

2010 ACRE enrollment decision by June 1, continued from page 1

Disadvantages of ACRE

Besides enrolling a farm prior to the annual deadline, a farm enrolled in ACRE must also provide the farm’s yields for the most recent five years. The farm’s crop insurance Actual Production History (APH) can be used for ACRE purposes. A producer enrolled in ACRE must provide the actual yields on that farm annually in order to compare farm’s actual revenue to the revenue guarantee. The final ACRE payment is not made until October, nearly one year following harvest, when the national cash price for that marketing year becomes final.

A farm enrolled in ACRE must also give up 20 percent of the farm’s direct payment (DP) annually, or roughly \$5 per acre. The decision to accept 80 percent of the DP under ACRE vs. 100 percent of the DP under the traditional programs annually adds to the complexity of the enrollment decision.

ACRE as a risk management tool

Thus determining to enroll in ACRE requires weighing the risk of giving up a portion of the DP vs. the reward of a payment should a loss in both state and farm revenue be triggered. ACRE can be used to better manage revenue risk on a farm and should not be confused as a means to make up for poor marketing or crop insurance decisions.

A producer’s bias as to the national average cash price comes into play as a part of the 2010 ACRE enrollment. Forecasting yield is no doubt difficult, thus making an accurate determination for revenue at both the state and farm levels seem daunting.

As of Feb. 19, 2010, the USDA’s Ag Outlook Conference forecast average cash prices during the 2010-11 marketing year to be \$3.60 per bushel corn and \$8.80 per bushel for soybeans. Assuming average 2010 state yields equal to the

benchmark yields of 171 bushels per acre for corn and 51 bushels per acre for soybeans, the national cash price average would have to drop by more than \$.15 per bushel for corn, but only \$.08 per bushel for soybeans. Thus the potential for 2010 ACRE payments is apparent.

Prior to the June 1 ACRE 2010 sign-up deadline, the USDA will release the May crop production report on May 11. It will provide the first update of potential 2010 planted acres, yield and the 2010-11 marketing year prices. However, the majority of the 2010 growing season lies beyond the June 1 deadline, making forecasting yield and price even more difficult than 2009 when the ACRE sign-up deadline took place in mid-August.

Finalizing 2010 ACRE enrollment

Remember ACRE payments are determined at the state level but paid on planted acres for a farm and adjusted to 83.3 percent. The planted acres cannot exceed the total base acres on that farm.

Thus if you thought ACRE payments favored one crop over another, the particular crop you plant in 2010 might merit consideration as to the likelihood of triggering an ACRE payment.

FSA allows the use of default yields to calculate the farm’s benchmark yield. This yield is 95 percent of the county’s average yield per planted acre for the crop years 2004 through 2008. The producer enrolling in ACRE can use the higher of the default or the actual farm yield. This is a benefit for those farms that have actual farm yields that are below the county’s average yields.

ACRE enrollment is by FSA farm number, so specific enrollment questions should be directed to your county FSA office.



2009 Farm and Rural Life Poll: Mixed livestock and grain farming*

by J. Gordon Arbuckle, Jr., extension sociologist; Paul Lasley, extension sociologist; Peter Korsching, professor; and Chris Kast, research assistant

The Iowa Farm and Rural Life Poll is an annual survey that collects and disseminates information on issues of importance to rural communities across Iowa and the Midwest. Conducted every year since its establishment in 1982, the Farm Poll is the longest-running survey of its kind in the nation. This article highlights information from the 2009 survey on mixed livestock and grain farming.

Mixed livestock and grain farming

Over the last several decades, Iowa farmers have increasingly shifted from mixed grain and livestock operations to specialized grain production. In 1989, 64 percent of Farm Poll participants raised both grain and livestock, 31 percent specialized in crop production only and three percent produced only livestock. By 2009, the percentage of farmers

with mixed crop and livestock farming systems had dropped to 42 percent, with 50 percent producing only row crops and slightly over one percent specializing in livestock. The 2009 Farm Poll investigated potential reasons behind this long-term shift away from mixed systems and toward specialized operations.

Several items received near unanimous endorsement as factors related to the decline in mixed grain and livestock farming. At the top of the list, with 92 percent agreement, was the statement “As farmers age, working with livestock becomes more difficult” (table 1). A second item related to the work involved in production processes, “Livestock production requires more labor than grain production,” drew 91 percent agreement among participants. The average age

2009 Farm and Rural Life Poll: Mixed livestock and grain farming, continued from page 2

of Iowa farmers has risen steadily over the last decades and continues to rise, so these responses both make sense and merit attention.

