

December 1983

A.E. Res. 83-43

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

**28 FARMS-1982
NEW YORK STATE**

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REPORTS
from
FARM COST ACCOUNTS

28 Farms, 1982

Enterprise data from the 1982 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 14853-0398.

Overhead Costs	A.E. Res. 83-41
Livestock Costs and Returns	A.E. Res. 83-42
Field Crops Costs and Returns	A.E. Res. 83-43
Fruit and Vegetable Crops Costs and Returns	A.E. Res. 83-44

FIELD CROPS COSTS AND RETURNS, A.E. Res. 83-43

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INTRODUCTION

The New York Farm Cost Account Project is a research project which serves as a means of obtaining primary cost data for enterprises common on New York farms. It provides data on labor requirements and costs, machinery costs, and production costs for crop and livestock enterprises. The data is 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 provide an indication of economic factors experienced by commercial farm businesses 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, completing the analysis, and preparing these reports were done by Barbara Wilcox and Florence Blodgett with assistance from Mary Chaffee, Cynthia Farrell and Diana Atkinson.

The material on pages 2, 3, and 4 of this report was taken from A.E. Res. 83-32, Dairy Farm Management Business Summary, New York, 1982 by Stuart F. Smith and Linda D. Putnam.

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 farm data would not exist.

Inflation, appreciation, supply and demand all have a direct affect on the inventory values on New York dairy farms. Machinery and real estate prices have risen steadily during the past six years with machinery prices increasing more rapidly. Dairy cow prices have changed most dramatically as the demand for replacements jumped in 1978 and 1979 and weakened in 1981 and 1982.

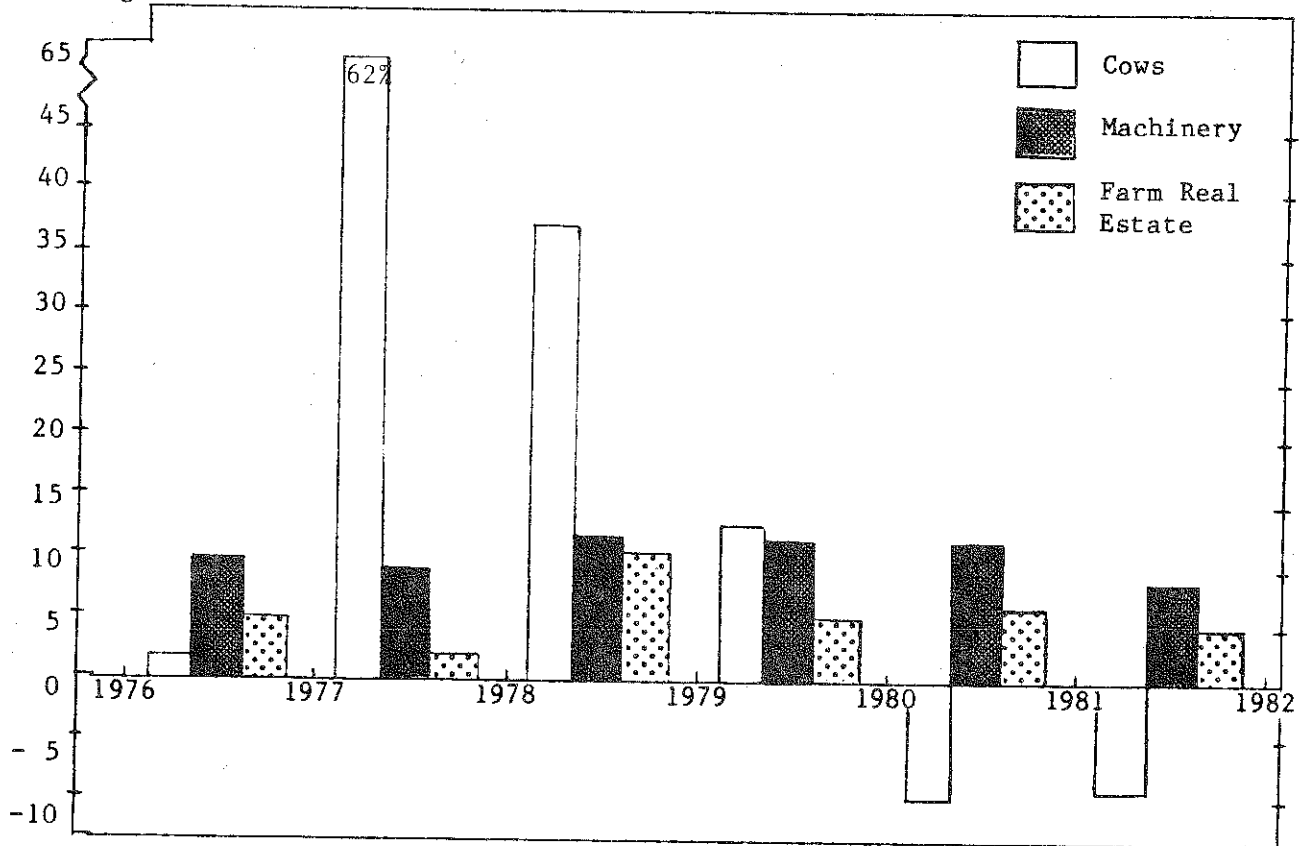
Table 1. UNIT VALUES OF NEW YORK DAIRY FARM INVENTORY ITEMS, 1976-1982

Year	New York Dairy Cows		Machinery*	N.Y. Farm Real Estate	
	Value/Head	1977=100	1977=100	Value/Acre	1977=100
1976	\$ 485	98	91	\$553	95
1977	495	100	100	587	100
1978	800	162	109	600	102
1979	1,105	223	122	670	113
1980	1,240	251	136	708	119
1981	1,120	226	152	749	126
1982	1,010	204	165	786	132

*Annual average for U.S.

