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

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Annual Report
of the
Southwestern Minnesota
Farm Management Service
1942

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Cooperator: _____

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Division of Agricultural Economics
University Farm
St. Paul, Minnesota
May 1943

Third Annual Report of the Southwest Minnesota Farm Management Service
of Brown, Cottonwood, Faribault, Jackson, Lincoln, Lyon, Martin,
Murray, Nobles, Pipestone, Redwood, Rock, and Watonwan Counties
for the Year 1942

Prepared by T. R. Nodland, G. E. Toben, and G. A. Pond

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INTRODUCTION

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

Note: Assistance in the preparation of this material was furnished by workers supplied on N.Y.A. Student Work Project No. 493-70. Sponsor: University of Minnesota.

The analysis of the records and the preparation of the reports are handled by the Division of Agricultural Economics under the direction of G. A. Pond, T. R. Nodland, and G. E. Toben. Field organization is handled by the Extension Division with S. B. Cleland and J. B. McNulty in charge of this work. Ross Huntsinger was the fieldman in 1942. County agricultural extension agents who cooperate in this project include Paul Kunkel, E. C. Rogers, C. G. Gaylord, Roland Abraham, T. G. Fuller, F. J. Meade, S. B. Simpson, A. B. Hagen, C. E. Stower, C. C. Chase, J. I. Swedberg, C. R. Simon, and Wayne Hanson.

The officers for the Southwest Farm Management Association for 1942 were:

President, Milford Davis, Reading, Nobles County
 Vice-President, W. J. Marsh, Madelia, Watonwan County
 Secretary-Treasurer, Arthur Foster, Garvin, Murray County

The board of directors include these officers and also the following: Alex Best, Brown county; Wm. Golly, Cottonwood county; Stanley Hanks, Faribault county; A. C. Irvine, Jackson county; Floyd Peterson, Lincoln county; E. C. Hodges, Lyon county; M. E. Teeter, Martin county; Paul Cunningham, Pipestone county; Wm. Poulsen, Redwood county; and L. J. Moeller, Rock county.

The following tabulation shows by counties the numbers of members who completed records in 1942:

Brown	7	Lincoln	7	Nobles	29
Cottonwood	10	Lyon	10	Pipestone	7
Faribault	17	Martin	13	Redwood	26
Jackson	14	Murray	12	Rock	8
				Watonwan	10
					170

In the tables on page 4 and succeeding pages are shown data for 165 farms. Five farms have been omitted from all of the averages in the tables because they differed widely in type from the others or were not sufficiently complete for a full analysis.

TYPE OF FARMING*

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

TOPOGRAPHY, SOILS, AND WEATHER

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

No unusually high or low temperatures occurred in 1942. Weather conditions were favorable for early spring farm activities; however, cool wet weather in May retarded growth of vegetation, and the planting of corn and other late crops was seriously delayed. Favorable weather conditions in June permitted field work to progress rapidly. Small grain and grasses did well in June and July, but it was too cool for warm weather crops. Rust damage occurred with flax suffering the most. Heavy rains

*For a more complete description of the area see Engene, S. A., and Pond, G. A., "Agricultural Production and Types of Farming in Minnesota," Minn. Bul. 347, May, 1940.

caused considerable damage and delayed haying and harvesting of small grain. Heavy rains, snow, and a hard freeze on September 24 damaged late corn and soybeans. Fortunately, ideal October weather lessened the effect of the September freeze.

Table 1. Monthly and Annual Precipitation

	Worthington		Fairmont		New Ulm		Redwood Falls	
	Precip- itation	Deapar- ture from normal	Precip- itation	Deapar- ture from normal	Precip- itation	Deapar- ture from normal	Precip- itation	Deapar- ture from normal
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
January	0.19	-0.44	0.05	-0.75	0.20	-0.93	0.00	-0.73
February	0.41	-0.36	0.22	-0.75	0.35	-0.71	0.30	-0.57
March	4.55	+3.29	2.27	+0.86	4.67	+3.06	2.83	+1.58
April	1.26	-0.82	1.44	-0.79	1.73	-0.46	1.62	-0.31
May	6.36	+2.42	3.83	-0.22	6.21	+2.64	4.60	+1.74
June	5.57	+1.28	3.06	-1.28	2.98	-1.67	2.57	-1.92
July	4.14	+0.75	4.45	+0.89	3.41	-0.27	1.84	-1.20
August	4.52	+0.76	4.70	+0.96	1.40	-2.15	1.48	-1.50
September	4.66	+1.12	3.62	-0.01	6.66	+3.07	4.63	+1.77
October	0.80	-0.89	1.00	-0.85	0.26	-1.90	0.39	-1.28
November	0.51	-0.66	0.39	-1.12	0.48	-0.83	0.33	-0.88
December	0.50	-0.11	0.95	+0.05	1.28	+0.38	0.43	-0.65
1942 Total	33.47	+6.34	25.98	-3.01	29.63	+0.23	21.02	-3.95
1941 Total	28.22	+1.09	32.92	+3.93	34.94	+5.54	26.07	+1.10
1940 Total	22.50	-4.63	28.72	-0.27	36.90	+7.50	25.95	+0.98
1939 Total	24.27	-2.86	21.92	-7.07	23.04	-6.36	18.52	-6.45
1938 Total	40.50	+13.37	39.99	+11.00	29.98	+0.58	26.84	+1.87
Normal								
Annual Prec.	27.13		28.99		29.40		24.97	

RECORDS KEPT

The records kept by the cooperators included inventories at the beginning and end of the year, cash receipts and expenses, a report of feed fed to the various classes of livestock, and a record of farm produce used by the farm family. Supplementary information was also secured during the year regarding crop and livestock production and practices.

The cooperators were assisted and supervised in keeping their records by the field agent, Ross Huntsinger, who visited each farm in the thirteen counties several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, viz., securing a monthly list of prices of farm products prevailing in the area, helping the farmer place uniform values on real estate and equipment, checking the cash and feed records, and answering any questions that might arise as to how the entries should be made in the account book. The supervision resulted in uniformity in the type of records secured, in the inventory valuations and in the prices at which feed and farm produce were charged.

At the end of the year, the books were taken to the central office at University Farm, where they were summarized. For the purpose of comparison, the earnings as shown in this report are computed as if each farm was owned by its operator; however, each tenant is supplied a statement of his earnings on the basis of the rental system under which he is operating.

Table 2. Summary of Farm Inventories (Beginning of Year), 1942

Items	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
Size of farm (acres)		284	424	233
Size of business (work units)*		624	890	436
Horses	\$	\$ 335	\$ 412	\$ 306
Productive livestock (total)		6,277	11,216	3,952
Dairy and dual-purpose cows		660	619	560
Other dairy & dual-purpose cattle		367	321	278
Beef cattle (including feeders)		2,710	5,414	1,413
Hogs		1,534	2,377	1,077
Sheep (including feeders)		854	2,340	478
Poultry (including turkeys)		152	145	146
Crop, seed, and feed		4,244	6,818	2,593
Mach. & equipment (total)		3,134	4,841	2,369
Power mach. (f. share)		1,191	1,756	931
Crop & gen. mach. (f. share)		1,501	2,405	1,119
Livestock equip. & supplies		442	680	319
Buildings, fences, etc.		7,383	9,620	6,571
Land		15,304	23,280	11,699
Total farm capital	\$	\$36,677	\$56,187	\$27,490

*Explanation of term: "Work units."

The total "work units" for any one farm is a measure of size of that farm business. It is the accomplishment of a farm worker in a ten-hour day working on crops and productive livestock at average efficiency.

The number of work units for each animal and each acre of crops used in this report are listed as follows:

Item	Per	No. of work units	Item	Per	No. of work units
Dairy and dual-purpose cows	cow	13.5	Small grain	acre	.7
Other dairy & dual-purpose cattle	animal	4.0	Soybeans for grain	"	.9
Beef breeding herd	unit*	4.0	Sugar beets	"	3.0
Sheep - farm flock	)	1.6	Sweet corn	"	2.5
Hens	100 hens	26.0	Corn, husked	"	1.3
Feeder cattle	)	.35	Corn, hogged	"	.8
Feeder sheep	) 100 lbs.	.4	Corn, shredded	"	2.5
Hogs	) produced	.25	Corn silage	"	1.9
Turkeys	)	.7	Corn fodder	"	1.3
Canning peas	acre	2.0	Alfalfa hay	"	1.0
			Soybean hay	"	1.4
			Other hay crops	"	.6

*Animal unit represents one cow, one bull, one feeder steer or heifer, two head of other cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, 100 hens, or 1,400 lbs. turkeys produced.

