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A.E. Res. 79-23

**FIELD CROPS
COSTS AND RETURNS
FROM
FARM COST ACCOUNTS**

27 FARMS-1978

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REPORTS
from
FARM COST ACCOUNTS

27 Farms, 1978

Enterprise data from the 1978 New York Farm Cost Account Project have been published in the following reports. Additional copies may be obtained from County Extension offices or directly from the Department of Agricultural Economics, Cornell University, Ithaca, New York 14853.

Overhead Costs	A.E. Res.	79-21
Livestock Costs and Returns	A.E. Res.	79-22
Field Crops Costs and Returns	A.E. Res.	79-23
Fruit and Vegetable Crops Costs and Returns	A.E. Res.	79-24

FIELD CROPS COSTS AND RETURNS, A.E. Res. 79-23

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INTRODUCTION

The New York Farm Cost Account Project is a research project which is a part of the Cornell Agricultural Management Information System (CAMIS). Since 1914 data have been published from detailed enterprise records kept by New York farmers in cooperation with the Department of Agricultural Economics at Cornell University. These publications provide College and field staff as well as farmers and others interested in agriculture with a continuous record of economic changes taking place on New York farms.

The farms are located in most of the farming areas of the State. They are generally well-managed, full-time, commercial farm businesses. They are representative of the "better" farms in New York.

The reports present the results of individual enterprises and the averages of the enterprise costs and returns for all farms. They show not only the averages of cost 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 annual averages of the various factors are not averages of average costs but are weighted by the size of the enterprise.

Acknowledgements

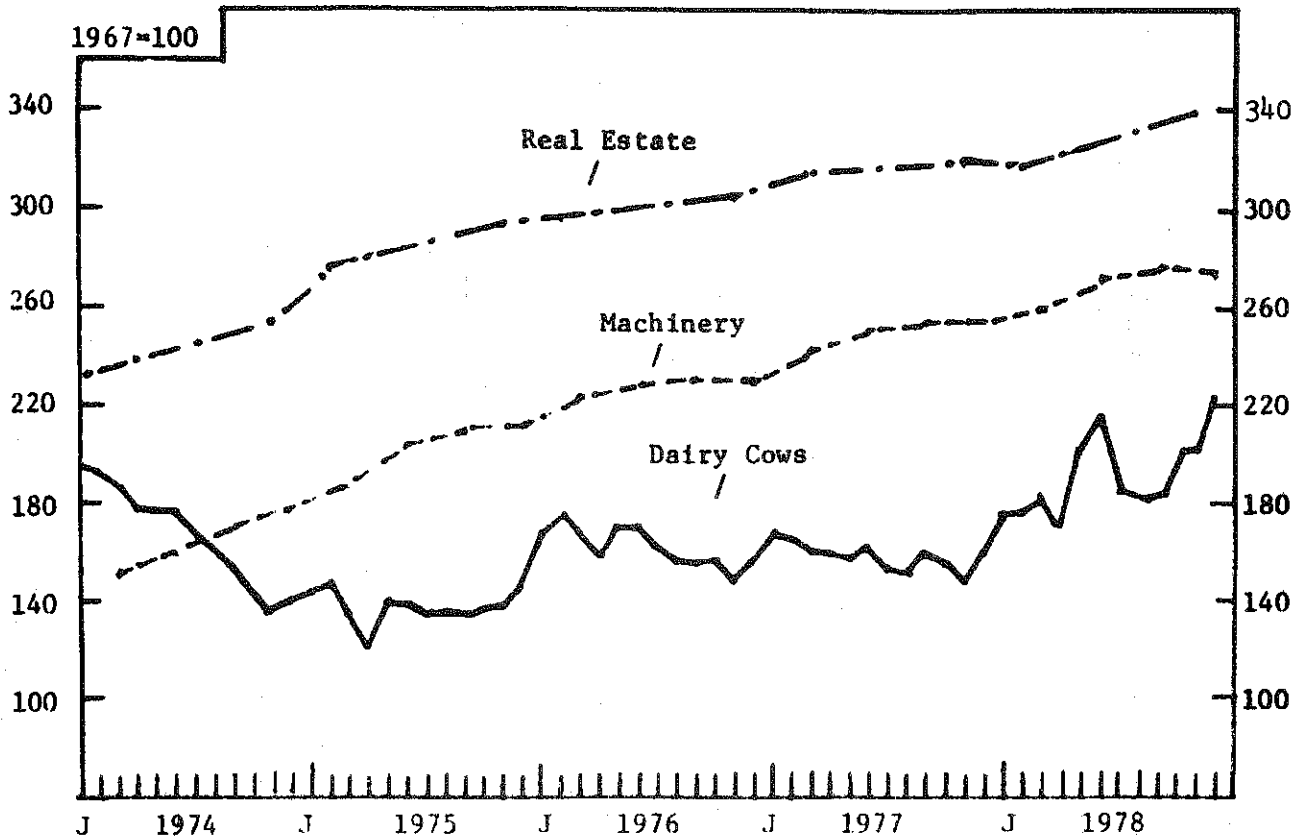
The project was under the supervision of Darwin Snyder, who also did the field work necessary to complete the records. Editing and processing the data, closing the books, and the preparation of these reports was done by Barbara Wilcox and Florence Blodgett assisted by Oneta Shipe. Mary Chaffee typed and assembled the reports and assisted in processing the data.

The material on pages 2, 3, and 4 of this report was taken from A.E. Res. 79-6, Dairy Farm Management, Business Summary, New York, 1978 by C. A. Bratton.

Special acknowledgement is due the group of farmers who are willing to keep the detailed records so essential to such a system of enterprise cost accounting. Without their continuing efforts and willingness to provide this information, this important and accurate source of real farm data would not exist.

VALUE OF N.Y. FARM REAL ESTATE, DAIRY COWS & MACHINERY
1974-1978

Prices



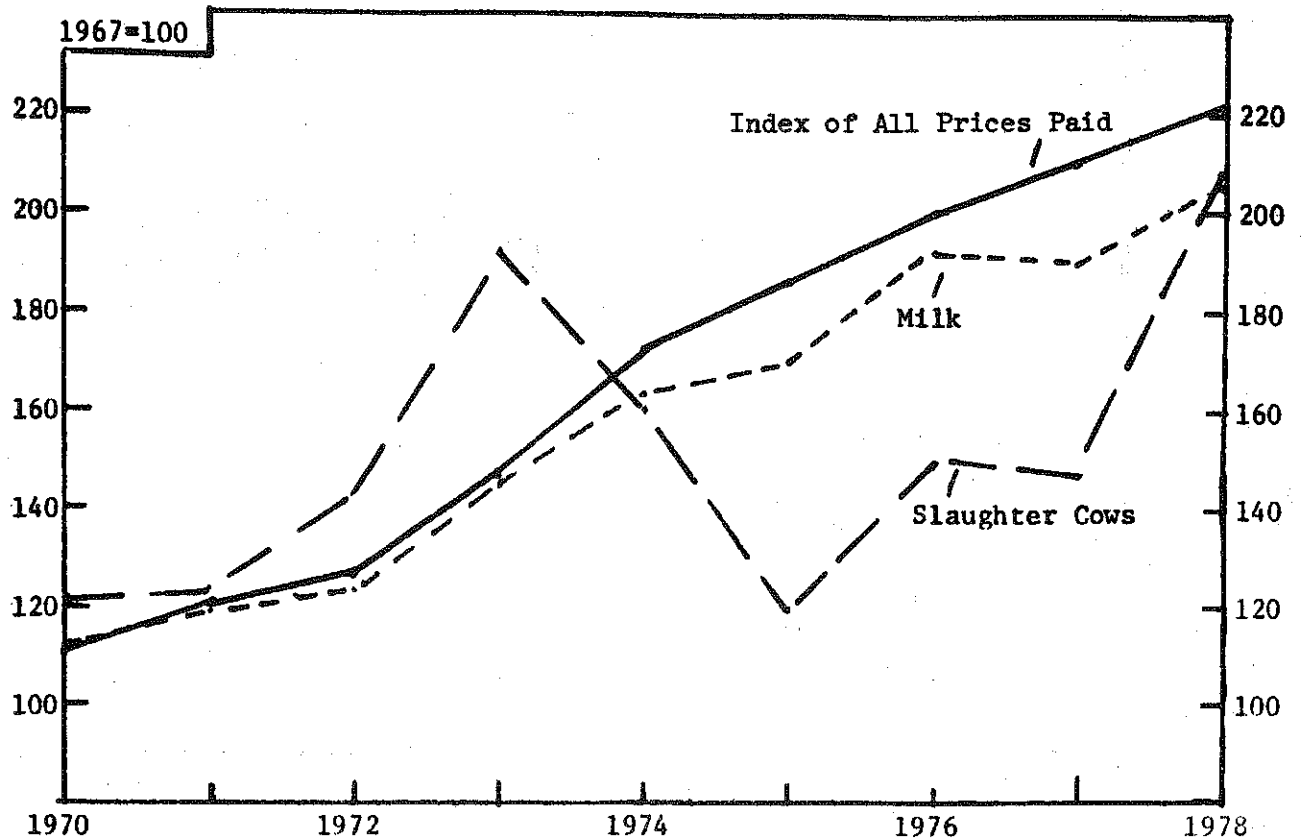
Price changes affect the inventory values on New York dairy farms. Real estate and machinery prices have risen steadily during the past five years. Dairy cow prices peaked in January 1974 but dropped sharply during the year, rose gradually during 1975, 1976 and 1977 and then jumped 39 percent in 1978. Dairy cow prices continued upward in 1979 and were reported at \$1,000 for April, or 45 percent above the December 1978 price. From 1967 to 1978, real estate values increased 239 percent, machinery prices 176 percent, and dairy cows 123 percent.

