December 1966 A. E. Res. 211

FIELD CROPS

COSTS AND RETURNS

from

FARM COST ACCOUNTS

42 FARMS - 1965

C. D. Kearl and Darwin P. Snyder

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture
A Contract College of the State University
Cornell University, Ithaca, New York

REPORTS
from
FARM COST ACCOUNTS
42 farms, 1965

Overhead Costs	A.E. Res. 210
Field Crop Costs and Returns	A.E. Res. 211
Cash Crops and Fruits Costs and Returns	A.E. Res. 212
Livestock Costs and Returns	A.E. Res. 213

FIELD CROPS COSTS AND RETURNS, A.E. Res. 211

- Contents -

	Page
Introduction	1
Summary of cost account enterprises	4
Rates of return compared with other years	5
Pasture	6
Hay	8
Hay crop silage	10
Corn silage	12
Corn grain	14
Oats	16
Wheat	18
Rye	20
Winter barley	20

INTRODUCTION

For the Cost Account year 1965 there were 42 New York State farmers who completed detailed records on their businesses in cooperation with the Department of Agricultural Economics, Cornell University. The farms are located in most of the farming areas of the state. They are generally well-run, full-time, commercial farm businesses. They are representative of the "better" farmers of New York

This report presents the results for individual enterprises and the averages of the costs and returns for all farms. It thus shows not only the averages of costs and returns but also indications of the variations and reasons for them. The factors for individual enterprises are arranged according to size of enterprise. The averages of the costs are not averages of average costs but are weighted by the size of enterprise.

The project was under the supervision of C. D. Kearl. The field work on these accounts was done by Darwin Snyder and C. D. Kearl. The closing of the books and the preparation of this report on results of the operation of the farms was done by the Cost Account staff consisting of Marjorie Evans, Oneta Shipe, Edith Slights, Edna Wheeler, Helen Kruth, Abbie Leonard, Mildred Kubota and Margaret Auble.

ECONOMIC CONDITIONS

New York farm prices and prices paid by farmers for articles they buy, as indicated by U.S. indexes, were fairly stable during 1965 but were both about two percent above the 1964 level. The index of the former was 99 and the latter 110 on a 1957-59 bases. This indicates that, if farmers were to have a level of net income in 1965 that was comparable with that of the base period, they had to adjust their business operations to offset the adverse cost-price relationship.

In the early months of 1966 farm prices advanced rapidly. Prices of articles farmers buy advanced too, but at a slower rate. This would indicate that 1966 might well be a favorable year for farmers.

Hourly wages of workers in manufacturing industries continued to climb at a rate of about three percent per year. This, of course, is in contrast to the situation for farmers' net incomes and points up the pressures that farmers have been under as they have struggled to maintain a relative standard of living.

Economic Indexes
(1957-59 = 100)

Year	New York farm prices	United States	
		Prices of articles farmers buy	Hourly earnings in manufacturing industries
1958	101	100	100
1959	100	102	104
1960	98	103	107
1961	95	104	110
1962	95	106	113
1963	95	106	115
1964	97	107	118
1965	99	110	121
Jan.	101	108	120
Feb.	101	109	120
March	98	109	120
April	100	109	120
May	99	110	121
June	98	110	121
July	95	110	121
Aug.	95	110	121
Sept.	96	110	122
Oct.	100	110	122
Nov.	100	110	122
Dec.	101	111	123
1966			
Jan.	103	112	123
Feb.	108	112	123
March	108	113	124
April	110	114	124

WEATHER CONDITIONS AT EIGHT NEW YORK STATIONS, 1965*

Station	Length growing season**	May 1 - Sept. 30 Average temperature	May 1 - Sept. 30 Precipitation	Annual total precipitation
	days	degrees	inches	inches
Aurora	155	64.2	8.9	22.5
Batavia	152	64.5	11.6	29.4
Brockport	106	64.2	9.5	25.6
Canton	115	61.6	12.7	28.6
Fredonia	151	65.2	14.1	38.3
Norwich	87	61.0	15.9	34.5
Poughkeepsie	163	69.5	14.0	32.0
Salem	90	64.5	14.9	31.8

*Weather Bureau, U.S. Department of Commerce, Annual Summary, 1965
**Number of days between last and first frost

Generally, the growing season in New York State was shorter than usual. However, in the central plains region it approached normal. After three dry years some areas still had dry weather. This was particularly true during May, June and July and seriously affected the yields of crops planted in the spring and dependent on good moisture during the spring months. In the latter part of the summer the rains came and helped but, although they replaced lost ground water, they were too late to enable farmers to get good crop yields. Overall, the precipitation was below normal but was considerably better than in 1964. The temperature during the growing season was below normal which probably made the dry weather more bearable and enabled the crops to use more effectively what water there was.

