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FARM BUSINESS ANALYSIS AND SUMMARY

26 Grape Farms in the Finger Lakes Region

1969

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FARM BUSINESS ANALYSIS AND SUMMARY

26 Finger Lakes Grape Farms
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This is a summary and analysis of records obtained from 26 Finger Lakes grape growers for the 1969 calendar year. The records were obtained on a survey form by Mr. G. C. Smith, Cooperative Extension Specialist, Finger Lakes Grape Industry Program, and Mr. T. W. Markham, Cooperative Extension Agent, Steuben County Extension Service.

The 26 farms included in this report were not selected at random and the data contained herein do not reflect the average costs and returns in producing grapes in the Finger Lakes area. Growers included were those interested in taking a closer look at their farm businesses and in comparing their operations with the averages for the group. However, this report provides a framework for summarizing and analyzing the farm business and can be useful to any grape grower. It also provides standards which a grower can use as a basis for comparison to see how his operations measure up to these averages.

Grapes were by far the most important enterprise on all of the farms studied. The grape enterprises were considerably above average in size. These producers averaged 64 acres of grapes (bearing and non-bearing) while the average in the Finger Lakes in 1966 was 18.5 acres (10,819 acres reported by 585 farms). Only one of the 26 farms included in this study had fewer than 18.5 acres. This fact reinforces the statement that these are not average farms. They include some of the best managed and most productive grape farms in the area. Another measure of their outstanding performance is indicated by the fact that these farms,

while accounting for less than one-half of one per cent of the number of farms in this area, produced 5,967 tons of grapes, or 14.5 per cent of the total tons reported purchased from the Finger Lakes area by New York State wineries and processing plants in 1969. The year was unusually favorable for Finger Lakes growers. Total production in this area in 1969 as indicated by processing plant receipts was 41,011 tons compared with 26,677 tons in 1968 -- an increase of 54 per cent -- while in the Chautauqua-Erie area receipts were 50,975 tons in 1969 compared with 56,765 tons in 1968 -- a decrease of 10 per cent. Another indication of the favorable production conditions was the average yield in 1969 on these farms of 4.0 tons of grapes per acre. In 1964, when the last farm management study was made in this area, the average yield was 3.4 tons per acre. The extremely favorable average labor income for the one year reported in this study was the result of excellent management as well as increased yield and higher average price for each grape variety sold. The weighted average price based on primary utilization of grape varieties weighted by amount of the leading varieties used (during the period 1964-1967) was \$147 per ton in 1964. For 1969 this average was \$202. In 1968 the average was \$156 per ton.

