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Economic Report R 74-4
Department of Agricultural and Applied Economics Institute of Agriculture St. Paul, Minnesota 55108 May 1974


Prepared by Janet B. Otis, Barbara B. Miller, and Truman R. Nodland*

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## INTRODUCTION

The Department of Agricultural and Applied Economics and the Agricultural Extension Service of the University of Minnesota, and the county extension services of several southeastern Minnesota counties are cooperating with the Southeastern Minnesota Farm Management Association in maintaining a farm management service. The Southeast Minnesota Farm Management Service was organized in 1927 and began operations on January 1, 1928. The Southeastern Minnesota Farm Management Association was organized in 1939 by the farmers and now represents the farmers in determining policies and maintaining the field organization and membership. Each farmer pays an annual fee which covers a part of the cost. The balance of the cost is defrayed by the University of Minnesota.

[^0]The analysis of the records and the preparation of the report are handled by the Department of Agricultural and Applied Economics under the direction of T. R. Nodland. Extension work in connection with the supervision of the project is handled by Ed Becker. Harvey Bjerke was the field agent for this project. At the end of the year, Kenneth Thomas, Department of Agricultural and Applied Economics, Mervin Freeman, Area Farm Management Agent at Rochester, Minnesota, and Michael Bjerke, a student in Agricultural Economics, aided in closing the records.

The following tabulation shows by counties the number of records submitted, the officers of the Association, and the county agricultural extension agents who cooperated in 1973.

| County | No. of <br> records |  | Association Officers |
| :--- | :---: | :--- | :--- |

The data for 118 farms are shown in the tables on succeeding pages. Eighteen farms were omitted from all averages in the tables because the records were not sufficiently complete for a full summarization or the records were not returned for summarization following completion of income tax schedules.

Because the farmers included in this study are, in general, above the average in managerial ability and operate larger and more productive farms, they have returns materially higher than the average for this section of the state. There were, however, wide variations in the methods and practices followed by these men. It is reasonable to assume that similar variations occur among all farmers in the area. To the extent that this is true, this report would be of value to all farmers and to others interested in agriculture in that it illustrates how farm records may be used as a basis for making an analysis of a farm business and for improving the management of a farm.

Table 1. Summary of Farm Inventories, 1973*

| Item |  |  | Average of 118 farms |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Jan. 1 | Dec. 31 |
| Size of farm (acres) |  |  | 345 |  |
| Size of business (work units) ${ }_{*} \%$ |  |  | 482 |  |
| Dairy cows |  |  | \$ 7325 | \$ 8313 |
| Other dairy cattle |  |  | 5391 | 6605 |
| Beef cattle (incl. feeders) |  |  | 4578 | 6311 |
| Hogs |  |  | 6344 | 10489 |
| Sheep (incl. feeders) |  |  | 78 | 83 |
| Poultry (inc1. turkeys) |  |  | 10 | 21 |
| Productive livestock total |  |  | \$23726 \$31822 |  |
| Horses |  |  | \$ 13 |  |
| Crop, seed and feed |  |  | \$22616 \$43793 |  |
| Auto and truck (farm share) |  |  | \$ 2110 \$ 2665 |  |
| Tractors and crop machinery |  |  | 16798 . | 19192 |
| Livestock equipment |  |  | 4062 | 4549 |
| Machinery and equipment total |  |  | \$22970 | \$26406 |
| Land $\%$ ** |  |  | \$59526 | \$59526 |
| Buildings, fences, etc. |  |  | \$28310 | \$29419 |
| Total farm capital managed |  |  | \$157156 \$190979 |  |
| Item | 23 most profitab1e |  | 23 1east profitable |  |
|  | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Size of farm (acres) |  |  | 237 |  |
| Size of business (work units) | 630 |  | 390 |  |
| Dairy cows | \$ 2526 | \$ 2087 | \$ 7742 | \$ 8562 |
|  | 2363 | 3547 | 4727 | 5362 |
| Beef cattle (incl feeders) | 7578 | 11582 | 1818 | 2356 |
| Hogs | 20707 | 35328 | 1734 | 1832 |
| Sheep (incl. feeders) | 119 | 146 | 18 | 19 |
| Poultry (inc1. turkeys) | - | - | 31 | 30 |
| Productive livestock | \$33293 | \$52690 | \$16070 | \$18161 |
| Horses <br> Crop, seed and feed | \$ | \$ | \$ 9 | \$ 36 |
|  | \$47967 | \$103098 | \$10899 | \$16120 |
| Auto and truck (farm share) Tractors and crop machinery Livestock equipment | \$ 2790 | \$ 3684 | \$ 1703 | \$ 2118 |
|  | 26824 | 32693 | 11843 | 12744 |
|  | 5640 | 6654 | 3185 | 3356 |
| Machinery and equipment total | \$35254 | \$43031 | \$16731 | \$18218 |
| Land <br> Buildings, fences, etc. <br> Total farm capital managed | \$121336 | \$121336 | \$37969 | \$37969 |
|  | \$ ${ }^{4} 43768$ | \$ 47433 | \$20411 | \$20997 |
|  | \$281618 | \$367588 | \$102089 | \$111501 |

* For the purpose of comparison, all of the data shown in this report, with the exception of tables 4 and 5, are presented on a full-owner basis. The assets, expenses, and receipts of the landlord are included in the records from rented farms.
*** See page 15 for an explanation of "work units."
*** Real estate values are based on cost and thus do not reflect current market prices.

Table 2. Summary of Farm Earnings (Cash Statement), 1973

| Item | Average <br> of 118 <br> farms | $\begin{gathered} 23 \text { most } \\ \text { profitable } \\ \text { farms } \\ \hline \end{gathered}$ | 23 least profitable farms |
| :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |
| Dairy catt1e sold | \$ 5855 | \$ 4028 | \$ 6035 |
| Dairy products sold | 20694 | 7143 | 23662 |
| Beef cattle sold (incl. feeders) | 6310 | 11747 | 1735 |
| Hogs sold | 22993 | 68920 | 6336 |
| Sheep and wool sold | 118 | 146 | 25 |
| Horses sold | 1 | 7 | - |
| Poultry sold (incl. turkeys) | 13 | - | 39 |
| Eggs sold | 85 | - | 131 |
| Corn sold | 11136 | 27363 | 3371 |
| Soybeans sold | 7991 | 21488 | 3291 |
| Small gra in sold | 494 | 300 | 671 |
| Other crops sold | 2568 | 4794 | 1524 |
| Machinery \& equipment sold \& gas tax refunds | 397 | 571 | 319 |
| Income from work off the farm | 889 | 1525 | 275 |
| Miscellaneous farm income | 1768 | 2613 | 642 |
| Total farm sales | \$81312 | \$150645 | \$48056 |
| Increase in farm capital | 33823 | 85970 | 9412 |
| Family living from the farm | 528 | 506 | 501 |
| Total farm receipts \$ | \$115663 | \$237121 | \$57969 |
| FARM EXPENSES |  |  |  |
| Dairy cattle bought | \$ 527 | \$ 258 | \$ 457 |
| Beef cattle bought (inc1. feeders) | 3768 | 8291 | 492 |
| Hogs bought | 1523 | 1332 | 1357 |
| Sheep bought | 4 | 1 | - |
| Horses bought | 7 | 11 | 27 |
| Poultry bought (incl. turkeys) | 24 | - | 26 |
| Miscellaneous livestock expense | 1978 | 2294 | 1809 |
| Feed bought | 10372 | 24208 | 4240 |
| Fertilizers bought | 4286 | 8235 | 2476 |
| Other crop expenses | 4869 | 9747 | 2416 |
| Custom work hired | 2023 | 2412 | 1668 |
| Gas, oil and grease bought (farm share) | 1858 | 2891 | 1348 |
| Repair of truck and auto (farm share) | 684 | 1033 | 537 |
| Repair and upkeep of farm real estate | 994 | 1598 | 742 |
| Repair and upkeep of tractors \& crop machiner | ry 2204 | 3471 | 1763 |
| Repair and upkeep of livestock equipment | 649 | 1073 | 476 |
| Wages of hired labor | 2335 | 4508 | 1371 |
| Electricity expense (farm share) | 698 | 1002 | 574 |
| Real estate taxes | 2287 | 3765 | 1572 |
| Telephone and general farm expense | 1069 | 1694 | 763 |
| Total cash operating expenses | \$42159 | \$77824 | \$24114 |
| Trucks and autos bought (farm share) | 1336 | 1987 | 1032 |
| Crop and power machinery bought | 7760 | 15140 | 4751 |
| Livestock equipment bought | 1544 | 2659 | 954 |
| New real estate and improvements | 3648 | 7521 | 2158 |
| Total farm purchases | \$56447 | \$105131 | \$33009 |
| Decrease in farm capital | - | - | - |
| Interest on farm capital at 6\% | 10444 | 19476 | 6408 |
| Family labor above one operator* | 8186 | 20300 | 3733 |
| Board furnished hired labor | 55 | 68 | 9 |
| Total farm expenses | \$75132 | \$144975 | $\overline{\$ 43159}$ |
| Labor and management earnings | \$40531 | \$ 92146 | \$14810 |
| Net cash income | \$24865 | \$ 45514 | \$15047 |

