

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.



October 1983

GREAT LAKES REGION 1982

L.D. Putnam G.B. White D.G. Himelrick

Department of Agricultural Economics New York State College of Agriculture and Life Sciences A Statutory College of the State University Cornell University, Ithaca, New York 14853

GREAT LAKES REGION GRAPE FARM BUSINESS

SUMMARY AND ANALYSIS, 1982

This is a summary and analysis of the 1982 farm business records from 16 commercial grape farms in the Great Lakes Region of New York. The summary was prepared by Linda D. Putnam and Gerald B. White, Department of Agricultural Economics, Cornell University; and David G. Himelrick, Great Lakes Regional Grape Specialist.

The main purpose of this study is to help the cooperators in this project and other grape growers to improve their skills as farm managers. The objective is to demonstrate the importance of good business records and to show how they can be used as a base for sound management decisions.

The summary and analysis presented in this publication should also be useful to agribusinessmen and agricultural teachers. However, <u>caution</u> <u>should be exercised in using data from this book</u>. These data were not obtained by using a random or representative sample of all grape farms in the Great Lakes Region. This publication, therefore, should not be used as an exact representation of the entire Great Lakes Region grape farm industry.

This report has been prepared for use in a systematic study of individual farm business operations.

TABLE OF CONTENTS

Page

The 1982 Crop Year	•	2
Summary of the Farm Business	•	3
Physical Resources	•	3
Capital Investment	•	4
Sources of Income	•	5
Where the Money Went	•	6
Machinery and Real Estate Inventory Calculations	•	7
Financial Summary	•	8
Farm Family Financial Situation	•	11
Analysis of the Farm Business	•	12
Cost Control	•	13
Capital and Capital Efficiency Factors	•	15
1982 Production and Marketings	•	16
Array of Business Factors	•	17
Custom Harvesting Enterprise	•	18

The 1982 Crop Year

Grape production in New York State was 154,000 tons in 1982, five percent above 1981 but well above the disastrous crop yields in 1977. The four counties which comprise the Great Lakes Grape Region (Chautauqua, Cattaraugus, Erie, and Niagara) had a one percent increase in total production. Prices were, in general, up from 1981. The average price paid to New York growers decreased from \$243 to \$230 per ton for all varieties. However, the price for Concords increased from \$187 to \$194 per ton.

	1977	1978	1979	1980	1981	1982
Tons of grapes produced all varieties	•					
Great Lakes Region	62,086	114,350	104,036	114,036	93,553	94,452
State of New York	97,209	181,911	158,966	171,000	146,500	154,000
Tons Concord grapes produced						
Great Lakes Region	53,417	98,657	94,959	102,304	82.015	83,244
State of New York	67,407	125,243	119,875	123,121	103.077	105,840
Average price paid by wineries and processors						
Concords, NYS (\$/ton All varieties.		217	204	196	187	194
NYS (\$/ton)	240	24 1	225	220	243	230

Source: New York Crop Reporting Service, Fruit, selected reports from 1978, 1979, 1980, 1981, 1982, and 1983.

A comparison of selected measures from the grape farm business summaries is shown below. Labor and management income per year was -\$7,398 compared with -\$17,005 in 1981. Much of this change can be attributed to a new method of assessing the cost of equity capital. (For further explana tion, see the discussion of labor and management income on page 8.) Investment per acre increased and cash expense per acre decreased somewhat, a change in trend from previous years where there was a steady increase due to inflation.

COMPARISONS OF SELECTED MEASURES, 1978-1982

	1978	<u>1979</u>	198 0	1981	1 9 82
No. farms	13	12	10	15	16
Acres bearing grapes	87.2	85.8	84.6	71.0	67.7
Worker equivalent	3.9	3.5	3.6	2.8	2.8
Total farm investment	\$278,396	\$290,728	\$328,696	\$264,197	\$271,267
Investment/bearing acre	\$3,193	\$3,388	\$3,884	\$3,719	\$4,005
Tons grapes harv./worker	121	120	110	121	109
Grape yield/bear. acre (T)) 5.5	4.9	4.7	4.7	4.5
Grape rec./bearing acre	\$1,323	\$1,138	\$1,057	\$1,085	\$1,079
Average price/ton grapes	\$245	\$232	\$225	\$229	\$238
Cash expense/grape acre	\$856	\$881	\$983	\$ 9 37	\$926
Net cash farm income	\$34,170	\$34,317	\$16,841	\$19,680	\$26,193
Labor & mgmt. inc./farm	\$28,262	\$413	\$-20,292	\$-17,005	\$-7,398
Rate of return on equity					
capital including apprec	. 16.7%	6.4%	1.1%	56%	.63%

Summary of the Farm Business

The first part of this publication summarizes the fruit business in a systematic, orderly manner. It provides an opportunity to study physical resources, capital investment, receipts, and expenses.

