

Where Did All Those Potatoes Come From?

by David A. Hendersen

Are we running out of farmland? Worried about all those new houses being built on large lots, land that was previously farmed? Will there be enough food to go around?

You may want to relax, enjoy that second helping at the supper table, and let the marketplace do its thing. Why, you might ask, such a cavalier attitude toward this gravely serious subject? To answer that, let's look at one specific food source, the French fry.

U.S. production of frozen potato products such as French fries consumes a vast amount of potatoes each year, estimated at 18 billion pounds in 2000. A typical French-fry plant requires up to four million pounds of raw potatoes delivered to its door in good condition every day for 300 days each year. Imagine rounding up that many potatoes daily.

How can the processing plants be assured enough potatoes will be grown to supply their facilities? The processors contract with

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individual growers each year to assure an adequate supply. Only the best farms are awarded contracts. Processors can be selective because more farmland is available than necessary.

Why is more farmland available? Largely because potato farmers become more efficient every year. Compare these figures regarding U.S. potato production:

Year	Total Harvested Acreage	Potatoes Harvested Per Acre	Total Production
1890	2,557,000	3,990 lbs.	10 billion lbs.
1997	1,362,000	33,800 lbs	46 billion lbs.

Source: Ed Plissey, "Milestones of the Century for U.S. Potato Industry," *Valley Potato Grower*, Jan. 2001, p. 4.

In the 107 years from 1890 to 1997, U.S. farmland acreage devoted to potatoes *decreased* by almost half. What happened to total production? It *increased* by four and a half times. Why? Because farmers continually improved the productive use of their



land. The amount of harvested potatoes per acre increased from less than 4,000 pounds to nearly 34,000 pounds in that time. A steady increase in production per acre is evident throughout the span. Even if you picked other dates since 1890, the results would be similar.



Why does potato farmland today produce this abundance?

There are too many reasons, both subtle and obvious, to list. Improved seed potatoes, better planting techniques, more consistent watering through irrigation, the use of fertilizers to replenish the soil, chemical treatments to stem losses from blight—these are a few of the easily recognizable reasons. Much progress results from the unique knowledge acquired by successful farmers as they search for even small improvements in yield.

Since potatoes are so plentiful in the United States, does that mean processors can be careless with their usage? Hardly. Competitive pressures drive the sloppy processors out of the market.

Twenty-five years ago, one pound of raw potatoes produced about seven ounces of finished frozen French fries. Today, one pound of potatoes produces nearly nine ounces of finished French fries, roughly 25 percent more.

To achieve this dramatic increase, processors have invested mightily in equipment,

training, and people. They have reduced the losses due to peeling, installed equipment to automatically locate and remove bruised and discolored sections of each potato, reduced fry breakage throughout the plant, and looked at every part of the process to improve efficiency. They keep finding new ways to reduce waste.

So at lunch today, while you are munching on your super-sized meal, imagine *one* acre of potato farmland and picture the roughly 19,000 pounds of frozen French fries produced from this crop. How many pounds of French fries will be produced from a single acre ten, 20, and 50 years from now? In a relatively free and competitive marketplace, no one knows the answer, but it is a safe bet to say: more—probably many more. □

