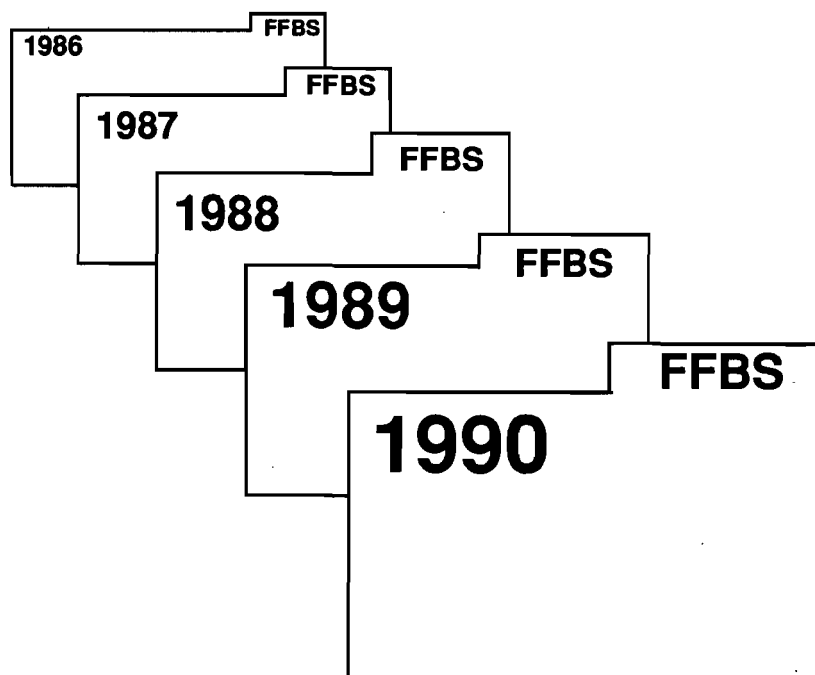


# **FRUIT FARM BUSINESS SUMMARY**

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## **LAKE ONTARIO REGION NEW YORK 1990**



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# 1990 FRUIT FARM BUSINESS SUMMARY LAKE ONTARIO REGION

Table of Contents	Page ----
INTRODUCTION .....	1
Format Features .....	1
Apple Production and Prices in Recent Years .....	2
SUMMARY AND ANALYSIS OF THE FARM BUSINESS .....	3
Business Characteristics .....	3
Farm Financial Status .....	4
Income Statement .....	7
Profitability Analysis .....	11
Cash Flow Statement .....	13
Repayment Analysis .....	15
Capital Efficiency Analysis .....	17
Equipment Analysis .....	17
Labor Analysis .....	18
Cropping Program Analysis .....	19
Cost Control Factors .....	20
PROGRESS OF THE FARM BUSINESS .....	20

## ABSTRACT

This report is a summary of 1990 farm business data collected from 22 fruit farm businesses located, except for one, in Western New York State. Apples are the predominant fruit crop. The data are presented as averages for all 22 farms. Analysis factors are compared for the same 11 farms for 1988-1990 and the same 17 farms for 1989-1990. 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.

**Acknowledgements** - The authors are research associate and regional fruit specialist respectively. Appreciation is expressed to the cooperating fruit farmers who provided the data summarized in this report. Also, the authors appreciate reviews of this report and helpful comments by Professor G. B. White of the Department of Agricultural Economics.

# 1990 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 year. 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 1990.

The primary objective of the fruit farm business summary, FFBS, program is to help farm managers improve the financial management of their business through 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 farmer's data are entered. This provides rapid processing of the information provided for timely use in the management of the farm business.

The farms in this study are primarily apple farms. An average of 86 percent of the receipts in 1990 was from the sale of apples. The data were not obtained from a random sample of all fruit farms in Western New York. Therefore, the analysis should not be used to represent the Western New York fruit industry.

## Format Features

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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 22 farms.

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 THREE YEAR COMPARISON of selected business factors, and
- (7) a TWO YEAR SAME FARM COMPARISON for 17 farms.
- (8) a THREE YEAR SAME FARM COMPARISON for 11 farms.

# Apple Production and Prices in Recent Years

Apple production for the State was 23.6 million bushels in 1990. Western New York growers produced 15.2 million bushels or about 64 percent of the total State crop. Statewide, production was up three percent and in Western New York it was down about six percent compared to 1989.

Thirty six percent of the 1990 apple crop produced in Western New York was sold fresh. This was up from 32 percent of the crop for 1989. The 1990 fresh crop was five and a half million bushels - highest in the past six years. Processing apple production in Western New York

Table 1. APPLE PRODUCTION AND PRICES  
New York State, 1987 - 1990

Item	1987	1988	1989	1990
Production:	----- million bushels -----			
Fresh apples				
Western New York	4.5	3.5	5.2	5.5
New York State	9.0	9.6	10.5	12.4
Processing apples				
Western New York	10.0	10.1	11.0	9.8
New York State	11.9	12.0	12.4	11.2
All varieties				
Western New York	14.5	13.6	16.2	15.2
New York State	21.0	21.7	22.9	23.6
Average Price Received per Bushel:	----- dollars -----			
Fresh Apples				
Western New York				
F.O.B. less pkg, stg, etc	5.92	6.09	6.03	8.65
Bulk price	4.37	4.62	4.83	4.83
Fruit Farm Business Summary	n/a	5.07	4.98	5.50
New York State				
F.O.B. less pkg, stg, etc	6.19	6.43	6.22	7.48
Bulk price	4.37	4.62	4.83	4.83
Processing apples				
Western New York	2.42	3.15	2.87	3.25
Fruit Farm Business Summary	n/a	2.86	2.93	3.34
New York State	2.39	3.02	2.81	3.15

Source: New York Agricultural Statistics Service, FRUIT series, Seasonal releases for July 1988, 1989, 1990, and 1991 and the annual Fruit Farm Business Summaries.

decreased 11 percent from 1989 to 9.8 million bushels for 1990. Sixty four percent of the Western New York crop was processing apples.

