UNIVERSITY OF MINNESOTA
Department of Agriculture
and
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
and the
County Extension Services of
Cottonwood, Faribault, Jackson, Martin, Murray, Nobles, Redwood,
Rock, and Watonwan Counties
and the
Southwest Minnesota Farm Management Association
Cooperating

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# Annual Report of the Southwestern Minnesota Farm Management Service 1945

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Cooperator: _____

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Sixth Annual Report of the Southwest Minnesota Farm Management Service of Cottonwood, Faribault, Jackson, Martin, Murray, Nobles, Redwood, Rock, and Watonwan Counties for the Year 1945

Prepared by T. R. Nodland and G. A. Pond

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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 county extension services of several southwestern Minnesota counties are cooperating with the Southwest Minnesota Farm Management Association in maintaining a farm management service. The Association was organized in the fall of 1939 by farmers in that part of the state for the purpose of studying the farm business thru farm records. Each farmer pays an annual fee which covers a part of the cost. The balance of the cost is defrayed by the University of Minnesota and the United States Department of Agriculture.

The analysis of the records and the preparation of the report are handled by the Division of Agricultural Economics under the direction of G. A. Pond and T. R. Nodland. Extension work in connection with the project is handled by S. B. Cleland and J. B. McNulty of the Agricultural Extension Division. J. R. Burkholder

is the field agent for this project. At the end of the year G. E. Toben of the Division of Agricultural Economics aided in closing the records. County agricultural extension agents who cooperate in this project include H. J. Vossen, Fred Geisler, Roland Abraham, S. B. Simpson, A. B. Hagen, C. E. Stower, Ross Huntsinger, J. I. Swedberg, C. R. Simon, Ed Kaeder and Henry Fox.

The officers for the Southwest Farm Management Association for 1945 were:

President, Will N. Nelson, Tracy, Redwood County
Vice-President, Lewis Hibma, Brewster, Nobles County
Secretary-Treasurer, Arthur Foster, Garvin, Murray County

The board of directors include these officers and also the following: Walter Schmotzer, Cottonwood County; Clarence Myers, Faribault County; Chas. Winzer, Jackson County; Paul Peters, Martin County; Herbert Johnson, Murray County; Jack L. McKeever and Ed Olson, Jr., Noble's County; Herbert Green, Redwood County; George Hofelman, Rock County and Clayton Johnson, Watonwan County.

The following tabulation shows by counties the numbers of members who completed records in 1945:

| | | | | | |
|---|---|---|---|---|---|
| Cottonwood | 12 | Martin | 11 | Redwood | 24 |
| Faribault | 17 | Murray | 17 | Rock | 9 |
| Jackson | 17 | Nobles | 34 | Watonwan | 14 |
| | | | | Total | 155 |

In the tables on page 6 and succeeding pages are shown data for 153 farms. Two farms have been omitted from all of the averages in the tables because the account books were not available at the time the summaries were made.

## TYPE OF FARMING

The farms in this area have a wide diversity of enterprises. All classes of livestock are important although livestock kept for meat production tends to predominate. The sale of crops constitutes an important source of income. The principal feed crops grown are corn, oats, barley and hay. In addition wheat, soybeans, sweet corn, canning peas, and flax are grown to a limited extent as cash crops.

## TOPOGRAPHY, SOILS, AND WEATHER

The soils range from dark brown to heavy black loam. The major part of the area is undulating to gently rolling land interspersed with almost level tracts. In the western part of the area the surface ranges from undulating to sharply rolling. Nearly all of the land is tillable and well drained.

Weather conditions in March were especially favorable for early spring farm activities. By the end of March considerable seeding of small grains had been done in the southern counties. Precipitation was considerably above normal in the southern counties from April thru July. Field work and growth of vegetation was retarded and corn planting was delayed. Small grains, meadows and pastures were good. During much of the remainder of the year precipitation was below normal. Corn made rapid progress during the late summer but killing frosts were general in late September. Consequently, much of the corn was of poor quality and very high in moisture content. Weather conditions in October were ideal for harvesting late crop and for drying the high moisture corn and soybeans.

Table 1. Monthly and Annual Precipitation

| | Worthington | | Fairmont | | Windom | | Redwood Falls | |
|---|---|---|---|---|---|---|---|---|
| | Precip-itation | Depar-ture from normal | Precip-itation | Depar-ture from normal | Precip-itation | Depar-ture from normal | Precip-itation | Depar-ture from normal |
| | Inches | Inches | Inches | Inches | Inches | Inches | Inches | Inches |
| January | 0.36 | -0.27 | 0.31 | -0.49 | 0.13 | -0.51 | 0.37 | -0.57 |
| February | 1.31 | +0.54 | 1.39 | +0.42 | 1.34 | +0.60 | 1.18 | +0.24 |
| March | 1.16 | -0.10 | 1.97 | +0.56 | 1.02 | -0.12 | 1.12 | +0.02 |
| April | 2.11 | +0.03 | 4.36 | +2.13 | 1.62 | -0.27 | 2.30 | +0.05 |
| May | 5.18 | +1.24 | 6.52 | +2.60 | 5.06 | +1.37 | 3.17 | -0.25 |
| June | 5.09 | +0.80 | 6.16 | +2.02 | 4.56 | +0.63 | 4.70 | +0.21 |
| July | 5.51 | +2.12 | 5.40 | +1.84 | 5.14 | +1.67 | 4.73 | +1.69 |
| August | 1.06 | -2.70 | 1.39 | -2.16 | 1.54 | -2.06 | 2.64 | -0.34 |
| September | 2.30 | -1.11 | 2.00 | -1.32 | 5.08 | +2.09 | 3.54 | +0.68 |
| October | 0.11 | -1.58 | 0.13 | -1.72 | 0.10 | -1.53 | 0.29 | -1.38 |
| November | 0.60 | -0.57 | 0.77 | -0.62 | 0.58 | -0.54 | 1.26 | +0.05 |
| December | 1.86 | +1.15 | 1.94 | +1.04 | 1.54 | +0.89 | 1.36 | +0.46 |
| 1945 Total | 26.65 | -0.45 | 32.34 | +4.30 | 27.71 | +2.22 | 26.66 | +0.86 |
| 1944 Total | 32.83 | +5.73 | 31.54 | +3.50 | 30.57 | +5.08 | 24.86 | -0.94 |
| 1943 Total | 33.15 | +6.05 | 36.64 | +8.60 | 30.37 | +4.88 | 31.04 | +5.24 |
| 1942 Total | 33.47 | +6.37 | 25.98 | -2.06 | 31.20 | +5.71 | 21.02 | -4.78 |
| 1941 Total | 28.22 | +1.12 | 32.92 | +4.88 | 25.40 | -0.09 | 26.07 | +0.27 |
| 1940 Total | 22.50 | -4.60 | 28.72 | +0.68 | 27.44 | +1.95 | 25.95 | +0.15 |
| 1939 Total | 24.27 | -2.83 | 21.92 | -6.12 | 21.64 | -3.85 | 18.52 | -7.28 |
| 1938 Total | 40.50 | +13.40 | 39.99 | +11.95 | 34.11 | +8.62 | 26.84 | +1.04 |
| Normal Annual Prec. | 27.10 | | 28.04 | | 25.49 | | 25.80 | |

## 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, who visited each farm in the nine counties several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, such as securing a monthly list of prices of farm products prevailing in the area, 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.

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

Table 2. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1945 (Operator's Share)

| | Your farm | | 45 Owners | |
|---|---|---|---|---|
| | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Total acres in farm | | | 227.3 | |
| Owned | | | 227.3 | |
| Rented | | | - | |
| Total farm capital | | | $ 34060 | $33842 |
| Accounts receivable | | | 3 | 26 |
| Stocks and bonds | | | 2597 | 3353 |
| Life insurance | | | 862 | 925 |
| Outside real estate | | | 1992 | 2537 |
| Other outside investments | | | 163 | 129 |
| Total outside investments | | | 5614 | 6944 |
| Cash on hand and in bank | | | 1074 | 1420 |
| Other household & personal assets | | | 1039 | 1014 |
| Total cash, household & personal assets | | | 2113 | 2434 |
| TOTAL ASSETS | | | 41790 | 43246 |
| Federal Land Bank Mortgage | | | 1219 | 872 |
| Other mortg. on land operated | | | 6024 | 5303 |
| Mortgages on other real estate | | | 527 | 503 |
| Production Credit Association | | | 313 | 537 |
| Other chattel mortgages | | | 248 | 293 |
| Notes payable | | | 1271 | 1051 |
| Accounts payable | | | 146 | 126 |
| TOTAL LIABILITIES | | | 9748 | 8685 |
| Farmer's net worth | | | 32042 | 34561 |
| Gain in net worth | | | | +2519 |

| | 33 Part Owners* | | 33 Renters ** | |
|---|---|---|---|---|
| | Jan. 1 | Dec. 31 | Jan. 1 | Dec. 31 |
| Total acres in farm | 333.1 | | 250.7 | |
| Owned | 210.9 | | - | |
| Rented | 122.2 | | 250.7 | |
| Total farm capital | $32294 | $23840 | $ 9205 | $9892 |
| Accounts receivable | 164 | 538 | 133 | 107 |
| Stocks and bonds | 2492 | 3023 | 1721 | 2298 |
| Life insurance | 780 | 857 | 307 | 337 |
| Outside real estate | 667 | 697 | - | 485 |
| Other outside investments | 121 | 121 | 48 | 51 |
| Total outside investments | 4060 | 4698 | 2076 | 3171 |
| Cash on hand and in bank | 695 | 888 | 579 | 1166 |
| Other household & personal assets | 1358 | 1347 | 998 | 1010 |
| Total cash, household & personal assets | 2053 | 2235 | 1577 | 2176 |
| TOTAL ASSETS | 38571 | 40311 | 12991 | 15346 |
| Federal Land Bank Mortgage | 1980 | 1184 | - | - |
| Other mortg. on land operated | 3749 | 3452 | - | - |
| Mortgages on other real estate | 82 | 15 | - | 352 |
| Production Credit Association | 1259 | 298 | 557 | 633 |
| Other chattel mortgages | 444 | 419 | 254 | 139 |
| Notes payable | 2482 | 2454 | 1004 | 1142 |
| Accounts payable | 206 | 243 | 207 | 217 |
| TOTAL LIABILITIES | 10202 | 8065 | 2022 | 2483 |
| Farmer's net worth | 28369 | 32246 | 10969 | 12863 |
| Gain in net worth | | +3877 | | +1894 |

*15 rented for cash, 6 cash and crop share, 11 crop share and 1 livestock share.
** 5 rented for cash, 17 cash and crop share 2 crop share and 9 livestock share.

Table 3. Summary of Farm Earnings by Tenure, 1945 (Operator's Share)

| | Your farm | 45 owners | 33 part-owners | 33 renters |
|---|---|---|---|---|
| FARM EXPENSES | | | | |
| Dairy and dual-purpose cows bought | $ | $ 58 | $ 18 | $ 93 |
| Other dairy & dual-pur. cattle bought | | 26 | 40 | 91 |
| Beef cattle bot. (incl. feeders) | | 1489 | 1733 | 732 |
| Hogs bought | | 302 | 705 | 248 |
| Sheep bought (including feeders) | | 238 | 607 | 664 |
| Poultry bought (including turkeys) | | 166 | 231 | 153 |
| Horses bought | | 17 | 9 | 6 |
| Misc. livestock expenses | | 216 | 216 | 129 |
| Misc. crop expenses | | 493 | 725 | 398 |
| Feed bought | | 2653 | 2649 | 1780 |
| Custom work hired | | 288 | 271 | 278 |
| Mech. power mach. (farm share) (new) | | 150 | 221 | 117 |
| Mech. power mach. (farm share) (upkp.) | | 230 | 299 | 176 |
| Mech. power (f. share) (gas, oil, etc.) | | 549 | 669 | 474 |
| Crop and general mach. (new) | | 344 | 437 | 417 |
| Crop and general mach. (upkeep) | | 171 | 242 | 160 |
| Livestock equipment (new) | | 56 | 64 | 117 |
| Livestock equipment (upkeep) | | 107 | 76 | 101 |
| Buildings and fencing (new) | | 394 | 558 | 25 |
| Buildings and fencing (upkeep) | | 266 | 268 | 33 |
| Hired labor | | 791 | 740 | 370 |
| Taxes (real estate & pers. property) | | 280 | 259 | 37 |
| General farm and insurance | | 138 | 142 | 83 |
| Cash rent | | - | 415 | 475 |
| Interest paid | | 407 | 367 | 81 |
| (1) Total farm purchases | | $ 9829 | $11961 | $ 7238 |
| (2) Decrease in farm capital | | 218 | - | - |
| (3) Board furnished hired labor | | 96 | 103 | 44 |
| (4) Interest on farm capital | | 1291 | 1261 | 396 |
| (5) Unpaid family labor | | 251 | 365 | 257 |
| (6) Total farm exp. (Sum of (1) to (5) | | $11685 | $13690 | $ 7935 |
| FARM RECEIPTS | | | | |
| Dairy and dual-purpose cows | $ | $ 163 | $ 192 | $ 238 |
| Dairy products | | 1008 | 828 | 673 |
| Other dairy and dual-purpose cattle | | 199 | 378 | 263 |
| Beef cattle (including feeders) | | 3632 | 5400 | 2046 |
| Hogs | | 4876 | 4561 | 2792 |
| Sheep and wool (including feeders) | | 857 | 740 | 870 |
| Poultry (including turkeys) | | 617 | 912 | 429 |
| Eggs | | 1199 | 948 | 785 |
| Horses | | 19 | 29 | 25 |
| Corn | | 358 | 475 | 296 |
| Small grain | | 499 | 1122 | 648 |
| Other crops | | 643 | 902 | 248 |
| Machinery & equip. sold | | 250 | 208 | 243 |
| Agricultural adjustment payments | | 47 | 91 | 19 |
| Income from work off the farm | | 213 | 472 | 213 |
| Misc. | | 36 | 61 | 27 |
| (7) Total farm sales | | $14616 | $17319 | $ 9815 |
| (8) Increase in farm capital | | - | 546 | 687 |
| (9) Family living from the farm | | 621 | 649 | 537 |
| (10) Total farm receipts (7)+(8)+(9) | | $15237 | $18514 | $11039 |
| (6) Total farm expenses | | 11685 | 13690 | 7935 |
| (11) Operator's labor earnings (10)-(6) | | 3552 | 4824 | 3104 |
| (12) Ret. cap. & fam. lab. (4)+(5)+(11) | | 5094 | 6450 | 3757 |

