

2008 ORGANIC FARM PERFORMANCE IN MINNESOTA



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2008
ORGANIC FARM
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ABOUT THIS REPORT

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 2008 performance of actual Minnesota organic farms. It also offers summary data from 2006 and 2007 for trend comparison purposes. More detailed information about previous years is available in reports at www.mda.state.mn.us/food/organic, at www.mgt.org, or in a searchable database at www.finbin.umn.edu.

HOW DOES THE ORGANIC FBM PROJECT WORK?

The Minnesota Department of Agriculture (MDA) administers the project, with critical support from the partners listed inside the front cover. Participating farmers receive 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 system and one Farm Business Management Association. The farmers work one-on-one with a local FBM instructor to keep and use quality records in their farm business decisions. Their farm data is then stripped of all its identifying characteristics (so the producers remain absolutely anonymous) and incorporated into FINBIN, a database managed by the University of Minnesota Center for Farm Financial Management www.finbin.umn.edu.

DOES IT MAKE A DIFFERENCE?

In 2008, an outside contractor evaluated this project for the MDA. Among her findings: more than 80% of respondents indicated above average or excellent experience with the program. According to participants, the best things about the program were the farm-specific analysis report they received, assistance with recordkeeping/financial statements/taxes, and outside advice. Participants said the FBM program made it easier for them to provide required information to lenders and to the USDA Farm Service Agency, and that information they gained from the project (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.mgt.org, or you may call Dick Joerger at 651-297-1484. Southwest Minnesota also has a Farm Business Management Association: please contact Jim Kurtz at 507-372-3904.

EXPLANATION OF DATA PROCESSING AND REPORT FORMAT

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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2008 ORGANIC FARM PERFORMANCE IN MINNESOTA – WHOLE FARM RESULTS AND TRENDS –

By Dale Nordquist, University of Minnesota Center for Farm Financial Management

This report summarizes individual farm financial results for participants in the Minnesota Organic Farm Business Management Project for 2008 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 74 farms participated in the program for 2008. Of those, 48 were “completely organic,” meaning that all of the agricultural products produced on the farm were produced under organic certification. The Whole Farm Results section summarizes only these completely organic farms.

FINANCIAL PERFORMANCE

Table 1 summarizes the financial performance of these 48 organic farms. On average, 2008 was a profitable year for these farms, but not as profitable as 2007. Median net farm income was very close to the 2007 level, down just slightly at \$56,412. Average net farm income was \$67,392 on sales of \$255,581. The average farm earned a rate of return on assets (ROA) of 8.9% (with assets valued at adjusted cost basis) and a rate of return on equity (ROE) of 11.5%. These rates were also down from the previous year. The fact that the ROE exceeded ROA is a positive indicator of profitability, and indicates that borrowed capital earned more than the average interest rate paid.

Liquidity levels also slipped slightly in 2008. In the previous year, participating farms ended the year with working capital (current assets minus current liabilities) equal to 29 % of a year’s income. By the end of 2008, these farms had only 22 % of a year’s income at their disposal. The average current ratio was 1.66:1, down from 1.98:1.

The ability of these farms to repay debt, measured by the term debt coverage ratio, was still relatively strong at 1.83:1, down from 2.51:1 for the 2007 farms. (Term debt coverage ratio measures the farm’s ability to cover all term debt and capital lease payments. A ratio of 1.83:1 indicates that after all expenses, family expenditures, and taxes, \$1.83 remained for every \$1.00 of scheduled debt repayment.) Net worth improvement, while not as strong as in 2007, was still very positive at \$44,495 (with assets valued at estimated market value).

COMPARISON TO CONVENTIONAL FARMS

Table 2 shows these same financial measures for the 2,361 Minnesota non-organic (conventional) farms that participated in farm management education programs. The average conventional farm was somewhat larger, with average total assets of \$1.9 million compared to \$1.15 million for the organic farms. The average conventional farm was also larger based on total sales, with gross income of \$681,889 compared to \$255,581 for the organic group. As might be expected, given their higher sales, conventional farm earnings were generally higher than those of the organic group, with a median net farm income of \$91,275 compared to \$56,412 for the organic farms.

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 8.9% compared to an average ROA of 10.5% for conventional farms (with assets valued at adjusted cost basis). Both of these rates are very strong by historical standards.

While it might be expected that organic farms would have higher profit margins than conventional commodity producers, this was only marginally true in 2009. Organic farms had an operating profit margin of 22.5% compared to 21.8% for conventional farms. As might be expected based on their volume of commodity sales, conventional farms generated more income per dollar of investment with an average asset turnover rate of 48.1% compared to 39.7% for organic farms. We stress these measures because operating profit margin multiplied

times asset turnover rate equals rate of return on assets. Organic farms, if they generate consistently lower turnover rates, have to improve their profit margin to compete financially with conventional farm returns.

The conventional farms used slightly more debt capital, with average debt-to-asset ratios of 47% compared to 40% for the organic farms. One troubling factor is that the liquidity position of organic farms deteriorated in 2008 compared to conventional farms. At the end of 2008, these organic farms had 22% of a year's income in working capital (current assets – current liabilities) compared to 31% for conventional farms.

PROFITABILITY COMPARISONS

There was a wide range of financial results within this group of organic farms, similar to the variation of returns seen historically for conventional farms. Table 3 sorts the 2008 organic farms into thirds based on net farm income. The highest profit group had median net earnings of \$122,639 compared to a loss of \$-1,808 for the low profit group. The high third was slightly larger in terms of sales and total assets and generated rates of return comparable to the most profitable conventional farms. The more interesting comparison might be the middle third compared to the low profit group. The low profit group was actually made up of larger farms, on average, based on total assets and yet generated less gross income. They owned more acres and rented fewer. These results are consistent with 2007 comparisons. It is not possible to tell from this summary, however, how many of the farms in the lower third were also in that category last year.

Debt level did not appear to be a contributing factor to the differences in profitability. The high profit farms actually had slightly higher debt-to-asset levels. Liquidity and repayment capacity are big concerns for the low profit group. On average, at the end of the year, they had only 3% of a year's gross income in working capital. A general guideline is that farms should have 25% of a year's income in working capital: 10% is considered critically low. The low profit group generated a term debt coverage ratio of 0.22:1, meaning that after owner withdrawals, they fell far short of earning enough to cover payments. The high profit farms, on the other hand, generated 2.80 times their scheduled debt payments. The high profit group's net worth increased, on average, by almost \$100,000, while the low profit group saw their net worth decrease slightly.

TYPE OF FARM

Of the 48 completely organic farms, 14 were crop farms and 26 were dairy farms¹ (Table 4). (The other eight farms were either organic hog or beef farms, for which there were not enough farms to summarize, or were diversified farms that did not fall clearly into a specific farm type.) Consistent with 2007 results, the organic crop farms were very profitable as a group, with median net farm income of \$98,337 and an ROA of more than 13%. Crop farms had high liquidity (2.50:1 current ratio) and high debt coverage (2.79:1 term debt coverage). The average organic crop farm's net worth increased by more than \$74,000 during the year.

The 26 organic dairy farms were less profitable compared to the crop farms and were also slightly less profitable than the 2007 organic dairies. Their median net farm income in 2008 was \$46,376 compared to \$53,783 in 2007. Their 2008 rate of return on assets was 6.5%. It is likely that high feed costs contributed to this decrease in profitability. (Conventional dairies experienced the same situation. It is interesting to note, however, that organic dairy profits did not decrease as much as those of conventional dairies). The data reported here indicate that the average organic dairy had slightly better than a break-even year in 2008. Consistent with their conventional dairy counterparts, their liquidity position was much lower than that of the crop farms, indicating much less ability to sustain a long period of reduced earnings. Still, the average organic dairy farm increased its net worth by more than \$36,000 in 2008.

SIZE OF FARM

This report sorts organic farms into size groups based on gross farm income (Table 5). The financial performance of these organic farms generally improved with farm size. This phenomenon was true based on net farm income and return on assets. The smallest farms had negative returns on assets, while the largest farms generated a return on assets of almost 13%. In general, farms that generated more than \$100,000 of gross income produced adequate returns. Many of the farms that grossed less than \$100,000 were probably part-time farms. These farms had lower profits but generally earned more than \$20,000 of non-farm income, somewhat more than the larger farms. Debt repayment capacity, as measured by term debt coverage ratio, also increased consistently with average business size, as did net worth growth. There was no consistent pattern in liquidity across these farm size groups.

¹Farms were categorized on the basis of having 70 percent or more of gross income from that category of income.

SUMMARY

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 un-mask the financial performance of a group of organic producers 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 this group of organic producers. Some producers were very profitable, had high rates of return, and ended 2008 in very strong financial positions. Others struggled to generate returns adequate to meet financial and family needs. Some differences may be explained by the weather and other factors beyond the control of the producer. Other differences might be explained by the relative profitability of specific commodities. Again, this is not unlike conventional farm production.

The tables that follow summarize the whole farm financial performance of this group of 48 organic producers. The first set of tables (Tables 1-5) includes the sorts on which the previous discussion is based. The next set provides information about crop enterprise (Tables 6-22) and dairy enterprise (Tables 23-27) performance. Finally, Table 28 shows the Farm Financial Standards Council's recommended ratios and measures. Use it together with 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. The privacy and anonymity of all participants' data is strictly protected.

VALUING A LIFESTYLE: USING NUMBERS TO INFORM BIG PICTURE THINKING

By Jack LaValla, FBM Instructor, Riverland College

I am a farm business management instructor in Southeast Minnesota, where I work with organic and conventional producers. I recognize that there are lots of numbers in this report! I would like to offer a few suggestions that might help you use this report in ways that are most beneficial to you.

I would like to start by asking you the following questions: What is it that you value about your role in agriculture? How do you choose to support the food and fiber system? Our values can either steer us toward or away from practices and sources of information. I think it's important to address the question of values and priorities up front, in order to help direct you to the information that will be most meaningful and relevant to you.

I'm going to approach this document by focusing on three critical areas for organic farm businesses:

1. Goals
2. Collaboration
3. How to Use Benchmarks and Financial Indicators

Goals

Goals are a reflection of your values system. In fact, they are a road map of your values. My primary objective as a teacher is to help farm families reach their goals by using:

- Sound Accounting Practices
- Financial Analysis
- Business Planning
- Informed Decision Making
- Reflective Evaluation

You should revisit your goals (both business and personal) on an annual basis. Informed decision making using the financial and production data available to you should support your goals. It is up to you to use some key indicators and analyze your business performance in order to determine whether you are indeed on track with your plan, or if you need to make some modifications. Lenders, business advisors, farm business managers, accountants, and others are all available to help, but at the end of the day, it's **your** farm.

COLLABORATION

Success in a business is not merely the result of individual effort, but rather the collaborative effort by several individuals and organizations working together. Developing working relationships built upon trust and common vision is generally a key to positive results.

As a farm business management instructor, I encourage and help facilitate collaborative relationships with farm families and those who support their business goals. A great strength of farmers over the years has been their resilient and independent spirit in the face of many obstacles. However, the "go it alone" practice can sometimes hamper progress and create a defensive attitude. For this reason I strongly recommend that producers use the information found in this report (along with their own individual business analysis, if they have one) to inform and educate others they work with. These may be lenders, agronomists, animal health providers, commodity marketing personnel, and/or certifying agencies.

It is important to state here that maximum profitability may not be the bottom line indicator of the success of your business! But you cannot assume that everyone who looks at your business performance from the outside can determine what you value if you do not share your goals and the indicators that highlight the goals you've established.

Information like the data contained in this report is especially valuable for collaborating with lenders. Over the years it has been difficult to find credible numbers for organic production. Instead, modified benchmarks from conventional farms were used. This practice didn't serve the needs of either the farmer or the lender. I have seen positive results as farmers and lenders work together to determine enterprise feasibility and cash flow requirements for the organic farm businesses.

Collaborating allows for determining areas of focus such as:

- Financial Indicators — *Where am I now?*
- Benchmarks — *How do I compare with others?*
- Trends — *How am I performing?*
- Projections — *Where am I headed?*

USING BENCHMARKS AND FINANCIAL INDICATORS

This report includes detailed information about the performance of organic farms and provides key measures you can use to compare your business performance against. You can reflect on and use this information when reviewing your goals. It will promote productive collaboration with family, business partners and other stakeholders as you make management decisions for your operation.

I recommend that my FBM students focus on three areas:

- Liquidity and Solvency – Find these measures on your Balance Sheet
- Profitability – Find these measures on your Income Statement
- Repayment Capacity – Find these measures on your Cash Flow Statement

LIQUIDITY	KEY INDICATOR:
This reflects the ability to meet financial obligations as they come due.	Working Capital – How much cash is available to operate in the short-term from within the business? Working capital is a very good predictor of the ability to cash flow during the year.
SOLVENCY	KEY INDICATORS:
If you were to sell your business, would you be able to pay off all business debts? Solvency is important in evaluating financial risk.	<p>Farm Debt to Asset Ratio – This is the bank’s share of the business. It compares total farm debt to total farm assets. A higher ratio indicates greater financial risk and lower borrowing capacity.</p> <p>Farm Equity to Asset Ratio – This is your share of the business. It compares farm equity to total farm assets. When added to the debt to asset ratio you will get 100%.</p> <p>Farm Debt to Equity Ratio – This number compares the bank’s ownership to your ownership. It indicates how much the owners have leveraged their equity in the business.</p>
PROFITABILITY	KEY INDICATORS:
This is the margin of difference between the value of goods produced and sold and the cost of the resources used in their production.	<p>Net Farm Income – This represents the return of cash to your labor, your management, and the equity that you have invested in your business. This is the reward for investing your family labor, management skills and money in the business.</p> <p>Rate of Return on Farm Equity – Think of this as the average interest rate you are earning through investment in the farm. It can be compared to returns available if your equity were invested somewhere else.</p> <p>Operating Profit Margin – This measure demonstrates the operating efficiency of your business by comparing the value of your farm production to your operating expenses.</p>
REPAYMENT CAPACITY	KEY INDICATORS:
This shows the borrower’s ability to repay term debts on time. It includes non-farm income and expenses, so it is not a measure of business performance alone—it indicates the ability to make a living on the farm.	<p>Term Debt Coverage Ratio – This indicates whether your business produced enough cash to cover all (both farm and non-farm) intermediate and long loan payments.</p> <p>Capital Replacement Margin – This is the money remaining after operating expenses, taxes, family living costs and scheduled loan payments have been made. It’s really the money that’s left (after paying all the bills) that can be used for purchasing or financing new buildings, equipment, land or livestock.</p>

In conclusion, I am confident that the information you will find in this book can provide you with valuable information to use in managing your business in order to reach the goals you have established for your family and your farming operation. Try using the indicators I have highlighted to measure productivity and efficiency. Depending on your individual situation or interests, you may choose to use others.

If you are a participant in the Farm Business Management program, remember that your year-end analysis provides only a snapshot view of your operation. There is real value in tracking your progress and identifying trends over time by analyzing your business each year for several years. This information will provide valuable fuel for discussion and interaction with your business collaborators.

Your financial and production data belong to you. Strategize to use it wisely in reviewing and setting goals for your family and farm business that reflect your values and sustain the role you play in the food and fiber system.

HOW TO USE THIS BOOK

ONE INSTRUCTOR'S ADVICE

By Mark Berg, FBM Instructor, Northland College

Even if you are someone who is **not** a student of Farm Business Management but want to find out about the production capabilities and economics of organic farming, this book can be very useful. It contains information that answers often-asked questions, including: *Can I make a living farming organically? What does it cost to be an organic farmer? How big do I have to be?*

CAN I MAKE A LIVING FARMING ORGANICALLY?

One of the easiest ways to find out whether farmers can make a living farming organically is to examine the *Financial Summaries* (Tables 1 and 3-5).

For the amount of profit, look at: 1) *Average net farm income*; and 2) *Median net farm income*.

For rate of return on investments made by these farmers, see: 1) *Rate of return on assets*; 2) *Rate of return on equity*; and 3) *Operating profit margin*.

To see whether this is enough profit, look at *Total family living expense* and see whether the profit is enough to cover *Total living, invest, cap. purch* (total non-farm living, investment, and capital purchases).

WHAT DOES IT COST TO BE AN ORGANIC FARMER?

The amount of investment and debt needed to become an organic farmer is wide and varies from farm to farm. It depends on factors like farm size, and whether a person is already farming or just beginning to build a new organic farm (incurring costs for farm and equipment purchases, for example.)

The amount of investment and debt carried by the organic farms included in this report is shown on the *Financial Summaries* (Tables 1 and 3-5) in *Total Farm Assets* and *Total Farm Liabilities*, as well as *Total Assets and Total Liabilities* (these include non-farm assets and loans).

The cost of producing an organic crop or livestock product is shown in detail on the *Crop Enterprise and Livestock Enterprise Analysis* tables (Tables 7 to 27). Here you will find lots of detail pertaining to the costs, yields, size, and profit.

HOW BIG DO I HAVE TO BE?

Information about farm size is printed at the bottom of the *Financial Summaries* (Tables 1 and 3-5) and at the top of the page of the *Crop Production & Marketing Summary* (Table 6). Yields and prices received for the organic crops are also listed in this table.