Net F.O.B. prices received per bushel for fresh apples in Western New York averaged \$8.65 per bushel, considerably higher than 1989 and highest in the past six years. The bulk price for fresh apples remained at \$4.83 per bushel. Western New York processing apple prices averaged \$3.25 per bushel or 7.7 cents per pound in 1990 - 13 percent above the \$2.87 per bushel received in 1989.

Statewide, fresh apple prices received by growers averaged \$7.48 per bushel net F.O.B. - \$1.26 per bushel higher than the average 1989 price. Processing apples, produced mostly in Western counties, averaged \$3.15 per bushel or 7.5 cents per pound for 1990.

## SUMMARY AND ANALYSIS OF THE FARM BUSINESS

### Business Characteristics

-----

Finding the right management strategies is an important part of operating a successful farm business. Various combinations of farm resources, enterprises, business arrangements, and management techniques are used by the fruit farmers in Western New York. The following table shows important farm business characteristics and the number of farmers reporting these characteristics.

Table 2. BUSINESS CHARACTERISTICS  
22 Western New York Fruit Farms, 1990

Type of Business:	No.	Business Record System:	No.
	---		---
Proprietors	6	Account Book	3
Partnerships	8	Agrifax (mail-in)	2
Corporations	8	On-Farm Computer	15
		Other	2

Business Composition:	No.
	---
Fruit production only	6
Fruit with storage	3
Fruit & other enterprises	7
Fruit w/storage & other enterprises	6

-----

## 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

Table 3. FARM BUSINESS BALANCE SHEET  
22 Western New York Fruit Farms, December 31

Farm Assets			Farm Liabilities & Net Worth		
	1989	1990		1989	1990
Current			Current: =< 1 yr		
	\$	\$		\$	\$
Cash, checking, sav	17,265	18,485	Accounts payable	19,214	18,906
Accounts receivable	60,599	90,820	Operating debt	34,542	49,492
Prepaid expenses	3,318	2,955	Short term	0	0
Fruit, other crops	66,034	97,956	Advanced govt recpts	0	0
Production supplies	10,587	7,882	Accrued interest	0	0
Packing supplies	1,305	1,337			
Total current	159,108	219,435	Total current	53,756	68,398
Intermediate			Intermediate: > 1 to < 10 yr		
Livestock	241	0	Structured debt	40,932	44,355
Livestock leased	0	0			
Equipment owned	144,908	149,615	Fin lease- Lvstk, Eq	1,716	1,217
Equipment leased	1,716	1,217			
FLB/PCA stock	4,704	5,086	FLB/PCA stock	4,704	5,086
Other stock, certs	42,889	47,570			
Total intermediate	194,458	203,488	Total intermediate	47,352	50,658
Long Term			Long Term: => 10 yr		
Land/buildings:			Structured debt	124,688	123,779
Owned	351,835	358,011			
Structures leased	0	0	Fin lease-structures	0	0
Total long term	351,835	358,011	Total long term	124,688	123,779
Total Farm:			Total Farm:		
Assets	705,401	780,934	Liabilities	225,796	242,835
			Net Worth	479,605	538,099
			Liab & Net Worth	705,401	780,934

the item has to the business.

Table 3 presents the balance sheet data for the 22 fruit farm cooperators. It lists the average value of assets and liabilities for December 31, 1989 and December 31, 1990 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. Carefull attention to asset values is important for a meaningful calculation of change in net worth, a measure of financial progress.

The table below provides a format for the reader to use to develop a balance sheet for an individual's farm business.

Table 4.

FARM BUSINESS BALANCE SHEET  
My Farm, December 31

Farm Assets			Farm Liabilities & Net Worth		
	1989	1990		1989	1990
Current			Current: =< 1 yr		
	\$	\$		\$	\$
Cash, checking, sav			Accounts payable		
Accounts receivable			Operating debt		
Prepaid expenses			Short term		
Fruit, other crops			Advanced govt recpts		
Production supplies			Accrued interest		
Packing supplies					
Total current			Total current		
Intermediate			Intermediate: > 1 to < 10 yr		
Livestock			Structured debt		
Livestock leased					
Equipment owned			Fin lease- Lvstk, Eq		
Equipment leased					
FLB/PCA stock			FLB/PCA stock		
Other stock, certs					
Total intermediate			Total intermediate		
Long Term			Long Term: => 10 yr		
Land/buildings:			Structured debt		
Owned					
Structures leased			Fin lease-structures		
Total long term			Total long term		
Total Farm:			Total Farm:		
Assets			Liabilities		
			Net Worth		
			Liab & Net Worth		



The 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. Debt levels per unit of production include some old standards that are still useful if used with measures of cash flow and repayment ability. The change in farm net worth without appreciation is an excellent indicator of financial progress from operating the business.

Table 5.

FARM BUSINESS BALANCE SHEET ANALYSIS  
Western New York Fruit Farms, December 31

Item	Same 17 farms 1989	1990	All 22 farms 1990	My farm
Financial Ratios - end of year	For the farm business only			
Percent equity	67%	69%	69%	_____ %
Debt to asset ratios				
Total debt	0.33	0.31	0.31	_____
Long term	0.36	0.34	0.35	_____
Current & intermediate	0.31	0.29	0.29	_____
Change in Net Worth				
Without appreciation	(\$34,319)	\$54,712	\$41,829	\$ _____
With appreciation	(\$12,302)	\$74,011	\$58,494	\$ _____
Debt Analysis - end of year				
Percent of total farm debt that is:				
Long term	52%	48%	51%	_____ %
Current & intermediate	48%	52%	49%	_____ %
Accounts payable only	9%	9%	8%	_____ %
Debt Levels - end of year				
Per bearing fruit acre:				
Total farm debt	\$1,160	\$1,207	\$1,220	\$ _____
Long term	606	578	622	_____
Current & intermediate	554	629	598	_____

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 6. FARM INVENTORY BALANCE  
22 Western New York Fruit Farms, 1990

