

10-1943

## EC861 Annual Farm Business Report : Northwest Nebraska Tableland Soil Areas Seven Farms Box Butte, Garden and Sheridan Counties 1942

Follow this and additional works at: <http://digitalcommons.unl.edu/extensionhist>

---

"EC861 Annual Farm Business Report : Northwest Nebraska Tableland Soil Areas Seven Farms Box Butte, Garden and Sheridan Counties 1942" (1943). *Historical Materials from University of Nebraska-Lincoln Extension*. 2307.  
<http://digitalcommons.unl.edu/extensionhist/2307>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

E.C. # 861 (1942)

AGRI

S  
85  
E7  
#861

October, 1943  
Area 6B

LIBRARY COLLEGE OF AGRICULTURE  
LINCOLN 1, NEBRASKA

Extension Circular 861  
1942

## ANNUAL FARM BUSINESS REPORT

Northwest Nebraska Tableland Soil Areas  
Seven Farms  
Box Butte, Garden, and Sheridan Counties

1942

Report prepared by F. J. Chase, Assistant Agricultural  
Extension Economist, with the aid of the Rural  
Economics Department, county extension agents  
and cooperating farmers.

Nebraska  
Cooperative Extension Work  
In Agriculture and Home Economics  
U. of N. Agr'l. College and U. S. Dept. of Agr. Cooperating  
W. H. Brokaw, Director  
Lincoln

"Issued in furtherance of the acts of May 8 and June 30, 1914."



FINANCIAL STATEMENT

1942

CASH INCOME

	Your Farm	Ave. of 7 Farms
Livestock.....\$	\$	\$ 3,062
Feed, grain and supplies\$	\$	\$ 6,566
Machinery and equipment.\$	\$	\$ 97
Farm improvements.....\$	\$	\$ -
Egg sales.....\$	\$	\$ 107
Dairy sales.....\$	\$	\$ 772
Labor off farm.....\$	\$	\$ 84
Miscellaneous.....\$	\$	\$ 412
Total.....\$	\$	\$11,100

CASH EXPENDITURES

	Your Farm	Ave. of 7 Farms
Livestock bought.....\$	\$	\$ 1,508
Feed bought.....\$	\$	\$ 809
Machinery expense.....\$	\$	\$ 2,650
Farm improvements.....\$	\$	\$ 496
Livestock expense.....\$	\$	\$ 63
Crop expense.....\$	\$	\$ 602
Hired labor.....\$	\$	\$ 1,426
Taxes.....\$	\$	\$ 310
Miscellaneous.....\$	\$	\$ 56
Total.....\$	\$	\$ 7,920

INVENTORY GAINS

Livestock.....\$	\$ 1,921
Feed, grain and supplies\$	\$ 662
Machinery and equipment.\$	\$ 887
Farm improvements.....\$	\$ 163
Total.....\$	\$ 3,633
Net cash gain.....\$	\$ 3,180
Net inventory gain.....\$	\$ 3,633
Net gain.....\$	\$ 6,813

INVENTORY LOSSES

Livestock.....\$	\$ -
Feed, grain and supplies...\$	\$ -
Machinery and equipment....\$	\$ -
Farm improvements.....\$	\$ -
Total.....\$	\$ -
Net cash loss.....\$	\$ -
Net inventory loss.....\$	\$ -
Net loss.....\$	\$ -

Above figures include

- No change in value on land
- No wages for unpaid family labor
- No wages for operator
- No interest on investment
- No interest actually paid

The preceding Financial Statement supplements this circular. It shows in summarized form the cash received and paid out, the inventory gains and losses, the net cash gain or loss, the net inventory gain or loss, and the net gain or loss for the farm. The figures given are for the average of the entire group of farms discussed in this report.

In the circular sent to each cooperator is a statement which gives the figures for his individual farm.

26596vh-10/43



TABLE I

Item	Your Farm	Area Averages 7 farms
<b>Capital Investments</b>		
Land	\$	15,830
Farm improvements	\$	2,216
Horses	\$	390
Cattle	\$	2,892
Hogs	\$	438
Sheep	\$	733
Poultry	\$	57
Livestock--total	\$	4,510
Machinery and equipment	\$	3,004
Feed, grain, & supplies	\$	3,327
<b>Total</b>	\$	28,887
<b>Receipts--Net Increases</b>		
Horses	\$	74
Cattle	\$	1,609
Hogs	\$	1,170
Sheep	\$	577
Poultry	\$	45
Egg sales	\$	107
Dairy sales	\$	772
Livestock--total	\$	4,354
Feed, grain, and supplies	\$	6,419
Labor off farm	\$	84
Miscellaneous receipts	\$	412
<b>Total</b>	\$	11,269
<b>Expenses--Net Decreases</b>		
Farm improvements	\$	334
Horses	\$	-
Miscellaneous live stock decreases	\$	-
Machinery and equipment	\$	1,666
Feed, grain, and supplies	\$	-
Live stock expense	\$	63
Crop expense	\$	602
Hired labor	\$	1,425
Taxes	\$	310
Miscellaneous expense	\$	56
<b>Total</b>	\$	4,456
Receipts less expenses	\$	6,813
Total unpaid labor	\$	905
Net income from investment and management	\$	5,908
<b>RATE EARNED ON INVESTMENT</b>		22.1%
Return to capital and oper- ator's labor & management	\$	6,628
5% Interest on investment	\$	1,444
Labor and management wage	\$	5,184