You should also look at the *Crop Enterprise and Livestock Enterprise Analysis* tables (Tables 7 to 22 and 23 to 27). These include acreage and numbers of cows.

From this point onward, you can dig more deeply into this book to find more detail. If you have further questions feel free to call any of the Farm Business Management instructors in your area.

GETTING THE MOST OUT OF YOUR OWN FARM ANALYSIS – A STEP BY STEP GUIDE FOR PARTICIPATING FARMERS

By Mark Berg, FBM Instructor, Northland College

Your own farm business analysis offers you a tremendous wealth of information, **if you use it**. It has a lot of numbers, so consider it as an encyclopedia of data, a reference guide about your own, unique farm. For effective use, you will consider different parts of it, at different times. But right now, let's go through your analysis as though you just received it, and want to review the year. Let's do some jumping around the analysis:

For an immediate and quick review, the steps I recommend are:

Step #1:

Assess the accuracy and completeness of the analysis

Step #1a: You want your information to be reliable. To see if the data is complete and accurate, take a look at the Cash Accuracy Check. This accounts for all the cash available and coming into the operation, and accounts for where it was spent or saved. The answer should read "0".

Step #1b: Then a quick look at the Liabilities Check. If they are correct, the balance will also read "0".

Step #1c: Before leaving this page, take a quick look at the Crop and Feed Check, to see if your production, sales, purchases, and usage look reasonable. All the ending amounts should read "0", or think about why they may not be.

Step #1d: For even more accuracy, compare the Contributions to Overhead Expenses table's *Total return over overhead expenses* to the Financial Statements & Measures table's *Net farm income from operations*. They should be close. This is comparing the financials profit to the enterprises profit.

Step #2: Check the profit

This is called *Net Farm Income*. Is it enough to cover family living, capital improvements on your farm, and principal payments on loans? (Hint: regular loans are called *Term debt* in your analysis.)

Step #3:

Reviewing planned vs. actual – making it happen.

Now go to the Planned vs. Actual page. There you can compare *planned production, income and expenses, money borrowed and paid back, and capital purchases and sales* from your business plan for the year against the actual results.

Step #4: Comparative trends

Scan across the page and look at your:

Income statement: Were there changes in *Gross Income, Operating Expenses, Profit*?

Balance Sheet information: How about changes in *Assets & debt, Net worth (equity), and Repayment Capacity*? (Study your balance sheet trends in more detail, later, on the pages of your farm business analysis).

Production: Review changes in farm size in acres and/or cattle numbers, acres planted; and your production.

Step #5: The crop enterprise analysis

For cash crops (those which you sell), find *Net return per acre* – this is your raw profit per acre. If you want to consider all things, including a charge for your labor, and see what remains of your profit/acre you will find this under *Net return over labor and management*.

For crops you raise for feed and forage, you will want to look under the Cost of Production section at the *With labor & management* amount. This is your cost per ton, bushel, or hundredweight. You need to know if you can raise a crop more cheaply than you can buy it.

For cash crops, again look under Cost of Production section at the *With labor & management* amount. You want the cost/unit to be less than the cash sale price of your crops.

Step #6: Livestock enterprise analysis

As we did in the crop table, go to the bottom of the page. Look at the valuable, unique-to-your-farm information under *Cost of Production* and *Other Information*.

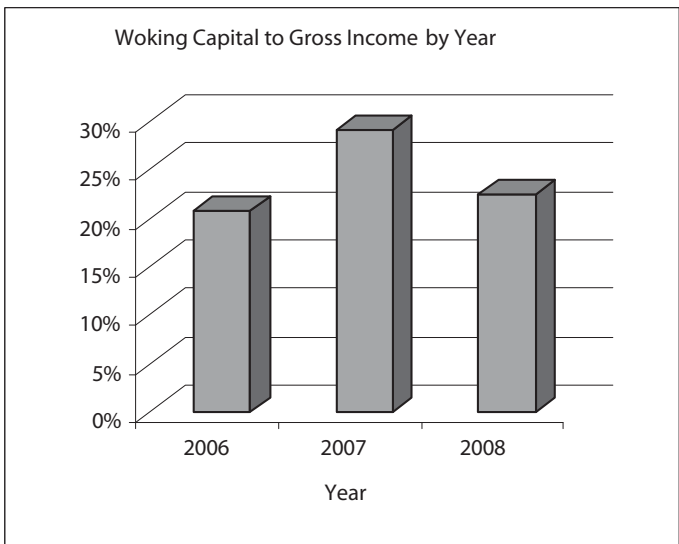
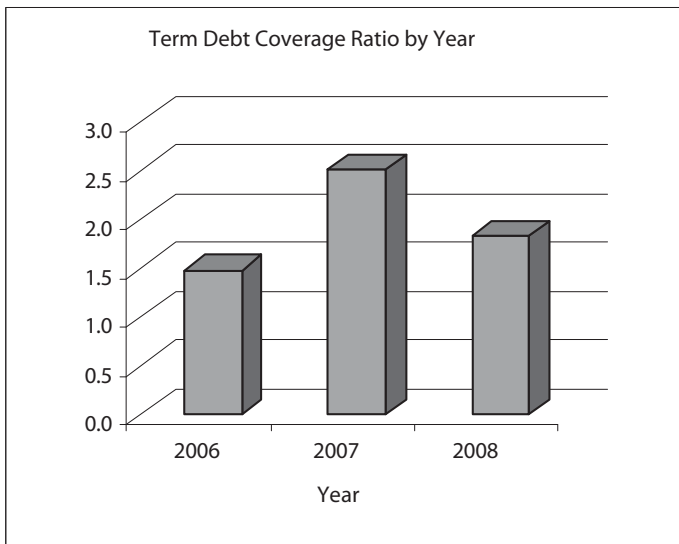
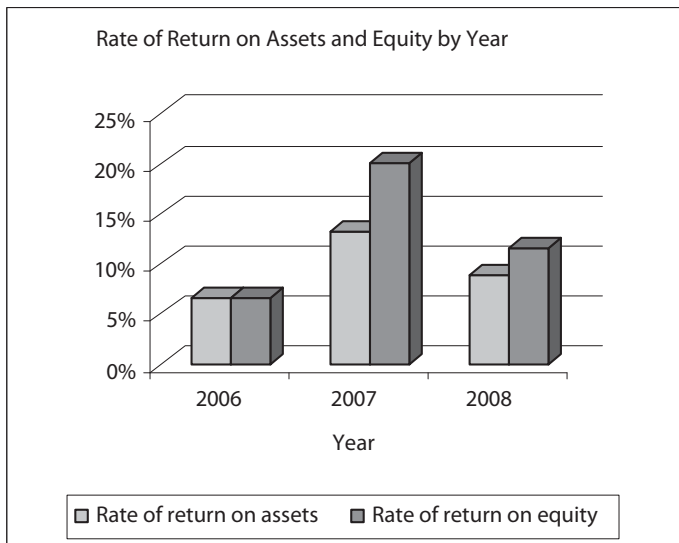
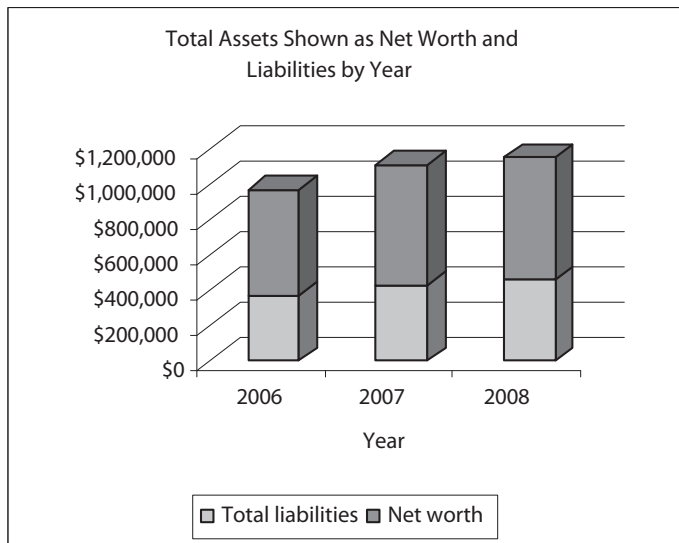
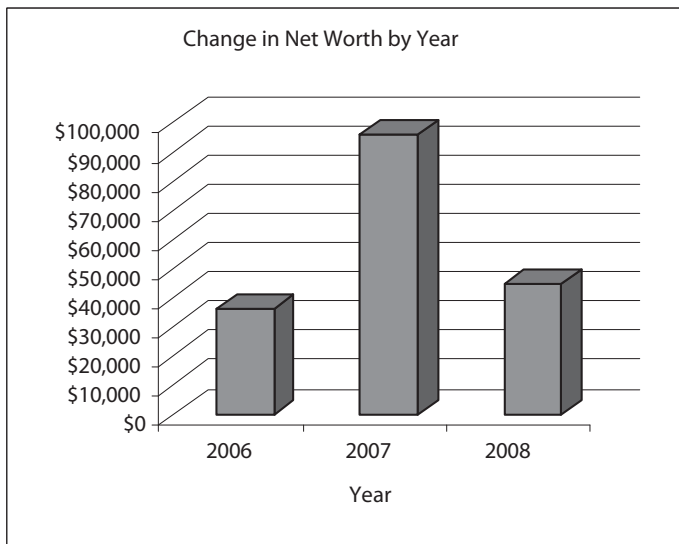
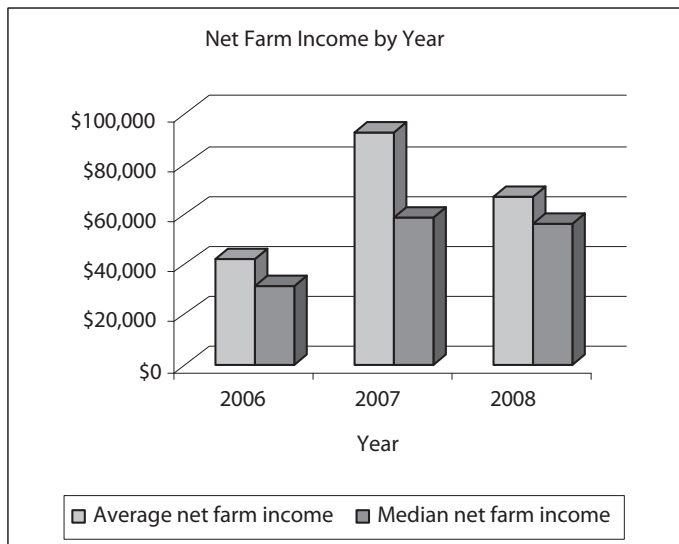
Step #7: Comparing your data to others

Now it's time to be more detailed. Starting with the Enterprise Tables, compare your information, in detail, with the averages in this *2008 Organic Farm Performance in Minnesota* book. This area is the heart of your business: where your operating money went and where your gross income came from.

Ask your instructor or advisor to help you look at the *Net farm income, Change in net worth, Repayment capacity, Farm size, Yields, Cost of Production*, and trends of the other farmers and compare them, again in detail, to your business.

Use the scorecard on the back of this book!! Comparing your data with the averages helps to give you a perspective as to what others are spending or earning, and how your costs, yields, prices (high or low) relate to the group you are in.

Figure A. Selected Factors by Year - Completely Organic Farms



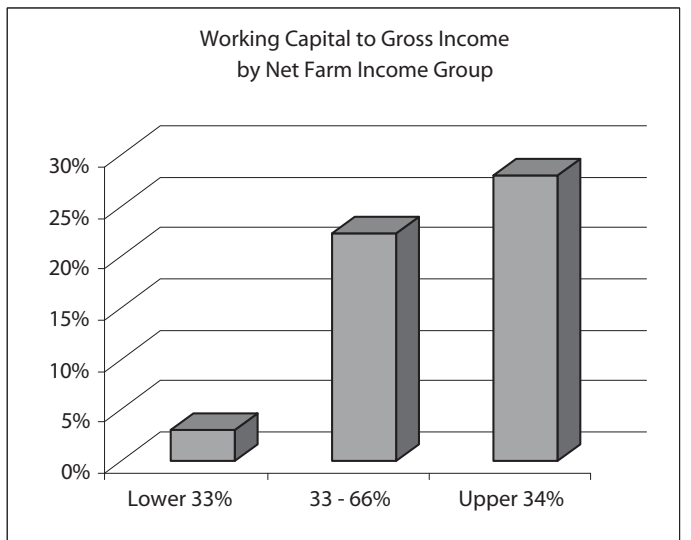
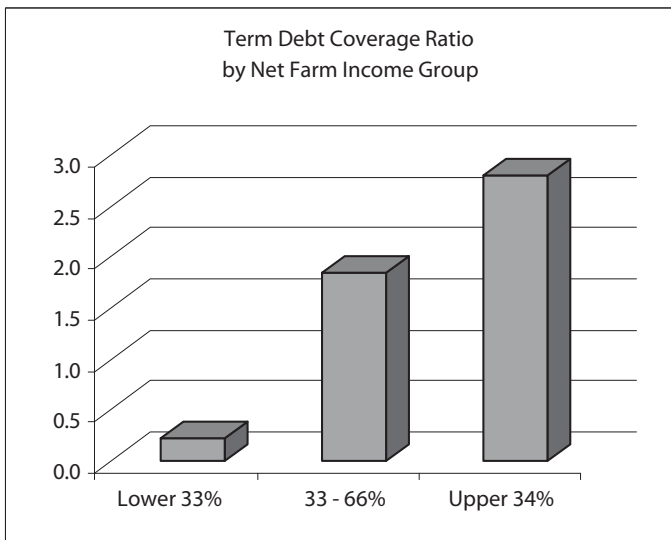
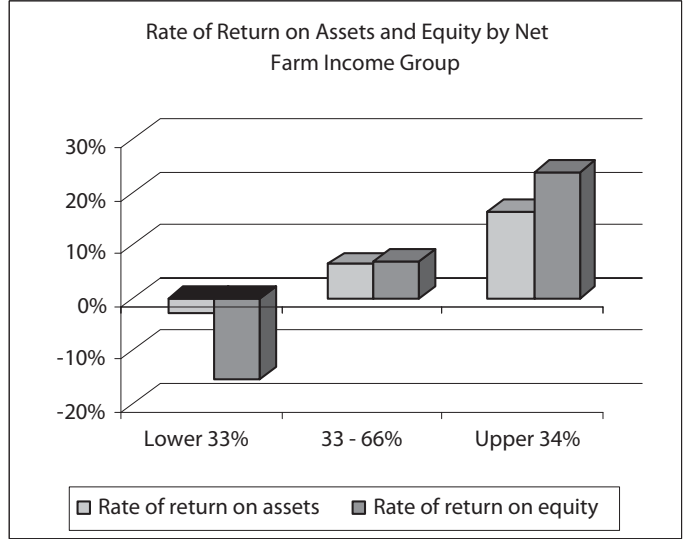
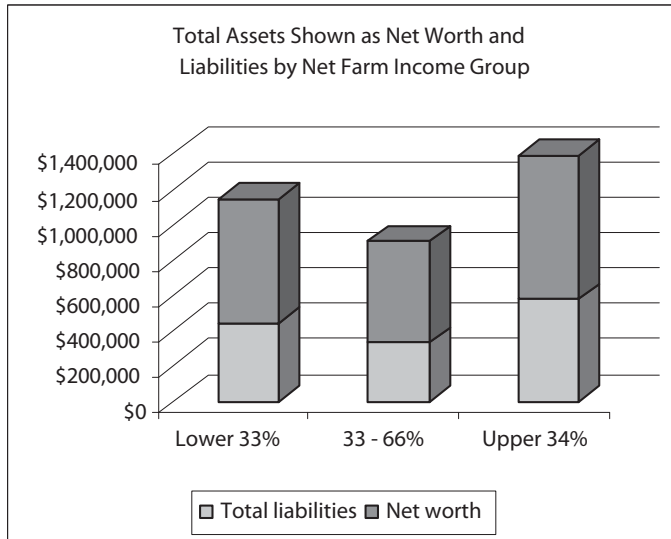
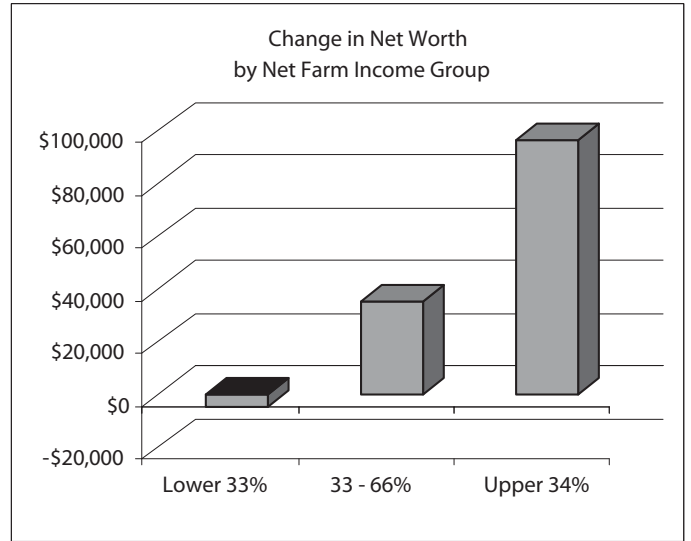
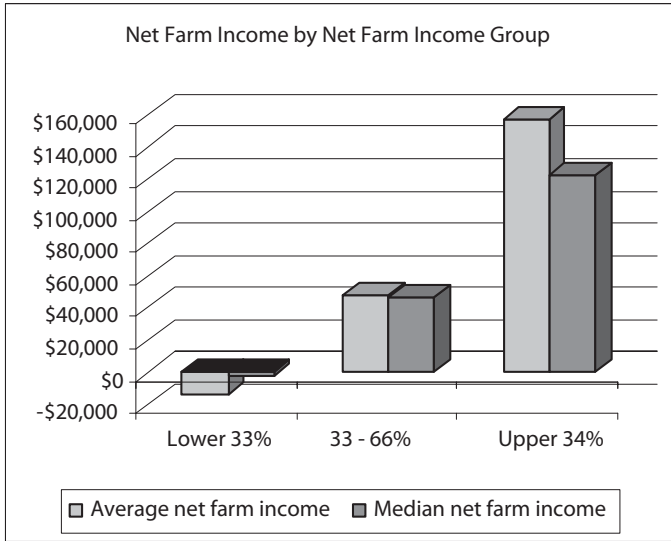
**Table 1. Financial Summary
Completely Organic Farms
(Sorted By Year)**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of farms	48	45	46
Income Statement			
Gross cash farm income	255,581	243,560	193,284
Total cash farm expense	201,791	192,489	158,521
Net cash farm income	53,791	51,071	34,763
Inventory change	31,859	58,684	20,971
Depreciation	-18,402	-16,748	-13,760
Net farm income from operations	67,247	93,007	41,973
Gain or loss on capital sales	145	-	-
Average net farm income	67,392	93,007	41,973
Median net farm income	56,412	58,886	31,489
Profitability (cost)			
Rate of return on assets	8.9 %	13.3 %	6.5 %
Rate of return on equity	11.5 %	20.1 %	6.5 %
Operating profit margin	22.5 %	31.8 %	18.0 %
Asset turnover rate	39.7 %	41.9 %	36.1 %
Liquidity & Repayment (end of year)			
Current assets	163,734	171,651	119,750
Current liabilities	98,622	86,680	75,646
Current ratio	1.66	1.98	1.58
Working capital	65,112	84,971	44,104
Working capital to gross inc	22.4 %	29.0 %	20.6 %
Term debt coverage ratio	1.83	2.51	1.48
Replacement coverage ratio	1.62	2.51	1.48
Solvency (end of year at market)			
Number of farms	48	45	46
Total farm assets	997,087	951,896	824,095
Total farm liabilities	415,764	381,270	327,774
Total assets	1,150,065	1,113,306	970,911
Total liabilities	455,692	428,695	372,722
Net worth	694,373	684,611	598,189
Net worth change	44,495	95,765	35,982
Farm debt to asset ratio	42 %	40 %	40 %
Total debt to asset ratio	40 %	39 %	38 %
Nonfarm Information			
Net nonfarm income	21,307	21,021	18,344
Farms reporting living expenses	9	7	6
Total family living expense	48,620	43,632	38,833
Total living, invest, cap. purch	49,895	53,647	44,853
Crop Acres			
Total acres owned	225	229	215
Total crop acres	377	398	351
Total crop acres owned	153	146	139
Total crop acres cash rented	209	238	207
Total crop acres share rented	16	14	5