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Finger Lakes Grape Growers
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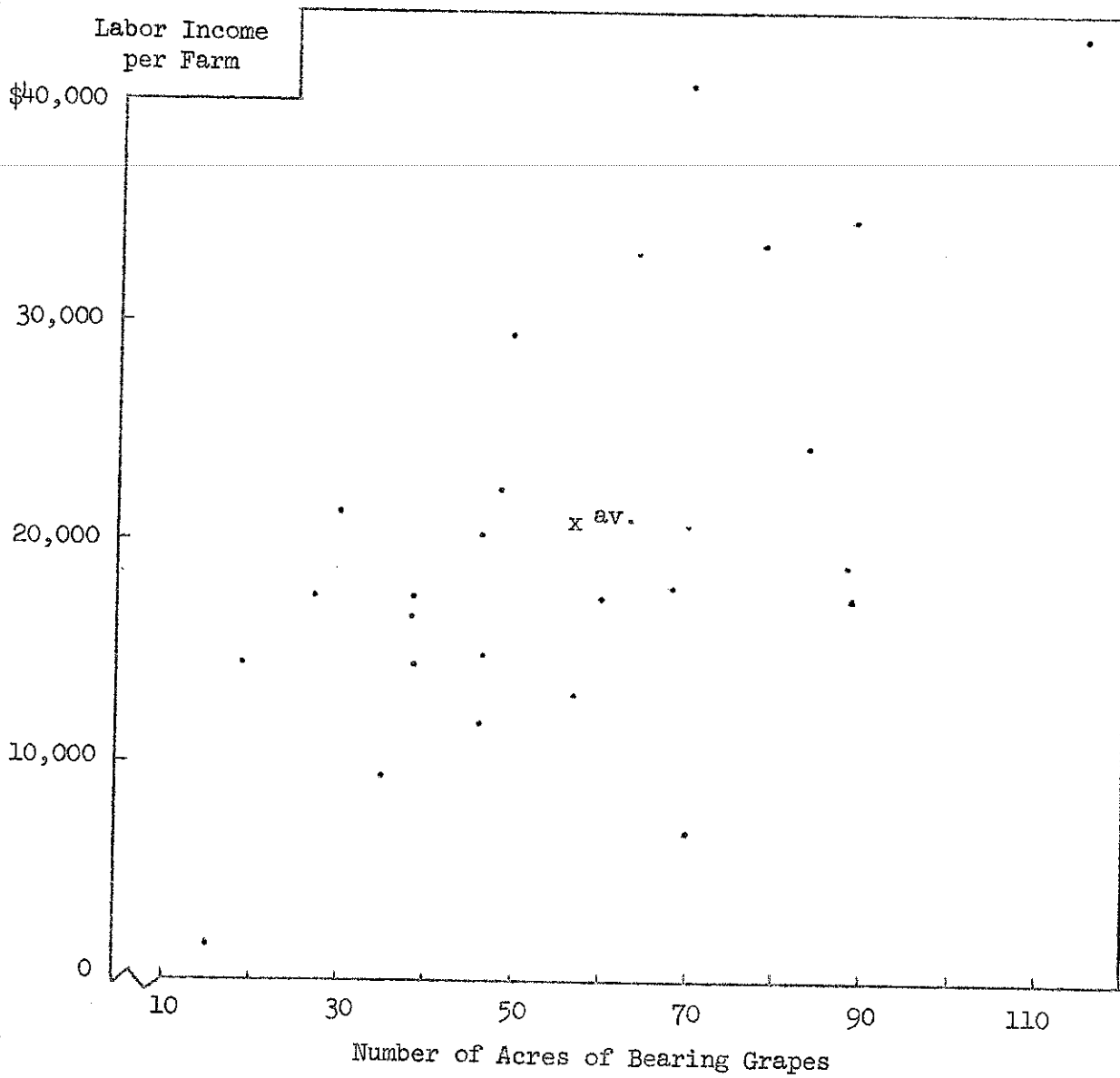
MEASURING THE PROFIT OR LOSS FROM THE FARM BUSINESS IN 1969

Item	My Farm	Average - 26 Farms
Average farm inventory	\$ _____	\$ <u>92,450</u>
Farm receipts, grapes	\$ _____	\$48,152
Farm receipts, other	_____	<u>10,020</u>
Total farm receipts	\$ _____	\$58,172
Farm expenses	_____	<u>31,322</u>
Farm income	\$ _____	\$26,850
Interest on capital @ 7 per cent	_____	<u>6,472</u>
Labor income per farm	\$ _____	\$20,378