Item		Average		My Farm	
Inventory Balance		Real Estate	Equipment	Real Estate	Equipment
Value- beginning of year	(1) \$	351,835	\$ 144,908	\$ _____	\$ _____
Purchases	\$	9,450 a	\$ 18,543	\$ _____	\$ _____
+ Nonfarm noncash transfers		0	0	_____	_____
- Lost capital		983		_____	_____
- Sales		1,873	1,465	_____	_____
- Depreciation		10,484	14,536	_____	_____
= Net investment	(2) \$	(3,889)	\$ 2,542	\$ _____	\$ _____
Appreciation	(3-1-2)	10,065 b	2,165	_____	_____
Value- end of year	(3) \$	358,011	\$ 149,615	\$ _____	\$ _____
a Purchase includes \$3,227 for land and \$6,223 for buildings.					
b RE apprec excludes \$1,391 of appreciation on assets sold during the year.					

#### 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 thus 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 is provided to enable any fruit farmer to compare his or her expenses and receipts with the group averages in the corresponding tables.

Table 7.

INCOME STATEMENT -- FARM EXPENSES  
22 Western New York Fruit Farms, 1990

EXPENSES	Cash amount paid	+	Change in inventory or prepaid expense	+	Change in accounts payable	=	Accrual expenses
Hired Labor							
Wages - regular	\$ 30,913		\$ 0		\$ (57)		\$ 30,856
picking	47,311		0		(50)		47,261
other parttime, seasonal	20,123		0		(33)		20,090
Other labor costs	18,919		0		(33)		18,886
Picker travel	1,191		0		0		1,191
Labor camp expenses	2,724		0		(90)		2,634
Equipment							
Machine hire, rent, lease	6,655		0		363		7,018
Repairs & parts	17,326		23		(782)		16,567
Auto expense - farm share	343		1		0		344
Fuel, oil & grease	12,019		(535)		18		11,502
Livestock							
All livestock expenses	0		126		0		126
Crops							
Fertilizer & lime	8,456		264		(727)		7,993
Replacement trees & plants	635		36		0		671
Spray	40,959		3,175		1,539		45,673
Supplies, other production exp	9,416		(384)		(135)		8,897
Packing supplies	1,138		(32)		17		1,123
Storage	6,414		0		5		6,419
Marketing, selling expenses	2,127		0		0		2,127
Real Estate							
Repair - land, bldg, fences	2,611		14		0		2,625
Taxes	6,938		0		192		7,130
Rent & lease	7,590		0		32		7,622
Other Expenses							
Insurance - fire, liab	4,565		116		(136)		4,545
- crop	984		0		0		984
Telephone - farm share	997		0		1		998
Electricity - farm share	4,577		0		(472)		4,105
Fruit purchased for resale	12,083		0		70		12,153
Interest paid	18,716		0		0		18,716
Miscellaneous	9,947		23		(30)		9,940
TOTAL OPERATING EXPENSES	\$ 295,677		\$ 2,827		\$ (308)		\$ 298,196
Expansion orchard	\$ 4,543		930		0		5,473
Depreciation - Equipment							14,536
Buildings							5,098
Bearing trees & vines							5,386
TOTAL ACCRUAL EXPENSES						\$	328,689

Table 8.

INCOME STATEMENT - FARM EXPENSES  
My Farm, 1990

EXPENSES	Cash amount paid +	Change in inventory or prepaid expense +	Change in accounts payable	Accrual = expenses
Hired Labor				
Wages - regular	\$ _____	\$ _____	\$ _____	\$ _____
picking	_____	_____	_____	_____
other parttime, seasonal	_____	_____	_____	_____
Other labor costs	_____	_____	_____	_____
Picker travel	_____	_____	_____	_____
Labor camp expenses	_____	_____	_____	_____
Equipment				
Machine hire, rent, lease	_____	_____	_____	_____
Repairs & parts	_____	_____	_____	_____
Auto expense - farm share	_____	_____	_____	_____
Fuel, oil & grease	_____	_____	_____	_____
Livestock				
All livestock expenses	_____	_____	_____	_____
Crops				
Fertilizer & lime	_____	_____	_____	_____
Replacement trees & plants	_____	_____	_____	_____
Spray	_____	_____	_____	_____
Other crop production expenses	_____	_____	_____	_____
Packing supplies	_____	_____	_____	_____
Storage	_____	_____	_____	_____
Marketing, selling expenses	_____	_____	_____	_____
Real Estate				
Repair - land, bldg, fences	_____	_____	_____	_____
Taxes	_____	_____	_____	_____
Rent & lease	_____	_____	_____	_____
Other Expenses				
Insurance	_____	_____	_____	_____
Telephone - farm share	_____	_____	_____	_____
Electricity - farm share	_____	_____	_____	_____
Fruit purchased for resale	_____	_____	_____	_____
Interest paid	_____	_____	_____	_____
Miscellaneous	_____	_____	_____	_____
TOTAL OPERATING EXPENSES	\$ _____	\$ _____	\$ _____	\$ _____
Expansion orchard	\$ _____	_____	_____	_____
Depreciation - Equipment				_____
Buildings				_____
Bearing trees & vines				_____
TOTAL ACCRUAL EXPENSES				\$ _____

Table 9.

INCOME STATEMENT - FARM RECEIPTS  
22 Western New York Fruit Farms, 1990

RECEIPTS	Cash receipts	+	Change in inventory	+	Change in accts/rec	=	Accrual receipts
Apples - Fresh	\$ 163,106	\$	29,181	\$	6,752	\$	199,039
- Processing	127,937		1,939		22,656		152,532
Cherries - sweet	4,659				(196)		4,463
- tart	12,365				(448)		11,917
Grapes	947				50		997
Peaches	2,143				482		2,625
Pears	5,958				0		5,958
Plums & prunes	1,123				5		1,128
All other fruit	968				258		1,226
Other crops, livestock & prod	2,398		802		(23)		3,177
Custom work, storage, rent	19,330				(632)		18,698
Other- incl govt recpts, refunds	9,235			a	(930)		8,305
- Nonfarm noncash capital		(-)	(227)b			(-)	(227)
TOTAL OPERATING RECEIPTS	\$ 350,169	\$	31,695	\$	27,974	\$	409,838

a Change in advanced government receipts. b Gifts & inheritances of livestock & crops.

