

had been quashed). At first historians thought that hatred of easterners was still so strong among the Regulators that they must have supported the English. However, recent research indicates that with few exceptions, former Regulators either supported the American cause or, like so many of those who lived on the very edge of the frontier, virtually ignored the entire affair.

No Regulation movement developed in Virginia or Maryland, although the people living on their frontiers also voiced the common frontier complaints. In both these colonies, however, it was in the interests of eastern land speculators to keep western grievances to a minimum. Even in Pennsylvania and the Carolinas, violence was brief and sporadic. Westerners were interested in reforming, not overthrowing, their colonial governments. In spite of east-west tensions, religious and nationality differences, and intercolonial rivalries, Crèvecoeur was again correct in his perception that from a mixture of the varied people who had settled in the English colonies, a new "race now called Americans" had developed.

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Colonial Agriculture

Jane Leach
Colonial America

They usually plant tobacco, Indian corn, wheat, peas or beans, barley, sweet potatoes, turnips which grow to monstrous size and are very good to eat. The soil is so favorable for fruit trees that I saw orchards planted, I was told, only ten years before, with larger and better growing trees than over twenty year old ones in Europe.

This rather glowing description of Virginia agriculture was made by a French traveler in the 1680s. As we will see in this chapter, however, colonial farmers suffered through a long period of trial and error before agricultural prosperity became possible.

The Beginnings

Most of the first settlers of Jamestown were townspeople, not farmers, and they were unable to raise enough food to keep themselves alive. It was the food they obtained by trade or force from the native Americans that saved the lives of some of them. Even the later settlers, who had been farmers in England, soon learned that European crops and methods were not necessarily successful in the New World. Fortunately, the native Americans taught the settlers how to grow corn, which became the staple crop in all the early colonies. Corn provided man with food and drink and also served as fodder

for the livestock. New "American" words (most of them borrowings from native American languages) such as hominy, mush, succotash, and pone illustrate the many ways in which corn was consumed.

Other native American food crops which the colonists borrowed were potatoes (both sweet and white), beans, pumpkins, and squash. The native Americans also taught the colonists how to dry fruits and vegetables and how to preserve them in honey or maple syrup. Still, a great deal of experimentation had to be done before the colonial farmer could determine which crop was best suited for a particular area. New Englanders attempted unsuccessfully to grow cotton, rice, and indigo. In spite of encouragement from the English government, southern farmers failed in their experiments with wine and silk culture and growing olives, figs, and spices.

Fortunately, as time went on, European crops such as wheat, rye, oats, and barley were grown successfully in America. Also, cattle, sheep, hogs, and horses, and other livestock previously unknown on this continent proved able to adapt to the climate in all thirteen colonies. Not only crops but also farming methods were transported to America, where local conditions often modified or completely changed them. In America farm land was—at first—exceedingly scarce. The eastern seacoast was thickly forested, and the soil had not been plowed. Only here and there had the native Americans cleared the ground to plant their crops. Thus, at first crops such as wheat, which required deep plowing, could not be successfully grown on American soil. This lack was overcome by the growth of corn. Corn was planted native American fashion by digging holes about four feet apart with a pointed stick or simple hoe. If the corn was carefully tended and kept free of weeds, the crop was usually good. Corn also had the advantage of being easy to harvest because it did not require threshing or winnowing.

At first settlers merely appropriated native American clearings to plant their crops. Later, when more land was required, they copied the native American method of clearing land by "girdling," or cutting a ring around each tree, removing the bark, and—by cutting off the flow of sap—causing the tree to die. Crops were planted between these trees until they either fell or were chopped down. The trunks and branches were then burned and their ashes used as fertilizer. Later oxen and horses were available to pull out tree stumps and roots. At this point, when clearings became larger, it finally became possible to plow the land more thoroughly and to grow wheat.

The story of early American agriculture continued to be one of trial and error. However, after the early years of settlement, American agriculture became extensive in nature. This was largely because of the easy and virtually free, supply of good land and the scarcity of capital and labor. Rather than utilize more scientific rotation of crops and better methods of fertilization, American farmers merely cultivated new fields. Peter Kalm, an eighteenth-century Swedish botanist, described the process in his *Travels into North America* (1771).

[American farmers] sow uncultivated grounds, as long as they will provide a crop without manuring, but . . . turn them into pastures as soon as they can bear no more, and . . . take in hand new spots of ground . . .

