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UNIVERSITY OF MINNECOTA  
Department of Agriculture  
and  
UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics  
Cooperating

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A Preliminary Report  
of  
LIVESTOCK COSTS AND RETURNS  
From  
Data Secured in 1930  
on the  
FARM ACCOUNTING ROUTE  
in  
ROCK & NOBLES COUNTIES - MINNESOTA

By

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INTRODUCTION

Method of Study

The Division of Farm Management and Agricultural Economics and of Animal Husbandry of the University of Minnesota are cooperating with the Bureau of Agricultural Economics of the United States Department of Agriculture in an accounting study of twenty-four farms in Rock and Nobles Counties in Southwestern Minnesota. This study was started March 1, 1929 and is being continued through 1931. This report presents the data on livestock costs and returns for the year March 1, 1930 to February 28, 1931. The farms were selected in cooperation with the county agricultural agents in the respective counties. Mr. C. G. Gaylord in Rock County and Mr. C. J. Gilbert in Nobles County. Only farms on which some type of beef production is a major enterprise were chosen. The farmers cooperating in this work keep complete record of cash receipts and cash expenditures, a daily record of the labor used on each crop and each class of livestock, a record of the farm produce used in the house and other detailed information regarding their business. These records are checked at least twice a month by the route man and supplemented with inventories, livestock feed records, reports of crop yields and practices and other significant facts about the farm operations. The data collected is sent to the central office at University Farm, St. Paul, where a detailed set of records for each farm is kept. From these records the costs presented in this report have been computed.

Description of Area

Rock and Nobles Counties are located in the southwestern corner of Minnesota. The soil in Rock County and the western edge of Nobles County is a windblown loess. This is one of the most fertile soil types in the State. The balance of Nobles County is covered with a glacial till, the prevailing soil type of the southern and central part of the state. This too is a production type well supplied with lime. According to the 1925 census, only four counties in the state had higher land values per acre than Rock and Nobles and in three of these the high land values were due largely to their nearness to the Twin Cities. Both counties are level to gently rolling with practically all land tillable. There are some sections, especially in southern Nobles County that need drainage to insure regular cropping and in Rock County there are limited areas of rock out-crop. The annual rainfall averages between 26 and 28 inches and the average growing season is from 130 to 140 days. Beef cattle and hogs are the principal classes of livestock raised. Corn, oats, and barley are the principal grain crops. They are raised primarily for feed although there is a surplus for sale on many farms. Alfalfa and wild hay are the principal hay crops grown.

## Description of Farms

The average size of the farms studied in 1930 was 360 acres. This is approximately 66% larger than the average size of farms in these two counties. The larger farms are better adapted to beef production. Two hundred sixty-eight acres or about 72% of the total acreage is in harvested crops. Of the balance there are 70 acres of pasture and 22 acres of farmstead roads, headlands and waste. Corn, oats, and barley are the principal grain crops raised. Alfalfa and wild hay are the principal hay crops.

Only two of the farms studied in 1930 are owned by the operators. Eight are rented entirely and of the remaining twelve the operator owns part of the land. Two-thirds of rented land is rented for cash and one-third on a crop share basis. According to the 1925 census more than one-half of all the farms in these two counties are operated by tenants.

The crop land included 106 acres of corn, 56 acres of oats, 20 acres of barley, 10 acres of flax, 11 acres other small grains, 12 acres alfalfa, 14 acres wild hay, 10 acres other hay, and 2 acres of miscellaneous crops.

Only four of the farms studied are owned by the operators. Eight are rented and of the remaining 12 the operator owns part of the land and rents the balance. Thirty-seven per cent of all the land is owned by the operators. Two-thirds of the rented land is rented for cash and one-third on a share basis. More than half of all farms in these two counties are operated by tenants.

All of the farms studied kept cattle, hogs and chickens and seven also kept small flocks of sheep. In 1930 these farms produced an average of approximately 22,400 pounds of cattle and 31,200 pounds of hogs per farm. Ninety cows, and a flock of 261 chickens were kept. One of the seven farms having sheep also bought feed lambs. The average investment in cattle, hogs, sheep and poultry on March first, 1930 and 1931 was over \$5000.00. Forty per cent of the cash receipts was from cattle sold, 5% from dairy products, 30 per cent from hogs, 3% from sheep and 3% from poultry; a total of 81% from livestock and poultry. Thirteen per cent of the receipts was from crops, chiefly corn, oats and flax.

#### Methods of Computing and Presenting Data.

The comparative costs and returns for each of the different classes of livestock produced in 1929 are presented in this preliminary report. Insofar as possible local prices were used in determining the costs and returns. Marketable feeds were charged at local prices and non-marketable feeds on a comparative feeding value basis. Man labor was figured at 30 cents per hour. Horse work was charged to the individual farm at the rate determined for that farm. The shelter charge was based on the annual cost of the buildings housing the livestock prorated on the basis of space occupied. The equipment charge is based on the annual cost of the particular class of equipment used by that class of livestock. The manure credit is based on a value of 75 cents per ton in the barnyard. Only the amount of the manure actually spread on the fields was credited to the livestock.

In studying the tables and in considering the income from livestock, one should keep in mind that these are comparative figures and represent charges which are not all actual cash expenses. All man labor and horse work, interest on the investment, the use of the buildings and equipment, as well as the feed have been charged to the enterprise. Therefore, a minus return means just that the particular class of livestock has failed to pay the prices charged for the different factors. There may be no other more profitable alternative use for the buildings, much of the labor or for the non-marketable feeds. A return above the price of marketable feeds and cash expenses may justify continued production although these figures fail to show a gain.

The individual farm figures have been arranged in order of decreasing returns, so that the one with the lowest cost or the greatest return comes at the top of the table. In this way each cooperator may quickly see how he compares with his neighbor. All tables have been computed on a per hundred pounds gain in weight, per animal, or some similar basis. All corn has been reduced to a shelled corn basis. The returns have been expressed in several ways. The gain or return over all costs is the amount left over after deducting all the charges listed in the table. The return over feed cost is what is left after deducting feed from the total income; or in other words it is what is left to pay for the labor, shelter, equipment, interest and miscellaneous cash costs. The return per hour represents what the enterprise returned for each hour man labor used in it, after allowance had been made for all charges except labor. The return per 56 pounds of grain represents what was left to pay for each 56 pounds of farm grain fed after making allowance for all other feed and the other charges.

Feeder cattle This class of cattle includes all cattle being fattened for market and covers only the feeding period. The return per 56 pounds of farm grain is obtained by deducting from the selling price all charges except that for farm grains fed. The result is then divided by the number of pounds of farm grains fed and multiplied by 56. Due to the impossibility of determining the pork credit for the feed picked up behind cattle this item was omitted from all calculations. This fact should be kept in mind when studying the statements for cattle and for hogs.

Breeding herd The breeding herd includes the bull as well as the cows. Insofar as was possible decreases in inventory values due to the change in price level have been eliminated for the cows which were listed on both the opening and closing inventory. The cost per calf was obtained by dividing the total cost of the herd by the number of calves raised.

All cattle Three more or less distinct types of beef production were found on the farms studied and averages are presented for each type. Group A is composed of the farmers combining dairy and beef production. Group B is composed of the farmers fattening more cattle than they raised in one year. The additional number was obtained either by purchase or by accumulation from past years. Group C is composed of the farmers keeping breeding herds primarily for raising calves. They are primarily baby beef producers. In 1930 the latter group, Group C, secured the highest average returns, Group B the next highest and Group A the lowest. The same relationship between the three groups existed in 1929.

#### Hogs

The hog enterprise is next to the cattle enterprise in importance on these farms. The average production of hogs per farm in 1930 was over 31,000 pounds. The quantities of feed used are in addition to any they may have salvaged following the cattle. The return per 56 pounds of grain fed is calculated in the same manner as for cattle. Hogs were more profitable than cattle in both 1929 and 1930.

#### Sheep

Flocks of sheep were kept on only seven farms. The large decline in lamb and wool prices resulted in much lower earnings in 1930 than in 1929.

#### Poultry

A flock of chickens was kept on each of the farms studied. However, with few exceptions, the poultry enterprise was of minor importance. In the data presented, the equivalent in chickens was substituted for ducks, geese, and turkeys. In practically all cases the relative number of these other birds was insignificant.

#### Work Horses

The farms studied were divided into two groups for presentation of costs of horse work. One group is composed of those using tractors for drawbar work, and the other is composed of those not using a tractor. Averages are presented for each group. The farms using tractors worked their horses fewer hours, used more pasture and less grain and hay, and had lower costs per hour.

#### Conclusions

The wide variations between farms in the expenditure for the various items indicates the possibility of materially increasing the efficiency of production on most farms. Each cooperator by studying the data for his farm in comparison with the other farms should be able to discover means of increasing his own efficiency and thereby increasing his returns.

