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Ohio Cropland Values and Cash Rents 2008-09

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Abstract

Ohio cropland values show signs of falling slightly while cash rents show signs of leveling off or seeing modest increases depending on the region and land productivity. Ohio cropland values are expected to decrease from 2.4% to 4.9% in 2009 while cash rents are expected to range from a decrease of 0.24% to an increase of up to 1.24%.

The "Ohio Cropland Values and Cash Rents" survey is conducted annually drawing on the expertise of numerous professionals that are knowledgeable of Ohio's cropland markets.

This survey found that in 2008, Ohio cropland averaged \$5,131 per acre for top land, \$4,257 for average land and \$3,292 for poor land. Top land averaged 180.7 bushels of corn per acre, 56.5 bushels of soybeans per acre and rented for \$165 per acre. Average land yielded, on average, 146.3 bushels of corn per acre, 44.3 bushels of soybeans per acre and rented for \$128 per acre. Poor cropland averaged 111.7 bushels of corn per acre, 32.5 bushels of soybeans per acre and rented for \$91 per acre.

Respondents were also asked to give their projections of land values and cash rents for 2009. Cropland values in Ohio in 2009 are projected to average \$5,007, \$4,126 and \$3,131 per acre for "Top", "Average", and "Poor" land, respectively. Cash Rents are projected to average \$165, \$128 and \$92 per acre for "Top", "Average", and "Poor" land, respectively.

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Introduction

Ohio cropland values show signs of falling slightly while cash rents show signs of leveling off or seeing modest increases depending on the region and land productivity. Ohio cropland values are expected to decrease from 2.4% to 4.9% in 2009 while cash rents are expected to range from a decrease of 0.24% to an increase of up to 1.24%.

The "Ohio Cropland Values and Cash Rents" survey is conducted annually drawing on the expertise of numerous professionals that are knowledgeable of Ohio's cropland markets. Surveyed groups include farm managers, rural appraisers, agricultural lenders, OSU Extension Educators, farmers and Farm Service Agency personnel.

One hundred eighteen surveys were completed, analyzed and summarized. Respondents were asked to give responses based on 3 classes of land in their area; "Top" producing land, "average" producing land and "poor" producing land. The preliminary survey results are summarized below for the entire state of Ohio (entire state results), Northwest Ohio and Southwest Ohio (these 2 regions had sufficient data to allow for regional summaries).

This survey found that in 2008, Ohio cropland averaged \$5,131 per acre for top land, \$4,257 for average land and \$3,292 for poor land. Top land averaged 180.7 bushels of corn per acre, 56.5 bushels of soybeans per acre and rented for \$165 per acre. Average land yielded, on average, 146.3 bushels of corn per acre, 44.3 bushels of soybeans per acre and rented for \$128 per acre. Poor cropland averaged 111.7 bushels of corn per acre, 32.5 bushels of soybeans per acre and rented for \$91 per acre.

Respondents were also asked to give their projections of land values and cash rents for 2009. Cropland values in Ohio in 2009 are projected to average \$5,007, \$4,126 and \$3,131 per acre for "Top", "Average", and "Poor" land, respectively. Cash Rents are projected to average \$165, \$128 and \$92 per acre for "Top", "Average", and "Poor" land, respectively.

Ohio Results

Top Cropland

Survey results indicate that "top" performing cropland in Ohio averages 180.7 bushels of corn per acre (Table 1). Results also show that average value of "top" cropland in 2008 was \$5,131 per acre (Tables 1 and 4). According to this survey "top" producing cropland in Ohio is expected to be valued at \$5,007 in 2009. This is a projected decrease of 2.4%. "Top" cropland in Ohio rented for an average of \$165 per acre in 2008 according to survey results (Tables 1 and 5). "Top" cropland is expected to rent for \$165 in 2009. This equates to a cash rent of \$0.91 per bushel of corn produced. Rents in the "top" cropland category are expected to equal 3.5% of land value in 2009.

Average Cropland

Survey results for "average" production cropland show an average yield to be 146.3 bushels of corn per acre. Results show that the value of "average" cropland in Ohio was \$4,257 per acre in 2008. According to survey data this "average" producing cropland is expected to be valued at \$4,126 per acre in 2009. This is a projected decrease of 3.1%.

"Average" cropland rented for an average of \$128 per acre in 2008 according to survey results. "Average" cropland is expected to rent for \$128 per acre in 2009. This equates to a cash rent of \$0.88 per bushel of corn produced. Rents in the "average" cropland category are expected to equal 3.3% of land value in 2009.

