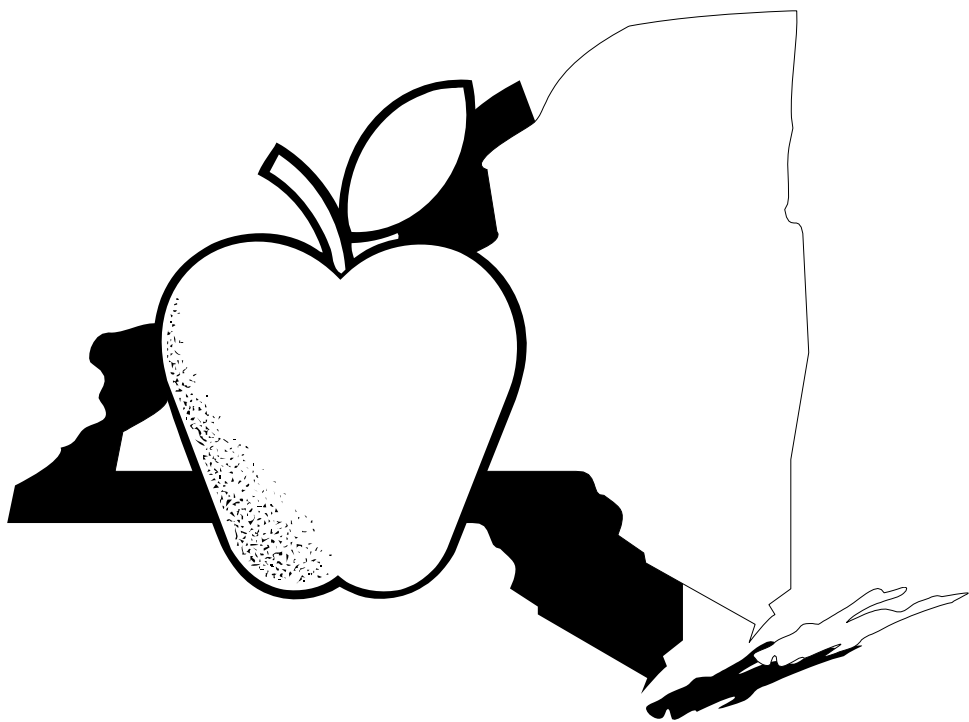


FRUIT FARM BUSINESS SUMMARY

LAKE ONTARIO REGION NEW YORK 2006



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ABSTRACT

This report is a summary of 2006 farm business data collected from 22 fruit farm businesses located in Western New York State. Apples are the predominant fruit crop. The data are presented as averages for all 22 farms. The business analysis includes a balance sheet, income statement, cash flow statement, and several financial and production analyses for the farms. Also included are blank columns for the user to enter his or her own farm data for comparison purposes.

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**2006 FRUIT FARM BUSINESS SUMMARY
LAKE ONTARIO REGION**

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2006 LAKE ONTARIO FRUIT FARM BUSINESS SUMMARY

INTRODUCTION

Western New York fruit farmers, whose major crop is apples, are invited to participate in Cornell Cooperative Extension's fruit farm business summary program. Each participating farmer receives a comprehensive business summary and analysis of his or her farm business. This report presents averages for the data submitted by participating farmers for 2006. The analysis was supported by a grant from the New York Farm Viability Institute, and marks the second consecutive comprehensive annual report since the 1998 crop year.

The primary objective of the fruit farm business summary (FFBS) program is to help farm managers improve the financial management of their businesses through the appropriate use of historical farm data and the application of modern farm business analysis techniques. The FFBS identifies the business and financial information farmers need and provides a framework for use in identifying and evaluating the strengths and weaknesses of the farm business.

A computer program is used to process the data collected from fruit farmers. This program enables an analysis to be produced on the farm as soon as the farmers' data are entered. This provides rapid processing of the information for timely use in the management of the farm business. The grant from the New York Farm Viability Institute made possible the development of a new program in Access and Excel for analyzing these fruit farms, with some new measures of financial performance added for 2005 and 2006.

The farms in this study are primarily apple farms. An average of 78 percent of the accrual receipts in 2006 was from the sale of apples. (This percentage is down from 84 percent in 1998, and is virtually identical to the 77 percent for apple receipts in 2005). The data were not obtained from a random sample of all fruit farms in Western New York; however, the analysis is useful for fruit farmers to compare their own farm financial factors with benchmarks from typical farms in the Western New York fruit industry.

Format Features

This report provides a set of tables which comprise a comprehensive analysis of the participating fruit farms. Worksheets are included to give fruit farmers an opportunity to summarize their business. The analysis tables have a blank column or section labeled "My Farm". It may be used to compare an individual farm business with the average performance of the farms in this study.

This report features:

- 1) A complete Balance Sheet and analysis including financial ratios.

- 2) An Income Statement including accrual accounting adjustments for farm business expenses and receipts, as well as measures of profitability with and without appreciation.
- 3) Forms for a Cash Flow Statement and Repayment Analysis Worksheets.
- 4) Analyses of Capital Efficiency, Equipment, and Labor.
- 5) A Cropping Program Analysis with Cost Control Factors.
- 6) A Summary of Selected Business Factors.

Apple Production, Prices, and Returns in Recent Years

The 22 farms in this summary produced a total of 3.17 million bushels, or about 10.6 percent of the state's total production in 2006. The average price of apples (both fresh and processing) for the Fruit Farm Business Summary farms was \$4.65 per bushel. The return on equity was 9.0 % (including appreciation of assets), and is the highest return on equity since the 19.1 % realized in 1991! The value of the New York apple crop was estimated at \$248 million (National Agricultural Statistics Service) and was the first time the estimated value had exceeded \$200 million.

As a comparison with the last five years that the summary was published (1994-1998), prices for fresh apples on the FFBS ranged from \$2.81 per bushel in 1994 to a high of \$4.29 per bushel in 1996. Return on Equity (with appreciation) was -12.9 % in 1998, the last year the FFBS was published; this had been the second worst year in the previous 20 years.

SUMMARY AND ANALYSIS OF THE FARM BUSINESS

Farm Financial Status

The first step in evaluating the financial status of the farm business is to construct a balance sheet which identifies all the assets and liabilities of the business. The second step is to evaluate the relationships between assets, liabilities, and net worth at the end of the year and the changes that occurred during the year.

Financial lease obligations are included in the balance sheet. The present value of all future payments is listed as a liability since the farmer is committed to make the payments by signing the lease. The present value is also listed as an asset, representing the future value the item has to the business.

