



## Western Ohio Cropland Values and Cash Rents 2012-13

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**Abstract:** Ohio cropland values and cash rental rates are projected to increase in 2013. According to the Ohio Cropland Values and Cash Rents Survey bare cropland values in western Ohio are expected to increase from 6.8% to 15.4% in 2013 depending on the region and land class. Cash rents are expected to increase from 7.8% to 10.7% depending on the region and land class.

## **Western Ohio Cropland Values and Cash Rents 2012-13**

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Ohio cropland varies significantly in its production capabilities and cropland values and cash rents vary widely throughout the state. Generally speaking, western Ohio cropland values and cash rents differ substantially from eastern Ohio cropland values and cash rents. This is due to a number of factors including land productivity and potential crop return, the variability of those crop returns, field size, field shape, drainage, population, ease of access, market access, local market price, potential for wildlife damage, and competition for rented cropland in a region. This factsheet is a summary of data collected for western Ohio cropland values and cash rents.

Ohio cropland values and cash rental rates are projected to increase in 2013. According to the Western Ohio Cropland Values and Cash Rents Survey, bare cropland values are expected to increase from 6.8% to 15.4% in 2013 depending on the region and land class. Cash rents are expected to increase from 7.8% to 10.7% depending on the region and land class.

The “Western Ohio Cropland Values and Cash Rents” study was conducted surveying professionals knowledgeable about Ohio’s cropland markets. Surveyed groups include farm managers, rural appraisers, agricultural lenders, OSU Extension educators, farmers, landowners, and Farm Service Agency personnel.

Seventy-eight surveys were completed, analyzed and summarized. Respondents were asked to give responses based on 3 classes of land in their area; “average” land, “top” land and “poor” land. They were asked to estimate 5 year corn and soybean yields for each land class based on typical farming practices. Survey respondents were asked to estimate current bare cropland values and cash rents negotiated in the current or recent year for each land class. Survey results are summarized below for Western Ohio and regional summaries (subsets of Western Ohio) are presented for Northwest Ohio and Southwest Ohio.

Tables show the Average (mean) of each measure, Standard Deviation of the data for that measure (measure of variability), and Range (average minus and plus one standard deviation). These latter two numbers reported indicate a range within which about two-thirds of the responses in the data for that measure will fall.

### **Western Ohio Results**

Survey results from Western Ohio are summarized in Table 1. See Figure 1 for counties included in this survey.

#### **Average Cropland**

Survey results for “average” producing cropland show an average yield to be 160.7 bushels of corn per acre. Results show that the value of “average” cropland in western Ohio was \$6,516 per acre in 2012. According to survey data this “average” producing cropland is expected to be valued at \$7,069 per acre in 2013. This is a projected increase of 8.5%.

“Average” cropland rented for an average of \$197 per acre in 2012 according to survey results. “Average” cropland is expected to rent for \$215 per acre in 2013. This equates to a cash rent of \$1.34 per bushel of corn produced. Rents in the “average” cropland category are expected to equal 3.0% of land value in 2013.

### Top Cropland

Survey results indicate that “top” performing cropland in western Ohio averages 192.3 bushels of corn per acre. Results also show that average value of “top” cropland in 2012 was \$7,865 per acre. According to this survey “top” cropland in western Ohio is expected to be valued at \$8,515 in 2013. This is a projected increase of 8.3%.

“Top” cropland in western Ohio rented for an average of \$256 per acre in 2012 according to survey results. “Top” cropland is expected to rent for \$283 in 2013. This equates to a cash rent of \$1.47 per bushel of corn produced. Rents in the “top” cropland category are expected to equal 3.3% of land value in 2013.

### Poor Cropland

The survey summary shows the average yield for “poor” performing cropland equals 127.2 bushels of corn per acre. Results also show that the average value of “poor” cropland was \$5,053 per acre in 2012. According to survey data this “poor” producing cropland is expected to be valued at \$5,645 in 2013. This is an increase of 11.7%.

“Poor” cropland rented for an average of \$144 per acre in 2012 according to survey results. Cash Rent for “Poor” cropland is expected to average \$156 per acre in 2013. This equates to a cash rent of \$1.23 per bushel of corn produced in 2013. Rents in the “poor” cropland category are expected to equal 2.8% of land value in 2013.

Figure 1: Western Ohio



## **Northwest Ohio Results**

Survey results from northwest Ohio are summarized in Table 2.