Poor Cropland

The survey summary shows the average yield for "poor" performing cropland equals 111.7 bushels of corn per acre. Results also show that the average value of "poor" cropland was \$3,292 per acre in 2008. According to survey data this "poor" producing cropland is expected to be valued at \$3,131 in 2009. This is a decrease of 4.9%.

"Poor" cropland rented for an average of \$91 per acre in 2008 according to survey results. Cash Rent for "Poor" cropland is expected to average \$92 per acre in 2009. This equates to a cash rent of \$0.83 per bushel of corn produced in 2009. Rents in the "poor" cropland category are expected to equal 3.0% of land value in 2009.

Northwest Ohio Results

Top Cropland

Survey results indicate that "top" performing cropland in northwest Ohio averages 179.5 bushels of corn per acre or 55.5 bushels of soybeans per acre (Table 2). Results also show that the average value of "top" cropland was \$4,894 per acre in 2008 (Tables 2 and 4). According to this survey "top" producing cropland in northwest Ohio is expected to be valued at \$4,803 in 2009. This is a projected decrease of 1.9%.

"Top" cropland in northwest Ohio rented for an average of \$164 per acre in 2008 and is expected to rent for \$161 in 2009 according to survey results, which equals \$0.90 per bushel of corn produced (Tables 2 and 5). Rents in the "top" cropland category are expected to equal 3.8% of land value.

Average Cropland

Yields for "average" production cropland are 143.4 bushels of corn per acre or 42.9 bushels of soybeans per acre. Results show that the value of "average" cropland in northwest Ohio was \$4,120 per acre in 2008. According to survey data this "average" producing cropland is expected to be valued at \$3,997 per acre in 2009. This is a projected decrease of 3.0%.

"Average" cropland rented for an average of \$130 per acre in 2008 according to survey results and is expected to rent for \$130 in 2009 which equals \$0.90 per bushel of corn produced. Rents in the "average" cropland category are expected to equal 3.6 % of land value in 2009.

Poor Cropland

The survey summary shows the average yield for "poor" performing cropland in northwestern Ohio equals 109.3 bushels of corn per acre or 31.7 bushels of soybeans per acre. Results also show that the average value of "poor" cropland was \$3,189 per acre in 2008 and is expected to average \$3,014 per acre in 2009. This is a decrease of 5.5%.

"Poor" cropland rented for an average of \$95 per acre in 2008 and is expected to average \$96 per acre in 2009 according to survey results which equals \$0.88 per bushel of corn produced. Rents in the "poor" cropland category are expected to equal 3.3% of land value in 2009.

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.

Southwest Ohio Results

Top Cropland

Survey results indicate that "top" performing cropland in southwest Ohio averages 185.1 bushels of corn per acre or 57.6 bushels of soybeans per acre (Table 3). Results also show that average value of "top" cropland was \$5,844 per acre in 2008 (Tables 3 and 4). According to this survey "top" producing cropland in southwest Ohio is expected to be valued at \$5,681 in 2009. This is a projected decrease of 2.8%.

"Top" cropland in southwest Ohio rented for an average of \$189 per acre in 2008 and is expected to rent for \$192 per acre in 2009 according to survey results which equals \$1.04 per bushel of corn produced (Tables 3 and 5). Rents in the "top" cropland category are expected to equal 3.7% of land value in 2009.

Average Cropland

Yields for "average" production cropland equal 151.8 bushels of corn per acre. Results show that the value of "average" cropland in southwest Ohio was \$4,814 per acre. According to survey data this "average" producing cropland is expected to be valued at \$4,646 per acre in 2009. This is a projected decrease of 3.5%.

"Average" cropland rented for an average of \$147 per acre in 2008 and is expected to rent for \$148 per acre in 2009 according to survey results which equals \$0.98 per bushel of corn produced. Rents in the "average" cropland category are expected to equal 3.4 % of land value in 2009.

Poor Cropland

The survey summary shows the average yield for "poor" performing cropland in southwestern Ohio equals 117.2 bushels of corn per acre. Results also show that the average value of "poor" cropland was \$3,760 per acre. According to survey data this "poor" producing cropland is expected to be valued at \$3,534 per acre in 2009. This is a decrease of 6.0%.

"Poor" cropland rented for an average of \$105 per acre in 2008 and is expected to average \$105 per acre in 2009 according to survey results which equals \$0.90 per bushel of corn produced. Rents in the "poor" cropland category are expected to equal 3.1% of land value in 2009.

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.

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 2009. Survey respondents estimate cash rents will increase 1.89% in the next 5 year period while cropland values will increase only 0.72% in that same period.