Table 1 presents the balance sheet data for the 22 fruit farm cooperators. It lists the average value of assets and liabilities for December 31, 2005 and December 31, 2006 and, therefore, shows the changes that occurred for each category during the year. Asset values that are estimated each year should reflect changes in quantity or quality of the asset and conservative adjustments for price changes. Careful attention to asset values is important for a meaningful calculation of change in net worth, a measure of financial progress.

Table 1
Farm Balance Sheet, 22 Western New York Fruit Farms,
2006

Farm Assets	Beginning of Year	End of Year	Farm Liabilities	Beginning of Year	End of Year
Current Assets			Current Liabilities		
Farm cash, checking & savings	\$39,252	\$27,287	Accounts payable	\$24,769	\$26,444
Notes receivable	\$16,326	\$15,584	Operating lines	\$200,429	\$211,595
Accounts receivable	\$209,145	\$242,311	Other short-term	\$11,960	\$12,072
Production and packing supplies & prepaid exp.	\$15,565	\$15,657	Current portion intermediate	\$28,354	\$36,572
Fruit & other crops in inventory	\$186,034	\$259,566	Current portion long-term	\$20,828	\$22,608
Farm market inventory	\$909	\$682			
Other current assets:	\$3,692	\$6,513			
Total Current Assets	\$470,923	\$568,600	Total Current Liabilities	\$286,340	\$309,291
Intermediate Assets			Intermediate Liabilities		
Livestock	\$0	\$0	Structured debt	\$85,955	\$89,259
Livestock leased	\$0	\$0	Equipment and capital lines	\$52,396	\$48,029
Equipment owned	\$415,100	\$443,281	FLB/PCA stock	\$6,631	\$4,033
Equipment leased	\$0	\$0			
FLB / PCA stock	\$6,631	\$4,033			
Co-op delivery stock	\$11,398	\$9,584			
Co-op retains	\$5,166	\$7,558			
Other stock & investments	\$30,700	\$20,958			
Other:	\$36,310	\$56,122			
Total Intermediate Assets	\$505,305	\$541,536	Total Intermediate Liabilities	\$144,982	\$141,321
Long term assets			Long Term Liabilities		
Land & buildings:			Mortgage #1	\$94,608	\$101,449
Owned	\$702,485	\$716,494	Other long term	\$103,666	\$101,438
Structures leased	\$0	\$0			
Leasehold Improvements	\$28,691	\$32,615			
Other:	\$341	\$3,449			
Total Long Term Assets	\$731,517	\$752,558	Total Long Term Liabilities	\$198,274	\$202,887
Total Farm Assets	\$1,707,745	\$1,862,694	Total Farm:		
			Liabilities	\$629,596	\$653,499
			Net Worth	\$1,078,149	\$1,209,195
			Liabilities & Net Worth	\$1,707,745	\$1,862,694
			Percent equity	63.0%	65.0%
			Debt per bearing fruit acre	\$2,970	\$3,083
			Debt per acre operated	\$2,141	\$2,223

Table 2 provides a format for the reader to use to develop a balance sheet for an individual farm business.

Table 2.

Farm Balance Sheet-My Farm, 2006

Farm Assets	Beginning of Year	End of Year	Farm Liabilities	Beginning of Year	End of Year
Current Assets			Current Liabilities		
Farm cash, checking & savings	_____	_____	Accounts payable	_____	_____
Notes receivable	_____	_____	Operating lines	_____	_____
Accounts receivable	_____	_____	Other short-term	_____	_____
Prdtn, packing supplies & prepaid exp.	_____	_____	Current portion intermediate	_____	_____
Fruit & other crops in inventory	_____	_____	Current portion long-term	_____	_____
Farm market inventory	_____	_____		_____	_____
Other current assets:	_____	_____		_____	_____
	_____	_____		_____	_____
Total Current Assets	_____	_____	Total Current Liabilities	_____	_____
Intermediate Assets			Intermediate Liabilities		
Livestock	_____	_____	Structured debt	_____	_____
Livestock leased	_____	_____	Equipment and capital lines	_____	_____
Equipment owned	_____	_____	FLB/PCA stock	_____	_____
Equipment leased	_____	_____		_____	_____
FLB / PCA stock	_____	_____		_____	_____
Co-op delivery stock	_____	_____		_____	_____
Co-op retains	_____	_____		_____	_____
Other stock & investments	_____	_____		_____	_____
Other:	_____	_____		_____	_____
	_____	_____		_____	_____
Total Intermediate Assets	_____	_____	Total Intermediate Liabilities	_____	_____
Long term assets			Long Term Liabilities		
Land & buildings:	_____	_____	Mortgage #1	_____	_____
Owned	_____	_____	Other long term	_____	_____
Structures leased	_____	_____		_____	_____
Leasehold Improvements	_____	_____		_____	_____
Other:	_____	_____		_____	_____
Total Long Term Assets	_____	_____	Total Long Term Liabilities	_____	_____
Total Farm Assets	_____	_____	Total Farm Liabilities	_____	_____

Balance sheet analysis involves an examination of financial and debt ratios. Percent equity is calculated by dividing end of year net worth by end of year assets. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect strength in solvency and the potential capacity to borrow. The change in farm net worth without appreciation is an excellent indicator of financial progress from operating the business.

The current ratio and working capital are measures of liquidity, or the ability of the farm business to meet its financial obligations as they come due. The business needs to generate enough cash to pay family living expenses, taxes, and to make debt payments on time. The current ratio is measured by end of year current assets divided by current liabilities.

Working capital indicates the operating capital available in the short term. The working capital expense ratio is computed by subtracting current liabilities from current assets, and dividing the result by total accrual expenses (end of year values).

The leverage ratio indicates the dollar amount of debt in relation to the dollar amount of net worth. As long as the rate of return on new investment exceeds the interest rate (marginal), the farm business can increase the level of net income with increased leverage. If some of the funds are re-invested, saved, or used to pay off debt, net worth will increase. Investing a portion of earnings back into the farm business results in growth under these conditions. Leverage is computed by dividing total liabilities by total farm net worth (end of the year values).

Table 3.**Farm Business Balance Sheet Analysis, 22 Western New York Fruit Farms, Dec. 31, 2006**

Item	Average 22 Farms	My Farm
<u>Financial Ratios - end of year</u>		
Percent Equity	65.00%	_____ %
Debt to Asset Ratio		
Total Debt	0.35	_____
Long-term	0.11	_____
Current and intermediate	0.24	_____
Intermediate and long-term	0.18	_____
Leverage Ratio	0.54	_____
Current Ratio	1.84	_____
Working Capital as % total expenses	32.00%	_____
<u>Change in Net Worth</u>		
With appreciation	\$131,046	\$ _____
Without appreciation	\$ 93,823	\$ _____
<u>Debt Analysis</u>		
Percent of total farm debt that is:		
Long term	31.00%	_____ %
Current and intermediate	69.00%	_____ %
Accounts payable only	4.00%	_____ %
<u>Debt Levels</u>		
Per bearing fruit acre		
Total farm debt	\$3,083	\$ _____
Long-term	\$957	\$ _____
Current and intermediate	\$2,126	\$ _____

The farm inventory balance is an accounting of the value of assets used on the balance sheet and the changes that occur from the beginning to end of year. Net investment indicates whether the capital stock is being expanded (positive) or depleted (negative).

