



Family corn farmers. American ingenuity.

By the time Lewis and Clark began their expedition from the Illinois Territory in 1804, corn had been grown successfully by settlers for more than a century across the continent. As it was domesticated over thousands of years prior, corn developed into a versatile crop, growing in a number of climates and soil types. Corn became a dependable staple across the Americas.

When reports from the Lewis and Clark scientific journey known as the “Corps of Discovery” began to trickle back east, farmers and settlers pointed their wagons west. They were looking to settle in the vast lands in the Central Plains described by Lewis and Clark as being fertile and rich. Perfect for growing corn, wheat and cotton. Perfect for providing the agriculture resources needed by a growing nation.

From this humble beginning of settlers scratching a living from the soil, farmers aimed to produce a better crop every year, to take one year’s knowledge and apply it to the next. As it turned out, the vast Midwestern United States and its fertile soil is an ideal location to grow corn. As decades passed, farmer know-how exploded. Each generation learned and adopted improved farming methods, passing this know-how along to their children, continuing a cycle that’s alive and well even today.

Soon, these fertile plains in the middle of the United States became known as the Corn Belt, even though the corn plant is widely adaptable, allowing it to be planted and harvested with great success in nearly every state and many countries around the world.

A hybrid by any other name

In the late 1880s, experiments involving a new method of breeding seed corn showed great promise. Corn, plant breeders found, can express heterosis or hybrid vigor.

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This means plant breeders can take two corn plants with favorable characteristics and cross them – allowing one of the plants to pollinate the other. If all goes as planned, the “hybrid” seed produced from the mating would be superior to both parents when planted and grown. It could have a higher yield potential, be more uniform, grow as a hardier plant and more, depending on how inherent the desirable characteristics were in each parent.

Is a national average of 300 bushels of corn per acre possible? Consider this: The average yield of National Corn Yield Contest winners last year was 302 bushels per acre. If they can do it, certainly others will follow.

This understanding created immense opportunities. Suddenly plant breeders could cross and re-cross different varieties of corn with the hope of creating a hybrid that would outperform other corn seed. Universities and agriculture publications began to promote the benefits of hybrids and national corn yields began to rise as farmers, seeing the benefits in their own fields, purchased the latest hybrids every spring.

It was a new and exciting age of agriculture. In 1933, less than 1 percent of planted corn was hybrid. By the early 1940s, hybrid usage rose to 78 percent and continued upward. In the mid-1950s, Henry A. Wallace, former Vice President, former Secretary of Agriculture and an early developer of hybrid seeds, noted the Corn Belt had developed into the “most productive agricultural civilization the world has ever seen.”

Such productivity continues today, with America’s corn farmers producing 20 percent more corn per acre than any other country in the world.

Record after record

How do America’s family farmers out-produce everyone else? The roots of this success run deep and wide.

There’s know-how – the everyday working knowledge and understanding of how best to plant, raise and harvest a crop that’s handed down from generation to generation. This is not simply tossing a few seeds to the ground and hoping for the best. It involves high-tech equipment that places hybrid seeds at the desired depth in the soil and the optimal number of seeds per acre. It’s the ability to help keep that crop healthy during the growing season. The understanding of where plant nutrients are needed and when – and the technical savvy to do just that. The optimism to invest hundreds of thousands of dollars into a crop Mother Nature can wipe out in an instant.

Then comes the continuing advancement of hybrid seed corn – every year means better hybrid seeds for farmers. Plant breeders today have advanced tools to better predict which desirable characteristics will come from its two parents. They can identify those with potential and determine those characteristics before a single seed is ever planted in the ground. Add the advances gained through biotechnology and the potential from mapping the corn genome, and it’s safe to say today’s yields – unimagined only a generation ago – are just the beginning.

Eight of the largest crops in history all occurred in the last eight years, with 12.4 billion bushels produced in 2010. That's enough corn to fill bushel baskets – the size of a small round laundry basket – that could go from the earth to the moon and back nearly seven times.