Table 4. Summary of Farm Inventories, 1945*

| Items | Your farm Jan. 1 | Your farm Dec. 31 | Average of 153 farms Jan. 1 | Average of 153 farms Dec. 31 |
|---|---|---|---|---|
| Size of farm (acres) | | | 268 | |
| Size of business (work units)** | | | 535 | |
| Productive livestock (total) | | | $6063 | $6833 |
| Dairy and dual purpose cows | | | 605 | 582 |
| Other dairy & dual purpose cattle | | | 369 | 361 |
| Beef cattle (incl. feeders) | | | 2479 | 2371 |
| Hogs | | | 1820 | 2528 |
| Sheep (including feeders) | | | 518 | 608 |
| Poultry (including turkeys) | | | 272 | 383 |
| Horses | | | 252 | 188 |
| Crop, seed, and feed | | | 4443 | 4084 |
| Mach. & equipment (total) | | | 3390 | 3362 |
| Power Mach. (farm share) | | | 1264 | 1155 |
| Crop & general mach. (farm share) | | | 1546 | 1643 |
| Livestock equipment & supplies | | | 580 | 564 |
| Buildings, fences, etc. | | | 7425 | 7420 |
| Land | | | 14146 | 14146 |
| Total farm capital | | | 35719 | 36033 |

| Items | 31 most profitable farms Jan. 1 | 31 most profitable farms Dec. 31 | 31 least profitable farms Jan. 1 | 31 least profitable farms Dec. 31 |
|---|---|---|---|---|
| Size of farm (acres) | 402 | | 228 | |
| Size of business (work units)** | 784 | | 425 | |
| Productive livestock (total) | $9202 | $10919 | $4908 | $5111 |
| Dairy & dual purpose cows | 580 | 637 | 620 | 517 |
| Other dairy & dual purpose cattle | 375 | 421 | 315 | 251 |
| Beef cattle (incl. feeders) | 4214 | 3478 | 2219 | 2194 |
| Hogs | 2896 | 4260 | 1330 | 1664 |
| Sheep (including feeders) | 866 | 1335 | 121 | 151 |
| Poultry (including turkeys) | 271 | 788 | 303 | 334 |
| Horses | 324 | 236 | 273 | 205 |
| Crop, seed, and feed | 7163 | 7181 | 3764 | 2892 |
| Mach. & equipment (total) | 4585 | 4482 | 2882 | 2835 |
| Power mach. (farm share) | 1676 | 1477 | 1096 | 1055 |
| Crop & general mach. | 2168 | 2292 | 1304 | 1310 |
| Livestock equipment & supplies | 741 | 713 | 482 | 470 |
| Buildings, fences, etc. | 8034 | 8081 | 7651 | 7427 |
| Land | 20195 | 20195 | 13396 | 13396 |
| Total farm capital | 49503 | 51094 | 32874 | 31866 |

*For the purpose of comparison, all the data shown in this report with the exception of Tables 2 and 3 are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the records from rented farms.

**See page 13 for an explanation of "work units".

Table 5. Family Living from the Farm, 1945

| Items | Your farm | Average 153 farms | 31 most profitable farms | 31 least profitable farms | Your farm | Average 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|---|---|---|---|
| No. of pers.(fam. | | 3.2 | 3.5 | 2.9 | | | | |
| adult equiv.(oth.* | | .3 | .6 | .3 | | | | |
| Whole milk | | 1159 qts. | 1491 | 947 | $ | $67.26 | $80.50 | $58.26 |
| Skim milk | | 241 qts. | 56 | 122 | | 1.80 | .31 | .91 |
| Cream | | 188 pts. | 156 | 176 | | 38.68 | 33.45 | 34.87 |
| Farm made butter | | 14 lbs. | 6 | 5 | | 6.87 | 3.16 | 2.26 |
| Eggs | | 162 doz. | 199 | 154 | | 54.33 | 71.05 | 51.06 |
| Cattle | | 566 lbs. | 689 | 469 | | 71.30 | 89.06 | 59.32 |
| Hogs | | 564 lbs. | 766 | 501 | | 78.29 | 104.89 | 72.59 |
| Sheep | | 5 lbs. | - | - | | .68 | - | - |
| Poultry | | 130 lbs. | 142 | 106 | | 30.43 | 33.69 | 26.75 |
| Potatoes | | 10 bus. | 15 | 10 | | 15.84 | 21.02 | 14.69 |
| Vegetables & fruits | | | | | | 65.39 | 63.18 | 66.18 |
| Farm fuel | | | | | | 6.09 | 4.82 | 5.91 |
| Rental vl. of house | | | | | | 197.94 | 198.15 | 205.15 |
| Misc. | | | | | | .17 | - | - |
| Total | | | | | | $635.07 | $703.28 | $597.95 |

Table 6. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1945

| Items | Your farm | Average of 70 farms | 14 most profitable farms | 14 least profitable farms |
|---|---|---|---|---|
| Number of persons - family | | 4.3 | 4.6 | 3.5 |
| Number of persons, (family | | 3.2 | 3.5 | 2.9 |
| adult equivalent (other* | | .3 | .5 | .2 |
| Food and meals bought | $ | $452 | $480 | $342 |
| Operating and supplies | | 227 | 449 | 135 |
| Clothing and clothing materials | | 273 | 328 | 224 |
| Personal care, personal spending | | 85 | 124 | 72 |
| Furnishings and equipment | | 91 | 133 | 37 |
| Education, recreation and development | | 124 | 271 | 88 |
| Medical care and health insurance | | 160 | 180 | 162 |
| Church, welfare, gifts | | 229 | 242 | 167 |
| Income tax | | 528 | 833 | 171 |
| Personal share of auto expense | | 58 | 69 | 69 |
| Household share of elect. & gas eng. exp. | | 36 | 34 | 30 |
| H.H.&pers.shr.of new auto,gas eng.&motors bot. | | 10 | 5 | - |
| Life insurance and other investments | | 969 | 1856 | 308 |
| Total household and personal cash expenses | | $3242 | $5004 | $1805 |
| Food furnished by the farm | | 447 | 472 | 376 |
| Fuel furnished by the farm | | 7 | 6 | 8 |
| House rental | | 184 | 178 | 204 |
| Total household and personal expenses | | $3880 | $5660 | $2393 |

*Hired help or others boarded.

Table 7. Summary of Farm Earnings (Cash Statement), 1945

| Items | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|
| FARM EXPENSES | | | | |
| Dairy and dual-purpose cows bought | $ | $ 65 | $ 123 | $ 36 |
| Other dairy & dual-pur. cattle bot. | | 53 | 83 | 29 |
| Beef cattle bot. (incl. feeders) | | 1390 | 2401 | 936 |
| Hogs bought | | 377 | 700 | 293 |
| Sheep bought (including feeders) | | 600 | 1169 | 39 |
| Poultry bought (including turkeys) | | 195 | 416 | 149 |
| Horses bought | | 15 | 7 | 22 |
| Misc. livestock expense | | 194 | 333 | 160 |
| Misc. crop expenses | | 575 | 904 | 493 |
| Feed bought | | 2416 | 3162 | 1861 |
| Custom work hired | | 292 | 327 | 298 |
| Mech.power mach.(farm share)(new) | | 200 | 178 | 217 |
| Mech.power mach.(farm share)(upkp.) | | 235 | 290 | 233 |
| Mech.power (f.share)(gas,oil,etc.) | | 582 | 807 | 541 |
| Crop and general mach. (new) | | 414 | 583 | 248 |
| Crop and general mach. (upkeep) | | 195 | 246 | 207 |
| Livestock equipment (new) | | 78 | 100 | 59 |
| Livestock equipment (upkeep) | | 94 | 137 | 85 |
| Buildings and fencing (new) | | 370 | 517 | 154 |
| Buildings and fencing (upkeep) | | 219 | 240 | 207 |
| Hired Labor | | 636 | 1229 | 475 |
| Taxes | | 311 | 424 | 273 |
| General farm and insurance | | 125 | 150 | 128 |
| (1) Total farm purchases | | $ 9631 | $14526 | $ 7143 |
| (2) Decreasd in farm capital | | - | - | 1008 |
| (3) Board furnished hired labor | | 83 | 152 | 94 |
| (4) Interest on farm capital | | 1794 | 2515 | 1619 |
| (5) Unpaid family labor | | 322 | 335 | 341 |
| (6) Total farm exp.(sum of (1) to (5) | | $11830 | $17528 | $10205 |
| FARM RECEIPTS | | | | |
| Dairy and dual-purpose cows | $ | $ 217 | $ 183 | $ 218 |
| Dairy products | | 906 | 840 | 874 |
| Other dairy & dual-purpose cattle | | 256 | 289 | 320 |
| Beef cattle (including feeders) | | 3777 | 6929 | 2553 |
| Hogs | | 4484 | 7118 | 3298 |
| Sheep and wool (including feeders) | | 926 | 1446 | 116 |
| Poultry (including turkeys) | | 659 | 1474 | 442 |
| Eggs | | 977 | 1042 | 953 |
| Horses | | 27 | 30 | 38 |
| Corn | | 587 | 817 | 365 |
| Small grain | | 949 | 1837 | 542 |
| Other crops | | 673 | 1117 | 504 |
| Machinery & equip. sold | | 251 | 378 | 169 |
| Agricultural adjustment payments | | 51 | 140 | 38 |
| Income from work off the farm | | 295 | 517 | 169 |
| Misc. | | 48 | 58 | 29 |
| (7) Total farm sales | | $15083 | $24215 | $10628 |
| (8) Increase in farm capital | | 314 | 1590 | - |
| (9) Family living from the farm | | 635 | 703 | 598 |
| (10) Total farm receipts (7)+(8)+(9) | | $16032 | $26508 | $11226 |
| (6) Total farm expenses | | 11830 | 17528 | 10205 |
| (11) Oper. labor earnings (10)-(6) | | 4202 | 8980 | 1021 |

Table 8. Summary of Farm Earnings (Enterprise Statement) 1945*

| Items | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|
| EXPENSES AND NET DECREASES | | | | |
| Total power | $ [illegible] | $1215 | $1627 | $1153 |
| Horses | | 158 | 226 | 135 |
| Tractor | | 521 | 750 | 477 |
| Truck | | 116 | 203 | 104 |
| Auto (farm share) | | 230 | 229 | 249 |
| Gas engine (farm share) | | 5 | 1 | 5 |
| Elec. plant or current (f. share) | | 61 | 77 | 52 |
| Hired power | | 124 | 141 | 131 |
| Crop and general machinery | [illegible] | 456 | 552 | 432 |
| Livestock equipment | [illegible] | 177 | 252 | 147 |
| Buildings, fencing and tiling | [illegible] | 481 | 594 | 480 |
| Misc. productive livestock expense | | 193 | 330 | 159 |
| Labor | [illegible] | 1109 | 1798 | 984 |
| Real estate taxes | | 259 | 347 | 231 |
| Personal property tax | | 52 | 77 | 42 |
| Insurance | | 41 | 54 | 36 |
| General farm | | 84 | 96 | 92 |
| Interest on farm capital | | 1794 | 2515 | 1619 |
| (1) Total expenses & net decreases | [illegible] | 5861 | 8242 | 5375 |
| RETURNS AND NET INCREASES | | | | |
| All productive livestock | $ [illegible] | $10748 | $16681 | $7900 |
| Dairy and dual purpose cows | [illegible] | 1084 | 1035 | 935 |
| Other dairy & dual pur.cattle | [illegible] | 378 | 433 | 390 |
| Beef breeding herd | [illegible] | 594 | 518 | 551 |
| Feeder cattle | [illegible] | 1745 | 3341 | 1151 |
| Hogs | [illegible] | 4892 | 7887 | 3411 |
| Sheep - farm flock | [illegible] | 119 | 92 | 102 |
| Sheep - feeders | [illegible] | 298 | 654 | 4 |
| Turkeys | [illegible] | 323 | 1395 | 71 |
| Chickens | [illegible] | 1315 | 1326 | 1285 |
| Crops, seed and feed | [illegible] | -1056 | -149 | -1745 |
| Income from labor off the farm | | 187 | 412 | 74 |
| Agricultural conservation payments | | 51 | 140 | 38 |
| Miscellaneous | | 133 | 138 | 129 |
| (2) Total returns & net increased | [illegible] | 10063 | 17222 | 6396 |
| (1) Total expenses & net decreases | | 5861 | 8242 | 5375 |
| (3) Oper. labor earnings (2) - (1) | [illegible] | 4202 | 8980 | 1021 |

* 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 8.