Table 1. REPORTED VALUES OF DAIRY FARM INVENTORY ITEMS, 1974-1978

Year*	N.Y. Dairy Cows		Machinery	N.Y. Farm Real Estate	
	Value/Head	1967=100	1967=100	Value/Acre	1967=100
1974	(Dec.) \$435	140	(Dec.) \$185	(Nov.) \$472	254
1975	(Dec.) 450	145	(Dec.) 222	(Nov.) 543	294
1976	(Dec.) 485	156	(Dec.) 233	(Nov.) 562	304
1977	(Dec.) 495	160	(Dec.) 253	(Nov.) 593	320
1978	(Dec.) 690	223	(Dec.) 276	(Nov.) 629	339
Percent change:					
1974 to 1975	+ 4%		+20%	+16%	
1975 to 1976	+ 8%		+ 5%	+ 3%	
1976 to 1977	+ 3%		+ 9%	+ 5%	
1977 to 1978	+39%		+ 9%	+ 6%	

* Latest figure reported for year, i.e., November for real estate.

PRICES RECEIVED AND PAID BY N.Y. DAIRY FARMERS, 1970-1978

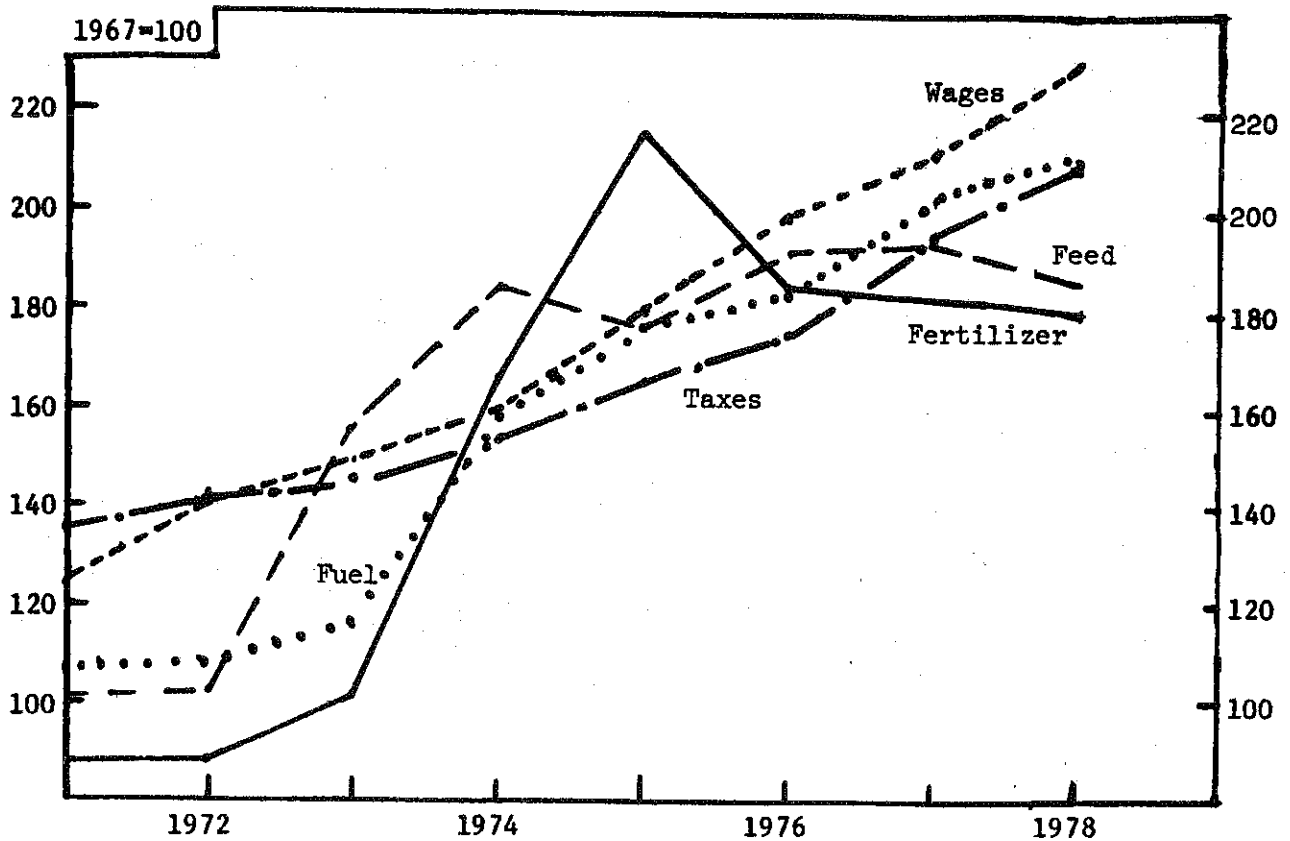


The relationship of prices received to prices paid determines the general level of farm incomes. The graph above shows the trend in prices since 1970 for milk, cull cows, and the index of prices paid by New York dairy farmers. Since 1971, milk prices have lagged behind all prices paid. Milk and slaughter cow prices dropped slightly in 1977 then rose sharply in 1978. In 1978, prices paid rose 5 percent, milk 8 percent, and slaughter cows 42 percent. The price situation for dairy farmers was more favorable in 1978 than in 1977.

Table 2. PRICES RECEIVED AND PAID BY NEW YORK DAIRY FARMERS, 1967-1978

Year	Milk 3.5% B.F. (cwt.)	Slaughter Cows (cwt.)	Prices Paid by N.Y. Dairy Farmers (1967=100)	Monthly Farm Price Per 100 Lbs. of Milk, 1978
1967	\$5.07	\$17.10	100	January \$ 9.82
1970	5.89	20.70	112	February 9.87
1971	6.02	21.20	120	March 9.65
1972	6.25	24.48	126	April 9.60
1973	7.30	32.80	146	May 9.55
1974	8.24	27.40	172	June 9.60
1975	8.64	20.60	186	July 10.16
1976	9.71	25.57	200	August 10.84
1977	9.61	25.09	210	September 11.12
1978	10.38	35.58	221	October 11.45
				November 11.54
				December 11.42

PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1971-1978



Since 1972, all prices paid by New York dairy farmers have risen but some more than others. Fertilizer and motor fuel prices jumped sharply in 1974 and 1975, then fertilizer dropped in 1976. Feed and fertilizer have held relatively steady since 1976, while wages, fuel, and taxes have continued to rise. Fuel, wages and taxes have more than doubled since 1967 (table 3).

