



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

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

-- 0 --

A Preliminary Report
of
CROP PRODUCTION COSTS

From
Data Secured in 1937
on the

FARM ACCOUNTING ROUTE

In

WINONA COUNTY, MINNESOTA

By

S. A. Engene, G. A. Sallee and G. A. Pond
Fred E. Wetherill, Routeman

-- 0 --

Mimeographed Report No. 95
Division of Agricultural Economics
University Farm
St. Paul, Minnesota
February, 1938

INDEX

	<u>Page</u>
Introduction.....	1
Methods of Computing Data.....	2
Using Crop Records to Increase Crop Returns.....	4
Comparative Cost and Return per Acre of Crops.....	5
Cost per Acre of Producing Barley.....	8
Cost per Acre of Producing Oats.....	9
Cost per Acre of Producing Winter Wheat.....	10
Cost per Acre of Producing Spring Wheat.....	11
Cost per Acre of Producing Oats and Barley.....	11
Cost per Acre of Producing Corn (Husked).....	12
Cost per Acre of Producing Corn (Shredded).....	13
Cost per Acre of Producing Corn Silage.....	14
Cost per Acre of Producing Alfalfa Hay.....	15
Cost per Acre of Producing Clover Hay.....	16
Cost per Acre of Producing Clover and Timothy Hay.....	16
Cost per Acre of Producing Timothy Hay.....	17
Cost per Acre of Producing Wild Hay.....	17

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 three-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 three 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 1937 are presented for each farm; the average costs for 1935 and 1936 are presented at the foot of each table. Comparative statements of costs and returns for 1935, 1936 and 1937 are presented on pages 5, 6 and 7. 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 net 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.

Assistance in tabulation and summarization was provided by workers supplied under Project 4841, Sub-project 420, Minnesota Works Progress Administration, and Federal Student Work Project, 1937-38, Project 87-70. Sponsor: University of Minnesota.

Table 1

Distribution of Crop Acreage
Acres per Farm

Crop	Farms Studied				Crop	Farms Studied			
	1935	1936	1937	County* 1934		1935	1936	1937	County 1934
Number of farms	20	24	25	-					
Corn	26	32	28	19	Alfalfa	18	14	20	2
Oats	35	26	27	17	Clover and timothy	11	22	17	8
Barley	51	38	27	15	Other hay	8	5	4	5
Wheat	11	8	11	2	Other crops	3	14	7	6
Other grains	22	20	16	7	Total crop acreage	185	179	157	81
					Total acreage	334	301	273	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 operators 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 three years.

The introduction of strip cropping has materially reduced the average size of fields, as may be seen from the data in Table 2. The average size of the

Table 2

Acres per Field by Crops and by Years - Winona County

Crop	Year		
	1935	1936	1937
Corn	11.09	8.06	7.10
Small grain	15.43	11.80	9.92
Alfalfa	6.93	6.26	5.96
Timothy and clover	11.12	12.64	7.17

corn, small grain, and timothy and clover fields has been reduced by one-third since 1935. The size of alfalfa fields has been affected less. Preliminary studies of the data obtained in this project indicate that considerably more time per acre is required for crop operations on small fields than on large fields. Analyses are being made at the present time to determine the effect of length and width of strips and of working with the contour upon labor requirements.

The Crop Seasons of 1935, 1936 and 1937

Heavy precipitation, plus the moisture from the winter snows on unfrozen ground, provided moisture for good yields in 1935. (See Table 3.) 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 satis-

Table 3

Month	Weather Conditions--Rainfall and Temperature*							
	Rainfall (inches)				Mean Temperature (degree F.)			
	1935	1936	1937	Normal	1935	1936	1937	Normal
April	2.34	.78	2.37	2.43	45.5	42.0	45.5	46.8
May	4.80	5.60	3.71	4.03	54.2	65.3	59.9	58.5
June	5.56	2.14	4.51	4.66	64.6	66.9	69.7	68.3
July	4.62	1.10	1.46	3.05	78.2	79.9	75.1	72.8
August	5.28	4.32	4.19	3.51	71.5	76.1	76.3	69.6
September	4.08	3.48	2.24	3.50	63.1	66.1	63.9	61.9

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

factory in the spring of 1937, but scant rains and high temperatures during the early part of July again reduced the yield of the second cutting of hay.

The dates on which a majority of the cooperating farmers began some of the major field operations are presented in Table 4. Field work began earlier in the

Table 4

Crop operation	Dates* for Starting Specified Crop Operations--Winona County					
	Year					
	1935		1936		1937	
Seeding small grain	April	13	April	22	April	20
Planting corn	May	17	May	13	May	19
Cutting alfalfa - 1st cutting	June	21	June	13	June	15
Cutting small grain	July	20	July	15	July	19
Cutting corn for silage	September	19	September	8	September	6

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

spring of 1935 than in either of the two following years. Harvesting, however, began considerably later in 1935 than in either of the other years.

METHODS OF COMPUTING DATA

The data for each farm were computed as if the farmer was 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, and at 9 cents in 1937. Two-plow tractors were charged at 45 cents per hour in 1935 and at 50 cents in 1936 and 1937, and three-plow tractors at 60 cents in 1935 and at 65 cents in 1936 and 1937. Seeds were charged at purchase prices, or 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. Flat charges per acre were made for seed for hay crops for machinery and for land. The local farm prices on December 1 were used in determining the value of the crop.

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.

USING CROP RECORDS TO INCREASE CROP RETURNS

A good crop rotation and efficient crop production are necessary for profitable farming. Good crop records will help the farmer to plan a satisfactory cropping program. They supply facts which are needed for accurate thinking.

Most of the crops raised on southeastern Minnesota farms are utilized as feed for livestock. It is important that those feed crops yield a large quantity of nutrients per acre at a low cost. The production per acre and the relative cost per hundred pounds of digestible nutrients for the principal feed crops for Winona County are presented in Table 5. Since these data are averages for the county, they

Table 5

Production per Acre and Relative Cost per Hundred Pounds
of Digestible Nutrients - Winona County

Crop	Average yield* (1917-36)	Total lbs. digestible nutrients [†]	% protein is of total nutrients [†]	Cost [‡] per 100 lbs. of total nutrients
Grains:	bushel			
Corn	37.4	1711	8.7	\$1.00
Barley	25.6	976	11.3	1.29
Winter wheat	18.3	870	11.1	1.46
Oats	35.1	790	13.8	1.51
Spring wheat	15.8	751	11.1	1.64
Roughages:	ton			
Alfalfa	2.6	2652	20.8	.42
Clover and timothy	1.7	1676	10.3	.58
Silage	7.8	2621	7.2	.78

*Yields of alfalfa, clover and timothy, and silage estimated from available data; all other yields from annual reports of State Department of Agriculture.