Cost and Return for Feeder Cattle - Rock and Nobles Counties - 1930  
(per 100 pounds gain in weight)

| Farm No.    | Pounds gain | Feeds    |                 |                   |                  |            | Hours        |                  | Expenses        |            |        |         |            |          |            |                |
|-------------|-------------|----------|-----------------|-------------------|------------------|------------|--------------|------------------|-----------------|------------|--------|---------|------------|----------|------------|----------------|
|             |             | Corn lb. | Small grain lb. | Protein feeds lb. | Hay & fodder lb. | Silage lb. | Pasture days | Man              | Horse           | Total feed | Labor  | Shelter | Equip-ment | Interest | Misc. cash | Total Expenses |
| 211         | 1105        | 289      | 74              | -                 | 181              | -          | -            | 3 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | \$4.31     | \$1.22 | \$-     | \$-        | \$3.06   | \$.01      | \$8.60         |
| 119         | 11310       | 441      | -               | -                 | 271              | -          | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 5.65       | .84    | .03     | .56        | .42      | .03        | 8.53           |
| 113         | 12755       | 489      | 74              | 28                | 271              | 446        | 2            | 1 $\frac{1}{2}$  | 1               | 8.09       | .55    | .21     | .03        | .14      | .01        | 9.13           |
| 419         | 55545       | 473      | 71              | 42                | 121              | 307        | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 8.00       | .84    | .19     | .06        | .50      | .05        | 9.64           |
| 302         | 29450       | 573      | 179             | 33                | 204              | -          | -            | 1                | 1               | 9.45       | .39    | -       | .15        | .38      | .02        | 10.39          |
| 123         | 10730       | 691      | 49              | -                 | 248              | -          | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 9.37       | .89    | .23     | .05        | .73      | .03        | 11.30          |
| 401         | 39544       | 745      | 23              | 23                | 113              | 186        | -            | 1 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 8.85       | .51    | .24     | .04        | .61      | .21        | 10.57          |
| 312         | 5745        | 681      | 183             | 5                 | 304              | -          | -            | 4 $\frac{1}{2}$  | 3 $\frac{1}{2}$ | 9.33       | 1.79   | -       | .01        | .58      | .08        | 11.79          |
| 116         | 5920        | 1181     | 25              | 20                | 321              | -          | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 11.72      | .87    | -       | .05        | .04      | .01        | 12.69          |
| 213         | 3715        | 990      | 111             | -                 | 297              | -          | 3            | 1 $\frac{1}{2}$  | -               | 11.28      | .58    | -       | .05        | .79      | .01        | 12.71          |
| 502         | 7200        | 846      | 52              | 14                | 269              | -          | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 10.84      | .87    | .53     | .28        | .88      | -          | 13.40          |
| 319         | 2600        | 888      | 73              | 8                 | 359              | -          | -            | 3 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 12.01      | 1.19   | .13     | .01        | .48      | .02        | 13.84          |
| 219         | 8850        | 952      | 191             | -                 | 372              | -          | -            | 2                | 1 $\frac{1}{2}$ | 12.47      | .76    | .07     | .15        | 1.20     | .02        | 14.67          |
| 107         | 4210        | 915      | 245             | 22                | 249              | -          | -            | 2 $\frac{1}{2}$  | 1               | 13.26      | .84    | -       | .01        | .87      | .02        | 15.00          |
| 105         | 8005        | 675      | 206             | 31                | 350              | -          | -            | 4 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 11.08      | 1.57   | 1.94    | .18        | .93      | .04        | 15.74          |
| 118         | 5720        | 1197     | -               | -                 | 307              | -          | -            | 2 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 13.30      | .90    | .79     | -          | .81      | .02        | 15.82          |
| 218         | 9155        | 965      | 133             | 23                | 336              | -          | 1            | 4 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 13.55      | 1.35   | .07     | .19        | .50      | .02        | 15.78          |
| 201         | 13805       | 678      | 541             | -                 | 1179             | -          | -            | 4 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 13.93      | 1.36   | .04     | -          | .44      | .19        | 15.96          |
| 102         | 2141        | 1080     | 30              | -                 | 234              | 1054       | -            | 5 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 14.65      | 1.68   | -       | -          | 1.05     | .02        | 17.40          |
| 104         | 14609       | 1304     | 450             | -                 | 388              | -          | 112          | 1 $\frac{1}{2}$  | 2 $\frac{1}{2}$ | 25.98      | .67    | .18     | .09        | .68      | .73        | 28.33          |
| 301         | 1681        | 1808     | 552             | -                 | 684              | -          | -            | 3 $\frac{1}{2}$  | 2 $\frac{1}{2}$ | 24.21      | 1.22   | .89     | .42        | 3.58     | .04        | 30.36          |
| 202         | 476         | 1689     | 820             | 21                | 1208             | -          | -            | 10 $\frac{1}{2}$ | 4 $\frac{1}{2}$ | 29.29      | 3.44   | -       | .93        | 6.20     | .03        | 39.89          |
| Aver. 11608 |             | 889      | 186             | 12                | 373              | 91         | 5            | 3 $\frac{1}{2}$  | 1 $\frac{1}{2}$ | 12.81      | 1.12   | .25     | .15        | 1.13     | .07        | 15.52          |



| Manure credit | Net expenses | Average selling price | Return per 56# grain |
|---------------|--------------|-----------------------|----------------------|
| \$.41         | \$8.19       | \$9.58                | \$.77                |
| .08           | 8.45         | 9.19                  | .56                  |
| .26           | 8.87         | 7.15                  | .33                  |
| .37           | 9.27         | 9.37                  | .57                  |
| .19           | 10.20        | 9.36                  | .52                  |
| .97           | 10.33        | 10.55                 | .62                  |
| .20           | 10.37        | 8.91                  | .43                  |
| 1.25          | 10.54        | 6.88                  | .28                  |
| .35           | 12.34        | 6.47                  | .20                  |
| .15           | 12.56        | 7.20                  | .21                  |
| .62           | 12.78        | 8.58                  | .34                  |
| .32           | 13.52        | 6.47                  | .20                  |
| .35           | 14.32        | 9.18                  | .28                  |
| .25           | 14.75        | 8.83                  | .25                  |
| .85           | 14.89        | 10.04                 | .23                  |
| .42           | 15.40        | 7.45                  | .19                  |
| .30           | 15.48        | 10.31                 | .34                  |
| .19           | 15.77        | 11.46                 | .40                  |
| .88           | 16.52        | 9.03                  | .18                  |
| .05           | 28.28        | 9.02                  | .03                  |
| 1.43          | 28.93        | 8.72                  | .00                  |
| 4.25          | 35.64        | 9.78                  | .12                  |
| .64           | 14.89        | 8.82                  | .32                  |

Cost per Head for Breeding Herd - Rock and Nobles Counties - 1930

| Farm No.  | Corn lb. | Small grain lb. | Misc. conc. lbs. | Hay & fodder lb. | Silage lb. | Pasture days | Hours |       | Feed    | Labor  | Shelter | Equip-ment | Int. ● 5% | Misc. cash | Deprec. | Total expense | Cream sold | Dairy Prod. used | Skim-milk fed |
|---|----------|-----------------|------------------|------------------|------------|--------------|-------|-------|---------|--------|---------|------------|-----------|------------|---------|---------------|------------|------------------|---------------|
|   |          |                 |                  |                  |            |              | Man   | Horse |         |        |         |            |           |            |         |               |            |                  |               |
| <b>Herds Kept Primarily for Beef Production</b> |          |                 |                  |                  |            |              |       |       |         |        |         |            |           |            |         |               |            |                  |               |
| 201   | 135      | 216             | -                | 815              | -          | 245          | 27½   | 1     | \$13.90 | \$8.41 | \$3.27  | \$.62      | \$3.83    | \$.38      | \$3.70  | \$34.11       | \$11.18    | \$3.10           | \$1.94        |
| 119   | 28       | 125             | -                | 1315             | -          | 245          | 44½   | 1     | 12.75   | 13.55  | 1.19    | .26        | 4.00      | .22        | -       | 31.97         | 10.13      | 2.27             | .90           |
| 218   | -        | 191             | 8                | 1913             | -          | 245          | 32½   | 1½    | 15.36   | 10.01  | 2.54    | .32        | 4.02      | .33        | 3.40    | 37.48         | 3.21       | 2.72             | .45           |
| 219   | -        | 579             | -                | 1902             | -          | 250          | 51    | 8     | 20.53   | 16.00  | .89     | .40        | 3.40      | .11        | 10.84   | 52.17         | 15.70      | 1.38             | 1.07          |
| 105   | -        | 545             | -                | 3012             | -          | 235          | 54½   | 6½    | 22.51   | 15.95  | .99     | 1.52       | 4.82      | .53        | 6.31    | 53.63         | 5.34       | 4.11             | 1.63          |
| 123   | -        | 95              | -                | 2427             | -          | 247          | 22    | 3½    | 18.96   | 6.89   | 1.07    | .47        | 5.06      | .25        | 12.62   | 45.32         | 2.42       | 1.26             | .55           |
| 401   | 148      | 98              | -                | 1898             | 2555       | 210          | 31½   | 7½    | 21.10   | 10.06  | .62     | .72        | 4.31      | .48        | 13.56   | 50.85         | 3.77       | 2.10             | .18           |
| 113   | 602      | 282             | 2                | 1454             | 5311       | 247          | 62    | 4½    | 37.77   | 19.03  | .91     | .52        | 4.07      | .22        | 9.46    | 71.98         | 7.93       | 2.49             | 3.45          |
| 202   | 152      | 273             | -                | 3419             | 2032       | 240          | 29½   | 3½    | 36.80   | 9.00   | 2.19    | .45        | 5.20      | .55        | 3.14    | 57.33         | 1.44       | 4.37             | .05           |
| Aver-<br>age                                    | 118      | 267             | 1                | 2017             | 1212       | 240          | 39½   | 4     | 22.35   | 12.21  | 1.52    | .59        | 4.30      | .34        | 7.00    | 48.31         | 6.79       | 2.64             | 1.14          |