Other factors, including displacement by grain farming, the Conservation Reserve Program (CRP) and recreation, also loomed large in farmers' assessments of the decline in mixed grain and livestock production systems. Ninety-one percent of farmers agreed that "increased grain production has displaced pasture and hay acreage" (table 1). Recent changes in land rental rates were also implicated, with 84 percent agreeing that higher rents have led to reductions in acreage available for grazing and haying. Sixty-four percent of participants agreed that the CRP has displaced pasture and hay acreage, and 51 percent agreed that conversion of farms to recreational and hunting land has led to a decline in land available for pasture and hay.

Substantial percentages of participants indicated that policy and market effects have also played a role in the decline of mixed systems. While 78 percent of participants agreed that mixed livestock and grain farms can better manage risk than specialized operations, 73 percent believed that commodity programs favor grain production over livestock or mixed grain-livestock systems, and 59 percent agreed that the profitability of livestock production has declined relative to grain production (table 1). Thirty-nine percent agreed that the costs of production systems are so high that producers have to choose between grain and livestock systems.

Survey information

Iowa State University Extension, the Iowa Agriculture and Home Economics Experiment Station, and the Iowa Department of Agriculture and Land Stewardship are partners in the Farm Poll effort. The information gathered through the Farm Poll is used to inform the development and improvement of research and extension programs and is used by local, state and national leaders in their decision-making processes. We thank the many farmers who responded to this year's survey and appreciate their continued participation in the Farm Poll.

Who Participates?

The 2009 Farm Poll questionnaires were mailed in January and February to a statewide panel of 2,201 farm operators. Usable surveys were received from 1,268 farmers, resulting in a 58 percent response rate. On average, Farm Poll participants were 64 years old, and had been farming for 39 years. Fifty percent of farmers reported that farm income made up more than half of their overall 2008 household income, and an additional 20 percent earned between 26 and 50 percent of their household income from farming. Copies of this or any other year's reports are available from your local county Extension office, the ISU Extension Online Store (www.extension.iastate.edu/store), ISU Extension Sociology (www.soc.iastate.edu/extension/farmpoll.html), or from the authors.

Table 1. Reasons for the decline in mixed livestock and grain farming

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
	—Percentage—				
As farmers age, working with livestock becomes more difficult	0	2	5	66	26
Increased grain production has displaced pasture and hay acreage.....	0	2	6	62	29
Livestock production requires more labor than grain production.....	1	3	6	62	29
The increase in land rental rates has reduced available pasture for grazing.....	0	3	12	57	27
Mixed livestock and grain farms can better manage risk than farms that rely only upon grain or livestock	1	6	16	64	14
Commodity programs favor grain production over livestock or mixed grain-livestock systems.....	1	6	21	55	18
The Conservation Reserve Program (CRP) has displaced pasture and hay acreage.....	1	11	25	51	13
The profitability of livestock production has declined relative to grain production	0	11	29	51	8
Conversion of pasture land to recreational/hunting land has reduced available pasture for grazing.....	2	13	35	37	14
Costs of production systems (machinery and equipment, facilities, etc.) are so high that farmers have to choose between grain and livestock	2	21	38	33	6

*Reprinted with permission from the Iowa Farm and Rural Life Poll, 2009 Summary Report, PM 2093. Renea Miller provided valuable layout assistance to the questionnaire and this report. The Iowa Department of Land Stewardship, Division of Statistics, assisted in the data collection.



Returns to farmland ownership

by William Edwards, extension economist, 515-294-6161, wedwards@iastate.edu,
Don Hofstrand, extension value-added specialist, co-director AgMRC, 641-423-0844, dhof@iastate.edu

Below are estimates of the average returns from owning farmland since 1970. Annual returns are in two forms: cash returns and change in market value. Total return is the sum of these two. The source of data for cash rents and land values is the Economic Research Service (USDA) data series for whole farm rents and value, not data from ISU Extension, which refers to rental rates for corn/soybean land only.

Cash returns

Cash rental rates are used as estimates of the cash returns to farmland. The rate of cash return (percent) each year is computed by dividing the cash rental rate by the market value of land in the same year.

Cash rental rates are a gross return, not a net return, because property taxes and other ownership expenses have not been

Table 1. Returns to farmland ownership per year (per acre).

