UNIVERSITY OF MINNESOTA
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Cooperating

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# A Preliminary Report of CROP PRODUCTION COSTS From Data Secured in 1939 on the FARM ACCOUNTING ROUTE In WINONA COUNTY, MINNESOTA

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## INTRODUCTION

This preliminary report is used to present the costs of producing the important crops grown on the farms included in the Farm Accounting Route in Winona County, Minnesota. The cooperation of a group of the progressive farmers in the county was secured in 1935 with the aid of the county agricultural agent, Mr. H. C. Pederson. During the five-year period a few farmers have elected to discontinue the work, and others have been added to take their place. A large proportion of the farmers have contributed records for each of the five years. These farmers have kept detailed records of time spent, operations performed, seed and twine used, yields, and other pertinent crop data. The costs of production for 1939 are presented for each farm; the average costs for each of the five years and for the five-year period are presented at the foot of each table. These data will enable the cooperating farmers to compare their costs with those of their neighbors. Such comparisons should suggest methods of improving their crop operations and increasing their returns.

Winona County lies in the southeastern part of the state. The topography varies from gently rolling to very hilly. Much of the county is covered with a deposit of very productive loessial material. The surface soil is deficient in lime, but lime deposits underlie it at a relatively shallow depth. The soil washes easily, with the steeper slopes subject to considerable erosion. The growing season varies from 140 to 160 days. The average rainfall is approximately 29 inches, 70 per cent of which is received during the months of April to September inclusive. Livestock and livestock products constitute the major sources of income.

The farms studied were larger than the average of the county. The distribution of acreage of the farms studied and of all farms in the county is given in Table 1.

Table 1
Distribution of Crop Acreage
Acres per Farm

| | Farms Studied | | | | | County* | | Farms Studied | | | | | County |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crop | 1935 | 1936 | 1937 | 1938 | 1939 | 1934 | Crop | 1935 | 1936 | 1937 | 1938 | 1939 | 1934 |
| No. of farms | 20 | 24 | 25 | 23 | 21 | - | | | | | | | |
| Corn | 26 | 32 | 28 | 28 | 28 | 19 | Alfalfa | 18 | 14 | 20 | 19 | 10 | 2 |
| Oats | 35 | 26 | 27 | 29 | 18 | 17 | Clov. & tim. | 11 | 22 | 17 | 14 | 18 | 8 |
| Barley | 51 | 38 | 27 | 28 | 25 | 15 | Other hay | 8 | 5 | 4 | 7 | 14 | 5 |
| Wheat | 11 | 8 | 11 | 10 | 2 | 2 | Other crops | 3 | 14 | 7 | 11 | 9 | 6 |
| Other grains | 22 | 20 | 16 | 10 | 26 | 7 | Total crop acreage | 185 | 179 | 157 | 156 | 150 | 81 |
| | | | | | | | Total acreage | 334 | 301 | 273 | 278 | 274 | 170 |

*1935 United States Census of Agriculture

### Soil Erosion a Problem

Soil erosion control is a definite problem on most of the farms studied. In fact, this area was selected because it offered an opportunity to study the effect of erosion control methods on farm organization and the cost of farm operation. A few fairly level farms were included for purposes of comparison. Most of the opera-

tors of the farms subject to erosion are cooperating with the Federal Soil Conservation Service in an erosion control program. The changes in field arrangements and cropping practices specified by that program were begun in 1936, and were almost completed in 1937. Difficulties in obtaining satisfactory stands of grass seedings has hindered the completion of the changes. The possible effects of these changes should be considered in comparing the crop statements for the five years.

The Crop Seasons of 1935, 1936, 1937, 1938, and 1939

Heavy precipitation, plus the moisture from the winter snows on unfrozen ground, provided moisture for good yields in 1935. (See Table 2.) Heavy summer rains, however, interfered with the curing of hay and drying of grain in the shock. Rainfall was satisfactory during the spring of 1936, but scant rains and high temperatures during July reduced the yields of all crops. Rainfall was again satisfactory in the spring of 1937, but scant rains and high temperatures during the early part of July reduced the yield of the second cutting of hay. Precipitation was extremely heavy during 1938 -- fifty-eight per cent above normal, and ten inches above the previous high reported by the Weather Bureau. Precipitation during the six months of April through September was seventy-four per cent above normal. Frequent rains falling after cutting reduced the quality of a large proportion of the hay, and caused a complete loss of part of it. Severe lodging and poor drying conditions caused heavy losses in both the quantity and quality of small grains harvested. Lower than normal temperatures and heavy rainfall through June and July gave the corn crop a slow start, but higher than normal temperatures and a late frost permitted the maturing of the heaviest corn crop of the four years of the study. Light precipitation during the spring of 1939 and heavy rains during the haying season resulted in low hay yields. Light precipitation in July limited the growth of second crop hay. Temperatures above normal and rains falling at critical times resulted in corn yields considerably above those of the preceding four years.

Table 2

Weather Conditions -- Rainfall and Temperature*

| | Rainfall (inches) | | | | | | Mean Temperature (degree F.) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Month | 1935 | 1936 | 1937 | 1938 | 1939 | Normal | 1935 | 1936 | 1937 | 1938 | 1939 | Normal |
| April | 2.34 | .78 | 2.37 | 4.01 | 2.16 | 2.43 | 45.5 | 42.0 | 45.5 | 48.0 | 45.4 | 46.8 |
| May | 4.80 | 5.60 | 3.71 | 6.63 | 1.41 | 4.03 | 54.2 | 65.3 | 59.9 | 58.2 | 65.7 | 58.5 |
| June | 5.56 | 2.14 | 4.51 | 6.32 | 5.89 | 4.66 | 64.6 | 66.9 | 69.7 | 67.6 | 71.3 | 68.3 |
| July | 4.62 | 1.10 | 1.46 | 8.27 | 2.04 | 3.05 | 78.2 | 79.9 | 75.1 | 72.5 | 75.3 | 72.8 |
| August | 5.28 | 4.32 | 4.19 | 3.43 | 5.39 | 3.51 | 71.5 | 76.1 | 76.3 | 72.6 | 70.2 | 69.6 |
| September | 4.08 | 3.48 | 2.24 | 8.24 | .99 | 3.50 | 63.1 | 66.1 | 63.9 | 62.6 | 67.2 | 61.9 |

*"Climatological Data," Minnesota Division of United States Weather Bureau; Average of reports for Winona (weight 2) and Rochester (weight 1).

The dates on which a majortiy of the cooperating farmers began some of the major field operations are presented in Table 3. Field work began earlier and proceeded more slowly in the spring of 1935 and 1938 than in 1936, 1937, and 1939. Silo filling began later in 1935 and 1938, the years of the heaviest rainfall, than in the other three years. The hay and small grain harvests began at approximately the same time each year.

Table 3
Dates* for Starting Specified Crop Operations -- Winona County

| Crop Operation | Year | | | | |
|---|---|---|---|---|---|
| | 1935 | 1936 | 1937 | 1938 | 1939 |
| Seeding small grain | April 13 | April 22 | April 20 | April 11 | April 24 |
| Planting corn | May 17 | May 13 | May 19 | May 21 | May 12 |
| Cutting alfalfa - 1st cutting | June 21 | June 13 | June 15 | June 15 | June 20 |
| Cutting small grain | July 20 | July 15 | July 19 | July 17 | July 19 |
| Cutting corn for silage | Sept. 19 | Sept. 8 | Sept. 6 | Sept. 19 | Sept. 7 |

*The date on which the largest number of farmers started work (i.e., the mode).

## METHODS OF COMPUTING DATA

The data for each farm were computed as if the farmer were a full-owner. The factors of cost were charged at local prices. Man labor was charged at 20 cents per hour. Horse work was charged at 8 cents per hour in 1935 and 1936, at 9 cents in 1937 and 1938, and at 10 cents in 1939. Two-plow tractors were charged at 45 cents per hour in 1935, at 50 cents in 1936 and 1937, and at 55 cents in 1938 and 1939; and three-plow tractors at 60 cents in 1935, at 65 cents in 1936 and 1937, and at 70 cents in 1938 and 1939. Seeds were charged at cost if purchased, otherwise at farm prices plus the cost of cleaning. Manure was charged at 50 cents per ton plus the cost of application. Forty per cent of the total manuring charge was allocated to the land covered and the balance was prorated on an acre basis to the remaining land normally receiving manure. Fifty per cent of the value of commercial fertilizer was charged against the crop in the year of application, twenty-five per cent the second year, and twenty-five per cent the third year. Flat charges per acre were made for seed for hay crops, for the use of machinery and for land. The cost of power was included with the cost of thresher, shredder and silo filler.