Physical Resources

Knowledge of what resources are employed and how they are combined is fundamental to sound business planning. This includes both the physical and financial resources of the business. Below are listed the physical resources for this group of grape farms.

Item	My Farm		Range		
Labor:			**************************************		
Number of operators		1.0	1.0 - 1.0		
Months of:					
Operator's		8.30	1.0 - 12.0		
Family paid		3.16	0.0 - 15.0		
Family unpaid		2.06	0.0 - 11.0		
Regular hired		8.11	0.0 - 48.0		
Seasonal hired		11.72	0.5 - 49.0		
Other		0.31	0.0 - 5.0		
Total		33.67	5.1 - 114.0		
Worker equivalent (total months ÷ 12)		2.81	0.43 - 9.5		
Land and Crops (acres)					
Bearing grapes:					
Harvested		67.72	23.0 - 222.0		
Not harvested		0.01	0.0 - 0.1		
Nonbearing grapes	Hereiten auf auf der Bergen von auf der	2.10	0.0 - 8.1		
Total Acres in Grapes	**************************************	69.83	23.0 - 230.0		
Total Crop Acres		74.16	23.0 - 232.0		
Crop Acres Rented		3.73	0.0 - 28.0		
Total Acres Owned		118.46	0.0 - 320.0		

FARM ORGANIZATION 16 Great Lakes Region Grape Farms, 1982

Capital Investment

Management of the capital resources of a farm business is becoming increasingly important. To measure the complete financial progress of a farm, year to year changes in the capital structure must be considered. In this report, borrowed as well as owned capital is included, and the end-ofyear farm inventory is used as the measure of capital investment.

	Му	Farm	Average per Farm		
Item	1/82	1/83	1/82	1/83	
Land & buildings	\$	\$	\$211,088	\$213,820	
Livestock	# THREE		375	510	
Machinery & equipment			47,181	54,586	
Supplies & crops			3,374	2,351	
TOTAL FARM INVENTORIES	\$	\$	\$262,018	\$271,267	

FARM INVENTORY VALUES 16 Great Lakes Region Grape Farms

In many farm businesses, poor capital efficiency is a major cause of low profits. The following measures of capital efficiency will help evaluate overall capital management.

INVESTMENT ANALYSIS 16 Great Lakes Region Grape Farms, January 1983

Item	My Farm	Average per Farm
Total investment per worker equivalent	\$	\$96,678
Total investment per acre of bearing grapes	\$	\$ 4,005
Land & buildings per total acres owned	\$	\$ 1,805
Capital Turnover*	yrs.	2.99 yrs.

* Calculated by dividing the total year-end investment by the total cash receipts for the year. Rapid capital turnover is more desirable than a slow rate of turnover when similar farm businesses are compared.

Sources of Income

A successful farm business requires a level of gross earnings great enough to pay all costs, both operating and overhead, and leave a margin for the operator's labor and management. Here we examine the sources of receipts for this group of grape farms.

FARM RECEIPTS

16 Great Lakes Region Grape Farms, 1982						
Item	My Farm	Average per Farm	Percent of Total			
Grapes:						
Primary market	\$	\$63,766	70.2			
Distress market	• <u>•••••</u> ••••••••••••••••••••••••••••••	50	0.1			
Total 1982 Payments Received	\$	\$63,816	70.3			
Previous year's payments, certificates		\$16,196	17.8			
Machine work & trucking		4,295	4.7			
Other crop receipts	10	1,566	1.7			
Work off farm		1,751	1.9			
Livestock & livestock product sales	······································	782	0 .9			
Rent		839	0 .9			
Other		1,616	1.8			
Total Cash Receipts	\$	\$90,861	100.0			
Total Cash Receipts	\$	\$90,86 1				
Less previous year's payments		- 16,196				
Plus anticipated 1982 payments	+	+ 9,255				
Increase in crop & supply inventory	+	+0				
Total Farm Receipts	\$	\$83,9 20				

Grape income accounted for 88 percent of cash receipts. An average of 306 tons of grapes per farm were harvested and sold. Cash grape receipts for the 1982 crop totaled \$209 per ton.