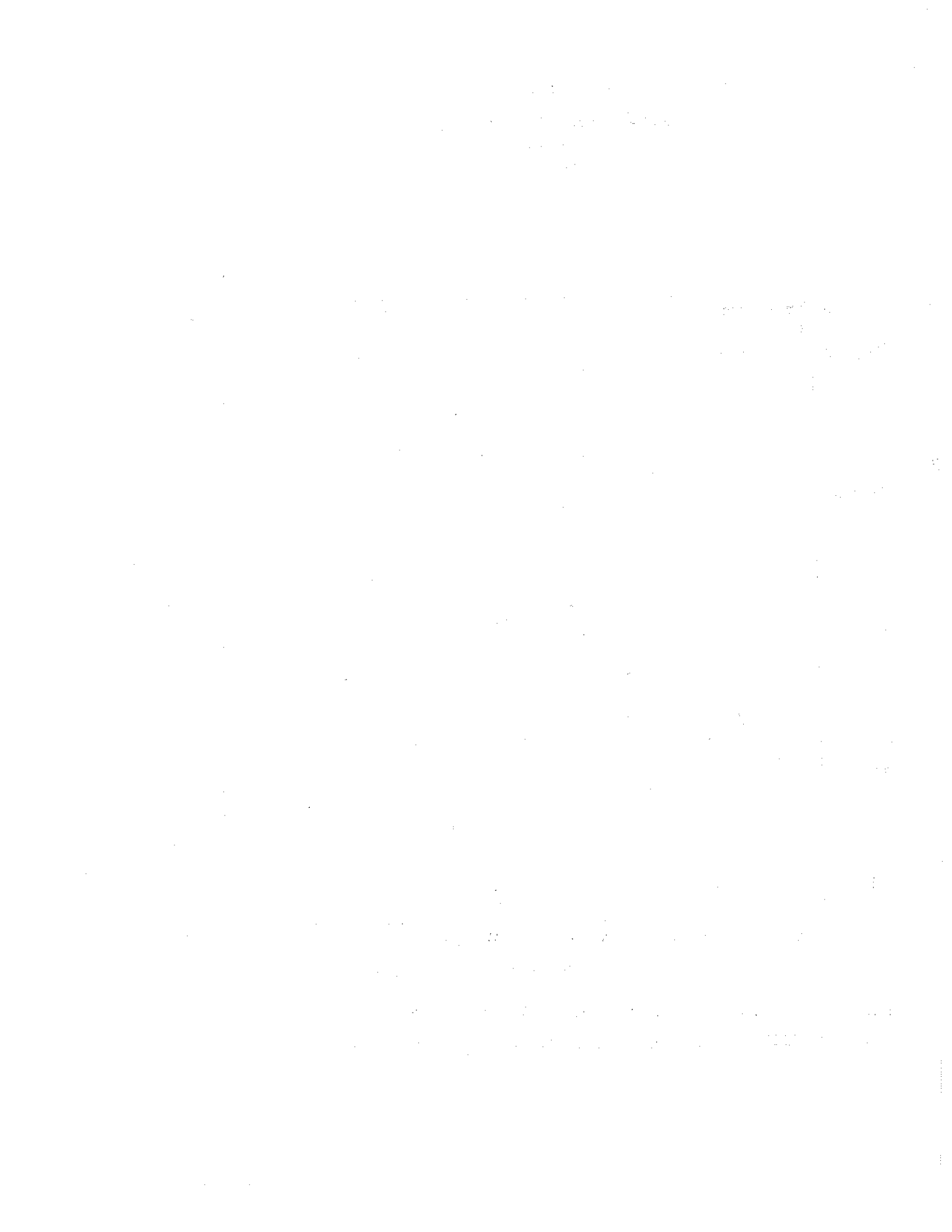
Labor income is the return the farm operator receives for his labor and management, in addition to the use of a house and products from the farm. It is the amount left after paying all farm expenses, and deducting a charge for unpaid family labor, and for interest on all of the capital invested in the business.

The average labor income on the 26 farms was \$20,378. The range was from \$1,895 to \$42,673.

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DISTRIBUTION OF LABOR INCOMES OF GRAPE FARMS OF DIFFERENT SIZE



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CAPITAL INVESTMENT

Farm Inventories, End of Year

Item	My Farm	Average - 26 Farms	Per Cent of Total
Livestock	\$ _____	\$ 528	1
Crops, feed and supplies	_____	2,929	3
Machinery and equipment	_____	15,308	16
Land and buildings	_____	<u>77,276</u>	<u>80</u>
Total farm inventories	\$ <u>_____</u>	<u>\$96,041</u>	<u>100</u>
Man equivalent	_____	3.9	
Investment per man	\$ _____	\$24,626	
Number of acres of grapes	_____	64	
Total farm investment per acre of grapes	\$ _____	\$ 1,501	
Number of crop acres	_____	70	
Investment per acre in crops	\$ _____	\$ 1,372	

Based on end of year inventory values, the total investment on the 26 grape farms averaged \$96,041.