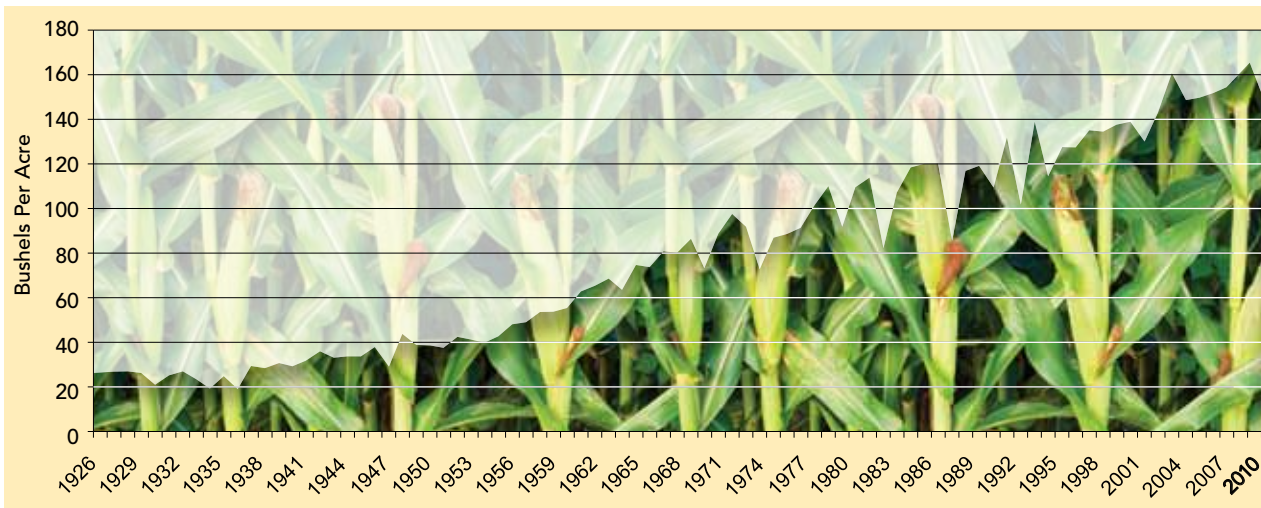
Yet even today's yields are impressive compared to those of just eight years ago. The national average of 153 bushels produced on each acre in 2010 was nearly 20 percent larger than the average yield in 2002 – and plant breeding experts estimate yields may jump 40 percent before 2020 and, perhaps, hit a national average of 300 bushels per acre by 2030.

Is this simply a pipe dream? Consider this: The average yield of National Corn Yield Contest winners last year was 302 bushels per acre. Contest winners are generally trendsetters. If they can do it, others will certainly follow.

These higher yields mean we'll see crops of 15 billion bushels and more – all from the same number of acres.

Farmers saw this incredible upward trend in corn production coming. It's why they've invested in new markets and new opportunities, and because of this, we have the opportunity to use corn in ways we never thought possible – beyond the traditional markets.

AVERAGE CORN YIELDS



Yields of 153 bushels per acre in 2010 were 24 bushels per acre greater than those just eight years earlier. Researchers estimate yields may surpass an average of 210 bushels by 2020 and reach a national average of 300 bushels by 2030. By sustainably producing more bushels per acre, farmers can develop new markets for corn – and replace their petroleum-based counterparts.

Hora family | Washington, Iowa

Kurt and Heather Hora own and operate their family farm in Washington, Iowa. "We strive to produce a better crop every year in terms of yields, but also in terms of reducing the amount of fertilizer and other inputs for every bushel we produce," Kurt said. "It's the smart thing to do for today and important for the next generation who will farm this land. We owe it to them to do the right things now."



**An acre of corn removes 8 tons
of harmful greenhouse gas, more than that
produced by your car annually.**

Source: EPA



**CORN FARMERS
COALITION**