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2011

**ORGANIC FARM  
PERFORMANCE  
IN MINNESOTA**



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## ABOUT THIS REPORT

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While there is lots of anecdotal information about farm performance and profitability, real world information about production, financial performance, and profitability on organic farms is scarce. This report provides detailed data about many aspects of the 2011 performance of actual Minnesota organic farms. It also offers summary data from previous years so readers can examine trends. More detailed information about each previous year is available in reports at [www.mda.state.mn.us/fbm](http://www.mda.state.mn.us/fbm) and in a searchable database at [www.finbin.umn.edu](http://www.finbin.umn.edu).

## HOW DOES THE ORGANIC FBM PROJECT WORK?

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The Minnesota Department of Agriculture (MDA) administered this project from 2006 to 2011, with critical support from the partners listed inside the front cover. Participating farmers received scholarships to defray the cost of tuition in local Farm Business Management (FBM) education programs offered throughout Minnesota by eight colleges within the Minnesota State Colleges and Universities (MnSCU) system and one Farm Business Management Association. Each farmer worked one-on-one with a local FBM instructor, learning to keep and use farm records in their business decisions. Their farm data was then stripped of all its identifying characteristics (so the producers remain absolutely anonymous) and incorporated into FINBIN, a publicly available database managed by the University of Minnesota Center for Farm Financial Management [www.finbin.umn.edu](http://www.finbin.umn.edu). While participation dropped some when the scholarship support ended, there were 41 completely organic farms that contributed data in 2011.

What do organic farmers like about the FBM program? They like the enterprise-specific analyses they receive, the assistance with recordkeeping/financial statements/taxes, and the outside perspective their instructors offer. Participating farmers said the FBM program made it easier for them to provide information to lenders and when applying for government programs, and that information they gained (particularly cash flow, cost of production, and profitability information) informed their own annual plans and investment decisions.

*FBM instructors work with all kinds of producers – organic and conventional, crop, specialty crop, and livestock. To learn more about FBM opportunities in your area, contact the MnSCU campus in your region. A list of programs is available at [www.fbm.mnscu.edu](http://www.fbm.mnscu.edu). Southwest Minnesota also has a Farm Business Management Association: please contact Barb Lenning at 507-752-5094.*

## NEW PROGRAM FOR TRANSITIONING/NEWLY CERTIFIED ORGANIC FARMERS

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The MDA is now working with the University of Minnesota and several other partners on a research project investigating the cost of transition to organic field crop and/or dairy production and is **actively seeking new farmers to participate**. Participating farmers receive FBM scholarships and the chance to take part in workshops, discussion groups and other opportunities. If you are a Minnesota farmer with any crop land, forage ground, or dairy cows in transition (even if you have other certified acres), please call 651-201-6616 to learn more about this opportunity.



## EXPLANATION OF DATA PROCESSING AND REPORT FORMAT

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The tables in this report were created using FINPACK and RankEm Central, software programs copyrighted by the Center for Farm Financial Management (CFFM) at the University of Minnesota. The data are provided to CFFM by farm business management instructors in the Minnesota State Colleges and Universities system, and by Minnesota Farm Management Association field staff.

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# 2011 ORGANIC FARM PERFORMANCE IN MINNESOTA

## INTRODUCTION AND OVERVIEW

*By Dale Nordquist<sup>1</sup>, Ron Dvergsten<sup>2</sup>, Richard Joerger<sup>3</sup>, and Meg Moynihan<sup>4</sup>*

This report summarizes individual farm financial results for participants in the Minnesota Organic Farm Business Management Project for 2011 and provides comparisons to previous years. The report includes whole-farm information, as well as costs and returns for individual enterprises. The year-end analysis of the individual farms was completed by Minnesota Farm Business Management instructors or by Minnesota Farm Management Associations. A total of 61 farmers reported data for 2011. Of those, 41 were “completely organic,” meaning that all of the agricultural products produced on the farm were produced under organic certification. The others were “split operations,” which have some certified organic and some conventional production. The *Whole Farm Results* section of this report summarizes **only** the completely organic farms, whereas the crop and dairy enterprise reports include data provided by **both** completely organic and split operations.

*Note:* The number of farms reporting data was slightly lower in 2011 than in previous years because project funding that reduced organic farmers’ cost to participate in FBM education ended after 2010. While some farms may have had additional land in transition to organic, qualifying them for a different subsidy, many of the farms included in the 2011 report elected to continue enrollment by paying full fees out of their own pockets. This self-selection might have an impact on comparisons of 2011 financial results with previous years.

Overall, analysis of key financial measures, including equity, solvency, and liquidity shows these organic farms performed in the acceptable to strong range of generally accepted farm financial standards (see table 27 and the red, yellow, and green Farm Finance Scorecard inside the back cover.) Positive changes in annual net worth reveal the financial strength of a farm business and, for organic farmers, the five year average annual net worth change between 2007 and 2011 has been a very rewarding \$55,000 per farm, ranging from a low in 2009 of \$7,564 to a high of \$96,893 in 2007.

## WHOLE FARM RESULTS

### Financial Performance

Table 1 summarizes the financial performance of participating farms over the five years of this project. The one characteristic that jumps out is how remarkably similar 2010 and 2011 were for these farms. Net farm income—the farm’s contribution to covering family living expenditures, income taxes, retirement savings, and reinvestment in the business—is one important financial measure. After a very financially challenging 2009, the *average* net farm income rose six fold to \$62,463 in 2010. In 2011, it dropped to \$60,260, down 5% from 2010. However, the *median* farm (half of the farms had higher incomes and half had lower) earned much lower returns in 2011. This information indicates that the returns in 2011 were not as evenly shared across the participating farms. In 2011, some farms were apparently very profitable, pulling up the average for the whole group.

The average organic farm earned a rate of return on assets (ROA) of 6.5% (with assets valued at adjusted cost basis) and a rate of return on equity of 8.2%. The relationship between ROA and ROE is a good barometer of profitability. Years when the ROE is higher than ROA are profitable years. When this is the case, borrowed capital earned more than it costs (ROA was higher than the average interest rate paid on borrowed capital). This goal was met—just barely—in 2011, and has been accomplished in four of the past five years for the average organic producer in this group.

The average of these farms remains in a strong liquidity position as they enter the 2012 growing season. Their current ratio improved a little, from 2.00:1 to 2.14:1. (A 2:1 current ratio is commonly considered a good goal.) At the end of 2011, their working capital (current assets minus current liabilities) equaled 28% of a year’s income. (A ratio of more than 25% working capital to gross is generally considered adequate.)

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The debt repayment capacity of these producers was adequate, but not exceptional. In 2011, they generated an average term debt coverage ratio (TDCR) of 1.60:1, meaning that they generated \$1.60 to cover each dollar of scheduled debt payments. Lenders use TDCR as a primary measure of loan soundness. In general, a TDCR over 1.50 is considered acceptable. The average organic farm reported that its net worth grew by \$71,663 in 2011, a 10% rate of growth. Their debt-to-asset ratio was very consistent with previous years at 40%.

## COMPARISON TO CONVENTIONAL FARMS

Table 2 shows these same financial measures for the almost 2,300 Minnesota conventional farms that participated in farm management education programs. The patterns for conventional farms are very similar to those of the organic participants. In 2011, conventional returns were very similar to the previous year. However, these conventional farms are, on average, much larger than the organic farms, which magnifies the dollar returns. The average of these farms earned a net farm income of \$201,078 in 2011 compared to \$60,253 for the organic group. In general terms, all major types of conventional farm (crop, dairy, hog, and beef) were very profitable in 2011.

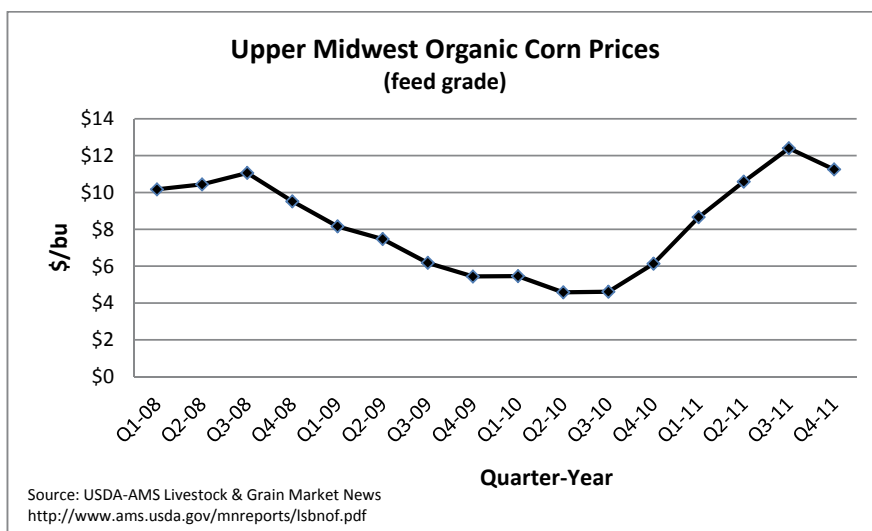
Comparing businesses of different size based on net income can be deceiving. Rate of return on assets (ROA) does a better job of adjusting for different levels of resources employed in the business. The average organic farm earned a rate of return on assets (ROA) of 6.5% compared to an average ROA of 11.4% for conventional farms (with assets valued at adjusted cost basis). Over the six years of comparing these farms, the conventional farms have consistently earned somewhat higher returns than the organic group based on ROA.

In 2011, as in 2010, profit margins were higher for conventional farms than for the organic operations (25% for conventional, 18% for organic). With their smaller volume of sales, organic producers need high margins to generate comparable profits. Profit margins need to be close to or over 20% for conventional farms to be profitable, and at 25%, this was a goal the conventional group met in 2011. With lower sales volumes, organic producers should be shooting for 25-30%, and their 2011 profit margin of 18% was substantially lower than that. The conventional and organic farms used comparable amounts of debt capital, with average debt-to-asset ratios of 41% for conventional farms compared to 40% for the organic farms. Conventional farms were, on average, in a stronger liquidity position than organic producers, with working capital to gross revenue levels averaging 38%, meaning that their working capital (current assets minus current liabilities) was equal to 38% of a year's gross income, compared to 28% for organic producers. This strong conventional farm performance was primarily driven by crop producers who were pushing 50% levels. Conventional farms also had stronger debt repayment capacity, generating a term debt coverage ratio of 2.99:1 (meaning that after family living and taxes, they had \$2.99 of income to cover each \$1.00 of scheduled debt payments) compared to 1.60:1 for organic farms.

In sum, the conventional farms outperformed these organic farms in 2011 as they did in 2010. This does not mean that these organic farms performed poorly. Instead, conventional Minnesota farms have had two exceptionally profitable years in a row.

## PROFITABILITY COMPARISONS

As is always the case, the “averages” mask the variability of returns across the wide range of producers. Table 3, which sorts the 2011 organic farms into thirds based on net farm income, shows that there was a more than \$120,000 difference between the median profits of the “high” and “low” profit farms. The high group earned profits very consistent with the median profits of the conventional farms. The high profit organic farms were larger, on average, than the low profit organic farms based on gross sales and on total assets.



The low profit group did not generate enough income to cover debt payments; they had a term debt coverage ratio of 0.13:1 (13 cents available to repay each dollar of scheduled payments). The high profit farms, on the other hand, generated 3.03 times their scheduled debt payments. The high profit group's net worth increased, on average, by over \$131,000, while the low profit group saw their net worth increase by \$71,000. However, virtually all of that increase for the low profit farms came from paper changes to the estimated market value of assets.

Economists are always trying to discover why some farms are profitable and others are not in a given year. There is a different story behind every situation that contributes to these results. Debt level may be a contributing factor. As in 2010, the high profit farms had, on average, the lowest debt to asset ratio. Enterprise is also a factor (see Type of Farm). Beyond these factors, there are thousands of decisions, many of them non-financial in nature, that contribute to these results.

## SIZE OF FARM

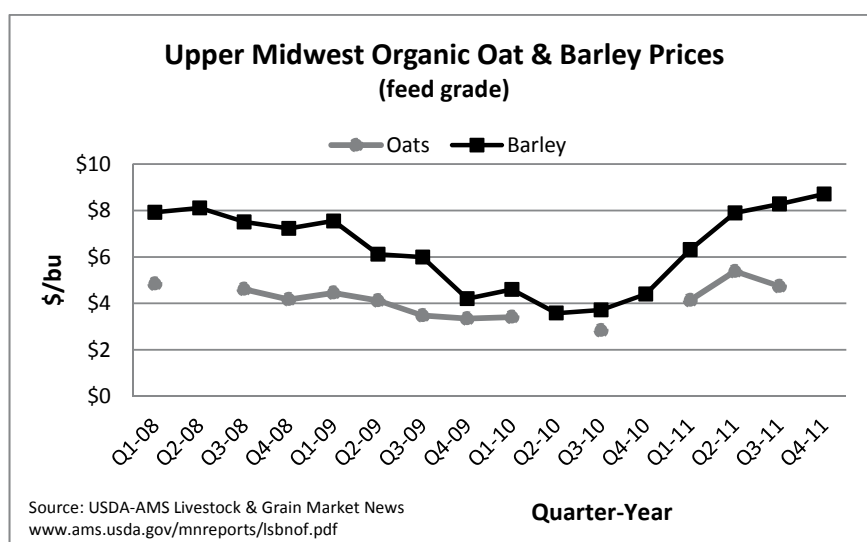
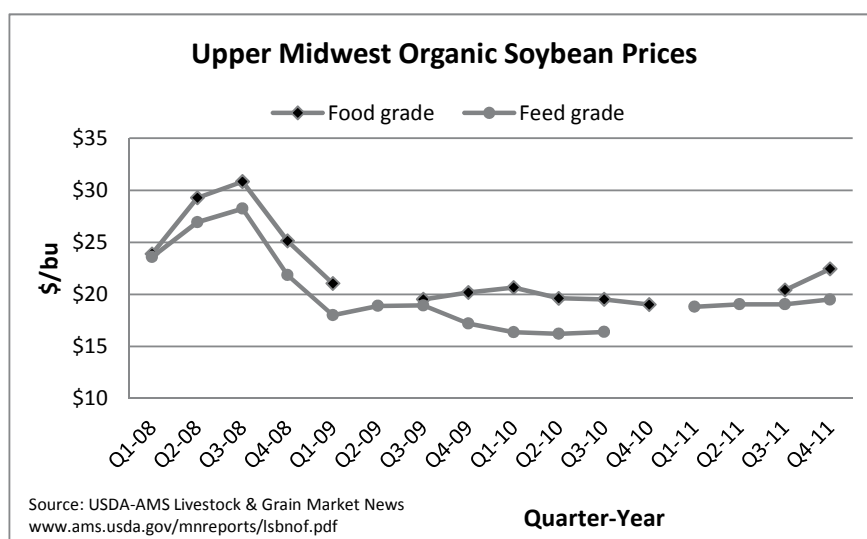
Table 4 sorts these organic farms into size groups based on gross farm income. Unlike conventional farms, where returns generally increased with business size in 2011, the organic farms did not show a consistent trend.

The largest farms were most profitable, but that is where the similarities stop. The smallest farms were the second most profitable when measured based on ROA. But the middle sized farms, while not as profitable, were more liquid. Consistent with 2010, larger farms generally had better asset turnover rates but suffered from low profit margins. Smaller farms had better profit margins but lower asset turnover. In other words, it appears that as these farms grow larger, some struggle with production efficiency. The smaller farms have better efficiencies, but some may lack the sales volume to benefit from those efficiencies.

## TYPE OF FARM

Of the 41 completely organic farms in the 2011 group, 10 were crop farms and 25 were dairy farms<sup>5</sup>. (The other 6 farms were either organic hog or beef farms, for which there were not enough farms to summarize by category, or were diversified farms that did not fit into any one farm type.) Table 5 shows a five year history for the organic crop farms, which have been on a financial roller-coaster during this period. In 2007 and 2008, they had very profitable years. In 2009, they hit on hard times. They bounced back a bit in 2010 and were even more profitable in 2011. Their return on equity was strong at 11%, their liquidity position was solid at 46.5%, working capital to gross and repayment capacity was also very strong in 2011 (TDCR of 3.42:1).

Table 6 shows the history for the organic dairy farms. Returns have been much more stable over time for the dairy farms. Other than 2009, which was a tough year for dairies whether organic or conventional, returns have been good, but not outstanding. In 2011, the average net farm income for these organic dairies was very similar to the crop farms, but the



<sup>5</sup>Farms were categorized on the basis of having 70 percent or more of gross income from that category.



median was lower. This data indicates that there was probably more variability across the dairy farms and that the most profitable dairies pulled up the average for the entire group. On average, their 8% return on equity shows relatively strong profitability. As is usually the case with dairy farms, their liquidity position was weaker than the crop farms, but not problematic. Their repayment capacity was also adequate, but not strong. They did report greater net worth gains than the crop farms, but much of that gain resulted from increases in the estimated market value of assets. The price received for milk was up slightly, from \$26.19 per hundred pounds in 2010 to \$27.32 in 2011, but their average cost of production per hundredweight of milk increased by nearly 18%, from \$22.29 in 2010 to \$26.21 in 2011. The high organic crop prices that benefitted organic crop producers in 2011 was one important factor that increased the cost of production for dairy farmers.

## SUMMARY

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One of the goals of this project is to document the financial performance of participating organic producers so that they and their peers have more accurate benchmarks on which to evaluate organic options. Another goal is to document the financial performance of a group of organic producers in order to provide agricultural lenders better information on which to base credit decisions and to give policy makers, researchers, and others real world insight into organic farm performance.

As with groups of conventional farms, there is tremendous variability in the production and financial performance of these organic producers. 2011 was a strong year for the organic crop farms in this group. Dairy farm profits were down in 2011, but have enjoyed relatively consistent profits over the past several years – with the exception of 2009. A picture emerges of a group of dairy operations that, given organic premiums, have been able to make very acceptable progress over the life of this project. Crop farm returns have been a bit more variable, but 2011 was a solid year financially for these organic crop farms as a group.

From the experiences of farms that contributed data for this report, we see that business performance for Minnesota organic farms was, for the most part, similar in 2010 and 2011, and much better than 2009, when several crop production issues contributed to poor returns. It appears that modest improvement in prices in 2011 offset slightly lower production yields and increased input costs.

As noted in the beginning of this introduction, the organic financial database contains fewer farm records in 2011 than for prior years, which is likely due to the end of subsidies that made the program more affordable for producers to participate. Most (60%) of the farms who remained in the program were dairy operations. Overall, crop acres decreased nearly 20% from the average of the previous four years. This phenomenon provides some confirmation to anecdotal reports of acreage reverting to conventional in this time of high conventional crop prices, particularly on larger operations, and of organic farmers losing rental ground as rental prices climb. For crop farms, the acreage decline was about 23%, on dairies, about 14%.

Analysis of the 2011 records in the Minnesota FINBIN database reveals that conventional farms were substantially larger than organic operations. The gross income of the organic producers was about 40% of the income of conventional growers, while average expenses for organic farm businesses were 36% of the conventional. The organic system also provided for a lower operating expense ratio in 2011, leaving a higher percentage of income as profit for the producer. The data in the respective balance sheets also support these ratios. A closer review of the balance sheets reveals the organic producers had about 50% of the total assets and 50% of the total liabilities compared to conventional producers. The average debt to asset ratio of organic and conventional producers was identical, at 42% in 2011.

The tables that follow summarize the whole farm financial performance of this group of organic producers. The first several tables (tables 1-7) include the whole farm data on which the previous discussion is based. The next set of tables provides information about crop and forage enterprises (tables 8-23) and dairy enterprise (tables 24-26) performance. Finally, table 27 shows the farm financial standards council's recommended ratios and measures. You can use the financial "scorecard" on the back cover to benchmark your own individual results.