|  |      |      |    |      |      |     |      |     |       |       |      |      |      |      |       |        |       |       |       |
|--|------|------|----|------|------|-----|------|-----|-------|-------|------|------|------|------|-------|--------|-------|-------|-------|
| <b>Herds Kept for Both Dairy and Beef Production</b> |      |      |    |      |      |     |      |     |       |       |      |      |      |      |       |        |       |       |       |
| 104  | 125  | 189  | -  | 2636 | -    | 246 | 89   | 5½  | 19.09 | 26.91 | 4.12 | .84  | 3.71 | 1.15 | 4.18  | 60.00  | 40.77 | 6.88  | 7.09  |
| 402  | 1100 | 1017 | -  | 1645 | -    | 233 | 98½  | 7   | 32.43 | 30.14 | 1.74 | .08  | 4.18 | .21  | 4.17  | 72.95  | 39.57 | 2.00  | 7.83  |
| 301  | 451  | 26   | -  | 1064 | -    | 237 | 90½  | 3½  | 18.20 | 27.43 | 2.62 | 2.96 | 2.69 | .74  | 7.96  | 62.60  | 23.33 | 5.02  | 5.15  |
| 118  | 23   | 994  | -  | 3241 | -    | 245 | 153½ | 3½  | 31.86 | 46.52 | 2.54 | .34  | 3.06 | .12  | 4.02  | 88.46  | 46.12 | 6.90  | 10.08 |
| 319  | 404  | 320  | -  | 2735 | -    | 273 | 71½  | 7   | 27.61 | 22.02 | 5.58 | .96  | 3.84 | .19  | -     | 60.20  | 19.51 | 8.70  | 3.57  |
| 502  | -    | 241  | -  | 121  | -    | 252 | 92½  | 6½  | 9.85  | 28.50 | 3.40 | .64  | 2.53 | -    | 11.54 | 56.46  | 15.18 | 11.18 | .83   |
| 116  | 153  | 458  | -  | 1553 | -    | 248 | 135½ | 4½  | 17.99 | 40.96 | 1.92 | 1.29 | 3.63 | .49  | 10.10 | 76.38  | 40.20 | 3.90  | 2.24  |
| 107  | 114  | 1283 | -  | 2312 | -    | 247 | 99½  | 2½  | 34.19 | 30.19 | 5.94 | 2.56 | 3.84 | .99  | 4.45  | 82.16  | 40.46 | 5.20  | 7.92  |
| 312  | 417  | 49   | -  | 4425 | -    | 249 | 78½  | 9½  | 27.71 | 24.46 | 6.48 | .95  | 2.72 | .82  | 6.11  | 69.25  | 17.03 | 4.07  | 1.70  |
| 302  | 538  | 2289 | -  | 4554 | -    | 212 | 134½ | 14  | 55.28 | 41.71 | 2.31 | 3.54 | 4.55 | 1.03 | 2.09  | 110.51 | 53.00 | 3.49  | 8.52  |
| 501  | 464  | 1358 | -  | 2424 | -    | 253 | 114½ | 7½  | 35.53 | 34.91 | 6.53 | 1.78 | 3.56 | .53  | 27.52 | 110.36 | 37.62 | 12.39 | 5.68  |
| 102  | 1031 | 316  | -  | 3716 | 6477 | 235 | 168½ | 3   | 55.14 | 50.83 | 7.75 | 1.78 | 4.09 | .61  | 7.39  | 127.59 | 54.11 | 5.44  | 6.65  |
| 213  | 359  | 1533 | -  | 4350 | -    | 260 | 109½ | 5½  | 49.42 | 33.56 | 2.66 | 1.26 | 3.85 | .20  | 16.61 | 107.56 | 27.30 | 13.75 | 4.05  |
| 419  | 932  | 1712 | 80 | 612  | 4254 | 272 | 127½ | 3½  | 49.58 | 38.57 | 7.60 | 1.21 | 3.03 | 1.95 | 13.16 | 115.10 | 19.57 | 6.88  | 4.07  |
| 211  | 459  | 2606 | -  | 4448 | -    | 246 | 133½ | 10½ | 55.69 | 41.05 | 8.35 | .95  | 4.26 | 2.78 | 14.16 | 127.24 | 10.48 | 20.70 | 2.78  |
| Aver-<br>age   | 442  | 959  | 5  | 2656 | 715  | 247 | 113  | 6½  | 34.64 | 34.52 | 4.64 | 1.41 | 3.57 | .79  | 8.89  | 88.46  | 32.28 | 7.77  | 5.28  |

\* Includes appreciation \$.73

\*\* Includes appreciation \$.08

| Measure | Total credit | Net cost | Cost per calf raised | Calves raised per cow |
|---------|--------------|----------|----------------------|-----------------------|
|---------|--------------|----------|----------------------|-----------------------|

|        |         |         |         |     |
|--------|---------|---------|---------|-----|
| \$1.08 | \$17.30 | \$16.81 | \$23.90 | .69 |
| 1.40*  | 14.70   | 17.27   | 22.75   | .78 |
| 1.46   | 7.84    | 29.64   | 31.78   | .98 |
| 1.82   | 12.97   | 32.20   | 55.49   | .60 |
| 5.12   | 16.20   | 37.43   | 37.91   | .88 |
| 2.43   | 6.66    | 38.66   | 51.38   | .78 |
| 1.39   | 7.44    | 43.41   | 53.09   | .84 |
| 2.23   | 16.10   | 55.88   | 68.98   | .85 |
| 1.99   | 7.85    | 49.48   | 67.22   | .76 |

|        |       |       |       |     |
|--------|-------|-------|-------|-----|
| 2.10** | 12.67 | 35.64 | 45.83 | .80 |
|--------|-------|-------|-------|-----|

|      |       |       |        |      |
|------|-------|-------|--------|------|
| 1.20 | 55.94 | 4.06  | 10.70  | .39  |
| 4.84 | 54.24 | 18.71 | 38.01  | .51  |
| 5.09 | 39.60 | 23.00 | 47.47  | .56  |
| 2.23 | 65.33 | 23.13 | 31.92  | .76  |
| 1.96 | 33.74 | 26.46 | 37.19  | .75  |
| 2.06 | 29.25 | 27.21 | 43.87  | .69  |
| 2.19 | 48.53 | 27.85 | 32.66  | .91  |
| .36  | 53.94 | 28.22 | 27.27  | 1.11 |
| 5.59 | 28.39 | 40.86 | 57.31  | .76  |
| 1.48 | 66.49 | 44.02 | 59.19  | .80  |
| 4.60 | 60.29 | 50.07 | 63.08  | .69  |
| 4.86 | 71.06 | 56.53 | 57.43  | 1.07 |
| .89  | 45.99 | 61.57 | 86.46  | .78  |
| 3.79 | 34.31 | 80.79 | 168.73 | .51  |
| 4.65 | 38.61 | 88.63 | 133.50 | .85  |

|      |       |       |       |     |
|------|-------|-------|-------|-----|
| 3.05 | 48.38 | 40.08 | 59.66 | .74 |
|------|-------|-------|-------|-----|