## ANALYSIS OF THE REASONS FOR DIFFERENCES IN OPERATOR'S EARNINGS

The operator's labor earnings varied widely among the farmers included in this study. The average labor earnings of those farmers ranking in the upper 20 per cent in the range according to earnings was $8,980 and of those in the lower 20 per cent was $1,021. This is a range of $7,959 between the average earnings of these two groups. Some of the causes for these differences in earnings may be beyond the control of the farmer. However, all of these farmers could make some changes in their farming operations which would increase earnings. A farmer can secure some ideas as to changes that could profitably be made on his farm by studying the facts about his business as presented in this report and comparing his accomplishments with other farmers following the same general type of farming. The more important management factors affecting earnings and their relationships with earnings are presented in the following tables. These factors vary from year to year in their relative influence on earnings.

Table 9. Relation of Crop Yields to Farm Earnings

| Per cent crop yields were of the average for all 153 farms | | No. of | Average operator's |
|---|---|---|---|
| Group | Average | farms | labor earnings |
| Below 86 | 75 | 34 | $2463 |
| 86-113 | 100 | 90 | 4025 |
| 114 and above | 125 | 29 | 6793 |

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 10, Relation of Choice of Crops to Farm Earnings

| Per cent of tillable land in high return crops* | | No. of | Average operator's |
|---|---|---|---|
| Group | Average | farms | labor earnings |
| Below 49.0 | 43.5 | 39 | $3557 |
| 49.0 - 57.9 | 53.9 | 59 | 4425 |
| 58.0 & above | 66.4 | 55 | 4421 |

*Crops are marked on page 16 as (A), (B), (C) and (D). All of acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

Farmers' earnings are affected by the choice of crops as well as by the yields of crops. As a rule, on these farms, such crops as alfalfa, clover, canning crops, sugar beets, corn, and flax bring a higher net return per acre than other crops usually grown. Additions can be made to earnings by putting as high a percentage as possible of the tillable land into these higher return crops.

Table 11. Relation of Returns from Productive Livestock to Farm Earnings

| Index of returns for $100 feed fed to productive livestock* Group | Average | No. of farms | Average operator's labor earnings |
|---|---|---|---|
| Below 86 | 76 | 30 | $2648 |
| 86 - 113 | 98 | 92 | 4184 |
| 114 and above | 128 | 31 | 5761 |

*The index is weighted by the number of animal units.

The majority of these farms are livestock farms. A large proportion of the crops raised are fed on the farm and some additional feed is purchased. Feed is the major item of cost in livestock production and livestock constitutes an important source of income on these farms. Hence there is a marked relationship between returns for $100 of feed and operator's labor earnings on these farms. There are a number of reasons for differences among farms in livestock returns. High productivity per animal and economy in the use of feed and labor are important. Other factors of considerable importance are kind of feed used, quality of pastures, balance of ration, degree of sanitation, and kind of shelter and equipment.

Table 12. Relation of Amount of Productive Livestock to Farm Earnings

| Productive livestock Units per 100 acres* Group | Average | No. of farms | Average operator's labor earnings |
|---|---|---|---|
| Below 14.0 | 10.3 | 30 | $4022 |
| 14.0 - 28.9 | 20.8 | 92 | 4142 |
| 29.0 and above | 37.6 | 31 | 4554 |

*Acres in timber not pastured, roads, waste and farmstead were not included.

On some farms the returns from livestock are so low that they do not cover feed and other costs. Such livestock is unprofitable, especially if there is more than enough to utilize what would otherwise be waste feed. 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 13. Relation of Size of Business (Work Units) to Farm Earnings

| No. of work units Group | Average | No. of farms | Average operator's labor earnings |
|---|---|---|---|
| Below 375 | 316 | 35 | $2378 |
| 375 - 674 | 496 | 85 | 3938 |
| 675 and above | 870 | 33 | 6818 |

The size of the farming operations is one of the important factors affecting the earnings of farmers. On the average, the farmers with a large business had larger earnings than the farmers with a small business. The size of the farm business is here measured in terms of the number of work units. For farmers operating their farms at a loss, the larger the volume of business, the larger will be the loss; but 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. The size of the farm business may be increased by farming more land, by keeping more livestock, or by keeping livestock or growing crops of a more intensive type.

Table 14. Relation of Amount of Work Accomplished per Worker to Farm Earnings

| Work units per worker Group | Average | No. of farms | Average operator's labor earnings |
|---|---|---|---|
| Below 250 | 210 | 32 | $2487 |
| 250 - 374 | 302 | 94 | 4236 |
| 375 and above | 445 | 27 | 6116 |

Farmers' earnings are generally higher on those farms on which a large amount of work is accomplished per worker. More days of productive work accomplished per worker reduces 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 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 and economical use of labor-saving machinery help to increase the work accomplished per worker.

Table 15. Relation of Power, Machinery, Equipment and Building Expense to Farm Earnings*

| Expense per work unit Group | Average | No. of farms | Average operator's labor earnings |
|---|---|---|---|
| $6.00 and above | $6.73 | 27 | $2467 |
| $3.25 - $5.99 | 4.45 | 96 | 4347 |
| Below $3.25 | 2.77 | 30 | 5300 |

*Includes building, fencing, all crop machinery and livestock equipment, horse feed, and miscellaneous horse expense.

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.

## CUMULATIVE EFFECT OF EXCELLING IN A NUMBER OF MANAGEMENT FACTORS

The relation of several management factors to operator's labor earnings has been shown in the preceding section. Because of the large number of interrelationships between these factors the exact relationship between one factor and earnings could not be determined. However, when the combined or cumulative influence of seven management factors on earnings is shown, the relationship becomes more marked. This is illustrated in Table 16. These seven factors alone are responsible for a considerable proportion of the variation among farmers in the returns secured from the farm business. Insofar as these factors are within the farmer's control, he will be well paid for his efforts to improve his efficiency in them.

Table 16. Relation of Operator's Labor Earnings to the Number of Factors in Which the Farmer is Above Average

| No. of factors in which farm excels | No. of farms | Your farm | The length of the shaded lines is in proportion to the average operator's labor earnings | Average operator's labor earnings |
|---|---|---|---|---|
| None or one | 26 | _____ | xxxxxxxxxxxx | $2292 |
| Two or three | 55 | _____ | xxxxxxxxxxxxxxxxx | 3058 |
| Four or five | 57 | _____ | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 5695 |
| Six or seven | 15 | _____ | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 6036 |

## EXPLANATION OF "WORK UNITS"

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker in a ten hour day working on crops and productive livestock at average efficiency or ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of crop are presented in Table 17.

Table 17. Number of Work Units for Each Class of Livestock and Each Acre of Crop

| Item | No. of work units | Item | No. of work units |
|---|---|---|---|
| Dairy and dual pur. cows | 13.5 per cow | Small grain | .7 per acre |
| Other dairy & du.pur.cattle | 4.0 per an.unit* | Sugar beets | 3.0 per acre |
| Beef breeding herd | 4.0 per an.unit* | Sweet corn | 2.3 per acre |
| Feeder cattle | .35 per 100 lbs. | Corn, husked | 1.0 per acre |
| Sheep - farm flock | 1.6 per an. unit* | Corn, hogged | .6 per acre |
| Sheep - feeders | .4 per 100 lbs. | Corn, shredded | 2.1 per acre |
| Hogs | .25 per 100 lbs. | Corn silage | 1.7 per acre |
| Turkeys | .7 per 100 lbs. | Corn fodder | .9 per acre |
| Hens | 26.0 per 100 hens | Alfalfa hay | 1.0 per acre |
| Canning peas | 2.0 per acre | Soybean hay | 1.4 per acre |
| Soybeans for grain | .9 per acre | Other hay crops | .6 per acre |

*Animal unit represents one cow, one bull, one feeder steer or heifer, two head of other cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, 100 hens or 1400 pounds of turkeys produced.

Table 18. Measures of Farm Organization and Management Efficiency, 1945

| Measures used in chart on page 15 | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|
| Operator's labor earnings | $_____ | $4202 | $8980 | $1021 |
| (1) Crop yields* | _____ | 100 | 109 | 90 |
| (2) % of tillable land in high ret. crops** | _____ | 55.7 | 55.8 | 54.4 |
| (3) Ret. for $100 feed to prod. livestock*** | _____ | 100 | 105 | 91 |
| (4) Prod. livestock units per 100 acres**** | _____ | 22.1 | 23.5 | 21.0 |
| (5) Size of business - work units | _____ | 535 | 784 | 425 |
| (6) Work units per worker | _____ | 297 | 356 | 250 |
| (7) Pow., mach., equip., & bldg. exp. per work unit | $_____ | $4.52 | $3.98 | $5.23 |
| Items related to some of the above measures: | | | | |
| (3) Index of return for $100 feed from - | | | | |
| Dairy cattle (See pages 20 & 21) | _____ | 100 | 97 | 99 |
| Dual-purpose cattle (See pp. 22 &23) | _____ | 100 | 78 | 88 |
| Beef cattle - breeding herd (See p.26) | _____ | 100 | 93 | 97 |
| Beef cattle - feeders (See page 25) | _____ | 100 | 111 | 88 |
| Hogs (See page 19) | _____ | 100 | 110 | 91 |
| Sheep - farm flock (See page 28) | _____ | 100 | 78 | 116 |
| Sheep - feeders (See page 29) | _____ | 100 | 104 | - |
| Turkeys (See page 26) | _____ | 100 | 105 | - |
| Chickens (See page 27) | _____ | 100 | 101 | 101 |
| (5) Work units on crops | _____ | 184 | 272 | 149 |
| Work units on productive livestock | _____ | 313 | 429 | 261 |
| Other work units | _____ | 38 | 83 | 15 |
| (6) Total number of workers - | _____ | 1.8 | 2.2 | 1.7 |
| Number of family workers | _____ | 1.3 | 1.3 | 1.3 |
| Number of hired workers | _____ | .5 | .9 | .4 |
| (7) Power expense per work unit | $_____ | $2.38 | $2.17 | $2.76 |
| Crop machinery expense per work unit | _____ | .88 | .71 | .96 |
| Livestock equip. expense per work unit | _____ | .34 | .34 | .36 |
| Bldgs. & fencing exp. per work unit | _____ | .92 | .76 | 1.15 |

*Given as a percentage of the average.