Table 3. Summary of Farm Inventories (End of Year), 1942

Items	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
Horses	\$	\$ 338	\$ 445	\$ 282
Productive livestock (total)		7,648	14,260	4,628
Dairy & dual-purpose cows		670	666	548
Other dairy & dual-purpose cattle		399	276	341
Beef cattle (including feeders)		2,872	5,900	1,476
Hogs		2,477	4,212	1,548
Sheep (including feeders)		1,003	2,988	445
Poultry (including turkeys)		227	218	270
Crop, seeds, and feed		4,781	8,404	2,468
Mach. & equipment (total)		3,366	5,067	2,510
Power machinery (farm share)		1,227	1,735	954
Crop and gen. machinery		1,636	2,624	1,220
Livestock equipment & supplies		503	708	336
Buildings, fences, etc.		7,342	9,683	6,395
Land		15,304	23,280	11,699
Total farm capital	\$	\$38,779	\$61,139	\$27,982

Table 4. Summary of Amount of Livestock

Items	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
No. of horses		4.0	5.2	3.5
No. of colts		.7	.9	.8
No. of dairy & dual-purpose cows		8.6	8.3	7.3
Head of other dairy & dual-purpose cattle		9.2	8.3	8.2
Head of cattle kept in beef breeding herd		9.9	18.6	6.0
Pounds of beef cattle produced		10,119	20,904	5,163
Pounds of feeder sheep produced		2,054	7,556	217
Litters of pigs		20.1	28.9	13.2
Pounds of hogs produced		34,522	56,790	19,823
Head of sheep (2 lambs = 1 head) (farm flock)		29.8	49.0	35.4
No. of hens		196	202	178
Total no. of prod. livestock animal units		66.9	117.5	44.0
% of total that are:				
Dairy and dual-purpose cows		17.5	9.8	19.1
Other dairy and dual-purpose cattle		10.3	5.6	11.6
In beef breeding herd		11.6	14.3	11.3
Feeder cattle		19.3	25.5	20.0
Sheep - farm flock		5.5	4.8	8.3
Sheep - feeders		3.8	9.4	.8
Hogs		26.4	24.1	23.3
Turkeys		1.4	4.0	-
Hens		4.2	2.5	5.6

Table 5. Summary of Farm Earnings (Cash Statement), 1942

Items	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
FARM EXPENSES				
Horses bought	\$	\$ 49	\$ 67	\$ 32
Dairy and dual-purpose cows bought		75	71	55
Other dairy & dual-purpose cattle bought		66	31	35
Beef cattle bought (including feeders)		1,718	3,535	750
Hogs bought		339	667	177
Sheep bought (including feeders)		866	3,524	128
Poultry bought (including turkeys)		138	291	91
Misc. crop expenses		377	600	303
Feed bought		2,235	4,616	1,293
Power mach. (farm share) (new)		256	259	237
Power mach. (farm share) (upkeep)		533	731	391
Custom work hired		199	176	162
Crop and general mach. (new)		387	643	262
Crop and general mach. (upkeep)		135	183	104
Livestock equipment (new)		134	165	59
Livestock equipment (upkeep)		57	90	40
Misc. livestock expense		148	231	105
Buildings and fencing (new)		327	513	221
Buildings and fencing (upkeep)		156	189	123
Hired labor		622	1,020	430
Taxes		355	501	292
Insurance		35	43	27
General farm		60	60	49
(1) Total farm purchases	\$	\$9,267	\$17,206	\$5,366
(2) Decrease in farm capital		-	-	-
(3) Board furnished hired labor		143	227	93
(4) Interest on farm capital		1,886	2,933	1,387
(5) Unpaid family labor		360	468	242
(6) Total farm expenses (Sum of (1) to (5))	\$	\$11,656	\$20,834	\$7,088
FARM RECEIPTS				
Horses	\$	\$ 47	\$ 42	\$ 58
Dairy and dual-purpose cows		256	285	220
Dairy products		804	808	589
Other dairy and dual-purpose cattle		190	143	121
Beef cattle (including feeders)		3,860	7,901	1,800
Hogs		4,336	7,086	2,480
Sheep and wool (including feeders)		1,402	3,994	448
Poultry (including turkeys)		598	1,608	172
Eggs		589	586	532
Corn		625	1,137	486
Small grain		1,120	1,899	865
Other crops		366	561	162
Power machinery sold		71	77	71
Crop and gen. mach. sold		62	124	28
Misc.		166	357	63
Income from work off the farm		163	165	35
Agricultural Adjustment payments		503	696	394
(7) Total farm sales	\$	\$15,158	\$27,469	\$8,524
(8) Increase in farm capital		2,102	4,952	492
(9) Family living from farm		584	688	515
(10) Total farm receipts (7) + (8) + (9)	\$	\$17,844	\$33,109	\$9,531
(6) Total farm expenses		11,656	20,834	7,088
(11) Operator's labor earnings (10) - (6)		6,188	12,275	2,443

Table 6. Summary of Farm Earnings (Enterprise Statement), 1942 (A)

Items	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
EXPENSES AND NET DECREASES				
Total power	\$	\$ 884	\$1,129	\$ 717
Horses		162	207	125
Tractor		338	452	291
Truck		95	170	55
Auto (farm share)		159	176	148
Gas engine (farm share)		2	1	3
Elec. plant or current (farm share)		40	46	31
Hired power		88	77	64
Crop and general machinery		347	446	282
Livestock equipment		120	205	80
Buildings, fencing and tiling		404	494	412
Misc. productive livestock expense		141	226	86
Labor		1,172	1,760	803
Real estate taxes		287	397	246
Personal property tax		68	104	46
Insurance		35	43	27
General farm		60	60	49
Interest on farm capital		1,886	2,933	1,387
(1) Total expenses & net decreases	\$	\$5,404	\$7,797	\$4,135
RETURNS AND NET INCREASES				
All productive livestock	\$	\$10,612	\$18,785	\$6,160
Dairy and dual-purpose cows		1,034	1,088	812
Other dairy & dual-purpose cattle		413	385	345
Beef breeding herd		485	990	264
Feeder cattle		1,800	3,830	830
Hogs		5,005	8,325	2,831
Sheep - farm flock		225	392	217
Sheep - feeders		399	1,414	69
Turkeys		427	1,554	-
Chickens		824	807	792
Crops, seed and feed		136	138	-140
Income from work off the farm		163	165	35
Agricultural Conservation payments		503	696	394
Miscellaneous		178	288	129
(2) Total returns & net increases		11,592	20,072	6,578
(1) Total expenses & net decreases		5,404	7,797	4,135
(3) Oper. labor earnings (2) minus (1) \$		\$6,188	\$12,275	\$2,443

(A) Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases, and total expenses and net decreases. The operator's labor earnings are the same as those in Table 5.

ANALYSIS OF THE REASONS FOR DIFFERENCES IN OPERATOR'S EARNINGS

The operator's labor earnings varied widely among the farmers included in this study. The average labor earnings of those farmers ranking in the upper 20 per cent in the range according to earnings was \$12,275 and of those in the lower 20 per cent was \$2,443. This is a range of \$9,832 between the average earnings of these two groups. Some of the causes for these differences in earnings may be beyond the control of the farmer. However, all of these farmers could make some changes in their farming operations which would increase earnings. A farmer can secure some ideas as to changes that could profitably be made on his farm by studying the facts about his business as presented in this report and comparing his accomplishments with other farmers following the same general type of farming. The more important management factors affecting earnings and their relationships with earnings are presented in the following tables.

Table 7. Relation of Crop Yields to Farm Earnings

Per cent crop yields were of the average for all 165 farms		No. of farms	Average operator's labor earnings
Group	Average		
Below 86	74	39	\$4,463
86-113	100	86	6,617
114 and above	125	40	6,947

High production per acre, up to certain limits, tends to lower the cost per bushel of grain or per ton of hay. Any possible method of management that will increase crop yields and therefore lower cost of production more than the extra expense incurred in securing the higher yields should be given consideration.