Table 4.**Farm Inventory Balance 22 Western New York Fruit Farms, 2006**

Inventory Balance	Average 22 Farms		My Farm	
	Real Estate	Equipment	Real Estate	Equipment
Beginning of year (1)	\$702,485	\$414,954	\$ _____	_____
Purchases	\$14,150	\$51,043	_____	_____
+ Noncash transfer to farm	\$0	\$0	_____	_____
- Lost capital	\$81	\$0	_____	_____
- Sales	\$1,276	\$4,412	_____	_____
- Depreciation	\$4,118	\$42,385	_____	_____
= Net Investment (2)	\$8,675	\$4,246	_____	_____
Appreciation (3-1-2)	\$5,334	\$23,838	_____	_____
End of year (3)	\$716,494	\$443,038	_____	_____

Income Statement

On the following pages the accrual adjusted income statement begins with an accounting of all farm business expenses.

Cash Paid is the actual amount of money paid out during the year and does not necessarily represent the cost of goods and services actually used.

Change in Inventory: An increase in inventory is subtracted in computing accrual expenses; it represents inputs that were purchased but not actually used during the year. A decrease in inventory is added to expenses because it represents the cost of inputs purchased in a prior year and used this year.

Changes in Prepaid Expenses apply to non-inventory categories. Included are expenses that have been paid in advance of their use, for example, next year's rent paid this year. An increase in a prepaid expense is an amount paid this year that is an expense for a future year and, thus, is subtracted from expenses; a decrease in a prepaid expense indicates an amount paid in a prior year that is an expense for this year and added to cash expenses.

Change in Accounts Payable: An increase in payables is an expense chargeable to this year but not paid by the end of the year. A decrease in payables is an expense for a previous year that was paid this year.

Accrual Expenses are the costs of inputs actually used for this year's production.

The worksheet on page 9 (Table 6) is provided to enable any fruit farmer to compare his or her expenses with the group averages in the corresponding table.

Table 5. Farm Expenses, 22 Western New York Fruit Farms, 2006

Expenses	Cash amount paid	Change in inventory or prepaid expenses	Change in accounts payable	Accrual Expenses
<u>Hired Labor</u>				
Wages:				
Regular	\$181,593	\$0	(\$1,008)	\$180,585
Picking	\$78,066	\$0	\$89	\$78,155
Other part-time, seasonal	\$16,370	(\$206)	\$0	\$16,164
Other labor costs	\$54,109	\$821	\$418	\$55,348
Picker travel	\$3,328	\$0	\$634	\$3,962
Labor camp expenses	\$866	\$0	\$0	\$866
<u>Equipment</u>				
Machine hire, rent, lease	\$7,900	\$0	\$136	\$8,036
Repairs and parts	\$27,500	\$97	\$279	\$27,876
Trucking expense	\$9,882	\$0	\$324	\$10,206
Fuel, oil, and grease	\$33,952	\$432	\$457	\$34,841
<u>Livestock</u>				
All livestock expense	\$0	\$0	\$0	\$0
<u>Crops</u>				
Fertilizer and lime	\$11,692	\$1,058	\$2,293	\$15,043
Replace trees and plants	\$7,476	\$987	\$2,159	\$10,622
Spray	\$101,543	\$127	\$7,412	\$109,082
Supplies, other	\$20,805	\$1,191	\$729	\$22,725
Processing package supplies	\$2,726	\$175	\$0	\$2,901
Storage	\$29,575	\$0	\$598	\$30,173
Marketing, selling expenses	\$3,386	\$0	\$0	\$3,386
<u>Real Estate</u>				
Repair-Land, building, fence	\$5,965	\$0	\$482	\$6,447
Taxes	\$10,028	\$338	\$614	\$10,980
Rent & lease	\$14,591	\$79	\$701	\$15,371
<u>Other Expenses</u>				
Fire, liability expenses	\$15,171	\$0	\$0	\$15,171
Crop and revenue Insurance	\$8,979	\$0	\$178	\$9,157
All utilities	\$18,100	\$0	\$176	\$18,276
Legal/office expense	\$9,095	\$8	\$0	\$9,103
Fruit purchased for resale	\$7,771	\$0	\$2,730	\$10,501
Interest paid	\$35,701	\$0	\$1,812	\$37,513
Misc.	\$16,864	\$479	\$1,787	\$19,130
TOTAL OPERATING EXPENSES	\$733,034	\$5,586	\$23,000	\$761,620
Depreciation:				
Equipment				\$42,385
Buildings				\$4,118
Bearing trees and vines				\$3,017
TOTAL ACCRUAL EXPENSES				\$811,140

Table 6.
Income Statement - Farm Expenses, My Farm, 2006

Expenses	Cash amount paid	Change in inventory or prepaid expenses	Change in accounts payable	Accrual Expenses
<u>Hired Labor</u>				
Wages:				
Regular	\$_____	\$_____	\$_____	\$_____
Picking	_____	_____	_____	_____
Other part-time, seasonal	_____	_____	_____	_____
Other labor costs	_____	_____	_____	_____
Picker travel	_____	_____	_____	_____
Labor camp expenses	_____	_____	_____	_____
<u>Equipment</u>				
Machine hire, rent, lease	_____	_____	_____	_____
Repairs and parts	_____	_____	_____	_____
Trucking expense	_____	_____	_____	_____
Fuel, oil, and grease	_____	_____	_____	_____
<u>Livestock</u>				
All livestock expense	_____	_____	_____	_____
<u>Crops</u>				
Fertilizer and lime	_____	_____	_____	_____
Replace trees and plants	_____	_____	_____	_____
Spray	_____	_____	_____	_____
Supplies, other	_____	_____	_____	_____
Processing package supplies	_____	_____	_____	_____
Storage	_____	_____	_____	_____
Marketing, selling expenses	_____	_____	_____	_____
<u>Real Estate</u>				
Repair-Land, building, fence	_____	_____	_____	_____
Taxes	_____	_____	_____	_____
Rent & lease	_____	_____	_____	_____
<u>Other Expenses</u>				
Fire, liability expenses	_____	_____	_____	_____
Crop and revenue Insurance	_____	_____	_____	_____
All utilities	_____	_____	_____	_____
Legal/office expense	_____	_____	_____	_____
Fruit purchased for resale	_____	_____	_____	_____
Interest paid	_____	_____	_____	_____
Misc.	_____	_____	_____	_____
Total Operating Expenses	_____	_____	_____	_____
Depreciation:				
Equipment	_____	_____	_____	_____
Buildings	_____	_____	_____	_____
Bearing trees and vines	_____	_____	_____	_____
Total Accrual Expenses	_____	_____	_____	_____