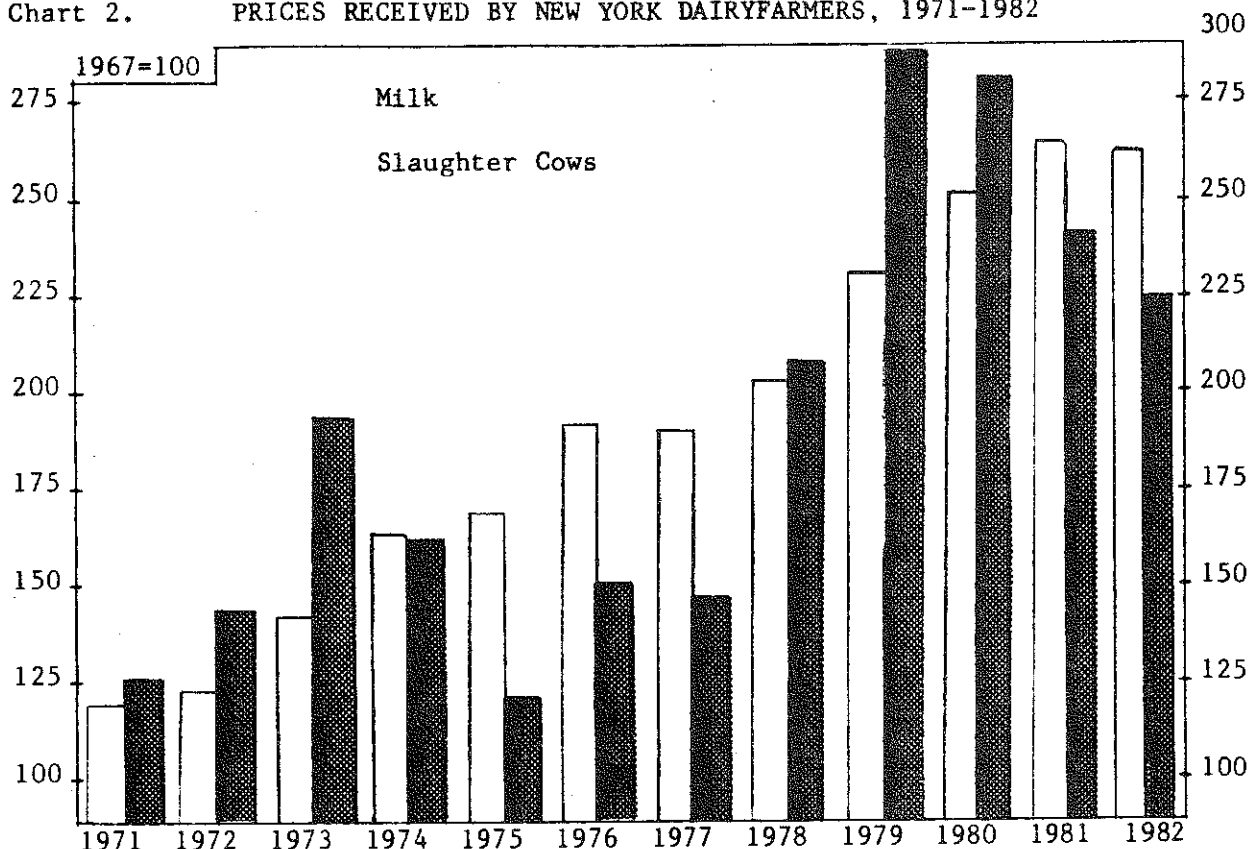
Table 1 shows New York year end (December) price received for dairy cows (replacements), an index of the same cow prices, an index of U.S. machinery prices, the average per acre value of New York farmland and buildings reported in April, and an index of the real estate prices.

Chart 1. ANNUAL CHANGES IN DAIRY COW, FARM MACHINERY, & FARM REAL ESTATE VALUES
New York Dairy Farms, 1976-1982



Source: USDA, Farm Real Estate Outlook & Situation Summary. USDA, Agricultural Prices.

Chart 2. PRICES RECEIVED BY NEW YORK DAIRYFARMERS, 1971-1982



The prices dairyfarmers receive for milk, cattle, and other commodities they sell have a major effect on dairy farm profits. Chart 2 shows what has happened to average milk and slaughter cow prices paid to New York farmers since 1971. Milk prices have increased at a more constant rate showing declines in 1977 and 1982. Slaughter cow prices have shown wide fluctuations over the period but have not moved in the same direction for more than four consecutive years; since 1979 prices have been declining.

Table 2. PRICES RECEIVED BY NEW YORK DAIRYFARMERS, 1970-1982

Year	All Milk	Slaughter Cows	Calves	Monthly Farm Price Per 100 Lbs. of Milk, 1982	
	(cwt.)	(cwt.)	(cwt.)		
1970	\$ 5.99	\$20.70	\$34.70	January	\$13.80
1971	6.12	21.20	36.20	February	13.70
1972	6.33	24.50	44.80	March	13.50
1973	7.32	32.80	54.60	April	13.20
1974	8.35	27.10	40.80	May	12.90
				June	12.90
1975	8.71	20.60	26.20	July	13.30
1976	9.83	25.40	34.50	August	13.80
1977	9.75	25.00	37.50	September	14.00
1978	10.50	35.30	58.20	October	14.20
1979	11.90	49.80	88.80	November	14.20
				December	13.90
1980	13.00	46.30	78.00		
1981	13.80	41.30	66.20		
1982	13.70	38.60	58.80		

Source: USDA, Agricultural Prices Annual Summary.

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1982

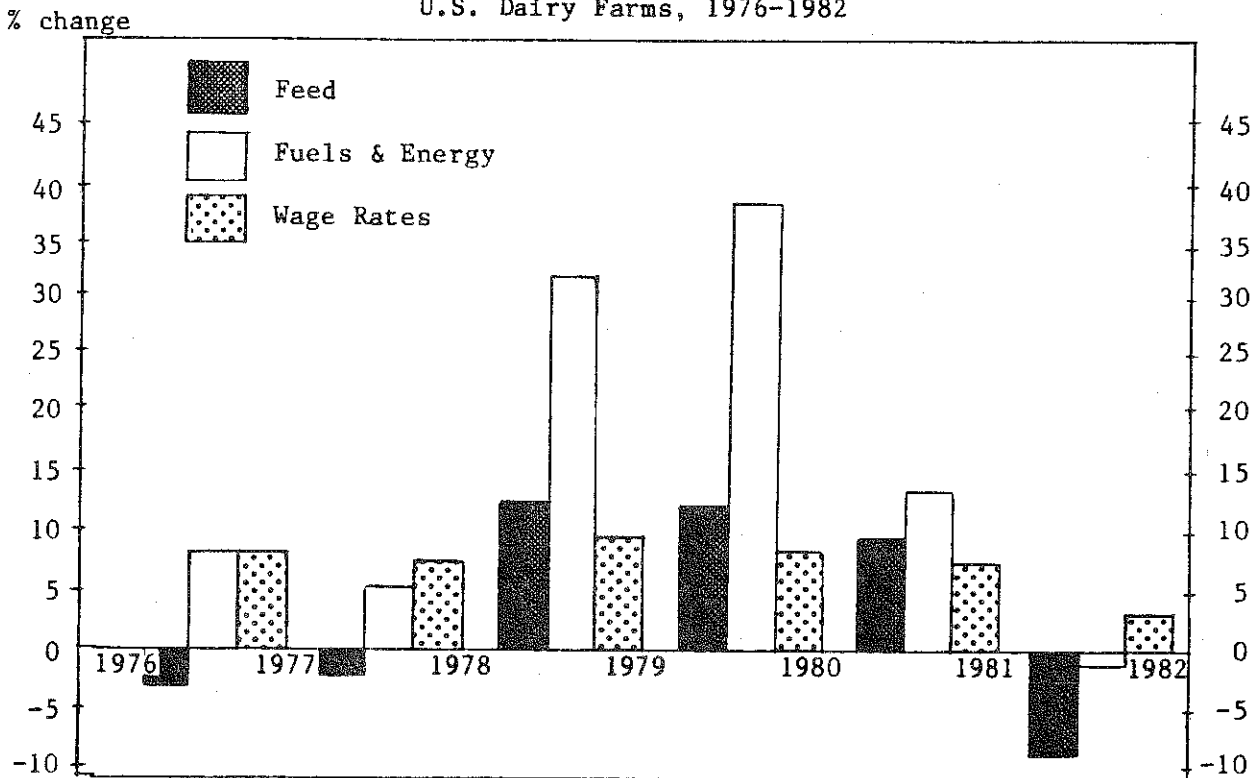
Year	Index 1977=100					
	Feed	Fert.	Fuel & Energy	Wage Rates	Taxes	Interest
1972	57	52	54	63	75	47
1973	86	56	57	69	77	55
1974	104	92	79	79	81	65
1975	100	120	88	85	87	77
1976	103	102	93	93	94	88
1977	100	100	100	100	100	100
1978	98	100	105	107	100	117
1979	110	108	137	117	107	143
1980	123	134	188	126	115	174
1981	134	144	213	137	123	211
1982	122	144	211	141	131	233

SOURCE: USDA Agricultural Prices

The prices dairyfarmers pay for a given quantity of goods and services has a major influence on farm production costs. The astute manager will keep close tabs on unit costs and substitute the most economical goods and services for those that are too expensive.

