

1959 ANNUAL REPORT  
**VOCATIONAL AGRICULTURE**  
**FARM ANALYSIS**  
EAST SOUTH CENTRAL MINNESOTA



**AUSTIN AREA VOCATIONAL SCHOOL**  
AUSTIN, MINNESOTA

IN COOPERATION WITH  
VOCATIONAL DIVISION, MINNESOTA DEPARTMENT OF EDUCATION  
AND AGRICULTURAL EDUCATION DEPARTMENT  
UNIVERSITY OF MINNESOTA

APRIL, 1960

1959 REPORT OF THE VOCATIONAL AGRICULTURE  
FARM ANALYSIS SERVICE IN EAST SOUTH CENTRAL MINNESOTA

Charles M. Painter

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INTRODUCTION

This is the fifth year that an analysis has been made by the Austin Area Vocational School. This type of analysis follows the same pattern as that used by the Farm Management Division of the University of Minnesota. These techniques have been developed through studies made with farm management association members since 1928.

We are indebted to Truman Nodland and his associates in the Farm Management Division for the many years of service rendered to vocational agriculture. The analysis of Veterans' Agriculture farm account books and those of cooperating Vocational Agriculture adult farmers has been the principle, but by no means the only, contribution to Vocational Agriculture by the Farm Management Division.

We would like also to express our appreciation to J. A. Kentta, Printing Instructor of the Austin Area Vocational School, and his class for preparing our cover page, and assembling the report.

The main purposes of the farm analysis service in this area are: (1) to give assistance to instructors in the mechanics of farm record supervision (2) to assist instructors and cooperating farmers in farm accounting techniques (3) to aid the farmer in the study of his farm business through analysis reports and (4) to provide case study material that can be used by farmers and farm groups to study management problems. The analysis is not set up for research purposes, but we hope that the data included here can be used for comparative studies.

This report and the analysis of records included in the report were done under the direction of Charles M. Painter, Vocational Agriculture Instructor of the Austin Area Vocational School. Clerical assistants were: Madge (Mrs. Merle) Anderson and Pat (Mrs. Carroll) Brown. Carol Greenlee, vocational office secretary prepared the report with strictly voluntary and highly appreciated assistance from Darlene Corson. Without the conscientious efforts of these people this report would not have been possible. Madge Anderson has assisted with the report for four seasons. Her skill plus the desire to turn out the best job that is humanly possible has been a stimulating influence on all of us who worked on the project.

Directing in a supervisory capacity for this and the other cooperating projects were: G. R. Cochran, State Supervisor of Agricultural Education, S. K. Wick, Director of Vocational Education, William Knaak Assistant Director of Vocational Education, in charge of Area Vocational Schools, and Morton Carney, Director of the Austin Area Vocational School. Promotion and technical assistance were provided by Milo Peterson, Professor of Agriculture Education.

The professional assistance of the University Division of Agricultural Economics, and the Agriculture Extension Service, have done much to bring farm management study up to date. Financial assistance from the Hill Family Foundation helped to initiate the program from 1954 through 1957.

Farmers pay a fee to cover the actual analysis costs. This fee covers the clerical costs of the analysis and cost of paper and stencils.

The following schools submitted 1959 farm records for analysis.

| <u>Name of School</u> | <u>No. of Books</u> | <u>Instructors</u>                              |
|-----------------------|---------------------|---|
| Faribault             | 7                   | Ralph Palen, Paul Day,<br>and Marvin Stotesbery |
| Kenyon                | 1                   | John Shelstad                                   |
| Austin                | 22                  | Charles Painter                                 |
| Hayfield              | 1                   | Marvin Thomsen and<br>Bert Fuller               |
| Blooming Prairie      | 8                   | Eugene Francis and<br>Truman Tilleraas          |
| Byron                 | 1                   | Joe Trammel                                     |
| Kasson-Mantorville    | 3                   | Ernest Knutson                                  |
| Wanamingo             | 2                   | Robert Johnson                                  |
| Zumbrota              | <u>5</u>            | Gerald Halvorson                                |
|                       | 50                  |   |

Table 1 Summary of Farm Inventories 1959\*

| Items                               | Your Farm |         | Average of 47 farms |         |
|-------------------------------------|-----------|---------|---------------------|---------|
|                                     | Jan. 1    | Dec. 31 | Jan. 1              | Dec. 31 |
| Size of farm (acres)                |           |         | 240                 |         |
| Size of business (work units)**     |           |         | 482                 |         |
| Dairy and dual purpose cows         |           |         | \$ 2933             | \$ 3035 |
| Other dairy and dual purpose cattle |           |         | 1596                | 1626    |
| Beef cattle (including feeders)     |           |         | 4422                | 5103    |
| Hogs                                |           |         | 2814                | 1749    |
| Sheep (including feeders)           |           |         | 214                 | 219     |
| Poultry (including turkeys)         |           |         | 331                 | 362     |
| Productive Livestock (total)        |           |         | 12310               | 12094   |
| Horses                              |           |         | 18                  | 14      |
| Crop, seed and feed                 |           |         | 6491                | 8070    |
| Power machinery (farm share)        |           |         | 3807                | 4071    |
| Crop and general machinery          |           |         | 4112                | 4711    |
| Livestock equipment                 |           |         | 1226                | 1415    |
| Machinery & equipment (total)       |           |         | 9145                | 10197   |
| Miscellaneous                       |           |         | —                   | —       |
| Land                                |           |         | 15058               | 15058   |
| Buildings, fences, etc.             |           |         | 12386               | 12731   |
| Total farm capital                  |           |         | 55408               | 58164   |

| Items                             | 15 most profitable farms |         | 15 least profitable farms |         |
|-----------------------------------|--------------------------|---------|---------------------------|---------|
|                                   | Jan. 1                   | Dec. 31 | Jan. 1                    | Dec. 31 |
| Size of farm (acres)              | 272                      |         | 247                       |         |
| Size of business (work units)**   | 622                      |         | 461                       |         |
| Dairy and dual purpose cows       | \$ 3928                  | \$ 3793 | \$ 1187                   | \$ 1211 |
| Other dairy & dual purpose cattle | 1664                     | 1619    | 894                       | 653     |
| Beef cattle (including feeders)   | 2015                     | 1945    | 10365                     | 12699   |
| Hogs                              | 2889                     | 1956    | 3827                      | 2199    |
| Sheep (including feeders)         | 80                       | 103     | 135                       | 62      |
| Poultry (including turkeys)       | 565                      | 709     | 320                       | 330     |
| Productive Livestock (total)      | 11141                    | 10125   | 16728                     | 17154   |
| Horses                            | 30                       | 32      | —                         | —       |
| Crop, seed, and feed              | 6665                     | 9586    | 8405                      | 9216    |
| Power machinery (farm share)      | 3921                     | 4179    | 4347                      | 4907    |
| Crop & general machinery          | 3869                     | 4780    | 5284                      | 5874    |
| Livestock equipment               | 1556                     | 1812    | 1366                      | 1705    |
| Machinery & equipment (total)     | 9346                     | 10771   | 10997                     | 12486   |
| Miscellaneous                     | —                        | —       | —                         | —       |
| Land                              | 15718                    | 15718   | 16785                     | 16785   |
| Buildings, fences, etc.           | 12798                    | 13553   | 15801                     | 15558   |
| Total farm capital                | 55698                    | 59785   | 68716                     | 71199   |

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

\*\*See explanation of work unit on page 9.