[†]Analysis of feeds from "Feeding the Dairy Herd", by Eckles, Minnesota Bulletin 218 (1932).

[‡]Average costs for Winona County Farm Accounting Route adjusted for differences in yield.

may not be directly applicable to all farms. However, they indicate the general relationships existing in this area. A farmer may use his own crop records to prepare a similar comparison in order to determine the most desirable cropping system for his farm.

Many farms raise some crops for sale. One important consideration in the selection of these is the net returns per acre. The calculation of statements similar to those on pages 5 to 7, using data applicable to the individual farm, will aid the farmer in selecting the most profitable cash crops.

Costs per unit of producing crops vary greatly among farms. The cost of producing barley in 1937 ranged from 32 cents per bushel to 76 cents. These costs per unit were affected both by costs per acre and by yields per acre. An examination of the crop statements in this report reveals substantial differences among the farms in the costs of producing an acre of any of the crops. The costs per acre of producing barley in 1937 ranged from \$11.46 to \$17.88. Some factors which favor low costs are (1) efficient arrangement of fields, (2) the use of efficient combinations of power and machinery, and (3) wise purchasing of supplies.

High crop yields will, within limits, reduce the costs per unit of producing crops. Analysis of the data presented in this report shows that in general costs per unit were low on those farms where yields were high. Some factors that favor high yields are (1) the use of a crop rotation which will increase fertility, (2) the effective use of manure available, (3) the use of commercial fertilizer when tests indicate its use to be profitable, (4) thorough preparation of the seedbed, (5) early seeding, (6) the use of varieties best adapted to the farm, and (7) the planting of clean seed of high vitality.

Comparative Cost and Return per Acre for the Principal Crops

	Barley			Oats			Winter Wheat			Spring Wheat		Rye	Flax
	1935	1936	1937	1935	1936	1937	1935	1936	1937	1935	1937	1935	1935
Number of farms	19	19	23	18	17	18	10	13	17	9	6	5	4
Acres per farm	53	40	30	40	34	36	14	13	14	10	7	27	6
Costs and returns:													
Man labor	\$1.61	\$1.62	\$1.93	\$1.63	\$1.65	\$1.78	\$2.22	\$1.94	\$1.84	\$1.70	\$1.67	\$1.39	\$2.78
Horse and tractor	1.84	2.07	2.23	1.94	2.13	2.16	2.08	2.31	2.17	1.85	2.25	1.50	3.01
Seed	2.12	1.55	2.41	1.34	.87	1.29	1.97	1.95	2.32	1.83	2.61	1.84	1.57
Twine	.16	.17	.30	.17	.18	.29	.21	.16	.24	.18	.25	.17	.02
Threshing	.61	.49	.77	.90	.87	1.26	.75	.67	.57	.42	.49	.36	1.48
Manure	.79	1.29	1.68	.75	1.10	1.78	.58	1.08	1.56	.68	1.05	.65	.38
Machinery	1.06	1.05	1.05	1.06	1.05	1.05	1.05	1.16	1.05	1.05	1.05	1.05	1.05
OPERATING COSTS	8.19	8.24	10.37	7.79	7.85	9.61	8.86	9.27	9.75	7.71	9.37	6.96	10.29
Land	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
TOTAL COSTS	11.69	11.74	13.87	11.29	11.35	13.11	12.36	12.77	13.25	11.21	12.87	10.46	13.79
Crop Value (Dec. 1)	11.28	19.32	17.03	7.63	12.67	10.60	21.86	19.94	13.52	8.25	13.50	5.21	9.48
VALUE LESS COST*	-41 ⁺	7.58 ⁺	3.16 ⁺	-3.66	1.32	-2.51	9.50	7.17	.27	-2.96	.63	-5.25	-4.31
Yield, bu.	20.5	16.8	26.2	31.8	28.8	42.4	23.5	16.8	16.9	11.0	15.0	12.4	6.0
Cost per bu.: Average	\$.57	\$.70	\$.53	\$.36	\$.39	\$.31	\$.53	\$.76	\$.78	\$1.02	\$.86	\$.84	\$2.30
Lowest	.35	.40	.32	.24	.29	.20	.34	.46	.54	.70	.59	.60	1.33
Highest	.91	1.16	.76	.64	.69	.48	1.10	1.79	1.25	1.51	1.24	1.59	4.59
December 1 price	.55 ⁺	1.15 ⁺	.65 ⁺	.24	.44	.25	.93	1.18	.80	.75 [‡]	.90	.42	1.58
Physical requirements:													
To harvest:													
Man labor, hrs.	3.1	3.7	3.4	3.2	4.0	3.4	2.7	4.2	3.6	3.2	3.3	2.4	5.6
Horse work, hrs.	10.3	10.2	7.7	11.6	12.2	8.6	9.6	13.7	9.9	10.8	6.4	6.1	17.5
Tractor use, hrs.	.8	1.1	1.4	.7	1.0	1.2	.7	.8	1.0	.6	1.6	.8	1.0
Harvest:													
Man labor, hrs.	4.9	4.4	6.2	4.9	4.2	5.5	8.4	5.5	5.6	5.3	5.0	4.6	8.3
Horse work, hrs.	5.3	5.2	6.2	5.9	4.8	6.2	9.4	7.0	6.0	5.2	6.7	4.7	11.3
Tractor use, hrs.	.3	.3	.4	.3	.3	.2	.3	.2	.3	.4	.2	.3	.4
Seed, bu.	1.7	2.0	2.0	2.3	2.2	2.1	1.6	1.7	1.6	1.6	1.7	1.7	.8
Twine, lbs.	2.2	1.8	3.2	2.4	2.5	3.1	3.1	2.3	2.8	2.6	2.9	2.3	-

*A minus (-) indicates a cost greater than the value of the crop.