Many of the costs used in these calculations are not out-of-pocket cash costs. Care must, therefore, be used in interpreting these data; but since the costs have been calculated on the same basis for each farm, they can be used safely in comparison between farms.

## Cost per Acre of Producing Barley

| Farm No. | Costs | | | | | | | | | Yield bu. | Cost per bu. | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | To Harvest | | | Harvesting | | |
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 028 | $1.21 | $1.67 | $1.33 | $.17 | $ .73 | $ .60 | $1.05 | $3.50 | $10.26 | 31.7 | $.32 | 2.4 | 3.7 | 1.2 | 3.7 | 5.7 | .1 |
| 017 | 2.19 | 2.75 | 1.02 | .26 | 1.11 | 1.41 | 1.05 | 3.50 | 13.29 | 38.7 | .34 | 3.6 | 13.2 | .6 | 7.4 | 10.0 | - |
| 123 | 1.99 | 1.86 | 1.15 | .27 | 1.09 | 3.30 | 1.05 | 3.50 | 14.21 | 36.4 | .39 | 2.5 | 2.6 | 1.6 | 7.4 | 4.2 | .6 |
| 236 | 1.49 | 2.14 | .94 | .23 | .87 | 1.68 | 1.05 | 3.50 | 11.90 | 29.2 | .41 | 2.5 | 2.3 | 1.9 | 5.0 | 5.3 | .6 |
| 014 | 1.43 | 2.28 | 1.24 | .33 | .83 | 1.23 | 1.05 | 3.50 | 11.89 | 27.6 | .43 | 2.7 | 7.6 | 1.2 | 4.4 | 6.6 | - |
| 027 | 2.48 | 2.48 | 1.05 | .23 | .91 | 2.29 | 1.05 | 3.50 | 13.99 | 30.2 | .46 | 3.0 | 3.8 | 2.0 | 9.4 | 6.8 | .6 |
| 159 | 1.31 | 1.97 | .90 | .18 | .80 | 2.46 | 1.05 | 3.50 | 12.17 | 26.7 | .46 | 2.0 | - | 2.0 | 4.5 | 3.9 | .4 |
| 119 | .94 | 1.75 | 1.26 | .25 | .46 | .81 | 1.10 | 3.50 | 10.07 | 21.3 | .47 | 2.2 | 1.9 | 1.7 | 2.5 | 1.3 | 1.0 |
| 018 | 1.62 | 2.52 | 1.20 | .21 | .77 | 1.76 | 1.05 | 3.50 | 12.63 | 25.5 | .50 | 4.2 | 7.9 | 1.9 | 3.9 | 6.7 | - |
| 239 | 1.68 | 2.15 | 1.23 | .17 | .66 | .97 | 1.12 | 3.50 | 11.48 | 22.2 | .52 | 3.4 | 5.3 | 1.7 | 5.0 | 3.8 | .6 |
| 189 | 1.74 | 2.68 | 1.25 | .33 | .65 | 1.91 | 1.05 | 3.50 | 13.11 | 21.7 | .60 | 4.0 | 8.9 | 1.5 | 4.7 | 3.7 | .5 |
| 229 | 1.47 | 1.22 | 1.47 | .20 | .65 | 3.61 | 1.05 | 3.50 | 13.17 | 21.6 | .61 | 1.6 | 3.3 | .6 | 5.7 | 5.5 | - |
| 118 | 1.80 | 2.27 | 1.69 | .23 | .62 | 2.14 | 1.05 | 3.50 | 13.30 | 20.6 | .64 | 2.9 | 4.4 | 1.8 | 6.1 | 4.2 | .8 |
| 179 | 1.62 | 2.37 | 1.16 | .19 | .53 | 1.72 | 1.05 | 3.50 | 12.14 | 17.5 | .69 | 3.3 | 5.2 | 2.1 | 4.8 | 7.1 | .0 |
| 129 | 1.28 | 2.91 | 1.03 | .25 | .70 | 1.62 | 1.19 | 3.50 | 12.48 | 17.4 | .72 | 3.2 | 3.0 | 2.5 | 3.2 | 1.4 | 1.0 |
| 143 | 1.74 | 2.95 | .87 | .21 | .39 | .72 | 1.05 | 3.50 | 11.43 | 13.1 | .87 | 3.9 | 3.0 | 2.7 | 4.8 | 7.4 | - |
| 116 | 1.07 | 1.78 | 1.17 | .07 | .25 | .96 | 1.05 | 3.50 | 9.85 | 8.2 | 1.21 | 2.3 | - | 2.3 | 3.0 | 2.0 | .5 |
| Average | | | | | | | | | | | | | | | | | |
| 1939 | 1.59 | 2.22 | 1.17 | .22 | .71 | 1.72 | 1.07 | 3.50 | 12.20 | 24.1 | .51 | 2.9 | 4.5 | 1.7 | 5.0 | 5.0 | .4 |
| 1938 | 1.93 | 2.31 | 1.63 | .21 | .78 | 1.96 | 1.05 | 3.50 | 13.37 | 25.2 | .53 | 3.4 | 7.0 | 1.4 | 6.2 | 5.9 | .5 |
| 1937 | 1.93 | 2.23 | 2.41 | .30 | .77 | 1.68 | 1.05 | 3.50 | 13.87 | 26.2 | .53 | 3.4 | 7.7 | 1.4 | 6.2 | 6.2 | .4 |
| 1936 | 1.62 | 2.07 | 1.55 | .17 | .49 | 1.29 | 1.05 | 3.50 | 11.74 | 16.8 | .70 | 3.7 | 10.2 | 1.1 | 4.4 | 5.2 | .3 |
| 1935 | 1.61 | 1.84 | 2.12 | .16 | .61 | .79 | 1.06 | 3.50 | 11.69 | 20.5 | .57 | 3.1 | 10.3 | .8 | 4.9 | 5.3 | .3 |
| Five years | 1.74 | 2.13 | 1.78 | .21 | .67 | 1.49 | 1.05 | 3.50 | 12.57 | 22.6 | .56 | 3.3 | 7.9 | 1.3 | 5.3 | 5.5 | .4 |