Table 2 Summary of Farm Earnings (Cash Statement) 1959

| Items                              | Your<br>farm | Average<br>of 47*<br>farms | 15 most<br>profitable<br>farms | 15 least<br>profitable<br>farms |
|------------------------------------|--------------|----------------------------|--------------------------------|---------------------------------|
| <b>FARM RECEIPTS</b>               |              |                            |                                |                                 |
| Dairy and dual purpose cattle      | _____        | \$ 1828                    | \$ 2245                        | \$ 849                          |
| Dairy products                     | _____        | 4492                       | 6396                           | 1736                            |
| Beef cattle (including feeders)    | _____        | 5130                       | 2700                           | 12001                           |
| Hogs                               | _____        | 5895                       | 5123                           | 9144                            |
| Sheep & wool (including feeders)   | _____        | 221                        | 32                             | 129                             |
| Horses                             | _____        | 3                          | —                              | —                               |
| Poultry                            | _____        | 1879                       | 5787                           | 65                              |
| Eggs                               | _____        | 917                        | 1471                           | 960                             |
| Corn                               | _____        | 1473                       | 2268                           | 1330                            |
| Small grain                        | _____        | 495                        | 823                            | 284                             |
| Other crops                        | _____        | 975                        | 1707                           | 318                             |
| Mach & equip sold & gas tax ref.   | _____        | 194                        | 208                            | 135                             |
| Income from work off the farm      | _____        | 357                        | 142                            | 452                             |
| Misc. farm income                  | _____        | 237                        | 226                            | 451                             |
| (1) Total farm sales               | _____        | 24096                      | 29128                          | 27854                           |
| (2) Increase in farm capital       | _____        | 2754                       | 4087                           | 2483                            |
| (3) Family living from the farm    | _____        | 271                        | 369                            | 203                             |
| (4) Total farm receipts (1+2+3)    | _____        | 27121                      | 33584                          | 30540                           |
| <b>FARM EXPENSES</b>               |              |                            |                                |                                 |
| Dairy & dual pur. cattle bought    | _____        | \$ 539                     | \$ 181                         | \$ —                            |
| Beef cattle bought (including f's) | _____        | 3290                       | 1193                           | 8458                            |
| Hogs bought                        | _____        | 387                        | 163                            | 768                             |
| Sheep bought (inc feeders)         | _____        | 287                        | 8                              | 735                             |
| Horses bought                      | _____        | —                          | —                              | —                               |
| Poultry bought                     | _____        | 475                        | 1299                           | 145                             |
| Misc. livestock expense            | _____        | 546                        | 843                            | 445                             |
| Feed bought                        | _____        | 4585                       | 6613                           | 5326                            |
| Fertilizers                        | _____        | 1112                       | 1391                           | 1389                            |
| Other crop expenses                | _____        | 894                        | 1057                           | 949                             |
| Custom work hired                  | _____        | 593                        | 800                            | 342                             |
| Gas, oil & grease bought(f.share)  | _____        | 949                        | 1108                           | 964                             |
| Rep. of mechanical power (f.share) | _____        | 487                        | 566                            | 501                             |
| Rep. & upkeep of real estate       | _____        | 377                        | 427                            | 405                             |
| Rep. & upkeep of crop & gen mach.  | _____        | 354                        | 362                            | 417                             |
| Rep. & upkeep of livestock equip.  | _____        | 97                         | 172                            | 60                              |
| Wages of hired labor               | _____        | 606                        | 865                            | 603                             |
| Electricity expense (farm share)   | _____        | 257                        | 298                            | 265                             |
| Real Estate & per. prop. taxes     | _____        | 838                        | 872                            | 930                             |
| Cash rent                          | _____        | —                          | —                              | —                               |
| General farm expense               | _____        | 302                        | 338                            | 317                             |
| (5) Total cash operating expense   | _____        | 16975                      | 18556                          | 23019                           |
| (6) Cap. purc-mech. pow.(f. share) | _____        | 920                        | 995                            | 1258                            |
| (7) Cap. purc-crop & gen mach.     | _____        | 1448                       | 1739                           | 1654                            |
| (8) Cap. pur.-livestock equip.     | _____        | 400                        | 518                            | 531                             |
| (9) Cap pur. bldgs & fencing       | _____        | 1136                       | 1613                           | 720                             |
| (10) Total farm purchases (5-9)    | _____        | 20879                      | 23421                          | 27182                           |
| (11) Decrease in farm capital      | _____        | —                          | —                              | —                               |
| (12) Interest on farm capital      | _____        | 2839                       | 2887                           | 3498                            |
| (13) Unpaid family labor           | _____        | 380                        | 385                            | 409                             |
| (14) Board furnished hired labor   | _____        | 41                         | 68                             | 32                              |
| (15) Total farm expenses (10-14)   | _____        | 24139                      | 26761                          | 31121                           |
| (16) Labor earnings (4) - (15)     | _____        | 2982                       | 6823                           | -581                            |