If you would like to further dissect the results of these and the other farms that participated in Minnesota farm management educational program, you can run your own data reports using FINBIN at [www.finbin.umn.edu](http://www.finbin.umn.edu). **The privacy and anonymity all participants' data is strictly protected.**

**Table 1. Financial Summary  
Completely Organic Farms, by Year**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	41	54	53	52	49
<b>Income Statement</b>					
Gross cash farm income	272,219	274,304	264,339	257,398	247,603
Total cash farm expense	218,670	217,649	210,878	201,582	194,313
Net cash farm income	53,549	56,655	53,461	55,817	53,290
Inventory change	24,727	25,055	(14,347)	31,217	58,225
Depreciation	(18,016)	(18,358)	(18,300)	(18,364)	(17,096)
Net farm income from operations	60,260	63,352	20,814	68,670	94,419
Gain or loss on capital sales	(7)	32	85	134	-
Average net farm income	60,253	63,384	20,899	68,803	94,419
Median net farm income	38,146	62,463	19,079	61,666	61,958
<b>Profitability (cost)</b>					
Rate of return on assets	6.5%	7.0%	1.1%	9.0%	13.5%
Rate of return on equity	8.2%	9.3%	-2.9%	11.6%	20.5%
Operating profit margin	17.7%	18.4%	3.3%	22.3%	32.2%
Asset turnover rate	36.6%	37.9%	32.7%	40.3%	41.8%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	155,103	188,924	146,876	156,751	166,248
Current liabilities	72,311	94,242	92,752	93,929	82,910
Current ratio	2.14	2	1.58	1.67	2.01
Working capital	82,792	94,683	54,124	62,822	83,338
Working capital to gross inc	28.0%	31.5%	21.6%	21.5%	28.1%
Term debt coverage ratio	1.60	1.68	0.58	1.83	2.57
Replacement coverage ratio	1.27	1.42	0.50	1.61	2.57
<b>Solvency (end of year at market)</b>					
Total farm assets	1,130,634	1,042,284	940,599	981,585	959,202
Total farm liabilities	477,093	458,645	408,040	402,792	385,461
Total assets	1,301,121	1,193,410	1,100,771	1,138,592	1,130,189
Total liabilities	514,892	488,788	445,661	439,885	431,004
Net worth	786,229	704,622	655,110	698,706	699,185
Net worth change	71,663	56,258	7,564	43,560	96,893
Farm debt to asset ratio	42%	44%	43%	41%	40%
Total debt to asset ratio	40%	41%	40%	39%	38%
<b>Nonfarm Information</b>					
Net nonfarm income	14,382	16,287	18,158	19,668	21,548
Farms reporting living expenses	5	11	9	10	8
Total family living expense	37,411	48,204	48,926	45,662	45,492
Total living, invest, cap. purch	51,852	61,186	50,216	47,034	54,732
<b>Crop Acres</b>					
Total acres owned	195	209	212	219	225
Total crop acres	295	361	356	358	372
Total crop acres owned	110	119	136	141	138
Total crop acres cash rented	180	239	205	202	221
Total crop acres share rented	4	3	15	14	13

**Table 2. Financial Summary  
Non-Organic (Conventional) Farms, by Year**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	2,295	2,345	2,327	2,331	2,475
<b>Income Statement</b>					
Gross cash farm income	822,314	682,003	634,897	682,612	596,442
Total cash farm expense	642,483	555,235	528,435	562,367	498,620
Net cash farm income	179,832	126,768	106,462	120,245	97,822
Inventory change	64,764	110,850	(16,464)	56,785	91,608
Depreciation	(44,636)	(40,856)	(36,238)	(34,685)	(30,017)
Net farm income from operations	199,960	196,763	53,760	142,345	159,413
Gain or loss on capital sales	1,118	1,127	724	1,111	-
Average net farm income	201,078	197,890	54,484	143,456	159,413
Median net farm income	129,027	125,086	34,517	91,749	107,866
<b>Profitability (cost)</b>					
Rate of return on assets	11.4%	12.6%	3.1%	10.5%	14.1%
Rate of return on equity	16.6%	19.1%	1.4%	14.7%	21.2%
Operating profit margin	24.5%	27.2%	7.9%	21.9%	27.5%
Asset turnover rate	46.5%	46.4%	39.8%	48.0%	51.3%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	584,658	553,085	442,774	465,467	405,665
Current liabilities	256,457	260,603	257,382	240,409	212,791
Current ratio	2.28	2.12	1.72	1.94	1.91
Working capital	328,201	292,482	185,392	225,059	192,874
Working capital to gross inc	37.8%	37.8%	29.2%	31.4%	28.5%
Term debt coverage ratio	2.99	3.04	1.03	2.4	2.81
Replacement coverage ratio	2.44	2.5	0.87	2.06	2.81
<b>Solvency (end of year at market)</b>					
Number of farms	2,295	2,345	2,327	2,331	2,475
Total farm assets	2,180,006	2,025,596	1,807,503	1,750,487	1,555,397
Total farm liabilities	926,340	907,861	840,303	817,671	724,768
Total assets	2,393,206	2,234,930	2,005,137	1,928,087	1,731,547
Total liabilities	981,289	961,338	889,115	862,495	768,388
Net worth	1,411,917	1,273,592	1,116,022	1,065,592	963,159
Net worth change	188,195	178,109	60,524	106,392	147,044
Farm debt to asset ratio	42%	45%	46%	47%	47%
Total debt to asset ratio	41%	43%	44%	45%	44%
<b>Nonfarm Information</b>					
Net nonfarm income	28,506	28,261	26,707	25,273	24,338
Farms reporting living expenses	575	644	649	770	746
Total family living expense	59,735	54,604	52,801	50,893	48,361
Total living, invest, cap. purch	94,376	80,989	84,353	77,779	72,400
<b>Crop Acres</b>					
Total acres owned	257	264	269	266	267
Total crop acres	810	829	813	797	789
Total crop acres owned	226	230	227	221	211
Total crop acres cash rented	563	576	562	553	553
Total crop acres share rented	21	23	23	24	24

**Table 3. Financial Summary**  
**Completely Organic Farms, by Net Farm Income**

	<u>Avg. All Farms</u>	<u>Low 33%</u>	<u>33 - 66%</u>	<u>High 34%</u>
Number of farms	41	13	14	14
<b>Income Statement</b>				
Gross cash farm income	272,219	174,379	222,139	413,151
Total cash farm expense	218,670	155,540	177,363	318,598
Net cash farm income	53,549	18,839	44,776	94,553
Inventory change	24,727	(13,237)	4,946	79,759
Depreciation	(18,016)	(14,335)	(7,127)	(32,323)
Net farm income from operations	60,260	(8,733)	42,596	141,989
Gain or loss on capital sales	(7)	-	(21)	-
Average net farm income	60,253	(8,733)	42,574	141,989
Median net farm income	38,146	701	37,224	122,565
<b>Profitability (cost)</b>				
Rate of return on assets	6.5%	-2.1%	4.8%	12.7%
Rate of return on equity	8.2%	-11.2%	4.1%	18.4%
Operating profit margin	17.7%	-10.7%	12.6%	27.3%
Asset turnover rate	36.6%	19.2%	38.4%	46.7%
<b>Liquidity &amp; Repayment (end of year)</b>				
Current assets	155,103	84,768	85,668	289,848
Current liabilities	72,311	37,378	43,810	133,250
Current ratio	2.14	2.27	1.96	2.18
Working capital	82,792	47,390	41,859	156,598
Working capital to gross inc	28.0%	30.6%	18.4%	31.6%
Term debt coverage ratio	1.60	0.13	1.15	3.03
Replacement coverage ratio	1.27	0.10	0.93	2.32
<b>Solvency (end of year at market)</b>				
Total farm assets	1,130,634	989,213	893,401	1,499,188
Total farm liabilities	477,093	472,691	373,490	584,785
Total assets	1,301,121	1,178,992	1,043,908	1,671,739
Total liabilities	514,892	513,127	406,073	625,349
Net worth	786,229	665,865	637,835	1,046,391
Net worth change	71,663	64,886	18,551	131,069
Farm debt to asset ratio	42%	48%	42%	39%
Total debt to asset ratio	40%	44%	39%	37%
<b>Nonfarm Information</b>				
Net nonfarm income	14,382	15,773	16,400	11,071
Farms reporting living expenses	5	2	-	3
Total family living expense	37,411	-	-	-
Total living, invest, cap. purch	51,852	-	-	-
<b>Crop Acres</b>				
Total acres owned	195	167	169	246
Total crop acres	295	190	187	501
Total crop acres owned	110	72	88	168
Total crop acres cash rented	180	118	98	321
Total crop acres share rented	4	-	-	12

**Table 4. Financial Summary, 2011**  
**Completely Organic Farms, by Farm Size (Gross Farm Income )**

	<u>Avg.</u> <u>All Farms</u>	<u>\$50,001-</u> <u>100,000</u>	<u>\$100,001-</u> <u>250,000</u>	<u>\$250,001-</u> <u>500,000</u>	<u>\$500,001-</u> <u>1,000,000</u>
Number of farms	41	5	12	15	5
<b>Income Statement</b>					
Gross cash farm income	272,219	76,088	155,871	327,190	774,170
Total cash farm expense	218,670	61,557	113,995	264,627	632,231
Net cash farm income	53,549	14,531	41,876	62,563	141,939
Inventory change	24,727	6,302	15,652	(5,398)	167,457
Depreciation	(18,016)	(2,898)	(13,270)	(14,293)	(66,426)
Net farm income from operations	60,260	17,935	44,258	42,872	242,971
Gain or loss on capital sales	(7)	-	(25)	-	-
Average net farm income	60,253	17,935	44,233	42,872	242,971
Median net farm income	38,146	21,121	39,974	38,146	176,024
<b>Profitability (cost)</b>					
Rate of return on assets	6.5%	7.7%	5.7%	4.2%	11.1%
Rate of return on equity	8.2%	19.3%	6.8%	3.1%	15.9%
Operating profit margin	17.7%	28.5%	21.2%	11.5%	23.2%
Asset turnover rate	36.6%	27.2%	26.9%	36.6%	48.0%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	155,103	36,838	113,788	143,100	512,263
Current liabilities	72,311	24,929	48,562	52,458	281,868
Current ratio	2.14	1.48	2.34	2.73	1.82
Working capital	82,792	11,909	65,227	90,642	230,396
Working capital to gross inc	28.0%	14.8%	38.4%	28.9%	23.9%
Term debt coverage ratio	1.60	1.36	1.39	0.84	2.82
Replacement coverage ratio	1.27	1.17	1.17	0.67	2.06
<b>Solvency (end of year at market)</b>					
Total farm assets	1,130,634	450,709	779,051	1,293,585	2,601,357
Total farm liabilities	477,093	245,415	336,865	526,480	1,127,280
Total assets	1,301,121	543,712	918,499	1,506,932	2,829,673
Total liabilities	514,892	266,845	369,091	587,701	1,139,185
Net worth	786,229	276,867	549,408	919,232	1,690,488
Net worth change	71,663	12,540	37,549	87,361	219,383
Farm debt to asset ratio	42%	54%	43%	41%	43%
Total debt to asset ratio	40%	49%	40%	39%	40%
<b>Nonfarm Information</b>					
Net nonfarm income	14,382	40,532	19,976	-722	5,559
Farms reporting living expenses	5	-	2	1	1
Total family living expense	37,411	-	-	-	-
Total living, invest, cap. purch	51,852	-	-	-	-
<b>Crop Acres</b>					
Total acres owned	195	32	196	233	299
Total crop acres	295	88	253	277	783
Total crop acres owned	110	42	120	86	255
Total crop acres cash rented	180	46	132	181	528
Total crop acres share rented	4	-	2	10	-



**Table 5. Financial Summary  
Completely Organic Crop Farms, by Year**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	10	14	12	14	17
<b>Income Statement</b>					
Gross cash farm income	243,441	238,556	250,717	316,502	306,112
Total cash farm expense	174,413	174,569	184,400	239,070	239,798
Net cash farm income	69,028	63,987	66,317	77,432	66,314
Inventory change	11,572	1,867	(36,747)	69,587	112,679
Depreciation	(19,448)	(17,686)	(26,691)	(26,654)	(22,718)
Net farm income from operations	61,153	48,168	2,879	120,365	156,276
Gain or loss on capital sales	(30)	-	375	-	-
Average net farm income	61,123	48,168	3,254	120,365	156,276
Median net farm income	49,019	10,043	2,585	98,337	76,099
<b>Profitability (cost)</b>					
Rate of return on assets	8.2%	4.6%	-1.1%	13.3%	19.8%
Rate of return on equity	11.0%	5.1%	-5.0%	17.9%	30.5%
Operating profit margin	18.9%	14.8%	-4.4%	28.8%	38.0%
Asset turnover rate	43.4%	30.9%	24.5%	46.1%	52.1%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	194,654	282,911	255,948	321,327	274,079
Current liabilities	82,128	160,657	125,704	128,300	115,748
Current ratio	2	2	2	3	2
Working capital	112,526	122,255	130,244	193,027	158,331
Working capital to gross inc	46.5%	50.9%	61.5%	49.2%	39.9%
Term debt coverage ratio	3.42	1.91	0.51	2.79	4.08
Replacement coverage ratio	2.30	1.62	0.39	2.42	4.08
<b>Solvency (end of year at market)</b>					
Total farm assets	736,164	883,891	1,024,461	1,029,708	1,041,004
Total farm liabilities	285,708	442,459	444,597	432,622	431,807
Total assets	915,996	1,047,317	1,229,514	1,203,099	1,241,041
Total liabilities	331,245	472,063	487,642	465,108	489,702
Net worth	584,752	575,254	741,872	737,991	751,339
Net worth change	61,148	51,416	-1,243	74,376	140,806
Farm debt to asset ratio	39%	50%	43%	42%	41%
Total debt to asset ratio	36%	45%	40%	39%	39%
<b>Nonfarm Information</b>					
Net nonfarm income	33,067	28,155	39,378	33,328	34,483
Farms reporting living expenses	1	2	2	3	3
Total family living expense	-	-	-	-	-
Total living, invest, cap. purch	-	-	-	-	-
<b>Crop Acres</b>					
Total acres owned	173	223	265	257	284
Total crop acres	511	664	707	734	772
Total crop acres owned	183	216	288	254	237
Total crop acres cash rented	313	449	379	428	505
Total crop acres share rented	15	-	40	52	30

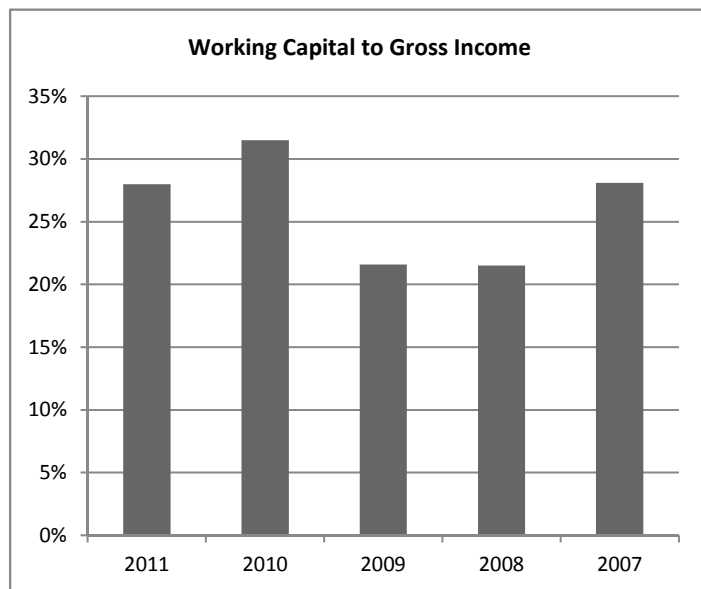
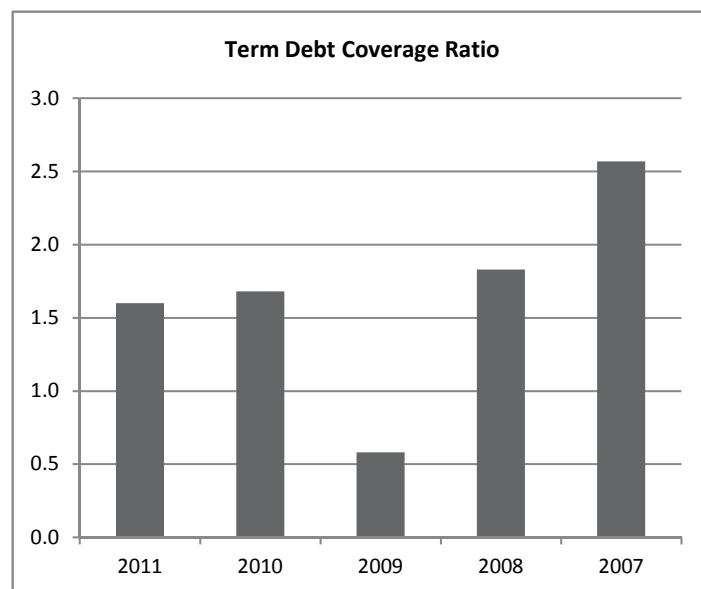
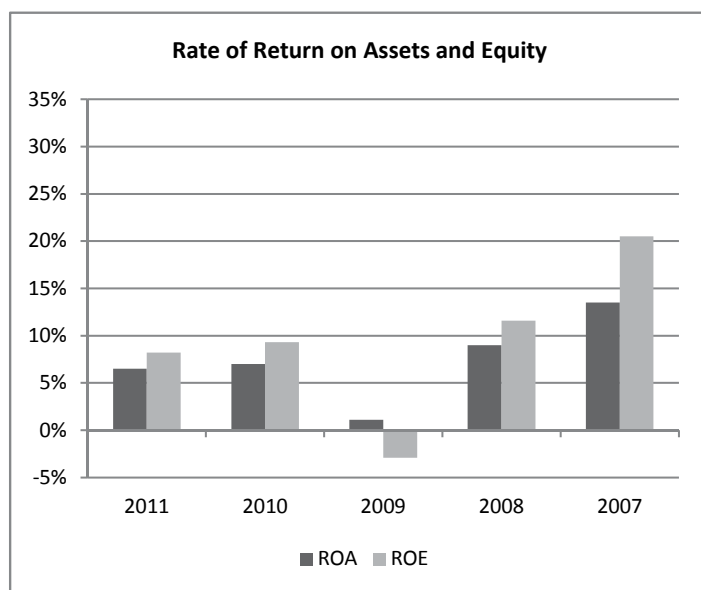
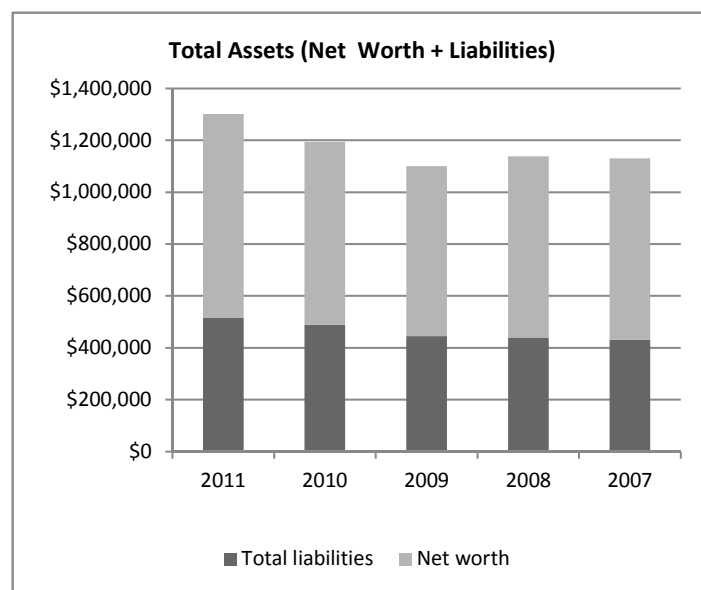
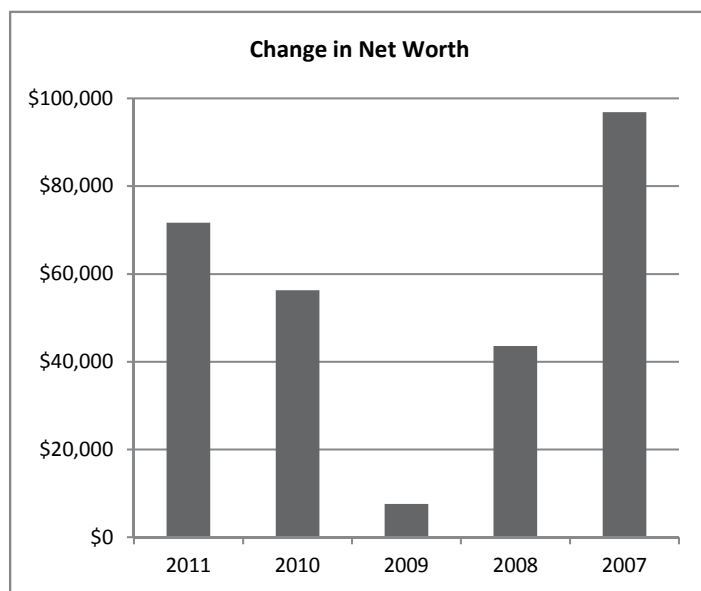
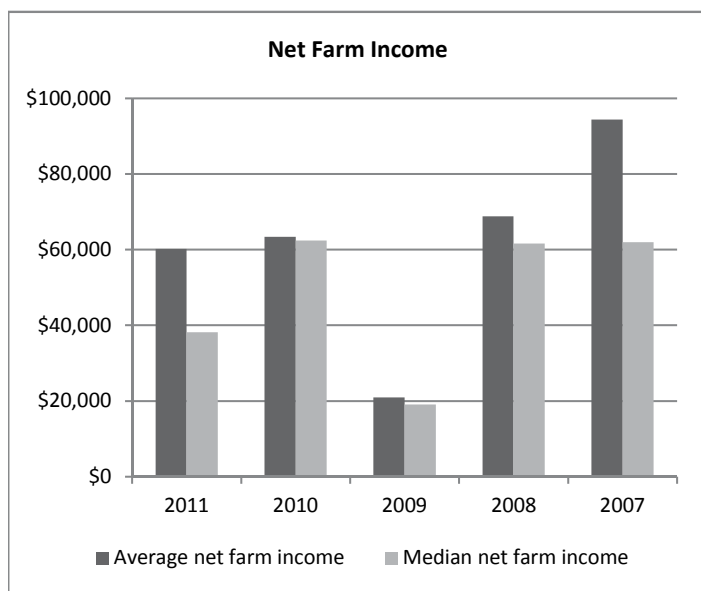
**Table 6. Financial Summary  
Completely Organic Dairy Farms, by Year**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	25	31	32	32	21
<b>Income Statement</b>					
Gross cash farm income	293,843	315,508	277,792	245,668	244,243
Total cash farm expense	248,183	262,873	224,126	197,375	195,527
Net cash farm income	45,660	52,635	53,666	48,293	48,716
Inventory change	37,091	38,358	(1,086)	18,239	32,143
Depreciation	(18,325)	(19,746)	(16,233)	(16,105)	(15,988)
Net farm income from operations	64,426	71,247	36,347	50,427	64,871
Gain or loss on capital sales	-	56	-	217	-
Average net farm income	64,426	71,303	36,347	50,644	64,871
Median net farm income	38,146	63,247	26,237	56,347	61,958
<b>Profitability (cost)</b>					
Rate of return on assets	6.4%	7.6%	3.0%	6.4%	8.2%
Rate of return on equity	7.9%	10.7%	0.6%	6.8%	10.8%
Operating profit margin	18.0%	17.9%	8.0%	17.6%	23.3%
Asset turnover rate	35.8%	42.3%	37.5%	36.5%	35.3%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	151,531	151,906	99,071	99,439	109,843
Current liabilities	72,524	77,223	68,734	81,085	76,180
Current ratio	2.09	1.97	1.44	1.23	1.44
Working capital	79,007	74,683	30,337	18,354	33,663
Working capital to gross inc	23.5%	20.9%	11.0%	6.9%	12.3%
Term debt coverage ratio	1.46	1.59	0.74	1.27	1.53
Replacement coverage ratio	1.16	1.33	0.66	1.16	1.53
<b>Solvency (end of year at market)</b>					
Total farm assets	1,292,937	1,136,861	933,445	1,007,845	1,095,011
Total farm liabilities	566,405	496,861	387,291	403,680	417,949
Total assets	1,477,502	1,286,053	1,100,789	1,168,557	1,276,742
Total liabilities	608,346	531,246	430,154	444,922	469,851
Net worth	869,157	754,808	670,635	723,635	806,891
Net worth change	83,004	40,236	14,757	31,070	58,966
Farm debt to asset ratio	44%	44%	41%	40%	38%
Total debt to asset ratio	41%	41%	39%	38%	37%
<b>Nonfarm Information</b>					
Net nonfarm income	8,775	10,094	10,181	14,462	15,061
Farms reporting living expenses	3	7	6	6	3
Total family living expense	-	53,681	40,136	35,366	-
Total living, invest, cap. Purch	-	65,252	33,850	24,419	-
<b>Crop Acres</b>					
Total acres owned	205	196	192	207	194
Total crop acres	210	249	210	216	143
Total crop acres owned	77	79	79	99	71
Total crop acres cash rented	133	167	132	116	72
Total crop acres share rented	1	3	-	1	-