Table 3 shows the unit cost indexes of selected goods and services used on New York dairy farms. The changes in feed prices, fuels and energy costs, and wage rates between years are illustrated in Chart 3.

Chart 3. ANNUAL CHANGES IN PRICES OF THREE MAJOR PRODUCTION ITEMS
U.S. Dairy Farms, 1976-1982



Fuel and energy costs have decreased for the first time in the last 10 years; feed costs decreased to below the 1980 level. Wage rates continue to increase.

Growing Conditions

Table 1. TEMPERATURE, PRECIPITATION, AND GROWING SEASON
Selected Stations, New York, 1941-70 and 1982

Station	Average temperature		Precipitation				Length of growing season*	
	May - Sept.		May - Sept.		Total Annual		1947-67 1982	
	1941-70	1982	1941-70	1982	1941-70	1982	1947-67	1982
	degrees		inches				days	
Albany	65.7	63.7	15.4	14.9	33.4	32.1	---	165
Alfred	61.8	60.0	17.2	18.0	36.7	35.4	125	106
Batavia	64.1	63.5	15.3	15.8	32.6	34.7	154	171
Binghamton	63.3	63.4	17.9	17.7	37.4	35.1	154	177
Canton	63.0	61.5	16.5	16.8	34.5	35.8	127	153
Geneva	70.6	64.0	14.6	12.9	32.3	25.5	---	178
Glens Falls	---	64.4	17.8	16.9	39.3	39.3	---	171
Ithaca	63.8	62.3	17.2	17.3	34.8	31.4	145	159
Lowville	62.5	60.2	16.5	16.7	38.5	36.9	123	116
Utica	63.5	64.3	18.1	15.6	40.6	36.5	157	160

* 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, 1982, Vol. 94, 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 1982 and for the period 1941-70.

Statewide, the 1982 crop season was characterized by a warm May and a wet June in an otherwise cool and dry season. In spite of generally unfavorable below average temperatures and rainfall, crop needs were apparently met at the right time in such a way that crop yields were quite normal for the year.

Table 2. GROWING SEASON RAINFALL
Selected Stations, New York, 1941-70 and 1982

	May		June		July		August		September	
	1941-70	1982	1941-70	1982	1941-70	1982	1941-70	1982	1941-70	1982
Albany	3.26	2.60	3.00	6.48	3.12	2.43	2.87	2.01	3.12	1.42
Alfred	3.76	3.46	3.76	6.67	3.73	3.35	3.00	1.49	2.93	3.04
Batavia	3.17	3.45	2.69	3.60	3.05	2.06	3.50	3.75	2.87	2.96
Binghamton	3.83	3.89	3.59	7.09	3.83	1.87	3.61	2.94	3.02	1.86
Canton	3.37	1.87	2.91	3.93	3.43	2.24	3.47	4.83	3.31	3.96
Geneva	3.02	2.09	3.10	4.74	3.06	2.64	2.82	0.74	2.59	2.68
Glens Falls	3.63	3.51	3.77	5.82	3.68	1.47	3.42	3.96	3.31	2.13
Ithaca	3.55	2.96	3.40	5.74	3.67	2.90	3.49	1.99	3.08	3.68
Lowville	3.42	2.06	2.94	3.50	3.26	2.60	3.58	3.96	3.31	4.58
Utica	3.52	2.72	3.55	5.81	4.17	3.11	3.54	1.71	3.32	2.20

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1982, Vol. 94, No. 13.

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

Item	Unit	New York State*				Cost Account 1982
		1957-61	1967-71	1977-81	1982	
Hay, Alfalfa mix.	tons	2.2	2.6	2.7	2.7	2.5
Corn Silage	tons	11	14	14	14	14
Corn grain	bu.	57	85	90	92	106
Oats	bu.	52	60	60	65	NA
Wheat	bu.	32	39	40	44	50
Milk per cow	lbs.	7,914	10,361	11,742	12,129	15,706

*Source: New York Agricultural Statistics, 1982; Crop Reporting Service, USDA.

FARM COST ACCOUNT SUMMARY, 1982
Crop Enterprises

Crop	Number of enter- prises	Average acres per enter- prise	Yield per acre	Hours of labor per acre*	Return per		Profit per acre	Profit on enter- prise
					Hour of labor	Dollar of cost		
<u>Forage:</u>								
Hay	19	80	2.5 tn	7	2.98	0.91	18-	1,449-
Hay crop silage	20	151	6.1 tn	4	2.20-	0.85	32-	4,812-
Corn silage	21	137	14.2 tn	5	3.38	0.96	15-	2,049-
<u>Grain:</u>								
Corn for grain	6	159	106 bu	4	5.14-	0.84	57-	9,076-
High moist. corn	19	137	3.8 tn	3	6.63-	0.86	42-	5,796-
Wheat, winter	7	152	50 bu	2	16.29-	0.77	51-	7,844-
Wheat, spring	6	78	45 bu	2	14.29-	0.77	53-	4,084-
<u>Fruit:</u>								
Apples	12	86	537 bu	105	4.50	0.83	281-	24,347-
Red tart cherries	6	37	7,313 lb	41	6.94	1.03	31	1,169

*To grow and harvest the crop.

ENTERPRISE RATES OF RETURN
FARM COST ACCOUNT RECORDS, 1979-82

Enterprise	Return per hour of labor				Return per dollar of cost			
	1979	1980	1981	1982	1979	1980	1981	1982
	\$	\$	\$	\$	\$	\$	\$	\$
<u>Livestock:</u>								
Dairy cows	10.77	10.64	7.89	8.65	1.15	1.11	1.04	1.07
Dairy heifers	3.97	5.94	0.25	1.49	0.96	0.99	0.87	0.91
<u>Forage:</u>								
Hay	0.90	0.02	1.70	2.98	0.84	0.81	0.86	0.91
Hay crop silage	0.39	5.82	2.79	2.20-	0.87	1.00	0.94	0.85
Corn silage	9.05	5.86	5.97	3.38	1.07	0.99	0.99	0.96
<u>Grain:</u>								
Corn for grain	5.12	23.76	12.79-	5.14-	1.00	1.28	0.77	0.84
High moisture corn	18.84	22.68	0.45	6.63-	1.22	1.23	0.92	0.86
Oats	18.35-	NA	NA	NA	0.63	NA	NA	NA
Wheat, winter	22.68	22.46	15.26	16.29-	1.26	1.21	1.10	0.77
Wheat, spring	NA	NA	NA	14.29-	NA	NA	NA	0.77
<u>Fruits:</u>								
Apples	7.39	5.52	8.97	4.50	1.07	0.91	1.13	0.83
Red tart cherries	33.16	17.29	13.76	6.94	2.80	1.62	1.35	1.03