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1978

Year	Index 1967=100				
	Feed	Fertilizer	Fuel	Wages	Taxes
1972	112	94	108	140	142
1973	157	102	116	150	146
1974	185	167	159	160	154
1975	177	217	177	180	166
1976	192	185	187	199	176
1977	194	182	203	212	195
1978	186	180	211	229	210
Percent increase:					
1972 to 1978 (av.)	11%	15%	16%	11%	8%
1976 to 1977	1%	-2%	9%	7%	11%
1977 to 1978	-4%	-1%	4%	8%	8%

SOURCE: U.S.D.A. - Agricultural Prices.

Growing Conditions

Table 1. TEMPERATURE, PRECIPITATION AND GROWING SEASON
Selected Stations, 1941-70 and 1978

	Average temperature		Precipitation				Length of growing season*	
	May - Sept.		May - Sept.		Total Annual		1947-67 1978	
	1941-70	1978	1941-70	1978	1941-70	1978	1947-67	1978
	degrees		inches				days	
Albany	65.7	63.5	15.4	15.5	33.4	33.5	---	145
Alfred	61.8	61.3	17.2	15.4	36.7	35.7	125	145
Aurora	64.6	63.7	13.8	16.7	40.0	35.0	160	166
Batavia	64.1	65.3	15.3	13.9	32.6	30.3	154	158
Binghamton	63.3	63.7	17.9	14.7	37.4	34.3	154	161
Canton	63.0	62.0	16.5	14.0	34.5	31.7	127	129
Glens Falls	----	63.6	17.8	22.3	39.3	44.0	---	129
Ithaca	63.8	62.4	17.2	13.1	34.8	32.0	145	145
Lowville	62.5	62.6	16.5	14.3	38.5	38.7	123	129
Utica	63.5	64.7	18.1	16.4	40.6	36.9	157	145

* Days between the last temperature of 32 degrees in the spring and the first in the fall.

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1978, Vol. 90, No. 13.

Weather is a factor to be considered when studying a farm business for a specific year. The growing conditions have a marked effect on the crops for that year. It is for this reason that data are presented on the growing conditions for 1978 and for the period 1941-70.

Average temperatures during the May through September growing season were about normal in 1978. Most weather stations indicated a longer than normal growing season. Rainfall for the growing season tended to be below normal in most areas especially during the first half or planting season. More normal rainfall well dispersed throughout the fall along with an abnormally long season resulted in as ideal a harvesting season in 1978 as one could special order.

Data are presented for ten weather stations. Rainfall is reported by months for the growing season (Table 2).

Table 2. GROWING SEASON RAINFALL
Selected Stations, 1941-70 and 1978

Station	May		June		July		August		September	
	1941-70	1978	1941-70	1978	1941-70	1978	1941-70	1978	1941-70	1978
	inches									
Albany	3.32	1.96	3.00	4.60	3.12	4.04	2.87	3.06	3.12	1.87
Alfred	3.76	3.81	3.76	2.34	3.73	2.83	3.00	3.85	2.93	2.52
Aurora	2.98	2.18	2.54	4.41	3.03	1.85	2.81	4.68	2.46	3.55
Batavia	3.17	2.67	2.69	1.84	3.05	2.23	3.50	2.57	2.87	4.62
Binghamton	3.83	2.55	3.59	3.85	3.83	2.54	3.61	4.61	3.02	1.16
Canton	3.37	1.88	2.91	2.97	3.43	1.73	3.47	5.11	3.31	2.28
Glens Falls	3.63	2.57	3.77	7.60	3.68	4.92	3.42	4.39	3.31	2.79
Ithaca	3.55	1.91	3.40	2.64	3.67	2.33	3.49	4.25	3.08	1.94
Lowville	3.42	2.27	2.94	2.55	3.26	2.27	3.58	2.94	3.31	4.23
Utica	3.52	1.86	3.55	4.59	4.17	3.16	3.54	2.22	3.32	4.61

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1978, Vol. 90, No. 13.

YIELDS FOR CROPS AND LIVESTOCK
New York State and Farm Cost Account Averages

Item	Unit	New York State*				Cost Account 1978
		1957-61	1967-71	1977	1978	
Hay	tons	1.9	2.2	2.0	2.1	2.2
Corn silage	tons	11	14	13.0	13.0	12.3
Corn grain	bu.	57	85	80	79	92
Oats	bu.	52	60	53	59	66
Wheat	bu.	32	39	39	35	30
Milk per cow	lbs.	7,914	10,361	11,190	11,360	15,051

*Source: Crop Production, 1978 Annual Summary; Crop Reporting Board, U.S.D.A. NY Economic Handbook, 1979; Department of Agricultural Economics, Cornell University, Ithaca, N.Y.; A.E. Ext. 78-37, December 1978.

FARM COST ACCOUNT SUMMARY, 1978

Crop Enterprises

Crop	Number of enterprises	Average acres per enterprise	Yield per acre	Hours of labor per acre*	Return per		Profit per acre	Profit on enterprise
					Hour of labor	Dollar of cost		
					\$	\$	\$	\$
<u>Forage:</u>								
Hay	19	76	2.2 tn	5	3.31	0.94	-8	-569
Hay crop silage	17	137	4.9 tn	4	-2.52	0.79	-31	-4,290
Corn silage	20	123	12.3 tn	5	4.46	0.98	-5	-566
<u>Grain:</u>								
Corn for grain	8	153	92 bu	3	0.00	0.92	-17	-2,721
High moist. corn	12	119	3.5 tn	4	6.98	1.04	8	1,005
Oats	9	45	66 bu	3	-3.92	0.77	-25	-1,118
Wheat	10	42	30 bu	4	-4.11	0.75	-36	-1,520
<u>Fruit:</u>								
Apples	12	108	529 bu	88	7.61	1.19	200	21,553
Sweet cherries	5	17	4,937 lb	95	7.45	1.29	268	4,567
Red tart cherries	8	32	5,715 lb	47	43.59	3.43	1,912	60,880

* To grow and harvest the crop.

ENTERPRISE RATES OF RETURN
FARM COST ACCOUNT RECORDS, 1975-78

Enterprise	Return per hour of labor				Return per dollar of cost			
	1975	1976	1977	1978	1975	1976	1977	1978
	\$	\$	\$	\$	\$	\$	\$	\$
Livestock:								
Dairy cows	6.29	6.73	5.07	9.01	1.09	1.10	1.03	1.13
Forage:								
Hay	5.36	4.90	5.15	3.31	1.11	1.05	1.05	0.94
Hay crop silage	9.48	6.79	3.19	-2.52	1.19	1.09	0.96	0.79
Corn silage	7.92	5.10	6.73	4.46	1.11	1.03	1.07	0.98
Grain:								
Corn for grain	5.02	-0.32	-0.99	0.00	1.02	0.91	0.87	0.92
High moisture corn	12.52	5.80	7.10	6.98	1.16	1.04	1.07	1.04
Oats	5.16	-3.44	-17.76	-3.92	1.06	0.80	0.54	0.77
Wheat	19.13	-0.23	-2.13	-4.11	1.34	0.88	0.84	0.75
Fruit:								
Apples	1.15	8.63	8.72	7.61	0.72	1.33	1.36	1.19
Sweet cherries	4.64	-0.98	7.32	7.45	1.15	0.59	1.23	1.29
Red tart cherries	4.85	21.18	17.71	43.59	1.06	1.91	1.64	3.43

Hay -

Hay enterprises deal only with that portion of the hay crop harvested as dry hay. Efforts are made to separate the costs related to dry hay production and those for hay crop silage. The hay crop is normally harvested more than once and, on most dairy farms, the harvest will include both dry hay and hay crop silage - sometimes on the same field the same day. Estimates are made to determine a reasonable allocation of production and acres to both enterprises.

