Performing custom work can be an additional source of income for farm operators around the state. For others, custom work is a full-time career. When labor is available, and another party has equipment, renting equipment for a short-term is also a common practice. While only a small portion of Iowa farmland is completely custom farmed, many farm operations rent equipment or hire out one or two operations on their farm each year.

The 2018 Iowa Farm Custom Rate Survey (www.extension.iastate.edu/agdm/crops/pdf/a3-10.pdf) canvassed 456 farmers, custom operators, and farm managers from the state, putting together a guide for pricing custom machine work. A total of 124 usable responses, giving 4,043 custom rates were received from Iowa farmers, custom operators, and farm managers. Thirteen percent of the respondents performed custom work, 23 percent hired work done, 42 percent indicated doing both, three percent indicated doing none, and 19 percent did not indicate whether they perform or hire custom work.

The publication, which can be found online at the Iowa State University Extension and Outreach Store (FM 1698) https://store.extension.iastate.edu/Product/1792 or on the Ag Decision Maker website (File A3-10) (www.extension.iastate.edu/agdm/crops/html/a3-10.html), provides rates for custom work in the following categories: tillage, planting, drilling, seeding, fertilizer application, harvesting, drying and hauling grain, harvesting forages, complete custom farming, labor, and both bin and machine rental. Newly added operations in 2018 include values for strip tillage and planting with a high-speed planter. All rates include fuel, repairs, depreciation, interest, labor, and all other machinery costs for the tractor and implement unless otherwise noted.

Handbook updates
For those of you subscribing to the handbook, the following updates are included.

- Historical Corn Yields by County – A1-12 (10 pages)
- Historical Soybean Yields by County – A1-13 (10 pages)
- Corn and Soybean County Yields – A1-14 (4 pages)
- 2018 Iowa Farm Custom Rate Survey – A3-10 (5 pages)

Please add these files to your handbook and remove the out-of-date material.
The average rate and range for each machine work function were compiled into the survey as usual, as well as the median charge and number of responses for each category. For the survey, the average is calculated as the simple average of all responses. The median is the response that splits all the ordered responses (from smallest to largest) in half.

The survey found there was a 5.6 percent price decrease across all surveyed categories. The change from 2017 to 2018 varied across categories, with harvest and hauling grain costs decreasing 9.4 percent and labor costs increasing 4.6 percent. Figure 1 shows the percentage change in each category in the survey. Table 1 shows historic rates for a sample of operations from the survey.

“Even with an increase in the price of diesel fuel assumed, the majority of operations reported a rate decline, this is in response to tight margins continuing for farm operations across the state,” said Alejandro Plastina, assistant professor and extension economist with ISU Extension and Outreach. “We appreciate the respondents to the survey, as the information available in the Custom Rate Survey is only possible due to their responses provided each year.”

The reported rates are expected to be charged or paid in 2018, including fuel and labor. The average price for diesel fuel was assumed to be $2.95 per gallon. The values presented in the survey are intended only as a guide. There are many reasons why the rate charged in a particular situation should be above or below the average. These include the timeliness with which operations are performed, quality and special features of the machine, operator skill, size and shape of fields, number of acres contracted, and the condition of the crop for harvesting. The availability of custom operators in a given area will also affect rates. Any custom rate should cover the cost of operating the farm machinery as well as the operator’s labor.

The Ag Decision Maker website offers a Decision Tool (download Excel file at www.extension.iastate.edu/agdm/crops/xls/a3-29machcostcalc.xls) to help custom operators and other farmers estimate their own costs for specific machinery operations. If you are interested in joining the 2019 Custom Rate Survey mailing list, send mail or e-mail address to: Alejandro Plastina, Iowa State University, Department of Economics, 478E Heady Hall, 518 Farm House Lane, Ames, IA 50011-1054, 515-294-6160, plastina@iastate.edu.