Cost and Returns for All Cattle - Rock and Nobles Counties - 1930  
(per 100 pounds gain in weight)

| Farm No.   | Weight produced lb. | Corn lb. | Small grain lb. | Coml. feeds lb. | Hay & fodder lb. | Silage lb. | Pasture days | Hours  |       | Expenses |        |         |            |           | Total expenses | Credits    |         |             | Net expenses |              |
|------------|---------------------|----------|-----------------|-----------------|------------------|------------|--------------|--------|-------|----------|--------|---------|------------|-----------|----------------|------------|---------|-------------|--------------|--------------|
|            |                     |          |                 |                 |                  |            |              | Man    | Horse | Feed     | Labor  | Shelter | Equip-ment | Int. @ 5% |                | Misc. cash | Measure | Dairy prod. |              | Total credit |
| 3419       | 94434               | 389      | 207             | 37              | 104              | 423        | 18           | 4 1/2  | 1 1/2 | \$8.73   | \$1.36 | \$.32   | \$.05      | \$.42     | \$.12          | \$11.00    | \$.39   | \$.47       | \$.86        | \$10.14      |
| 0119       | 33260               | 182      | 104             | -               | 251              | -          | 47           | 5 1/2  | 1 1/2 | 4.74     | 1.71   | .12     | .22        | .70       | .03            | 7.52       | .11     | 1.21        | 1.32         | 6.20         |
| 0218       | 27360               | 316      | 64              | 8               | 272              | -          | 38           | 4 1/2  | 1 1/2 | 6.21     | 1.41   | .28     | .09        | .47       | .05            | 8.51       | .25     | .54         | .79          | 7.72         |
| 8302       | 40315               | 438      | 279             | 24              | 359              | -          | 19           | 6 1/2  | 1 1/2 | 9.25     | 1.97   | .11     | .24        | .53       | .07            | 12.77      | .22     | 2.38        | 2.60         | 10.17        |
| A107       | 12335               | 348      | 247             | 7               | 337              | -          | 39           | 11 1/2 | 1 1/2 | 8.87     | 3.57   | .87     | .25        | .77       | .13            | 14.46      | .16     | 5.49        | 5.65         | 8.81         |
| A116       | 24865               | 332      | 102             | 6               | 267              | -          | 56           | 11 1/2 | 1 1/2 | 6.47     | 3.42   | .16     | .10        | .56       | .04            | 10.75      | .39     | 3.06        | 3.45         | 7.30         |
| A118       | 22970               | 316      | 171             | -               | 513              | -          | 54           | 19 1/2 | 1 1/2 | 8.30     | 5.86   | .56     | .04        | .64       | .03            | 15.43      | .48     | 6.82        | 7.30         | 8.13         |
| 0201       | 22480               | 433      | 360             | -               | 210              | -          | 42           | 6 1/2  | 1 1/2 | 10.52    | 2.08   | 1.20    | .08        | .76       | .18            | 14.82      | .26     | 1.95        | 2.21         | 12.61        |
| 401        | 52479               | 575      | 27              | 17              | 216              | 328        | 20           | 36 1/2 | 1 1/2 | 8.32     | 1.18   | .27     | .08        | .77       | .19            | 10.81      | .25     | .41         | .66          | 10.15        |
| 3219       | 21925               | 385      | 203             | -               | 464              | -          | 65           | 9      | 2     | 9.12     | 2.89   | .27     | .11        | 1.07      | .10            | 13.56      | .50     | 2.42        | 2.92         | 10.64        |
| A319       | 12720               | 245      | 106             | 2               | 583              | -          | 89           | 13 1/2 | 1 1/2 | 8.60     | 4.30   | 1.76    | .15        | 1.01      | .05            | 15.87      | .54     | 4.92        | 5.46         | 10.41        |
| 202        | 18337               | 130      | 145             | 1               | 673              | 311        | 67           | 6 1/2  | 1 1/2 | 9.09     | 1.95   | .67     | .09        | 1.40      | .41            | 13.61      | .88     | .84         | 1.72         | 11.89        |
| 3301       | 12215               | 317      | 149             | -               | 307              | -          | 70           | 16 1/2 | 1 1/2 | 7.56     | 5.14   | 1.37    | .51        | 1.02      | .12            | 15.72      | 1.23    | 5.25        | 6.48         | 9.24         |
| A501       | 6715                | 100      | 247             | -               | 534              | -          | 223          | 18     | 1 1/2 | 7.23     | 5.58   | 1.28    | .25        | .75       | .08            | 15.18      | 1.05    | 7.32        | 8.37         | 5.81         |
| 0123       | 18420               | 424      | 75              | -               | 547              | -          | 56           | 6 1/2  | 1 1/2 | 9.26     | 2.05   | .45     | .10        | 1.26      | .14            | 13.26      | .80     | .61         | 1.60*        | 11.66        |
| B113       | 26450               | 278      | 85              | 19              | 250              | 964        | 50           | 6 1/2  | 1     | 8.50     | 1.94   | .23     | .05        | .69       | .07            | 11.48      | .43     | .97         | 1.40         | 10.08        |
| 0105       | 15065               | 364      | 229             | 17              | 621              | -          | 53           | 11 1/2 | 2     | 9.83     | 3.70   | 1.31    | .31        | 1.24      | .10            | 16.49      | 1.31    | 1.56        | 2.87         | 13.62        |
| A213       | 9865                | 462      | 239             | -               | 707              | -          | 60           | 14 1/2 | 1     | 11.98    | 4.55   | .40     | .16        | .87       | .05            | 18.01      | .20     | 5.14        | 5.34         | 12.67        |
| A312       | 11660               | 408      | 166             | 5               | 820              | -          | 58           | 14 1/2 | 3 1/2 | 9.87     | 4.72   | 1.72    | .13        | .76       | .21            | 17.41      | 1.59    | 3.02        | 4.61         | 12.80        |
| A102       | 8975                | 435      | 112             | -               | 618              | 1270       | 54           | 26 1/2 | 1 1/2 | 12.85    | 8.02   | 1.40    | .24        | .95       | .19            | 23.65      | 1.06    | 8.99        | 10.05        | 13.60        |
| B502       | 12390               | 491      | 103             | 8               | 174              | -          | 43           | 11 1/2 | 1 1/2 | 7.99     | 3.61   | .62     | .23        | .90       | .01            | 13.36      | .59     | 2.48        | 3.07         | 10.29        |
| A402       | 4525                | 549      | 475             | -               | 804              | -          | 140          | 39 1/2 | 3 1/2 | 15.98    | 12.07  | .84     | .06        | 2.07      | .08            | 31.10      | 2.22    | 17.75       | 19.97        | 11.13        |
| B211       | 3205                | 248      | 701             | -               | 940              | -          | 62           | 24 1/2 | 2 1/2 | 13.92    | 7.63   | 2.35    | .13        | 1.90      | .41            | 26.34      | 1.10    | 4.79        | 5.89         | 20.45        |
| B104       | 23164               | 837      | 309             | -               | 505              | -          | 100          | 9 1/2  | 2 1/2 | 18.35    | 2.91   | .61     | .13        | .82       | .63            | 23.45      | .46     | 4.36        | 4.82         | 18.63        |
| 1930 Aver. |                     |          |                 |                 |                  |            |              |        |       |          |        |         |            |           |                |            |         |             |              |              |
| All farms  | 22416               | 375      | 206             | 6               | 466              | 137        | 64           | 14     | 1 1/2 | 9.67     | 3.90   | .80     | .16        | .93       | .15            | 15.61      | .69     | 3.87        | 4.56         | 11.05        |
| Group A    | 12803               | 355      | 211             | 2               | 587              | 141        | 86           | 18 1/2 | 1 1/2 | 10.01    | 5.79   | 1.00    | .15        | .93       | .10            | 17.98      | .85     | 6.95        | 7.80         | 10.18        |
| " B        | 29262               | 423      | 255             | 11              | 388              | 173        | 54           | 11     | 1 1/2 | 10.50    | 3.43   | .74     | .18        | .92       | .19            | 15.96      | .62     | 2.89        | 3.51         | 12.45        |
| " C        | 23437               | 344      | 166             | 5               | 382              | -          | 47           | 7      | 1     | 8.11     | 2.19   | .67     | .16        | .89       | .10            | 12.12      | .55     | 1.21        | 1.76         | 10.36        |
| 1929 Aver. |                     |          |                 |                 |                  |            |              |        |       |          |        |         |            |           |                |            |         |             |              |              |
| All farms  | 18683               | 331      | 174             | 7               | 436              | 231        | 44           | 14 1/2 | 1 1/2 | 11.52    | 4.67   | .90     | .14        | 1.19      | .12            | 18.53      | .88     | 5.26        | 6.14         | 12.39        |
| Group A    | 14359               | 318      | 200             | 2               | 513              | 203        | 52           | 19 1/2 | 2     | 12.28    | 6.08   | .96     | .16        | 1.23      | .12            | 20.83      | 1.12    | 7.94        | 9.06         | 11.77        |
| " B        | 28045               | 408      | 174             | 14              | 423              | 377        | 32           | 13 1/2 | 1 1/2 | 12.36    | 4.28   | .75     | .13        | 1.17      | .13            | 18.82      | .89     | 4.88        | 5.77         | 13.05        |
| " C        | 17423               | 287      | 147             | 8               | 379              | -          | 52           | 12     | 1 1/2 | 9.52     | 3.15   | .71     | .13        | 1.04      | .07            | 14.62      | .78     | 2.47        | 3.25         | 11.37        |

\* Animal value product is the net value of animals produced after allowing for differences in inventory values.