Growing costs include only those costs related to an established hay crop. Costs to establish new seedings are not included except as seeding costs are amortized over the life of the stand. This year's share of those costs are shown as "seed" costs.

Harvesting costs include costs for the obvious harvesting activities plus costs to place the crop in farm storage or on a truck if sold at harvest time.

Storing and selling costs include costs to store the crop and interest on the value of the crop while stored. Costs incurred by the grower to sell any part of the crop would also be included.

HAY
COSTS AND RETURNS PER ACRE
1,445 ACRES ON 19 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 0 HR - - - - -	\$ 0
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	0
CUSTOM WORK, EQUIP RENT - - - - -	0
LAND USE - - - - -	30
MANURE, LIME, COVER CROP - - - - -	2
FERT - LBS N- 6, P- 13, K- 29 - - - - -	7
SEED, PLANTS NA - - - - -	7
SPRAY, DUST MATERIALS - - - - -	1
INTEREST, ALL OTHER - - - - -	2
TOTAL GROWING COSTS - - - - -	\$ 49
HARVESTING:	
LABOR 5 HR - - - - -	26
TRACTOR 3 HR - - - - -	11
TRUCK, EQUIPMENT - - - - -	21
CUSTOM WORK, EQUIP RENT - - - - -	0
ALL OTHER - - - - -	8
TOTAL HARVESTING COSTS - - - - -	66
TOTAL PRODUCTION COSTS - - - - -	\$ 115
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIP - - - - -	0
BUILDING USE - - - - -	9
INTEREST, ALL OTHER - - - - -	7
TOTAL STORING AND SELLING COSTS - - - - -	16
TOTAL COSTS - - - - -	\$ 131
RETURNS:	
CROP - YIELD: 2.2 TN - - - - -	\$ 123
BY-PRODUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 123
PROFIT: - - - - -	\$ 8-

	AVERAGE
OTHER FACTORS: COST PER TN TO: GROW	\$ 23
HARVEST	30
STORE AND SELL	7
TOTAL (OR NET*) COST PER TN	60
TOTAL (OR NET*) RETURN ** PER TN	57
PROFIT PER TN	3-
LABOR RETURN PER ACRE	\$ 18
PRODUCTION PER HOUR OF LABOR	0.4 TN
RETURN PER HOUR OF LABOR	\$ 3.31
RETURN PER DOLLAR OF COST	0.94

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 19 ENTERPRISES OF HAY
19 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE		PRCD PER HR OF LABOR TN	AVERAGE			TOTAL RETURN \$
		PER YIELD TN	ACRE LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	
830	167.4	2.8	6	0.4	66	64	148	170
112	153.1	1.8	4	0.4	24	46	80	105
848	139.0	1.9	3	0.5	68	67	150	107
843	134.0	2.5	5	0.4	58	46	115	150
836	118.2	3.1	9	0.3	69	83	165	159
127	110.0	1.7	2	0.7	24	38	74	101
834	101.5	2.1	6	0.3	34	83	143	97
827	80.0	2.0	6	0.3	42	76	137	102
108	70.9	1.9	5	0.4	30	46	88	104
105	65.5	1.2	5	0.3	46	55	121	72
821	49.4	1.5	8	0.2	63	114	191	105
824	45.3	3.4	9	0.4	79	106	204	205
835	43.0	2.3	7	0.3	65	84	178	140
146	41.7	1.4	6	0.2	64	70	150	83
840	30.0	1.6	4	0.4	21	67	105	81
108	28.8	2.0	2	0.9	23	45	81	111
130	26.0	1.8	4	0.4	42	93	146	108
804	22.2	2.3	10	0.2	68	99	186	135
828	19.2	2.8	8	0.3	25	72	114	155

1978 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	137.0	2.3	6	0.5	52	58	123	133
MED	65.1	2.1	7	0.4	52	81	152	118
LOW	28.0	2.0	6	0.5	41	75	131	113

ANNUAL AVERAGES- ALL ENTR, WEIGHTED BY ACRES:

1978	76.1	2.2	5	0.4	49	66	131	123
1977	69.3	2.3	6	0.4	49	65	136	142
1976	69.2	2.7	7	0.4	49	64	130	136
1975	50.2	2.8	7	0.4	42	69	126	140
1974	66.9	2.4	6	0.4	33	51	96	95

- * TO GROW AND HARVEST THE CROP
 ** INCLUDES STORING AND SELLING COSTS
 *** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 (RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 19 ENTERPRISES OF HAY
19 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER IN***		RETURN PER HOUR \$		PROFIT ON ENTER- FARM	
PROFIT	LABOR RETURN	COST	NET RETURN	OF LABOR	OF COST	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	
22	47	52	60	7.42	1.14	3,574	830
25	39	46	60	9.84	1.32	3,897	112
43-	12-	77	55	3.66-	0.72	5,889-	848
35	53	46	60	9.38	1.31	4,712	843
6-	43	54	52	4.82	0.96	739-	836
27	36	44	60	15.26	1.36	2,973	127
46-	13-	69	47	2.11-	0.68	4,691-	834
35-	4	67	50	0.66	0.74	2,831-	827
16	33	47	55	6.51	1.18	1,134	108
49-	28-	100	60	6.19-	0.60	3,175-	105
86-	32-	127	70	3.97-	0.55	4,245-	821
1	37	60	60	4.15	1.01	51	824
38-	7-	76	60	1.03-	0.79	1,637-	835
67-	46-	108	60	8.30-	0.56	2,764-	146
24-	7-	66	51	2.17-	0.77	724-	840
30	39	40	55	18.06	1.36	853	108
38-	25-	81	60	6.19-	0.74	972-	130
51-	5	83	60	0.54	0.73	1,131-	804
41	63	41	55	7.61	1.35	773	828

1978 GROUP AVERAGES, ACCORDING TO ACRES:

						THIRDS	
10	34	54	58	7.18	1.14	1,421	HIGH
33-	0	79	58	0.27-	0.79	2,198-	MED
17-	5	70	57	1.59	0.92	660-	LOW

ANNUAL AVERAGES- ALL ENIP, WEIGHTED BY ACRES:

8-	18	60	57	3.31	0.94	569-	1978
6	32	59	62	5.15	1.05	467	1977
6	34	47	50	4.90	1.05	468	1976
14	41	44	49	5.46	1.11	695	1975
1-	18	40	40	3.28	1.00	9-	1974

Hay Crop Silage -

Hay crop silage enterprises deal only with that portion of the hay crop handled as hay crop silage. See notes on page 8.

Because hay crop silage is harvested at a wide range of moisture levels, production is converted to a standard equivalent at 55 percent moisture to provide more meaningful data to average and/or compare.

Storing and selling costs include the cost of storing the silage and interest on the value of the crop while stored. Costs to remove the crop from storage are charged to the consuming livestock enterprise.