Table 8. Relation of Choice of Crops to Farm Earnings

Per cent of tillable land in high return crops*		No. of farms	Average operator's labor earnings
Group	Average		
Below 35.0	31.1	43	\$5,258
35.0-42.0	38.4	72	5,644
42.0 & above	46.2	50	7,771

*Crops are marked on page 14 as (A), (B), (C), and (D). All of acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

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

Table 9. Relation of Returns from Productive Livestock to Farm Earnings

Index of returns for \$100 feed fed to productive livestock*		No. of farms**	Average operator's labor earnings
Group	Average		
Below 84	75	40	\$3,840
84-117	100	109	6,464
118 and above	128	26	7,741

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

**One farmer did not raise livestock.

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

Table 10. Relation of Amount of Productive Livestock to Farm Earnings

Productive livestock units per 100 acres*		No. of farms	Average operator's labor earnings
Group	Average		
Below 16.0	12.3	34	\$5,130
16.0-29.9	22.7	90	5,757
30.0 and above	39.4	41	8,012

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

On some farms the returns from livestock are so low that they do not cover feed and other costs. Such livestock is unprofitable, especially if there is more than enough to utilize what would otherwise be waste feed. If the livestock is yielding a net return, an increased amount of livestock adds to size of business and the opportunity to increase the farm earnings. Livestock produces manure and aids in keeping up the fertility of the land, and utilizes waste products on the farm. Livestock also helps to provide productive employment throughout the year. Any method that aids in utilizing the available resources to full and efficient capacity should add to the farm income.

Table 11. Relation of Size of Business (Work Units) to Farm Earnings

No. of work units		No. of farms	Average operator's labor earnings
Group	Average		
Group	343	31	\$3,429
400-699	549	89	5,355
700 and above	964	45	9,736

The size of the farming operations is one of the important factors affecting the earnings of farmers. On the average, the farmers with a large business had larger earnings than the farmers with a small business. The size of the farm business is here measured in terms of the number of work units. For farmers operating their farms at a loss, the larger the volume of business, the larger will be the loss; but a farmer who is making a profit could make a larger profit if he increased his size of business, providing that in so doing he does not lower materially the efficiency in some one or more important branches of his business. Those farmers who have large businesses usually have more flexibility of their organization than does the man with a small business, and can utilize more efficiently and to better advantage available labor, power, machinery and buildings. The size of the farm business may be increased by farming more land, by keeping more livestock, or by keeping livestock or growing crops of a more intensive type.

Table 12. Relation of Amount of Work Accomplished per Worker to Farm Earnings

Work units per worker Group	Average	No. of farms	Average operator's labor earnings
Below 235	195	37	\$4,135
235-319	279	94	6,428
320 and above	381	34	7,759

Farmers' earnings are generally higher on those farms on which a large amount of work is accomplished per worker. More days of productive work accomplished per worker reduces the labor charge per unit of business. Higher labor accomplishment can be secured in several ways. In the first place, the business must be large enough so that there will be at least sufficient work available for the family labor. The farm should be so organized that the labor requirements are well distributed throughout the year. Handling pastures in such a way that as large a proportion as possible of the year's feed for livestock may be obtained from them helps to reduce labor requirements. Proper planning of the farm work and economical use of labor-saving machinery help to increase the work accomplished per worker.

Table 13. Relation of Power, Machinery, Equipment and Building Expense to Farm Earnings*

Expense per work unit Group	Average	No. of farms	Average operator's labor earnings
\$3.50 and above	\$4.28	33	\$4,028
\$2.25-\$3.49	2.85	95	6,688
Below \$2.25	1.80	37	6,829

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

The expense factor does not show as high relationship with earnings when prices are high as when they are low. Some farms are under-equipped. On a few farms, excessive expenses constitute the main factor causing earnings to be very low.

Some of the cash expenses can be kept down by careful management. Oftentimes necessary repairs and improvements can be made by using the available farm labor rather than by hiring extra help. Repairs and overhauling should be done before spring work begins insofar as possible; or on rainy days or in other spare time during the summer. Reducing the number of horses to the minimum required for efficient operation of the farm helps reduce the power expense. In some cases, farmers can offset some or all of the power and machinery expense by using their equipment for outside work.

EFFECT OF WELL-BALANCED EFFICIENCY ON FARM PROFITS

It is quite evident from this report that few farmers have a monopoly on efficiency. Quite often farm operators show efficient management in one part of the farm business, which is offset by poor results in other phases. These farmers get medium returns while those who fall down all along the line get the lowest returns; and on the other hand those few who can manage to attain high efficiency in all parts of their organization receive returns well above the average. This is well illustrated in Table 14.

Table 14. Relation of Operator's Labor Earnings to the Number of Factors in which the Farmer Is Above Average

[illegible]

The array in Table 14 indicates that it will be worth-while for each cooperator to study carefully his ranking on pages 12 and 13, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Table 15. Measures of Farm Organization and Management Efficiency, 1942

Measures used in chart on page 13	Your farm	Average of 165 farms	33 most profit- able farms	33 least profit- able farms
Operator's labor earnings	\$ _____	\$6,188	\$12,275	\$2,443
(1) Crop yields*	_____	100	109	90
(2) % of tillable land in high return crops**	_____	38.9	40.6	37.5
(3) Ret. for \$100 feed to productive livestock***	_____	100	112	90
(4) Productive livestock units per 100 acres****	_____	24.7	29.5	21.1
(5) Size of business - work units	_____	624	897	430
(6) Work units per worker	_____	281	321	241
(7) Pow., mach., equip., & bldg. exp. per work unit	\$ _____	\$2.90	\$2.54	\$3.50
Measures and items related to some of the above measures:				
(3) Index of return for \$100 feed from -				
Dairy cattle	_____	100	109	98
Dual-purpose cattle	_____	100	116	89
Beef cattle - breeding herd	_____	100	105	89
Beef cattle - feeders	_____	100	111	81
Hogs	_____	100	109	92
Sheep - farm flock	_____	100	124	96
Sheep - feeders	_____	100	123	96
Turkeys	_____	100	104	-
Chickens	_____	100	102	99
(5) Work units on crops	_____	219	318	164
Work units on productive livestock	_____	364	538	257
Other work units	_____	41	41	9
(6) Total number of workers	_____	2.3	2.9	1.9
Number of family workers	_____	1.5	1.7	1.3
Number of hired workers	_____	.8	1.2	.6
(7) Power expense per work unit	\$ _____	\$1.48	\$1.29	\$1.69
Crop machinery expense per work unit	_____	.57	.49	.66
Livestock equip. expense per work unit	_____	.19	.22	.20
Bldgs. and fencing exp. per work unit	_____	.66	.54	.95

*Given as a percentage of the average.

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

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

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

Thermometer Chart

Using your figures from page 12 locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 165 farms included in this summary are located between the dotted lines across the center of this page.

