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**LIVESTOCK
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

LIVESTOCK COSTS AND RETURNS, A.E. Res. 79-22

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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

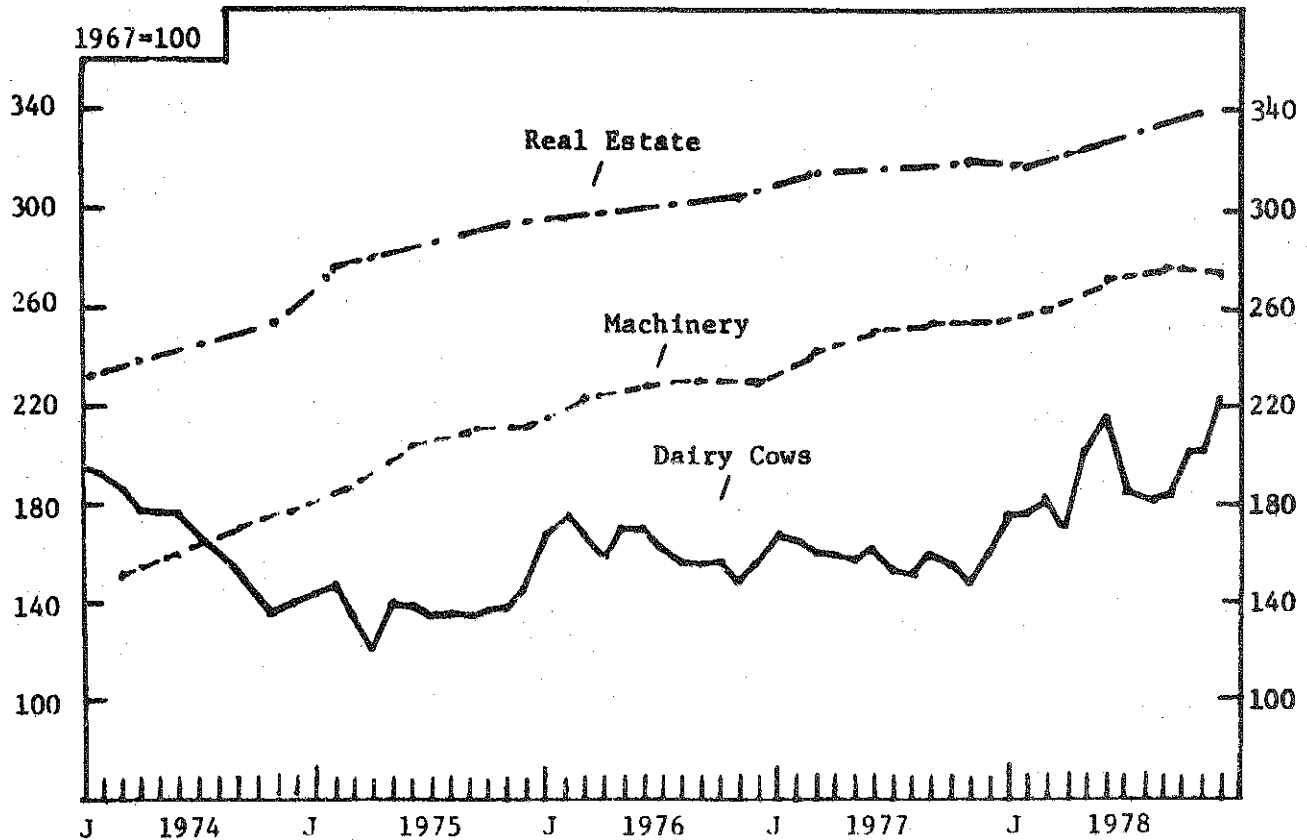
The project was under the supervision of Darwin Snyder, who also did the field work necessary to complete the records. Editing and processing the data, closing the books, and the preparation of these reports was done by Barbara Wilcox and Florence Blodgett assisted by Oneta Shipe. Mary Chaffee typed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