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
1,518 ACRES ON 19 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
COSTS	
GROWING:	
LABOR 0 HR - - - - -	\$ 0
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	1
CUSTOM WORK, EQUIPMENT RENT - - - - -	0
LAND USE - - - - -	39
MANURE, LIME, COVER CROP - - - - -	3
FERTILIZER - LBS N- 3, P- 10, K- 31 - - - - -	10
SEED, PLANTS NA - - - - -	14
SPRAY, DUST MATERIALS - - - - -	1
INTEREST, ALL OTHER - - - - -	3
TOTAL GROWING COSTS - - - - -	\$ 71
HARVESTING:	
LABOR 7 HR - - - - -	38
TRACTOR 2 HR - - - - -	19
TRUCK, EQUIPMENT - - - - -	28
CUSTOM WORK, EQUIPMENT RENT - - - - -	1
ALL OTHER - - - - -	14
TOTAL HARVESTING COSTS - - - - -	100
TOTAL PRODUCTION COSTS - - - - -	\$171
STORING AND SELLING:	
LABOR 0 HR - - - - -	1
TRACTOR, TRUCK, EQUIPMENT - - - - -	0
BUILDING USE - - - - -	11
INTEREST, ALL OTHER - - - - -	10
TOTAL STORING AND SELLING COSTS - - - - -	22
TOTAL COSTS - - - - -	\$193
RETURNS	
CROP - YIELD: 2.5 TN - - - - -	\$175
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$175
PROFIT - - - - -	18-
AVERAGE	
OTHER FACTORS: COST PER TN TO: GROW	\$ 28
HARVEST	39
STORE AND SELL	10
TOTAL (OR NET*) COST PER TN	77
TOTAL (OR NET*) RETURN ** PER TN	70
PROFIT PER TON	7-
LABOR RETURN PER ACRE	\$ 21
PRODUCTION PER HOUR OF LABOR	0.4 TN
RETURN PER HOUR OF LABOR	\$2.98
RETURN PER DOLLAR OF COST	0.91

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 19 ENTERPRISES OF HAY
19 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		PROD PER HR OF LABOR		AVERAGE PER ACRE			
	PER ENTR	AVERAGE YIELD	PER ACRE LABOR*	HR OF LABOR	GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	TN	HR	TN	\$	\$	\$	\$
830	286.5	2.0	11	0.2	56	108	179	163
840	139.0	2.7	4	0.8	52	60	136	148
836	120.5	3.7	8	0.4	102	115	249	247
827	106.0	2.8	7	0.4	121	128	286	187
867	104.7	2.4	5	0.5	76	90	188	173
117	101.8	2.0	6	0.3	27	68	116	118
105	98.0	2.8	6	0.5	69	78	170	211
153	91.6	1.8	4	0.4	30	68	109	111
111	77.0	2.2	8	0.3	94	111	220	132
821	61.0	3.2	5	0.6	62	82	162	254
112	53.8	3.1	9	0.3	100	139	261	227
835	49.0	3.5	6	0.6	69	117	228	264
828	40.5	1.9	11	0.2	55	119	197	122
824	39.5	2.0	7	0.3	112	126	245	140
127	38.0	2.1	3	0.6	123	85	247	177
146	37.2	1.6	5	0.3	100	126	246	107
834	30.0	3.5	7	0.5	62	62	157	228
804	28.3	3.0	10	0.3	81	180	287	208
105	16.0	2.5	6	0.4	57	143	236	200

1982 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	143.1	2.6	7	0.4	72	95	192	173
MED	67.3	2.6	7	0.4	68	102	192	189
LOW	31.5	2.4	6	0.4	89	120	237	177

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	79.9	2.5	7	0.4	71	99	193	175
1981	52.4	3.2	7	0.4	87	118	234	202
1980	70.1	2.8	7	0.4	80	97	201	163
1979	76.0	2.9	7	0.4	72	89	185	155
1978	76.1	2.2	5	0.4	49	66	131	123

*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, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER TON***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
16-	39	89	81	3.64	0.91	4,637-	830
12	39	50	54	9.73	1.10	1,798	840
2-	52	67	67	6.15	0.99	273-	836
99-	43-	101	66	6.49-	0.65	10,488-	827
15-	6	79	73	1.21	0.92	1,572-	867
2	32	59	60	5.42	1.02	231	117
41	75	60	75	11.50	1.24	4,065	105
2	21	59	60	4.76	1.01	141	153
88-	41-	99	60	5.34-	0.60	6,707-	111
92	118	51	80	23.53	1.57	5,657	821
34-	7	85	74	0.75	0.87	1,843-	112
36	67	65	76	10.86	1.16	1,798	835
75-	25-	105	65	2.29-	0.62	3,041-	828
105-	68-	122	70	10.31-	0.57	4,136-	824
70-	50-	119	85	15.14-	0.72	2,664-	127
139-	114-	153	66	21.14-	0.43	5,184-	146
71	109	45	65	16.46	1.45	2,126	834
79-	10-	97	70	1.10-	0.72	2,234-	804
36-	5-	94	80	0.88-	0.85	568-	105

1982 GROUP AVERAGES, ACCORDING TO ACRES:

							THIRDS
19-	21	74	67	3.28	0.93	2,490-	HIGH
4-	32	75	70	6.25	1.01	10	MED
60-	23-	100	73	5.35-	0.79	2,110-	LOW

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

18-	21	77	70	2.98	0.91	1,449-	1982
32-	13	74	64	1.70	0.86	1,710-	1981
38-	0	70	57	0.02	0.81	2,632-	1980
30-	6	64	54	0.90	0.84	2,260-	1979
8-	18	60	57	3.31	0.94	569-	1978

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
3,013 ACRES ON 20 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
COSTS	
GROWING:	
LABOR 0 HR - - - - -	\$ 1
TRACTOR 0 HR - - - - -	0
TRUCK, EQUIPMENT - - - - -	0
CUSTOM WORK, EQUIPMENT RENT - - - - -	1
LAND USE - - - - -	51
MANURE, LIME, COVER CROP - - - - -	4
FERTILIZER - LBS N- 3, P- 11, K- 61 - - - - -	15
SEED, PLANTS NA - - - - -	23
SPRAY, DUST MATERIALS - - - - -	2
INTEREST, ALL OTHER - - - - -	4
TOTAL GROWING COSTS - - - - -	\$101
HARVESTING:	
LABOR 4 HR - - - - -	23
TRACTOR 2 HR - - - - -	19
TRUCK, EQUIPMENT - - - - -	40
CUSTOM WORK, EQUIPMENT RENT - - - - -	0
ALL OTHER - - - - -	6
TOTAL HARVESTING COSTS - - - - -	88
TOTAL PRODUCTION COSTS - - - - -	\$189
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIPMENT - - - - -	0
BUILDING USE - - - - -	15
INTEREST, ALL OTHER - - - - -	10
TOTAL STORING AND SELLING COSTS - - - - -	25
TOTAL COSTS - - - - -	\$214
RETURNS	
CROP - YIELD: 6.1 TN - @ 55% MOISTURE - - - - -	\$182
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$182
PROFIT - - - - -	32-

AVERAGE	

OTHER FACTORS: COST PER TN TO: GROW	\$ 17
HARVEST	14
STORE AND SELL	4
TOTAL (OR NET*) COST PER TN	35
TOTAL (OR NET*) RETURN ** PER TN	30
PROFIT PER TON	5-

LABOR RETURN PER ACRE	\$ 15-
PRODUCTION PER HOUR OF LABOR	1.6 TN
RETURN PER HOUR OF LABOR	\$2.20-
RETURN PER DOLLAR OF COST	0.85