HAY CROP SILAGE
 COSTS AND RETURNS PER ACRE
 2,330 ACRES ON 17 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 0 HR - - - - -	\$ 0
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	0
CUSTOM WORK, EQUIP RENT - - - - -	0
LAND USE - - - - -	33
MANURE, LIME, COVER CROP - - - - -	6
FERT - LBS N- 3, P- 11, K- 52 - - - - -	10
SEED, PLANTS NA - - - - -	13
SPRAY, DUST MATERIALS - - - - -	2
INTEREST, ALL OTHER - - - - -	2
TOTAL GROWING COSTS - - - - -	\$ 66
HARVESTING:	
LABOR 4 HR - - - - -	21
TRACTOR 3 HR - - - - -	12
TRUCK, EQUIPMENT - - - - -	27
CUSTOM WORK, EQUIP RENT - - - - -	1
ALL OTHER - - - - -	3
TOTAL HARVESTING COSTS - - - - -	64
TOTAL PRODUCTION COSTS - - - - -	\$ 130
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIP - - - - -	0
BUILDING USE - - - - -	13
INTEREST, ALL OTHER - - - - -	5
TOTAL STORING AND SELLING COSTS - - - - -	18
TOTAL COSTS - - - - -	\$ 148
RETURNS:	
CROP - YIELD: 4.9 TN @55% MOISTURE	\$ 117
BY-PRODUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 117
PROFIT: - - - - -	\$ 31-

	AVERAGE
OTHER FACTORS: COST PER TN TO: GROW	\$ 14
HARVEST	13
STORE AND SELL	4
TOTAL (OR NET*) COST PER TN	30
TOTAL (OR NET*) RETURN ** PER TN	24
PROFIT PER TN	6-
LABOR RETURN PER ACRE	\$ 9-
PRODUCTION PER HOUR OF LABOR	1.2 TN
RETURN PER HOUR OF LABOR	\$ 2.52-
RETURN PER DOLLAR OF COST	0.79

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 ** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 17 ENTERPRISES OF HAY CROP SILAGE
17 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENIR AC	AVERAGE		PRCD PER HR OF LABOR TN	GROW COST \$	AVERAGE		
		PER YIELD TN	ACRE LABOR* HR			PER HARV COST \$	ACRE TOTAL COST** \$	TOTAL RETURN \$
834	480.3	4.3	6	0.7	53	74	138	95
827	270.0	4.7	2	1.9	67	50	145	118
806	211.5	5.1	6	0.9	96	65	182	116
835	179.5	3.7	4	0.9	58	71	149	89
105	149.5	3.4	3	1.2	47	51	111	85
840	145.5	5.9	3	2.0	57	73	141	129
812	131.3	4.3	2	1.8	125	57	189	103
824	130.0	7.8	3	2.3	74	58	165	196
804	122.3	4.2	4	1.0	79	69	153	100
821	100.7	5.8	4	1.4	60	80	162	151
830	92.5	4.8	6	0.8	57	51	113	115
130	76.0	5.1	3	1.7	105	67	208	152
108	75.1	6.1	5	1.3	54	60	136	158
828	68.2	5.6	4	1.6	30	67	138	135
112	53.4	5.3	3	1.6	29	54	92	122
108	31.0	6.4	3	2.4	34	50	113	154
146	13.3	4.8	5	1.1	65	74	143	115

1978 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	239.4	4.6	4	1.3	63	64	145	106
MED	115.4	5.4	5	1.5	80	64	157	134
LOW	52.8	5.6	4	1.6	53	63	139	140

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY ACRES:

1978	137.1	4.9	4	1.2	66	64	148	117
1977	120.0	6.2	5	1.3	63	71	157	151
1976	92.6	7.7	5	1.5	57	68	147	160
1975	127.2	6.7	4	1.7	51	49	118	140
1974	110.4	6.4	4	1.5	43	49	110	111

* TO GROW AND HARVEST THE CROP
 ** INCLUDES STORING AND SELLING COSTS
 *** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 (RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

Note: Yield adjusted to 55% moisture.

FACTORS FROM 17 ENTERPRISES OF HAY CROP SILAGE
17 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER IN***		RETURN PER HOUR		PROFIT ON	
PROFIT	LABOR RETURN	NET COST	NET RETURN	OF LABOR	OF COST	ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
43-	10-	32	22	1.88-	0.69	20,253-	834
27-	9-	31	25	4.09-	0.81	7,269-	827
66-	34-	35	23	6.21-	0.64	14,024-	806
60-	44-	40	24	11.43-	0.59	10,890-	835
26-	13-	33	25	5.15-	0.76	3,944-	105
12-	2	24	22	0.56	0.92	1,612-	840
86-	66-	44	24	28.11-	0.54	11,387-	812
31	45	21	25	13.46	1.19	4,070	824
53-	28-	37	24	7.14-	0.66	6,417-	804
11-	16	28	26	3.74	0.93	1,109-	821
2	24	24	24	3.96	1.02	158	830
56-	46-	41	30	15.85-	0.73	4,199-	130
22	42	22	26	8.72	1.16	1,602	108
3-	7	24	24	1.93	0.98	188-	828
30	41	17	23	12.11	1.32	1,595	112
41	53	18	24	19.75	1.37	1,291	108
28-	11-	30	24	2.69-	0.81	365-	146

1978 GROUP AVERAGES, ACCORDING TO ACRES:

							THIRDS
38-	17-	33	24	4.69-	0.74	9,664-	HIGH
22-	1-	31	25	2.81-	0.87	2,936-	MED
1	15	26	26	4.00	1.06	43-	LOW

ANNUAL AVERAGES- ALL ENTR, WEIGHTED BY ACRES:

31-	9-	30	24	2.52-	0.79	4,290-	1978
6-	15	25	25	3.19	0.96	669-	1977
13	34	19	21	6.79	1.09	1,202	1976
22	38	18	21	9.48	1.19	2,783	1975
1	17	17	17	3.95	1.01	131	1974

Corn Silage -

Storing and selling costs include the cost of storing the silage and interest on the value of the crop while stored. Costs to remove the crop from storage are charged to the consuming livestock enterprise.

CORN SILAGE
 COSTS AND RETURNS PER ACRE
 2,460 ACRES ON 20 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 2 HR - - - - -	\$ 11
TRACTOR 2 HR - - - - -	9
TRUCK, EQUIPMENT - - - - -	13
CUSTOM WORK, EQUIP RENT - - - - -	1
LAND USE - - - - -	33
MANURE, LIME, COVER CROP - - - - -	19
FERT - LBS N- 108, P- 61, K- 78 - - - - -	39
SEED, PLANTS 17 LB - - - - -	13
SPRAY, DUST MATERIALS - - - - -	15
INTEREST, ALL OTHER - - - - -	4
TOTAL GROWING COSTS - - - - -	\$ 157
HARVESTING:	
LABOR 3 HR - - - - -	19
TRACTOR 3 HR - - - - -	12
TRUCK, EQUIPMENT - - - - -	28
CUSTOM WORK, EQUIP RENT - - - - -	0
ALL OTHER - - - - -	3
TOTAL HARVESTING COSTS - - - - -	62
TOTAL PRODUCTION COSTS - - - - -	\$ 219
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIP - - - - -	0
BUILDING USE - - - - -	8
INTEREST, ALL OTHER - - - - -	9
TOTAL STORING AND SELLING COSTS - - - - -	17
TOTAL COSTS - - - - -	\$ 236
RETURNS:	
CROP - YIELD: 12.3 TN - - - - -	\$ 231
BY-PRODUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 231
PROFIT: - - - - -	\$ 5-

	AVERAGE
OTHER FACTORS: COST PER TN TO: GROW	\$ 13
HARVEST	5
STORE AND SELL	1
TOTAL (OR NET*) COST PER TN	19
TOTAL (OR NET*) RETURN ** PER TN	19
PROFIT PER TN	0
LABOR RETURN PER ACRE	\$ 25
PRODUCTION PER HOUR OF LABOR	2.2 TN
RETURN PER HOUR OF LABOR	\$ 4.46
RETURN PER DOLLAR OF COST	0.98

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 ** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 20 ENTERPRISES OF CORN SILAGE
20 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENIR AC	AVERAGE		PRCD PER HR OF LABOR TN	AVERAGE			TOTAL RETURN \$
		PER YIELD TN	ACRE LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	
827	331.0	13.5	6	2.3	154	81	246	230
834	320.5	10.0	6	1.7	141	66	220	180
806	234.9	11.4	7	1.6	162	69	244	228
821	207.2	11.5	6	1.8	151	72	243	242
812	202.7	14.1	3	4.6	161	51	233	255
830	169.7	10.3	8	1.4	164	55	228	196
804	159.1	12.8	7	1.9	179	66	255	241
824	146.2	17.1	3	4.7	165	56	245	325
840	141.0	13.1	4	3.4	164	43	226	233
835	105.0	9.6	6	1.8	187	30	243	193
105	102.5	12.7	6	2.2	149	43	209	241
836	81.5	12.6	5	2.7	129	43	198	240
127	54.0	13.5	7	1.9	174	85	269	267
146	50.0	9.9	5	2.1	153	56	224	199
112	47.0	11.1	6	1.9	115	56	197	243
843	35.0	11.4	7	1.5	172	77	276	229
108	25.8	17.4	10	1.6	136	97	254	349
108	20.2	13.0	6	2.1	119	51	189	260
828	14.5	10.3	6	1.7	140	73	234	195
130	13.0	10.0	6	1.8	210	95	349	200