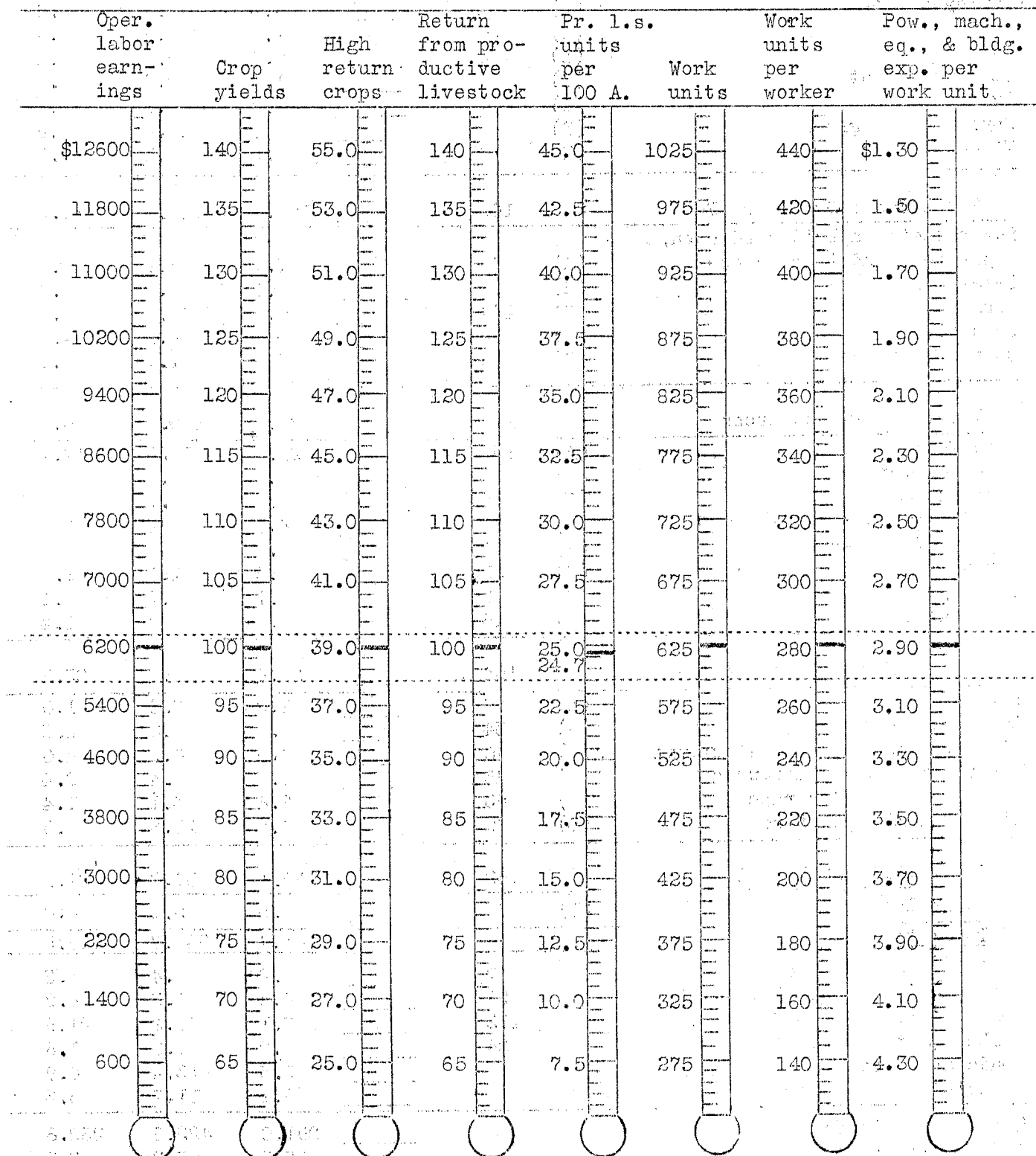


Table 16. Distribution of Acres in Farm, 1942

Crop: (A) (B) (C) and (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 12)	No. growing this crop	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
Canning peas	(A) 9	_____	1.2	1.8	.2
Flax.	(B) 146	_____	37.1	60.9	29.4
Barley	(C) 88	_____	15.4	27.7	13.6
Barley and oats	(C) 14	_____	4.5	1.1	1.6
Wheat	(D) 30	_____	1.9	1.6	2.9
Oats	(D) 140	_____	30.5	35.1	25.1
Oats and wheat	(D) 10	_____	1.6	2.7	2.3
Rye	(D) 10	_____	.8	.5	1.5
Soybeans for grain	(D) 88	_____	11.0	16.4	5.6
Miscellaneous	(D) 6	_____	.3	.1	.3
Total Small Grain and Peas	165	_____	104.3	147.9	82.5
Sugar beets, hybrid seed corn, potatoes and truck crops	(A) 66	_____	1.7	3.1	1.0
Sweet corn	(B) 10	_____	1.1	1.0	.6
Corn grain	(B) 164	_____	69.2	100.1	46.0
Corn silage	(C) 80	_____	5.7	9.9	4.1
Corn fodder	(D) 44	_____	2.0	1.7	5.1
Total cultivated crops	165	_____	79.7	115.8	56.8
Alfalfa hay	(A) 158	_____	21.9	31.3	17.1
Sweet clover hay	(B) 7	_____	.5	1.9	-
Soybean hay	(C) 15	_____	.6	1.1	.9
Mixed legumes & non-legumes	(C) 58	_____	4.6	5.2	2.5
Legumes for seed	(C) 6	_____	.4	-	.1
Timothy and/or brome	(D) 20	_____	.8	1.1	1.2
Timothy seed	(D) 2	_____	.1	.3	.1
Other annual hay	(D) 15	_____	.9	1.8	1.4
Total tillable land in hay	164	_____	29.8	42.7	23.3
Alfalfa pasture	(A) 63	_____	2.2	2.6	1.0
Sweet clover pasture	(B) 34	_____	4.8	9.0	6.3
Mixture incl. alf., sweet clover, brome	(B) 46	_____	6.0	6.5	4.0
Other legumes and mixtures	(C) 45	_____	3.8	4.4	2.4
Sudan grass and/or rape	(C) 63	_____	2.8	4.1	1.4
Other tillable pasture	(D) 79	_____	7.5	10.6	6.8
Total tillable land in pasture	162	_____	27.1	37.2	21.9
Tillable land not cropped	(D) 63	_____	3.5	5.1	4.0
Total tillable land			244.4	348.7	188.5
Phalaris hay (non-tillable)	7	_____	.2	.4	.3
Wild hay (non-tillable)	56	_____	4.5	7.2	4.9
Non-tillable pasture	112	_____	22.1	41.2	21.9
Timber (not pastured)	28	_____	1.2	1.0	1.8
Roads and waste		_____	9.5	13.4	6.9
Farmstead		_____	9.1	11.7	8.3
Total acres in farm			291.0	423.6	232.6
% land tillable			85.3	85.2	82.3
% tillable land in high return crops			38.9	40.6	37.5

Table 17. Crop Yields per Acre, 1942

Crop	Your farm	Average of 165 farms	33 most profitable farms	33 least profitable farms
Canning peas, value above seed cost	\$	\$34.82	\$48.23	
Flax, bu.		11.5	12.1	9.8
Barley, bu.		24.0	25.6	22.9
Barley and oats, bu.		39.1	-	-
Wheat, bu.		15.8	17.5	13.9
Oats, bu.		44.8	44.9	43.4
Oats and wheat, bu.		47.5	46.9	49.9
Rye, bu.		15.9	21.0	12.7
Soybeans for grain, bu.		12.2	15.4	10.3
Sweet corn, tons		3.8	4.7	3.0
Corn, grain, bu.		57.4	62.5	49.8
Corn silage, tons		10.3	10.6	9.5
Corn fodder, tons		2.7	3.3	2.4
Alfalfa hay, tons		2.5	2.6	2.7
Sweet clover hay, tons		.9	1.0	-
Soybean hay, tons		1.3	.9	1.2
Mixed legume & non-legume hay, tons		1.9	1.9	1.8
Legumes for seed, lbs.		52.	-	-
Timothy and/or brome hay, tons		1.2	2.3	.6
Timothy seed, pounds		-	-	-
Other annual hay, tons		1.0	.8	.9
Phalaris hay on non-tillable land, tons		1.4	-	1.8
Wild hay, tons		.6	.8	.7

Table 18. Factors of Cost and Returns from Dairy Cows, 1942

Items	Your farm	Average of 61 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Pounds of butterfat per cow		250	318	188
Feeds per cow, lbs.:				
Corn		1,621	2,003	1,501
Small grain		927	959	800
Com. feeds - under 25% protein		43	51	0
Com. feeds - over 25% protein		107	190	34
Legume hay		4,175	4,460	5,166
Other hay		219	52	170
Fodder and stover		399	297	756
Total concentrates		2,698	3,203	2,335
Total dry roughages		4,793	4,809	6,092
Silage		4,458	5,107	2,250
Total digestible nutrients*		5,274	5,788	5,292
T.D.N. per lb. B.F.		21.9	18.3	28.9
% T.D.N. that is protein		14.3	14.6	15.2
Feed cost per cow:				
Concentrates	\$	\$33.91	\$41.32	\$28.22
Roughages		23.53	24.95	24.74
Pasture		5.55	5.47	5.51
TOTAL FEED COSTS	\$	\$62.99	\$71.74	\$58.47
Value of produce per cow:				
B.F. sales	\$	\$101.14	\$136.07	\$64.76
Dairy produce used in house		8.60	6.33	9.48
Milk to livestock		15.85	18.11	16.00
Net increases in value of cows		7.53	10.53	13.34
TOTAL VALUE PRODUCED	\$	\$133.12	\$171.04	\$103.58
RETURNS ABOVE FEED COST PER COW	\$	\$70.13	\$99.30	\$45.11
RETURNS FOR \$100 OF FEED	\$	\$216	\$243	\$186
Price received per lb. B.F. sold				
As manufacturing cream (cents)		42.9	43.1	41.8
As mkt. mk. & cm. & mk. for cheese(cts.)		63.6	63.7	-
Feed cost per lb. B.F. (cents)		25.8	22.6	31.9
% fall freshening		49.2	60.8	56.2
Number of dairy cows**		13.4	16.1	9.6

*Not including nutrients received from pasture.