Table 7. Income Statement-Farm Receipts, 22 Western New York Fruit Farms, 2006

Receipts	Cash Receipts	Change in inventory	Change in accounts receivable	Accrual Receipts
<u>Apples:</u>				
Fresh	\$423,883	\$81,091	\$4,899	\$509,873
Peelers	\$191,304	(\$6,241)	\$25,750	\$210,813
Juice	\$17,311	(\$1,318)	\$1,002	\$16,995
<u>Cherries:</u>				
Sweet	\$28,600	\$0	(\$120)	\$28,480
Tart	\$13,060	\$0	(\$1,421)	\$11,639
Grapes	\$0	\$0	\$0	\$0
Peaches	\$40,394	\$0	\$424	\$40,818
Plums and Prunes	\$1,156	\$0	\$0	\$1,156
Pears	\$12,263	\$0	\$218	\$12,481
Other Crops, Livestock, & Prod	\$11,222	\$0	(\$1,453)	\$9,769
Custom Work, Storage, Rent	\$34,633	\$0	\$2,930	\$37,563
Other	\$68,667	\$0	\$937	\$69,604
Total Operating Receipts	\$842,493	\$73,532	\$33,166	\$949,191

Cash Receipts include the amount received during the year from the sale of farm products and services, and government programs.

Changes in Inventory are calculated by subtracting beginning of year values from end of year values excluding appreciation. Changes in crop and livestock inventories are calculated. Changes in advanced government receipts are calculated by subtracting the end of year balance from the beginning year balance.

Changes in Accounts Receivable are calculated by subtracting beginning year balances from end year balances.

Accrual Receipts represent the value of all farm commodities and services generated by the farm business during the year.

Table 8.
Income Statement - Farm Receipts, My Farm 2006

Receipts	Cash Receipts	Change in inventory	Change in accounts receivable	Accrual Receipts
<u>Apples:</u>				
Fresh	\$_____	\$_____	\$_____	\$_____
Peelers	_____	_____	_____	_____
Juice	_____	_____	_____	_____
<u>Cherries:</u>				
Sweet	_____	_____	_____	_____
Tart	_____	_____	_____	_____
Grapes	_____	_____	_____	_____
Peaches	_____	_____	_____	_____
Plums and Prunes	_____	_____	_____	_____
Pears	_____	_____	_____	_____
Other Crops, Livestock, & Prod	_____	_____	_____	_____
Custom Work, Storage, Rent	_____	_____	_____	_____
Other	_____	_____	_____	_____
Total Operating Receipts	_____	_____	_____	_____

Profitability Analysis

Farm owner-operators contribute labor, management, and capital to their businesses and the best combination of these resources maximizes profits. Farm profitability can be measured as the return to all family resources or as the return to one or more individual resources such as labor and management.

Net Farm Income is the total combined return to the farm operators and other unpaid family members for their labor, management, and equity capital. It is the farm family's annual net return from working, managing, financing, and owning the farm business. This is not a measure of cash available from the year's business operation. Cash flow is measured later in this report.

Net farm income is computed both with and without appreciation. Appreciation represents the change in values caused by annual changes in prices of livestock, equipment, real estate inventory, and stocks and certificates (other than Farm Credit). Appreciation is a major factor contributing to changes in farm net worth and must be included for a complete profitability analysis.

Table 9.

Net Farm Income, 22 Western New York Fruit Farms, 2006		
ITEM	AVERAGE	My Farm
Total Accrual Receipt	\$949,191	\$ _____
+ Appreciation:		
Livestock	\$0	_____
Equipment	\$23,838	_____
Real estate	\$5,334	_____
Other stocks and certificates	\$8,051	_____
= Total Accrual Receipts with Appreciation	\$986,414	_____
- Total Accrual Expenses	\$811,140	_____
= Net Farm Income with appreciation	\$175,274	_____
without appreciation	\$138,051	_____

Return to Operators' Labor, Management, and Equity Capital measures the total business profits for the farm operator(s). It is calculated by deducting a charge for unpaid family labor from net farm income. Operators' labor is not included in unpaid family labor. Return to operators' labor, management, and equity capital has been calculated both with and without appreciation. Appreciation is considered an important part of the return to ownership of farm assets.

Table 10.

**Return to Operators' Labor, Management, and Equity Capital
22 Western New York Fruit Farms, 2006**

Item	Average	My Farm
With appreciation:		
Net farm income	\$175,274	\$ _____
- Family unpaid labor @ \$2,300/mo	\$0	_____
= Return to operators' labor management and equity	\$175,274	_____
Without appreciation:		
Net farm income	\$138,051	_____
- Family unpaid labor @ \$2,300/mo	\$0	_____
= Return to operators' labor management and equity	\$138,051	_____

Labor and Management Income is the return which farm operators receive for their labor and management used in operating the farm business. Appreciation is not included as part of the return to labor and management because it results from ownership of assets rather than management of the farm business. Labor and management income is calculated by deducting the opportunity cost of using equity capital, at a real interest rate of five percent, from the return to operators' labor, management, and equity capital excluding appreciation. The interest charge of five percent reflects the long-term average rate of return above inflation that a farmer might expect to earn in an investment of comparable risk.

Table 11.

**Labor & Management Income
22 Western New York Fruit Farms, 2006**

Item	Average	My Farm
Net Farm Income with Appreciation	\$175,274	\$_____
Net Farm Income without Appreciation	\$138,051	_____
- Family Labor @ \$2,300 per month	\$0	_____
- Real interest @ 5% on Equity Capital	<u>\$60,460</u>	_____
= Labor and management income with appreciation (1.4 operators)	\$114,814	_____
Labor and management income with appreciation per Operator	\$81,477	_____
= Labor and management income without appreciation (1.4 operators)	\$77,591	_____
Labor and management income without appreciation per Operator	\$55,062	_____

Return on Equity Capital measures the net return remaining for the farmer's equity or owned capital after a charge has been made for the owner-operators' labor and management. The earnings or amount of net farm income allocated to labor and management is the opportunity cost of operators' labor and management estimated by the cooperators. Return on equity capital is calculated with and without appreciation. The rate of return on equity capital is determined by dividing the amount returned by the average farm net worth or equity capital. Net farm income from operations ratio is net farm income (without appreciation) divided by total accrual receipts. It is a general measure of returns to equity and labor and management as a percent of what the farm produced.

