**Agriculture**

**Agriscience** is the application of scientific and new technologies to agriculture.

**Agriculture** is defined as the activities concerned with the production of plants and animals, and related supplies, services, mechanics, products, processing, and marketing.

**The History of Agriculture**

Agriculture is thought to have first appeared on Earth about 9500 BC in the Middle East in an area known as the Fertile Crescent. In 8500 BC we began to see subsistence economies based on domesticated crops and plants. The first crops grown known as the eight founder crops included [emmer wheat](http://wheat), [einkorn wheat](http://wheat), then hulled [barley](http://en.wikipedia.org/wiki/Barley), [pea](http://en.wikipedia.org/wiki/Pea), [lentil](http://en.wikipedia.org/wiki/Lentil), [bitter vetch](http://vetch), [chick pea](http://pea) and [flax](http://en.wikipedia.org/wiki/Flax). Humans gradually shifted from being hunter-gatherers to agriculturalists who planted some crops and continue to gather from other naturally occurring crops.

In about 5500 BC full dependence on domesticated crops and animals began to occur. In this era mono-cropping became more common. The advent of agriculture allowed societies to become more densely populated and to feed more people on a smaller land base.

After Columbus reached America, there began to be a free flow of crops from the Americas to the rest of the world. Crops such as squash, corn/maize, and tomatoes became parts of the European diet, while strains of wheat were grown extensively in the Americas. By the early 1800’s strains and cultivars of various plants were being selected for many traits. The 20th century brought an age of mechanization to farming that allowed much more work to be completed, much more efficiently.

Cattle, sheep, goats, pigs, and gazelles roamed free. Goats were likely the first to give up their wild ways. People don't kill their own goats the same way they kill wild ones. Other DNA evidence indicates that after the initial domestication of goats, migrating people took the animals with them all over the world to trade as good sources of meat, milk, and wool. Other scientists have found multiple origins for cows, pigs, and yaks.

Squash were probably the first plants domesticated in North America up to 10,000 years ago. Corn was probably domesticated 6,300 years ago.

**A History of Agriculture in the Maritimes**

Maritime agriculture dates from the establishment of [PORT-ROYAL](http://www.thecanadianencyclopedia.com/articles/portroyal) by the French in 1605. [ACADIAN](http://www.thecanadianencyclopedia.com/articles/acadia) settlers diked the saltwater marshes in the Annapolis basin and used them for growing wheat, flax, vegetables and pasturage. After the signing of the Treaty of [UTRECHT](http://www.thecanadianencyclopedia.com/articles/treaty-of-utrecht) (1713), France withdrew to Plaisance, Nfld; Île Royale (Cape Breton Island); and Île St-Jean (PEI). They intended that Île St-Jean would serve as a source of grain and livestock for their naval and fishing base on Cape Breton. Few Acadians moved from their homeland to Île St-Jean before the 1750s. By mid-century the predominantly fishing population in Île Royale was cultivating small clearings with wheat and vegetables and possessed a variety of livestock.

After acquiring Acadia in 1713, Britain promoted Maritime agriculture in pursuit of objectives of defence and [MERCANTILISM](http://www.thecanadianencyclopedia.com/articles/mercantilism). Provisions were needed to support Nova Scotia's role as a strategic bulwark against the French. Britain also promoted agriculture to supply provisions for the West Indies trade, and hemp for its navy and merchant marine. Financial incentives were offered to Halifax settlers to clear and fence their land, but the lack of major markets kept the area in a state of self-sufficiency. The Acadians continued to supply produce to the French on Ile Royale, an act which contributed to their expulsion by the British in 1755. Some Acadians were later asked, however, to instruct the British in marshland farming. The influx of [LOYALIST](http://www.thecanadianencyclopedia.com/articles/loyalists) settlers in the 1780s increased demand for marshland produce. Since the American states provided stiff competition in flour and grains, the Fundy marshlands were largely turned to pasture and hay for cattle production. On PEI the British government attempted to promote agricultural settlement by granting 66 lots of 8094 ha to private individuals.