It might well be said that American farmers practiced field rotation rather than crop rotation. The only significant amount of intensive agriculture in colonial America was found among German farmers, who used manure and lime as fertilizers and practiced crop rotation.

Farm Implements

Farm implements were few and simple. No settler of Plymouth owned a plow until the early 1630s. It is estimated that even in the 1760s, only one American farmer out of five owned a plow. The plow that was in use during the seventeenth and eighteenth centuries was made of wood and was tipped with an iron plowshare. This plow was not efficient; a farmer was lucky to plow one acre a day with it. After plowing, farmers used a harrow with wooden teeth to crush the clods of earth. Other tools, such as hoes, spades, scythes, flails, rakes, and pitchforks, were also usually made of wood. A two-wheeled cart, usually pulled by oxen (as was the plow), took care of the transportation of the farmers, their families, and their crops.

Sowing was done by hand, with crops scattered widely in broadcast fashion. Scythes, or sickles, were used to cut the grain at a rate of, perhaps, three-fourths of an acre a day. Only the introduction of the cradle scythe in about 1750 increased the amount a person could harvest. The grain was tied into bundles which were dried out and then taken to the threshing floor. There they were beaten with flails made of a two-foot striker attached by a leather thong to a four-foot handle. Using this tool, a person was able to thresh six bushels a day. Later, however, horses or cattle were driven out on the threshing floor to thresh the grain. To separate the grain from the chaff, farmers dropped the grain from the top of a barn on a windy day. These inefficient tools and methods helped make farming a tedious occupation. So too did crop diseases and all types of predators, including bears, foxes, rabbits, crows, and wild pigeons. Nevertheless, one worker was usually able to produce eighty to a hundred bushels of corn a year, which was sufficient to feed an entire family.

Agriculture in the New England Colonies

The differences in soil and climate of each of the sections of the new country had marked effects upon their agriculture. New England had the least promising conditions for agriculture. Here the coastal plain was only fifty to eighty miles wide, the soil (with the exception of the Connecticut River

valley) was thin and rocky, summers were short, and winters were long and severe. Only hardy crops—corn, oats, rye, barley, cabbages, peas, turnips, onions, beans, squash, pumpkins, apples, pears, berries, and, after the middle of the eighteenth century, the white potato—could be grown under these conditions. New England farming was largely subsistence farming. Most of the work was done by farmers and their families, and the region imported more food than it exported.

Farms in seventeenth-century New England most closely resembled those of the mother country. The legislature granted each town an area six miles square. The town, in turn, allotted its freemen a small (three- to five-acre) "home lot" near the village, where they could grow fruits and vegetables. The towns also included woodland where the farmers could obtain firewood for their homes, stones for their fences, and meadows to pasture their livestock. Each freeman also received a portion of land outside the village. The size of its allotment depended on the freeman's economic and social status as well as family size. Because various tracts of land were put into cultivation at different times, every freeman eventually owned a number of scattered parcels of land. Because each parcel was so small, farmers would usually agree to plant the same crop on each tract of land. Farmers were responsible for working their own parcel of the tract, although cooperation during planting and harvesting seasons was a necessity.

This land system was obviously inefficient. Farmers lost a great deal of time going from one parcel of their land to another. The smallness of the parcels made it difficult to rotate crops or to fertilize them properly. By the eighteenth century, therefore, a noticeable trend toward consolidation and absentee ownership was seen in all New England towns. These trends were furthered by arranged marriages, exchanges, and sales. Still, most New England farms ranged between 50 and 100 acres.

Scientific stock breeding was also impossible when all cattle shared the same fields. Cattle did very poorly until the last years of the seventeenth century because hay, and other feed, was not grown in America. Only when various types of clovers were imported from England did American cattle begin to improve. Even in the eighteenth century, however, Peter Kalm reported that "their cattle are harassed by labor, and each generation decreases in goodness and size by being kept short of food." Sheep also found the New England climate difficult and, all during the colonial period, produced less wool there than they did in England.

On the other hand, hogs flourished in New England as they did in all sections of colonial America. After being fattened all summer and fall, the hogs were slaughtered in the winter. Very little of the animal was wasted. The lean meat was ground into sausage. Intestines were eaten as "chitterlings." The fat was converted into lard and the remainder of the meat was either cured or salted. Salt pork remained edible almost indefinitely, and large amounts were exported to the West Indies.