Period	Year	Whole farm cash rent	Market land value	Cash rent as percent of land value	Percentage change in land value	Total percentage return
Ethanol Boom	2009	\$167	\$3,850	4.3%	-2.5%	1.8%
	2008	152	3,950	3.8	17.2	21.1
	2007	136	3,370	4.0	15.8	19.8
	2006	122	2,910	4.2	10.2	14.4
	2005	124	2,640	4.7	20.0	24.7
	2004	118	2,200	5.4	9.5	14.8
Recovery	2003	114	2,010	5.7	4.7	10.4
	2002	112	1,920	5.8	3.8	9.6
	2001	108	1,850	5.8	2.8	8.6
	2000	105	1,800	5.8	1.7	7.5
	1999	102	1,770	5.7	4.1	9.9
	1998	109	1,700	6.4	6.3	12.7
	1997	106	1,600	6.6	10.3	17.0
	1996	107	1,450	7.4	7.4	14.8
	1995	102	1,350	7.6	5.5	13.0
	1994	100	1,280	7.8	5.6	13.4
	1993	102	1,212	8.4	5.1	13.5
	1992	101	1,153	8.8	1.2	10.0
	1991	97	1,139	8.5	4.5	13.0
	1990	96	1,090	8.8	-0.5	8.4
1989	91	1,095	8.3	15.6	24.0	
1988	82	947	8.7	20.5	29.2	
Farm Crisis	1987	76	786	9.6	-10.0	-0.3
	1986	83	873	9.5	-20.0	-10.5
	1985	98	1,091	9.0	-28.1	-19.1
	1984	109	1,518	7.2	-3.2	4.0
	1983	106	1,568	6.7	-13.0	-6.3
	1982	106	1,802	5.9	-7.2	-1.3
Farm Boom	1981	102	1,941	5.2	7.2	12.4
	1980	96	1,811	5.3	16.8	22.1
	1979	89	1,550	5.7	16.5	22.2
	1978	82	1,331	6.2	5.7	11.9
	1977	79	1,259	6.3	36.8	43.1
	1976	69	920	7.5	28.0	35.5
	1975	60	719	8.3	20.4	28.8
	1974	53	597	8.9	28.1	37.0
	1973	39	466	8.4	12.6	20.9
	1972	35	414	8.5	5.6	14.1
1971	34	392	8.7	0.0	8.7	
1970	33	392	8.4	2.6	11.0	

Source: USDA Annual Survey of Agricultural Land Values and Cash Rents.
Cash rental rates for 1995 through 2009 are averages of cropland and pasture rents.

continued on page 5

Returns to farmland ownership, continued from page 4

deducted. These will probably reduce the total return by one to two percentage points. Also, cash returns have not been adjusted for inflation over this period.

Increase (decrease) in value

Another form of return is the annual increase or decrease in the market value of farmland. This increase or decrease is computed as a percentage change in value from one year to the next.

Both the estimated cash rent rate and the land value are based on USDA surveys. They differ slightly from Iowa State University surveys.

Results over the entire period

Cash returns – As shown in Table 1, the rate of gross cash return has been up and down since 1970. The return was only 3.8 percent in 2008 because land values were rising faster than rental rates. Conversely, the rate was 9.6 percent in 1987 because land values declined faster than rental rates during the crisis of the 1980s. The average over the period from 1970 to 2009 was 7.0 percent.

Land value change – The return due to changes in land values was much more volatile, ranging from a high of 36.8 percent in 1977 to a low of negative 28.1 percent in 1985. Over the entire period, land values increased by an average of 6.7 percent per year.

Total returns – The total return (annual cash return plus change in land value) averaged 13.6 percent per year and ranged from a low of a negative 19.1 percent in 1985 to a high of 43.1 percent in 1977.

Results by financial period

Rates of return have varied greatly during specific time periods over the past thirty-nine years. The rates of return during the farm boom period, farm crisis period and the current period are shown in Table 2.

Farm boom period – During the farmland boom period of 1970 through 1981, land values increased rapidly (15.0 percent

on average) providing a total return of 22.3 percent. It should be noted that cash rental rates and land values for the decade before 1970 were very stable. Farmland values and rental rates started their rapid rise in 1973/74 when grain shortages pushed prices to extremely high levels.

Farm crisis period – During the farm financial crisis years of 1982 through 1987, land values declined rapidly – an average of 13.6 percent per year. Cash returns as a percent of land values actually increased during this period because land values dropped faster than rental rates. However, the land value declines more than offset cash returns and the average total return was a negative 5.6 percent.

Recovery period – From 1988 to 2003 land values and rental rates resumed their upward trend, although at a slower rate than during the boom period. The average rate of return during this period has been similar to the average rate of return over the entire period. In the past few years land values have increased faster than cash rents.

Ethanol boom period – From the beginning of the ethanol boom period of 2004 to the present time (2009), farmland values and rental rates have increased rapidly. Farmland values increased an average of 11.7 per year over this period. Because land values increased faster than rental rates, cash rent as a percent of land value dropped to an average of 4.4 percent. Total return averaged 16.1 percent.

Entire period – From 1970 to the present time, farmland has returned an average of 13.6 percent, of which land value increases accounted for 6.7 percent of the increase, and rent as a percent of land value accounted for the remaining 7 percent.

