UNIVERSITY OF MINNESOTA<br>Department of Agriculture and<br>UNITED STATES DEPARTMENT OF AGRIGULTURE<br>Bureau of Agricultural Economics<br>and the<br>Farm Bureaus of<br>Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca Counties Cooperating<br>$=3.0 \times s$<br>Annual Report<br>of the<br>Farm Management Service<br>for Farmers in Southeast Minnesota<br>for the year<br>1934<br>.-. $0 \ldots$<br>Cooperator:<br>$\qquad$

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Seventh Annual Report of the Farm Management Service of Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca
Counties for the Year 1934

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## INTRODUCTION

The Division of Agricultural Economics and the Division of Agricultural Extension of the University of Minnesota, the Bureau of Agricultural Economics of the United States Department of Agriculture, and the farm bureaus of Dodge. Freeborn, Goodhue, Le Sueur, Mower, Fice, Steele, and Vaseca Counties organized late in 1927 the Farm Management Service Project, to operate in the above named counties, beginnirg January 1, 1928. This farm management service is offered to farmers who Cesire to kəep farm records, and to have these records summarized and analyzed in connection with those of other famers. Each farmer who cooperates in this service pays an annual fee which covers a part of the cost.

The project is under the direction of G. A. Pond and W. P. Ranney of the Division of Agricultural Economics, University of Minnesota. Hearty support
and assistance have been rendered by the county agricultural ageats of the above named counties, respectively: M. I. Armour, W. M. Lawson, M. A. Thorfinnson, R. D. Evans, F. I. Liebenstein, Don Marti, and R. A. Fischer; by S. A. Engene and J. B. McNulty of the Division of Agricultural Extension and by G. A. Sallee, T. R. Nodland and R. H. Loreaux of the Division of Agricultural Economics, who aided in closing the records at the end of the year.

## TYPE OF FARMING

The service is restricted to livestock farms on which dairy cattle are the principal source of income. Although some milk and cream are retailed in cities, and some milk is sold for shipment to the Twin Cities, cream for manufacture into butter is the principal dairy product sold. This is marketed through farmer owned cooperative creameries specializing in the manufacture of high quality butter. The skimmilk 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, sweet corn, caming peas, sugar beets, flax, and potatoes are grown to a limited extent as cash crops.

This report shows that the receipts from the sales of dairy products constituted about one-third, and the receipts from hog sales (including A. A. A. adjustment payments) about one-fifth of the average cash incone of 120 cooperators included in this report. These farms are fairly typical of the system of dairy farming prevailing in southeastern Minnesota.

> CLIMATE, SOIL, AND TOPOGRAPHY

The weather conditions normally are fairly uniform in these eight counties. The season of 1934 was characterized by severe drouth in the spring and early summer. The spring was cool and backward up to the last week in April. From then on to August, temperatures averaged very much above normal. The germination of small grain and corn was hindered by lack of moisture. Severe dust storms damaged growing crops. Small grain, canning peas, sugar beets, and hay crops suffered severely from heat and drouth. Rains in June revived the corn crop and some of the emergency forage crops, but did not altogether offset the danage already done. Summer rains were somewhat more timely and ample in Dodge, Mower and Steele Counties than in the rest of this area.

The soil varies from sandy loam to a rich black clay loam; the latter type predominates in this area. 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. Goodhue County has more rolling land than the other counties. Nuch of the level land is tiled to make possible its cultivation in wet years. However, on a number of farms, there is considerable land which is poorly drained. In Goodhue, Dodge, and Mower Counties, and the eastern part of Rice and Steele Counties, the soil is generally lime deficient, and applications of lime are necessary in order to grow alfalfa and sweet clover. In the remainder of the area, it is not necessary, as a rule, to apply lime in order to grow these two crops.

## RECORDS KEPT

The records kept by the cooperators included inventories at the beginning and end of the year, cash receipts and expenses, a report of feed fed to the various classes of livestock, and a record of farm produce used by the farm family. Supplementary information was also secured during the year regarding crop and livestock production and practices.

The cooperators were assisted and supervised in keeping their records by the field agent, R. C. Bevan, who visited each farm in the eight counties several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, viz., securing a monthly list of prices of farm products prevailing in the areas, helping the farmer place uniform values on real estate and equipment, checking the cash and feed records, and answering any questions that might arise as to how the entries should be made in the account book. The supervision resulted in uniformity in the type of records secured, in the inventory valuations and in the prices at which feed and farm produce were charged.

At the end of the year, each farm was visited by a representative of the University who cheked the records for completeness and accuracy. The books were then taken to the central office at University Farm, where every entry was again checked and omissions were noted. Any discrepancies found were referred back to the farmers for correction. This double checking insured a high degree of accuracy and completeness in each individual record.

## PURPOSE OF PROJECI

The Farm Management Service renders assistance to the cooperators in keeping such records as will enable each operator to know the returns for his labor and management, the returns to capital and family labor, and the actual earnings from the farm that the fanily had to spend for living and personal use. The main purpose of the service is to secure such data and information, which when compared with that secured on other farms, will enable the cooperator to increase his efficiency in various enterprises and to organize his farm on a more profitable basis. Por the latter purpose, it was necessary for all the cooperators, tenants as well as owner operators to include the whole farm business in order that the results would be on a comparative basis. For the purpose of comparison, the earnings as shown in this report are computed as if each farm was owned by its operator; however, each tenant is supplied a statement of his earnings on the basis of the rental system under which he was operating.

## ANALYSIS OF THE FARM BUSTNESS

On pages 6 and 7 are presented financial summaries of the year's busim ness, showing the average results for the 120 farms on which the work was completed for the twelve months' period, Jamuary 1,1934 to December 31, 1934, and the average results for the highest onemifth of the farms in respect to operator's Labor Earnings, and likewise for the lowest one-fifth. In the "your farm" column, in the copy sent to the farmer, the results of his individual farm business are inserted in order that he may compare his figures with the averages of the various groups.

The data on page 9 and the remaining pages, which set up the raniking in the various meanures of efficiency, should suggest to each cooperator some possi-m bilities for improvement in his organization of the various enterprises and of the business as a whole. Although each farm is an individual problem and has its particular advantages and limitations, the type of farming is fairly uniform in the area. This study should bring out trends toward more profitable combinations of enterprises, and also toward more efficient methods of management within the enterprises. In spite of the differences in physical and economic conditions explained on page 2, it is significant that the same general factors account for financial success in all of the eight counties.

## CAPITAL INEESTMENT IN FARM BUSINESS

The average size of the farms in this report was 209 acres. The average farm inventory was $\$ 17,431$. This does not include the value of the house in which the operator lived. In 1934, 45.7 per cent of the average farr inventory consisted of land; 20.4 per cent of permanent improvement; 11.6 per cent of feeds and supplies; 10.5 per cent of machinery and equipment; and 11.8 per cent of livestock, of which about two-fifths or an average of $\$ 759$ was the average inventory value of milk cows.

## REIURNS TO OPERATORS FOR THEIR LABOR AND MANAGEMENT

The average cas receipts per farm were $\$ 4,182$. In addition, farm prom duce to the value of $\$ 223$ was consumed by the farm family and there was an average inventory increase of $\$ 611$ per farm. The total average receipts per farm is the sum of these three items, $\$ 5,016$. The average total expense per farm, $\$ 2,109$, inw cludes $\$ 2,027$ cash expenses and an estimated allowance of $\$ 82$ for board of hired labor. The difference between the total income and total expense figure is $\$ 2,907$. 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, $\$ 872$, for the services of capital, there remains' $\$ 2,035$ for the services of the farmer and his family. The average value of family labor used, if computed at hired man's wages, was $\$ 190$. The average operator's labor earnings is the family earnings less their allowance of $\$ 190$, or $\$ 1,845$. 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.

On page 21, financial summaries for 1934 are shown for six groups of farms, classified on basis of size (total acres in farm). A comparison of the financial returns and other miscellaneous information for 1928 to 1934 inclusive is given on pages 29, 30 and 31 .

The table on page 18 shows the average amounts and values for each item included in the total of farm produce used in the house. On many farms, a saving could be made if more produce were raised on the farm rather than purchased.

Sixty-five farmers included in this report kept a detailed record of personal and household expenses, and asked for a distribution of these expenses. This distribution is shown on page 18, with averages for the sixty-five farms and for the thirteen most profitable and thirteen least profitable in this group. Taling into consideration the number of merbers (adult equivalents) in his family and the number in the average family, each farmer can compare his items of expense with those of the average.

| Items | Your farm | Average <br> of 120 <br> farms | $\begin{aligned} & 24 \text { most } \\ & \text { profitable } \\ & \text { farms } \end{aligned}$ | 24 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| Size of farm (acres) |  | 209 | 292 | 161 |
| Size of business (days of prod.work)(1) |  | 783 | 1,181 | 579 |
| Average farm inventory (without house) |  | \$17,431 | 6,423 | \$13,437 |
| Land |  | 7,960 | 11,668 | 6,793 |
| Farm improvements |  | 3,555 | 5,202 | 2,796 |
| Machinery and equipment (total) |  | 1,828 | 3,071 | 1,130 |
| General machinery and equipment |  | 1,316 | 2,211 | 836 |
| Tractor |  | 275 | 487 | 162 |
| Truck |  | 61 | 144 | 20 |
| Auto (farm share) |  | 110 | 145 | 76 |
| Gas engine (farm share) |  | 21 | 22 | 21 |
| Electrical equipment (farm share) |  | 45 | 62 | 15 |
| Feeds and seeds |  | 1,998 | 3,295 | 1,210 |
| Miscellaneous supplies |  | 27 | 43 | 14 |
| Horses (total) |  | 465 | 526 | 358 |
| Horses |  | 425 | 489 | 336 |
| Colts |  | 40 | 37 | 22 |
| Productive livestock (total) |  | 1,598 | 2,618 | 1,136 |
| Cows |  | 759 | 1,149 | 566 |
| Other cattle |  | 416 | 796 | 279 |
| Hogs |  | 202 | 278 | 121 |
| Sheep |  | 80 | 140 | 72 |
| Poultry |  | 141 | 255 | 98 |

(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 data presented in Minnesota Technical Bulletin 44, "A Study of Dairy Farm Organization in Southeastern Minnesotal, are listed as follows:

| Item | Per of | No. of days <br> of prod. work | Item Per | No. of days of prod. worls |
| :---: | :---: | :---: | :---: | :---: |
| Cows | Cow | 16.6 | Corn for grain Acre (husked) | 2.1 |
| Other cattle | Animal unit* | 7.6 |  |  |
| Sheep | Animal unit* | 2.7 | $\begin{gathered} \text { Corn for grain } \\ \text { (husk. \& shred.) } \end{gathered}$ | 2.8 |
| Poultry | 100 hens | 20.1 |  |  |
| Hogs | 100 lbs. pork | k . 55 | Corn for silage " | 2.6 |
|  | produced |  | Com hogged " | 1.25 |
| Alfalfa | Acre | 1.5 | Corn for fodder " | 1.8 |
| Tame \& wild hay | 11 | . 6 | Sweet corn " | 3.0 |
| Small grain \& flax | I' | 1.0 | Potatoes " | 6.4 |
| Small grain hogged | 11 | . 4 | Sugar beets " | 4.0 |
| Canning peas | 11 | 2.5 |  |  |