\* See the Footnote\*\* on page 5

Table 3 Summary of Farm Earnings (Enterprise Statement) 1959\*

| Items                                  | Your<br>farm | Average<br>of 47<br>farms | 15 most<br>Profitable<br>Farms | 15 least<br>profitable<br>farms |
|--|--------------|---------------------------|--------------------------------|---------------------------------|
| RETURNS AND NET INCREASES              |              |                           |                                |                                 |
| 1. Dairy & dual-purpose cows           | _____        | \$ 4686                   | \$ 6757                        | \$ 1792                         |
| 2. Other dairy & dual-pur. cattle      | _____        | 1483                      | 1893                           | 681                             |
| 3. Beef breeding herd                  | _____        | 264                       | 345                            | 480                             |
| 4. Feeder cattle                       | _____        | 2287                      | 1115                           | 5463                            |
| 5. Hogs                                | _____        | 4250                      | 4057                           | 6067                            |
| 6. Sheep - farm flock                  | _____        | 65                        | 47                             | 42                              |
| 7. Sheep - feeders                     | _____        | 104                       | —                              | —                               |
| 8. Turkeys                             | _____        | 1468                      | 4599                           | —                               |
| 9. Chickens                            | _____        | 913                       | 1545                           | 916                             |
| 10. All productive livestock           | _____        | 15520                     | 20358                          | 15441                           |
| 11. Value of feed fed to livestock     | _____        | 10554                     | 12177                          | 12977                           |
| 12. Return over feed from livestock    | _____        | 4966                      | 8181                           | 2464                            |
| 13. Crops, seed, and feed              | _____        | 8404                      | 10741                          | 8024                            |
| 14. Income from labor off farm         | _____        | 209                       | 77                             | 167                             |
| 15. Agricultural conservation payments | _____        | 6                         | —                              | 11                              |
| 16. Miscellaneous                      | _____        | 230                       | 226                            | 439                             |
| 17. Total returns and net increases    | _____        | 13815                     | 19225                          | 11105                           |
| EXPENSES AND NET DECREASES             |              |                           |                                |                                 |
| 18. Horses                             | _____        | \$ 2                      | \$ 2                           | \$ —                            |
| 19. Truck                              | _____        | 369                       | 391                            | 480                             |
| 20. Auto (farm share)                  | _____        | 411                       | 454                            | 391                             |
| 21. Tractor                            | _____        | 1092                      | 1351                           | 1056                            |
| 22. Elec. & gas engine exp. (f share)  | _____        | 257                       | 298                            | 265                             |
| 23. Hired power                        | _____        | 451                       | 597                            | 271                             |
| 24. Total power                        | _____        | 2582                      | 3089                           | 2463                            |
| 25. Crop & general machinery           | _____        | 1284                      | 1333                           | 1470                            |
| 26. Livestock equipment                | _____        | 296                       | 435                            | 252                             |
| 27. Buildings, fencing & tiling        | _____        | 1121                      | 1285                           | 1266                            |
| 28. Misc. prod. livestock expense      | _____        | 546                       | 843                            | 445                             |
| 29. Labor                              | _____        | 1026                      | 1319                           | 1044                            |
| 30. Real estate taxes                  | _____        | 646                       | 680                            | 706                             |
| 31. Personal property tax              | _____        | 191                       | 193                            | 224                             |
| 32. Insurance                          | _____        | 154                       | 173                            | 185                             |
| 33. General farm                       | _____        | 148                       | 165                            | 132                             |
| 34. Interest on farm capital           | _____        | 2839                      | 2887                           | 3498                            |
| 35. Total expenses & net decrease      | _____        | 10833                     | 12402                          | 11685                           |
| 36. Labor earnings                     | _____        | 2982                      | 6823                           | -580                            |

\* 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.

Table 4 Household and Personal Expenses for  
Those Farms Which Kept Complete Accounts of These Expenses 1959

| Items   | Your<br>farm | Average<br>of 17<br>farms |
|---|--------------|---------------------------|
| Number of persons - family                        | _____        | 4.7                       |
| Number of adult equivalent - family               | _____        | 3.4                       |
| other*  | _____        | .1                        |
| Food and meals bought                             | _____        | \$ 932                    |
| Operating and supplies                            | _____        | 261                       |
| Furnishings and equipment                         | _____        | 236                       |
| Clothing and clothing materials                   | _____        | 270                       |
| Personal care, personal spending                  | _____        | 189                       |
| Education, recreation, and development            | _____        | 145                       |
| Gifts and special events                          | _____        | 63                        |
| Medical care and health insurance                 | _____        | 441                       |
| Church, welfare                                   | _____        | 165                       |
| Personal share of auto expense                    | _____        | 171                       |
| Operator's share of upkeep on dwelling            | _____        | 159                       |
| Household share of electric and telephone expense | _____        | 122                       |
| Total cash living expense                         | _____        | \$3154                    |
| Household and personal share of new auto          | _____        | 83                        |
| New dwelling                                      | _____        | —                         |
| Taxes and other deductions                        | _____        | 11                        |
| Life insurance                                    | _____        | 183                       |
| Other savings & investments                       | _____        | 219                       |
| Total household and personal cash exp.            | _____        | \$3650                    |
| Income:   |              |                           |
| Operators labor earnings                          | _____        | \$2640                    |
| Return to capital and labor                       | _____        | \$5151                    |

\* Hired help or others boarded

Table 5 Net worth Statement for Those Farmers Who Kept A  
Complete Record of All Assets and Liabilities 1959 (Operator's Share)

| Items                    | Your farm |         | 28 farms |         |
|--------------------------|-----------|---------|----------|---------|
|                          | Jan. 1    | Dec. 31 | Jan. 1   | Dec. 31 |
| Total farm capital       | _____     | _____   | \$41105  | \$42649 |
| Auto (personal share)    | _____     | _____   | 595      | 576     |
| Dwelling                 | _____     | _____   | 3181     | 3297    |
| Other personal assets    | _____     | _____   | 5221     | 5412    |
| TOTAL ASSETS             | _____     | _____   | \$50102  | \$51934 |
| Real estate indebtedness | _____     | _____   | \$ 9483  | \$ 9511 |
| Other indebtedness       | _____     | _____   | 5182     | 6143    |
| TOTAL LIABILITIES        | _____     | _____   | \$14665  | \$15654 |
| Farmer's Net Worth       | _____     | _____   | \$35437  | \$36280 |
| Gain in Net Worth        | _____     | _____   |          | \$ +843 |