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 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 10.

INCOME STATEMENT - FARM RECEIPTS - My Farm

RECEIPTS	Cash receipts	+	Change in inventory	+	Change in accts/rec	=	Accrual receipts
Apples - Fresh	\$ _____	\$	_____	\$	_____	\$	_____
- Processing	_____		_____		_____		_____
Cherries - sweet	_____				_____		_____
- tart	_____				_____		_____
Grapes	_____				_____		_____
Peaches	_____				_____		_____
Pears	_____				_____		_____
Plums & prunes	_____				_____		_____
All other fruit	_____				_____		_____
Other crops, livestock & prod	_____		_____		_____		_____
Custom work, storage, rent	_____				_____		_____
Other- incl govt recpts, refunds	_____				_____		_____
- Nonfarm noncash capital		(-)	_____			(-)	_____
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 FLB and PCA). Appreciation is a major factor contributing to changes in farm net worth and must be included for a complete profitability analysis.

Table 11. NET FARM INCOME  
Western New York Fruit Farms

Item	Same 17 farms 1989	1990	22 farms 1990	My Farm
Total accrual receipts	\$ 368,730	\$ 465,542	\$ 409,840	\$ _____
+ Appreciation:				
Livestock	135	(1,038)	(802)	_____
Equipment	4,207	1,157	2,165	_____
Real estate	15,479	13,781	11,456	_____
Other- Stock & cert	+ 2,196	+ 5,399	+ 3,846	+ _____
= Total accrual receipts with appreciation	\$ 390,747	\$ 484,841	\$ 426,505	\$ _____
- Total accrual expenses	- 335,759	- 368,928	- 328,688	- _____
= Net Farm Income with appreciation	\$ 54,988	\$ 115,913	\$ 97,817	\$ _____
Net Farm Income without appreciation	\$ 32,971	\$ 96,614	\$ 81,152	\$ _____

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 12. RETURN TO OPERATORS' LABOR, MANAGEMENT AND EQUITY CAPITAL  
Western New York Fruit Farms

Item	Same 17 farms 1989	17 farms 1990	22 farms 1990	My farm
With appreciation:				
Net farm income	\$ 54,988	\$ 115,913	\$ 97,817	\$ _____
- Family unpaid labor @ \$1250 per month (1990)	- 926	- 1,544	- 1,449	- _____
= Return to operators' labor management, & equity	\$ 54,062	\$ 114,369	\$ 96,368	\$ _____
Without appreciation:				
Net farm income	\$ 32,971	\$ 96,614	\$ 81,152	\$ _____
- Family unpaid labor @ \$1250 per month (1990)	- 926	- 1,544	- 1,449	- _____
= Return to operators' labor management, & equity	\$ 32,045	\$ 95,070	\$ 79,703	\$ _____

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 13. LABOR AND MANAGEMENT INCOME  
Western New York Fruit Farms

Item	Same 17 farms 1989	17 farms 1990	22 farms 1990	My Farm
Without appreciation:				
Return to operators' labor, management, & equity	\$ 32,045	\$ 95,070	\$ 79,703	\$ _____
- Real interest @ 5% on average equity capital	- 25,565	- 27,803	- 25,443	- _____
= Labor & Management Income per farm	\$ 6,480	\$ 67,267	\$ 54,260	\$ _____
Labor & Management Income per operator	\$ 3,429	\$ 35,141	\$ 30,349	\$ _____

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-operator's 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.

RETURN ON TOTAL CAPITAL is calculated by adding interest paid to the return on equity capital and then dividing by average farm assets. It indicates the rate of return earned by this business on all of the funds used in this business.

Table 14. RETURN ON EQUITY CAPITAL AND RETURN ON TOTAL CAPITAL  
Western New York Fruit Farms

Item	Same 17 farms 1989	17 farms 1990	22 farms 1990	My farm
Average number of bearing acres	217	223	199	_____
Average EQUITY capital	\$ 511,292	\$ 556,053	\$ 508,854	\$ _____
Average TOTAL capital	\$ 754,006	\$ 815,563	\$ 743,168	\$ _____
Returns WITH appreciation:				
Return to operators' labor, management & equity capital	\$ 54,062	\$ 114,369	\$ 96,368	\$ _____
- Value of opers' labor & mgmt	46,695	48,790	45,512	_____
= Return on avg. EQUITY capital	\$ 7,367	\$ 65,579	\$ 50,856	\$ _____
+ Interest paid	20,023	19,611	18,716	_____
= Return on avg. TOTAL capital	\$ 27,390	\$ 85,190	\$ 69,572	\$ _____
Rates of return on:				
Average EQUITY capital	1.4%	11.8%	10.0%	_____%
Average TOTAL capital	3.6%	10.4%	9.4%	_____%
Returns WITHOUT appreciation:				
Return on avg. equity capital WITH appreciation	\$ 7,367	\$ 65,579	\$ 50,856	\$ _____
- Total appreciation	22,017	19,299	16,665	_____
= Return on avg. EQUITY capital	\$ (14,650)	\$ 46,280	\$ 34,191	\$ _____
+ Interest paid	20,023	19,611	18,716	_____
= Return on avg. TOTAL capital	\$ 5,373	\$ 65,891	\$ 52,907	\$ _____
Rates of return on:				
Average EQUITY capital	-2.9%	8.3%	6.7%	_____%
Average TOTAL capital	0.7%	8.1%	7.1%	_____%

#### 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 the following table. By definition, total cash inflows must equal total cash outflows when beginning and end balances are included. Any imbalance is, therefore, the error from incorrect accounting of cash inflows and cash outflows.