Table 2. Returns to farmland by time period.

Time period	Cash rent as percent of value	Percentage change in land value	Total percentage return
Boom period -- 1970-81	7.3%	15.0%	22.3%
Farm crisis -- 1982-87	8.0	-13.6	-5.6
Recovery period -- 1988-03	7.3	6.2	13.4
Ethanol boom -- 2004-09	4.4	11.7	16.1
Entire period -- 1970-09	7.0	6.7	13.6

Table 3. Returns to farmland ownership by purchase date

Ownership period	Purchase price	2009 Price	Percent increase in price	Average annual rent as percent of purchase price*
Beginning of boom period to present (1970 - 2009)	\$392	\$3,850	882%	24%
End of boom period to present (1981 - 2009)	1,941	3,850	98	6
End of crisis period to present (1987- 2009)	786	3,850	390	14
Beginning of ethanol boom to present (2004 - 2009)	2,200	3,850	75	6

* The cash return per year is computed by dividing the cash rental rate for each year during the time period by the farmland purchase price. An average cash return is then computed for the time period.

Returns to farmland ownership, continued from page 5

Results by farmland purchase date

Rates of return on farmland investments vary greatly depending on when farmland is purchased. In Table 3, farmland is assumed to be purchased at three different time-periods; the beginning of the boom period (1970), the end of the boom period (1981) and the end of the crisis period (1987). The rates of return for each of these three investment periods are shown in Table 3.

Beginning of boom period (1970) - A typical Iowa farmland purchase in 1970 would have been \$392 per acre. The value of the farmland 39 years later in 2009 was \$3,850, for an increase of 882 percent or 23 percent per year. The average gross cash return over the period was 24 percent. This was computed by dividing the cash rental rate for each year by the 1970 original purchase price of \$392. The return ranged from 8 percent in the year of purchase in 1970 to 43 percent in 2009.

End of boom period (1981) - A farmland purchase in 1981 would have been for \$1,941 per acre. The value 28 years later in 2009 was double the 1981 value, for an average increase of 4 percent per year. The average gross cash return over the period was 6 percent. The gross cash return was 8.6 percent in 2009 when cash rents were \$167 per acre.

End of the crisis period (1987) - In 1987 the average Iowa farmland value was \$786 per acre. The value in 2009, 22 years later, was \$3,850 for an increase of 390 percent or 18 percent per year. The average gross cash return over the period was 14 percent. The gross cash return in 2009 was 21 percent.

Beginning of ethanol boom period (2004) - The rapid expansion of the corn ethanol industry since 2004 has pushed land values and rental rates upward. The value of a farmland purchase in 2004 would have been \$2,200. The value in 2009, five years later was \$3,850 for an increase of 75 percent or 15 percent per year. The average gross cash return over the period was 6 percent.

Summary

Over the years farmland investments have yielded a very competitive rate of return. However, about half of the return comes from appreciation in land value, which can be highly unpredictable. Moreover, it does not provide any cash for making mortgage payments or paying other ownership costs.

Updates, continued from page 1

Internet Updates

The following updates have been added on www.extension.iastate.edu/agdm.

How Often Can Cattle Feeders Hedge a Profit with Futures? -- B2-54 (4 pages)

Iowa Farmland Legal Descriptions -- C2-85 (3 pages)

Computing the Corn Suitability Rating on Your Farm -- C2-87

Conducting Market Research -- C5-30 (3 pages)

Evaluating Marketing Outlets Using Whole-Farm Records -- C5-32 (4 pages)

Marketing on the Internet -- C5-34 (3 page)

Catering - Events and Festivals -- C5-36 (2 pages)

Community Supported Agriculture -- C5-37 (2 pages)

Using Partial Budgets to Make Decisions -- C6-10 (5 pages)

Decision Tools and Current Profitability

The following tools have been added or updated on www.extension.iastate.edu/agdm.

ACRE Payment Estimator -- A1-45

2010 Average Crop Revenue Election (ACRE) -- Voiced Media

Season Average Price Calculator -- A2-15

Corn Profitability -- A1-85

Soybean Profitability -- A1-86

Ethanol Profitability -- D1-10

Biodiesel Profitability -- D1-15

Returns for Farrow-to-Finish -- B1-30

Returns for Weaned Pigs -- B1-33

Returns for Steer Calves -- B1-35

Returns for Yearling Steers -- B1-35

... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write

USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964. Issued in furtherance of Cooperative Extension work, Acts of May 8 and July 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

Permission to copy

Permission is given to reprint ISU Extension materials contained in this publication via copy machine or other copy technology, so long as the source (Ag Decision Maker Iowa State University Extension) is clearly identifiable and the appropriate author is properly credited.