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Land rents decline but margins do not improve

By Alejandro Plastina, extension economist, 515-294-6161, plastina@iastate.edu

A 2015 survey shows that cash rental rates for farmland in Iowa fell by 5 percent in 2015, accumulating a 9 percent decline since 2013. This is consistent with the recently observed decline in Iowa land values. However, average marketing year prices for corn and soybeans are projected to decline, respectively, by 47 percent and 30 percent from their 2012-13 levels in 2014-15. As a result, profit margins are expected to fall further, and likely turn negative for the average Iowa farmer.

Survey shows decline in all districts

For the state as a whole, reported rental rates for land planted to corn and soybeans were down from $260 per acre last year to $246 in 2015, or nearly 5 percent according to a survey conducted by Iowa State University Extension and Outreach. This is about half the change in Iowa farmland values over the past 12 months reported in surveys conducted by the Iowa REALTORS Land Institute and summarized in *AgDM File C2-75,* Farmland Value Survey (REALTORS Land Institute). But the 9 percent accumulated decline in rental rates since 2013 is aligned with the 8.9 percent decline in land values reported in the 2014 Iowa Land Value Survey published by the ISU Center for Agriculture and Rural Development (*AgDM File C2-70,* Farmland Value Survey (Iowa State University).

Iowans supplied nearly 1,450 responses about typical cash rental rates in their counties for land producing corn and soybeans, hay, oats and pasture. Of these, 49 percent came from farmers, 27 percent from landowners, 12 percent from agricultural lenders, 10 percent from professional farm managers, and 2 percent from other professionals. This is not to say that all cash rents were lowered for 2015. The intent of the survey was to report typical rents being paid for the current

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Handbook updates

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

Cash Corn and Soybean Prices – A2-11 (4 pages)

Replacement Strategies for Farm Machinery – A3-30 (7 pages)

Computing a Cropland Cash Rental Rate – C2-20 (4 pages)

Flexible Farm Lease Agreements – C2-21 (4 pages)

Please add these files to your handbook and remove the out-of-date material.

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Inside . . .

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Extension and Outreach

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crop year, including those that may have been negotiated in prior years as well as those that were set more recently.

AgDM File C2-10, Cash Rental Rates for Iowa 2015 Survey provides detailed results by county and crop. There was considerable variability across counties in year-to-year changes, as is typical of survey data, but 89 percent of the responses showed at least a small decrease in average rents for corn and soybeans. Grundy County showed the highest average rent, at $316 per acre. The report also shows typical rents for alfalfa, grass hay, oats, pasture, corn stalk grazing and hunting rights in each county and district.

Rents slowly adjust to lower crop revenues

Table 1 shows the average rent reported for land planted to corn and soybeans in each of the nine crop reporting districts in Iowa for last year and this year. Northeast Iowa had the highest average rental rate in 2015. All districts showed a decrease. The largest decreases in average rents were recorded in the central and west central districts. Those districts had the highest rents among all crop reporting districts in 2014, as well as 2013.

All areas of the state faced significantly lower grain prices at harvest for the 2014 crop, as well as decreased forward pricing opportunities for the 2015 crop. This was the major factor impacting rents.

Table 1. Typical cash rental rates reported for land producing corn and soybeans, $ per acre.

Crop Reporting District	Average, 2014 - $	Average, 2015 - $	Change - $	Change - %
Northwest	270	259	-11	-4%
North Central	270	254	-16	-6%
Northeast	277	273	-4	-1%
West Central	288	265	-23	-8%
Central	284	261	-24	-8%
East Central	273	255	-19	-7%
Southwest	249	242	-7	-3%
South Central	202	187	-15	-7%
Southeast	229	217	-12	-5%
Statewide	260	246	-14	-5%