* Animal Unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, five hogs, ten plgs, or 100 hens.

| Items | $\begin{aligned} & \text { Your } \\ & \text { farm } \end{aligned}$ | Average of 120 farms | 24 most profitable farms | 24 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| CASH EXPENSES |  |  |  |  |
| Tractor (new \& exp.) \$ | \$ | 132 | 219 | 86 |
| Truck (new \& exp.) |  | 56 | 157 | 24 |
| Auto (new \& exp.) (farm share) |  | 102 | 164 | 68 |
| Gas engine (new \& exp.) (farm share) |  | 1.4 | 14 | 19 |
| Electricity (new \& exp.) (farm share) |  | 38 | 78 | 10 |
| Machinery and equipment (nevs) |  | 114 | 204 | 57 |
| Machinery and equipment (exp.) |  | 57 | 93 | 42 |
| Bldgs., fences, tiling (new) |  | 62 | 36 | 120 |
| Bldgs., fences, tiling (exp.) |  | 44 | 99 | 53 |
| Hired labor |  | 252 | 560 | 122 |
| Feed for livestock |  | 392 | 843 | 314 |
| Other expense for livestock |  | 52 | 90 | 30 |
| Horses bought |  | 34 | 51 | 19 |
| Cows bought |  | 29 | 69 | 13 |
| Other cattle bought |  | 81 | 308 | 25 |
| Hogs bought |  | 27 | 44 | 7 |
| Sheep bought |  | 34 | 17 | 64 |
| Poultry bought |  | 46 | 98 | 31 |
| Crop (seed, twine, spray) |  | 161 | 262 | 120 |
| Taxes and insurance |  | 275 | 419 | 206 |
| General farm |  | 25 | 31 | 23 |
| (1) Total cash expense |  | 2,027 | 3,862 | 1,453 |
| (2) Decrease in farm inventory |  | - |  |  |
| (3) Board for hired labor |  | 82 | 127 | 44 |
| (4) Total expense (sum of (1)(2) \& (3) |  | 2,109 | 3.989 | 1,497 |
| CASH RECEIPTS |  |  |  |  |
| Horses |  | 29 | 36 | 14 |
| Cows |  | 147 | 209 | 133 |
| Dairy products |  | 1,249. | 2,210 | 779 |
| Other cattle |  | 304 | 755 | 193 |
| Hogs |  | . 1203 | 849 | 339 |
| Sheep |  | 121 | 138 | 194 |
| Poultry |  | 263 | 732 | 104 |
| Eges |  | 289 | 497 | 192 |
| Small grain |  | 256 | 425 | 203 |
| Corn |  | 151 | 325 | 51 |
| Hay |  | 25 | 74 | 4 |
| Root crops |  | 24 | 57 |  |
| Other crops |  | 79 | 208 | 24 |
| Miscellaneous |  | 121 | 191 | 59 |
| Income from work off the farm |  | 160 | 348 | 92 |
| A.A.A. adjustment payments |  | 361 | 517 | 224 |
| (5) Total cash receipts |  | 4,182 | 7.571 | 2,612 |
| (6) Increase in farm inventory |  | 611 | 1,479 | 92 |
| (7) Farm produce used in house |  | 223 | 261 | 193 |
| (8) Total receipts (sum of (5) \& (6) |  | 5,016 | 9,311 | 2.897 |
| (9) Total expenses (4) |  | 2,109 | 3,989 | 1,497 |
| (9) Ret.to cap. \& fem. labor(8) minus(4) | $45$ | 2,907 | 5,322 | 1,400 |
| (10) Interest on farm inveritory |  | 872 | 1,321 | 672 |
| (11) Family labor earnings (9)minus(10) |  | 2,035 | 4,001 | 728 |
| (12) Unpaid family labor |  | 190 | 285 | 199 |
| (13) Oper. labor earnings (11)minus(12) | - | 1,845 | 3.716 | 529 |


| Items Your <br> farm  | Average of 120 farms | 24 most profitable farms | 24 least profitable <br> farms |
| :---: | :---: | :---: | :---: |
| EXPENSES AND NET DECREASES |  |  |  |
| Total power machinery and equipment \$ | \$324 | \$581 | \$228 |
| Hired | 47 | 69 | 35 |
| Tractor | 98 | 198 | 67 |
| Truck | 44 | 113 | 25 |
| Auto (farm share) | 87 | 113 | 71 |
| Gas engine (farm share) | 14 | 12 | 18 |
| Elec. plant or current (farm share) | 34 | 76 | 12 |
| General machinery and equipment | 197 | 320 | 140 |
| Bldgs., fencing, tiling | 164 | 238 | 143 |
| Hired labor | 252 | 560 | 122 |
| Prod. livestock misa. expense | 35 | 70 | 18 |
| Miscellaneous horse expense | 5 | 3 | 4 |
| Crop | 118 | 215 | 80 |
| Feal estate taxes | 216 | 318 | 167 |
| Personal property tax | 18 | 30 | 13 |
| Insurance | 41 | 71 | 26 |
| General farm | 25 | 31 | 23 |
| Crops and feeds | - | - | - |
| Horses | - | 8 | - |
| Board for hired labor | 82 | 128 | 44 |
| Interest on farm inventory | 872 | 1,321 | 672 |
| Unpaid family labor | 190 | 285 | 199 |
| (1) Total | 2,539 | 4,179 | 1,879 |
| RETURNS AND NET INCREASES |  |  |  |
| Crops | 861 | 1,788 | 217 |
| Wheat adjustment payment | 37 | 65 | 33 |
| Corn adjustment payment | 113 | 166 | 69 |
| Hog adjustment payment | 211 | 285 | 123 |
| All productive livestock | 3,206 | 5,538 | 2,031 |
| Cows (including milk to other lvst.) | 1,486 | 2,518 | 952 |
| Other cattle | 389 | 758 | 281 |
| Hogs | 675 | 891 | 386 |
| Sheep | 95 | 145 | 123 |
| Poultry | 561 | 1,226 | 289 |
| Horses | 12 |  | 7 |
| Miscellaneous | 11 | 11 | 6 |
| Income from work off the farm - | 163 | 357 | 93 |
| (2) Total | 4,614 | 8,210 | 2,579 |
| (3) Millk produced and fed on farm | 230 | 315 | 171 |
| (4) Tot.ret. \& net incr., (2) minus (3) | 4,384 | 7.895 | 2,408 |
| Total expenses (1) | 2,539 | 4,179 | 1.879 |
| (5) Oper. labor earnings (4) mirus (1) | 1,845 | 3,716 | 529 |

(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 .

## EFPECT 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 of the business. These farmers get medium returns while those who fall down all along the line get the lowest returns and those few who can manage a large volume of business with high all around efficiency receive returns well above the average.

The data in this report and the reports of recent years in this same area, indicate that there are many factors of various degrees of importance which show relationships with operator's labor earnings or which offer opportunities for increasing earnings. Size of business tends to be a disadvantage to those who show a loss, for greater size is a factor serving to increase the loss. However, for those who excell in most of the other factors and receive some return for their labor and management, the latter tends to be increased by size of business. Iikewise, it is an advantage to have more livestock per hundred acres when the stock shows a profit and a disadvantage when it shows a loss. Hence, a high balanced standing in the following eight factors is quite essential in order to secure the highest possible returns:

1. Pounds of butterfat per cow.
2. Returns above feed cost for productive livestock (other than cows) per animal unit.
3. Productive livestock units per 100 acres.
4. Crop yields.
5. Percentage of tillable acres in high return crops.
6. Size of business-days of productive work.
7. Days of productive work per worker.
8. Equipment and farm power expense (building, fencing, all machinery, horse feed, and miscellaneous horse expense) per day of productive work.

In Chart I isshown the effect of the number of the above factors in which the farmer excels on his labor earnings. The 18 farmers who excelled in six or more factors had earnings of $\$ 1,762$ above the average of 15 farmers who did not excell in more than one of the factors.

Chart I. Relation of Operator's Labor Earnings to the Number of Factors in which 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 |
| :---: | :---: | :---: | :---: | :---: |
| Six or more | 18 |  | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | \$2,838 |
| Four or five | 56 |  | mxxyxxyxxxxxxxxyxxyxyxx | 2,020 |
| Iwo or three | 31 |  | xxxxyxxxxxxxxxx | 1,323 |
| None or one | 15 |  | xxxxxxxxxxx | 1,076 |

The array in Chart I suggests that it will be worth while for each cooperator to study carefully his ranking on pages 9 and 10 , and learn through his standing in respect to each of the above factors the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency 1934

| Measures used in chart on page 10 | Your farm | ```Average of 120 farms``` | $\begin{aligned} & 24 \text { most } \\ & \text { profit } \\ & \text { able } \\ & \text { farms } \\ & \hline \end{aligned}$ | $\begin{aligned} & 24 \text { least } \\ & \text { profit- } \\ & \text { able } \\ & \text { farms } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Operator's Labor Earnings |  | \$1,845 | \$3,716 | \$529 |
| (1) Lbs. of butterfat per cow |  | 236 | 245 | 216 |
| (2) Return over feed (pr. lvst. other than cows)* |  | \$16. 57 | \$27.42 | \$9.21 |
| (3) Productive livestock units per 100 acres |  | 20.1 | 20.7 | 21.1 |
| (4) Crop yields** |  | 100 | 111 | 87 |
| (5) \% of tillable land in high return crops*** |  | 36.0 | 42.0 | 33.8 |
| (6) Size of business-days of productive work |  | 783 | 1,18.1 | 579 |
| (7) Days of productive work per worker |  | 339 | 366 | 295 |
| (8) Power and eq. expense per day of prod. work | ¢ | \$1.18 | \$1.24 | \$1.20 |

Measures and items related to some of the above measures:
(2) Return over feed per head other cattle Return over feed per 100 lbs . pork produced Return over feed per hen Return over feed per head sheep


| $\$-4.12$ | $\$-3.65$ | $\$-3.57$ |
| ---: | ---: | ---: |
| .96 | .82 | .56 |
| .82 | .84 | .41 |
| 1.90 | 1.07 | 2.07 |

(6) Days of productive worl: on crops


| 217 | 341 | 150 |
| ---: | ---: | ---: |
| 512 | 721 | 398 |
| 54 | 119 | 31 |

(7) Total number of workers

$2.3 \quad 3.2$
1.9

Number of family workers
$1.5 \quad 1.8$
1.5 Number of hired workers

$\$ .72$
.25
.21
$\begin{array}{rr}\$ .76 & \$ .70 \\ .27 & .25 \\ .21 & .25\end{array}$

[^0]Using your figures from page 9 , locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 120 farms included in this summary are located between the two lines across the center of the page.