<table>
<thead>
<tr>
<th>Table 1. Average farm custom rates reported for Iowa</th>
</tr>
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<tbody>
<tr>
<td>Chisel plowing, per acre</td>
</tr>
<tr>
<td>Planting, no attachments, per acre</td>
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<tr>
<td>Spraying, per acre</td>
</tr>
<tr>
<td>Combining corn, per acre</td>
</tr>
<tr>
<td>Combining soybeans, per acre</td>
</tr>
<tr>
<td>Baling square bales, per bale</td>
</tr>
<tr>
<td>Custom farming, corn, per acre</td>
</tr>
<tr>
<td>Custom farming, soybeans, per acre</td>
</tr>
<tr>
<td>Machinery operating wage, per hour</td>
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</tbody>
</table>

Source: Iowa State University Extension and Outreach, Iowa Farm Custom Rate Surveys, FM 1698.
As we look toward the beginning of planting season for most of the country, the factors that determine the price they will receive in the coming crop marketing year are not under the control of individual farmers. An extremely hard freeze in the Ukraine, a drought in South America, or crop production problems in the U.S.—any one of these three or others—could result in higher expected crop prices for farmers in the U.S. and around of the world.

But with a half-way-favorable spring planting season and stable carryover supplies projected for the 2018/2019 crop-marketing year, crop prices could end up near or below current midpoint price projections. If that were to happen, returns for major crops could be in negative territory with 2018 net farm income hitting the lowest level since the 2013 peak.

To compound the bleak outlook, two of the three major commodity programs (crop revenue insurance and the Agricultural Risk Coverage program) were designed based on the unproven idea that crop prices would remain at profitable or near-profitable levels for the foreseeable future. They have not.

The third program—Price Loss Coverage—was not selected by a significant number of farmers so even though it is counter-cyclical, making increasing payments as prices decline, it is not enough to have a major impact on the decline in net farm income.

While national aggregate net farm income is forecast to be in the $59-$60 billion range, “median farm income earned by [individual] farm households is estimated at -$940 in 2016 and is forecast to decline to -$1,316 in 2018. In recent years, slightly more than half of farm households have had negative farm income each year” [https://tinyurl.com/y99ypkj4]. The result is that some farmers are having trouble getting farm operating loans.

So, what does all of this mean?

Combine the increased financial stress with the results of a 2016 Centers for Disease Control study, “Suicide Rates by Occupational Group – 17 States, 2012,” which found that the occupational group farming, fishing, and forestry had the highest suicide rate of any occupational group. In the 17 states studied, the 2012 suicide rate among those whose major occupation group was farming, fishing, and forestry was 84.5 suicides per 100,000 persons [https://tinyurl.com/yboovk6j].

Those numbers and an article in www.theguardian.com, “Why are America’s farmers killing themselves in record numbers?” by Debbie Weingarten [https://tinyurl.com/y7hrlq5w] make it clear that the costs and returns and net farm income numbers as well as the farm policy design failures we have been examining in our recent columns are not idle statistics. They can have tragic consequences.

To get a handle on what is happening in the countryside, we talked to National Farmers Union President Roger Johnson who was a credit counselor for hundreds of farm families during the farm financial crisis in the 1980s. He talked about a presentation that he made in January at the North Dakota State University Farm Economics Summit where he compared the situation in the 1980s with what we are seeing today.

He noted that, unlike the 1980s, land values have not collapsed, machinery values are not below 50 percent, interest rates are lower, and the overall farm debt-to-asset ratio looks good by historical standards. As a result, things don’t blow up as quickly as they did in the earlier crisis period. On the other hand, farm operating costs are an order of magnitude higher than they were in the 1980s. And, if interest rates begin to edge up, the situation could quickly go south in just a couple of years.

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For the farmer who has been denied an operating loan, the feelings of failure and inadequacy are no different from what farmers were feeling three decades ago. In this situation or even one where the financial stress is high, access to mental health services is critical.

The 2008 Farm Bill included a federal program called “Farm and Ranch Stress Assistance Network” which was meant to provide farmers with affordable mental health programs to help them deal with the stresses of farming. The program would have provided grants to support farm helplines, websites, educational services, support groups, mental health outreach, and home delivery of assistance, but it was never funded. Sadly, it is needed now.

“See something, say something” is a good aphorism not only to prevent mass shootings, but also to prevent suicides in both farm and non-farm communities. We urge our readers to watch for signs of stress in their spouses, children, friends, and neighbors. The first step is to get the person you are concerned about to call the Suicide Prevention Lifeline, 1-800-273-TALK (8255), or make the call yourself. Information is also available at www.suicidepreventionlifeline.org. It is better to be too concerned than to wait and hope things will blow over.

