The Agricultural Act of 2014 allows farmland owners and operators to make a one-time election of a commodity program among the Price Loss Coverage (PLC), the Agricultural Risk Coverage at the County Level (ARC-CO), and the Agricultural Risk Coverage at the Individual Level (ARC-IC) programs for 2014 through 2018. It also allows the operator to enroll annually in the chosen program. However, prior to making those decisions, farmland owners will have a one-time option to reallocate base (or program) acres for PLC and ARC-CO, and another one-time option to update the program payment yields for PLC.

The choice to update base acres and yields is one that owners and operators should consider closely. These opportunities to update are few and far between. And it may be a few more farm bills before another update occurs. The opportunity to update allows a realignment between the farm's current production pattern and the payment formulas for commodity programs. For some farms, the base acreage and yields were determined with data from the 1980s. A lot has changed since then. The acreage update will move base acreage to more closely match current plantings. The yield update could provide larger payments, based on larger yields.

A new decision tool (www.extension.iastate.edu/agdm/crops/xls/a1-35baseacresandyields.xlsx) is designed to help Iowa farmland owners with the base acre reallocation and payment yield update decisions. Most of the information required to use this tool (2009-2012 planted and considered planted acres, Base acreage reallocation and payment yield update by Alejandro Plastina, extension economist, plastina@iastate.edu, 515-294-6160)
current base acres, and current CCP payment yields) has already been mailed by the USDA Farm Service Agency (FSA) to farmland owners and operators. The other required information (actual farm yields 2008-2012 on a planted acre basis) will have to be recovered from farm and other agricultural records. The owner or operator can compile the yield per crop per year, but not submit the yields to the FSA county office until yield software becomes available in the fall of 2014.

Letters to owners and operators will be missing planted and considered planted (P&PC) history of covered commodities where a tract division, tract combination, new tract, or farm transfer occurred between 2009 through 2014. County FSA offices were provided instructions for researching and documenting missing P&CP acreage history that will be loaded into the Farm Bill Acreage History Software once it is available.

**Base acreage reallocation**

After identifying your farm in the top part of the worksheet by FSA farm number, please input the P&CP acres to each crop in that farm for 2009 through 2012, as well as the current base acres on the farm.

The worksheet calculates the new reallocated base acres as the 2014 total base acres in that farm multiplied by the reallocation percentage stemming from the planting history. Therefore, the total number of base acres will be exactly the same before and after the reallocation and only the number of acres assigned to each crop might vary.

Finally, you can choose whether to update base acres or retain the current base allocation and see how that impacts the payment acres for ARC-CO and PLC (equal to 85 percent of the base acres per crop) over 2014 through 2018.

**PLC payment yield update**

After identifying your farm in the top part of the worksheet by FSA farm number, enter the actual farm yields for 2008 through 2012, as well as the CCP payment yields. If a crop was not planted in a particular year, then enter NP (not planted) in the corresponding cell; if a crop was planted or considered planted but no yield information is available, then enter ND (no data).

The worksheet calculates the updated payment yields as the historical average of the highest of 90 percent of the farm yield or 75 percent of the 2008-2012 average county yields. If the updated payment yields are higher than the CCP payment yields, then it makes sense to update the farm’s yield information.

The first worksheet within the decision tool shows information for an example farm. The decision tool has multiple worksheets to allow a user to enter data for up to five farms.

The base acreage reallocation calculator and other 2014 farm bill materials are available on the AgDM Farm Bill page, [www.extension.iastate.edu/agdm/info/farmbill.html](http://www.extension.iastate.edu/agdm/info/farmbill.html). New materials are being added to the webpage as rules are finalized.
Every five years the U.S. Department of Agriculture carries out an extensive survey of farmers all across the nation. The information that is collected and published serves a wide variety of purposes. One of the more important ones is to provide a snapshot of what farms and farmers at the national, state and county level look like, and how they are changing over time.

**Number of farms**
The long-term trend in Iowa as well as in most other states has been for the number of farms to decrease over time. The 2012 Census showed 88,637 farms in Iowa, a decrease of over 4,000 compared to 2007. However, these farms did not just disappear. Many mid-size farms were consolidated into larger units or subdivided into smaller units. In fact, the number of farms under 50 acres and over 1,000 acres have increased. The area of land in farms dropped just 0.4 percent over the same five-year period, while the number of harvested acres actually increased by 3.0 percent.

**Number of farmers**
Sometimes there is confusion between the number of farms and the number of farmers. These are not the same. Most of the Census information is collected by farm, which is defined as any agricultural operation that sold at least $1,000 in production in the past year. Many small, part-time operations that do not fit the traditional “family farm” image are included, as well as some very large livestock and crop producers. Tracts of land owned by multiple landowners that are all being rented by the same operator count as one farm.