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 20 ENTERPRISES OF HAY CROP SILAGE
20 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR	AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE			
		YIELD	LABOR*		GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	TN	HR	TN	\$	\$	\$	\$
834	690.0	6.3	3	2.0	97	71	186	177
827	293.5	6.8	6	1.2	126	110	268	204
830	381.8	4.7	4	1.1	61	79	155	185
806	211.6	6.9	5	1.4	128	119	273	206
824	197.4	4.8	4	1.4	129	78	252	155
111	195.0	5.6	5	1.2	103	110	226	169
812	189.8	6.9	2	3.6	159	61	239	194
840	119.0	6.3	3	2.1	101	74	194	152
105	110.5	5.8	4	1.5	72	86	187	174
804	100.0	6.1	4	1.4	78	89	179	182
835	82.0	7.9	3	2.4	66	137	275	236
112	81.7	6.9	4	1.8	110	101	258	207
105	81.6	6.5	3	2.1	95	138	257	209
146	70.1	3.9	4	0.9	100	124	234	126
821	70.0	6.4	2	2.6	62	67	154	219
828	63.4	4.4	3	1.6	75	77	191	124
127	52.0	4.4	2	2.1	123	55	213	155
153	49.2	6.4	2	2.7	30	60	132	166
117	47.1	6.9	4	1.6	69	83	168	179
867	27.3	6.4	2	2.6	118	97	253	200

1982 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	294.2	6.0	4	1.7	115	90	228	184
MED	95.8	6.6	4	1.9	87	104	225	193
LOW	54.2	5.5	3	2.0	82	80	192	167

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	150.7	6.1	4	1.6	101	88	214	182
1981	149.0	7.9	4	2.0	106	100	233	219
1980	156.5	7.2	4	1.9	87	84	195	194
1979	139.9	6.6	5	1.4	82	82	189	165
1978	137.1	4.9	4	1.2	66	64	148	117

*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 PERCENT MOISTURE.

FACTORS FROM 20 ENTERPRISES OF HAY CROP SILAGE
20 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER TON***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
9-	10	29	28	3.02	0.95	6,055-	834
64-	16-	39	30	2.76-	0.76	18,651-	827
30	56	33	39	12.03	1.20	8,601	830
67-	30-	40	30	6.43-	0.75	14,185-	806
97-	77-	52	32	21.86-	0.61	19,189-	824
57-	30-	40	30	6.39-	0.75	11,136-	111
45-	33-	35	28	17.22-	0.81	8,541-	812
42-	23-	31	24	7.59-	0.78	5,076-	840
13-	8	32	30	2.03	0.93	1,412-	105
3	31	30	30	7.04	1.02	299	804
39-	23-	35	30	7.07-	0.86	3,256-	835
51-	31-	37	30	8.34-	0.80	4,159-	112
48-	30-	39	32	9.67-	0.81	3,919-	105
108-	88-	60	32	20.75-	0.54	7,589-	146
65	77	24	34	31.61	1.42	4,506	821
67-	54-	43	28	19.16-	0.65	4,255-	828
58-	45-	48	35	22.50-	0.73	3,001-	127
34	46	21	26	19.35	1.26	1,698	153
11	33	24	26	7.74	1.07	532	117
53-	42-	39	31	16.88-	0.79	1,451-	867

1982 GROUP AVERAGES, ACCORDING TO ACRES:

44-	17-	38	31	5.66-	0.83	9,879-	THIRDS HIGH
32-	11-	34	29	3.93-	0.87	2,921-	MED
25-	10-	37	30	2.94-	0.92	1,366-	LOW

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

32-	15-	35	30	2.20-	0.85	4,812-	1982
14-	11	30	28	2.79	0.94	2,129-	1981
1-	23	27	27	5.82	1.00	152-	1980
24-	2	29	25	0.39	0.87	3,417-	1979
31-	9-	30	24	2.52-	0.79	4,290-	1978

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
2,869 ACRES ON 21 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
COSTS	
GROWING:	
LABOR 2 HR - - - - -	\$ 11
TRACTOR 1 HR - - - - -	15
TRUCK, EQUIPMENT - - - - -	23
CUSTOM WORK, EQUIPMENT RENT - - - - -	3
LAND USE - - - - -	52
MANURE, LIME, COVER CROP - - - - -	27
FERTILIZER - LBS N- 95, P- 65, K- 75 - - - - -	51
SEED, PLANTS 25 M - - - - -	17
SPRAY, DUST MATERIALS - - - - -	24
INTEREST, ALL OTHER - - - - -	5
TOTAL GROWING COSTS - - - - -	\$228
HARVESTING:	
LABOR 3 HR - - - - -	20
TRACTOR 2 HR - - - - -	17
TRUCK, EQUIPMENT - - - - -	37
CUSTOM WORK, EQUIPMENT RENT - - - - -	0
ALL OTHER - - - - -	4
TOTAL HARVESTING COSTS - - - - -	78
TOTAL PRODUCTION COSTS - - - - -	\$306
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIPMENT - - - - -	1
BUILDING USE - - - - -	14
INTEREST, ALL OTHER - - - - -	18
TOTAL STORING AND SELLING COSTS - - - - -	33
TOTAL COSTS - - - - -	\$339
RETURNS	
CROP - YIELD: 14.2 TN - - - - -	\$324
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$324
PROFIT - - - - -	15-

AVERAGE	

OTHER FACTORS: COST PER TN TO: GROW	\$ 16
HARVEST	6
STORE AND SELL	2
TOTAL (OR NET*) COST PER TN	24
TOTAL (OR NET*) RETURN ** PER TN	23
PROFIT PER TON	1-

LABOR RETURN PER ACRE	\$ 16
PRODUCTION PER HOUR OF LABOR	2.9 TN
RETURN PER HOUR OF LABOR	\$3.38
RETURN PER DOLLAR OF COST	0.96

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 21 ENTERPRISES OF CORN SILAGE
21 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR	AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE			
		YIELD	LABOR*		GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	TN	HR	TN	\$	\$	\$	\$
834	531.8	12.2	3	3.5	190	59	285	269
812	308.1	18.5	3	6.6	272	89	408	407
827	290.0	14.8	6	2.4	228	99	345	326
806	277.1	13.3	6	2.2	228	82	327	306
840	179.0	14.3	4	4.0	241	62	332	286
830	170.5	16.8	8	2.3	246	66	347	438
824	154.1	17.1	5	3.5	241	84	356	394
804	130.8	16.7	7	2.7	257	95	371	385
821	130.0	14.5	5	2.6	230	61	337	363
105	100.0	13.9	4	3.6	201	99	337	348
112	82.5	14.5	5	2.8	208	93	357	313
836	81.9	12.7	5	2.3	189	78	314	298
835	76.0	13.6	4	3.6	255	59	363	326
111	68.0	10.9	8	1.3	193	135	361	250
153	60.5	8.8	3	3.8	228	32	281	177
105	52.8	15.5	6	2.7	246	80	372	357
828	48.3	4.9	4	1.1	255	62	333	107
127	39.0	13.6	5	2.7	247	81	363	381
146	35.0	9.3	5	1.9	206	113	336	213
867	28.0	11.0	5	2.0	243	76	361	264
117	25.9	11.7	7	1.8	200	125	337	235

1982 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	272.9	15.3	5	3.5	235	77	343	347
MED	95.6	13.8	5	2.7	219	89	349	326
LOW	41.4	10.7	5	2.3	232	81	340	248