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

Table 19. Feed Costs and Returns from Other Dairy Cattle, 1942

Items	Your Farm	Average of 59 farms*	12 farms highest in butterfat per cow	11 farms lowest in butterfat per cow*
Feeds per head, lbs.:				
Concentrates		731	1,092	450
Hay and fodder		1,384	1,671	1,277
Silage		1,424	1,505	822
Whole milk		443	486	427
Skim milk		1,355	1,163	2,082
Feed cost per head:				
Concentrates	\$	\$8.99	\$13.33	\$5.52
Roughages		6.82	8.16	5.57
Milk		10.30	9.63	12.14
Pasture		1.83	1.78	1.94
TOTAL FEED COSTS	\$	\$27.94	\$32.90	\$25.17
Net inc. in value of other dairy cattle	\$	\$48.24	\$58.51	\$45.69
RETURNS ABOVE FEED COST PER HEAD	\$	\$20.30	\$25.61	\$20.52
RETURNS FOR \$100 OF FEED	\$	\$187	\$184	\$212
Number of head of other dairy cattle		13.9	14.3	9.9

Table 20. Feed Costs and Returns from All Dairy Cattle

Items	Your farm	Average of 61 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates		2,272	2,829	1,908
Hay and fodder		4,042	4,251	4,707
Silage		3,974	5,107	1,963
Feed cost per animal unit:				
Concentrates	\$	\$28.38	\$36.06	\$23.17
Roughages		20.01	21.77	20.17
Pasture		4.88	4.81	4.98
TOTAL FEED COSTS	\$	\$53.27	\$62.64	\$48.32
Value of produce per animal unit:				
Dairy products	\$	\$78.37	\$102.98	\$54.54
Net increase in value of dairy cattle		33.68	42.32	36.50
TOTAL VALUE PRODUCED	\$	\$112.05	\$145.30	\$91.04
RETURNS ABOVE FEED PER ANIMAL UNIT	\$	\$58.78	\$82.66	\$42.72
RETURNS FOR \$100 OF FEED	\$	\$216	\$235	\$199
Animal units of dairy cattle		20.6	23.7	14.4

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

Table 21. Factors of Cost and Returns from Dual-Purpose Cows, 1942

Items	Your farm	Average of 60 farms	12 farms highest in butterfat per cow	12 farms lowest in butterfat per cow
Pounds of butterfat per cow		190	266	120
Feeds per cow, lbs.:				
Corn		1,109	1,720	773
Small grain		731	868	559
Com. feeds - under 25% protein		12	40	8
Com. feeds - over 25% protein		47	83	15
Legume hay		3,330	3,511	2,629
Other hay		452	252	702
Fodder and stover		245	66	405
Total concentrates		1,899	2,711	1,355
Total dry roughages		4,027	3,829	3,736
Silage		3,701	2,557	3,234
Total digestible nutrients*		4,155	4,507	3,452
T.D.N. per lb. B.F.		23.2	17.0	30.2
% T.D.N. that is protein		14.2	14.5	13.6
Feed cost per cow:				
Concentrates	\$	\$23.41	\$34.08	\$16.46
Roughages		19.09	17.31	16.46
Pasture		6.05	6.06	5.72
TOTAL FEED COSTS	\$	\$48.55	\$57.45	\$38.64
Value of produce per cow:				
B.F. sales	\$	\$62.47	\$90.09	\$40.97
Dairy produce used in house		12.68	14.99	6.89
Milk to livestock		15.32	18.44	10.84
Net increases in value of cows		12.36	14.07	18.23
TOTAL VALUE PRODUCED	\$	\$102.83	\$137.59	\$76.93
RETURNS ABOVE FEED COST PER COW	\$	\$54.28	\$80.14	\$38.29
RETURNS FOR \$100 OF FEED	\$	\$220	\$243	\$203
Price received per lb. B.F. sold				
As manufacturing cream (cents)		42.0	41.1	41.9
As market milk or milk for cheese(cts.)		-	-	-
Feed cost per lb. B.F. (cents)		26.7	21.7	33.2
% fall freshening		37.9	47.8	26.2
Number of dual-purpose cows		9.5	7.0	11.1

*Not including nutrients received from pasture.

Table 22. Feed Costs and Returns from Other Dual-Purpose Cattle, 1942

Items	Your farm	Average of 45 farms*	9 farms highest in returns above feed	9 farms lowest in returns above feed
Feeds per head, lbs.:				
Concentrates		687	457	953
Hay and fodder		1,184	1,077	1,190
Silage		981	1,307	977
Whole milk		299	182	260
Skim milk		1,218	807	921
Feed cost per head:				
Concentrates	\$	\$8.30	\$5.60	\$11.30
Roughages		5.38	5.66	5.20
Milk		8.26	5.27	6.89
Pasture		2.68	2.15	2.85
TOTAL FEED COSTS	\$	\$24.62	\$18.68	\$26.24
Net increase in value	\$	\$47.54	\$65.92	\$25.19
RETURNS ABOVE FEED COST PER HEAD	\$	\$22.92	\$47.24	\$-1.05
RETURNS FOR \$100 OF FEED	\$	\$218	\$401	\$96
No. of head of other dual-purpose cattle		15.2	12.6	20.2

Table 23. Feed Costs and Returns from All Dual-Purpose Cattle

Items	Your farm	Average of 60 farms	12 farms highest in returns above feed	12 farms lowest in returns above feed
Feeds per animal unit, lbs.:				
Concentrates		1,755	2,183	1,584
Hay and fodder		3,374	2,635	3,695
Silage		3,160	2,746	2,593
Feed cost per animal unit:				
Concentrates	\$	\$21.47	\$27.23	\$19.22
Roughages		15.98	13.51	15.69
Pasture		5.80	5.75	6.52
TOTAL FEED COSTS	\$	\$43.25	\$46.49	\$41.43
Value of produce per animal unit:				
Dairy products	\$	\$56.25	\$86.14	\$39.65
Net increase in value		37.91	42.21	26.56
TOTAL VALUE PRODUCED	\$	\$94.16	\$128.35	\$66.21
RETURNS ABOVE FEED PER ANIMAL UNIT	\$	\$50.91	\$81.86	\$24.78
RETURNS FOR \$100 OF FEED	\$	\$225	\$287	\$167
Animal units of dual-purpose cattle		15.5	10.0	19.7

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

Table 24. Feed Costs and Returns from Beef Cattle, 1942

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Beef breeding herd: no. of farms:	44	11	11	
Feeds per animal unit, lbs.:				
Concentrates	1,369	1,773	906	
Legume hay	1,673	2,110	1,861	
Other hay	386	419	355	
Fodder and stover	405	348	271	
Silage	2,825	2,454	3,833	
Skim milk*	149	114	72	
Whole milk*	26	9	6	
Feed cost per animal unit:				
Concentrates	\$16.35	\$20.84	\$11.00	
Roughages	11.54	12.87	13.38	
Milk*	.80	.41	.27	
Pasture	5.86	4.82	6.21	
TOTAL FEED COSTS	\$34.55	\$38.94	\$30.86	
Value of produce per animal unit:				
Dairy products	\$11.72	\$20.50	\$5.72	
Net increase in value of animals	58.36	76.08	37.61	
TOTAL VALUE PRODUCED	\$70.08	\$96.58	\$43.33	
RETURNS ABOVE FEED COST PER ANIMAL UNIT	\$35.53	\$57.64	\$12.47	
RETURNS FOR \$100 OF FEED	\$215	\$286	\$144	
Number of cows and herd bulls	17.4	18.1	17.2	
Number of animal units in the herd	27.3	26.7	26.7	
Feeder cattle: no. of farms:	94	19	19	
Feeds per cwt. beef produced, lbs.:				
Corn	818	607	1,066	
Small grain	60	30	113	
Com. feeds - under 25% protein	8	7	3	
Com. feeds - over 25% protein	29	19	34	
Legume hay	285	263	399	
Other hay	69	39	141	
Fodder and stover	36	16	21	
Total concentrates	915	663	1,216	
Total dry roughages	390	318	561	
Silage	400	256	324	
Feed cost per cwt. beef produced:				
Concentrates	\$11.02	\$7.97	\$14.59	
Roughages	1.82	1.46	2.25	
Pasture	.43	.23	.85	
TOTAL FEED COSTS	\$13.27	\$9.66	\$17.69	
Net increase in value of feeders	\$16.91	\$19.27	\$12.49	
RETURNS ABOVE FEED COST PER CWT. BEEF PROD.	\$3.64	\$9.61	\$-5.20	
RETURNS FOR \$100 OF FEED	\$139	\$204	\$73	
Price received per 100 lbs. beef sold	\$12.22	\$12.70	\$11.30	
Price received per 100 lbs. bought in 1942	\$11.82	\$11.17	\$11.45	
No. of animal units	34.1	28.2	18.8	
Pounds of beef produced	17,496	17,244	8,105	

*Several farmers had both dairy or dual-purpose cows and beef cows and fed considerable amounts of milk produced by the dairy herd to beef calves.

