



Agriculture in Ohio

Learn about Ohio's agricultural heritage, including the ways that farming has shaped our landscape, our culture and our economy.

The Land

Ohio's state boundaries enclose 41,222 square miles. The southeast part of the state was not shaped by glaciers, and thus has more hills and generally poorer soil than the glaciated areas of Ohio. With a growing season of approximately 160 days and 30-40 inches of rain annually, all crops common to the temperate zone can be grown and all types of livestock can be raised in the state of Ohio.

American Indian Agriculture

Agriculture in what would later become the state of Ohio began with the Adena culture (1000 B.C.-A.D. 200). Archaeological evidence suggests that the Adena people grew pumpkins, gourds, sunflowers, and maize (corn). They used tools made of stone, animal bones, and tortoise shells to clear and cultivate the land. Later American Indian cultures—the Hopewell and Fort Ancient peoples—also grew maize, along with beans, squash, and tobacco. Maize was the most important crop. American Indian women planted kernels in small hills, then planted beans among the corn hills that climbed the corn stalks. Women were also responsible for pounding the maize into meal.

American Indians of the historic period, which included the Wyandots, Shawnees, Delawares, Miamis, Seneca-Cayugas, and Ottawas, used the same tools and grew many of the same crops as did the prehistoric Adena, Hopewell, and Fort Ancient cultures, including maize, beans, squash, gourds, pumpkins, muskmelons, and watermelons. Especially important were sunflowers, which produced oil for cooking and cosmetic use, and tobacco, which men used in ceremonies and religious rites. After white settlers arrived in the Ohio country, the American Indians acquired iron tools, such as hoes and hatchets, and adopted some European farming methods. Most American Indian groups were removed from Ohio by 1825; the last group departed in 1842.

19th Century Agriculture

Early European settlers who moved to the Northwest Territory or the new state of Ohio around the turn of the 19th century had to clear native ash, beech, maple, oak, black walnut, chestnut, and sycamore trees before they could plant their first crops. Clearing land for farming involved pulling up the smallest trees and roots, cutting down and burning medium-sized trees, and girdling large trees, which involved cutting a groove in the tree trunks so that they would eventually die and fall over. Settlers used some of the logs to build their homes.

Early Ohio farmers used tools and methods common to their former homes in other states or countries. Typical tools included a hoe and harrow for working the soil, an ox- or horse-drawn plow, and a scythe or cradle for cutting grain. Corn was the most important crop. In 1850, Ohio led the nation in agricultural production of corn, wool, horses, and sheep. Important factors in the growth of agriculture in the state were the canals, roads and



railroads that allowed for convenient transport of farm products to markets both east and west of Ohio. After 1850, Ohio lost ground to the prairie states in terms of production, although agriculture remained a vital part of Ohio's economy.

Innovations in equipment brought changes to the practice of farming. The horse-drawn grain reaper invented by Cincinnati Obed Hussey in the 1830s, and a similar one made by Cyrus McCormick, resulted in significant savings in time and energy, although they were expensive, costing about \$150 in 1840. Labor shortages during the Civil War helped speed the introduction of new devices, like the reaper, steam engine-powered threshing machines, sulky plows, and other types of equipment.

Fruit culture was also important in 19th century Ohio. One of the state's most famous pioneers, John Chapman, is better known as Johnny Appleseed. Chapman planted apple trees around the state to sell to settlers. The Rome Beauty apple developed from a single tree planted in Rome Township, Lawrence County, in 1817. Cincinnati and the Lake Erie area were both well-suited to growing grapes, and Nicholas Longworth of Cincinnati is famous for developing the Catawba grape. Other important fruit crops were peaches, pears and cherries.

County Agricultural Societies and the State Board of Agriculture

County agricultural societies in Ohio, first established in Marietta soon after settlement, were slow to gain popularity, but grew in number and strength through the second half of the 19th century. Modeled after societies in England and the eastern United States, the purpose of the societies was to encourage better farming through information-sharing and competition. The societies held fairs and awarded prizes. In 1846, the General Assembly passed legislation that established a secure funding mechanism for county societies, which greatly encouraged their growth. By 1860, 84 of Ohio's 88 counties had an agricultural society.

Also in 1846, the state legislature created the state's Board of Agriculture, the forerunner of the present-day Department of Agriculture. The board's chief activity was initially to hold an annual convention, and later to organize the state fair. Cincinnati was the host city for the first state fair in 1850, making Ohio the second U.S. state to sponsor a state fair. After several years in which the location of the fair moved around the state, the Ohio State Fair found a permanent home in Columbus. Combining competition, education, and entertainment, the fair played an important role in the development of agriculture in Ohio.

20th Century Agriculture

Governor James M. Cox, who served two terms from 1913 to 1915 and 1917 to 1921, was influential in the advancement of scientific farming. Cox grew up on a farm and hoped to encourage young people to stay on the farm instead of moving to the city. He increased state support for agricultural experiments and education, particularly in rural and village schools.

During the Great Depression, Ohio farmers struggled to deal with severe droughts and erratic weather, in addition to the economic troubles prevalent throughout the country. The Agriculture Adjustment Act of 1933, passed during the administration of President Franklin D.



Roosevelt, created programs that increased the price of farm goods by limiting the amount on the market. Farm income rose significantly as a result. Three years later, the act was declared unconstitutional. Other Depression-era programs were the Soil Conservation Act of 1936, through which Ohio farmers replaced soil-depleting crops with soil-enriching crops, and the Rural Electrification Act, which brought electric power to many farmers for the first time.