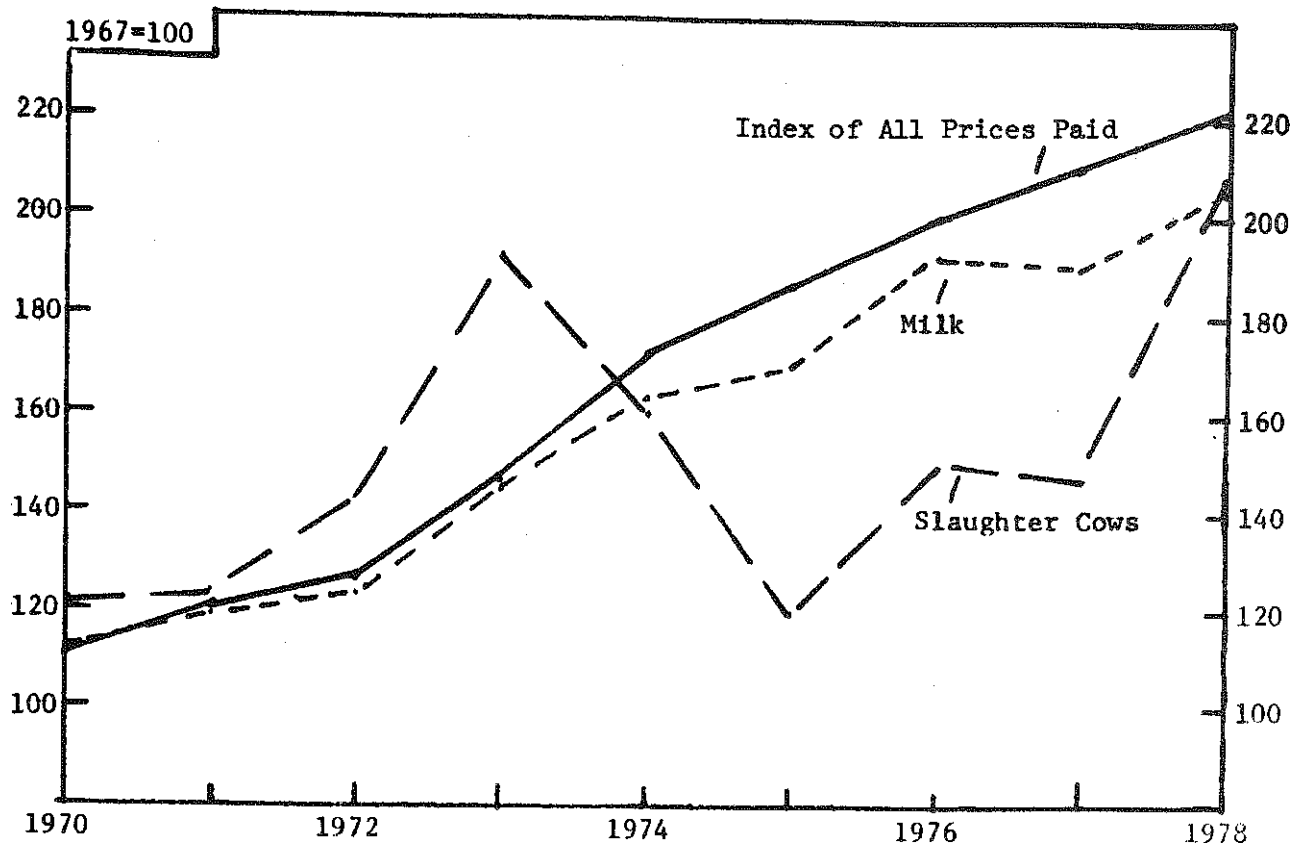
Price changes affect the inventory values on New York dairy farms. Real estate and machinery prices have risen steadily during the past five years. Dairy cow prices peaked in January 1974 but dropped sharply during the year, rose gradually during 1975, 1976 and 1977 and then jumped 39 percent in 1978. 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	Value/Head	1967=100	Value/Acre	1967=100
1974	(Dec.) \$435	140	(Dec.) \$185	123	(Nov.) \$472	254
1975	(Dec.) 450	145	(Dec.) 222	148	(Nov.) 543	294
1976	(Dec.) 485	156	(Dec.) 233	155	(Nov.) 562	304
1977	(Dec.) 495	160	(Dec.) 253	169	(Nov.) 593	320
1978	(Dec.) 690	223	(Dec.) 276	184	(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