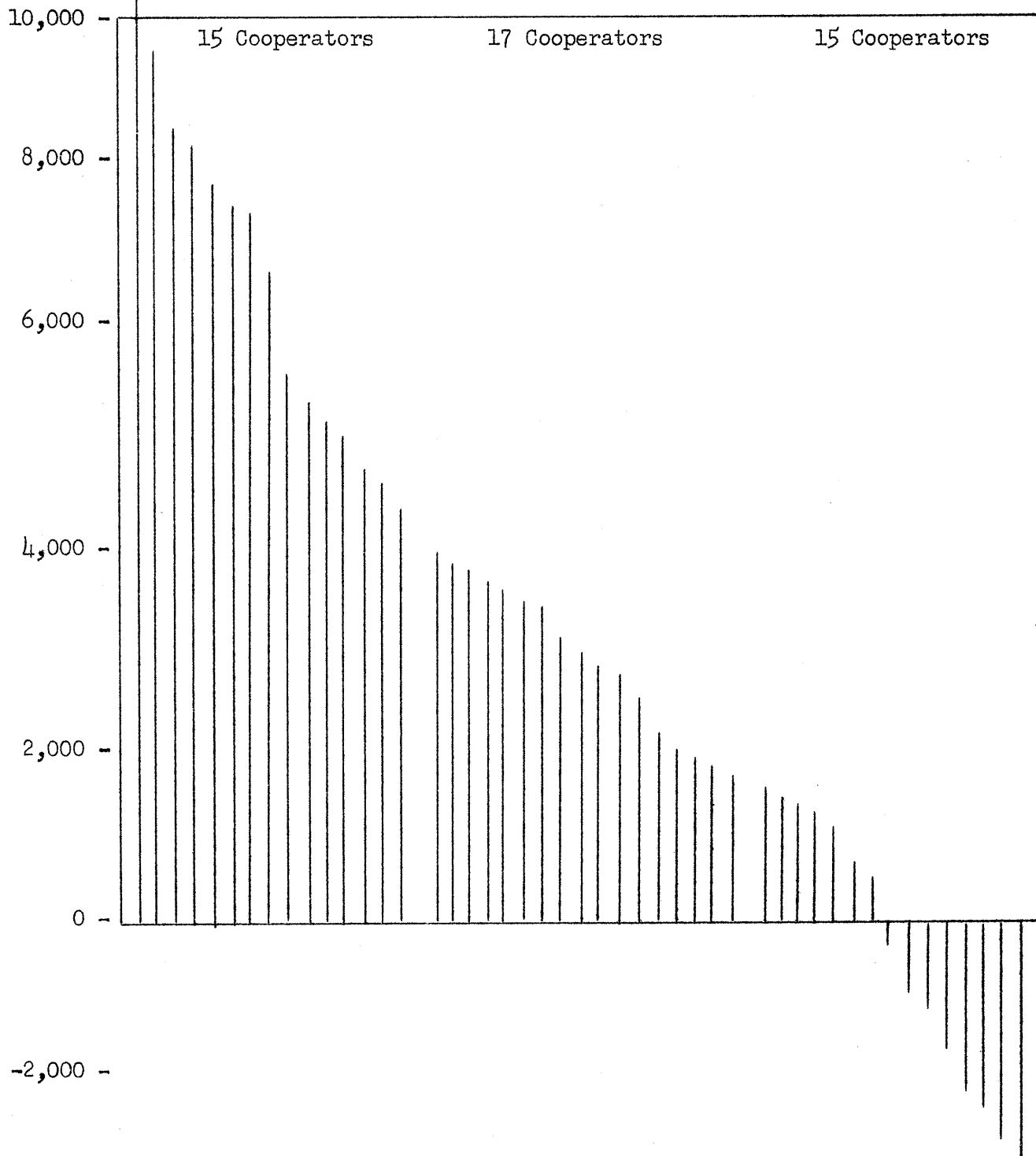
Table 6 Summary of Farm Earnings by Tenure 1959 (Operator's Share)

| Items                                  | Your<br>farm | 36 owners &<br>part owners | 11<br>renters |
|--|--------------|----------------------------|---------------|
| <u>FARM RECEIPTS</u>                   |              |                            |               |
| Dairy and dual-purpose cattle          |              | \$1751                     | \$1019        |
| Dairy products                         |              | 3425                       | 4850          |
| Beef cattle (including feeders)        |              | 6518                       | 299           |
| Hogs                                   |              | 7085                       | 1551          |
| Sheep and wool (including feeders)     |              | 177                        | 247           |
| Horses                                 |              | ---                        | 7             |
| Poultry (including turkeys)            |              | 2441                       | 42            |
| Eggs                                   |              | 921                        | 800           |
| Corn                                   |              | 1395                       | 1306          |
| Small grain                            |              | 579                        | 155           |
| Other crops                            |              | 1130                       | 162           |
| Machinery and equipment sold           |              | 214                        | 112           |
| Income from work off the farm          |              | 291                        | 625           |
| Miscellaneous                          |              | 286                        | 75            |
| (1) Total farm sales                   |              | \$26213                    | \$11250       |
| (2) Increase in farm capital           |              | 2957                       | 2018          |
| (3) Family living from the farm        |              | 272                        | 225           |
| (4) Total farm receipts (1)+(2)+(3)    |              | \$29442                    | \$13493       |
| <u>FARM EXPENSES</u>                   |              |                            |               |
| Dairy & dual-purpose cattle bought     |              | \$ 667                     | \$ 412        |
| Beef cattle bought (inc. feeders)      |              | 4295                       | ---           |
| Hogs bought                            |              | 483                        | 71            |
| Sheep bought (Inc. feeders)            |              | 348                        | 46            |
| Horses bought                          |              | ---                        | ---           |
| Poultry (including turkeys)            |              | 593                        | 89            |
| Misc. livestock expense                |              | 562                        | 301           |
| Feed                                   |              | 5350                       | 1438          |
| Fertilizers                            |              | 1237                       | 433           |
| Other crop expense                     |              | 968                        | 563           |
| Custom work hired                      |              | 552                        | 447           |
| Gas, Oil, and grease                   |              | 993                        | 733           |
| Rep. Tractor, truck, auto (farm share) |              | 515                        | 390           |
| Repair & upkeep of real estate         |              | 400                        | 173           |
| Rep. & upkeep of crop & gen. mach.     |              | 379                        | 267           |
| Rep. & upkeep of livestock equip.      |              | 105                        | 62            |
| Wages of hired labor                   |              | 680                        | 356           |
| Electricity expense (farm share)       |              | 249                        | 240           |
| Real est. & pers. property taxes       |              | 818                        | 198           |
| Cash rent                              |              | ---                        | 464           |
| Gen. farm and insurance                |              | 325                        | 170           |
| Interest paid                          |              | ---                        | ---           |
| Total cash operating expenses          |              | \$19519                    | \$ 6853       |
| Mech. power bought (farm share)        |              | 927                        | 865           |
| Crop & general machinery bought        |              | 1471                       | 1321          |
| Livestock equipment bought             |              | 339                        | 456           |
| New real estate improvements           |              | 1230                       | 183           |
| (5) Total farm purchases               |              | \$23486                    | \$ 9678       |
| (6) Decrease in farm capital           |              | ---                        | ---           |
| (7) Interest of farm capital           |              | 2953                       | 957           |
| (8) Unpaid family labor                |              | 408                        | 290           |
| (9) Board furnished hired labor        |              | 33                         | 65            |
| (10) Total farm expenses 5+6+7+8+9     |              | \$26880                    | \$10990       |
| (11) Labor earnings (4) - (10)         |              | 2562                       | 2503          |
| (12) Ret. to cap. & fam. labor 7+8+11  |              | 5923                       | 3750          |