Where the Money Went

With the large amount of cash flowing through a farm business today, it is important that the farm operator study expenses closely.

Item	My Farm	Average per Farm	Expense per acre of grapes (total)
Hired labor	\$	\$24,896	\$ 357
Machine hire	<u></u>	5,145	74
Machine repair & farm share of auto expense Gasoline & oil		3,939 3,126	56 45
Spray		2,884	41
Fertilizer		3,638	52
Seeds & grape roots (replacements)		93	1
Posts and wire		645	9
Other crop expense		2,084	30
Real estate upkeep		476	7
Taxes		3,750	54
Insurance		1,764	25
Rent		51 9	7
Utilities		569	8
Interest paid		9,477	136
Miscellaneous		1,664	24
TOTAL CASH & OPERATING EXPENSES	\$	\$64,669	\$ 92 6
Machinery depreciation		6,063	87
Real estate depreciation		5,051	72
Decrease in supply inventory		1,023	15
Unpaid family labor		1,031	15
Interest on equity capital @ 5%		12,459	178
TOTAL FARM EXPENSES	\$	\$90,296	\$1,293

.

FARM EXPENSES 16 Great Lakes Region Grape Farms, 1982

Machinery and Real Estate Inventory Calculations

Capital outlays for machinery, buildings and land improvements (including drainage and vineyard establishment) usually occur in large, uneven amounts, but depreciate gradually over a period of time. Depreciation is the annual charge for the use of the machinery complement and real estate improvements in production. Depreciation was taken from the farm depreciation schedule. Appreciation, which results from inflation, is calculated as a residual.

MACHINERY AND EQUIPMENT INVENTORY 16 Great Lakes Region Grape Farms, 1982

Item	My Farm	Average
End of year market value	(A)\$	\$54,586
Beginning market value	\$	\$ 47,181
Plus machinery purchases	+	+ 7,578
Less machinery sales		- 408
Less depreciation*	ange	- 6,063
Net end investment	(B)\$	48,288
APPRECIATION [(A)-(B)]	\$_	\$ 6,298

The average machinery depreciation of \$6,063 is 11 percent of the beginning inventory plus machinery purchases.

Item	Му	Farm	Ave	erage
End of year market value		(A)\$	_	\$213,820
Beginning market value	\$		\$211,088	
Plus cost of new real estate	+		+ 6,947	
Less real estate sold			- 147	
Less depreciation*			- 5,051	
Net end investment		(B)	•	212,837
Appreciation [(A)-(B)]		\$		\$ 9 83

REAL ESTATE INVENTORY 16 Great Lakes Region Grape Farms, 1982

*Depreciation (excluding additional first year depreciation) from tax records.

Financial Summary

The net returns for any business can be measured in several different ways. Each measure calculates the net return to a selected resource or group of resources such as labor or capital. Some of the common farm business measures are given below.

Net cash farm income reflects the cash available from the year's operation of the farm business for family living, payments on debt principal, and new purchases or investments. A family may have had additional cash available if members had nonfarm income.

Item	My Farm	Average per Farm
Total Cash Receipts	\$	\$90,861
Total Cash Operating Expenses		64,669
NET CASH FARM INCOME	\$	\$26,192
Family Living Expenses		
CASH FOR INVESTMENT AND PRINCIPAL PAYMENTS ON DEBTS	\$	

NET CASH FARM INCOME 16 Great Lakes Region Grape Farms, 1982

Labor and management income is the return to the farm operator for labor and management. It is the measure most commonly used when comparing the profitability of farm businesses. Labor and management income is the amount left after paying all cash operating expenses and deducting charges for depreciation, unpaid labor, interest on equity capital and losses in fruit and supply inventories. The business is charged a five percent real rate of interest or opportunity cost for the use of equity capital. This real rate of interest represents the long term average rate of return that a grower could expect to earn on investments with comparable risks to farming, in an economy with little or no inflation.

Labor and management income; labor, management and ownership income; and return on equity capital are computed in the following three tables. The computations are done by two different methods. These methods are as follows:

- Method (1) Total receipts is the sum of total cash receipts minus grape payments from previous years plus anticipated 1982 payments plus or minus the increase or decrease in the crop and supply inventory. This method is the one which has been used in the most recent years in Cornell grape farm business summaries.
- Method (2) Total receipts is the sum of total cash receipts in the calendar year (including grape payments from previous years) plus or minus the increase or decrease in crop and supply inventory. Using this method, net income did not depend on growers estimates of future receipts for the current crop.