## Cost per Acre of Producing Oats

| Farm No. | Costs | | | | | | | | | Yield | Cost | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | bu. | per bu. | To Harvest Man | To Harvest Horse | To Harvest Tractor | Harvesting Man | Harvesting Horse | Harvesting Tractor |
| 119 | $ .75 | $1.18 | $ .72 | $.21 | $ .57 | $ .69 | $1.08 | $3.50 | $ 8.70 | 45.9 | $.19 | 1.8 | 1.6 | 1.3 | 1.9 | 1.3 | .8 |
| 017 | 2.16 | 2.80 | 1.01 | .26 | 1.91 | 1.38 | 1.05 | 3.50 | 14.07 | 69.8 | .20 | 4.4 | 8.9 | 1.5 | 6.4 | 8.4 | - |
| 143 | 1.85 | 3.30 | .88 | .20 | 1.95 | .72 | 1.05 | 3.50 | 13.45 | 65.1 | .21 | 4.2 | 3.1 | 3.0 | 5.0 | 9.0 | - |
| 123 | 1.43 | 1.89 | 1.16 | .22 | 2.00 | 3.00 | 1.05 | 3.50 | 14.25 | 66.8 | .21 | 2.6 | 2.9 | 1.6 | 4.6 | 2.6 | .8 |
| 018 | 2.21 | 2.91 | .68 | .19 | 1.59 | 1.98 | 1.05 | 3.50 | 14.11 | 53.1 | .27 | 3.7 | 3.6 | 2.4 | 7.4 | 12.1 | - |
| 129 | 1.09 | 2.18 | .78 | .20 | .77 | 1.65 | 1.11 | 3.50 | 11.28 | 41.3 | .27 | 3.1 | 2.8 | 2.4 | 2.3 | 1.4 | .7 |
| 028 | 1.19 | 1.81 | 1.04 | .16 | .93 | 1.43 | 1.05 | 3.50 | 11.11 | 40.5 | .27 | 2.2 | 1.8 | 1.7 | 3.8 | 5.8 | .2 |
| 014 | 1.34 | 2.21 | .90 | .31 | 1.23 | 1.57 | 1.05 | 3.50 | 12.11 | 40.9 | .30 | 2.7 | 9.5 | .9 | 4.0 | 6.4 | - |
| 179 | 1.80 | 2.57 | .70 | .19 | 1.23 | 1.08 | 1.05 | 3.50 | 12.12 | 41.0 | .30 | 3.9 | 14.3 | .7 | 5.1 | 5.6 | .3 |
| 159 | 1.32 | 1.99 | .82 | .18 | 1.02 | .53 | 1.05 | 3.50 | 10.41 | 34.1 | .31 | 1.8 | - | 1.8 | 4.8 | 4.7 | .5 |
| 118 | 1.68 | 2.34 | .88 | .20 | 1.21 | 1.95 | 1.05 | 3.50 | 12.81 | 40.5 | .32 | 3.2 | 6.4 | 1.6 | 5.2 | 5.4 | .5 |
| 139 | 1.26 | 1.62 | .83 | .23 | 1.00 | 1.77 | 1.05 | 3.50 | 11.26 | 33.4 | .34 | 2.6 | 10.3 | - | 3.7 | 5.9 | - |
| 027 | 1.97 | 2.43 | .74 | .13 | 1.11 | 2.22 | 1.05 | 3.50 | 13.15 | 38.1 | .34 | 3.3 | 4.3 | 2.2 | 6.5 | 4.6 | .6 |
| 236 | 1.20 | 1.77 | .75 | .23 | .91 | 1.59 | 1.05 | 3.50 | 11.00 | 30.4 | .36 | 2.3 | 2.5 | 1.6 | 3.7 | 3.2 | .5 |
| 226 | 1.85 | 2.15 | 1.40 | .20 | 1.38 | 2.92 | 1.05 | 3.50 | 14.45 | 39.5 | .36 | 2.9 | 4.2 | 1.6 | 6.3 | 4.2 | .8 |
| 116 | 1.07 | 1.60 | .97 | .11 | .68 | 1.45 | 1.05 | 3.50 | 10.43 | 22.6 | .46 | 2.2 | - | 2.1 | 3.2 | 2.4 | .3 |
| Average - | | | | | | | | | | | | | | | | | |
| 1939 | 1.51 | 2.17 | .89 | .20 | 1.22 | 1.62 | 1.06 | 3.50 | 12.17 | 43.9 | .28 | 2.9 | 4.8 | 1.6 | 4.6 | 5.2 | .4 |
| 1938 | 2.00 | 2.35 | .89 | .20 | 1.00 | 1.68 | 1.05 | 3.50 | 12.67 | 33.0 | .38 | 3.4 | 8.2 | 1.3 | 6.6 | 6.0 | .5 |
| 1937 | 1.78 | 2.16 | 1.29 | .29 | 1.26 | 1.78 | 1.05 | 3.50 | 13.11 | 42.4 | .31 | 3.4 | 8.6 | 1.2 | 5.5 | 6.2 | .2 |
| 1936 | 1.65 | 2.13 | .87 | .18 | .87 | 1.10 | 1.05 | 3.50 | 11.35 | 28.8 | .39 | 4.0 | 12.2 | 1.0 | 4.2 | 4.8 | .3 |
| 1935 | 1.63 | 1.94 | 1.34 | .17 | .90 | .75 | 1.06 | 3.50 | 11.29 | 31.8 | .36 | 3.2 | 11.6 | .7 | 4.9 | 5.9 | .3 |
| Five years | 1.71 | 2.15 | 1.06 | .21 | 1.05 | 1.39 | 1.05 | 3.50 | 12.12 | 36.0 | .34 | 3.4 | 9.1 | 1.2 | 5.2 | 5.6 | .3 |

## Cost per Acre of Producing Winter Wheat

| Farm No. | Costs | | | | | | | | Yield | Cost | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | bu. | per bu. | To Harvest | | | Harvesting | |
| | | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 236 | $1.84 | $2.18 | $ .74 | $.16 | $.57 | $2.37 | $1.05 | $3.50 | $12.41 | 18.9 | $.66 | 2.2 | 3.8 | 1.2 | 7.0 | 6.4 | .9 |
| 189 | 1.70 | 2.85 | .86 | .30 | .37 | 1.91 | 1.05 | 3.50 | 12.54 | 12.2 | 1.03 | 3.9 | 7.5 | 2.0 | 4.6 | 3.3 | .5 |
| 179 | 1.40 | 2.05 | 1.20 | .15 | .29 | 1.04 | 1.05 | 3.50 | 10.68 | 9.7 | 1.10 | 3.1 | 2.5 | 2.2 | 3.8 | 5.6 | - |
| 018 | 2.15 | 2.51 | 1.07 | .12 | .31 | 2.42 | 1.05 | 3.50 | 13.13 | 10.2 | 1.28 | 3.4 | 9.8 | .4 | 7.4 | 13.2 | - |
| 229 | 2.19 | 3.34 | 1.62 | .10 | .27 | 3.74 | 1.05 | 3.50 | 15.81 | 9.1 | 1.74 | 6.6 | 7.7 | 3.7 | 4.4 | 5.2 | - |
| 118 | 1.50 | 2.08 | 1.33 | .14 | .19 | 1.87 | 1.05 | 3.50 | 11.66 | 6.5 | 1.80 | 2.9 | 3.2 | 2.0 | 4.6 | 4.2 | .4 |
| 129 | 2.08 | 2.94 | 1.08 | .10 | .18 | 1.46 | 1.05 | 3.50 | 12.39 | 6.0 | 2.06 | 3.1 | 4.0 | 2.1 | 7.3 | 10.4 | - |
| 143 | 2.32 | 4.93 | 1.79 | .14 | .14 | .72 | 1.35 | 3.50 | 14.89 | 4.6 | 3.23 | 7.8 | 4.0 | 5.3 | 3.8 | 8.5 | - |
| Average | | | | | | | | | | | | | | | | | |
| 1939 | 1.90 | 2.86 | 1.21 | .15 | .29 | 1.94 | 1.09 | 3.50 | 12.94 | 9.6 | 1.35 | 4.1 | 5.3 | 2.4 | 5.4 | 7.1 | .2 |
| 1938 | 2.01 | 2.45 | 1.71 | .18 | .35 | 1.61 | 1.11 | 3.50 | 12.92 | 11.1 | 1.16 | 3.6 | 7.1 | 1.8 | 6.4 | 6.2 | .3 |
| 1937 | 1.84 | 2.17 | 2.32 | .24 | .57 | 1.56 | 1.05 | 3.50 | 13.25 | 16.9 | .78 | 3.6 | 9.9 | 1.0 | 5.6 | 6.0 | .3 |
| 1936 | 1.94 | 2.31 | 1.95 | .16 | .67 | 1.08 | 1.16 | 3.50 | 12.77 | 16.8 | .76 | 4.2 | 13.7 | .8 | 5.5 | 7.0 | .2 |
| 1935 | 2.22 | 2.08 | 1.97 | .21 | .75 | .58 | 1.05 | 3.50 | 12.36 | 23.5 | .53 | 2.7 | 9.6 | .7 | 8.4 | 9.4 | .3 |
| Five years | 1.98 | 2.37 | 1.83 | .19 | .53 | 1.36 | 1.09 | 3.50 | 12.85 | 15.6 | .82 | 3.6 | 9.1 | 1.3 | 6.3 | 7.1 | .3 |

## Cost per Acre of Producing Spring Wheat

| Farm No. | Costs | | | | | | | | Yield | Cost | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | bu. | per bu. | To Harvest | | | Harvesting | |
| | | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 119 | $ .82 | $1.90 | $ .89 | $.16 | $.46 | $ .67 | $1.10 | $3.50 | $ 9.50 | 12.4 | $.76 | 1.9 | 2.0 | 1.4 | 2.2 | - | 1.4 |
| 028 | 1.23 | 2.17 | .98 | .13 | .27 | .61 | 1.05 | 3.50 | 9.94 | 11.6 | .85 | 3.3 | 1.8 | 2.8 | 2.8 | 4.2 | - |
| 017 | 2.40 | 3.03 | 1.22 | .16 | .28 | 1.61 | 1.05 | 3.50 | 13.25 | 9.8 | 1.35 | 4.6 | 15.2 | .8 | 7.4 | 9.8 | - |
| 027 | 2.13 | 2.28 | 1.26 | .22 | .26 | 1.98 | 1.05 | 3.50 | 12.68 | 8.7 | 1.46 | 2.9 | 3.2 | 2.1 | 7.8 | 3.7 | .8 |
| 139 | 1.44 | 2.07 | 1.33 | .07 | .15 | 1.77 | 1.05 | 3.50 | 11.38 | 5.0 | 2.28 | 3.3 | 13.3 | - | 3.9 | 7.2 | - |
| 109 | 2.06 | 2.57 | 1.67 | .27 | .14 | 1.91 | 1.05 | 3.50 | 13.17 | 4.6 | 2.87 | 3.6 | 2.5 | 2.5 | 6.7 | 3.7 | 1.0 |
| Average | | | | | | | | | | | | | | | | | |
| 1939 | 1.68 | 2.34 | 1.22 | .17 | .26 | 1.42 | 1.06 | 3.50 | 11.65 | 8.7 | 1.34 | 3.3 | 6.3 | 1.6 | 5.1 | 4.8 | .5 |
| 1937 | 1.67 | 2.25 | 2.61 | .25 | .49 | 1.05 | 1.05 | 3.50 | 12.87 | 15.0 | .86 | 3.3 | 6.4 | 1.6 | 5.0 | 6.7 | .2 |
| 1935 | 1.70 | 1.85 | 1.83 | .18 | .42 | .68 | 1.05 | 3.50 | 11.21 | 11.0 | 1.02 | 3.2 | 10.8 | .6 | 5.3 | 5.2 | .4 |
| 3 Yrs | 1.68 | 2.15 | 1.89 | .20 | .39 | 1.05 | 1.05 | 3.50 | 11.91 | 11.5 | 1.04 | 3.3 | 7.8 | 1.3 | 5.1 | 5.6 | .4 |