| $\begin{aligned} & \text { Oper. } \\ & \text { labor } \\ & \text { earn- } \\ & \text { ings } \end{aligned}$ | Ibs. <br> B.F. <br> per <br> cow | Ret. above feed; proch. livestock other than cows | - Prod. livestock units per 100 A. | $\begin{aligned} & \text { Crop } \\ & \text { yields } \end{aligned}$ | High return crops | Days of prod. work | Days <br> prod. <br> work <br> per <br> worker | Power \& eq. exp. per day prod. worls |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \overline{\text { Figh }} \\ & \$ 7,053 \end{aligned}$ | 387 | \$138.65 | 50.4 | 158 | 68.1 | 2950 | 585 | \$. 49 |
| 4,345 | 336 | 66.57 | 32.6 | 140 | 56.0 | 1433 | 489 | . 68 |
| 3,845 | 316 | 56.57 | 30.1 | 132 | 52.0 | 1303 | 459 | . 78 |
| 3,345 | 296 | 46.57 | 27.6 | 124 | 48.0 | 1173 | 429 | . 88 |
| 2,845 | 276 | 36.57 | 25.1 | 116 | 44.0 | 1043 | 399 | . 98 |
| 2,345 | 256 | 26.57 | 22.6 | 108 | 40.0 | 913 | 369 | 1.08 |
| 1.845 | 236 | 16.57 | 20.1 | 100 | 36.0 | 783 | 339 | 1.18 |
| 1,545 | 218 | 10.57 | 18.3 | 92 | 33.0 | 703 | 319 | 1.28 |
| 1,245 | 200 | 4.57 | 16.5 | 84 | 30.0 | 623 | 299 | 1.38 |
| 945 | 182 | $-1.43$ | 14.7 | 76 | 27.0 | 543 | 279 | 1.48 |
| 645 | 164 | -7.43 | 12.9 | 68 | 24.0 | 463 | 259 | 1.58 |
| 345 | 146 | $-13.43$ | 11.1 | 60 | 21.0 | 383 | 239 | 1.68 |
| Iown | 127 | $-64.94$ | 8.3 | 52 | 12.9 | 256 | 197 | 1.80 |

Distribution of Acres in Farm 1934

| Crop |  | No. of | Your | Aver. | 24 most | 24 least |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(A)(B)(C)(D)$ refer to |  | farms. | farm | of | profit- | profit- |
| ranking used in calculating |  | growing |  | 120 | able | able |
| \% of tillable land in High |  | this |  | farms | farms | farms |
| Return Crops (see page 9) |  | crop |  |  |  |  |



Yield of Crops 1934

| Yield of crops | $\begin{aligned} & \text { Your } \\ & \text { farm } \end{aligned}$ | Average 120 <br> farms | $\begin{aligned} & 24 \text { most } \\ & \text { profitable } \\ & \text { farms } \end{aligned}$ | 24 least profitable farms |
| :---: | :---: | :---: | :---: | :---: |
| Winter wheat, bu. |  | 13.5 | 12.3 | 6.4 |
| Spring wheat, bu. |  | 11.2 | 11.6 | 8.8 |
| Oats, bu. |  | 20.0 | 24.1 | 21.2 |
| Barley, bu. |  | 16.9 | 18.2 | 12.8 |
| Rye, bu. |  | 5.7 | 4.4 | 7.1 |
| Flax, bu. |  | 7.5 | 7.8 | 10.0 |
| Wheat and oats, bu. |  | 14.4 | 15.2 | 17.0 |
| Oats and barley, bu. |  | 19.3 | 23.1 | 14.7 |
| Flax and wheat, bu. |  | 9.7 | 9.6 | 8.8 |
| Oats, barley, and wheat, bu. |  | 15.7 | 18.0 | 9.2 |
| Canning peas, value above seed cost |  | \$4.93 | \$5.97 | - |
| Corn, grain, bu. |  | 31.8 | 35.5 | 28.5 |
| Corn, silage, tons |  | 7.0 | 7.4 | 6.2 |
| Corn, fodder, tons |  | 1.9 | 2.2 | 1.8 |
| Sweet corn, tons ${ }^{\text {- }}$ |  | 2.1 | 2.5 | 1.0 |
| Sugar beets, tons |  | 6.2 | 6.2 | - |
| Patatoes, bu. |  | 66.7 | 53.4 | 119.8 |
| Alfalfa, tons |  | 1.1 | 1.3 | . 9 |
| Red clover, tons |  | . 8 | - | . 2 |
| Clover and timothy, tons |  | . 5 | . 6 | . 3 |
| Soybean hay, tons |  | 1.1 | 1.3 | 1.2 |
| Tinothy hay, tons |  | .6 | . 8 | . 2 |
| Sudan grass, tons |  | 1.7 | 1.6 | 1.8 |
| Small grain, tons |  | . 7 | . 7 | . 6 |
| Philaris hay, tons |  | 1.6 | 1.3 | 3.0 |
| Wild hay, tons |  | . 8 | .6 | . 9 |
| Miscellaneous crops |  |  |  |  |

Some methods farmers use to increase their crop yields:

1. Tile, if necessary.
2. Plow under legumes-mrow 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 recomended varieties of crops.
8. Use best tested seed available.
9. Prepare seed-bed thoroughly and timely.

| Your <br> farm | $\begin{aligned} & \text { Aver age } \\ & 120 \\ & \text { farms. } \\ & \hline \end{aligned}$ | 24 most profitable farms | 24 least profitable farms |
| :---: | :---: | :---: | :---: |
| Acres in farm | 209 | 292 | 161 |
| No. of horses (with tractor)* | 5.3 | 6.0 | 4.3 |
| No. of horses (without tractor)** | 5.1 | 6.0 | 4.1 |
| No. of colts | . 7 | . 6 | . 4 |
| No. of cows | 19.1 | 24.8 | 15.3 |
| No. of cows per worker | 8.4 | 8.2 | 7:9 |
| Head of other cattle | 19.6 | 29.5 | 16.4 |
| Litters of pigs raised | 7.1 | 9.1 | 4.6 |
| Pounds of pork produced | 12013 | 15411 | 7213 |
| Head of sheep (2 lambs equal 1 head) | 18.6 | 26.6 | 21.7 |
| No. of hens | 190.4 | 318.4 | 144.0 |
| Total no. of prod. livestock animal units | 39.8 | 56.9 | 32.4 |
| \% of tot. prod. Ivst. units that are cows | 49.3 | 46.6 | 49.8 |
| \% of tot. prod. lvst. units that are o. cattle | 25.3 | 25.5 | 26.5 |
| \% of tot. prod. lvst. units that are hogs | 13.6 | 12.2 | 11.4 |
| \% of tot. prod. Ivst. units that are sheep | 5.7 | 6.2 | 6.9 |
| $\%$ of tot. prod. Ivst. units that are hens \& $\begin{gathered}\text { turimeys }\end{gathered}$ | 6.1 | 9.5 | 5.4 |
| *Number of farms with tractors | 82 | 23 | 12 |
| **Number of farrs without tractors | 38 | 1 | 12 |



Factors of Cost and Returns in Dairy Production 1934

| Items $\quad \begin{aligned} & \text { Your } \\ & \text { farm }\end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { l20 } \\ & \text { farms } \end{aligned}$ | 24 farms highest in B.F. per con | 24 farms lowest in B.F. per cow |
| :---: | :---: | :---: | :---: |
| Ibs. butterfat per cow | 236 | 307 | 165 |
| Feeds per cow, lbs.: |  |  |  |
| Corn | 618 | 808 | 464 |
| Small grain | 641 | 977 | 303 |
| Com. feeds - under $25 \%$ protein | 172 | 294 | 88 |
| Com. feeds - over $25 \%$ protein | 52 | 152 | 1 |
| Tame hay | 780 | 743 | 830 |
| Alfalfa | 1,879 | 2,345 | 1,381 |
| Wild hay | 123 | 102 | 117 |
| Corn fodder | 910 | 563 | 983 |
| Si lage | 7.318 | 7.561 | 7,030 |
| Total concentrates | 1,483 | 2,231 | 856 |
| Total dry roughage | 3.692 | 3,753 | 3,311 |
| Total digestible nutrients | 4,137 | 4,797 | 3,401 |
| Total digest. nutrients per lb, B.F.* | 17.9 | 15.7 | 21.0 |
| \% protein in ration | 12.3 | 13.3 | 11.5 |
| \% cows fresh - Sept. to Dec. inclusive | 59.3 | 63.7 | 54.3 |
| Feed cost per cow: |  |  |  |
| Concentrates \$ | \$14.34 | \$23.72 | \$7.12 |
| Roughages | 27.09 | 29.47 | 24.60 |
| Pasture | 3.78 | 3.52 | 4.02 |
| TOTAL FEED COSTS | \$ 4 | \$56 |  |
| Value of produce per cow: |  |  |  |
| 'B.F. sales \$ | \$61.49 | \$90.15 | \$38.29 |
| Dairy produce used in house | 4.32 | 4.68 | 3.65 |
| Milk to other livestock | 12.39 | 13.98 | 10.54 |
| Appreciation or depreciation TOTAL VAIJTE OF PFODUCT | $-3.17_{\$ 1}$ | $-3.92$ <br> \$1 | $-1.01$ |
| RETURNS ABOVE FEED COST PER COW 曾 |  | \$48 | \$15 |
| Price received per 1 b . B.F. sold: |  |  |  |
| As manufacturing cream \$ | \$. 28 | \$. 28 | \$. 27 |
| As market milk \& cream \& cheese milk | .47 | .46 | . 42 |
| Feed cost per Ib. B.F. | . 19 | . 18 | .22 |
| Number of cows** | 19.1 | 18.5 | 20.4 |

[^1]Feed Costs and Returns for Other Cattle and Sheep 1934

| Items | $\begin{aligned} & \text { Your } \\ & \text { farm } \end{aligned}$ | Average of all farms | Farms <br> highest in returns above foed per head | Farms <br> lowest in returns above feed per head |
| :---: | :---: | :---: | :---: | :---: |
| Other cattle: no of farms: 118 24 24 |  |  |  |  |
| Feeds used per head, lbs.: |  |  |  |  |
| Concentrates |  | 410 | 588 | 466 |
| Hay and fodder |  | 1480 | 1399 | 1709 |
| Silage |  | 2576 | 2078 | 3203 |
| Whole milk |  | 432 | 233 | 680 |
| Skimmilk |  | 1457 | 1480 | 1282 |
| Feed cost per head: |  |  |  |  |
| Concentrates |  | \$3.66 | \$5.16 | \$4.19 |
| Roughages |  | 9.57 | 8.85 | 12.18 |
| Milk |  | 7.65 | 5.21 | 10.92 |
| Pasture |  | 1.26 | 1.09 | 1.27 |
| TOTAL |  | \$22. 14 | \$20.31 | \$28. 56 |
| RETURNS PER HEAD |  | \$18.00 | \$26.97 | \$13.94 |
| RETURNS ABOVE FEED COST PER HEAD |  | \$ -4.14 | \$6.66 | \$-14.62 |
| \% death loss |  | 10.0 | 8.3 | 10.7 |
| Number of head of young cattle |  | 18.5 | 20.2 | 16.1 |
| Sheep; no of farms: |  | 52 | 11 | 11 |
| Teeds used per head,* lbs.: |  |  |  |  |
| Concentrates |  | 91 | 61 | 142 |
| Tame hay |  | 73 | 92 | 31 |
| Alfalfa |  | 81 | 2.6 | 128 |
| Corm fodder and wild hay |  | 124 | 102 | 227 |
| Silage |  | 132 | 102 | 120 |
| Feed cost per head: |  |  |  |  |
| Concentrates |  | \$. 78 | \$. 52 | \$1.27 |
| Roughages |  | 1.09 | . 76 | 1.35 |
| Pasture |  | . 58 | . 60 | . 60 |
| TOTAL | \$ | \$2. 45 | \$1.88 | \$3.22 |
| Value of production per head: |  |  |  |  |
| Wool |  | \$1.29 | \$1. 59 | \$1.06 |
| Mutton |  | 3.06 | 4.78 | . 77 |
| TOTAL |  | \$4.35 | \$6. 37 | \$1. 83 |
| RETURNS ABOVE FEED COST PER HEAD | \$ | \$1.90 | \$ $\$ 4.49$ | \$-1.39 |
| Price per lb. wool sold | \$ | \$. 19 | \$. 20 | \$. 17 |
| Value per lamb sold | - | 5.04 | 5.32 | 4.88 |
| \% lamb crop |  | 98.0 | 111.0 | 74.0 |
| \% death loss |  | 13.0 | 7.0 | 23.0 |
| No. of head of sheep* | - | 43.0 | 43.3 | 35.6 |