**Table 2. Financial Summary
All Participating Non-Organic Farms
(Sorted By Year)**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of farms	2361	2527	2409
Income Statement			
Gross cash farm income	681,889	600,204	502,298
Total cash farm expense	561,734	503,537	427,222
Net cash farm income	120,156	96,667	75,075
Inventory change	56,503	91,018	49,586
Depreciation	-34,812	-30,265	-27,352
Net farm income from operations	141,846	157,420	97,309
Gain or loss on capital sales	1,121	-	-
Average net farm income	142,967	157,420	97,309
Median net farm income	91,275	107,062	61,145
Profitability (cost)			
Rate of return on assets	10.5 %	14.0 %	9.3 %
Rate of return on equity	14.6 %	21.0 %	12.3 %
Operating profit margin	21.8 %	27.2 %	20.3 %
Asset turnover rate	48.1 %	51.4 %	46.1 %
Liquidity & Repayment (end of year)			
Current assets	465,171	407,357	332,184
Current liabilities	239,772	216,030	204,724
Current ratio	1.94	1.89	1.62
Working capital	225,399	191,327	127,460
Working capital to gross inc	31.4 %	28.1 %	23.0 %
Term debt coverage ratio	2.40	2.78	1.91
Replacement coverage ratio	2.05	2.78	1.91
Solvency (end of year at market)			
Number of farms	2,361	2,527	2,409
Total farm assets	1,747,305	1,566,457	1,418,806
Total farm liabilities	815,400	733,053	674,292
Total assets	1,925,162	1,743,866	1,593,159
Total liabilities	860,341	776,795	714,939
Net worth	1,064,821	967,071	878,220
Net worth change	105,544	145,981	96,806
Farm debt to asset ratio	47 %	47 %	48 %
Total debt to asset ratio	45 %	45 %	45 %
Nonfarm Information			
Net nonfarm income	25,191	24,589	24,720
Farms reporting living expenses	780	770	745
Total family living expense	50,955	48,048	45,299
Total living, invest, cap. purch	77,664	71,874	68,580
Crop Acres			
Total acres owned	265	268	275
Total crop acres	795	785	791
Total crop acres owned	220	211	221
Total crop acres cash rented	551	550	545
Total crop acres share rented	23	24	25

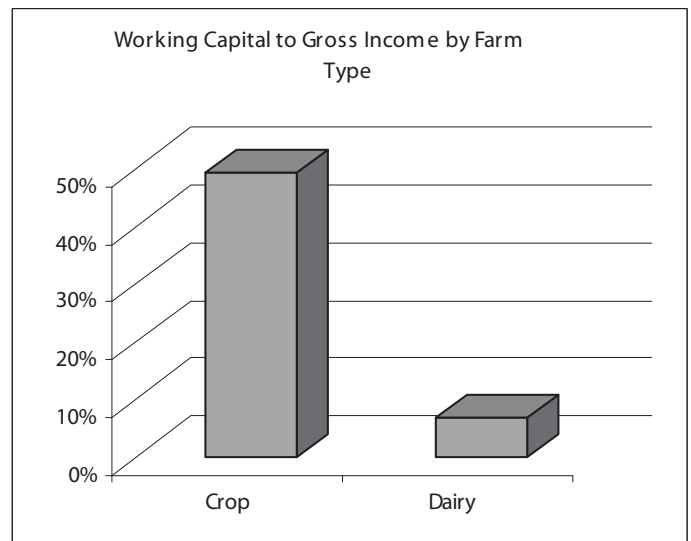
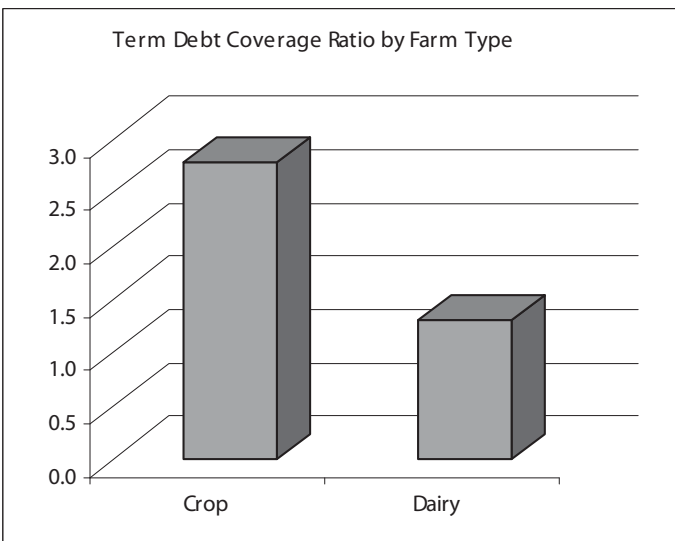
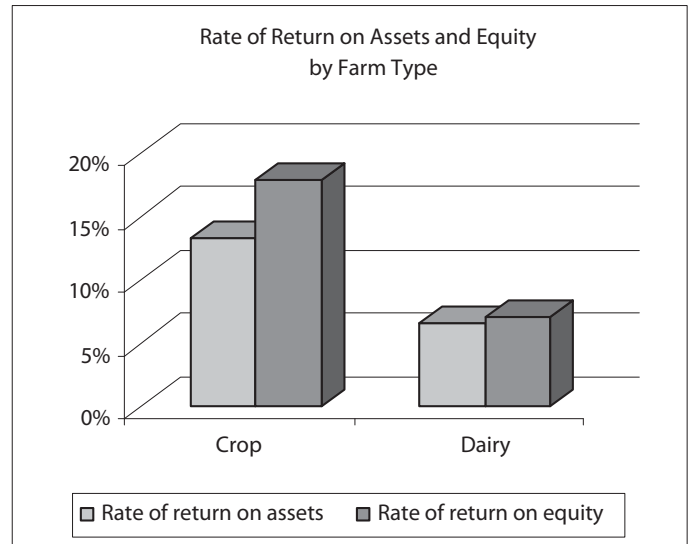
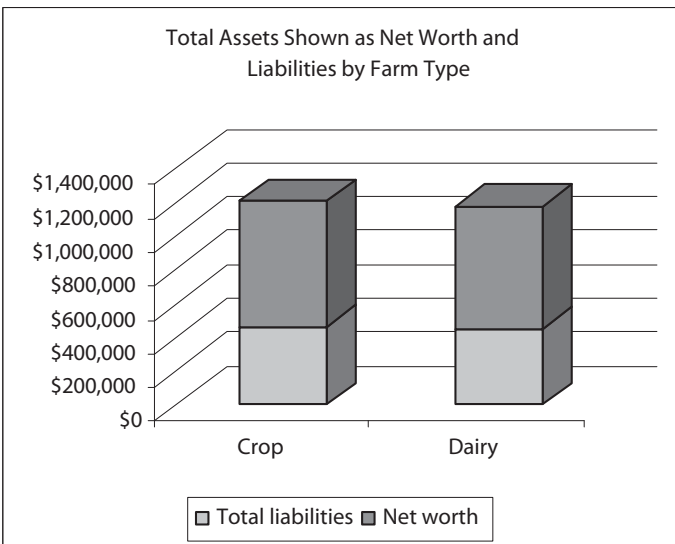
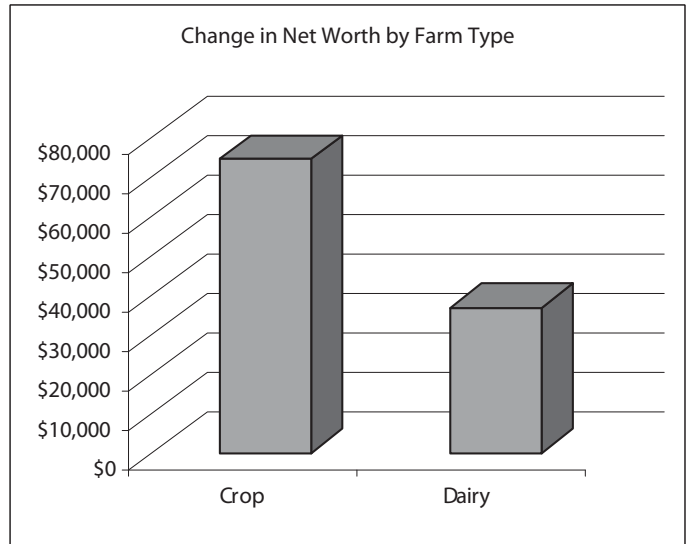
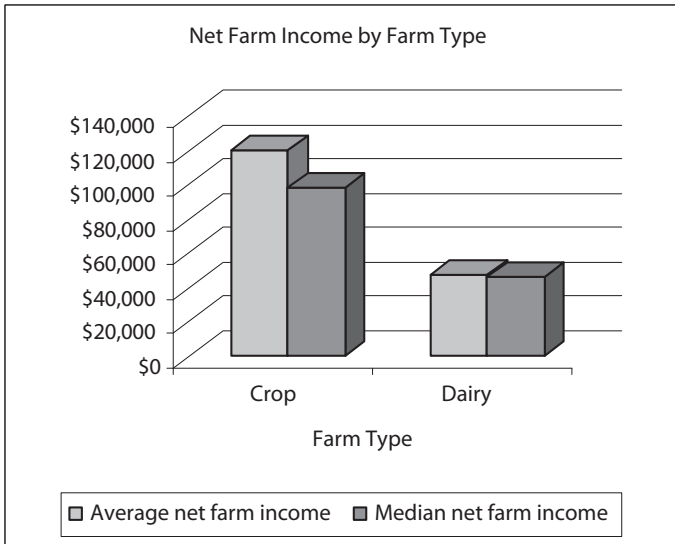
Figure B. Selected Factors by Net Farm Income Group - Completely Organic Farms



**Table 3. Financial Summary
Completely Organic Farms, 2008
(Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>33 - 66%</u>	<u>High 34%</u>
Number of farms	48	15	16	17
Income Statement				
Gross cash farm income	255,581	150,067	186,207	413,975
Total cash farm expense	201,791	156,110	145,287	295,277
Net cash farm income	53,791	-6,043	40,920	118,699
Inventory change	31,859	3,959	23,855	64,011
Depreciation	-18,402	-11,516	-16,658	-26,120
Net farm income from operations	67,247	-13,600	48,116	156,589
Gain or loss on capital sales	145	-	-155	555
Average net farm income	67,392	-13,600	47,961	157,144
Median net farm income	56,412	-1,808	46,376	122,639
Profitability (cost)				
Rate of return on assets	8.9 %	-2.7 %	6.4 %	16.3 %
Rate of return on equity	11.5 %	-15.5 %	7.0 %	23.9 %
Operating profit margin	22.5 %	-10.6 %	20.4 %	31.5 %
Asset turnover rate	39.7 %	25.8 %	31.2 %	51.6 %
Liquidity & Repayment (end of year)				
Current assets	163,734	87,848	97,503	293,027
Current liabilities	98,622	83,131	51,174	156,947
Current ratio	1.66	1.06	1.91	1.87
Working capital	65,112	4,717	46,329	136,080
Working capital to gross inc	22.4 %	3.0 %	22.3 %	28.0 %
Term debt coverage ratio	1.83	0.22	1.84	2.80
Replacement coverage ratio	1.62	0.20	1.66	2.45
Solvency (end of year at market)				
Number of farms	48	15	16	17
Total farm assets	997,087	977,110	763,198	1,234,846
Total farm liabilities	415,764	409,305	315,409	515,915
Total assets	1,150,065	1,141,162	903,761	1,389,736
Total liabilities	455,692	444,541	334,061	580,007
Net worth	694,373	696,621	569,701	809,729
Net worth change	44,495	-4,401	35,352	96,245
Farm debt to asset ratio	42 %	42 %	41 %	42 %
Total debt to asset ratio	40 %	39 %	37 %	42 %
Nonfarm Information				
Net nonfarm income	21,307	27,234	24,195	13,360
Farms reporting living expenses	9	3	2	4
Total family living expense	48,620	-	-	-
Total living, invest, cap. purch	49,895	-	-	-
Crop Acres				
Total acres owned	225	217	161	293
Total crop acres	377	212	208	682
Total crop acres owned	153	111	88	251
Total crop acres cash rented	209	99	120	389
Total crop acres share rented	16	1	-	43