[^1]Table 3. Summary of Farm Earnings (Enterprise Statement), 1973*

| Item | ```Average of 118 farms``` | ```23 most profitable farms``` |  |
| :---: | :---: | :---: | :---: |
| RETURNS AND NET INCREASES |  |  |  |
| Dairy cows | \$21870 | \$ 7596 | \$24747 |
| Other dairy cattle | 7143 | 4262 | 6624 |
| Beef breeding herd | 452 | 280 | 830 |
| Feeder cattle | 3646 | 7353 | 977 |
| Hogs | 25693 | 82361 | 5111 |
| Sheep - farm flock | 120 | 175 | 26 |
| Sheep - feeders | - | - | - |
| Chickens and turkeys | 88 | - - | 142 |
| All productive livestock | \$59012 | \$102027 | \$38457 |
| Value of feed fed to livestock | 28910 | 45265 | 19611 |
| Return over feed from livestock | \$30102 | \$ 56762 | \$18846 |
| Value added by crops | 52584 | 112130 | 24326 |
| Income from labor off the farm | 472 | 1046 | 169 |
| Miscellaneous farm income | 1768 | 2613 | 642 |
| Total returns and net increases | \$84926 | \$172551 | \$43983 |
| EXPENSES AND NET DECREASES |  |  |  |
| Horses | \$ 2 | \$ 4 | \$ 2 |
| Truck | 934 | 1519 | 713 |
| Auto (farm share) | 857 | 1122 | 683 |
| Electricity (farm share) | 698 | 1002 | 574 |
| Hired power | 1329 | 1577 | 1087 |
| Tractors and crop machinery | 8312 | 14112 | 6295 |
| Livestock equipment | 1697 | 2690 | 1258 |
| Buildings, fencing, and tiling | 3518 | 5439 | 2315 |
| Miscellaneous livestock expense | 1978 | 2294 | 1809 |
| Labor** | 11270 | 25711 | 5694 |
| Real estate taxes | 2287 | 3765 | 1572 |
| General farm expense and telephone | 1069 | 1694 | 763 |
| Interest on farm capital at $6 \% \% \% *$ | 10444 | 19476 | 6408 |
| Total expenses and net decreases | \$44395 | \$80405 | \$29173 |
| Labor and management earnings | \$40531 | \$92146 | \$14810 |

* Earnings statements, as shown in table 2, stress purchases and sales; inventory adjustments are entered as one item--either as an increase or as a decrease in farm capital. Likewise, family living from the farm is entered as a single item of income. On the enterprise basis, the value of livestock and livestock products produced includes sales, value used in the home, changes in inventories, and accounts for transfers between enterprises. Purchases of livestock are subtracted so the data represents value of livestock and livestock products added by the enterprise.

Costs of operating each service enterprise (auto and trucks, tractors and crop machinery, etc.) are calculated in a similar manner. Credit is given to crops for feed raised on the farm and consumed by livestock. Thus, while earnings statements on the enterprise basis do not show purchases and sales, such a statement more truly shows the value produced for the productive enterprises and net expenses for each of the service enterprises.
** Includes labor earnings for partners above one full-time individual.
*r\%' Interest calculated on the "book" value of capital managed. If current market prices were applied to real estate, about $\$ 3200$ would be added to the interest on average capital managed.

Table 4. Net Worth Statement for Those Farmers Who Kept A Complete Record of A11 Assets and Liabilities, 1973 (Operator's Share)

| Item | 18 Owners |  |
| :---: | :---: | :---: |
|  | Jan. 1 | Dec. 31 |
| Total acres in farm | 270 |  |
| Acres owned | 270 |  |
| Acres rented | - |  |
| Total farm capital - operator's | \$ 97337 | \$114413 |
| Stocks and bonds | \$ 24600 | \$ 21817 |
| Life insurance cash value | 3757 | 3896 |
| Notes and accounts receivable | 2607 | 5591 |
| Shares in cooperative organizations | 2026 | 2205 |
| Outside real estate | 15047 | 18532 |
| Cash on hand and in bank | 4875 | 6684 |
| Household furnishings and clothing | 3419 | 3590 |
| Personal share of auto and truck | 820 | 964 |
| Farm dwelling | 4602 | 4409 |
| Total non-farm assets - operator's | \$ 61753 | \$ 67688 |
| Total assets | \$159090 | \$182101 |
| Mortgages on farm operated | \$ 20125 | \$ 18908 |
| Mortgages on other real estate | 9359 | 13191 |
| Chatte1 mortgages | 12601 | 13151 |
| Notes payable | 2797 | 2866 |
| Accounts payable | 3721 | 1651 |
| Total 1iabilities - operator's | \$ 48603 | \$49767 |
| Farmer's net worth | \$110487 | \$132334 |
| Change in net worth |  | \$ 21847 |
| Item | 30 Part-owners |  |
|  | Jan. 1 | Dec. 31 |
| Total acres in farm | 405 |  |
| Acres owned | 252 |  |
| Acres rented | 153 |  |
| Total farm capital - operator's | \$142792 | \$180606 |
| Stocks and bonds | \$ 4706 | \$ 6169 |
| Life insurance cash value | 5114 | 5557 |
| Notes and accounts receivable | 1118 | 2816 |
| Shares in cooperative organizations | 1638 | 1894 |
| Outside real estate | 3361 | 7841 |
| Cash on hand and in bank | 8063 | 8740 |
| Household furnishings and clothing | 4294 | 4787 |
| Personal share of auto and truck | 824 | 900 |
| Farm dwelling | 9412 | 9388 |
| Total non-farm assets - operator's | \$ 38530 | \$48092 |
| Total assets | \$181322 | \$228698 |
| Mortgages on farm operated | 35862 | 33744 |
| Mortgages on other real estate | 767 | 2933 |
| Chattel mortgages | 26788 | 25791 |
| Notes payable | 10442 | 10858 |
| Accounts payable | 3782 | 1998 |
| Total liabilities - operator's | \$ 77641 | \$75324 |
| Farmer's net worth | \$103681 | \$153374 |
| Change in net worth |  | \$ 49693 |