	LA	BOR ANI) MANAGI	ement	INCOME	
16	Great	Lakes	Region	Grape	Farms,	1982

	······	Average per Farm		
Item	My Farm	[Method 1]	[Method 2]	
Total Farm Receipts	\$	\$82,898	\$89,839	
Total Farm Expenses		90,296	90,296	
LABOR & MANAGEMENT INCOME PER FARM	\$	(-)\$ 7,398 ((-)\$ 457	

It is common to compute labor and management return per operator as well as per farm because most studies include some farms with more than one operator. However, the average number of operators for 1982 was 1.0; therefore labor and management income per operator was the same as labor and management income per farm.

In addition to labor and management income, the owner-operator of a farm business should receive income for his capital investment in the business. He receives this income in the form of interest on equity in the business and real estate and machinery appreciation. These three "owner-ship income" items are added to labor and management income to determine labor, management and ownership income. This indicates the total return the owner-operator receives for owning and operating the business.

The growers who participated in this summary submitted balance sheets and net worth or equity capital was easily computed. Average equity capital was estimated as \$249,172 per farm.

Item	My Farm	Average per Farm [Method 1] [Method 2]		
Labor & Management Income Per Farm	\$	(-)\$ 7,398	(-)\$ 457	
Add: Real Estate Appreciation		9 83	9 83	
Add: Machinery Appreciation		6,298	6,2 9 8	
Add: Interest on Equity Capital @ 5%		12,459	12,459	
LABOR, MANAGEMENT & OWNERSHIP INCOME				
PER FARM	\$	\$12,342	\$19,283	
PER OPERATOR	\$	\$12,342	\$19,283	

LABOR, MANAGEMENT AND OWNERSHIP INCOME 16 Great Lakes Region Grape Farms, 1982 <u>Return on equity capital</u> can be computed with or without real estate appreciation. To calculate return on equity capital (including real estate appreciation) the value of operator's labor and management is deducted from labor, management and ownership income. This return to equity capital is divided by the owner's equity investment in the business to compute the rate of return on equity capital. Owner's equity investment used here is total end of year farm inventories less total farm liabilities.

		Average per Farm	
Itëm	My Farm		[Method 2]
Labor & Management & Ownership Income	\$	\$12,342	\$19,283
Less: Value of Operator's Labor & Management*		10,772	10,772
Return on Equity Capital		\$ 1,570	\$ 8,511
Rate of Return on Equity Capital (equity capital = \$249,172)	%	.63%	3.42%

RETURN ON EQUITY CAPITAL 16 Great Lakes Region Grape Farms, 1982

* Values estimated at \$750 per month for labor and 5 percent of cash receipts for management.

Farm Family Financial Situation

The financial situation is an important part of the grape farm business summary. It has a direct affect on current cash outflow and future capital investment decisions. A grower may have a good labor income, but a high debt load may seriously restrict his management flexibility.

The balance sheet of the financial situation is provided below.

FARM FAMILY FINANCIAL SITUATION 16 Great Lakes Region Grape Farms, 1982

Item	My Farm	Average per Farm
Assets		
Total farm inventory	\$	\$271,267
Accounts receivable		26,130
Co-op investment		25,730
Cash & checking account		12,147
TOTAL FARM ASSETS	\$	\$335,274
Liabilities		
Real estate mortgage	\$	\$ 55,076
Liens & secured loans		14,822
Installment contracts	······	6,378
Accounts payable		3,458
Other farm debt		6,368
TOTAL FARM LIABILITIES	\$	\$ 86,102
FARM NET WORTH (Farm assets less		
liabilities)	\$	\$249,172
Percent Equity (Farm net worth		
+ total farm assets)	%	74.3%
Farm Debt Per Worker Equivalent	\$	\$ 30,686
Farm Debt per Bearing Acre of Grapes	\$	\$ 1,271

Payment ability is the most important consideration in determining if and how proposed investments should be financed. The farm business must produce enough cash income to meet operating expenses, to cover family living expenses and to make debt payments. The average farm in this study had a net cash flow, excluding interest paid, of \$35,670. This amount was available for family living expenses, debt payments, and cash for capital investments during the year.

Analysis of the Farm Business

Some of the business factors which affect profits and which a farmer can control to some degree are: (1) size of enterprise, (2) labor efficiency, (3) yields, and (4) price.

A comparison of your farm with the averages of these factors for these farms can provide valuable clues to the strong and weak points of an individual grape farm business.