⁺Malting barley prices. Using feed barley prices of 35 cents in 1935, 73 cents in 1936, and 42 cents in 1937, crop value less cost would be \$-4.51, \$.52 and \$-2.87 respectively.

[‡]Low price because of low quality.

Comparative Cost and Return per Acre for the Principal Crops (continued)

	Oats and Barley			Oats & Wheat		Husked Corn			Shredded Corn			Silage Corn		
	1935	1936	1937	1935	1935	1936	1937	1935	1936	1937	1935	1936	1937	
Number of farms	4	7	6	5	15	10	15	7	11	16	20	22	23	
Acres per farm	18	19	21	23	10	15	11	11	10	10	13	18	14	
Costs and returns:														
Man labor	\$1.52	\$1.83	\$2.03	\$1.76	\$4.45	\$4.62	\$4.01	\$5.92	\$5.18	\$5.74	\$4.34	\$3.92	\$4.07	
Horse and tractor	1.90	2.04	2.26	2.04	4.40	4.16	4.36	4.83	4.34	4.93	4.06	4.00	4.48	
Seed	2.00	1.28	2.13	1.85	.42	.76	.67	.48	.64	.52	.64	.74	.56	
Twine	.16	.22	.27	.19	-	-	-	.27	.25	.49	.34	.26	.46	
Threshing*	.67	.82	1.40	.71	.19	-	.28	1.74	1.49	2.23	2.40	2.05	2.05	
Manure	.35	1.59	1.64	.73	1.80	3.12	2.26	2.48	3.08	3.48	2.41	3.28	2.66	
Machinery	1.05	1.05	1.05	1.05	1.55	1.55	1.55	2.50	2.48	2.50	2.50	2.50	2.50	
OPERATING COSTS	7.65	8.83	10.78	8.33	12.81	14.21	13.13	18.22	17.46	19.39	16.69	16.75	16.78	
Land	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
TOTAL COSTS	11.15	12.33	14.28	11.83	16.31	17.71	16.63	20.54 [†]	18.88 [†]	20.70 [†]	19.39 [†]	16.90 [†]	19.19 [†]	
Crop value (Dec. 1)	6.60	15.95	13.67	12.30	16.38	31.40	20.70	13.89	27.90	22.05	-	-	-	
VALUE LESS COSTS [‡]	-4.55	3.62	-.61	.47	.07	13.69	4.07	-6.65	9.02	1.75	-	-	-	
Yield, bu.	21.3**	27.5**	40.2**	22.6**	38.1	31.4	46.0	32.3	27.5	49.0	-	-	-	
tons	-	-	-	-	-	-	-	-	-	-	7.4	5.1	8.2	
Cost per bu.: Average	\$.52	\$.45	\$.36	\$.52	\$.43	\$.56	\$.36	\$.64	\$.69	\$.42	\$2.62	\$3.31	\$2.34	
(or ton) Lowest	.35	.34	.28	.38	.26	.35	.26	.36	.33	.27	2.02	.96	1.50	
Highest	.83	.86	.42	1.52	1.07	1.90	.99	1.31	2.21	.95	3.96	5.68	3.77	
Dec. 1 price, per bu.	.31	.58	.34	.54	.43	1.00	.45	.43	1.00	.45	-	-	-	
Physical requirements:														
To harvest:														
Man labor, hrs.	3.3	4.0	3.9	2.9	11.8	11.8	9.7	11.9	10.5	11.1	10.1	11.3	10.5	
Horse work, hrs.	12.6	12.0	9.3	7.7	28.1	24.3	17.3	28.1	24.1	22.8	24.0	24.8	20.5	
Tractor use, hrs.	.5	.8	1.3	1.1	1.1	1.4	2.5	.9	1.2	1.8	1.1	1.5	2.2	
Harvest:														
Man labor, hrs.	4.3	5.1	6.1	5.9	10.4	11.3	10.3	17.6	15.4	17.6	11.6	8.3	9.8	
Horse work, hrs.	4.0	5.2	5.6	5.6	17.0	17.3	14.3	25.8	21.8	21.2	19.0	14.4	15.0	
Tractor use, hrs.	.5	.5	.4	.5	.3	-	.3	-	-	-	-	-	.1	
Seed, bu.	2.2	2.1	2.3	2.0	.19	.20	.16	.19	.19	.17	.24	.22	.21	
Twine, lbs.	2.3	2.7	2.9	2.5	-	-	-	4.4	3.2	6.0	4.8	3.0	5.5	

*Includes also charges for mechanical husker, shredder with power, and silage cutter with power.

[†]Net cost after deducting credit for stover of \$1.18 in 1935, \$2.08 in 1936 and \$2.69 in 1937.

[‡]Net cost after deducting credit for corn knocked off by binder of \$.80 in 1935, \$3.35 in 1936 and \$1.09 in 1937.

[§]A minus (-) indicates a cost greater than the value of the crop.

**At 40 pounds per bushel.

Comparative Cost and Return per Acre for the Principal Crops (continued)