Table 15. ANNUAL CASH FLOW STATEMENT  
22 Western New York Fruit Farms, 1990

Item	Average	My Farm
<b>Cash Inflows</b>		
Beginning farm cash, checking & savings	\$ 17,265	\$ _____
Cash farm receipts	350,170	_____
Sale of assets:		
Equipment	1,465	_____
Real estate	2,438	_____
Other stock & certificates	638	_____
Money borrowed:		
Increase in operating debt	18,420	_____
Short term	5,689	_____
Intermediate	4,576	_____
Long term	3,773	_____
Refinanced debt	4,545	_____
Nonfarm:		
Income	1,314	_____
Capital used in business	2,160	_____
Money borrowed	45	_____
Total Cash Inflows	(1) \$ 412,498	\$ _____
<b>Cash Outflows</b>		
Cash farm expenses (excluding interest paid)	\$ 276,961	\$ _____
Capital purchases:		
Expansion orchard	4,543	_____
Equipment	18,543	_____
Real estate	9,450	_____
Other stock & certificates	1,472	_____
Debt payments:		
Principal payments for:		
Decrease in operating debt	0	_____
Short term	4,614	_____
Intermediate	5,643	_____
Long term	5,090	_____
Refinanced debt	4,545	_____
Interest paid	18,716	_____
Personal withdrawals and family expenditures including nonfarm debt payments and corporation operator labor costs	44,039	_____
Ending farm cash, checking & savings	18,485	_____
Total Cash Outflows	(2) \$ 412,101	\$ _____
Imbalance (error)	(1-2) \$ 397	\$ _____

## 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 16. FARM DEBT PAYMENTS PLANNED  
22 Western New York Fruit Farms, 1990

Debt Payments	Average		Planned 1991	My farm		Planned 1991
	1990 Planned	Payments Made a		1990 Planned	Payments Made a	
Accts payable (net reduction)	\$455	\$308	\$5,000	\$_____	\$_____	\$_____
Operating (net reduction)	9,520	0	21,929	_____	_____	_____
Short term (prin & interest)	4,129	5,122	1,139	_____	_____	_____
Intermediate (prin & interest)	7,740	8,620	7,190	_____	_____	_____
Long term (prin & interest)	11,064	15,675	18,212	_____	_____	_____
Total debt payments	\$32,908	\$29,725	\$53,470	\$_____	\$_____	\$_____
Payments as a % of:						
Total accrual receipts	8%	7%		____%	____%	
Total accrual fruit receipts	9%	8%		____%	____%	
Payments per acre of bearing fruit	\$165	\$149		\$_____	\$_____	
Payments per bushel of apples sold	\$0.41	\$0.37		\$_____	\$_____	

a Actual payments excluding refinanced debt.

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 to many farmers and lenders is whether planned payments can be made in 1991. The worksheet provided in Table 18 can be used to estimate repayment ability, which can then be compared to planned 1991 debt payments shown in Table 16 above.

Table 17. CASH FLOW COVERAGE RATIO  
22 Western New York Fruit Farms, 1990

Item	Average	My farm
Cash farm receipts	\$350,170	\$_____
- Cash farm expenses	295,678	_____
+ Interest paid	18,716	_____
- Net personal withdrawals from farm a	42,679	_____
= Amount available for debt service (1)	\$30,529	\$_____
Debt payments planned for this year (2)	\$32,908	\$_____
Cash Flow Coverage Ratio (1/2)	0.93	_____

a Personal withdrawals and family expenditures less nonfarm income and nonfarm money borrowed. If family withdrawals are excluded, the cash flow coverage ratio will be incorrect.

Table 18.

ANNUAL CASH FLOW WORKSHEET - 1990 AND 1991 PROJECTION

Item	Average of 22 farms	My farm, 1990 Total	Per brng acre	Expected change	1991 Projection
Average bearing acres of fruit	199				
Accrual Operating Receipts					
	(/brng ac)				
Apples - Fresh	\$ 1,000	\$	\$		\$
Processing	767				
All other fruit	142				
Other crops, livestock & products	16				
Custom work, storage & rent	94				
Other - incl govt recpts, refunds	41				
Total operating receipts	\$ 2,060	\$	\$		\$
Accrual Operating Expenses					
Labor- Wages - regular	\$ 155	\$	\$		\$
picking	238				
other ptime, seasnl	101				
Other labor costs	95				
Picker travel, Labor camp exp	19				
Equip- Machine hire, rent, lease	35				
Repairs, parts & auto expense	85				
Fuel, oil & grease	58				
Lvstk- All livestock expense	1				
Crops- Fertilizer & lime	40				
Replacement trees & plants	3				
Spray	230				
Other crop production expense	45				
Packing supplies, storage	32				
Marketing, selling expense	16				
R Est- Repair- land, bldg, fences	13				
Taxes	36				
Rent & lease	38				
Other- Insurance	28				
Utilities- telephone, elect	26				
Fruit purchased for resale	61				
Miscellaneous	50				
Total excluding interest paid	\$ 1,405	\$	\$		\$
Repayment Analysis:	(total)				
Net accrual oper income excl int	\$130,361	\$			\$
- Change in livestock & crop inv	31,695				
- Change in accounts receivable	27,975				
+ Change in crop & supply inv	2,826				
+ Change in accounts payable a	(308)				
NET CASH FLOW	\$ 73,209	\$			\$
- Net personal withdrawals	42,679				
Available for debt pymnts, investmnt	\$ 30,530	\$			\$
- Farm debt payments: prin & int	29,725 b				
Available for farm investment	\$ 805	\$			\$
Capital purchases	\$ 34,008	\$			\$
Additional capital needed	\$ 33,203	\$			\$

a Less change in accounts payable for interest.

b See previous page.

## 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.

Table 19.