Table 2 shows state average yields for corn since 2010 and the average marketing year cash prices received in Iowa as reported by the National Agricultural Statistics Service (NASS), the resulting average crop revenue per acre, and the non-land costs of corn production for a typical Iowa farm from *AgDM File A1-20,* Estimated Costs of Crop Production in Iowa - 2015. The tenant's residual, or maximum cash rent to break even, is calculated as crop revenue minus non-land cost of production. The return to management is calculated as the difference between the tenant's residual and the average cash rent reported in *AgDM File C2-10*, Cash Rental Rates for Iowa 2015 Survey . The estimated yield for 2015 is based on a trend projection of corn yields in Iowa since 2005, excluding the extremely low yield observed in 2012. The projected corn price for 2014 is calculated as the 2013 price in Iowa adjusted by the rate of growth in national prices between the 2013-14 marketing year average price and the mid-point forecast for 2014-15 from the April 2015 edition of USDA's World Agricultural Supply and Demand Estimates report. The estimated price for 2015 is calculated as the 2014 price forecast adjusted for the expected decline in corn prices reported by the USDA Office of the Chief Economist in the 2015 edition of the Long-term Agricultural Projections report.

Return to management for a typical corn operation was positive in 2010-12, but turned negative in 2013 and increased in absolute size in 2014. Since 2013, the typical Iowa farm has had to come up with additional revenue from other sources to cover fixed costs of corn production. In 2013, the average multiple peril crop insurance indemnity payment received per planted acre more than offset the $43 gap, and the return to management after indemnity payment was positive. But in 2014, the average indemnity payment was insufficient to cover the negative return to management. As a result, the $11 gap had to be financed with income from livestock operations, non-farm income, asset liquidation, savings, or debt. In the projected scenario for 2015, the return to management before indemnity payments would amount to -$128: revenue from corn production would cover all variable costs but would fall short of covering fixed costs by $128. The marketing year average corn price would have to climb to $4.36 in 2015-16 for the typical tenant to break even with a yield of 171 bushels per acre; or to $4.19 with a yield of 178 bushels per acre.

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Table 2. Return to management for the typical corn operation in Iowa, 2010-2015

Year	Yield bu/acre	Price $/bu	Crop Revenue $/acre	Non-land Cost of Production $/acre	Tenant's Residual $/acre	Land Rate $/acre	Return to Mgmt. $/acre	Crop Ins. $/acre	Return to Mgmt. after Crop Ins. $/acre
2010	165	5.46	901	422	479	184	295	21	316
2011	172	6.35	1,092	491	601	214	387	12	399
2012	137	6.94	951	517	434	252	181	123	304
2013	164	4.51	740	513	227	270	-43	132	89
2014	178	3.72	662	495	166	260	-94	83	-11
2015	171	3.61	617	499	118	246	-128		

Table 3. Return to management for the typical soybean operation in Iowa, 2010-2015

Year	Yield bu/acre	Price $/bu	Crop Revenue $/acre	Non-land Cost of Production $/acre	Tenant's Residual $/acre	Land Rate $/acre	Return to Mgmt. $/acre	Crop Ins. $/acre	Return to Mgmt. after Crop Ins. $/acre
2010	51.0	12.08	616	239	377	184	194	7	200
2011	51.5	13.08	674	258	416	214	202	11	212
2012	45.0	14.54	654	288	366	252	114	27	141
2013	45.5	13.38	609	272	337	270	67	25	93
2014	51.5	10.32	531	270	262	260	2	26	27
2015	48.0	8.77	421	275	146	246	-100		

Table 3 reports a similar analysis for the typical soybean operation in Iowa. In this case, return to management prior to crop insurance was positive in 2010-14. However, the $100 gap projected for 2015 would require financing from other sources of income or debt. The marketing year average price for soybeans would have to climb to $10.85 per bushel in 2015-16 for the tenant to break even with a yield of 48 bushels per acre; or to $10.11 with a yield of 51.5 bushels per acre.

Farm program payments (ARC/PLC) are expected to contribute only marginally at most to covering the negative returns to corn and soybean production in Iowa in 2015.

The estimated return to management in Tables 2 and 3 is based on cash rented land. Return to management on owned land does not depend on rental rates, but on interest payments on land loans, property taxes, and maintenance and upkeep costs. For example, return to management on fully owned land will be positive as long as crop revenue exceeds land property taxes, maintenance and upkeep costs plus non-land cost of production.

Setting rents for next year

Survey information can serve as a reference point for negotiating an appropriate rental rate for next year. However, rents for individual farms should vary based on productivity, ease of farming, fertility, drainage, local price patterns, longevity of the lease and possible services performed by the tenant.