**Table 7. Organic Crop Production and Marketing Summary, by Year**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	61	79	78	78	69
<b>Acreage Summary</b>					
Total acres owned	196	231	236	237	279
Total crop acres	340	417	410	429	526
Crop acres owned	117	144	158	165	187
Crop acres cash rented	220	270	241	253	323
Crop acres share rented	3	3	11	11	17
Total pasture acres	41	44	46	46	31
Percent crop acres owned	34%	35%	38%	38%	35%
<b>Average Price Received (Cash Sales Only)</b>					
Barley, Organic per bu	-	7.05	7.88	10.02	5.54
Corn, Blue, Organic per bu	-	-	10.79	-	-
Corn, Organic per bu	8.89	6.11	7.74	8.71	6.85
Hay, Alfalfa, Organic per ton	79.90	131.55	109	120.37	125.17
Oats, Organic per bu	4.40	3.64	4.58	4.46	4.93
Soybeans, Organic per bu	18.65	15.00	21.08	22.50	16.17
Wheat, Spring, Organic per bu	8.88	5.41	13.42	16.26	9.87
<b>Average Yield Per Acre</b>					
Barley, Organic (bu)	31.02	59.93	55.45	51.55	31.85
Corn, Organic (bu)	93.90	127.31	110.93	110.01	80.58
Corn, Blue, Organic (bu)	-	-	-	46.81	-
Corn Silage, Organic (ton)	14.02	16.82	14.87	13.08	11.64
Hay, Alfalfa, Organic (ton)	3.97	3.83	2.70	3.31	3.35
Hay, Grass, Organic (ton)	2.32	3.83	3.23	3.13	2.63
Hay, Mixed, Organic (ton)	2.50	2.55	2.06	2.53	2.03
Oatlage, Organic (ton)	-	-	5.54	3.38	-
Oats, Organic (bu)	52.40	51.7	58.38	56.72	77.31
Pasture, Organic (aum)	4.09	5.29	4.00	5.70	3.89
Peas, Organic (lb)	-	1,987.85	-	-	-
Sorghum Silage, Organic (ton)	-	13.91	6.81	-	-
Soybeans, Organic (bu)	20.87	27.97	23.07	18.56	20.83
Wheat, Spring, Organic (bu)	26.00	39.62	52.85	43.36	25.33

**Figure A. Selected Factors - Completely Organic Farms - by Year**



**Figure B. Selected Factors - Completely Organic Farms - by Net Farm Income**

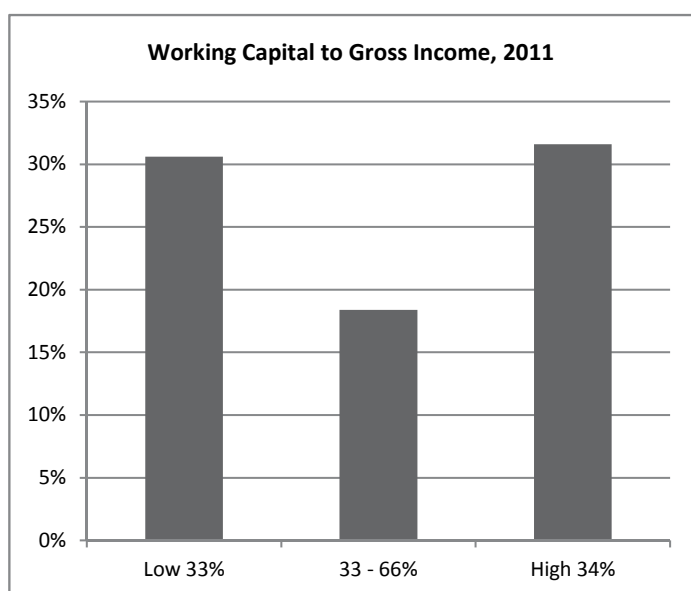
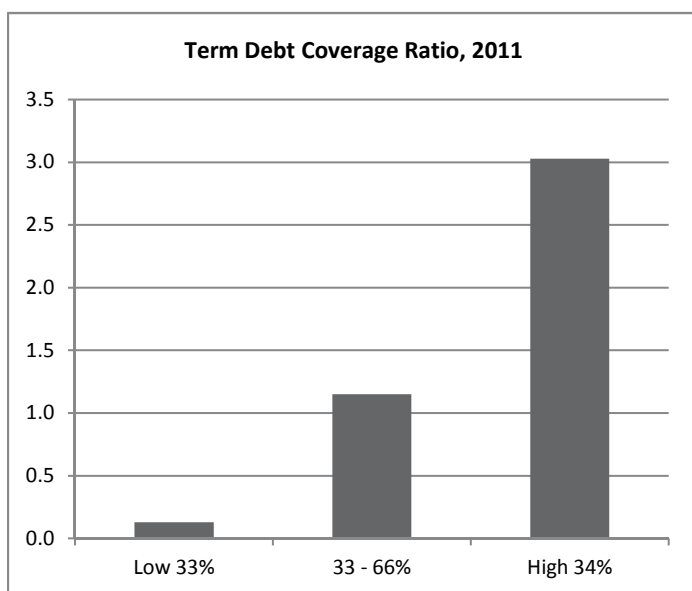
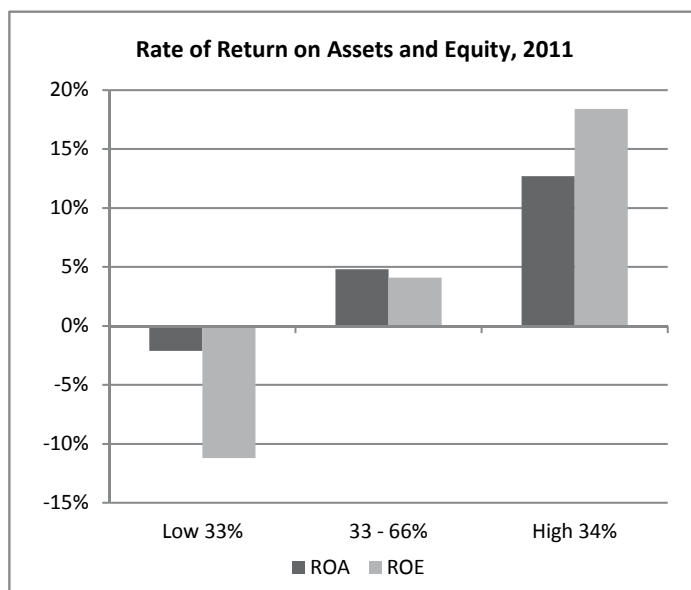
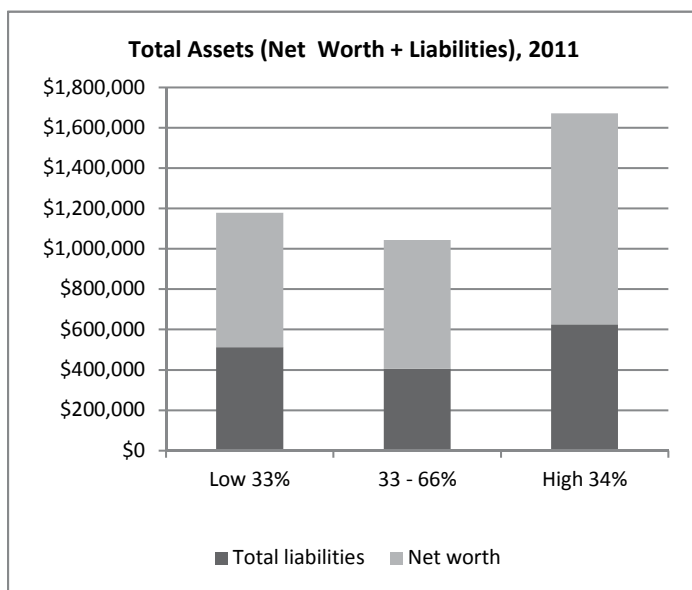
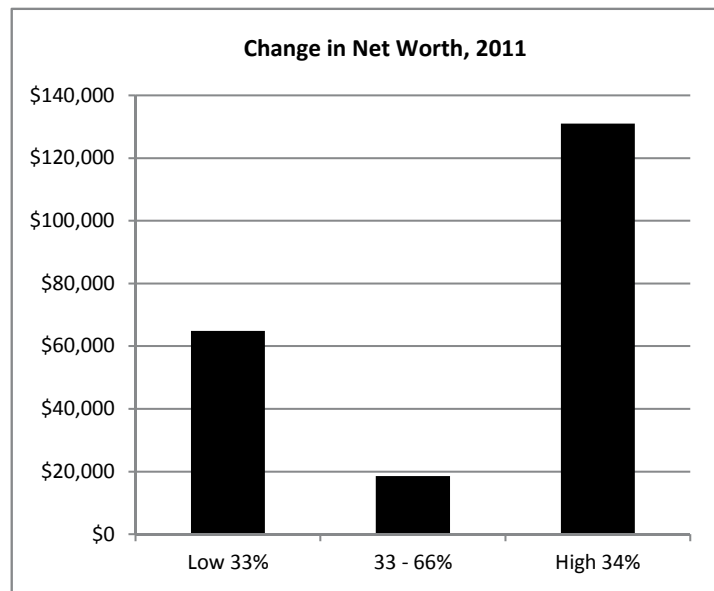
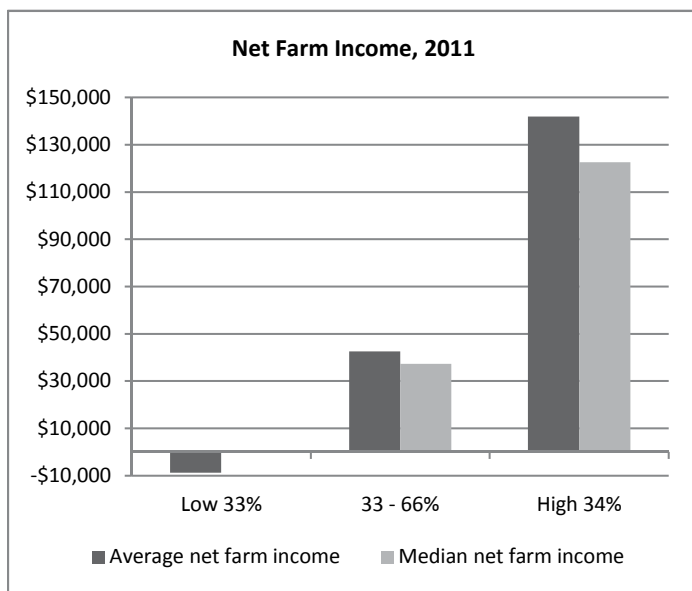
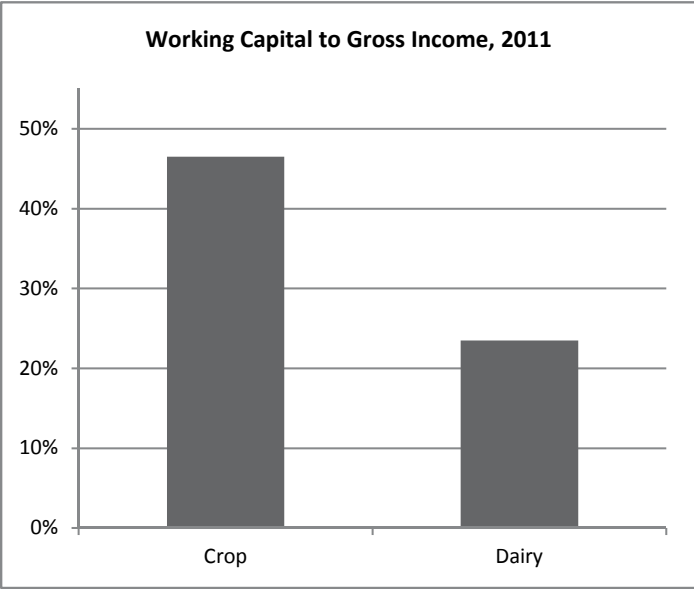
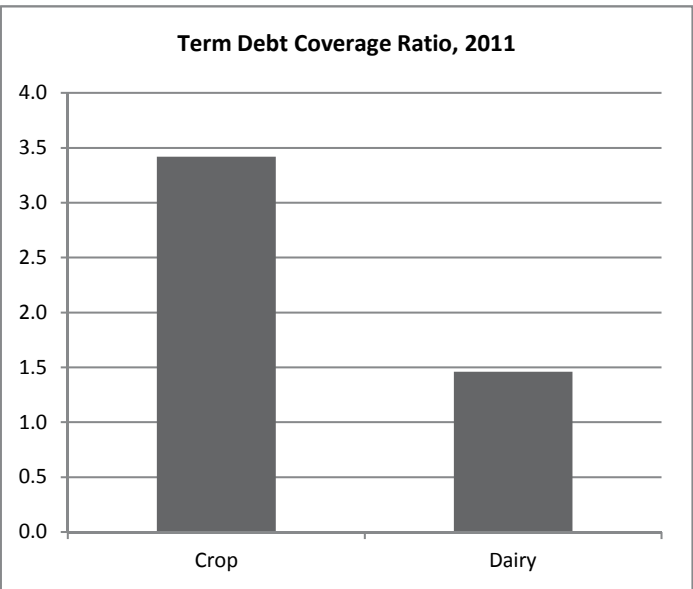
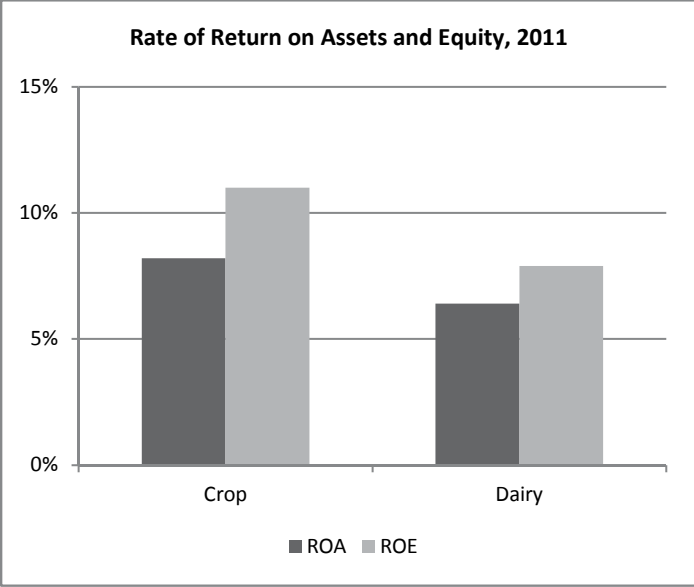
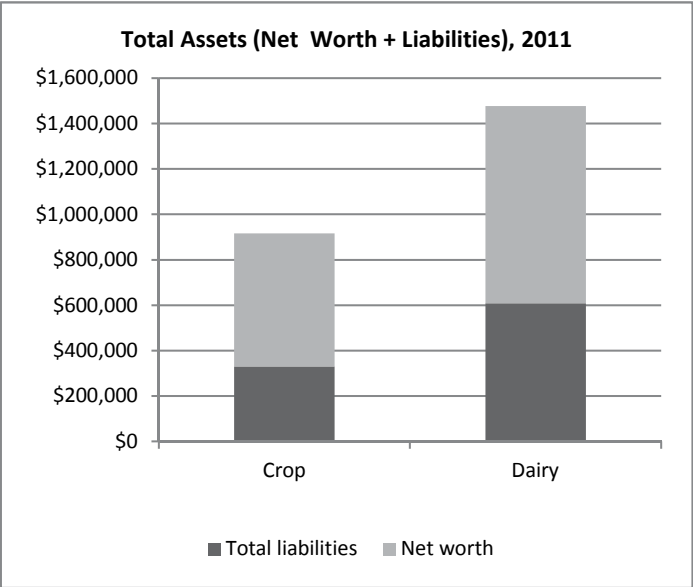
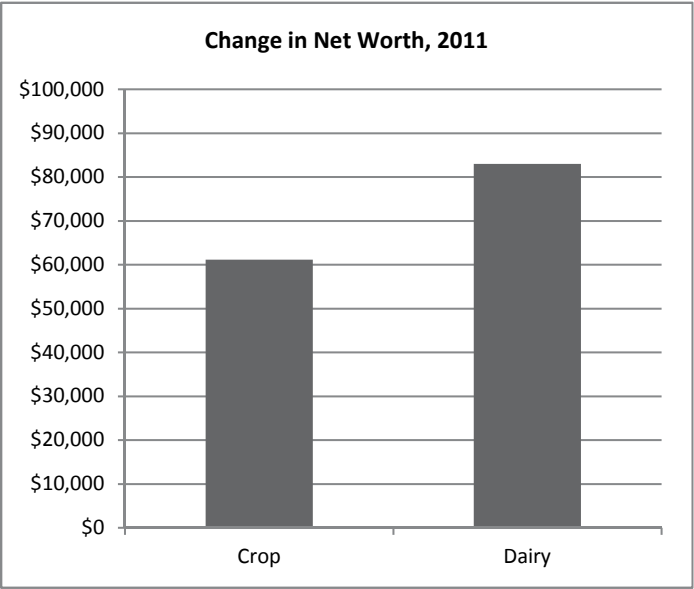
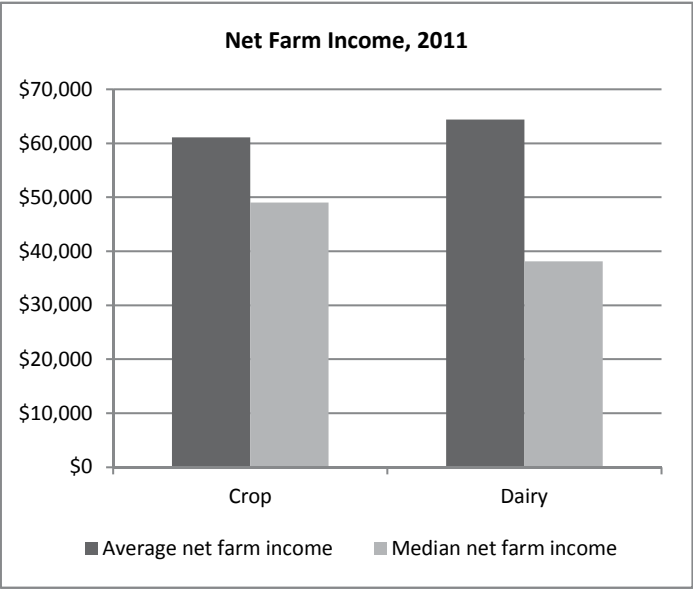
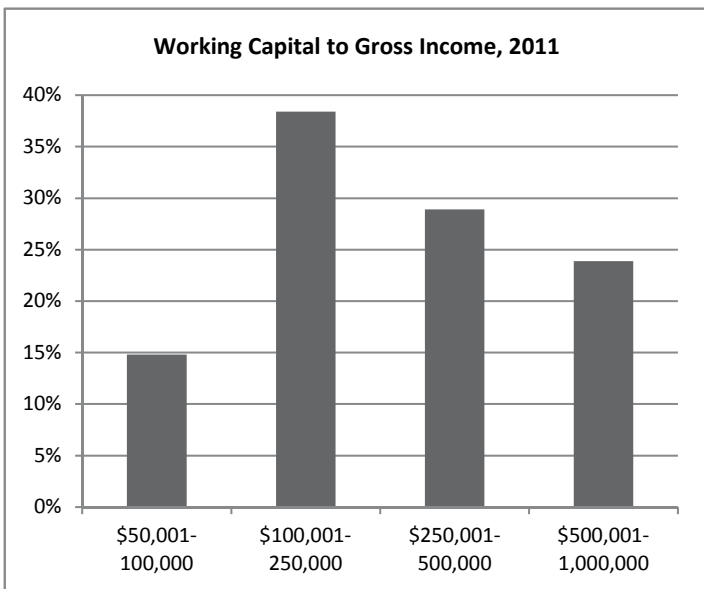
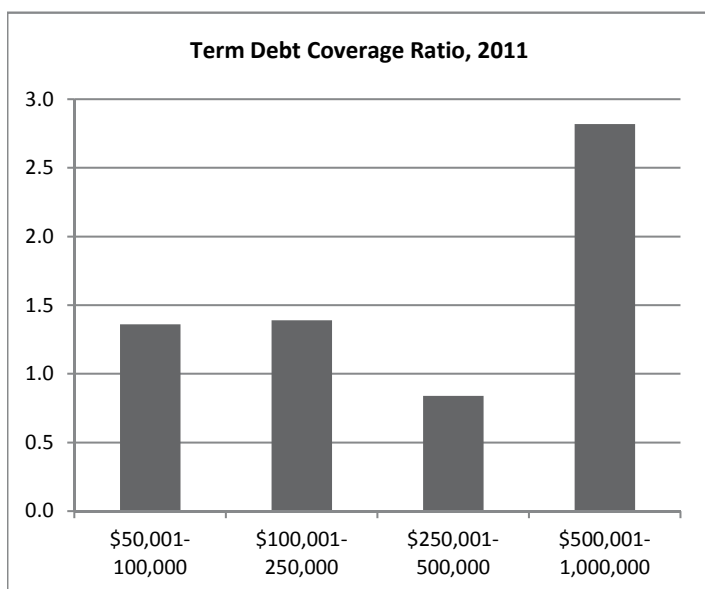
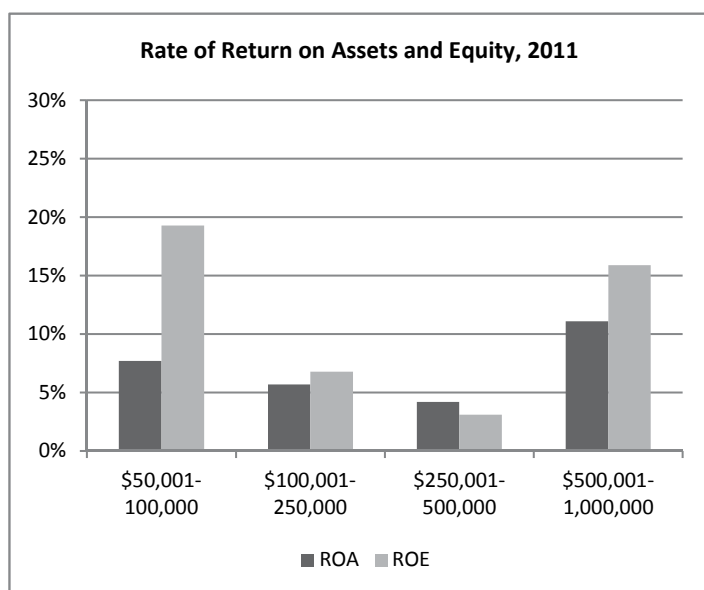
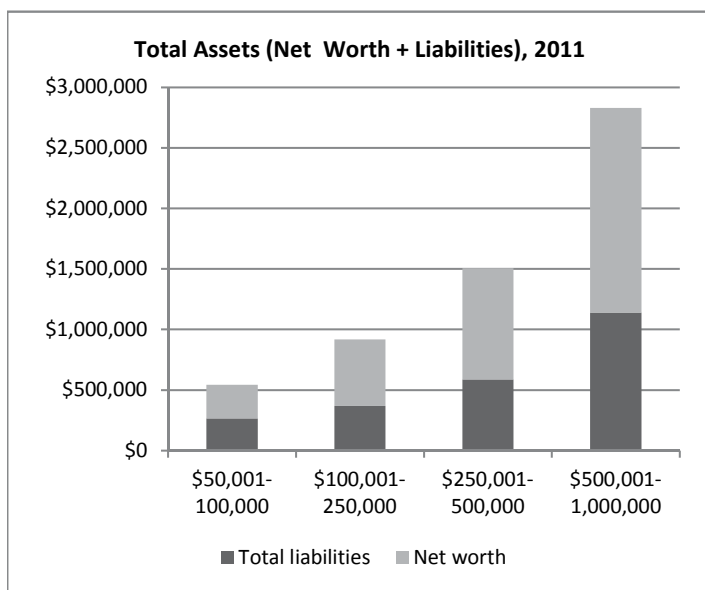
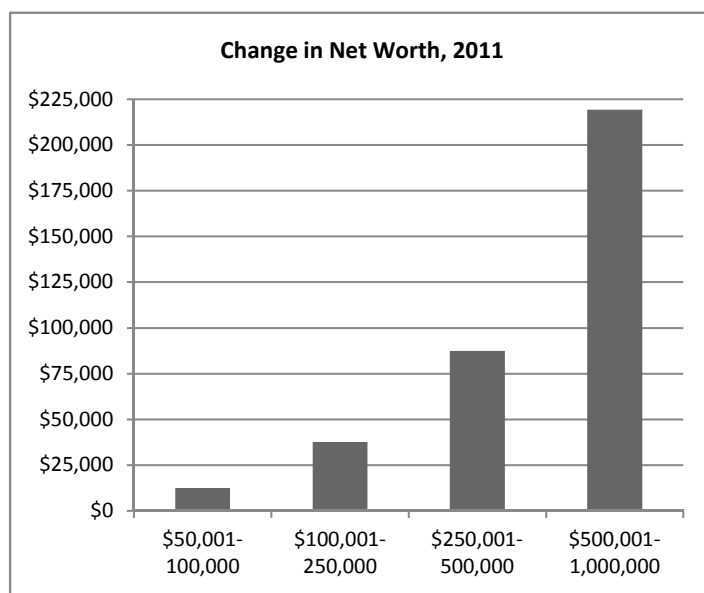
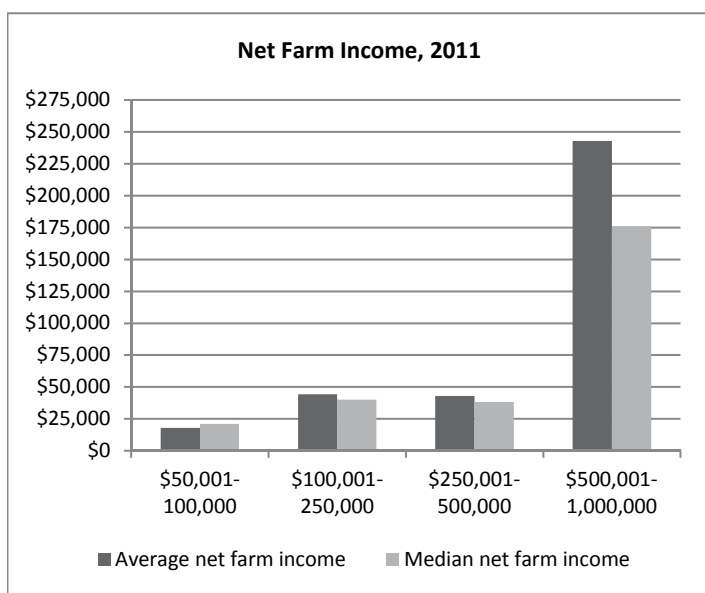