Table 12.
Return on Equity Capital and Return on Total Capital
22 Western New York Fruit Farms, 2006

Item	Average 22 Farms	My Farm
Net farm income with appreciation	\$175,274	\$ _____
- Unpaid family labor @ \$2,000 per month	\$0	_____
- Values of operator labor and management	<u>\$66,013</u>	_____
= Return to equity capital with appreciation	\$109,261	_____
+ Interest Paid	<u>\$37,513</u>	_____
= Return to all capital with appreciation	\$146,774	_____
Return to equity capital without appreciation	\$72,038	_____
Return to all capital without appreciation	\$109,551	_____
Rate of return on average equity capital with appreciation	9.00%	_____ %
without appreciation	6.00%	_____ %
Rate of return on all capital with appreciation	7.90%	_____ %
without appreciation	5.90%	_____ %
Net farm income from operations ratio	\$14.50	_____

Cash Flow Statement

Completing an annual cash flow statement is an important step in understanding the sources and uses of funds for the business. Understanding last year's cash flow is the first step toward planning and managing cash flow for the current and future years.

The **Annual Cash Flow Statement** is structured to compare all the cash inflows with all the cash outflows for the year. A complete list of cash inflows and cash outflows is included in Table 13. By definition, total cash inflows must equal total cash outflows when beginning and ending balances are included. Any imbalance is, therefore, the error from incorrect accounting of cash inflows and cash outflows. A cash flow sheet is available for growers to use to reconcile cash flow on their own operations (Table 14).

Table 13.**Annual Cash Flow Statement, 22 Western New York Fruit Farms 2006**

Cash Flow from Operating Activities		
Cash farm receipts	\$842,493	
- Cash farm expenses	\$733,034	
= Net Cash Farm Income		\$109,459
Personal withdrawals & family expenses including nonfarm debt payments	\$65,112	
- Nonfarm income	\$13,312	
- Net cash withdrawals from farm		\$51,800
= Net Provided by Operating Activities		\$57,659
Cash Flow from Investing Activities		
Sale of assets: machinery	\$4,412	
real estate	\$1,276	
other stock & certificates	\$3,892	
= Total asset sales		\$9,580
Capital Purchases: expansion orchard	\$25,723	
+ machinery	\$51,043	
+ real estate	\$14,150	
+ other stock & certificates	\$10,282	
- Total invested in farm assets		\$101,198
+ Net Provided by Investment		(\$91,618)
Cash Flow From Financing Activities		
Money borrowed (intermediate & long term)	\$52,747	
+ Money borrowed (short term)	\$4,989	
+ Increase in operating debt	\$25,795	
+ Cash from nonfarm capital used in business	\$0	
+ Money borrowed - nonfarm	\$0	
= Cash flow from financing		\$83,531
Principal payments (intermediate & long term)	\$39,061	
+ Principal payments (short term)	\$4,766	
+ Decrease in operating debt	\$14,795	
- Cash outflow for financing		\$58,622
= Net Provided by Financing Activities		\$24,909
Cash Flow from Reserves		
Beginning farm cash, checking & savings		\$39,252
- Ending farm cash, checking & savings		\$27,287
= Net Provided from Reserves		\$11,965
Imbalance		\$2,915

Table 14.**Annual Cash Flow Statement, My Farm 2006****Cash Flow from Operating Activities**

Cash farm receipts	\$	_____	
- Cash farm expenses		_____	
= Net Cash Farm Income			_____
Personal Withdrawals & family expenses including nonfarm debt payments		_____	
- Nonfarm income		_____	
- Net cash withdrawals from farm			_____
= Net Provided by Operating Activities			=====

Cash Flow from Investing Activities

Sale of assets: machinery		_____	
real estate		_____	
other stock & certificates		_____	
= Total asset sales			_____
Capital Purchases: expansion orchard		_____	
+ machinery		_____	
+ real estate		_____	
+ other stock & certificates		_____	
- Total invested in farm assets			_____
+ Net Provided by Investment			=====

Cash Flow From Financing Activities

Money borrowed (intermediate & long term)		_____	
+ Money borrowed (short term)		_____	
+ Increase in operating debt		_____	
+ Cash from nonfarm capital used in business		_____	
+ Money borrowed - nonfarm		_____	
= Cash flow from financing			_____
Principal payments (intermediate & long term)		_____	
+ Principal payments (short term)		_____	
+ Decrease in operating debt		_____	
- Cash outflow for financing			_____
= Net Provided by Financing Activities			=====

Cash Flow from Reserves

Beginning farm cash, checking & savings			_____
- Ending farm cash, checking & savings			_____
= Net Provided from Reserves			=====

Imbalance

			=====
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Repayment Analysis

The second step in cash flow analysis is to compare the debt payments planned for this year with the amount actually paid. The measures listed below provide a number of different perspectives on the repayment performance of the business.

Table 15.

**Farm Debt Payments Planned
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms	
	Actual Payments 2006	Planned Payments 2007
Current/Short Term (net reduction)	\$13,041	\$9,113
Intermediate Term (net reduction)	\$7,288	\$36,573
Long Term (net reduction)	\$6,398	\$22,608
Total Debt Payments	\$26,727	\$68,294
Payments as a percent of:		
Total accrual receipts	2.80%	7.20%
Total accrual fruit receipts	2.90%	7.50%
Payments per bearing fruit acre	\$126	\$322
Payments per acre operated	\$91	\$232
Payments per bushel of apples sold	\$0.19	\$0.48

Item	My Farm	
	Actual Payments 2006	Planned Payments 2007
Current/Short Term (net reduction)	\$_____	\$_____
Intermediate Term (net reduction)	_____	_____
Long Term (net reduction)	_____	_____
Total Debt Payments	_____	_____
Payments as a percent of:		
Total accrual receipts	_____%	_____%
Total accrual fruit receipts	_____%	_____%
Payments per bearing fruit acre	\$_____	\$_____
Payments per acre operated	_____	_____
Payments per bushel of apples sold	_____	_____

The **Cash Flow Coverage Ratio** measures the ability of the farm business to meet its planned debt payment schedule. The ratio shows the percentage of planned payments that could have been made with this year's available cash flow. However, the critical question for many farmers and lenders is whether planned payments can be made in 2006. The worksheet provided in Table 17 and 18 can be used to estimate repayment ability which can then be compared to planned 2006 debt payments shown in Table 16.

Table 16.