Table 5. Summary of Farm Earnings by Tenure, 1973 (Operator's Share)

| Item | $46$ <br> Owners | 52 PartOwners | 5 <br> Renters |
| :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |
| Dairy cattle sold | \$ 4867 | \$ 5395 | \$ 5549 |
| Dairy products sold | 18226 | 20498 | 14808 |
| Beef cattle sold (incl. feeders) | 3368 | 7045 | - |
| Hogs sold | 17504 | 19929 | 32966 |
| Sheep and wool sold | 246 | 49 | - |
| Horses sold | 3 | - | - |
| Poultry sold (inc1. turkeys) | 13 | 16 | - |
| Eggs sold | 153 | - | - |
| Corn sold | 6001 | 15095 | 3719 |
| Soybeans sold | 4707 | 8587 | 3008 |
| Small grain sold | 573 | 395 | 47 |
| Other crops sold | 1951 | 2604 | 2040 |
| Machinery and equipment sold \& gas tax refund | 307 | 390 | 1329 |
| Income from work off the farm | 777 | 1166 | 561 |
| Miscellaneous farm income | 1999 | 1477 | 363 |
| (1) Total farm sales | \$60695 | \$82646 | \$64390 |
| (2) Increase in farm capital | 19232 | 39575 | 32541 |
| (3) Family living from the farm | 436 | 546 | 475 |
| (4) Total farm receipts (1)+(2)+(3) | $\overline{\$ 80363}$ | \$122767 | \$97406 |
| FARM EXPENSES |  |  |  |
| Dairy cattle bought | \$ 391 | \$ 591 | \$ |
| Beef cattle bought (inc1. feeders) | 1058 | 5424 | \$ |
| Hogs bought | 1200 | 1125 | 8878 |
| Sheep bought | 8 | 2 | - |
| Horses bought | 6 | - | - |
| Poultry bought (incl. turkeys) | 49 | 2 | - |
| Miscellaneous livestock expense | 1412 | 2064 | 2723 |
| Feed bought | 8970 | 9319 | 15070 |
| Fertilizers bought | 2944 | 4379 | 3700 |
| Other crop expenses | 3286 | 5303 | 3329 |
| Custom work hired | 1733 | 2279 | 1317 |
| Gas, oil and grease bought (farm share) | 1609 | 1902 | 1371 |
| Repair and upkeep of power \& crop machinery | 2329 | 3129 | 2593 |
| Repair and upkeep of real estate | 824 | 1053 | 666 |
| Repair and upkeep of livestock equipment | 539 | 651 | 777 |
| Wages of hired labor | 2221 | 2618 | 1831 |
| Electricity expense (farm share) | 546 | 734 | 463 |
| Real estate taxes | 1547 | 1617 | 156 |
| Cash rent | 84 | 2576 | 5352 |
| General farm expense \& telephone | 948 | 1135 | 1050 |
| Interest paid | 2820 | 4316 | 2363 |
| Total cash operating expense | \$34524 | \$50219 | \$51639 |
| Trucks and autos bought (farm share) | 1125 | 1447 | 2115 |
| Crop and power machinery bought | 4804 | 8594 | 10726 |
| Livestock equipment bought | 1046 | 1804 | 810 |
| Farm purchase and real estate improvements | 1980 | 5004 | 1873 |
| (5) Total farm purchases | \$43479 | \$67068 | \$67163 |
| (6) Decrease in farm capital | - | - |  |
| (7) Interest on operator's farm capital | 3551 | 5484 | 2340 |
| (8) Unpaid family labor | 571 | 749 | 630 |
| (9) Board furnished hired labor | 48 | 82 | - |
| (10) Total farm expenses (5)+(6)+(7)+(8)+(9) | \$47649 | \$73383 | $\overline{\$ 70133}$ |
| (11) Jabor earnings (4)-(10) | \$32714 | \$49384 | \$27273 |
| (12) Return to capital \& family labor (7)+(8)+(11) | \$36836 | \$55617 | \$30243 |

Table 6. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1973

| Item | Average of 38 farms | 8 high in return to cap. and fam. labor | 8 10w in return to cap. and fam. labor |
| :---: | :---: | :---: | :---: |
| Number of persons - family | 4.5 | 4.5 | 4.4 |
| Number of adult equivalent $\begin{aligned}- & \text { family } \\ & - \text { others* }\end{aligned}$ | 3.9 | $\begin{array}{r} 4.1 \\ .1 \end{array}$ | $4.0$ |

## EXPENSES

| Food and meals bought | \$ 2029 | \$ 2285 | \$ 2012 |
| :---: | :---: | :---: | :---: |
| Operating and supplies | 551 | 603 | 430 |
| Furnishings and equipment | 758 | 933 | 590 |
| Clothing and clothing materials | 863 | 981 | 594 |
| Personal care and spending | 409 | 538 | 132 |
| Education | 310 | 540 | 70 |
| Recreation | 474 | 831 | 375 |
| Gifts and special events | 528 | 941 | 189 |
| Medical and hospital expenses | 1125 | 752 | 1121 |
| Church and welfare | 555 | 881 | 364 |
| Personal share of auto expense | 462 | 599 | 325 |
| Upkeep on dwelling | 59 | 70 | 13 |
| Personal share of tel. \& elec. expense | 224 | 254 | 197 |
| Total cash living expense | \$ 8347 | \$10208 | \$ 6412 |
| Personal share of new auto | 480 | 511 | 72 |
| New dwelling | 145 | 584 | - |
| Taxes** | 1454 | 2661 | 1023 |
| Life insurance | 1100 | 1727 | 530 |
| Other savings and investments | 1369 | 4538 | 1912 |
| Total household and personal cash expense | \$12895 | \$20229 | \$ 9949 |
| Family living from the farm | 485 | 439 | 556 |
| Total cash expenses and perquisites | \$13380 | \$20668 | \$10505 |

RECEIPTS

| Return to capital and family labor | $\$ 53107$ | $\$ 108082$ | $\$ 19637$ |
| :--- | ---: | ---: | ---: |
| Income from outside investments | 1018 | 2480 | 924 |
| Other personal income | 828 | 566 | 1005 |

[^2]Table 7. Family Living from the Farm, 1973

| Item | Average of 38 farms | $\begin{gathered} \text { Average } \\ \text { of } 38 \\ \text { farms } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: |
| Number of adult equivalents - family <br> - other* | $\begin{array}{r} 4.0 \\ .1 \end{array}$ |  |
| Whole milk | 943 qts. | \$ 132 |
| Cream | 6 pts. | 2 |
| Cattle | $839 \mathrm{lbs}$. | 311 |
| Hogs | 198 1bs. | 78 |
| Sheep | 3 lbs . | 1 |
| Poultry | 4 1bs. | 1 |
| Eggs | 5 doz . | 1 |
| Total |  | \$ 526 |

[^3]
## CULULATIVE EFFECT OF EXCELLING IN A NUMBER OF MANAGEMENT FACTORS

Studies of earnings of fanners in this area show that there are seven major management factors causing variations in earnings among farmers within a given year. These seven factors are (1) crop yields, (2) choice of crops, (3) returns from livestock, (4) amount of livestock, (5) size of business, (6) work accomplishments per worker, and (7) control over expenses. The combined or cumulative influence of these seven management factors on earnings is shown in table 8. The farmer's earnings are determined to a considerable extent by his accomplishments in these seven factors.