## Cost per Acre of Producing Oats and Barley

| Farm No. | Costs | | | | | | | | | Yield Bu. | Cost per bu. | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | | | To Harvest | | | Harvesting | | |
| | | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 109 | $1.80 | $2.41 | $ .94 | $.33 | $1.46 | $2.07 | $1.05 | $3.50 | $13.56 | 48.7 | $.28 | 3.3 | 3.3 | 2.0 | 5.7 | 5.9 | .7 |
| 017 | 1.89 | 2.22 | .90 | .17 | 1.18 | 1.56 | 1.05 | 3.50 | 12.47 | 38.6 | .32 | 4.1 | 11.3 | .5 | 5.3 | 7.1 | - |
| 123 | 1.63 | 1.91 | 1.03 | .24 | 1.37 | 3.44 | 1.05 | 3.50 | 14.17 | 42.6 | .33 | 2.8 | 3.0 | 1.8 | 5.3 | 1.8 | .8 |
| 236 | 1.51 | 2.03 | 1.19 | .26 | 1.09 | 1.60 | 1.05 | 3.50 | 12.23 | 36.5 | .34 | 2.4 | 1.9 | 1.9 | 5.1 | 4.2 | .7 |
| 229 | 1.83 | 1.88 | 1.39 | .22 | 1.01 | 1.20 | 1.05 | 3.50 | 12.08 | 33.8 | .36 | 3.2 | 4.0 | 1.7 | 5.9 | 5.7 | - |
| 226 | 1.56 | 1.89 | 1.32 | .21 | 1.19 | 3.37 | 1.05 | 3.50 | 14.09 | 34.1 | .41 | 2.5 | 2.7 | 1.6 | 5.3 | 4.2 | .5 |
| 139 | 1.50 | 1.92 | 1.07 | .18 | .77 | 1.77 | 1.05 | 3.50 | 11.76 | 25.7 | .46 | 2.8 | 10.1 | .3 | 4.7 | 7.4 | - |
| 239 | 1.61 | 1.64 | .85 | .19 | .72 | .91 | 1.11 | 3.50 | 10.53 | 20.8 | .51 | 2.4 | 3.7 | 1.2 | 5.6 | 3.5 | .5 |
| 143 | 1.67 | 3.51 | .81 | .20 | .50 | .82 | 1.05 | 3.50 | 12.06 | 15.0 | .80 | 5.0 | 3.5 | 3.7 | 3.4 | 5.9 | - |
| Average | | | | | | | | | | | | | | | | | |
| 1939 | 1.66 | 2.16 | 1.06 | .22 | 1.03 | 1.86 | 1.06 | 3.50 | 12.55 | 32.9 | .38 | 3.2 | 4.8 | 1.6 | 5.1 | 5.1 | .4 |
| 1938 | 2.27 | 2.35 | 1.25 | .22 | 1.10 | 2.01 | 1.05 | 3.50 | 13.75 | 34.2 | .40 | 3.8 | 10.8 | 1.0 | 7.6 | 6.7 | .4 |
| 1937 | 2.03 | 2.26 | 2.13 | .27 | 1.40 | 1.64 | 1.05 | 3.50 | 14.28 | 40.2 | .36 | 3.9 | 9.3 | 1.3 | 6.1 | 5.6 | .4 |
| 1936 | 1.83 | 2.04 | 1.28 | .22 | .82 | 1.59 | 1.05 | 3.50 | 12.33 | 27.5 | .45 | 4.0 | 12.0 | .8 | 5.1 | 5.2 | .5 |
| 1935 | 1.52 | 1.90 | 2.00 | .16 | .67 | .35 | 1.05 | 3.50 | 11.15 | 21.3 | .52 | 3.3 | 12.6 | .5 | 4.3 | 4.0 | .5 |
| Five years | 1.86 | 2.14 | 1.55 | .22 | 1.00 | 1.49 | 1.05 | 3.50 | 12.81 | 31.2 | .41 | 3.6 | 9.9 | 1.0 | 5.6 | 5.3 | .4 |

## Cost per Acre of Producing Flax

| Farm No. | Costs | | | | | | | | | Yield Bu. | Cost per bu. | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Thresh-ing | Manure | Mach-inery | Land | Total | | | To Harvest | | | Harvesting | | |
| | | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 027 | $2.31 | $2.78 | $ .84 | $.27 | $1.75 | $1.86 | $1.05 | $3.50 | $14.36 | 19.4 | $.74 | 3.1 | 2.6 | 2.4 | 8.5 | 6.9 | .9 |
| 014 | 2.01 | 2.98 | 1.50 | .15 | 1.54 | 1.12 | 1.05 | 3.50 | 13.85 | 15.4 | .90 | 4.1 | 14.2 | 1.0 | 5.9 | 8.6 | - |
| 129 | 1.31 | 3.71 | 1.23 | .20 | .27 | 1.46 | 1.05 | 3.50 | 12.73 | 9.9 | 1.29 | 4.7 | 2.4 | 4.1 | 1.8 | 6.3 | .3 |
| 226 | 2.29 | 2.94 | 1.71 | .23 | 1.06 | 2.23 | 1.05 | 3.50 | 15.01 | 10.5 | 1.42 | 3.7 | 3.8 | 2.3 | 7.8 | 8.8 | .7 |
| 123 | 2.68 | 2.98 | 1.61 | .31 | .64 | 2.99 | 1.05 | 3.50 | 15.76 | 7.1 | 2.23 | 3.5 | 3.9 | 2.2 | 9.9 | 8.9 | .9 |
| 118 | 2.84 | 2.98 | 3.20 | .36 | .58 | 3.90 | 1.05 | 3.50 | 18.41 | 5.8 | 3.17 | 2.7 | 1.3 | 2.3 | 11.5 | 9.4 | 1.1 |
| Average | | | | | | | | | | | | | | | | | |
| 1939 | 2.24 | 3.06 | 1.68 | .25 | .98 | 2.26 | 1.05 | 3.50 | 15.02 | 11.4 | 1.32 | 3.6 | 4.7 | 2.4 | 7.6 | 8.2 | .6 |
| 1935 | 1.41 | 2.51 | 1.67 | .07 | .84 | .55 | 1.05 | 3.50 | 11.60 | 8.4 | 1.38 | 3.1 | 4.5 | 2.0 | 3.9 | 6.6 | - |
| 2 yrs. | 1.82 | 2.79 | 1.68 | .16 | .91 | 1.40 | 1.05 | 3.50 | 13.31 | 9.9 | 1.34 | 3.4 | 4.6 | 2.2 | 5.8 | 7.4 | .3 |