Investment costs are an important part of your costs of operation. If yours are out of line in relation to your production capacity, this means an added burden in overhead cost.

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FARM RECEIPTS

Item	My Farm	Average - 26 Farms	Per Cent of Total
Total grape receipts	\$ _____	\$48,152	83
Other crop receipts	_____	486	1
Livestock products and livestock sales	_____	1,327	2
Miscellaneous receipts	_____	1,291	2
Increase in inventory	_____	<u>6,916</u>	<u>12</u>
Total farm receipts	\$ <u>_____</u>	<u>\$58,172</u>	<u>100</u>

Grape income comprised 83 per cent of total farm receipts.

Increase in inventory is included as a farm receipt because it is assumed that the added inventory value could be turned into cash at the owner's discretion. The increase in inventory came about through additional investment in machinery and in land and buildings.

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FARM EXPENSES

Item	My Farm	Average - 26 Farms	Per Cent of Total
Livestock expense	\$ _____	\$ 845	3
Lime and fertilizer	_____	1,112	4
Seeds and plants	_____	215	*
Storage and containers	_____	496	2
Spray materials	_____	1,153	4
Vineyard and other crop expense	_____	1,366	4
Gas and oil	_____	887	3
Auto and truck	_____	277	1
Equipment repair	_____	1,361	4
Machine hire	_____	2,140	7
Real estate upkeep	_____	389	1
Labor	_____	12,339	40
Telephone and electricity	_____	278	1
Taxes and insurance	_____	1,572	5
Miscellaneous farm expense	_____	1,357	4
New buildings	_____	157	*
New machinery	_____	5,145	17
Livestock bought	_____	51	*
Unpaid family labor	_____	182	*
Total farm expenses	\$ _____	\$31,322	100

Farm expenses on these 26 farms averaged \$31,322. Hired labor was the most important, accounting for 40 per cent of the total. Equipment costs were the next largest expense. The combined costs of gas, truck and auto, equipment repair, machine hire, and new machinery accounted for 32 per cent of all expenses.

* Less than one per cent.

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POWER AND MACHINERY COSTS*

Item	My Farm	Average - 26 Farms
Beginning inventory	\$ _____	\$11,824
New machinery bought	_____	<u>5,145</u>
Total	\$ _____	\$16,969
End inventory	\$ _____	\$15,308
Machinery sold	_____	<u>25</u>
Total	\$ _____	<u>\$15,333</u>
Depreciation	\$ _____	\$ 1,636
Interest at 7% av. inventory	_____	950
Gas and oil	_____	887
Machinery repairs	_____	1,361
Machine hire	_____	2,126
Auto expenses (farm share)	_____	277
Electricity (farm share)	_____	<u>152</u>
TOTAL MACHINERY COSTS	\$ _____	\$ 7,389
Income from machine work	\$ _____	\$ 163
Gas tax refund	\$ _____	<u>\$ 68</u>
NET MACHINERY COST	\$ _____	\$ 7,158
<hr style="border-top: 1px dashed black;"/>		
Acres in grapes	_____	64
Machinery cost per acre in grapes	\$ _____	\$ 121
Man equivalent	_____	3.9
Machinery cost per man	\$ _____	\$ 1,835

All net machinery costs, including depreciation, totaled \$7,158. On the 26 grape farms, machinery costs on the basis of an acre in grapes averaged \$121.

Efficiency in the use of equipment is an important factor affecting profits in producing grapes.

* Does not include housing or repair labor costs.

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LABOR AND MACHINERY COSTS

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.

LABOR AND POWER AND MACHINERY COSTS

Item	My Farm	Average - 26 Farms
Value of operator's labor*	\$ _____	\$ 6,438
Hired labor	_____	12,339
Unpaid family labor	_____	<u>182</u>
TOTAL LABOR COSTS	\$ _____	\$18,959
Net power and machinery cost	_____	<u>7,158</u>
TOTAL LABOR AND MACHINERY COST	\$ _____	\$26,117
Total labor and machinery cost per acre in grapes	\$ _____	\$ 408
Total labor and machinery cost per man	\$ _____	\$ 6,697

* Valued at a rate of \$5,400 per operator per year. There were 31 operators on the 26 farms included in this study.