Table 25. Feed Costs and Returns from Sheep, 1942

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Farm flock: no. of farms:		63	13	13
Feeds per head,* lbs.:				
Concentrates		92	74	122
Legume hay		167	144	138
Other hay		31	58	13
Fodder and stover		44	30	62
Silage		77	86	58
Feed cost per head:				
Concentrates	\$	\$1.14	\$.93	\$1.53
Roughages		.88	.86	.75
Pasture		.99	1.03	1.06
TOTAL FEED COSTS	\$	\$3.01	\$2.82	\$3.34
Value of produce per head:				
Wool	\$	\$3.02	\$3.45	\$2.82
Net increase in value of sheep		5.60	9.53	1.98
TOTAL VALUE PRODUCED	\$	\$8.62	\$12.98	\$4.80
RETURNS ABOVE FEED COST PER HEAD	\$	\$5.61	\$10.16	\$1.46
RETURNS FOR \$100 OF FEED	\$	\$321	\$519	\$154
Price per 100 lbs. of lambs sold	\$	\$13.12	\$13.37	\$11.11
Price per lb. wool sold (cents)		40.9	39.6	39.7
Pounds of wool per sheep sheared		9.0	10.3	8.2
Number of ewes kept for lambing		49	25	61
% lamb crop		109	113	104
% death loss		11	7	21
No. of head of sheep* (farm flock)		77	37	86
Feeder sheep: no. of farms		26	9	9
Feeds per cwt. sheep produced, lbs.:				
Concentrates		926	778	1,369
Legume hay		397	292	546
Other hay		48	31	93
Fodder and stover		20	46	11
Silage		370	38	701
Feed cost per head:				
Concentrates	\$	\$11.02	\$9.02	\$16.47
Roughages		2.19	1.35	3.30
Pasture		1.02	1.79	.64
TOTAL FEED COSTS	\$	\$14.23	\$12.16	\$20.41
Net increase in value of sheep	\$	\$20.90	\$26.46	\$17.08
RETURNS ABOVE FEED COST PER CWT. PRODUCED	\$	\$6.67	\$14.30	\$-3.33
RETURNS FOR \$100 OF FEED	\$	\$176	\$234	\$84
Price per cwt. sheep sold	\$	\$12.47	\$12.95	\$12.10
Price per cwt. for sheep bought in 1942	\$	\$12.61	\$12.73	\$12.64
% death loss		2.9	3.3	3.1
Pounds of sheep produced		12,938	10,621	5,521

*Two lambs under 6 months of age considered as one head.

Table 26. Feed Costs and Returns from Hogs and Chickens, 1942

Items	Your farm	Average of all farms	Farms highest in return above feed	Farms lowest in return above feed
Hogs: no. of farms		162	32	32
Feed per cwt. hogs produced, lbs.:				
Corn		390	299	504
Small grain		78	66	113
Com. feeds - under 25% protein		5	6	6
Com. feeds - over 25% protein		23	18	27
Total concentrates		496	389	650
Skim milk and buttermilk		86	90	99
Feed cost per cwt. hogs produced:				
Concentrates	\$	\$6.40	\$5.04	\$8.30
Skim milk and buttermilk		.18	.19	.20
Pasture		.18	.19	.21
TOTAL FEED COSTS	\$	\$6.76	\$5.42	\$8.71
Net. incr. in value per cwt. hogs prod.	\$	\$14.37	\$15.23	\$13.94
RET. ABOVE FEED COST PER CWT. HOGS PROD.	\$	\$7.61	\$9.81	\$5.23
RETURNS FOR \$100 OF FEED	\$	\$221	\$289	\$162
Price received per cwt. hogs sold	\$	\$13.13	\$13.84	\$12.82
Total no. of litters raised		20.5	26.4	18.1
No. of pigs born per litter		7.8	8.0	7.0
No. of pigs weaned per litter		6.3	6.4	5.5
% of two-litter systems		33.2	30.8	31.7
Pounds of hogs produced		35,161	44,705	29,875
Chickens: no. of farms:		147	29	29
Feed per hen, lbs.:				
Grain		108	106	106
Commercial feeds		24	25	22
Total concentrates		132	131	128
Skim milk and buttermilk		24	35	18
Feed cost per hen:				
Concentrates	\$	\$2.10	\$2.12	\$2.13
Skim milk and buttermilk		.05	.08	.04
TOTAL FEED COST	\$	\$2.15	\$2.20	\$2.17
Value of produce per hen:				
Eggs sold and used in house	\$	\$3.18	\$3.85	\$2.43
Net increase in value of chickens		1.04	1.81	.52
TOTAL VALUE PRODUCED	\$	\$4.22	\$5.66	\$2.95
RETURNS ABOVE FEED COST PER HEN	\$	\$2.07	\$3.46	\$.78
RETURNS FOR \$100 OF FEED	\$	\$210	\$281	\$148
Price rec'd. per doz. eggs sold (cents)		28.4	29.0	28.0
Eggs laid per hen		135	162	105
No. of hens		218	191	222
% of hens that are pullets		78	84	70

Table 27. Feed Costs and Returns for Turkeys, 1942

Items	Your farm	Average of 8 farms	4 farms highest in returns above feed	4 farms lowest in returns above feed
Feed per cwt. turkeys produced, lbs.:				
Grain	_____	381	352	410
Com. feeds - under 25% protein	_____	29	16	43
Com. feeds - over 25% protein	_____	154	165	142
Total concentrates	_____	564	533	595
Skim milk	_____	0	0	1
Feed cost per cwt. turkeys produced	\$ _____	\$11.40	\$10.39	\$12.41
Value of produce per cwt. turkeys prod.				
Eggs and poults	\$ _____	\$ 0	\$ 0	\$ 0
Net increases in turkeys	_____	25.49	25.85	25.13
TOTAL VALUE PRODUCED	\$ _____	\$25.49	\$25.85	\$25.13
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	\$ _____	\$14.09	\$15.46	\$12.72
RETURNS FOR \$100 OF FEED	\$ _____	\$227	\$248	\$204
Price rec'd per lb. turkey sold (cts.)	_____	29.1	29.7	28.6
Pounds of turkeys produced	_____	33,675	32,260	35,090

Table 28. Feed Costs for Horses and Misc. Power and Machinery Expense, 1942

Items	Your farm	Average of 161 farms*	32 most profit- able farms*	32 least profit- able farms*
Feed per horse, ** lbs.:				
Grain	_____	1,933	2,021	1,580
Hay	_____	2,852	2,616	2,389
Fodder and stover	_____	294	160	303
Feed costs per horse:				
Grain	\$ _____	\$23.72	\$24.84	\$19.24
Roughage	_____	9.19	8.39	7.67
Pasture	_____	4.15	4.09	4.99
TOTAL FEED COSTS	\$ _____	\$37.06	\$37.32	\$31.90
Number of work horses	_____	4.1	5.4	3.6
Number of colts	_____	.7	.9	.8
Crop acres per farm	_____	218.5	314.0	167.9
Tractor and horse exp. per crop acre	\$ _____	\$2.44	\$2.19	\$2.65
Crop and general mach. exp. per crop acre	\$ _____	1.67	1.49	1.71

*Four farms did not have horses. The number of horses, crop acres and expenses per crop acre are averages of 165 farms.