	Alfalfa Hay			Clover Hay		Clover Hay & Seed 1936	Clover and Timothy		Timothy		Wild Hay		Soybean
	1935	1936	1937	1936	1937		1935	1937	Seed 1936	Hay 1937	1935	1937	Hay 1935
Number of farms	19	15	21	14	6	13	7	13	5	7	10	6	5
Acres per farm	15	11	23	18	10	20	12	15	9	6	4	5	6
Costs and returns:													
Man labor	\$2.80	\$2.50	\$1.81	\$1.45	\$.85	\$2.12	\$1.70	\$1.32	\$.89	\$1.15	\$1.96	\$1.08	\$3.46
Horse and tractor	1.86	1.69	1.48	1.12	.74	1.44	1.28	1.07	.56	.80	1.15	.98	3.18
Seed	1.10	1.20	1.20	2.63	2.70	2.70	1.10	1.85	1.30	1.30	-	-	1.76
Twine	-	-	-	-	-	-	-	-	.14	-	-	-	.14
Hulling and threshing	-	-	-	-	-	.64	-	-	.82	-	-	-	-
Manure	.75	1.44	1.79	1.25	1.07	1.16	.81	1.96	.85	1.85	-	-	1.12
Machinery	1.21	1.20	1.06	.57	.56	1.06	.82	.56	.20	.54	.74	.55	1.51
OPERATING COSTS	7.72	8.03	7.34	7.02	5.92	9.12	5.71	6.76	4.76	5.64	3.85	2.61	11.17
Land	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	2.00	2.00	3.50
TOTAL COSTS	11.22	11.53	10.84	10.52	9.42	12.62	9.21	10.26	8.26	9.14	5.85	4.61	14.67
Yield, bu.	-	-	-	-	-	.61	-	-	4.1	-	-	-	-
tons	3.1	1.9	2.1	1.3	.8	1.3	2.3	1.4	-	1.2	1.5	.9	1.7
Cost per bu.: Average	\$3.62	\$6.07	\$5.16	\$8.09	\$11.78	-	\$4.00	\$7.33	\$2.01	\$7.62	\$3.90	\$5.12	\$8.63
(or ton) Lowest	2.29	2.35	3.30	4.68	9.35	-	2.76	4.49	1.15	4.77	2.10	4.39	5.85
Highest	6.68	13.43	7.77	13.37	14.17	-	5.34	13.83	5.57	30.57	12.69	6.98	16.65
Physical requirements:													
1st cutting:													
Man labor, hrs.	7.6	6.6	6.3	7.2	4.2	6.9	7.2	6.5	4.4	5.5	9.1	5.4	7.7
Horse work, hrs.	11.4	10.0	9.2	10.8	6.4	9.6	11.8	9.3	3.7	8.2	13.0	8.8	19.4
Tractor use, hrs.	.2	.2	.3	.4	.3	.4	.2	.4	.5	-	-	.4	1.2
2nd cutting:													
Man labor, hrs.	5.2	3.8	2.8	.1	-	3.7	1.3	.1	-	.2	.7	-	9.6
Horse work, hrs.	7.6	6.3	4.3	.1	-	5.1	3.2	.1	-	.4	1.4	-	11.2
Tractor use, hrs.	.2	.1	.1	-	-	-	-	-	-	-	-	-	.1
3rd cutting:													
Man labor, hrs.	1.2	2.1	.2	-	-	-	-	-	-	-	-	-	-
Horse work, hrs.	1.7	2.9	.3	-	-	-	-	-	-	-	-	-	-
Tractor use, hrs.	-	.1	-	-	-	-	-	-	-	-	-	-	-
Seed, bu.	-	-	-	-	-	-	-	-	-	-	-	-	1.0
Twine, lbs.	-	-	-	-	-	-	-	-	1.7	-	-	-	2.1

Cost per Acre of Producing Barley - 1937

Farm no.	Costs									Yield bu.	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Twine	Thresh- ing	Manure	Mach- inery	Land	Total			To Harvest			Harvesting		
												Man	Horse	Tractor	Man	Horse	Tractor
210	\$1.61	\$2.01	\$2.54	\$.42	\$1.28	\$2.00	\$1.05	\$3.50	\$14.41	44.6	\$.32	3.0	2.8	2.3	5.0	3.5	.6
229	1.90	1.88	2.17	.34	1.07	1.59	1.05	3.50	13.50	37.0	.36	2.8	4.3	1.7	6.7	6.9	-
236	1.74	2.02	2.56	.29	1.00	1.52	1.05	3.50	13.68	33.5	.41	2.7	2.5	1.9	6.0	4.5	.9
123	2.62	2.82	2.72	.30	.99	1.01	1.05	3.50	15.01	35.7	.42	4.8	12.7	1.2	8.3	3.7	1.5
118	1.72	2.17	2.34	.23	.91	1.83	1.05	3.50	13.75	30.5	.45	3.4	5.3	1.9	5.2	4.4	.6
016	1.93	2.30	2.21	.29	.94	2.73	1.05	3.50	14.95	31.3	.48	4.4	8.9	1.7	5.2	7.2	-
121	1.58	1.95	2.44	.24	.72	.64	1.05	3.50	12.12	24.0	.50	2.4	3.3	1.6	5.5	2.5	.6
189	1.62	2.12	2.65	.25	.84	2.47	1.05	3.50	14.50	28.0	.52	2.4	2.2	1.7	5.7	4.5	.6
028	1.66	2.00	2.45	.31	.71	.94	1.05	3.50	12.62	23.7	.53	3.1	2.3	2.3	5.2	6.9	-
119	1.32	1.81	1.89	.16	.63	1.10	1.05	3.50	11.46	21.0	.54	2.9	6.8	1.2	3.7	4.1	.1
116	1.81	2.18	2.39	.32	.67	.52	1.05	3.50	12.44	22.3	.56	4.2	13.6	.8	4.8	2.8	.6
159	1.81	2.23	2.38	.25	.73	1.74	1.05	3.50	13.69	24.3	.56	3.6	1.1	1.9	5.4	4.8	.7
149	1.64	2.68	2.43	.25	.72	1.35	1.05	3.50	13.62	23.9	.57	3.6	8.9	1.8	4.6	4.1	.5
129	1.22	2.15	2.39	.19	.63	.92	1.05	3.50	12.05	21.0	.57	2.6	2.7	2.2	3.5	5.6	-
018	2.64	2.80	2.30	.28	.83	2.99	1.05	3.50	16.39	27.6	.59	4.4	15.2	.9	8.8	10.7	-
114	3.71	2.96	2.01	.44	.82	3.39	1.05	3.50	17.88	29.7	.60	3.3	12.6	-	15.2	20.3	-
027	1.80	2.02	2.29	.31	.64	2.81	1.07	3.50	14.44	23.1	.62	3.1	9.7	.9	5.9	5.2	.5
017	2.31	2.47	2.05	.41	.65	1.18	1.05	3.50	13.62	21.6	.63	4.3	16.7	-	7.2	10.7	-
109	2.32	2.34	1.90	.33	.68	2.38	1.05	3.50	14.50	22.7	.64	3.8	4.8	2.2	7.8	4.8	.7
014	1.66	2.24	2.85	.23	.60	.83	1.05	3.50	12.96	20.1	.64	3.5	11.8	.9	4.8	6.7	-
226	2.09	1.33	3.55	.55	.65	2.74	1.05	3.50	15.46	22.9	.68	1.5	1.8	.9	9.0	4.8	.6
179	1.88	2.54	2.36	.22	.59	1.93	1.05	3.50	14.07	19.5	.72	5.0	17.1	1.0	4.4	5.2	.1
169	1.74	2.21	2.45	.23	.46	-	1.05	3.50	11.64	15.3	.76	3.9	9.7	1.1	4.8	8.4	-
Avg.	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