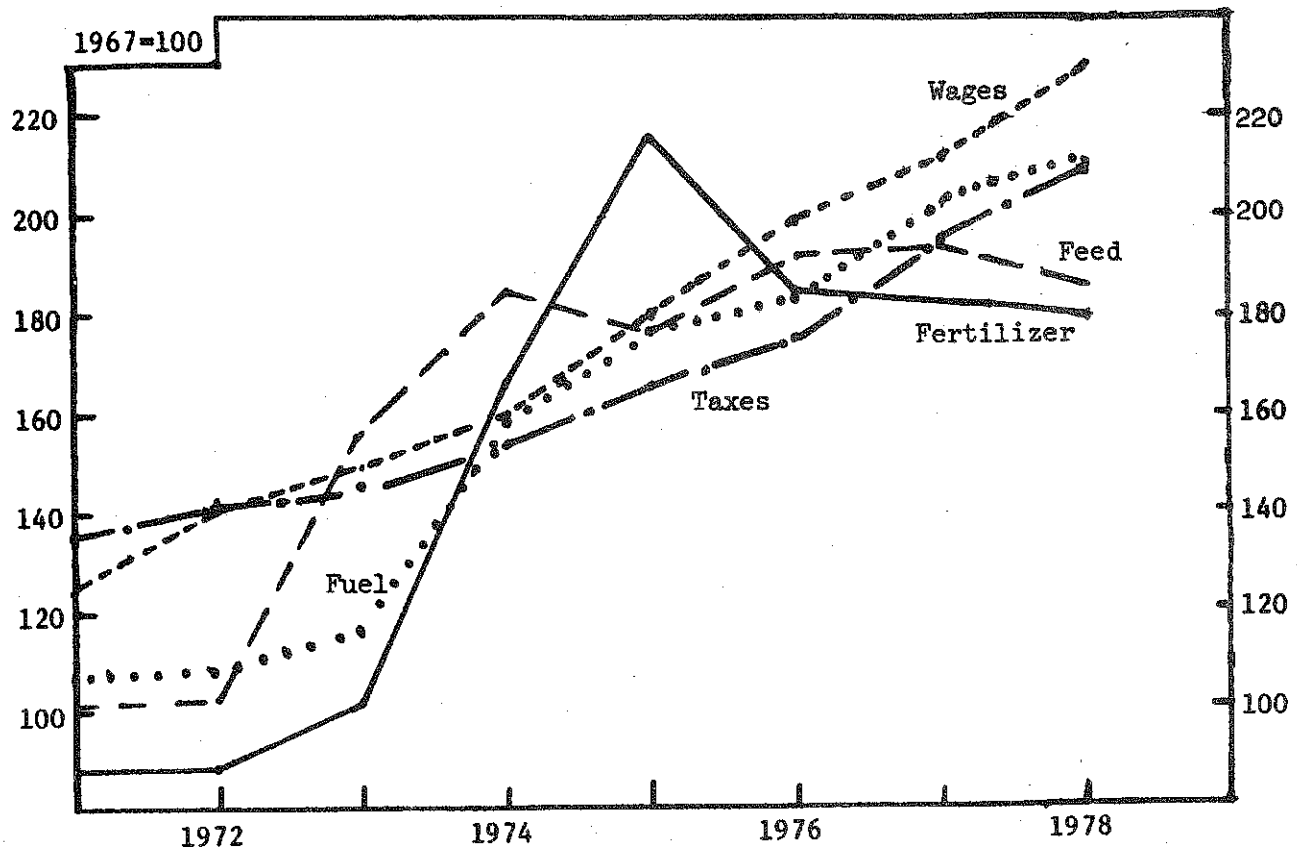


The relationship of prices received to prices paid determines the general level of farm incomes. The graph above shows the trend in prices since 1970 for milk, cull cows, and the index of prices paid by New York dairy farmers. Since 1971, milk prices have lagged behind all prices paid. Milk and slaughter 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

Dairy Cows -

Compared to 1977, average dairy cow values increased about 30 percent in 1978. Cull beef prices increased by over 40 percent and bob calf prices increased by more than 50 percent. Since these dairy enterprises represent commercial herds where herd dispersals are not a factor, cow values at the beginning of the year were adjusted upward to prevent unrealized capital gain from inflating dairy cow enterprise profits. Thus, 1978 profits on these dairy enterprises are not directly affected by the rapid increase in cow values during the year. However, profits are affected by the increase in cull beef prices and bob calf prices as dairymen disposed of livestock in the normal conduct of their herd management practices. Also, with higher values for cows in the dairy herd, interest charged for the investment in the cow increased accordingly.