The summary of these responses is presented in Tables 1 through 3 and includes: Value of Cropland in Transition (areas where much of the land is moving into residential, commercial & industrial uses), Expected Percent Change in the Value of Bare 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 2009, Expected Average Operating Loan Rate for 2009, 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 Ohio and 2 sub-regions (northwest and southwest) of Ohio.

Interpreting Tables 1-3

Tables 1 through 3 show the average (Avg) (simple average) of each measure, standard deviation (Std) of the data for that measure (measure of variability), average plus one standard deviation (Avg+Std), and average minus one standard deviation (Avg-Std). These latter two numbers reported indicate a range within which about two-thirds of the responses in the data for that measure will fall.

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:

Ohio Cropland Values and Cash Rents 2007-08 at:

http://ohioline.osu.edu/ae-fact/pdf/Cropland Values Rents 07 08.pdf

Ohio Farm Real Estate Markets at:

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

Land Rental Rates: Survey Results and Summary at:

http://vanwert.osu.edu/ag/landrentalrates.pdf and companion <u>Cash Rent Calculator</u> at: http://vanwert.osu.edu/ag/calculator.htm

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 Value | es and C | ash Rents | | | |
|-------------------------|-----------------------|----------|------------|---------|------------|-------------|
| Ohio Re | esults | | | | | |
| | | | Avg | Std | Avg+ 1 Std | Avg - 1 Std |
| Тор | Avg Corn Yield | | 180.69 | 18.37 | 199.05 | 162.32 |
| | Avg Soybean Yield | | 56.47 | 6.74 | 63.22 | 49.73 |
| | Market Value per Acre | 2008 | \$5,131.19 | 1414.72 | 6545.91 | 3716.48 |
| | | 2009 | \$5,006.62 | 1463.54 | 6470.16 | 3543.08 |
| | Rent per Acre | 2008 | \$165.10 | 43.04 | 208.14 | 122.06 |
| | | 2009 | \$164.67 | 46.43 | 211.10 | 118.24 |
| Average | Avg Corn Yield | | 146.25 | 13.96 | 160.22 | 132.29 |
| | Avg Soybean Yield | | 44.34 | 5.26 | 49.60 | 39.08 |
| | Market Value per Acre | 2008 | \$4,256.88 | 1096.17 | 5353.05 | 3160.71 |
| | | 2009 | \$4,125.74 | 1171.11 | 5296.84 | 2954.63 |
| | Rent per Acre | 2008 | \$127.69 | 34.48 | 162.17 | 93.21 |
| | | 2009 | \$128.11 | 36.49 | 164.60 | 91.61 |
| Poor | Avg Corn Yield | | 111.70 | 17.22 | 128.92 | 94.48 |
| | Avg Soybean Yield | | 32.51 | 6.44 | 38.95 | 26.07 |
| | Market Value per Acre | 2008 | \$3,291.51 | 927.22 | 4218.73 | 2364.29 |
| | | 2009 | \$3,130.86 | 868.34 | 3999.20 | 2262.52 |
| | Rent per Acre | 2008 | \$91.12 | 28.21 | 119.32 | 62.91 |
| | | 2009 | \$92.25 | 27.95 | 120.20 | 64.30 |
| | | | | | | |
| Cropland | in Transition | 2008 | \$7,333.73 | 3176.50 | 10510.23 | 4157.23 |
| | | 2009 | \$7,065.85 | 3255.50 | 10321.36 | 3810.35 |
| Cash Rental % Change | | | 1.89% | 0.14 | 0.16 | -0.12 |
| Cropland Value % Change | | | 0.72% | 0.12 | 0.13 | -0.12 |
| Mortgage Interest | | | 8.29% | 0.09 | 0.17 | -0.01 |
| Operating Loan Rate | | | 6.24% | 0.01 | 0.07 | 0.05 |
| Pasture - | Cash Rent per Acre | | \$51.31 | 29.69 | 81.00 | 21.63 |
| Value per | r Acre | | \$2,694.40 | 1031.13 | 3725.53 | 1663.27 |