YIELDS FOR CROPS AND LIVESTOCK

Item	Unit	New York State* 1936-40	New York State* 1946-55	New York State* 1965	Cost Account 1965
Hay	tons	1.3	1.7	1.7	2.1
Corn silage	tons	9	10	12	12
Corn grain	bu.	34	44	57	45
Wheat	bu.	24	31	36	45
Oats	bu.	30	38	47	60
Cows	lbs.	5,628	6,588	9,300	13,008
Hens	eggs	154	188	218	208

*AMS Reports and unpublished tabulations

For some New York farmers this was the fourth dry year in a row and generally, across the state, crop yields were only fair. However, the moisture conditions as noted above were "spotty" and some farmers had good crops. The spring planted crops suffered in many cases while the winter crops such as wheat were not seriously affected by the lack of rainfall.

SUMMARY, 1965
Crop Enterprises

Crop	Number of accounts	Average acres per enter-prise	Average yield per acre	Hours of labor per acre	Return per hour of labor	Return per dollar of cost	Profit per acre	Profit on enter-prise
Fruit:								
Apples	15	67.0	429 bu.	105	$2.26	$1.11	$ 48	$3,230
Sweet cherries	6	10.4	4,274 lbs.	136	2.47	1.36	127	1,320
Sour cherries	8	30.3	8,057 lbs.	147	1.68	1.05	20	616
Peaches	5	14.8	93 bu.	123	1.05	0.85	-70	-1,029
Grapes	5	25.9	3.9 tons	126	2.16	1.08	36	928
Grain:								
Wheat	15	78.0	45 bu.	4	5.89	1.24	16	1,280
Corn for grain	8	110.9	45 bu.	5	-3.79	0.66	-30	-3,328
Oats	6	29.4	60 bu.	5	-1.67	0.79	-16	-462
Rye	5	9.8	39 bu.	7	1.61	0.99	-1	-6
Hay and Silage:								
Hay	24	94.1	2.1 tons	5	2.78	1.08	5	436
Hay crop silage	8	44.7	5.8 tons	5	4.31	1.16	13	565
Corn silage	27	76.3	12 tons	7	1.31	0.97	-3	-264

Livestock Enterprises

Enterprise	Number of accounts	Average number of head per farm	Production per head	Hours of labor per head	Return per hour of labor	Return per dollar of cost	Profit on enter-prise
Dairy cows	25	84	13,088 lbs.	63	$1.85	$1.01	$ 316
Hens	5	15,453	208 eggs	0.4	2.56	1.04	3,808

SUMMARY, 1965

Farm enterprise	Return per hour of labor					Return per dollar of cost			
	1949 to 1953	1962	1963	1964	1965	1962	1963	1964	1965
	$	$	$	$	$	$	$	$	$
Livestock:									
Dairy cows	1.41	1.45	1.68	1.60	1.85	0.97	1.00	0.99	1.01
Hens	1.38	1.89	2.44	0.71	2.56	1.03	1.06	0.92	1.04
Raising chicks	0.83	14.09	3.44	5.00	--	1.35	1.06	1.11	--
Fruit:									
Apples	2.01	2.55	2.72	2.33	2.26	1.23	1.27	1.15	1.11
Sweet cherries	--	--	3.26	2.16	2.47	--	1.85	1.31	1.36
Sour cherries	--	1.22	2.37	1.16	1.68	0.96	1.48	0.90	1.05
Peaches	1.11	1.08	1.22	1.24	1.05	0.84	0.86	0.91	0.85
Grapes	--	--	3.70	2.14	2.16	--	1.65	1.21	1.08
Grain:									
Corn	2.25	1.87	1.39	1.47	-3.79	1.00	0.95	0.96	0.66
Oats	0.37	0.38	-0.38	-0.82	-1.67	0.88	0.83	0.79	0.79
Wheat	3.47	5.89	4.39	4.51	5.89	1.36	1.23	1.21	1.24
Rye	--	--	--	4.79	1.61	--	--	1.25	0.99
Hay and Silage:									
All hay	1.37	2.40	3.56	3.18	2.78	1.06	1.19	1.13	1.08
Hay crop silage	--	--	--	1.00	4.31	--	--	0.93	1.16
Corn silage	--	0.76	1.79	1.44	1.31	0.93	1.01	0.97	0.97