# RANGE IN EARNINGS

There was a wide range in labor earnings in 1959. Crop yields did not vary as greatly as in 1958. Feeding operations were less profitable than in the three previous years. Factors that we feel contributed the most to differences in labor earnings this particular year were in order of our appraisal: 1. Crop yields; 2. Livestock feeding efficiency; 3. Work units per worker; 4. Low overhead cost per work unit.



# "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. The number of work units for each class of livestock and each acre of crop are presented in Table 7.

Table 7 Number of Work Units for Each Class of Livestock and Each Acre of Crop

| Item                          | No. of<br>work units | Item            | No. of<br>work units |
|-------------------------------|----------------------|-----------------|----------------------|
| Dairy and dual-purpose cows   | 10.0 per cow         | Small grain     | .5 per acre          |
| Other dairy & du. pur. cattle | 3.5 per an. unit*    | Sugar beets     | 1.5 per acre         |
| Beef breeding herd            | 3.5 per an. unit*    | Sweet corn      | .7 per acre          |
| Feeder cattle                 | .25 per 100 lbs.     | Corn husked     | .7 per acre          |
| Sheep - farm flock            | 1.5 per an. unit*    | Corn, hogged    | .4 per acre          |
| Sheep - feeders               | .3 per 100 lbs.      | Corn, shredded  | 1.5 per acre         |
| Hogs                          | .2 per 100 lbs.      | Corn, silage    | 1.0 per acre         |
| Turkeys                       | .5 per 100 lbs.      | Corn, fodder    | 1.0 per acre         |
| Hens                          | 20.0 per 100 hens    | Alfalfa hay     | .6 per acre          |
| Canning peas                  | .5 per acre          | Soybean hay     | .8 per acre          |
| Soybeans for grain            | .5 per acre          | Other hay crops | .4 per acre          |

\* Animal unit represents one dairy cow or bull; two other dairy cattle; 1 1/4 beef cows or bull; 1 feeder steer or heifer; 3 1/3 other beef cattle; 7 sheep; 14 lambs; 2 1/2 hogs; 5 pigs; 50 hens or 1,100 pounds of turkeys produced.

Table 8 Measures of Farm Organization and Management Efficiency 1959

| Measures used in chart on page 11                                   | Your farm | Average of 47 farms | 15 most profitable farms | 15 least profitable farms |
|---|-----------|---------------------|--------------------------|---------------------------|
| Labor earnings  | \$ _____  | \$2982              | \$6823                   | \$-581                    |
| (1) Crop yields*  | _____     | 100                 | 105                      | 95                        |
| (2) Per cent tillable land in high return crops                     | _____     | 66                  | 66.9                     | 72.4                      |
| (3) Return for \$100 feed to produce livestock*                     | _____     | 100                 | 105                      | 96                        |
| (4) Prod. livestock units per 100 Acres **                          | _____     | 44.6                | 39.8                     | 43.5                      |
| (5) Size of business-work units                                     | _____     | 482                 | 622                      | 461                       |
| (6) Work units per worker   | _____     | 320                 | 389                      | 298                       |
| (7) Power; machinery; equipment; & building expense per work unit\$ | _____     | \$12.14             | \$11.43                  | \$12.81                   |
| Items related to some of the above measures***                      |           |                     |                          |                           |
| (3) Index of return for \$100 feed from:                            |           |                     |                          |                           |
| Dairy cattle (see pgs 15 & 16)                                      | _____     | 100                 | 107                      | 105                       |
| Beef cattle-breeding herd (see page 17)                             | _____     | 100                 | 119                      | 140                       |
| Beef cattle-feeders (see pg 17)                                     | _____     | 100                 | 122                      | 109                       |
| Hogs (see pages 13 & 14)  | _____     | 100                 | 110                      | 95                        |
| Sheep-farm flock (see pg 18)  | _____     | 100                 | 93                       | 114                       |
| Chickens (see page 19)  | _____     | 100                 | 108                      | 90                        |
| Turkeys (see page 20)   | _____     | 100                 | 113                      | —                         |
| (4) Number of animal units  | _____     | 86                  | 86                       | 115                       |
| (5) Work units on crop  | _____     | 122                 | 140                      | 136                       |
| Work units on productive livestock                                  | _____     | 360                 | 482                      | 325                       |
| (7) Power expense per work unit                                     | \$ _____  | \$5.89              | \$5.70                   | \$5.67                    |
| Crop machinery expense per work units                               | \$ _____  | \$3.16              | \$2.82                   | \$3.67                    |
| Livestock equip expense per work unit                               | \$ _____  | \$ .63              | \$ .68                   | \$ .67                    |
| Building & fence expense per work unit                              | \$ _____  | \$2.46              | \$2.23                   | \$2.80                    |

\* Given as a percentage of the average

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

\*\*\* Cooperators from Austin, Mankato, and Winona were combined on beef breeding herds, beef feeder cattle, sheep, and turkeys.

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 47 farms included in this summary are located between the dotted lines across the center of this page.