Cost per Acre of Producing Oats - 1937

Farm no.	Costs									Yield bu.	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Twine	Thresh- ing	Manure	Mach- inery	Land	Total			To Harvest			Harvesting		
												Man	Horse	Tractor	Man	Horse	Tractor
014	\$1.64	\$2.11	\$.89	\$.23	\$1.75	\$.73	\$1.05	\$3.50	\$11.90	58.2	\$.20	3.0	9.8	.9	5.2	6.9	-
119	1.43	1.88	1.07	.27	1.62	.65	1.05	3.50	11.47	53.9	.21	2.9	7.2	1.1	4.2	4.1	.2
028	1.62	2.01	1.40	.31	1.66	.99	1.05	3.50	12.54	55.4	.23	3.1	2.5	2.4	5.0	6.4	-
017	1.59	1.78	1.30	.28	1.61	1.18	1.05	3.50	12.29	53.6	.23	3.7	14.7	-	4.2	5.1	-
210	1.44	1.72	1.14	.38	1.47	2.03	1.05	3.50	12.73	51.9	.24	2.6	2.3	2.0	4.6	2.5	.5
027	2.03	2.18	1.71	.27	1.66	2.19	1.05	3.50	14.59	57.0	.26	3.5	13.0	.6	6.7	7.8	-
121	1.26	1.64	1.49	.24	1.15	.87	1.05	3.50	11.20	38.5	.29	2.1	3.2	1.3	4.2	2.1	.5
016	2.20	2.70	1.44	.30	1.51	2.61	1.05	3.50	15.31	50.4	.30	4.5	8.7	2.2	6.5	8.9	-
226	2.18	1.91	1.15	.55	1.40	2.76	1.05	3.50	14.50	46.6	.31	2.6	1.9	1.9	8.3	4.8	.7
018	2.40	2.68	1.12	.32	1.33	2.80	1.05	3.50	15.20	44.5	.34	4.0	14.9	.7	8.0	10.9	-
118	1.21	1.76	1.10	.25	.96	1.32	1.05	3.50	11.15	32.1	.35	2.6	4.8	1.5	3.4	3.7	.5
149	1.55	2.69	1.64	.24	1.10	1.34	1.05	3.50	13.11	36.5	.36	3.6	9.2	1.8	4.2	2.8	.7
169	1.83	2.27	.99	.25	1.16	3.71	1.05	3.50	14.76	38.7	.38	4.0	10.3	1.2	5.1	7.9	-
111	3.57	2.91	1.18	.25	1.13	2.18	1.05	3.50	15.77	37.7	.42	4.5	17.3	-	13.3	15.1	-
159	1.40	2.03	1.09	.19	.80	1.39	1.05	3.50	11.45	26.8	.43	3.2	.7	2.1	3.8	3.0	.5
179	1.72	2.22	1.04	.27	.80	1.65	1.05	3.50	12.25	26.9	.46	4.3	15.8	.6	4.3	4.4	.2
129	1.32	2.24	1.44	.20	.74	.95	1.05	3.50	11.44	24.6	.46	3.0	4.3	2.0	3.6	6.1	-
114	1.68	2.09	2.01	.48	.84	2.72	1.05	3.50	14.37	29.8	.48	3.8	14.5	-	4.6	8.7	-
Avg.																	
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

Cost per Acre of Producing Winter Wheat - 1937

Farm no.	Costs									Yield bu.	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Twine	Threshing	Manure	Machinery	Land	Total			To Harvest			Harvesting		
												Man	Horse	Tractor	Man	Horse	Tractor
210	\$1.95	\$1.93	\$2.28	\$.42	\$.78	\$2.05	\$1.05	\$3.50	\$13.96	26.0	\$.54	2.6	2.8	1.9	7.2	5.3	.5
159	2.33	2.97	1.91	.26	.71	.59	1.05	3.50	13.32	23.8	.56	3.6	3.4	2.4	8.0	7.9	.6
189	1.80	2.02	2.07	.21	.71	2.10	1.05	3.50	13.46	23.7	.57	2.9	7.2	1.0	6.1	3.0	.7
236	1.57	1.90	1.76	.22	.57	1.29	1.05	3.50	11.86	19.1	.62	2.8	2.4	2.2	5.1	4.3	.4
118	1.43	1.78	2.22	.25	.54	1.33	1.05	3.50	12.10	18.2	.67	2.4	4.6	1.4	4.7	4.0	.6
116	1.87	2.03	1.84	.30	.52	.85	1.05	3.50	11.96	17.3	.69	3.7	13.0	.5	5.7	3.6	.6
129	.78	1.26	1.73	.19	.38	.92	1.05	3.50	9.81	12.5	.78	1.7	3.1	1.0	2.2	3.9	-
027	1.80	1.91	2.42	.23	.50	2.99	1.05	3.50	14.40	16.8	.86	3.6	14.2	-	5.4	7.0	-
018	2.66	2.63	2.93	.17	.56	2.83	1.05	3.50	16.33	18.6	.88	4.0	19.0	-	9.3	10.3	-
014	2.33	3.25	2.15	.17	.49	1.40	1.05	3.50	14.34	16.2	.88	6.2	23.6	.5	5.5	8.7	-
169	2.56	2.74	2.20	.18	.51	2.54	1.05	3.50	15.28	16.9	.90	4.9	13.6	.7	7.9	13.0	-
179	1.97	2.17	2.52	.21	.43	1.40	1.05	3.50	13.25	14.3	.93	4.6	14.3	.7	5.3	6.2	-
123	2.43	2.66	2.95	.30	1.29	1.03	1.05	3.50	15.21	16.2	.94	6.1	19.7	-	6.0	5.0	.9
119	1.35	1.79	3.80	.16	.39	.60	1.05	3.50	12.64	13.0	.98	3.6	12.2	.6	3.1	3.1	-
028	1.59	1.97	2.26	.31	.63	1.99	1.05	3.50	13.30	12.7	1.05	3.0	2.3	2.4	5.0	6.3	-
016	2.03	2.59	2.15	.20	.40	2.05	1.05	3.50	13.97	13.2	1.06	4.1	9.2	1.6	6.1	10.4	-
121	.81	1.33	2.23	.23	.24	.65	1.05	3.50	10.04	8.0	1.25	1.7	3.4	.9	2.3	1.4	.5
Avg.																	
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

