



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.*

PURPOSE AND RESULTS OF THE COTTONWOOD-JACKSON STATISTICAL ROUTE
(University of Minnesota and U. S. Department of Agriculture
in Co-operation With Farm Bureaus of Jackson and Cottonwood Counties)

Object: The objects in view in conducting this study of farm costs are:

1-To compare the profit between different crops and different classes of livestock in order that a farmer may more systematically plan his business.

2-To determine the best methods of production by studying the methods of those who are consistently low cost producers. Among the 23 farms included on this route in 1921, the cost of 100 lbs of gain on hogs varied from \$3.60 to \$7.20, and the cost of a bushel of corn from 32 to 92 cents. The methods used by these low cost producers can be imitated by all.

3-To determine the quantity of labor, feed and other elements of cost entering into the production of any given product. Then by applying current prices of feed, labor, etc., close estimates of cost can be made for any given price situation.

4-To furnish Congress, State Legislatures, and the various governmental agencies which deal with policies affecting the farming business with dependable information as to farm costs and profits. For example, figures from this cost route were presented with good effect in 1921 before the Inter-State Commerce Commission in the hearing on grain freight rates.

How Supported: Jointly financed by the University of Minnesota and the U. S. Department of Agriculture.

Method of Getting Costs: During 1921, twenty-three farmers furnished the material for complete cost records. A route man is stationed at Windom, who visits each farm two or three times per week, gathering complete records of every detail of the farm business. Inventories

were taken at the beginning and end of the year. Every hour of labor performed and every dollar of cash received or paid out was recorded. Complete feed records were kept for all classes of livestock. Each field was carefully measured in order to determine the yield on the acre basis.

These figures were sent to the Cost Accounting Section of the Experiment Station where all computing was done by trained accountants. Two such routes are being conducted in Minnesota. The other route is in Steele County.

STATISTICS FOR YEAR ENDING MARCH 1, 1922
(Average of 23 farms on Cottonwood-Jackson Route)

	<u>Average</u>	<u>Lowest</u>	<u>Highest</u>
Acres per farm	178	80	317
Crop acres per farm	131	52	226
Hours labor by proprietor per weed day	10.1	7.2	12.3
Hours labor by proprietor per Sunday	4.6	2.0	8.2
Hours unpaid labor per day	4.0	.6	11.2
Days hired labor per year	71	0	313
Average cost man labor per hour (including board)	21 ¢		
Acres of crops per work horse (not including pasture)	22½	7½	47½
Hours labor per horse per year	830	458	1294
Cost of horse labor per hour	10½ ¢	7 3/4 ¢	13½ ¢
<u>Yields:</u>			
Corn, bushels	45	24	60
Silage, tons	8	6	9
Oats, bushels	33	19	45
Tame hay, tons	1.5	1.0	2.4
<u>Cost per Ton or Lb:</u>			
x Corn, per bu.	37 ¢	31 ¢	91 ¢
x Oats, per bu.	35 ¢	27 ¢	55 ¢
x Tame hay, per ton	\$ 5.85	\$ 5.41	\$ 7.59
Butterfat, per lb	46 ¢	24 ¢	88 ¢
Hogs per lb.	3.1 ¢	3.6 ¢	7.2 ¢
<u>Crops per 160 acres:</u>			
Corn	50 acres		
Small grain	42½ "		
Tame hay	23		

x-land rent figured as 2/5 of the crop.

AVERAGE RETURNS PER FARM - WINDOM 1921

Receipts:

Cream and other dairy products	\$ 366
Cattle	313
Swine	899
Poultry	159
Sheep	59
Crops	224
Miscellaneous & outside work	<u>118</u>

\$ 2138

Expenses:

Hired labor	\$ 71
Threshing, twine, seed etc.	95
Livestock purchases & expenses	211
Feeds purchased	76
Machinery and repairs	200
Building & fence repairs	63
Taxes	139
Interest, actually paid	194
Rent, actually paid	165
Miscellaneous	<u>41</u>

\$ 1255

Excess of cash receipts over cash expenses	\$ 883
Value of products used in house	230
Estimated house rent (12% of 2000)	<u>240</u>

Total income not counting decrease in inventory \$ 1353

Business Expenses, Not Cash:

Decrease of inventory	\$ 288
Value of unpaid family labor except operator's 1464 hrs. @ 20¢	<u>293</u>

Total \$ 581

Excess of income over expenses (Pay for 3360 hrs. of labor of proprietor and interest on investment of \$23,000) \$ 772

C O R N
(Av. Cost of Production, 23 Farms 1921)

Man hours	17.5 @ 20¢	\$ 3.50	
Horse hours	41.5 @ 10¢	4.15	
Seed cost		.53	
Machinery		<u>1.75</u>	
Total operating cost			\$ 9.93
Yield			45 bu.
Tenant's share, 2/5 rental basis			27 bu.
Cost of production per bu. (tenant's share)			37 ¢

O A T S
(Av. Cost of Production, 23 Farms 1921)

Man hours	7.07 @ 20¢	\$ 1.41	
Horse hours	15.80 @ 10¢	1.58	
Seed cost		.98	
Threshing		1.03	
Twine		.36	
Machinery		<u>1.50</u>	
Total operating cost			\$ 6.86
Yield			32.9 bu.
Tenants share, 2/5 rental basis			19.7 bu.
Cost of production per bu. (tenant's share)			35 ¢

COST OF GAINS ON HOGS (100 LB. BASIS)
(Average of 23 farms, 1921)

Man labor	3.5 hrs. @ 20¢	\$.70	
Horse labor	4 hrs. @ 10¢	.04	
Grain	569# @ 29¢ per 56#	2.96	
Milk	83# @ 15¢ per 100#	.12	
Miscellaneous cash cost		.07	
Interest		.37	
Shelter		<u>.33</u>	
Total cost			\$ 4.59
Average sale price			7.26
Profit			2.67
Average return per 56# grain			.55