# THERMOMETER CHART

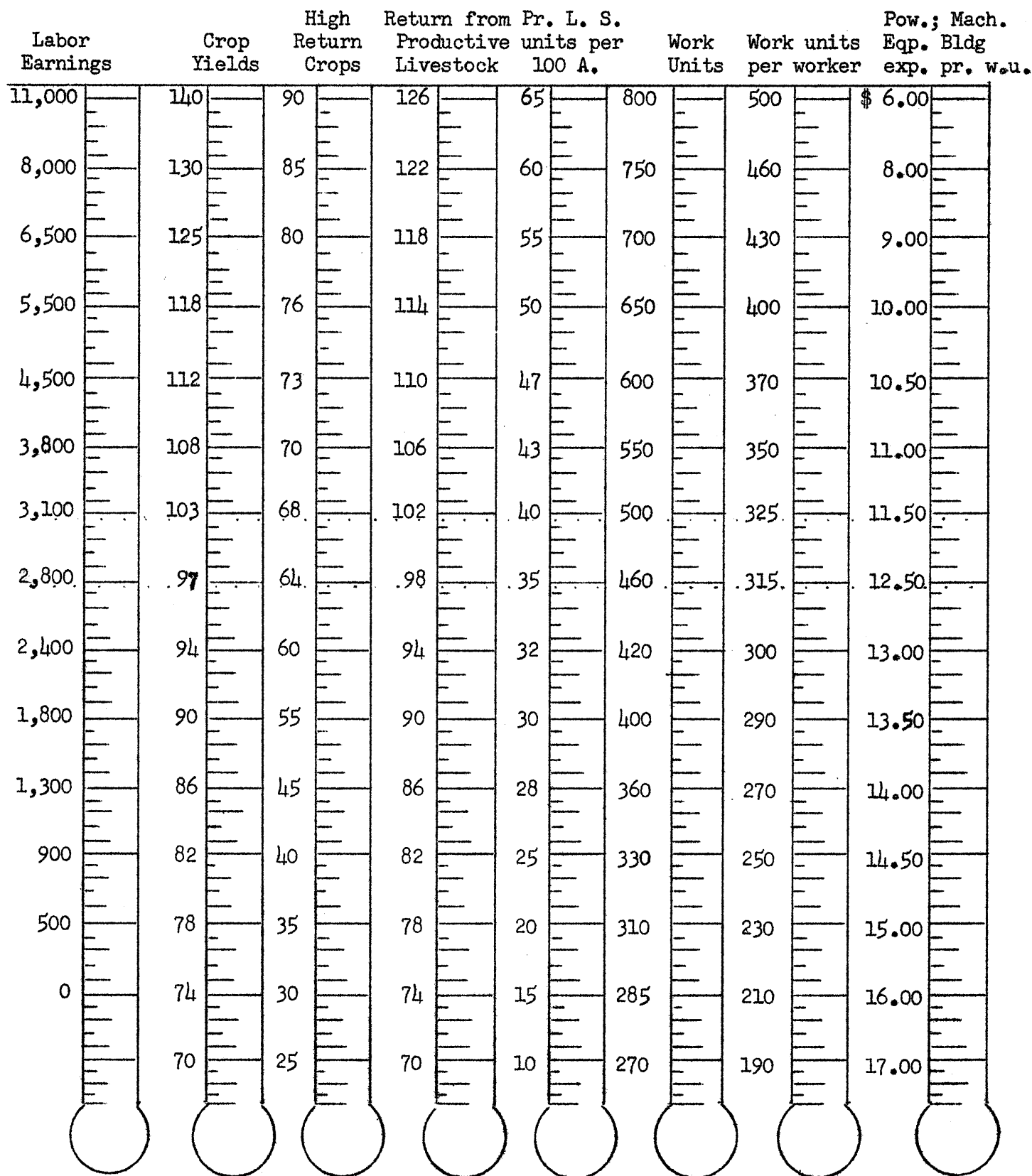


Table 9 Distribution of Acres and Yield 1959

| Crop                           | Crop rating | Number growing | Acres your farm | Average acres of 48 farms | Your yields | Average yield |
|--------------------------------|-------------|----------------|-----------------|---------------------------|-------------|---------------|
| Oats (& mixture)               | D           | 42             | _____           | 25.0                      | _____       | 64.7          |
| Oats silage                    | C           | 6              | _____           | 1.4                       | _____       | 6.2T          |
| Canning peas                   | B           | 2              | _____           | .5                        | _____       | \$41.50       |
| Wheat                          | C           | 11             | _____           | 3.1                       | _____       | 32.4          |
| **Barley, Rye & Misc.          | D           | 5              | _____           | .7                        | _____       | --            |
| Total small grain & peas       |             |                | _____           | 30.7                      |             |               |
| Canning corn                   | B           | 5              | _____           | 2.0                       | _____       | 3.3T          |
| Corn grain                     | A           | 48             | _____           | 99.                       | _____       | 69.0          |
| Soybeans (grain)               | B           | 18             | _____           | 12.9                      | _____       | 23.5          |
| Corn silage                    | B           | 32             | _____           | 10.3                      | _____       | 11.5T         |
| Total cultivated crops         |             |                | _____           | 124.2                     |             |               |
| Alfalfa hay                    | B           | 40             | _____           | 32.0                      | _____       | 2.9T          |
| Red Clover hay                 | C           | 0              | _____           |                           | _____       | 0             |
| Other Legumes & Legume         |             |                |                 |                           |             |               |
| Mistures                       | C           | 1              | _____           | .8                        | _____       | 2.9T          |
| *Misc. Hay & Seed              | D           | 3              | _____           | 1.0                       | _____       |               |
| Total tillable land in pasture |             |                | _____           | 33.8                      |             |               |
| Alfalfa pasture                | B           | 31             | _____           | 13.5                      |             |               |
| Other legume pasture (C or B)  |             | 2              | _____           | 1.1                       |             |               |
| Other tillable pasture         | D           | 10             | _____           | 1.9                       |             |               |
| Total tillable land in pasture |             |                | _____           | 16.5                      |             |               |
| Soil bank                      | A           |                | _____           | 0                         |             |               |
| Tillable land not cropped      |             |                |                 |                           |             |               |
| (inc. plowdown & waterways)    |             | 2              | _____           | .8                        |             |               |
| Total tillable land            |             |                | _____           | 206                       |             |               |
| Wild hay                       |             |                | _____           | .1                        |             |               |
| Non-tillable pasture           |             |                | _____           | 11.4                      |             |               |
| Timber                         |             |                | _____           | 3.7                       |             |               |
| Roads and waste                |             |                | _____           | 10.0                      |             |               |
| Farmstead                      |             |                | _____           | 8.8                       |             |               |
| Total acres in farm            |             |                | _____           | 240                       |             |               |
| Per cent land tillable         |             |                | _____           | 86                        |             |               |
| Per cent in high return crops  |             |                | _____           | 66                        |             |               |

\* Some crops were grouped because acreages for each were less than one acre. Included are legumes for seed and timothy for seed and emergency hay crops.

\*\* Only one case each so average yields were not computed.

# TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 10. 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 value of milk consumed by calves is included in the total returns from dairy or 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.