Factors from 24 PASTURE Accounts, 1965
(Arranged by acres of regular pasture)

Farm number	Total acres pasture	Amount per acre for regular pasture*		
		Hours labor	Pounds fertilizer	Total cost
	acres	hours	pounds	$
398	278.7	**	---	6
375	180.0	---	---	8
382	147.0	0.1	---	5
450	120.5	0.3	216	19
420	117.7	---	51	6
188	102.7	0.6	---	5
316	81.3	0.6	---	12
455	79.0	0.2	89	7
429	77.0	1.7	103	30
408	76.4	0.1	9	15
428	72.0	0.3	56	17
331	64.5	---	---	3
434	61.1	0.2	65	25
424	52.2	0.7	147	19
431	51.9	0.1	77	17
438	51.0	0.5	208	25
281	47.4	1.0	25	16
391	44.9	0.9	42	25
309	42.0	0.6	---	9
443	38.0	---	---	5
449	30.0	---	---	17
448	29.5	0.3	---	23
426	24.5	**	---	13
200	14.8	---	---	16
Averages for 1965, by thirds, according to acres of pasture, weighted by farms:				
High	138.4	0.2	44	8
Medium	63.3	0.4	83	19
Low	33.9	0.4	8	16
Annual averages, all farms, weighted by acres of pasture:				
1965	78.5	0.3	43	12
1964	78.9	0.3	63	14
1963	79.2	0.3	50	14
1962	85.6	0.3	22	10
1961	82.3	0.3	23	12

*Includes permanent and rotated pasture
**Less than 0.1 hour

PASTURE, 1965
1,884 acres of regular pasture on 24 farms with Dairy Cow Accounts

	Average cost	
	Per farm	Per acre
	dollars	dollars
Cost of regular pasture*:		
Labor	41	0.52
Tractor	16	0.20
Other equipment (including auto and truck)	22	0.29
Manure	139	1.78
Lime	60	0.77
Fertilizer	115	1.46
Seed and seeding	30	0.38
Interest	201	2.56
Taxes	73	0.93
Fences	223	2.83
Other	26	0.33
Total cost of regular pasture	946	12.05
Credits for hay cut, etc.	11	
Net cost of regular pasture	935	
Aftermath pasture	188	
Annual crops pasture	50	
Hired pasture	128	
Total pasture cost	1,301	

*Includes permanent and rotated pasture

Factors from 24 HAY Accounts, 1965
(Arranged by acres of hay)

Farm number	Hay per farm	Yield per acre	Labor per acre	Average per acre		Net cost per ton	Labor return		Return per dollar of cost	Profit on enterprise
				Cost	Returns		Per acre	Per hour		
	acres	tons	hours	$	$	$	$	$	$	$
398	196.1	3.3	4	61	75	17	21	5.07	1.22	2,716
428	158.0	2.0	4	49	59	23	16	3.94	1.21	1,591
420	157.7	1.3	2	39	39	25	3	2.08	1.00	-19
375	133.5	1.9	3	49	68	25	26	8.12	1.39	2,547
221	132.0	2.3	7	70	55	31	1	0.21	0.79	-1,939
449	127.0	2.0	7	62	57	31	4	0.61	0.92	-637
426	121.5	1.4	7	79	78	27	11	1.50	0.99	-106
309	116.5	2.8	5	66	62	23	4	0.87	0.95	-416
331	108.6	1.7	7	46	57	23	21	3.03	1.23	1,171
450	101.2	2.1	3	68	84	32	23	7.48	1.24	1,636
438	98.0	1.9	2	29	49	14	25	9.97	1.68	1,955
429	97.0	2.0	3	72	88	32	22	6.69	1.23	1,575
188	94.3	2.3	4	49	73	19	30	7.77	1.49	2,294
316	80.1	1.9	4	38	29	19	-3	-0.97	0.75	-755
431	77.8	2.1	4	86	85	40	7	1.63	0.99	-51
324	76.5	1.7	3	46	58	23	17	5.42	1.26	900
281	73.3	1.8	6	56	67	29	21	3.31	1.18	771
382	71.1	2.4	6	72	65	30	5	0.94	0.90	-511
443	51.5	2.8	4	52	69	19	25	6.83	1.33	886
455	47.0	2.3	5	62	75	20	23	4.88	1.22	631
424	43.0	1.6	5	99	43	62	-49	-10.78	0.43	-2,404
391	40.0	1.2	8	90	34	72	-38	-4.67	0.38	-2,234
430	36.4	1.8	5	34	58	19	33	6.54	1.72	886
200	21.3	3.8	9	88	87	20	13	1.42	0.99	-11
Averages for 1965, by thirds, according to acres of hay, weighted by farms:										
High	142.8	2.1	5	59	62	25	11	2.80	1.06	467
Medium	91.7	2.0	4	54	65	25	18	5.13	1.23	1,091
Low	48.0	2.2	6	69	62	34	4	1.06	1.02	-248
Annual averages, all farms, weighted by acres of hay:										
1965	94.1	2.1	5	58	63	25	13	2.78	1.08	436
1964	103.7	2.1	5	57	64	24	17	3.18	1.13	770
1963	106.7	2.7	6	59	70	21	22	3.56	1.19	1,221
1962	95.0	2.0	5	54	58	26	12	2.40	1.06	334
1961	84.7	2.6	7	60	63	21	15	2.01	1.05	240

