

October 1982

A.E. Res. 82-36

**FRUIT AND VEGETABLE CROPS
COSTS AND RETURNS
FROM
FARM COST ACCOUNTS**

**28 FARMS-1981
NEW YORK STATE**

Darwin P. Snyder

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

REPORTS
from
FARM COST ACCOUNTS

28 Farms, 1981

Enterprise data from the 1981 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. 82-33
Livestock Costs and Returns	A.E. Res. 82-34
Field Crops Costs and Returns	A.E. Res. 82-35
Fruit and Vegetable Crops Costs and Returns	A.E. Res. 82-36

WESTERN NEW YORK

FRUIT AND VEGETABLE CROPS COSTS AND RETURNS, A.E. Res. 82-36

-Contents-

	<u>Page</u>
Introduction	1
Summary of Cost Account enterprises	6
Rates of return compared with other years	7
Apples	8
Sweet cherries	12
Red tart cherries	14
Other fruits	18
Vegetable crops	20

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 some of the "better" farmers 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 assisted in processing the data.

The material on page 4 of this report was taken from A.E. Res. 82-24, Dairy Farm Management Business Summary, New York, 1981, by Stuart F. Smith.

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.

FRUIT**COMMERCIAL FRUIT UTILIZED PRODUCTION**
New York and United States

Fruit	New York				United States			
	Average		1980	1981	Average		1980	1981
	1969-73	1976-80			1969-73	1976-80		
--- thousand tons ---								
Apples	422	494	550	400	3,116	3,765	4,414	3,823
Sweet Cherries	5	3	5	2	129	165	164	154
Tart Cherries	16	10	15	4	131	93	113	69
Grapes	141	161	175	150	3,555	4,708	5,595	4,458
Peaches	9	6	7	5	1,455	1,417	1,540	1,394
Pears	16	16	21	17	668	816	897	892

Source: Non-Citrus Fruits and Nuts, 1981 Annual Summary; Midyear Supplement; FrNt 1-3(82); CRB, SRS, USDA.

Fruit crop production in New York suffered in 1981 due primarily to unfavorable weather conditions in the spring. While maintaining its second place rank in the nation for apple production, New York had the smallest crop of apples since 1973. Production of the other major fruit crops in the State also suffered, especially cherries. Tart cherry production was the lowest in over a decade, if not on record. Sweet cherry production was the lowest since 1977. Production for both grapes and peaches was below average. The pear crop was the only fruit crop in the State with a normal crop. Nationally, production for all six of these fruit crops was down from the previous year, but production for only cherries and grapes was significantly below normal.

AVERAGE FARM PRICES OF FRUITS
New York and United States

Fruit	New York				United States			
	Average		1980	1981	Average		1980	1981
	1969-73	1976-80			1969-73	1976-80		
-- dollars per ton --								
Apples:								
Fresh	180	302	360	420	154	266	242	312
Processed	65	100	86	127	63	109	84	106
All Sales	105	178	188	224	115	198	172	216
Sweet Cherries	271	477	450	621	352	544	649	771
Tart Cherries	204	649	382	902	209	663	404	890
Grapes	174	222	218	248	117	212	239	297
Peaches	214	395	470	472	133	222	248	266
Pears	131	195	222	219	120	178	196	186

Source: Non-Citrus Fruits and Nuts, 1981 Annual Summary; Midyear Supplement; FrNt 1-3(82); CRB, SRS, USDA.

Prices for fresh apples in New York were the highest on record in 1981. Processing apples brought the highest prices since 1973. The result was a record average price for all apples produced in the State. The U.S. fresh apple price was also a record. New York prices for sweet cherries and peaches also set new records. Prices for New York tart cherries, grapes, and pears were the second highest on record. As far as U.S. prices are concerned, sweet cherries, grapes, and peaches reached new highs and tart cherries were second only to record high prices in 1979. The U.S. pear price has declined each year since 1977.