1978 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	232.2	12.0	7	2.2	159	66	239	225
MED	105.0	13.1	6	2.8	162	50	232	250
LOW	29.4	11.9	7	1.9	150	73	246	240

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY ACRES:

1978	123.0	12.3	5	2.2	157	62	236	231
1977	98.1	12.8	6	1.9	144	62	225	239
1976	106.7	13.1	6	2.1	135	52	207	212
1975	98.3	14.1	6	2.4	136	48	207	229
1974	106.6	13.5	5	2.3	120	41	178	187

* TO GROW AND HARVEST THE CROP

** INCLUDES STORING AND SELLING COSTS

*** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED

(RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 20 ENTERPRISES OF CORN SILAGE
20 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

PROFIT	AVERAGE	AVERAGE		RETURN PER		PROFIT	FARM
	PER ACRE	PER	IN***	OF	CF	ON	
	LABOR	NET	NET	LABOR	CF	ENTER-	NO
\$	RETURN	COST	RETURN	LABOR	COST	PRISE	
	\$	\$	\$	\$	\$	\$	
16-	21	18	17	3.66	0.93	5,601-	827
40-	10-	22	18	1.78-	0.82	13,045-	834
16-	23	21	20	3.32	0.93	3,934-	806
1-	39	21	21	6.14	0.99	273-	821
22	46	17	18	15.03	1.09	4,293	812
32-	2-	22	19	0.34-	0.86	5,346-	830
14-	23	20	19	3.46	0.94	2,232-	804
80	96	14	19	26.11	1.33	11,753	824
7	24	17	18	6.38	1.03	1,006	840
50-	28-	25	20	5.44-	0.79	5,258-	835
32	57	16	19	9.93	1.15	3,305	105
42	73	16	19	15.39	1.21	3,407	836
2-	28	20	20	3.88	0.99	115-	127
25-	8-	23	20	1.89-	0.89	1,253-	146
46	66	18	22	11.51	1.24	2,203	112
47-	22-	24	20	2.95-	0.83	1,654-	843
95	141	15	20	13.29	1.37	2,453	108
71	95	15	20	15.56	1.38	1,444	108
39-	21-	23	19	3.71-	0.83	560-	828
149-	132-	35	20	23.31-	0.57	1,939-	130

1978 GROUP AVERAGES, ACCORDING TO ACRES:

							THIRDS
13-	20	21	19	4.21	0.94	3,733-	HIGH
18	42	19	20	9.38	1.08	2,350	MED
6-	17	22	21	1.21	1.02	99	LOW

ANNUAL AVERAGES- ALL ENTR. WEIGHTED BY ACRES:

5-	25	19	19	4.46	0.98	566-	1978
14	45	18	19	6.73	1.07	1,454	1977
5	31	16	16	5.10	1.03	551	1976
22	47	15	16	7.92	1.11	2,245	1975
9	31	13	14	5.28	1.05	971	1974

Corn Grain -

Harvesting costs include costs to place the crop in a truck if the crop is to leave the farm for any reason at harvest time. Otherwise, harvesting costs include costs to deliver the corn to farm drying facilities or storage.

Storing and selling costs include costs to haul the corn from the farm to be dried, stored and/or sold. Also included are drying, storing and handling costs to the point of sale. Fuel for drying and custom drying costs are included under "all other" along with interest on the value of the stored crop. If the crop is used on the farm, costs to remove it from storage are charged to the livestock enterprise. A wide range of practices are followed from farm to farm.

CORN FOR GRAIN
COSTS AND RETURNS PER ACRE
1,228 ACRES ON 8 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 2 HR	\$ 10
TRACTOR 1 HR	7
TRUCK, EQUIPMENT	11
CUSTOM WORK, EQUIP RENT	2
LAND USE	26
MANURE, LIME, COVER CROP	8
FERT - LBS N- 144, P- 71, K- 92	55
SEED, PLANTS 19 LB	14
SPRAY, DUST MATERIALS	16
INTEREST, ALL OTHER	7
TOTAL GROWING COSTS	\$ 156
HARVESTING:	
LABOR 1 HR	4
TRACTOR 0 HR	1
TRUCK, EQUIPMENT	8
CUSTOM WORK, EQUIP RENT	15
ALL OTHER	2
TOTAL HARVESTING COSTS	30
TOTAL PRODUCTION COSTS	\$ 186
STORING AND SELLING:	
LABOR 1 HR	4
TRACTOR, TRUCK, EQUIP	3
BUILDING USE	13
INTEREST, ALL OTHER	16
TOTAL STORING AND SELLING COSTS	36
TOTAL COSTS	\$ 222
RETURNS:	
CROP - YIELD: 92 BU	\$ 205
BY-PRODUCT, OTHER RETURNS **	0
TOTAL RETURNS	\$ 205
PROFIT:	\$ 17-

	AVERAGE
OTHER FACTORS: COST PER BU TO: GROW	\$ 1.69
HARVEST	0.33
STORE AND SELL	0.39
TOTAL (OR NET*) COST PER BU	2.41
TOTAL (OR NET*) RETURN ** PER BU	2.22
PROFIT PER BU	0.19-
LABOR RETURN PER ACRE	\$ 0
PRODUCTION PER HOUR OF LABOR	31 BU
RETURN PER HOUR OF LABOR	\$ 0.00
RETURN PER DOLLAR OF COST	0.92

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 8 ENTERPRISES OF CORN FOR GRAIN
8 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENIR AC	AVERAGE		PRCD PER HR OF LABOR BU	AVERAGE			
		PER YIELD BU	ACRE LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	TOTAL RETURN \$
833	765.3	100	3	36	170	33	250	226
858	117.5	104	2	45	134	30	191	233
112	94.5	48	3	14	121	17	146	107
802	87.0	78	3	26	133	20	173	161
836	84.8	93	4	30	132	26	163	195
146	33.0	49	4	11	133	47	205	115
108	25.8	66	4	17	114	31	154	137
822	20.3	84	8	11	205	23	265	149

ANNUAL AVERAGES- ALL ENIR, WEIGHED BY ACRES:

1978	153.5	92	3	31	156	30	222	205
1977	149.4	76	4	21	137	21	187	163
1976	127.1	75	3	22	133	26	192	175
1975	56.2	83	4	20	133	27	185	189
1974	134.1	71	3	23	114	21	155	197

* TO GROW AND HARVEST THE CROP
 ** INCLUDES STORING AND SELLING COSTS
 *** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 (RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 8 ENTERPRISES OF CORN FOR GRAIN
8 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BU***		RETURN PER HOUR \$		PROFIT ON	
LABOR	RETURN	NET COST	NET RETURN	OF LABOR	OF COST	ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
24-	4-	2.50	2.26	1.28-	0.90	18,801-	833
42	54	1.83	2.24	22.96	1.22	4,946	858
39-	26-	3.07	2.24	7.52-	0.73	3,752-	112
12-	1-	2.20	2.05	0.55-	0.93	1,035-	802
32	50	1.76	2.10	16.15	1.19	2,638	836
90-	69-	4.20	2.35	12.00-	0.56	2,971-	146
17-	0	2.34	2.07	0.32-	0.89	455-	108
116-	72-	3.15	1.78	8.95-	0.56	2,343-	822

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY ACRES:

17-	0	2.41	2.22	0.00	0.92	2,721-	1978
24-	4-	2.38	2.08	0.99-	0.87	3,488-	1977
17-	0	2.57	2.35	0.32-	0.91	2,156-	1976
4	23	2.23	2.29	5.02	1.02	248	1975
42	54	2.17	2.77	16.65	1.28	5,751	1974

High Moisture Corn -

These enterprises include both high moisture shelled corn and ground ear corn fed on the farm to dairy cattle. Costs to remove the corn from storage are charged to the livestock enterprise.

