

Wheat acreage has declined, net revenue still remains negative

Wheat is the third most widely grown row crop in the US with 50.1 million planted acres and 43.9 million harvested acres in 2016. Total planted acres have been generally on a downward trend in recent years with a recent high of 63.6 million acres planted in 2008 the same year that experienced the highest harvested acres (56.0 million) since 2000. Depending on the area of the country, wheat can be either a winter crop or a spring crop and comes in far more classes than corn or soybeans. The difference between planted and harvested acres are their use for silage, straw, and grazing in addition to abandoned acres due to a crop failure.

In this column we want to look at the profitability of growing wheat. As we did with corn and soybeans in previous columns (<https://tinyurl.com/ycbhjvzr>), we are using the “Commodity Costs and Returns” numbers that are provided by the Economic Research Service (ERS) of the United States Department of Agriculture (USDA) (<https://tinyurl.com/j2pxesv>). The tables we will be using are those released in October 2017 and are the first estimates available after the end of the 2016 crop marketing year for the dominant crops grown in the US.

US farmers harvested 2.3 billion bushels of corn in 2016, up from 2.1 billion bushels a year earlier. The 2016 season average price paid to farmers was \$3.89 per bushel, \$1.00 per bushel lower than in 2015. As recently as 2012 wheat farmers received a season average price of \$7.77 per bushel. The 2016 wheat price was at levels not seen since 2005 when the price of a bushel of wheat averaged \$3.42.

The 2016 gross value of production for wheat was \$206.35 per planted acre, calculated on the season average price paid to farmers. This was \$1.65 per acre higher than a year earlier because even though the price was lower, the yield was 10.8 bushels per planted acre higher.

Wheat farmers were able to reduce their operating costs by \$7.51 per acre. This reduction was led by fertilizer at \$5.93 per acre, followed by fuel, lube, and electricity at \$1.53, seed at \$0.81, and custom operations at \$0.02. The cost of chemicals increased by \$0.52 per acre. Interest on operating inputs rose by \$0.15 per acre, repairs by \$0.07 per acre and other variable expenses by \$0.04.

These farmers also decreased their 2016 allocated overhead from a year earlier by \$1.49 per planted acre. The opportunity cost of land declined by \$3.10 per acre. Increases were seen in capital recovery of machinery and equipment, \$0.74 per acre; the opportunity cost of unpaid labor (the farmer), \$0.67 per acre; hired labor, \$0.11 per acre; and general farm overhead, \$0.09. Taxes and insurance remained unchanged from a year earlier.

The total for operating costs and allocated overhead declined by \$9.00 to \$300.45 per planted acre. With \$206.35 in revenue and \$300.45 in expenses, wheat farmers lost \$94.10 per acre or \$10.65 an acre less than they lost a year earlier. This is the fourth year in a row that wheat farmers have experienced a loss. The total loss for the 4 years was \$318.16 per acre.

The January 2018 issue of USDA’s World Agricultural Supply and Demand Estimates projects 2017 wheat planted acres at 46.0 million acres—4.1 million acres less than in 2016—and a yield of 37.6 bushels per planted acre for a harvest of 1.7 billion bushels. With a projected mid-point price of \$4.60 per bushel farmers would earn \$181.70 per planted acre which includes \$8.74 per planted acre in silage, straw, and grazing revenue.

If wheat farmers are able to hold their expenses to 2016's \$300.45 per planted acre, they would incur a loss of \$118.75 per planted acre. With losses like this, it would not be surprising to see a further reduction in wheat acreage.

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