\*\* A minus (-) indicates a failure to cover the expenses charged.

\*\*\* Group A - Farmers combining dairying and beef production; Group B - Farmers feeding more cattle than are raised on their farms; Group C - Beef production.

| Animal value product* | Gain     | Return per 56# grain | Aver. selling price |
|-----------------------|----------|----------------------|---------------------|
| \$10.02               | \$-.12** | \$.53                | \$9.08              |
| 5.99                  | -.21     | .45                  | 8.87                |
| 7.03                  | -.69     | .49                  | 9.83                |
| 7.79                  | -2.38    | .32                  | 9.48                |
| 5.89                  | -2.92    | .25                  | 8.90                |
| 4.09                  | -3.21    | .06                  | 6.96                |
| 4.35                  | -3.77    | .10                  | 7.45                |
| 8.63                  | -3.98    | .32                  | 11.46               |
| 6.11                  | -4.04    | .16                  | 8.73                |
| 5.38                  | -5.26    | .03                  | 8.87                |
| 4.43                  | -5.98    | -.38                 | 6.49                |
| 5.62                  | -6.27    | -.76                 | 11.87               |
| 2.67                  | -6.57    | -.31                 | 12.95               |
| .10                   | -6.71    | -.55                 | 5.98                |
| 4.88                  | -6.78    | -.19                 | 9.97                |
| 2.93                  | -7.15    | -.59                 | 7.11                |
| 5.69                  | -7.93    | -.22                 | 9.18                |
| 4.68                  | -8.00    | -.13                 | 7.27                |
| 4.27                  | -8.53    | -.33                 | 6.29                |
| 4.79                  | -8.81    | -.37                 | 8.27                |
| .06                   | -10.23   | -.38                 | 8.25                |
| -2.39                 | -13.52   | -1.36                | 7.00                |
| 3.66                  | -16.79   | -.56                 | 9.58                |
| -1.76                 | -20.39   | -.36                 | 8.90                |
| 4.37                  | -6.68    | -.11                 | 8.70                |
| 3.35                  | -6.83    | -.31                 | 7.18                |
| 3.84                  | -8.61    | -.16                 | 9.28                |
| 6.44                  | -3.92    | .17                  | 9.86                |
| 11.09                 | -1.31    | .53                  | 11.50               |
| 9.11                  | -2.66    | .41                  | 10.95               |
| 12.89                 | -.16     | .67                  | 11.65               |
| 11.76                 | .39      | .73                  | 11.91               |

- Farmers specializing on baby-

Cost and Return for Swine, Rock and Nobles Counties - 1930  
(per 100 pounds marketable hogs produced)

| Farm No. | Pounds produced | Feeds    |                 |                |               |                          |                |              | Hours |       | Expenses |             |         |             |          | Manure credit |            |               |
|----------|-----------------|----------|-----------------|----------------|---------------|--------------------------|----------------|--------------|-------|-------|----------|-------------|---------|-------------|----------|---------------|------------|---------------|
|          |                 | Corn lb. | Small grain lb. | Com. feeds lb. | Penk- age lb. | Total Concen- trates lb. | Skin- milk lb. | Pasture days | Man   | Horse | Feed     | Total labor | Shelter | Equip- ment | Interest |               | Misc. cash | Total Expense |
| 501      | 16950           | 196      | 88              | -              | -             | 284                      | 80             | 34           | 2     |       | \$2.98   | \$.51       | \$.28   | \$.02       | \$.17    | \$.02         | \$4.08     | \$.11         |
| 213      | 24440           | 321      | 121             | 1              | -             | 443                      | 38             | 37           | 1 1/2 |       | 4.12     | .41         | .17     | .03         | .11      | .15           | 4.93       | .10           |
| 211      | 42724           | 293      | 128             | 5              | 2             | 428                      | 8              | 19           | 1     |       | 4.26     | .31         | .18     | .06         | .11      | .14           | 5.06       | .08           |
| 301      | 40165           | 374      | 82              | 5              | 8             | 429                      | 81             | 32           | 1 1/2 |       | 4.65     | .38         | .08     | .05         | .14      | .16           | 5.46       | .04           |
| 401      | 17670           | 381      | 64              | -              | 5             | 450                      | 4              | 19           | 1 1/2 |       | 4.47     | .38         | .31     | .03         | .22      | .23           | 5.64       | .03           |
| 113      | 29644           | 215      | 148             | 6              | 12            | 381                      | 43             | 23           | 2     |       | 4.31     | .67         | .30     | .10         | .14      | .30           | 5.22       | .13           |
| 115      | 12415           | 209      | 148             | 14             | -             | 371                      | 101            | 29           | 2 1/2 |       | 4.36     | .66         | .39     | .12         | .24      | .20           | 5.97       | .15           |
| 319      | 21895           | 306      | 131             | 3              | 4             | 444                      | 70             | 34           | 2     |       | 4.58     | .66         | .23     | .15         | .21      | .21           | 6.04       | .07           |
| 107      | 40900           | 308      | 177             | -              | 6             | 491                      | 71             | 28           | 1 1/2 |       | 5.14     | .50         | .14     | .08         | .16      | .24           | 6.26       | .08           |
| 502      | 22179           | 308      | 181             | -              | 7             | 496                      | 4              | 38           | 2 1/2 |       | 4.69     | .67         | .42     | .02         | .15      | .35           | 6.30       | .04           |
| 104      | 46377           | 325      | 135             | 1              | 4             | 465                      | 75             | 35           | 1     |       | 5.47     | .31         | .16     | .10         | .20      | .27           | 6.50       | .23           |
| 419      | 46128           | 309      | 133             | 15             | 8             | 465                      | 33             | 18           | 1 1/2 |       | 5.32     | .55         | .16     | .04         | .16      | .21           | 6.44       | .05           |
| 105      | 37788           | 386      | 143             | -              | 11            | 540                      | 38             | 24           | 2     | 1     | 5.64     | .65         | .09     | .03         | .11      | .05           | 6.57       | .08           |
| 119      | 27649           | 351      | 147             | 2              | 5             | 505                      | 13             | 33           | 2     |       | 5.22     | .60         | .13     | .27         | .14      | .17           | 6.53       | .03           |
| 402      | 34755           | 420      | 86              | 6              | 9             | 521                      | 105            | 2            | 1 1/2 |       | 5.76     | .58         | .07     | .02         | .25      | .02           | 6.70       | .07           |
| 118      | 45235           | 297      | 200             | 2              | -             | 499                      | 116            | 38           | 2 1/2 |       | 5.69     | .79         | .11     | .02         | .17      | -             | 6.78       | .04           |
| 201      | 15195           | 362      | 109             | -              | -             | 471                      | 84             | 45           | 4 1/2 |       | 4.74     | 1.33        | .13     | -           | .20      | .46           | 6.86       | .05           |
| 219      | 46956           | 228      | 271             | -              | 6             | 505                      | 47             | 54           | 2     |       | 5.65     | .51         | .14     | .11         | .24      | .17           | 6.92       | .03           |
| 123      | 37005           | 442      | 102             | 3              | 7             | 594                      | -              | 14           | 1 1/2 | 1     | 5.71     | .44         | .11     | .08         | .41      | .30           | 7.05       | .14           |
| 302      | 66513           | 498      | 25              | 12             | 25            | 560                      | 54             | 20           | 1     |       | 6.64     | .35         | .03     | .11         | .29      | .02           | 7.44       | .02           |
| 312      | 23595           | 435      | 156             | 2              | 2             | 595                      | 28             | 47           | 2 1/2 |       | 5.82     | .80         | .56     | .02         | .27      | .19           | 7.66       | .08           |
| 102      | 12500           | 434      | 123             | 1              | 1             | 559                      | 155            | 55           | 2 1/2 |       | 6.04     | .85         | .36     | .05         | .19      | .51           | 8.00       | .03           |
| 218      | 18340           | 334      | 348             | -              | -             | 682                      | -              | 49           | 2 1/2 |       | 6.59     | .84         | .10     | .14         | .36      | .18           | 8.21       | .10           |
| 202      | 23814           | 433      | 151             | 11             | 17            | 612                      | 2              | 19           | 3 1/2 |       | 6.52     | 1.04        | .39     | .22         | .27      | .11           | 8.55       | .03           |
| Aver.    |                 |          |                 |                |               |                          |                |              |       |       |          |             |         |             |          |               |            |               |
| 1930     | 31288           | 339      | 142             | 4              | 6             | 490                      | 52             | 31           | 2     | 1/2   | 5.18     | .62         | .21     | .08         | .20      | .20           | 6.49       | .07           |
| 1929     | 29029           | 446      | 104             | 4              | 5             | 559                      | 35             | 21           | 2 1/2 | 1/2   | 7.07     | .87         | .24     | .09         | .31      | .28           | 8.86       | .09           |