Table 8. Relation of Labor Earnings to the Number of Factors in Which the Farmer Excels

| Number of factors in which farmer excels | No. of farms | Your farm | The length of the shaded lines is in proportion to the average operator's labor earnings | Average labor earnings |
| :---: | :---: | :---: | :---: | :---: |
| 0 or 1 | 16 |  | XXXXXXXXXXXXXX | \$ 25183 |
| 2 or 3 | 54 |  | XXXXXXXXXXXXXXXXXXXX | 37282 |
| 4 or 5 | 31 |  | XXXXXXXXXXXXXXXXXXXX | 40966 |
| 6 or 7 | 17 |  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 65091 |

The array in table 8 indicates that it will be worthwhile for each cooperator to study carefully his ranking on pages 10 and 11 , and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Table 9. Measures of Farm Organization and Management Efficiency, 1973

| Measures used in chart on page 11 | Average <br> of 118 <br> farms | 23 most <br> profitable <br> farms | 23 least <br> profitable <br> farms |
| :--- | ---: | ---: | ---: |

Items related to some of the above measures:

| Index of return for \$100 of feed from: |  |  |  |
| :---: | :---: | :---: | :---: |
| Dairy cattle (see pages 16 and 17) | 100 | 105 | 97 |
| Beef cattle - breeding herd (see page 19) | 100 | - | - |
| Beef cattle - feeders (see page 20 | 100 | - | 118 |
| Hogs (see page 18) | 100 | 108 | 98 |
| Sheep - farm flock (see page 21) | 100 | 95 | - |
| Chickens (see page 22) | 100 | - | - |
| Number of animal units | 102.0 | 169.6 | 65.0 |
| Work units on crops | 157 | 270 | 99 |
| Work units on productive livestock | 306 | 318 | 284 |
| Other work units | 19 | 42 | 7 |
| Number of family workers | 1.3 | 1.3 | 1.4 |
| Number of hired workers | . 4 | . 7 | . 3 |
| Total number of workers | $\overline{1.7}$ | 2.0 | 1.7 |
| Power \& crop machinery expense per work unit | \$27.91 | \$34.58 | \$25.53 |
| Livestock equipment expense per work unit | 3.49 | 3.49 | + 3.14 |
| Building \& fencing expense per work unit | 7.49 | 9.15 | 6.15 |
| Number of crop acres per farm | 282 | 492 | 180 |
| Tractor \& crop machinery expense per crop acre | \$31.19 | \$32.13 | \$32. 21 |
| Rate earned on capital managed (\$9600 is deducted for operator's labor) | 23.8\% | 31.4\% | 10.9\% |

* Given as a percentage of the average.
** Crops are marked in table 10 as A, B, C, and D. All of acres in A crops, one-half of acres in $B$ crops, and one-fourth of acres in $C$ crops are used in calculating percent of tillable land in high return crops.
*** An index weighted by the animal units of livestock.
$\%$ 流 Acres in timber not pastured, roads, waste, and farmstead were not included.

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 118 farms included in this summary are located between the dotted lines across the center of this page.


Table 10. Distribution of Acres in Farm, 1973

| Item | $\begin{aligned} & \text { Crop } \\ & \text { ratings } \end{aligned}$ | Number growing this crop | Average of 118 farms | ```Ave. per farm raising each crop``` |
| :---: | :---: | :---: | :---: | :---: |
| Canning peas | B | 10 | 1.9 | 22.9 |
| Wheat | C | 16 | 2.5 | 18.4 |
| Oats for silage | C | 15 | 2.2 | 17.4 |
| Oats for grain | D | 79 | 16.6 | 24.8 |
| Barley | D | 5 | 1.1 | 25.0 |
| Other small grain | D or C | 1 | - | 6.0 |
| Total small grains and peas |  | 98 | 24.3 | 29.3 |
| Corn grain | A | 118 | 122.0 | 122.0 |
| Soybeans for grain | B | 77 | 75.6 | 115.9 |
| Sweet corn | B | 14 | 5.2 | 43.5 |
| Corn silage | B | 73 | 12.5 | 20.2 |
| Total cultivated crops |  | 118 | 215.3 | 215.3 |
| Alfalfa hay | B | 98 | 40.6 | 48.9 |
| Other legume hay | C | - | - | - ${ }^{-}$ |
| Annual hay | D. | 5 | . 8 | 17.5 |
| Total tillable land in hay |  | 100 | 41.4 | 48.8 |
| Alfalfa pasture | B | 43 | 8.1 | 22.2 |
| Other tillable pasture | D | 6 | . 5 | 10.2 |
| Total tillable land in pasture |  | 47 | 8.6 | 21.6 |
| Feed grain program (diverted acres) | B | 59 | 7.2 | 14.4 |
| Tillable land not cropped | D | 12 | 1.0 | 10.3 |
| Total tillable land |  | 118 | 297.8 | 297.8 |
| Wild hay |  | 12 | 1.0 | 9.3 |
| Non-tillable pasture |  | 66 | 17.4 | 31.1 |
| Timber not pastured |  | 45 | 8.7 | 22.9 |
| Roads and waste |  |  | 11.8 |  |
| Farmstead |  |  | 8.2 |  |
| Total acres in farm |  |  | 344.9 |  |
| Percent land tillable |  |  | 85.7 |  |
| Percent tillable land in high return | crops |  | 65.3 |  |

Table 11. Crop Yields per Acre, 1973

| Item | Average of farms <br> growing each crop |
| :--- | ---: |
| Canning peas | $\$ 84.72$ |
| Wheat, bu, | 37.9 |
| Oats for silage, tons | 4.1 |
| Oats for grain, bu. | 61.0 |
| Barley, bu. | 54.8 |
| Corn grain, bu. | 109.3 |
| Soybeans, bu, | 33.0 |
| Sweet corn, tons | 5.8 |
| Corn silage, tons | 16.7 |
| Alfalfa hay, tons | 3.6 |
| Annual hay, tons | 2.8 |

Table 12. Average Price of Feeds, 1973

| Item | Value | Item | Va1ue |
| :--- | ---: | :--- | ---: |
| Ear corn, per bu. |  |  |  |
| Oats, per bu. | $\$ 1.70$ | Alfa1fa hay, per ton | $\$ 30.00$ |
| Barley, per bu. | 1.90 | Timothy hay, per ton | 18.70 |
| Soybean meal, per cwt. | 13.50 | Wild hay, per ton | 15.00 |
|  |  | Corn silage, per ton | 10.00 |
|  |  |  | 5.00 |

Table 13. Return Above Listed Costs per Acre of Crops, 1973

| Item | Corn grain | $\begin{gathered} \text { Corn } \\ \text { silage } \end{gathered}$ | Soy- <br> beans |
| :---: | :---: | :---: | :---: |
| Number of farmers reporting | 104 | 66 | 69 |
| Yield per acre | 109.3 bu . | 16.7 | 33.0 |
| Price per unit | \$ 2.20 | \$ 13.00 | \$ 5.50 |
| Total return | \$240.46 | \$217.10 | \$181. 50 |
| Fertilizer | \$ 20.36 | \$ 20.49 | \$ 2.46 |
| Seeds, herbicides, etc. | 20.77 | 20.48 | 13.52 |
| Total 1isted costs | \$41.13 | \$ 40.97 | \$15.98 |
| Return above 1isted costs | \$199.33 | \$176.13 | \$165.52 |
| Item | A1falfa hay | Oats | Wheat |
| Number of farmers reporting | 76 | 54 | 8 |
| Yield per acre | 3.6 tons | 61.0 bu. | 37.9 |
| Price per unit | \$ 40.00 | \$ 1.10 | \$ 4.00 |
| Total return | \$144.00 | \$ 67.10 | \$151.60 |
| Fertilizer | \$ 8.30 | \$ 3.29 | \$ 6.95 |
| Seeds, herbicides, etc. | 9.84 | 4.82 | 12.23 |
| Total listed costs | \$ 18.14 | \$ 8.11 | \$ 19.18 |
| Return above listed costs | \$125.86 | \$ 58.99 | \$132.42 |

## EXPLANATION OF "WORK UNITS" AND "ANIMAL UNITS"

The total "work units" for any one farm is a measure of the size of that farm business. A work unit, as used in this report, is the average accomplishment of a farm worker, in a ten-hour day, working on crops and productive livestock at average efficiency, or ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of crop are presented in table 14.