### CAPITAL EFFICIENCY ANALYSIS 22 Western New York Fruit Farms, 1990

Item	Average Capital Investment			
	Per worker equiv	Per bearing ac: Owned	Operated	Per all fruit acres
Average: Total farm capital	\$87,458	\$5,238	\$3,735	\$3,350
----- Real estate	41,768	2,502	n/a	1,600
All equipment	8,598	n/a	367	329
Capital turnover, years	1.74			
My Farm: Total farm capital	\$ _____	\$ _____	\$ _____	\$ _____
----- Real estate	_____	_____	n/a	_____
All equipment	_____	n/a	_____	_____
Capital turnover, years	_____			

## Equipment Analysis

Equipment costs comprise nearly 15 percent of the cost of fruit production. Total equipment expenses include the major fixed costs (interest and depreciation) as well as the accrual operating costs.

Table 20.

### ACCRUAL EQUIPMENT EXPENSES 22 Western New York Fruit Farms, 1990

Item	Average			My Farm		
	Total equip cost	Equipment cost per fruit acre operated: Bearing	cost per All fruit	Total equip cost	Equipment cost per fruit acre operated: Bearing	cost per All fruit
Annual Accrual Cost:						
Mach hire, rent, lease	\$7,018	\$35	\$32	\$ _____	\$ _____	\$ _____
Repair & parts	16,567	83	75	_____	_____	_____
Auto exp - farm share	344	2	2	_____	_____	_____
Fuel, oil & grease	11,502	58	52	_____	_____	_____
Interest - (5%)	7,363	37	33	_____	_____	_____
Depreciation	14,536	73	66	_____	_____	_____
Total equipment cost	\$57,330	\$288	\$260	\$ _____	\$ _____	\$ _____

## 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.

Table 21. LABOR FORCE INVENTORY AND ANALYSIS  
22 Western New York Fruit Farms, 1990

Labor Force	Full time months	Age yrs	Years of Education	Value of lab/mgt
Average: Operator number 1	11.2	45	14	\$24,133
----- number 2	6.0	39	14	\$12,194
number 3	3.7	31	15	\$7,798
number 4	0.7	44	13	\$1,386
Family unpaid	1.2			
Family paid	2.7			
Hired-regular	22.1			
-picking	35.3			
-parttime, seasonal	19.3			
			Total	\$45,511
			Average /oper =	\$25,284
Total	102.2	mo / 12 =	8.52 worker equivalent	
			1.80 operator/manager equiv	
My Farm: Total	_____	mo / 12 =	_____ worker equivalent	
----- Operators	_____	mo / 12 =	_____ operator/manager equiv	

Labor Efficiency	Average		My Farm	
	Total	Per worker	Total	Per worker
Bearing fruit, acres	199.0	23.4	_____	_____
Total fruit, acres	221.9	26.1	_____	_____
Apples sold, bushels	77,045	9,067	_____	_____
Accrual receipts	\$409,840	\$48,231	\$_____	\$_____
Accrual fruit receipts	\$379,886	\$44,706	\$_____	\$_____

## Labor Cost or Value

## Annual accrual cost

Type	Average			My Farm		
	Total	Per worker equiv	Per brng ac	Total	Per wkr equiv	Per brng ac
Value of operator(s)						
labor @ \$1250 /mo	\$26,818	\$12,600	\$135	\$_____	\$_____	\$_____
Family unpaid @ \$1250 /mo	1,449	9,000	7	_____	_____	_____
Family paid (excl oper)	3,596	20,347	18	_____	_____	_____
Hired - regular (excl oper)	35,128	16,246	177	_____	_____	_____
- picking	59,164	19,325	297	_____	_____	_____
- other parttime, seasonal	24,315	13,078	122	_____	_____	_____
All labor (incl non-cash)	\$150,470	\$17,668	\$756	\$_____	\$_____	\$_____
All equipment cost	57,330	6,747	288	_____	_____	_____
Total labor and equipment cost	\$207,800	\$24,415	\$1,044	\$_____	\$_____	\$_____

# 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.

Table 22. LAND RESOURCES AND CROP PRODUCTION  
22 Western New York Fruit Farms, 1990

Item	Average			My Farm		
	For all farms:			Owned	Rented	Total
Land class (End of year)	Owned	Rented	Total			
Bearing fruit, acres	142	57	199			
Non-bearing fruit, acres	19	4	23			
Other crops, open, acres	25	10	35			
Nontillable pasture, acres	9	1	10			
Other nontillable, acres	43	8	51			
Total land operated	238	80	318			

Crop Production	For farms having the fruit:			Total acres	Yield per acre
	No. of farms	Average acres	Yield per acre		
Bearing Fruit:					
Apples - fresh	21	80.8	453 bu		bu
- processing	19	98.9	534 bu		bu
- all apples	22	163.0	495 bu		bu
Cherries - sweet	6	6.1	3,905 lb		lb
- tart	13	43.1	3,987 lb		lb
Grapes	2	7.9	3.5 tn		tn
Peaches	7	6.3	170 bu		bu
Pears	11	8.6	261 bu		bu
Plums, prunes	6	4.2	148 bu		bu
Other fruit	5	4.7			
Total bearing fruit ac	22	199.0			
Non-bearing Fruit:					
Apples - fresh	18	18.4			
- processing	1	50.0			
Cherries - sweet	0	0.0			
- tart	4	21.1			
Other non-bearing	6	6.2			
Total non-brng fruit acres	20	25.2			
Other crops, open:					
Other	15	51.1			

## 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 in excess of 50 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 23.

### COST CONTROL FACTORS 22 Western New York Fruit Farms, 1990

Item	Cost per fruit acre operated	
	Bearing acres	All fruit acres
All labor - including operators	\$ 756	678
Picking labor only	297	267
Other hired labor	317	284
All equipment cost	288	258
Spray	230	206

Type of Paid Labor	----- Average annual labor costs per worker -----				Average accrual total cost per month	
	Cash gross wage	Other cash costs Cost	% of gross	Accrual adjust- ment		
Family paid	\$13,973	\$2,014	14%	\$104	\$16,091	\$1,341
Hired:						
Career regular	15,078	3,365	22%	626	19,069	1,589
Picking	16,083	4,055	25%	(1)	20,137	1,678
Parttime, seasonal	12,512	2,647	21%	(50)	15,109	1,259
All paid labor	14,863	3,451	23%	(39)	18,275	1,523

## 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.

The tables on the following pages provide the opportunity for you to compare your business factors with averages for the participating farms for the past three years. 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 24.