**Crops are marked in Table 19 as (A), (B), (C) and (D). All of acres in (A) crops, one half of acres in (B) crops, and one fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

***An index weighted by the animal units of livestock.

****Acres in timber not pastured, roads, waste and farmstead were not included.

## Thermometer Chart

Using your figures from page 14, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 153 farms included in this summary are located between the dotted lines across the center of this page.

| Oper. labor earnings | Crop yields | High return crops | Return from productive livestock | Pr. l.s. units per 100 A. | Work units | Work units per worker | Pow., mach., eq., & bldg. exp. per work unit |
|---|---|---|---|---|---|---|---|
| $9000 | 140 | 79.5 | 140 | 42.0 | 855 | 460 | $2.10 |
| 8400 | 135 | 76.5 | 135 | 39.5 | 815 | 440 | 2.40 |
| 7800 | 130 | 73.5 | 130 | 37.0 | 775 | 420 | 2.70 |
| 7200 | 125 | 70.5 | 125 | 34.5 | 735 | 400 | 3.00 |
| 6600 | 120 | 67.5 | 120 | 32.0 | 695 | 380 | 3.30 |
| 6000 | 115 | 64.5 | 115 | 29.5 | 655 | 360 | 3.60 |
| 5400 | 110 | 61.5 | 110 | 27.0 | 615 | 340 | 3.90 |
| 4800 | 105 | 58.5 | 105 | 24.5 | 575 | 320 | 4.20 |
| 4200 | 100 | 55.5 | 100 | 22.0 | 535 | 300 | 4.50 |
| 3600 | 95 | 52.5 | 95 | 19.5 | 495 | 280 | 4.80 |
| 3000 | 90 | 49.5 | 90 | 17.0 | 455 | 260 | 5.10 |
| 2400 | 85 | 46.5 | 85 | 14.5 | 415 | 240 | 5.40 |
| 1800 | 80 | 43.5 | 80 | 12.0 | 375 | 220 | 5.70 |
| 1200 | 75 | 40.5 | 75 | 9.5 | 335 | 200 | 6.00 |
| 600 | 70 | 37.5 | 70 | 7.0 | 295 | 180 | 6.30 |
| 0 | 65 | 34.5 | 65 | 4.5 | 255 | 160 | 6.60 |

Table 19. Distribution of Acres in Farm, 1945

| Crop: (A) (B) (C) and (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 14) | | No. growing this crop | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms | Average per farm growing crop |
|---|---|---|---|---|---|---|---|
| Canning peas | (A) | 8 | ____ | .8 | .7 | .3 | 14.8 |
| Flax | (C) | 83 | ____ | 15.8 | 29.3 | 10.8 | 29.0 |
| Barley | (D) | 17 | ____ | 1.1 | 2.8 | .5 | 9.6 |
| Wheat | (D) | 10 | ____ | .6 | 1.5 | .6 | 9.7 |
| Oats | (D) | 149 | ____ | 52.0 | 73.9 | 43.2 | 53.4 |
| Soybeans for grain | (C) | 76 | ____ | 13.9 | 25.0 | 11.0 | 28.1 |
| Rye, millet and buckwheat | (D) | 6 | ____ | .4 | .6 | .3 | 10.2 |
| **Total Small Grain, peas & Soybeans** | | **152** | ____ | 84.6 | 133.8 | 66.7 | 85.1 |
| Sugar beets, hybrid seed corn, potatoes and truck crops | (A) | 17 | ____ | 1.0 | 1.4 | 1.1 | 9.0 |
| Corn grain | (A) | 152 | ____ | 84.2 | 133.8 | 62.8 | 84.8 |
| Corn or sorghum silage | (B) | 80 | ____ | 7.1 | 7.8 | 7.2 | 13.5 |
| Sweet corn | (B) | 6 | ____ | 1.1 | - | .6 | 27.8 |
| Corn or sorghum fodder | (D) | 21 | ____ | .8 | 1.3 | 1.0 | 5.8 |
| Total cultivated crops | | 153 | ____ | 94.2 | 144.3 | 72.7 | 94.2 |
| Alfalfa hay | (A) | 130 | ____ | 14.8 | 18.4 | 12.6 | 17.4 |
| Soybean hay | (C) | 17 | ____ | .7 | .8 | .8 | 6.6 |
| Mixed legumes & non-legumes | (C) | 34 | ____ | 3.0 | 4.4 | 5.7 | 13.5 |
| Timothy and/or brome for hay or seed | (D) | 18 | ____ | 1.2 | 1.6 | .3 | 10.0 |
| Misc. hay and seed | (D) | 8 | ____ | .2 | .1 | - | 4.4 |
| Total tillable land in hay | | 145 | ____ | 19.9 | 25.3 | 19.4 | 21.0 |
| Alfalfa and mixtures inc.alf | (A) | 74 | ____ | 6.0 | 5.8 | 5.2 | 12.3 |
| Sweet clover pasture | (B) | 13 | ____ | 1.6 | .5 | 1.4 | 19.0 |
| Other legumes and mixtures | (C) | 35 | ____ | 3.4 | 4.5 | 4.2 | 15.0 |
| Sudan grass and/or rape | (C) | 22 | ____ | 1.1 | 2.7 | .7 | 7.8 |
| Other tillable pasture | (D) | 56 | ____ | 5.9 | 8.8 | 4.3 | 16.1 |
| Total tillable land in pasture | | 132 | ____ | 18.0 | 22.3 | 15.8 | 20.9 |
| Tillable land not cropped | (D) | 38 | ____ | 3.9 | 3.7 | 2.0 | 16.0 |
| Total tillable land | | | ____ | 220.6 | 329.4 | 176.6 | 220.6 |
| Wild or phalaris hay (non-tillable) | | 51 | ____ | 3.8 | 7.6 | 6.0 | 11.4 |
| Non-tillable pasture | | 94 | ____ | 23.8 | 36.1 | 27.9 | 38.7 |
| Roads, waste and timber | | | ____ | 11.3 | 17.5 | 8.3 | |
| Farmstead | | | ____ | 8.5 | 10.9 | 8.8 | |
| Total acres in farm | | | ____ | 268.0 | 401.5 | 227.6 | |
| % land tillable | | | ____ | 82.3 | 82.0 | 77.6 | |
| % tillable land in high return crops | | | ____ | 55.7 | 55.8 | 54.4 | |

Table 20. Crop Yields per Acre, 1945

| Crop | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|
| Canning peas, value above seed cost | $_____ | $56.76 | - | - |
| Flax, bu. | _____ | 13.8 | 14.6 | 12.8 |
| Barley, bu. | _____ | 44.3 | 43.5 | 50.5 |
| Wheat, bu. | _____ | 27.1 | 27.5 | 20.0 |
| Oats, bu. | _____ | 51.8 | 60.4 | 46.8 |
| Soybeans for grain, bu. | _____ | 15.3 | 17.5 | 15.0 |
| Corn grain, bu. | _____ | 33.5 | 36.5 | 31.4 |
| Corn or sorghum silage, tons | _____ | 7.1 | 7.7 | 6.4 |
| Sweet corn, tons | _____ | 2.6 | - | - |
| Corn or sorghum fodder, tons | _____ | 2.6 | 2.4 | 1.7 |
| Alfalfa hay, tons | _____ | 2.1 | 2.0 | 1.9 |
| Soybean hay, tons | _____ | 1.1 | .8 | .9 |
| Mixed legume & non-legume hay, tons | _____ | 1.9 | 1.6 | 1.4 |
| Timothy and/or brome hay, tons | _____ | 1.6 | 1.7 | - |
| Other annual hay, tons | _____ | 1.2 | - | - |
| Phalaris hay on non-tillable land, tons | _____ | 1.2 | - | - |
| Wild hay, tons | _____ | 1.0 | 1.1 | 1.0 |

Table 21. Average Price of Feeds, 1945

| Item | Value | Item | Value |
|---|---|---|---|
| Ear corn, per bu. | $ .84 | Alfalfa hay, per ton | $15.00 |
| Oats, per bu. | .64 | Red or alsike clover hay, per ton | 12.75 |
| Barley, per bu. | .94 | Soybean hay, per ton | 12.75 |
| Wheat, per bu. | 1.47 | Timothy hay, per ton | 9.00 |
| Soybeans, per bu. | 2.05 | Brome hay, per ton | 9.00 |
| Bran, per cwt. | 2.18 | Sweet clover hay, per ton | 8.75 |
| Linseed oilmeal, per cwt. | 2.88 | Wild hay, per ton | 7.50 |
| Soybean oilmeal, per cwt. | 3.00 | Corn fodder, per ton | 6.75 |
| Tankage, per cwt. | 4.10 | Corn silage, per ton | 5.00 |
| Skim milk, per cwt. | .26 | Pasture, per mo. per an. unit | 1.10 |

Table 22. Summary of Amount of Livestock, 1945

| Items | Your farm | Average of 153 farms | 31 most profitable farms | 31 least profitable farms |
|---|---|---|---|---|
| No. of horses | | 3.1 | 4.1 | 3.0 |
| No. of colts | | .3 | .5 | .4 |
| No. of dairy & dual purpose cows | | 6.1 | 6.7 | 5.7 |
| Head of other dairy & dual pur. cattle | | 7.1 | 7.7 | 6.7 |
| Head of cattle in beef breeding herd | | 10.8 | 10.6 | 10.6 |
| Pounds of feeder cattle produced | | 7695 | 14209 | 5474 |
| Pounds of feeder sheep produced | | 1237 | 2238 | 18 |
| Litters of pigs | | 19.4 | 28.8 | 17.6 |
| Pounds of hogs produced | | 33994 | 52726 | 24561 |
| Head of sheep (2 lambs = 1 head) | | 13.6 | 16.8 | 12.3 |
| No. of hens | | 215 | 236 | 212 |
| Total no. of prod.lvstk. animal units | | 52.1 | 77.8 | 41.8 |
| % of total that are: | | | | |
| Dairy cows | | 10.5 | 8.4 | 10.9 |
| Other dairy cattle | | 6.4 | 5.2 | 6.6 |
| Dual purpose cows | | 3.8 | 2.9 | 2.9 |
| Other dual purpose cattle | | 2.7 | 2.5 | 2.0 |
| Beef breeding herd | | 14.8 | 10.5 | 18.7 |
| Feeder cattle | | 18.7 | 23.0 | 20.4 |
| Hogs | | 29.4 | 31.2 | 28.1 |
| Sheep - farm flock | | 3.7 | 2.5 | 3.8 |
| - feeders | | 3.1 | 5.8 | .1 |
| Turkeys | | 1.1 | 4.0 | .5 |
| Hens | | 5.8 | 4.0 | 6.0 |

Table 23. Feed Costs for Horses and Misc. Power and Machinery Expense, 1945

| Items | Your farm | Average of 145 farms* | 30 most profitable farms* | 30 least profitable farms* |
|---|---|---|---|---|
| Feed per horse,** lbs.: | | | | |
| Grain | | 905 | 1066 | 659 |
| Hay | | 1827 | 1882 | 1925 |
| Fodder and stover | | 68 | 78 | 48 |
| Feed costs per horse: | | | | |
| Grain | $ | $15.81 | $19.35 | $10.65 |
| Roughage | | 10.79 | 10.66 | 11.22 |
| Pasture | | 5.50 | 5.34 | 5.68 |
| TOTAL FEED COSTS | $ | $32.10 | $35.35 | $27.55 |
| Number of work horses | | 3.3 | 4.3 | 3.1 |
| Number of colts | | .4 | .5 | .4 |
| Crop acres per farm | | 202.5 | 311.0 | 164.8 |
| Tractor and horse exp. per crop acre | $ | $ 3.46 | $ 3.11 | $ 3.70 |
| Crop & gen.mach.exp.per crop acre | $ | 2.34 | 1.82 | 2.67 |

*Eight farmers did not have horses. The crop acres and expenses per crop acre are averages of 153 farms.

**Two colts equal one horse.

Table 24. Feed Costs and Returns from Hogs, 1945

| Items | Your farm | Average of 144 farms | 29 farms highest in returns above feed | 29 farms lowest in returns above feed |
|---|---|---|---|---|
| Feed per cwt. hogs produced, lbs.: | | | | |
| Corn | _____ | 414 | 313 | 559 |
| Small grain | _____ | 77 | 54 | 100 |
| Commercial feeds | _____ | 37 | 30 | 38 |
| Total concentrates | _____ | 528 | 397 | 697 |
| Skim milk and buttermilk | _____ | 57 | 49 | 84 |
| Feed cost per cwt. hogs produced: | | | | |
| Concentrates | $_____ | $ 8.74 | $ 6.70 | $11.43 |
| Skim milk and buttermilk | _____ | .14 | .13 | .18 |
| Pasture | _____ | .16 | .14 | .21 |
| TOTAL FEED COSTS | $_____ | $ 9.04 | $ 6.97 | $11.82 |
| Net increase in val. per cwt.hogs prod. | $_____ | $14.27 | $15.02 | $13.83 |
| RETURNS ABOVE FEED COST PER CWT.HOGS PROD. | $_____ | $ 5.23 | $ 8.05 | $ 2.01 |
| RETURNS FOR $100 OF FEED | $_____ | $165 | $217 | $118 |
| Price received per cwt. hogs sold | $_____ | $14.27 | $14.68 | $14.23 |
| No. of spring litters raised | _____ | 15.1 | 15.1 | 14.1 |
| No. of fall litters raised | _____ | 5.5 | 3.8 | 5.9 |
| Total no. of litters raised | _____ | 20.6 | 18.9 | 20.0 |
| No. of pigs born per litter | _____ | 7.6 | 7.9 | 7.1 |
| No. of pigs weaned per litter | _____ | 6.2 | 6.4 | 5.9 |
| Pounds of hogs produced | _____ | 36069 | 38805 | 30842 |

High returns are associated with high quality management. The combined effect on return over feed from excelling in a number of hog management factors is shown in Table 25. The factors included are: (1) pounds of concentrates required to produce 100 pounds of hogs including skim milk and buttermilk on a grain equivalent basis, (2) price received for hogs sold, (3) number of pigs born per litter, (4) number of pigs weaned per litter, and (5) sanitation (pigs raised on clean ground). Nine farmers were below the average of the group in all five factors; their average return over feed was $3.03 per 100 pounds of hogs. The 23 farmers who were above average in four or all five factors had an average return over feed of $6.88 per 100 pounds. The difference between the two extremes amounts to $3.85 per 100 pounds, or $1389 for the average production of 36069 pounds of hogs on these farms.