VEGETABLES FOR PROCESSING AND FRESH MARKET
Acreage, Yield, and Value per Unit
New York

Crop	1981 % of U.S. Total Production	Acres Harvested		Yield per Acre		Value per Unit				
		1979	1980	1981	1979	1980	1981			
	%	-- 1,000 acres --		-- tons --		-- \$ per ton --				
Processing vegetables:										
Beans, snap	14	46	46	39	2.3	2.4	2.5	161	169	185
Sweet corn	4	21	17	21	5.3	5.1	4.7	47	49	62
Peas	2	6.2	6.0	7.8	1.7	1.7	1.9	249	278	317
	%	-- 1,000 acres --		-- cwt. --		-- \$ per cwt --				
Fresh market vegetables:										
Carrots*	2	1.1	1.0	1.1	290	365	355	4.55	8.56	9.58
Cauliflower* - L.I.	5	1.5	1.5	1.9	90	104	135	18.70	20.20	26.00
- Upstate	4	1.5	1.7	1.7	102	100	120	15.70	19.50	20.10
Celery*	2	0.6	0.7	0.7	468	425	465	9.03	9.32	13.20
Lettuce	1	3.6	3.8	3.8	195	210	195	12.00	13.60	18.10
Onions*	11	14.6	14.3	14.3	330	310	275	7.85	15.10	14.70
Sweet corn	11	22	22	22	65	75	71	8.42	9.51	10.80
Tomatoes	2	3.0	3.2	3.2	130	130	135	25.40	28.60	27.40

Source: Vegetables, 1981, Annual Summary; Vg 1-2(82); CRB, ESCS, USDA.

*Includes data for both fresh market and processing crops.

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1980

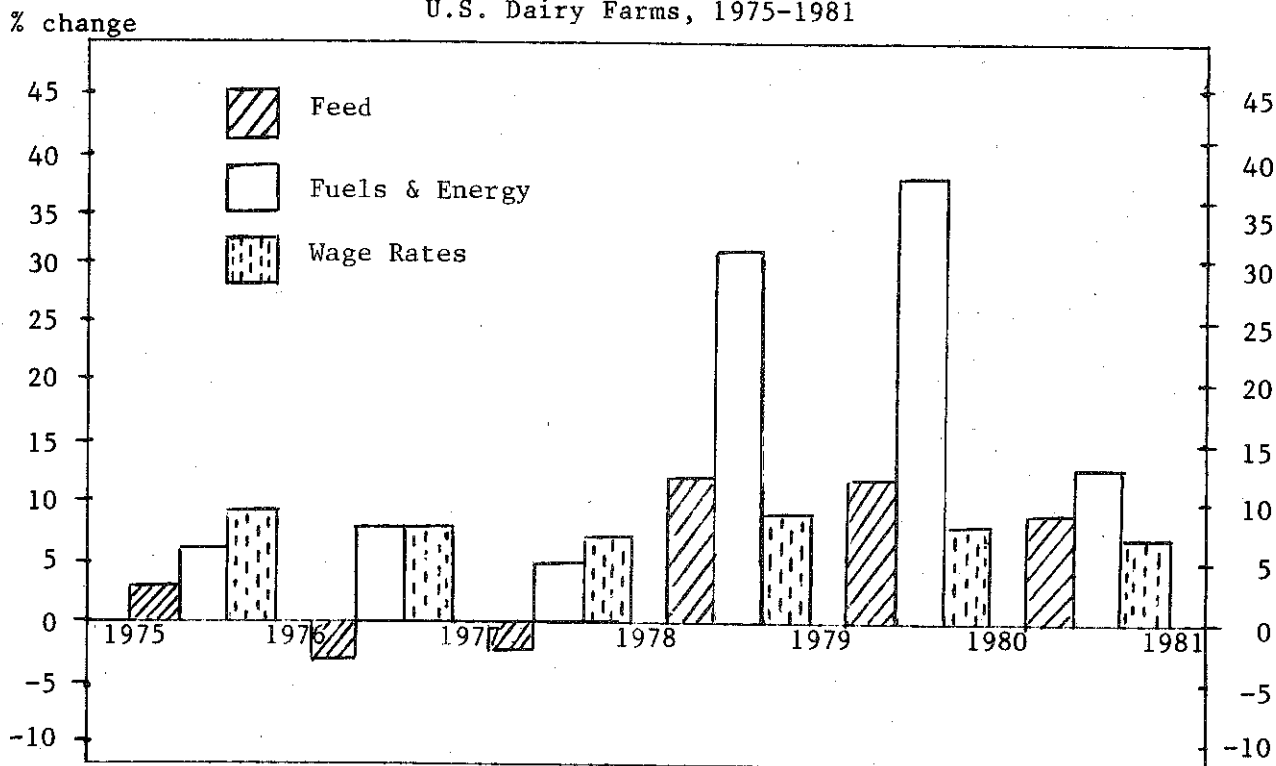
Year	Index 1977=100					
	Feed	Fert.	Fuel & Energy	Wage Rates	Taxes	Interest
1972	57	52	54	63	75	46
1973	86	56	57	69	77	54
1974	104	92	79	79	81	65
1975	100	120	88	85	87	76
1976	103	102	93	93	94	87
1977	100	100	100	100	100	100
1978	98	100	105	107	100	118
1979	110	108	137	117	107	144
1980	123	134	188	127	114	179
1981	134	144	213	136	124	195