Other resources available for estimating a fair cash rent include the AgDM Information Files Computing a Cropland Cash Rental Rate (C2-20), Computing a Pasture Rental Rate (C2-23) and Flexible Farm Lease Agreements (C2-21). All of these fact sheets include decision tools (electronic spreadsheets) to help analyze individual leasing situations.

For questions regarding the cash rent survey, contact the authors. For leasing questions in general, contact a farm management field specialist, www.extension.iastate.edu/ag/farm-management-0.

Five strategies for managing 2015 crop financial risks

By Steven D. Johnson, PhD, farm management specialist, 515-957-5790, sdjohns@iastate.edu

While production risks are at the forefront of most producers' minds, don't ignore the need to manage your farm's overall financial risks. While the initial concern may be trying to market crops at cash prices not seen since 2009, part of the solution is looking beyond the next six months.

Despite the tight profit margins expected for 2015, consider these five financial risk management strategies.

Protect your working capital

Maintain adequate cash reserves, which are typically working capital (current assets minus current liabilities) as well as operating lines of credit. By the late summer months, these reserves and access to credit will be critical to finish off 2015 crop operating expenses and make early input decisions for the 2016 crop. Many operations reduced their available working capital the past year and may not have maintained adequate cash reserves for what are needed in the face of falling crop prices. The goal of most Corn Belt row crop operations would be to maintain a 40 percent ratio of working capital to gross revenue (current assets minus current liabilities) divided by gross crop revenue. This ratio was nearly double that 40 percent level for many farms in 2012 and 2013.

Secure repayment capacity

With interest rates at near record lows, lock in rates now on longer-term debt and renegotiate repayment terms to free up additional cash to make crop operating decisions. This past winter most agricultural lenders did a nice job of reaching out to help qualified customers free up working capital by reamortizing existing loans and reducing principal repayments. The operating lines of credit established for 2015 did not likely include storing a large portion of both 21014 and 2015 crops into the fall and winter months.

Control your costs

The knee jerk reaction by many producers in light of the tight crop profit margins for 2015 was just to cut costs. A better strategy is to control those controllable expenses while maintaining great yield prospects. Prioritize your cost cutting measures early before the 2015 growing season progresses. Identify those input decisions that will be critical to maximize your economic return on crop inputs.

Maximize your 2015 yield

It's still the total bushels produced and marketed that will generate the total gross crop revenue you'll need to pay both crop-related and family living expenses. Think ahead now to the 2015 crop harvest and how best you might manage on-farm drying and storage capacity. Consider on-farm versus commercial costs for those corn bushels that you can't manage on-farm. Perhaps making new crop corn and soybean sales directly from the field to avoid shrink and storage costs as well as harvest basis risks.

Manage price risks

Many farms still have their working capital tied up in unpriced 2014 bushels. Consider making old and new crop sales in the spring and early summer months. That's typically when the futures markets build in a risk premium for corn and soybeans and a majority of the global feed grain crops are grown in the northern hemisphere. Should the 2015 crop yield prospects remain large into the late summer months, the risk of both lower futures prices and wider basis will likely increase. Storing two years of crops into 2016 could prove expensive and add to a farm's financial risks.

With razor thin profit margins for 2015 crops, plan ahead now by utilizing these five crop risk management strategies. There's an old adage that says, "Failing to plan is planning to fail."

New ARC-CO and PLC spreadsheets calculate projected payments

By Alejandro Plastina, extension economist, 515-294-6161, plastina@iastate.edu

Three new spreadsheets have been developed to help Iowa corn and soybean producers calculate ARC-CO or PLC payments for the 2014 and 2015 crop years.

ARC/PLC payments depend on the marketing year average (MYA) prices for covered commodities. For corn and soybeans, the official 2014 MYA price will be announced by USDA in early September 2015. Until then, the actual amount of ARC/PLC payments will be unknown. However, using county yields and price projections published by USDA, ARC/PLC payments for the 2014 and 2015 crop years can be reasonably projected. A detailed description of ARC/PLC programs is available in *AgDM File A1-32,* New Safety Net: PLC, ARC-CO, ARC-IC.

