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Report  
of a  
Farm Management Survey  
of  
130 Dairy Farms  
in  
Freeborn, Steele, and Waseca  
Counties

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Name: \_\_\_\_\_

Mimeographed Report No. 79  
Division of Agricultural Economics  
University Farm  
St. Paul, Minnesota  
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Report of a Farm Management Survey of 130 Dairy Farms in  
Freeborn, Steele and Waseca Counties

Prepared by W. P. Ranney and G. A. Pond

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INTRODUCTION

The Division of Agricultural Economics of the University of Minnesota in cooperation with the United States Department of Agriculture made a survey of 130 dairy farms in southeastern Minnesota the past summer. In addition to information covering the receipts and expenses of the farm, considerable data covering crop and livestock organization, livestock feeds, labor expended on the dairy herd, crop and livestock practices, building and machinery equipment, and soil conservation needs and practices were obtained. These records covered the year ending April 30, 1936. This report is designed primarily for the purpose of presenting some of the results of this study for the benefit of the farmers who so generously gave of their time at a very busy season of the year. In the reports sent to these farmers each individual's figures are written into the column headed "your farm". For each item the averages for the entire group and for the most successful and the least successful farmers are given. This should enable each individual cooperating in this study to see how he compares with his neighbors in the success with which he operates the various parts of his farm business, as well as, to indicate some of the factors accounting for his success or his failure to achieve it. Additional reports of other phases of this survey study will appear at later dates.

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1/ A similar survey was made on 120 dairy farms in east central Minnesota. Mimeographed Report No. 80 presents an analysis of the farm businesses for those 120 farms in a manner similar to that used in this report.

This report closely parallels in form the annual reports of the South-eastern Minnesota Farm Management Service. Since most of the information was obtained by interview rather than from records the authors do not claim the same degree of accuracy or completeness that characterizes the reports just mentioned. Cream receipts, since they were taken from the creamery records are accurate. The accuracy of other items are limited by the farmers' memory and the skill of the interviewer in asking questions. A simple practical system of accurately supervised farm records is available to farmers in this area for a very nominal fee. Some of the farmers included in this survey are already getting this service. It is suggested that any others interested get in touch with their county agent or with the Division of Agricultural Extension, University Farm, St. Paul.

This survey is a part of the general study of interregional competition in dairying, which is under the supervision of Sherman Johnson of the Bureau of Agricultural Economics at Washington, D. C. The collection of the data and analysis of the records are under the direction of G. A. Pond and W. P. Ranney of the Division of Agricultural Economics, University of Minnesota. The data were collected by the following agents representing both the United States Department of Agriculture and the University of Minnesota: Raymond Burkholder, Clarence Hemming, Raymond W. Palmby, and Harold Peterson. B. R. Hurt of the United States Department of Agriculture assisted in checking the records.

Hearty support and assistance were rendered by the county agricultural agents W. M. Lawson, C. F. Murphy, and G. A. Strobel. The Agricultural Extension Division of the University of Minnesota is cooperating in the publication and distribution of this report.

#### LOCATION OF AREA

The farms surveyed are located in the northwestern corner of Freeborn County, the southwestern corner of Steele County, and the southeastern corner of Waseca County. The location of the farms by townships is as follows:

| <u>Freeborn County</u> |              | <u>Steele County</u> |              | <u>Waseca County</u> |              |
|------------------------|--------------|----------------------|--------------|----------------------|--------------|
| Township               | No. of farms | Township             | No. of farms | Township             | No. of farms |
| Freeborn               | 28           | Lemond               | 23           | New Richland         | 21           |
| Carlston               | 11           | Berlin               | 19           | Otisco               | 13           |
| Manchester             | 3            |                      |              | Wilton               | 7            |
|                        |              |                      |              | Byron                | 3            |

#### TYPE OF FARMING

The farms included in this survey are livestock farms on which dairy cattle are the principal source of income. The butterfat is sold as cream for manufacture into butter, through farmer owned cooperative creameries specializing in the manufacture of high quality butter. The skim milk is retained on the farm and fed to hogs and poultry. These two classes of livestock are also an important source of income.

The principal crops grown are corn, oats, barley, and hay. These crops are raised primarily as livestock feed although a seasonal surplus may be sold. Wheat, flax, sweet corn, sugar beets and potatoes are grown to a limited extent as cash crops.

This report shows that the receipts from the sales of dairy products constituted over one-fourth, and the receipts from hog sales (not including A.A.A. adjustment payments) over one-fourth of the average cash income of the 130 farmers included in this report. These farms are fairly typical of the system of dairy farming prevailing in southeastern Minnesota.

#### CLIMATE, SOIL, AND TOPOGRAPHY

On account of the severe drouth of 1934, the supply of feed on these farms on May 1, 1935 was below normal. Weather conditions and crop yields in 1935, however, were approximately normal.

A rich black clay loam predominates on these farms. There is a little peat and sandy loam on a few farms. Applications of lime are unnecessary in order to grow alfalfa and sweet clover.

Some of the farms are level, all tillable, and well drained, but most of them are gently rolling with some land too rough or too wet to cultivate.

#### ANALYSIS OF THE FARM BUSINESS

The main purpose of the farm business analysis is to present each farmer's data and information in such a way that he can compare it with that secured on other farms. Thereby he is enabled to study his efficiency in various enterprises and to organize his farm on a more profitable basis. For the latter purpose, it was necessary for all of the farmers, tenants as well as owner-operators to include the whole farm business in order that the results would be on a comparative basis. The earnings as shown in this report are computed as if each farm was owned by its operator.

On pages 5 to 7 are presented financial summaries of the year's business, showing the average results for the 130 farms, the average results for the highest one-fifth of the farms in respect to Operator's Labor Earnings, and likewise for the lowest one-fifth.

The data on pages 8 to 20 should suggest to each cooperator some possibilities for improvement in his production, control of expenses, and in his organization of the various enterprises and of the business as a whole. Each farm is an individual problem and has its particular advantages and limitations in respect to natural resources and markets. However, there are certain general factors related to financial success on these farms.

#### CAPITAL INVESTMENT IN FARM BUSINESS

The average size of the farms in this report is 156 acres. The average farm inventory was \$13,734. This does not include the value of the house in which the operator lived, which amounted to \$2,106. In 1935, 53 percent of the average farm inventory consisted of land, 21 percent of permanent improvements, 2 per cent of feeds and supplies, 9 per cent of machinery and equipment, and 15 per cent of livestock, of which over one-third of an average of \$765 was the average inventory value of milk cows.

#### RETURNS TO OPERATORS FOR THEIR LABOR AND MANAGEMENT

The average cash receipts per farm were \$3,040. In addition, farm produce to the value of \$256 was consumed by the farm family and there was an average inventory increase of \$520 per farm. The total average receipts per farm is the sum of

these three items, \$3,816. The average total expense per farm, \$1,364, includes \$1,293 cash expenses and an estimated allowance of \$71 for board of hired labor. The difference between the total income and total expense figure is \$2,452. This is the return which the farmer received for his own labor and management, the services of members of his family and the use of his capital. After deducting a charge of 5 per cent on the average inventory valuation, \$687, for the services of capital, there remains \$1,765 for the services of the farmer and his family. The average value of family labor used, if computed at hired man's wages, was \$298. The average operator's labor earnings are the family earnings less their allowance of \$298, or \$1,467. This is the return to the farmer for his labor and management over and above a 5 per cent return for his capital and going wages for other members of the family.