HAY, 1965
2,259 acres on 24 farms

Average per acre:	Dollars	
Growing:		
Land	8.85	
1.6 tons of manure at $2.51 per ton	4.01	
149 pounds of fertilizer at $72.89 per ton	5.43	
Share of seeding cost	3.77	
Interest	0.79	
All other	1.83	
Total growing		24.68
Harvesting:		
4.4 hours of labor at $1.76 per hour	7.74	
2.6 hours of tractor work at $1.35 per hour	3.52	
Equipment (including auto and truck)	10.13	
Hired baling	0.25	
All other	2.21	
Total harvesting		23.85
Storing and selling		10.04
Total cost per acre		58.57
Returns:		
2.1 tons of hay	57.82	
Value of aftermath pasture, green chop, etc.	5.39	
Total returns per acre		63.21
Net gain per acre		4.64
Cost to grow a ton		11.80
Cost to harvest a ton		11.40
Cost to store and sell a ton		4.80
Total cost per ton		28.00
Net cost per ton (value of pasture, etc. deducted)		25.42
Value per ton		27.64
Net gain per ton		2.22
Labor return per acre		12.64
Return per hour of labor		2.78
Return per dollar of cost		1.08

Factors from 8 HAY CROP SILAGE Accounts, 1965
(Arranged by acres of silage)

Farm number	Silage per farm	Yield per acre	Labor per acre	Average per acre		Net cost per ton	Labor return		Return per dollar of cost	Profit on enterprise
				Cost	Returns		Per acre	Per hour		
	acres	tons	hours	$	$	$	$	$	$	$
386	81.2	4.0	7	94	121	17.35	41	5.75	1.28	2,162
424	63.0	6.5	4	93	67	13.91	-19	-4.65	0.73	-1,609
382	57.4	11.8	9	104	181	8.86	97	11.05	1.74	4,444
221	55.0	3.5	4	47	42	13.55	4	1.04	0.89	-297
391	40.0	5.2	2	73	52	14.04	-16	-6.36	0.71	-837
200	29.8	5.9	6	80	107	13.44	36	6.01	1.34	808
438	22.0	3.2	3	27	26	6.33	5	1.58	0.96	-23
428	9.0	3.3	3	77	63	18.23	-9	-2.80	0.82	-127
Annual averages, all farms, weighted by acres of hay crop silage:										
1965	44.7	5.8	5	80	93	12.56	23	4.31	1.16	565
1964	54.8	4.1	4	53	50	12.89	4	1.00	0.93	-190

HAY CROP SILAGE, 1965
357 acres on 8 farms

Average per acre:	Dollars	
Growing:		
Land	11.07	
0.9 tons of manure at $2.64 per ton	2.38	
56 pounds of fertilizer at $62.14 per ton	1.74	
Seeding	3.92	
Interest	0.72	
All other	1.50	
Total growing		21.33
Harvesting:		
5.4 hours of labor at $2.00 per hour	10.78	
4.4 hours of tractor labor at $1.68 per hour	7.39	
Other equipment (including auto and truck)	21.62	
All other	3.53	
Total harvesting		43.32
Storing costs		15.55
Total cost per acre		80.20
Returns:		
5.8 tons of hay crop silage	86.02	
Value of aftermath pasture, green chop and hay	6.83	
Total returns per acre		92.85
Net gain per acre		12.65
Cost to grow a ton		3.65
Cost to harvest a ton		7.42
Cost to store a ton		2.66
Total cost per ton		13.73
Net cost per ton (pasture, greenchop and hay deducted)		12.56
Value per ton		14.73
Net gain per ton		2.17
Labor return per acre		23.45
Return per hour of labor		4.31
Return per dollar of cost		1.16