Cost per Acre of Producing Spring Wheat - 1937

Farm no.	Costs									Yield bu.	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Twine	Threshing	Manure	Machinery	Land	Total			To Harvest			Harvesting		
												Man	Horse	Tractor	Man	Horse	Tractor
119	\$1.38	\$1.90	\$2.06	\$.16	\$.54	\$.77	\$1.05	\$3.50	\$11.36	19.2	\$.59	3.0	7.6	1.2	3.9	2.8	.3
017	2.50	2.09	3.65	.44	.62	1.17	1.05	3.50	15.02	20.5	.73	3.2	8.4	-	9.3	14.7	-
129	.90	1.85	2.51	.19	.38	.92	1.05	3.50	11.30	12.6	.90	2.6	2.9	1.9	1.8	3.9	-
014	1.49	1.99	2.77	.28	.41	1.19	1.05	3.50	12.68	13.3	.95	2.2	2.3	1.6	5.3	8.4	-
028	1.88	2.15	1.93	.31	.62	.94	1.05	3.50	12.38	12.5	.99	3.2	3.5	2.3	6.2	7.5	-
149	1.87	3.54	2.76	.11	.35	1.29	1.05	3.50	14.47	11.7	1.24	5.5	13.7	2.6	3.8	2.7	.6
Avg.																	
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

Cost per Acre of Producing Oats and Barley - 1937

Farm no.	Costs									Yield bu.*	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Twine	Threshing	Manure	Machinery	Land	Total			To Harvest			Harvesting		
												Man	Horse	Tractor	Man	Horse	Tractor
229	\$2.29	\$2.59	\$1.79	\$.29	\$1.72	\$1.59	\$1.05	\$3.50	\$14.82	52.9	\$.28	4.8	6.7	2.7	6.6	6.9	-
123	2.28	2.43	2.15	.30	1.41	1.18	1.05	3.50	14.30	43.4	.33	4.6	11.6	1.0	6.8	4.2	1.0
139	1.74	2.02	2.44	.36	1.77	1.30	1.05	3.50	14.18	40.8	.35	3.8	14.9	-	4.9	7.4	-
109	2.46	2.48	1.76	.24	1.19	2.51	1.05	3.50	15.19	37.5	.38	4.1	5.0	2.2	7.5	4.8	.7
189	1.60	2.08	2.84	.25	1.34	2.09	1.05	3.50	14.75	36.7	.40	2.2	1.7	1.7	5.8	4.5	.6
017	1.81	1.98	1.79	.16	.96	1.18	1.05	3.50	12.43	29.7	.42	4.1	16.1	-	5.0	5.9	-
Avg.																	
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

*At 40 pounds per bushel.

Cost per Acre of Producing Corn (Husked) - 1937

Farm no.	Costs								Yield bu.	Cost per bu.	Labor					
	Man	Horse & tractor	Seed	Husker	Manure	Mach- inery	Land	Total			To Harvest			Harvesting		
											Man	Horse	Tractor	Man	Horse	Tractor
123	\$5.06	\$5.44	\$.77	\$.40	\$3.39	\$1.55	\$3.50	\$20.11	78.8	\$.26	12.5	21.0	2.5	12.8	22.9	.4
189	3.89	3.49	.47	-	2.09	1.55	3.50	14.99	57.0	.26	6.2	12.2	1.2	13.2	18.0	-
159	2.49	4.66	.59	.89	-	1.55	3.50	13.68	50.0	.27	6.3	5.2	4.1	6.2	10.5	.9
027	4.30	6.19	.94	-	2.37	1.55	3.50	18.85	66.6	.28	11.1	17.8	5.7	10.4	19.5	-
116	2.64	3.84	.84	1.28	1.75	1.55	3.50	15.40	53.1	.29	7.6	13.3	3.1	5.6	4.9	1.3
028	5.40	4.15	1.25	-	1.83	1.55	3.50	17.68	58.0	.30	7.8	16.2	2.0	19.2	18.8	-
229	6.40	5.29	1.10	-	2.50	1.55	3.50	20.34	63.5	.32	16.4	24.8	2.2	15.6	21.9	-
109	1.75	2.14	.38	-	1.83	1.55	3.50	11.15	33.5	.33	5.9	12.1	1.1	2.8	5.5	-
226	3.25	3.93	.52	-	2.19	1.55	3.50	14.94	44.4	.34	6.1	4.2	4.0	10.1	17.3	-
169	6.23	5.29	.50	-	3.17	1.55	3.50	20.24	60.0	.34	16.2	34.8	1.2	15.0	17.6	-
111	4.38	3.50	.47	-	.82	1.55	3.50	14.22	26.8	.53	10.5	28.0	-	11.3	10.9	-
129	1.88	3.18	.91	-	2.60	1.55	3.50	13.62	25.5	.53	6.3	6.6	3.3	3.1	4.7	-
179	2.58	3.70	.49	1.68	4.60	1.55	3.50	18.10	29.6	.61	10.2	17.5	1.8	2.7	4.3	1.7
121	3.82	4.41	.45	-	.64	1.55	3.50	14.37	21.4	.67	8.7	15.6	2.1	10.4	17.9	-
018	6.00	6.21	.30	-	4.17	1.55	3.50	21.73	22.0	.99	14.1	29.5	3.4	15.9	20.7	-
Avg.																
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