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


Feed Costs per Horse and Other Power Fxpense Items 1934

| $\begin{array}{ll}\text { Farms with Tractore } & \text { Your } \\ \text { farm }\end{array}$ | Average | Most profitable farms | Least profitable farms |
| :---: | :---: | :---: | :---: |
| Number of farms: | 82 | 16 | 16 |
| Feed per horse,* 1bs.: |  |  |  |
| Grain | 2566 | 2928 | 2237 |
| Tame hay and alfalfa | 2152 | 2408 | 2418 |
| Wild hay and fodder | 2120 | 2436 | 1520 |
| Feed costs per horse: |  |  |  |
| Grain \$ | \$26.33 | \$30.08 | \$23.35 |
| Roughage | 14.29 | 15.53 | 13.00 |
| Pasture | 1.99 | 1.50 | 2.68 |
| Total \$ | \$42.61 | \$47.11 | \$39.03 |
| Number of work horses | 5.3 | 6.1 | 4.7 |
| Number of colts | . 8 | . 6 | . 5 |
| Crop acres per horse | 30.0 | 39.0 | 29.0 |
| Tractor and horse exp. per crop A. $\$$Farm power expense per day prod.work | \$2.56 | \$2.46 | \$2.42 |
|  | . 73 | . 75 | . 72 |

## Farms without Tractors

Number of farms:
Feed per horse,* lbs.:

Grain
Tame hay and alfalfa
Wild hay and fodder
Feed costs per horse:
Grain
Roughage
Pasture
Total
Number of work horses
Number of colts
Crop acres per horse
Horse expense per crop acre
Farm power exp. per day prod. work

38
8
8

3199
1342
1931
2211
1804
1186
*Two colts equal one horse.

Distribution of Farm Produce Used in House 1934


Distribution of Household and Personal Expenses for Those Farms which Kept Complete Accounts of These Expenses 1934

| Your | Average | 13 most | 13 least |
| :--- | :--- | :--- | :--- |
| farm | 65 farms | profitable profitable |  |

Number of persons,

adult equivalent Family \begin{tabular}{llll}
\& 3.6 \& 3.8 \& 3.6 <br>
Other*

$\quad$

3.6 \& .7
\end{tabular}

Food
Operating and supplies
Furnishing and equipment
Clothing and materials
Health
Development and recreation Personal
Iife insurance and savings
Personal share of auto expense
Fousing


| 3.6 | 3.8 | 3.6 |
| ---: | ---: | ---: |
| .7 | .8 | .3 |
| $\$ 234.45$ | $\$ 275.85$ | $\$ 185.25$ |
| 67.49 | 93.94 | 48.40 |
| 37.97 | 42.55 | 29.39 |
| 100.95 | 157.87 | 74.31 |
| 44.81 | 51.58 | 26.14 |
| 72.28 | 119.27 | 24.68 |
| 55.14 | 92.43 | 44.15 |
| 124.70 | 206.82 | 57.61 |
| 50.69 | 65.85 | 43.84 |
| 23.62 | 70.85 | 10.88 |
|  |  | $\$ 544.65$ |
| $\$ 812.10$ | $\$ 1,177.01$ | $\$ 54.6$ |
| 187.03 | 240.11 | 149.49 |
| 31.12 | 34.85 | 19.38 |
| 137.52 | 152.10 | 115.12 |
| 50.70 | 55.75 | 33.67 |
| 218.47 | $\$ 1,659.82$ | $\$ 862.31$ |

*Hired help or others boarded.
**Personal share of auto, gas engine, and electric plant, and household goods.

Summary of Farm Invertories 1934

| County: | Dodge <br> \& Mower | Freeborn | Goodhue |
| :---: | :---: | :---: | :---: |
| Number of farms | 23 | 21 | 24 |
| Average farm inventory (without house | \$19,060 | \$15,234 | \$17,001 |
| Land. | 7,809 | 7,528 | 7,903 |
| Farm improvements | 3,982 | 2,875 | 3,501 |
| Machinery and equipment (total) | 2,279 | 1,288 | 1,845 |
| General machinery and equipment | 1,627 | 921 | 1,258 |
| Tractor | 402 | 168 | 325 |
| Truck | 100 | 18 | 80 |
| Auto (farm share) | 91 | 120 | 111 |
| Gas engine (farm share) | 26 | 14 | 34 |
| Elec. equipment (farm share) | 33 | 47 | 37 |
| Feeds and seeds | 2,313 | 1,757 | 1,924 |
| Miscellaneous supplies | 30 | 16 | 21 |
| Horses (total) | 516 | 395 | 552. |
| Horses | 482 | 366 | 483 |
| Colts | 34 | 29 | 69 |
| Productive livestock (total) | 2,131 | 1,375 | 1,255. |
| Cows | 996 | 659 | 596 |
| Other cattle | 717 | 290 | 357 |
| Hogs | 197 | 192 | 141 |
| Sheep | 128 | 119 | - 69 |
| Poultry | 93 | 115 | 92 |
| County: | Rice | Steele | Waseca \& Le Sueur |
| Number of farms | 13 | 22 | 17 |
| Average farm inventory (without house) | 16,530 | \$18,021 | \$18,465 |
| Land | 7.494 | 7,928 | 9,176 |
| Farm improvements | 3.541 | 3,889 | 3,474 |
| Machinery and equipment (total.) | 1,980 | 1,802 |  |
| - General machinery and equipment | 1,468 | $1,337$ | $1,320$ |
| - Tractor | 229 | 247 | 240 |
| Truck | 26 | 49 | 75 |
| Auto (farm share) | 145 | 115 | 89 |
| Gas engine (farm share) | 22 | 10 | 16 |
| Elec. equiprnent (farm share) | 90 | 44 | 35 |
| Feeds and seeds |  | 2,242 | 1,911 |
| Miscellaneous supplies | 27 | 15 | . 58 |
| Horses (total) | 359 | 420 | 497 |
| Horses | 347 | - 396 | 439 |
| Colts | 12 | $\therefore 24$ | 58 |
| Productive livestock (total) | 1,462 | 1,725 | 1,574 |
| Cows | 660 | 849 | 747 |
| Other cattle | 336 | 385 | 350 |
| Hogs | 203 | 301 | 179 |
| Sheep | 53 | 40 | 56 |
| Poultry | 210 | 150 | 242 |


| Items | Dodge <br> \& Mower | $\begin{aligned} & \text { Freem } \\ & \text { born } \end{aligned}$ | $\begin{aligned} & \text { Good- } \\ & \text { hue } \end{aligned}$ | Rice | Steele |  <br> Le Sueur |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CASH EXPENSES |  |  |  |  |  |  |
| Tractor (new \& exp.) | \$119 | \$65 | \$273 | \$87 | \$113 | \$91 |
| Truck ( new \& exp.) | 89 | 40 | 38 | 46 | 51 | 67 |
| Auto (new \& exp.) (farm share) | 85 | 125 | 71 | 144 | 92 | 123 |
| Gas engine (new \& exp.) (farm sh.) | 19 | 11 | 14 | 19 | 11 | 10 |
| Wlectricity (new \& exp.)(farm sh.) | 51 | 21 | 8 | 66 | 43 | 53 |
| Machinery \& equipment (new) | 166 | 89 | 100 | 98 | 112 | 110 |
| Machinery \& equipment (exp.) | 61 | 45 | 57 | 53 | 64 | 62 |
| Bldgs., fen., til. (new) | 130 | 63 | 48 | 49 | 33 | 39 |
| Bldgs., fen., til. (exp.) | 73 | 55 | 34 | 18 | 35 | 34 |
| Hired labor | 444 | 165 | 196 | 140 | 258 | 255 |
| Feed for livestock | 521 | 199 | 352 | 523 | 310 | 523 |
| Other exp. for livestock. | 71 | 41 | 44 | 48 | 45 | 64 |
| Forses bought | 27 | 16 | 34 | 34 | 64 | 28 |
| Cows bought | 51 | 12 | 1 | 16 | 68 | 15 |
| Other cattle bought | 292 | 32 | 12 | 45 | 46 | 24 |
| Hogs bought | 37 | 18 | 8 | 12 | 67 | 12 |
| Sheep bought | 56 | 83 | 1 | 3 | 44 | 1 |
| Poultry bought | 37 | 36 | 26 | 66 | 41 | 89 |
| Crop (seed, twine, spray) | 196 | 145 | 139 | 165 | 141 | 190 |
| Taxes and insurance | 340 | 221 | 218 | 302 | 297 | 290 |
| General farm | 29 | 18 | 24 | 33 | 19 | 33 |
| Total cash expense | 2,894 | 1,500 | 1,698 | 1,967 | 1,954 | 2,113 |
| Board for hired labor | 88 | 80 | . 78 | 61 | 80 | 101 |
| Total expense | 2,982 | 1,580 | 1,776 | 2,028 | 2,034 | 2,214 |
| CASE RECEIPIS |  |  |  |  |  |  |
| Horses | 21 | 19 | 33 | 12 | 46 | 41 |
| Cows | 163 | 120 | 158 | 110 | 138 | 181 |
| Dairy products | 1,905 | 995 | 964 | 1,043 | 1,289 | 1,185 |
| Other cattie | 636 | 141 | 268 | 223 | 207 | - 293 |
| Hogs | 540 | 612 | 414 | 450 | 996 | 558 |
| Sheep | 212 | 260 | 62 | 28 | 55 | 64 |
| Poultry | 250 | 116 | 75 | 482 | 259 | 563 |
| EgEs | 169 | 199 | 256 | 415 | 325 | 464 |
| Small grain | 186 | 61 | 565 | 378 | 208 | 130 |
| Corn | 80 | 200 | 23 | 200 | 125 | 363 |
| Hay | 30 | 8 | 3 | 24 | 29 | 64 |
| Root crops | 1 | 57 | 2 | 1 | 12 | 78 |
| Other crops | 114 | 38 | 41 | 37 | 120 | 113 |
| Miscellaneous | 122 | 105 | 140 | 143 | 98 | 126 |
| Work off farm | 323 | 81 | 86 | 295 | 87 | 135 |
| A.A.A. adjustment payments | 290 | 433 | 312 | 334 | 423 | 378 |
| Total cash receipts | 5,042 | 3,445 | 3.402 | 4,175 | 4,417 | 4,736 |
| Increase in farm inventory | 1,160 | 391 | 355 | 455 | 866 | 289 |
| Farm produce used in house | 228 | - 207 | 223 | 225 | 217 | 243 |
| Total receipts. | 6,430 | 4,043 | 3.980 | 4,855 | 5,500 | 5.268 |
| Total expenses | 2,982 | 1,580 | 1,776 | 2,028 | 2,034 | 2:214 |
| Return to cap. \& family labor | 3.448 | 2,463 | 2,204 | 2,827 | 3,466 | 3.054 |
| Interest on farm inventory | 953 2495 | , 762 | $\begin{array}{r}850 \\ \hline\end{array}$ | -826 | + 901 | - 923 |
| Family labor earnings | 2,495 226 | 1,701 | 1,354 160 | 2,001 218 | $\begin{array}{r}2,565 \\ \hline 188\end{array}$ | 2.,131 |
| Operator's labor earnings | 2,269 | 1,580 | 1,194 | 1,7.83 | 2,377 | 1,876 |