**Cash Flow Coverage Ratio
22 Western New York Fruit Farms, 2006**

Item	Average	My Farm
Cash Farm Receipts	\$842,493	\$ _____
- Cash Farm Expenses	\$733,034	_____
+ Interest Paid	\$35,701	_____
 = Amount Available for debt service	 \$145,160	 _____
 Debt Payments Planned	 \$68,294	 _____
 Cash Flow Coverage Ratio	 2.13	 _____

Table 17.

**Annual Cash Flow Worksheet
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms	My Farm Total	My Farm per bearing acre
Average Bearing Acres and Bearing Fruit Acres	212	_____	_____
Accrual Operating Receipts (per fruit bearing acre)			
Apples:			
Fresh	\$2,405	\$_____	\$_____
Peelers	\$994	_____	_____
Juice	\$80	_____	_____
Cherries:			
Sweet	\$134	_____	_____
Tart	\$55	_____	_____
Grapes	\$0	_____	_____
Peaches	\$193	_____	_____
Plums and Prunes	\$5	_____	_____
Pears	\$59	_____	_____
Other Crops, Livestock, & Prod	\$46	_____	_____
Custom Work, Storage, Rent	\$177	_____	_____
Other	\$328	_____	_____
Total Operating Receipts	\$4,477	_____	_____

Table 18.

**Annual Cash Flow Worksheet
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms	My Farm Total	My Farm per bearing acre
Accrual Operating Expenses			
Wages:			
Regular	\$852	\$ _____	\$ _____
Harvest	\$369	_____	_____
Other part-time seasonal	\$76	_____	_____
Other labor costs	\$261	_____	_____
Picker travel	\$19	_____	_____
Labor camp expenses	\$4	_____	_____
Machine rent, hire, lease	\$38	_____	_____
Repairs and parts	\$131	_____	_____
Trucking expense	\$48	_____	_____
Fuel, oil, and grease	\$164	_____	_____
All livestock expense	\$0	_____	_____
Fertilizer and lime	\$71	_____	_____
Replacement trees and plants	\$50	_____	_____
Spray	\$515	_____	_____
Supplies, other	\$107	_____	_____
Processing package supplies	\$14	_____	_____
Storage	\$142	_____	_____
Marketing, selling expenses	\$16	_____	_____
Repair-land, build, fence	\$30	_____	_____
Taxes	\$52	_____	_____
Rent & lease	\$73	_____	_____
Fire, liability expenses	\$72	_____	_____
Crop and revenue insurance	\$43	_____	_____
All utilities	\$86	_____	_____
Legal/office expense	\$43	_____	_____
Fruit purchased for resale	\$50	_____	_____
Miscellaneous	\$90	_____	_____
TOTAL Operating Expenses			
Excluding Interest Paid	\$3,416	_____	_____

Table 19.

**Annual Cash Flow Worksheet- Repayment Analysis
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms	My Farm Total
Repayment Analysis (Total)		
Net Accrual Operating Income (excluding interest paid)	\$225,084	\$ _____
- Change in livestock and crop inventory	\$62,806	_____
- Change in accounts receivable	\$ 23,932	_____
- Change in supply inventory	\$0	_____
Net operating cash flow	\$140,770	_____
- Net personal withdrawals	\$65,112	_____
Available for debt payments and investment	\$75,658	_____
- Farm debt payments (principle and interest)	\$96,135	_____
Available for farm investment	(\$22,901)	_____
Capital purchases	\$101,198	_____
Additional capital needed	\$124,099	_____

Capital Efficiency Analysis

Capital efficiency factors measure how intensively capital is being used in the farm business. As capital needs grow, capital management becomes more important.

Capital turnover is a measure of capital efficiency as it shows the number of years of farm receipts required to equal or "turnover" the capital investment. It is computed by dividing the average farm asset value by the year's total farm accrual receipts and appreciation. Summing the next three ratios (operating expense, interest expense, and depreciation expense) gives total expenses per dollar of accrual receipts. In Table 20, total expenses per dollar of receipts is \$.82.

Table 20.

**Capital Efficiency Analysis
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms		
	Per worker equiv	Per bearing fruit acre	Per acre operated
Assets			
Total Farm Capital	\$138,739	\$8,421	\$6,072
Real estate	\$57,520	\$3,491	\$2,517
All Equipment	\$33,355	\$2,024	\$1,460
Ratios:			
Capital turnover	Operating Expense	Interest Expense	Depreciation Expense
0.55	0.73	0.04	0.05
=1.8 yrs.			
My Farm			
Total Farm Capital	_____	_____	_____
Real estate	_____	_____	_____
All Equipment	_____	_____	_____
Ratios:			
Capital turnover	Operating Expense	Interest Expense	Depreciation Expense
_____	_____	_____	_____

Equipment Analysis

Equipment costs comprised nearly 18 percent of the cost of fruit production in 2006. Total equipment expenses include the major fixed costs (interest and depreciation) as well as the accrual operating costs.

Table 21.

**Accrual Equipment Expenses
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms		
	Total	Equipment cost per fruit acre operated	
		bearing	all fruit
Machine Hire,			
Equipment Rent, Lease	\$8,036	\$38	\$33
Repair and parts	\$27,876	\$131	\$115
Trucking	\$10,206	\$48	\$42
Fuel, oil, and grease	\$34,841	\$160	\$140
Interest on avg equipment capital at 5%	\$21,460	\$96	\$84
Depreciation	<u>\$42,385</u>	<u>\$171</u>	<u>\$150</u>
Total Equipment Cost	\$144,804	\$644	\$565

Item	My Farm		
	Total	Equipment cost per fruit acre operated	
		bearing	all fruit
Machine Hire,			
Equipment Rent, Lease	\$_____	\$_____	\$_____
Repair and parts	_____	_____	_____
Trucking	_____	_____	_____
Fuel, oil, and grease	_____	_____	_____
Interest on avg.equipment capital at 5%	_____	_____	_____
Depreciation	_____	_____	_____
Total Equipment Cost	_____	_____	_____

Labor Analysis

The efficient use of labor is closely related to farm profitability. Measures of labor efficiency or productivity are key indicators of management's success. Labor is the largest single cost category on fruit farms, accounting for 41 % of total accrual expenses.

Table 22.