**Two colts equal one horse.

Table 29. Family Living from the Farm, 1942

Items	Your farm	Average of 165 farms	33 most profit-able farms	33 least profit-able farms	Your farm	Average of 165 farms	33 most profit-able farms	33 least profit-able farms
No. of persons (Family)	_____	3.4	3.8	2.9				
adult equiv. (Other*)	_____	.5	.7	.4				
Whole milk	_____	1196 qts.	1492	1125	\$ _____	\$49.10	\$58.30	\$46.48
Skim milk	_____	394 qts.	571	133	_____	1.92	2.71	.63
Cream	_____	291 pts.	365	246	_____	39.12	49.31	31.64
Farm made butter	_____	12 lbs.	15	21	_____	5.23	6.27	8.62
Eggs	_____	184 doz.	227	163	_____	47.08	58.33	41.64
Cattle	_____	416 lbs.	530	392	_____	42.96	61.67	38.93
Hogs	_____	541 lbs.	563	458	_____	68.88	71.91	57.40
Sheep	_____	8 lbs.	7	2	_____	1.02	.70	.22
Poultry	_____	110 lbs.	83	94	_____	18.22	12.91	15.11
Potatoes	_____	15 bu.	15	15	_____	12.79	12.66	13.62
Vegetables & fruits	_____	-	-	-	_____	50.65	68.58	38.54
Farm fuel	_____	-	-	-	_____	11.08	5.77	6.66
Rental value of house	_____				_____	236.13	278.99	215.67
Total					\$ _____	\$584.18	\$688.11	\$515.16

Table 30. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1942

Items	Your farm	Average of 122 farms	24 most profit-able farms	24 least profit-able farms
Number of persons - family	_____	4.5	4.9	4.0
Number of persons, (Family adult equivalent (Other*)	_____	3.5	4.0	3.1
	_____	.5	.6	.4
Food and meals bought	\$ _____	\$395	\$479	\$321
Operating and supplies	_____	144	152	124
Clothing and clothing materials	_____	228	333	151
Personal care, personal spending	_____	71	103	47
Furnishings and equipment	_____	145	214	100
Education, recreation and development	_____	130	228	51
Medical care and health insurance	_____	123	153	80
Church, welfare, gifts and income taxes	_____	152	217	84
Personal share of auto expense	_____	86	103	62
Household share of elect. & gas eng. expenses	_____	40	50	39
H.H. & pers.shr.of new auto,gas eng.& motors bot	_____	31	26	24
Life insurance and other investments	_____	544	938	135
Total household and personal cash expenses	\$ _____	\$2,089	\$2,996	\$1,218
Food furnished by the farm	\$ _____	\$339	\$408	\$325
Fuel furnished by the farm	_____	13	11	9
House rental	_____	237	287	244
Total household and personal expenses	\$ _____	\$2,678	\$3,702	\$1,796

*Hired help or others boarded.

Table 31. Summary of Farm Earnings - Averaged by Counties, 1942

	Brown & Watonswan	Cotton- wood	Fari- bault	Jackson	Lincoln & Lyon	Martin	Murray	Nobles	Pipestone & Rock	Redwood
FARM EXPENSES										
Cattle bought	\$990	\$2,306	\$1,431	\$2,171	\$371	\$457	\$1,334	\$3,969	\$1,344	\$2,233
Hogs bought	200	513	353	377	220	169	478	252	935	170
Sheep bought	245	230	352	543	20	5	244	3,072	2,129	69
Poultry bought	85	84	84	76	64	109	65	356	162	102
Feed	1,164	2,465	1,289	1,469	1,286	1,057	1,230	3,888	3,356	3,079
Other livestock expense	108	107	148	187	146	180	138	182	173	108
Crop expense	332	368	336	326	546	295	336	418	330	389
Power machinery & equipment	1,104	1,577	1,480	1,784	1,566	1,530	1,256	1,770	1,241	1,849
Custom work hired	191	152	240	194	160	258	168	203	197	206
Buildings	306	460	551	764	359	608	429	524	548	379
Hired labor	436	443	530	653	747	563	461	791	585	709
Taxes, insurance, & misc.	331	532	437	386	451	294	370	586	455	494
(1) Total purchases	\$5,492	\$9,237	\$7,231	\$8,930	\$5,936	\$5,525	\$6,509	\$16,011	\$11,455	\$9,787
(2) Decrease in cap.	-	-	-	-	-	-	-	-	-	-
(3) Board to hired labor	176	121	85	138	128	128	116	170	166	156
(4) Unpaid family labor	437	307	348	274	314	308	161	381	600	365
(5) Int. on farm cap.	1,748	1,891	1,849	1,568	1,673	1,680	1,463	2,348	2,034	2,016
(6) Total expenses	\$7,853	\$11,556	\$9,513	\$10,910	\$8,051	\$7,641	\$8,249	\$18,910	\$14,255	\$12,324
FARM RECEIPTS										
Cattle sales	\$3,002	\$5,149	\$3,094	\$3,744	\$1,523	\$1,282	\$2,470	\$8,786	\$3,107	\$5,838
Dairy products	905	660	787	947	1,025	1,324	425	746	845	561
Hogs	3,059	3,596	4,215	4,442	3,520	4,042	3,416	4,702	5,791	5,335
Sheep	545	521	1,324	689	233	173	610	3,867	4,107	83
Poultry & eggs	918	998	817	650	703	755	797	2,899	1,441	622
Crop	1,900	3,526	1,895	1,616	2,262	2,287	1,931	1,821	1,747	2,623
AAA payment	448	513	456	442	424	387	494	675	513	516
Miscellaneous cash receipts	522	477	295	478	508	244	678	483	828	551
(7) Total farm sales	\$11,299	\$15,440	\$12,883	\$13,008	\$10,198	\$10,494	\$10,821	\$23,979	\$18,379	\$16,129
(8) Increase in cap.	938	686	2,310	2,883	2,189	2,539	1,404	1,808	2,654	2,907
(9) Family living from farm	721	511	604	544	552	528	430	595	610	617
(10) Total receipts	\$12,958	\$16,637	\$15,797	\$16,435	\$12,939	\$13,561	\$12,655	\$26,382	\$21,643	\$19,653
(6) Total expenses	7,853	11,556	9,513	10,910	8,051	7,641	8,249	18,910	14,255	12,324
(11) Oper. labor earnings	5,105	5,081	6,284	5,525	4,888	5,920	4,406	7,472	7,388	7,329

Table 32. Miscellaneous Information - Averaged by Counties, 1942

	Brown & Watonswan	Cotton- wood	Fari- bault	Jackson	Lincoln & Lyon	Martin	Murray	Nobles	Pipestone & Rock	Redwood
<u>FARM INVENTORIES (Beginning of year)</u>										
Horses	\$ 411	\$ 277	\$ 325	\$ 261	\$ 322	\$ 382	\$ 271	\$ 407	\$ 295	\$ 313
Productive livestock	4,948	5,772	6,086	4,738	4,232	4,185	3,677	10,100	7,513	6,890
Crop, seed and feed	3,916	5,517	4,137	3,462	3,957	3,241	4,029	4,845	4,428	4,474
Mach. and equipment	3,041	3,532	2,912	2,377	3,111	2,423	2,678	3,708	3,553	3,285
Buildings	8,264	7,028	7,832	7,252	7,516	7,364	6,172	7,682	7,596	6,714
Land	13,908	15,344	14,537	11,832	13,232	14,730	11,736	19,316	15,976	17,184
Total farm capital	\$34,488	\$37,470	\$35,829	\$29,922	\$32,370	\$32,325	\$28,563	\$46,058	\$39,361	\$38,860
<u>MEAS. OF FARM ORG. AND MANAGEMENT EFFIC.</u>										
Crop yields - % of ave.	114	89	113	98	94	120	86	90	95	101
% high return crops	38.1	38.1	42.3	41.6	36.8	37.2	38.8	39.6	37.0	38.5
Index ret. from livestock	101	100	99	100	94	105	98	98	107	99
A. U. livestock per 100 A.	25.0	18.7	28.8	26.5	17.2	22.5	21.0	30.8	28.4	21.6
Work units	562	567	575	553	656	503	546	746	725	630
Work units per worker	245	283	285	250	286	250	313	296	297	289
Exp. per work unit	\$2.87	\$3.42	\$2.78	\$3.38	\$2.66	\$3.76	\$2.64	\$2.61	\$2.32	\$3.14
<u>DISTRIBUTION OF ACRES IN FARM</u>										
Small grain	74.2	135.1	80.3	79.4	129.7	66.0	94.1	114.6	101.7	138.4
Cultivated crops	63.2	73.6	76.6	65.5	73.1	70.8	65.5	101.5	83.6	91.7
Tillable hay land	28.3	29.0	23.1	28.5	29.1	18.3	31.9	38.0	30.1	31.6
Tillable pasture	26.1	15.3	28.6	18.2	27.6	31.8	24.3	38.4	32.2	19.2
Total acres in farm	240.8	318.6	240.4	223.6	346.1	207.7	259.8	334.8	301.8	346.2
% land tillable	80.9	82.0	87.5	86.6	80.4	90.3	82.2	88.1	84.1	87.4
<u>CROP YIELDS PER ACRE</u>										
Flax, bu.	11.6	10.6	11.5	10.7	11.4	12.6	11.1	10.6	12.7	12.5
Barley, bu.	26.2	21.2	34.3	15.8	29.6	31.7	18.0	20.5	25.2	23.8
Cats, bu.	49.6	42.3	52.3	45.0	39.7	52.2	42.5	37.8	37.8	52.3
Soybeans, bu.	12.7	10.6	15.8	9.9	13.4	12.6	8.4	10.7	14.8	13.3
Corn, grain, bu.	68.7	48.0	70.5	59.7	49.1	71.4	44.6	54.6	51.2	54.9
Corn silage, tons	10.6	10.2	9.0	11.5	9.9	15.1	8.1	9.7	8.8	9.6
Alfalfa hay, tons	3.3	2.3	2.6	2.6	2.4	3.0	2.0	2.2	2.7	2.5
<u>AN. UNITS OF LIVESTOCK</u>										
% dairy and du.-pur. cattle	54.9	52.0	63.9	53.9	54.1	43.4	47.9	99.3	81.4	73.1
% in beef breeding herd	36.2	25.4	22.5	33.5	36.7	36.1	17.9	23.8	29.2	22.2
% feeder cattle	14.5	3.9	14.9	0	15.2	10.1	26.3	7.2	11.6	12.7
% sheep-farm flock	10.7	30.5	19.2	22.8	9.5	6.8	18.4	23.9	12.9	30.1
% sheep-feeders	5.8	4.9	6.8	6.7	8.9	4.5	5.3	6.8	3.9	1.8
% hogs	2.6	2.4	4.5	3.4	0	0	1.4	9.4	10.5	0
% turkeys	25.3	26.5	28.1	29.9	24.7	37.1	25.5	19.5	25.0	29.2
% hens	.2	1.2	0	0	0	.5	0	6.2	3.2	0
	4.7	5.2	4.0	3.7	5.0	4.9	5.2	3.2	3.7	4.0