| Net expense | Average selling price | Return per 56# grain | Pigs raised per litter |
|-------------|-----------------------|----------------------|------------------------|
| \$3.97      | \$7.27                | \$1.17               | 4.5                    |
| 4.89        | 7.10                  | .79                  | 5.3                    |
| 4.98        | 7.34                  | .83                  | 5.6                    |
| 5.42        | 7.91                  | .85                  | 5.8                    |
| 5.61        | 7.76                  | .80                  | 5.8                    |
| 5.69        | 7.37                  | .79                  | 6.8                    |
| 5.82        | 7.88                  | .84                  | 4.3                    |
| 5.97        | 7.98                  | .75                  | 4.7                    |
| 6.18        | 7.50                  | .55                  | 6.7                    |
| 6.26        | 7.15                  | .59                  | 6.8                    |
| 6.27        | 7.85                  | .78                  | 4.7                    |
| 6.39        | 7.77                  | .73                  | 6.7                    |
| 6.49        | 6.98                  | .57                  | 7.9                    |
| 6.50        | 7.74                  | .68                  | 5.9                    |
| 6.63        | 8.66                  | .76                  | 4.5                    |
| 6.74        | 7.38                  | .64                  | 6.7                    |
| 6.81        | 7.26                  | .55                  | 4.7                    |
| 6.89        | 8.02                  | .66                  | 4.9                    |
| 5.91        | 8.97                  | .76                  | 4.9                    |
| 7.42        | 8.77                  | .70                  | 4.8                    |
| 7.58        | 9.28                  | .66                  | 4.9                    |
| 7.97        | 7.52                  | .47                  | 5.8                    |
| 8.11        | 8.93                  | .58                  | 3.5                    |
| 8.52        | 7.22                  | .41                  | 3.8                    |
| 6.42        | 7.81                  | .71                  | 5.5                    |
| 8.77        | 9.53                  | .74                  | 4.9                    |

Cost and Return per Mature Sheep - Rock and Nobles Counties - 1930

| Farm No. | No. of Sheep | Feeds        |                        |               |                 | Hours |       | Costs  |       |         |                |       | Total Manure<br>expense | Misc.<br>credit | Misc.<br>credit | Total Net<br>credit | Total Net<br>expense |               |
|----------|--------------|--------------|------------------------|---------------|-----------------|-------|-------|--------|-------|---------|----------------|-------|-------------------------|-----------------|-----------------|---------------------|----------------------|---------------|
|          |              | Grain<br>lb. | Hay &<br>fodder<br>lb. | Silage<br>lb. | Pasture<br>days | Man   | Horse | Feed   | Labor | Shelter | Equip-<br>ment | Int.  |                         |                 |                 |                     |                      | Misc.<br>cash |
| 113      | 52           | 25           | 82                     | -             | 209             | 1     | 1     | \$1.88 | \$.30 | \$.07   | -              | \$.48 | \$.23                   | \$2.96          | \$-             | \$.04               | \$.04                | \$2.32        |
| 105      | 26           | -            | -                      | -             | 242             | 1     | 1     | 1.51   | .31   | -       | -              | .49   | .26                     | 2.57            | 1.16            | -                   | 1.16                 | 1.41          |
| 119      | 37           | 15           | 108                    | -             | 247             | 1     | 1     | 1.98   | .26   | -       | .02            | .34   | .25                     | 2.85            | -               | -                   | -                    | 2.85          |
| 111      | 195          | 114          | 206                    | -             | 212             | 1     | 1     | 3.37   | .65   | -       | .06            | .70   | .05                     | 4.83            | .06             | -                   | .06                  | 4.77          |
| 101      | 151          | 201          | 33                     | 15            | 220             | 1     | 1     | 3.35   | .39   | .32     | -              | .38   | .13                     | 4.57            | .02             | -                   | .02                  | 4.55          |
| 113      | 62           | 4            | 205                    | 231           | 233             | 2     | 2     | 2.67   | .82   | .27     | .03            | .49   | .20                     | 4.48            | -               | -                   | -                    | 4.48          |
| 119      | 28           | 48           | 71                     | -             | 224             | 1     | 1     | 2.24   | .39   | .28     | .06            | .49   | .31                     | 3.77            | .05             | -                   | .05                  | 3.72          |
| Aver.    |              |              |                        |               |                 |       |       |        |       |         |                |       |                         |                 |                 |                     |                      |               |
| 1930     | 80           | 58           | 101                    | 35            | 227             | 1     | 1     | 2.44   | .45   | .13     | .02            | .48   | .20                     | 3.72            | .18             | .01                 | .19                  | 3.53          |
| 1929     | 106          | 86           | 113                    | 31            | 245             | 2     | 2     | 3.49   | .55   | .21     | .26            | .50   | .16                     | 5.28            | .03             | .03                 | .06                  | 5.22          |



| Value of Product |        |        | Gain  | Return | Selling Price |        | Lamba | death |       |
|------------------|--------|--------|-------|--------|---------------|--------|-------|-------|-------|
| Sheep            | Wool   | Total  | over  | feed   | Wool          | Sheep  | per   | loss  |       |
|                  |        |        |       |        | lb.           | per    | ewe   | lamb  | sheep |
|                  |        |        |       |        | cwt.          |        |       |       |       |
| \$2.75           | \$1.05 | \$3.80 | \$.88 | \$1.92 | \$.13         | \$7.62 | 1.0   | 26    | 3     |
| -                | .14    | .14    | -1.27 | -1.37  | -             | 6.53   | 1.2   | 11    | 23    |
| -.32             | 1.33   | 1.07   | -1.78 | -.90   | .17           | 7.80   | .8    | 17    | 0     |
| 1.72             | .87    | 2.59   | -2.18 | -.78   | .16           | 8.49   | .7    | 27    | 4     |
| 1.50             | .86    | 2.36   | -2.19 | -.39   | .16           | 8.06   | 1.2   | 6     | 9     |
| .51              | 1.16   | 1.67   | -2.81 | -1.00  | .16           | 7.25   | .9    | 7     | 3     |
| -2.19            | 1.22   | -.97   | -4.69 | -3.22  | .16           | 6.18   | .7    | 27    | 33    |
| .56              | .96    | 1.52   | -2.01 | -.91   | .16           | 7.42   | .9    | 17    | 11    |
| 3.22             | 1.33   | 4.55   | -.67  | 1.07   | .28           | 11.31  | 1.0   | 12    | 16    |

Cost and Return for Poultry - Rock and Nobles Counties - 1930  
(per 100 chickens)