HIGH MOISTURE CORN
COSTS AND RETURNS PER ACRE
1,431 ACRES ON 11 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 2 HR - - - - -	\$ 11
TRACTOR 2 HR - - - - -	11
TRUCK, EQUIPMENT - - - - -	15
CUSTOM WORK, EQUIP RENT - - - - -	3
LAND USE - - - - -	36
MANURE, LIME, COVER CROP - - - - -	11
FERT - LBS N- 113, P- 65, K- 96 - - - - -	38
SEED, PLANTS 16 LB - - - - -	12
SPRAY, DUST MATERIALS - - - - -	13
INTEREST, ALL OTHER - - - - -	4
TOTAL GROWING COSTS - - - - -	\$ 154
HARVESTING:	
LABOR 2 HR - - - - -	9
TRACTOR 1 HR - - - - -	3
TRUCK, EQUIPMENT - - - - -	18
CUSTOM WORK, EQUIP RENT - - - - -	3
ALL OTHER - - - - -	0
TOTAL HARVESTING COSTS - - - - -	33
TOTAL PRODUCTION COSTS - - - - -	\$ 187
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIP - - - - -	0
BUILDING USE - - - - -	8
INTEREST, ALL OTHER - - - - -	5
TOTAL STORING AND SELLING COSTS - - - - -	13
TOTAL COSTS - - - - -	\$ 200
RETURNS:	
CROP - YIELD: 3.5 TN - - - - -	\$ 208
BY-PRODUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 208
PROFIT: - - - - -	\$ 8

	AVERAGE
OTHER FACTORS: COST PER TN TO: GROW	\$ 44
HARVEST	9
STORE AND SELL	3
TOTAL (OR NET*) COST PER TN	56
TOTAL (OR NET*) RETURN ** PER TN	59
PROFIT PER TN	3
LABOR RETURN PER ACRE	\$ 28
PRODUCTION PER HOUR OF LABOR	0.9 TN
RETURN PER HOUR OF LABOR	\$ 6.98
RETURN PER DOLLAR OF COST	1.04

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 12 ENTERPRISES OF HIGH MOISTURE CORN
11 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE		PROC PER HR OF LABOR TN	AVERAGE PER ACRE			
		YIELD TN	LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	TOTAL RETURN \$
834	433.0	4.1	5	0.9	146	41	202	225
824+	200.0	2.4	2	1.0	166	17	188	154
827	161.0	4.2	5	1.0	137	33	176	230
827+	128.0	2.8	4	0.8	153	24	203	181
105	110.0	4.5	6	0.7	163	43	212	250
828+	109.9	2.1	3	0.7	138	27	176	139
835	81.0	4.7	7	0.8	188	30	227	279
108+	54.6	3.4	2	1.4	136	29	185	237
130+	50.0	3.2	2	1.5	214	24	257	227
806	46.0	3.9	4	0.9	159	52	230	236
146	40.0	2.6	4	0.7	149	53	205	153
830	18.0	2.4	6	0.4	146	34	186	155

ANNUAL AVERAGES-- ALL ENTR. WEIGHTED BY ACRES:

1978	119.3	3.5	4	0.9	154	33	200	208
1977	114.7	3.0	4	0.7	131	34	176	188
1976	95.1	3.3	4	0.7	137	34	183	191
1975	105.4	3.3	3	1.0	134	25	171	199
1974	100.0	3.4	4	0.9	116	29	156	258

* TO GROW AND HARVEST THE CROP

** INCLUDES STORING AND SELLING COSTS

*** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
(RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

+ Harvested as HM shelled corn, otherwise as HM ground ear corn.

FACTORS FROM 12 ENTERPRISES OF HIGH MOISTURE CORN
 11 COST ACCOUNT FARMS, 1978
 (READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER IN***		RETURN PER		PROFIT	
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST	ON ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
23	46	50	55	9.94	1.11	9,724	834
34-	23-	79	65	10.53-	0.82	6,760-	824
54	82	42	55	18.83	1.30	8,567	827
22-	0	73	65	0.02	0.89	2,805-	827
38	65	47	55	10.51	1.18	4,186	105
37-	28-	82	65	9.35-	0.79	4,056-	828
52	77	49	60	12.62	1.23	4,213	835
52	63	55	70	25.70	1.28	2,867	108
30-	23-	79	70	11.04-	0.88	1,533-	130
6	31	58	60	7.20	1.03	291	806
52-	39-	80	60	10.97-	0.75	2,087-	146
31-	6-	78	65	1.11-	0.84	544-	830

ANNUAL AVERAGES-- ALL ENTR. WEIGHTED BY ACRES:

8	28	56	59	6.98	1.04	1,005	1978
12	30	57	61	7.10	1.07	1,363	1977
8	26	56	58	5.80	1.04	698	1976
28	42	52	60	12.52	1.16	2,963	1975
102	115	46	76	31.77	1.65	10,172	1974

Small Grains - Oats and Wheat -

Harvesting costs include costs to harvest the grain only and place it in farm storage. Costs and returns for handling the straw have been excluded from the enterprise figures.

Storing and selling costs include mainly the cost of bins to store the crop and interest on the value of the stored crop. Costs incurred by the grower to sell any part of the crop would also be included. If fed on the farm, cost to remove the crop from storage are charged to the consuming livestock enterprise.

OATS
 COSTS AND RETURNS PER ACRE
 406 ACRES ON 9 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 2 HR - - - - -	\$ 10
TRACTOR 2 HR - - - - -	8
TRUCK, EQUIPMENT - - - - -	10
CUSTOM WORK, EQUIP RENT - - - - -	0
LAND USE - - - - -	31
MANURE, LIME, COVER CROP - - - - -	3
FERT - LBS N- 27, P- 36, K- 31 - - - - -	14
SEED, PLANTS 80 LB - - - - -	9
SPRAY, DUST MATERIALS - - - - -	1
INTEREST, ALL OTHER - - - - -	2
TOTAL GROWING COSTS - - - - -	\$ 88
HARVESTING:	
LABOR 1 HR - - - - -	3
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	7
CUSTOM WORK, EQUIP RENT - - - - -	3
ALL OTHER - - - - -	1
TOTAL HARVESTING COSTS - - - - -	14
TOTAL PRODUCTION COSTS - - - - -	\$ 102
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIP - - - - -	1
BUILDING USE - - - - -	0
INTEREST, ALL OTHER - - - - -	5
TOTAL STORING AND SELLING COSTS - - - - -	6
TOTAL COSTS - - - - -	\$ 108
RETURNS:	
CROP - YIELD: 66 BU - - - - -	\$ 83
BY-PRODUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 83
PROFIT: - - - - -	\$ 25-

	AVERAGE
OTHER FACTORS: COST PER BU TO: GROW	\$ 1.33
HARVEST	0.22
STORE AND SELL	0.08
TOTAL (OR NET*) COST PER BU	1.62
TOTAL (OR NET*) RETURN ** PER BU	1.25
PROFIT PER BU	0.37-
LABOR RETURN PER ACRE	\$ 10-
PRODUCTION PER HOUR OF LABOR	24 BU
RETURN PER HOUR OF LABOR	\$ 3.92-
RETURN PER DOLLAR OF COST	0.77