## Cost per Acre of Producing Corn (Husked)

| Farm No. | Costs | | | | | | | | Yield bu. | Cost per bu. | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Husker | Manure | Mach-inery | Land | Total | | | To Harvest | | | Harvesting | | |
| | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 028 | $4.44 | $4.15 | $.79 | $ - | $ .63 | $1.55 | $3.50 | $15.06 | 70.5 | $.21 | 6.1 | 10.9 | 2.2 | 16.1 | 18.3 | - |
| 116 | 1.97 | 3.99 | .80 | 1.00 | 1.84 | 1.55 | 3.50 | 14.65 | 70.9 | .21 | 5.4 | 1.9 | 4.5 | 4.5 | 3.9 | 1.7 |
| 027 | 2.51 | 4.58 | .74 | 1.20 | 1.88 | 1.55 | 3.50 | 15.96 | 70.6 | .23 | 7.2 | 4.0 | 5.4 | 5.3 | 5.1 | 1.0 |
| 236 | 2.32 | 3.64 | .28 | - | 2.92 | 1.55 | 3.50 | 14.71 | 65.3 | .23 | 7.9 | 13.3 | 2.0 | 6.2 | 12.1 | - |
| 119 | 2.07 | 3.90 | .54 | 1.00 | 2.58 | 1.55 | 3.50 | 15.14 | 57.5 | .26 | 5.3 | 1.8 | 4.3 | 5.1 | 4.8 | 1.6 |
| 229 | 5.90 | 4.90 | .52 | - | 2.56 | 1.55 | 3.50 | 18.93 | 72.8 | .26 | 17.8 | 20.9 | 1.6 | 11.7 | 19.1 | - |
| 189 | 3.60 | 5.82 | .75 | 1.22 | 2.93 | 1.55 | 3.50 | 19.37 | 73.7 | .26 | 11.9 | 22.1 | 2.7 | 6.1 | 6.5 | 1.5 |
| 226 | 5.14 | 6.41 | .56 | - | 2.63 | 1.55 | 3.50 | 19.79 | 76.6 | .26 | 5.8 | 2.0 | 4.8 | 19.9 | 35.4 | - |
| 018 | 5.35 | 5.67 | .78 | - | .57 | 1.55 | 3.50 | 17.42 | 61.5 | .28 | 10.5 | 21.4 | 2.0 | 16.2 | 24.4 | - |
| 111 | 4.72 | 5.66 | .85 | - | .57 | 1.55 | 3.50 | 16.85 | 56.7 | .30 | 12.9 | 38.8 | - | 10.7 | 17.8 | - |
| 123 | 4.37 | 5.18 | .60 | - | 6.39 | 1.55 | 3.50 | 21.59 | 72.1 | .30 | 10.1 | 17.6 | 2.0 | 11.8 | 23.2 | - |
| 159 | 3.75 | 5.27 | 1.52 | - | 1.51 | 1.55 | 3.50 | 17.10 | 50.8 | .34 | 5.1 | 4.8 | 3.2 | 13.7 | 26.8 | - |
| 118 | 4.31 | 5.11 | .72 | .87 | 3.58 | 1.55 | 3.50 | 19.64 | 49.9 | .39 | 12.1 | 19.2 | 2.0 | 9.5 | 18.0 | .5 |
| 179 | 2.66 | 4.25 | .68 | 1.00 | 1.48 | 1.55 | 3.50 | 15.12 | 38.6 | .39 | 9.4 | 13.2 | 3.2 | 4.0 | 4.0 | 1.4 |
| 129 | 3.40 | 5.81 | .84 | 1.00 | 6.58 | 1.55 | 3.50 | 22.68 | 52.0 | .44 | 11.4 | 15.7 | 3.5 | 5.6 | 6.9 | 1.6 |
| Average | | | | | | | | | | | | | | | | |
| 1939 | 3.80 | 4.96 | .73 | .49 | 2.57 | 1.55 | 3.50 | 17.60 | 62.6 | .28 | 9.2 | 13.8 | 2.9 | 9.8 | 15.1 | .6 |
| 1938 | 4.13 | 5.13 | .73 | .36 | 3.74 | 1.55 | 3.50 | 19.14 | 59.3 | .32 | 10.4 | 18.0 | 2.7 | 10.3 | 16.6 | .6 |
| 1937 | 4.01 | 4.36 | .67 | .28 | 2.26 | 1.55 | 3.50 | 16.63 | 46.0 | .36 | 9.7 | 17.3 | 2.5 | 10.3 | 14.3 | .3 |
| 1936 | 4.62 | 4.16 | .76 | - | 3.12 | 1.55 | 3.50 | 17.71 | 31.4 | .56 | 11.8 | 24.3 | 1.4 | 11.3 | 17.3 | - |
| 1935 | 4.45 | 4.40 | .42 | .19 | 1.80 | 1.55 | 3.50 | 16.31 | 38.1 | .43 | 11.8 | 28.1 | 1.1 | 10.4 | 17.0 | .3 |
| Five years | 4.20 | 4.60 | .66 | .27 | 2.70 | 1.55 | 3.50 | 17.48 | 47.5 | .37 | 10.6 | 20.3 | 2.1 | 10.4 | 14.1 | .4 |

## Cost per Acre of Producing Corn (Shredded)

| Farm No. | Costs | | | | | | | | | Stover Credit | Net Cost | Yield bu. | Cost per bu. | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Shredder | Manure | Machinery | Land | Total | | | | | To Harvest | | | Harvesting | | |
| | | | | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 123 | $5.04 | $4.87 | $ .62 | $.52 | $1.91 | $6.46 | $2.50 | $3.50 | $25.42 | $4.46 | $20.96 | 88.4 | $.24 | 10.2 | 17.8 | 2.0 | 15.0 | 20.0 | - |
| 028 | 5.62 | 4.74 | .80 | .33 | 2.69 | .62 | 2.50 | 3.50 | 20.80 | 3.83 | 16.97 | 70.5 | .24 | 5.9 | 10.4 | 2.1 | 22.2 | 25.3 | - |
| 014 | 5.20 | 5.74 | 1.00 | .33 | 2.05 | 1.27 | 2.50 | 3.50 | 21.59 | 3.64 | 17.95 | 72.0 | .25 | 8.6 | 17.9 | 2.5 | 17.4 | 22.0 | - |
| 027 | 3.57 | 4.45 | .48 | .29 | 2.29 | 2.83 | 2.50 | 3.50 | 19.91 | 3.20 | 16.71 | 61.1 | .27 | 5.9 | 5.0 | 4.2 | 11.9 | 10.2 | 1.1 |
| 018 | 6.35 | 6.03 | .69 | .35 | 1.65 | 3.01 | 2.53 | 3.50 | 24.11 | 3.31 | 20.80 | 66.8 | .31 | 11.9 | 23.0 | 1.8 | 19.9 | 27.3 | - |
| 239 | 6.15 | 4.26 | .55 | .54 | 2.29 | 4.52 | 2.64 | 3.50 | 24.45 | 3.53 | 20.92 | 67.1 | .31 | 8.2 | 15.3 | 2.4 | 22.5 | 14.4 | - |
| 139 | 6.38 | 5.45 | 1.07 | .43 | 3.23 | 5.67 | 2.50 | 3.50 | 28.23 | 3.47 | 24.76 | 72.2 | .34 | 9.0 | 26.5 | - | 22.9 | 27.9 | - |
| 109 | 5.67 | 4.98 | 1.68 | .40 | 2.83 | 8.14 | 2.50 | 3.50 | 29.70 | 3.89 | 25.81 | 74.4 | .35 | 5.6 | 6.8 | 2.5 | 22.7 | 29.2 | - |
| 017 | 6.47 | 4.83 | .23 | .33 | 2.18 | 3.66 | 2.50 | 3.50 | 23.70 | 2.69 | 21.01 | 59.2 | .36 | 8.7 | 17.5 | .6 | 23.7 | 26.6 | - |
| 111 | 6.22 | 5.79 | .98 | .37 | 2.25 | 1.31 | 2.50 | 3.50 | 22.92 | 2.22 | 20.70 | 53.7 | .38 | 12.7 | 38.2 | - | 18.4 | 19.7 | - |
| 118 | 5.29 | 5.01 | .71 | .22 | 2.23 | 3.56 | 2.50 | 3.50 | 23.02 | 2.76 | 20.26 | 49.6 | .41 | 11.9 | 19.0 | 2.0 | 14.5 | 19.9 | - |
| Average | | | | | | | | | | | | | | | | | | | |
| 1939 | 5.63 | 5.10 | .80 | .37 | 2.33 | 3.74 | 2.52 | 3.50 | 23.99 | 3.36 | 20.63 | 66.8 | .31 | 9.0 | 17.9 | 1.8 | 19.2 | 22.1 | .1 |
| 1938 | 5.82 | 5.15 | .66 | .45 | 2.04 | 3.80 | 2.50 | 3.50 | 23.92 | 3.32 | 20.60 | 55.2 | .37 | 10.4 | 21.9 | 1.9 | 18.7 | 21.8 | .1 |
| 1937 | 5.74 | 4.93 | .52 | .49 | 2.23 | 3.48 | 2.50 | 3.50 | 23.39 | 2.69 | 20.70 | 49.0 | .42 | 11.1 | 22.8 | 1.8 | 17.6 | 21.2 | - |
| 1936 | 5.18 | 4.34 | .64 | .25 | 1.49 | 3.08 | 2.48 | 3.50 | 20.96 | 2.08 | 18.88 | 27.5 | .69 | 10.5 | 24.1 | 1.2 | 15.4 | 21.8 | - |
| 1935 | 5.92 | 4.83 | .48 | .27 | 1.74 | 2.48 | 2.50 | 3.50 | 21.72 | 1.18 | 20.54 | 32.3 | .64 | 11.9 | 28.1 | .9 | 17.6 | 25.8 | - |
| Five years | 5.66 | 4.87 | .62 | .36 | 1.97 | 3.32 | 2.50 | 3.50 | 22.80 | 2.53 | 20.27 | 46.2 | .44 | 10.6 | 23.0 | 1.5 | 17.7 | 22.5 | .0 |