26596vh-10/43



FACTORS THAT AFFECT FARM INCOME  
Summary of 7 Farm Business Records

TABLE 2

FACTORS	Your Farm	Area Averages 7 farms
I. Size of Business		
A. Measures of size		
1. Total acres in farm		1527
2. Acres in cropland		562
3. Total work units needed		588
II. Farm Organization		
A. Acres in principal crops		
1. Corn		75
2. Wheat		117
3. Barley		56
4. Fallow		161
B. Numbers of livestock		
1. All cattle		46
2. Milk cows		7
3. Litters farrowed		7 (4)
4. Hens		91
III. Rates of Production		
A. Crop yields per acre		
1. Corn (bus.)		18
2. Wheat (bus.)		29
3. Barley (bus.)		16
B. Livestock production		
1. Dairy sales per cow		115
2. Egg sales per hen		1.18
3. Pigs weaned per litter		5 (4)
IV. Efficiency in the Use of Feed, Labor, & Equipment		
A. Feed returns per \$100 feed fed		
1. All productive livestock		189
2. Cattle		218 (2)
3. Hogs		328 (1)
4. Sheep		159 (1)
5. Poultry		116 (2)
B. Total labor work units accomplished per man		230
1. Crops		118
2. Livestock		106
3. Crop acres per man		220
4. Man labor cost per crop acre		4.22
C. Equipment		
1. Power and machinery cost per acre cropland		3.15
V. Miscellaneous		
A. Balance in farm organization		
1. Days productive work		
a. Needed on crops		301
b. Needed on livestock		272
2. Recpt's from livestock per A.		2.82
B. Other Factors		
1. Per cent of farm in cropland		36.8
2. Value of land per acre		10
3. Total investment per acre		19
4. Gross receipts per acre		7.38
5. Total expense per acre		3.51
6. Net receipts per acre		3.87

Footnote: Figures in parentheses give number of farms reporting. 26596jh-10/43



TABLE 3

## THERMOMETER CHART

SIZE		FARM ORGANIZATION				RATES OF PRODUCTION				EFFICIENCY			
Acres in Farm	Man Work Units	Acres in		Numbers of		Crop Yields		Livestock		Returns per \$100 feed fed	Work Units Accomplished	Power & Machinery cost per acre	Labor and Management wage
		Corn	Wheat	Cattle	Litters farrowed	Corn	Wheat	Dairy sales per cow	Pigs weaned per litter				
HIGH													
6080	1059	125	240	168	12	29	36	216	7	363	424	1.68	12,535
4377	963	120	237	136	10	27	-	205	-	351	380	-	10,674
3427	838	105	197	106	9	24	-	175	7	297	330	1.75	8,844
2477	713	90	157	76	8	21	33	145	6	243	280	2.45	7,014
AVERAGE													
1527	588	75	117	46	7	18	29	115	5	189	230	3.15	5,184
577	463	60	77	16	6	15	25	85	4	135	180	3.85	3,354
-	338	45	37	-	5	-	21	55	3	81	-	4.55	-
-	-	-	-	-	4	-	17	-	-	-	-	5.25	-
LOW													
400	310	42	14	3	3	13	13	26	3	39	134	5.84	1,552

The numbers between the lines across the middle of the page are the approximate averages in the area of the factors named at the top of each column. The numbers set off by lines across the top of the page show the highest efficiency attained by cooperators in these factors. Those similarly indicated at the bottom of the page give the lowest efficiency shown by the records used in this study. The columns are independent of each other and each may be considered as a thermometer of efficiency. By drawing a line across each column at the number nearest approaching the figure for your farm in that factor (Table 2), you can compare your efficiency with that of other farms included in this study.



## Annual Farm Business Report

Box Butte, Garden and Sioux Counties\* 1942

### Introduction

Farm business records of cooperating farmers are summarized by areas in 1942. General farming areas of Box Butte, Garden, and Sioux counties have been grouped together because they are similar in soils, climate, type of farming and market conditions.

### Financial Statement

On the seven farms reporting, the average cash income in 1942 was about \$3,200 more than the average cash expenses. This net cash gain, which is the difference between expenses and income, is the amount of money the farmer and his family have for use after the farm business expenses have been paid. It may be used to pay debts, to buy additional livestock and equipment, to invest in bonds or savings, or for personal enjoyment.