Figure C. Selected Factors - Completely Organic Farms - by Farm Type



**Figure D. Selected Factors - Completely Organic Farms - by Farm Size (gross farm income)**



**Figure E. Organic Crop, Forage, and Livestock Trends<sup>1, 2</sup>**

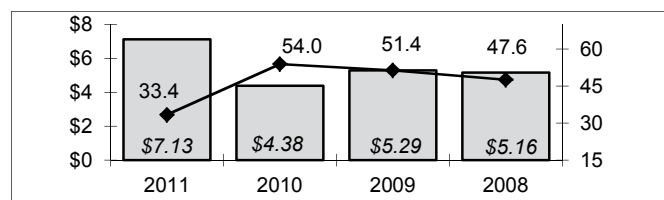
Graphs show

Cost of Production (bar)

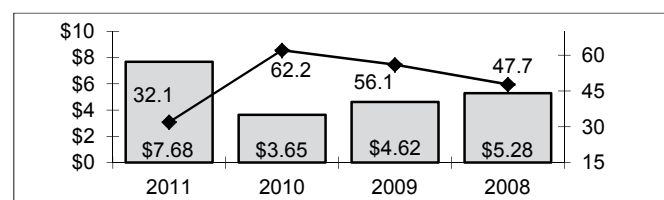
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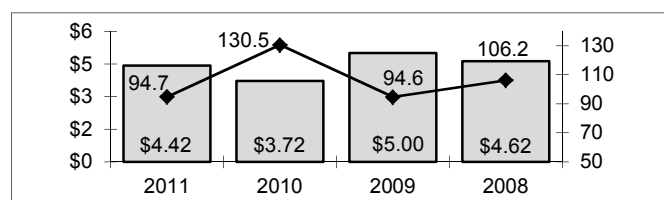
	2011	2010	2009	2008
<b><u>Barley - Owned Land</u></b>				
Yield per acre (bu)	33.4	54.0	51.4	47.6
Value per bu	8.21	5.08	6.25	6.63
Direct Exp per acre	142.19	136.86	153.99	139.85
Total Exp per acre	274.24	238.74	256.33	224.55
Net Return per acre	58.52	55.32	77.68	97.89
Cost of Production per bu	7.13	4.38	5.29	5.16



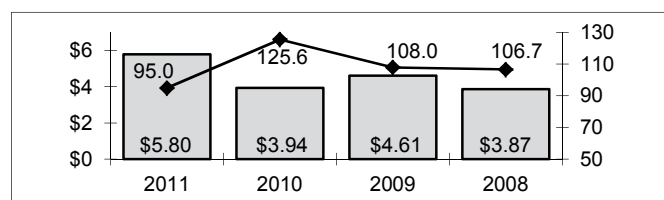
<b><u>Barley - Rented Land</u></b>				
Yield per acre (bu)	32.1	62.2	56.1	47.7
Value per bu	7.37	5.41	5.37	8.36
Direct Exp per acre	206.20	165.25	181.39	176.20
Total Exp per acre	299.60	209.40	242.46	247.67
Net Return per acre	9.30	128.37	61.90	170.80
Cost of Production per bu	7.68	3.65	4.62	5.28



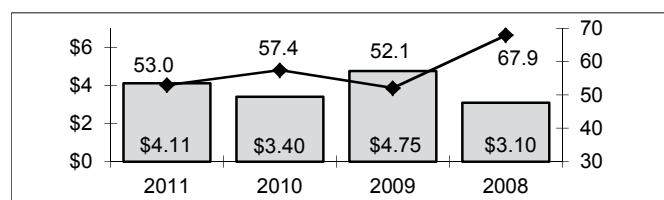
<b><u>Corn - Owned Land</u></b>				
Yield per acre (bu)	94.74	130.53	94.64	106.21
Value per bu	10.43	6.91	5.97	8.6
Direct Exp per acre	329.54	295.12	256.97	300.04
Total Exp per acre	515.29	477.86	446.37	497.06
Net Return per acre	618.05	442.98	132.08	455.36
Cost of Production per bu	4.42	3.72	5.00	4.62



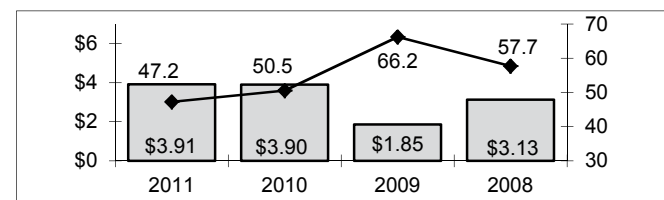
<b><u>Corn - Rented Land</u></b>				
Yield per acre (bu)	95.0	125.6	108.0	106.7
Value per bu	10.72	7.19	6.62	9.49
Direct Exp per acre	510.15	406.05	383.66	358.26
Total Exp per acre	631.68	488.60	480.36	438.40
Net Return per acre	503.81	434.74	240.69	626.61
Cost of Production per bu	5.80	3.94	4.61	3.87



<b><u>Oats - Owned Land</u></b>				
Yield per acre (bu)	53.0	57.4	52.1	67.9
Value per bu	6.10	4.90	5.15	5.10
Direct Exp per acre	131.83	129.41	129.35	116.27
Total Exp per acre	269.44	246.09	242.79	250.28
Net Return per acre	127.54	84.80	38.12	146.60
Cost of Production per bu	4.11	3.40	4.75	3.10



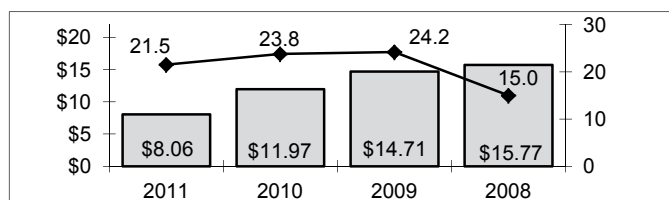
<b><u>Oats - Rented Land</u></b>				
Yield per acre (bu)	47.2	50.5	66.2	57.7
Value per bu	5.03	3.94	3.67	4.73
Direct Exp per acre	138.43	141.54	111.48	135.93
Total Exp per acre	175.88	195.20	150.20	193.24
Net Return per acre	64.68	12.83	123.20	107.36
Cost of Production per bu	3.91	3.90	1.85	3.13



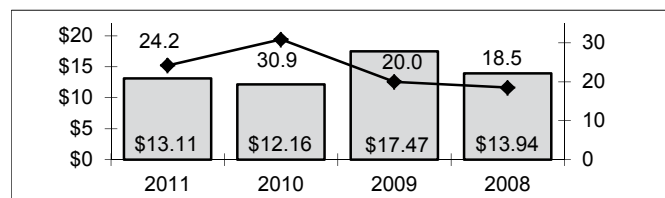
<sup>1</sup> Net return does NOT include labor or management

<sup>2</sup> Cost of Production DOES include labor and management costs

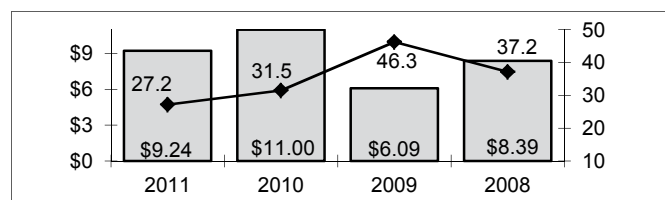
	2011	2010	2009	2008
<b><u>Soybeans - Owned Land</u></b>				
Yield per acre (bu)	21.5	23.8	24.2	15.0
Value per bu	21.24	19.90	17.65	19.39
Direct Exp per acre	189.93	145.07	187.11	147.86
Total Exp per acre	349.84	260.92	354.63	286.49
Net Return per acre	311.42	215.05	92.62	78.12
Cost of Production per bu	8.06	11.97	14.71	15.77



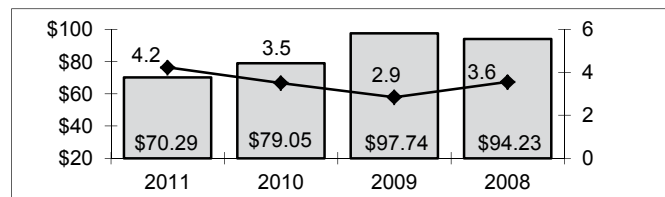
<b><u>Soybeans - Rented Land</u></b>				
Yield per acre (bu)	24.2	30.9	20.0	18.5
Value per bu	21.63	18.58	18.19	22.93
Direct Exp per acre	350.20	291.36	272.92	296.04
Total Exp per acre	426.44	357.80	356.98	361.97
Net Return per acre	219.43	223.26	45.13	187.62
Cost of Production per bu	13.11	12.16	17.47	13.94



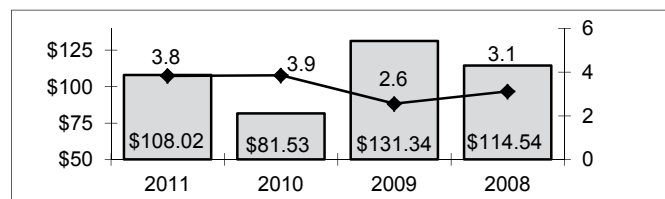
<b><u>Spring Wheat - Owned Land</u></b>				
Yield per acre (bu)	27.2	31.5	46.3	37.2
Value per bu	12.55	10.13	6.01	13.88
Direct Exp per acre	167.84	167.99	172.14	181.59
Total Exp per acre	289.73	327.12	304.97	288.63
Net Return per acre	119.58	(7.58)	8.47	227.45
Cost of Production per bu	9.24	11.00	6.09	8.39



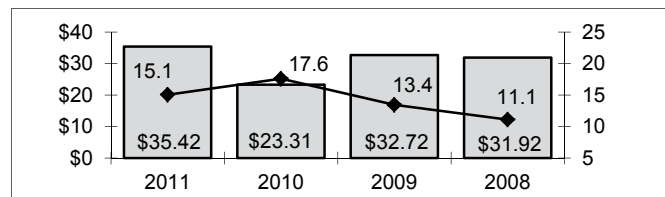
<b><u>Alfalfa Hay - Owned Land</u></b>				
Yield per acre (ton)	4.2	3.5	2.9	3.6
Value per ton	99.43	112.50	122.78	138.16
Direct Exp per acre	160.76	142.54	132.47	175.24
Total Exp per acre	285.78	258.09	247.96	307.51
Net Return per acre	150.26	141.25	106.34	184.94
Cost of Production per ton	70.29	79.05	97.74	94.23



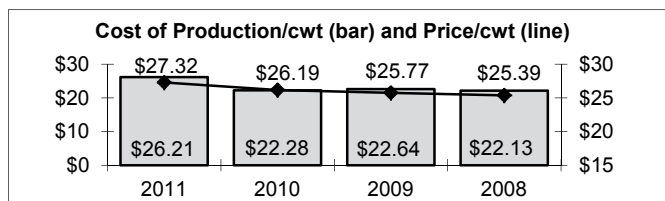
<b><u>Alfalfa Hay - Rented Land</u></b>				
Yield per acre (ton)	3.8	3.9	2.6	3.1
Value per ton	117.75	118.66	127.21	142.21
Direct Exp per acre	264.25	219.87	215.57	245.82
Total Exp per acre	395.70	300.05	307.26	328.73
Net Return per acre	61.34	160.58	17.41	115.57
Cost of Production per ton	108.02	81.53	131.34	114.54



<b><u>Corn Silage - Rented Land</u></b>				
Yield per acre (ton)	15.1	17.6	13.4	11.1
Value per ton	50.82	36.05	42.00	44.04
Direct Exp per acre	389.64	294.55	335.20	261.44
Total Exp per acre	512.87	382.31	420.61	342.00
Net Return per acre	258.57	253.24	144.77	163.37
Cost of Production per bu	35.42	23.31	32.72	31.92



<b><u>Dairy</u></b>				
Production lb/cow	12,133	12,819	12,129	12,629
Avg. Price rec'd/cwt	27.32	26.19	25.77	25.39
Total Feed Cost/cwt	11.85	9.44	10.33	10.31
Cost of Production/cwt	26.21	22.28	22.64	22.13
Net Return/cwt	3.47	5.90	5.37	5.34
Net Return/cow	421.37	756.20	651.63	674.65



# CROP ENTERPRISE REPORTS

Crop rotation is a critical strategy for weed, disease, and nutrient management on farms, so it is important for farmers to be able to grow a variety of crops profitably. According to the data reported here, the most profitable crop on a per acre basis in 2011 was corn, with net returns (excluding labor and management) of \$618 per acre on owned land, followed by soybeans (\$311) and corn silage (\$270). Corn and soybean yields were down – likely due, at least in part, to very wet weather across most of the state in May and June 2011 that delayed planting. Yields of some earlier-planted crops, including barley and wheat, were up. Prices for many crops were substantially higher in 2011 than 2010, with corn selling for about 50% more, soybeans 11% more, and wheat 24% more.