## Cost per Acre of Producing Corn Silage

| Farm No. | Costs | | | | | | | | | Corn Credit | Net Cost | Yield tons | Cost per ton | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | To Harvest | | | Harvesting | | |
| | Man labor | Horse & Tractor | Seed | Twine | Cutter | Manure | Machinery | Land | Total | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 226 | $3.10 | $4.82 | $ .52 | $.32 | $1.39 | $2.83 | $2.22 | $3.50 | $18.70 | $1.07 | $17.63 | 11.2 | $1.14 | 5.5 | 1.6 | 4.7 | 10.0 | 11.6 | 1.7 |
| 119 | 3.10 | 3.84 | .52 | .34 | 2.16 | 2.56 | 2.50 | 3.50 | 18.52 | .64 | 17.88 | 12.9 | 1.39 | 5.2 | 1.8 | 4.3 | 10.3 | 13.1 | - |
| 014 | 4.28 | 5.38 | .95 | .32 | 2.13 | 1.28 | 2.50 | 3.50 | 20.34 | .51 | 19.83 | 11.9 | 1.67 | 8.6 | 17.9 | 2.5 | 12.8 | 18.4 | - |
| 123 | 5.71 | 5.77 | .54 | .54 | 3.23 | 5.64 | 2.50 | 3.50 | 27.43 | 2.20 | 25.23 | 14.2 | 1.78 | 10.1 | 17.5 | 2.1 | 18.4 | 23.7 | .9 |
| 027 | 3.52 | 5.04 | .32 | .28 | 3.20 | 4.18 | 2.50 | 3.50 | 22.54 | 1.31 | 21.23 | 11.5 | 1.84 | 5.5 | 2.8 | 4.4 | 12.1 | 13.2 | 1.8 |
| 116 | 3.12 | 4.53 | .33 | .27 | 2.24 | 1.71 | 2.50 | 3.50 | 18.70 | 2.89 | 15.81 | 8.6 | 1.84 | 5.6 | 1.6 | 4.8 | 10.0 | 11.7 | 1.0 |
| 189 | 4.32 | 5.34 | 1.02 | .34 | 2.72 | 2.66 | 2.50 | 3.50 | 22.40 | 1.77 | 20.63 | 11.2 | 1.84 | 8.3 | 13.4 | 2.5 | 13.3 | 22.8 | - |
| 129 | 3.79 | 4.96 | .84 | .31 | 2.21 | 3.98 | 2.50 | 3.50 | 22.09 | 1.23 | 20.86 | 11.3 | 1.85 | 10.9 | 17.0 | 2.4 | 8.1 | 15.5 | - |
| 179 | 3.29 | 3.54 | .42 | .46 | 2.00 | 2.88 | 2.50 | 3.50 | 18.59 | 3.70 | 14.89 | 7.9 | 1.87 | 7.3 | 14.2 | 1.5 | 9.2 | 12.9 | - |
| 028 | 3.36 | 3.90 | .72 | .31 | 1.86 | 1.95 | 2.50 | 3.50 | 18.10 | - | 18.10 | 9.5 | 1.90 | 7.1 | 13.6 | 1.6 | 9.7 | 16.3 | - |
| 111 | 4.25 | 3.46 | .39 | .33 | 3.15 | .71 | 2.50 | 3.50 | 18.29 | 2.04 | 16.25 | 8.5 | 1.91 | 7.2 | 22.0 | - | 14.1 | 12.6 | - |
| 109 | 3.26 | 4.38 | 1.09 | .43 | 1.97 | 3.24 | 2.50 | 3.50 | 20.37 | .61 | 19.76 | 10.3 | 1.92 | 7.0 | 5.5 | 4.5 | 9.3 | 13.4 | - |
| 236 | 3.81 | 4.36 | .95 | .27 | 1.94 | 2.28 | 2.50 | 3.50 | 19.61 | .98 | 18.63 | 9.7 | 1.92 | 8.7 | 13.8 | 2.1 | 10.3 | 18.2 | - |
| 118 | 5.62 | 5.39 | .72 | .22 | 2.29 | 3.59 | 2.50 | 3.50 | 23.83 | 1.22 | 22.61 | 10.7 | 2.10 | 12.0 | 19.2 | 2.1 | 16.1 | 23.4 | - |
| 017 | 4.18 | 3.88 | .46 | .49 | 2.58 | 4.03 | 2.50 | 3.50 | 21.62 | 1.04 | 20.58 | 9.5 | 2.17 | 6.8 | 10.9 | 1.2 | 14.1 | 19.2 | - |
| 139 | 4.85 | 5.20 | 1.26 | .33 | 2.34 | 2.14 | 2.50 | 3.50 | 22.12 | - | 22.12 | 10.1 | 2.19 | 13.0 | 31.4 | - | 11.2 | 20.6 | - |
| 239 | 3.77 | 4.52 | .53 | .29 | 1.92 | 3.31 | 2.56 | 3.50 | 20.40 | .62 | 19.78 | 8.4 | 2.36 | 7.9 | 13.2 | 2.4 | 10.9 | 19.0 | - |
| 018 | 4.74 | 5.63 | .94 | .33 | 2.54 | 3.69 | 2.50 | 3.50 | 23.87 | - | 23.87 | 10.0 | 2.39 | 12.1 | 23.8 | 2.2 | 11.6 | 20.1 | - |
| 159 | 2.99 | 3.76 | .56 | .22 | 2.43 | 2.63 | 2.65 | 3.50 | 18.74 | .75 | 17.99 | 7.2 | 2.48 | 6.6 | 8.8 | 3.0 | 8.4 | 9.5 | - |
| 229 | 4.62 | 4.53 | .80 | .26 | 1.87 | 3.56 | 2.50 | 3.50 | 21.64 | 1.12 | 20.52 | 7.9 | 2.61 | 13.2 | 22.3 | 1.9 | 9.9 | 12.7 | - |
| 143 | 3.44 | 6.05 | .70 | .26 | 2.01 | 2.97 | 2.50 | 3.50 | 21.43 | - | 21.43 | 6.1 | 3.51 | 8.9 | 5.3 | 6.2 | 8.3 | 12.1 | - |
| Average | | | | | | | | | | | | | | | | | | | |
| 1939 | 3.96 | 4.68 | .72 | .33 | 2.29 | 2.94 | 2.50 | 3.50 | 20.92 | 1.13 | 19.79 | 9.9 | 2.00 | 8.5 | 13.2 | 2.7 | 11.3 | 16.2 | .2 |
| 1938 | 4.29 | 4.73 | .54 | .39 | 2.32 | 3.51 | 2.50 | 3.50 | 21.78 | .70 | 21.08 | 9.3 | 2.27 | 9.5 | 17.5 | 2.2 | 11.9 | 17.5 | .4 |
| 1937 | 4.07 | 4.48 | .56 | .46 | 2.05 | 2.66 | 2.50 | 3.50 | 20.28 | 1.09 | 19.19 | 8.2 | 2.34 | 10.5 | 20.5 | 2.2 | 9.8 | 15.0 | .1 |
| 1936 | 3.92 | 4.00 | .74 | .26 | 2.05 | 3.28 | 2.50 | 3.50 | 20.25 | 3.35 | 16.90 | 5.1 | 3.31 | 11.3 | 24.8 | 1.5 | 8.3 | 14.4 | - |
| 1935 | 4.34 | 4.06 | .64 | .34 | 2.40 | 2.41 | 2.50 | 3.50 | 20.19 | .80 | 19.39 | 7.4 | 2.62 | 10.1 | 24.0 | 1.1 | 11.6 | 19.0 | - |
| Five years | 4.12 | 4.39 | .64 | .35 | 2.22 | 2.96 | 2.50 | 3.50 | 20.68 | 1.41 | 19.27 | 8.0 | 2.41 | 10.0 | 20.0 | 1.9 | 10.6 | 16.4 | .1 |

