

Using the ISU ACRE Calculator

July 2009



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Presentation Objectives

- **Highlight the ISU AgDecison Maker Web Site**
- **Demonstrate how the ISU ACRE Calculator Works**
- **Create an Example Farm in Polk County Iowa**
 - **Examine Potential ACRE Payments at 2 Price Levels (90% and 85% of 2008 National Cash)**
- **Compare the Farm's potential ACRE Payments to those if you only enroll in the DCP**
- **Highlight the importance of Farm Yield Decisions, National Cash Prices and Revenue Guarantees**

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 Business Start-up
 Marketing
 Operations
 Analysis

Ag Decision Maker (AgDM)
 An agricultural economics and business web site.



New Information

Current Outlook and Profitability | **Farm Bill Information** | Farm Bill Meetings | Leasing Meetings

July 2009 Updates

AgDM Newsletter (pdf)

- Default yields available for ACRE program
- Tracking biodiesel profitability
- Side-stepping SE tax on a trade?

AgDM New and Updated Files

- **Crops -- Cost and Returns:**
 - Corn and Soybean Loan Rates -- A1-34
 - Supplemental Revenue Assistance (SURE) -- A1-44
 - Average Crop Revenue Election (ACRE) -- A1-45
- **Livestock -- Markets:**
 - Lean Hog Basis -- B2-41
 - Live Cattle Basis -- B2-42
 - Feeder Cattle Basis -- B2-43
- **Whole Farm --Leasing:**

Supporters

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Silver Supporters

Smart Loan Consolidation.com

US BANK

FIRST SECURITY

Hertz

First Citizens National

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2008 Farm Bill Information

Informational meetings are being held throughout the state to cover provisions of the new 2008 Farm Bill, see the **Farm Bill Meetings page** for dates and locations.

Crops

Information Files

- Commodity Programs for Crops -- A1-32
- Corn and Soybean Loan Rates -- A1-34
- Marketing Loans and LDPs -- A1-38
- Supplemental Revenue Assistance (SURE) -- A1-44
- Average Crop Revenue Election (ACRE) -- A1-45
- Food, Conservation, and Energy Act of 2008 Horticulture and Organic Agriculture Titles -- A1-46

Decision Tools (xls) Teaching Activities (doc) Voiced Media

Newsletter Articles

- ISU Extension offers information about new farm bill programs -- March 2009
- Supplemental Revenue Assistance (SURE) buy-in is reopened -- March 2009
- Average Crop Revenue Election (ACRE) -- October 2008
- Payment limitations in the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) -- September 2008
- ACRE payment calculators -- August 2008
- Tax provisions in the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) -- August 2008
- Crop disaster payments are now a SURE thing -- August 2008

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Production Evidence & Yield Data

- Review new FSA-658 Form for required production information in total bushels
- Request EZ-156 form from FSA for Certified Acres
- Benchmark Farm Yield Yields for Example Farm
 - 2004: 200 Certified Soybeans Acres, 51 bu/A
 - 2005: 200 Certified Corn Acres, 195 bu/A
 - 2006: 100 Certified Corn Acre, 171 bu/A
 - 2006: 100 Certified Soybean Acres, 53 bu/A
 - 2007: 100 Certified Corn Acres, 201 bu/A
 - 2007: 100 Certified Soybean Acres, 55 bu/A
 - 2008: 200 Certified Soybean Acres, 42 bu/A

Farm Information & Yield Data

Farm Information			
	Name of operator or farm	Example Farm	
	FSA farm number	1234	
Yield Data		Corn	Soybeans
Assumed annual yield increase, %		2.0%	1.0%
<small>% per year</small>			
Farm level yields (use pull-down menus to select crop yield options)			
2004	No Corn Grown <input type="button" value="v"/>	Soybeans Grown <input type="button" value="v"/>	51 bu. per acre
2005	Corn Grown <input type="button" value="v"/>	No Yield Data <input type="button" value="v"/>	195 bu. per acre
2006	Corn Grown <input type="button" value="v"/>	Soybeans Grown <input type="button" value="v"/>	171 53 bu. per acre
2007	Corn Grown <input type="button" value="v"/>	Soybeans Grown <input type="button" value="v"/>	201 55 bu. per acre
2008	No Corn Grown <input type="button" value="v"/>	Soybeans Grown <input type="button" value="v"/>	42 bu. per acre
Estimated 2009		193	51.0 bu. per acre
Estimated 2010		197	51.0 bu. per acre
Estimated 2011		201	52.0 bu. per acre
Estimated 2012		205	52.0 bu. per acre