Factors from 27 CORN SILAGE Accounts, 1965
(Arranged by acres of silage)

Farm number	Silage per farm	Yield per acre	Labor per acre	Average per acre		Net cost per ton	Labor return		Return per dollar of cost	Profit on enterprise
				Cost	Returns		Per acre	Per hour		
	acres	tons	hours	$	$	$	$	$	$	$
386	181.0	13	8	106	115	8.10	25	3.17	1.09	1,630
391	165.6	9	4	101	83	10.93	-10	-2.52	0.82	-2,942
434	140.9	10	3	97	99	9.75	10	3.38	1.03	350
382	127.6	10	4	94	125	9.45	40	9.47	1.32	3,892
424	118.0	12	6	124	89	10.44	-26	-4.35	0.72	-4,125
426	99.0	7	7	100	56	14.20	-33	-4.77	0.56	-4,342
449	97.0	15	9	124	146	8.06	33	3.89	1.17	2,114
398	83.8	18	11	157	145	8.67	6	0.56	0.92	-1,020
420	83.2	17	5	106	138	6.14	44	8.31	1.30	2,683
324	81.8	10	8	78	92	7.98	27	3.38	1.18	1,133
443	78.0	16	4	94	159	5.94	72	20.43	1.68	5,033
428	76.0	12	11	102	110	8.37	23	2.15	1.08	589
429	74.0	12	7	144	104	12.42	-28	-4.01	0.72	-2,960
221	67.0	13	8	134	89	10.50	-26	-3.39	0.67	-2,987
331	65.2	11	15	103	109	9.43	28	1.89	1.06	405
408	63.5	10	2	93	65	9.57	-21	-9.21	0.70	-1,761
431	57.0	10	10	131	103	12.73	-11	-1.08	0.79	-1,597
438	57.0	14	8	84	120	5.36	50	6.53	1.43	2,043
281	56.4	10	8	89	99	8.99	23	2.90	1.11	564
450	52.7	9	9	131	104	15.14	-8	-0.83	0.79	-1,430
188	50.5	14	7	135	166	9.76	41	5.88	1.23	1,569
375	44.5	10	5	160	101	15.87	-49	-9.34	0.63	-2,642
309	42.1	9	6	130	77	15.22	-43	-7.06	0.59	-2,239
200	34.8	8	11	119	80	14.85	-23	-2.03	0.67	-1,354
448	23.0	17	7	154	138	8.83	-3	-0.39	0.90	-359
316	21.2	12	15	122	117	10.45	20	1.35	0.96	-111
455	19.0	15	16	131	170	8.46	71	4.52	1.30	743
Averages for 1965, by thirds, according to acres of silage, weighted by farms:										
High	121.8	12	6	112	111	9.53	10	1.90	0.99	-196
Medium	68.8	12	8	107	106	9.14	13	1.85	1.03	-11
Low	38.2	12	9	130	117	11.95	3	-0.56	0.91	-584
Annual averages, all farms, weighted by acres of silage:										
1965	76.3	12	7	112	109	9.47	9	1.31	0.97	-264
1964	61.7	11	8	102	99	9.03	12	1.44	0.97	-159
1963	42.2	13	9	109	110	8.21	16	1.79	1.01	28
1962	35.0	12	10	114	106	9.62	7	0.76	0.93	-296
1961	31.2	12	10	104	102	8.34	14	1.40	0.98	-70