Table 25. Relation of Return Over Feed per 100 Pounds of Hogs to the Number of Management Factors in Which Farmers Excelled

| No. of factors in which farmer excels | No. of farms* | The length of the shaded lines is in proportion to the average return over feed per 100 pounds of hogs | Average return over feed |
|---|---|---|---|
| 0 | 9 | xxxxxxxxxxxxxx | $3.03 |
| 1 | 28 | xxxxxxxxxxxxxxxxxxxx | 4.30 |
| 2 | 35 | xxxxxxxxxxxxxxxxxxxxxxxx | 5.20 |
| 3 | 39 | xxxxxxxxxxxxxxxxxxxxxxxxx | 5.47 |
| 4 or 5 | 23 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 6.88 |

*The data from 10 farmers who purchased feeder pigs or who did not supply information on sanitation practices were omitted from this table.

Table 26. Factors of Cost and Returns from Dairy Cows, 1945

| | Your farm | Average of 56 farms | 11 farms highest in butterfat per cow | 11 farms lowest in butterfat per cow |
|---|---|---|---|---|
| Pounds of butterfat per cow | _____ | 242 | 329 | 153 |
| Feeds per cow, lbs.: | | | | |
| Corn | _____ | 1950 | 1764 | 1942 |
| Small grain | _____ | 765 | 912 | 499 |
| Commercial feeds | _____ | 164 | 244 | 87 |
| Legume hay | _____ | 3388 | 3212 | 2820 |
| Other hay | _____ | 492 | 655 | 707 |
| Fodder and stover | _____ | 141 | 104 | 187 |
| Total concentrates | _____ | 2879 | 2920 | 2528 |
| Total dry roughage | _____ | 4021 | 3971 | 3714 |
| Silage | _____ | 4376 | 5640 | 3881 |
| Total digestible nutrients* | _____ | 4987 | 5216 | 4402 |
| T. D. N. per lb. B.F. | _____ | 20.6 | 15.9 | 28.8 |
| % T. D. N. that is protein | _____ | 13.5 | 13.6 | 12.5 |
| Feed cost per cow: | | | | |
| Concentrates | $_____ | $48.77 | $51.48 | $41.20 |
| Roughages | _____ | 38.27 | 40.87 | 33.99 |
| Pasture | _____ | 5.64 | 5.51 | 5.65 |
| TOTAL FEED COSTS | $_____ | $92.68 | $97.86 | $80.84 |
| Value of produce per cow: | | | | |
| B.F. sales | $_____ | $143.51 | $228.43 | $77.80 |
| Dairy produce used in house | _____ | 14.50 | 9.05 | 12.54 |
| Milk to livestock | _____ | 18.39 | 18.46 | 14.23 |
| Net increases in value of cows | _____ | 8.58 | 13.16 | 3.22 |
| TOTAL VALUE PRODUCED | $_____ | $184.98 | $269.10 | $107.79 |
| RETURNS ABOVE FEED COST PER COW | $_____ | $92.30 | $171.24 | $26.95 |
| RETURNS FOR $100 OF FEED | $_____ | $205 | $280 | $137 |
| Price rec. per lb. B.F. sold (cts.) | _____ | 67.7 | 74.1 | 62.8 |
| As manufacturing cream (cts.) | _____ | 62.6 | 63.4 | 60.9 |
| Other | _____ | 89.1 | 91.4 | 81.9 |
| Feed cost per lb. B.F. (cts.) | _____ | 38.3 | 29.7 | 52.8 |
| % fall freshening | _____ | 44.5 | 48.5 | 30.3 |
| Number of cows** | _____ | 11.5 | 15.0 | 7.9 |

*Not including nutrients received from pasture.

**All dairy cows which have at some time in the past freshened are included in the dairy herd, and affect the average number of cows used in computing this table. There is some variation in the number of months of dry period per cow; however, this variation is small for the majority of farms.

Table 27. Feed Costs and Returns from Other Dairy Cattle, 1945

| Items | Your farm | Average of 52 farms* | 11 farms highest in butterfat per cow | 9 farms lowest in butterfat per cow* |
|---|---|---|---|---|
| Feeds per head, lbs.: | | | | |
| Concentrates | _____ | 918 | 866 | 1079 |
| Hay and fodder | _____ | 1681 | 1724 | 1573 |
| Silage | _____ | 1406 | 2294 | 770 |
| Skim milk | _____ | 871 | 753 | 1024 |
| Whole milk | _____ | 288 | 228 | 295 |
| TOTAL FEED COSTS PER HEAD | $_____ | $42.01 | $43.38 | $41.96 |
| Net inc. in value of other dairy cattle | $_____ | $52.76 | $52.70 | $45.01 |
| RETURNS ABOVE FEED COST PER HEAD | $_____ | $10.75 | $ 9.32 | $ 3.05 |
| RETURNS FOR $100 OF FEED | $_____ | $126 | $123 | $107 |
| Number of head of other dairy cattle | _____ | 15.1 | 17.7 | 8.1 |

Table 28. Feed Costs and Returns from All Dairy Cattle, 1945

| Items | Your farm | Average of 56 farms | 11 farms highest in butterfat per cow | 11 farms lowest in butterfat per cow |
|---|---|---|---|---|
| Feeds per animal unit, lbs.: | | | | |
| Concentrates | _____ | 2442 | 2396 | 2404 |
| Hay and fodder | _____ | 3672 | 3616 | 3403 |
| Silage | _____ | 3890 | 5072 | 3476 |
| TOTAL FEED COSTS PER ANIMAL UNIT | $_____ | $80.54 | $84.68 | $74.91 |
| Value of produce per animal unit: | | | | |
| Dairy products | $_____ | $103.69 | $150.89 | $67.55 |
| Net incr. in value of dairy cattle | _____ | 41.95 | 45.80 | 28.86 |
| TOTAL VALUE PRODUCED | $_____ | $145.64 | $196.69 | $96.41 |
| RETURNS ABOVE FEED PER ANIMAL UNIT | $_____ | $ 65.10 | $112.01 | $21.50 |
| RETURNS PER $100 OF FEED | $_____ | $186 | $235 | $133 |
| Animal units of dairy cattle | _____ | 18.9 | 24.4 | 11.4 |

*Four farmers having both a dairy and a beef herd used a beef bull and included all the young stock in the beef herd.

Table 29. Factors of Cost and Returns from Dual Purpose Cows, 1945

| Items | Your farm | Average of 29 farms* | 10 farms highest in butterfat per cow | 10 farms lowest in butterfat per cow* |
|---|---|---|---|---|
| Pounds of butterfat per cow | _____ | 182 | 241 | 130 |
| Feeds per cow, lbs.: | | | | |
| Corn | _____ | 1562 | 1835 | 1805 |
| Small grain | _____ | 729 | 516 | 471 |
| Commercial feeds | _____ | 73 | 109 | 80 |
| Legume hay | _____ | 3172 | 3303 | 2517 |
| Other hay | _____ | 182 | 151 | 268 |
| Fodder and stover | _____ | 288 | 233 | 235 |
| Total concentrates | _____ | 2364 | 2460 | 2356 |
| Total dry roughage | _____ | 3642 | 3687 | 3020 |
| Silage | _____ | 3344 | 3178 | 2791 |
| Total digestible nutrients* | _____ | 4241 | 4324 | 3869 |
| T.D.N. per lb. B.F. | _____ | 23.3 | 17.9 | 29.8 |
| % T.D.N. that is protein | _____ | 13.7 | 13.6 | 13.1 |
| Feed cost per cow: | | | | |
| Concentrates | $_____ | $39.53 | $39.68 | $38.85 |
| Roughages | _____ | 33.11 | 33.24 | 27.75 |
| Pasture | _____ | 5.38 | 4.91 | 5.45 |
| TOTAL FEED COSTS | $_____ | $78.02 | $77.83 | $72.05 |
| Value of produce per cow: | | | | |
| B.F. sales | $_____ | $89.26 | $121.31 | $60.71 |
| Dairy produce used in house | _____ | 18.72 | 23.08 | 16.42 |
| Milk to livestock | _____ | 16.39 | 18.28 | 13.59 |
| Net increases in value of cows | _____ | 14.93 | 20.68 | 12.85 |
| TOTAL VALUE PRODUCED | $_____ | $139.30 | $183.35 | $103.57 |
| RETURNS ABOVE FEED COST PER COW | $_____ | $61.28 | $105.52 | $31.52 |
| RETURNS FOR $100 OF FEED | $_____ | $195 | $250 | $157 |
| Price recd. per lb. B.F. sold (cts.) | _____ | 61.9 | 60.9 | 62.7 |
| Feed cost per lb. B.F. (cts.) | _____ | 42.9 | 32.3 | 55.4 |
| % fall freshening | _____ | 43.0 | 54.5 | 33.4 |
| Number of cows | _____ | 7.6 | 6.1 | 8.5 |

* Not including nutrients received from pasture.

Table 30. Feed Costs and Returns from Other Dual-Purpose Cattle, 1945

| Items | Your farm | Average of 26 farms* | 9 farms highest in returns above feed | 9 farms lowest in returns above feed |
|---|---|---|---|---|
| Feeds per head, lbs.: | | | | |
| Concentrates | _____ | 1214 | 1047 | 1449 |
| Hay and fodder | _____ | 1370 | 819 | 1757 |
| Silage | _____ | 1250 | 1471 | 1742 |
| Skim milk | _____ | 1166 | 1051 | 1155 |
| Whole milk | _____ | 329 | 245 | 468 |
| TOTAL FEED COSTS PER HEAD | $_____ | $44.69 | $37.50 | $55.30 |
| Net Increase in value | $_____ | $58.06 | $70.40 | $46.37 |
| RETURNS ABOVE FEED COST PER HEAD | $_____ | $13.37 | $32.90 | $-8.93 |
| RETURNS FOR $100 OF FEED | $_____ | $147 | $207 | $ 88 |
| No. of head of other dual-purpose cattle | _____ | 11.7 | 13.6 | 11.2 |

Table 31. Feed Costs and Returns from All Dual-Purpose Cattle, 1945

| Items | Your farm | Average of 29 farms | 10 farms highest in returns above feed | 10 farms lowest in returns above feed |
|---|---|---|---|---|
| Butterfat per cow | _____ | 182 | 220 | 136 |
| Feeds per animal unit, lbs.: | | | | |
| Concentrates | _____ | 2287 | 1933 | 2586 |
| Hay and fodder | _____ | 3223 | 3367 | 3340 |
| Silage | _____ | 2822 | 2084 | 3905 |
| FEED COSTS PER ANIMAL UNIT | $_____ | $71.76 | $62.68 | $82.16 |
| Value of produce per animal unit: | | | | |
| Dairy products | $_____ | $72.90 | $99.55 | $54.98 |
| Net increase in value | _____ | 48.04 | 50.36 | 40.95 |
| TOTAL VALUE PRODUCED | $_____ | $120.94 | $149.91 | $95.93 |
| RETURNS ABOVE FEED PER ANIMAL UNIT | $_____ | $49.18 | $87.23 | $13.77 |
| RETURNS FOR $100 OF FEED | $_____ | $180 | $252 | $119 |
| Animal units of dual-purpose cattle | _____ | 13.2 | 10.8 | 14.7 |

*Three farmers having both a dual-purpose and a beef herd used a beef bull and included all the young stock in the beef herd.

The farmer who excels in all phases of the management of his dairy cows receives a larger return than one who excels in none or only a few of the management factors. The combined effect on return over feed per dairy cow from excelling in a number of management factors is shown in Table 32. The factors included are (1) pounds of butterfat per cow, (2) total digestible nutrients per pound of butterfat, (3) percentage of protein in the T.D.N., (4) price received for butterfat, (5) feed cost per pound of butterfat, and (6) percentage of fall freshening. Five farmers were below the average of the group in all six factors; their return over feed amounted to $26.43 per cow. Three farmers who were above the average of the group in all six factors received a return over feed of $175.91 per cow. The difference between these two extremes amounts to $149.48 per cow or $1719 for the average herd of 11.5 cows.

Table 32. Relation of Return Over Feed per Dairy Cow to Number of Management Factors in Which Farmers Excelled

| No. of factors in which farmer excels | No. of farms | The length of the shaded lines is in proportion to the average return over feed per dairy cow | Average return over feed |
|---|---|---|---|
| 0 | 5 | xxxxx | $26.43 |
| 1 | 11 | xxxxxxxx | 39.30 |
| 2 | 8 | xxxxxxxxxxxxxxxx | 91.65 |
| 3 | 13 | xxxxxxxxxxxxxxxxxx | 98.76 |
| 4 | 10 | xxxxxxxxxxxxxxxxxxxxxxx | 123.01 |
| 5 | 6 | xxxxxxxxxxxxxxxxxxxxxxxxxxx | 138.22 |
| 6 | 3 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 175.91 |

Similar variations occur in the returns secured from dual purpose cows. The data in Table 33 show the combined effect from excelling in the six factors listed above. The 5 farmers who were below the average of the group in all six factors or excelled in only one factor received a return over feed cost per cow of $21.26. Seven farmers who excelled in five or six factors received a return of $101.36 per cow. The difference between these two extremes amounts to $80.10 per cow or $609 for the average milking herd of 7.6 cows.