Demand for farm goods skyrocketed during World War II, and production increased correspondingly. The labor shortage that resulted from farmers joining the military was in part eased by migrant workers from Mexico and the West Indies. More than 8,000 German and Italian prisoners of war were also put to work on farms and in food processing plants in Bowling Green, Celina, Defiance and other cities to combat the shortage. Many Ohioans planted "victory gardens" in their yards or communities to grow their own food, so that farm produce could be sent overseas to feed soldiers and allies.

After World War II, many Ohio farmers were able to invest in mechanized equipment, such as twine binders, self-propelled combines, corn pickers and tractors, which greatly improved efficiency. The percentage of farms that had electric power increased through the 1940s, which also boosted productivity. In the late 1960s, soybeans were introduced in Ohio and quickly joined corn as one of the top crops grown in the state.

The second half of the 20th century witnessed a decline in the number of Ohioans involved in agriculture, as dropping prices and a rising cost of living pushed Ohioans into non-agricultural jobs in cities and suburbs. Many of those who remained on the farm had to take second jobs to make ends meet. While both the number of farmers and percentage of Ohio residents who were farmers have grown smaller since the mid-20th century, the average farm size and output increased. Despite the encroachment of cities and suburbs on farms, almost half of Ohio's land is used for farming, and agriculture remains a dominant force in the state's modern economy.

Agricultural Education

Early experiments in agricultural education failed in Ohio. Not until the establishment of the Ohio Agricultural and Mechanical College in 1873 did the state have a successful institution of higher learning devoted to agriculture. Its success was qualified, however, as liberal arts studies, part of the school's curriculum from the beginning, overshadowed its agricultural program. In 1878, the school's name changed to the Ohio State University, reflecting its broader focus.

In 1882, the university established an agricultural experiment station to bolster the agriculture program. The Hatch Act of 1887, a federal act that provided funding for such activities, was a response to the land-grant universities' abandonment of their agricultural and mechanical roots. In 1892, the Ohio Agricultural Experiment Station (known today as the Ohio Agricultural Research and Development Center) moved from the university at Columbus, to Wooster, Ohio, in Wayne County.



While the university and agricultural experiment station offered formalized training for farmers, other educational opportunities were also available. Farmers' institutes, sponsored by the state Board of Agriculture beginning in 1880, were held around the state. These institutes offered farmers a chance to learn and socialize. Combining education and fun was the goal of another farmers' organization, the Ohio State Grange. Organized in 1872, it was unique in admitting women to full membership and focusing on all aspects of farm life.

Albert Belmont Graham (1868–1960) started 4-H in Clark County in 1902 to build character and teach children about agriculture, geology, and natural history through practical application. Three years after founding the organization, Graham became the first superintendent of agricultural extension in Ohio. The purpose of extension, as elaborated in the Smith-Lever Act of 1914, was to "aid in diffusing among the people of the United States useful and practical information in subjects relating to agriculture and home economics and to encourage the application of the same." Extension exemplified a land-grant university's duty to conduct research, provide education, and serve the public. Building communities and increasing knowledge of scientific farming methods were two important goals, achieved chiefly through research, publications and meetings. Both 4-H and agricultural extension are still active organizations.

Another federal act, the Smith-Hughes Act of 1917, encouraged vocational training in public schools in the areas of agriculture, home economics, and the building trades. This development paved the way for the formation of the Future Farmers of America Association in 1928. The organization aimed to prepare members for careers in agriculture and related professions. By the 2013-2014 academic year, the Ohio FFA had more than 23,000 members in over 300 chapters statewide.

Bibliography

Brown, John T. *Agriculture in Ohio: Its Beginning and Development*. Columbus, Ohio Department of Agriculture, 1940.

Burkett, Charles William. *History of Ohio Agriculture: A Treatise on the Development of the Various Lines and Phases of Farm Life in Ohio*. Concord: Rumford Press, 1900.

Cunningham, John F. *The Story of Ohio Agriculture*. Unpublished typescript, [1960?].
"Did You Know." Ohio Department of Agriculture. Web Site. April 10, 2003.
<http://www.ohioaginfo.com/general_didyouknow.htm>.

"The Evolution of 4-H." Ohio 4-H Youth Development. Web Site. April 10, 2003.
<<http://www.ohio4H.org/history.htm>>.

"History of Extension." Ohio State University Extension. Web Site. April 10, 2003.
<http://edn.ag.ohio-state.edu/newpersonnel/history_of_extension.htm>.

Hurt, R. Douglas. "Ohio Agriculture Since World War II." *Ohio History*. 1999 (97): 50-71.



Jones, Robert Leslie. *History of Agriculture in Ohio to 1880*. Kent: Kent State University Press, 1983.

Knepper, George W. *Ohio and Its People*. 2d ed. Kent: Kent State University Press, 1997.ⁿ

"Ohio FFA History." Ohio FFA Association. Web Site. April 10, 2003.
<<http://www.ohioffa.org/about/ffahistory/1920/voc1.shtml>>.

Roseboom, Eugene H. and Francis P. Weisenburger. *A History of Ohio*. Columbus: The Ohio Historical Society, 1991.

Ohio. Department of Agriculture. *The Farmers' Centennial History of Ohio 1803-1903*. Springfield: Springfield Publishing Co., State Printers, 1904.