Farm's FSA Information Needed

- **Example Farm: Polk County Iowa/FSA Farm #1234**
- **Farm's Base Acres and Yield Information (Request from FSA the EZ-156 form)**
 - 100 Acre Corn Base, 100 Acre Soybean Base
 - 150 bu/A Counter-Cyclical (CC) Corn Yield
 - 42 bu/A Counter-Cyclical (CC) Soybean Yield
- **2009 through 2012 Crop Rotation Plans:**
 - 100 Acres of Corn and 100 Acres of Soybeans Annually
- **Estimated 2009 Crop Insurance Premium Paid**
 - \$22.67/A for Corn and \$10/A for Soybeans

Current Payment Information

Current Payment Information	Corn	Soybeans	
Counter-cyclical payment base yields	150	42	bu per acre
Counter-cyclical payment base acres	100	100	acres
Planted acres expected 2009	100	100	acres
Planted acres expected 2010	100	100	acres
Planted acres expected 2011	100	100	acres
Planted acres expected 2012	100	100	acres
Crop insurance premium paid in 2009, per acre	\$ 22.67	\$ 10.00	\$ per acre
Direct payment from FSA, total \$ for farm for 2008		4,000	total \$
Number of payment limitations for USDA payments		1	
Direct payment limit if in ACRE	\$	39,200	
ACRE payment limit	\$	65,800	
USDA loan rate in county	\$ 1.86	\$ 4.90	\$ per bu.
Adjusted loan rate if enrolled in ACRE (70 %)	\$ 1.30	\$ 3.43	\$ per bu.
USDA target price	\$ 2.63	\$ 5.80	\$ per bu.

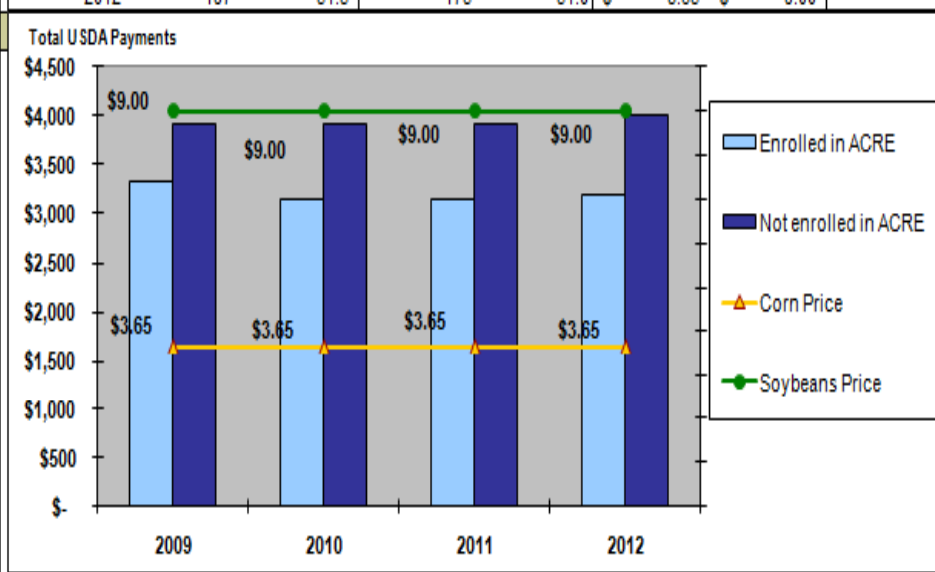
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Farm, County and Iowa Yields & National Average Cash Prices