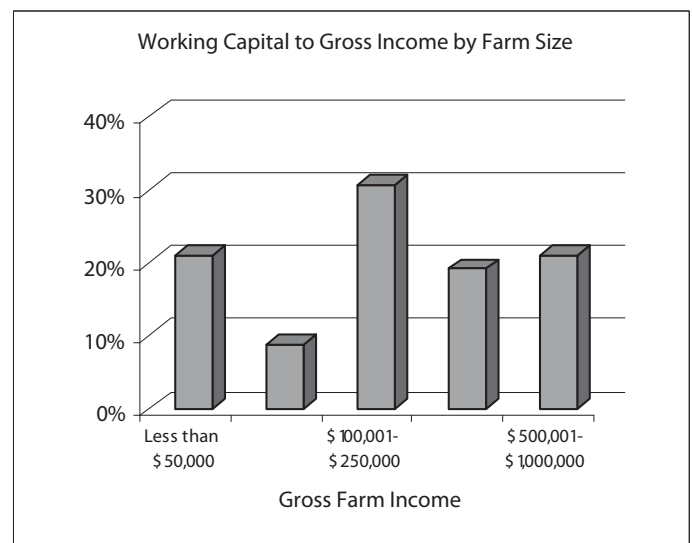
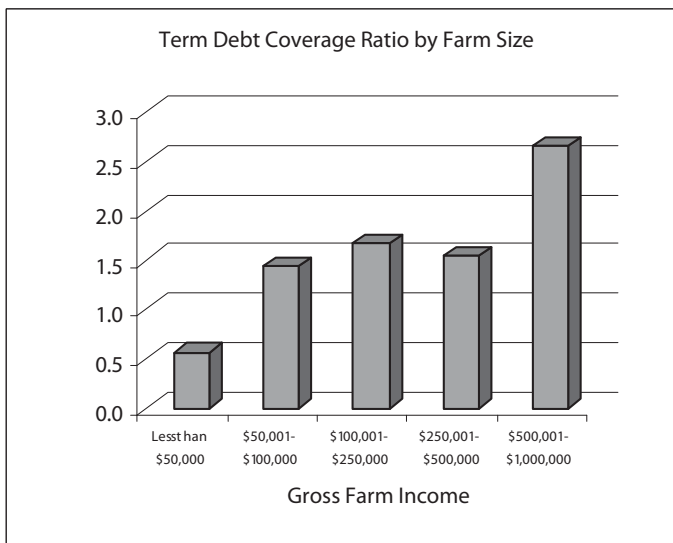
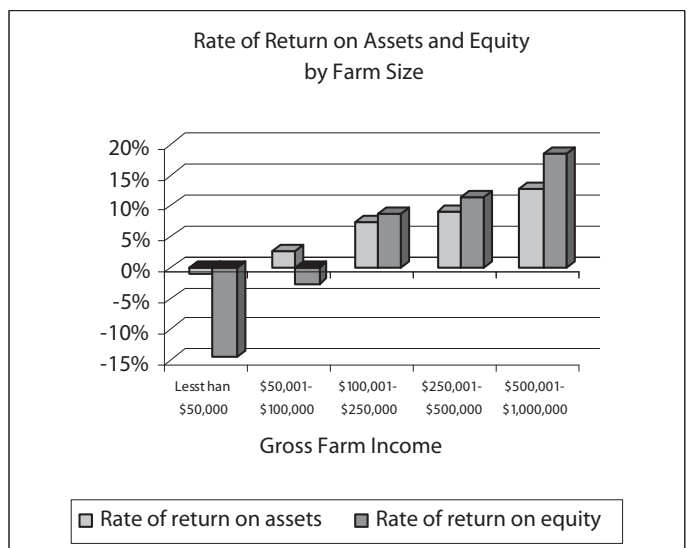
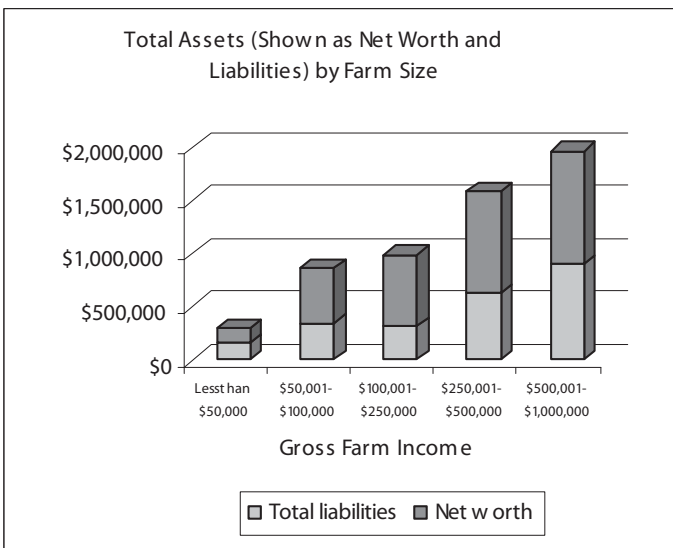
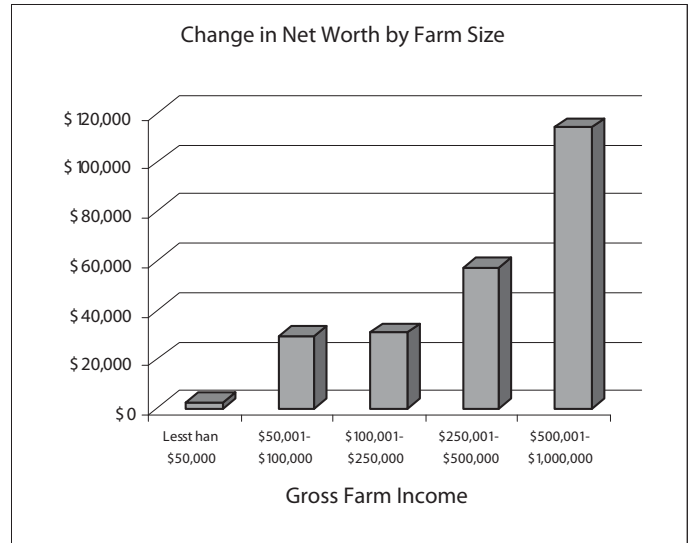
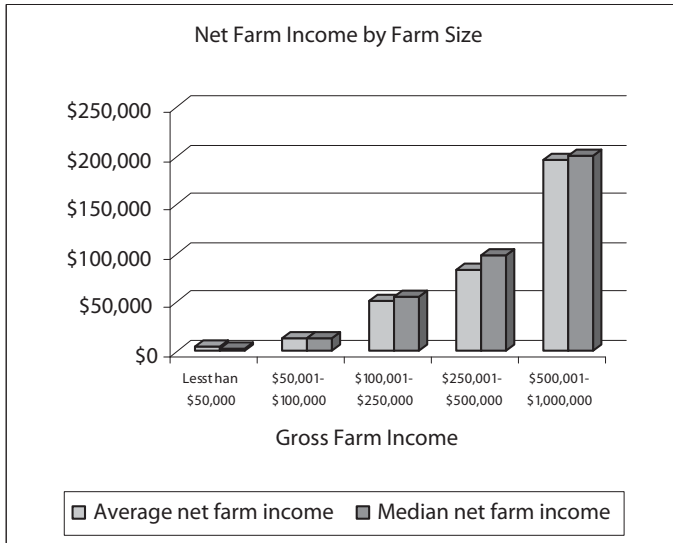
Figure C. Selected Factors by Farm Type - Completely Organic Farms



**Table 4. Financial Summary
Completely Organic Farms, 2008
(Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Dairy</u>
Number of farms	48	14	26
Income Statement			
Gross cash farm income	255,581	316,502	220,981
Total cash farm expense	201,791	239,070	175,017
Net cash farm income	53,791	77,432	45,964
Inventory change	31,859	69,587	14,912
Depreciation	-18,402	-26,654	-13,656
Net farm income from operations	67,247	120,365	47,219
Gain or loss on capital sales	145	-	-96
Average net farm income	67,392	120,365	47,124
Median net farm income	56,412	98,337	46,376
Profitability (cost)			
Rate of return on assets	8.9 %	13.3 %	6.5 %
Rate of return on equity	11.5 %	17.9 %	7.0 %
Operating profit margin	22.5 %	28.8 %	19.3 %
Asset turnover rate	39.7 %	46.1 %	33.8 %
Liquidity & Repayment (end of year)			
Current assets	163,734	321,327	85,255
Current liabilities	98,622	128,300	68,699
Current ratio	1.66	2.50	1.24
Working capital	65,112	193,027	16,556
Working capital to gross inc	22.4 %	49.2 %	6.9 %
Term debt coverage ratio	1.83	2.79	1.30
Replacement coverage ratio	1.62	2.42	1.20
Solvency (end of year at market)			
Number of farms	48	14	26
Total farm assets	997,087	1,029,708	1,003,995
Total farm liabilities	415,764	432,622	395,180
Total assets	1,150,065	1,203,099	1,169,722
Total liabilities	455,692	465,108	445,433
Net worth	694,373	737,991	724,288
Net worth change	44,495	74,376	36,809
Farm debt to asset ratio	42 %	42 %	39 %
Total debt to asset ratio	40 %	39 %	38 %
Nonfarm Information			
Net nonfarm income	21,307	33,328	17,799
Farms reporting living expenses	9	3	4
Total family living expense	48,620	-	-
Total living, invest, cap. purch	49,895	-	-
Crop Acres			
Total acres owned	225	257	217
Total crop acres	377	734	209
Total crop acres owned	153	254	108
Total crop acres cash rented	209	428	100
Total crop acres share rented	16	52	1

Figure D. Selected Factors by Gross Farm Income - Completely Organic Farms



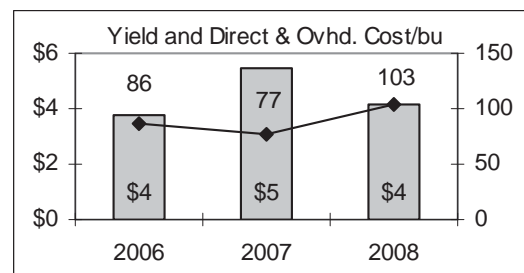
**Table 5. Financial Summary
Completely Organic Farms, 2008
(Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Less than 50,000</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>
Number of farms	48	6	7	18	10	7
Income Statement						
Gross cash farm income	255,581	35,485	76,542	172,981	346,805	705,355
Total cash farm expense	201,791	48,538	66,432	132,448	282,920	530,920
Net cash farm income	53,791	-13,053	10,109	40,533	63,885	174,435
Inventory change	31,859	21,982	11,758	22,428	45,306	65,468
Depreciation	-18,402	-3,986	-9,084	-12,126	-26,994	-43,941
Net farm income from operations	67,247	4,944	12,783	50,835	82,197	195,963
Gain or loss on capital sales	145	-	-	-138	943	-
Average net farm income	67,392	4,944	12,783	50,697	83,140	195,963
Median net farm income	56,412	3,009	13,177	56,412	97,551	200,204
Profitability (cost)						
Rate of return on assets	8.9 %	-1.1 %	2.8 %	7.5 %	9.0 %	12.9 %
Rate of return on equity	11.5 %	-14.7 %	-2.8 %	8.9 %	11.4 %	18.4 %
Operating profit margin	22.5 %	-3.5 %	13.8 %	25.0 %	20.8 %	24.6 %
Asset turnover rate	39.7 %	30.7 %	20.4 %	30.1 %	43.2 %	52.6 %
Liquidity & Repayment (end of year)						
Current assets	163,734	46,279	47,168	105,153	208,877	467,119
Current liabilities	98,622	34,631	39,066	45,050	132,471	302,427
Current ratio	1.66	1.34	1.21	2.33	1.58	1.54
Working capital	65,112	11,648	8,102	60,104	76,406	164,691
Working capital to gross inc	22.4 %	21.0 %	8.8 %	30.7 %	19.2 %	21.0 %
Term debt coverage ratio	1.83	0.57	1.44	1.67	1.54	2.66
Replacement coverage ratio	1.62	0.51	1.33	1.44	1.42	2.26
Solvency (end of year at market)						
Number of farms	48	6	7	18	10	7
Total farm assets	997,087	232,379	656,793	826,378	1,406,608	1,846,784
Total farm liabilities	415,764	135,505	323,659	290,897	566,584	853,719
Total assets	1,150,065	292,502	866,075	989,687	1,581,953	1,964,525
Total liabilities	455,692	161,010	347,912	325,108	631,524	900,653
Net worth	694,373	131,492	518,163	664,579	950,429	1,063,872
Net worth change	44,495	2,288	29,015	30,532	57,305	113,760
Farm debt to asset ratio	42 %	58 %	49 %	35 %	40 %	46 %
Total debt to asset ratio	40 %	55 %	40 %	33 %	40 %	46 %
Nonfarm Information						
Net nonfarm income	21,307	20,938	50,273	18,553	14,769	9,081
Farms reporting living expenses	9	2	-	2	1	4
Total family living expense	48,620	-	-	-	-	-
Total living, invest, cap. purch	49,895	-	-	-	-	-
Crop Acres						
Total acres owned	225	107	137	225	269	351
Total crop acres	377	139	158	215	382	1,208
Total crop acres owned	153	83	88	110	164	374
Total crop acres cash rented	209	53	71	100	218	745
Total crop acres share rented	16	3	-	6	-	89

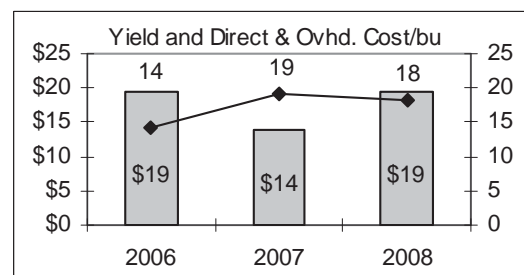
Figure E. Organic Crop, Forage, and Livestock Trends¹

Graphs show yields (line) and expenses (bar).

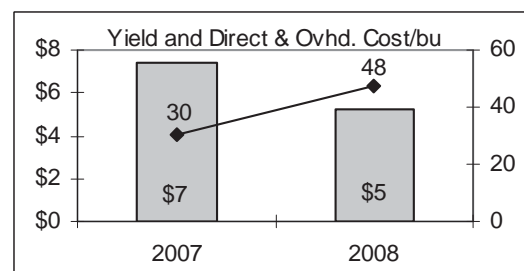
	2008	2007	2006
Corn			
Yield per Acre	103.26	77.04	85.94
Value per Bushel	\$9.43	\$8.09	\$5.29
Fuel, Oil, Repairs per Acre	\$67.71	\$58.03	\$67.60
Total Dir & Ovhd Exp per Acre	\$427.41	\$419.54	\$325.24
Net Return per Acre	\$601.35	\$270.71	\$148.37
Total Direct Exp per Bushel	\$3.37	\$4.11	\$2.79
Total Dir & Ovhd Exp per Bushel	\$4.14	\$5.45	\$3.78



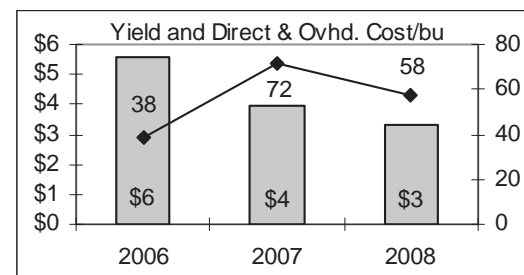
Soybeans			
Yield per Acre	18.27	19.29	14.13
Value per Bushel	\$22.84	\$19.06	\$14.63
Fuel, Oil, Repairs per Acre	\$52.80	\$42.85	\$44.79
Total Dir & Ovhd Exp per Acre	\$354.64	\$269.81	\$273.42
Net Return per Acre	\$183.18	\$118.43	-\$10.99
Total Direct Exp per Bushel	\$15.81	\$10.80	\$15.44
Total Dir & Ovhd Exp per Bushel	\$19.41	\$13.99	\$19.35



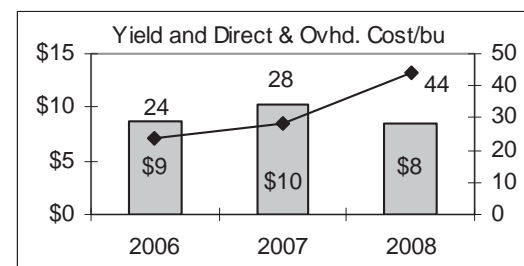
Barley			
Yield per Acre	47.72	30.08	
Value per Bushel	\$8.36	\$6.81	
Fuel, Oil, Repairs per Acre	\$48.14	\$48.15	
Total Dir & Ovhd Exp per Acre	\$247.67	\$222.04	
Net Return per Acre	\$170.80	\$0.05	
Total Direct Exp per Bushel	\$3.69	\$5.83	
Total Dir & Ovhd Exp per Bushel	\$5.19	\$7.38	



Oats			
Yield per Acre	57.71	71.89	38.26
Value per Bushel	\$4.73	\$5.04	\$3.03
Fuel, Oil, Repairs per Acre	\$43.82	\$37.74	\$39.35
Total Dir & Ovhd Exp per Acre	\$193.24	\$285.70	\$212.52
Net Return per Acre	\$107.36	\$92.11	-\$88.88
Total Direct Exp per Bushel	\$2.36	\$2.76	\$4.23
Total Dir & Ovhd Exp per Bushel	\$3.35	\$3.97	\$5.56

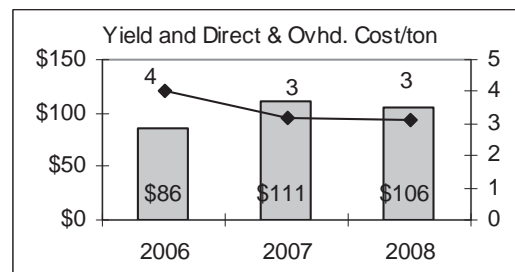


Spring Wheat			
Yield per Acre	43.84	28.16	23.82
Value per Bushel	\$15.04	\$13.99	\$6.49
Fuel, Oil, Repairs per Acre	\$67.76	\$44.89	\$40.51
Total Dir & Ovhd Exp per Acre	\$367.68	\$290.00	\$207.86
Net Return per Acre	\$314.14	\$111.35	-\$7.93
Total Direct Exp per Bushel	\$6.75	\$7.77	\$6.72
Total Dir & Ovhd Exp per Bushel	\$8.73	\$10.30	\$8.39

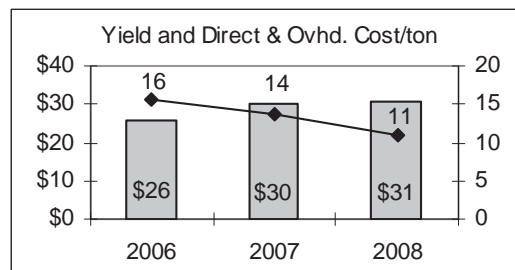


¹ To account for more production costs, data reflects production on cash rented land only.