Horses were also an important New England export to the West Indies. The best horses were the "Narragansett Pacers" from Rhode Island. This Narragansett section of Rhode Island differed greatly from the rest of New England in that it had estates—similar to southern plantations, even including slaves—on which horses and cattle were bred,¹ using the most scientific techniques known at the period.

Agriculture in the Middle Colonies

The soil and climate of the middle colonies as well as a broad coastal plain (over a hundred miles wide) were much more favorable to agriculture than the conditions in New England. The crops grown in the middle colonies were similar to those grown in New England, although wheat, rather than corn, became the principal crop. A typical farmer could grow five to twelve bushels an acre, and so much wheat and flour were exported from Philadelphia and New York (mostly to the West Indies but also to the southern colonies and southern Europe) that the middle colonies became known as the Bread or Breadbasket Colonies.

In these colonies the cattle and hogs were fed on corn and then exported to the West Indies. Sheep (valued more for their wool than for their meat) also did well in the middle colonies, but fewer horses were bred than in New England. The agriculture of the middle colonies may best be described as mixed. Much of the crop was consumed by farmers and their families. However, a significant surplus—perhaps as much as 40 percent after 1750—remained, which was exported to the areas already mentioned and brought in return many articles which were not produced locally.

Because the middle colonies began as proprietary colonies, the earliest grants of land within their boundaries tended to be large and subject to a quitrent. However, the necessity of attracting immigrants soon led to the sale of smaller parcels of land at reasonable prices and with reduced quitrents. Only in the Hudson River valley of New York did large semifeudal estates—such as Rensselaerswyck with its 700,000 acres, and other large grants—survive. In the rest of the section, the typical farm consisted of about 150 acres and was held by its owner in fee simple. Probably less than half was under cultivation; the rest served as pasture or remained forested. Quitrents were low, two to four shillings per hundred acres, and usually payable in produce; yet the Penn family collected barely one-third of the rents due it. Middle colony farms usually required some supplemental labor. On most farms this need was supplied by indentured servants and a smaller number of hired hands.

Agriculture in the Southern Colonies

The southern colonies were ideally suited for agriculture. The coastal plain was approximately 200 miles wide, the soil was generally rich, and the climate was mild. The most important crop of the upper south (Maryland, Vir-

ginia, and North Carolina) was tobacco. At the beginning of the seventeenth century, England was importing about £200,000 worth of tobacco—mainly from the Spanish empire. As noted earlier, between 1612 and 1616 John Rolfe learned from the native Americans how to cure tobacco, and the success of the crop on the English market was assured. The English government banned the growing of tobacco at home and forbade the importation of foreign tobacco. Twenty thousand pounds of tobacco were sent to England from America in 1618; 500,000 in 1629; 28 million by 1688; and 105 million in the years just before the Revolution.

As you will recall, land in Virginia was originally owned by the Virginia company, and in Maryland, by the Calvert family. Private ownership soon developed, but quitrents continued to be collected in both colonies. The headright system, under which those who imported indentured servants were granted additional lands, led to a rapid increase in the size of estates, though they tended to be limited by the shortage of labor to about 600 acres for most of the seventeenth century. With the large-scale importation of slaves in the eighteenth century, however, the lid was removed. William Byrd II was the owner of almost 180,000 acres, and Robert "King" Carter ruled over 300,000 acres and 1,000 slaves. (It should be kept in mind, however, that the average southern farm was only about 200 acres.)

However, only a small portion of a plantation was under cultivation at any one time. Plantation owners kept using the same fields until they were exhausted (which with tobacco usually occurred within seven years) and then deserted them and opened up new fields. The second reason for limiting acreage under cultivation was the high cost of production. Gray, in his history of southern agriculture, estimated that it cost almost £1,900 to keep 2,000 acres of tobacco under cultivation and even more to grow rice or indigo. Many planters, discouraged by the falling prices for tobacco during most of the eighteenth century, switched to the production of winter wheat, which was planted in the fall after the tobacco was harvested and did not ripen until June or July, after the tobacco plants were transplanted. By 1770 Virginia and Maryland were exporting over 1 million bushels of grain. Other planters rented or sold their excess land and earned a larger income from land speculation than from farming.