| Farm No.     | Size of flock, chickens | Feeds     |                 |                | Hours |       | Expenses |         |         |            |        |            | Credit for manure | Net expense | Value Product |          |         |
|--------------|-------------------------|-----------|-----------------|----------------|-------|-------|----------|---------|---------|------------|--------|------------|-------------------|-------------|---------------|----------|---------|
|              |                         | Grain lb. | Conl. feeds lb. | Skim-milk* lb. | Men   | Horse | Feed     | Labor   | Shelter | Equip-ment | Int.   | Misc. cash |                   |             | Total expense | Poultry  | Eggs    |
| 202          | 470                     | 3711      | 531             | 840            | 98    | 3     | \$54.42  | \$29.72 | \$5.98  | \$7.19     | \$4.07 | \$20.85    | \$122.23          | \$1.92      | \$120.31      | \$109.55 | \$80.38 |
| 319          | 245                     | 2497      | -               | 1926           | 105   | 1     | 29.55    | 31.70   | 15.82   | .85        | 3.83   | .10        | 81.85             | 2.45        | 79.41         | 62.85    | 70.04   |
| 116          | 79                      | 1247      | 63              | -              | 228   | -     | 12.43    | 68.26   | 23.54   | 1.21       | 3.56   | -          | 109.00            | -           | 109.00        | 83.10    | 65.42   |
| 219          | 406                     | 2485      | -               | 1168           | 52    | 1     | 25.86    | 15.75   | 5.91    | 5.81       | 2.40   | 3.20       | 58.93             | .37         | 58.56         | 38.96    | 52.68   |
| 401          | 358                     | 3070      | 308             | 284            | 84    | 1     | 36.06    | 25.39   | 5.03    | 5.82       | 2.71   | 3.31       | 78.32             | .84         | 77.48         | 5.08     | 102.09  |
| 102          | 239                     | 3890      | 272             | 1585           | 135   | 1     | 52.23    | 40.50   | 8.79    | 4.86       | 2.64   | 2.01       | 111.03            | 1.26        | 109.77        | 97.09    | 39.37   |
| 502          | 189                     | 1206      | -               | 1517           | 80    | -     | 16.37    | 24.17   | 11.11   | 2.58       | 4.29   | .34        | 58.86             | .79         | 58.07         | -12.65   | 93.12   |
| 107          | 275                     | 3692      | 264             | 907            | 87    | 2     | 52.94    | 25.58   | 7.64    | 9.76       | 1.75   | 7.59       | 106.26            | 2.18        | 104.08        | 97.45    | 23.74   |
| 218          | 247                     | 1395      | -               | 1222           | 78    | 1     | 20.18    | 23.53   | 9.72    | .83        | 4.82   | -          | 59.08             | 1.22        | 57.86         | -14.07   | 84.34   |
| 501          | 207                     | 1547      | -               | 374            | 66    | 2     | 16.09    | 20.02   | 11.59   | 2.62       | 3.73   | .31        | 54.36             | 1.45        | 52.91         | -16.54   | 76.61   |
| 312          | 138                     | 2844      | 203             | 1177           | 123   | -     | 30.14    | 36.84   | 17.40   | 4.20       | 3.75   | 2.35       | 94.68             | 5.44        | 89.24         | 6.26     | 65.47   |
| 302          | 190                     | 2226      | 628             | 1181           | 84    | 1     | 48.76    | 25.56   | 30.31   | 10.62      | 5.79   | 11.69      | 132.73            | 3.95        | 128.78        | -19.21   | 124.46  |
| 104          | 416                     | 2231      | 120             | 1321           | 68    | -     | 29.53    | 20.66   | 8.65    | 3.61       | 3.13   | 12.59      | 78.17             | 2.16        | 76.01         | -6.72    | 57.49   |
| 201          | 272                     | 4943      | -               | 828            | 134   | 1     | 45.33    | 40.46   | 6.62    | 2.56       | 3.23   | 4.61       | 102.91            | .55         | 102.36        | 7.04     | 67.90   |
| 118          | 534                     | 7676      | 75              | 3557           | 181   | 1     | 92.06    | 54.51   | 3.15    | 7.39       | 3.43   | 4.71       | 165.25            | 3.79        | 161.46        | 61.00    | 60.22   |
| 105          | 315                     | 2987      | 143             | 320            | 113   | -     | 33.22    | 34.15   | 18.10   | 1.97       | 4.04   | 7.31       | 98.79             | 2.38        | 96.41         | -14.61   | 55.65   |
| 119          | 335                     | 2786      | 180             | 1245           | 116   | 2     | 36.89    | 34.96   | 8.60    | 3.24       | 2.32   | 4.37       | 90.38             | 2.24        | 88.14         | -18.55   | 42.09   |
| 213          | 174                     | 3161      | 1063            | 4410           | 170   | 1     | 87.46    | 51.17   | 15.90   | 10.67      | 4.26   | 18.36      | 188.82            | 1.29        | 187.53        | 9.57     | 111.65  |
| 113          | 240                     | 4313      | 1417            | 2258           | 131   | 1     | 91.44    | 39.52   | 20.00   | 1.50       | 2.79   | 21.87      | 183.12            | 6.25        | 176.87        | 45.89    | 61.03   |
| 123          | 365                     | 5953      | 923             | 6016           | 161   | 8     | 100.02   | 49.14   | 15.11   | 12.90      | 4.36   | 9.45       | 190.98            | 1.03        | 189.95        | 17.29    | 108.77  |
| 211          | 106                     | 625       | 377             | -              | 148   | 1     | 22.51    | 44.54   | 28.35   | 28.56      | 2.62   | 22.96      | 149.49            | 4.25        | 145.24        | 47.92    | 18.60   |
| 419          | 123                     | 3623      | 398             | 3720           | 163   | 1     | 87.15    | 48.92   | 38.05   | 9.13       | 2.87   | 12.51      | 198.69            | .61         | 198.08        | 5.59     | 56.99   |
| 301          | 69                      | 1673      | 72              | 134            | 265   | -     | 20.17    | 79.56   | 23.49   | .15        | 4.27   | .22        | 127.86            | 8.70        | 119.16        | -105.23  | 72.94   |
| <b>Aver.</b> |                         |           |                 |                |       |       |          |         |         |            |        |            |                   |             |               |          |         |
| 1930         | 261                     | 3060      | 332             | 1565           | 125   | 1     | 45.27    | 37.66   | 14.78   | 6.27       | 3.51   | 7.42       | 114.91            | 2.40        | 112.51        | 21.19    | 68.90   |
| 1929         | 250                     | 3847      | 395             | 436            | 166   | 4     | 59.90    | 50.45   | 16.85   | 6.39       | 3.97   | 4.49       | 142.05            | 3.71        | 138.34        | 45.31    | 94.33   |

\*Tankage and meat scraps have been multiplied by 10 and added to skimmilk.

| Total  | Return           |           | Per hour | % Laying hens | Eggs per hen | Price              |
|--------|------------------|-----------|----------|---------------|--------------|--------------------|
|        | Over net expense | Over feed |          |               |              | reduced            |
|        |                  |           | labor    |               |              | per doz. eggs sold |
| 189.93 | \$69.62          | \$135.51  | \$1.01   | 36            | 109          | \$.24              |
| 132.89 | 53.48            | 103.33    | .81      | 64            | 80           | .17                |
| 148.52 | 39.52            | 136.09    | .47      | 79            | 58           | .20                |
| 91.64  | 33.08            | 65.78     | .94      | 37            | 98           | .17                |
| 107.17 | 29.69            | 71.11     | .65      | 53            | 80           | .31                |
| 136.46 | 26.69            | 84.23     | .50      | 46            | 81           | .16                |
| 80.47  | 22.40            | 64.10     | .58      | 54            | 121          | .18                |
| 121.19 | 17.11            | 68.25     | .50      | 33            | 56           | .14                |
| 70.27  | 12.40            | 50.09     | .46      | 72            | 81           | .18                |
| 60.07  | 7.16             | 33.98     | .41      | 89            | 56           | .18                |
| 71.73  | -17.51           | 41.59     | .16      | 70            | 61           | .18                |
| 105.25 | -23.53           | 56.49     | .02      | 68            | 91           | .26                |
| 50.77  | -25.24           | 21.24     | -.07     | 45            | 65           | .31                |
| 74.94  | -27.42           | 29.61     | .10      | 53            | 76           | .21                |
| 121.22 | -40.24           | 29.16     | .08      | 49            | 85           | .20                |
| 41.04  | -55.37           | 7.82      | -.19     | 60            | 64           | .18                |
| 23.54  | -64.60           | -13.35    | -.26     | 51            | 56           | .18                |
| 121.22 | -66.31           | 33.76     | -.09     | 64            | 82           | .30                |
| 106.92 | -69.95           | 15.48     | -.23     | 51            | 72           | .21                |
| 119.06 | -70.91           | 19.04     | -.14     | 67            | 84           | .22                |
| 66.52  | -78.72           | 44.01     | -.23     | 39            | 40           | .12                |
| 62.59  | -135.49          | -24.56    | -.53     | 43            | 90           | .19                |
| 32.29  | -151.45          | -52.46    | -.27     | 87            | 62           | .18                |
| 90.09  | -22.42           | 44.82     | .12      | 57            | 76           | .20                |
| 139.64 | 1.30             | 79.74     | .31      | 57            | 75           | .28                |