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	136.6	14.2	5	2.9	228	79	339	324
1981	110.9	16.0	5	3.1	220	95	347	342
1980	122.1	14.6	5	3.0	202	80	307	304
1979	122.0	14.6	5	2.8	173	66	263	281
1978	123.0	12.3	5	2.2	157	62	236	231

*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 21 ENTERPRISES OF CORN SILAGE
21 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER TON***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
16-	4	23	22	1.17	0.94	8,657-	834
1-	25	22	22	8.84	1.00	398-	812
19-	33	23	22	5.39	0.95	5,471-	827
21-	23	25	23	3.84	0.94	5,763-	806
46-	22-	23	20	6.06-	0.86	8,096-	840
91	136	21	26	16.83	1.26	15,524	830
38	66	21	23	13.41	1.11	5,869	824
14	56	22	23	8.91	1.04	1,830	804
26	54	23	25	9.87	1.08	3,397	821
11	32	24	25	8.23	1.03	1,099	105
44-	18-	25	22	3.47-	0.88	3,647-	112
16-	23	25	23	4.12	0.95	1,284-	836
37-	19-	27	24	5.05-	0.90	2,848-	835
111-	62-	33	23	7.35-	0.69	7,599-	111
104-	92-	32	20	39.74-	0.63	6,271-	153
15-	16	24	23	2.77	0.96	813-	105
226-	205-	68	22	45.15-	0.32	10,897-	828
18	45	27	28	8.97	1.05	685	127
123-	101-	36	23	20.43-	0.63	4,319-	146
97-	73-	33	24	13.17-	0.73	2,736-	867
102-	67-	29	20	10.36-	0.70	2,644-	117

1982 GROUP AVERAGES, ACCORDING TO ACRES:

							THIRDS
4	38	23	23	6.20	1.01	999-	HIGH
23-	9	26	24	2.18	0.94	1,293-	MED
92-	68-	36	23	16.73-	0.72	3,856-	LOW

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

15-	16	24	23	3.38	0.96	2,049-	1982
5-	31	22	21	5.97	0.99	556-	1981
3-	29	21	21	5.86	0.99	417-	1980
18	48	18	19	9.05	1.07	2,181	1979
5-	25	19	19	4.46	0.98	566-	1978

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
952 ACRES ON 6 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
<u>COSTS</u>	
GROWING:	
LABOR 2 HR - - - - -	\$ 16
TRACTOR 1 HR - - - - -	22
TRUCK, EQUIPMENT - - - - -	20
CUSTOM WORK, EQUIPMENT RENT - - - - -	1
LAND USE - - - - -	69
MANURE, LIME, COVER CROP - - - - -	12
FERTILIZER - LBS N- 116, P- 63, K- 97 - - - - -	56
SEED, PLANTS 25 M - - - - -	17
SPRAY, DUST MATERIALS - - - - -	25
INTEREST, ALL OTHER - - - - -	12
TOTAL GROWING COSTS - - - - -	\$250
HARVESTING:	
LABOR 2 HR - - - - -	15
TRACTOR 0 HR - - - - -	3
TRUCK, EQUIPMENT - - - - -	26
CUSTOM WORK, EQUIPMENT RENT - - - - -	1
ALL OTHER - - - - -	7
TOTAL HARVESTING COSTS - - - - -	52
TOTAL PRODUCTION COSTS - - - - -	\$302
STORING AND SELLING:	
LABOR 1 HR - - - - -	5
TRACTOR, TRUCK, EQUIPMENT - - - - -	15
BUILDING USE - - - - -	1
INTEREST, ALL OTHER - - - - -	34
TOTAL STORING AND SELLING COSTS - - - - -	55
TOTAL COSTS - - - - -	\$357
<u>RETURNS</u>	
CROP - YIELD: 106 BU - - - - -	\$299
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$299
<u>PROFIT</u> - - - - -	58-
AVERAGE	
OTHER FACTORS: COST PER BU TO: GROW	\$2.36
HARVEST	0.49
STORE AND SELL	0.51
TOTAL (OR NET*) COST PER BU	3.36
TOTAL (OR NET*) RETURN ** PER BU	2.82
PROFIT PER BU	0.54-
LABOR RETURN PER ACRE	\$ 21-
PRODUCTION PER HOUR OF LABOR	30 BU
RETURN PER HOUR OF LABOR	\$5.14-
RETURN PER DOLLAR OF COST	0.84

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 6 ENTERPRISES OF CORN FOR GRAIN
6 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR	AVERAGE PER ACRE		PROD PER HR OF	AVERAGE PER ACRE			
		YIELD	LABOR*	LABOR	GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	BU	HR	BU	\$	\$	\$	\$
827	506.0	96	4	29	232	44	327	268
848	280.0	117	3	34	295	54	415	346
836	86.1	116	5	24	199	55	268	292
867	46.0	130	2	54	282	91	466	391
105	17.3	91	3	33	215	60	347	273
105	16.6	120	9	15	237	126	431	264

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	158.7	106	4	30	250	52	357	300
1981	82.2	93	3	29	220	47	310	240
1980	54.8	100	3	29	184	40	259	331
1979	97.9	99	3	28	181	43	266	265
1978	153.5	92	3	31	156	30	222	205

*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 6 ENTERPRISES OF CORN FOR GRAIN
6 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BUSHEL***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
59-	22-	3.41	2.80	5.19-	0.82	29,701-	827
69-	28-	3.54	2.95	7.88-	0.83	19,282-	848
24	59	2.32	2.52	12.14	1.09	2,026	836
75-	64-	3.58	3.00	24.90-	0.84	3,464-	867
74-	59-	3.80	3.00	21.21-	0.79	1,272-	105
167-	119-	3.59	2.20	13.10-	0.61	2,763-	105

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

57-	21-	3.36	2.82	5.14-	0.84	9,076-	1982
70-	45-	3.35	2.59	12.79-	0.77	5,778-	1981
72	97	2.59	3.30	23.76	1.28	3,907	1980
1-	19	2.69	2.68	5.12	1.00	112-	1979
17-	0	2.41	2.22	0.00	0.92	2,721-	1978

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
2,600 ACRES ON 15 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
COSTS	
GROWING:	
LABOR 2 HR - - - - -	\$ 10
TRACTOR 1 HR - - - - -	16
TRUCK, EQUIPMENT - - - - -	19
CUSTOM WORK, EQUIPMENT RENT - - - - -	3
LAND USE - - - - -	59
MANURE, LIME, COVER CROP - - - - -	21
FERTILIZER - LBS N- 102, P- 69, K- 83 - - - - -	51
SEED, PLANTS 25 M - - - - -	17
SPRAY, DUST MATERIALS - - - - -	25
INTEREST, ALL OTHER - - - - -	6
TOTAL GROWING COSTS - - - - -	\$227
HARVESTING:	
LABOR 2 HR - - - - -	10
TRACTOR 1 HR - - - - -	7
TRUCK, EQUIPMENT - - - - -	24
CUSTOM WORK, EQUIPMENT RENT - - - - -	4
ALL OTHER - - - - -	3
TOTAL HARVESTING COSTS - - - - -	48
TOTAL PRODUCTION COSTS - - - - -	\$275
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIPMENT - - - - -	0
BUILDING USE - - - - -	14
INTEREST, ALL OTHER - - - - -	16
TOTAL STORING AND SELLING COSTS - - - - -	30
TOTAL COSTS - - - - -	\$305
RETURNS	
CROP - YIELD: 3.8 TN - - - - -	\$262
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$262
PROFIT - - - - -	43-