Labor Inventory Analysis, 22 Western New York Fruit Farms, 2006

Labor force	Full-time Months	Age, Years	Education, Years	Value of Labor and Management
Average				
Operator 1	11.11	54	13	\$42,784
Operator 2	4.50	51	15	\$16,070
Operator 3	1.23	55	15	\$6,801
Operator 4	0.07	64	16	\$359
Family Paid	0.00		Total	\$66,014
Family Unpaid	0.00		Avg. per Operator	\$46,845
Hired				
Regular	85.1			
Harvest	42.4			
Other PT/Seasonal	10.0			
Total Hired	137.5			
Total	154.4	mo./12 =	12.9	worker equivalent
			1.41	oper./manager equivalent
			11.5	hired worker equiv
<hr/>				
My Farm:				
Total	_____	mo./12 =	_____	worker equivalent
Operators	_____	mo./12 =	_____	operator./manager equivalent
<hr/>				

Table 23.**Labor Efficiency Analysis, 22 Western New York Fruit Farms, 2006**

Labor Efficiency	<u>Average 22 Farms</u>		<u>My Farm</u>	
	Total	Per Worker	Total	Per Worker
Bearing fruit acres	212	16.5	_____	_____
Total acres operated	294	22.8	_____	_____
Apples sold, bu.	143,700	11,168	_____	_____
Accrual receipts	\$949,191	\$73,767	_____	_____

Labor Cost or Value	<u>Average 22 Farms</u>			<u>My Farm</u>		
	Total	Per Worker Equivalent	Per Bearing Fruit Acre	Total	Per Worker Equivalent	Per Bearing Fruit Acre
Value of operators' labor @ \$2,400/mo.	\$40,584	\$3,154	\$191	\$_____	\$_____	\$_____
Family unpaid @ \$2,400 per mo.	\$0	\$0	\$0	_____	_____	_____
Hired						
Regular	\$180,585	\$14,034	\$852	_____	_____	_____
Harvest	\$78,155	\$6,074	\$369	_____	_____	_____
Other PT/Seasonal	\$16,164	\$1,256	\$76	_____	_____	_____
Total Hired	\$274,904	\$21,364	\$1,297	_____	_____	_____
Indirect Labor Costs	\$55,348	\$4,301	\$261	_____	_____	_____
Total Labor	\$330,252	\$25,666	\$1,558	_____	_____	_____
Machinery Costs	\$144,804	\$11,253	\$683	_____	_____	_____
Total Labor and Machinery	\$475,056	\$36,919	\$2,241	_____	_____	_____
Hired Labor as Percent of Crop Sales	32.60%			\$_____		
Total Labor as Percent of Crop Sales	39.20%			\$_____		

Cropping Program Analysis

The cropping program is the central part of a fruit farm business. A complete evaluation of available land resources, how they are being used, how well crops are producing, and what it costs to produce them, is required to evaluate alternative cropping choices. In the table below, average crop acres and yields are presented for the number of farms reporting each crop. A worksheet is shown

(Table 25) to develop comparable figures for your own operation. The nonbearing acreage is 12.4 percent of total fruit acres.

Table 24.
Land Resources and Crop Production, 22 Western New York Fruit Farms, 2006

Item	Average 22 Farms			
Land Class (end of year)				
Bearing fruit acres			212.0	
Non-bearing fruit acres			30.0	
Other crops and open acres			42.0	
Non-tillable acres			53.0	
Total land operated			294.0	
Rented land included above			59.2	
<u>For farms having the fruit:</u>				
Crop Production	No. of farms	Average acres	Yield per acre	Percent of Total Apples
Bearing Fruit:				
Apples : fresh	22	112.1	650.5 bu.	46.00%
: Peelers	21	67.3	959.7 bu.	49.00%
: Juice	16	-	-	7.00%
Total Apples	22	176.3	827.3 bu.	
Cherries : sweet	10	11.0	6067.0 lb.	
: tart	5	38.0	7500.0 lb.	
Grapes	0	0.0	0.0 ton	
Peaches	14	17.8	5.5 ton	
Plums/Prunes	5	4.0	3.5 ton	
Pears	5	14.9	8.0 ton	
Non-Bearing Fruit:				
Apples : fresh	20	19.0		
: Peeler	6	7.1		
Cherries : sweet	6	3.2		
: tart	7	21.9		
Grapes	1	1.0		
Peaches	6	3.7		
Plums/Prunes	1	2.0		
Pears	3	5.0		
Other Crops, Open:				
Other	5	9.1		

Table 25.

Land Resources and Crop Production, My Farm, 2006

Item	Total acres		
Land Class (end of year)			
Bearing fruit acres	_____		
Non-bearing fruit acres	_____		
Other crops and open acres	_____		
Non-tillable acres	_____		
 Total land operated	 _____		
Rented land included above	_____		
	My Farm		
Crop Production	Total acres	Yield per acre	Percent of total apples
Bearing Fruit:			
Apples:			
Fresh	_____	_____ bu.	_____ %
Peelers	_____	_____ bu.	_____ %
Juice			_____ %
Total Apples	_____	_____ bu.	
Cherries:			
Sweet	_____	_____ lb.	
Tart	_____	_____ lb.	
Grapes	_____	_____ ton	
Peaches	_____	_____ ton	
Plums/prunes	_____	_____ ton	
Pears			
Non-Bearing Fruit:			
Apples:			
Fresh	_____		
Peeler	_____		
Cherries:			
Sweet	_____		
Tart	_____		
Grapes	_____		
Peaches	_____		
Plums/prunes	_____		
Pears	_____		
Other Crops, Open:			
Other			

Cost Control Factors

The control of costs is an important factor in the success of modern commercial fruit farm businesses. But before they can be controlled, they must be known. A major reason for farm business analysis is to identify the most significant cost items so cost control decisions can be encouraged as warranted. However, the optimum level of input items used to obtain the greatest net return is difficult to determine.

Farm managers have substituted power and equipment for labor to a large degree. With labor and equipment costs comprising about 60 percent of total production costs on fruit farms, it is important to know and control these and other costs on a production unit basis.

Table 26.

**Cost Control Factors
22 Western New York Fruit Farms, 2006**

Item	Average 22 Farms		My Farm	
	Cost Per Fruit Acre Operated Bearing Acres	All Fruit Acres	Cost Per Fruit Acre Operated Bearing Acres	All Fruit Acres
All labor including operators' labor	\$1,558	\$1,365	_____	_____
Harvest labor	\$369	\$323	_____	_____
Other hired labor	\$261	\$229	_____	_____
All equipment cost	\$683	\$598	_____	_____
Spray	\$515	\$451	_____	_____

PROGRESS OF THE FARM BUSINESS

Comparing your business with average data from other fruit farms can be a helpful part of a business checkup. While a wide variation in business size and composition exists in this group of fruit farms, many of the factors will provide a meaningful indication of how you compare with other fruit farms. It is, perhaps, even more important for you to determine the progress your business has made over the past two or three years and to set goals for the future. See the last table in this publication for the progress chart for the farms in this year's study.

The tables on the following pages provide the opportunity for you to compare your business factors with averages for the participating farms for the current year. It also encourages you to set some goals toward which to strive as you measure the progress of your farm business over the years.