The two staple crops of the lower south (South Carolina and Georgia) came to be rice and indigo. Rice was introduced into South Carolina during the 1660s, but its cultivation did not succeed until a more hearty variety from Madagascar was imported by John Thurber, a sea captain, in the 1690s. Rice grew best in the swampy, mosquito-infested fields along the coast. Rice cultivation proved to be extremely profitable. Rice sold for £2 a barrel, and over 150,000 barrels were being exported from Charleston just prior to the Revolution.

Indigo, the source of a valuable blue dye, was introduced into South Carolina in 1741 by Eliza Lucas (later Mrs. Charles Pinckney), whose father had been a governor in the West Indies. It proved to be an ideal supplement to rice cultivation because it grew in the uplands and needed care at different periods of the year than rice did. Indigo was in such demand that the English government paid producers a bounty of four pence a pound. This raised prices to as much as five shillings a pound, and South Carolina and Georgia were producing well over 1 million pounds a year during the early 1770s. After independence, when the bounty no longer existed, American indigo could not compete in the English market and was no longer produced.

The cultivation of rice and indigo was more intensive than that of tobacco, but plantations in the lower south often exceeded 1,000 acres. Because of the danger, arduousness, and unpleasantness of the labor involved in both rice and indigo cultivation, all work was done by slaves—usually thirty or forty to a plantation. Actually, in the rice plantations owners probably learned the production techniques from their slaves, who were familiar with West African methods of growing rice.

While the production of staple crops for market is called commercial agriculture, two points should be kept in mind in studying southern agriculture. Corn (whose acreage exceeded that of tobacco), wheat, and a wide variety of fruits and vegetables were grown in all parts of the south largely for home consumption. Many of these crops were grown on fields that could no longer produce tobacco. Cotton was also grown in the colonial south, but the difficulty of separating the seeds from the lint limited its commercial possibilities. Lastly the vast majority of southerners did not live on plantations but on farms of about 300 acres—only slightly larger than those of the middle colonies. They had difficulty in competing with the large planters (who were able to cut production costs) and therefore grew more corn and wheat than tobacco, which usually had to be sold to their richer neighbors. Still, it is estimated that over half of all southern crops were exported overseas.

Cattle raising was also important to the southern farmer. The livestock industry of the southern colonies, particularly the Carolinas had many of the characteristics which we usually associate with the post-Civil War west. Cattle were allowed to run loose on the open range to forage. Periodic roundups took place, in which the cattle were enclosed in cow pens, or corrals, branded, and then driven to coastal towns—usually Charleston. There they were sold for their meat, hides, and fat, which was used for candles. Sheep and horses were also raised and, as in the other sections, hogs did exceptionally well. Some southern beef and pork were exported to the West Indies, yet in other parts of the south where planters concentrated strictly on the production of a staple crop, these same products had to be imported from the middle colonies.

Colonial farmers have been accused of being stodgy and conservative in their methods. Yet, the handicaps under which they labored—primitive tools, high labor costs, poor transportation, lack of sound currency, and the trial-and-error process of adapting European crops and methods to American conditions—must have seemed almost insurmountable. Still, these problems were surmounted, and American farmers supplied the products needed not only for themselves and their families but also for fellow colonists on the mainland and in the West Indies and for innumerable Europeans of whose existence these farmers were only dimly aware.

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Colonial Commerce

As early as 1645, a correspondent wrote John Winthrop of Massachusetts about the advantages of trade with the West Indies:

The certaintest commodities you can carry for these parts [the West Indies] will be fish as mackerel, bass, dry fish; beef or pork if you can procure them at reasonable rates. Linnen cloth is [also] a certain commodity.

New Englanders followed this advice all during the colonial period, but the West Indian trade was only one phase of a far-flung commercial network for the colonies.

The Colonies as Suppliers and Markets

As England had planned, the colonies did fall into the expected pattern of providing raw materials for the mother country. Even before the colonies were founded, Europeans were obtaining fish, furs, and timber from the North American continent. Later, tobacco, rice, indigo, and sugar were added to the list of colonial staples. On the other hand, the colonists depended on England for much of their manufactured and capital goods.

Even the poorest family might own an English-made knife or gun. Farmers and artisans hoped to acquire English tools and implements. Housewives needed pots, pans, and other household utensils. Also, as