CORN SILAGE, 1965
2,060 acres on 27 farms

Average per acre:	Dollars	
Growing:		
Land	10.36	
6.3 tons of manure at $2.33 per ton	14.69	
486 pounds of fertilizer at $82.55 per ton	20.06	
8.2 quarts of seed at $11.63 per bushel	2.98	
2.6 hours of labor at $1.81 per hour	4.71	
2.2 hours of tractor work at $1.68 per hour	3.69	
Other equipment (including auto and truck)	4.61	
Spray materials	4.85	
Interest	0.59	
All other	3.80	
Total growing		70.34
Harvesting:		
4.3 hours of labor	7.88	
3.5 hours of tractor work	5.50	
Other equipment (including auto and truck)	12.27	
Hired silo filling	0.72	
All other	1.15	
Total harvesting		27.52
Storing costs		13.98
Total cost per acre		111.84
Returns:		
11.8 tons of silage	108.07	
All other (value of green chop)	0.31	
Total returns per acre:		108.38
Net loss per acre		3.46
Cost to grow a ton		5.97
Cost to harvest a ton		2.34
Cost to store a ton		1.19
Total cost per ton		9.50
Net cost per ton		9.47
Net return per ton		9.18
Loss per ton		0.29
Labor return per acre		9.13
Return per hour of labor		1.31
Return per dollar of cost		0.97

Factors from 8 CORN FOR GRAIN Accounts, 1965
(Arranged by acres of corn)

Farm number	Grain per farm	Yield per acre	Labor per acre	Average per acre		Net cost per bushel	Labor return		Return per dollar of cost	Profit on enter-prise
				Cost	Returns		Per acre	Per hour		
	acres	bushels	hours	$	$	$	$	$	$	$
425	335.0	46	4	92	57	2.01	-25	-5.91	0.62	-11,783
439	271.5	35	5	88	46	2.55	-31	-5.98	0.52	-11,499
382	87.0	57	7	77	75	1.34	12	1.85	0.97	-206
449	85.0	43	7	105	59	2.44	-36	-4.88	0.56	-3,905
408	38.5	73	2	105	94	1.45	-7	-4.23	0.90	-425
324	34.0	37	4	44	72	0.42	35	8.21	1.64	949
438	26.0	68	8	78	84	1.16	21	2.61	1.07	153
443	10.0	79	6	79	88	1.00	22	3.58	1.12	94
Annual averages, all farms, weighted by acres of corn:										
1965	110.9	45	5	89	59	1.94	-19	-3.79	0.66	-3,328
1964	67.8	57	5	78	75	1.38	8	1.47	0.96	-221
1963	47.6	56	6	76	72	1.35	8	1.39	0.95	-180
1962	52.0	70	7	83	83	1.18	14	1.87	1.00	-5
1961	30.1	71	7	83	85	1.15	13	1.99	1.02	55

CORN FOR GRAIN, 1965
887 acres on 8 farms

Average per acre:	Dollars	
Growing:		
Land	9.06	
0.2 tons of manure at $3.50 per ton	0.70	
539 pounds of fertilizer at $91.35 per ton	24.62	
8.4 quarts of seed at $11.12 per bushel	2.92	
2.8 hours of labor at $2.19 per hour	6.14	
2.4 hours of tractor work at $1.82 per hour	4.38	
Other equipment (including auto and truck)	4.89	
Spray materials	5.14	
Interest	0.71	
All other	4.39	
Total growing		62.95
Harvesting:		
1.8 hours of labor	3.72	
1.2 hours of tractor work	1.90	
Other equipment (including auto and truck)	10.90	
Hired harvesting	0.72	
All other	0.51	
Total harvesting		17.75
Storing and selling		8.32
Total cost per acre		89.02
Returns:		
45 bushels of shelled corn	57.93	
Other	1.08	
Total returns per acre		59.01
Net loss per acre		30.01
Cost to grow a bushel		1.39
Cost to harvest a bushel		0.39
Cost to store and sell a bushel		0.19
Total cost per bushel		1.97
Net cost per bushel (value green chop, silage deducted)		1.94
Value per bushel		1.28
Loss per bushel		0.66
Labor return per acre		-19.16
Return per hour of labor		-3.79
Return per dollar of cost		0.66

Factors from 6 OAT Accounts, 1965
(Arranged by acres of oats)