## Cost per Acre of Producing Alfalfa Hay

| Farm No. | Costs | | | | | | | Yield tons | Cost per ton | Hours | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | First Cutting | | | Second Cutting | | | | Third Cutting | | | | |
| | Man labor | Horse & Tractor | Seed | Manure | Machinery | Land | Total | | | Man | Horse | Tractor | % cut | Man | Horse | Tractor | % cut | Man | Horse | Tractor |
| 028 | $1.85 | $1.15 | $1.65 | $ .60 | $1.05 | $3.50 | $ 9.80 | 1.5 | $6.53 | 4.3 | 5.6 | - | 100 | 5.0 | 5.9 | - | - | - | - | - |
| 014 | 1.76 | 1.54 | 1.65 | 2.21 | 1.05 | 3.50 | 11.71 | 1.6 | 7.32 | 4.4 | 7.0 | - | 100 | 4.4 | 8.4 | - | - | - | - | - |
| 129 | 1.27 | .88 | 1.65 | 1.28 | 1.05 | 3.50 | 9.73 | 1.3 | 7.48 | 3.3 | 5.1 | - | 100 | 3.0 | 3.7 | - | - | - | - | - |
| 179 | 1.39 | 1.52 | 1.65 | 1.15 | .73 | 3.50 | 9.94 | 1.3 | 7.65 | 5.7 | 7.0 | 1.0 | 34 | 1.3 | 1.0 | .3 | - | - | - | - |
| 118 | 1.86 | 1.89 | 1.65 | 1.90 | .77 | 3.50 | 11.57 | 1.4 | 8.26 | 8.4 | 14.7 | .3 | 44 | .9 | 1.4 | .2 | - | - | - | - |
| 018 | 1.76 | 1.47 | 1.65 | 1.44 | 1.05 | 3.50 | 10.87 | 1.3 | 8.36 | 3.8 | 6.3 | - | 100 | 5.0 | 8.4 | - | - | - | - | - |
| 236 | 1.27 | .90 | 1.65 | 1.75 | .67 | 3.50 | 9.74 | 1.1 | 8.85 | 4.4 | 5.6 | - | 23 | 2.0 | 3.4 | - | - | - | - | - |
| 189 | 1.12 | 1.15 | 1.65 | 3.31 | .97 | 3.50 | 11.70 | 1.3 | 9.00 | 4.0 | 5.4 | .5 | 82 | 1.6 | 2.5 | - | - | - | - | - |
| 116 | 1.16 | 1.74 | 1.65 | 1.29 | 1.05 | 3.50 | 10.39 | 1.1 | 9.45 | 3.7 | 1.5 | 1.7 | 100 | 2.1 | - | 1.2 | - | - | - | - |
| 159 | 1.22 | 2.20 | 1.65 | - | 1.05 | 3.50 | 9.62 | 1.0 | 9.62 | 4.0 | 4.2 | 1.3 | 100 | 2.1 | 1.7 | 1.3 | - | - | - | - |
| 109 | 1.24 | 1.04 | 1.65 | 1.91 | .79 | 3.50 | 10.13 | 1.0 | 10.13 | 4.2 | 7.4 | - | 47 | 2.0 | 3.0 | - | - | - | - | - |
| Average 1939 | 1.44 | 1.41 | 1.65 | 1.54 | .93 | 3.50 | 10.47 | 1.3 | 8.05 | 4.6 | 6.3 | .4 | 75 | 2.7 | 3.6 | .3 | 0 | - | - | - |
| 1938 | 1.75 | 1.51 | 1.65 | 1.79 | 1.06 | 3.50 | 11.26 | 2.3 | 4.90 | 5.0 | 7.1 | .4 | 91 | 3.5 | 5.3 | .2 | 14 | .3 | .5 | - |
| 1937 | 1.81 | 1.48 | 1.60 | 1.79 | 1.06 | 3.50 | 11.24 | 2.1 | 5.35 | 6.3 | 9.2 | .3 | 88 | 2.8 | 4.3 | .1 | 14 | .2 | .3 | - |
| 1936 | 2.50 | 1.69 | 1.60 | 1.44 | 1.20 | 3.50 | 11.93 | 1.9 | 6.28 | 6.6 | 10.0 | .2 | 96 | 3.8 | 6.3 | .1 | 35 | 2.1 | 2.9 | .1 |
| 1935 | 2.80 | 1.86 | 1.50 | .75 | 1.21 | 3.50 | 11.62 | 3.1 | 3.75 | 7.6 | 11.4 | .2 | 90 | 5.2 | 7.6 | .2 | 26 | 1.2 | 1.7 | - |
| Five years | 2.06 | 1.59 | 1.60 | 1.46 | 1.09 | 3.50 | 11.30 | 2.1 | 5.38 | 6.0 | 8.8 | .3 | 88 | 3.6 | 5.4 | .2 | 18 | .8 | 1.1 | .0 |

## Cost per Acre of Producing Alfalfa and Timothy Hay

| Farm No. | Costs | | | | | | | Yield tons | Cost per ton | Hours | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | First Cutting | | | Second Cutting | | | | Third Cutting | | | | |
| | Man labor | Horse & Tractor | Seed | Manure | Machinery | Land | Total | | | Man | Horse | Tractor | % cut | Man | Horse | Tractor | % cut | Man | Horse | Tractor |
| 017 | $1.70 | $1.03 | $1.25 | $1.38 | $1.05 | $3.50 | $ 9.91 | 2.3 | $4.31 | 5.0 | 6.3 | - | 100 | 3.5 | 4.0 | - | - | - | - | - |
| 229 | 2.32 | 1.44 | 1.25 | 3.78 | 1.50 | 3.50 | 13.79 | 2.0 | 6.90 | 6.2 | 5.6 | .4 | 100 | 2.1 | 3.4 | - | 100 | 3.3 | 3.4 | - |
| 123 | 1.38 | .95 | 1.25 | 2.60 | 1.05 | 3.50 | 10.73 | 1.3 | 8.25 | 3.2 | 4.0 | - | 100 | 3.7 | 5.5 | - | - | - | - | - |
| 143 | .92 | .87 | 1.25 | .76 | .55 | 3.50 | 7.85 | 1.0 | 7.85 | 4.6 | 5.9 | .4 | - | - | - | - | - | - | - | - |
| 189 | .79 | .94 | 1.25 | 1.96 | .55 | 3.50 | 8.99 | 1.0 | 8.99 | 4.0 | 6.0 | .5 | - | - | - | - | - | - | - | - |
| 159 | .72 | 1.27 | 1.25 | 2.14 | 1.05 | 3.50 | 9.93 | .9 | 11.03 | 2.1 | 1.8 | .8 | 100 | 1.5 | 1.7 | .7 | - | - | - | - |
| Average 1939 | 1.31 | 1.08 | 1.25 | 2.10 | .96 | 3.50 | 10.20 | 1.4 | 7.29 | 4.2 | 4.9 | .4 | 67 | 1.8 | 2.4 | .1 | 17 | .5 | .6 | - |