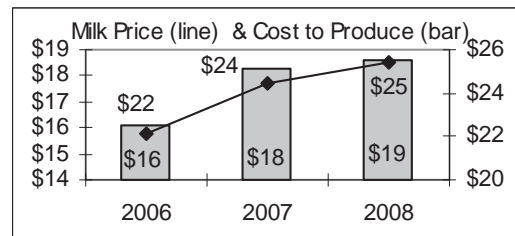
	2008	2007	2006
Alfalfa Hay			
Yield per Acre	3.11	3.18	4.05
Value per Ton	\$142.21	\$139.15	\$115.69
Fuel, Oil, Repairs per Acre	\$66.30	\$61.64	\$53.01
Total Dir & Ovhd Exp per Acre	\$328.73	\$352.73	\$350.36
Net Return per Acre	\$115.57	\$91.22	\$125.64
Total Direct Exp per Ton	\$78.95	\$72.55	\$70.21
Total Dir & Ovhd Exp per Ton	\$105.58	\$110.85	\$86.43



Corn Silage			
Yield per Acre	11.09	13.57	15.64
Value per Ton	\$44.04	\$32.29	\$27.21
Fuel, Oil, Repairs per Acre	\$80.00	\$108.55	\$76.26
Total Dir & Ovhd Exp per Acre	\$342.00	\$408.44	\$399.17
Net Return per Acre	\$163.37	\$39.31	\$40.32
Total Direct Exp per Ton	\$23.58	\$21.88	\$19.35
Total Dir & Ovhd Exp per Ton	\$30.84	\$30.10	\$25.53



Dairy			
Production/Cow	12,629	13,372	12,323
Price Rec'vd/Cwt Milk	\$25.39	\$24.44	\$22.15
Total Feed Cost/Cwt Milk	\$10.31	\$10.47	\$7.64
Return over Feed/Cwt Milk	\$5.95	\$5.30	\$4.67
Net Return/Cwt Milk	\$2.33	\$2.33	\$2.06
Total Direct & Ovhd Exp/Cwt	\$18.60	\$18.24	\$16.07



INTRODUCTION TO THE CROP REPORTS

The Crop Production and Marketing Summary in Table 6 offers a snapshot of yields and prices received for crops in 2006, 2007, and 2008. The Crop Enterprise Analysis tables that follow (Tables 7-22) show the average physical production, gross return, direct expenses, overhead expenses, and net returns per acre for various cropping enterprises on both completely and partially organic farms. Separate tables are included for owned and cash rented land. The reports include historical comparisons of enterprise returns for years 2006 through 2008, and 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 each cost category:

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

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

With labor and management is the break even 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.

**Table 6. Crop Production and Marketing Summary
Completely and Partially Organic Farms
(Sorted By Year)**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of farms	73	64	70
Acreage Summary			
Total acres owned	245	284	264
Total crop acres	451	552	514
Crop acres owned	176	197	174
Crop acres cash rented	263	337	316
Crop acres share rented	11	18	25
Total pasture acres	47	33	27
Percent crop acres owned	39%	36%	34%
Average Price Received (Cash Sales Only)			
Soybeans, Organic per bushel	22.5	16.17	14.17
Soybeans per bushel	11.58	7.96	6.32
Corn per bushel	5.06	3.76	2.11
Corn, Organic per bushel	8.71	6.62	5.19
Hay, Alfalfa, Organic per ton	120.39	125.17	132.22
Wheat, Spring per bushel	6.8	4.7	4.11
Oats, Organic per bushel	-	4.94	-
Hay, Alfalfa per ton	-	-	78.85
Barley, Organic per bushel	-	5.54	-
Average Yield Per Acre			
Hay, Alfalfa, Organic (ton)	3.3	3.35	3.81
Corn, Organic (bushel)	110.94	78.74	90.03
Soybeans, Organic (bushel)	18.56	20.83	15.11
Soybeans (bushel)	31.13	33.98	31.53
Corn Silage, Organic (ton)	12.62	11.64	14.7
Oats, Organic (bushel)	56.55	77.31	40.12
Corn (bushel)	156.33	134.08	151.12
Pasture, Organic (aum)	5.7	3.89	7.47
Barley, Organic (bushel)	51.55	31.85	31.81
Hay, Grass, Organic (ton)	2.81	2.63	2.98
Wheat, Spring, Organic (bushel)	43.36	25.33	27.65
Wheat, Spring (bushel)	60.59	53.18	42.41
CRP (\$)	60.24	-	56.84
Hay, Mixed, Organic (ton)	2.53	-	-
Sunflowers, Organic (cwt)	-	12.59	-

**Table 7. Crop Enterprise Analysis
Alfalfa Hay, Organic, on Owned Land**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	29	28	28
Number of farms	21	21	19
Acres	62.28	62.17	49.03
Yield per acre (ton)	3.56	3.56	3.54
Operators share of yield %	100.00	100.00	100.00
Value per ton	138.16	148.96	122.17
Total product return per acre	491.20	530.92	432.77
Other crop income per acre	1.25	-	14.97
Gross return per acre	492.44	530.92	447.75
Direct Expenses			
Seed	1.16	6.49	1.30
Fertilizer	31.61	30.59	34.14
Non-chemical crop protect	0.64	-	-
Crop insurance	1.51	1.63	0.65
Storage	1.07	-	-
Fuel & oil	35.58	35.84	26.01
Repairs	33.16	35.31	27.76
Repair, machinery	7.19	2.34	5.45
Custom hire	42.00	61.03	92.94
Repair, buildings	4.99	0.47	0.56
Hired labor	0.36	-	4.52
Machinery leases	-	-	1.61
Hauling and trucking	0.08	7.85	13.17
Marketing	0.14	-	1.22
Organic certification	2.30	2.56	1.37
Operating interest	7.44	7.68	6.56
Miscellaneous	6.00	0.74	1.83
Total direct expenses per acre	175.24	192.53	219.08
Return over direct exp per acre	317.21	338.38	228.66
Overhead Expenses			
Repair, machinery	-	6.45	-
Custom hire	0.18	19.87	3.88
Hired labor	16.12	14.08	11.81
Machinery leases	1.87	6.47	1.42
Building leases	5.74	-	1.06
RE & pers. property taxes	11.52	10.89	10.02
Farm insurance	6.61	8.23	5.99
Utilities	6.38	5.62	3.41
Dues & professional fees	3.52	9.32	4.17
Interest	30.26	48.30	37.01
Mach & bldg depreciation	43.22	37.13	24.50
Miscellaneous	6.84	6.25	6.45
Total overhead expenses per acre	132.27	172.62	109.73
Total dir & ovhd expenses per acre	307.51	365.15	328.81
Net return per acre	184.94	165.77	118.94
Government payments	17.30	14.42	14.29
Net return with govt pmts	202.24	180.19	133.23
Labor & management charge	46.05	46.57	31.08
Net return over lbr & mgt	156.18	133.62	102.14
Cost of Production			
Total direct expense per ton	49.29	54.02	61.85
Total dir & ovhd exp per ton	86.49	102.45	92.83
Less govt & other income	81.28	98.40	84.56
With labor & management	94.23	111.47	93.34
Net value per unit	138.16	148.96	122.17
Machinery cost per acre	168.41	215.12	189.96
Est. labor hours per acre	5.09	4.60	4.31

**Table 8. Crop Enterprise Analysis
Alfalfa Hay, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	35	24	18
Number of farms	20	16	17
Acres	59.59	80.80	67.83
Yield per acre (ton)	3.11	3.18	4.05
Operators share of yield %	100.00	100.00	100.00
Value per ton	142.21	139.15	115.69
Total product return per acre	442.77	442.76	468.99
Crop insurance per acre	1.53	-	-
Other crop income per acre	-	1.19	7.01
Gross return per acre	444.30	443.95	476.00
Direct Expenses			
Seed	2.18	7.01	2.37
Fertilizer	13.21	30.40	21.97
Non-chemical crop protect	-	1.28	3.63
Crop insurance	0.49	0.48	0.60
Storage	1.20	-	-
Fuel & oil	29.25	27.89	22.35
Repairs	34.15	31.53	25.64
Repair, machinery	2.29	1.96	4.41
Custom hire	53.72	39.53	112.30
Repair, buildings	0.61	0.26	0.61
Hired labor	0.15	-	8.06
Land rent	81.29	67.72	71.78
Machinery leases	-	-	2.40
Hauling and trucking	13.85	7.06	-
Marketing	0.12	-	1.12
Organic certification	1.77	2.27	1.68
Operating interest	10.25	11.89	4.87
Miscellaneous	1.31	1.58	0.82
Total direct expenses per acre	245.82	230.85	284.60
Return over direct exp per acre	198.48	213.10	191.40
Overhead Expenses			
Custom hire	0.26	25.37	4.31
Hired labor	26.28	21.72	16.51
Machinery leases	0.47	1.67	1.85
Building leases	2.07	-	0.43
Farm insurance	3.82	9.53	4.85
Utilities	3.60	4.70	2.75
Dues & professional fees	1.06	2.70	1.35
Interest	8.89	5.36	5.04
Mach & bldg depreciation	27.48	32.16	22.51
Miscellaneous	8.98	18.67	6.17
Total overhead expenses per acre	82.91	121.88	65.76
Total dir & ovhd expenses per acre	328.73	352.73	350.36
Net return per acre	115.57	91.22	125.64
Government payments	13.36	15.37	11.77
Net return with govt pmts	128.93	106.59	137.41
Labor & management charge	42.78	33.23	25.95
Net return over lbr & mgt	86.15	73.36	111.46
Cost of Production			
Total direct expense per ton	78.95	72.55	70.21
Total dir & ovhd exp per ton	105.58	110.85	86.43
Less govt & other income	100.80	105.65	81.80
With labor & management	114.54	116.09	88.20
Net value per unit	142.21	139.15	115.69
Machinery cost per acre	154.29	164.20	198.97
Est. labor hours per acre	4.33	3.19	5.19

Table 9. Crop Enterprise Analysis
Barley, Organic, on Owned Land

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	10	8	8
Number of farms	8	7	8
Acres	71.79	49.21	55.73
Yield per acre (bu.)	47.64	35.04	39.71
Operators share of yield %	100.00	100.00	100.00
Value per bu.	6.63	6.14	4.84
Total product return per acre	315.72	215.25	192.38
Crop insurance per acre	1.69	-	-
Other crop income per acre	5.04	38.36	10.80
Gross return per acre	322.45	253.60	203.18
Direct Expenses			
Seed	26.31	22.38	11.03
Fertilizer	24.81	13.21	3.75
Crop insurance	7.10	5.54	4.14
Fuel & oil	31.82	14.13	20.19
Repairs	29.36	19.01	18.18
Repair, machinery	0.58	1.50	1.94
Custom hire	1.11	1.47	1.07
Repair, buildings	0.66	0.12	0.59
Hauling and trucking	1.52	0.73	-
Organic certification	4.57	2.77	1.55
Operating interest	3.88	6.88	11.40
Miscellaneous	8.13	0.28	-
Total direct expenses per acre	139.85	88.01	73.85
Return over direct exp per acre	182.60	165.59	129.33
Overhead Expenses			
Custom hire	0.43	8.57	2.17
Hired labor	9.74	7.39	8.42
RE & pers. property taxes	8.15	7.25	10.12
Farm insurance	5.43	4.05	5.02
Utilities	3.59	3.82	4.96
Dues & professional fees	2.94	3.06	2.77
Interest	24.09	22.75	26.44
Mach & bldg depreciation	29.79	36.59	20.29
Miscellaneous	0.54	3.34	11.40
Total overhead expenses per acre	84.71	96.83	91.59
Total dir & ovhd expenses per acre	224.55	184.84	165.44
Net return per acre	97.89	68.76	37.74
Government payments	14.60	12.36	18.19
Net return with govt pmts	112.49	81.12	55.94
Labor & management charge	42.35	39.25	31.06
Net return over lbr & mgt	70.14	41.87	24.87
Cost of Production			
Total direct expense per bu.	2.94	2.51	1.86
Total dir & ovhd exp per bu.	4.71	5.27	4.17
Less govt & other income	4.27	3.83	3.44
With labor & management	5.16	4.95	4.22
Net value per unit	6.63	6.14	4.84
Machinery cost per acre	94.52	82.57	67.26
Est. labor hours per acre	2.86	3.74	3.93

**Table 10. Crop Enterprise Analysis
Barley, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>
Number of fields	11	9
Number of farms	11	8
Acres	56.06	78.93
Yield per acre (bu.)	47.72	30.08
Operators share of yield %	100.00	100.00
Value per bu.	8.36	6.81
Total product return per acre	399.09	204.88
Crop insurance per acre	16.22	-
LDP income per acre	0.89	-
Other crop income per acre	2.27	17.22
Gross return per acre	418.47	222.10
Direct Expenses		
Seed	20.14	20.18
Fertilizer	24.22	24.08
Crop insurance	5.60	6.62
Fuel & oil	16.23	20.80
Repairs	30.11	25.95
Repair, machinery	0.84	0.84
Custom hire	8.60	3.04
Repair, buildings	0.96	0.56
Hired labor	1.11	-
Land rent	49.94	60.66
Utilities	1.45	-
Hauling and trucking	1.81	4.63
Marketing	1.08	-
Organic certification	2.23	1.55
Operating interest	5.73	5.52
Miscellaneous	6.16	1.06
Total direct expenses per acre	176.20	175.48
Return over direct exp per acre	242.27	46.62
Overhead Expenses		
Custom hire	1.48	3.35
Hired labor	7.05	7.31
Machinery leases	0.11	0.89
Building leases	-	-
Farm insurance	3.46	3.58
Utilities	2.96	3.57
Dues & professional fees	1.27	3.82
Interest	6.31	3.35
Mach & bldg depreciation	44.13	17.32
Miscellaneous	4.70	3.36
Total overhead expenses per acre	71.47	46.56
Total dir & ovhd expenses per acre	247.67	222.04
Net return per acre	170.80	0.05
Government payments	8.76	12.04
Net return with govt pmts	179.56	12.10
Labor & management charge	32.38	33.18
Net return over lbr & mgt	147.18	-21.08
Cost of Production		
Total direct expense per bu.	3.69	5.83
Total dir & ovhd exp per bu.	5.19	7.38
Less govt & other income	4.60	6.41
With labor & management	5.28	7.51
Net value per unit	8.38	6.81
Machinery cost per acre	104.98	74.93
Est. labor hours per acre	2.70	2.99

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

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	33	20	17
Number of farms	21	16	15
Acres	25.96	40.10	41.82
Yield per acre (bu.)	106.21	98.50	93.68
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.60	8.88	5.51
Other product return per acre	-	6.35	7.11
Total product return per acre	913.62	880.66	523.48
Crop insurance per acre	35.83	-	-
Other crop income per acre	2.97	47.89	33.76
Gross return per acre	952.42	928.55	557.23
Direct Expenses			
Seed	58.24	38.96	39.69
Fertilizer	86.23	45.79	24.07
Non-chemical crop protect	4.29	1.26	14.44
Crop insurance	26.17	16.99	5.80
Drying expense	11.56	2.78	2.73
Irrigation energy	0.54	-	-
Fuel & oil	41.46	34.54	41.24
Repairs	43.41	23.68	40.66
Repair, machinery	2.85	4.48	4.00
Custom hire	8.68	3.70	0.04
Repair, buildings	1.08	0.17	0.48
Hired labor	0.32	-	6.61
Machinery leases	-	0.49	2.63
Hauling and trucking	0.12	0.30	1.35
Marketing	0.53	-	-
Organic certification	1.00	2.59	1.51
Operating interest	12.59	5.73	12.77
Miscellaneous	0.97	1.30	0.57
Total direct expenses per acre	300.04	182.77	198.59
Return over direct exp per acre	652.38	745.78	358.64
Overhead Expenses			
Repair, machinery	-	1.49	-
Custom hire	0.21	8.43	7.46
Hired labor	34.46	14.67	12.67
Machinery leases	0.63	4.19	1.39
Building leases	5.85	-	0.73
RE & pers. property taxes	13.19	13.70	11.58
Farm insurance	5.76	9.03	8.31
Utilities	4.97	5.62	6.10
Dues & professional fees	6.47	7.11	3.65
Interest	76.92	60.57	55.73
Mach & bldg depreciation	39.64	29.33	42.51
Miscellaneous	8.92	6.01	5.80
Total overhead expenses per acre	197.02	160.15	155.94
Total dir & ovhd expenses per acre	497.06	342.92	354.53
Net return per acre	455.36	585.63	202.70
Government payments	20.64	22.31	29.12
Net return with govt pmts	476.00	607.94	231.82
Labor & management charge	52.58	42.71	52.72
Net return over lbr & mgt	423.42	565.22	179.10
Cost of Production			
Total direct expense per bu.	2.82	1.86	2.12
Total dir & ovhd exp per bu.	4.68	3.48	3.78
Less govt & other income	4.12	2.70	3.04
With labor & management	4.62	3.14	3.60
Net value per unit	8.60	8.88	5.51
Machinery cost per acre	143.12	115.25	144.02
Est. labor hours per acre	7.24	5.39	4.82