The number of farms represents the number of business units, but the number of people involved may be more important. Each farm has one or more operators. Family partnerships or corporations count as one farm, but usually include multiple operators who often are related to each other. In fact, in 2012 Iowa had 131,535 farm operators, an average of 1.5 operators per farm. The total number of farm operators decreased by 4,533 from 2007, a drop of 3.3 percent, but the number of operators per farm did not change.

**Farm employees**
The number of farm operators can be used as a measure of the number of “farmers.” However, many people work on farms as hired employees rather than self-employed operators. Should they be considered farmers? They perform farm work for a living, so perhaps they should. The 2012 Census of Agriculture showed that there were 79,838 paid farm workers in Iowa, nearly one per farm. Adding the number of operators and employees together shows that 211,373 people were employed on farms in Iowa.

Many of the paid employees worked only part-time, but 25,620 of them worked at least 150 days out of the year on the farm. If we consider these “full-time” farm employees to be farmers, and add them to the number of operators, we find that there are actually 157,155 “farmers” in Iowa by this definition. This number is almost exactly the same as was reported in 2007. The increase in full-time farm employees in the past five year essentially offset the decrease in farm operators.

Of course, not all farm operators work full time on the farm, either. Census data reveal that 40 percent of Iowa operators worked only on the farm in 2012, while 21 percent reported part-time non-farm employment and 38 percent worked 200 days or more off the farm, essentially a full-time job. If we add just the operators who did not work off the farm to the number of paid workers with at least 150 days of farm work, we can estimate the number of “full-time” farmers.
farmers in Iowa to be 78,078. Not surprisingly, operators of larger farms were less likely to have off-farm employment.

**Women operators**
The latest Census also provides some details about the 32,907 female farm operators in Iowa. They account for 25 percent of all the farm operators in the state, the same proportion as in 2007, though the actual number dropped by 856. Of these female operators 7,108 were identified as the primary operator of the farm, accounting for 8 percent of all the primary operators. Another 23,235 were identified as the “second” operator, in most cases the spouse of the primary operator.

**Other characteristics**
The average age of the principal operators was 57.1 years, an increase of one year from 2007. However, the average age of all operators was slightly lower that, at 55.6 years. Over 58 percent of the principal operators were over the age of 55, but only 46 percent of the non-principal operators were over 55. This indicates that many of the non-principal operators represent the next generation of farmers.

Farm tenure continues to change. Operations with all owned land accounted for 56 percent of Iowa farms, a slight decrease from 2007, while the proportion of part-owners increased slightly to 34 percent. Ten percent were full renters. Seven percent of the farms had a crop-share lease, while 40 percent paid some cash rent (some farms did both). Just over 8 percent leased part of their machinery, and 32 percent hired some outside labor. Interest expense was reported by 55 percent of farms, indicating that they borrowed at least some of the funds used in their businesses. Over 85 percent of the harvested acres were covered by some form of crop insurance.


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**Selected Data from 2012 and 2007 Census of Agriculture**

<table>
<thead>
<tr>
<th>Category</th>
<th>2012 Census of Ag</th>
<th>% Change</th>
<th>2007 Census of Ag</th>
</tr>
</thead>
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<tr>
<td>Number of farms</td>
<td>88,637</td>
<td>-4.5%</td>
<td>92,856</td>
</tr>
<tr>
<td>Number of farm operators</td>
<td>131,535</td>
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<td>Number of paid farm workers</td>
<td>79,838</td>
<td>+1.0%</td>
<td>71,924</td>
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<td>Number of operators plus paid workers</td>
<td>211,373</td>
<td>+1.6%</td>
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<td>Number of paid workers working 150 days or more</td>
<td>25,620</td>
<td>+18.3%</td>
<td>21,658</td>
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<tr>
<td>Number of operators plus paid workers working 150 days or more</td>
<td>157,155</td>
<td>-0.4%</td>
<td>157,726</td>
</tr>
<tr>
<td>Number of female operators</td>
<td>32,907</td>
<td>-2.5%</td>
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<td>Number of fully owned farms</td>
<td>49,525</td>
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<td>Number of partly owned farms</td>
<td>30,025</td>
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<td>Number of fully rented farms</td>
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<td>Number of operators with no off-farm employment</td>
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<td>Number of operators with 200 or more days of off-farm employment</td>
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<tr>
<td>Percent of farms hiring labor</td>
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<td>Percent of farms paying cash rent</td>
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<td>37.3%</td>
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<td>Percent of farms with crop share rent</td>
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<td>Percent of farms leasing machinery</td>
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<td>Percent of farms paying interest</td>
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<tr>
<td>Percent of farms buying crop insurance</td>
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<td>43.5%</td>
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<tr>
<td>Percent of crop acres covered by crop insurance</td>
<td>85.2%</td>
<td></td>
<td>79.3%</td>
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</tbody>
</table>

Nate Anderson, a Cherokee area farmer, had the perfect spot at the 2014 Farm Progress Show. Between large seed company tents and blocks filled with farm equipment, Anderson joined Iowa State University experts and Secretary of Agriculture Bill Northey to talk about cover crops and no-till planting – two management tools he uses in his corn-soybean acreage program.

