



The tools farmers used in 1800 were simple ones. Farmers used axes to cut down trees. Saws were then used to cut the trees into logs to build log cabins. Wood from trees was also used to make fences and furniture.

A plow with an iron blade was used to prepare soil for planting. As this blade was dragged across a field, it dug a long groove called a furrow.

If farmers were lucky, they would have had a team of oxen to pull these plows. Even then, plowing was slow work. The thick prairie soil stuck to the iron blades. Farmers had to stop every few steps to scrape dirt from their plows.

Farmers planted their crops by hand. They walked up and down their fields, dropping seeds into the fresh furrows. They hoped the seeds would take root in this loose soil.

Farmers used a scythe, a curved knife on a long handle, to harvest their grain crops. Later on, they threshed the grain by beating it with a tool called a flail. Threshing separates the seeds of the grain from the rest of the plant.

With these tools, a farmer had to work about 300 hours to raise 100 bushels of wheat. For this amount of wheat, he had to plow, plant, and harvest five acres of land.

## AGRICULTURAL CHANGES...

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During the 1800s, Americans had invented many new farm tools. Many of these tools had to be pulled through fields by teams of horses.

The most important new tool for prairie farmers was the steel plow. A man named John Deere invented it in 1837. Deere's plows were made with steel blades rather than iron. Steel blades were sharper and smoother than iron blades. As a result, steel plows could cut through the thick prairie soil far more easily than the earlier iron plows.

Another new tool was a grain-cutting machine called a **reaper**. A man named Cyrus McCormick invented it in 1834. A farmer could cut much more grain with McCormick's reaper than with a scythe.



New machines also helped farmers. One machine was the horse-drawn seed drill. It planted seeds much faster than a farmer could by hand. Another machine was the horse-drawn **combine**. A combine could cut and thresh a field of grain at the same time.

These inventions helped Midwestern farmers grow more food with less effort. In 1800, a farmer had needed to spend 300 hours of labor to raise 100 bushels of wheat. By 1900, it took farmers just 50 hours to raise the same number of bushels.

By the year 2000, most of the work of plowing, planting, and picking crops was done by machines. Gasoline engines supply the power for these machines.

The most important new farm tool of the last 100 years has been the tractor. Farmers can use tractors in two ways. One way is to pull heavy loads. A modern tractor can pull more weight than 100 horses can. The other way is to power other farm equipment. Farmers use tractors to pull plows, seed drills, and machines that harvest their crops.

For dairy farmers, no tool has been more useful than the milking machine. Before the invention of the milking machines, dairy farmers had to milk each cow by hand. This was slow work. Milking machines allow a farmer to milk many cows at the same time. As a result, dairy farms are much larger today than they were in 1900.



New tools have also helped Midwestern farmers grow more food on less land. In 1800, a farmer needed five acres to grow 100 bushels of wheat. By 2000, the same amount of wheat could be grown on just three acres.

New machines have also reduced the time it takes to raise 100 bushels of wheat. In 1800, it took farm workers 300 hours of labor to raise that much wheat. Today, it takes less than 4 hours to raise 100 bushels of wheat. That's a big difference.