### **Average Cropland**

Yields for “average” producing cropland average 157.5 bushels of corn per acre or 48.87 bushels of soybeans per acre. Results show that the value of “average” cropland in northwest Ohio was \$6,294 per acre in 2012. According to survey data this “average” producing cropland is expected to be valued at \$6,960 per acre in 2013. This is a projected increase of 10.6%.

“Average” cropland rented for an average of \$180 per acre in 2012 according to survey results and is expected to rent for \$196 in 2013 which equals \$1.24 per bushel of corn produced. Rents in the “average” cropland category are expected to equal 2.8 % of land value in 2013.

### **Top Cropland**

Survey results indicate that “top” performing cropland in northwest Ohio averages 189.6 bushels of corn per acre or 60.9 bushels of soybeans per acre. Results also show that the average value of “top” cropland was \$7,790 per acre in 2012. According to this survey “top” producing cropland in northwest Ohio is expected to be valued at \$8,579 in 2013. This is a projected increase of 10.1%.

“Top” cropland in northwest Ohio rented for an average of \$235 per acre in 2012 and is expected to rent for \$260 in 2013 according to survey results, which equals \$1.37 per bushel of corn produced. Rents in the “top” cropland category are expected to equal 3.0% of land value.

### **Poor Cropland**

The survey summary shows the average yield for “poor” performing cropland in northwestern Ohio equals 126.8 bushels of corn per acre or 37.5 bushels of soybeans per acre. Results also show that the average value of “poor” cropland was \$4,756 per acre in 2012 and is expected to average \$5,488 per acre in 2013. This is a projected increase of 15.4%.

“Poor” cropland rented for an average of \$130 per acre in 2012 and is expected to average \$141 per acre in 2013 according to survey results which equals \$1.11 per bushel of corn produced. Rents in the “poor” cropland category are expected to equal 2.6% of land value in 2013.

The northwest region for the purposes of this survey includes: Williams, Fulton, Lucas, Ottawa, Defiance, Henry, Wood, Sandusky, Paulding, Putnam, Hancock, Seneca, Van Wert, Allen, Hardin, Wyandot, Crawford, Marion and Morrow Counties. See Figure 2.

Figure 2: Northwest Ohio



**Southwest Ohio Results**

Survey results from southwest Ohio are summarized in Table 3.

**Average Cropland**

Yields for “average” cropland equal 163.1 bushels of corn per acre. Results show that the value of “average” cropland in southwest Ohio was \$6,680 per acre in 2012. According to survey data this “average” producing cropland is expected to be valued at \$7,170 per acre in 2013. This is a projected increase of 7.3%.

“Average” cropland rented for an average of \$210 per acre in 2012 and is expected to rent for \$228 per acre in 2013 according to survey results which equals \$1.40 per bushel of corn produced. Rents in the “average” cropland category are expected to equal 3.2% of land value in 2013.

**Top Cropland**

Survey results indicate that “top” performing cropland in southwest Ohio averages 194.4 bushels of corn per acre or 61.5 bushels of soybeans per acre. Results also show that average value of “top” cropland was \$7,920 per acre in 2012. According to this survey “top” producing cropland in southwest Ohio is expected to be valued at \$8,455 per acre in 2013. This is a projected increase of 6.8%.

“Top” cropland in southwest Ohio rented for an average of \$271 per acre in 2012 and is expected to rent for \$300 per acre in 2013 according to survey results which equals \$1.54 per bushel of corn produced. Rents in the “top” cropland category are expected to equal 3.5% of land value in 2013.

**Poor Cropland**

The survey summary shows the average yield for “poor” cropland in southwestern Ohio equals 127.5 bushels of corn per acre. Results also show that the average value of “poor” cropland was \$5,279 per acre in 2012. According to survey data this “poor” producing cropland is expected to be valued at \$5,790 per acre in 2013. This is an increase of 9.7%.

“Poor” cropland rented for an average of \$154 per acre in 2012 and is expected to average \$166 per acre in 2013 according to survey results which equals \$1.30 per bushel of corn produced. Rents in the “poor” cropland category are expected to equal 2.9% of land value in 2013.

The southwest region for the purposes of this survey includes: Mercer, Auglaize, Shelby, Logan, Union, Delaware, Darke, Miami, Champaign, Clark, Madison, Franklin, Preble, Montgomery, Greene, Butler, Warren, Hamilton, Clermont, Clinton, Fayette and Pickaway Counties. See Figure 3.