Summary of Farm Inventories

| Items                                   | Your farm | Average of 130 farms | 26 most profitable farms | 26 least profitable farms |
|---|-----------|----------------------|--------------------------|---------------------------|
| Size of farm (acres)                    | _____     | 156                  | 214                      | 138                       |
| Size of business(days of prod.work( (1) | _____     | 540                  | 760                      | 426                       |
| Average farm inventory (without house)  | _____     | \$13734              | \$17761                  | \$11674                   |
| Land                                    | _____     | 7259                 | 9421                     | 6353                      |
| Farm improvements                       | _____     | 2931                 | 3253                     | 2631                      |
| Machinery & equipment (total)           | _____     | 1239                 | 1736                     | 958                       |
| Gen. machinery & equipment              | _____     | 743                  | 979                      | 549                       |
| Tractor                                 | _____     | 240                  | 404                      | 182                       |
| Truck                                   | _____     | 22                   | 69                       | 11                        |
| Auto (farm share)                       | _____     | 183                  | 219                      | 163                       |
| Electrical equipment (farm share)       | _____     | 51                   | 65                       | 53                        |
| Feeds and seed                          | _____     | \$261                | \$516                    | \$158                     |
| Horses (total)                          | _____     | 531                  | 680                      | 470                       |
| Horses                                  | _____     | 478                  | 621                      | 416                       |
| Colts                                   | _____     | 53                   | 59                       | 54                        |
| Productive livestock (total)            | _____     | \$1513               | \$2155                   | \$1104                    |
| Cows                                    | _____     | 765                  | 997                      | 614                       |
| Other cattle                            | _____     | 308                  | 525                      | 182                       |
| Hogs                                    | _____     | 299                  | 464                      | 187                       |
| Sheep                                   | _____     | 31                   | 51                       | 29                        |
| Poultry                                 | _____     | 110                  | 118                      | 92                        |

(1) Explanation of term, "Days of Productive Work".

The total "Days of Productive Work" for any one farm are a measure of size of that farm business. The average number of "ten-hour days" of man labor required per head of productive livestock and per acre of crops is used in combining the crops and the livestock in one single measure of size of business.

The number of days of productive work for each animal and each acre of crops, computed from labor data presented in Minnesota Technical Bulletin 44, "A Study of Dairy Farm Organization in Southeastern Minnesota", is listed as follows:

| Item              | Per                    | Number of days of prod. work: | Item                 | Per  | Number of days of prod. work |
|-------------------|------------------------|-------------------------------|----------------------|------|------------------------------|
| Cows              | Cow                    | 16.6                          | Small grain and flax | Acre | 1.0                          |
| Other cattle      | Animal unit*           | 7.6                           | Corn (husked)        | "    | 2.1                          |
| Sheep             | Animal unit*           | 2.7                           | Corn (silage)        | "    | 2.6                          |
| Poultry           | 100 hens               | 20.1                          | Corn (fodder)        | "    | 1.8                          |
| Hogs              | 100 lbs. pork produced | .55                           | Corn (hogged)        | "    | 1.25                         |
| Alfalfa           | Acre                   | 1.5                           | Potatoes             | "    | 6.4                          |
| Tame and wild hay | "                      | .6                            |                      |      |                              |

\*Animal unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, 2100 lbs. of hogs produced, or 100 hens.

## Summary of Farm Earnings

| Items                                   | Your<br>farm | Average<br>of 130<br>farms | 26 most<br>profitable<br>farms | 26 least<br>profitable<br>farms |
|---|--------------|----------------------------|--------------------------------|---------------------------------|
| <b>CASH EXPENSES</b>                    |              |                            |                                |                                 |
| Tractor (new & exp.)                    | \$ _____     | 121                        | 341                            | 44                              |
| Truck (new & exp.)                      | _____        | 14                         | 43                             | 11                              |
| Auto (new & exp.) (farm share)          | _____        | 99                         | 132                            | 77                              |
| Electricity (new & exp.) (farm share)   | _____        | 16                         | 28                             | 5                               |
| Machinery and equipment (new)           | _____        | 89                         | 206                            | 22                              |
| Machinery and equipment (exp.)          | _____        | 31                         | 46                             | 23                              |
| Bldgs., fences, tiling (new)            | _____        | 84                         | 61                             | 95                              |
| Bldgs., fences, tiling (exp.)           | _____        | 75                         | 98                             | 60                              |
| Hired labor                             | _____        | 140                        | 243                            | 113                             |
| Feed for livestock                      | _____        | 134                        | 241                            | 80                              |
| Other expenses for livestock            | _____        | 24                         | 35                             | 19                              |
| Horses bought                           | _____        | 30                         | 85                             | 30                              |
| Cows bought                             | _____        | 19                         | 43                             | 5                               |
| Other cattle bought                     | _____        | 57                         | 130                            | 30                              |
| Hogs bought                             | _____        | 26                         | 41                             | 7                               |
| Sheep bought                            | _____        | 4                          | 2                              | 4                               |
| Poultry bought                          | _____        | 22                         | 31                             | 10                              |
| Crop (seed, twine, spray)               | _____        | 106                        | 158                            | 81                              |
| Taxes and insurance                     | _____        | 191                        | 269                            | 167                             |
| General farm                            | _____        | 11                         | 17                             | 6                               |
| (1) Total cash expense                  | \$ _____     | 1293                       | 2250                           | 889                             |
| (2) Decrease in farm inventory          | _____        | -                          | -                              | -                               |
| (3) Board for hired labor               | _____        | 71                         | 109                            | 57                              |
| (4) Total expense (sum of (1),(2)&(3))  | _____        | 1364                       | 2359                           | 946                             |
| <b>CASH RECEIPTS</b>                    |              |                            |                                |                                 |
| Horses                                  | \$ _____     | 48                         | 89                             | 32                              |
| Cows                                    | _____        | 133                        | 201                            | 75                              |
| Dairy products                          | _____        | 872                        | 1178                           | 516                             |
| Other cattle                            | _____        | 232                        | 337                            | 121                             |
| Hogs                                    | _____        | 824                        | 1544                           | 464                             |
| Sheep                                   | _____        | 29                         | 59                             | 20                              |
| Poultry                                 | _____        | 122                        | 155                            | 95                              |
| Eggs                                    | _____        | 225                        | 329                            | 162                             |
| Small grain                             | _____        | 138                        | 298                            | 91                              |
| Corn                                    | _____        | 58                         | 72                             | 95                              |
| Hay                                     | _____        | 8                          | 14                             | 5                               |
| Root crops                              | _____        | 21                         | 63                             | 14                              |
| Other crops                             | _____        | 22                         | 50                             | 14                              |
| Miscellaneous                           | _____        | 51                         | 148                            | 22                              |
| Income from work off the farm           | _____        | 66                         | 154                            | 23                              |
| AAA adjustment payments                 | _____        | 191                        | 365                            | 113                             |
| (5) Total cash receipts                 | \$ _____     | 3040                       | 5056                           | 1862                            |
| (6) Increase in farm inventory          | _____        | 520                        | 1216                           | 107                             |
| (7) Farm produce used in house          | _____        | 256                        | 318                            | 197                             |
| (8) Total receipts (sum of (5),(6)&(7)) | _____        | 3816                       | 6590                           | 2166                            |
| Total expenses (4)                      | _____        | 1364                       | 2359                           | 946                             |
| (9) Ret. to cap.&fam.labor(8) minus(4)  | _____        | 2452                       | 4231                           | 1220                            |
| (10) Interest on farm inventory         | _____        | 687                        | 888                            | 584                             |
| (11) Family labor earnings(9) minus(10) | _____        | 1765                       | 3343                           | 636                             |
| (12) Unpaid family labor                | _____        | 298                        | 263                            | 295                             |
| (13) Operator's labor earnings          | _____        |                            |                                |                                 |
| (11) minus (12)                         | _____        | 1467                       | 3080                           | 341                             |