Farm number	Grain per farm	Yield per acre	Labor per acre	Average per acre		Net cost per bushel	Labor return		Return per dollar of cost	Profit on enterprise
				Cost	Returns		Per acre	Per hour		
	acres	bushels	hours	$	$	$	$	$	$	$
398	68.5	58	5	98	66	1.42	-24	-4.96	0.67	-2,176
316	37.8	52	5	68	54	1.02	-6	-1.16	0.80	-521
438	37.0	63	5	51	54	0.71	12	2.44	1.05	104
200	13.1	76	3	76	55	0.99	-16	-5.02	0.73	-273
426	10.0	61	5	54	64	0.74	18	3.69	1.18	99
443	10.0	75	4	80	80	0.86	7	1.91	0.99	-5
Annual averages, all farms, weighted by acres of oats:										
1965	29.4	60	5	77	61	1.07	-8	-1.67	0.79	-462
1964	28.2	50	5	59	47	1.00	-4	-0.82	0.79	-345
1963	20.0	59	6	71	59	1.00	-2	-0.38	0.83	-237
1962	28.6	57	6	67	59	0.94	2	0.38	0.88	-237
1961	27.2	54	5	64	51	1.02	-5	-0.96	0.79	-365

OATS, 1965
176 acres on 6 farms

Average per acre:	Dollars	
Growing:		
Land	9.30	
4.9 tons of manure at $2.70 per ton	13.25	
279 pounds of fertilizer at $75.20 per ton	10.49	
2.2 bushels of seed at $1.90 per bushel	4.18	
2.3 hours of labor at $1.70 per hour	3.90	
2.1 hours of tractor work at $1.42 per hour	2.98	
Other equipment (including auto and truck)	3.64	
Interest	0.52	
All other	3.57	
Total growing		51.83
Harvesting:		
2.4 hours of labor	4.08	
1.2 hours of tractor work	1.89	
Other equipment (including auto and truck)	8.09	
Hired combining	2.30	
All other	0.86	
Total harvesting		17.22
Storing and selling		7.48
Total cost per acre		76.53
Returns:		
60 bushels of oats	49.07	
0.6 ton of oats straw	11.75	
Total returns per acre		60.82
Net loss per acre		15.71
Cost to grow a bushel		0.86
Cost to harvest a bushel		0.29
Cost to store and sell a bushel		0.12
Total cost per bushel		1.27
Net cost per bushel (value straw deducted)		1.07
Value per bushel		0.81
Loss per bushel		0.26
Labor return per acre		-7.73
Return per hour of labor		-1.67
Return per dollar of cost		0.79

Factors from 15 WHEAT Accounts, 1965
(Arranged by acres of wheat)

Farm number	Grain per farm	Yield per acre	Labor per acre	Average per acre		Net cost per bushel	Labor return		Return per dollar of cost	Profit on enterprise
				Cost	Returns		Per acre	Per hour		
	acres	bushels	hours	$	$	$	$	$	$	$
221	476.0	50	4	60	98	1.15	46	12.51	1.62	17,875
386	137.0	42	3	69	75	1.48	12	3.68	1.08	788
315	90.1	41	3	47	73	1.09	33	10.19	1.56	2,384
170	84.0	51	5	76	100	1.50	34	6.69	1.32	2,058
449	73.0	25	8	65	45	2.21	-9	-1.10	0.69	-1,465
438	63.0	44	5	61	73	1.09	21	4.15	1.19	738
425	48.5	45	6	117	71	2.37	-33	-5.88	0.61	-2,235
391	42.2	40	5	62	85	1.19	33	7.04	1.37	975
267	32.6	27	4	54	37	1.98	-2	-0.55	0.68	-564
382	32.3	57	4	119	103	1.73	-6	-1.41	0.87	-518
200	27.7	28	5	67	62	2.03	2	0.42	0.92	-140
430	22.4	49	3	51	65	1.06	19	5.96	1.26	305
174	17.9	45	3	97	87	1.59	-4	-1.29	0.90	-171
309	17.6	34	7	95	68	2.29	-16	-2.33	0.72	-477
448	6.0	44	8	122	63	2.41	-46	-5.50	0.52	-354
Averages for 1965, by thirds, according to acres of wheat, weighted by farms:										
High	172.0	42	5	63	78	1.49	23	6.39	1.25	4,328
Medium	43.7	43	5	83	74	1.67	3	0.67	0.94	-321
Low	18.3	40	5	86	69	1.88	-9	-0.55	0.86	-167
Annual averages, all farms, weighted by acres of wheat:										
1965	78.0	45	4	67	83	1.37	25	5.89	1.24	1,280
1964	54.8	47	6	68	82	1.27	26	4.51	1.21	788
1963	38.5	42	7	73	90	1.40	29	4.39	1.23	656
1962	42.4	41	6	66	90	1.39	35	5.89	1.36	997
1961	50.1	39	6	69	76	1.56	18	2.94	1.10	339