Inventory gains in 1942 were about \$3,600 or \$400 more than the cash gains. (Both the net cash income and inventory changes are included in the net farm income.) Inventory gains may be due to an increase in the number of livestock, the amount of grain, feed and other products, or to an advance in prices or to both. In 1942 they were due to both increased amounts and advanced prices. Inventory increases resulting from price advances of farm products or livestock to be used or fed on the farm are less important to the farmer than cash gains. An advance of fifty cents per bushel in the price of corn held for feeding is purely a paper profit. The pounds of beef or pork that can be made by feeding corn does not increase with the price. For this reason farm inventories should be based on conservative values.

A detailed summary of the farm business is shown in Table 1, page 3. "Receipts less expenses" shown near the bottom of this table is the same as the "net gain" shown in the financial summary on page 2. This item includes the net cash gain and the net increase in farm inventories and is not the amount of money available for spending.

"Total unpaid labor" is the cash value of the estimated time the operator and members of the family spent working on the farm during the year. This was calculated uniformly at \$60 per month for 1942.

"Net income from investment and management" is the amount left after wages for labor and all other expenses have been subtracted from receipts.

The "rate earned on the investment" is found by dividing the "net income from investment and management" by the "total capital investment." This will vary somewhat according to valuations of capital investments. A farm with a large amount of capital will not earn as high a rate on the investment as the same farm would with a lower valuation.

"The labor and management wage" is the estimated amount the farm operator receives for his labor and management after all costs of operating the farm have been allowed. These costs include all cash expenses; inventory decreases, unpaid family labor excepting the operator, and a capital charge of 5 per cent on the total investment.

\*Footnotes: Acknowledgement is made of the cooperation of the seven farmers of north-west Nebraska high plains soil areas who furnished their records for this report and of the county agents.



### Grouping of Farms

The farm business records of the seven farms reporting are averaged into one group. More groups could be formed in this summary with a greater number of records. Averages usually show what can be expected in a certain area even though the figures may not fit the individual farm. Important factors that influence the business of single farms can be compared to the mean of the area. In such a comparison, the important elements of the particular farm should be equal to or even better than the average.

### Factors that Influence Profits

As every farmer knows there are many factors that influence the success of the farm business. Some of these factors can be grouped as follows.

1. Size or volume of business
2. Farm organization
3. Rates of production
4. Efficiency in the use of feed, labor, and equipment

### Size or Volume of Farm Business

There are several measures of the size of a farm business. In Table 2 total acres in the farm, number of acres in important crops, total numbers of livestock, and the man work units accomplished by the labor force are used.

Operators on comparatively small farms who wish to increase the volume of their business might be able to do so by having their main crops on the most productive fields and by having more livestock per acre of cropland.

### Efficiency

The rate of efficiency in operating a farm business can be measured in several different ways. The most important of these are the returns for the feed fed to livestock, the work units\* accomplished per man, crop acres per man, man labor cost per crop acres, and the power and machinery cost per acre of cropland.

Timeliness of all farm operations is considered by successful farmers probably the most essential items of efficiency. The proper timing of all farm operations may mean the success of the farm enterprises. All crops planted in the proper season have great influence on the yield. Machinery and equipment repaired when needed save expenses. Man labor performed is more efficient and livestock gains are made more economically when the work is done at the proper time.

\*WORK UNITS---A work unit is the average amount of work that can be accomplished by a mature worker in a 10-hour day while using standard equipment and working at an average rate of speed.



There are not enough records in this summary to make more than one group which is an average group for all cooperators in the area. For this reason all the averages shown may not indicate the desirable figure for the factors influencing the individual farm business.

The average size of the seven farms reporting is 1,527 total acres, one-third of which is cropland. Individual farms vary from 400 to 6,080 total acres. A farm should be large enough to furnish full use of machinery and labor.

The average farm shows 75 acres of corn, 117 acres of wheat, 56 acres of barley, and 161 acres of summer fallow, or of the total cropland about 13 per cent was corn, 21 per cent was wheat, 10 per cent was barley, and 28 per cent was fallow in 1943. Individual farms will vary somewhat from these average proportions but any farm usually will show greater net returns when it has comparatively large acres of the important crops with average yields.

There are an average of 46 cattle per farm or about one animal for every 30 acres. Seven milk cows per farm is sufficient for family use and some to sell. There are five litters of pigs for the average farm.

Crop yields of the more important crops (corn at 18 bushels per acre and wheat at 29) are good. Farmers with large comparative acreages and low yields can expect correspondingly low net incomes. Barley yielded on an average 16 bushels per acre. At this yield barley furnishes less feed units per acre than either wheat or corn and indicates that barley culture should receive some study.

Dairy sales per cow of \$115 are high, but there is one dairy farm included in this average so this figure is not too accurate a measure of a standard for all farms. Egg sales per hen of \$1.18 are low in comparison to state averages but with only 91 hens on these farms the number of eggs sold per hen may be less than state average. Five pigs weaned per litter is lower than the state average.

Returns for \$100 worth of feed fed to all livestock of \$189 shows good use of the rough feed. Probably a few more cattle could be handled profitably which would increase the efficiency of the labor and add to the total net income.

26596jh-10/43