## Cost per Acre of Producing Clover and Timothy Hay

| Farm No. | Costs | | | | | | | Yield tons | Cost per ton | Hours | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Manure | Machinery | Land | Total | | | First Cutting | | | Second Cutting | | | |
| | | | | | | | | | | Man | Horse | Tractor | % cut | Man | Horse | Tractor |
| 226 | $2.40 | $2.03 | $1.30 | $2.36 | $1.05 | $3.50 | $12.64 | 2.4 | $5.27 | 6.0 | 10.6 | - | 100 | 6.0 | 9.6 | - |
| 014 | 1.93 | 1.29 | 1.30 | 1.23 | 1.05 | 3.50 | 10.30 | 1.7 | 6.06 | 6.5 | 7.5 | - | 100 | 3.1 | 5.4 | - |
| 028 | .89 | .68 | 1.30 | .69 | .55 | 3.50 | 7.61 | 1.2 | 6.34 | 4.5 | 6.0 | .1 | - | - | - | - |
| 189 | 1.16 | .84 | 1.30 | 1.93 | .55 | 3.50 | 9.28 | 1.3 | 7.14 | 5.8 | 7.5 | .1 | - | - | - | - |
| 111 | .62 | .51 | 1.56 | .53 | .55 | 3.50 | 7.27 | .9 | 8.08 | 3.1 | 5.1 | - | - | - | - | - |
| 018 | 1.15 | 1.04 | 1.30 | 1.68 | 1.05 | 3.50 | 9.72 | 1.2 | 8.10 | 2.9 | 5.1 | - | 100 | 2.9 | 5.3 | - |
| 123 | 1.07 | 1.15 | 1.30 | 3.83 | .55 | 3.50 | 11.40 | 1.2 | 9.50 | 5.3 | 7.2 | .8 | - | - | - | - |
| 143 | .68 | .62 | 1.30 | 1.11 | .55 | 3.50 | 7.76 | .8 | 9.70 | 3.4 | 6.2 | - | - | - | - | - |
| 159 | 1.14 | 1.65 | 1.30 | - | .55 | 3.50 | 8.14 | .8 | 10.18 | 5.7 | 7.9 | 1.6 | - | - | - | - |
| 116 | .42 | .53 | 1.30 | .96 | .55 | 3.50 | 7.26 | .5 | 14.52 | 2.1 | .3 | .9 | - | - | - | - |
| 229 | 1.81 | 1.18 | 1.30 | 3.78 | .55 | 3.50 | 12.12 | .7 | 17.31 | 9.1 | 5.8 | 1.1 | - | - | - | - |
| 027 | .85 | .70 | 1.30 | 2.01 | .55 | 3.50 | 8.91 | .4 | 22.28 | 4.2 | 7.0 | - | - | - | - | - |
| Average | | | | | | | | | | | | | | | | |
| 1939 | 1.18 | 1.02 | 1.32 | 1.67 | .68 | 3.50 | 9.37 | 1.1 | 8.52 | 4.9 | 6.4 | .4 | 25 | 1.0 | 1.7 | - |
| 1938 | 1.32 | 1.18 | 1.60 | 1.88 | .73 | 3.50 | 10.21 | 2.3 | 4.44 | 5.2 | 7.8 | .5 | 40 | 1.4 | 1.9 | - |
| 1937 | 1.32 | 1.07 | 1.85 | 1.96 | .56 | 3.50 | 10.26 | 1.4 | 7.33 | 6.5 | 9.3 | .4 | 3 | .1 | .1 | - |
| 1935 | 1.70 | 1.28 | 1.10 | .81 | .82 | 3.50 | 9.21 | 2.3 | 4.00 | 7.2 | 11.8 | .2 | 34 | 1.3 | 3.2 | - |
| Four years | 1.38 | 1.13 | 1.47 | 1.58 | .70 | 3.50 | 9.76 | 1.8 | 5.42 | 6.0 | 8.8 | .4 | 26 | .9 | 1.7 | - |

Cost per Acre of Producing Timothy Hay

| Farm No. | Costs | | | | | | | Yield tons | Cost per ton | Hours | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Manure | Mach-inery | Land | Total | | | Man | Horse | Tractor |
| 129 | $1.07 | $ .90 | $ .25 | $1.00 | $.55 | $3.50 | $7.27 | 1.0 | $7.27 | 5.4 | 9.0 | - |
| 028 | .95 | 1.14 | .25 | .61 | .55 | 3.50 | 7.00 | .9 | 7.78 | 4.8 | 4.5 | 1.2 |
| 017 | .63 | .43 | .25 | 1.38 | .55 | 3.50 | 6.74 | .8 | 8.42 | 3.1 | 4.3 | - |
| 236 | .92 | .74 | .25 | 1.60 | .55 | 3.50 | 7.56 | .7 | 10.80 | 4.6 | 7.5 | - |
| 143 | .32 | .23 | .25 | .72 | .55 | 3.50 | 5.57 | .5 | 11.14 | 1.6 | 2.3 | - |
| 118 | .53 | .53 | .25 | 1.87 | .55 | 3.50 | 7.23 | .6 | 12.05 | 2.6 | 5.3 | - |
| 179 | .64 | .44 | .25 | 1.17 | .55 | 3.50 | 6.55 | .5 | 13.10 | 3.2 | 4.5 | - |
| 239 | .26 | .22 | .25 | .91 | .27 | 3.50 | 5.41 | .3 | 18.03 | 1.3 | 2.2 | - |
| Average | | | | | | | | | | | | |
| 1939 | .66 | .58 | .25 | 1.16 | .52 | 3.50 | 6.67 | .7 | 9.53 | 3.3 | 5.0 | .2 |
| 1938 | 1.42 | 1.26 | .75 | 1.77 | .58 | 3.50 | 9.28 | 1.3 | 7.14 | 7.1 | 11.3 | .4 |
| 1937 | 1.15 | .80 | 1.30 | 1.85 | .54 | 3.50 | 9.14 | 1.2 | 7.62 | 5.7 | 8.6 | - |
| Three years | 1.08 | .88 | .76 | 1.59 | .55 | 3.50 | 8.36 | 1.1 | 7.60 | 5.4 | 8.3 | .2 |

Cost per Acre of Producing Soybean Hay

| Farm No. | Costs | | | | | | | | Yield tons | Cost per ton | Hours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Man labor | Horse & Tractor | Seed | Twine | Manure | Machinery | Land | Total | | | To Harvest | | | Harvesting | | |
| | | | | | | | | | | | Man | Horse | Tractor | Man | Horse | Tractor |
| 028 | $2.31 | $2.77 | $ .53 | $.30 | $ .61 | $2.00 | $3.50 | $12.02 | 2.6 | $ 4.62 | 6.4 | 17.7 | .3 | 5.1 | 2.9 | 1.0 |
| 239 | 3.23 | 3.36 | 1.04 | - | .90 | 2.00 | 3.50 | 14.03 | 2.2 | 6.38 | 6.3 | 13.7 | 1.6 | 9.8 | 10.8 | - |
| 179 | 3.54 | 4.36 | 1.67 | - | 1.04 | 2.00 | 3.50 | 16.11 | 2.0 | 8.06 | 7.8 | 7.3 | 4.2 | 9.9 | 13.2 | - |
| 027 | 3.96 | 4.78 | 1.05 | .34 | 2.16 | 2.00 | 3.50 | 17.79 | 2.2 | 8.09 | 9.6 | 15.1 | 2.7 | 10.2 | 8.4 | 1.7 |
| 123 | 2.83 | 2.81 | 2.47 | .28 | 3.81 | 1.40 | 3.50 | 17.10 | 2.0 | 8.55 | 3.7 | 5.2 | 1.9 | 10.4 | 6.8 | 1.0 |
| 119 | 1.76 | 2.53 | 1.55 | .18 | .44 | 1.40 | 3.50 | 11.36 | 1.3 | 8.74 | 3.4 | 2.5 | 2.7 | 5.4 | 3.5 | .8 |
| 189 | 2.77 | 2.73 | 1.96 | - | 1.90 | 1.40 | 3.50 | 14.26 | 1.6 | 8.91 | 2.3 | 2.0 | 1.5 | 11.6 | 14.5 | - |
| 109 | 2.62 | 3.41 | 1.12 | - | 1.63 | 2.00 | 3.50 | 14.28 | 1.6 | 8.92 | 6.1 | 3.0 | 4.6 | 7.0 | 5.9 | - |
| 226 | 2.01 | 2.30 | 1.28 | - | 3.35 | 1.40 | 3.50 | 13.84 | 1.4 | 9.88 | 4.5 | 5.4 | 1.8 | 5.5 | 7.5 | - |
| 118 | 2.60 | 4.25 | 2.63 | - | 2.49 | 1.40 | 3.50 | 16.87 | 1.6 | 10.54 | 3.1 | 1.4 | 2.8 | 9.9 | 11.2 | 2.6 |
| 143 | 3.54 | 6.88 | 1.82 | - | .72 | 2.85 | 3.50 | 19.31 | 1.8 | 10.73 | 7.2 | 3.4 | 6.0 | 10.6 | 13.6 | 1.4 |
| 229 | 3.44 | 2.59 | 2.13 | - | 3.78 | 2.00 | 3.50 | 17.44 | 1.5 | 11.63 | 6.9 | 10.4 | 1.7 | 10.3 | 4.0 | .4 |
| 111 | 2.62 | 3.23 | .53 | - | .80 | 2.00 | 3.50 | 12.68 | .9 | 14.09 | 7.4 | 24.0 | - | 5.7 | 8.3 | - |
| Average | | | | | | | | | | | | | | | | |
| 1939 | 2.86 | 3.54 | 1.52 | .09 | 1.82 | 1.83 | 3.50 | 15.16 | 1.7 | 8.92 | 5.7 | 8.5 | 2.4 | 8.6 | 8.5 | .7 |
| 1935 | 3.46 | 3.42 | 1.76 | .14 | 1.12 | 1.51 | 3.50 | 14.91 | 1.7 | 8.77 | 7.7 | 19.4 | 1.2 | 9.6 | 11.2 | .1 |
| Two years | 3.16 | 3.48 | 1.64 | .12 | 1.47 | 1.67 | 3.50 | 15.04 | 1.7 | 8.85 | 6.7 | 14.0 | 1.8 | 9.1 | 9.9 | .4 |