Table 27.**Analyzing the Fruit Farm Business, 22 Western New York Fruit Farms, 2006**

Selected Factors	2006 Average 22 Farms	My Farm
Number of Farms		_____
Size of Business		
Total acres	294	_____
All fruit acres (incl non-bearing)	242	_____
Bearing fruit acres	212	_____
Fresh- percent of all apple acres	58.00%	_____
Apples produced (bushels)	144,156	_____
Apples sold (bushels)	143,700	_____
Worker Equivalent	12.9	_____
Rates of Production		
All apples, bushels per bearing acre	827.30	_____
Fresh - percent of apples harvested	46%	_____
Cherries - tart, pounds per bearing acre	7,500.00	_____
Cherries - sweet, pounds per bearing acre	6,067.00	_____
Peaches - tons per bearing acre	5.50	_____
Plums/Prunes - tons per bearing acre	3.50	_____
Pears - tons per bearing acre	8.00	_____
Labor Efficiency		
Bearing fruit acres per worker	16.5	_____
All fruit acres per worker	18.8	_____
Accrual Receipts per worker	\$73,767	_____
Cost Control - Accrual		
Costs per bearing fruit acre		
All labor	\$1,558	_____
All equipment	\$683	_____
Spray	\$515	_____
Expansion orchard expense	\$25,723	_____
Hired labor as percent of operating expense	38.00%	_____
Capital Efficiency		
Total farm capital per bearing fruit acre	\$8,421	_____
Total farm capital per fruit acre	\$6,072	_____
Capital Turnover Ratio	0.55	_____
Profitability		
Net farm income without appreciation	\$138,051	_____
Net farm income with appreciation	\$175,274	_____
Labor and management income per operator	\$55,062	_____
Rate of return on:		
Equity capital with appreciation	9.00%	_____
All capital with appreciation	7.90%	_____
Financial Summary, End of Year		
Farm net worth	\$1,209,195	_____
Debt to asset ratio	0.35	_____
Farm debt per bearing fruit acre	\$3,083	_____
Cash flow coverage ratio	2.13	_____

Table 28. Progress of the Farm Business, 17 Farms, 2005 and 2006.

Selected Factors	2005 Average 17 Farms	2006 Average 17 Farms	My Farm
Size of Business			
Total acres	333	310	_____
All fruit acres (incl non-bearing)	276	267	_____
Bearing fruit acres	243	234	_____
Fresh- percent of all apple acres	57.65%	59.00%	_____
Apples produced (bushels)	144,698	158,637	_____
Apples sold (bushels)	144,698	158,637	_____
Worker Equivalent	14.45	14.7	_____
Rates of Production			
All apples, bushels per bearing acre	692.19	823.90	_____
Fresh - percent of apples harvested	44%	46%	_____
Cherries - tart, pounds per bearing acre	5273.78	7,500.00	_____
Cherries - sweet, pounds per bearing acre	3946.04	5,877.00	_____
Peaches - tons per bearing acre	3.42	5.50	_____
Plums/Prunes - tons per bearing acre	0.58	3.50	_____
Pears - tons per bearing acre	5.63	5.80	_____
Labor Efficiency			
Bearing fruit acres per worker	16.81	15.90	_____
All fruit acres per worker	19.08	18.20	_____
Accrual Receipts per worker	\$60,796	\$69,918	_____
Cost Control - Accrual			
Costs per bearing fruit acre			
All labor	\$1,454	\$1,599	_____
All equipment	\$594	\$675	_____
Spray	\$403	\$532	_____
Expansion orchard expense	\$25,289	\$30,241	_____
Hired labor as percent of operating expense	39.77%	38.00%	_____
Capital Efficiency			
Total farm capital per bearing fruit acre	\$7,782	\$8,435	_____
Total farm capital per fruit acre	\$6,855	\$6,667	_____
Capital Turnover Ratio	0.47	0.54	_____
Profitability			
Net farm income without appreciation	\$71,068	\$113,879	_____
Net farm income with appreciation	\$78,206	\$148,006	_____
Labor and management income per operator	\$6,520	\$27,195	_____
Rate of return on:			
Equity capital with appreciation	-1.68%	5.80%	_____
All capital with appreciation	0.69%	5.80%	_____
Financial Summary, End of Year			
Farm net worth	\$1,153,546	\$1,209,402	_____
Debt to asset ratio	0.38	0.37	_____
Farm debt per bearing fruit acre	\$2,865	\$3,196	_____
Cash flow coverage ratio	2.59	2.20	_____

NOTES

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2007-14	Dairy Farm Business Summary, Central Valleys Region, 2006	(\$12.00)	Knoblauch, W., Karszes, J., Radick, C., Wickswat, C., Manning, J., Balbian, D., Allhusen, G., Buxton, S. and L. Putnam
2007-13	Dairy Farm Business Summary, Intensive Grazing Farms, New York, 2006	(\$16.00)	Conneman, G., Grace, J., Karszes, J., Degni, J., Munsee, D., Putnam, L., Staehr, A. and C. Kyle
2007-12	Quantifying the Contributions to Dairy Farm Business Risk: Implications for Producer's Risk Management Strategies		Schmit, T., Chang, H., Boisvert, R. and L. Tauer
2007-11	Dairy Farm Business Summary, Northern New York Region, 2006	(\$12.00)	Knoblauch, W., Putnam, L., Karszes, J., Murray, P., Vokey, F., Ames, M., Van Loo, W., Deming, A. and J. Prosper
2007-10	Dairy Farm Business Summary, Western and Central Plateau Region, 2006	(\$12.00)	Knoblauch, W., Putnam, L., Karszes, J., Grace, J., Munsee, D. and J. Petzen
2007-09	Dairy Farm Business Summary, New York Small Herd Farms, 80 Cows or Fewer, 2006	(\$16.00)	Knoblauch, W., Putnam, L., Kiraly, M. and J. Karszes
2007-08	Producing a Business Plan for Value-Added Agriculture		Streeter, D.
2007-07	Dairy Farm Business Summary, Northern Hudson Region, 2006	(\$12.00)	Conneman, G., Putnam, L., Wickswat, C., Buxton, S., Smith, R. and J. Karszes
2007-06	Dairy Farm Business Summary, Western and Central Plain Region, 2006	(\$12.00)	Knoblauch, W., Putnam, L., Karszes, J., Hanchar, J., Moag, G., Getty, K. and Z. Waite
2007-05	Dairy Farm Business Summary, New York Large Herd Farms, 300 Cows or Larger, 2006	(\$16.00)	Karszes, J., Knoblauch, W. and L. Putnam

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