Anderson and Northey, two of the farmers featured in the nutrient management area of the Iowa State University tent, shared their management strategy experiences and listened as farmers talked about management practices for their own farms.

“It’s good for farmers to share their experiences and questions, and find out more about management practices they are considering,” said Anderson. “We need to keep talking and encouraging each other.”

Northey agrees, saying that farmers talking to farmers and learning from each other is going to be the way Iowa ramps up water quality efforts and the implementation of new management practices. “There’s a lot of momentum right now around implementing new practices,” Northey said. “Iowa farmers, universities and agribusiness have been working on water quality issues for a long time, certainly soil conservation issues, but the last few years we have focused on ramping that up.”

It was only natural that Anderson and Northey would be guest experts in the Farm Progress Show tent organized by Iowa State University College of Agriculture and Life Sciences and Extension and Outreach. Anderson is a 2010 Iowa State graduate in agronomy and Northey’s state office, Iowa Department of Agriculture and Land Stewardship, partnered with Iowa State University and Iowa Department of Natural Resources to create the state’s Nutrient Reduction Strategy as a way to reduce the nitrogen and phosphorus loads in water leaving farm lands.

The best practices outlined in the strategy and the current initiative encouraging the implementation of those practices were the focus of one area of the Iowa State tent at the Farm Progress Show. Matt Helmers, Iowa State University professor in agricultural and biosystems engineering and extension water quality specialist, was the staff expert the day Northey and Anderson were at the show. Helmers said this is an opportune time for folks in agriculture to show that they can make a positive impact on water quality.

“Profitability is important to our farmers,” said Helmers, “Short-term and long-term profitability and economic vitality of agriculture in the state are tied to our soil resources. If we are not protecting our soil resources, we jeopardize the long-term profitability of our agricultural system.”

Helmers and other Iowa State researchers, faculty and extension specialists talked to farm show visitors about research being conducted around experts at Farm Progress Show encourage water quality improvement practices supported by research

by Willy Klein, ISU Extension and Outreach Organizational Advancement, wklein@iastate.edu, 515-294-0662
Experts at Farm Progress Show encourage water quality improvement practices supported by research, continued from page 5

the suite of management practices outlined in the state strategy. Helmers said research is looking at how well the practices are performing, related costs and long-term benefits.

Water quality initiative funding from the Iowa legislature is enticing farmers to try practices new to them. “We'll learn more by doing,” said Northey. “We encourage every farmer to find something that works for them – try cover crops in a small way, try no-till or strip-till, look at getting cost share on a bioreactor. We are seeing a great success in farmer participation.”

He said the number of acres with cover crops has doubled each of the last few years and there are increasing numbers of farmers trying no-till, strip-till and nitrification inhibitors.

“Young farmers like Nate Anderson will be part of figuring out what this next generation of conservation ethic is, and how we care for the land, how we improve water quality. It's fun to join Iowa State in these conversations.”

More information about the water quality initiative best management practices is available in the ISU Extension and Outreach publication, Reducing Nutrient Loss: Science Shows What Works, available from the Extension Online Store, (store.extension.iastate.edu). Take a closer look at the practices and Iowans implementing them at www.cleanwateriowa.org. The clean water Iowa website includes best practices for residential and urban, and city and industry, as well as for farms.

Updates, continued from page 1

Internet Updates
The following Information Files and Decision Tools have been updated on www.extension.iastate.edu/agdm.

Estimated Cost of Establishment and Production of Miscanthus in Iowa – A1-28 (8 pages)
Miscanthus Production Budget – A1-28 (Decision Tool)
Base Acreage Reallocation and Payment Yield Update – A1-35 (2 pages)
Base Acreage Reallocation and Payment Yield Update – A1-35 (Decision Tool)
Trend-Adjusted Actual Production History (APH) – A1-56 (3 pages)
Estimating the Cost for Drying Corn – A2-31 (3 pages)
Comparison of Drying Systems – A2-31 (Decision Tool)
Grain Drying and Shrink Comparison – A2-32 (3 pages)
Grain Drying and Shrink Comparison – A2-32 (Decision Tool)

Current Profitability
The following tools have been updated on www.extension.iastate.edu/agdm/info/outlook.html.

Corn Profitability – A1-85
Soybean Profitability – A1-86
Iowa Cash Corn and Soybean Prices – A2-11
Season Average Price Calculator – A2-15
Ethanol Profitability – D1-10
Biodiesel Profitability – D1-15