The Crop Enterprise Analysis tables that follow show the average physical production, gross return, direct expenses, overhead expenses, and net returns per acre for various certified organic cropping enterprises.<sup>6</sup> Separate tables are included for owned and cash rented land. The reports include historical comparisons of enterprise returns for years 2007 through 2011. Only crops with sufficient instances to summarize are included.

*Gross Return* per acre includes the value of the crop produced plus any other income directly associated with production of the crop, including LDP payments, crop insurance proceeds and any disaster payments that might have been received. It does not include direct and counter-cyclical government payments (see *Net return with government payments*).

*The Value per unit* (ton or bushel) is assigned by the producer. For cash crops, the value is based on the actual sales price for production sold or contracted before year-end and the inventory value for crops still in inventory at year-end. The local harvest-time price is used for forages and other feed crops.

*Net return per acre* is the amount contributed toward operator labor, management, and equity capital. Land costs include land rent on the rented land pages but only actual interest paid and real estate taxes on owned land. **For this reason, net returns from owned and rented land should not be compared.**

*Net return with government payments* is the net return per acre after decoupled government payments such as direct and counter-cyclical government payments have been added. These payments are generally allocated evenly per acre across all crops except vegetables and pasture.

*Net return over labor and management* is the return, including government payments, after compensating the operator for unpaid labor and management. This is also known as the per acre return to equity capital.

*Cost of production* shows the average cost per unit produced in several cost categories:

*Total direct* and overhead expense per unit is the breakeven price needed to cover cash costs and depreciation.

*Less government and other income* is the breakeven price when government payments and any miscellaneous income are used to offset some expenses.

*With labor and management* is the breakeven price to provide a labor and management return for the operator(s).

*Machinery cost per acre* includes fuel and oil, repairs, custom hire, machinery lease payments, machinery depreciation, and interest on intermediate debt.

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<sup>6</sup>The farms reporting may be completely organic or may be “split operations,” reporting here on their certified organic production.



**Table 8. Crop Enterprise Analysis  
Barley, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	9	8	14	10	8
Number of farms	8	8	10	8	7
Acres	37.0	24.6	19.0	71.8	49.2
Yield per acre (bu.)	33.4	54.0	51.4	47.6	35.0
Operators share of yield %	100	100	100	100	100
Value per bu.	8.21	5.08	6.25	6.63	6.14
Other product return per acre	26.66	3.66	2.79	-	-
Total product return per acre	301.01	278.15	324.42	315.72	215.25
Crop insurance per acre	22.48	9.63	-	1.69	-
Other crop income per acre	9.26	6.29	9.59	5.04	38.36
Gross return per acre	332.75	294.07	334.01	322.45	253.60
<b>Direct Expenses</b>					
Seed	35.57	33.12	29.78	26.31	22.38
Fertilizer	12.75	28.67	28.03	24.81	13.21
Crop insurance	9.37	4.14	7.91	7.10	5.54
Drying expense	-	-	14.41	-	-
Fuel & oil	22.35	22.54	15.73	31.82	14.13
Repairs	40.26	23.06	33.84	30.60	20.63
Custom hire	4.82	6.06	10.99	1.11	1.47
Hired labor	2.12	0.56	8.37	-	-
Machinery leases	-	4.64	-	-	-
Utilities	1.02	-	0.21	-	-
Hauling and trucking	1.60	-	-	1.52	0.73
Marketing	-	-	1.80	-	-
Organic certification	0.71	0.66	0.47	4.57	2.77
Operating interest	4.26	13.07	1.58	3.88	6.88
Miscellaneous	7.38	0.34	0.88	8.13	0.28
Total direct expenses per acre	142.19	136.86	153.99	139.85	88.01
Return over direct exp per acre	190.56	157.21	180.02	182.60	165.59
<b>Overhead Expenses</b>					
Custom hire	-	0.27	-	0.43	8.57
Hired labor	17.33	7.02	5.53	9.74	7.39
Machinery leases	0.48	2.87	2.60	0.02	0.19
RE & pers. property taxes	14.54	13.97	12.48	8.15	7.25
Farm insurance	4.40	4.54	5.20	5.43	4.05
Utilities	3.20	4.29	5.88	3.59	3.82
Dues & professional fees	2.56	4.10	2.93	2.94	3.06
Interest	46.01	40.32	39.66	24.09	22.75
Mach & bldg depreciation	37.14	18.03	23.73	29.79	36.59
Miscellaneous	6.38	6.48	4.33	0.53	3.15
Total overhead expenses per acre	132.04	101.89	102.35	84.71	96.83
Total dir & ovhd expenses per acre	274.24	238.74	256.33	224.55	184.84
Net return per acre	58.52	55.32	77.68	97.89	68.76
Government payments	12.50	11.80	8.55	14.60	12.36
Net return with govt pmts	71.01	67.13	86.23	112.49	81.12
Labor & management charge	34.89	29.08	36.77	42.35	39.25
Net return over lbr & mgt	36.12	38.04	49.46	70.14	41.87
<b>Cost of Production</b>					
Total direct expense per bu.	4.25	2.53	2.99	2.94	2.51
Total dir & ovhd exp per bu.	8.20	4.42	4.98	4.71	5.27
Less govt & other income	6.08	3.84	4.58	4.27	3.83
With labor & management	7.13	4.38	5.29	5.16	4.95
Net value per unit	8.21	5.08	6.25	6.63	6.14
Machinery cost per acre	104.78	80.69	92.15	94.52	82.57
Est. labor hours per acre	3.17	2.95	3.95	2.86	3.74

**Table 9. Crop Enterprise Analysis  
Barley, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	9	9	11	11	9
Number of farms	9	8	10	11	8
Acres	90.4	58.5	66.8	56.1	78.9
Yield per acre (bu.)	32.1	62.2	56.1	47.7	30.1
Operators share of yield %	100	100	100	100	100
Value per bu.	7.37	5.41	5.37	8.36	6.81
Other product return per acre	10.93	-	-	-	-
Total product return per acre	247.08	336.34	301.44	399.09	204.88
Crop insurance per acre	52.18	-	1.11	16.22	-
LDP income per acre	-	-	-	0.89	-
Other crop income per acre	9.64	1.42	1.81	2.27	17.22
Gross return per acre	308.90	337.77	304.36	418.47	222.10
<b>Direct Expenses</b>					
Seed	26.93	16.97	19.45	20.14	20.18
Fertilizer	3.69	23.67	21.31	24.22	24.08
Crop insurance	13.57	6.00	5.03	5.60	6.62
Drying expense	3.67	-	9.69	-	-
Fuel & oil	25.77	17.98	13.99	16.23	20.80
Repairs	47.81	17.88	33.40	31.91	27.35
Custom hire	2.72	4.63	7.34	8.60	3.04
Hired labor	0.95	0.34	-	1.11	-
Land rent	67.18	68.48	62.71	49.94	60.66
Machinery leases	0.18	1.14	-	-	-
Utilities	0.89	-	-	1.45	-
Hauling and trucking	0.86	-	-	1.81	4.63
Marketing	-	-	1.21	1.08	-
Organic certification	0.59	0.67	0.76	2.23	1.55
Operating interest	7.53	7.21	5.99	5.73	5.52
Miscellaneous	3.88	0.27	0.51	6.16	1.06
Total direct expenses per acre	206.20	165.25	181.39	176.20	175.48
Return over direct exp per acre	102.70	172.52	122.97	242.27	46.62
<b>Overhead Expenses</b>					
Custom hire	12.17	2.19	0.83	1.48	3.35
Hired labor	20.55	12.56	12.67	7.05	7.31
Machinery leases	0.30	0.06	0.42	0.11	0.89
Farm insurance	5.61	5.16	6.30	3.46	3.58
Utilities	7.51	6.38	6.10	2.96	3.57
Dues & professional fees	3.42	2.57	2.14	1.27	3.82
Interest	3.80	1.64	5.19	6.31	3.35
Mach & bldg depreciation	37.73	9.57	24.14	44.13	17.32
Miscellaneous	2.31	4.02	3.27	4.70	3.36
Total overhead expenses per acre	93.39	44.14	61.07	71.47	46.56
Total dir & ovhd expenses per acre	299.60	209.40	242.46	247.67	222.04
Net return per acre	9.30	128.37	61.90	170.80	0.05
Government payments	11.10	14.35	12.58	8.76	12.04
Net return with govt pmts	20.41	142.72	74.48	179.56	12.10
Labor & management charge	30.47	32.90	32.10	32.38	33.18
Net return over lbr & mgt	(10.06)	109.82	42.39	147.18	(21.08)
<b>Cost of Production</b>					
Total direct expense per bu.	6.43	2.66	3.23	3.69	5.83
Total dir & ovhd exp per bu.	9.35	3.37	4.32	5.19	7.38
Less govt & other income	6.73	3.12	4.05	4.60	6.41
With labor & management	7.68	3.65	4.62	5.28	7.51
Net value per unit	7.37	5.41	5.37	8.38	6.81
Machinery cost per acre	126.23	54.10	81.93	104.98	74.93
Est. labor hours per acre	3.10	2.68	2.99	2.70	2.99

**Table 10. Crop Enterprise Analysis  
Corn, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	14	31	22	33	20
Number of farms	14	23	19	21	16
Acres	40.5	40.1	28.4	26.0	40.1
Yield per acre (bu.)	94.7	130.5	94.6	106.2	98.5
Operators share of yield %	100	100	100	100	100
Value per bu.	10.43	6.91	5.97	8.60	8.88
Other product return per acre	-	4.07	3.56	-	6.35
Total product return per acre	987.74	906.52	568.77	913.62	880.66
Crop insurance per acre	144.60	3.46	5.81	35.83	-
Other crop income per acre	0.99	10.85	3.88	2.97	47.89
Gross return per acre	1,133.33	920.84	578.46	952.42	928.55
<b>Direct Expenses</b>					
Seed	62.50	53.61	61.24	58.24	38.96
Fertilizer	67.16	52.96	54.64	86.23	45.79
Non-chemical crop protect	30.63	0.64	0.96	4.29	1.26
Crop insurance	37.37	12.81	13.98	26.17	16.99
Drying expense	4.18	4.38	7.83	11.56	2.78
Irrigation energy	-	0.08	-	0.54	-
Fuel & oil	38.24	31.55	29.35	41.46	34.54
Repairs	59.71	34.99	60.21	47.34	30.20
Custom hire	5.41	14.16	12.13	8.68	3.70
Hired labor	0.57	0.12	1.24	0.32	-
Machinery leases	-	4.75	3.02	-	0.49
Hauling and trucking	-	3.45	3.26	0.12	0.30
Marketing	3.07	0.40	-	0.53	-
Organic certification	4.69	0.39	2.05	1.00	2.59
Operating interest	13.67	6.49	6.62	12.59	5.73
Miscellaneous	2.36	10.72	0.42	0.97	1.30
Total direct expenses per acre	329.54	295.12	256.97	300.04	184.63
Return over direct exp per acre	803.79	625.72	321.49	652.38	743.91
<b>Overhead Expenses</b>					
Custom hire	0.37	-	-	0.21	8.43
Hired labor	23.49	14.34	29.68	34.46	14.67
Machinery leases	-	1.05	2.81	0.63	4.19
Building leases	0.14	-	0.00	5.85	-
RE & pers. property taxes	17.29	13.96	11.74	13.19	13.70
Farm insurance	9.56	6.88	4.37	5.76	9.03
Utilities	11.37	7.34	8.53	4.97	5.62
Dues & professional fees	5.09	3.91	5.36	6.47	7.11
Interest	67.72	65.57	74.39	76.92	60.57
Mach & bldg depreciation	43.17	42.36	42.91	39.64	29.33
Miscellaneous	7.54	8.77	9.62	8.92	5.63
Total overhead expenses per acre	185.75	182.74	189.41	197.02	158.28
Total dir & ovhd expenses per acre	515.29	477.86	446.37	497.06	342.92
Net return per acre	618.05	442.98	132.08	455.36	585.63
Government payments	22.09	23.12	11.87	20.64	22.31
Net return with govt pmts	640.14	466.10	143.95	476.00	607.94
Labor & management charge	71.49	48.95	51.53	52.58	42.71
Net return over lbr & mgt	568.65	417.15	92.42	423.42	565.22
<b>Cost of Production</b>					
Total direct expense per bu.	3.48	2.26	2.72	2.82	1.87
Total dir & ovhd exp per bu.	5.44	3.66	4.72	4.68	3.48
Less govt & other income	3.67	3.34	4.45	4.12	2.70
With labor & management	4.42	3.72	5.00	4.62	3.14
Net value per unit	10.43	6.91	5.97	8.60	8.88
Machinery cost per acre	149.73	149.82	155.04	143.12	115.25
Est. labor hours per acre	4.37	5.22	7.37	7.24	5.39

**Table 11. Crop Enterprise Analysis  
Corn, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	26	34	22	24	25
Number of farms	23	26	18	23	20
Acres	63.2	44.8	57.5	46.3	73.4
Yield per acre (bu.)	95.0	125.6	108.0	106.7	77.0
Operators share of yield %	100	100	100	100	100
Value per bu.	10.72	7.19	6.62	9.49	8.09
Other product return per acre	-	8.58	2.67	-	3.83
Total product return per acre	1,017.91	911.41	717.58	1,012.10	627.00
Crop insurance per acre	108.65	3.44	3.47	40.33	-
Other crop income per acre	8.93	8.49	-	12.59	63.25
Gross return per acre	1,135.49	923.33	721.05	1,065.01	690.25
<b>Direct Expenses</b>					
Seed	72.47	64.03	74.83	48.98	48.34
Fertilizer	89.36	73.21	57.42	50.48	48.52
Crop chemicals	-	1.18	-	5.92	-
Non-chemical crop protect	16.27	5.23	4.21	6.47	4.30
Crop insurance	28.88	11.81	13.58	16.11	14.94
Drying expense	3.13	6.92	24.36	4.79	1.37
Storage	-	1.11	-	-	0.48
Fuel & oil	42.75	35.29	24.02	29.94	27.45
Repairs	61.81	39.36	39.35	32.82	33.38
Custom hire	6.77	14.71	14.22	21.05	25.08
Hired labor	0.15	1.46	1.61	9.41	-
Land rent	166.47	105.78	113.30	82.52	96.31
Utilities	0.89	0.02	0.53	1.69	-
Hauling and trucking	5.60	0.25	2.56	-	3.17
Marketing	0.56	0.04	0.16	0.96	0.02
Organic certification	3.48	0.99	1.12	1.08	2.94
Operating interest	9.89	7.14	7.56	8.58	12.16
Miscellaneous	1.66	4.05	4.83	1.49	1.00
Total direct expenses per acre	510.15	406.05	383.66	358.26	319.46
Return over direct exp per acre	625.34	517.29	337.39	706.75	370.79
<b>Overhead Expenses</b>					
Custom hire	3.46	0.00	0.20	0.11	12.70
Hired labor	27.73	12.61	14.16	15.03	12.06
Machinery leases	2.58	2.64	2.44	0.89	6.02
Farm insurance	8.63	6.82	5.95	4.98	7.34
Utilities	9.58	6.84	7.92	6.21	5.28
Dues & professional fees	5.28	4.28	3.20	2.93	5.15
Interest	7.91	5.78	10.24	6.46	8.71
Mach & bldg depreciation	43.36	27.43	39.41	26.44	29.28
Miscellaneous	13.00	9.54	13.20	10.84	13.53
Total overhead expenses per acre	121.52	82.55	96.71	80.14	100.08
Total dir & ovhd expenses per acre	631.68	488.60	480.36	438.40	419.54
Net return per acre	503.81	434.74	240.69	626.61	270.71
Government payments	19.71	20.74	19.02	16.95	18.40
Net return with govt pmts	523.52	455.48	259.71	643.56	289.10
Labor & management charge	56.00	46.99	42.98	43.76	40.30
Net return over lbr & mgt	467.53	408.49	216.73	599.80	248.80
<b>Cost of Production</b>					
Total direct expense per bu.	5.37	3.23	3.55	3.36	4.15
Total dir & ovhd exp per bu.	6.65	3.89	4.45	4.11	5.45
Less govt & other income	5.21	3.56	4.22	3.46	4.34
With labor & management	5.80	3.94	4.61	3.87	4.86
Net value per unit	10.72	7.19	6.62	9.49	8.09
Machinery cost per acre	165.05	133.42	125.86	128.84	140.53
Est. labor hours per acre	4.95	4.50	4.74	4.92	4.06