Figure 3: Southwest Ohio



## **Additional Survey Results**

Survey respondents were asked to give their best estimates for long term land value and cash rent change as well as projections for mortgage and operating loan interest rates for 2013.

The average estimate of cropland value change in the next 5 years is an increase of 0.79% (for the entire 5 year period). There was a large range in responses from survey participants for cropland value change in 5 years. Responses ranged from an increase of 25% to a decrease of 35%.

The average estimate of cash rent change in the next 5 years is an increase of 1.38%. There was a large range in responses from survey participants for cash rent change in 5 years. Responses ranged from an increase of 30% to a decrease of 35%.

The summary of these responses is presented in Tables 1 through 3 and includes: Expected Percent Change in the Value of Cropland in the Next 5 Years, Expected Percent Change in the Cash Rental Rates in the Next 5 Years, Expected Average Interest Rate for Mortgage Loans for 2013, Expected Average Operating Loan Rate for 2013, Pasture Cash Rent per Acre and the Value of Pasture Land. Tables 1 through 3 below show the results of the survey for these measures for Western Ohio, Northwest Ohio and Southwest Ohio.

## **Summary**

This study will add to existing research on Ohio farmland values and cash rents that can assist producers and landowners with purchase and rental decisions. Existing research includes:

Western Ohio Cropland Values and Cash Rents 2011-12 at:

[http://ohioline.osu.edu/ae-fact/pdf/Western\\_Ohio\\_Cropland\\_Values\\_and\\_Cash\\_Rents\\_2011-12\\_AEDE-15-12.pdf](http://ohioline.osu.edu/ae-fact/pdf/Western_Ohio_Cropland_Values_and_Cash_Rents_2011-12_AEDE-15-12.pdf)

Western Ohio Cropland Values and Cash Rents 2010-11 at:

<http://ohioline.osu.edu/ae-fact/pdf/11-AED-911.pdf>

Western Ohio Cropland Values and Cash Rents 2009-10 at:

<http://ohioline.osu.edu/ae-fact/pdf/AEDE-RP-0125-10.pdf>

Ohio Cropland Values and Cash Rents 2008-09 at:

<http://ohioline.osu.edu/ae-fact/pdf/cropland0809.pdf>

Ohio Cropland Values and Cash Rents 2007-08 at:

[http://ohioline.osu.edu/ae-fact/pdf/Cropland\\_Values\\_Rents\\_07\\_08.pdf](http://ohioline.osu.edu/ae-fact/pdf/Cropland_Values_Rents_07_08.pdf)

Ohio Cropland Values and Cash Rents 2006-07 at:

<http://ohioline.osu.edu/ae-fact/pdf/cropland.pdf>

Ohio Cropland Values and Cash Rents 2005-06 at:

<http://aede.osu.edu/resources/docs/pdf/D8QOMB09-77MY-IDPZ-DST14X1DMQ007PS6.pdf>

Ohio Farm Real Estate Markets (2003) at:

<http://aede.osu.edu/resources/docs/pdf/C2V16S20-H8CG-UEFY-JGL2H3JPU7Y1PO5J.pdf>

Also, check with your local OSU Extension Office for local land value/rental survey summaries. For additional information on farmland lease issues see the Department of Agricultural, Environmental and Development Economics (AEDE) Farm Management webpage at: <http://aede.osu.edu/Programs/FarmManagement/MgtPublications.htm>