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 ** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 9 ENTERPRISES OF OATS
9 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENIR AC	AVERAGE PER ACRE		PRCD PER HR OF LABOR BU	AVERAGE PER ACRE			TOTAL RETURN \$
		YIELD BU	LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	
833	90.5	64	4	16	88	15	107	70
112	68.5	74	2	36	70	7	82	100
827	65.0	71	2	34	76	19	99	89
824	62.5	62	2	31	94	11	111	80
858	49.5	59	4	16	101	20	125	76
108	23.0	71	2	29	73	19	98	92
848	22.0	68	3	31	131	17	161	82
836	15.6	64	3	29	102	13	116	83
146	10.0	60	3	21	114	16	133	78

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY ACRES:

1978	45.2	66	3	24	88	14	108	83
1977	44.8	39	2	19	74	15	104	56
1976	42.5	54	3	20	87	10	105	83
1975	29.2	88	4	23	97	15	119	126
1974	33.4	69	4	19	85	19	113	124

* TO GROW AND HARVEST THE CROP

** INCLUDES STORING AND SELLING COSTS

*** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED

(RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 9 ENTERPRISES OF OATS
9 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BU***		RETURN PER HOUR \$		PROFIT ON	
LABOR	RETURN	NET COST	NET RETURN	OF LABOR	OF COST	ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
37-	17-	1.67	1.10	4.49-	0.66	3,306-	833
18	25	1.11	1.34	10.89	1.21	1,207	112
10-	4	1.39	1.25	1.99	0.90	666-	827
31-	22-	1.80	1.30	11.56-	0.72	1,922-	824
49-	29-	2.14	1.30	7.92-	0.61	2,430-	858
6-	4	1.39	1.30	1.42	0.93	150-	108
79-	59-	2.36	1.20	26.77-	0.51	1,741-	848
33-	18-	1.82	1.30	8.93-	0.72	515-	836
55-	44-	2.21	1.30	15.44-	0.59	545-	146

ANNUAL AVERAGES--ALL ENTR. WEIGHTED BY ACRES:

25-	10-	1.62	1.25	3.92-	0.77	1,118-	1978
48-	37-	2.64	1.42	17.76-	0.54	2,140-	1977
22-	9-	1.95	1.56	3.44-	0.80	899-	1976
7	21	1.35	1.43	5.16	1.06	203	1975
11	24	1.65	1.81	6.14	1.10	375	1974

Wheat -

See note regarding small grains on page 28.

WHEAT
COSTS AND RETURNS PER ACRE
414 ACRES ON 9 COST ACCOUNT FARMS, 1978

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 3 HR - - - - -	\$ 14
TRACTOR 2 HR - - - - -	11
TRUCK, EQUIPMENT - - - - -	12
CUSTOM WORK, EQUIP RENT - - - - -	2
LAND USE - - - - -	35
MANURE, LIME, COVER CPOP - - - - -	4
FERT - LBS N- 32, P- 43, K- 49 - - - - -	17
SEED, PLANTS NA - - - - -	16
SPRAY, DUST MATEPIALS - - - - -	1
INTEREST, ALL OTHER - - - - -	4
TOTAL GROWING COSTS - - - - -	\$ 116
HARVESTING:	
LABOR 1 HR - - - - -	4
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	11
CUSTOM WORK, EQUIP RENT - - - - -	5
ALL OTHER - - - - -	1
TOTAL HARVESTING COSTS - - - - -	21
TOTAL PRODUCTION COSTS - - - - -	\$ 137
STORING AND SELLING:	
LABOR 0 HR - - - - -	2
TRACTOR, TRUCK, EQUIP - - - - -	2
BUILDING USE - - - - -	1
INTEREST, ALL OTHER - - - - -	5
TOTAL STORING AND SELLING COSTS - - - - -	10
TOTAL COSTS - - - - -	\$ 147
RETURNS:	
CROP - YIELD: 30 BU - - - - -	\$ 111
BY-PRDUCT, OTHER RETURNS ** - - - - -	0
TOTAL RETURNS - - - - -	\$ 111
PROFIT: - - - - -	\$ 36-

	AVERAGE
OTHER FACTORS: COST PER BU TO: GROW	\$ 3.86
HARVEST	0.70
STORE AND SELL	0.33
TOTAL (OR NET*) COST PER BU	4.89
TOTAL (OR NET*) RETURN ** PER BU	3.67
PROFIT PER BU	1.22-
LABOR RETURN PER ACRE	\$ 16-
PRODUCTION PER HOUR OF LABOR	8 BU
RETURN PER HOUR OF LABOR	\$ 4.11-
RETURN PER DOLLAR OF COST	0.75

* VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
** RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED

FACTORS FROM 10 ENTERPRISES OF WHEAT
9 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE		PROD PER HR OF LABOR BU	AVERAGE PER ACRE			TOTAL RETURN \$
		YIELD PER BU	LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	
827	96.0	32	2	21	103	34	147	128
833	60.0	18	7	3	187	21	217	62
830	47.0	30	4	7	94	11	107	120
835	42.0	30	5	6	94	14	115	107
836	38.9	40	4	11	104	14	126	161
848	37.0	26	2	13	101	17	123	89
830	34.8	44	5	9	89	21	157	149
812	31.9	33	3	11	145	18	162	102
828	17.0	24	5	5	122	26	148	70
858	10.0	14	4	4	117	18	138	47

ANNUAL AVERAGES- ALL ENTR. WEIGHTED BY ACRES:

1978	41.5	30	4	8	116	21	147	111
1977	162.0	44	3	19	98	16	131	109
1976	158.7	43	3	18	96	17	127	112
1975	148.1	47	2	23	87	13	116	155
1974	135.7	42	2	20	76	15	101	151

* TO GROW AND HARVEST THE CROP
 ** INCLUDES STORING AND SELLING COSTS
 *** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 (RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 1 ENTERPRISE OF SOYBEANS
1 COST ACCOUNT FARMS, 1978
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE		PROD PER HR OF LABOR BU	AVERAGE PER ACRE			TOTAL RETURN \$
		YIELD PER BU	LABOR* HR		GROW COST \$	HARV COST \$	TOTAL COST** \$	
833	495.5	19	3	6	100	17	124	118

* TO GROW AND HARVEST THE CROP
 ** INCLUDES STORING AND SELLING COSTS
 *** VALUE OF BY-PRODUCTS, IF ANY, DEDUCTED
 (RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM 10 ENTERPRISES OF WHEAT
9 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BU***		RETURN PER HOUR \$		PROFIT ON	
LABOR	NET	NET	NET	OF	OF	ENTER-	FARM
PROFIT	RETURN	COST	RETURN	LABOR	COST	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	
19-	7-	4.60	3.99	4.51-	0.87	1,860-	827
155-	122-	12.20	3.50	17.36-	0.29	9,272-	833
13	30	3.55	4.00	6.83	1.13	630	830
8-	13	3.84	3.57	2.32	0.93	340-	835
35	54	3.13	4.00	12.89	1.28	1,362	836
34-	18-	4.79	3.46	9.56-	0.72	1,267-	848
8-	18	3.55	3.35	2.54	0.95	298-	830
60-	38-	4.94	3.09	12.95-	0.63	1,935-	812
78-	61-	6.14	2.90	12.62-	0.47	1,328-	828
91-	73-	10.20	3.50	21.08-	0.34	904-	858

ANNUAL AVERAGES- ALL ENTIR. WEIGHIED BY ACRES:

36-	16-	4.89	3.67	4.11-	0.75	1,520-	1978
22-	6-	2.99	2.50	2.13-	0.84	3,462-	1977
15-	0	2.93	2.59	0.23-	0.88	2,335-	1976
39	50	2.44	3.26	19.13	1.34	5,767	1975
50	60	2.40	3.59	24.43	1.49	6,762	1974

FACTORS FROM 1 ENTERPRISE OF SOYBEANS
1 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BU***		RETURN PER HOUR \$		PROFIT ON	
LABOR	NET	NET	NET	OF	OF	ENTER-	FARM
PROFIT	RETURN	COST	RETURN	LABOR	COST	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	
6-	10	6.58	6.27	3.03	0.95	2,937-	833