**Table 12. Crop Enterprise Analysis  
Corn Silage, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	7	14	11	15	14
Number of farms	6	13	10	12	12
Acres	27.3	23.3	26.1	21.4	25.2
Yield per acre (ton)	11.9	15.9	15.8	15.0	12.3
Operators share of yield %	100	100	100	100	100
Value per ton	47.40	37.53	40.98	45.42	36.22
Other product return per acre	117.80	-	-	-	-
Total product return per acre	682.16	598.06	647.48	681.97	443.67
Crop insurance per acre	13.30	-	-	13.21	-
Other crop income per acre	-	-	-	0.28	50.31
Gross return per acre	695.45	598.06	647.48	695.46	493.97
<b>Direct Expenses</b>					
Seed	45.42	60.22	57.13	54.42	45.08
Fertilizer	94.38	35.82	26.85	59.92	29.19
Crop insurance	10.74	9.53	9.30	10.96	9.39
Storage	-	4.91	8.52	5.66	2.41
Irrigation energy	-	0.21	-	1.54	1.46
Fuel & oil	44.26	42.37	37.40	45.77	33.36
Repairs	67.29	43.46	70.35	57.82	73.62
Custom hire	5.66	10.40	14.43	24.29	23.20
Hired labor	2.88	0.40	9.57	0.76	-
Machinery leases	-	3.07	0.06	-	-
Organic certification	0.68	1.78	0.13	2.31	0.95
Operating interest	1.72	14.29	3.82	5.93	2.85
Miscellaneous	6.95	0.92	0.66	4.69	3.49
Total direct expenses per acre	279.99	227.38	238.23	274.07	225.01
Return over direct exp per acre	415.46	370.68	409.24	421.39	268.96
<b>Overhead Expenses</b>					
Custom hire	0.02	0.41	4.03	0.00	9.13
Hired labor	52.59	19.68	29.17	19.83	33.61
Machinery leases	1.66	3.60	4.55	0.88	5.02
Building leases	0.03	-	-	15.37	-
RE & pers. property taxes	9.75	10.71	9.06	9.15	9.27
Farm insurance	5.36	7.74	6.87	4.85	7.19
Utilities	4.16	7.77	6.54	3.95	5.05
Dues & professional fees	2.28	4.24	4.64	2.68	3.06
Interest	27.11	27.50	28.47	31.04	37.64
Mach & bldg depreciation	37.08	37.95	42.01	42.29	34.82
Miscellaneous	4.70	8.06	11.81	10.07	5.96
Total overhead expenses per acre	144.76	127.65	147.14	140.12	150.76
Total dir & ovhd expenses per acre	424.76	355.03	385.37	414.19	375.77
Net return per acre	270.70	243.03	262.10	281.28	118.21
Government payments	6.39	10.23	8.79	60.62	13.34
Net return with govt pmts	277.08	253.26	270.89	341.89	131.55
Labor & management charge	44.11	48.33	56.94	41.68	47.72
Net return over lbr & mgt	232.98	204.93	213.95	300.21	83.83
<b>Cost of Production</b>					
Total direct expense per ton	23.51	14.27	15.08	18.25	18.37
Total dir & ovhd exp per ton	35.67	22.28	24.39	27.59	30.68
Less govt & other income	24.13	21.64	23.84	22.65	25.48
With labor & management	27.83	24.67	27.44	25.43	29.38
Net value per unit	47.40	37.53	40.98	45.42	36.22
Machinery cost per acre	160.74	148.55	176.53	180.37	188.34
Est. labor hours per acre	4.86	5.11	7.54	5.77	6.38



**Table 13. Crop Enterprise Analysis  
Corn Silage, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	12	16	18	13	5
Number of farms	11	15	14	12	5
Acres	18.6	24.3	21.1	37.0	15.4
Yield per acre (ton)	15.1	17.6	13.4	11.1	13.6
Operators share of yield %	100	100	100	100	100
Value per ton	50.82	36.05	42.00	44.04	32.29
Other product return per acre	-	-	0.67	-	-
Total product return per acre	765.16	635.54	565.38	488.40	438.20
Crop insurance per acre	6.29	-	-	13.44	-
LDP income per acre	-	-	-	3.53	-
Other crop income per acre	-	-	-	-	9.55
Gross return per acre	771.45	635.54	565.38	505.37	447.74
<b>Direct Expenses</b>					
Seed	69.69	41.87	57.26	44.42	37.43
Fertilizer	49.97	29.79	25.43	28.50	26.93
Crop chemicals	0.65	-	-	1.48	4.81
Non-chemical crop protect	4.00	1.44	8.91	7.42	0.92
Crop insurance	7.87	4.66	5.19	6.63	4.74
Storage	-	3.35	0.90	2.34	-
Fuel & oil	37.73	31.65	24.01	36.33	38.77
Repairs	65.16	31.18	57.04	43.66	69.78
Custom hire	34.80	25.21	70.63	25.25	9.07
Hired labor	2.47	0.75	0.97	-	-
Land rent	105.03	69.05	75.76	56.56	95.36
Machinery leases	-	4.19	0.02	-	-
Organic certification	4.23	1.38	1.20	0.57	1.44
Operating interest	3.46	2.34	4.64	4.60	2.23
Miscellaneous	4.59	0.70	3.26	3.67	5.47
Total direct expenses per acre	389.64	294.55	335.20	261.44	296.94
Return over direct exp per acre	381.80	340.99	230.17	243.93	150.80
<b>Overhead Expenses</b>					
Custom hire	19.23	0.01	0.02	3.27	6.82
Hired labor	14.86	17.16	17.47	17.71	24.95
Machinery leases	8.44	5.18	1.69	0.54	-
Building leases	0.03	0.05	5.49	-	3.97
Farm insurance	5.54	2.46	2.68	2.85	5.61
Utilities	4.43	2.94	2.83	3.27	4.47
Dues & professional fees	2.15	3.42	1.64	3.19	5.56
Interest	8.58	7.07	6.56	9.16	15.41
Mach & bldg depreciation	44.77	23.51	39.06	32.56	40.20
Miscellaneous	15.21	9.77	7.97	7.99	4.52
Total overhead expenses per acre	123.23	87.76	85.40	80.55	111.49
Total dir & ovhd expenses per acre	512.87	382.31	420.61	342.00	408.44
Net return per acre	258.57	253.24	144.77	163.37	39.31
Government payments	14.03	10.20	10.80	5.94	5.48
Net return with govt pmts	272.60	263.44	155.57	169.31	44.79
Labor & management charge	40.63	38.76	30.83	34.85	62.25
Net return over lbr & mgt	231.98	224.68	124.75	134.46	(17.46)
<b>Cost of Production</b>					
Total direct expense per ton	25.88	16.71	24.93	23.58	21.88
Total dir & ovhd exp per ton	34.07	21.69	31.28	30.84	30.10
Less govt & other income	32.72	21.11	30.43	28.77	28.99
With labor & management	35.42	23.31	32.72	31.92	33.58
Net value per unit	50.82	36.05	42.00	44.36	32.29
Machinery cost per acre	214.36	143.37	193.68	148.01	175.78
Est. labor hours per acre	5.19	5.24	4.77	5.25	10.69

**Table 14. Crop Enterprise Analysis  
Oats, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	7	7	13	10	9
Number of farms	7	7	12	10	7
Acres	39.3	39.4	31.4	25.4	42.6
Yield per acre (bu.)	53.0	57.4	52.1	67.9	82.1
Operators share of yield %	100	100	100	100	100
Value per bu.	6.10	4.90	5.15	5.10	4.17
Other product return per acre	46.09	14.36	2.94	2.84	5.63
Total product return per acre	369.49	295.66	271.17	349.62	348.17
Crop insurance per acre	-	4.59	4.27	-	-
LDP income per acre	-	-	-	3.08	-
Other crop income per acre	27.49	30.65	5.47	44.18	31.68
Gross return per acre	396.98	330.89	280.91	396.88	379.85
<b>Direct Expenses</b>					
Seed	35.56	23.72	12.84	19.40	13.29
Fertilizer	-	5.82	31.58	8.53	13.09
Non-chemical crop protect	-	0.62	-	-	-
Crop insurance	2.83	2.73	10.22	1.77	7.10
Irrigation energy	-	0.41	-	0.69	-
Packaging and supplies	0.55	-	-	-	-
Fuel & oil	25.25	30.24	23.33	21.26	22.90
Repairs	30.93	31.73	40.22	42.21	21.87
Custom hire	9.19	10.59	2.76	17.41	22.11
Hired labor	7.58	-	3.56	-	-
Machinery leases	-	3.77	-	-	-
Hauling and trucking	5.49	6.88	-	1.13	2.27
Marketing	0.57	-	-	-	-
Organic certification	4.38	0.66	2.66	1.24	2.55
Operating interest	0.27	10.89	2.07	2.51	3.73
Miscellaneous	9.22	1.36	0.11	0.13	0.52
Total direct expenses per acre	131.83	129.41	129.35	116.27	109.42
Return over direct exp per acre	265.15	201.48	151.56	280.61	270.44
<b>Overhead Expenses</b>					
Custom hire	-	0.00	0.32	0.92	4.95
Hired labor	10.64	5.49	10.88	7.89	13.50
Machinery leases	0.15	2.39	3.85	4.45	7.25
RE & pers. property taxes	13.55	12.93	10.38	14.37	13.99
Farm insurance	4.84	6.45	4.01	6.89	6.09
Utilities	6.96	6.19	5.77	6.32	4.82
Dues & professional fees	3.27	5.89	3.59	3.39	5.10
Interest	67.91	35.70	45.13	46.47	51.64
Mach & bldg depreciation	26.09	35.27	23.61	38.71	30.67
Miscellaneous	4.18	6.38	5.90	4.60	7.27
Total overhead expenses per acre	137.60	116.68	113.44	134.01	145.29
Total dir & ovhd expenses per acre	269.44	246.09	242.79	250.28	254.71
Net return per acre	127.54	84.80	38.12	146.60	125.15
Government payments	15.85	26.67	11.08	12.04	16.67
Net return with govt pmts	143.39	111.47	49.20	158.64	141.82
Labor & management charge	37.54	25.59	28.30	22.35	38.74
Net return over lbr & mgt	105.85	85.88	20.91	136.29	103.08
<b>Cost of Production</b>					
Total direct expense per bu.	2.49	2.25	2.48	1.71	1.33
Total dir & ovhd exp per bu.	5.09	4.28	4.66	3.68	3.10
Less govt & other income	3.40	2.96	4.21	2.77	2.44
With labor & management	4.11	3.40	4.75	3.10	2.92
Net value per unit	6.10	4.90	5.15	5.15	4.17
Machinery cost per acre	95.15	116.83	98.68	117.11	113.61
Est. labor hours per acre	2.42	3.53	3.69	2.70	3.52

**Table 15. Crop Enterprise Analysis  
Oats, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	10	13	10	13	7
Number of farms	10	11	10	13	5
Acres	27.3	42.3	40.4	40.5	79.8
Yield per acre (bu.)	47.2	50.5	66.2	57.7	71.9
Operators share of yield %	100	100	100	100	100
Value per bu.	5.03	3.94	3.67	4.73	5.04
Other product return per acre	-	1.92	-	-	11.77
Total product return per acre	237.57	200.90	242.85	273.23	373.79
Crop insurance per acre	-	-	-	2.41	-
Other crop income per acre	3.00	7.13	30.56	24.96	4.03
Gross return per acre	240.57	208.03	273.40	300.60	377.81
<b>Direct Expenses</b>					
Seed	16.16	15.47	12.96	16.74	15.96
Fertilizer	8.26	24.73	2.15	5.69	42.25
Non-chemical crop protect	3.30	1.37	-	-	-
Crop insurance	0.27	4.62	4.25	1.92	6.45
Drying expense	-	0.64	-	-	-
Fuel & oil	17.68	15.04	12.20	19.90	18.86
Repairs	26.95	18.31	23.23	23.92	18.87
Custom hire	5.10	1.80	4.00	11.18	21.66
Hired labor	0.55	-	0.37	0.26	-
Land rent	54.81	52.01	46.52	48.18	61.10
Machinery leases	-	-	1.07	-	-
Utilities	0.09	-	1.15	0.34	-
Hauling and trucking	1.64	2.40	-	0.14	-
Organic certification	3.07	0.75	0.43	0.76	2.89
Operating interest	0.20	4.30	0.81	4.41	10.10
Miscellaneous	0.34	0.10	2.32	2.47	0.39
Total direct expenses per acre	138.43	141.54	111.48	135.93	198.55
Return over direct exp per acre	102.14	66.49	161.92	164.68	179.27
<b>Overhead Expenses</b>					
Custom hire	1.35	1.86	0.08	1.88	22.09
Hired labor	7.00	14.56	8.23	9.67	12.97
Machinery leases	0.44	0.30	0.09	1.47	0.16
Farm insurance	2.27	4.64	2.07	2.99	6.20
Utilities	2.72	6.05	2.48	2.60	2.47
Dues & professional fees	1.43	1.66	1.04	2.32	2.75
Interest	6.68	5.22	6.42	4.73	5.44
Mach & bldg depreciation	13.02	17.91	16.78	29.46	27.43
Miscellaneous	2.54	1.46	1.51	2.19	7.65
Total overhead expenses per acre	37.45	53.66	38.72	57.32	87.15
Total dir & ovhd expenses per acre	175.88	195.20	150.20	193.24	285.70
Net return per acre	64.68	12.83	123.20	107.36	92.11
Government payments	7.67	13.84	10.29	10.41	16.65
Net return with govt pmts	72.35	26.67	133.49	117.77	108.76
Labor & management charge	19.22	24.55	13.19	25.21	14.10
Net return over lbr & mgt	53.13	2.12	120.30	92.56	94.66
<b>Cost of Production</b>					
Total direct expense per bu.	2.93	2.80	1.68	2.36	2.76
Total dir & ovhd exp per bu.	3.73	3.86	2.27	3.35	3.97
Less govt & other income	3.50	3.41	1.65	2.69	3.52
With labor & management	3.91	3.90	1.85	3.13	3.72
Net value per unit	5.03	3.94	3.67	4.73	5.04
Machinery cost per acre	70.81	59.00	62.73	88.92	113.08
Est. labor hours per acre	1.95	2.53	1.54	2.09	2.09

**Table 16. Crop Enterprise Analysis  
Soybeans, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	14	16	24	14	17
Number of farms	13	14	18	11	16
Acres	47.7	50.8	45.4	54.5	76.6
Yield per acre (bu.)	21.5	23.8	24.2	15.0	23.0
Operators share of yield %	100	100	100	100	100
Value per bu.	21.24	19.90	17.65	19.39	19.63
Other product return per acre	1.94	-	0.55	-	1.63
Total product return per acre	458.91	473.88	428.13	290.40	453.26
Crop insurance per acre	193.87	1.75	18.61	74.21	-
Other crop income per acre	8.48	0.33	0.51	-	20.08
Gross return per acre	661.27	475.96	447.25	364.61	473.34
<b>Direct Expenses</b>					
Seed	38.96	33.09	45.36	30.54	35.19
Fertilizer	4.36	6.06	28.27	15.08	4.48
Non-chemical crop protect	7.62	1.34	4.12	2.83	2.99
Crop insurance	24.59	7.93	15.30	17.09	10.98
Fuel & oil	25.32	23.35	21.78	27.21	21.11
Repairs	36.44	26.92	33.47	34.18	22.12
Custom hire	14.16	4.93	8.00	3.05	2.74
Hired labor	23.85	14.93	21.89	0.52	1.16
Machinery leases	4.41	6.38	0.46	6.10	3.33
Hauling and trucking	2.37	1.00	-	0.51	1.86
Marketing	-	0.54	0.05	0.31	-
Organic certification	3.44	0.85	3.20	2.56	1.84
Operating interest	3.83	16.41	4.33	7.70	3.63
Miscellaneous	0.57	1.33	0.87	0.19	0.36
Total direct expenses per acre	189.93	145.07	187.11	147.86	111.79
Return over direct exp per acre	471.34	330.90	260.15	216.74	361.56
<b>Overhead Expenses</b>					
Custom hire	2.39	0.25	2.76	1.38	4.21
Hired labor	18.57	6.64	18.16	14.17	10.71
Machinery leases	0.07	3.23	0.85	0.46	1.36
RE & pers. property taxes	15.25	12.29	14.25	10.37	11.47
Farm insurance	4.22	4.57	6.16	4.61	4.34
Utilities	7.47	5.24	8.44	3.67	4.40
Dues & professional fees	3.85	6.03	3.70	4.02	3.90
Interest	66.81	44.85	60.20	63.69	57.42
Mach & bldg depreciation	32.91	27.13	46.72	29.89	30.25
Miscellaneous	8.37	5.62	6.27	6.37	6.46
Total overhead expenses per acre	159.92	115.85	167.52	138.63	134.53
Total dir & ovhd expenses per acre	349.84	260.92	354.63	286.49	246.32
Net return per acre	311.42	215.05	92.62	78.12	227.03
Government payments	17.16	19.61	13.61	17.57	19.45
Net return with govt pmts	328.58	234.65	106.24	95.69	246.47
Labor & management charge	44.97	45.79	34.97	41.50	35.82
Net return over lbr & mgt	283.61	188.87	71.26	54.19	210.65
<b>Cost of Production</b>					
Total direct expense per bu.	8.83	6.09	7.72	9.87	4.86
Total dir & ovhd exp per bu.	16.26	10.96	14.64	19.13	10.71
Less govt & other income	5.97	10.05	13.26	13.00	8.92
With labor & management	8.06	11.97	14.71	15.77	10.47
Net value per unit	21.24	19.90	17.65	19.39	19.63
Machinery cost per acre	118.27	94.47	113.16	103.65	87.88
Est. labor hours per acre	3.91	4.01	4.25	4.47	3.34

**Table 17. Crop Enterprise Analysis  
Soybeans, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	14	19	17	24	23
Number of farms	12	16	16	18	19
Acres	69.1	64.2	55.3	72.3	68.5
Yield per acre (bu.)	24.2	30.9	20.0	18.5	19.3
Operators share of yield %	100	100	100	100	100
Value per bu.	21.63	18.58	18.19	22.93	19.06
Other product return per acre	-	-	-	10.44	0.52
Total product return per acre	523.15	573.37	363.19	434.24	368.14
Crop insurance per acre	112.08	1.41	38.33	60.16	-
Other crop income per acre	10.64	6.27	0.59	55.20	20.41
Gross return per acre	645.87	581.05	402.12	549.60	388.54
<b>Direct Expenses</b>					
Seed	37.85	43.63	47.83	40.40	31.07
Fertilizer	10.41	0.87	1.79	15.72	4.49
Non-chemical crop protect	18.35	1.91	3.22	5.92	1.96
Crop insurance	27.81	15.44	20.27	18.25	12.70
Irrigation energy	-	1.27	-	-	0.94
Fuel & oil	27.09	22.75	15.68	23.92	19.25
Repairs	33.75	23.95	17.45	31.23	23.60
Custom hire	3.33	20.21	15.81	24.82	9.48
Hired labor	37.37	36.22	17.61	22.89	6.41
Land rent	135.94	116.11	110.39	96.32	85.96
Machinery leases	-	-	1.23	-	-
Utilities	0.79	-	0.62	0.24	-
Hauling and trucking	3.61	1.10	-	0.67	2.67
Organic certification	4.03	1.92	1.90	3.10	2.26
Operating interest	8.08	4.06	12.03	9.46	6.14
Miscellaneous	1.79	1.90	1.86	3.10	1.33
Total direct expenses per acre	350.20	291.36	272.92	296.04	208.27
Return over direct exp per acre	295.67	289.70	129.20	253.55	180.27
<b>Overhead Expenses</b>					
Custom hire	0.63	1.20	0.09	0.34	4.26
Hired labor	24.59	11.39	14.08	10.15	6.16
Machinery leases	0.61	0.40	-	1.44	3.63
Farm insurance	4.84	4.04	4.49	5.54	4.45
Utilities	6.05	6.60	8.37	5.60	3.41
Dues & professional fees	3.83	3.52	2.77	3.47	4.24
Interest	6.92	5.02	8.61	8.39	5.42
Mach & bldg depreciation	20.21	26.07	35.90	22.23	21.78
Miscellaneous	8.55	8.19	8.48	7.15	8.19
Total overhead expenses per acre	76.24	66.44	84.07	65.93	61.54
Total dir & ovhd expenses per acre	426.44	357.80	356.98	361.97	269.81
Net return per acre	219.43	223.26	45.13	187.62	118.73
Government payments	20.92	20.19	15.84	14.71	11.77
Net return with govt pmts	240.35	243.45	60.98	202.33	130.50
Labor & management charge	34.35	45.21	46.67	36.19	35.75
Net return over lbr & mgt	206.00	198.24	14.31	166.14	94.75
<b>Cost of Production</b>					
Total direct expense per bu.	14.48	9.44	13.67	16.02	10.80
Total dir & ovhd exp per bu.	17.63	11.59	17.87	19.59	13.99
Less govt & other income	11.69	10.69	15.13	11.98	12.29
With labor & management	13.11	12.16	17.47	13.94	14.15
Net value per unit	21.63	18.58	18.19	22.93	19.06
Machinery cost per acre	91.16	96.55	95.83	109.65	85.59
Est. labor hours per acre	3.44	3.24	3.60	3.16	2.91

