will identify the main idea in the reading.
 - Students will identify the supporting details.
 - Students will discuss the difference between matriarchal and patriarchal society and how it shifted among the Cherokee over time.
3. As a class make a list of all the foods mentioned in the reading. Write the list on the board.
 - Students will develop a timeline showing when the different foods were adopted by Cherokee farmers.
4. Compare and contrast agriculture of the Cherokees before and after removal.
5. Students will use online resources to research and write short reports about the Green Corn Ceremony as it was celebrated in the past and as it is celebrated today among the Cherokee.
 - What other Oklahoma tribes have similar ceremonies?
 - Students will discuss what they have learned.
6. Students will research the climate and natural resources of southern Appalachia and compare it with the climate and natural resources of northeastern Oklahoma.
 - Students will describe how the Cherokees used Oklahoma's natural resources to survive.
7. Students will use online resources to research major crops grown in northeastern Oklahoma compared with major crops grown in the southern Appalachian states.
8. Students will research the Trail of Tears. List some of the circumstances leading to the removal. How many of the Cherokee were on the Trail of Tears? How many survived?
9. On a map of the US students will locate the Appalachian Mountains and the states that are now in the territory that formerly was the home of the Cherokees.
10. Students will trace the routes the Cherokee took from southern Appalachia to Indian Territory.
11. The Cherokee in the east were organized around membership in seven clans. The Wild Potato Clan was the farming clan. Students will research to identify and describe the remaining six clans.
12. Students will research heirloom seeds. Several varieties of heirloom seeds have the word "Cherokee" in their names. Students will list some of those seed varieties.

13. Provide samples of some heirloom vs. hybrid seeds for students to plant. Students will design experiments and use different variables to test how they will do in different growing conditions.
14. Students will gather seeds in the wild and design growing experiments to test the success of seeds grown in the wild compared with commercial seeds.

Background and Reading Page Sources:

- King, Lindsay, Western Kentucky University, “The First Agriculturalist in Tennessee,” *Humanities Tennessee*, <http://humanitiestennessee.org/sites/humanitiestennessee.org/files/The%20First%20Agriculturalist%20in%20Tennessee%20-Cherokee.pdf>
- Southern Cherokee Nation of Kentucky, “Beloved Woman of the Southern Cherokee: Nancy Ward,” <http://www.southerncherokeemuseum.com/historystories/beloved-woman-of-scn/>
- Timberlake, Henry, *The Memoirs of Lieut. Henry Timberlake (who accompanied the three Cherokee Indians to England in the year 1762); containing whatever he observed remarkable, or worthy of public notice during his travels to and from that nation; wherein the country, government, genius and customs of the inhabitants are described; also the principal occurrences during their residence in London; illustrated with an accurate map of their Over-hill settlement, and a curious secret journal, taken by the Indians out of the pocket of a Frenchman they had killed, 1765*, <https://archive.org/details/memoirsoflieuthe00intimb>
- Tuddenham, Susan, “After the Trail of Tears: The Cherokee in Oklahoma,” 1838-1870, *Concord Review*, 1998, http://www.tcr.org/tcr/essays/Web_Cherokee.pdf

Ag Career: Ethnobotanist

Job Description: The field of ethnobotany focuses on how native plants are used by certain populations for cooking, healing, hunting, building and wearing, as well as for ceremonial purposes. Ethnobotanists often travel to perform their fieldwork and research. While in the field, they collaborate with shamans, healers and specialists, such as doctors trained in traditional and modern medicine. They also spend time in the lab studying plants under a microscope. Because of the required level of education required for the profession, ethnobotanists could teach at the university level.

Skills: Because ethnobotanists often work outdoors in remote locations, they need to be able to handle primitive conditions and extreme weather. They must build trust with the indigenous people they’re observing. Ethnobotanists must have the patience to withstand long hours in the field taking notes and collecting plant specimens.

Education: Ethnobotanists usually have a background in biology or botany, but may do supplemental graduate work in other disciplines, including anthropology, archeology, linguistics, history and sociology. Most have master’s or doctorate degrees. Many schools offer undergraduate and graduate degree programs in botany, but a small number of ethnobotany programs are also available at both levels.

Cherokee Farming

The Cherokee may have been raising squash as early as 3,000 years ago. Even earlier, some scientists think they may have been cultivating plants such as marsh elder, lambsquarters, pigweed, and sunflowers. For at least the last 1,400 years they have been raising beans and corn. During the Mississippian Period (800 to 1500 CE), the Cherokee ancestors developed a new variety of corn called eastern flint which closely resembles modern corn. Corn was central to several religious ceremonies, especially the Green Corn Ceremony.

The Cherokee cleared woodlands for cultivated fields in a practice called “slash and burn” or “swidden” agriculture. This involved felling larger trees and burning shrubs and grasses. New fields would be cultivated with a digging stick. These fields would be used until the soils became depleted. Then the depleted fields would be left alone to lie fallow, and new fields would be cleared.

Cherokee society was matrilineal. In matrilineal societies, a person’s clan and tribal membership are traced through the mother rather than the father. The women were the farmers and were in charge of the fields and gardens. Villages were surrounded by vast communal cornfields. The entire community, women and men, worked in these fields.