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<u>Measures of Size</u>	<u>My Farm</u>	<u>Average - 26 Farms</u>
1. Acres in bearing grapes	_____	56
2. Acres in non-bearing grapes	_____	8
3. Total acres in fruit	_____	65
4. Total crop acres	_____	70
5. Man equivalent	_____	3.9
6. Total work units	_____	562
7. Tons grapes produced	_____	230
 <u>Labor Efficiency</u>		
1. Acres in bearing and non-bearing grapes per man	_____	16
2. Tons grapes produced per man	_____	59
3. Crop acres per man	_____	18
4. Work units per man	_____	144
 <u>Rates of Production</u>		
1. Grape yield per acre (tons)	_____	4.1
2. Grape receipts per acre of bearing grapes	\$ _____	\$860
 <u>Degree of Specialization</u>		
1. Per cent of work units on grapes	_____	98
2. Per cent of all receipts from grapes	_____	83

These business analysis factors show the size of the grape enterprise and its relation to the whole farm business on the 26 farms. They also show measures of labor efficiency and rates of grape production.

A grape producer can gain valuable information about the strong and weak points of his grape enterprise by comparing data from his business with the average on the 26 farms.

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AN ARRAY OF BUSINESS FACTORS - 26 FARMS*

Acres of bearing grapes	Tons of grapes produced per man	Yield per acre of bearing grapes	Investment per acre of grapes (bearing and non-bearing)	Per cent of total work units on grapes
		(tons)	(dollars)	
115	95	5.6	784	100
89	88	5.6	868	100
88	85	5.5	1101	100
84	79	5.4	1229	100
78	78	5.1	1234	100
70	77	5.0	1237	100
70	77	4.8	1297	100
70	75	4.8	1303	100
70	75	4.7	1354	100
68	67	4.4	1364	100
64	66	4.4	1474	100
60	65	4.1	1506	100
57	64	4.1	1565	100
50	63	4.0	1606	100
48	55	3.9	1666	100
46	54	3.7	1673	100
46	53	3.7	1694	100
46	49	3.7	1725	99
38	48	3.5	1781	98
38	48	3.4	1834	98
38	48	3.4	1923	97
35	44	3.2	1974	97
30	44	3.2	2064	96
27	43	3.1	2088	96
19	34	2.8	2124	90
15	25	2.0	2643	84

* Each column is independent of the others.

USE YOUR RECORDS

Good farm records are worth many dollars to the farm manager. Here are the most important uses:

A Diary -- In planning work this month and this year, it helps to "check the record" to find out what action was taken last month or last year.

To Analyze the Business -- The operator of a commercial farm business must move fast to keep up-to-date. Good records will show him the strong and weak points of his business. This information provides a foundation on which to make changes to build a more profitable business.

For Tax Purposes -- Tax obligations make it a must to have complete records. Tax dollars can be saved every year by using farm records. Equally important are good records at the time of a sale of part or all of the farm property.

For Family Partnerships -- When a farm is owned and operated by father and son or other family combination, records are necessary for fair treatment of all family members. Good records will settle many disagreements before they start.

For Credit -- Most commercial farm businesses use credit. A record of cash receipts and expenses, together with an annual inventory are required by most lenders. Such records provide for wiser use of farm credit, and better understanding between borrower and lender.

In Case of Family or Business Crises -- At the death of the farm operator, good records can save the heirs time, money, and heart-ache. Annual inventories are especially important for this purpose. Inventories are also worth a lot in case of a fire or other disaster.

Keeping farm records is only part of the job. Learning to use them is even more important. Don't be satisfied just to meet tax requirements. You owe it to yourself and your business to make greater use of your farm records. They can be your most valuable farm equipment.