Table 33. Summary of Farm Earnings by Years*

Items	1940	1941	1942
No. of farms	165	166	165
FARM EXPENSES			
Horses bought	\$ 32	\$ 32	\$ 49
Dairy and dual-purpose cattle bought	76	138	141
Beef cattle bought (including feeders)	1,243	1,766	1,718
Hogs bought	103	209	339
Sheep bought (including feeders)	414	686	866
Poultry bought (including turkeys)	99	96	138
Miscellaneous crop expenses	243	303	377
Feed bought	1,007	1,718	2,235
Power machinery (farm share) (new)	379	446	256
Power machinery (farm share) (upkeep)	411	497	533
Custom work hired	150	140	199
Crop and general machinery (new)	319	416	387
Crop and general machinery (upkeep)	69	84	135
Livestock equipment (new)	74	123	134
Livestock equipment (upkeep)	20	32	57
Miscellaneous livestock expense	72	109	148
Buildings and fencing (new)	412	434	327
Buildings and fencing (upkeep)	88	141	156
Hired labor	392	561	622
Taxes	313	337	355
Insurance	15	32	35
General farm	59	55	60
(1) Total farm purchases	\$5,990	\$8,355	\$9,267
(2) Decrease in farm capital	-	-	-
(3) Board furnished hired labor	131	171	143
(4) Interest on farm capital	1,635	1,831	1,886
(5) Unpaid family labor	252	288	360
(6) Total farm expenses (Sum of (1) to (5))	\$8,008	\$10,645	\$11,656
FARM RECEIPTS			
Horses	\$ 42	\$ 41	\$ 47
Dairy and dual-purpose cattle	265	392	446
Dairy products	570	758	804
Beef cattle (including feeders)	2,373	3,399	3,860
Hogs	1,162	2,306	4,336
Sheep and wool (including feeders)	470	1,032	1,402
Poultry (including turkeys)	372	396	598
Eggs	244	334	589
Corn	516	477	625
Small grain	849	1,133	1,120
Other crops	239	283	366
Power machinery sold	168	204	71
Crop and general machinery sold	81	74	62
Miscellaneous	394	176	166
Income from work off the farm	193	196	163
Agricultural Adjustment payments	506	503	503
(7) Total farm sales	\$8,444	\$11,704	\$15,158
(8) Increase in farm capital	1,179	2,618	2,102
(9) Family living from farm	483	538	584
(10) Total farm receipts (7) + (8) + (9)	\$10,106	\$14,860	\$17,844
(6) Total farm expenses	8,008	10,645	11,656
(11) Operator's labor earnings (10) - (6)	2,098	4,215	6,188

*The financial statements differ in that the unpaid family labor rate was \$45 per month in 1940, \$50 in 1941 and \$60 in 1942; and the board for hired labor was calculated at \$18 per month in 1940, \$20 in 1941 and \$25 in 1942.

Table 34. Summary of Miscellaneous Items by Years

Items	1940	1941	1942
Total farm capital	\$32,724	\$36,613	\$37,728
<u>MEAS. OF FARM ORG. AND MANAGEMENT EFFICIENCY</u>			
% tillable land in high return crops	35.9	36.5	38.9
Animal units prod. livestock per 100 A.	22.1	24.7	24.7
Work units	569	631	624
Work units per worker	263	264	281
Expenses per work unit	\$2.17	\$2.30	\$2.90
<u>ACRES PER FARM</u>			
Crop acres per farm	279	295	291
	213	223	219
<u>CROP YIELDS PER ACRE</u>			
Flax, bu.	13.7	12.0	11.5
Barley, bu.	42.3	29.6	24.0
Oats, bu.	60.1	26.4	44.8
Corn, grain, bu.	46.2	55.9	57.4
Corn silage, tons	8.5	9.5	10.3
Alfalfa hay, tons	2.0	2.0	2.5
<u>RETURN ABOVE FEED COST PER:</u>			
Dairy cow	\$43.03	\$56.89	\$70.13
Dual-purpose cow	26.49	39.13	54.28
Animal unit in beef breeding herd	18.20	25.06	35.53
100 pounds feeder cattle produced	2.92	3.99	3.64
Head of sheep in farm flock	3.27	5.96	5.61
100 pounds feeder sheep produced	2.13	8.01	6.67
100 pounds hogs produced	1.23	5.15	7.61
Hen	.96	1.35	2.07
100 pounds turkeys produced	5.74	9.63	14.09
<u>FEED COST PER:</u>			
Dairy cow	\$46.50	\$53.11	\$62.99
Dual-purpose cow	34.85	44.19	48.55
Animal unit in beef breeding herd	29.86	33.57	34.55
100 pounds of feeder cattle produced	8.00	9.21	13.27
Head of sheep in farm flock	2.60	2.76	3.01
100 pounds feeder sheep produced	7.16	8.38	14.23
100 pounds hogs produced	4.29	5.55	6.76
Hen	1.11	1.50	2.15
100 pounds turkeys produced	7.27	8.26	11.40
Horse	29.74	31.80	37.06
<u>MISC. LIVESTOCK INFORMATION</u>			
No. of work horses	4.1	4.2	4.0
No. of colts	1.0	1.0	.7
No. of dairy or dual-purpose cows	8.6	9.1	8.6
Head of cattle in beef breeding herd	9.0	9.4	9.9
Pounds feeder cattle produced	8,678	14,087	10,119
Litters of pigs	13.6	16.9	20.1
Pounds of hogs produced	21,335	27,550	34,522
No. of hens	161	173	196
Pounds of butterfat per dairy cow	250	254	250
Pounds of butterfat per dual-purpose cow	179	190	190
No. of pigs weaned per litter	6.2	6.4	6.3
% lamb crop	110	110	109
Eggs per hen	113	117	135

Table 34. Summary of Miscellaneous Items by Years (Continued)

Items	1940	1941	1942
<u>PRICE RECEIVED PER:</u>			
Pound butterfat sold to creameries	\$.31	\$.37	\$.42
100 pounds feeder cattle	8.81	10.13	12.22
100 pounds feeder sheep	8.74	10.08	12.47
Pound of wool	.29	.38	.41
100 pounds of hogs	5.15	9.07	13.13
Dozen eggs	.15	.21	.28
Pound of turkeys	.14	.18	.29
<u>PRICE OF FEED</u>			
Shelled corn, bu.	\$.47	\$.54	\$.68
Oats, bu.	.26	.32	.41
Barley, bu.	.31	.39	.52
Alfalfa hay, ton	7.50	8.50	8.00
Timothy hay, ton	4.80	5.45	5.15
Corn silage, ton	2.10	2.55	2.75
Bran, cwt.	1.20	1.50	2.10
Linseed oilmeal, cwt.	1.75	2.00	2.40
Tankage, cwt.	2.50	3.20	4.10
Meat scraps, cwt.	2.55	3.20	4.10

Suggestions for Improvements