WHEAT, 1965
1,170 acres on 15 farms

Average per acre:	Dollars	
Growing:		
Land	12.02	
0.3 ton of manure at $3.30 per ton	0.99	
314 pounds of fertilizer at $76.56 per ton	12.02	
1.9 bushels of seed at $2.37 per bushel	4.50	
2.0 hours of labor at $2.01 per hour	4.02	
1.7 hours of tractor work at $1.68 per hour	2.86	
Other equipment (including auto and truck)	2.58	
Interest	1.72	
All other	3.01	
Total growing		43.72
Harvesting:		
2.1 hours of labor	4.37	
0.5 hour of tractor work	0.69	
Hired combining	1.67	
Other equipment (including auto and truck)	9.33	
All other	1.32	
Total harvesting		17.38
Storing and selling		6.03
Total cost per acre		67.13
Returns:		
45 bushels of wheat	77.70	
0.4 ton of straw	5.84	
Total returns per acre		83.54
Net gain per acre		16.41
Cost to grow a bushel		0.98
Cost to harvest a bushel		0.39
Cost to store and sell a bushel		0.13
Total cost per bushel		1.50
Net cost per bushel (value straw deducted)		1.37
Value per bushel		1.74
Gain per bushel		0.37
Labor return per acre		25.32
Labor return per hour		5.89
Return per dollar of cost		1.24

Factors from 5 Rye Accounts, 1965
(Arranged by acres of rye)

Farm number	Grain per farm	Yield per acre	Labor per acre	Average per acre Cost	Average per acre Returns	Net cost per bushel	Labor return Per acre	Labor return Per hour	Return per dollar of cost	Profit on enterprise
	acres	bushels	hours	$	$	$	$	$	$	$
221	20.0	50	5	50	50	1.00	11	2.35	1.00	-3
449	16.0	28	12	49	67	0.88	34	2.81	1.36	282
174	5.8	38	4	139	81	3.03	-51	-13.50	0.58	-335
170	4.2	29	2	39	36	1.37	1	0.33	0.91	-14
316	3.0	42	5	74	87	1.19	21	4.00	1.17	38
Annual averages, all farms, weighted by acres of rye:										
1965	9.8	39	7	61	60	1.24	11	1.61	0.99	-6
1964	13.9	46	4	45	56	0.85	20	4.79	1.25	156

Factors from 2 WINTER BARLEY Accounts, 1965
(Arranged by acres of barley)

Farm number	Grain per farm	Yield per acre	Labor per acre	Average per acre Cost	Average per acre Returns	Net cost per bushel	Labor return Per acre	Labor return Per hour	Return per dollar of cost	Profit on enterprise
	acres	bushels	hours	$	$	$	$	$	$	$
315	65.6	56	4	47	54	0.83	14	4.04	1.15	464
382	34.6	65	2	79	91	1.01	17	8.15	1.16	426
Annual averages, all farms, weighted by acres of barley:										
1965				- Not averaged -						
1964				- Not averaged -						
1963				- Not averaged -						
1962				- Not averaged -						
1961	20.2	68	5	63	76	0.75	21	4.70	1.21	264

RYE, 1965
49 acres on 5 farms

Average per acre:	Dollars	
Growing:		
Land	12.51	
59 pounds of fertilizer at $70.51 per ton	2.08	
2.1 bushels of seed at $1.46 per bushel	3.06	
2.6 hours of labor at $1.79 per hour	4.65	
2.3 hours of tractor work at $1.87 per hour	4.29	
Other equipment (including auto and truck)	1.80	
Interest	1.39	
All other	6.73	
Total growing		36.51
Harvesting:		
4.2 hours of labor	7.04	
1.2 hours of tractor work	1.08	
Hired combining	1.08	
Other equipment (including auto and truck)	13.14	
All other	0.86	
Total harvesting		23.20
Storing and selling		1.21
Total cost per acre		60.92
Returns:		
39 bushels of rye	47.92	
.5 ton of straw	12.35	
Total returns per acre		60.27
Net loss per acre		0.65
Cost to grow a bushel		0.94
Cost to harvest a bushel		0.59
Cost to store and sell a bushel		0.03
Total cost per bushel		1.56
Net cost per bushel (value straw deducted)		1.24
Value per bushel		1.22
Loss per bushel		0.02
Labor return per acre		11.04
Labor return per hour		1.61
Return per dollar of cost		0.99