| Range in Size | $\begin{aligned} & \text { Under } \\ & 100 \mathrm{~A} . \end{aligned}$ | $\begin{aligned} & 100 \text { to } \\ & 139 \mathrm{~A} . \end{aligned}$ | $\begin{aligned} & 140 \text { to } \\ & 179 \mathrm{~A} . \end{aligned}$ | $\begin{aligned} & 180 \text { to } \\ & 219 \mathrm{~A} . \\ & \hline \end{aligned}$ | $\begin{array}{r} 220 \mathrm{to} \\ 259 \mathrm{~A} . \\ \hline \end{array}$ | $260 \mathrm{~A} .$ \& above |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 6 | 16 | 29 | 23 | 22 | 24 |
| CASH EXPENSES |  |  |  |  |  |  |
| Tractor (new \& exp.) | \$10 | \$38 | \$88 | \$121 | \$162 | \$263 |
| Truck (new \& exp.) | 39 | 18 | 29 | 56 | 100 | 75 |
| Auto (new \& exp.) (farm share) | 54 | 95 | 62 | 74 | 135 | 165 |
| Gas engine ( ncw \& exp.) (f.sh.) | ) 1 | 18 | 10 | 12 | 18 | 17 |
| Elec. (new \& exp.) (f. sh.) | 30 | 31 | 24 | 37 | 56 | 45 |
| Mach. and equipment (new) | 116 | 80 | 69 | 98 | 130 | 193 |
| Mach. and equipment (exp.) | 31 | 29 | 60 | 51 | 56 | 85 |
| Buildings, fencing, tiling (new) |  | 137 | 54 | 57 | 85 | 22 |
| Buildings, fencing, tiling(exp. | .) 13 | 59 | 24 | 55 | 46 | 53 |
| Fired labor | 83 | 106 | 143 | 218 | 448 | 376 |
| Feed for livestock | 465 | 333 | 422 | 294 | 390 | 476 |
| Other expense for livestock | 69 | 42 | 42 | 51 | 55 | 64 |
| Horses bou.ght | 29 | 46 | 27 | 49 | 20 | 35 |
| Cows bought | 63 | 28 | 12 | 10 | 31 | 55 |
| Other cattle bought | 0 | 21 | 36 | 15 | 28 | 305 |
| Hogs bought | 35 | 18 | 35 | 21 | 15 | 37 |
| Sheep bought | 0 | 0 | 26 | 13 | 58 | 72 |
| Poultry bought | 36 | 77 | 60 | 32 | 32 | 36 |
| Crop (seed, twine, spray) | 66 | 127 | 154 | 133 | 177 | 230 |
| Taxes and insurance | 203 | 166 | 211 | 276 | 316 | 409 |
| General farm | 30 | 21 | 21 | 2.4 | 33 | 25 |
| Total cash expense 1 | 1,376 | 1,490 | 1,609 | 1,697 | 2,391 | 3,038 |
| Board for hired labor | 26 | 42 | 58 | 96 | 112 | 112 |
| Total expense 1 | 1,402 | 1,532 | 1,667 | 1,793 | 2,503 | 3,150 |
| CASH RECEIPTS |  |  |  |  |  |  |
| Horses | 16 | 22 | 14 | 44 | 40 | 33 |
| Cows | 91 | 126 | 121 | 180 | 126 | 194 |
| Dairy products 1 | 1,056 | 859 | 933 | 1,257 | 1,578 | 1,632 |
| Other cattle | 65 | 159 | 119 | 208 | 278 | 800 |
| Hogs | 268 | 361 | 616 | 562 | 689 | 796 |
| Sheep | 14 | 26 | 72 | 41 | 200 | 272 |
| Poultry | 146 | 350 | 504 | 169 | 74 | 204 |
| Eggs | 151 | 354 | 362 | 207 | 229 | 325 |
| Small grain | 56 | 36 | 155 | 226 | 432 | 445 |
| Corn | 12 | 91 | 86 | 188 | 201 | 224 |
| Hay | 2 | 18 | 13 | 19 | 3 | 73 |
| Root crops | 5 | 52 | 2 | 30 | 26 | 30 |
| Other crops | 34 | 22 | 47 | 43 | 74 | 204 |
| Miscellaneous | 115 | 77 | 60 | 125 | 160 | 187 |
| Work off farm | 195 | 169 | 69 | 94 | 400 | 100 |
| A.A.A. adjustment payments | 103 | 208 | 352 | 344 | 403 | 516 |
| Total cash receipts 2 | 2,329 | 2,930 | 3,525 | 3.737 | 4,913 | 6,035 |
| Increase in farm inventory | 89 | 369 | 426 | 447 | 690 | 1,209 |
| Farm produce used in house | 161 | 222 | 200 | 206 | 227 | 282 |
| Total receipts 2 | 2,579 | 3,521 | 4,151 | 4.390 | 5,830 | 7,526 |
| Total expenses 1 | 1,402 | 1,532 | 1,667 | 1,793 | 2,503 | 3,150 |
| Return to cap. \& family labor 1 | 1,177 | 1,989 | 2,484 | 2,597 | 3,327 | 4.376 |
| Interest on farm inventory | 460 | 556 | 719 | 789 | 987 | 1,343 |
| Family labor earnings | 717 | 1,433 | 1,765 | 1,808 | 2,340 | 3,033 |
| Unpaid family labor | 82 | 201 | 172 | 126 | 154 | 329 |
| Operator's labor earnings | 635 | 1,232 | 1,593 | 1,682 | 2,186 | 2,704 |



Yields of Crops 1934

| Counties: | Dodge \& Mower | $\begin{aligned} & \text { Freen } \\ & \text { born } \\ & \hline \end{aligned}$ | Good- hue | Rice | Steele | Waseca \& LeSueur |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crops: |  |  |  |  |  |  |
| Winter wheat, bu. | 1 | 10.6 | - | 11.0 | 16.1 | 12.4 |
| Spring wheat, bu. | 9.1 | 5.0 | 14.5 | 7.9 | 12.2 | 12.0 |
| Oats, bu. | 15.2 | 19.5 | 21.2 | 17.2 | 22.3 | 23.2 |
| Barley, bu. | 10.9 | 16.5 | 14.4 | 16.5 | 26.2 | 18.0 |
| Rye, bu. | 4.0 | 9.6 | 5.6 | - | 6.7 | 3.7 |
| Flax, bu. | 8.0 | 5.0 | 10.0 | - | 7.8 | 6.4 |
| Theat and oats, bu. | 13.2 | 16.7 | 16.6 | 14.0 | 15.9 | 13.1 |
| Oats and barley, bu. | 12.0 | 20.3 | 16.5 | 17.8 | 23.9 | 21.8 |
| Flax and wheat, bu. | 7.2 | 9.4 | 10.3 | - | 10.1 | - |
| Oats, barley and wheat, b | bu.12.9 | 15.1 | - | - | 25.0 | 14.7 |
| Canning peas, bu. | $\Theta$ | - | - | - | \$6.22 | \$5.27 |
| Corn, grain, bu. | 39.3 | 29.8 | 26.8 | 30.7 | 35.9 | 26.3 |
| Corn, silage, tons | 7.3 | 7.3 | 5.6 | 7.0 | 8.1 | 6.8 |
| Corn, fodder, tons | 2.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 |
| Sweet corn, tons | 2.1 | - | - | 1.8 | 2.6 | 2.1 |
| Sugar beets, tons | - | - | - |  |  | 6.2 |
| Potatoes, bu. | 53.8 | 57.0 | 140.9 | 62.4 | 45.8 | 42.0 |
| Alfalfa, tons | 1.1 | 1.2 | . 8 | 1.2 | 1.4 | 1.2 |
| Red clover, tons | - | 1.0 | - | - | . 2 | . 6 |
| Clover and timothy, tons | . 4 | . 4 | . 5 | - | . 7 | - |
| Soy bean hay, tons | 1.2 | 1.1 | 1.0 | . 9 | 1.5 | 1.2 |
| Timothy, tons | . 4 | . 1 | . 1 | . 8 | . 8 | 1.8 |
| Wild hay, tons | . 4 | 1.1 | . 2 | . 7 | . 7 | . 6 |

Factors Pelated with Earnings 1934

| Counties: | Dodge \& Mower | Freeborn | Goodmue |
| :---: | :---: | :---: | :---: |
| Lbs. B.F. per cow | 238 | 235 | 227 |
| Return above feed (P.I.S. other than cows) | \$14.70 | \$10.36 | \$11.20 |
| Prod. livestock units per 100 acres | 19.6 | 21.1 | 16.9 |
| Crop yields (\% of average) | 93 | 101 | 89 |
| \% tillable land in high return crops | 30.6 | 36.1 | 34.4 |
| Days of productive work | 963 | 696 | 667 |
| Days of productive work per worker | 355 | 368 | 3320 |
| Power \& equip. expense per day prod. work | \$1. 10 | \$1.11 | \$1.30 |
| Counties: | Rice | Steele | Waseca \& Le Sueur |
| Lbs. B.F. per cow | 246 | 242 | 231 |
| Return above feed (P.I.S. other than cows) | \$29.39 | \$19.28 | \$21.09 |
| Prod. livestock units per 100 acres | 21.4 | 22.5 | 19.8 |
| Crop yields (\% of average) | 98 | 122 | 98 |
| \% tillable land in high return crops | 38.7 | 36.7 | 42.1 |
| Days of productive work | 709 | 807 | 839 |
| Days productive work per worker | 317 | 336 | 331 |
| Power \& equip. expense per day prod. work | \$1.26 | \$1.19 | \$1.15 |


| Counties: | Dodge \& Mower | Freeborn | Goodhue |
| :---: | :---: | :---: | :---: |