PROGRESS OF THE FRUIT FARM BUSINESS  
Western New York State, 1988-1990

Selected Factors	Average per Farm		
	12 farms in: 1988	19 farms in: 1989	22 farms in: 1990
<b>Size of Business</b>			
All cropland incl fruit, ac	293	268	257
All fruit incl non-brng, ac	270	239	222
Bearing fruit, acres	246	215	199
Bearing apples, acres	208	178	163
Fresh- % of all apple acres	47%	47%	47%
Apples produced, bushels	83,246	74,602	80,510
Accrual apples sold, bushels	85,730	78,341	77,045
Worker equivalents	9.54	8.81	8.50
Total accrual operating recpts	\$ 421,765	\$ 359,861	\$ 409,840
<b>Rates of Production</b>			
All apples, bu per bearing ac	400	418	495
Fresh- % of apples harvested	45%	39%	43%
Cherries- tart, lb / brng ac	4,803	4,544	3,987
Pears, bu per bearing acre	249	300	259
Nonbearing to brng acre ratio	10%	11%	11%
<b>Labor Efficiency</b>			
Brng fruit, acres per worker	26	24	23
All fruit, acres per worker	28	27	26
Accrual receipts per worker	\$ 44,199	\$ 40,828	\$ 48,231
<b>Cost Control - accrual</b>			
Cost / brng acre: All labor	\$ 582	\$ 648	\$ 756
All equip	\$ 267	\$ 268	\$ 288
Spray	\$ 141	\$ 177	\$ 230
Hired labor - % of oper exp	43%	40%	41%
<b>Capital Efficiency- avg for yr</b>			
Total farm capital /brng ac	\$ 3,123	\$ 3,412	\$ 3,735
Total farm capital /fruit ac	\$ 2,845	\$ 3,071	\$ 3,350
Capital turnover, years	1.8	1.9	1.7
<b>Profitability</b>			
Net farm income: w/o apprec	\$ 97,028	\$ 34,124	\$ 81,153
w/ apprec	\$ 109,763	\$ 54,906	\$ 97,817
Labor & mgmt income / oper	\$ 36,592	\$ 4,341	\$ 30,349
Rate of return to avg capital			
w/apprec: Equity capital	12.4%	1.6%	10.0%
Total capital	10.8%	3.8%	9.4%
<b>Financial Summary - end of yr</b>			
Farm: Net worth	\$ 520,878	\$ 496,972	\$ 538,101
Debt to asset ratio	0.35	0.33	0.31
Debt per bearing ac	\$ 1,130	\$ 1,117	\$ 1,220



Table 25.

PROGRESS OF THE FRUIT FARM BUSINESS  
All Summary Farms, New York State, 1989-1990

Selected Factors	Average per Farm Same 17 farms in:		All 22 farms in
	1989	1990	1990
<b>Size of Business</b>			
All cropland incl fruit, ac	270	284	257
All fruit incl non-brng, ac	240	250	222
Bearing fruit, acres	217	223	199
Bearing apples, acres	179	188	163
Fresh- % of all apple acres	48%	46%	47%
Apples produced, bushels	74,898	91,047	80,510
Accrual apples sold, bushels	79,078	86,584	77,045
Worker equivalents	9.23	9.41	8.50
Total accrual operating recpts	\$ 368,730	\$ 465,542	\$ 409,840
<b>Rates of Production</b>			
All apples, bu per bearing ac	418	486	495
Fresh- % of apples harvested	40%	44%	43%
Cherries- tart, lb / brng ac	4,575	4,419	3,987
Pears, bu per bearing acre	306	263	259
Nonbearing to brng acre ratio	10%	12%	11%
<b>Labor Efficiency</b>			
Brng fruit, acres per worker	24	24	23
All fruit, acres per worker	26	27	26
Accrual receipts per worker	\$ 39,965	\$ 49,450	\$ 48,231
<b>Cost Control - accrual</b>			
Cost / brng acre: All labor	\$ 655	\$ 761	\$ 756
All equip	\$ 274	\$ 284	\$ 288
Spray	\$ 177	\$ 231	\$ 230
Hired labor - % of oper exp	39%	41%	41%
<b>Capital Efficiency- avg for yr</b>			
Total farm capital /brng ac	\$ 3,470	\$ 3,661	\$ 3,735
Total farm capital /fruit ac	\$ 3,144	\$ 3,262	\$ 3,350
Capital turnover, years	1.9	1.7	1.7
<b>Profitability</b>			
Net farm income: w/o apprec	\$ 32,971	\$ 96,614	\$ 81,153
w/ apprec	\$ 54,988	\$ 115,913	\$ 97,817
Labor & mgmt income / oper	\$ 3,429	\$ 35,141	\$ 30,349
Rate of return to avg capital			
w/apprec: Equity capital	1.4%	11.8%	10.0%
Total capital	3.6%	10.4%	9.4%
<b>Financial Summary - end of yr</b>			
Farm: Net worth	\$ 505,140	\$ 593,059	\$ 538,101
Debt to asset ratio	0.33	0.31	0.31
Debt per bearing ac	\$ 1,160	\$ 1,207	\$ 1,220

Table 26.