| Table 2 | : Ohio Cropland Value | es and Ca | ash Rents | | | |
|------------------------------|-----------------------|-----------|------------|---------|------------|-------------|
| Northw | est Ohio Results | | | | | |
| | | | Avg | Std | Avg+ 1 Std | Avg - 1 Std |
| Тор | Avg Corn Yield | | 179.50 | 18.99 | 198.49 | 160.51 |
| | Avg Soybean Yield | | 55.47 | 7.38 | 62.85 | 48.09 |
| | Market Value per Acre | 2008 | \$4,894.19 | 862.18 | 5756.37 | 4032.00 |
| | | 2009 | \$4,803.05 | 856.78 | 5659.83 | 3946.27 |
| | Rent per Acre | 2008 | \$164.13 | 21.79 | 185.92 | 142.34 |
| | | 2009 | \$161.06 | 19.54 | 180.60 | 141.51 |
| Average | Avg Corn Yield | | 143.42 | 15.44 | 158.86 | 127.99 |
| | Avg Soybean Yield | | 42.86 | 5.62 | 48.48 | 37.23 |
| | Market Value per Acre | 2008 | \$4,120.24 | 619.41 | 4739.65 | 3500.83 |
| | | 2009 | \$3,996.88 | 639.92 | 4636.79 | 3356.96 |
| | Rent per Acre | 2008 | \$129.84 | 18.44 | 148.28 | 111.39 |
| | | 2009 | \$129.67 | 20.24 | 149.90 | 109.43 |
| Poor | Avg Corn Yield | | 109.26 | 19.30 | 128.56 | 89.95 |
| | Avg Soybean Yield | | 31.74 | 6.88 | 38.62 | 24.87 |
| | Market Value per Acre | 2008 | \$3,189.02 | 578.09 | 3767.12 | 2610.93 |
| | | 2009 | \$3,014.10 | 582.41 | 3596.51 | 2431.69 |
| | Rent per Acre | 2008 | \$95.34 | 15.41 | 110.75 | 79.93 |
| | | 2009 | \$96.22 | 14.67 | 110.89 | 81.55 |
| | | | | | | |
| Cropland | in Transition | 2008 | \$8,687.50 | 3005.91 | 11693.41 | 5681.59 |
| | | 2009 | \$8,583.33 | 3021.39 | 11604.72 | 5561.94 |
| Cash Rental % Change | | | 1.39% | 0.15 | 0.16 | -0.13 |
| Cropland Value % Change | | | 0.82% | 0.14 | 0.14 | -0.13 |
| Mortgage Interest | | | 8.85% | 0.10 | 0.19 | -0.01 |
| Operating Loan Rate | | | 6.33% | 0.01 | 0.07 | 0.05 |
| Pasture - Cash Rent per Acre | | | \$69.55 | 30.45 | 100.00 | 39.09 |
| Value pe | r Acre | | \$2,490.91 | 713.38 | 3204.29 | 1777.53 |

| Table 3 | : Ohio Cropland Value | es and Ca | sh Rents | | | |
|------------------------------|-----------------------|-----------|------------|---------|------------|-------------|
| Southw | est Ohio Results | | | | | |
| | | | Avg | Std | Avg+ 1 Std | Avg - 1 Std |
| Тор | Avg Corn Yield | | 185.10 | 17.63 | 202.74 | 167.47 |
| | Avg Soybean Yield | | 57.56 | 6.58 | 64.15 | 50.98 |
| | Market Value per Acre | 2008 | \$5,843.62 | 1543.66 | 7387.28 | 4299.95 |
| | | 2009 | \$5,680.68 | 1666.85 | 7347.53 | 4013.83 |
| | Rent per Acre | 2008 | \$189.03 | 39.90 | 228.93 | 149.13 |
| | | 2009 | \$192.46 | 44.64 | 237.10 | 147.82 |
| Average | Avg Corn Yield | | 151.78 | 11.64 | 163.42 | 140.14 |
| | Avg Soybean Yield | | 45.96 | 4.87 | 50.83 | 41.09 |
| | Market Value per Acre | 2008 | \$4,813.54 | 1128.06 | 5941.60 | 3685.48 |
| | | 2009 | \$4,645.56 | 1310.05 | 5955.61 | 3335.51 |
| | Rent per Acre | 2008 | \$147.05 | 27.06 | 174.11 | 119.99 |
| | | 2009 | \$148.18 | 29.87 | 178.05 | 118.31 |
| Poor | Avg Corn Yield | | 117.17 | 14.71 | 131.88 | 102.46 |
| | Avg Soybean Yield | | 34.11 | 5.93 | 40.04 | 28.17 |
| | Market Value per Acre | 2008 | \$3,759.78 | 862.27 | 4622.05 | 2897.51 |
| | | 2009 | \$3,534.30 | 834.92 | 4369.22 | 2699.39 |
| | Rent per Acre | 2008 | \$105.00 | 23.04 | 128.04 | 81.96 |
| | | 2009 | \$104.89 | 24.19 | 129.09 | 80.70 |
| | | | | | | |
| Cropland | in Transition | 2008 | \$7,612.94 | 3421.28 | 11034.22 | 4191.67 |
| | | 2009 | \$7,266.67 | 3495.54 | 10762.21 | 3771.12 |
| Cash Rental % Change | | | 0.05% | 0.15 | 0.15 | -0.15 |
| Cropland Value % Change | | | -1.35% | 0.12 | 0.11 | -0.14 |
| Mortgage Interest | | | 8.25% | 0.10 | 0.19 | -0.02 |
| Operating Loan Rate | | | 6.16% | 0.01 | 0.07 | 0.05 |
| Pasture - Cash Rent per Acre | | | \$52.86 | 30.07 | 82.93 | 22.78 |
| Value pe | r Acre | | \$2,927.50 | 1172.65 | 4100.15 | 1754.85 |