## Items

No. of horses (farms with tractor)

|  | 5.2 | 4.8 | 5.6 |
| :--- | ---: | ---: | ---: |
|  | 6.3 | 5.0 | 5.0 |
|  | 23.4 | 17.7 | 1.2 |
|  | 8.9 | 9.3 | 8.2 |
|  | 25.9 | 16.8 | 7.1 |
|  | 6.8 | 8.0 | 5.5 |
|  | 11263 | 12372 | 9084 |
|  | 29.9 | 32.6 | 14.7 |
|  | 126.2 | 165.6 | 151.0 |
|  | 47.6 | 38.9 | 34.8 |
|  | 49.7 | 48.2 | 48.9 |
|  | 27.2 | 22.1 | 29.8 |
|  | 10.6 | 15.7 | 10.4 |
|  | 7.7 | 9.2 | 6.3 |
| ows | 4.8 | 4.6 |  |
| attle* |  |  |  |
|  | 4.8 |  |  |

No. of cows
No. of cows per worker
8.9
9.3 8.2

Head of other cattle
Iitters of pigs raised

|  | 5.2 | 4.8 | 5.6 |
| :--- | ---: | ---: | ---: |
|  | 6.3 | 5.0 | 5.0 |
|  | 23.4 | 17.7 | 1.2 |
|  | 8.9 | 9.3 | 8.2 |
|  | 25.9 | 16.8 | 7.1 |
|  | 6.8 | 8.0 | 5.5 |
|  | 11263 | 12372 | 9084 |
|  | 29.9 | 32.6 | 14.7 |
|  | 126.2 | 165.6 | 151.0 |
|  | 47.6 | 38.9 | 34.8 |
|  | 49.7 | 48.2 | 48.9 |
|  | 27.2 | 22.1 | 29.8 |
|  | 10.6 | 15.7 | 10.4 |
|  | 7.7 | 9.2 | 6.3 |
| ows | 4.8 | 4.6 |  |
| attle* |  |  |  |
|  | 4.8 |  |  |

Head of sheep ( 2 lambs equal 1 head)
29.9
165.6
151.0

No. of hens
Slotal no. of prod. livestock animal units
47.6
38.9
34.8
\% of total prod. livestock units that are cows

|  | 5.2 | 4.8 | 5.6 |
| :--- | ---: | ---: | ---: |
|  | 6.3 | 5.0 | 5.0 |
|  | 23.4 | 17.7 | 1.2 |
|  | 8.9 | 9.3 | 8.2 |
|  | 25.9 | 16.8 | 7.1 |
|  | 6.8 | 8.0 | 5.5 |
|  | 11263 | 12372 | 9084 |
|  | 29.9 | 32.6 | 14.7 |
|  | 126.2 | 165.6 | 151.0 |
|  | 47.6 | 38.9 | 34.8 |
|  | 49.7 | 48.2 | 48.9 |
|  | 27.2 | 22.1 | 29.8 |
|  | 10.6 | 15.7 | 10.4 |
|  | 7.7 | 9.2 | 6.3 |
| ows | 4.8 | 4.6 |  |
| attle* |  |  |  |
|  | 4.8 |  |  |

\% of total prod. livestock units that are sheep
\% of total prod. livestock units that are hens and
Counties:

## Items

No. of horses (farms with tractor)
No. of horses (farms without tractor)
No. of colts
No. of cows

| 4.6 | 5.3 | 6.1 |
| ---: | ---: | ---: |
| 3.6 | 6.1 | 5.1 |
| 15.3 | 20.5 | 1.1 |
| 7.1 | 8.5 | 7.5 |
| 15.9 | 18.3 | 19.1 |
| 5.4 | 9.4 | 7.1 |
| 9392 | 17850 | 1165 |
| 7.2 | 8.9 | 12.9 |
| 225.8 | 198.9 | 325.6 |
| 32.8 | 41.5 | 40.4 |
| 49.9 | 49.2 | 50.6 |
| 26.1 | 22.9 | 22.4 |
| 12.9 | 18.6 | 13.9 |
| 1.7 | 3.1 | 4.4 |
| 9.4 | 6.2 | 8.7 |

Head of other cattle
Litters of pigs raised
Pounds of pork produced
Head of sheep ( 2 lambs equal 1 head)
No. of hens
Total no. of prod. livestock animal units
\% of total prod. livestock units that are cows
\% of total prod. livestock units that are cattle*
\% of total prod. livestock units that are hogs
\% of total prod. livestock units that are sheep
1.7
3.1
4.4
$\%$ of total prod. livestock units that are hens and
turgreys

[^2]Factors of Cost and Returns in Dairy Production, 1934

| counties | Dodge Mower | $\begin{gathered} \text { \& Free- } \\ \text { born } \end{gathered}$ | Good- hue | Rice | Steele | Waseca \& LeSueur |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of farms | 23 | 21 | 24 | 13 | 22 | 17 |
| Butterfat per cow | 238 | 235 | 227 | 246 | 242 | 231 |
| Feed per cow, lbs.: |  |  |  |  |  |  |
| Corn | 486 | 623 | 624 | 504 | 620 | 867 |
| Small grain | 813 | 715 | 426 | 740 | 696 | 472 |
| Com. feeds - under $25 \%$ protein | 161 | 64 | 275 | 281 | 89 | 196 |
| Com. feeds - over $25 \%$ protein | 105 | 27 | 44 | 48 | 49 | 28 |
| Tame hay | 848 | 837 | 988 | 562 | 667 | 636 |
| Alfalfa | 1,347 | 1,757 | 1,472 | 2,751 | 2,449 | 1,920 |
| Wild hay | 48 | 286 | 80 | 50 | 16 | 282 |
| Corn fodder | 1,001 | 663 | 539 | 1,285 | 970 | 1,251 |
| Silage | 8,238 | 6,574 | 6,925 | 8,022 | 7,812 | 6,371 |
| Total concentrates | 1,565 | 1,429 | 1,369 | 1,573 | 1,454 | 1,563 |
| Total dry roughage | 3,244 | 3,543 | 3,079 | 4,648 | 4,102 | 4,089 |
| Total digestible nutrients | 4,123 | 3,960 | 3,679 | 4,755 | 4,429 | 4,173 |
| Total digestible nutrients per lb. B.F. | 17.5 | 17.5 | 16.7 | 19.8 | 18.5 | 18.3 |
| \% protein in ration | 11.7 | 12.4 | 12.5 | 13.2 | 12.6 | 12.0 |
| \% cows fresh - Sept. to Dec. | 53.9 | 56.9 | 56.8 | 72.6 | 59.3 | 62.9 |
| Feed cost per cow: |  |  |  |  |  |  |
| Concentrates \$ | \$16.24 | \$13.31 | \$12.42 | \$16. 85 | \$14.46 | \$13.70 |
| Roughages | 26.05 | 26.02 | 24.32 | 33.24 | 30.46 | 24.67 |
| Pasture | 3.61 | 4.00 | 3.86 | 3.85 | 3.46 | 3.94 |
| Total feed cost | 45.90 | 43.33 | 40.60 | 53.94 | 48.38 | 42.31 |
| Feed cost per 1b. B.F. | . 19 | . 19 | . 18 | . 22 | . 20 | . 19 |
| Value of produce per cow: |  |  |  |  |  |  |
| B.F. sales | \$70.14 | \$55.25 | \$53.18 | \$69.35 | \$64.60 | \$59.19 |
| Dairy products used in house | 3.63 | 6.47 | 4.48 | 4.76 | 2.98 | 3.73 |
| Milk to other livestock | 11.69 | 12.37 | 12.02 | 10.88 | 13.60 | 13.46 |
| Appreciation or depreciation | -2.95 | -3.79 | -1.59 | -5.18 | -4.25 | -1.99 |
| Total value of product | 82.51 | 70.30 | 68.09 | 79.81 | 76.93 | 74.39 |
| Return above feed cost per cowPrice received per lb. B.F. sold: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| As manufacturing cream | . 27 | . 27 | . 27 | . 28 | . 29 | . 28 |
| As market mill \& cream \& cheese mill | 11k. 49 | . 38 | . 32 | . 52 | . 38 | . 63 |
| Number of cows | 23.4 | 17.7 | 17.1 | 15.4 | 20.1 | 19.5 |

Feed Costs and Returns for Other Cattle and Sheep 1934

| Counties | Dodge Mower | $\begin{gathered} \text { Free- } \\ \text { born } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Good- } \\ & \text { hue } \end{aligned}$ | Rice | Steele | Waseca \& LeSueur. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other cattle; no. of forms: | 21 | 21 | 24 | 13 | 22 | 17 |
| Feeds used per head, lbs.: |  |  |  |  |  |  |
| Concentrates | 414 | 482 | 452 | 261 | 317 | 494 |
| Hay and fodder | 1,257 | 1,383 | 1,209 | 1,641 | 1,622 | 1.946 |
| Silage | 2,572 | 2,408 | 2,618 | 2,791 | 2,871 | 2,181 |
| Whole mills | 408 | 402 | 398 | 350 | 452 | ,588 |
| Skimmilk | 1,481 | 1,524 | 1,369 | 1,209 | 1,475 | 1,634 |
| Feed costs per head: |  |  |  |  |  |  |
| Concentrates | \$3.96 | \$3.69 | \$3.85 | \$2.66 | \$2.96 | \$4.66 |
| Roughages | 8.84 | 9.74 | 8.44 | 10.49 | 10.64 | 9.80 |
| Milk | 7.18 | 7.58 | 7.28 | 6.02 | 7.77 | 9.96 |
| Pasture | 1.17 | 1.22 | 1.32 | 1.19 | 1.29 | 1.31 |
| Total | \$21.15 | \$22.23 | \$20. 89 | \$20.36 | \$22. 66 | \$25.73 |
| Returns per head | 16.96 | 16.59 | 17.09 | 19.42 | 18.95 | 19.98 |
| Return above feed cost per head \$-4.19 |  | \$-5.64 | - -3.80 | --. 94 | \$-3.71 | \$-5.75 |
| \% death loss | 12.7 | 11.4 | 10.8 | 5.2 | 9.3 | 8.2 |
| No. of head of young cattle | 20.5 | 16.8 | 19.6 | 15.9 | 18.3 | 19.1 |
| Sheep; no. of farms: | 12 | 11 | 12 | 2. | 8 | 1 |
| Feed used per head,*Ibs.: |  |  |  |  |  |  |
| Concentrates | 100 | 136 | 66 | 51 | 71 | 80 |
| Tame hay | 102 | 65 | 78 | 207 | 22 | 49 |
| Alfalfa | 58 | 92 | 69 | 108 | 33 | 170 |
| Corn fodder and wild hay | 82 | 91 | 87 | 195 | 290 | 100 |
| Silage | 142 | 110 | 184 | 358 | 117 | 11 |
| Feed cost per head: |  |  |  |  |  |  |
| Concentrates | \$. 91 | \$1.02 | \$. 58 | \$. 34 | \$. 85 | \$. 59 |
| Roughages | 1.03 | 1.06 | 1.07 | 2.04 | 1.01 | 1.09 |
| Pasture | . 61 | . 56 | . 64 | .40 | .43 | . 70 |
| Total | \$2. 55 | \$2. 64 | \$2.29 | \$2.78 | \$2. 29 | \$2.38 |
| Value of production per head: |  |  |  |  |  |  |
| Wool | 1.39 | . 84 | 1.50 | 1.20 | 1.20 | 1.60 |
| Mutton | 4.03 | 3.11 | 2.37 | 3.52 | 2.67 | 2.78 |
| Total | 35.42 | \$3.95 | \$3.87 | \$4.72 | \$3.87 | \$4.38 |
| Return above feed cost per head | \$2. 87 | \$1.31 | \$1.58 | \$1.94 | \$1. 58 | \$2.00 |
| Price per lb. wool sold | . 19 | . 18 | . 19 | . 23 | . 19 | . 18 |
| Value per lamb sold | 4.90 | 5.01 | 4.93 | 5.47 | 5.34 | 5.19 |
| \% Iamb crop | 115.0 | 101.0 | 87.0 | 127.0 | 94.0 | 81.0 |
| \% death loss | 7.0 | 14.0 | 15.0 | 6.0 | 16.0 | 14.0 |
| No. of head of sheep* | 57.4 | 62.2 | 29.4 | 46.5 | 24.6 | 31.3 |