PLC payments are triggered if the MYA price is lower than the reference price: $3.70 per bushel of corn, and $8.40 per bushel of soybeans. After downloading the PLC Payment Calculator, the user can input base acres and program payment yields by farm to obtain the projected PLC payments for 2014 and 2015. The base acres and program payment yields can be obtained from FSA offices. The spreadsheet also shows the projected PLC payments per base acre, and the projected payments under alternative prices (5, 10 and 15 percent above and below the USDA price forecast). Since PLC payments do not depend on the geographical location of the farm, this spreadsheet can be used to calculate payments for any farm with corn and soybean base acres in the nation.

ARC-CO payments are triggered if the actual county revenue is lower than the ARC-CO guarantee revenue, which is based on county yields and MYA prices over the previous 5 years. After downloading the ARC-CO 2014 Payment Calculator, the user can input base acres and select from a drop-down menu the county where the farm is located. The spreadsheet reports the projected ARC-CO payments for 2014 (total and per base acre), the price below which ARC-CO payments are triggered in the selected county, and projected payments under alternative prices (5, 10 and 15 percent above and below the USDA price forecast).

The ARC-CO 2015 Payment Calculator uses the MYA prices projected by USDA for the 2014 crop year, and the 2014 county yields reported by USDA/NASS to calculate the 2015 ARC-CO guarantee. The county yields used by FSA to calculate actual ARC-CO guarantees in late 2016 might differ from the yields reported by USDA/NASS. The 2015 projected "actual" county revenue is calculated as the USDA MYA price projection times the projected county yield. The 2015 county yield is projected with a linear trend over the previous 10 years (2005-2014). The user can enter base acres and the county where the farm is located to obtain information about the projected ARC-CO payments for 2015 (total and per base acre), as well as a sensitivity analysis showing alternative ARC-CO payments for 2015 under different combinations of MYA prices (10 and 20 percent above and below USDA price forecast), and "actual" yields (10 and 20 percent above and below the trend-projected yield).

If ARC/PLC payments are triggered for the 2014 crop year, they will be issued after the end of the marketing year when USDA announces the official marketing year average (MYA) price, but not before October 1, 2015. The projected prices used in the ARC/PLC payment calculators will be updated monthly.


Review crop marketing fundamentals in new video series

By Chad Hart, extension economist, 515-294-9111, chart@iastate.edu and Steven D. Johnson, PhD, farm management specialist, 515-957-5790, sdjohns@iastate.edu

A series of educational videos addressing various components of grain marketing fundamentals was recently created. These videos feature faculty and staff from Iowa State University Extension and Outreach. Links for the videos and other marketing resources can be found on the Markets page of the Ag Decision Maker website.

1) Introduction to Crop Marketing - An overview of corn and soybean marketing including the four basic marketing tools: cash sales, forward contracts, futures and options.

2) ISU Crop Marketing Information- Resources from Iowa State University.

3) Basis, Futures Carry and the Cost of Storage - Learn about crop basis, futures carry and the cost of grain storage.

4) Market Fundamentals (Supply/Demand) - Examine the balance between crop supplies and crop demands that determine both futures and cash prices.

5) Technical Chart Signals - Examine chart signals on futures charts.

6) Seasonal Price Trends - Review corn and soybean price patterns that repeat themselves with some degree of accuracy year after year in crop markets.

7) Crop Marketing Strategies - Learn to use a crop marketing matrix based on your expectation for futures prices and basis to determine appropriate strategies and tools.

8) Marketing Tools: Futures - Review the role of futures contracts traded on the Chicago Board of Trade (CBOT) farmers can use to reduce crop price risk by hedging.

9) Marketing Tools: Options - Understand the basics of both put and call options used for managing futures price risk.

10) Developing a Crop Marketing Plan - Learn how to put together a proactive strategy to price your crop.

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Internet Updates

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

Price Loss Coverage (PLC) Payment Calculator – A1-32 (Decision Tool)
ARC-CO Payment Calculator for 2014/15 – A1-32 (Decision Tool)
ARC-CO Payment Calculator for 2015/16 – A1-32 (Decision Tool)
Do I Need a Written Lease? – C2-03 (2 pages)
Computing a Livestock Building Cash Rental Rate – C2-26 (3 pages)
Creating a Flexible Swine Building Rental Agreement – C2-27 (2 pages)
Crop-Share Lease Analysis – C2-30 (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

. . . and justice for all

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