Item	Average per Farm	My Farm
Measures of Size		
1. Acres in bearing grapes	68.0	
2. Acres of grapes harvested	68.0	
3. Acres in nonbearing grapes	2.1	
4. Worker equivalent	2.8	
5. Tons of grapes harvested	306.4	
6. Tons of grapes grown	306.5	
Labor Efficiency		
1. Acres in grapes harvested per worker	24.1	
2. Tons of grapes harvested per worker	109.2	- ·
Production Factors		
l. Grape yield per acre (tons) of bearing grapes	4.5	
 Grape receipts* per acre of bearing grapes 	\$1,079	\$
Price		
1. Average price per ton of grapes sold**	\$ 238	\$

SELECTED FARM BUSINESS MEASURES 16 Great Lakes Region Grape Farms, 1982

* Cash receipts from sale of grapes plus anticipated payments from current grape crop.

**Grape receipts + tons of grapes harvested.

Cost Control

Power and machinery costs were major expenses on these grape farms. Net operating and investment costs averaged \$17,049.

POWER AND MACHINERY COSTS

16 Great Lakes I	Region Grape Far	ms, 1982	
Item	Average per Far	m My	Farm
Machinery depreciation	\$ 6,0	63 \$	
Interest at 5% average inventory	2,5	44	
Gas & oil	3,1	26	
Auto	2	84	
Truck, tractor & equipment repair	3,6	55	1970 - 14 Martin
Machine hire	5,1	45	
Utilities	5	70	
Total Machinery Costs '	\$21,3	87 \$	
Income from machine work	- 4,2	.94	
Gasoline tax refund	-	44	
NET MACHINERY COSTS	\$17,0	49 \$	
Net Machinery Costs:			
Per acre of bearing grapes	\$2	.52 \$	
Per worker equivalent	\$6,0)76 \$	
Per ton of grapes harvested	\$	56 \$	

Since power and machinery costs represent a substantial portion of total costs, efficiency in use is an important factor affecting profitability of the business. Net machinery costs per acre of bearing grapes averaged \$252.

Most farm operators justify major machinery purchases as a way to save labor and increase productivity. How well labor and machinery are combined has an important bearing on farm profits.

Item	Average per Farm	My Farm
Value of operator's labor*	\$ 6,229	\$
Hired labor	24,896	
Unpaid family labor	1,031	
TOTAL LABOR COSTS	\$32,156	\$
fotal net machinery cost	17,049	
TOTAL LABOR & MACHINERY COSTS	\$49,205	\$
Labor cost:		ande kant dan dan kole kole nga dan kan kan kan kan kan
Per worker equivalent	\$11,460	\$
Per acre of bearing grapes	\$475	\$
Per ton of grapes harvested	\$105	\$
Labor & machinery cost:		
Per worker equivalent	\$17,536	\$
Per acre of bearing grapes	\$726	\$
Per ton of grapes harvested	\$161	\$

LABOR AND MACHINERY COSTS 16 Great Lakes Region Grape Farms, 1982

* Valued at \$750 per month for operator's labor (value of management and owned capital excluded).

MISCELLANEOUS COST MEASURES 16 Great Lakes Region Grape Farms, 1982

Item A	verage per Farm	My Farm	
Crop expense per acre of bearing grapes**	\$138	\$	
Spray expense per acre of bearing grapes	43	\$	
Taxes per total acres owned	32	\$	
Taxes per \$1,000 of end real estate inventory	18	\$	
Taxes & insurance per \$1,000 real estate inven	tory 26	\$	

**Includes spray, fertilizer, replacement vines, posts and wire and other crop expenses.

.

Item	Average per Farm	Percent of Total	My Farm	
Land & buildings	\$213,820	78.8	\$	
Livestock	510	0.2		
Machinery & equipment	54,586	20.1		
Supplies	2,351	0.9		
Total Farm Inventories	\$271,267	100.0	\$	
Worker equivalent	2.8	1999 - Allen Ander Hann Hann Hallen Salar Salar (1999 - 1999 - 1999 - 1999 -		
Investment per worker equiv.	\$96,678		\$	
Acres of bearing grapes	67.7			
Machinery & equipment investment per acre of bearing grapes	\$806		\$	
Land & building investment per acre owned	\$1,805		\$	
Total farm investment per acre of bearing grapes	\$4,005		\$	
Total farm investment per ton of grapes sold	\$885		\$	
Capital turnover (years for cash receipts to equal capital)	2.99			

Capital and Capital Efficiency Factors

The average investment in the farm business was \$271,267. About 79 percent of this total is represented by vineyards, land and buildings.