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

Feed Costs and Feturns for Hogs and Poultry 1934

| County: | Dodge Mower | $\begin{aligned} & \text { Free- } \\ & \text { born } \end{aligned}$ | Goodhue | Rice | Steele | Waseca \& Ie Sueur |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hogs: no. of farms: | 22 | 20 | 24 | 12 | 22 | 16 |
| Libs. feed per 100 lbs . pork produced: |  |  |  |  |  |  |
| Small grain | 58 | 50 | 30 | 34 | 72 | 62 |
| Cormercial grain feeds | 7 | 3 | 19 | 16 | 5 | 11 |
| Total grain ${ }^{\text {a }}$ a commercial feeds | 355 | 426 | 402 | 399 | 394 | 476 |
| Tankage | 1 | 1 | 2 | 1 | 3 | 2 |
| Skimmilk | 535 | 475 | 547 | 606 | 644 | 559 |
| Value of feed per 100 lbs . pork prod.: |  |  |  |  |  |  |
| Grain and commercial feeds | \$3.33 | \$3.67 | \$3. 65 | \$3.43. | \$3.79 | \$4.65 |
| Tankage and skimmilk | . 75 | .73 | . 87 | . 93 | 1.03 | . 88 |
| Pasture | . 09 | . 14 | . 12 | . 10 | . 10 | . 12 |
| Total | 4.17 | 4.54 | 4.64 | 4.46 | 4.92 | 5.65 |
| Return per $100 \mathrm{lbs}$. pork produced | 5.74 | 5.67 | 5.52 | 5.44 | 5.98 | 5.52 |
| Return above feed cost per 100 lbs . pork produced |  |  |  |  |  |  |
| Price rec. per 100 lbs. pork sold | 4.13 | 4.12 | 3.79 | 3.82 | 4.31 | 3.78 |
| Total no. of litters | 7.1 | 8.4 | 5.5 | 5.8 | 9.4 | 7.6 |
| Total no. of pigs weaned per litter | 5.9 | 6.2 | 6.4 | 6.1 | 6.6 | 6.5 |
| Pounds of pork produced. | 11,775 | 12,991 | 9,085 | 10,175 | 17,850 | 11,863 |
| $\frac{\text { Poultry: no. of farms }}{\text { Lbs. of feed per hen: }}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Concentrates | 119 | 112 | 101 | 103 | 108 | 128 |
| Skimmilk | 57 | 88 | 63 | 106 | 86 | 65 |
| Cost of feed per hen: |  |  |  |  |  |  |
| Concentrates | \$1.43 | \$1.22 | \$1.29 | \$1.35 | \$1.31 | \$1.56 |
| Skimmi 1 k | . 09 | . 13 | . 09 | . 16 | . 13 | . 10 |
| Total | 1.52 | 1.35 | 1.38 | 1.51 | 1.44 | 1.66 |
| Value of product per hen: |  |  |  |  |  |  |
| Eggs sold and used in house | \$1.43 | \$1.28 | \$1.75 | \$1.78 | \$1. 64 | \$1.25 |
| Poultry sold and used in house plus appreciation or less depreciation | 1.13 | . 80 | . 44 | . 65 | . 48 | 1.10 |
| Total | 2.56 | 2.08 | 2.19 | 2.43 | 2.12 | 2.35 |
| Return above feed cost per hen | \$1.04 | \$. 73 | \$. 81 | \$. 92 | \$. 68 | \$. 69 |
| Price rec. per dozen eggs sold (cents) | 14.9 | 15.2 | 15.1 | 16.9 | 14.8 | 15.8 |
| Eggs laid per hen | 112 | 103 | 138 | 126 | 127 | 96 |
| No. of hens | 138 | 174 | 158 | 226 | 208 | 346 |
| \% of total no. that are pullets | 74 | 76 | 75 | 86 | 78 | 72 |

Feed Costs per Forse and Other Power Expense Items 1934

| Counties: | Freeborn | Goodhue | Rice | Steele | Waseca \& Le Sueur |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Farms with tractors: no. 12 | 10 | 17 | 8 | 18 | 12 |
| Feed per horse,* lbs.: |  |  |  |  |  |
| Grain 2365 | 2480 | 2558 | 2813 | 3082 | 1991 |
| Tame hay and alfalfa 2695 | 1567 | 2680 | 2521 | 1624 | 1667 |
| Wild hay and fodder 1773 | 1993 | 939 | 2901 | 2584 | 3175 |
| Feed costs per horse: |  |  |  |  |  |
| Grain \$23.77 | \$24.32 | \$27.43 | \$30. 65 | \$31.11 | \$20.01 |
| Roughage 15.69 | 11.47 | 13.39 | 19.67 | 13.31 | 13.85 |
| Pasture 2.62 | 2.02 | 2.38 | . 77 | 1.40 | 2.19 |
| Total 42.08 | 37.81 | 43.20 | 51.09 | 45.82 | 36.05 |
| Number of work horses 5.2 | 4.8 | 5.3 | 4.6 | 5.3 | 6.1 |
| Number of colts .7 | . 9 | . 8 | . 5 | . 5 | . 9 |
| Crop acres per horse $\quad 34.0$ | 30.0 | 30.0 | 34.0 | 29.0 | 26.0 |
| Tractor \& horse expense per crop A. $\$ 2.30$ | \$2.30 | \$2.56 | \$3.09 | \$2. 85 | \$2.37 |
| Farm power exp. per day prod. work . 68 | . 61 | . 73 | . 93 | .74 | . 69 |
| Farms without tractors: no, 6 | 11 | 7 | 5 | 4 | 5 |
| Feed per horse, \% Ibs.: |  |  |  |  |  |
| Grain 2402 | 2455 | 2566 | 2924 | 2794 | 2742 |
| Tane hay and alfalfa 1395 | 1337 | 2152 | 2563 | 2208 | 979 |
| Wild hay and fodder. 2328 | 1471 | 2120 | 1450 | 1966 | 3235 |
| Feed costs per horse: |  |  |  |  |  |
| Grain \$ ${ }^{\text {¢ } 20.94}$ | \$23.18 | \$26.33 | \$30.77 | \$26.71 | \$29.12 |
| Roughage 8.44 | 10.54 | 14.29 | 14.63 | 15.41 | 12.66 |
| Pasture 1.93 | 1.58 | 1.99 | 1.62 | 1.51 | 2.60 |
| Total 3131 | 35.30 | 42.61 | 47.02 | 43.63 | 44.38 |
| Number of work horses 6.2 | 5.0 | 5.1 | 3.6 | 6.1 | 5.1 |
| Number of colts . 6 | . 5 | . 6 | 0 | . 3 | 1.4 |
| Crop acres per horse 19.0 | 21.0 | 19.0 | 16.0 | 17.0 | 20.0 |
| Horse expense per crop A. 1.70 | \$2.13 | \$2.30 | \$3.51 | \$2.72 | \$2.27 |
| Farm power exp. per day prod. work . 60 | . 70 | . 68 | . 61 | . 72 | . 71 |

[^3]|  | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Items |  | 124 | 172 | 180 | 147 | 143 | 108 |
| Number of farms | 163 | 175 | 183 | 198 | 201 | 202 | 209 |
| Acres in farm farm | 112 | 121 | 128 | 137 | 138 | 141 | 137 |
| Crop acres in fing |  |  |  |  |  |  |  |
| Farm inventory (not including house) | $\$ 23,655$ | $\$ 25,494$ | $\$ 25,562$ | $\$ 23,060$ | $\$ 16,680$ | $\$ 15,522$ | $\$ 17,431$ |

Farm Earnings (see page 32)

| CASH EXPENSES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tractor (new \& exp.) | \$94 | \$249 | \$224 | \$151 | \$98 | \$94 | \$132 |
| Truck ( new \& exp.) | 29 | 65 | 51 | 53 | 52 | 44 | 56 |
| Auto (new \& exp.) (farm share) | 127 | 144 | 111 | 89 | 63 | 66 | 102 |
| Gas engine (new \& exp.) (farm share) | 14 | 19 | 14 | 13 | 10 | 9 | 14 |
| Electricity (new \& exp.) (farm share) | 32 | 24 | 22 | 36 | 31 | 33 | 38 |
| Machinery and equipment (new) | 151 | 228 | 174 | 134 | 89 | 98 | 114 |
| Machinery and equipment (exp.) | 74 | 70 | 57 | 63 | 51 | 48 | 57 |
| Buildings, fences, tiling (new) | 94 | 167 | 178 | 69 | 47 | 51 | 62 |
| Buildings, fences, tiling (exp.) | 54 | 49 | 32 | 37 | 19 | 26 | 44 |
| Hired labor | 252 | 293 | 262 | 275 | 220 | 208 | $25 ?$ |
| Feed for livestock | 504 | 376 | 309 | 380 | 282 | 200 | 392 |
| Other expense for livestock | 59 | 74 | 80 | 8 | 55 | 49 | 52 |
| Horses bought, | 44 | 28 | 38 | 26 | 32 | 33 | 34 |
| Cows bought | 79 | 41 | 45 | 18 | 17 | 15 | 29 |
| Other cattle bought | 63 | 99 | 78 | 45 | 34 | 52 | 81 |
| Hogs bought | 69 | 101 | 116 | 69 | 23 | 27 | 27 |
| Sheep bought | 5 | 8 | 4 | 15 | 10 | 8 | 34 |
| Poultry bought | 35 | 39 | 43 | 39 | 35 | 42 | 46 |
| Crop (seed, twine, spray) | 172 | 199 | 202 | 200 | 129 | 107 | 161 |
| Taxes and insurance | 285 | 312 | 324 | 349 | 341 | 275 | 275 |
| General farm | 30 | 29 | 26 | 34 | 31 | 25 | 25 |
| (1) Total cash expense | 2,266 | 2,614 | 2,390 | 2,177 | 1,669 | 1,510 | 2,027 |
| (2) Decrease in farm inventory | - | - | 375 | 971 | 919 | - |  |
| (3) Board for hired labor |  | 110 | 113 | 100 | 68 | 71 | 82 |
| (4) Total expense (sum of (1),(2)\&(3) | 2,361 | 2,724 | 2,878 | 3,248 | 2,656 | 1,581 | 2,109 |