DAIRY COWS, 1978
COSTS AND RETURNS PER DAIRY COW
2,849 COWS ON 20 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 88
FEED - 4,357 LBS OF DRY GRAIN - - - - -	\$ 320
1.5 TONS OF HIGH MOISTURE CORN - - - - -	93
0.6 TONS OF HAY - - - - -	37
3.6 TONS OF HAY CROP SILAGE - - - - -	87
7.8 TONS OF CORN SILAGE - - - - -	144
PASTURE AND ALL OTHER FEED - - - - -	28
TOTAL FEED COST PER COW - - - - -	709
LABOR - 50 HOURS - - - - -	253
TRACTOR, TRUCK - - - - -	23
EQUIPMENT - - - - -	71
BEDDING - - - - -	12
BREEDING - - - - -	20
VET AND MEDICINE - - - - -	33
MILK HAULING - - - - -	40
MILK TESTING - - - - -	9
SUPPLIES - - - - -	19
UTILITIES - - - - -	20
INSURANCE - - - - -	4
INTEREST ON VALUE OF COW - - - - -	50
BUILDING USE - - - - -	59
ALL OTHER - - - - -	91
TOTAL OTHER THAN DEPREC, FEED, LABOR - - - - -	451
TOTAL COSTS - - - - -	\$ 1,501
RETURNS:	
14,976 POUNDS OF MILK SOLD - - - - -	\$1,626
75 POUNDS OF MILK USED ON FARM - - - - -	8
CALVES - - - - -	62
OTHER RETURNS - - - - -	4
TOTAL RETURNS - - - - -	\$ 1,700
PROFIT: - - - - -	\$ 199
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 2.74
TOTAL FEED COST	4.71
LABOR COST	1.68
TOTAL COST	\$ 9.53
RETURNS	10.86
MILK PRODUCED PER HOUR OF LABOR	300 LB
RETURN PER HOUR OF LABOR	\$ 9.01
RETURN PER DOLLAR OF COST	1.13

FACTORS FROM 20 DAIRY COW ENTERPRISES
20 COST ACCOUNT FARMS, 1978
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NO	MILK PER COW LB	LABOR PER COW HR	MILK PER HR OF LABOR LB	FEED PER COW				VET MED COST/COW \$	
					DRY GRAIN LB	HIGH CORN TN	HAY MSTR TN	HAY CROP SILG TN		CORN SILG TN
834	443	15,181	41	372	1,011	3.0	.1	3.5	5.9	17
827	375	13,657	44	312	3,653	2.2	.2	3.4	7.7	45
812	277	17,507	37	477	6,823			2.1	10.3	55
806	202	16,308	42	391	8,733	1.7	.1	5.3	10.9	28
824	197	15,991	45	354	2,944	2.9	.4	4.4	6.6	37
830	163	17,106	49	347	4,724	.7	1.8	1.5	9.0	45
804	160	14,528	39	372	6,475		.3	2.9	11.6	16
821	160	14,193	45	315	4,875		.4	3.7	11.5	23
105	137	11,907	51	234	1,942	3.5	.5	3.2	6.5	41
840	133	14,948	50	297	5,594		.5	7.8	9.7	19
835	118	15,784	41	385	7,203	1.3	1.1	5.6	4.7	37
836	75	14,331	61	234	5,120		1.9		7.9	30
130*	70	12,561	113	112	400	3.0	.4	5.0	3.3	17
108*	58	12,995	61	213	759	2.2		6.6	5.2	13
843*	53	11,896	51	234	4,528		5.7			19
112*	53	16,885	96	175	7,623		2.2	3.7	4.9	27
828*	46	14,274	93	154	652	5.6	1.0	7.5	3.2	61
146*	45	13,340	143	93	6,089		1.3	.7	4.7	63
108*	42	17,193	97	176	6,524		1.4	3.9	3.1	20
127*	42	15,750	54	292	5,619		2.1		12.5	35

1978 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

THIRDS

HIGH	260	15,755	43	375	4,910	1.5	.5	3.3	8.9	35
MED	116	13,954	61	263	4,189	1.4	.8	4.3	7.3	28
LOW	48	14,619	86	192	4,542	1.2	2.0	3.2	4.9	34

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

1978	142	15,051	50	300	4,357	1.5	.6	3.6	7.8	33
1977	130	14,344	54	264	4,272	1.7	.7	4.1	7.5	26
1976	128	14,455	55	263	4,586	1.3	.6	4.3	8.6	26
1975	140	14,515	51	287	4,394	1.3	.5	4.1	8.3	23
1974	129	14,144	54	262	4,575	1.2	.8	4.2	8.5	21

* STANCHION BARNS

See note on page 8.