Cost per Acre of Producing Corn (Shredded) - 1937

Farm no.	Costs									Stover credit	Net cost	Yield bu.	Cost per bu.	Labor					
	Man tractor	Horse & Seed	Twine	Shredder	Manure	Mach- inery	Land	Total	To Harvest					Harvesting					
									Man					Horse	Tractor	Man	Horse	Tractor	
123	\$7.62	\$5.10	\$.48	\$.37	\$2.44	\$3.39	\$2.50	\$3.50	\$25.40	\$4.37	\$21.03	78.8	\$.27	12.2	21.0	2.4	25.9	22.5	-
109	4.89	4.13	.50	.61	2.61	2.79	2.50	3.50	21.53	3.43	18.10	56.5	.32	8.4	14.3	2.4	16.1	18.3	-
149	4.83	5.17	.52	.49	1.30	3.15	2.50	3.50	21.46	3.17	18.29	57.1	.32	11.7	25.9	1.9	12.4	15.4	.3
210	4.29	4.34	.39	1.19	1.15	1.72	2.50	3.50	19.08	3.56	15.52	48.4	.32	10.9	13.5	3.9	10.6	12.9	-
139	5.79	4.90	.56	.26	1.26	1.08	2.50	3.50	19.85	2.35	17.50	49.0	.36	11.3	32.2	-	17.6	22.2	-
017	6.66	4.79	.70	.52	2.30	3.07	2.50	3.50	24.04	1.29	22.75	61.6	.37	11.5	29.5	.2	21.8	22.4	-
014	5.62	4.94	.35	.55	3.23	1.17	2.50	3.50	21.86	2.70	19.16	50.7	.38	9.0	21.0	1.8	19.1	21.0	-
116	4.91	4.78	.51	.41	5.18	1.43	2.50	3.50	23.22	3.17	20.05	53.1	.38	8.0	17.7	2.4	16.6	22.0	-
016	5.80	5.62	.52	.54	1.48	3.39	2.50	3.50	23.35	2.92	20.43	50.2	.41	14.7	26.6	2.8	14.3	20.1	-
111	6.23	4.58	.53	.21	2.00	1.16	2.50	3.50	20.71	2.68	18.03	44.1	.41	11.0	30.4	-	20.1	20.4	-
114	6.69	4.59	.50	.41	2.40	2.76	2.50	3.50	23.35	3.02	20.33	49.5	.41	12.0	30.9	-	21.4	20.1	-
119	4.84	5.06	1.14	.39	1.95	3.78	2.50	3.50	23.16	2.62	20.54	44.6	.46	9.8	15.9	2.7	14.4	20.6	-
028	4.06	3.73	.52	.78	1.15	1.64	2.50	3.50	17.88	1.88	16.00	33.0	.48	6.5	10.9	2.7	13.8	15.8	-
169	7.00	6.27	.28	.43	2.40	10.55	2.50	3.50	32.93	2.56	30.37	50.2	.60	13.3	27.6	1.9	21.7	31.4	-
118	5.41	5.00	.52	.47	2.77	6.30	2.50	3.50	26.47	1.58	24.89	27.6	.90	9.5	15.0	2.2	17.5	28.4	-
018	7.06	5.94	.33	.25	2.06	8.32	2.50	3.50	29.96	1.72	28.24	29.9	.95	17.3	31.7	1.5	18.0	26.1	-
Avg.																			
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	-

Cost per Acre of Producing Corn Silage - 1937

Farm no.	Costs									Corn credit	Net cost	Yield tons	Cost per ton	Labor						
	Man Horse & tractor		Seed	Twine	Cutter	Manure	Mach-inery	Land	Total					To Harvest			Harvesting			
	Man	Horse												Man	Horse	Tractor	Man	Horse	Tractor	
123	\$4.93	\$4.85	\$.51	\$.38	\$2.35	\$2.55	\$2.50	\$3.50	\$21.57	\$1.87	\$19.70	13.1	\$1.50	11.4	20.9	1.8	13.3	22.9	-	
210	4.37	4.47	.41	1.19	2.09	2.52	2.50	3.50	21.05	.75	20.30	12.1	1.63	9.4	11.2	3.6	12.5	18.3	-	
028	4.00	3.99	.50	.78	1.90	1.56	2.50	3.50	18.73	1.43	17.30	10.6	1.64	7.4	16.1	2.0	12.6	17.3	-	
226	3.30	4.17	.60	.44	1.70	4.09	2.50	3.50	20.30	.67	19.63	11.6	1.69	6.8	3.8	4.8	9.7	11.8	.7	
109	3.24	3.54	.46	.61	1.79	3.91	2.50	3.50	19.55	.43	19.12	10.5	1.82	7.6	13.4	2.2	8.6	13.8	-	
114	4.88	4.00	.48	.41	2.31	2.25	2.50	3.50	20.33	1.96	18.37	9.7	1.90	7.4	21.5	-	17.0	23.0	-	
149	4.13	5.27	.50	.52	1.99	3.13	2.50	3.50	21.54	1.22	20.32	9.6	2.13	12.4	25.9	2.3	8.2	13.9	.3	
159	3.64	4.63	.73	.36	2.52	2.44	2.50	3.50	20.32	1.36	18.96	8.3	2.30	6.2	5.7	3.7	12.0	19.2	-	
139	4.48	4.77	.49	.25	2.07	3.18	2.50	3.50	21.24	.96	20.28	8.7	2.34	13.3	35.2	-	9.1	17.8	-	
111	4.05	4.06	.42	.23	2.01	1.26	2.50	3.50	18.03	-	18.03	7.6	2.37	11.5	30.2	-	8.7	14.9	-	
017	4.42	4.10	.76	.40	2.19	2.58	2.50	3.50	20.45	.50	19.95	8.4	2.37	10.0	25.5	.6	12.1	16.7	-	
121	3.21	3.62	.34	.30	1.84	.64	2.50	3.50	15.95	-	15.95	6.7	2.38	8.5	15.2	2.2	7.5	9.5	-	
119	3.20	3.87	.71	.36	2.05	2.44	2.50	3.50	18.63	.25	18.38	7.0	2.64	9.6	18.6	2.2	6.4	8.6	-	
014	2.51	3.65	.47	.56	1.77	1.11	2.50	3.50	16.07	.94	15.13	5.7	2.68	7.9	22.4	1.3	4.7	8.8	-	
118	4.01	3.80	.54	.44	2.02	2.28	2.50	3.50	19.09	1.24	17.85	6.6	2.72	9.2	14.7	2.2	10.9	15.4	-	
018	4.99	5.53	.34	.43	2.30	5.29	2.50	3.50	24.88	.60	24.28	8.9	2.74	14.2	35.1	1.8	10.8	16.3	-	
169	4.46	4.54	.59	.42	2.07	3.41	2.50	3.50	21.49	2.85	18.64	6.5	2.89	13.6	28.8	1.0	8.7	16.2	-	
027	4.20	6.06	.52	.54	2.12	2.34	2.50	3.50	21.78	.77	21.01	7.3	2.89	11.0	17.7	5.6	10.0	10.3	1.4	
229	5.15	4.55	1.06	.37	1.90	2.08	2.50	3.50	21.11	3.10	18.01	6.1	2.91	17.0	25.5	2.2	8.7	12.8	-	
189	3.41	4.04	.50	.26	2.22	3.17	2.50	3.50	19.60	1.95	17.65	5.8	3.04	7.7	13.5	2.1	9.4	16.1	-	
016	4.87	4.91	.52	.54	1.99	3.42	2.50	3.50	22.25	.63	21.62	6.7	3.21	13.4	23.6	2.5	11.0	17.0	-	
179	4.30	5.32	.46	.49	1.80	1.74	2.50	3.50	20.11	1.12	18.99	5.2	3.66	14.3	32.1	2.5	7.2	12.8	-	
129	3.79	5.40	.98	.28	2.16	3.74	2.50	3.50	22.35	.53	21.82	5.8	3.77	12.1	15.6	4.6	6.8	10.9	-	
Avg.																				
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	-	