Summary by Years (continued)
CASH RECEIPTS

| Horses. | 33 | 28 | 40 | 26 | 25 | 17 | 29 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cows | 353 | 350 | 281 | 174 | 128 | 100 | 147 |
| Dairy products | 1,649 | 1,674 | 1,374 | 1,276 | 978 | 1,064 | 1,249 |
| Other cattle | 375 | 427 | 319 | 286 | 213 | 204 | 304 |
| Hogs | 1,040 | 1,287 | 1,323 | 1,024 | 502 | 510 | 603 |
| Sheep | 45 | 59 | 35 | 46 | 37 | 62 | 121 |
| Poultry | 142 | 138 | 135 | 143 | 140 | 147 | 263 |
| Fggs | 272 | 278 | 272 | 231 | 193 | 229 | 289 |
| Small grain | 214 | 268 | 164 | 145 | 111 | 211 | 256 |
| Corn | 29 | 45 | 44 | 43 | 30 | 44 | 151 |
| Fay | 28 | 21 | 19 | 13 | 23 | 17 | 25 |
| Root crops | 1 | 57 | 56 | 38 | 33 | 53 | 24 |
| Other crops | 85 | 136 | 150 | 84 | 91 | 70 | 79 |
| Miscellaneous | 81 | 187 | 175 | 135 | 144 | 112 | 121 |
| Income from work off the farm | 117 | 88 | 89 | 140 | 106 | 96 | 160 |
| A.A.A. adjustment payments | 0 | 0 | 0 | 0 | 0 | 0 | 361 |
| (5) Total cash receipts | 4,464 | 5,043 | 4,476 | 3,804 | 2,754 | 2,936 | 4,182 |
| (6) Increase in farm inventory | 387 | 847 | , | 3,804 | , | 505 | 611 |
| (7) Farm produce used in house | 323 | 326 | 304 | 242 | 197 | 193 | 223 |
| (8) Total receipts (sum of (5)(6) \& | (7) 5174 | 6,216 | 4,780 | 4,046 | 2,951 | 3,634 | 5,016 |
| Total expenses (4) | 2,361 | 2,724 | 2,878 | 3,248 | 2,656 | 1,581 | 2,109 |
| (9) Ret.to cap.\& fam. labor (8) - (4) | 2,813 | 3,492 | 1,902 | 798 | 295 | 2,053 | 2,907 |
| (10) Interest on farm inventory | 1,182 | 1,274 | 1,278 | 1,153 | 834 | 826 | 872 |
| (11) Family labor (9)-(10) | 1,631 | 2,218 | 624 | -355 | -539 | 1,227 | 2,035 |
| (12) Unpaid family labor | 354 | 361 | 381 | 257 | 229 | 241 | 190 |
| (13) Oper labor earnings (11) - (12) | 1,27] | 1,857 | 243 | -622 | -768 | 986 | 1,845 |
| MISCEITANEOUS TTEMS |  |  |  |  |  |  |  |
| Yield per acre, corm (bu.) | 40.9 | 48.6 | 47.1 | 32.1 | 51.3 | 54.7 | 31.8 |
| Yield per acre, barley (bu.) | 36.9 | 35.1 | 31.8 | 24.9 | 33.7 | 23.6 | 16.9 |
| Yield per acre, oats (bu.) | 44.6 | 47.5 | 50.6 | 39.0 | 54.8 | 35.7 | 20.0 |
| Yield per acre, alfalfa (tons) | 2.9 | 3.1 | 2.6 | 2.3 | 2.8 | 2.5 | 1.1 |
| \% of tillable land in high ret. crops | 31.0 | 32.8 | 33.4 | 33.4 | 35.6 | 40.5 | 36.0 |
| Prod. livestock units per 100 A . | 19.4 | 18.9 | 19.4 | 21.7 | 20.9 | 20.9 | 20.1 |
| No. of days of productive work | $589$ | 611 | $653$ | $770^{6}$ | 757 | 768 | 783 |
| Days of proauctive work per worker Pow. \& eq. exp. per day of prod. work | $\begin{array}{r} 308 \\ \$ 1.82 \end{array}$ | $\$ 1.612$ |  |  | $\begin{array}{r} 337 \\ \$ 1.15 \end{array}$ |  | $\begin{array}{r} 539 \\ \$ 1 \end{array}$ |
| No. of farms with tractors | $\begin{array}{r}\$ 1.85 \\ \hline 9\end{array}$ | \$1.00 | ${ }^{41} 12$ | P1. 96 | $\$ 1 . \frac{15}{94}$ | \$1. 10 | $\$ 1 . \frac{18}{82}$ |


| Miscellaneous items (contimued) | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of work horses | 5.5 | 5.4 | 5.3 | 5.5 | 5.4 | 5.4 | 5.3 |
| No. of colts | . 7 | . 8 | . 7 | . 9 | . 8 | 6 | . 7 |
| No. of cows | 13.8 | 14.7 | 15.5 | 17.7 | 18.2 | 18.7 | 19.1 |
| No. of head of other cattle | 14.2 | 15.5 | 16.7 | 20.3 | 20.6 | 19.8 | 19.6 |
| No. of litters of spring pigs | 5.9 | 6.3 | 6.8 | 8.9 | 7.2 | 6.9 | 5.1 |
| No. of litters of fall pigs | 3.3 | 3.2 | 3.2 | 5.0 | 4.0 | 4.9 | 2.1 |
| Lbs. of pork produced | 12,143 | 13,270 | 14,974 | 18,886 | 14,796 | 15,094 | 12,013 |
| 10. of head of sheep | 6.7 | 7.3 | 7.8 | 12.2 | 14.4 | 14.5 | 18.6 |
| No. of hens | 139 | 134 | 147 | 157 | 165 | 187 | 190 |
| Lbs. of B.F. per cow | 241.4 | 246.7 | 241.6 | 241.3 | 240.0 | 242.5 | 235.9 |
| No. of pigs per litter | 6.2 | 6.4 | 6.3 | 6.4 | 5.9 | 5.8 | 6.1 |
| No. of eggs laid per hen | 92.8 | 96.5 | 110.0 | 119.0 | 106.0 | 118.0 | 118.0 |
| Price received per lb. B.F. sold | \$. 53 | \$. 50 | \$. 40 | \$. 29 | \$. 22 | \$. 22 | \$. 28 |
| Price received per cwt. hogs sold | 8.23 | 9.60 | 8.94 | 5.33 | 3.18 | 3.42 | 4.01 |
| Amount received per lamb sold | 10.02 | 9.55 | 5.92 | 4.36 | 3.63 | 4.73 | 5.04 |
| Price received per lb, wool sold | . 42 | . 30 | . 18 | . 13 | . 08 | . 23 | . 19 |
| Price received per dozen eggs sold | . 27 | :28 | . 22 | . 16 | . 13 | . 12 | . 15 |
| Returns above feed cost per cow | \$77.43 | \$75.56 | \$45.17 | \$21. 54 | \$17.78 | \$26.46 | \$29.82 |
| Ret. above feed cost per head other cattle | 15.74 | 20.55 | 1.76 | -4.57 | -4.12 | -. 58 | -4.14 |
| Ret. above feed cost per cwt. pork prod. | . 54 | 2.46 | 1.69 | -. 24 | -. 56 | . 53 | . 96 |
| Ret. above feed cost per head sheep | 6.72 | 4.28 | -. 14 | 0 | -. 08 | 2.36 | 1.90 |
| Ret. above feed cost per hen | 1.86 | 1.78 | 1.35 | 1.22 | . 81 | . 75 | 81 |
| Feed cost per cow | \$70.85 | \$68.15 | \$61.38 | \$53.9\% | \$41.46 | \$34.47 | \$45.21 |
| Feed cost per head other cattle | 33.92 | 32.10 | 29.42 | 23.50 | 17.75 | 16.51 | 22.14 |
| Feed cost per cwt. pork produced | 7.98 | 7.34 | 6.32 | 4.03 | 3.14 | 2.83 | 4.71 |
| Feed cost per head sheep | 2.56 | 3.07 | 2.69 | 2.31 | 1.78 | 1.91 | 2.45 |
| Feed cost per hen | 1.55 | 1.69 | 1.38 | 1.04 | . 86 | . 93 | 1.46 |
| Feed cost per horse | 57.11 | 53.07 | 43.21 | 36.74 | 28.44 | 27.98 | 41.59 |
| Price of feed, shelled com (per bu.) | \$. 66 | \$. 73 | \$. 64 | \$. 46 | \$.36 | \$. 27 | \$. 52 |
| Price of feed, barley (per bu.) | . 67 | . 52 | . 42 | . 37 | . 29 | . 35 | . 65 |
| Price of feed, oats (per bu.) | . 49 | . 40 | . 31 | . 24 | . 19 | . 19 | . 36 |
| Price of feed, bran (per cwt.) | 1.80 | 1.60 | 1.40 | . 90 | . 68 | . 77 | 1.15 |
| Price of feed, oil meal (per cut.) | 2.90 | 3.05 | 2.75 | 1.85 | 1.48 | 1.60 | 2.13 |
| Price of feed, alfalfa (per ton) | 15.00 | 14.50 | 13.09 | 13.00 | 10,00 | 7.50 | 12.00 |

Footnote for pages 29, 30 and 31.
The values of farm real estate in 1931 were reduced approximately 25\% fron 1928-1930 values. The values in 1932 were reduced about $29 \%$ from the 1931 values. Only land was affected by the reduction in 1931, but in 1932 buildings and improvements were cut $25 \%$. The value of dairy cows was also adjusted downward in 1932. These capital losses were not included in the inventory decreases in the financial statement but the decreased valuation resulted in a lower interest charge. No changes in the basis of inventory valuations were made in 1933 or 1934.

The financial statements differ also in that the unpaid family labor rate was $\$ 60$ per month for the 1928 to 1930 period, $\$ 40$ in 1931, and $\$ 30$ in 1932 , 1933 and 1934 ; and the board for hired labor was figured at $\$ 20$ per month in 1928, 1929 and 1930, $\$ 15$ per month in 1931, and $\$ 10$ per month in 1932, 1933 and 1934.

These adjustrients to meet changes in the price level should be considered in comparing 1934 results with previous years.

None of the wheat adjustment payments received under A.A.A. contracts were included in farm receipts for 1933. The wheat payments represent remuneration to the producer for adjustments made in 1934 and 1935 and are therefore credited in these years. One-half of the total amount that is due for the full period of the contract is credited as income in 1934 and the remaining onemalf will be credited in 1935. All of the money received or due under the 1934 cornhog contracts is credited as income in 1934 even though final payments for 1934 will not be made till 1935.

The calculation of the per cent of tillable land in high return crops was changed slightly in 1933; barley wias moved from the (C) group to the (B) group, (see page 9 for explanation of method of calculation), and was kept in (B) group in 1934.


[^0]:    *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 11 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.

[^1]:    *ivot 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.

[^2]:    * Cattle other than cows.

[^3]:    *Two colts equal one horse.