PROGRESS OF THE FRUIT FARM BUSINESS  
All Summary Farms, New York State, 1988-1990

Selected Factors	Average per Farm Same 11 farms in:		
	1988	1989	1990
<b>Size of Business</b>			
All cropland incl fruit, ac	289	281	287
All fruit incl non-brng, ac	265	261	266
Bearing fruit, acres	245	240	240
Bearing apples, acres	207	207	211
Fresh- % of all apple acres	47%	48%	45%
Apples produced, bushels	87,996	84,330	103,711
Accrual apples sold, bushels	90,705	92,032	100,740
Worker equivalents	9.99	10.24	10.42
Total accrual operating recpts	\$ 436,091	\$ 401,843	\$ 525,738
<b>Rates of Production</b>			
All apples, bu per bearing ac	425	408	491
Fresh- % of apples harvested	45%	40%	42%
Cherries- tart, lb / brng ac	4,966	3,915	4,138
Pears, bu per bearing acre	252	348	284
Nonbearing to brng acre ratio	8%	9%	11%
<b>Labor Efficiency</b>			
Brng fruit, acres per worker	25	23	23
All fruit, acres per worker	27	25	26
Accrual receipts per worker	\$ 43,632	\$ 39,246	\$ 50,444
<b>Cost Control - accrual</b>			
Cost / brng acre: All labor	\$ 608	\$ 666	\$ 792
All equip	\$ 274	\$ 279	\$ 285
Spray	\$ 143	\$ 175	\$ 217
Hired labor - % of oper exp	43%	40%	43%
<b>Capital Efficiency- avg for yr</b>			
Total farm capital /brng ac	\$ 3,175	\$ 3,577	\$ 3,873
Total farm capital /fruit ac	\$ 2,933	\$ 3,286	\$ 3,486
Capital turnover, years	1.8	2.0	1.7
<b>Profitability</b>			
Net farm income: w/o apprec	\$ 101,546	\$ 22,118	\$ 118,998
w/ apprec	\$ 109,788	\$ 40,944	\$ 145,430
Labor & mgmt income / oper	\$ 38,492	\$ (3,544)	\$ 45,438
Rate of return to avg capital			
w/apprec: Equity capital	12.7%	-2.2%	14.8%
Total capital	10.8%	1.6%	12.3%
<b>Financial Summary - end of yr</b>			
Farm: Net worth	\$ 504,386	\$ 528,454	\$ 654,142
Debt to asset ratio	0.38	0.38	0.33
Debt per bearing ac	\$ 1,239	\$ 1,354	\$ 1,370

Table 27.

PROGRESS OF THE FRUIT FARM BUSINESS  
Western New York State, 1988-1990

Selected Factors	My Farm			
	1988	1989	1990	Goal
<b>Size of Business</b>				
All cropland incl fruit, ac	_____	_____	_____	_____
All fruit incl non-brng, ac	_____	_____	_____	_____
Bearing fruit, acres	_____	_____	_____	_____
Bearing apples, acres	_____	_____	_____	_____
Fresh- % of all apple acres	_____%	_____%	_____%	_____%
Apples produced, bushels	_____	_____	_____	_____
Accrual apples sold, bushels	_____	_____	_____	_____
Worker equivalents	_____	_____	_____	_____
Total accrual operating recpts	\$_____	\$_____	\$_____	\$_____
<b>Rates of Production</b>				
All apples, bu per bearing ac	_____	_____	_____	_____
Fresh- % of apples harvested	_____%	_____%	_____%	_____%
Cherries- tart, lb / brng ac	_____	_____	_____	_____
Pears, bu per bearing acre	_____	_____	_____	_____
Nonbearing to brng acre ratio	_____%	_____%	_____%	_____%
<b>Labor Efficiency</b>				
Brng fruit, acres per worker	_____	_____	_____	_____
All fruit, acres per worker	_____	_____	_____	_____
Accrual receipts per worker	\$_____	\$_____	\$_____	\$_____
<b>Cost Control - accrual</b>				
Cost / brng acre: All labor	\$_____	\$_____	\$_____	\$_____
All equip	\$_____	\$_____	\$_____	\$_____
Spray	\$_____	\$_____	\$_____	\$_____
Hired labor - % of oper exp	_____%	_____%	_____%	_____%
<b>Capital Efficiency- avg for yr</b>				
Total farm capital /brng ac	\$_____	\$_____	\$_____	\$_____
Total farm capital /fruit ac	\$_____	\$_____	\$_____	\$_____
Capital turnover, years	_____	_____	_____	_____
<b>Profitability</b>				
Net farm income: w/o apprec	\$_____	\$_____	\$_____	\$_____
w/ apprec	\$_____	\$_____	\$_____	\$_____
Labor & mgmt income / oper	\$_____	\$_____	\$_____	\$_____
Rate of return to avg capital	_____%	_____%	_____%	_____%
w/apprec: Equity capital	_____%	_____%	_____%	_____%
Total capital	_____%	_____%	_____%	_____%
<b>Financial Summary - end of yr</b>				
Farm: Net worth	\$_____	\$_____	\$_____	\$_____
Debt to asset ratio	_____	_____	_____	_____
Debt per bearing ac	\$_____	\$_____	\$_____	\$_____

Other Agricultural Economics Extension Publications

No. 91-14	Dairy Farm Business Summary Western Plateau Region 1990	George L. Casler Carl W. Albers Andrew N. Dufresne Joan S. Petzen Linda D. Putnam Stuart F. Smith
No. 91-15	Dairy Farm Business Summary Mohawk Region 1990	Eddy L. LaDue Mark E. Anibal Jacqueline M. Mierek
No. 91-16	Dairy Farm Business Summary Northern Hudson Region 1990	Stuart F. Smith Linda D. Putnam Cathy S. Wickswat John M. Thurgood Thomas J. Gallagher
No. 91-17	Dairy Farm Business Summary Southeastern New York 1990	Stuart F. Smith Linda D. Putnam Alan S. White Gerald J. Skoda Stephen E. Hadcock
No. 91-18	Supermarket Dairy Department: An Overview of Operations and Performance	Edward McLaughlin David Russo
No. 91-19	Dairy Farm Business Summary Eastern New York Renter Summary 1990	Linda D. Putnam Stuart F. Smith
No. 91-20	National and State Trends in Milk Production, 1991	Andrew Novakovic Kevin Jack Maura Keniston
No. 91-21	New York Milk Production from 1979 to 1989: A County and Regional Analysis	Kevin E. Jack Andrew M. Novakovic