AVERAGE	

OTHER FACTORS: COST PER TN TO: GROW	\$ 60
HARVEST	13
STORE AND SELL	8
TOTAL (OR NET*) COST PER TN	81
TOTAL (OR NET*) RETURN ** PER TN	69
PROFIT PER TN	12-

LABOR RETURN PER ACRE	\$ 22-
PRODUCTION PER HOUR OF LABOR	1.1 TN
RETURN PER HOUR OF LABOR	\$6.63-
RETURN PER DOLLAR OF COST	0.86

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 19 ENTERPRISES OF HIGH MOISTURE CORN
15 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		PROD PER HR OF LABOR		AVERAGE PER ACRE			
	PER ENTR	AVERAGE YIELD	PER ACRE LABOR*	HR OF LABOR	GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	TN	HR	TN	\$	\$	\$	\$
834	510.0	4.0	2	1.7	216	32	267	263
827†	458.0	3.6	4	1.1	235	46	331	288
834†	342.0	3.2	2	1.5	219	33	272	240
824†	202.4	2.2	2	1.2	239	38	293	144
111	129.0	3.9	7	0.5	215	83	317	232
821	128.0	5.3	7	0.7	209	91	336	369
112†	114.0	3.5	2	1.5	227	38	306	256
830	107.8	5.3	5	1.1	233	35	328	371
828†	104.4	3.6	2	3.6	232	37	293	216
105	95.4	5.8	5	1.3	239	66	326	350
105†	85.9	3.0	3	1.0	200	60	273	215
867†	66.0	3.9	2	1.5	282	95	420	312
835†	66.0	3.3	4	1.0	252	43	307	244
806†	57.8	3.1	5	0.6	243	60	379	218
835	42.5	5.9	4	1.5	256	48	322	381
105	32.7	4.4	6	0.9	247	73	322	177
153	28.2	5.2	3	1.9	225	63	308	339
146	21.9	2.3	6	0.4	206	121	349	119
867†	8.0	2.1	3	0.7	238	79	341	170

1982 GROUP AVERAGES, ACCORDING TO ACRES:

THIRDS

HIGH	294.9	3.7	4	1.1	222	54	303	256
MED	91.4	4.1	3	1.6	238	53	322	281
LOW	31.9	3.8	5	1.0	236	74	337	234

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	136.8	3.8	3	1.1	227	48	305	262
1981	125.9	3.6	4	1.1	216	51	291	268
1980	144.3	3.6	4	1.0	191	42	255	314
1979	137.5	3.8	3	1.1	159	41	217	264
1978	119.3	3.5	4	0.9	154	33	200	208

*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 19 ENTERPRISES OF HIGH MOISTURE CORN
15 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER TON***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
4-	10	66	65	4.00	0.98	2,164-	834
43-	16-	92	80	4.87-	0.87	19,947-	827
32-	19-	85	75	8.90-	0.88	10,911-	834
149-	138-	132	65	71.91-	0.49	30,168-	824
85-	43-	82	60	6.11-	0.73	10,917-	111
33	71	64	70	9.49	1.10	4,202	821
50-	37-	87	73	14.53-	0.84	5,723-	112
43	69	62	70	14.53	1.13	4,586	830
77-	65-	82	60	23.23-	0.74	8,074-	828
24	49	56	60	10.66	1.07	2,313	105
58-	43-	92	73	15.10-	0.79	4,981-	105
108-	97-	108	80	37.73-	0.74	7,130-	867
63-	47-	94	75	15.00-	0.80	4,148-	835
161-	124-	122	70	24.98-	0.58	9,310-	806
59	78	55	65	20.37	1.18	2,513	835
145-	114-	73	40	21.24-	0.55	4,732-	105
31	45	59	65	16.49	1.10	878	153
230-	205-	153	52	36.91-	0.34	5,049-	146
171-	157-	160	80	52.46-	0.50	1,366-	867

1982 GROUP AVERAGES, ACCORDING TO ACRES:

							THIRDS
47-	23-	87	69	13.05-	0.84	11,651-	HIGH
41-	24-	83	70	11.49-	0.87	3,308-	MED
103-	80-	104	62	16.46-	0.71	2,844-	LOW

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

42-	22-	81	69	6.63-	0.86	5,796-	1982
23-	1-	81	75	0.45-	0.92	2,819-	1981
59	80	71	87	22.68	1.23	8,578	1980
47	66	57	69	18.84	1.22	6,560	1979
8	28	56	59	6.98	1.04	1,005	1978

Small Grains -

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.

WINTER WHEAT
COSTS AND RETURNS PER ACRE
1,067 ACRES ON 7 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
<u>COSTS</u>	
GROWING:	
LABOR 1 HR - - - - -	\$ 10
TRACTOR 1 HR - - - - -	11
TRUCK, EQUIPMENT - - - - -	15
CUSTOM WORK, EQUIPMENT RENT - - - - -	4
LAND USE - - - - -	64
MANURE, LIME, COVER CROP - - - - -	2
FERTILIZER - LBS N- 76, P- 39, K- 34 - - - - -	36
SEED, PLANTS 131 LB - - - - -	20
SPRAY, DUST MATERIALS - - - - -	2
INTEREST, ALL OTHER - - - - -	7
TOTAL GROWING COSTS - - - - -	\$171
HARVESTING:	
LABOR 1 HR - - - - -	7
TRACTOR 0 HR - - - - -	1
TRUCK, EQUIPMENT - - - - -	22
CUSTOM WORK, EQUIPMENT RENT - - - - -	0
ALL OTHER - - - - -	4
TOTAL HARVESTING COSTS - - - - -	34
TOTAL PRODUCTION COSTS - - - - -	\$205
STORING AND SELLING:	
LABOR 0 HR - - - - -	1
TRACTOR, TRUCK, EQUIPMENT - - - - -	5
BUILDING USE - - - - -	1
INTEREST, ALL OTHER - - - - -	12
TOTAL STORING AND SELLING COSTS - - - - -	19
TOTAL COSTS - - - - -	\$224
<u>RETURNS</u>	
CROP - YIELD: 50 BU - - - - -	\$173
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$173
<u>PROFIT</u> - - - - -	51-

	AVERAGE
OTHER FACTORS: COST PER BU TO: GROW	\$3.42
HARVEST	0.69
STORE AND SELL	0.39
TOTAL (OR NET*) COST PER BU	4.50
TOTAL (OR NET*) RETURN ** PER BU	3.47
PROFIT PER BU	1.03-

LABOR RETURN PER ACRE	\$ 34-
PRODUCTION PER HOUR OF LABOR	25 BU
RETURN PER HOUR OF LABOR	16.29-
RETURN PER DOLLAR OF COST	0.77

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 7 ENTERPRISES OF WINTER WHEAT
7 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		PROD PER		AVERAGE PER ACRE			
	PER ENTR	AVERAGE YIELD	PER ACRE LABOR*	HR OF LABOR	GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	BU	HR	BU	\$	\$	\$	\$
827	756.0	54	2	29	180	36	240	190
848	114.0	32	1	23	130	29	170	108
834	89.0	41	2	19	153	24	185	147
836	41.4	47	4	13	148	49	210	182
824	37.3	45	3	15	182	26	213	127
828	17.0	49	2	17	182	29	210	145
867	12.0	25	3	10	116	18	139	74

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	152.4	50	2	25	171	34	224	173
1981	145.7	56	2	29	134	30	181	198
1980	150.2	50	2	26	120	27	167	202
1979	130.9	47	2	23	110	21	150	189
1978	41.5	30	4	8	116	21	147	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).