Polk		Click on the menu to the left to choose your Iowa county.						
County and Iowa Yield Data and U.S. Price Data								
Farm Yield or 95% of County Average			Iowa Average Yield		U.S. Marketing Year Price			
Year	Corn	Soybeans	Corn	Soybeans	Corn	Soybeans		
2004	180	48.9	181	49.0	\$ 2.06	\$ 5.74		
2005	195	51.9	173	52.0	\$ 2.00	\$ 5.66		
2006	171	53.0	166	50.5	\$ 3.04	\$ 6.43		
2007	201	55.0	171	52.0	\$ 4.20	\$ 10.10		
2008	169	42.0	169	45.5	\$ 4.05	\$ 10.00		Price trend, % of 2008 prices
Estimated 2009	193	51.0	175	50.5	\$ 3.65	\$ 9.00		90%
Estimated 2010	197	51.0	178	51.0	\$ 3.65	\$ 9.00		90%
Estimated 2011	201	52.0	182	51.5	\$ 3.65	\$ 9.00		90%
Estimated 2012	205	52.0	189	52.0	\$ 3.65	\$ 9.00		90%
Olympic Average Farm Yields			Olympic Ave. Iowa Yields		2-year Average Prices			
2009	182	51.5	171	50.5	\$ 4.13	\$ 10.05		
2010	186	52.0	171	51.0	\$ 3.85	\$ 9.50		
2011	187	51.5	172	50.5	\$ 3.65	\$ 9.00		
2012	197	51.5	175	51.0	\$ 3.65	\$ 9.00		

ACRE vs. Non-ACRE Multi-Year Comparison



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Potential ACRE Payments (Prices at 90% of 2008)


Potential ACRE Guarantees, Revenues and Payments					
Corn					
Farm level ACRE trigger, \$ per acre	\$ 773	\$ 739	\$ 705	\$ 742	
Farm level ACRE revenue, \$ per acre	\$ 704	\$ 719	\$ 734	\$ 748	
	Trigger met.	Trigger met.			
State level ACRE trigger, \$ per acre	\$ 635	\$ 593	\$ 565	\$ 575	
State level ACRE revenue, \$ per acre	\$ 639	\$ 650	\$ 664	\$ 690	
Projected ACRE payment per acre	\$ -	\$ -	\$ -	\$ -	
Projected ACRE payment for all acres	\$ -	\$ -	\$ -	\$ -	\$ -
Potential loan deficiency payments under ACRE	\$ -	\$ -	\$ -	\$ -	\$ -
Breakeven 2009 price to trigger ACRE payments	\$ 3.65	\$ 3.41	\$ 3.25	\$ 3.31	
Soybeans					
Farm level ACRE trigger, \$ per acre	\$ 528	\$ 504	\$ 474	\$ 474	
Farm level ACRE revenue, \$ per acre	\$ 459	\$ 459	\$ 468	\$ 468	
	Trigger met.	Trigger met.	Trigger met.	Trigger met.	
State level ACRE trigger, \$ per acre	\$ 457	\$ 436	\$ 409	\$ 413	
State level ACRE revenue, \$ per acre	\$ 455	\$ 459	\$ 464	\$ 468	
	Trigger met.				
Projected ACRE payment per acre	\$ 2.32	\$ -	\$ -	\$ -	
Projected ACRE payment for all acres	\$ 193	\$ -	\$ -	\$ -	\$ 193
Potential loan deficiency payments under ACRE	\$ -	\$ -	\$ -	\$ -	\$ -
Breakeven 2009 price to trigger ACRE payments	\$ 9.12	\$ 8.71	\$ 8.18	\$ 8.28	
Corn and soybeans combined, enrolled in ACRE					
Total ACRE payment for corn and soybeans	\$ 193	\$ -	\$ -	\$ -	\$ 193
Total loan deficiency payments (LDPs)	\$ -	\$ -	\$ -	\$ -	\$ -
Total direct payments (80%)	\$ 3,136	\$ 3,136	\$ 3,136	\$ 3,200	\$ 12,608
Total payments if enrolled in ACRE	\$ 3,329	\$ 3,136	\$ 3,136	\$ 3,200	\$ 12,801
Potential payments if not enrolled in ACRE					
Total price counter cyclical payments	\$ -	\$ -	\$ -	\$ -	\$ -
Total loan deficiency payments (LDPs)	\$ -	\$ -	\$ -	\$ -	\$ -
Total direct payments	\$ 3,920	\$ 3,920	\$ 3,920	\$ 4,000	\$ 15,760
Total payments if not enrolled in ACRE	\$ 3,920	\$ 3,920	\$ 3,920	\$ 4,000	\$ 15,760