Table 33. Relation of Return Over Feed per Dual Purpose Cow to Number of Management Factors in Which Farmers Excelled

| No. of factors in which farmer excels | No. of farms | The length of the shaded lines is in proportion to the average return over feed per dual purpose cow | Average return over feed |
|---|---|---|---|
| None or 1 | 5 | xxxxxxx | $21.26 |
| 2 | 7 | xxxxxxxxxxx | 36.32 |
| 3 | 5 | xxxxxxxxxxxxxx | 44.09 |
| 4 | 5 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 97.35 |
| 5 or 6 | 7 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 101.36 |

Table 34. Feed Costs and Returns From Beef Cattle, 1945

| Items | Your farm | Average of all farms | Farms highest in returns above feed | Farms lowest in returns above feed |
|---|---|---|---|---|
| Beef breeding herd: No. of farms: | | 45 | 11 | 11 |
| Feeds per animal unit, lbs.: | | | | |
| Concentrates | _____ | 1569 | 1541 | 1787 |
| Legume hay | _____ | 1803 | 1917 | 2606 |
| Other hay | _____ | 352 | 480 | 166 |
| Fodder and stover | _____ | 462 | 597 | 456 |
| Silage | _____ | 2749 | 2841 | 1848 |
| Skim milk* | _____ | 63 | 45 | 148 |
| Whole milk* | _____ | 2 | 0 | 7 |
| Feed cost per animal unit: | | | | |
| Concentrates | $_____ | $24.54 | $24.47 | $26.29 |
| Roughages | _____ | 22.61 | 24.02 | 25.22 |
| Milk* | _____ | .20 | .12 | .54 |
| Pasture | _____ | 5.49 | 5.16 | 6.14 |
| TOTAL FEED COSTS | $_____ | $52.84 | $53.77 | $58.19 |
| Value of produce per animal unit: | | | | |
| Dairy products | $_____ | $14.88 | $23.03 | $ 6.95 |
| Net increase in value of animals | _____ | 61.96 | 86.25 | 48.51 |
| TOTAL VALUE PRODUCED | $_____ | $76.84 | $109.28 | $55.46 |
| RETURNS ABOVE FEED COST PER ANIMAL UNIT | $_____ | $24.00 | $55.51 | $-2.73 |
| RETURNS FOR $100 OF FEED | $_____ | $158 | $215 | $95 |
| Number of cows and herd bulls | _____ | 15.8 | 19.7 | 12.4 |
| Number of animal units in the herd | _____ | 25.6 | 30.5 | 20.7 |
| Lbs. beef produced | _____ | 10531 | 13070 | 7854 |
| Feeder cattle: No. of farms | | 73 | 15 | 15 |
| Feeds per cwt. beef produced, lbs.: | | | | |
| Corn | _____ | 757 | 642 | 1013 |
| Small grain | _____ | 21 | 10 | 28 |
| Commercial feeds | _____ | 36 | 38 | 38 |
| Legume hay | _____ | 205 | 186 | 219 |
| Other hay | _____ | 75 | 35 | 98 |
| Fodder and stover | _____ | 32 | 71 | 25 |
| Total concentrates | _____ | 814 | 690 | 1079 |
| Total dry roughages | _____ | 312 | 292 | 342 |
| Silage | _____ | 395 | 196 | 357 |
| Feed cost per cwt. beef produced: | | | | |
| Concentrates | $_____ | $12.60 | $10.61 | $16.44 |
| Roughages | _____ | 2.81 | 2.02 | 2.98 |
| Pasture | _____ | .21 | .08 | .17 |
| TOTAL FEED COSTS | $_____ | $15.62 | $12.71 | $19.59 |
| Net increase in value of feeders | $_____ | $23.00 | $25.45 | $20.48 |
| RETURNS ABOVE FEED COST PER CWT. BEEF PROD. | $_____ | $ 7.38 | $12.74 | $ .89 |
| RETURNS FOR $100 OF FEED | $_____ | $157 | $207 | $108 |
| Price recd. per cwt.beef sold in 1945 | $_____ | $14.95 | $15.11 | $14.26 |
| Price pd. for feeder cattle bot.in 1945 | $_____ | $12.60 | $12.01 | $13.44 |
| No. of animal units | _____ | 26.9 | 25.1 | 24.2 |
| Pounds of beef produced | _____ | 15977 | 17280 | 13820 |

*Two farmers had both dairy cows and beef cows and fed milk produced by the milking herd to beef calves.

Table 35. Feed Costs and Returns from a Farm Flock of Sheep, 1945

| Items | Your farm | Average of 48 farms | 10 farms highest in returns above feed | 10 farms lowest in returns above feed |
|---|---|---|---|---|
| Feeds per head,* lbs.: | | | | |
| Concentrates | | 93 | 84 | 105 |
| Legume hay | | 164 | 90 | 249 |
| Other hay | | 28 | 9 | 32 |
| Fodder and stover | | 10 | 21 | 11 |
| Silage | | 130 | 18 | 194 |
| Feed cost per head: | | | | |
| Concentrates | $ | $ 1.60 | $ 1.44 | $ 1.82 |
| Roughages | | 1.66 | .82 | 2.34 |
| Pasture | | 1.07 | 1.20 | .95 |
| TOTAL FEED COSTS | $ | $ 4.33 | $ 3.46 | $ 5.11 |
| Value of produce per head: | | | | |
| Wool | $ | $ 2.84 | $ 2.86 | $ 2.82 |
| Net increase in value of sheep | | 6.35 | 11.39 | 1.01 |
| TOTAL VALUE PRODUCED | $ | $ 9.19 | $14.25 | $ 3.83 |
| RETURNS ABOVE FEED COST PER HEAD | $ | $ 4.86 | $10.79 | $-1.28 |
| RETURNS FOR $100 OF FEED | $ | $251 | $458 | $78 |
| Price per cwt. of lambs sold | $ | $13.93 | $15.47 | $10.89 |
| Price per lb. wool sold (cts.) | | 42.4 | 42.9 | 41.8 |
| Pounds of wool per sheep sheared | | 8.4 | 8.4 | 7.5 |
| Number of ewes kept for lambing | | 30 | 21 | 31 |
| % lamb crop** | | 99 | 109 | 65 |
| % death loss** | | 9.4 | 6.4 | 14.4 |
| No. of head of sheep* | | 42 | 29 | 36 |

*Two lambs under six months of age considered as one head.
**Lambs which die during month of birth are not included.

Superior management in the sheep enterprise results in a comparatively high return over feed just as superior management in the dairy herd or poultry flock resulted in a high return over feed per cow or per hen. The effect on return over feed from excelling in 6 factors is shown in Table 36. The factors included are (1) feed cost per head, (2) price received per 100 lbs. of lambs sold, (3) price received per lb. of wool sold, (4) lbs. of wool per sheep sheared, (5) per cent lamb crop, and (6) per cent death loss. The 9 farmers who were above the average in only one or two factors received a return above feed cost of $1.73 per head, while 11 farmers who excelled in 5 or 6 of the factors received a return of $7.47 per head. The difference between the two extremes is $5.74 or $241 for the average flock of 42 head.

Table 36. Relation of Return Over Feed Per Head of Sheep to Number of Management Factors in Which Farmers Excelled

| No. of factors in which farmer excels | No. of farms* | Length of shaded lines is in proportion to the average return over feed per head of sheep | Average return over feed |
|---|---|---|---|
| 1 or 2 | 9 | xxxxxxxxx | $1.73 |
| 3 or 4 | 18 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 6.61 |
| 5 or 6 | 11 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 7.47 |

*The records of 10 farmers who did not sell lambs or failed to report weights were omitted.

Table 37. Feed Costs and Returns from Feeder Sheep, 1945

| Items | Your farm | Average of 17 farms | 8 farms highest in returns above feed | 8 farms lowest in returns above feed |
|---|---|---|---|---|
| Feeds per cwt. sheep produced, lbs.: | | | | |
| Concentrates | _____ | 793 | 748 | 840 |
| Legume hay | _____ | 292 | 245 | 342 |
| Other hay | _____ | 40 | 48 | 37 |
| Silage | _____ | 171 | 307 | 50 |
| Feed cost per cwt.: | | | | |
| Concentrates | $_____ | $11.95 | $11.46 | $12.44 |
| Roughages | _____ | 2.66 | 2.64 | 2.74 |
| Pasture | _____ | .54 | .14 | 1.01 |
| TOTAL FEED COSTS | $_____ | $15.15 | $14.24 | $16.19 |
| Net increase in value of sheep | $_____ | $24.59 | $28.62 | $20.90 |
| RETURNS ABOVE FEED COST PER CWT. PROD. | $_____ | $ 9.44 | $14.38 | $ 4.71 |
| RETURNS FOR $100 OF FEED | $_____ | $172 | $215 | $132 |
| Price per cwt. sheep sold | $_____ | $15.91 | $15.75 | $16.12 |
| Price per cwt. for sheep bot. | $_____ | $14.59 | $14.45 | $14.79 |
| % death loss | _____ | 3.0 | 3.5 | 2.6 |
| Pounds of sheep produced | _____ | 11034 | 10511 | 13242 |

Table 38. Feed Costs and Returns for Turkeys, 1945

| Items | Your farm | Average of 6 farms | 3 farms highest in returns above feed | 3 farms lowest in returns above feed |
|---|---|---|---|---|
| Feed per cwt. turkeys produced, lbs.: | | | | |
| Grain | _____ | 361 | 324 | 397 |
| Commercial feeds | _____ | 197 | 198 | 196 |
| Total concentrates | _____ | 558 | 522 | 593 |
| Feed cost per cwt. turkeys produced | $_____ | $14.89 | $13.30 | $16.47 |
| Net increases in value of turkeys | $_____ | $27.06 | $26.90 | $27.21 |
| RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED | $_____ | $12.17 | $13.60 | $10.74 |
| RETURNS FOR $100 FEED | $_____ | $184 | $202 | $165 |
| Price rec'd per lb. turkey sold (cts.) | _____ | 32.5 | 32.7 | 32.2 |
| No. of poults put on feed | _____ | 1963 | 2995 | 930 |
| Price paid per poult purchased (cts.) | _____ | 96.3 | 87.2 | 105.3 |
| Weight per bird sold, lbs. | _____ | 19.4 | 19.1 | 19.7 |
| % death loss | _____ | 16.1 | 14.8 | 17.5 |
| Pounds of turkeys produced | _____ | 30747 | 49236 | 12257 |

Table 39. Feed Costs and Returns from Chickens, 1945

| Items | Your farm | Average of 137 farms | 28 farms highest in return above feed | 28 farms lowest in return above feed |
|---|---|---|---|---|
| Feed per hen, lbs.: | | | | |
| Grain | _____ | 112 | 121 | 124 |
| Commercial feeds | _____ | 42 | 52 | 34 |
| Total concentrates | _____ | 154 | 173 | 158 |
| Skim milk and buttermilk | _____ | 9 | 18 | 9 |
| TOTAL FEED COST PER HEN | $_____ | $ 3.53 | $ 4.04 | $ 3.42 |
| Value of produce per hen: | | | | |
| Eggs sold and used in house | $_____ | $ 4.75 | $ 5.84 | $ 3.42 |
| Net increase in value of chickens | _____ | 1.41 | 2.92 | .61 |
| TOTAL VALUE PRODUCED | $_____ | $ 6.16 | $ 8.76 | $ 4.03 |
| RETURNS ABOVE FEED COST PER HEN | $_____ | $ 2.63 | $ 4.72 | $ .61 |
| RETURNS FOR $100 OF FEED | $_____ | $180 | $225 | $121 |
| Price rec'd per doz. eggs sold (cts.) | _____ | 35.0 | 35.6 | 34.7 |
| Eggs laid per hen | _____ | 163 | 197 | 120 |
| Ave. no. of hens on farm during the year | _____ | 238 | 224 | 215 |
| % of hens that are pullets | _____ | 86 | 93 | 73 |
| % death loss of hens | _____ | 11.5 | 8.9 | 14.5 |
| Number of chicks purchased | _____ | 644 | 929 | 401 |
| Lbs. chickens produced | _____ | 1828 | 2858 | 903 |

Superior management leads to high returns. The combined effect on return over feed from excelling in a number of poultry management factors is shown in Table 39. The factors included are (1) pounds of concentrates per hen, including skim milk on a grain equivalent basis, (2) price received per dozen of eggs sold, (3) Number of eggs laid per hen, (4) percentage of the hens that are pullets, and (5) death loss. The 13 farmers who excelled in only one of these five factors received an average return over feed of $1.11 per hen. The six farmers who excelled in all five factors had an average return over feed of $3.88 per hen. The difference between the two extremes amounts to $2.77 or $659 for the average flock of 238 hens.