FACTORS FROM 7 ENTERPRISES OF WINTER WHEAT
7 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BUSHEL***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
50-	33-	4.42	3.49	16.65-	0.79	38,084-	827
62-	48-	5.28	3.34	34.13-	0.63	7,174-	848
38-	24-	4.48	3.56	11.18-	0.79	3,393-	834
28-	11	4.45	3.85	2.67	0.86	1,176-	836
86-	69-	4.73	2.82	23.14-	0.60	3,198-	824
65-	53-	4.28	2.95	18.69-	0.69	1,110-	828
65-	49-	5.47	2.94	13.86-	0.54	771-	867

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

51-	34-	4.50	3.47	16.29-	0.77	7,844-	1982
17	33	3.23	3.54	15.26	1.10	2,509	1981
35	50	3.32	4.01	22.46	1.21	5,236	1980
39	54	3.19	4.04	22.68	1.26	5,171	1979
36-	16-	4.89	3.67	4.11-	0.75	1,520-	1978

NOTE: see page 28.

SPRING WHEAT
COSTS AND RETURNS PER ACRE
466 ACRES ON 6 COST ACCOUNT FARMS, 1982

ITEM	AVERAGE PER ACRE
COSTS	
GROWING:	
LABOR 2 HR - - - - -	\$ 12
TRACTOR 1 HR - - - - -	18
TRUCK, EQUIPMENT - - - - -	12
CUSTOM WORK, EQUIPMENT RENT - - - - -	12
LAND USE - - - - -	51
MANURE, LIME, COVER CROP - - - - -	1
FERTILIZER - LBS N- 101, P- 38, K- 38 - - - - -	42
SEED, PLANTS 164 LB - - - - -	25
SPRAY, DUST MATERIALS - - - - -	1
INTEREST, ALL OTHER - - - - -	14
TOTAL GROWING COSTS - - - - -	\$188
HARVESTING:	
LABOR 1 HR - - - - -	6
TRACTOR 0 HR - - - - -	3
TRUCK, EQUIPMENT - - - - -	18
CUSTOM WORK, EQUIPMENT RENT - - - - -	1
ALL OTHER - - - - -	3
TOTAL HARVESTING COSTS - - - - -	31
TOTAL PRODUCTION COSTS - - - - -	\$219
STORING AND SELLING:	
LABOR 0 HR - - - - -	0
TRACTOR, TRUCK, EQUIPMENT - - - - -	2
BUILDING USE - - - - -	1
INTEREST, ALL OTHER - - - - -	9
TOTAL STORING AND SELLING COSTS - - - - -	12
TOTAL COSTS - - - - -	\$231
RETURNS	
CROP - YIELD: 45 BU - - - - -	\$178
BY-PRODUCT, OTHER RETURNS** - - - - -	0
TOTAL RETURNS - - - - -	\$178
PROFIT - - - - -	53-
AVERAGE	
OTHER FACTORS: COST PER BU TO: GROW	\$4.15
HARVEST	0.68
STORE AND SELL	0.25
TOTAL (OR NET*) COST PER BU	5.08
TOTAL (OR NET*) RETURN ** PER BU	3.92
PROFIT PER BU	1.16-
LABOR RETURN PER ACRE	\$ 35-
PRODUCTION PER HOUR OF LABOR	19 BU
RETURN PER HOUR OF LABOR	14.29-
RETURN PER DOLLAR OF COST	0.77

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

**RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED.

FACTORS FROM 6 ENTERPRISES OF SPRING WHEAT
6 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE		
	PER ENTR	YIELD	LABOR*	BU	GROW COST	HARV COST	TOTAL COST**	TOTAL RETURN
	AC	BU	HR	BU	\$	\$	\$	\$
864	284.4	51	2	27	196	33	241	194
834	55.0	37	3	14	180	23	215	146
848	50.8	35	3	16	196	21	231	156
827	48.0	45	5	9	193	36	244	195
830	23.0	28	4	8	92	30	128	97
146	5.0	30	4	6	165	34	203	90

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

1982	77.7	45	2	19	189	31	231	178
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*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 6 ENTERPRISES OF SPRING WHEAT
6 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BUSHEL***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
47-	34-	4.75	3.83	18.13-	0.81	13,236-	864
69-	53-	5.80	3.94	19.87-	0.68	3,797-	834
75-	50-	6.51	4.39	22.11-	0.67	3,824-	848
49-	8-	5.40	4.31	1.72-	0.80	2,373-	827
31-	11-	4.61	3.50	3.01-	0.76	708-	830
113-	90-	6.76	3.00	18.99-	0.44	564-	146

ANNUAL AVERAGES - ALL ENTR, WEIGHTED BY ACRES:

53-	35-	5.08	3.92	14.29-	0.77	4,084-	1982
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FACTORS FROM 3 ENTERPRISES OF SPRING BARLEY
3 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE			TOTAL RETURN
	PER ENTR	YIELD	LABOR*	GROW COST		HARV COST	TOTAL COST**		
	AC	BU	HR	BU	\$	\$	\$	\$	
835	42.5	80	4	22	142	48	195	132	
840	29.0	61	3	22	163	26	200	167	
836	11.7	98	2	43	159	53	224	197	

FACTORS FROM 2 ENTERPRISES OF OATS
2 COST ACCOUNT FARMS, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE			TOTAL RETURN
	PER ENTR	YIELD	LABOR*	GROW COST		HARV COST	TOTAL COST**		
	AC	BU	HR	BU	\$	\$	\$	\$	
827	45.0	111	2	53	125	26	154	145	
840	30.0	62	3	22	149	25	178	113	

SUNFLOWERS
FACTORS FROM 1 ENTERPRISE OF OTHER GRAINS
1 COST ACCOUNT FARM, 1982
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES		AVERAGE PER ACRE		PROD PER HR OF LABOR	AVERAGE PER ACRE			TOTAL RETURN
	PER ENTR	YIELD	LABOR*	GROW COST		HARV COST	TOTAL COST**		
	AC	LB	HR	LB	\$	\$	\$	\$	
864	232.2	1,981	2	765	216	54	310	277	

*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 3 ENTERPRISES OF SPRING BARLEY
3 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BUSHEL***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
63-	45-	2.43	1.65	12.15-	0.68	2,683-	835
33-	15-	3.28	2.73	4.96	0.83	975-	840
27-	5-	2.28	2.00	2.18-	0.88	320-	836

FACTORS FROM 2 ENTERPRISES OF OATS
2 COST ACCOUNT FARMS, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BUSHEL***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
9-	8	1.38	1.30	3.94	0.94	419-	827
65-	47-	2.85	1.80	16.38-	0.63	1,969-	840

SUNFLOWERS
FACTORS FROM 1 ENTERPRISE OF OTHER GRAINS
1 COST ACCOUNT FARM, 1982
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER POUND***		RETURN PER		PROFIT ON ENTERPRISE	FARM NO
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST		
\$	\$	\$	\$	\$	\$	\$	
33-	11-	0.16	0.14	3.45-	0.89	7,560-	864