Table 14. Number of Work Units for Each Class of Livestock and Each Acre of Crop

|  | Number of work units |  | Number of work units |
| :---: | :---: | :---: | :---: |
| Dairy cows | 7.0 per cow | Small grain | . 3 per acre |
| Other dairy cattle | 1.2 per head | Sugar beets | 1.8 per acre |
| Beef breeding herd | 1.5 per cow | Sweet corn | . 7 per acre |
| Feeder cattle | .12 per 100 lbs . | Corn husked | . 6 per acre |
| Sheep, farm flock | . 6 per ewe | Corn silage | . 8 per acre |
| Sheep, feeders | . 3 per 100 lbs . | Potatoes | 4.0 per acre |
| Hogs | . 12 per 100 lbs . | Alfalfa hay | . 6 per acre |
| Turkeys | . 1 per 100 1bs. | Soybean hay | . 6 per acre |
| Hens | 5.0 per 100 hens | Other hay crops | . 4 per acre |
| Canning peas | . 3 per acre | Labor off the farm | 1.0 per $\$ 25$ |
| Soybeans for grain | . 5 per acre |  |  |

Table 15. Factors of Costs and Returns from Dairy Cows, 1973

| Item | Average of 75 farms | 15 farms highest in butterfat per cow | 15 farms 1owest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| Pounds of milk per cow | 12228 | 14535 | 8949 |
| Percent butterfat in milk | 3.7 | 3.8 | 3.9 |
| Pounds of butterfat per cow | 457 | 548 | 345 |
| Price received per pound of BF sold | \$ 1.73 | \$ 1.72 | \$ 1.66 |
| Price received per cwt, of milk sold | 6.50 | 6.51 | 6.51 |
| Value of produce per cow: |  |  |  |
| Dairy product sales | \$779.23 | \$930.30 | \$564.35 |
| Dairy produce used in home | 5.65 | 4.88 | 6.66 |
| Milk fed to livestock | 7.27 | 7.50 | 6.32 |
| Net increase in value of cows | 35.42 | 65.04 | 16.40 |
| TOTAL VALUE PRODUCED | \$827.57 | \$1007.72 | \$593.73 |
| Feed cost per cow: |  |  |  |
| Concentrates | \$226.73 | \$250.97 | \$161.15 |
| Roughages | 144.99 | 153.61 | 131.11 |
| Pasture | 10.00 | 10.10 | 16.04 |
| TOTAL FEED COST | \$381.72 | \$414.68 | \$308.30 |
| Return above feed cost per cow | \$445.85 | \$593.04 | \$285.43 |
| RETURNS FOR \$100 OF FEED | \$222 | \$249 | \$201 |
| Feeds per cow, 1bs.: |  |  |  |
| Corn | 5239 | 5835 | 3928 |
| Small grain | 528 | 509 | 296 |
| Commercial feeds | 527 | 564 | 354 |
| Total concentrates | 6294 | 6908 | 4578 |
| Total hay | 7018 | 7901 | 6600 |
| Sil age | 7987 | 7028 | 6465 |
| Feed cost per pound of butterfat | \$ . 84 | \$ . 76 | \$ . 89 |
| Feed cost per cwt. of milk | 3.17 | 2.87 | 3.53 |
| Number of cows* | 40.5 | 44.6 | 30.0 |

* All dairy cows which have at some time in the past freshened are included in the dairy herd and affect the average number of cows used in computing this table.

Table 16. Feed Costs and Returns from Other Dairy Cattle, 1973

| Item | Average of 75 farms | 15 farms highest in butterfat per cow | 15 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| NET INCREASE IN VALUE OF OTHER DAIRY CATtLe | \$198.63 | \$235.08 | \$154.86 |
| TOTAL FEED COST PER HEAD | \$111.61 | \$104.90 | \$100.04 |
| RETURNS ABOVE FEED COST PER HEAD | \$ 87.02 | \$130.18 | \$ 54.82 |
| RETURNS FOR \$100 OF FEED | \$191 | \$232 | \$180 |
| Feed per head, 1bs.: |  |  |  |
| Concentrates | 1466 | 1282 | 1202 |
| Hay | 2251 | 2017 | 2239. |
| Silage | 2849 | 2608 | 2917 |
| Whole milk | 84 | 98 | 74 |
| Number of head of other dairy cattle | 55.3 | 62.1 | 42.3 |

Table 17. Feed Costs and Returns from All Dairy Catt1e, 1973

| Item | Average of 75 farms | 15 farms highest in butterfat per cow | 15 farms lowest in butterfat per cow |
| :---: | :---: | :---: | :---: |
| Value of produce per cow: |  |  |  |
| Dairy products | \$784.87 | \$935.18 | \$571.02 |
| Net increase in value of dairy cattle | 317.76 | 399.35 | 237.17 |
| TOTAL VALUE PRODUCED | \$1102.63 | \$1334.53 | \$808.19 |
| TOTAL FEED COSTS PER COW | \$532. 21 | \$555.11 | \$446.51 |
| RETURNS ABOVE FEED COST PER COW | \$570.42 | \$779.42 | \$361.68 |
| RETURNS FOR \$100 OF FEED | \$ 212 | \$ 245 | \$ 191 |
| Feed per cow, lbs.: |  |  |  |
| Concentrates | 8490 | 8881 | 6394 |
| Hay | 10161 | 10777 | 9807 |
| Silage | 11911 | 10489 | 10880 |
| Miscellaneous costs per cow | \$50.81 | \$73.19 | \$34.81 |

Table 18. Feed Costs and Returns from Hogs, 1973

| Item | Average <br> of 51 <br> farms | Farms with breeding stock |  |  | 11 farmswithpurchasedfeeder pigs |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ```Average of 40 farms``` | 8 farms highest in returns above feed | ```farms lowest in returns above feed``` |  |
| Pounds of hogs produced | 130788 | 151835 | 146712 | 80179 | 54250 |
| Net increase in value per cwt. produced | \$42.26 | \$44.13 | \$51. 22 | \$39.96 | \$35.50 |
| Feed cost per cwt. produced | 20.77 | 21.34 | 19.25 | 27.34 | 18.75 |
| Return above feed cost per cwt. produced | \$21.49 | \$22.79 | \$31.97 | \$12.62 | \$16.75 |
| RETURNS FOR \$100 OF FEED | \$213 | \$215 | \$267 | \$151 | \$203 |
| Price received per cwt. sold | \$41.28 | \$41.30 | \$46. 22 | \$39.08 | \$41.19 |
| Weight per hog sold | 233 | 235 | 217 | 245 | 224 |
| Miscellaneous costs per cwt. produced | \$ . 58 | \$ . 61 | \$ . 73 | \$ . 54 | \$ . 36 |
| Feed per cwt. hogs produced, 1bs.: |  |  |  |  |  |
| Corn | 385 | 397 | 388 | 542 | 342 |
| Small grain | 19 | 20 | 16 | 26 | 14 |
| Commercial feeds* | 72 | 75 | 72 | 84 | 61 |
| Total concentrates | 476 | $\frac{792}{}$ | 476 | 652 | 417 |
| Total number of litters raised | 72 | 92 | 90 | 52 | 1 |
| Number of pigs born per litter | 8.7 | 8.8 | 9.0 | 7.6 | 6.0 |
| Number of pigs weaned per litter | 7.2 | 7.2 | 7.1 | 6.3 | 5.6 |
| Number of feeder pigs purchased | 72 | 19 | - | - | 265 |
| Total weight of feeders purchased | 2991 | 812 | - | - | 10916 |
| Price paid per feeder pig | \$31.93 | \$30.06 | - | - | \$32.31 |

* This includes purchased complete feeds which have not been divided between corn, small grain and protein feeds.