FACTORS FROM 20 DAIRY COW ENTERPRISES
20 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVG COST PER COW FOR		AVG PER CWT OF MILK		AVERAGE PER COW			RETURN PER HOUR \$ OF OF		PROFIT ON ENTER- FARM	
FEED	LABOR	COST	RETURN	COST	TURN	FEI	LABOR	COST	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
556	208	8.02	10.86	1294	1725	431	15.65	1.33	191,011	834
649	288	9.97	10.85	1414	1533	119	9.33	1.08	44,888	827
765	298	9.20	10.80	1695	1975	280	15.77	1.17	77,540	812
931	239	10.58	11.61	1778	1947	169	9.76	1.09	34,082	806
681	203	7.96	10.21	1330	1689	359	12.45	1.27	70,765	824
830	196	8.98	10.86	1622	1944	322	10.50	1.20	52,501	830
789	219	10.02	11.57	1505	1731	226	11.36	1.15	36,044	804
758	286	10.66	11.22	1587	1666	79	8.11	1.05	12,652	821
633	219	11.13	10.91	1371	1345	26-	3.80	0.98	3,508-	105
822	227	9.96	10.87	1575	1712	137	7.22	1.09	18,208	840
909	166	9.89	10.64	1630	1749	119	6.97	1.07	14,113	835
494	407	10.15	10.73	1513	1596	83	8.00	1.05	6,208	836
545	325	9.93	10.70	1311	1408	97	3.75	1.07	6,813	130
537	263	9.59	10.47	1308	1421	113	6.16	1.09	6,568	108
666	188	11.43	10.32	1407	1274	133-	1.09	0.91	7,023-	843
837	323	10.00	10.09	1760	1776	16	3.51	1.01	839	112
727	251	10.42	10.37	1581	1573	8-	2.64	1.00	329-	828
588	575	12.11	10.44	1675	1452	223-	2.45	0.87	10,029-	146
679	345	8.52	10.35	1540	1855	315	6.77	1.20	13,226	108
864	230	10.68	11.05	1744	1803	59	5.36	1.03	2,465	127

1978 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

										THIRDS
744	236	9.25	10.97	1520	1792	272	12.12	1.18	72,404	HIGH
694	272	10.29	10.85	1498	1580	82	6.31	1.05	9,081	MED
700	311	10.39	10.44	1574	1594	20	4.00	1.02	817	LOW

ANNUAL AVERAGES, ALL ENIR, WEIGHIED BY NUMBER OF COWS:

709	253	9.53	10.86	1501	1700	199	9.01	1.13	28,352	1978
695	229	9.58	9.90	1413	1460	47	5.07	1.03	6,085	1977
666	237	9.12	10.04	1356	1489	133	6.73	1.10	17,005	1976
625	209	8.26	9.02	1231	1341	110	6.29	1.09	15,361	1975
600	199	7.90	8.76	1155	1276	121	5.94	1.10	15,647	1974

STANCHION BARN HERDS
DAIRY COWS, 1978
COSTS AND RETURNS PER DAIRY COW
409 COWS ON 8 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 93
FEED - 3,741 LBS OF DRY GRAIN - - - - -	\$ 261
1.4 TONS OF HIGH MOISTURE CORN - - - - -	92
1.7 TONS OF HAY - - - - -	107
3.6 TONS OF HAY CROP SILAGE - - - - -	92
4.4 TONS OF CORN SILAGE - - - - -	90
PASTURE AND ALL OTHER FEED - - - - -	27
TOTAL FEED COST PER COW - - - - -	669
LABOR - 89 HOURS - - - - -	310
TRACTOR, TRUCK - - - - -	7
EQUIPMENT - - - - -	67
BEDDING - - - - -	20
BREEDING - - - - -	21
VET AND MEDICINE - - - - -	30
MILK HAULING - - - - -	26
MILK TESTING - - - - -	12
SUPPLIES - - - - -	27
UTILITIES - - - - -	27
INSURANCE - - - - -	3
INTEREST ON VALUE OF COW - - - - -	50
BUILDING USE - - - - -	58
ALL OTHER - - - - -	99
TOTAL OTHER THAN DEPREC, FEED, LABOR - - - - -	447
TOTAL COSTS - - - - -	\$ 1,519
RETURNS:	
14,044 POUNDS OF MILK SOLD - - - - -	\$1,470
134 POUNDS OF MILK USED ON FARM - - - - -	14
CALVES - - - - -	62
OTHER RETURNS - - - - -	4
TOTAL RETURNS - - - - -	\$ 1,550
PROFIT: - - - - -	\$ 31
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 2.49
TOTAL FEED COST	4.72
LABOR COST	2.18
TOTAL COST	\$ 10.25
RETURNS	10.47
MILK PRODUCED PER HOUR OF LABOR	160 LB
RETURN PER HOUR OF LABOR	\$ 3.83
RETURN PER DOLLAR OF COST	1.02