Summary of Farm Earnings (A)

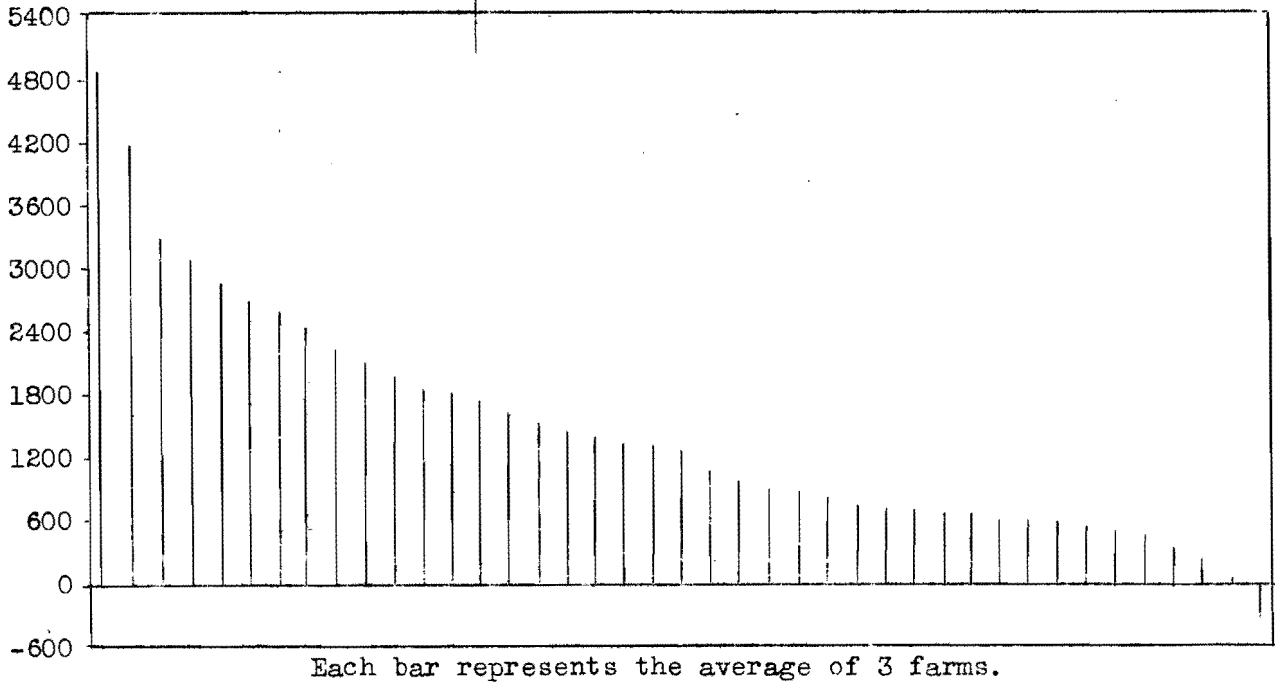
| Items                                      | Your farm | Average of 130 farms | 26 most profitable farms | 26 least profitable farms |
|--|-----------|----------------------|--------------------------|---------------------------|
| <b>EXPENSES AND NET DECREASES</b>          |           |                      |                          |                           |
| Total power                                | \$ _____  | \$474                | \$668                    | \$426                     |
| Hired                                      | _____     | 48                   | 56                       | 41                        |
| Tractor                                    | _____     | 102                  | 186                      | 73                        |
| Truck                                      | _____     | 14                   | 31                       | 12                        |
| Auto (farm share)                          | _____     | 122                  | 125                      | 113                       |
| Elec. plant or current (farm share)        | _____     | 26                   | 45                       | 16                        |
| Horses                                     | _____     | 162                  | 225                      | 171                       |
| General machinery and equipment            | _____     | 118                  | 148                      | 89                        |
| Buildings, fencing, tiling                 | _____     | 149                  | 165                      | 142                       |
| Productive livestock misc. expense         | _____     | 20                   | 30                       | 15                        |
| Crop                                       | _____     | 63                   | 114                      | 48                        |
| Real estate taxes                          | _____     | 150                  | 221                      | 130                       |
| Personal property tax                      | _____     | 18                   | 23                       | 15                        |
| Insurance                                  | _____     | 23                   | 25                       | 22                        |
| General farm                               | _____     | 11                   | 17                       | 6                         |
| Hired labor & board, & unpaid family labor | _____     | 509                  | 615                      | 465                       |
| Interest on farm inventory                 | _____     | 687                  | 888                      | 584                       |
| (1) Total                                  | _____     | 2225                 | 2914                     | 1942                      |
| <b>RETURNS AND NET INCREASES</b>           |           |                      |                          |                           |
| All productive livestock                   | _____     | 2,920                | 4,574                    | 1,777                     |
| Cows                                       | _____     | 1,169                | 1,569                    | 728                       |
| Other cattle                               | _____     | 396                  | 698                      | 226                       |
| Hogs                                       | _____     | 949                  | 1,719                    | 529                       |
| Sheep                                      | _____     | 28                   | 63                       | 14                        |
| Chickens                                   | _____     | 378                  | 525                      | 280                       |
| Crops, feed, vegetables, and fuel          | _____     | 508                  | 900                      | 368                       |
| AAA adjustment payments                    | _____     | 191                  | 365                      | 113                       |
| Miscellaneous                              | _____     | 1                    | 1                        | 0                         |
| Income from work off the farm              | _____     | 72                   | 154                      | 25                        |
| (2) Total                                  | _____     | 3,692                | 5,994                    | 2,283                     |
| Total expenses (1)                         | _____     | 2,225                | 2,914                    | 1,942                     |
| (3) Oper. labor earnings (2) minus (1)     | _____     | 1,467                | 3,080                    | 341                       |

(A) Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases, and total expenses and net decreases. The operator's labor earnings are the same as those on page 6.

Analyzing the Reasons for Differences in Operator's Earnings

The financial statements on the preceding pages show that on the average the farmers included in this study obtained about \$122 per month for their labor and management, or a total for the year of \$1467. The most significant fact in these statements, however, is the wide range in earnings - from \$4807 to a loss of \$513, or a range of \$5320. The following diagram illustrates this fact:

Chart 1. Range of Earnings



Some of the causes for these differences in earnings may be beyond the control of the farmer. It is significant, however, that the data secured from the survey indicate that there are several very definite factors that enable some farmers to make substantial earnings, while others fail to meet expenses. These factors and their relationship with earnings are the following:

Table 1. Relation of Dairy Production to Farm Earnings.

| Group         | Lbs. butterfat per cow<br>Average | No. of<br>Farms | Average<br>Earnings |
|---------------|-----------------------------------|-----------------|---------------------|
| Below 180     | 153                               | 31              | \$ 978              |
| 180 - 249     | 217                               | 68              | 1504                |
| 250 and above | 283                               | 31              | 1877                |

High production per cow tends to lower the cost of producing a pound of butterfat. This is very important on those farms on which butterfat sales are the major source of income.

Table 2. Relation of Returns From Other Productive Livestock to Farm Earnings

| Group        | Returns above feed cost per animal unit<br>of prod. livestock other than cows<br>Average | No. of<br>farms | Average<br>Earnings |
|--------------|--|-----------------|---------------------|
| Below \$ 45  | \$ 24  | 30              | \$ 847              |
| 45 - 89      | 68   | 71              | 1517                |
| 90 and above | 110  | 29              | 1988                |

These farmers have, in addition to the dairy herd, quite an investment in other classes of productive livestock, as young cattle, hogs, sheep, or poultry. Most or all of the feed raised is fed, and considerable additional feed is purchased. High returns per dollar invested in these animals usually accompanies greater profits from the livestock. This means another addition to the farm earnings.