Table 10 Total Feed Costs and Returns From Your Livestock Enterprises 1959

|                        | Dairy or Dual Purpose Cattle |       |                     | Beef          |
|------------------------|------------------------------|-------|---------------------|---------------|
|                        | Cows                         | Other | All                 | breeding herd |
| Total returns          | _____                        | _____ | _____               | _____         |
| Total feed cost        | _____                        | _____ | _____               | _____         |
| Total return over feed | _____                        | _____ | _____               | _____         |
|                        | Feeder Cattle                | Hogs  | Farm Flock of sheep | Chickens      |
| Total returns          | _____                        | _____ | _____               | _____         |
| Total feed cost        | _____                        | _____ | _____               | _____         |
| Total return over feed | _____                        | _____ | _____               | _____         |

Feed is the largest single item of cost for all classes of livestock. The proportion of the total cost represented by feed varies 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 85 per cent for hogs, feeder cattle and feeder lambs. It is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises to cover costs other than feed,

## HOGS

Hogs and dairy were the major livestock enterprises in the area. Only those farmers producing 6,000 pounds of pork or more were included in the averages. The price paid for corn was in some instances over \$1.15 per bushel. With inventory corn valued at \$ .95 per bushel and oats valued at \$ .60 per bushel feed prices averaged about the same as for 1958. With lower pork prices the corn-hog ratio was much narrower than for the previous year.

Table 11 Feed Costs and Returns from Hogs 1959

| Items  | Your farm | Average of 30 farms | 10 farms highest in returns above feed | 10 farms lowest in returns above feed |
|--|-----------|---------------------|--|---------------------------------------|
| Feed per cwt. hogs produced, lbs:              |           |                     |  |                                       |
| Corn   | _____     | 310                 | 285                                    | 306                                   |
| Small grain                                    | _____     | 65                  | 55                                     | 92                                    |
| Commercial feeds                               | _____     | 55                  | 56                                     | 49                                    |
| Total concentrates                             | _____     | 430                 | 396                                    | 447                                   |
| Feed cost per cwt. hogs produced:              |           |                     |  |                                       |
| Concentrates (inc. alfalfa)                    | _____     | \$ 9.82             | \$ 9.22                                | \$10.04                               |
| Pasture  | _____     | .05                 | .07                                    | .01                                   |
| TOTAL FEED COSTS                               | _____     | \$ 9.87             | \$ 9.22                                | \$10.05                               |
| Net increase in val per cwt. hogs pro.         | _____     | \$11.43             | \$12.69                                | \$ 9.73                               |
| RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED | _____     | \$ 1.56             | \$ 3.47                                | \$ -.32                               |
| RETURNS FOR \$100 OF FEED                      | _____     | \$116               | \$138                                  | \$ 97                                 |
| Price received per cwt. hogs sold              | _____     | \$13.83             | \$14.31                                | \$12.97                               |
| No. of spring litters raised                   | _____     | 17                  | 16                                     | 12                                    |
| No. of fall litters raised                     | _____     | 10                  | 8                                      | 7                                     |
| Total no. of litters raised                    | _____     | 27                  | 24                                     | 19                                    |
| No. of pigs born per litter                    | _____     | 8.7                 | 9.7                                    | 7.5                                   |
| No. of pigs weaned per litter                  | _____     | 6.8                 | 7.8                                    | 5.8                                   |
| Pounds of hogs produced                        | _____     | 51751               | 39582                                  | 36862                                 |

\*Thirty-seven cooperators raised hogs - those producing less than 6,000# of pork were not included in the averages. Also omitted were several with less than a full years operation. Inconsistancies in records eliminated a few others.

#### DAIRY AND DUAL PURPOSE CATTLE

No herds were classed as dual purpose. Production this year was unusually high. It will be noted that the high producing herds gave a slightly lower return per hundred dollars worth of feed than the average, but a much higher return over feed cost per cow. The condition of pastures was better than for most years.

Table 12 Factors of Cost and Returns from Dairy Cows 1959

| Items                              | Your<br>farm | Average<br>of<br>26 farms | 9 Farms<br>Highest in<br>butterfat<br>per cow | 9 farms<br>lowest in<br>Butterfat<br>per cow |
|------------------------------------|--------------|---------------------------|---|--|
| Pounds of Butterfat per cow        | _____        | 353                       | 415   | 295  |
| Pounds of milk per cow             | _____        | 9730                      | 11617   | 1886   |
| % of butterfat in milk             | _____        | 3.7                       | 3.6   | 3.9  |
| Price rec. per lb. of B. F. sold ¢ | _____        | 89                        | 91.8  | 87.7   |
| Price rec. per cwt. Milk sold      | _____        | 3.28                      | 3.33  | 3.37   |
| Feeds per cow, lbs:                |              |                           |   |  |
| Corn                               | _____        | 1909                      | 2393  | 1369   |
| Small grain                        | _____        | 915                       | 1259  | 638  |
| Commercial feeds                   | _____        | 479                       | 688   | 242  |
| Legume Hay                         | _____        | 4914                      | 5360  | 5286   |
| Other Hay                          | _____        | 191                       |   | 198  |
| Total concentrates                 | _____        | 3303                      | 4340  | 2249   |
| Total dry roughage                 | _____        | 5105                      | 5360  | 5484   |
| Silage                             | _____        | 9348                      | 9905  | 8096   |
| Feed cost per cow:                 |              |                           |   |  |
| Concentrates                       | _____        | \$71.91                   | \$97.90                                       | \$ 46.64                                     |
| Roughages                          | _____        | 70.11                     | 73.52   | 71.66  |
| Pasture                            | _____        | 10.15                     | 13.74   | 9.42   |
| TOTAL FEED COSTS                   | _____        | \$152.17                  | \$185.16                                      | \$127.72                                     |
| Value of produce per cow:          |              |                           |   |  |
| B. F. sales                        | _____        | \$303.33                  | \$367.07                                      | <del>\$246.08</del>                          |
| Dairy products used in home        | _____        | 5.30                      | 5.54  | 5.84   |
| Milk to livestock                  | _____        | 6.97                      | 7.35  | 6.81   |
| Net increases in value of cows     | _____        | -3.79                     | -1.79   | -7.83  |
| TOTAL VALUE PRODUCED               | _____        | \$311.81                  | \$378.17                                      | \$250.90                                     |
| RETURNS ABOVE FEED COST PER COW    | _____        | \$159.64                  | \$193.01                                      | \$123.18                                     |
| RETURNS FOR \$100 OF FEED          | _____        | \$205.00                  | \$204.00                                      | \$196.00                                     |
| Feed cost per lb. B. F. (cents)    | _____        | 43.1                      | 44.6  | 43.6   |
| Number of cows*                    | _____        | 24.6                      | 27.7  | 20.3   |

\* 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. Herds of less than five cows were omitted from this study.