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Farm, County and Iowa & Lower 2009-12 Prices

Polk	Click on the menu to the left to choose your Iowa county.					
County and Iowa Yield Data and U.S. Price Data						
Farm Yield or 95% of County Average			Iowa Average Yield		U.S. Marketing Year Price	
Year	Corn	Soybeans	Corn	Soybeans	Corn	Soybeans
2004	180	48.9	181	49.0	\$ 2.06	\$ 5.74
2005	195	51.9	173	52.0	\$ 2.00	\$ 5.66
2006	171	53.0	166	50.5	\$ 3.04	\$ 6.43
2007	201	55.0	171	52.0	\$ 4.20	\$ 10.10
2008	169	42.0	169	45.5	\$ 4.05	\$ 10.00
Estimated 2009	193	51.0	175	50.5	\$ 3.44	\$ 8.50
Estimated 2010	197	51.0	178	51.0	\$ 3.44	\$ 8.50
Estimated 2011	201	52.0	182	51.5	\$ 3.44	\$ 8.50
Estimated 2012	205	52.0	189	52.0	\$ 3.44	\$ 8.50
Olympic Average Farm Yields			Olympic Ave. Iowa Yields		2-year Average Prices	
2009	182	51.5	171	50.5	\$ 4.13	\$ 10.05
2010	186	52.0	171	51.0	\$ 3.75	\$ 9.25
2011	187	51.5	172	50.5	\$ 3.44	\$ 8.50
2012	197	51.5	175	51.0	\$ 3.44	\$ 8.50

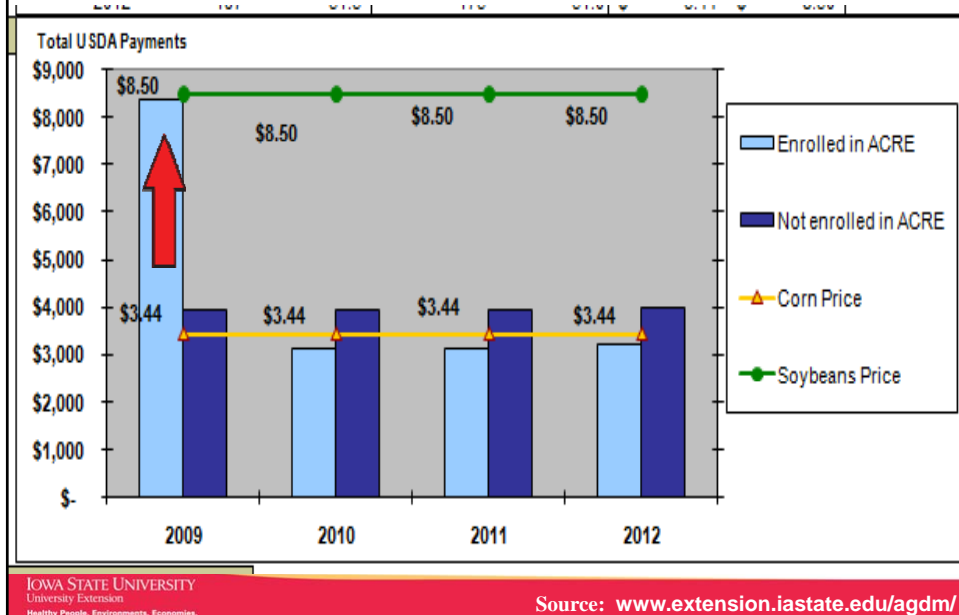


Price trend, % of 2008 prices

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ACRE Payments with Low Prices (85% of 2008)