FREESTALL BARN HERDS
 DAIRY COWS, 1978
 COSTS AND RETURNS PER DAIRY COW
 2,440 COWS ON 12 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 88
FEED - 4,460 LBS OF DRY GRAIN - - - - -	\$ 330
1.5 TONS OF HIGH MOISTURE CORN - - - - -	93
0.4 TONS OF HAY - - - - -	25
3.6 TONS OF HAY CROP SILAGE - - - - -	86
8.3 TONS OF CORN SILAGE - - - - -	153
PASTURE AND ALL OTHER FEED - - - - -	29
TOTAL FEED COST PER COW - - - - -	716
LABOR - 44 HOURS - - - - -	244
TRACTOR, TRUCK - - - - -	25
EQUIPMENT - - - - -	71
BEDDING - - - - -	11
BREEDING - - - - -	20
VET AND MEDICINE - - - - -	33
MILK HAULING - - - - -	42
MILK TESTING - - - - -	8
SUPPLIES - - - - -	17
UTILITIES - - - - -	19
INSURANCE - - - - -	4
INTEREST ON VALUE OF COW - - - - -	49
BUILDING USE - - - - -	59
ALL OTHER - - - - -	92
TOTAL OTHER THAN DEPREC, FEED, LABOR - - - - -	450
TOTAL COSTS - - - - -	\$ 1,498
RETURNS:	
15,132 POUNDS OF MILK SOLD - - - - -	\$1,652
65 POUNDS OF MILK USED ON FARM - - - - -	7
CALVES - - - - -	63
OTHER RETURNS - - - - -	4
TOTAL RETURNS - - - - -	\$ 1,726
PROFIT: - - - - -	\$ 228
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 2.78
TOTAL FEED COST	4.71
LABOR COST	1.60
TOTAL COST	\$ 9.42
RETURNS	10.92
MILK PRODUCED PER HOUR OF LABOR	348 LB
RETURN PER HOUR OF LABOR	\$ 10.78
RETURN PER DOLLAR OF COST	1.15

See note on page 8.

FACTORS FROM 20 DAIRY COW ENTERPRISES
20 COST ACCOUNT FARMS, 1978
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NO	MILK LABOR		MILK PER HR OF LABOR LB	FEED PER COW					VET MED COST/ COW \$
		PER COW LB	PER COW HR		DRY GRAIN LB	HIGH MSTR CORN TN	HAY CROP HAY TN	CORN SILG SILG TN		

8 STANCHION BARN HERDS:

130	70	12,561	113	112	400	3.0	.4	5.0	3.3	17
108	58	12,995	61	213	759	2.2		6.6	5.2	13
843	53	11,896	51	234	4,528		5.7			19
112	53	16,885	96	175	7,623		2.2	3.7	4.9	27
828	46	14,274	93	154	652	5.6	1.0	7.5	3.2	61
146	45	13,340	143	93	6,089		1.3	.7	4.7	63
108	42	17,193	97	176	6,524		1.4	3.9	3.1	20
127	42	15,750	54	292	5,619		2.1		12.5	35

ANNUAL AVERAGES, ALL ENIR, WEIGHTED BY NUMBER OF COWS:

1978	51	14,178	89	160	3,741	1.4	1.7	3.6	4.4	30
1977	53	13,503	90	150	4,050	1.5	1.7	4.1	6.3	23
1976	48	13,530	92	147	5,224	.8	1.6	4.4	6.6	24
1975	55	12,178	78	156	3,034	1.5	1.4	4.5	5.5	15
1974	67	12,740	71	180	3,476	1.2	1.8	3.6	6.2	12

See note on page 8.