Table 3. Relation of Amount of Productive Livestock to Farm Earnings

| <u>Productive livestock units per 100A.</u> | <u>No. of Farms</u> | <u>Average Earnings</u> |
|---|---------------------|-------------------------|
| Below 15.0                                  | 40                  | \$1240                  |
| 15.0 to 19.9                                | 55                  | 1436                    |
| 20.0 and above                              | 35                  | 1777                    |

If the livestock is yielding a net return, an increased amount of livestock adds to size of business and the opportunity to increase the farm earnings. Livestock produces manure and aids in keeping up the fertility of the land, and utilizes waste products on the farm. Livestock also helps to provide productive employment throughout the year. Any method that aids in utilizing the available resources to full and efficient capacity should add to the farm income.

Table 4. Relation of Crop Yields to Farm Earnings.

| <u>Per cent crop yields were of the average for all the 130 farms</u> |                | <u>No. of Farms</u> | <u>Average Earnings</u> |
|---|----------------|---------------------|-------------------------|
| <u>Group</u>  | <u>Average</u> |                     |                         |
| Below 85  | 78             | 21                  | \$ 975                  |
| 85 - 114  | 99             | 84                  | 1427                    |
| 115 and above   | 121            | 25                  | 2017                    |

High production per acre, up to certain limits, tends to lower the cost per bushel of grain or per ton of hay. Any possible method of management that will increase crop yields and therefore lower cost of production more than the extra expense incurred in securing the higher yields should be given consideration.

Table 5. Relation of Choice of Crops to Farm Earnings.

| <u>Per cent of tillable land in high return crops*</u> |                | <u>No. of Farms</u> | <u>Average Earnings</u> |
|--|----------------|---------------------|-------------------------|
| <u>Group</u>   | <u>Average</u> |                     |                         |
| Below 30.0   | 23.8           | 26                  | \$ 887                  |
| 30.0 to 41.9   | 35.8           | 70                  | 1602                    |
| 42.0 and above   | 45.7           | 34                  | 1635                    |

\* Crops are marked on page 14 as (A), (B), (C), (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 per cent of tillable land in high return crops.

Taking into consideration average crop yields and average prices for crops raised over a period of years it has been found that there are considerable variations in the net returns from crops. This constitutes the basis for the classification of crops into (A), (B), (C) and (D) groups as on page 14 .

It is possible that for certain farms some of the crops should be classified differently. Moreover, the local market situation, or particular conditions of soil, topography, or labor may make it impossible or inadvisable to raise certain crops. However, as shown in Table 5, it is apparent that each farmer can well afford to put as large acreage as possible of his tillable acres in crops that are more profitable, keeping in mind the following suggestions when making selections: the particular purpose of the various crops; the needs of livestock; the effects of the cropping system on future crop yields; its effect on distribution of labor and power requirements throught the year, and the probable future trends in sale values of the various crops.

Table 6. Relation of Size of Business (days of productive work) to Farm Earnings

| Days of productive work |         | No. of | Average  |
|-------------------------|---------|--------|----------|
| Group                   | Average | farms  | Earnings |
| Below 400               | 308     | 31     | \$ 849   |
| 400 to 649              | 536     | 70     | 1272     |
| 650 and above           | 799     | 29     | 2600     |

Average farm earnings tend to increase with an increase in size of business where size of business is measured by days of productive work. However, for those farmers who are operating their farms at a loss, the larger the volume of business the larger will be the loss. On the other hand, a farmer who is making a profit, could make a larger profit if he increased his size of business, providing that in so doing he does not lower materially the efficiency in some one or more important branches of his business. Those farmers who have large businesses usually have more flexibility of their organization than does the man with a small business, and can utilize more efficiently and to better advantage available labor, power, machinery and buildings.

Table 7. Relation of Amount of Work Accomplished per Worker to Farm Earnings.

| Days of productive work per worker |         | No. of | Average  |
|------------------------------------|---------|--------|----------|
| Group                              | Average | Farms  | Earnings |
| Below 220                          | 184     | 35     | \$ 844   |
| 220 - 319                          | 270     | 65     | 1351     |
| 320 and above                      | 364     | 30     | 2446     |

More days of productive work accomplished per worker reduce the labor charge per unit of business. Higher labor accomplishment can be secured in several ways. In the first place the business must be large enough so that there will be at least sufficient work available for the family labor. The farm should be so organized that the labor requirements are well distributed throughout the year. Handling pastures in an efficient manner, in such a way that as large a proportion as possible of the year's feed for livestock may be obtained from them, helps to reduce labor requirements. Proper planning of the farm work, economical use of labor saving machinery, etc., help to increase the work accomplished per worker.

Table 8. Relation of Power, Machinery and Building Expense to Farm Earnings.\*

| Expense per day of productive work |         | No. of | Average  |
|------------------------------------|---------|--------|----------|
| Group                              | Average | Farms  | Earnings |
| \$1.70 and above                   | \$2.09  | 28     | \$ 959   |
| 1.05 to \$1.69                     | 1.34    | 72     | 1533     |
| Below \$1.05                       | .86     | 30     | 1785     |

\* Includes building, fencing, machinery, and horse expenses and value of feed fed to horses.

The expense factor shows a higher relation with earnings when prices are very low than when they are high. Some farms are under-equipped. On a few farms, excessive expenses constitute the main factor causing earnings to be very low.

Some of the cash expenses can be kept down by careful management. Oftentimes necessary repairs and improvements can be made by using the available farm labor rather than by hiring extra help. Repairs and overhauling should be done before spring work begins insofar as possible; or on rainy days or in other spare time during the summer. Reducing the number of horses to the minimum required for efficient operation of the farm, helps reduce the power expense. In some cases farmers can offset some or all of the power and machinery expense by using their equipment for outside work.

Effect of Well Balanced Efficiency on Farm Profits

It is quite evident from this report that few farmers have a monopoly on efficiency. Quite often farm operators show efficient management in one part of the farm business, which is offset by poor results in other phases. These farmers get medium returns while those who fall down all along the line get the lowest returns, and on the other hand those few who can manage to attain high efficiency in all parts of their organization receive returns well above the average. This is well illustrated in Table 9.

Table 9: Relation of Operator's Labor Earnings to the Number of Factors in Which the Farmer is Above the Average

| No. of factors in which farm excels | No. of Farms | Your Farm | The length of the shaded lines are in proportion to the average operator's labor earnings | Average Operator's Earnings |
|-------------------------------------|--------------|-----------|---|-----------------------------|
| Seven or more                       | 13           | _____     | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  | \$2701                      |
| Six                                 | 17           | _____     | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  | 2493                        |
| Five                                | 30           | _____     | XXXXXXXXXXXXXXXXXXXX  | 1633                        |
| Four                                | 20           | _____     | XXXXXXXXXXXXXXXXXXXX  | 1267                        |
| Three                               | 26           | _____     | XXXXXXXXXXXX  | 1047                        |
| Two or less                         | 24           | _____     | XXXXX   | 489                         |