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Potential ACRE Payments – Low Prices

Potential ACRE Guarantees, Revenues and Payments					
Corn	2009	2010	2011	2012	Total
Farm level ACRE trigger, \$ per acre	\$ 773	\$ 719	\$ 666	\$ 700	
Farm level ACRE revenue, \$ per acre	\$ 664	\$ 678	\$ 691	\$ 705	
	Trigger met.	Trigger met.			
State level ACRE trigger, \$ per acre	\$ 635	\$ 576	\$ 533	\$ 542	
State level ACRE revenue, \$ per acre	\$ 602	\$ 612	\$ 626	\$ 650	
	Trigger met.				
Projected ACRE payment per acre	\$ 34.95	\$ -	\$ -	\$ -	
Projected ACRE payment for all acres	\$ 2,911	\$ -	\$ -	\$ -	\$ 2,911
Potential loan deficiency payments under ACRE	\$ -	\$ -	\$ -	\$ -	\$ -
Breakeven 2009 price to trigger ACRE payments	\$ 3.65	\$ 3.32	\$ 3.07	\$ 3.12	
Soybeans	2009	2010	2011	2012	Total
Farm level ACRE trigger, \$ per acre	\$ 528	\$ 491	\$ 448	\$ 448	
Farm level ACRE revenue, \$ per acre	\$ 434	\$ 434	\$ 442	\$ 442	
	Trigger met.	Trigger met.	Trigger met.	Trigger met.	
State level ACRE trigger, \$ per acre	\$ 457	\$ 425	\$ 386	\$ 390	
State level ACRE revenue, \$ per acre	\$ 429	\$ 434	\$ 438	\$ 442	
	Trigger met.				
Projected ACRE payment per acre	\$ 28.07	\$ -	\$ -	\$ -	
Projected ACRE payment for all acres	\$ 2,338	\$ -	\$ -	\$ -	\$ 2,338
Potential loan deficiency payments under ACRE	\$ -	\$ -	\$ -	\$ -	\$ -
Breakeven 2009 price to trigger ACRE payments	\$ 9.12	\$ 8.49	\$ 7.73	\$ 7.80	
Corn and soybeans combined, enrolled in ACRE	2009	2010	2011	2012	Total
Total ACRE payment for corn and soybeans	\$ 5,249	\$ -	\$ -	\$ -	\$ 5,249
Total loan deficiency payments (LDPs)	\$ -	\$ -	\$ -	\$ -	\$ -
Total direct payments (80%)	\$ 3,136	\$ 3,136	\$ 3,136	\$ 3,200	\$ 12,608
Total payments if enrolled in ACRE	\$ 8,385	\$ 3,136	\$ 3,136	\$ 3,200	\$ 17,857
Potential payments if not enrolled in ACRE	2009	2010	2011	2012	Total
Total price counter cyclical payments	\$ -	\$ -	\$ -	\$ -	\$ -
Total loan deficiency payments (LDPs)	\$ -	\$ -	\$ -	\$ -	\$ -
Total direct payments	\$ 3,920	\$ 3,920	\$ 3,920	\$ 4,000	\$ 15,760
Total payments if not enrolled in ACRE	\$ 3,920	\$ 3,920	\$ 3,920	\$ 4,000	\$ 15,760

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ISU ACRE Calculator Strategies

- Analyze Your Own Farms by FSA Farm Number
 - Create a different file name for each farm you analyze
 - Print off results and highlight assumptions
 - Accumulate production evidence for that farm
- Request FSA EZ-Form 156 for Farm Information
- Compare Your “proven yields” annually for 2004-08 to the County “plug yields”
- Create different price scenarios using the “toggle button”
- Make a decision regarding 2009 ACRE enrollment well in advance of August 14th deadline
- If you notify FSA of intent to elect/enroll a farm in ACRE, follow through as your DCP contract is likely void.

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Source: Johnson, ISU Extension, July 2009