Table 1: Ohio Cropland Values and Cash Rents						
Western Ohio Results						
Land Class		Average	Standard Deviation	Range*		
Average	Avg Corn Yield (bu/a)	160.7	15.3	175.9	145.4	
	Avg Soybean Yield (bu/a)	49.6	4.1	53.7	45.6	
	Market Value per Acre	2012	\$6,516	\$1,459	\$7,975	\$5,056
		2013	\$7,069	\$1,551	\$8,621	\$5,518
	Rent per Acre	2012	\$197	\$40	\$238	\$157
		2013	\$215	\$42	\$256	\$173
Top	Avg Corn Yield (bu/a)	192.3	17.0	209.3	175.3	
	Avg Soybean Yield (bu/a)	61.2	6.3	67.6	54.9	
	Market Value per Acre	2012	\$7,865	\$2,009	\$9,873	\$5,856
		2013	\$8,515	\$2,087	\$10,602	\$6,428
	Rent per Acre	2012	\$256	\$55	\$311	\$201
		2013	\$283	\$54	\$337	\$230
Poor	Avg Corn Yield (bu/a)	127.2	19.8	147.0	107.4	
	Avg Soybean Yield (bu/a)	38.6	5.1	43.7	33.5	
	Market Value per Acre	2012	\$5,053	\$1,246	\$6,298	\$3,807
		2013	\$5,645	\$1,405	\$7,051	\$4,240
	Rent per Acre	2012	\$144	\$37	\$181	\$106
		2013	\$156	\$40	\$196	\$116
Five Year Projected Percent Change in Cash Rent		1.38%	15.10%	16.47%	-13.72%	
Five Year Projected Percent Change in Cropland Value		0.79%	14.98%	15.77%	-14.19%	
Mortgage Interest Rate - 20 Year Fixed - Projected 2013		4.65%	0.47%	5.13%	4.18%	
Operating Loan Rate - Projected 2013		4.16%	0.92%	5.07%	3.24%	
Pasture Cash Rent - Projected 2013 - Improved, Non-Rotation		\$80	\$45	\$125	\$35	
Pasture Land Value - Projected 2013 - Improved, Non-Rotation		\$3,636	\$1,514	\$5,150	\$2,121	
* Range - One standard deviation above and below the average (mean).						
Approximately two-thirds of the responses fall within this range.						



Table 2: Ohio Cropland Values and Cash Rents						
Northwest Ohio Results						
Land Class			Average	Standard Deviation	Range*	
Average		Avg Corn Yield (bu/a)	157.5	12.7	170.2	144.9
		Avg Soybean Yield (bu/a)	48.7	4.0	52.7	44.7
	Market Value per Acre	2012	\$6,294	\$938	\$7,232	\$5,356
		2013	\$6,960	\$1,075	\$8,034	\$5,885
	Rent per Acre	2012	\$180	\$33	\$213	\$147
		2013	\$196	\$30	\$227	\$166
Top		Avg Corn Yield (bu/a)	189.6	16.6	206.2	173.0
		Avg Soybean Yield (bu/a)	60.9	6.9	67.8	54.0
	Market Value per Acre	2012	\$7,790	\$1,205	\$8,996	\$6,585
		2013	\$8,579	\$1,492	\$10,071	\$7,088
	Rent per Acre	2012	\$235	\$52	\$288	\$183
		2013	\$260	\$42	\$302	\$218
Poor		Avg Corn Yield (bu/a)	126.8	16.4	143.2	110.4
		Avg Soybean Yield (bu/a)	37.5	3.3	40.8	34.1
	Market Value per Acre	2012	\$4,756	\$1,068	\$5,824	\$3,688
		2013	\$5,488	\$1,321	\$6,810	\$4,167
	Rent per Acre	2012	\$130	\$23	\$153	\$108
		2013	\$141	\$20	\$161	\$121
Five Year Projected Percent Change in Cash Rent			4.43%	15.03%	19.46%	-10.61%
Five Year Projected Percent Change in Cropland Value			6.10%	13.29%	19.39%	-7.20%
Mortgage Interest Rate - 20 Year Fixed - Projected 2013			4.79%	0.49%	5.28%	4.30%
Operating Loan Rate - Projected 2013			3.96%	0.46%	4.42%	3.50%
Pasture Cash Rent - Projected 2013 - Improved, Non-Rotation			\$71	\$32	\$103	\$38
Pasture Land Value - Projected 2013 - Improved, Non-Rotation			\$3,186	\$1,369	\$4,555	\$1,816
* Range - One standard deviation above and below the average (mean).						
Approximately two-thirds of the responses fall within this range.						