The women and children tended smaller household gardens near their homes. Children used blow darts to scare away small animals and birds. In the household gardens were a smaller variety of corn, beans, squash, pumpkins and sunflowers. To plant corn, the women would dig small holes about two inches apart, place seven kernels of corn in each hole and cover the hole with a small hill of soil. Pumpkins, beans and sunflowers grew in between the rows of corn. Nitrogen-depleting corn was planted with nitrogen-fixing beans. Pole beans were allowed to climb on the tall stalks of corn.

The men helped clear the larger communal fields but spent most of their time at war and hunting deer, bear, and elk. Like tribes in the west, the Cherokee also hunted bison but a smaller breed, called timber bison, which is now extinct. Children used darts blown through hollowed-out river cane to hunt smaller game—squirrel, rabbit, opossum and game birds.

The English Lieutenant Henry Timberlake visited the Cherokee in 1762. He was surprised to find that the women did most of the farm labor.

The soil is so remarkably fertile that the women alone do all the laborious tasks of agriculture, the soil requiring only a little stirring with a hoe to produce whatever is required of it; yielding vast quantities of pease, beans, potatoes, cabbages, Indian corn, pumpions, melons, and tobacco, not to mention a number of other vegetables imported from Europe, not so generally known amongst them, which flourish as much, or more here than in their native climate; and, by the daily experience of the goodness of the soil, we may conclude that, with due care, all European plants might succeed in the same manner. (Timberlake, 42)

By the mid-1700s Cherokees were growing apples from Europe, black-eyed peas from Africa and sweet potatoes from the Caribbean. By the late 1700s they were growing watermelon from African and peach trees introduced by the Spanish. Peaches were pounded and mixed with flour to make bread and cooked and dried for winter storage or used to flavor soups and beverages.

In the mid 1700s, a white captive, Mrs. Bean, introduced the Cherokee to dairy cattle and taught them to prepare and use dairy foods. This provided some nourishment even when hunting was bad. With the

Wild Potato Clan

Ah-ni-ga-to-ge-wi or Wild Potato Clan (originally Kituwah clan, has also been known as the Bear Clan, Raccoon Clan and even Blind Savannah in different regions) — Were known to be farmers and gatherers of the wild potato plants in swamps (hence the name gatogewi = “swamp”), along streams, and swamps to make flour or bread for food, and were so named after them.

The wild potato was a main staple of the older Cherokee life back east (Tsa-la-gi U-weti). Historically, members of this clan were known to be keepers of the land and gatherers. The clan color is green and their wood is birch. Their flag is yellow with green stars.



Cherokee Bread Making

After making a fire on the hearth-stone, about the size of a large dish, they sweep the embers off, laying a loaf smooth on it; this they cover with a sort of deep dish, and renew the fire upon the whole, under which the bread bakes to as great perfection as in any European oven. (Timberlake, 1765)

introduction of dairy farming the Cherokee began to amass large herds and farms, which required more manual labor. This would soon lead the Cherokee into using slave labor.

The same white captive taught Cherokee women to set up looms, spin thread or yarn and weave cloth. At this time, the Cherokee were wearing a combination of traditional hide (animal skin) clothing and loomed cloth purchased from traders. Weaving their own cloth would make the Cherokee people less dependent on traders. It also led to a change in terms gender roles. Women began spending more time in the home weaving and doing household chores. The men began taking more responsibility for the farm work.

By the 1820s Cherokees were practicing small-scale woods ranching of hogs and cattle, hunting and gathering, and fishing. Farms ranged in size from two to 10 acres at that time and were arranged in kin-based groups along the stream and river valleys. Cherokee land was valuable farming land with the ideal climate and necessary 200 frost-free days for growing cotton. Some Cherokee farmers began growing cotton to sell. This put them in competition with white farmers who were also trying to make money growing cotton. For this and a combination of other reasons, the government decided to move the

Cherokee from their ancestral lands in the east to the land in the west, known then as Indian Territory and now as Oklahoma.

The removal took place in two phases, 1836 and 1839. One group left voluntarily in 1836 and another group was forced to leave in 1839. This forced removal came to be known as the "Trail of Tears." Many Cherokee died on the Trail of Tears. Most of those who died were women and children.

Although they lost many of their tools, horses and livestock on the journey, the Cherokee took up farming again when they got to the new land. The women had sewed seeds from their old fields into the hems of their skirts. They used these seeds to start over.

Economically the Cherokee benefited from the good soil of the new territory. By 1859 there were over 100,000 acres in cultivation, and Cherokee farmers were averaging over 35 bushels of corn an acre. The tribe had over 240,000 head of cattle and were exporting 50,000 head a year, worth over \$1,000,000, to eastern markets. Flatboats and steamboats connected Cherokee towns with centers of US trade as far south as New Orleans.

According to Cherokee folklore, plants are sacred. They not only feed us but also have healing powers. An old Cherokee story is that when animals were being over-hunted by humans, the animals decided to get together and hold a counsel. They decided to infect humans with disease. Each animal came up with a different disease. The plants were still friendly toward humans, however, so each plant came up with a cure for one of the diseases that infected humans.

Today, as with the general population, there are very few Cherokees farmers. But there are some who are trying to revive some of their traditional healing plants by gathering and saving heirloom seeds and providing the seeds to tribal members to plant in their gardens.