The array in Table 9 indicates that it will be worth while for each cooperator to study carefully his ranking on pages 12 and 13, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency

| Measures used in chart<br>on page 13             | Your<br>Farm | Average<br>of 130<br>farms | 26 most<br>profit-<br>able<br>Farms | 26 least<br>profit-<br>able<br>farms |
|--|--------------|----------------------------|-------------------------------------|--------------------------------------|
| Operator's Labor Earnings                        | \$ _____     | \$1467                     | \$3080                              | \$341                                |
| (1) Pounds of butterfat per cow                  | _____        | 217                        | 234                                 | 164                                  |
| (2) Return over feed (pr.livst. other than cows) | \$ _____     | \$87.00                    | \$88.00                             | \$47.00                              |
| (3) Productive livestock units per 100 acres     | _____        | 17.7                       | 18.4                                | 15.8                                 |
| (4) Crop yields**                                | _____        | 100                        | 104                                 | 94                                   |
| (5) % of tillable land in high return crops***   | _____        | 36.0                       | 40.3                                | 32.8                                 |
| (6) Size of business--days of productive work    | _____        | 540                        | 760                                 | 426                                  |
| (7) Days of productive work per worker           | _____        | 268                        | 344                                 | 227                                  |
| (8) Power and eq. expense per day of prod. work  | \$ _____     | \$1.39                     | \$1.27                              | \$1.57                               |

Measures and items related to some of the above measures:

|  |          |       |       |       |
|--|----------|-------|-------|-------|
| (2) Return over feed per head other cattle   | \$ _____ | \$19. | \$24. | \$15. |
| Return over feed per 100 lbs. hogs produced  | _____    | 3.19  | 5.11  | 1.06  |
| Return over feed per hen                     | _____    | 1.58  | 1.84  | 1.38  |
| Return over feed per head sheep              | _____    | 3.39  | 4.43  | 1.45  |
| (6) Days of productive work on crops         | _____    | 160   | 234   | 133   |
| Days of productive work on prod. livestock   | _____    | 362   | 488   | 287   |
| Days of other productive work                | _____    | 18    | 38    | 6     |
| (7) Total number of workers                  | _____    | 2.0   | 2.2   | 1.9   |
| Number of family workers                     | _____    | 1.6   | 1.6   | 1.6   |
| Number of hired workers                      | _____    | .4    | .6    | .3    |
| (8) Power expense per day of productive work | \$ _____ | .88   | .85   | 1.02  |
| Mach. & equip. exp. per day of prod. work    | _____    | .22   | .20   | .21   |
| Bldg. & fencing exp. per day of prod. work   | _____    | .29   | .22   | .34   |

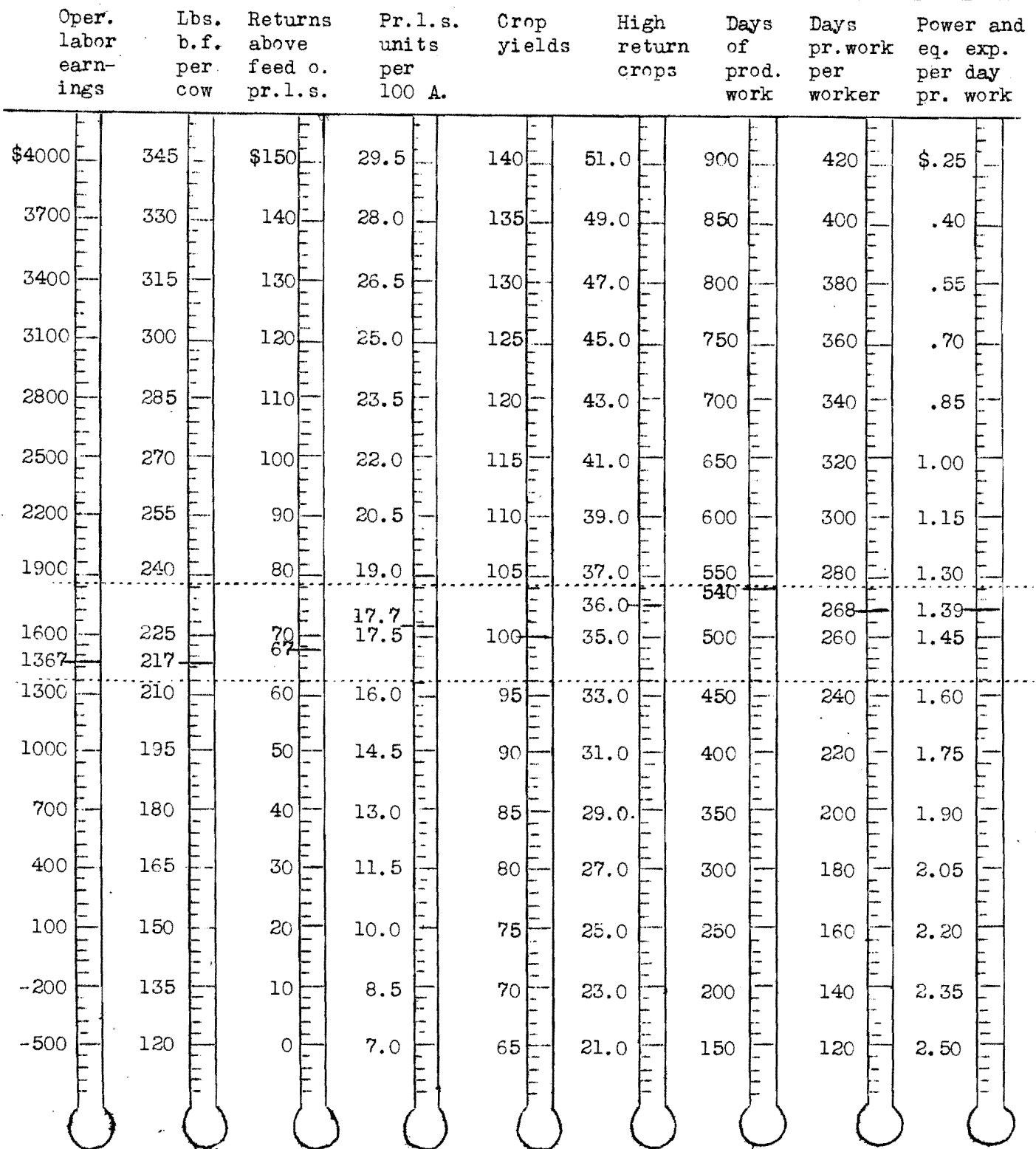
\*Given as returns over feed cost per animal unit of productive livestock other than cows.

\*\*Given as a percentage of the average.

\*\*\*Crops are marked on page 14 as (A), (B), (C), (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 per cent of tillable land in high return crops.

Thermometer Chart

Using your figures from page 12, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for 130 farms included in this summary are located between the two dotted lines across the center of this page.