Table 19. Feed Costs and Returns from Beef Breeding Herd, 1973

| Item | Average of 7 farms |
| :---: | :---: |
| TOTAL VALUE PRODUCED PER COW | \$208.89 |
| Feed cost per cow: |  |
| Concentrates | \$ 44.17 |
| Roughages | 72.79 |
| Pasture | 30.66 |
| TOTAL FEED COST | \$147.62 |
| RETURNS ABOVE FEED COST PER COW | \$ 61.27 |
| RETURNS FOR \$100 OF FEED | \$154 |
| Miscellaneous costs per cow | \$ 5.46 |
| Feed per cow, 1bs.: |  |
| Concentrates | 1310 |
| Hay | 4060 |
| Silage | 2378 |
| Pounds of beef produced | 16281 |
| Number of cows | 33.7 |
| Number of other beef cattle | 31.8 |

Table 20. Feed Costs and Returns from Feeder Cattle, 1973

| Item | Average of 18 farms |
| :---: | :---: |
| Pounds of beef produced | 55355 |
| net increase in value of feeders per cwt. of BEEF PRODUCED | \$50.29 |
| Feed cost per cwt. beef produced: |  |
| Concentrates | \$26.56 |
| Roughages | 8.89 |
| Pasture | . 78 |
| TOTAL FEED COST | \$36.23 |
| Returns above feed cost per cht. beef produced | \$14.06 |
| RETURNS FOR \$100 OF FEED | \$143 |
| Miscellaneous costs per cwt. of beef produced | \$ . 82 |
| Feed per cwt. beef produced, lbs.: |  |
| Corn | 732 |
| Smal1 grain | 6 |
| Commercial feeds | 46 |
| Total concentrates | 784 |
| Total hay | 333 |
| Silage | 781 |
| Price paid per cwt. of beef bought | \$51.04 |
| Price received per cwt. of feeder cattle sold | \$43.58 |
| Number of animal units | 88.7 |

Table 21. Feed Costs and Returns from a Farm Flock of Sheep, 1973

| Item | Average of 7 farms |
| :---: | :---: |
| Value of produce per ewe: |  |
| Wool | \$11.00 |
| Net increase in value of sheep | 37.44 |
| TOTAL VALUE PRODUCED | \$48.44 |
| Feed cost per ewe: |  |
| Concentrates | \$12.78 |
| Roughages | 14.17 |
| Pasture | 5.50 |
| TOTAL FEED COST PER EWE | \$32.45 |
| RETURNS ABOVE FEED COST PER EWE | \$15.99 |
| RETURNS FOR \$100 OF FEED | \$152 |
| Miscellaneous costs per ewe | \$ 2.68 |
| Feeds per ewe, Ibs.: |  |
| Concentrates | 357 |
| Hay | 945 |
| Silage | - |
| Price received per cwt. of lambs sold | \$38.59 |
| Price received per pound of wool sold | \$ 1.08 |
| Pounds of wool per sheep sheared | 8.5 |
| Percent 1amb crop* | 118 |
| Percent death loss* | 8.0 |
| Pounds of sheep produced | 3104 |
| Number of ewes | 31 |

[^4]Table 22. Summary by Years

| Item | Average $1945-49$ | $\begin{array}{ll} \hline \text { Average } & \text { A } \\ 1950-54 & 1 \end{array}$ | $\begin{aligned} & \hline \text { Average } \\ & 1955-59 \end{aligned}$ | Average 1960-64 | $\begin{aligned} & \hline \text { Average } \\ & 1965-69 \\ & \hline \end{aligned}$ | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 169 | 162 | 165 | 158 | 134 | 113 | 113 | 114 | 118 |
| Total farm capital managed | \$31402 | \$42663 | \$49342 | \$60988 | \$84088 | \$107724 | \$120511 | \$137338 | \$174068 |
| Monthly charge for: |  |  |  |  |  |  |  | 300 | - |
| Unpaid family labor* | 113 | 125 | 133 | 147 | 160 | 250 | 300 | 300 | 350 |
| Second operator* | 113 | 125 | 133 | 187 | 295 | 500 | 600 | 600 | ** |
| Board for hired labor* | 33 | 36 | 38 | 40 | 45 | 60 | 60 | 60 | 75 |
| FARM EXPENSES |  |  |  |  |  |  |  |  |  |
| Dairy cattle bought | \$ 285 | \$ 314 | \$ 235 | \$ 265 | \$ 398 | \$ 521 | \$ 544 | \$ 363 |  |
| Beef cattle bought | 200 | 588 | 913 | 1185 | 791 | 908 | 2228 | 2536 | 3768 |
| Hogs bought | 194 | 202 | 258 | 386 | 504 | 616 | 534 | 751 | 1523 |
| Sheep bought (incl. feeders) | 64 | 35 | 143 | 88 | 7 | 7 73 | 10 | 11 | 4 |
| Poultry bought (inc1. turkeys) | 176 | 154 | 124 | 154 | 110 | 73 | 50 | 9 | 24 7 |
| Horses bought | 14 | 6 | 6 | 2 | 1 | 1347 | 1468 | 1662 | 7 1978 |
| Miscellaneous livestock expense | 228 | 359 | 530 | 731 | 947 | 1347 | 1468 | 1662 | 1978 |
| Fertilizers bought | - | - ${ }^{-}$ | 877 | 1085 | 1978 | 2250 | 2686 | 2940 | 4286 |
| Miscellaneous crop expenses | 701 *** | * 1010*** | * 651 | 926 | 1878 | 2593 | 2966 | 3341 | 4869 |
| Feed bought | 1954 | 2241 | 2747 | 3735 | 4279 | 5001 | 4539 | 5975 | 10372 |
| Custom work hired | 401 | 552 | 745 | 857 | 1295 | 1744 | 1868 | 1908 | 2023 |
| Power \& crop machinery (new) | 1282 | 1744 | 1825 | 1803 | 3538 | 4565 | 4902 | 6434 | 9096 |
| Power \& crop machinery (upkeep) | 1208 | 1550 | 1937 | 2378 | 2712 | 3737 | 3970 | 4254 | 5444 |
| Livestock equipment (new) | 111 | 202 | 347 | 412 | 658 | 986 | 1154 | 954 | 1544 |
| Livestock equipment (upkeep) | 86 | 113 | 152 | 171 | 225 | 345 | 380 | 440 | 649 |
| Buildings and fencing (new) | 778 | 983 | 982 | 1229 | 1930 | 2948 | 2801 | 3909 | 3648 |
| Buildings and fencing (upkeep) | 323 | 368 | 320 | 344 | 436 | 573 | 621 | 684 | 994 |
| Hired labor | 849 | 857 | 878 | 922 | 1123 | 1730 | 1838 | 1895 | 2335 |
| Taxes | 392 | 633 | 861 | 1301 | 1589 | 1921 | 2384 | 2129 | 2287 |
| General farm expense | 150 | 239 | 316 | 409 | 555 | 769 | 786 | 901 | 1069 |
| Total farm purchases | \$ 9396 | \$12150 | \$14847 | $\overline{\$ 18383}$ | \$24954 | \$32634 | \$35730 | \$41096 | \$56447 |
| Decrease in farm capital | - | - | - | - | - | - | - | - | - |
| Interest on farm capital $* * * *$ | 1570 | 2133 | 2467 | 3049 | 4482 | 6463 | 7231 | 8240 | 10444 |
| Unpaid family labor | 511 | 496 | 540 | 629 | 815 | 1171 | 1405 | 1532 | 8186 |
| Board furnished hired labor | 174 | 166 | 134 | 101 | 64 | 55 | 64 | 45 | 5 515 |
| Total farm expense | \$11651 | \$14945 | \$17988 | \$22162 | \$30315 | \$40323 | \$44430 | \$50913 | \$75132 |