Table 4. Average estimated Ohio land value per acre (tillable, bare land), per bu. corn and soybean yields, by geographical area and land class, Ohio Cropland Values and Cash Rents Survey 2008-09.

| | | | | Land ' | Value | Land Value/ | Land Value/ | |
|-----------|-------------------|-----------|----------|-----------|------------------|-------------|-------------|-------------|
| | | | | Dollars I | Dollars Per Acre | | | Bushel Soy. |
| | | | | 2008 | 2009* | % Change | 2008 | 2008 |
| Area | Land Class | Corn bu/A | Soy bu/A | \$/A | \$/A | 08 to '09 | \$/Bu | \$/Bu |
| Northwest | Тор | 179.5 | 55.5 | \$4,894 | \$4,803 | -1.9% | \$27.27 | \$88.23 |
| | Average | 143.4 | 42.9 | \$4,120 | \$3,997 | -3.0% | \$28.73 | \$96.13 |
| | Poor | 109.3 | 31.7 | \$3,189 | \$3,014 | -5.5% | \$29.19 | \$100.47 |
| Southwest | Тор | 185.1 | 57.6 | \$5,844 | \$5,681 | -2.8% | \$31.57 | \$101.52 |
| | Average | 151.8 | 46.0 | \$4,814 | \$4,646 | -3.5% | \$31.71 | \$104.73 |
| | Poor | 117.2 | 34.1 | \$3,760 | \$3,534 | -6.0% | \$32.09 | \$110.23 |
| Ohio | Тор | 180.7 | 56.5 | \$5,131 | \$5,007 | -2.4% | \$28.40 | \$90.87 |
| | Average | 146.3 | 44.3 | \$4,257 | \$4,126 | -3.1% | \$29.11 | \$96.01 |
| | Poor | 111.7 | 32.5 | \$3,292 | \$3,131 | -4.9% | \$29.47 | \$101.25 |
| | Transition | XXX | XXX | \$7.334 | \$7.066 | -3.65% | | _ |

^{*} Projected Land Value

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 2008-09.

| | | | | | | | Rent per | Rent per | Rent as % of | Rent as % of |
|-----------|-------------------|-----------|----------|---------------|---------------|-----------|-------------|-------------|--------------|--------------|
| | | | | Rent Per Acre | Rent Per Acre | | Bushel Corn | Bushel Corn | Land Value | Land Value |
| | | | | 2008 | 2009* | % Change | 2008 | 2009 | 2008 | 2009 |
| Area | Land Class | Corn bu/A | Soy bu/A | \$/A | \$/A | 08 to '09 | \$/Bu | \$/Bu | % | % |
| Northwest | Тор | 179.5 | 55.5 | \$164 | \$161 | -1.87% | \$0.91 | \$0.90 | 4.1% | 3.8% |
| | Average | 143.4 | 42.9 | \$130 | \$130 | -0.13% | \$0.91 | \$0.90 | 3.8% | 3.6% |
| | Poor | 109.3 | 31.7 | \$95 | \$96 | 0.92% | \$0.87 | \$0.88 | 3.5% | 3.3% |
| Southwest | Тор | 185.1 | 57.6 | \$189 | \$192 | 1.81% | \$1.02 | \$1.04 | 3.8% | 3.7% |
| | Average | 151.8 | 46.0 | \$147 | \$148 | 0.77% | \$0.97 | \$0.98 | 3.6% | 3.4% |
| | Poor | 117.2 | 34.1 | \$105 | \$105 | -0.10% | \$0.90 | \$0.90 | 3.3% | 3.1% |
| Ohio | Тор | 180.7 | 56.5 | \$165 | \$165 | -0.26% | \$0.91 | \$0.91 | 3.7% | 3.5% |
| | Average | 146.3 | 44.3 | \$128 | \$128 | 0.33% | \$0.87 | \$0.88 | 3.4% | 3.3% |
| | Poor | 111.7 | 32.5 | \$91 | \$92 | 1.24% | \$0.82 | \$0.83 | 3.1% | 3.0% |

^{*} Projected Rental Rate