Table 40. Relation of Return Over Feed Per Hen to the Number of Management Factors in Which Farmers Excelled

| No. of factors in which farmer excels | No. of farms | The length of the shaded lines is in proportion to the average return over feed per hen | Average return over feed per hen |
|---|---|---|---|
| 1 | 13 | xxxxxxxxxxx | $1.11 |
| 2 | 39 | xxxxxxxxxxxxxxxxxxx | 1.90 |
| 3 | 42 | xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 2.87 |
| 4 | 37 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 3.47 |
| 5 | 6 | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 3.88 |

Table 41. Total feed Costs and Returns from Your Livestock Enterprises, 1945

| | Dairy or dual purpose cattle | | | Beef breeding herd | Feeder cattle |
|---|---|---|---|---|---|
| | Cows | Other | All | | |
| Total returns | ____ | ____ | ____ | ____ | ____ |
| Total feed cost | ____ | ____ | ____ | ____ | ____ |
| Total return over feed | ____ | ____ | ____ | ____ | ____ |

| | | Sheep | | | |
|---|---|---|---|---|---|
| | Hogs | Farm Flock | Feeders | Turkeys | Chickens |
| Total returns | ____ | ____ | ____ | ____ | ____ |
| Total feed cost | ____ | ____ | ____ | ____ | ____ |
| Total return over feed | ____ | ____ | ____ | ____ | ____ |

The total "return over feed costs" for each class of livestock is shown in Table 41. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head" "per unit" or per "100 pounds". These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The total return is the same as the returns and net increases shown on page 9. The value of milk consumed by calves is included in the total returns from dairy or dual purpose cows and in the total feed cost for other dairy or other dual purpose cattle. The value of milk consumed by calves is not included in either the total returns or the feed cost of "all dairy" or "all dual purpose" cattle. The return over feed is not a net return but rather the amount available from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest, and veterinary bills and to provide a return for the use of family labor and capital.

Feed is the largest single item of cost for all classes of livestock. However, the proportion of the total cost represented by feed varies considerably between classes of livestock. Feed makes up approximately 45 per cent of the total costs of maintaining dairy cattle and poultry, 50 per cent in the case of a farm flock of sheep and 75 to 90 per cent for hogs, feeder cattle and feeder lambs. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than feed.

Table 42. Summary of Farm Earnings - Averaged by Counties, 1945

| | Cotton-wood | Fari-bault | Jackson | Martin | Murray | Nobles | Redwood | Rock | Watonwan |
|---|---|---|---|---|---|---|---|---|---|
| FARM EXPENSES | | | | | | | | | |
| Cattle bought | $1049 | $1423 | $2159 | $1247 | $1589 | $1173 | $2439 | $1309 | $585 |
| Hogs bought | 542 | 324 | 293 | 158 | 484 | 385 | 440 | 533 | 211 |
| Sheep bought | 1908 | 891 | 36 | 1 | 583 | 1256 | 13 | 90 | 53 |
| Poultry bought | 213 | 156 | 137 | 97 | 91 | 373 | 167 | 207 | 114 |
| Misc. livestock exp. | 136 | 172 | 166 | 267 | 142 | 218 | 157 | 417 | 173 |
| Crop expense | 778 | 477 | 528 | 652 | 593 | 493 | 745 | 501 | 440 |
| Feed | 2508 | 2269 | 2830 | 1317 | 2048 | 2843 | 2608 | 2864 | 1644 |
| Custom work hired | 383 | 348 | 250 | 363 | 240 | 268 | 226 | 372 | 322 |
| Power expense | 1220 | 955 | 1061 | 881 | 1024 | 845 | 1352 | 1159 | 848 |
| Crop mach. & livestock equip. | 814 | 661 | 554 | 600 | 799 | 945 | 867 | 1153 | 495 |
| Buildings | 388 | 293 | 674 | 740 | 635 | 577 | 904 | 690 | 247 |
| Labor | 573 | 490 | 618 | 767 | 718 | 445 | 730 | 1380 | 483 |
| Taxes, insurance, & misc. | 494 | 441 | 410 | 312 | 461 | 405 | 485 | 540 | 392 |
| (1) Total purchases | $11006 | 8900 | 9716 | 7402 | 9407 | $10226 | 11133 | $11215 | 6007 |
| (2) Decrease in cap. | 940 | 379 | - | 173 | 261 | - | - | - | - |
| (3) Board to hired labor | 87 | 29 | 41 | 212 | 89 | 28 | 128 | 204 | 66 |
| (4) Unpaid family labor | 538 | 464 | 367 | 368 | 249 | 218 | 284 | 490 | 147 |
| (5) Int. on farm cap. | 1832 | 1803 | 1714 | 1820 | 1825 | 1673 | 1980 | 1940 | 1649 |
| (6) Total Expenses | 14403 | 11575 | 11838 | 9975 | 11831 | 12145 | 13525 | 13849 | 7869 |
| FARM RECEIPTS | | | | | | | | | |
| Cattle sales | $3337 | $3492 | $4254 | $3121 | $5005 | $3969 | $6709 | $3830 | $2508 |
| Dairy products | 1313 | 998 | 632 | 1789 | 555 | 761 | 535 | 1623 | 1040 |
| Hogs | 3659 | 4711 | 4715 | 3295 | 3749 | 4544 | 5093 | 6536 | 3913 |
| Sheep | 3063 | 1109 | 77 | 271 | 806 | 1603 | 76 | 1314 | 120 |
| Poultry & eggs | 1847 | 1432 | 1850 | 1017 | 1052 | 2325 | 1431 | 1927 | 1156 |
| Crop | 3790 | 2130 | 2100 | 1979 | 3189 | 1132 | 3128 | 1177 | 1647 |
| AAA payment | 107 | 32 | 55 | 28 | 54 | 37 | 70 | 83 | 10 |
| Work off the farm | 236 | 109 | 168 | 371 | 506 | 246 | 436 | 316 | 275 |
| Misc. cash receipts | 300 | 259 | 250 | 224 | 405 | 417 | 323 | 425 | 222 |
| (7) Total farm sales | 17652 | 14272 | 14101 | 12095 | 15321 | $15034 | 17801 | 17231 | 10891 |
| (8) Increase in cap. | - | - | 498 | - | - | 374 | 1592 | 86 | 948 |
| (9) Family living from farm | 606 | 619 | 688 | 577 | 665 | 549 | 645 | 799 | 712 |
| (10) Total receipts | 18258 | 14891 | 15287 | 12672 | 15986 | 15957 | 20038 | 18116 | 12551 |
| (6) Total expenses | 14403 | 11575 | 11838 | 9975 | 11831 | 12145 | 13525 | 13849 | 7869 |
| (11) Oper. labor earnings | 3855 | 3316 | 3449 | 2697 | 4155 | 3812 | 6513 | 4267 | 4682 |

Table 43. Miscellaneous Information - Averaged by Counties, 1945

| | Cottonwood | Faribault | Jackson | Martin | Murray | Nobles | Redwood | Rock | Watonwan |
|---|---|---|---|---|---|---|---|---|---|
| FARM INVENTORIES (Beginning of Year) | | | | | | | | | |
| Productive livestock | $5342 | $5932 | $5552 | $5242 | $6249 | $5736 | $7302 | $7706 | $5419 |
| Horses | 154 | 275 | 259 | 289 | 233 | 284 | 226 | 221 | 287 |
| Crop, seed and feed | 4107 | 3628 | 4253 | 4319 | 4451 | 4466 | 5142 | 5844 | 3844 |
| Mach. and equipment | 3646 | 3195 | 3232 | 2849 | 4169 | 3088 | 3734 | 3969 | 2788 |
| Buildings | 8440 | 8724 | 7134 | 7346 | 7847 | 6286 | 6424 | 8717 | 8466 |
| Land | 15427 | 14494 | 13544 | 16445 | 13691 | 13404 | 15983 | 12309 | 11705 |
| Total farm capital | 37116 | 36248 | 34024 | 36490 | 36640 | 33264 | 38811 | 38766 | 32509 |
| MEAS. OF FARM ORG. AND MANAGEMENT EFFIC. | | | | | | | | | |
| Crop yields - % of ave. | 96 | 102 | 96 | 97 | 94 | 91 | 111 | 95 | 116 |
| % high return crops | 58.8 | 57.6 | 52.0 | 53.3 | 55.0 | 53.9 | 56.0 | 62.8 | 57.8 |
| Index ret. from livestock | 108 | 94 | 96 | 101 | 96 | 102 | 96 | 104 | 106 |
| A.U. livestock per 100 A. | 18.9 | 23.1 | 22.2 | 21.9 | 21.2 | 25.8 | 17.7 | 28.6 | 19.4 |
| Work units | 569 | 495 | 483 | 549 | 572 | 502 | 590 | 636 | 478 |
| Work units per worker | 286 | 292 | 288 | 276 | 315 | 330 | 321 | 300 | 319 |
| Exp. per work unit | $4.91 | $4.82 | $5.12 | $4.38 | $4.41 | $4.31 | $4.54 | $4.14 | $3.98 |
| DISTRIBUTION OF ACRES IN FARM | | | | | | | | | |
| Small grain | 110.6 | 76.1 | 77.3 | 72.6 | 100.4 | 69.3 | 113.3 | 70.2 | 66.2 |
| Cultivated crops | 110.9 | 82.8 | 86.0 | 90.0 | 100.7 | 80.3 | 127.6 | 76.7 | 85.2 |
| Tillable hay land | 20.9 | 19.8 | 17.7 | 20.3 | 20.5 | 20.6 | 15.9 | 36.1 | 15.2 |
| Tillable pasture | 12.8 | 22.9 | 12.6 | 24.0 | 19.5 | 14.0 | 20.5 | 20.7 | 20.1 |
| Tillable land not cropped | 5.8 | 6.1 | 6.9 | .2 | 5.6 | 3.0 | 4.7 | .8 | 0 |
| Total acres in farm | 317.3 | 245.8 | 245.5 | 231.7 | 304.3 | 220.8 | 355.5 | 259.7 | 228.9 |
| % land tillable | 82.3 | 84.5 | 81.7 | 89.4 | 81.1 | 84.8 | 79.3 | 78.7 | 81.6 |
| CROP YIELDS PER ACRE | | | | | | | | | |
| Flax, bu. | 13.3 | 12.0 | 11.7 | 15.7 | 14.1 | 13.4 | 15.0 | 16.0 | 14.4 |
| Oats, bu. | 54.9 | 50.2 | 47.6 | 47.3 | 52.5 | 46.2 | 58.2 | 55.1 | 60.0 |
| Soybeans, bu. | 13.3 | 15.5 | 13.7 | 14.2 | 15.6 | 13.2 | 17.6 | - | 19.8 |
| Corn, grain, bu. | 31.6 | 35.9 | 35.9 | 33.5 | 29.0 | 29.6 | 37.9 | 30.0 | 39.0 |
| Corn silgge, tons | 6.6 | 8.0 | 5.7 | 9.1 | 6.6 | 6.4 | 8.5 | 5.5 | 8.5 |
| Alfalfa hay, tons | 2.1 | 2.3 | 2.3 | 2.1 | 1.7 | 1.9 | 2.3 | 2.1 | 2.6 |
| AN. UNITS OF LIVESTOCK | 46.6 | 49.0 | 50.4 | 47.0 | 54.3 | 51.6 | 59.1 | 68.2 | 41.8 |
| % dairy and du. pur. cattle | 31.5 | 23.1 | 14.6 | 33.0 | 17.2 | 22.9 | 20.8 | 32.2 | 27.3 |
| % in beef breeding herd | 1.6 | 17.2 | 24.3 | 15.6 | 25.7 | 8.7 | 11.3 | 17.7 | 15.9 |
| % feeder cattle | 14.5 | 14.4 | 24.5 | 18.3 | 25.5 | 18.4 | 21.9 | 8.0 | 14.8 |
| % hogs | 30.1 | 29.6 | 27.7 | 23.7 | 22.1 | 30.5 | 34.7 | 27.1 | 33.6 |
| % sheep-farm flock | 6.6 | 5.4 | 2.0 | 4.9 | 3.0 | 3.2 | 2.5 | 7.5 | 2.3 |
| % sheep-feeders | 7.5 | 5.2 | .2 | .1 | 2.4 | 7.1 | - | 1.8 | .3 |
| % turkeys | 1.4 | 1.1 | - | - | - | 3.7 | 6 | - | - |
| % hens | 6.8 | 4.0 | 6.7 | 4.4 | 4.1 | 5.5 | 8.2 | 5.7 | 5.8 |