12 FREESTALL BARN HERDS:

834	443	15,181	41	372	1,011	3.0	.1	3.5	5.9	17
827	375	13,657	44	312	3,653	2.2	.2	3.4	7.7	45
812	277	17,507	37	477	6,823			2.1	10.3	55
806	202	16,308	42	391	8,733	1.7	.1	5.3	10.9	28
824	197	15,991	45	354	2,944	2.9	.4	4.4	6.6	37
830	163	17,106	49	347	4,724	.7	1.8	1.5	9.0	45
804	160	14,528	39	372	6,475		.3	2.9	11.6	16
821	160	14,193	45	315	4,875		.4	3.7	11.5	23
105	137	11,907	51	234	1,942	3.5	.5	3.2	6.5	41
840	133	14,948	50	297	5,594		.5	7.8	9.7	19
835	118	15,784	41	385	7,203	1.3	1.1	5.6	4.7	37
836	75	14,331	61	234	5,120		1.9		7.9	30

ANNUAL AVERAGES, ALL ENIR, WEIGHTED BY NUMBER OF COWS:

1978	203	15,197	44	348	4,460	1.5	.4	3.6	8.3	33
1977	193	14,534	46	314	4,322	1.7	.5	4.1	7.8	27
1976	188	14,632	48	306	4,463	1.4	.5	4.2	9.0	26
1975	194	14,935	46	326	4,638	1.3	.3	4.1	8.9	24
1974	185	14,607	48	301	4,937	1.2	.5	4.4	9.2	24

See note on page 8.

FACTORS FROM 20 DAIRY COW ENTERPRISES
20 COST ACCOUNT FARMS, 1978
(READ ACROSS BOTH PAGES)

AVG COST PER COW		AVG PER CWT OF MILK		AVERAGE PER COW			RETURN PER HOUR		PROFIT ON ENTERPRISE		FARM NO
FEED	LABOR	COST	RETURN	COST	TURN	ENT	LABOR	COST	PRICE		NO
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	

8 STANCHION BARN HERDS:

545	325	9.93	10.70	1311	1408	97	3.75	1.07	6,813	130
537	263	9.59	10.47	1308	1421	113	6.16	1.09	6,568	108
666	188	11.43	10.32	1407	1274	133-	1.09	0.91	7,023-	843
837	323	10.00	10.09	1760	1776	16	3.51	1.01	839	112
727	251	10.42	10.37	1581	1573	8-	2.64	1.00	329-	828
588	575	12.11	10.44	1675	1452	223-	2.45	0.87	10,029-	146
679	345	8.52	10.35	1540	1855	315	6.77	1.20	13,226	108
864	230	10.68	11.05	1744	1803	59	5.36	1.03	2,465	127

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

669	310	10.25	10.47	1519	1550	31	3.83	1.02	1,566	1978
709	300	10.77	9.67	1493	1345	148-	1.69	0.90	7,911-	1977
666	305	10.28	9.76	1426	1357	69-	2.55	0.95	3,333-	1976
570	275	9.77	8.71	1214	1085	129-	1.88	0.89	7,062-	1975
535	230	8.27	8.53	1089	1122	33	3.73	1.03	2,234	1974

12 FREESTALL BARN HERDS:

556	208	8.02	10.86	1294	1725	431	15.65	1.33	191,011	834
649	288	9.97	10.85	1414	1533	119	9.33	1.08	44,888	827
765	298	9.20	10.80	1695	1975	280	15.77	1.17	77,540	812
931	239	10.58	11.61	1778	1947	169	9.76	1.09	34,082	806
681	203	7.96	10.21	1330	1689	359	12.45	1.27	70,765	824
830	196	8.98	10.86	1622	1944	322	10.50	1.20	52,501	830
789	219	10.02	11.57	1505	1731	226	11.36	1.15	36,044	804
758	286	10.66	11.22	1587	1666	79	8.11	1.05	12,652	821
633	219	11.13	10.91	1371	1345	26-	3.80	0.98	3,508-	105
822	227	9.96	10.87	1575	1712	137	7.22	1.09	18,208	840
909	166	9.89	10.84	1630	1749	119	6.97	1.07	14,113	835
494	407	10.15	10.73	1513	1596	83	8.00	1.05	6,208	836

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

716	244	9.42	10.92	1498	1726	228	10.78	1.15	46,209	1978
692	213	9.33	9.95	1395	1486	91	6.56	1.06	17,538	1977
666	224	8.91	10.09	1343	1515	172	8.28	1.13	32,259	1976
635	197	8.05	9.07	1234	1387	153	7.64	1.12	29,631	1975
622	189	7.79	8.82	1177	1327	150	7.01	1.13	27,841	1974