Distribution of Acres in Farm

| Crop<br>(A)(B)(C)(D) refer to<br>ranking used in calculating<br>% of tillable land in High<br>Return Crops (see page 12) | No. of<br>farms<br>growing<br>this<br>crop | Your<br>Farm | Aver.<br>of<br>130<br>farms | 26 most<br>profit-<br>able<br>farms | 26 least<br>profit-<br>able<br>farms |
|--|--|--------------|-----------------------------|-------------------------------------|--------------------------------------|
| Winter wheat   | (B) 12                                     | _____        | 1.1                         | 3.2                                 | .5                                   |
| Spring wheat   | (C) 25                                     | _____        | 1.4                         | 3.0                                 | 1.6                                  |
| Oats   | (D) 60                                     | _____        | 13.4                        | 14.8                                | 16.2                                 |
| Barley   | (B) 56                                     | _____        | 6.6                         | 11.5                                | 3.3                                  |
| Rye  | (D) 12                                     | _____        | .5                          | .7                                  | .6                                   |
| Flax   | (B) 18                                     | _____        | 1.7                         | 5.2                                 | .2                                   |
| Wheat and oats   | (C) 25                                     | _____        | 5.5                         | 13.2                                | 3.5                                  |
| Oats and barley  | (C) 75                                     | _____        | 19.6                        | 24.5                                | 15.0                                 |
| Miscellaneous (includes 1.1A of soy beans)   | (C) 24                                     | _____        | 1.3                         | 2.8                                 | .5                                   |
| Total grain and peas   |  |              | 51.1                        | 78.9                                | 41.4                                 |
| Corn, grain  | (B) 130                                    | _____        | 28.1                        | 37.3                                | 25.6                                 |
| Corn, silage   | (C) 94                                     | _____        | 6.7                         | 9.5                                 | 4.3                                  |
| Corn, fodder   | (D) 36                                     | _____        | 1.6                         | 2.0                                 | 1.1                                  |
| Sweet corn   | (B) 9                                      | _____        | .8                          | 2.6                                 | .0                                   |
| Sugar beets  | (A) 1                                      | _____        | .1                          | .0                                  | .5                                   |
| Potatoes   | (A) 25                                     | _____        | .5                          | 1.3                                 | .3                                   |
| Total cultivated crops   |  |              | 37.8                        | 52.7                                | 31.8                                 |
| Alfalfa  | (A) 117                                    | _____        | 10.4                        | 15.6                                | 7.5                                  |
| Red clover   | (B) 9                                      | _____        | .5                          | .8                                  | .4                                   |
| Other legumes & mix. (incl. 2.5 A. soybeans)   | (C) 19                                     | _____        | .9                          | .7                                  | 1.7                                  |
| Soy beans  | (C) 26                                     | _____        | 1.1                         | 1.2                                 | .8                                   |
| Timothy  | (D) 3                                      | _____        | .1                          | .2                                  | .1                                   |
| Annual hay (millet, sudan grass, sm. grain, etc.)  | (D) 14                                     | _____        | .6                          | .0                                  | .8                                   |
| Miscellaneous hays and seed crops  | (C) 3                                      | _____        | .2                          | .0                                  | .8                                   |
| Phalaris (non-tillable land)   | 19   | _____        | .9                          | 1.2                                 | .7                                   |
| Wild hay (non-tillable land)   | 87   | _____        | 8.9                         | 10.6                                | 10.5                                 |
| Total hay  |  |              | 23.6                        | 30.3                                | 23.3                                 |
| Total crop acreage   |  |              | 112.5                       | 161.9                               | 96.5                                 |
| Sweet clover pasture-  | (B) 38                                     | _____        | 3.0                         | 4.0                                 | 2.7                                  |
| Alfalfa pasture  | (A) 15                                     | _____        | .6                          | .6                                  | 1.3                                  |
| Red clover or rape pasture (hogs)  | (B) 2                                      | _____        | .1                          | .0                                  | .0                                   |
| Miscellaneous legume pasture   | (C) 5                                      | _____        | .4                          | .7                                  | .3                                   |
| Other tillable pasture   | (D) 60                                     | _____        | 8.5                         | 5.6                                 | 11.6                                 |
| Non-tillable pasture   | 89   | _____        | 19.3                        | 28.0                                | 13.6                                 |
| Total pasture  |  |              | 31.9                        | 38.9                                | 29.5                                 |
| Tillable land not cropped  | 13   | _____        | .6                          | 1.0                                 | 1.4                                  |
| Timber (not pastured)  | 9  | _____        | .6                          | .1                                  | 2.4                                  |
| Roads and waste  |  | _____        |                             |                                     |                                      |
| Farmstead  |  | _____        | 10.5                        | 11.8                                | 8.5                                  |
| Total acres in farm  |  |              | 156.1                       | 213.7                               | 138.3                                |
| % of land tillable   |  |              | 75                          | 76                                  | 75.4                                 |
| % of tillable land in high return crops  |  |              | 36.0                        | 40.3                                | 32.8                                 |



Yield of Crops

| Yield of crops per acre  | Your farm | Average 130 farms | 26 most profitable farms | 26 least profitable farms |
|--------------------------|-----------|-------------------|--------------------------|---------------------------|
| Winter wheat, bu.        | _____     | 23.2              | 25.1                     | 15.0                      |
| Spring wheat, bu.        | _____     | 14.6              | 11.6                     | 18.7                      |
| Oats, bu.                | _____     | 50.3              | 52.0                     | 45.1                      |
| Barley, bu.              | _____     | 34.5              | 35.3                     | 33.3                      |
| Rye, bu.                 | _____     | 24.2              | 30.9                     | 30.0                      |
| Flax, bu.                | _____     | 7.8               | 8.9                      | 1.8                       |
| Wheat and oats, bu.      | _____     | 36.3              | 35.6                     | 29.5                      |
| Oats and barley, bu.     | _____     | 48.0              | 51.0                     | 43.3                      |
| Buckwheat                | _____     | 13.0              | --                       | 8.3                       |
| Field peas               | _____     | 16.3              | --                       | --                        |
| Soy beans, bu.           | _____     | 17.8              | 16.1                     | 18.4                      |
| Corn, grain, bu.         | _____     | 51.0              | 53.1                     | 50.4                      |
| Corn, silage, tons       | _____     | 9.2               | 8.9                      | 8.9                       |
| Corn, fodder, tons       | _____     | 3.8               | 4.5                      | 3.4                       |
| Sweet corn, tons         | _____     | 2.6               | 2.3                      | --                        |
| Sugar beets, tons        | _____     | 8.0               | --                       | 8.0                       |
| Potatoes, bu             | _____     | 84.9              | 107.2                    | 64.4                      |
| Alfalfa, tons            | _____     | 3.2               | 3.3                      | 2.8                       |
| Red clover, tons         | _____     | 1.6               | 2.0                      | .8                        |
| Clover and timothy, tons | _____     | 2.1               | 2.9                      | 2.4                       |
| Soybean hay, tons        | _____     | 2.2               | 1.8                      | 3.0                       |
| Timothy hay, tons        | _____     | 1.3               | 1.0                      | 1.0                       |
| Phalaris hay, tons       | _____     | 2.7               | 1.9                      | 3.0                       |
| Wild hay, tons           | _____     | 1.3               | 1.3                      | 1.4                       |
| Miscellaneous crops      | _____     | _____             | _____                    | _____                     |

Some methods farmers use to increase their crop yields:

1. Tile, if necessary.
2. Plow under legumes--grow sweet clover in small grains on high lime soil--lime for alfalfa, if necessary.
3. Test out commercial fertilizers on strips of land to see if they pay.
4. Utilize manure effectively.
5. Use rotated legume pastures.
6. Raise and feed hogs on these pastures and hog down corn.
7. Grow recommended varieties of crops.
8. Use best tested seed available.
9. Prepare seed-bed thoroly and timely.