Another source for Iowans in need of legal, financial, stress, or crisis and disaster questions, is available through the Iowa Concern Hotline, call 1-800-447-1985, or visit the website, www.extension.iastate.edu/iowaconcern/.

Policy Pennings Column 913
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USDA NASS county yield results from 2017
By Ann Johanns, extension program specialist, 641-732-5574, aholste@iastate.edu

The 2017 average corn and soybean yields for counties and districts in Iowa were released in late February 2018 (Figure 1). This information is collected by USDA’s National Agricultural Statistics Service (NASS) each year using the December Agricultural Survey and County Agricultural Production Survey.

Through the Ag Decision Maker website, we provide this data in Information Files A1-12 and A1-13, Historical Yields by County, which show county averages from 2008 through 2017 (www.extension.iastate.edu/agdm/crops/pdf/a1-12.pdf and www.extension.iastate.edu/agdm/crops/pdf/a1-13.pdf). This information is helpful for seeing trends in yields over the past ten years. Information File A1-14, Iowa Corn and Soybean Yields, also shows the ten-year average yield, as well as the year and yield results for the highest and lowest years for each county in the past ten years (www.extension.iastate.edu/agdm/crops/pdf/a1-14.pdf).

Yield data is helpful in developing corn and soybean budgets, cash-flow projections, flexible lease payments, or other types of analysis for producers in which the actual production history is not available. Note that the crop yields are reported in bushels per harvested acre; Farm Bill programs such as Agricultural Risk Coverage (ARC) use bushels per planted acre.

Forty-five counties reported their highest yield for corn in 2017, and 12 counties reported the highest soybean yield in 2017. Marshall County had the highest corn yield at 222.4 bushels/acre, and Sioux County reported the highest soybean yield at 64.6 bushels/acre. The state average corn yield was 202.0 bushels/acre, the second year in a row with a state average over 200 bushels/acre. The state average soybean yield was 56.5 bushels/acre. A slight decline from the record high achieved in 2016, but still in the top three statewide yields seen in the past ten years.

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At the District level, four areas, North Central, Northeast, East Central, and Southwest all reported record corn yields in 2017. The remaining Districts in the state achieved a record high in 2016. Yields ranged from a high of 214.9 bushels/acre in the East Central District to 159.9 bushels/acre in the South Central part of the state. All Districts in the state had a record high soybean yield in 2016, and none topped this in 2017. The highest yielding region for 2017 in the state was the Northwest at 59.6 bushels/acre, and lowest was South Central, at 48.0 bushels/acre.

Each year, randomly selected operators in Iowa are interviewed for these surveys. The operator reports the whole farm's planted and harvested acreage, yield and production for corn, soybeans, and hay. They also are asked to report acres rented from someone else. Other crops such as wheat and oats are collected earlier in the year. The data are collected using several methods: mail, telephone interview, personal interview or the operator can even report using several methods: mail, telephone interview, or even report electronically. Data collection begins in late fall and continues through mid-January. Trained enumerators or census takers collect the data. Strict guidelines are followed in all states to ensure comparable results on a national level. Participation in agricultural surveys such as these is critical for the results to be published across the state.

In 2017, there were four counties in South Central Iowa lacking corn yield information and three counties with no soybean yield reported. This is the second time since 2015 that yield information has not been reported for both major crops in all 99 counties in Iowa. Results in these counties were suppressed due to not enough usable responses. If county yield data is used in a lease or other component on a farm operation, it might be necessary to agree upon a secondary source for yield information if the county yield is not released by NASS in a given year.

Summarized yield information is available on the Ag Decision Maker website, www.extension.iastate.edu/agdm/. For other county estimates, including other crops, livestock, and farm numbers, visit the USDA NASS website for Iowa at: www.nass.usda.gov/Statistics_by_State/Iowa/index.php.

Figure 1. 2017 county yields (bushels per acre)

Updates, continued from page 1

Internet Updates
The following Decision Tools have been updated on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).
- **Corn Profitability** – A1-85 (Decision Tool)
- **Soybean Profitability** – A1-86 (Decision Tool)

Current Profitability
The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://www.extension.iastate.edu/agdm/info/outlook.html).
- **Iowa Cash Corn and Soybean Prices** – A2-11
- **Season Average Price Calculator** – A2-15
- **Ethanol Profitability** – D1-10
- **Biodiesel Profitability** – D1-15