HEIFERS, 1978
 COSTS PER HEIFER EQUIVALENT
 812 MATURE-HEIFER EQUIVALENTS ON
 17 COST ACCOUNT FARMS*

ITEM	AVERAGE PER HEIFER RAISED TO 29 MONTHS
VALUE OF CALF AT BIRTH - - - - -	\$ 90
FEED - MILK AND MILK REPLACER - - - - -	\$ 17
1,998 POUNDS OF DRY GRAIN - - -	125
.1 TONS OF HIGH MOISTURE CORN -	7
1.4 TONS OF HAY - - - - -	82
.9 TONS OF HAY CROP SILAGE - -	22
9.0 TONS OF CORN SILAGE - - - -	159
PASTURE AND ALL OTHER FEED - - -	35
TOTAL FEED COST - - - - -	447
LABOR - 28 HOURS - - - - -	132
TRACTOR, TRUCK - - - - -	23
EQUIPMENT - - - - -	10
BEDDING - - - - -	17
BREEDING - - - - -	8
VET AND MEDICINE - - - - -	7
UTILITIES - - - - -	4
INSURANCE - - - - -	5
INTEREST - - - - -	59
BUILDING USE - - - - -	61
ALL OTHER - - - - -	64
TOTAL OTHER THAN CALF, FEED, LABOR -	258
TOTAL COSTS - TO RAISE A HEIFER TO 29 MONTHS OF AGE - - - - -	\$ 927

* THERE WERE A TOTAL OF 1,991 HEIFERS OF ALL AGES ON THESE FARMS FOR A PART OR ALL OF THE YEAR. THEY WERE FED A TOTAL OF 23,557 NET HEIFER-MONTHS, WHICH, DIVIDED BY 29, EQUALS 812 MATURE-HEIFER EQUIVALENTS. (HEIFERS RAISED ON CONTRACT ARE NOT INCLUDED.)

FACTORS FROM 17 HEIFER ENTERPRISES
17 COST ACCOUNT FARMS, 1978
(ARRANGED BY NUMBER OF HEIFERS)

FARM NO	NUMBER OF HEIFERS	LABOR PER HEIFER HR	AVERAGE AGE AT FRESHENING MO	NET COST* PER HEIFER MONTH \$	PER HEIFER AT FRESHENING COST \$	PER HEIFER AT FRESHENING VALUE \$	RETURN PER HOUR OF LABOR \$	RETURN PER HOUR OF LABOR COST \$
834	408	7	25	30	859	900	0.06	0.91
827	282	6	25	24	663	700	11.98	1.10
824	161	18	27	31	907	800	2.41-	0.71
830	143	13	29	37	1,194	800	4.60-	0.78
806	130	8	26	25	720	800	8.61	1.07
821	124	6	25	20	591	750	19.99	1.31
840	111	14	31	29	1,008	900	0.50	0.86
835	101	17	24	28	766	750	4.28	1.01
105	98	22	28	32	971	800	2.91	0.93
804	96	10	25	27	754	750	20.97	1.45
836	58	15	33	26	924	800	3.24	0.86
112	56	14	30	34	1,109	800	3.02-	0.81
130	53	12	32	26	917	600	2.08-	0.83
146	46	25	25	32	865	679	0.95-	0.74
108	45	17	39	29	1,256	800	4.69-	0.58
108	42	18	31	32	1,067	700	1.67-	0.76
127	37	14	26	40	1,161	1,000	9.03-	0.64

1978 GROUP AVERAGES, ACCORDING TO NUMBER OF HEIFERS:

THIRDS

HIGH	208	10	26	28	823	792	5.61	0.98
MED	93	16	28	28	885	801	6.38	1.02
LOW	47	17	31	32	1,063	764	3.56-	0.73

ANNUAL AVERAGES-- ALL ENIR, WEIGHTED BY NUMBER OF HEIFERS:

1978	124	12	27	29	862	789	2.23	0.92
1977	113	13	27	25	739	605	1.43-	0.78
1976	108	12	28	24	734	566	2.90-	0.72
1975	115	12	28	23	705	523	3.58-	0.69
1974	95	13	27	23	669	497	4.18-	0.66

* VALUE OF CALF EXCLUDED

Note - Costs to raise heifers increased more rapidly in 1978 than in recent years. However, returns on the 1978 heifer enterprises were enhanced by a significant increase (over 30 percent) in the market value of ready-to-freshen heifers during the year.