**Table 18. Crop Enterprise Analysis  
Spring Wheat, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	7	7	10	10	2007 data unavailable: insufficient number of operations reporting
Number of farms	7	5	9	7	
Acres	46.4	30.0	72.3	54.5	
Yield per acre (bu.)	27.2	31.5	46.3	37.2	
Operators share of yield %	100	100	100	100	
Value per bu.	12.55	10.13	6.01	13.88	
Other product return per acre	22.17	-	15.27	-	
Total product return per acre	363.62	319.53	293.32	516.08	
Crop insurance per acre	44.11	-	20.11	-	
Other crop income per acre	1.58	-	0.01	-	
Gross return per acre	409.31	319.53	313.44	516.08	
<b>Direct Expenses</b>					
Seed	35.65	32.63	25.09	41.08	
Fertilizer	30.91	43.44	43.58	46.64	
Crop insurance	14.85	9.42	12.03	21.99	
Drying expense	2.02	-	-	-	
Fuel & oil	25.86	27.93	14.06	32.12	
Repairs	41.19	27.62	20.72	26.64	
Custom hire	2.27	0.96	9.87	0.61	
Hired labor	-	-	-	2.14	
Machinery leases	8.93	6.33	0.09	-	
Marketing	0.38	0.90	-	0.12	
Organic certification	0.59	0.17	1.87	2.07	
Operating interest	4.30	18.50	2.23	6.49	
Miscellaneous	0.90	0.09	0.00	1.68	
Total direct expenses per acre	167.84	167.99	172.14	181.59	
Return over direct exp per acre	241.47	151.54	141.30	334.49	
<b>Overhead Expenses</b>					
Custom hire	10.06	-	3.12	0.41	
Hired labor	26.66	10.02	20.56	17.82	
Machinery leases	0.36	4.58	0.36	0.10	
RE & pers. property taxes	10.34	18.23	10.28	11.41	
Farm insurance	4.56	7.05	5.37	5.81	
Utilities	8.28	6.20	4.77	3.93	
Dues & professional fees	2.66	8.67	1.98	3.24	
Interest	24.95	68.65	22.82	36.23	
Mach & bldg depreciation	26.26	27.55	22.62	23.37	
Miscellaneous	7.75	8.16	5.06	4.73	
Total overhead expenses per acre	121.89	159.12	132.83	107.03	
Total dir & ovhd expenses per acre	289.73	327.12	304.97	288.63	
Net return per acre	119.58	(7.58)	8.47	227.45	
Government payments	11.78	14.45	12.83	12.91	
Net return with govt pmts	131.36	6.87	21.29	240.36	
Labor & management charge	41.48	34.20	24.90	35.97	
Net return over lbr & mgt	89.88	(27.33)	(3.61)	204.39	
<b>Cost of Production</b>					
Total direct expense per bu.	6.17	5.33	3.72	4.89	
Total dir & ovhd exp per bu.	10.65	10.37	6.59	7.76	
Less govt & other income	7.72	9.92	5.55	7.42	
With labor & management	9.24	11.00	6.09	8.39	
Net value per unit	12.55	10.13	6.01	13.88	
Machinery cost per acre	118.73	96.44	90.02	88.37	
Est. labor hours per acre	4.35	4.52	3.46	3.57	

**Table 19. Crop Enterprise Analysis  
Spring Wheat, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	8		7	8	9
Number of farms	6	2010 data unavailable: insufficient number of operations reporting	7	7	6
Acres	69.4		68.8	93.8	123.4
Yield per acre (bu.)	27.5		49.2	43.8	28.2
Operators share of yield %	100		100	100	100
Value per bu.	13.49		8.29	15.04	13.99
Other product return per acre	12.79		10.71	-	-
Total product return per acre	384.18		418.55	659.33	394.07
Crop insurance per acre	33.43		3.92	5.44	-
Other crop income per acre	11.85		0.11	17.05	7.28
Gross return per acre	429.46		422.58	681.82	401.36
<b>Direct Expenses</b>					
Seed	32.32		35.22	47.51	27.27
Fertilizer	36.60		53.07	47.43	34.52
Crop chemicals	-		-	2.02	-
Crop insurance	12.24		11.49	21.95	13.40
Drying expense	1.09		-	2.05	1.11
Packaging and supplies	0.55		-	-	-
Fuel & oil	28.23		16.96	22.64	19.41
Repairs	37.56		30.28	45.12	25.48
Custom hire	1.56		3.55	11.93	8.87
Hired labor	9.66		0.65	0.32	-
Land rent	102.13		95.15	80.23	64.34
Hauling and trucking	3.43		-	1.61	12.58
Marketing	0.52		-	0.57	-
Organic certification	1.79		2.77	1.57	2.28
Operating interest	3.50		6.89	7.88	9.60
Miscellaneous	11.51		0.20	2.00	-
Total direct expenses per acre	282.70		256.22	294.82	218.87
Return over direct exp per acre	146.76		166.36	387.00	182.48
<b>Overhead Expenses</b>					
Custom hire	7.43		2.24	0.58	12.95
Hired labor	31.49		23.04	23.94	15.76
Machinery leases	0.08		0.00	1.65	0.07
Farm insurance	3.27		5.99	5.47	5.05
Utilities	7.22		7.47	6.50	4.32
Dues & professional fees	2.46		1.36	2.05	2.66
Interest	2.73		2.53	3.63	3.04
Mach & bldg depreciation	23.51		29.81	26.47	21.65
Miscellaneous	6.72		6.74	2.57	5.62
Total overhead expenses per acre	84.92		79.19	72.86	71.13
Total dir & ovhd expenses per acre	367.62		335.41	367.68	290.00
Net return per acre	61.84		87.17	314.14	111.35
Government payments	16.40		11.18	23.43	16.08
Net return with govt pmts	78.25		98.35	337.57	127.44
Labor & management charge	32.02		28.74	30.84	23.88
Net return over lbr & mgt	46.22		69.62	306.73	103.55
<b>Cost of Production</b>					
Total direct expense per bu.	10.27		5.21	6.72	7.77
Total dir & ovhd exp per bu.	13.35		6.82	8.39	10.30
Less govt & other income	10.65		6.29	7.34	9.47
With labor & management	11.81		6.87	8.04	10.32
Net value per unit	13.49		8.29	15.04	13.99
Machinery cost per acre	98.22		81.47	107.70	91.07
Est. labor hours per acre	3.66		3.50	3.61	2.34

**Table 20. Crop Enterprise Analysis  
Alfalfa Hay, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	17	26	32	29	28
Number of farms	15	17	24	21	21
Acres	72.6	60.3	57.5	62.3	62.2
Yield per acre (ton)	4.2	3.5	2.9	3.6	3.6
Operators share of yield %	100	100	100	100	100
Value per ton	99.43	112.50	122.78	138.16	148.96
Total product return per acre	421.83	395.41	349.65	491.20	530.92
Crop insurance per acre	3.09	-	3.38	-	-
Other crop income per acre	11.12	3.92	1.27	1.25	-
Gross return per acre	436.04	399.33	354.30	492.44	530.92
<b>Direct Expenses</b>					
Seed	2.05	-	0.05	1.16	6.49
Fertilizer	40.39	33.56	31.73	31.61	30.59
Non-chemical crop protect	0.43	-	0.12	0.64	-
Crop insurance	1.50	0.92	1.15	1.51	1.63
Storage	3.31	0.21	0.55	1.07	-
Packaging and supplies	10.36	0.74	-	-	-
Fuel & oil	25.51	24.75	25.50	35.58	35.84
Repairs	38.57	31.45	39.87	45.35	44.57
Custom hire	22.05	32.76	23.90	42.00	61.03
Hired labor	5.21	0.22	2.47	0.36	-
Machinery leases	0.61	1.19	-	-	-
Hauling and trucking	3.87	6.42	-	0.08	7.85
Organic certification	0.85	0.96	1.58	2.30	2.56
Operating interest	3.76	7.12	3.75	7.44	7.68
Miscellaneous	2.29	2.26	1.80	6.15	0.74
Total direct expenses per acre	160.76	142.54	132.47	175.24	198.98
Return over direct exp per acre	275.28	256.79	221.84	317.21	331.94
<b>Overhead Expenses</b>					
Custom hire	4.87	1.25	2.40	0.18	19.87
Hired labor	20.85	26.35	20.57	16.12	14.08
Machinery leases	0.71	1.87	3.51	1.87	6.47
Building leases	-	-	-	5.74	-
RE & pers. property taxes	12.98	11.31	10.31	11.52	10.89
Farm insurance	5.77	4.91	6.29	6.61	8.23
Utilities	5.61	4.12	6.39	6.38	5.62
Dues & professional fees	2.18	4.34	2.84	3.52	9.32
Interest	36.02	23.50	22.45	30.26	48.30
Mach & bldg depreciation	31.08	29.52	35.15	43.22	37.13
Miscellaneous	4.95	8.38	5.57	6.84	6.25
Total overhead expenses per acre	125.02	115.54	115.49	132.27	166.17
Total dir & ovhd expenses per acre	285.78	258.09	247.96	307.51	365.15
Net return per acre	150.26	141.25	106.34	184.94	165.77
Government payments	8.71	10.57	9.88	17.30	14.42
Net return with govt pmts	158.97	151.81	116.22	202.24	180.19
Labor & management charge	35.35	34.26	44.92	46.05	46.57
Net return over lbr & mgt	123.61	117.55	71.30	156.18	133.62
<b>Cost of Production</b>					
Total direct expense per ton	37.89	40.56	46.52	49.29	55.83
Total dir & ovhd exp per ton	67.36	73.43	87.07	86.49	102.45
Less govt & other income	61.96	69.31	81.97	81.28	98.40
With labor & management	70.29	79.05	97.74	94.23	111.47
Net value per unit	99.43	112.50	122.78	138.16	148.96
Machinery cost per acre	127.16	125.70	132.55	168.41	215.12
Est. labor hours per acre	3.63	5.27	4.87	5.09	4.60



**Table 21. Crop Enterprise Analysis  
Alfalfa Hay, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	23	22	28	35	24
Number of farms	20	20	24	20	16
Acres	101.3	114.4	87.4	59.6	80.8
Yield per acre (ton)	3.8	3.9	2.6	3.1	3.2
Operators share of yield %	100	100	100	100	100
Value per ton	117.75	118.66	127.21	142.21	139.15
Total product return per acre	451.05	456.62	324.67	442.77	442.76
Crop insurance per acre	0.82	-	-	1.53	-
Other crop income per acre	5.17	4.02	-	-	1.19
Gross return per acre	457.04	460.63	324.67	444.30	443.95
<b>Direct Expenses</b>					
Seed	1.29	-	0.12	2.18	7.01
Fertilizer	51.90	20.80	15.98	13.21	30.40
Non-chemical crop protect	-	-	-	-	1.28
Crop insurance	0.34	0.21	0.64	0.49	0.48
Storage	0.76	0.52	0.03	1.20	-
Irrigation energy	-	-	2.01	0.10	0.42
Packaging and supplies	7.59	1.92	-	-	-
Fuel & oil	36.14	24.29	22.87	29.25	27.89
Repairs	46.75	26.59	44.23	37.04	33.76
Custom hire	19.49	48.53	32.96	53.72	39.53
Hired labor	3.68	3.33	1.18	0.15	-
Land rent	77.55	75.41	83.46	81.29	67.72
Machinery leases	0.79	0.40	0.88	-	-
Hauling and trucking	6.99	5.13	-	13.85	7.06
Marketing	-	-	1.11	0.12	-
Organic certification	0.95	1.16	1.32	1.77	2.27
Operating interest	6.80	3.40	7.28	10.25	11.89
Miscellaneous	3.22	1.43	1.48	1.21	1.16
Total direct expenses per acre	264.25	219.87	215.57	245.82	230.85
Return over direct exp per acre	192.79	240.76	109.10	198.48	213.10
<b>Overhead Expenses</b>					
Custom hire	17.58	1.18	2.75	0.26	25.37
Hired labor	33.46	20.38	30.03	26.28	21.72
Machinery leases	4.36	3.97	2.52	0.47	1.67
Building leases	-	-	1.83	2.07	-
Farm insurance	3.67	2.43	3.78	3.82	9.53
Utilities	4.45	3.13	3.49	3.60	4.70
Dues & professional fees	2.53	3.33	2.01	1.06	2.70
Interest	8.73	10.94	7.88	8.89	5.36
Mach & bldg depreciation	47.20	27.06	32.44	27.48	32.16
Miscellaneous	9.46	4.61	4.97	8.98	18.67
Total overhead expenses per acre	131.45	80.18	91.69	82.91	121.88
Total dir & ovhd expenses per acre	395.70	300.05	307.26	328.73	352.73
Net return per acre	61.34	160.58	17.41	115.57	91.22
<b>Government payments</b>	9.22	10.95	9.01	13.36	15.37
Net return with govt pmts	70.56	171.53	26.43	128.93	106.59
Labor & management charge	33.30	28.66	36.96	42.78	33.23
Net return over lbr & mgt	37.26	142.87	(10.53)	86.15	73.36
<b>Cost of Production</b>					
Total direct expense per ton	68.98	57.14	84.46	78.95	72.55
Total dir & ovhd exp per ton	103.30	77.97	120.39	105.58	110.85
Less govt & other income	99.33	74.08	116.86	100.80	105.65
With labor & management	108.02	81.53	131.34	114.54	116.09
<b>Net value per unit</b>	117.75	118.66	127.21	142.21	139.15
Machinery cost per acre	175.09	142.55	141.64	154.29	164.20
Est. labor hours per acre	3.76	3.48	5.03	4.33	3.19

**Table 22. Crop Enterprise Analysis  
Pasture, Organic on Owned Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	17	24	29	26	13
Number of farms	12	19	19	15	9
Acres	70.0	59.7	47.0	51.1	68.5
Yield per acre (aum)	3.2	5.2	4.5	2.9	4.2
Operators share of yield %	100	100	100	100	100
Value per aum	37.19	34.67	37.96	42.23	32.79
Other product return per acre	-	-	1.76	-	-
Total product return per acre	120.27	180.07	170.78	120.99	136.50
Other crop income per acre	13.65	10.84	2.90	7.28	-
Gross return per acre	133.92	190.92	173.67	128.27	136.50
<b>Direct Expenses</b>					
Seed	2.46	1.06	5.05	9.02	2.04
Fertilizer	3.72	10.21	13.03	16.05	2.62
Crop insurance	0.50	0.17	0.06	-	-
Irrigation energy	-	0.02	2.42	0.66	-
Fuel & oil	3.93	5.18	4.56	5.32	2.46
Repairs	4.64	10.11	10.57	6.13	3.49
Custom hire	-	1.60	0.09	0.14	-
Hired labor	-	0.52	2.94	1.92	-
Organic certification	0.50	0.52	0.34	0.81	0.89
Operating interest	0.23	0.36	0.41	1.04	0.06
Miscellaneous	-	0.64	0.89	1.27	-
Total direct expenses per acre	15.99	30.38	40.36	42.35	11.56
Return over direct exp per acre	117.93	160.54	133.31	85.92	124.94
<b>Overhead Expenses</b>					
Hired labor	2.33	1.52	3.69	1.62	1.01
RE & pers. property taxes	13.69	13.56	12.68	10.51	7.96
Farm insurance	0.89	1.20	0.71	0.69	0.62
Utilities	0.55	0.44	0.49	0.44	0.38
Dues & professional fees	0.27	0.64	0.27	0.33	0.36
Interest	33.86	30.56	29.05	24.11	15.47
Mach & bldg depreciation	3.34	7.22	7.98	4.99	3.77
Miscellaneous	0.29	2.37	1.16	1.02	0.79
Total overhead expenses per acre	55.20	57.52	56.02	43.70	30.36
Total dir & ovhd expenses per acre	71.19	87.90	96.39	86.05	41.92
Net return per acre	62.73	103.02	77.28	42.22	94.58
Government payments	2.55	10.54	5.52	1.49	5.90
Net return with govt pmts	65.28	113.56	82.81	43.71	100.48
Labor & management charge	2.89	4.65	7.84	6.47	3.69
Net return over lbr & mgt	62.39	108.90	74.97	37.24	96.78
<b>Cost of Production</b>					
Total direct expense per aum	4.95	5.85	9.06	14.78	2.78
Total dir & ovhd exp per aum	22.01	16.92	21.65	30.04	10.07
Less govt & other income	17.00	12.81	19.36	26.98	8.65
With labor & management	17.90	13.70	21.12	29.23	9.54
Net value per unit	37.19	34.67	37.96	42.23	32.79
Machinery cost per acre	12.72	24.81	23.89	18.13	10.77
Est. labor hours per acre	0.42	0.72	1.00	0.89	0.48

**Table 23. Crop Enterprise Analysis  
Pasture, Organic on Rented Land**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of fields	11	10	15	11	6
Number of farms	9	8	13	9	5
Acres	62.8	45.9	68.2	52.1	85.6
Yield per acre (aum)	5.7	5.6	3.2	3.6	7.8
Operators share of yield %	100	100	100	100	100
Value per aum	33.54	47.65	46.76	59.38	30.15
Other product return per acre	3.39	2.33	-	-	-
Total product return per acre	195.97	267.86	147.49	215.65	233.98
Other crop income per acre	5.97	-	1.19	7.56	-
Gross return per acre	201.94	267.86	148.67	223.21	233.98
<b>Direct Expenses</b>					
Seed	1.56	2.07	4.84	2.70	1.92
Fertilizer	4.95	4.54	1.59	6.99	10.71
Fuel & oil	5.56	3.77	2.19	3.79	2.46
Repairs	6.10	4.08	3.90	3.98	1.65
Custom hire	3.62	0.27	0.12	0.24	-
Hired labor	-	0.54	0.47	-	-
Land rent	97.28	71.69	48.13	50.53	100.44
Utilities	-	0.13	0.07	0.67	-
Organic certification	1.48	0.51	0.69	0.51	0.90
Operating interest	0.30	0.43	0.40	0.73	0.03
Miscellaneous	0.86	0.02	0.82	0.15	-
Total direct expenses per acre	121.71	101.57	63.21	70.30	118.11
Return over direct exp per acre	80.24	166.29	85.46	152.91	115.88
<b>Overhead Expenses</b>					
Hired labor	2.56	2.24	2.03	1.79	1.27
Farm insurance	0.50	1.09	0.66	0.77	1.27
Utilities	0.87	0.22	0.25	0.27	1.32
Dues & professional fees	0.63	1.34	0.65	0.48	0.19
Interest	1.29	1.14	1.56	1.05	0.87
Mach & bldg depreciation	3.91	4.70	3.59	3.78	2.24
Miscellaneous	4.13	2.95	2.27	2.72	0.10
Total overhead expenses per acre	13.90	14.38	11.01	10.85	7.26
Total dir & ovhd expenses per acre	135.60	115.94	74.22	81.16	125.37
Net return per acre	66.34	151.91	74.45	142.06	108.62
Government payments	5.20	3.51	3.90	3.13	7.49
Net return with govt pmts	71.54	155.43	78.35	145.18	116.11
Labor & management charge	5.31	2.58	2.42	2.11	7.62
Net return over lbr & mgt	66.23	152.84	75.93	143.07	108.49
<b>Cost of Production</b>					
Total direct expense per aum	21.19	18.23	20.04	19.36	15.22
Total dir & ovhd exp per aum	23.61	20.81	23.53	22.35	16.15
Less govt & other income	21.08	19.76	21.92	19.40	15.19
With labor & management	22.00	20.22	22.69	19.99	16.17
Net value per unit	33.54	47.65	46.76	59.38	30.15
Machinery cost per acre	20.56	14.14	11.23	12.18	6.85
Est. labor hours per acre	0.65	0.56	0.38	0.38	0.83

# DAIRY ENTERPRISE REPORTS

Organic dairies continued to generate consistent profits on a per cow basis in 2011, but net returns averaged \$421 per cow for organic dairies, down substantially from \$756 the previous year. A conventional dairy summary is not included here but is available at [www.finbin.umn.edu](http://www.finbin.umn.edu).

The average price received for milk was up slightly, to \$27.32 per hundred pounds of milk (cwt), but compared to 2010, production per cow was down by about 700 pounds. Feed costs were up significantly, which likely contributed to both decreased production and decreased profits. On average, it cost organic producers \$26.21 to produce one hundred pounds of milk, up nearly 18% compared to 2010. Net returns for dairy replacement heifers were negative in all five years.

The dairy enterprise analysis tables that follow show the average production, gross returns, direct expenses, overhead expenses, and net returns per cow and per hundredweight for organic milking cows, as well as similar measures per animal for dairy replacement heifers.