**Table 12. Crop Enterprise Analysis
Corn, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	23	25	18
Number of farms	22	20	15
Acres	44.77	73.35	43.93
Yield per acre (bu.)	103.26	77.04	85.94
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	9.43	8.09	5.29
Other product return per acre	-	3.83	1.14
Total product return per acre	973.48	627.00	455.72
Crop insurance per acre	41.70	-	-
Other crop income per acre	13.58	63.25	17.89
Gross return per acre	1,028.77	690.25	473.61
Direct Expenses			
Seed	52.84	48.34	38.46
Fertilizer	54.45	48.52	42.73
Crop chemicals	6.38	-	-
Non-chemical crop protect	6.98	4.30	2.14
Crop insurance	17.38	14.94	7.84
Drying expense	5.16	1.37	1.97
Fuel & oil	32.30	27.45	25.86
Repairs	28.04	23.49	32.31
Repair, machinery	6.38	5.97	9.07
Custom hire	22.71	25.08	3.48
Repair, buildings	0.99	1.12	0.36
Hired labor	10.16	-	-
Land rent	89.02	96.31	64.43
Machinery leases	-	0.09	0.59
Utilities	1.83	-	-
Hauling and trucking	-	3.17	-
Marketing	1.04	0.02	0.24
Organic certification	1.17	2.94	2.33
Operating interest	9.26	12.16	8.03
Miscellaneous	1.61	1.39	0.24
Total direct expenses per acre	347.70	316.66	240.06
Return over direct exp per acre	681.07	373.59	233.54
Overhead Expenses			
Repair, machinery	-	2.80	-
Custom hire	0.12	12.70	2.52
Hired labor	16.22	12.06	24.95
Machinery leases	0.96	6.02	1.12
Building leases	0.17	-	2.88
Farm insurance	5.37	7.34	5.98
Utilities	6.70	5.28	3.74
Dues & professional fees	3.16	5.15	2.67
Interest	6.97	8.71	6.98
Mach & bldg depreciation	28.52	29.28	29.64
Miscellaneous	11.52	13.53	4.70
Total overhead expenses per acre	79.72	102.89	85.17
Total dir & ovhd expenses per acre	427.41	419.54	325.24
Net return per acre	601.35	270.71	148.37
Government payments	16.71	18.40	26.27
Net return with govt pmts	618.07	289.10	174.64
Labor & management charge	45.64	40.30	34.40
Net return over lbr & mgt	572.43	248.80	140.24
Cost of Production			
Total direct expense per bu.	3.37	4.11	2.79
Total dir & ovhd exp per bu.	4.14	5.45	3.78
Less govt & other income	3.44	4.34	3.26
With labor & management	3.88	4.86	3.66
Net value per unit	9.43	8.09	5.29
Machinery cost per acre	123.05	140.53	108.84
Est. labor hours per acre	4.75	4.06	4.99

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

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	15	14	9
Number of farms	12	12	8
Acres	21.44	25.16	28.72
Yield per acre (ton)	15.01	12.25	14.09
Operator's share of yield %	100.00	100.00	100.00
Value per ton	45.42	36.22	30.87
Other product return per acre	-	-	12.07
Total product return per acre	681.97	443.67	447.13
Crop insurance per acre	13.21	-	-
Other crop income per acre	0.28	50.31	-
Gross return per acre	695.46	493.97	447.13
Direct Expenses			
Seed	54.42	45.08	41.28
Fertilizer	59.92	29.19	23.64
Non-chemical crop protect	0.23	0.11	2.22
Crop insurance	10.96	9.39	3.23
Storage	5.66	2.41	-
Irrigation energy	1.54	1.46	-
Fuel & oil	45.77	33.36	33.17
Repairs	55.26	52.39	35.95
Repair, machinery	2.56	8.40	13.17
Custom hire	24.29	23.20	23.41
Repair, buildings	-	1.75	1.18
Hired labor	0.76	-	-
Machinery leases	-	-	1.94
Marketing	-	-	2.51
Organic certification	2.31	0.95	0.71
Operating interest	5.93	2.85	4.95
Miscellaneous	4.45	3.38	-
Total direct expenses per acre	274.07	213.93	187.37
Return over direct exp per acre	421.39	280.04	259.77
Overhead Expenses			
Repair, machinery	-	10.61	-
Custom hire	0.00	9.13	0.11
Hired labor	19.83	33.61	29.28
Machinery leases	0.88	5.02	4.48
Building leases	15.37	-	2.38
RE & pers. property taxes	9.15	9.27	8.69
Farm insurance	4.85	7.19	7.78
Utilities	3.95	5.05	4.00
Dues & professional fees	2.68	3.06	1.68
Interest	31.04	37.64	23.21
Mach & bldg depreciation	42.29	34.82	31.96
Miscellaneous	10.07	6.43	5.59
Total overhead expenses per acre	140.12	161.84	119.14
Total dir & ovhd expenses per acre	414.19	375.77	306.51
Net return per acre	281.28	118.21	140.63
Government payments	60.62	13.34	29.21
Net return with govt pmts	341.89	131.55	169.84
Labor & management charge	41.68	47.72	29.20
Net return over lbr & mgt	300.21	83.83	140.64
Cost of Production			
Total direct expense per ton	18.25	17.46	13.29
Total dir & ovhd exp per ton	27.59	30.68	21.75
Less govt & other income	22.65	25.48	18.82
With labor & management	25.43	29.38	20.89
Net value per unit	45.42	36.22	30.87
Machinery cost per acre	180.37	188.34	150.43
Est. labor hours per acre	5.77	6.38	5.36

**Table 14. Crop Enterprise Analysis
Corn Silage, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	13	5	10
Number of farms	12	5	9
Acres	36.95	15.40	16.70
Yield per acre (ton)	11.09	13.57	15.64
Operators share of yield %	100.00	100.00	100.00
Value per ton	44.04	32.29	27.21
Other product return per acre	-	-	14.01
Total product return per acre	488.40	438.20	439.48
Crop insurance per acre	13.44	-	-
LDP income per acre	3.53	-	-
Other crop income per acre	-	9.55	-
Gross return per acre	505.37	447.74	439.48
Direct Expenses			
Seed	44.42	37.43	42.87
Fertilizer	28.50	26.93	29.44
Crop chemicals	1.48	4.81	-
Non-chemical crop protect	7.42	0.92	4.73
Crop insurance	6.63	4.74	2.46
Storage	2.34	-	-
Fuel & oil	36.33	38.77	31.20
Repairs	42.23	53.91	36.66
Repair, machinery	1.12	15.60	6.98
Custom hire	25.25	9.07	55.87
Repair, buildings	0.32	0.27	1.42
Land rent	56.56	95.36	81.09
Machinery leases	-	-	1.94
Organic certification	0.57	1.44	1.61
Operating interest	4.60	2.23	6.32
Miscellaneous	3.67	5.47	-
Total direct expenses per acre	261.44	296.94	302.61
Return over direct exp per acre	243.93	150.80	136.87
Overhead Expenses			
Custom hire	3.27	6.82	1.28
Hired labor	17.71	24.95	30.30
Machinery leases	0.54	-	2.16
Building leases	-	3.97	-
Farm insurance	2.85	5.61	6.39
Utilities	3.27	4.47	4.11
Dues & professional fees	3.19	5.56	3.40
Interest	9.16	15.41	11.27
Mach & bldg depreciation	32.56	40.20	29.95
Miscellaneous	7.99	4.52	7.69
Total overhead expenses per acre	80.55	111.49	96.56
Total dir & ovhd expenses per acre	342.00	408.44	399.17
Net return per acre	163.37	39.31	40.32
Government payments	5.94	5.48	28.67
Net return with govt pmts	169.31	44.79	68.98
Labor & management charge	34.85	62.25	33.08
Net return over lbr & mgt	134.46	-17.46	35.90
Cost of Production			
Total direct expense per ton	23.58	21.88	19.35
Total dir & ovhd exp per ton	30.84	30.10	25.53
Less govt & other income	28.77	28.99	22.80
With labor & management	31.92	33.58	24.91
Net value per unit	44.36	32.29	27.21
Machinery cost per acre	148.01	175.78	173.63
Est. labor hours per acre	5.25	10.69	6.36

Table 15. Crop Enterprise Analysis
Oats, Organic, on Owned Land

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	10	9	7
Number of farms	10	7	7
Acres	25.37	42.62	51.29
Yield per acre (bu.)	67.94	82.11	46.04
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.10	4.17	3.23
Other product return per acre	2.84	5.63	-
Total product return per acre	349.62	348.17	148.59
LDP income per acre	3.08	-	-
Other crop income per acre	44.18	31.68	15.06
Gross return per acre	396.88	379.85	163.64
Direct Expenses			
Seed	19.40	13.29	9.74
Fertilizer	8.53	13.09	18.47
Crop insurance	1.77	7.10	11.14
Irrigation energy	0.69	-	-
Fuel & oil	21.26	22.90	20.72
Repairs	16.59	9.46	18.81
Repair, machinery	14.05	9.11	2.59
Custom hire	17.41	22.11	-
Repair, buildings	11.57	3.30	0.60
Hired labor	-	-	12.20
Machinery leases	-	-	3.64
Hauling and trucking	1.13	2.27	2.49
Organic certification	1.24	2.55	2.38
Operating interest	2.51	3.73	10.47
Miscellaneous	0.13	0.52	0.82
Total direct expenses per acre	116.27	109.42	114.07
Return over direct exp per acre	280.61	270.44	49.57
Overhead Expenses			
Custom hire	0.92	4.95	6.05
Hired labor	7.89	13.50	0.40
Machinery leases	4.45	7.25	0.05
RE & pers. property taxes	14.37	13.99	5.39
Farm insurance	6.89	6.09	3.83
Utilities	6.32	4.82	4.04
Dues & professional fees	3.39	5.10	2.10
Interest	46.47	51.64	30.41
Mach & bldg depreciation	38.71	30.67	21.85
Miscellaneous	4.60	7.27	3.41
Total overhead expenses per acre	134.01	145.29	77.53
Total dir & ovhd expenses per acre	250.28	254.71	191.60
Net return per acre	146.60	125.15	-27.95
Government payments	12.04	16.67	18.88
Net return with govt pmts	158.64	141.82	-9.08
Labor & management charge	22.35	38.74	23.31
Net return over lbr & mgt	136.29	103.08	-32.38
Cost of Production			
Total direct expense per bu.	1.71	1.33	2.48
Total dir & ovhd exp per bu.	3.68	3.10	4.16
Less govt & other income	2.77	2.44	3.42
With labor & management	3.10	2.92	3.93
Net value per unit	5.15	4.17	3.23
Machinery cost per acre	117.11	113.61	74.54
Est. labor hours per acre	2.70	3.52	2.10

Table 16. Crop Enterprise Analysis
Oats, Organic, on Cash Rent

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	13	7	13
Number of farms	13	5	12
Acres	40.52	79.83	87.78
Yield per acre (bu.)	57.71	71.89	38.26
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.73	5.04	3.03
Other product return per acre	-	11.77	-
Total product return per acre	273.23	373.79	116.10
Crop insurance per acre	2.41	-	-
Other crop income per acre	24.96	4.03	7.55
Gross return per acre	300.60	377.81	123.65
Direct Expenses			
Seed	16.74	15.96	11.76
Fertilizer	5.69	42.25	23.05
Non-chemical crop protect	-	-	2.78
Crop insurance	1.92	6.45	6.45
Fuel & oil	19.90	18.86	18.64
Repairs	20.54	16.20	20.71
Repair, machinery	1.84	2.60	-
Custom hire	11.18	21.66	1.36
Repair, buildings	1.54	0.08	-
Hired labor	0.26	-	10.73
Land rent	48.18	61.10	47.01
Machinery leases	-	-	3.20
Hauling and trucking	0.14	-	2.19
Organic certification	0.76	2.89	1.86
Operating interest	4.41	10.10	11.53
Miscellaneous	2.81	0.39	0.61
Total direct expenses per acre	135.93	198.55	161.87
Return over direct exp per acre	164.68	179.27	-38.22
Overhead Expenses			
Custom hire	1.88	22.09	6.91
Hired labor	9.67	12.97	4.02
Machinery leases	1.47	0.16	0.33
Farm insurance	2.99	6.20	3.67
Utilities	2.60	2.47	2.87
Dues & professional fees	2.32	2.75	3.66
Interest	4.73	5.44	4.91
Mach & bldg depreciation	29.46	27.43	20.73
Miscellaneous	2.19	7.65	3.56
Total overhead expenses per acre	57.32	87.15	50.65
Total dir & ovhd expenses per acre	193.24	285.70	212.52
Net return per acre	107.36	92.11	-88.88
Government payments	10.41	16.65	20.10
Net return with govt pmts	117.77	108.76	-68.77
Labor & management charge	25.21	14.10	27.33
Net return over lbr & mgt	92.56	94.66	-96.10
Cost of Production			
Total direct expense per bu.	2.36	2.76	4.23
Total dir & ovhd exp per bu.	3.35	3.97	5.56
Less govt & other income	2.69	3.52	4.83
With labor & management	3.13	3.72	5.55
Net value per unit	4.73	5.04	3.03
Machinery cost per acre	88.92	113.08	73.54
Est. labor hours per acre	2.09	2.09	2.16

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

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	14	17	14
Number of farms	11	16	14
Acres	54.46	76.58	77.99
Yield per acre (bu.)	14.98	23.01	13.76
Operators share of yield %	100.00	100.00	100.00
Value per bu.	19.39	19.63	14.37
Other product return per acre	-	1.63	-
Total product return per acre	290.40	453.26	197.77
Crop insurance per acre	74.21	-	-
Other crop income per acre	-	20.08	38.16
Gross return per acre	364.61	473.34	235.93
Direct Expenses			
Seed	30.54	35.19	29.09
Fertilizer	15.08	4.48	8.46
Non-chemical crop protect	2.83	2.99	10.74
Crop insurance	17.09	10.98	10.38
Fuel & oil	27.21	21.11	19.35
Repairs	31.38	18.70	25.21
Repair, machinery	1.64	2.85	0.61
Custom hire	3.05	2.74	2.97
Repair, buildings	1.16	0.57	-
Hired labor	0.52	1.16	7.17
Machinery leases	6.10	3.33	1.26
Hauling and trucking	0.51	1.86	0.71
Organic certification	2.56	1.84	1.46
Operating interest	7.70	3.63	8.85
Miscellaneous	0.50	0.36	0.29
Total direct expenses per acre	147.86	111.79	126.55
Return over direct exp per acre	216.74	361.56	109.39
Overhead Expenses			
Custom hire	1.38	4.21	2.94
Hired labor	14.17	10.71	9.79
Machinery leases	0.46	1.36	0.79
RE & pers. property taxes	10.37	11.47	9.03
Farm insurance	4.61	4.34	3.59
Utilities	3.67	4.40	3.52
Dues & professional fees	4.02	3.90	1.80
Interest	63.69	57.42	29.16
Mach & bldg depreciation	29.89	30.25	23.64
Miscellaneous	6.37	6.46	4.45
Total overhead expenses per acre	138.63	134.53	88.70
Total dir & ovhd expenses per acre	286.49	246.32	215.25
Net return per acre	78.12	227.03	20.68
Government payments	17.57	19.45	19.98
Net return with govt pmts	95.69	246.47	40.66
Labor & management charge	41.50	35.82	30.18
Net return over lbr & mgt	54.19	210.65	10.49
Cost of Production			
Total direct expense per bu.	9.87	4.86	9.19
Total dir & ovhd exp per bu.	19.13	10.71	15.64
Less govt & other income	13.00	8.92	11.41
With labor & management	15.77	10.47	13.61
Net value per unit	19.39	19.63	14.37
Machinery cost per acre	103.65	87.88	77.31
Est. labor hours per acre	4.47	3.34	2.72