Investment costs such as depreciation and interest are part of the total cost of operating a farm business. Obtaining efficiency in the use of capital, as measured by investment relative to productive capacity and income, is an important part of managing a farm. The factors calculated in the table above can help a farmer gauge the soundness of his capital invest-ment. On these farms, investment per acre of bearing grapes ranged from \$727 to \$8,788.

CAPITAL INVESTMENT AND CAPITAL EFFICIENCY FACTORS

1982 Production and Marketings

Item	Number of Growers Reporting	Average of All Growers
Bearing vines:		
Harvested, sold in primary market	16	67.66
Harvested, sold in distress market	1	0.06
Not harvested	_1	0.01
Total Bearing	16	67.73
Nonbearing Vines	5	2.10
Total Acres in V	ines	69.83

ACRES IN VINES AND MARKETINGS 16 Great Lakes Region Grape Farms, 1982

Total acres in vines averaged 69.83 acres per farm. Ninety-seven percent of this total acreage produced a crop which was harvested and sold in the growers' primary or usual markets. The growers reported about 0.1 percent of the acreage in vines was harvested and sold in the open market. One grower had sales in the open market.

> GRAPES HARVESTED & SOLD IN THE USUAL MARKETS 16 Great Lakes Region Grape Farms, 1982

Variety	Acres	Tons	Average Yield/Acre
Concord	48.6	231.2	4.8 Tn.
All other varieties	19.0	74.9	<u>3.9</u> Tn.
Total	67.6	306.1	4.5 Tn.

Concords were an important variety on all farms. This variety accounted for 72 percent of the acreage harvested and 76 percent of the tonnage. The average yield of Concords was 4.8 tons per acre, compared with 3.9 tons per acre for all other varieties.

Array of Business Factors

Vineyardists in the management program can determine how their business stands relative to the others in the summary by encircling the factor measurement for their farm in each column of the table below.

Grape Acres Harv.	Tons Grapes Harv.	Worker Equiv.	Tons Grapes Harv./ Worker	Tons Grapes/ Grape Acre	Total Farm Invest./ Grape Acre	Grape Receipts/ Grape Acre	Total Cash Oper. Exp./ Total Crop Acres
222	983	9.5	303	11.1	8,788	2,582	2,019
134	623	4.8	232	5.9	8,244	1,178	1,344
110	531	4.3	165	5.5	7,252	1,177	1,059
82	428	3.7	132	5.5	5,063	1,156	1,008
79	406	3.6	131	5.4	5,014	1,130	999
76	374	2.7	127	4.9	4,910	1,117	993
60	29 0	2.7	126	4.9	4,345	1,114	987
48	284	2.6	115	4.9	4,094	1,054	934
45	222	2.5	111	4.8	3,988	1,026	864
42	220	2.3	109	4.7	3,892	99 0	858
41	193	1.7	104	4.7	3,648	969	726
38	182	1.6	103	4.6	3,157	968	708
30	165	1.1	100	4.4	2,985	9 60	675
28	141	1.0	72	4.3	2,930	895	618
26	129	.7	62	3.9	2,115	788	618
23	127	•4	61	3.6	727	687	580

ARRAY OF SELECTED BUSINESS FACTORS 16 Great Lakes Region Grape Farms, 1982

Custom Harvesting Enterprise

Four of the farms in this summary had custom harvesting operations. The receipts, expenses, and machinery used were allocated to this enterprise, and are not included in the computations in the preceding pages.

		Average per Farm	Range
Receipts		\$10,987	\$29 - 25,537
Expenses			
Hired labor	\$1,854		
Machine hire	689		
Machine repair & farm shar of auto expense	e 1,150		
Gasoline & oil	1,030		
Real estate upkeep	0		
Insurance	192		
Utilities	85		
Interest paid	264		
Miscellaneous	216		
TOTAL CASH EXPENSES	\$5,480		
Machinery depreciation	1,244		
TOTAL EXPENSES		\$ 6,724	
Net Income for Enterprise		\$ 4,263	\$-2,569 - 12,08

CUSTOM HARVESTING ENTERPRISE Four Great Lakes Region Grape Farms, 1982

The average net income was \$4,263. These growers had investments in machinery of \$20,161 allocated to custom harvesting. This is not the full value of all machinery used in custom harvesting, but rather it reflects these growers' estimation of what percentage of their machinery should be allocated to the enterprise. The same principle is used for the allocation of other expenses.