As in other years of this project, dairy was the only type of organic livestock production with sufficient numbers to summarize here. Two formats are included for the dairy reports: 1) historical reports comparing data for years 2007 through 2011, and 2) 2011 dairy results sorted into thirds by net return per cow). For similar reports that describe the performance of conventional dairies in 2010, visit [www.finbin.umn.edu](http://www.finbin.umn.edu).

*Gross margin* is the accrual gross value produced by the enterprise net of the cost of purchased animals. It includes income from the sale of offspring and livestock products, cull income, non-cash transfers to other enterprises, and the value of production used in the home or for feed. It also includes the value of inventory change from beginning to the end of the year. The cost of livestock purchased and the value of animals transferred in are deducted.

*Net return* is the amount contributed per cow of the enterprise toward operator labor, management, and equity capital.

*Net return over labor and management* is the return remaining after compensating the operator for unpaid labor and management. This is the per-unit return to equity capital.

*Cost of Production* section shows the average cost per unit sold in each cost category.

*Total direct and overhead expense* per unit is the break-even price needed to cover cash costs and depreciation. For grow/finish enterprises, this includes the purchase cost or transfer-in value of the animal.

*With other revenue adjustments* is the break-even price adjusted for cull sales, other offspring sales, the cost of replacement stock, and any other miscellaneous income. This assumes that some costs can be covered by these other income sources.

*With labor and management* is the final break-even price to provide a labor and management return for the operator(s).

*Other Information* contains both economic and technical efficiency measures for each enterprise.

**Table 24. Organic Dairy Enterprise Analysis**  
**Average per Cow**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	27	38	31	30	
Milk sold	3,187.06	3,257.04	3,038.65	3,105.09	3,171.95
Dairy Calves sold	35.40	17.40	17.27	20.30	22.99
Transferred out	50.74	61.99	44.85	76.40	150.91
Cull sales	189.14	144.60	113.76	99.97	105.28
Other income	143.64	115.46	250.77	117.90	114.52
Purchased	(1.14)	(37.67)	(36.51)	(88.40)	(75.74)
Transferred in	(101.00)	(123.94)	(121.92)	(133.42)	(342.67)
Inventory change	(44.56)	57.52	(8.76)	158.74	107.05
Dairy repl net cost	(354.13)	(390.29)	(361.84)	(332.87)	-
Gross margin	3,105.15	3,102.12	2,936.26	3,023.72	3,254.28
<b>Direct Expenses</b>					
Protein Vit Minerals	190.24	188.87	188.67	169.83	182.76
Complete Ration	25.84	51.44	16.63	95.16	87.07
Corn	94.14	22.82	25.18	47.70	58.99
Haylage, Alfalfa	100.37	64.22	62.08	78.72	86.78
Pasture	62.93	67.83	67.12	51.73	13.86
Corn, Organic	166.86	154.67	194.67	167.32	245.56
Corn Silage, Organic	172.55	90.61	109.18	90.89	76.17
Hay, Alfalfa, Organic	295.08	263.18	224.03	192.30	174.44
Pasture, Organic	96.76	103.52	107.13	74.33	128.42
Hay, Grass, Organic	27.38	14.30	32.08	72.33	112.41
Other feed stuffs	205.03	188.11	226.32	261.97	233.73
Veterinary	33.96	32.78	27.05	29.23	31.22
Supplies	271.47	253.96	204.50	224.72	203.97
Fuel & oil	96.09	70.21	55.88	73.75	57.35
Repairs	173.93	138.79	116.93	100.38	139.06
Hired labor	104.74	37.40	54.80	47.06	1.93
Marketing	28.30	37.88	57.43	27.53	33.86
Total direct expenses	2,145.68	1,780.58	1,769.67	1,804.94	1,867.59
Return over direct expense	959.47	1,321.54	1,166.60	1,218.79	1,386.69
<b>Overhead Expenses</b>					
Hired labor	133.32	184.01	169.51	175.23	195.06
Farm insurance	30.81	33.36	29.59	25.97	35.18
Utilities	60.33	60.03	66.48	68.06	68.56
Interest	113.23	72.71	77.64	98.43	100.02
Mach & bldg depreciation	104.49	108.19	93.91	106.59	94.30
Miscellaneous	95.93	107.05	77.82	69.86	78.65
Total overhead expenses	538.10	565.34	514.97	544.14	571.78
Total dir & ovhd expenses	2,683.77	2,345.92	2,284.63	2,349.07	2,439.37
Net return	421.37	756.20	651.63	674.65	814.91
Labor & management charge	296.76	268.51	285.16	262.96	273.42
Net return over lbr & mgt	124.62	487.68	366.47	411.70	541.49
<b>Cost of Production Per Cwt. Of Milk</b>					
Total direct expense per unit	17.68	13.89	14.59	14.29	13.97
Total dir& ovhd expense per unit	22.12	18.30	18.84	18.60	18.24
With other revenue adjustments	23.76	20.19	20.29	20.05	18.31
With labor and management	26.21	22.28	22.64	22.13	20.35
Est. labor hours per unit	39.8	39.3	39.5	39.4	45.2
<b>Other Information</b>					
Number of cows	85	79	78	77	65
Milk produced per cow (lb)	12,133	12,819	12,129	12,629	13,372
Total milk sold (lb)	988,982	979,760	917,025	940,233	838,957
Lb of milk sold per FTE	820,043	886,296	836,365	868,396	803,966
Culling percentage	25.5	23.6	21.7	19.0	16.1
Turnover rate (percent)	33.2	29.8	27.3	25.3	25.4
Cow death loss (percent)	6.3	5.4	3.9	5.4	8.4
Percent of barn capacity	98.2	97.6	103.9	102.1	98.5
Feed cost per day	3.94	3.31	3.43	3.57	3.84
Feed cost per cwt of milk	11.85	9.44	10.33	10.31	10.47
Feed cost per cow	1,437.20	1,209.56	1,253.08	1,302.27	1,400.20
Avg. milk price per cwt	27.32	26.19	25.77	25.39	24.44

**Table 25. Organic Dairy Enterprise Analysis  
by Net Return per Cow**

	<u>Low 33%</u>		<u>33-66%</u>		<u>High 34%</u>	
Number of farms	8		9		10	
	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>
Milk sold (hd)	9,903.4	2,665.43	10,572.5	2,951.42	14,815.1	4,021.83
Dairy Calves sold (hd)	0.3	25.78	0.2	25.12	0.2	57.39
Transferred out (hd)	0.7	18.18	0.7	74.54	0.9	59.91
Cull sales (hd)	0.2	188.71	0.2	144.38	0.3	239.53
Other income		155.69		150.35		122.96
Purchased (hd)	-	-	0.0	(2.01)	0.0	(1.40)
Transferred in (hd)	0.3	-	0.3	(196.50)	0.3	(105.23)
Inventory change (hd)	(0.1)	(132.82)	0.0	54.22	0.0	(57.94)
Dairy replacement net cost		(517.12)		(371.36)		(156.20)
Gross margin		2,403.85		2,830.16		4,180.84
<b>Direct Expenses</b>						
Protein Vit Minerals (lb)	529.8	149.29	550.4	161.67	857.5	267.01
Corn (bu.)	7.0	70.38	-	-	23.8	225.20
Corn Silage (lb)	2,067.8	59.78	-	-	757.7	11.37
Hay, Alfalfa (lb)	1,023.7	76.78	-	-	-	-
Haylage, Alfalfa (lb)	1,512.5	56.72	1,796.1	30.67	7,206.3	225.97
Pasture (aum)	0.4	36.85	1.3	69.88	2.0	83.78
Soybeans (bu.)	0.3	6.49	-	-	5.3	100.66
Barley, Organic (bu.)	3.7	32.19	8.3	50.77	11.0	63.53
Corn, Organic (bu.)	24.6	159.26	27.4	224.64	17.0	110.76
Corn Silage, Organic (lb)	4,092.1	87.21	5,786.9	125.82	10,858.3	318.26
Hay, Alfalfa, Organic (lb)	7,096.6	361.21	7,198.4	351.09	3,103.6	160.09
Pasture, Organic (aum)	2.5	164.95	5.0	92.28	1.3	26.98
Other feed stuffs (lb)	1,549.7	85.38	4,915.0	120.79	4,160.1	176.81
Veterinary		27.20		23.91		52.56
Supplies		277.62		263.13		283.11
Fuel & oil		100.75		72.75		117.01
Repairs		217.09		113.85		193.60
Hired labor		126.25		149.59		31.12
Bedding		7.38		5.60		67.46
Total direct expenses		2,102.79		1,856.45		2,515.28
Return over direct expense		301.07		973.70		1,665.56
<b>Overhead Expenses</b>						
Hired labor		140.73		156.86		98.93
Farm insurance		44.52		21.69		25.96
Utilities		72.93		50.99		56.92
Interest		140.02		146.20		47.08
Mach & bldg depreciation		108.79		97.37		107.72
Miscellaneous		124.71		73.04		89.90
Total overhead expenses		631.70		546.14		426.50
Total dir & ovhd expenses		2,734.49		2,402.59		2,941.78
Net return		(330.63)		427.57		1,239.06
Labor & management charge		226.62		228.97		449.27
Net return over lbr & mgt		(557.25)		198.59		789.79
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		20.15		16.90		16.47
Total dir & ovhd expense per unit		26.20		21.87		19.26
With other revenue adjustments		29.98		23.90		19.00
With labor and management		32.15		25.98		21.94
Est. labor hours per unit		43.22		37.99		38.16
<b>Other Information</b>						
Number of cows		98		88		71
Milk produced per cow (lb)		10,437		10,987		15,272
Total milk sold (lb)		967,439		933,791		1,055,888
Lb of milk sold per FTE		641,525		779,215		1,087,120
Culling percentage		25.0		20.4		31.7
Turnover rate		34.9		29.3		35.8
Cow death loss percent		8.6		6.8		3.4
Percent of barn capacity		103.9		99.7		91.3
Feed cost per day		3.69		3.36		4.85
Feed cost per cwt. of milk		12.90		11.17		11.59
Feed cost per cow		1,346.50		1,227.61		1,770.41
Avg. milk price per cwt.		26.91		27.92		27.15

**Table 26 . Organic Dairy Enterprise Analysis  
Replacement Heifers, Avg per Head (\$ Value)**

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Number of farms	20	24	22	22	20
Replacements sold (hd)	76.13	36.56	46.61	41.83	110.04
Transferred out (hd)	531.24	588.61	367.07	529.10	447.18
Cull sales (hd)	0.51	0.99	0.65	-	10.20
Other income	0.55	-	3.37	13.24	6.70
Purchased (hd)	(17.75)	(6.55)	(26.85)	(4.60)	(5.92)
Transferred in (hd)	(167.29)	(144.64)	(143.70)	(169.80)	(150.43)
Inventory change (hd)	72.09	4.89	7.80	94.42	118.00
Gross margin	495.48	479.86	254.96	504.19	535.77
<b>Direct Expenses</b>					
Protein Vit Minerals (lb)	43.11	43.66	42.55	22.20	35.99
Milk (lb)	99.02	61.50	48.50	42.85	67.16
Complete Ration (lb)	15.58	2.97	4.44	23.32	34.14
Hay, Alfalfa (lb)	33.00	-	8.17	5.30	49.60
Haylage, Alfalfa (lb)	25.58	7.64	23.38	20.19	8.22
Pasture (aum)	43.39	18.05	5.03	30.34	7.14
Corn, Organic (bu.)	14.34	22.37	25.53	13.14	22.42
Corn Silage, Organic (lb)	47.99	23.34	37.76	31.81	25.13
Hay, Alfalfa, Organic (lb)	49.96	72.63	50.90	68.22	33.49
Oats, Organic (bu.)	10.55	12.01	17.23	6.64	14.04
Pasture, Organic (aum)	29.78	43.04	48.94	39.28	33.37
Hay, Grass, Organic (lb)	10.65	13.12	22.56	28.25	27.85
Oatlage, Organic (lb)	11.65	8.20	34.89	9.91	0.25
Hay, Mixed, Organic (lb)	12.39	17.15	25.36	5.30	20.98
Other feed stuffs (lb)	45.85	25.91	43.08	45.65	49.00
Supplies	48.62	60.26	34.71	37.62	22.81
Contract production exp.	-	47.94	10.92	32.58	28.56
Fuel & oil	19.48	27.31	9.24	14.76	7.49
Repairs	30.74	39.37	23.95	21.98	19.24
Bedding	5.34	6.47	14.31	10.91	5.29
Total direct expenses	597.02	552.95	531.46	510.27	512.18
Return over direct expense	(101.54)	(73.09)	(276.50)	(6.08)	23.59
<b>Overhead Expenses</b>					
Hired labor	25.09	59.44	32.65	32.07	27.47
Utilities	9.93	17.84	14.01	11.54	10.48
Interest	18.12	32.24	16.12	21.99	15.34
Mach & bldg depreciation	21.74	23.70	16.06	19.76	12.59
Miscellaneous	24.86	34.06	19.73	15.64	18.94
Total overhead expenses	99.74	167.28	98.57	101.00	84.81
Total dir & ovhd expenses	696.76	720.23	630.03	611.27	596.99
Net return	(201.28)	(240.37)	(375.07)	(107.08)	(61.22)
Labor & management charge	56.06	58.45	54.70	51.89	42.35
Net return over lbr & mgt	(257.34)	(298.82)	(429.77)	(158.97)	(103.57)
<b>Cost of Production Per Head Per Day</b>					
Total direct expense per unit	1.94	1.91	1.89	1.62	1.46
Total dir & ovhd expense per unit	2.22	2.37	2.16	1.90	1.69
With other revenue adjustments	2.22	2.37	2.16	1.87	1.69
With labor and management	2.37	2.53	2.31	2.01	1.81
Est. labor hours per unit	7.28	11.44	8.07	8.42	6.44
<b>Other Information</b>					
No. purchased or transferred in	49	55	46	49	49
Number sold or transferred out	40	48	39	36	33
Average number of head	68	71	60	64	65
Percentage death loss	9.6	8.0	9.5	9.6	12.6
Feed cost per average head	492.84	371.59	438.32	392.42	428.80
Feed cost/head sold/trans	842.09	555.02	672.88	703.37	836.87
Total cost/head sold/trans	1,477.49	1,380.08	1,294.81	1,308.26	1,289.63
Feed cost per head per day	1.35	1.02	1.20	1.08	1.17
Avg. purch price /head	1,423.53	1,241.56	1,135.48	1,083.33	1,275.00
Avg. sales price /head	366.80	164.97	170.22	252.78	528.50

# MAKING SENSE OF FARM FINANCIAL RATIOS AND GUIDELINES

*Use with Table 27 and the Farm Finance Scorecard inside and outside the back cover.*

## LIQUIDITY

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is the ability of your farm business to meet financial obligations as they come due – to generate enough cash to pay your family living expenses and taxes, and make debt payments on time.

1. Current ratio – measures the extent to which current farm assets, if sold tomorrow, would pay off current farm liabilities.
2. Working capital – tells us the operating capital available in the short-term from within the business.
3. Working capital to gross revenues – measures operating capital available against the size of the business.

## SOLVENCY

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is the ability of your business to pay all its debts if it were sold tomorrow. Solvency is important in evaluating the financial risk and borrowing capacity of the business.

4. Farm debt-to-asset ratio – is the bank's share of the business. It compares total farm debt to total farm assets. A higher ratio is an indicator of greater financial risk and lower borrowing capacity.
5. Farm equity-to-asset ratio – is your share of the business. It compares farm equity to total farm assets. If you add the debt-to-asset ratio and the equity-to-asset ratio, you must get 100%.
6. Farm debt-to-equity ratio – compares the bank's ownership to your ownership. It also indicates how much an owner has leveraged ( *i.e.*, multiplied) his/her equity in the business.

## PROFITABILITY

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is the difference between the value of goods produced and the cost of the resources used in their production.

7. Net farm income – represents return to three things: 1) your labor, 2) your management, and 3) the equity that you have invested in the business. It is the reward for investing your unpaid family labor, management, and money in the business instead of elsewhere. Anything left in the business, *i.e.*, not taken out for family living and taxes, will increase your farm's net worth.
8. Rate of return on farm assets – can be thought of as the average interest rate being earned on all (yours and creditors') investments in the farm. Unpaid labor and management are assigned a return before return on farm assets is calculated.
9. Rate of return on farm equity – represents the interest rate being earned by your investment in the farm. This return can be compared to returns available if your equity were invested somewhere else, such as a certificate of deposit.
10. Operating profit margin – shows the operating efficiency of the business. If expenses are low relative to the value of farm production, the business will have a healthy operating profit margin. A low profit margin can be caused by low product prices, high operating expenses, or inefficient production.
11. EBITDA – stands for Earnings Before Interest Taxes Depreciation and Amortization. Measures earnings available for debt repayment.



## REPAYMENT CAPACITY

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shows the borrower's (*i.e.*, your) ability to repay term debts on time. It includes non-farm income and so is not a measure of business performance alone.

12. Capital debt repayment capacity – measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.
13. Capital debt repayment margin – is the amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It's really the money left, after paying all bills, that is available for purchasing or financing new machinery, equipment, land, or livestock.
14. Replacement margin – the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.
15. Term-debt coverage ratio – tells whether your business produced enough income to cover all intermediate and long-term debt payments. A ratio of less than 1.0 indicates that the business had to liquidate inventories, run up open accounts, borrow money, or sell assets to make scheduled payments.
16. Replacement margin coverage ratio – A ratio under 1.0 indicates that you did not generate enough income to cover term debt payments and unfunded capital purchases.

## FINANCIAL EFFICIENCY

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shows how effectively your business uses assets to generate income. Past performance of the business could well indicate potential future accomplishments. It also answers these questions: *Are you using every available asset to its fullest potential? What are the effects of production, purchasing, pricing, financing, and marketing decisions on gross income?*

17. Asset-turnover rate – measures efficiency in using capital. You could think of it as capital productivity. Generating a high level of production with a low level of capital investment will give a high asset-turnover rate. If, on the other hand, the turnover is low you will want to explore methods to use the capital invested much more efficiently or sell some low-return investments. (It could mean getting rid of that swamp on the back 40 and getting something that produces income.)

The last four ratios show how Gross Farm Income is used. The sum of the four equals 100% (of Gross Farm Income):

18. Operating-expense ratio – shows the proportion of farm income that is used to pay operating expenses, not including principal or interest.
19. Depreciation-expense ratio – indicates how fast the business wears out capital. It tells what proportion of farm income is needed to maintain the capital used by the business.
20. Interest-expense ratio – shows how much of gross farm income is used to pay for interest on borrowed capital.
21. Net farm income ratio – compares profit to gross farm income. It shows how much is left after all farm expenses, except for unpaid labor and management, are paid.

**Table 27 . Financial Standards Measures  
Completely Organic Farms, by Net Farm Income**

	<u>Avg. All Farms</u>	<u>Low 33%</u>	<u>33 - 66%</u>	<u>High 34%</u>
Number of farms	41	13	14	14
<b>Liquidity</b>				
Current ratio	2.14	2.27	1.96	2.18
Working capital	82,792	47,390	41,859	156,598
Working capital to gross income	28.0%	30.6%	18.4%	31.6%
<b>Solvency (market)</b>				
Farm debt to asset ratio	42%	48%	42%	39%
Farm equity to asset ratio	58%	52%	58%	61%
Farm debt to equity ratio	0.73	0.92	0.72	0.64
<b>Profitability (cost)</b>				
Rate of return on farm assets	6.5%	-2.1%	4.8%	12.7%
Rate of return on farm equity	8.2%	-11.2%	4.1%	18.4%
Operating profit margin	17.7%	-10.7%	12.6%	27.3%
Net farm income	60,253	(8,733)	42,574	141,989
EBIDTA	97,099	22,353	65,865	197,741
<b>Repayment Capacity</b>				
Capital debt repayment capacity	68,319	5,651	34,332	160,498
Capital debt repayment margin	25,702	(39,430)	4,395	107,488
Replacement margin	14,581	(49,372)	(2,744)	91,291
Term debt coverage ratio	1.60	0.13	1.15	3.03
Replacement coverage ratio	1.27	0.10	0.93	2.32
<b>Efficiency</b>				
Asset turnover rate (cost)	36.6%	19.2%	38.4%	46.7%
Operating expense ratio	67.2%	85.6%	71.1%	60.1%
Depreciation expense ratio	6.1%	9.2%	3.1%	6.5%
Interest expense ratio	6.3%	10.7%	6.9%	4.8%
Net farm income ratio	20.4%	-5.6%	18.7%	28.7%