**Table 18. Crop Enterprise Analysis
Soybeans, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	23	23	35
Number of farms	17	19	18
Acres	72.18	68.50	105.89
Yield per acre (bu.)	18.27	19.29	14.13
Operators share of yield %	100.00	100.00	100.00
Value per bu.	22.84	19.06	14.63
Other product return per acre	10.92	0.52	-
Total product return per acre	428.36	368.14	206.76
Crop insurance per acre	51.74	-	-
Other crop income per acre	57.71	20.41	55.68
Gross return per acre	537.82	388.54	262.43
Direct Expenses			
Seed	40.28	31.07	32.67
Fertilizer	16.44	4.49	15.85
Non-chemical crop protect	6.19	1.96	5.54
Crop insurance	18.36	12.70	15.99
Irrigation energy	-	0.94	-
Fuel & oil	22.29	19.25	21.45
Repairs	19.48	18.61	22.44
Repair, machinery	7.71	4.81	0.89
Custom hire	25.95	9.48	4.22
Repair, buildings	3.32	0.18	0.01
Hired labor	16.52	6.41	20.16
Land rent	95.47	85.96	60.15
Machinery leases	-	-	3.40
Hauling and trucking	0.70	2.67	2.33
Organic certification	3.24	2.26	1.32
Operating interest	9.46	6.14	11.03
Miscellaneous	3.47	1.33	0.74
Total direct expenses per acre	288.89	208.27	218.19
Return over direct exp per acre	248.93	180.27	44.24
Overhead Expenses			
Custom hire	0.36	4.26	8.30
Hired labor	10.61	6.16	5.77
Machinery leases	1.50	3.63	0.27
Farm insurance	5.75	4.45	3.41
Utilities	5.53	3.41	3.06
Dues & professional fees	3.58	4.24	5.28
Interest	8.77	5.42	4.06
Mach & bldg depreciation	22.21	21.78	21.33
Miscellaneous	7.43	8.19	3.75
Total overhead expenses per acre	65.75	61.54	55.23
Total dir & ovhd expenses per acre	354.64	269.81	273.42
Net return per acre	183.18	118.73	-10.99
Government payments	14.47	11.77	20.06
Net return with govt pmts	197.65	130.50	9.07
Labor & management charge	37.10	35.75	28.90
Net return over lbr & mgt	160.55	94.75	-19.83
Cost of Production			
Total direct expense per bu.	15.81	10.80	15.44
Total dir & ovhd exp per bu.	19.41	13.99	19.35
Less govt & other income	12.03	12.29	13.99
With labor & management	14.06	14.15	16.04
Net value per unit	22.84	19.06	14.63
Machinery cost per acre	107.10	85.59	82.51
Est. labor hours per acre	3.04	2.91	2.27

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

	<u>2008</u>	<u>2006</u>
Number of fields	10	7
Number of farms	7	7
Acres	54.48	81.30
Yield per acre (bu.)	37.17	28.46
Operator's share of yield %	100.00	100.00
Value per bu.	13.88	6.70
Total product return per acre	516.08	190.79
Other crop income per acre	-	18.99
Gross return per acre	516.08	209.78
Direct Expenses		
Seed	41.08	16.69
Fertilizer	46.64	24.94
Crop insurance	21.99	3.35
Drying expense	-	0.16
Fuel & oil	32.12	24.86
Repairs	26.64	25.00
Custom hire	0.61	6.32
Hired labor	2.14	-
Hauling and trucking	-	4.74
Organic certification	2.07	0.72
Operating interest	6.49	4.59
Miscellaneous	1.81	-
Total direct expenses per acre	181.59	111.38
Return over direct exp per acre	334.49	98.40
Overhead Expenses		
Custom hire	0.41	2.59
Hired labor	17.82	11.05
Machinery leases	0.10	0.85
RE & pers. property taxes	11.41	10.35
Farm insurance	5.81	4.61
Utilities	3.93	3.76
Dues & professional fees	3.24	3.60
Interest	36.23	25.90
Mach & bldg depreciation	23.37	17.48
Miscellaneous	4.73	3.39
Total overhead expenses per acre	107.03	83.58
Total dir & ovhd expenses per acre	288.63	194.96
Net return per acre	227.45	14.82
Government payments	12.91	12.10
Net return with govt pmts	240.36	26.92
Labor & management charge	35.97	30.03
Net return over lbr & mgt	204.39	-3.11
Cost of Production		
Total direct expense per bu.	4.89	3.91
Total dir & ovhd exp per bu.	7.76	6.85
Less govt & other income	7.42	5.76
With labor & management	8.39	6.81
Net value per unit	13.88	6.70
Machinery cost per acre	88.37	79.63
Est. labor hours per acre	3.57	3.30

**Table 20. Crop Enterprise Analysis
Spring Wheat, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	8	9	7
Number of farms	7	6	5
Acres	93.84	123.37	151.71
Yield per acre (bu.)	43.84	28.16	23.82
Operators share of yield %	100.00	100.00	100.00
Value per bu.	15.04	13.99	6.49
Other product return per acre	-	-	2.12
Total product return per acre	659.33	394.07	156.64
Crop insurance per acre	5.44	-	-
Other crop income per acre	17.05	7.28	43.29
Gross return per acre	681.82	401.36	199.93
Direct Expenses			
Seed	47.51	27.27	18.99
Fertilizer	47.43	34.52	12.19
Crop chemicals	2.02	-	-
Non-chemical crop protect	-	-	15.50
Crop insurance	21.95	13.40	9.87
Drying expense	2.05	1.11	0.34
Fuel & oil	22.64	19.41	17.95
Repairs	37.15	25.48	22.56
Repair, machinery	4.46	-	-
Custom hire	11.93	8.87	2.59
Repair, buildings	3.51	-	-
Land rent	80.23	64.34	54.86
Hauling and trucking	1.61	12.58	-
Marketing	0.57	-	-
Organic certification	1.57	2.28	0.55
Operating interest	7.88	9.60	5.02
Miscellaneous	2.32	-	0.30
Total direct expenses per acre	294.82	218.87	160.70
Return over direct exp per acre	387.00	182.48	39.23
Overhead Expenses			
Custom hire	0.58	12.95	4.22
Hired labor	23.94	15.76	13.08
Machinery leases	1.65	0.07	3.54
Farm insurance	5.47	5.05	3.07
Utilities	6.50	4.32	3.53
Dues & professional fees	2.05	2.66	3.59
Interest	3.63	3.04	2.37
Mach & bldg depreciation	26.47	21.65	11.98
Miscellaneous	2.57	5.62	1.78
Total overhead expenses per acre	72.86	71.13	47.16
Total dir & ovhd expenses per acre	367.68	290.00	207.86
Net return per acre	314.14	111.35	-7.93
Government payments	23.43	16.08	17.28
Net return with govt pmts	337.57	127.44	9.35
Labor & management charge	30.84	23.88	17.43
Net return over lbr & mgt	306.73	103.55	-8.08
Cost of Production			
Total direct expense per bu.	6.72	7.77	6.75
Total dir & ovhd exp per bu.	8.39	10.30	8.73
Less govt & other income	7.34	9.47	6.09
With labor & management	8.04	10.32	6.83
Net value per unit	15.04	13.99	6.49
Machinery cost per acre	107.70	91.07	64.22
Est. labor hours per acre	3.61	2.34	2.21

**Table 21. Crop Enterprise Analysis
Pasture, Organic, on Owned Land**

	<u>2008</u>	<u>2007</u>	<u>2006</u>
Number of fields	26	13	13
Number of farms	15	9	11
Acres	51.10	68.53	67.80
Yield per acre (aum)	2.86	4.16	7.07
Operators share of yield %	100.00	100.00	100.00
Value per aum	42.23	32.79	14.84
Total product return per acre	120.99	136.50	104.99
Other crop income per acre	7.28	-	0.98
Gross return per acre	128.27	136.50	105.97
Direct Expenses			
Seed	9.02	2.04	1.10
Fertilizer	16.05	2.62	6.55
Irrigation energy	0.66	-	-
Fuel & oil	5.32	2.46	2.74
Repairs	5.42	2.48	3.74
Repair, machinery	0.71	0.82	0.63
Hired labor	1.92	-	-
Organic certification	0.81	0.89	0.31
Operating interest	1.04	0.06	1.04
Miscellaneous	1.41	0.19	0.08
Total direct expenses per acre	42.35	11.56	16.20
Return over direct exp per acre	85.92	124.94	89.77
Overhead Expenses			
Hired labor	1.62	1.01	1.48
RE & pers. property taxes	10.51	7.96	9.15
Farm insurance	0.69	0.62	0.73
Interest	24.11	15.47	20.28
Mach & bldg depreciation	4.99	3.77	4.90
Miscellaneous	1.78	1.53	1.71
Total overhead expenses per acre	43.70	30.36	38.23
Total dir & ovhd expenses per acre	86.05	41.92	54.43
Net return per acre	42.22	94.58	51.54
Government payments	1.49	5.90	8.37
Net return with govt pmts	43.71	100.48	59.91
Labor & management charge	6.47	3.69	5.01
Net return over lbr & mgt	37.24	96.78	54.90
Cost of Production			
Total direct expense per aum	14.78	2.78	2.29
Total dir & ovhd exp per aum	30.04	10.07	7.69
Less govt & other income	26.98	8.65	6.37
With labor & management	29.23	9.54	7.08
Net value per unit	42.23	32.79	14.84
Machinery cost per acre	18.13	10.77	12.79
Est. labor hours per acre	0.89	0.48	0.69

**Table 22. Crop Enterprise Analysis
Pasture, Organic, on Cash Rent**

	<u>2008</u>	<u>2007</u>
Number of fields	11	6
Number of farms	9	5
Acres	52.05	85.63
Yield per acre (aum)	3.63	7.76
Operators share of yield %	100.00	100.00
Value per aum	59.38	30.15
Total product return per acre	215.65	233.98
Other crop income per acre	7.56	-
Gross return per acre	223.21	233.98
Direct Expenses		
Seed	2.70	1.92
Fertilizer	6.99	10.71
Fuel & oil	3.79	2.46
Repairs	2.90	0.33
Repair, machinery	0.87	1.30
Land rent	50.53	100.44
Utilities	0.67	-
Organic certification	0.51	0.90
Operating interest	0.73	0.03
Miscellaneous	0.60	0.02
Total direct expenses per acre	70.30	118.11
Return over direct exp per acre	152.91	115.88
Overhead Expenses		
Hired labor	1.79	1.27
Farm insurance	0.77	1.27
Utilities	0.27	1.32
Interest	1.05	0.87
Mach & bldg depreciation	3.78	2.24
Miscellaneous	3.20	0.29
Total overhead expenses per acre	10.85	7.26
Total dir & ovhd expenses per acre	81.16	125.37
Net return per acre	142.06	108.62
Government payments	3.13	7.49
Net return with govt pmts	145.18	116.11
Labor & management charge	2.11	7.62
Net return over lbr & mgt	143.07	108.49
Cost of Production		
Total direct expense per aum	19.36	15.22
Total dir & ovhd exp per aum	22.35	16.15
Less govt & other income	19.40	15.19
With labor & management	19.99	16.17
Net value per unit	59.38	30.15
Machinery cost per acre	12.18	6.85
Est. labor hours per acre	0.38	0.83

INTRODUCTION TO THE DAIRY REPORTS

The Livestock Enterprise Analysis (Tables 23-26) show the average physical production, gross returns, direct expenses, overhead expenses, and net returns per budget unit. For this group of organic producers, the only enterprises with sufficient numbers to summarize were dairy and dairy replacements. Two formats are included for dairy reports: historical reports comparing enterprise returns for years 2006 through 2008, and 2008 dairy results sorted into thirds by enterprise net return. For comparison, these same reports are included for conventional Minnesota dairies.

Gross margin is the accrual gross value produced by the enterprise net of the cost of purchased animals. It includes income from 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.

The Cost of Production section shows the average cost per unit sold in each cost category. *Total direct and overhead expense per unit* is the breakeven 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 breakeven 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 breakeven price to provide a labor and management return for the operator(s).

Other Information contains both economic and technical efficiency measures.

**Table 23. Livestock Enterprise Analysis
Organic Dairy
Average Per Cow**

	<u>2008</u>		<u>2007</u>		<u>2006</u>	
Number of farms	30		23		22	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	12,228.8	3,105.09	12,976.5	3,171.95	12,109.8	2,681.93
Milk used in home (hd)	17.8	5.80	25.8	5.79	31.7	6.96
Milk fed to animals (hd)	382.6	95.62	369.4	85.24	181.2	32.70
Dairy Calves sold (hd)	0.2	20.30	0.1	22.99	0.2	46.64
Transferred out (hd)	0.7	76.40	0.8	150.91	0.7	148.88
Cull sales (hd)	0.2	99.97	0.2	105.28	0.2	80.53
Butchered (hd)	0.0	6.76	0.0	4.81	0.0	4.63
Other income		9.72		18.67		64.85
Purchased (hd)	0.1	-88.40	0.0	-75.74	0.0	-16.44
Transferred in (hd)	0.3	-133.42	0.2	-342.67	0.3	-352.11
Inventory change (hd)	0.1	158.74	0.1	107.05	0.1	103.43
Dairy repl net cost		-332.87		-		-
Gross margin		3,023.72		3,254.28		2,802.01
Direct Expenses						
Protein Vit Minerals (lb.)	6,387.7	169.83	1,115.4	182.76	777.6	145.97
Complete Ration (lb.)	651.2	95.16	401.4	87.07	108.5	24.45
Corn (bu.)	29.6	215.02	39.7	304.55	31.7	153.46
Corn Silage (lb.)	7,827.5	121.21	6,151.8	97.40	4,495.0	64.50
Hay, Alfalfa (lb.)	3,531.0	240.79	3,263.1	193.89	4,497.4	213.13
Hay, Grass (lb.)	1,321.8	79.78	2,571.2	132.07	2,077.4	71.74
Haylage, Alfalfa (lb.)	2,386.2	78.72	3,064.6	86.78	1,768.7	53.70
Pasture (aum)	7.6	126.06	7.9	142.29	4.1	125.84
Other feed stuffs (lb)	2,431.5	175.70	2,724.3	173.40	1,280.5	89.05
Supplies		276.98		276.72		292.17
Fuel & oil		73.75		57.35		55.21
Repairs		77.35		86.10		76.06
Hired labor		47.06		1.93		-
Marketing		27.53		33.86		29.08
Total direct expenses		1,804.94		1,856.16		1,394.37
Return over direct expense		1,218.79		1,398.12		1,407.65
Overhead Expenses						
Hired labor		175.23		195.06		236.31
Farm insurance		25.97		35.18		36.24
Utilities		68.06		68.56		59.27
Interest		98.43		100.02		88.05
Mach & bldg depreciation		106.59		94.30		93.38
Miscellaneous		69.86		90.08		72.86
Total overhead expenses		544.14		583.21		586.11
Total dir & ovhd expenses		2,349.07		2,439.37		1,980.48
Net return		674.65		814.91		821.54
Labor & management charge		262.96		273.42		253.25
Net return over lbr & mgt		411.70		541.49		568.28
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		14.29		13.88		11.32
Total dir & ovhd expense per unit		18.60		18.24		16.07
With other revenue adjustments		20.05		18.31		15.42
With labor and management		22.13		20.35		17.47
Est. labor hours per unit		39.43		45.19		48.36
Other Information						
Number of cows		76.9		64.7		72.3
Milk produced per cow		12,629		13,372		12,323
Total milk sold		940,233		838,957		875,756
Pounds of milk sold per FTE		868,396		803,966		701,129
Culling percentage		19.0		16.1		16.2
Turnover rate		25.3		25.4		21.9
Cow death loss percent		5.4		8.4		4.8
Percent of barn capacity		102.1		98.5		105.0
Feed cost per day		3.57		3.84		2.58
Feed cost per cwt of milk		10.31		10.47		7.64
Feed cost per cow		1,302.27		1,400.20		941.84
Avg. milk price per cwt.		25.39		24.44		22.15

**Table 24. Livestock Enterprise Analysis
Non-Organic Dairy
Average Per Cow**

	<u>2008</u>		<u>2007</u>		<u>2006</u>	
Number of farms	472		554		537	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	21,533.0	4,164.77	21,346.9	3,963.33	21,562.0	2,852.49
Milk used in home (hd)	3.3	0.62	3.9	0.86	5.4	0.80
Milk fed to animals (hd)	71.0	11.60	91.3	12.59	60.3	6.47
Dairy Calves sold (hd)	0.3	32.73	0.3	38.86	0.3	58.77
Transferred out (hd)	0.6	49.05	0.6	136.40	0.6	121.87
Cull sales (hd)	0.2	148.15	0.2	141.60	0.2	142.52
Butchered (hd)	0.0	2.28	0.0	2.36	0.0	2.61
Hedging gain/loss		-12.10		-		-
Other income		7.78		10.21		80.61
Purchased (hd)	0.1	-111.19	0.1	-88.86	0.1	-100.18
Transferred in (hd)	0.3	-101.34	0.3	-479.00	0.3	-439.41
Inventory change (hd)	0.1	78.09	1.9	96.81	0.1	100.78
Dairy repl net cost		-391.52		-		-
Gross margin		3,878.92		3,835.17		2,827.33
Direct Expenses						
Protein Vit Minerals (lb.)	3,069.4	603.28	3,127.1	464.97	2,853.9	373.20
Complete Ration (lb.)	1,706.9	227.90	1,322.4	176.00	1,540.9	153.52
Corn (bu.)	58.8	240.62	61.3	196.65	67.8	145.86
Corn Silage (lb.)	15,978.9	240.87	15,344.8	199.72	14,991.6	151.92
Hay, Alfalfa (lb.)	3,202.9	210.52	3,073.5	172.61	3,040.7	138.01
Haylage, Alfalfa (lb.)	4,880.5	130.86	6,679.4	133.95	5,689.8	123.09
Other feed stuffs (lb)	1,772.3	109.82	1,659.8	96.36	1,701.8	65.55
Veterinary		115.11		115.77		110.78
Supplies		335.98		309.80		287.65
Fuel & oil		104.42		78.58		69.09
Repairs		106.45		82.63		67.87
Hired labor		107.80		14.28		14.09
Hauling and trucking		49.70		36.69		34.15
Marketing		43.58		49.95		36.17
Bedding		59.43		54.33		49.39
Total direct expenses		2,686.34		2,182.29		1,820.34
Return over direct expense		1,192.58		1,652.88		1,006.98
Overhead Expenses						
Hired labor		239.94		294.71		267.71
Utilities		54.49		71.37		68.18
Interest		114.60		128.14		119.48
Mach & bldg depreciation		133.19		133.75		119.39
Miscellaneous		146.82		160.23		136.75
Total overhead expenses		689.04		788.20		711.51
Total dir & ovhd expenses		3,375.37		2,970.49		2,531.85
Net return		503.54		864.68		295.47
Labor & management charge		221.21		224.05		203.49
Net return over lbr & mgt		282.33		640.63		91.98
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.43		10.18		8.42
Total dir & ovhd expense per unit		15.62		13.85		11.71
With other revenue adjustments		17.00		14.51		11.86
With labor and management		18.02		15.56		12.80
Est. labor hours per unit		41.90		42.00		40.73
Other Information						
Number of cows		145.2		131.6		126.8
Milk produced per cow		21,607		21,442		21,628
Total milk sold		3,126,985		2,808,616		2,733,794
Pounds of milk sold per FTE		1,439,001		1,423,254		1,482,326
Culling percentage		24.5		24.2		24.8
Turnover rate		32.8		33.0		32.6
Cow death loss percent		7.9		8.3		7.2
Percent of barn capacity		108.3		108.8		107.8
Feed cost per day		4.83		3.95		3.15
Feed cost per cwt of milk		8.16		6.72		5.32
Feed cost per cow		1,763.87		1,440.26		1,151.15
Avg. milk price per cwt.		19.34		18.57		13.23