Table 3: Ohio Cropland Values and Cash Rents						
Southwest Ohio Results						
Land Class			Average	Standard Deviation	Range*	
Average	Avg Corn Yield (bu/a)		163.1	16.8	180.0	146.3
	Avg Soybean Yield (bu/a)		50.4	4.1	54.4	46.3
	Market Value per Acre	2012	\$6,680	\$1,745	\$8,425	\$4,935
		2013	\$7,170	\$1,897	\$9,068	\$5,273
	Rent per Acre	2012	\$210	\$41	\$251	\$168
		2013	\$228	\$45	\$272	\$183
Top	Avg Corn Yield (bu/a)		194.4	17.3	211.6	177.1
	Avg Soybean Yield (bu/a)		61.5	6.0	67.5	55.5
	Market Value per Acre	2012	\$7,920	\$2,458	\$10,378	\$5,462
		2013	\$8,455	\$2,534	\$10,990	\$5,921
	Rent per Acre	2012	\$271	\$53	\$324	\$218
		2013	\$300	\$55	\$356	\$245
Poor	Avg Corn Yield (bu/a)		127.5	22.4	149.9	105.1
	Avg Soybean Yield (bu/a)		39.5	6.0	45.4	33.5
	Market Value per Acre	2012	\$5,279	\$1,338	\$6,617	\$3,942
		2013	\$5,790	\$1,481	\$7,271	\$4,309
	Rent per Acre	2012	\$154	\$43	\$197	\$111
		2013	\$166	\$47	\$214	\$119
Five Year Projected Percent Change in Cash Rent			-0.85%	14.95%	14.10%	-15.80%
Five Year Projected Percent Change in Cropland Value			-3.04%	15.12%	12.08%	-18.16%
Mortgage Interest Rate - 20 Year Fixed - Projected 2013			4.54%	0.44%	4.97%	4.10%
Operating Loan Rate - Projected 2013			4.33%	1.16%	5.49%	3.17%
Pasture Cash Rent - Projected 2013 - Improved, Non-Rotation			\$84	\$49	\$133	\$35
Pasture Land Value - Projected 2013 - Improved, Non-Rotation			\$3,786	\$1,562	\$5,348	\$2,224
* Range - One standard deviation above and below the average (mean).						
Approximately two-thirds of the responses fall within this range.						

<b>Table 4. Average estimated Ohio land value per acre (tillable, bare land), per bu. corn and soybean yields, by geographical area and land class</b>						
<b>Ohio Cropland Values and Cash Rents Survey 2012-13</b>						
				<b>Land Value</b>		
				<b>Dollars Per Acre</b>		
				<b>2012</b>	<b>2013*</b>	<b>% Change</b>
<b>Area</b>	<b>Land Class</b>	<b>Corn bu/A</b>	<b>Soy bu/A</b>	<b>\$/A</b>	<b>\$/A</b>	<b>'12 to '13</b>
<b>Northwest</b>	<b>Average</b>	157.5	48.7	\$6,294	\$6,960	10.6%
	<b>Top</b>	189.6	60.9	\$7,790	\$8,579	10.1%
	<b>Poor</b>	126.8	37.5	\$4,756	\$5,488	15.4%
<b>Southwest</b>	<b>Average</b>	163.1	50.4	\$6,680	\$7,170	7.3%
	<b>Top</b>	194.4	61.5	\$7,920	\$8,455	6.8%
	<b>Poor</b>	127.5	39.5	\$5,279	\$5,790	9.7%
<b>Western</b>	<b>Average</b>	160.7	49.6	\$6,516	\$7,069	8.5%
	<b>Top</b>	192.3	61.2	\$7,865	\$8,515	8.3%
	<b>Poor</b>	127.2	38.6	\$5,053	\$5,645	11.7%
<b>* Projected Land Value</b>						

**Table 5. Average estimated Ohio cash rent per acre (tillable, bare land), per bushel corn and soybean yields, by geographical area and land class**  
**Ohio Cropland Values and Cash Rents Survey 2012-13**

Area	Land Class	Corn bu/A	Soy bu/A	Rent Per Acre			Rent per Bushel Corn		Rent as % of Land Value	
				2012	2013*	% Change	2012	2013	2012	2013
				\$/A	\$/A	12 to '13	\$/Bu	\$/Bu	%	%
Northwest	Average	157.5	48.7	\$180	\$196	8.9%	\$1.14	\$1.24	2.9%	2.8%
	Top	189.6	60.9	\$235	\$260	10.6%	\$1.24	\$1.37	3.0%	3.0%
	Poor	126.8	37.5	\$130	\$141	8.5%	\$1.03	\$1.11	2.7%	2.6%
Southwest	Average	163.1	50.4	\$210	\$228	8.6%	\$1.29	\$1.40	3.1%	3.2%
	Top	194.4	61.5	\$271	\$300	10.7%	\$1.39	\$1.54	3.4%	3.5%
	Poor	127.5	39.5	\$154	\$166	7.8%	\$1.21	\$1.30	2.9%	2.9%
Western	Average	160.7	49.6	\$197	\$215	9.1%	\$1.23	\$1.34	3.0%	3.0%
	Top	192.3	61.2	\$256	\$283	10.5%	\$1.33	\$1.47	3.3%	3.3%
	Poor	127.2	38.6	\$144	\$156	8.3%	\$1.13	\$1.23	2.8%	2.8%
* Projected Rental Rate										