Table 44. Summary of Farm Earnings by Years*

| Items | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|
| No. of farms | 165 | 166 | 165 | 164 | 163 | 153 |
| Total farm capital | $32724 | $36613 | $37728 | 37602 | $36000 | $35876 |
| Monthly charge for unpaid family lab.* | 45 | 50 | 60 | 75 | 85 | .90 |
| Monthly charge for board to hired lab.* | 18 | 20 | 25 | 25 | 25 | .25 |
| FARM EXPENSES | | | | | | |
| Dairy and dual-pur.cattle bot. | $ 76 | $ 138 | $ 141 | $ 135 | $ 112 | $ 118 |
| Beef cattle bot.(incl.feeders) | 1243 | 1766 | 1718 | 1187 | 1109 | 1390 |
| Hogs bot. | 103 | 209 | 339 | 408 | 315 | 377 |
| Sheep bot. (incl. feeders) | 414 | 686 | 866 | 694 | 321 | 600 |
| Poultry bot. (incl. turkeys) | 99 | 96 | 138 | 165 | 200 | 195 |
| Horses bot. | 32 | 32 | 49 | 33 | 43 | 15 |
| Misc. livestock expense | 72 | 109 | 148 | 199 | 173 | 194 |
| Miscellaneous crop expenses | 243 | 303 | 377 | 507 | 582 | 575 |
| Feed bought | 1007 | 1718 | 2235 | 3080 | 2164 | 2416 |
| Custom work hired | 150 | 140 | 199 | 215 | 261 | 292 |
| Power mach. (new) | 379 | 446 | 256 | 180 | 337 | 200 |
| Power mach.(upkeep) | 411 | 497 | 533 | 617 | 699 | 817 |
| Crop and gen. mach. (new) | 319 | 416 | 387 | 221 | 332 | 414 |
| Crop and gen. mach. (upkeep | 69 | 84 | 135 | 157 | 174 | 195 |
| Livestock equipment (new) | 74 | 123 | 134 | 138 | 91 | 78 |
| Livestock equipment (upkeep) | 20 | 32 | 57 | 87 | 78 | 94 |
| Buildings and fencing (new) | 412 | 434 | 327 | 236 | 297 | 370 |
| Buildings and fencing (upkeep) | 88 | 141 | 156 | 168 | 192 | 219 |
| Hired labor | 392 | 561 | 622 | 739 | 651 | 636 |
| Taxes | 313 | 337 | 355 | 335 | 311 | 311 |
| Insurance | 15 | 32 | 35 | 40 | 41 | 41 |
| General farm | 59 | 55 | 60 | 72 | 80 | 84 |
| (1) Total farm purchases | $5990 | $8355 | $9267 | $9613 | $8563 | $9631 |
| (2) Decrease in farm capital | - | - | - | - | 412 | - |
| (3) Board furnished hired labor | 131 | 171 | 143 | 147 | 118 | 83 |
| (4) Interest on farm capital | 1635 | 1831 | 1886 | 1880 | 1800 | 1794 |
| (5) Unpaid family labor | 252 | 288 | 360 | 335 | 316 | 322 |
| (6) Total farm exp. (Sum of (1)to(5) | $8008 | $10645 | $11656 | $11975 | $11209 | $11830 |

*These adjustments should be considered in comparing 1945 results with previous years.

Table 44 Summary of Farm Earnings by years (continued)

| Items | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|
| FARM RECEIPTS | | | | | | |
| Dairy and dual-purpose cattle | $ 265 | $ 392 | $ 446 | $ 419 | $ 392 | $ 473 |
| Dairy products | 570 | 758 | 804 | 916 | 865 | 906 |
| Beef cattle (incl. feeders) | 2373 | 3399 | 3860 | 3590 | 2478 | 3777 |
| Hogs | 1162 | 2306 | 4336 | 5630 | 4671 | 4484 |
| Sheep and wool (incl. feeders) | 470 | 1032 | 1402 | 968 | 768 | 926 |
| Poultry (including turkeys) | 372 | 396 | 598 | 622 | 829 | 659 |
| Eggs | 244 | 334 | 589 | 905 | 911 | 977 |
| Horses | 42 | 41 | 47 | 45 | 47 | 27 |
| Corn | 516 | 477 | 625 | 724 | 578 | 587 |
| Small grain | 849 | 1133 | 1120 | 1382 | 669 | 949 |
| Other crops | 239 | 283 | 366 | 510 | 600 | 673 |
| Machinery and equipment sold | 249 | 278 | 133 | 137 | 185 | 251 |
| Agri. adjustment payment | 506 | 503 | 503 | 264 | 74 | 51 |
| Income from labor off the farm | 193 | 196 | 163 | 137 | 183 | 295 |
| Miscellaneous | 394 | 176 | 166 | 185 | 197 | 48 |
| (7) Total farm sales | $8444 | $11704 | $15158 | $16434 | $13447 | $15083 |
| (8) Increase in farm capital | 1179 | 2618 | 2102 | 2 | - | 314 |
| (9) Family living from farm | 483 | 538 | 584 | 588 | 572 | 635 |
| (10) Tot. farm rec. (7)+(8)+(9) | $10106 | $14860 | $17844 | $17024 | $14019 | $16032 |
| (6) Total farm expenses | 8008 | 10645 | 11656 | 11975 | 11209 | 11830 |
| (11) Oper. lab. earn. (10) - (6) | 2098 | 4215 | 6188 | 5049 | 2810 | 4202 |
| MEAS. OF FARM ORG. AND MANAGEMENT EFFICIENCY | | | | | | |
| % high return crops* | 35.9 | 36.5 | 38.9 | 40.3 | 54.2 | 55.7 |
| Prod. livestock units per 100A. | 22.1 | 24.7 | 24.7 | 25.1 | 21.4 | 22.1 |
| Work units | 569 | 631 | 624 | 586 | 530 | 535 |
| Work units per worker | 263 | 264 | 281 | 279 | 279 | 297 |
| Expenses per work unit | $2.17 | $2.30 | $2.90 | $3.52 | $4.20 | $4.52 |
| ACRES PER FARM | 279 | 295 | 291 | 280 | 268 | 268 |
| Crop acres per farm | 213 | 223 | 219 | 212 | 191 | 203 |
| CROP YIELDS PER ACRE | | | | | | |
| Flax, bu. | 13.7 | 12.0 | 11.5 | 9.5 | 6.0 | 13.8 |
| Barley, bu. | 42.3 | 29.6 | 24.0 | 10.7 | 18.8 | 44.3 |
| Oats, bu. | 60.1 | 26.4 | 44.8 | 34.3 | 36.3 | 51.8 |
| Corn, grain, bu. | 46.2 | 55.9 | 57.4 | 39.6 | 49.6 | 33.5 |
| Corn silage, tons | 8.5 | 9.5 | 10.3 | 8.5 | 7.5 | 7.1 |
| Alfalfa hay, tons | 2.0 | 2.0 | 2.5 | 2.3 | 2.0 | 2.1 |

* The crop ratings used in calculating the percentage of the tillable land in high return crops was changed considerably in 1944.

Table 45. Summary of Miscellaneous Items by years

| Items | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|
| RETURN ABOVE FEED COST PER: | | | | | | |
| Dairy cow | $43.03 | $56.89 | $70.13 | $69.86 | $69.45 | $92.30 |
| Dual-purpose cow | 26.49 | 39.13 | 54.28 | 41.21 | 46.01 | 61.28 |
| Animal unit in beef breeding herd | 13.20 | 25.06 | 35.53 | 18.54 | 12.20 | 24.00 |
| 100 lbs. feeder cattle produced | 2.92 | 3.99 | 3.64 | 1.43 | 3.56 | 7.38 |
| Head of sheep in farm flock | 3.27 | 5.96 | 5.61 | 3.37 | 3.00 | 4.86 |
| 100 lbs. feeder sheep produced | 2.13 | 8.01 | 6.67 | 4.24 | 10.85 | 9.44 |
| 100 lbs. hogs produced | 1.23 | 5.15 | 7.61 | 2.93 | 3.31 | 5.23 |
| Hen | .96 | 1.35 | 2.07 | 2.48 | 1.71 | 2.63 |
| 100 pounds turkeys produced | 5.74 | 9.63 | 14.09 | 12.31 | 10.27 | 12.17 |
| FEED COST PER: | | | | | | |
| Dairy cow | $46.50 | $53.11 | $62.99 | $88.03 | $88.04 | $92.68 |
| Dual-purpose cow | 34.85 | 44.19 | 48.55 | 70.09 | 68.02 | 78.02 |
| Animal unit in beef breeding herd | 29.86 | 33.57 | 34.55 | 46.58 | 49.92 | 52.84 |
| 100 lbs. of feeder cattle produced | 8.00 | 9.21 | 13.27 | 17.25 | 15.06 | 15.62 |
| Head of sheep in farm flock | 2.60 | 2.76 | 3.01 | 4.14 | 3.78 | 4.33 |
| 100 lbs. feeder sheep produced | 7.16 | 8.38 | 14.23 | 13.85 | 12.98 | 15.15 |
| 100 lbs. hogs produced | 4.29 | 5.55 | 6.76 | 9.39 | 10.32 | 9.04 |
| Hen | 1.11 | 1.50 | 2.15 | 3.17 | 3.46 | 3.53 |
| 100 lbs. turkeys produced | 7.27 | 8.26 | 11.40 | 14.96 | 14.88 | 14.89 |
| Horse | 29.74 | 31.80 | 37.06 | 47.87 | 40.58 | 32.10 |
| MISC. LIVESTOCK INFORMATION | | | | | | |
| No. of work horses | 4.1 | 4.2 | 4.0 | 3.7 | 3.3 | 3.1 |
| No. of colts | 1.0 | 1.0 | .7 | .7 | .6 | .3 |
| No. of dairy or dual-purpose cows | 8.6 | 9.1 | 8.6 | 7.6 | 6.6 | 6.1 |
| Head in beef breeding herd | 9.0 | 9.4 | 9.9 | 10.7 | 13.5 | 10.8 |
| Lbs. feeder cattle produced | 8678 | 14087 | 10119 | 8483 | 5315 | 7695 |
| Litters of pigs | 13.6 | 16.9 | 20.1 | 25.4 | 16.7 | 19.4 |
| Pounds of hogs produced | 21335 | 27550 | 34522 | 39596 | 29054 | 33994 |
| No. of hens | 161 | 173 | 196 | 223 | 230 | 215 |
| Lbs. of butterfat per dairy cow | 250 | 254 | 250 | 251 | 226 | 242 |
| Lbs. of butterfat per dual-pur. cow | 179 | 190 | 190 | 182 | 172 | 182 |
| No. of pigs weaned per litter | 6.2 | 6.4 | 6.3 | 6.0 | 5.9 | 6.2 |
| % lamb crop | 110 | 110 | 109 | 105 | 94 | 99 |
| Eggs per hen | 113 | 117 | 135 | 146 | 157 | 163 |

Table 45, Summary of Miscellaneous Items by Years (Continued)

| Items | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|
| PRICE RECEIVED PER: | | | | | | |
| Lb. B.F. sold to creameries | $ .31 | $ .37 | $ .42 | $ .53 | $ .58 | $ .62 |
| 100 pounds feeder cattle | 8.81 | 10.13 | 12.22 | 13.68 | 13.83 | 14.95 |
| 100 pounds feeder sheep | 8.74 | 10.08 | 12.47 | 14.52 | 15.32 | 15.91 |
| Pound of wool | .29 | .38 | .41 | .41 | .41 | .42 |
| 100 pounds of hogs | 5.15 | 9.07 | 13.13 | 13.80 | 13.12 | 14.27 |
| Dozen eggs | .15 | .21 | .28 | .35 | .31 | .35 |
| Pound of turkeys | .14 | .18 | .29 | .32 | .34 | .32 |
| PRICE OF FEED | | | | | | |
| Shelled corn, bu. | $ .47 | $ .54 | $ .68 | $ .91 | $ .92 | $ .86 |
| Oats, bu. | .26 | .32 | .41 | .60 | .70 | .64 |
| Barley, bu. | .31 | .39 | .52 | .77 | .92 | .94 |
| Alfalfa hay, ton | 7.50 | 8.50 | 8.00 | 11.00 | 15.00 | 15.00 |
| Timothy hay, ton | 4.80 | 5.45 | 5.15 | 6.75 | 9.00 | 9.00 |
| Corn silage, ton | 2.10 | 2.55 | 2.75 | 3.62 | 5.00 | 5.00 |
| Bran, cwt. | 1.20 | 1.50 | 2.10 | 2.10 | 2.20 | 2.18 |
| Linseed oilmeal, cwt. | 1.75 | 2.00 | 2.40 | 2.55 | 2.85 | 2.88 |
| Tankage, cwt. | 2.50 | 3.20 | 4.10 | 4.00 | 4.18 | 4.10 |
| Meat scraps, cwt. | 2.55 | 3.20 | 4.10 | 4.00 | 4.18 | 4.10 |

Suggestions for Improvements