Table 13 Feed Costs and Returns from Other Dairy and Dual Purpose Cattle 1959

| Items                             | Your<br>farm | Average<br>of<br>25 farms | 9 farms<br>highest in<br>butterfat<br>per cow | 8 farms<br>lowest in<br>butterfat<br>per cow |
|-----------------------------------|--------------|---------------------------|---|--|
| Feeds per head, lbs.              |              |                           |   |  |
| Concentrates                      | _____        | 797                       | 1072  | 503  |
| Hay and fodder                    | _____        | 2560                      | 3650  | 1792   |
| Silage                            | _____        | 3354                      | 4213  | 2226   |
| Whole Milk                        | _____        | 253                       | 304   | 225  |
| Feed cost per head:               |              |                           |   |  |
| Concentrates                      | _____        | \$18.98                   | \$24.70                                       | \$11.35                                      |
| Roughages                         | _____        | 27.89                     | 34.92   | 22.53  |
| Milk                              | _____        | 7.80                      | 9.05  | 7.18   |
| Pasture                           | _____        | 3.44                      | 3.85  | 4.03   |
| TOTAL FEED COSTS PER HEAD         | _____        | \$58.11                   | \$72.52                                       | \$45.09                                      |
| Net inc. in value of other cattle | _____        | \$98.89                   | \$119.00                                      | \$74.78                                      |
| RETURNS ABOVE FEED COST PER HEAD  | _____        | \$40.78                   | \$46.48                                       | \$29.69                                      |
| RETURNS FOR \$100 OF FEED         | _____        | \$170.00                  | \$164.00                                      | \$166.00                                     |
| Number of head of other cattle    | _____        | 25.                       | 24.2  | 24.3   |

Table 14 Feed Costs and Returns from All Dairy and Dual Purpose Cattle 1959

| Items                              | Your<br>farm | Average<br>of 26<br>farms | 9 farms<br>highest in<br>Butterfat<br>per cow | 9 farms<br>lowest in<br>Butterfat<br>per cow |
|------------------------------------|--------------|---------------------------|---|--|
| Feed per animal unit, lbs:         |              |                           |   |  |
| Concentrates                       | _____        | 2698                      | 3624  | 1777   |
| Hay and fodder                     | _____        | 5045                      | 5908  | 4809   |
| Silage                             | _____        | 8453                      | 9635  | 6757   |
| TOTAL FEED COSTS PER ANIMAL UNIT   | _____        | \$133.33                  | \$165.03                                      | \$108.68                                     |
| Value of produce per animal unit:  |              |                           |   |  |
| Dairy products                     | _____        | \$207.64                  | \$258.75                                      | \$164.44                                     |
| Net inc. in value of dairy cattle  | _____        | 58.49                     | 66.68   | 44.94  |
| TOTAL VALUE PRODUCED               | _____        | \$266.13                  | \$325.43                                      | \$209.38                                     |
| RETURNS ABOVE FEED PER ANIMAL UNIT | _____        | \$132.80                  | \$160.40                                      | \$100.70                                     |
| RETURNS PER \$100 OF FEED          | _____        | \$200.00                  | \$197.00                                      | \$193.00                                     |
| Animal units of cattle             | _____        | 36.9                      | 40  | 31.5   |

Table 15 Feed Cost and Returns from Beef Cattle 1959

| Items  | Your<br>farm | Average<br>of all<br>farms                 |
|--|--------------|--|
| Beef breeding herd: 6 farms: Austin Area and Winona Area |              |  |
| Feeds per animal units, lbs.:                            |              |  |
| Concentrates   | _____        | 381  |
| Legume hay   | _____        | 3358                                       |
| Other hay  | _____        | —  |
| Silage   | _____        | 2157                                       |
| Feed cost per animal units:                              |              |  |
| Concentrates   | \$ _____     | \$ 7.66                                    |
| Roughages  | \$ _____     | \$35.67                                    |
| Pasture  | \$ _____     | \$19.30                                    |
| TOTAL FEED COSTS   | \$ _____     | \$62.63                                    |
| Value of produce per animal unit:                        |              |  |
| Dairy products   | _____        | \$ .97                                     |
| Net increase in value of animals                         | _____        | 99.42                                      |
| TOTAL VALUE PRODUCED                                     | _____        | \$100.39                                   |
| RETURNS ABOVE FEED COST PER ANIMAL UNIT                  | _____        | \$ 37.76                                   |
| RETURNS FOR \$100 OF FEED                                | _____        | \$160.00                                   |
| Number of cows and herd bulls                            | _____        | 29.1                                       |
| Number of animal units in the herd                       | _____        | 35.2                                       |
| Pounds of beef produced                                  | _____        | 14276                                      |
| Feeding Cattle: No. of farms:                            | your<br>farm | 10 Austin<br>34 Mankato,<br>Winona, Austin |
| Feeds per cwt. beef produced, lbs.:                      |              |  |
| Corn   | _____        | 606  |
| Small grain  | _____        | 39   |
| Commercial feeds   | _____        | 61   |
| Legume hay   | _____        | 206  |
| Other hay and fodder                                     | _____        | 5  |
| Total concentrates                                       | _____        | 706  |
| Total hay and fodder                                     | _____        | 211  |
| Silage   | _____        | 372  |
| Feed cost per cwt. beef produced:                        |              |  |
| Concentrates   | \$ _____     | \$ 13.78                                   |
| Roughages  | _____        | 2.92                                       |
| Pasture  | _____        | .13  |
| TOTAL FEED COSTS   | _____        | 16.83                                      |
| Net increase in value of feeders                         | _____        | 20.91                                      |
| RETURNS ABOVE FEED COST PER CWT. BEEF PRO.               | _____        | 4.08                                       |
| RETURNS FOR \$100 OF FEED                                | \$ _____     | \$124.00                                   |
| Price paid per cwt beef bought                           | _____        | 28.33                                      |
| Price received for feeder cattle sold                    | _____        | 24.96                                      |
| Number of animal units                                   | _____        | 113.2                                      |
| Pounds of beef produced                                  | _____        | 58727                                      |
|  |              | \$126.00                                   |
|  |              | 29.21                                      |
|  |              | 25.62                                      |
|  |              | 87.  |
|  |              | 53506                                      |