11

Cost per Acre of Producing Alfalfa Hay - 1937

Farm no.	Costs							Yield tons per ton	Cost per ton	Hours														
	Man	Horse & Seed tractor		Manure	Mach- inery	Land	Total			First Cutting			Second Cutting			Third Cutting								
											Man	Horse	Tractor	% cut	Man	Horse	Tractor	% cut	Man	Horse	Tractor	% cut		
210	\$2.17	\$1.26	\$1.20	\$2.05	\$1.05	\$3.50	\$11.23	3.4	\$3.30	8.2	8.7	.3	100	2.7	3.7	-	-	-	-	-	-	-	-	
139	1.82	1.39	1.20	1.16	1.05	3.50	10.12	2.4	4.22	5.5	9.2	-	100	3.6	6.2	-	-	-	-	-	-	-	-	
129	2.02	1.55	1.20	.92	1.50	3.50	10.69	2.5	4.28	6.1	10.3	-	100	3.0	5.0	-	100	1.0	1.9	-	-	-	-	
114	3.28	2.90	1.20	3.39	1.05	3.50	15.32	3.5	4.38	12.5	24.4	-	100	3.9	7.8	-	-	-	-	-	-	-	-	
149	1.87	1.63	1.20	1.25	1.28	3.50	10.73	2.3	4.67	5.1	7.9	.4	100	3.3	6.2	-	52	1.0	1.4	-	-	-	-	
109	1.56	1.19	1.20	2.46	1.02	3.50	10.93	2.3	4.75	5.4	8.0	.2	80	2.1	3.1	-	16	.3	.7	-	-	-	-	
028	1.38	.86	1.20	1.65	.55	3.50	9.14	1.9	4.81	6.9	9.5	-	-	-	-	-	-	-	-	-	-	-	-	
027	2.10	2.16	1.20	2.39	1.05	3.50	12.40	2.5	4.96	6.9	9.8	1.2	100	3.6	4.5	.6	-	-	-	-	-	-	-	
169	2.05	1.56	1.20	2.40	1.44	3.50	12.15	2.4	5.06	5.8	9.8	-	100	3.4	6.1	-	87	1.0	1.5	-	-	-	-	
014	1.57	1.16	1.20	.75	1.05	3.50	9.23	1.8	5.13	3.6	6.7	-	100	4.3	6.2	-	-	-	-	-	-	-	-	
119	1.37	1.32	1.20	.92	1.05	3.50	9.36	1.8	5.20	4.6	6.0	.7	100	2.3	3.8	-	-	-	-	-	-	-	-	
236	1.56	1.11	1.20	1.62	1.05	3.50	10.04	1.9	5.28	4.4	6.8	-	100	3.4	5.0	.1	-	-	-	-	-	-	-	
189	1.74	1.22	1.20	2.15	1.05	3.50	10.86	2.0	5.43	5.2	7.5	.1	100	3.5	5.3	-	-	-	-	-	-	-	-	
123	1.47	1.23	1.20	1.01	1.05	3.50	9.46	1.7	5.56	5.2	6.1	.8	100	2.1	2.4	.1	-	-	-	-	-	-	-	
179	2.43	1.55	1.20	1.45	1.05	3.50	11.18	1.9	5.88	8.5	10.8	-	100	3.6	5.1	.2	-	-	-	-	-	-	-	
226	1.74	1.26	1.20	3.37	1.17	3.50	12.24	2.0	6.12	6.1	6.1	.7	85	1.5	2.2	-	43	1.1	1.8	-	-	-	-	
159	1.89	2.47	1.20	1.63	1.02	3.50	11.71	1.9	6.16	7.1	8.2	1.8	74	2.3	1.8	.6	-	-	-	-	-	-	-	
016	1.82	1.39	1.20	1.99	1.05	3.50	10.95	1.7	6.44	6.1	8.9	.3	100	3.0	5.0	-	-	-	-	-	-	-	-	
111	.82	.93	1.20	1.16	.65	3.50	8.26	1.2	6.88	7.9	8.4	-	21	1.2	1.9	-	-	-	-	-	-	-	-	
118	1.61	1.58	1.20	1.04	.98	3.50	9.91	1.4	7.08	6.4	11.0	.7	86	1.6	3.0	-	-	-	-	-	-	-	-	
018	1.78	1.29	1.20	2.83	1.05	3.50	11.65	1.5	7.77	5.0	7.5	-	100	3.9	6.9	-	-	-	-	-	-	-	-	
Avg.																								
1937	1.81	1.48	1.20	1.79	1.06	3.50	10.84	2.1	5.16	6.3	9.2	.3	88	2.8	4.3	.1	14	.2	.3	-	-	-	-	
1936	2.50	1.69	1.20	1.44	1.20	3.50	11.53	1.9	6.07	6.6	10.0	.2	96	3.8	6.3	.1	35	2.1	2.9	.1	-	-	-	
1935	2.80	1.86	1.10	.75	1.21	3.50	11.22	3.1	3.62	7.6	11.4	.2	90	5.2	7.6	.2	26	1.2	1.7	-	-	-	-	