Summary of Amount of Livestock

|   | Your farm | Average 130 farms | 26 most profitable farms | 26 least profitable farms |
|---|-----------|-------------------|--------------------------|---------------------------|
| Acres in farm                                 | _____     | 156               | 214                      | 138                       |
| No. of horses                                 | _____     | 4.7               | 5.9                      | 4.3                       |
| No. of colts                                  | _____     | .8                | 1.0                      | 1.0                       |
| No. of cows                                   | _____     | 13.9              | 17.2                     | 12.0                      |
| No. of cows per worker                        | _____     | 6.9               | 7.8                      | 6.2                       |
| Head of other cattle                          | _____     | 10.1              | 15.2                     | 7.1                       |
| Pounds of hogs produced                       | _____     | 10623             | 18523                    | 6666                      |
| Head of sheep (2 lambs equal 1 head)          | _____     | 6.9               | 12.3                     | 6.0                       |
| No. of hens                                   | _____     | 156.1             | 188.0                    | 128.0                     |
| Total no. of prod. livestock animal units     | _____     | 27.0              | 37.3                     | 21.0                      |
| % of tot. prod. lvst. units that are cows     | _____     | 53.6              | 47.1                     | 57.0                      |
| % of tot. prod. lvst. units that are o.cattle | _____     | 18.4              | 19.9                     | 16.9                      |
| % of tot. prod. lvst. units that are hogs     | _____     | 18.6              | 23.9                     | 15.9                      |
| % of tot. prod. lvst. units that are sheep    | _____ +   | 2.9               | 3.7                      | 2.8                       |
| % of tot. prod. lvst. units that are hens     | _____     | 6.5               | 5.4                      | 7.4                       |
| Number of farms with tractors                 |           | 43                | 20                       | 16                        |
| Number of farms without tractors              |           | 35                | 6                        | 10                        |

Distribution of Farm Produce Used in House

|                                | Quantities |                   | Values    |                   |
|--------------------------------|------------|-------------------|-----------|-------------------|
|                                | Your farm  | Average 130 farms | Your farm | Average 130 farms |
| Whole milk                     | _____      | 1376 qts.         | \$ _____  | \$ 39             |
| Cream                          | _____      | 482 pts.          | _____     | 46                |
| Farm made butter               | _____      | 2 lbs.            | _____     | 1                 |
| Eggs                           | _____      | 188 doz.          | _____     | 32                |
| Poultry                        | _____      | 34 head           | _____     | 15                |
| Cattle                         | _____      | 143 lbs.          | _____     | 9                 |
| Hogs                           | _____      | 507 lbs.          | _____     | 46                |
| Potatoes                       | _____      | 31 bu.            | _____     | 11                |
| Vegetables and fruit           | _____      | -                 | _____     | 45                |
| Farm fuel                      | _____      | 3 cds.            | _____     | 12                |
| Total                          |            |                   | \$ _____  | \$256             |
| Average value of farm dwelling | _____      |                   | \$ _____  | \$2106            |

Factors of Cost and Returns in Dairy Production

| Items  | Your farm | Average 130 farms | 26 farms highest in B.F. per cow | 26 farms lowest in B. F. per cow |
|--|-----------|-------------------|----------------------------------|----------------------------------|
| Pounds butterfat per cow                               | _____     | 217               | 288                              | 148                              |
| Feeds per cow, lbs.:                                   |           |                   |                                  |                                  |
| Corn   | _____     | 688               | 837                              | 825                              |
| Small grain  | _____     | 1566              | 1714                             | 1470                             |
| Com. feeds - under 25% protein                         | _____     | 59                | 112                              | 12                               |
| Com. feeds - over 25% protein                          | _____     | 50                | 132                              | 9                                |
| Tame hay   | _____     | 678               | 208                              | 1023                             |
| Alfalfa  | _____     | 3212              | 3246                             | 3212                             |
| Wild hay   | _____     | 326               | 195                              | 371                              |
| Corn fodder  | _____     | 909               | 1632                             | 948                              |
| Silage   | _____     | 6316              | 7955                             | 4636                             |
| Total concentrates                                     | _____     | 2363              | 2795                             | 2316                             |
| Total dry roughage                                     | _____     | 5125              | 5281                             | 5564                             |
| Total digestible nutrients                             | _____     | 5433              | 6225                             | 5282                             |
| Total digest. nutrients per lb. B.F.*                  | _____     | 26.2              | 21.8                             | 36.4                             |
| % cows fresh - Sept. to Dec. inclusive                 | _____     | 62.               | 71.                              | 50.                              |
| Feed cost per cow:                                     |           |                   |                                  |                                  |
| Concentrates   | \$ _____  | \$22              | \$27                             | \$21                             |
| Roughages  | _____     | 19                | 20                               | 18                               |
| Pasture  | _____     | 5                 | 5                                | 4                                |
| TOTAL FEED COSTS                                       | \$ _____  | \$46              | \$52                             | \$43                             |
| Value of produce per cow:                              |           |                   |                                  |                                  |
| B.F. sales   | \$ _____  | \$63              | \$86                             | \$40                             |
| Dairy produce used in house                            | _____     | 7                 | 7                                | 7                                |
| Milk to other livestock                                | _____     | 13                | 15                               | 9                                |
| Appreciation or depreciation                           | _____     | 2                 | 2                                | 4                                |
| TOTAL VALUE OF PRODUCT                                 | \$ _____  | \$85              | \$110                            | \$60                             |
| RETURNS ABOVE FEED COST PER COW                        | \$ _____  | \$39              | \$ 58                            | \$17                             |
| Price received per lb. B.F. sold:                      |           |                   |                                  |                                  |
| As manufacturing cream (cents)                         | _____     | 33.7              | 34.0                             | 33.3                             |
| Feed cost per lb. B.F. (cents)                         | _____     | 21.9              | 18.1                             | 29.7                             |
| Number of cows**                                       | _____     | 13.9              | 12.5                             | 13.5                             |
| Hours of man labor on dairy herd, per cow              |           | 176               | 203                              | 178                              |
| Hours of horse work on dairy herd, per cow             |           | 4                 | 5                                | 5                                |
| Miles travelled by car or truck hauling cream, per cow |           | 61                | 66                               | 67                               |

\*Not including nutrients secured from pasture.

\*\*All 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. There is some variation in the number of months of dry period per cow; however, this variation is small for the majority of the farms.

Feed Costs and Returns for Other Dairy Cattle

| Items                            | Your farm | Average of 121 farms | 24 Farms highest in returns above feed per head | 24 Farms lowest in returns above feed per head |
|----------------------------------|-----------|----------------------|---|--|
| Feeds used per head, lbs.:       |           |                      |   |  |
| Concentrates                     | _____     | 240                  | 116   | 585  |
| Hay and fodder                   | _____     | 1344                 | 1564  | 1395   |
| Silage                           | _____     | 1364                 | 838   | 1780   |
| Whole milk                       | _____     | 1206                 | 1304  | 2897   |
| Skimmilk                         | _____     | 2206                 | 2662  | 2306   |
| Feed cost per head:              |           |                      |   |  |
| Concentrates                     | \$ _____  | \$ 2                 | \$ 1  | \$ 5   |
| Roughages                        | _____     | 5                    | 4   | 5  |
| Milk                             | _____     | 19                   | 21  | 40   |
| Pasture                          | _____     | 1                    | 1   | 1  |
| TOTAL                            | \$ _____  | \$27                 | \$27  | \$51   |
| RETURNS PER HEAD                 | \$ _____  | \$46                 | \$75  | \$47   |
| RETURNS ABOVE FEED COST PER HEAD | \$ _____  | \$19                 | \$48  | \$-4   |
| Number of head of young cattle   | _____     | 9.0                  | 5.6   | 9.5  |

Feed Costs and Returns for Beef Cattle

| Items                                       | Your farm | Average 15 farms | 5 farms highest in returns above feed | 5 farms lowest in returns above feed |
|---|-----------|------------------|---------------------------------------|--------------------------------------|
| Feeds used per 100 lbs. beef produced:      |           |                  |                                       |                                      |
| Concentrates                                | _____     | 453              | 330                                   | 703                                  |
| Hay and fodder                              | _____     | 280              | 112                                   | 486                                  |
| Silage                                      | _____     | 367              | 244                                   | 534                                  |
| Whole milk                                  | _____     | 20               | 18                                    | 12                                   |
| Skimmilk                                    | _____     | 238              | 242                                   | 259                                  |
| Feed cost per 100 lbs. beef produced:       |           |                  |                                       |                                      |
| Concentrates                                | \$ _____  | \$4.47           | \$3.28                                | \$6.96                               |
| Roughages                                   | _____     | .98              | .57                                   | 1.56                                 |
| Milk  | _____     | .63              | .63                                   | .55                                  |
| Pasture                                     | _____     | .24              | .21                                   | .41                                  |
| TOTAL                                       | \$ _____  | \$5.32           | \$4.69                                | \$9.48                               |
| RETURNS PER 100# BEEF PRODUCED              | \$ _____  | \$8.02           | \$10.06                               | \$3.00                               |
| RETURNS ABOVE FEED COST PER 100# BEEF PROD. | \$ _____  | \$1.70           | \$5.37                                | \$-2.84                              |
| Pounds of beef produced                     | _____     | 11,425           | 5,970                                 | 13,194                               |

