



Farm Talk

Jerry Webb

Farming evolution was no 'over-night' revolution

Agriculture has gone through some tremendous changes over the past couple of centuries.

From hand power to horsepower; from horsepower to mechanical power. From a time when almost everyone had to farm just to get something to eat, to a time when hardly anyone farms and there's too much to eat.

It's been a very gradual evolution—in fact there was hardly any evolution at all from the time of the first settlers until the period surrounding the Civil War when man power became scarce and farmers were pressed into using horses and the many advanced machines available to do their farm work.

It may come as a surprise to many that American farmers were slow to change. They had neither the financial ability or the motivation to buy reapers, gang plows, grain drills, threshing machines, and all the rest of the gadgets available to them in the mid-1800s.

Sure, they had horses and oxen,

and they were used as beasts of burden. But they were utilized much the same as they had for centuries. They did the really heavy work that men could not do, like pulling a wooden plow, dragging heavy stones and logs, or pulling a wagon. But seeds were planted by hand and crops were cultivated with a hoe and most harvesting was a slow, laborious hand process.

In the years just prior to the Civil War, it took about 50 manhours to produce an acre of wheat. Typical farming technique of the period involved a walking plow, a bundle of brush used as a harrow, hand broadcasting of the seed, harvesting with a sickle, and threshing with a flail. For that effort, the farmer reaped about 20 bushels of grain.

With that kind of labor requirement, it's easy to see why about two-thirds of those gainfully employed in this country during that time were involved in farming.

Advanced farm machinery was

available in the pre-Civil War period—it just wasn't being used by farmers. In the first place it cost money, and that was something farmers didn't have. They could go for years and never see more than a few dollars as they ate what they produced and bartered for the things they couldn't produce. And so to invest in a grain drill or a threshing machine was out of the question.

Inventors were spitting out new equipment ideas during the first half of the 19th Century, much faster than farmers were willing to change. Here's a partial list of farm machinery that was patented during that period: a mowing machine, an iron plow with interchangeable parts, a revolving hay rake, a grain reaper, even a grain combine was patented in the early 1800s.

There were also major developments in other agricultural techniques during that period. New breeds of livestock, new crops, improved varieties of existing crops, agricultural magazines, advanced technology in food preservation, and transportation.

It was a magnificent time for new technology, and yet farmers were slow to adopt this new information. And then, in 1861 a Civil War began and it triggered the first great agricultural revolution. Two factors—a shortage of manpower and a general improvement in farm incomes caused farmers to start looking at new ways to do things. Other developments followed that assured a continuing flow of agricultural technology, and an exodus from agriculture began that has continued to this day.

In 1820 there were almost 10 million people in the United States, with 72 percent of those gainfully employed engaged in agriculture.

By 1890, the population had increased to more than 60 million, but barely a third lived on farms. Of

course, that was a time of expanding agriculture through the westward movement. There were homesteads to be had, land to be cleared, and agriculture was growing. But it was growing with less and less man-hours per acre and per unit of production.

A farmer was still growing 20 bushels of wheat to the acre, but he was doing it with only 10 hours of labor. And he was using a gang plow, a mechanical seeder, a harrow, a binder, and a threshing machine — all powered with horses.

World War I signaled another dramatic shift in farm production as the tractor started to replace horsepower. By 1930, the typical farmer was still producing 20 bushels of wheat per acre, but he was doing that with only four hours of labor. And he was using a tractor pulling a three-bottom gang plow, a 10-foot tandem disk, and a grain combine. He also hauled his output to market in a truck.

But consider this: U.S. population has reached almost 123

million people while the farm population had increased by only four million, compared with 40 years before. The country was growing, but the farm population had virtually stagnated, even at a time when farm productivity was expanding.

Today, a handful of Americans till this great continent from coast to coast, using large machinery, sophisticated technology, and huge amounts of capital. And instead of man-hours per acre, farmers count acres per man hour.

If you're against progress, then you don't like the story of American agriculture.

If you yearn for the good old days of sweaty horses, hand-picked corn and a walking plow, then you can probably see lots of things wrong with modern agriculture.

But when you sit down at the dinner table tonight, remember that progress puts food on the table in unheard of, even unnecessary abundance, and still one acre in four produces for the world market.

USDA proposes change in marking meat products

WASHINGTON — Requirements for the sale, transportation and marking of certain meat products would be simplified under a rule proposed by the U.S. Department of Agriculture.

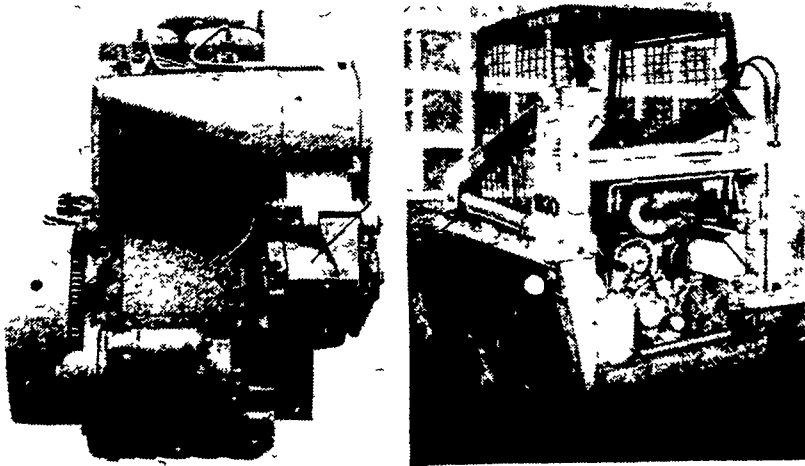
Donald L. Houston, administrator of USDA's Food Safety and Inspection Service, said the proposal is intended to reduce the paperwork requirements imposed on the meat industry in the transportation of edible and inedible meat food products.

Under the proposal, the food safety and inspection agency plans

to delete two shippers' certificates currently required for the transportation of U.S. inspected and passed meat and meat food products.

The proposal also would expedite the return of alleged adulterated or misbranded meat products by retail stores to slaughter or processing plants by revoking a special permit now needed to accompany the products. In its place, the proposal would require that oral permission be obtained from the federal supervisor of the area in which the plant is located.

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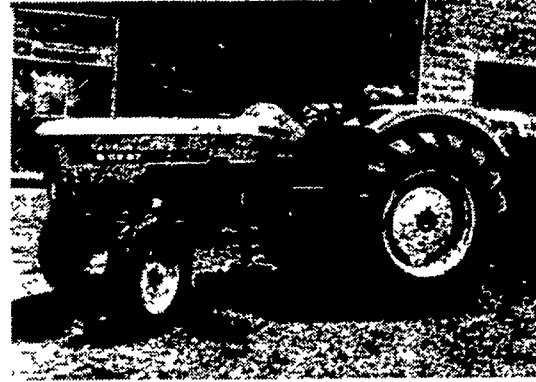
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