[^5]Table 22. Summary by Years (continued)

| Item 1 | $\begin{aligned} & \text { Average } \\ & 1945-49 \end{aligned}$ | Average 1950-54 | $\begin{gathered} \hline \text { Average } \\ 1955-59 \end{gathered}$ | $\begin{aligned} & \hline \text { Average } \\ & 1960-64 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & 1965-69 \end{aligned}$ | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARM RECEIPTS |  |  |  |  |  |  |  |  |  |
| Dairy cattle sold | \$ 1406 | \$ 1680 | \$ 1641 | \$ 2061 | \$ 3246 | \$ 3676 | \$ 3952 | \$ 4694 | \$ 5855 |
| Dairy products sold | 4080 | 4702 | 6032 | 8105 | 11631 | 16686 | 17478 | 17262 | 20694 |
| Beef cattle sold | 616 | 1301 | 1891 | 2688 | 2148 | 3030 | 4555 | 5319 | 6310 |
| Hogs sold | 3598 | 4253 | 4653 | 5961 | 7973 | 9069 | 6932 | 12516 | 22993 |
| Sheep and wool sold | 232 | 171 | 272 | 222 | 95 | 82 | 96 | 111 | 118 |
| Poultry (incl. turkeys) sold | 672 | 354 | 212 | 88 | 82 | 19 | 14 | 8 | 13 |
| Eggs sold | 1319 | 1297 | 1075 | 1015 | 732 | 225 | 130 | 90 | 85 |
| Horses sold | 20 | 14 | 8 | 4 | 1 | - | - | 1 | 1 |
| Corn sold | 335 | 766 | 1926 | 1594 | 2467 | 4844 | 4822 | 5255 | 11136 |
| Soybeans sold | - | - | - | - | 1689 | 2762 | 2936 | 4464 | 7991 |
| Small grain sold | 659 | 495 | 481 | 624 | 492 | 421 | 356 | 259 | 494 |
| Other crops sold* | 819 | 853 | 1334 | 2181 | 2582 | 2208 | 2600 | 4023 | 2568 |
| Mach. \& equip. sold \& gas tax refu | und 261 | 328 | 271 | 323 | 379 | 458 | 430 | 348 | 397 |
| Income from work off the farm | 178 | 182 | 269 | 239 | 432 | 399 | 346 | 484 | 889 |
| Miscellaneous farm income | 267 | 356 | 458 | 559 | 1022 | 1435 | 1100 | 1508 | 1768 |
| Total farm sales | \$14462 | \$16752 | \$20523 | \$25664 | \$34971 | \$45314 | \$45747 | \$56342 | \$81312 |
| Increase in farm capital | 1411 | 1905 | 941 | 601 | 3516 | 3814 | 5698 | 10109 | 33825 |
| Family living from the farm | 715 | 620 | 304 | 307 | 321 | 373 | 341 | 380 | 526 |
| Total farm receipts | \$16588 | \$19277 | \$21768 | \$26572 | \$38808 | \$49501 | \$51786 | \$66831 | \$115663 |
| Total farm expenses | 11651 | 14945 | 17988 | 22162 | 30515 | 40323 | 44430 | 50913 | 75132 |
| Labor and management earnings | \$ 4937 | \$ 4332 | \$ 3780 | \$ 4410 | \$8293 | \$ 9178 | \$ 7356 | \$15918 | \$ 40531 |
| MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY |  |  |  |  |  |  |  |  |  |
| Percent land in high return crops** | ** 50.9 | 62.8 | 62.7 | 60.1 | 60.5 | 63.6 | 66.1 | 64.8 | 65.3 |
| Livestock units per 100 acres ${ }^{*} * *$ | 22.8 | 28.9 | 33.7 | 36.4 | 34.3 | 34.3 | 32.9 | 33.1 | 36.9 |
| Work units**** | 601 | 535 | 486 | 548 | 505 | 431 | 443 | 446 | 482 |
| Work units per worker**** | 300 | 284 | 274 | 318 | 305 | 254 | 261 | 262 | 284 |
|  | \$4.69 | \$8.18 | \$10.81 | \$11.61 | \$17.99 | \$27.86 | \$29.72 | \$31.75 | \$38.89 |

[^6]Table 23. Summary of Miscellaneous Items by Years.

| Item | Average $1945-49$ | Average $1950-54$ | $\begin{gathered} \text { Average } \\ 1955-59 \end{gathered}$ | Average 1960-64 | $\begin{aligned} & \text { Average } \\ & 1965-69 \end{aligned}$ | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RETURN ABOVE FEED COST PER |  |  |  |  |  |  |  |  |  |
| Dairy cow | \$161.27 | \$156.86 | \$162.86 | \$183.05 | \$266.74 | \$373.65 | \$383.61 | \$417.68 | \$445.85 |
| 100 lbs . feeder cattle produced | 6.40 | 7.37 | 4.76 | 1.78 | 5.08 | 3.78 | 9.62 | 17.82 | 14.06 |
| Ewe | 11.16 | 9.47 | 6.18 | 5.40 | 7.52 | 11.29 | 10.82 | 16.75 | 15.99 |
| 100 1bs. hogs produced | 6.09 | 6.47 | 4.62 | 4.57 | 8.86 | 5.17 | 6.05 | 14.17 | 21.49 |
| Hen | 2.11 | 1.60 | 1.39 | 1.27 | . 84 | . 59 | -. 54 | . 14 | 1.67 |
| FEED COST PER |  |  |  |  |  |  |  |  |  |
| Dairy cow | \$123.22 | \$142.59 | \$147.05 | \$169.62 | \$215.79 | \$246.53 | \$253.73 | \$257.59 | \$381.72 |
| 100 lbs. feeder cattle produced | 23.08 | 19.46 | 18.83 | 19.10 | 21.60 | 22.08 | 22.08 | 22.10 | 36.23 |
| Ewe | 8.07 | 10.73 | 11.17 | 13.46 | 19.51 | 23.69 | 23.16 | 24.58 | 32.46 |
| 100 lbs . hogs produced | 13.23 | 12.95 | 10.65 | 10.65 | 11.90 | 12.06 | 12.60 | 12.88 | 20.77 |
| Hen | 4.39 | 4.76 | 3.78 | 3.28 | 3.31 | 2.97 | 3.00 | 2.78 | 4.27 |
| MISCELTANEOUS LIVESTOCK INFORMATION |  |  |  |  |  |  |  |  |  |
| Number of dairy cows | 17.0 | 17.7 | 19.8 | 22.2 | 24.2 | 26.7 | 27.2 | 25.7 | 25.8 |
| Pounds of feeder cattle produced | 813 | 2118 | 3529 | 5573 | 4308 | 5784 | 7013 | 7211 | 8593 |
| Litters of pigs | 11.7 | 13.5 | 17.3 | 19.4 | 19.7 | 22.0 | 18.4 | 24.3 | 34.3 |
| Pounds of hogs produced | 18505 | 17579 | 28272 | 36619 | 36519 | 36039 | 35542 | 47090 | 56762 |
| Number of hens | 235 | 219 | 209 | 197 | 138 | 47 | 32 | 23 | 14 |
| Pounds of butterfat per dairy cow | - 278 | 308 | 342 | 375 | 417 | 457 | 453 | 461 | 457 |
| Pigs weaned per litter | 6.5 | 6.7 | 6.9 | 7.1 | 7.3 | 7.3 | 7.2 | 7.2 | 7.2 |
| Number of head of ewes | 7 | 7 | 5 | 4 | 3 | 2 | 2 | 2 | 2 |
| Eggs per hen | 177 | 194 | 203 | 205 | 201 | 187 | 197 | 198 | 168 |