Between 1783 and 1850 agriculture was dominant in PEI, but subordinate to the cod [FISHERY](http://www.thecanadianencyclopedia.com/articles/fisheries) and the trade with the West Indies in Nova Scotia, and secondary to the [TIMBER TRADE](http://www.thecanadianencyclopedia.com/articles/timber-trade-history) and shipbuilding in New Brunswick. With British and Loyalist immigration, the area of agricultural settlement in the Maritimes expanded from the marshlands to include the shores of rivers, especially the [SAINT JOHN](http://www.thecanadianencyclopedia.com/articles/saint-john-river). Although the new areas were suited to cereal production, settlers tended to engage in mixed farming for cultural, agricultural and marketing reasons. Most full-time farmers concentrated on livestock raising, which required less manpower than did cereal growing. Before 1850 both Nova Scotia and New Brunswick remained net importers of foodstuffs from the US. PEI alone achieved an agricultural surplus, exporting [WHEAT](http://www.thecanadianencyclopedia.com/articles/wheat) to England as early as 1831.

Agricultural development in the early 19th century was limited by the skills post-Loyalist immigrants possessed. Most of these settlers were Highland [SCOTS](http://www.thecanadianencyclopedia.com/articles/scots) who were ill-prepared for clearing virgin forest, and the standard of agricultural practice was low. In 1818 John [YOUNG](http://www.thecanadianencyclopedia.com/articles/john-young), a Halifax merchant using the name "Agricola," began agitating for improved farming methods. As a result, agricultural societies were formed with a government-sponsored central organization in Halifax. Young's efforts had virtually no impact, however, since merchants were not involved in local farming. Hence there was little economic incentive for farmers to produce a surplus for sale. Nonetheless, agricultural lands and output grew gradually, and by mid-century the farming community was a political force, demanding transportation improvements and agricultural protection.

After 1850 Maritime agriculture was affected by 2 principal developments: the transition throughout the capitalist world from general to specialized agricultural production and, especially after 1896, the integration of the Maritime economy into the Canadian [ECONOMY](http://www.thecanadianencyclopedia.com/articles/economy). The last 2 decades of the 19th century witnessed an increase in the production of factory cheese and creamery butter and a rapid increase in the export of [APPLES](http://www.thecanadianencyclopedia.com/articles/sweet-apple), especially to Britain (*see* [FRUIT AND VEGETABLE INDUSTRY](http://www.thecanadianencyclopedia.com/articles/fruit-and-vegetable-industry)).

After 1896 the boom associated with Prairie settlement opened the Canadian market to fruit (especially apples) and [POTATOES](http://www.thecanadianencyclopedia.com/articles/potato). By the 1920s the British market for Nova Scotia apples was threatened by American, Australian and BC competition, notwithstanding improvements introduced by Nova Scotia producers to increase efficiency. The Canadian market for potatoes was supplemented by markets in Cuba and the US. Although Cuba moved to self-sufficiency after 1928, PEI retained some of the market by providing seed stock.

Those sectors of Maritime agriculture dependent on local markets began to suffer in the 1920s. Difficulties in the forest industries contributed to the disappearance of markets, and the introduction of the internal combustion engine diminished the demand for horses and hay. Meat from other parts of Canada supplanted local production. In the 1930s the potato export market suffered as American and Cuban markets became less accessible. These factors, coupled with problems in the silver fox industry (*see* [FUR FARMING](http://www.thecanadianencyclopedia.com/articles/fur-farming)), were catastrophic for PEI; its agricultural income dropped from $9.8 million in 1927 to $2.3 million in 1932. Only the apple export market remained stable, a result of British preferential tariffs on apples from the empire. In response to various difficulties during the 1930s, many farmers turned to more diversified self-sufficient agriculture, a change reflected in increased dairy, poultry and egg production.