**Cost of Horse Work per Horse - Rock and Noble Counties - 1930**

| Farm No.  | Feed    |           |              | Man hours | Expenses   |           |         |            |        |            |       | Credits    |        |              |              |
|---|---------|-----------|--------------|-----------|------------|-----------|---------|------------|--------|------------|-------|------------|--------|--------------|--------------|
|   | Hay lb. | Grain lb. | Pasture days |           | Total feed | Man labor | Shelter | Equip-ment | Int.   | Misc. cash | Dep.  | Total cost | Manure | Misc. credit | Total credit |
| <b>Farms on which Tractors were Used for Drawbar Work</b>     |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| 104   | 1756    | 1651      | 165          | 33        | \$23.36    | \$7.97    | \$2.98  | \$2.38     | \$6.04 | \$ .72     | \$ -  | \$46.65    | \$3.88 | \$7.30       | \$11.18      |
| 202   | 2502    | 2160      | 166          | 48        | 32.91      | 14.50     | 1.80    | 4.78       | 4.13   | .04        | 3.33  | 61.49      | 6.50   | -            | 6.50         |
| 419   | 2406    | 2135      | 110          | 49        | 43.75      | 14.93     | 5.84    | 6.62       | 4.77   | .36        | 3.05  | 85.32      | 1.23   | -            | 1.23         |
| 401   | 5714    | 2254      | 127          | 63        | 46.90      | 19.06     | 7.53    | 1.28       | 5.20   | 1.35       | 6.85  | 88.17      | 2.76   | .86          | 3.62         |
| 501   | 2668    | 1773      | 185          | 47        | 32.75      | 14.26     | 5.45    | 3.35       | 4.13   | .19        | 5.00  | 66.14      | 2.11   | 1.25         | 3.36         |
| 319   | 2500    | 3660      | 162          | 43        | 44.37      | 12.92     | 9.67    | 4.85       | 5.64   | .66        | 4.50  | 83.21      | 10.50  | 1.00         | 11.50        |
| 219   | 3629    | 1660      | 155          | 57        | 44.09      | 17.25     | 3.27    | 3.70       | 6.93   | .80        | 15.59 | 91.63      | 1.87   | 1.25         | 3.12         |
| 211   | 3103    | 3336      | 198          | 43        | 47.02      | 13.13     | 5.70    | 3.44       | 4.83   | .13        | .50   | 74.75      | 6.12   | -            | 6.12         |
| 118   | 3385    | 3311      | 169          | 25        | 47.72      | 7.77      | 4.80    | 2.54       | 2.55   | .04        | 13.54 | 78.96      | 4.85   | 1.84         | 6.69         |
| 218   | 2450    | 2328      | 180          | 40        | 34.03      | 12.04     | 9.60    | 2.47       | 3.17   | .12        | 5.00  | 56.43      | 2.25   | -            | 2.25         |
| 502   | 3023    | 4350      | 147          | 73        | 51.59      | 22.11     | 5.12    | 3.09       | 3.33   | 1.00       | 20.00 | 106.24     | 2.00   | -            | 2.00         |
| 107   | 4238    | 2084      | 185          | 49        | 42.65      | 14.31     | 9.24    | 5.69       | 5.02   | .19        | 14.85 | 93.55      | .89    | -            | .89          |
| <b>Aver.</b>  |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| 1930  | 3115    | 2642      | 162          | 48        | 41.03      | 14.40     | 6.00    | 3.73       | 4.73   | .47        | 8.18  | 78.54      | 3.75   | 1.12         | 4.87         |
| 1929  | 3382    | 3229      | 139          | 52        | 59.85      | 17.32     | 5.48    | 5.25       | 4.82   | .49        | 8.67  | 101.58     | 4.41   | .22          | 4.63         |
| <b>Farms on which Tractors were not Used for Drawbar Work</b> |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| 102   | 6354    | 4120      | 70           | 67        | 64.79      | 20.33     | 3.03    | 3.35       | 3.36   | .55        | 3.23  | 104.64     | 10.33  | -            | 10.33        |
| 116   | 3642    | 4108      | 131          | 72        | 50.81      | 21.74     | 3.48    | 4.13       | 3.95   | .06        | 4.96  | 89.13      | 3.31   | -            | 3.31         |
| 105   | 2419    | 3903      | 147          | 57        | 44.47      | 17.18     | 15.10   | 4.99       | 6.53   | .95        | 3.72  | 92.24      | 8.38   | 1.24         | 9.62         |
| 301   | 5135    | 3798      | 124          | 31        | 54.84      | 9.46      | 5.13    | 2.46       | 5.45   | .14        | 13.94 | 91.02      | 1.75   | -            | 1.75         |
| 302   | 3342    | 3336      | 165          | 39        | 45.83      | 11.75     | 6.14    | 2.97       | 5.96   | .75        | 6.47  | 79.87      | 4.46   | -            | 4.46         |
| 113   | 4593    | 3670      | 109          | 61        | 50.84      | 18.37     | 3.38    | 5.21       | 6.92   | .12        | 8.88  | 93.72      | 8.58   | -            | 8.58         |
| 123   | 3625    | 2547      | 185          | 34        | 45.29      | 10.44     | 5.66    | 3.57       | 3.08   | .18        | .99   | 69.21      | 4.66   | -            | 4.66         |
| 312   | 3798    | 3536      | 172          | 46        | 48.80      | 13.95     | 6.19    | 2.66       | 5.31   | .71        | 6.85  | 84.47      | 4.67   | -            | 4.67         |
| 119   | 2439    | 3551      | 156          | 51        | 45.42      | 15.20     | 4.35    | 5.41       | 4.13   | 1.32       | 17.28 | 93.11      | 2.21   | 2.03         | 4.24         |
| 201   | 1972    | 2965      | 169          | 73        | 46.57      | 22.07     | 9.82    | 1.43       | 3.89   | .07        | 4.44  | 88.29      | 2.08   | -            | 2.08         |
| 213   | 4106    | 2909      | 188          | 52        | 46.46      | 15.76     | 5.94    | 5.03       | 5.59   | .07        | 17.36 | 96.21      | .60    | 1.98         | 2.58         |
| <b>Aver.</b>  |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| 1930  | 3766    | 3504      | 148          | 53        | 49.46      | 16.02     | 6.75    | 3.75       | 4.92   | .38        | 7.97  | 89.26      | 4.64   | .48          | 5.12         |
| 1929  | 3582    | 4094      | 125          | 47        | 67.61      | 17.38     | 7.95    | 5.73       | 5.50   | .67        | 11.67 | 117.51     | 5.05   | 1.52         | 6.57         |
| <b>All Farms</b>  |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| <b>Aver.</b>  |         |           |              |           |            |           |         |            |        |            |       |            |        |              |              |
| 1930  | 3255    | 2953      | 155          | 50        | 45.07      | 15.18     | 5.36    | 3.74       | 4.82   | .43        | 8.07  | 83.67      | 4.17   | .82          | 4.99         |
| 1929  | 3393    | 3691      | 133          | 56        | 62.15      | 16.89     | 6.55    | 5.93       | 5.12   | .57        | 9.85  | 107.06     | 4.67   | 1.40         | 6.07         |
|   | 3487    | 3682      | 132          | 52        | 63.77      | 17.35     | 6.77    | 6.02       | 5.17   | .60        | 10.24 | 109.92     | 4.75   | .90          | 5.65         |

| Net-cost | Hours worked | Cost per hour (cents) | Crop acres per hour |
|----------|--------------|-----------------------|---------------------|
|----------|--------------|-----------------------|---------------------|

|        |      |      |      |
|--------|------|------|------|
| 835.47 | 752  | 4.7  | 21.9 |
| 84.99  | 832  | 6.1  | 33.4 |
| 84.09  | 1087 | 7.7  | 27.8 |
| 84.55  | 1049 | 8.1  | 26.8 |
| 62.78  | 734  | 8.6  | 34.4 |
| 71.71  | 730  | 9.1  | 33.3 |
| 88.51  | 960  | 9.2  | 32.2 |
| 68.63  | 688  | 10.0 | 24.4 |
| 72.27  | 715  | 10.1 | 29.9 |
| 64.18  | 633  | 10.1 | 22.9 |
| 104.24 | 862  | 12.1 | 31.5 |
| 92.66  | 608  | 15.3 | 28.7 |

|       |     |      |      |
|-------|-----|------|------|
| 73.67 | 814 | 9.1  | 28.7 |
| 96.95 | 884 | 11.1 | 28.8 |

|       |      |      |      |
|-------|------|------|------|
| 94.31 | 1317 | 7.2  | 34.5 |
| 85.92 | 1095 | 7.8  | 34.0 |
| 82.62 | 1002 | 8.2  | 19.8 |
| 89.27 | 1032 | 8.7  | 35.1 |
| 75.41 | 866  | 8.7  | 30.7 |
| 85.14 | 977  | 8.7  | 29.8 |
| 64.55 | 719  | 9.0  | 23.4 |
| 79.80 | 794  | 10.1 | 21.5 |
| 88.87 | 862  | 10.3 | 27.7 |
| 86.21 | 699  | 12.3 | 33.2 |
| 93.63 | 715  | 13.1 | 20.2 |

|        |     |      |           |
|--------|-----|------|-----------|
| 84.14  | 916 | 9.2  | 28.2      |
| 110.94 | 945 | 11.8 | 30.2 28.2 |

|        |     |      |      |
|--------|-----|------|------|
| 78.68  | 853 | 9.1  | 28.4 |
| 100.99 | 847 | 11.9 | 28.6 |

104.27      916 1/2      11.5

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