**Table 25. Livestock Enterprise Analysis
Organic Dairy, 2008
(Farms Sorted By Net Return Per Unit)
Average Per Cow**

	Low 33%		33 - 66%		High 34%	
Number of farms	9		10		11	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	11,606.5	2,697.29	10,920.5	2,880.32	14,433.7	3,778.77
Milk used in home (hd)	4.4	1.11	11.0	6.19	39.1	9.93
Milk fed to animals (hd)	512.0	104.48	400.4	83.93	234.2	101.18
Dairy Calves sold (hd)	0.1	9.06	0.2	28.41	0.2	21.43
Transferred out (hd)	0.7	40.02	0.7	62.23	0.8	129.33
Cull sales (hd)	0.3	121.14	0.1	63.11	0.2	124.17
Butchered (hd)	0.0	14.29	0.0	5.12	0.0	1.39
Other income		10.89		14.33		2.96
Purchased (hd)	0.0	-58.31	0.0	-9.33	0.1	-214.29
Transferred in (hd)	0.3	-8.49	0.3	-77.65	0.3	-323.86
Inventory change (hd)	0.0	18.40	0.1	150.51	0.2	306.31
Dairy repl net cost		-487.47		-345.86		-165.52
Gross margin		2,462.42		2,861.32		3,771.81
Direct Expenses						
Protein Vit Minerals (lb.)	19,826.1	228.71	424.6	129.69	487.6	161.07
Complete Ration (lb.)	-	0.96	391.4	66.66	1,606.2	222.22
Corn (bu.)	38.3	248.51	24.1	216.06	27.8	180.93
Corn Silage (lb.)	9,360.3	178.51	3,168.3	67.12	12,005.5	130.98
Corn, Ear (lb.)	-	-	-	-	1,387.0	62.41
Hay, Alfalfa (lb.)	1,945.1	145.35	4,909.8	337.82	3,404.2	216.02
Hay, Grass (lb.)	3,976.8	245.90	195.7	9.78	92.6	2.32
Haylage, Alfalfa (lb.)	3,600.3	82.93	1,664.4	51.58	2,076.3	107.68
Pasture (aum)	17.4	134.30	2.8	104.05	3.8	144.81
Hay, Mixed, Organic (lb.)	707.6	30.07	106.9	6.42	1,475.7	78.74
Other feed stuffs (lb)	1,745.6	85.69	991.0	170.85	1,173.4	91.39
Supplies		282.76		219.96		373.96
Fuel & oil		46.95		79.74		92.72
Repairs		86.57		56.50		93.72
Repair, livestock equip		-		45.06		-
Hired labor		-		77.27		56.35
Total direct expenses		1,797.22		1,638.57		2,015.31
Return over direct expense		665.20		1,222.74		1,756.50
Overhead Expenses						
Hired labor		278.95		187.33		58.84
Utilities		96.40		53.60		57.91
Interest		134.55		95.55		66.54
Mach & bldg depreciation		114.67		112.28		91.73
Miscellaneous		110.13		91.97		86.52
Total overhead expenses		734.70		540.72		361.54
Total dir & ovhd expenses		2,531.92		2,179.29		2,376.86
Net return		-69.50		682.03		1,394.96
Labor & management charge		210.17		200.51		390.82
Net return over lbr & mgt		-279.67		481.52		1,004.13
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		14.83		14.46		13.70
Total dir & ovhd expense per unit		20.89		19.23		16.16
With other revenue adjustments		23.69		20.19		16.96
With labor and management		25.43		21.96		19.62
Est. labor hours per unit		39.64		37.28		41.85
Other Information						
Number of cows		78.5		87.9		65.5
Milk produced per cow		12,123		11,332		14,707
Total milk sold		911,238		959,912		946,066
Pounds of milk sold per FTE		819,926		820,283		965,623
Culling percentage		26.5		13.1		18.9
Turnover rate		34.1		19.8		23.3
Cow death loss percent		6.4		5.7		4.2
Percent of barn capacity		94.8		112.0		98.8
Feed cost per day		3.78		3.18		3.83
Feed cost per cwt of milk		11.39		10.24		9.51
Feed cost per cow		1,380.94		1,160.04		1,398.57
Avg. milk price per cwt.		23.24		26.38		26.18

**Table 26. Livestock Enterprise Analysis
Organic Dairy
Dairy Replacement Heifers -- Average Per Head**

	2008		2007		2006	
	22		20		20	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Replacements sold (hd)	0.2	41.83	0.2	110.04	0.2	65.13
Transferred out (hd)	0.4	529.10	0.3	447.18	0.4	423.28
Cull sales (hd)	-	-	0.0	10.20	0.0	0.79
Butchered (hd)	0.0	1.87	0.0	6.70	0.0	1.84
Other income		11.36		-		-
Purchased (hd)	0.0	-4.60	0.0	-5.92	0.0	-20.91
Transferred in (hd)	0.8	-169.80	0.7	-150.43	0.7	-160.66
Inventory change (hd)	0.1	94.42	0.1	118.00	0.1	135.37
Gross margin		504.19		535.77		444.83
Direct Expenses						
Protein Vit Minerals (lb.)	1,610.4	22.20	104.1	35.99	100.0	42.67
Milk (lb.)	189.7	42.85	313.0	67.16	207.5	38.20
Complete Ration (lb.)	302.6	23.32	117.2	34.14	52.4	10.70
Corn (bu.)	2.0	17.24	3.5	24.30	3.5	19.52
Corn Silage (lb.)	2,488.6	38.89	1,680.0	29.73	1,459.3	19.96
Hay, Alfalfa (lb.)	1,263.0	73.52	1,602.4	83.09	1,983.6	85.23
Hay, Grass (lb.)	752.2	36.10	775.2	32.68	839.2	28.97
Haylage, Alfalfa (lb.)	463.9	20.19	325.9	8.22	358.0	9.83
Oatlage (lb.)	1,133.9	15.21	41.8	0.59	69.7	1.05
Oats (bu.)	3.8	7.37	3.5	14.54	3.9	11.35
Pasture (aum)	4.1	69.62	4.2	40.51	2.4	60.09
Hay, Mixed, Organic (lb.)	176.8	5.30	571.2	20.98	-	-
Other feed stuffs (lb)	375.4	20.60	1,222.2	36.85	790.5	19.47
Veterinary		3.90		6.92		6.37
Supplies		26.46		21.43		32.32
Contract production exp.		32.58		28.56		33.42
Fuel & oil		14.76		7.49		9.92
Repairs		17.74		13.51		14.63
Hired labor		11.50		0.18		-
Bedding		10.91		5.29		2.80
Total direct expenses		510.27		512.18		446.50
Return over direct expense		-6.08		23.59		-1.67
Overhead Expenses						
Hired labor		32.07		27.47		46.54
Utilities		11.54		10.48		10.75
Interest		21.99		15.34		14.38
Mach & bldg depreciation		19.76		12.59		18.13
Miscellaneous		15.64		18.94		19.28
Total overhead expenses		101.00		84.81		109.08
Total dir & ovhd expenses		611.27		596.99		555.58
Net return		-107.08		-61.22		-110.75
Labor & management charge		51.89		42.35		44.34
Net return over lbr & mgt		-158.97		-103.57		-155.09
Cost of Production Per Head Per Day						
Total direct expense per unit		1.62		1.46		1.34
Total dir & ovhd expense per unit		1.90		1.69		1.64
With other revenue adjustments		1.87		1.69		1.64
With labor and management		2.01		1.81		1.76
Est. labor hours per unit		8.42		6.44		9.35
Other Information						
No. purchased or trans in		49		49		47
Number sold or trans out		36		33		35
Average number of head		64		65		65
Percentage death loss		9.6		12.6		11.3
Feed cost per average head		392.42		428.80		347.04
Feed cost/head sold/trans		703.37		836.87		643.72
Total cost/head sold/trans		1,308.26		1,289.63		1,193.63
Feed cost per head per day		1.08		1.17		0.95
Avg. purch price / head		1,083.33		1,275.00		1,800.00
Avg. sales price / head		252.78		528.50		373.73

**Table 27. Livestock Enterprise Analysis
Non-Organic Dairy
Dairy Replacement Heifers -- Average Per Head**

	2008		2007		2006	
	421		478		455	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Replacements sold (hd)	0.1	41.69	0.1	54.55	0.2	64.03
Transferred out (hd)	0.4	576.58	0.4	591.96	0.4	537.19
Cull sales (hd)	0.0	4.50	0.0	4.88	0.0	5.83
Butchered (hd)	0.0	1.15	0.0	1.63	0.0	1.77
Other income		2.46		14.03		11.11
Purchased (hd)	0.0	-27.09	0.0	-61.63	0.0	-42.86
Transferred in (hd)	0.6	-130.51	0.6	-147.78	0.6	-131.66
Inventory change (hd)	0.1	76.73	0.1	91.61	0.1	57.52
Gross margin		545.51		549.23		502.93
Direct Expenses						
Protein Vit Minerals (lb.)	1,185.3	62.79	446.0	53.66	820.6	49.26
Milk Replacer (lb.)	10.8	14.40	13.6	16.67	14.8	15.76
Complete Ration (lb.)	284.1	37.89	238.0	28.17	891.4	23.73
Corn (bu.)	7.2	29.00	7.2	24.25	9.6	20.27
Corn Silage (lb.)	4,995.6	74.89	5,369.9	59.11	4,966.5	48.89
Hay, Alfalfa (lb.)	1,245.8	74.17	1,225.1	60.48	1,167.4	46.49
Hay, Grass (lb.)	585.7	22.66	653.3	22.03	689.7	18.85
Haylage, Alfalfa (lb.)	804.7	20.07	886.6	20.64	1,158.0	23.79
Other feed stuffs (lb)	943.9	36.58	866.5	28.70	863.9	22.66
Breeding fees		12.43		10.74		8.66
Veterinary		15.46		13.64		14.85
Supplies		24.42		24.71		25.59
Contract production exp.		93.88		81.50		57.81
Fuel & oil		17.46		13.06		12.01
Repairs		18.21		12.78		11.02
Hired labor		8.88		0.50		0.76
Bedding		13.04		10.83		9.66
Total direct expenses		576.22		481.47		410.06
Return over direct expense		-30.70		67.77		92.87
Overhead Expenses						
Hired labor		40.30		45.79		42.17
Building leases		6.41		5.34		5.00
Farm insurance		5.84		5.71		5.74
Utilities		9.60		11.84		11.89
Interest		19.16		21.48		19.89
Mach & bldg depreciation		22.86		24.48		22.19
Miscellaneous		11.40		15.08		13.64
Total overhead expenses		115.56		129.72		120.51
Total dir & ovhd expenses		691.77		611.19		530.57
Net return		-146.26		-61.96		-27.64
Labor & management charge		39.36		37.39		37.15
Net return over lbr & mgt		-185.62		-99.35		-64.79
Cost of Production Per Head Per Day						
Total direct expense per unit		1.78		1.62		1.42
Total dir & ovhd expense per unit		2.10		1.98		1.75
With other revenue adjustments		2.09		1.94		1.72
With labor and management		2.20		2.04		1.82
Est. labor hours per unit		7.19		6.94		7.14
Other Information						
No. purchased or trans in		76		80		74
Number sold or trans out		62		62		62
Average number of head		120		116		108
Percentage death loss		9.9		9.6		8.5
Feed cost per average head		372.45		313.71		269.70
Feed cost/head sold/trans		718.56		588.33		470.29
Total cost/head sold/trans		1,550.92		1,398.78		1,161.34
Feed cost per head per day		1.02		0.86		0.74
Avg. purchase weight		-		-		4
Avg. purch price / head		1,457.62		1,315.82		1,020.51
Avg. wgt / Replacements sold		12		-		-
Avg. sales price / head		423.86		506.98		419.43

MAKING SENSE OF FARM FINANCIAL RATIOS AND GUIDELINES²

Use with Table 28 and the Farm Finance Scorecard inside and outside the back cover

LIQUIDITY

- 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

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 the owners have leveraged (i.e., multiplied) their equity in the business.

SOLVENCY

- 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.

PROFITABILITY

- 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 3 things: Your labor; Your management, and Your 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 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

- Earnings Before Interest Taxes Depreciation and Amortization. Measures earnings available for debt repayment.

²Developed by K. Becker, D. Kaupila, G. Rogers, R. Parsons, D. Nordquist, R. Craven at University of Vermont Extension and Center for Farm Financial Management, University of Minnesota.

REPAYMENT CAPACITY

- 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

- shows how effectively your business uses assets to generate income. Past performance of the business could well indicate potential future accomplishments. It also answers the 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 28. Financial Standards Measures
Completely Organic Farms
(Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>33 - 66%</u>	<u>High 34%</u>
Number of farms	48	15	16	17
Liquidity				
Current ratio	1.66	1.06	1.91	1.87
Working capital	65,112	4,717	46,329	136,080
Working capital to gross inc	22.4 %	3.0 %	22.3 %	28.0 %
Solvency (market)				
Farm debt to asset ratio	42 %	42 %	41 %	42 %
Farm equity to asset ratio	58 %	58 %	59 %	58 %
Farm debt to equity ratio	0.72	0.72	0.70	0.72
Profitability (cost)				
Rate of return on farm assets	8.9 %	-2.7 %	6.4 %	16.3 %
Rate of return on farm equity	11.5 %	-15.5 %	7.0 %	23.9 %
Operating profit margin	22.5 %	-10.6 %	20.4 %	31.5 %
Net farm income	67,392	-13,600	47,961	157,144
EBIDTA	105,023	15,885	78,153	208,962
Repayment Capacity				
Capital debt repayment capacity	69,417	7,426	57,522	135,310
Capital debt repayment margin	31,574	-25,693	26,331	87,039
Replacement margin	26,601	-30,091	22,823	80,180
Term debt coverage ratio	1.83	0.22	1.84	2.80
Replacement coverage ratio	1.62	0.20	1.66	2.45
Efficiency				
Asset turnover rate (cost)	39.7 %	25.8 %	31.2 %	51.6 %
Operating expense ratio	63.9 %	90.0 %	62.3 %	57.1 %
Depreciation expense ratio	6.3 %	7.3 %	8.0 %	5.4 %
Interest expense ratio	6.7 %	11.6 %	6.5 %	5.4 %
Net farm income ratio	23.2 %	-8.6 %	23.1 %	32.3 %

Farm Financial Scorecard

Liquidity

Current ratio _____ . _____

Strong 2.0 **Vulnerable** 1.0



Working capital \$ _____

Solvency (Market)

Note: These solvency ratios exclude deferred liabilities

Farm debt/asset ratio _____ %

30% 70%



Farm equity/asset ratio _____ %

70% 30%



Farm debt/equity ratio _____ %

43% 233%



Profitability (Cost)

Net farm income \$ _____

Rate of return on farm assets _____ %

8% 3%



Rate of return on farm equity _____ %

15% 5%



Operating profit margin _____ %

25% 10%



Repayment Capacity (Accrual)

Term-debt coverage ratio _____ %

150% 110%



Capital-replacement margin \$ _____

Financial Efficiency

Asset-turnover rate (market) _____ %

Can vary depending on the type of farm

Operating-expense ratio _____ %

65% 80%



Depreciation-expense ratio _____ %

5% 11%



Interest-expense ratio _____ %

5% 11%



Net farm income ratio _____ %

20% 10%