Table 23. Summary of Miscellaneous Items by Years (continued)

| Item | Average $1945-49$ | Average $1950-54$ | $\begin{aligned} & \text { Average } \\ & 1955-59 \end{aligned}$ | Average 1960-64 | $\begin{aligned} & \hline \text { Average } \\ & \text { 1965-69 } \end{aligned}$ | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRICE RECEIVED PER |  |  |  |  |  |  |  |  |  |
| Pound of butterfat in milk | \$ . 92 | \$. 90 | \$ . 90 | \$ . 94 | \$ 1.15 | \$ 1.36 | \$ 1.40 | \$ 1.43 | \$ 1.73 |
| Cwt. of milk | * | * | * | 3.48 | 4.31 | 5.09 | 5.27 | 5.47 | 6.50 |
| Cwt. of hogs sold | 19.36 | 19.54 | 15.99 | 15.55 | 20.89 | 21.93 | 18.02 | 26.13 | 41.28 |
| Cwt. of feeder cattle sold | 20.56 | 26.22 | 21.19 | 22.61 | 24.02 | 27.44 | 28.57 | 33.48 | 43.58 |
| Pound of wool sold | . 43 | . 58 | . 50 | . 62 | . 56 | . 45 | . 62 | . 86 | 1.08 |
| Dozen of eggs sold | . 39 | . 37 | . 31 | . 28 | . 28 | . 29 | . 25 | . 25 | . 46 |
| PRICE OF FEED |  |  |  |  |  |  |  |  |  |
| Corn (per bu.) | \$ 1.29 | \$ 1.31 | \$ 1.11 | \$ . 99 | \$ 1.10 | \$ 1.15 | \$ 1.17 | \$ 1.08 | \$ 1.70 |
| Barley (per bu.) | 1.31 | 1.16 | . 92 | . 91 | . 97 | . 85 | . 90 | . 92 | 1.55 |
| Oats (per bu.) | . 75 | . 74 | . 59 | . 61 | . 62 | . 60 | . 62 | . 65 | . 90 |
| Oilmeal (per cwt.) | 3.84 | 4.19 | 3.73 | 4.36 | 4.99 | 5.00 | 5.00 | 6.35 | 13.50 |
| Alfalfa (per ton) | 18.40 | 18.30 | 18.20 | 19.40 | 20.80 | 20.00 | 20.00 | 21.00 | 30.00 |
| Timothy hay (per ton) | 10.84 | 10.58 | 10.58 | 11.22 | 12.00 | 11.60 | 11.60 | 11.60 | 18.70 |
| Corn silage (per ton) | 5.71 | 6.01 | 6.08 | 6.60 | 7.36 | 7.25 | 7.25 | 7.25 | 10.00 |
| ACRES PER FARM |  |  |  |  |  |  |  |  |  |
| Small grains | 57.5 | 48.5 | 36.1 | 34.5 | 30.4 | 28.0 | 25.8 | 23.4 | 24.3 |
| Cultivated crops | 56.3 | 65.2 | 90.9 | 103.6 | 132.4 | 152.3 | 170.3 | 175.7 | 215.3 |
| Tillable land in hay | 29.8 | 38.5 | 37.6 | 39.4 | 40.0 | 43.7 | 46.5 | 41.3 | 41.4 |
| Tillable. land in pasture | 20.8 | 22.3 | 20.0 | 16.6 | 12.8 | 11.4 | 10.5 | 8.6 | 8.6 |
| Tillable land not cropped** | 1.7 | . 9 | 1.9 | 14.4 | 22.0 | 22.8 | 22.4 | 37.7 | 8.2 |
| Total tillable land | 166.1 | 175.4 | 186.5 | 208.5 | 237.6 | 258.2 | 275.5 | 286.7 | 297.8 |
| Non-tillable land | 57.4 | 50.0 | 48.2 | 47.3 | 46.3 | 48.7 | 48.4 | 51.5 | 47.1 |
| Total acres per farm | $\underline{223.5}$ | 225.4 | 234.7 | 255.8 | 283.9 | 306.9 | $\overline{323.9}$ | 338.2 | 344.9 |
| YIELD PER ACRE |  |  |  |  |  |  |  |  |  |
| Corn (bu.) | 47.6 | 59.8 | 73.1 | 72.4 | 86.8 | 96.7 | 96.2 | 101.1 | 109.3 |
| Barley (bu.) | 30.8 | 29.1 | 41.4 | 44.9 | 51.4 | 48.4 | 38.6 | 53.4 | 54.8 |
| Oats (bu.) | 48.2 | 32.8 | 58.3 | 58.3 | 62.4 | 55.6 | 61.4 | 66.6 | 61.0 |
| Alfalfa (tons) | 2.3 | 2.7 | 2.9 | 3.0 | 3.2 | 3.6 | 3.6 | 3.6 | 3.6 |
| Soybeans (bu.) | 16.4 | 19.6 | 24.8 | 23.6 | 24.4 | 29.5 | 25.7 | 30.9 | 33.0 |

[^7]
[^0]:    * The authors are indebted to Dorothy Spreck and Eileen Miley for their assistance in the preparation of this report.

[^1]:    * Includes labor earnings for partners above one full-time individual.

[^2]:    * Hired help or others boarded.
    ** A11 farmers did not report amount of state and federal income taxes.

[^3]:    * Hired help or others boarded.

[^4]:    * Lambs which die during month of birth are not included.

[^5]:    * These adjustments should be considered in comparing 1973 with previous years.
    ** Labor earnings was divided between the various partners.
    *** Includes fertilizer.
    ti**: Interest was calculated at the rate of $5 \%$ on capital managed from 1940 to 1966 , at $5.5 \%$ from 1967 to 1969 , and at 6\% in 1970-73.

[^6]:    * Includes soybeans 1945-1965
    ** The crop ratings used in calculating the percentage of the tillable land in high return crops were considerably changed in 1957.
    *** The basis for computing animal units was revised in 1951.
    \%*** The basis for computing work units was revised in 1953 and 1967.

[^7]:    * Information not available.
    ** Including feed grain program.