Feed Costs and Returns for Sheep

| Items                                | Your farm | Average 26 farms | 8 farms highest in returns above feed | 8 farms lowest in returns above feed |
|--------------------------------------|-----------|------------------|---------------------------------------|--------------------------------------|
| <b>Feeds used per head,* lbs.:</b>   |           |                  |                                       |                                      |
| Concentrates                         | _____     | 31               | 1                                     | 29                                   |
| Tame hay                             | _____     | 22               | 16                                    | 30                                   |
| Alfalfa                              | _____     | 108              | 52                                    | 136                                  |
| Corn fodder and wild hay             | _____     | 67               | 21                                    | 105                                  |
| Silage                               | _____     | 132              | 100                                   | 204                                  |
| <b>Feed cost per head:</b>           |           |                  |                                       |                                      |
| Concentrates                         | \$ _____  | \$.28            | \$.02                                 | \$.23                                |
| Roughages                            | _____     | .58              | .31                                   | .81                                  |
| Pasture                              | _____     | .48              | .71                                   | .49                                  |
| TOTAL                                | \$ _____  | \$1.34           | \$1.04                                | \$1.53                               |
| <b>Value of production per head:</b> |           |                  |                                       |                                      |
| Wool                                 | \$ _____  | \$1.26           | \$1.80                                | \$.93                                |
| Mutton                               | _____     | 3.47             | 0.31                                  | .93                                  |
| TOTAL                                | \$ _____  | \$4.73           | \$8.17                                | \$1.83                               |
| RETURNS ABOVE FEED COST PER HEAD     | \$ _____  | 3.39             | 7.13                                  | .33                                  |
| Price per lb. wool sold              | \$ _____  | \$.25            | \$.26                                 | \$.20                                |
| Value per lamb sold                  | _____     | \$7.83           | \$7.71                                | \$8.00                               |
| % lamb crop                          | _____     | 90               | 125                                   | 63                                   |
| % death loss                         | _____     | 5                | 0                                     | 6                                    |
| No. of head of sheep*                | _____     | 34.1             | 20.6                                  | 33.0                                 |

\*Two lambs under 6 months of age considered as one head.

Feed Costs and Returns for Hogs

| Items   | Your farm | Average 125 farms | 25 farms highest in returns above feed | 25 farms lowest in returns above feed |
|---|-----------|-------------------|--|---------------------------------------|
| <b>Lbs. of feed per 100 lbs. hogs produced:</b> |           |                   |  |                                       |
| Corn  | _____     | 370               | 200                                    | 650                                   |
| Small grain                                     | _____     | 123               | 82                                     | 174                                   |
| Commercial grain feeds                          | _____     | 4                 | 4                                      | 1                                     |
| Total grain and commercial feeds                | _____     | 497               | 286                                    | 825                                   |
| Tankage   | _____     | 2                 | 1                                      | 3                                     |
| Skimmilk  | _____     | 502               | 337                                    | 789                                   |
| <b>Cost of feed per 100 lbs. hogs produced:</b> |           |                   |  |                                       |
| Grain and commercial feeds                      | \$ _____  | \$4.78            | \$2.73                                 | \$7.94                                |
| Tankage and skimmilk                            | _____     | .81               | .54                                    | 1.26                                  |
| Pasture   | _____     | .12               | .00                                    | .20                                   |
| Total Feed Cost per 100 lbs. Hogs Prod.         | \$ _____  | \$5.71            | \$3.23                                 | \$9.40                                |
| RETURNS PER 100 LBS HOGS PRODUCED               | \$ _____  | \$8.90            | \$9.75                                 | \$8.15                                |
| RET-ABOVE FEED COST PER 100# HOGS PROD.         | \$ _____  | \$3.19            | \$6.42                                 | \$1.25                                |
| Price received per 100 lbs. hogs sold           | \$ _____  | \$8.75            | \$0.48                                 | \$8.44                                |
| Lbs. of hogs produced                           | _____     | 10,959            | 15,569                                 | 6,552                                 |

Feed Costs and Returns for Poultry

| Items   | Your farm | Average 130 farms | 26 farms highest in returns above feed per hen | 26 farms lowest in returns above feed per hen |
|---|-----------|-------------------|--|---|
| Lbs. of feed per hen:   |           |                   |  |   |
| Concentrates  | _____     | 71                | 71   | 90  |
| Skimmilk  | _____     | 51                | 53   | 53  |
| Cost of feed per hen:   |           |                   |  |   |
| Concentrates  | \$ _____  | \$.78             | \$.81  | \$1.05  |
| Skimmilk  | _____     | .07               | .08  | .08   |
| TOTAL   | \$ _____  | \$.85             | \$.89  | \$1.13  |
| Value of product per hen:   |           |                   |  |   |
| Eggs sold and used in house   | \$ _____  | \$1.62            | \$2.58   | \$ .99  |
| Poultry sold and used in house plus appreciation or less depreciation | _____     | .81               | 1.39   | .44   |
| TOTAL   | \$ _____  | \$2.43            | \$3.97   | \$1.43  |
| RETURNS ABOVE FEED COST PER HEN                                       | \$ _____  | \$1.58            | \$3.08   | \$ .30  |
| Price received per doz. eggs sold (cents)                             | _____     | 17.9              | 18.7   | 17.6  |
| Eggs laid per hen   | _____     | 110               | 107  | 69  |
| No. of hens   | _____     | 156               | 136  | 119   |

Feed Costs per Horse and Other Power Expense Items

|                                       | Your farm | Average | Most profitable farms | Least profitable farms |
|---------------------------------------|-----------|---------|-----------------------|------------------------|
| Number of farms:                      |           | 130     | 26                    | 26                     |
| Feed per horse,* lbs.:                |           |         |                       |                        |
| Grain                                 | _____     | 2,764   | 2,830                 | 2,751                  |
| Tame hay and alfalfa                  | _____     | 1,533   | 1,764                 | 1,742                  |
| Wild hay and fodder                   | _____     | 2,519   | 2,570                 | 2,188                  |
| Feed costs per horse:                 |           |         |                       |                        |
| Grain                                 | \$ _____  | \$.25   | \$.26                 | \$.24                  |
| Roughage                              | _____     | 7       | 8                     | 8                      |
| Pasture                               | _____     | 3       | 3                     | 3                      |
| TOTAL                                 | \$ _____  | \$.35   | \$.37                 | \$.35                  |
| Number of work horses                 | _____     | 4.7     | 5.9                   | 4.3                    |
| Number of colts                       | _____     | .8      | 1.0                   | 1.0                    |
| Total acres in farm                   | _____     | 156     | 214                   | 138                    |
| Crop acres per horse                  | _____     | 25      | 28                    | 24                     |
| Tractor and horse exp. per crop acre  | \$ _____  | \$2.34  | \$2.62                | \$2.61                 |
| Farm power expense per day prod. work | _____     | .88     | .63                   | 1.03                   |

\*Two colts equal one horse.