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, 1975-1981



Although all three major cost items have increased since 1975. Feed prices have been through a cycle, fuel and energy costs show the greatest increases, and wage rates have increased at a relatively slow but constant rate.

Growing Conditions

Table 1. TEMPERATURE, PRECIPITATION, AND GROWING SEASON
Selected Stations, New York, 1941-70 and 1981

Station	Average temperature		Precipitation				Length of growing season*	
	May - Sept.		May - Sept.		Total Annual		1947-67 1981	
	1941-70	1981	1941-70	1981	1941-70	1981	1947-67	1981
	degrees		inches				days	
Albany	65.7	64.4	15.4	13.9	33.4	30.4	---	133
Alfred	61.8	60.8	17.2	19.3	36.7	49.8	125	132
Aurora	64.6	63.3	13.8	21.1	40.0	37.7	160	134
Batavia	64.1	64.4	15.3	----	32.6	39.8	154	159
Binghamton	63.3	63.6	17.9	12.7	37.4	30.3	154	156
Canton	63.0	62.0	16.5	20.2	34.5	34.7	127	133
Glens Falls	----	64.1	17.8	17.8	39.3	30.4	---	134
Ithaca	63.8	62.7	17.2	17.0	34.8	39.1	145	133
Lowville	62.5	60.7	16.5	----	38.5	37.6	123	133
Utica	63.5	63.8	18.1	23.3	40.6	41.9	157	135

*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, 1981, Vol. 93, No. 13.

Weather is a factor to be considered when studying a farm business for 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 1981 and for the period 1941-70.

The 1981 growing season, generally, produced good crops although the harvest season, particularly September, was cool and wet. Variability was a key word to describe both temperatures and precipitation in most parts of the State throughout the season. Table 2 illustrates weather stations which show conditions that deviated significantly from the average.

Data in Tables 1 and 2 are presented for 10 weather stations located throughout the State.

Table 2. GROWING SEASON RAINFALL
Selected Stations, New York, 1941-70 and 1981

	May		June		July		August		September	
	1941-70	1981	1941-70	1981	1941-70	1981	1941-70	1981	1941-70	1981
	inches									
Albany	3.26	2.44	3.00	2.78	3.12	3.50	2.87	1.76	3.12	3.45
Alfred	3.76	2.55	3.76	3.52	3.73	6.53	3.00	1.70	2.93	4.96
Aurora	2.98	1.95	2.54	3.82	3.03	4.07	2.81	4.34	2.46	6.95
Batavia	3.17	----	2.69	----	3.05	3.20	3.50	5.07	2.87	5.67
Binghamton	3.83	1.94	3.59	3.42	3.83	1.99	3.61	1.99	3.02	3.40
Canton	3.37	2.90	2.91	3.88	3.43	2.27	3.47	5.23	3.31	5.93
Glens Falls	3.63	2.81	3.77	2.47	3.68	3.81	3.42	2.35	3.31	6.40
Ithaca	3.55	1.78	3.40	2.57	3.67	4.03	3.49	3.63	3.08	4.98
Lowville	3.42	2.98	2.94	3.20	3.26	5.11	3.58	----	3.31	5.27
Utica	3.52	2.01	3.55	3.42	4.17	4.06	3.54	2.75	3.32	11.09

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1981, Vol. 93, No. 13.

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

Item	Unit	New York State*				Cost
		1957-61	1967-71	1977-81	1981	Account 1981
Hay, Alfalfa mix.	tons	2.2	2.6	2.7	2.7	3.2
Corn silage	tons	11	14	14	14.5	16.0
Corn grain	bu.	57	85	90	93	93
Oats	bu.	52	60	60	64	--
Wheat	bu.	32	39	40	44	56
Milk per cow	lbs.	7,914	10,361	11,742	12,265	15,493

*Source: New York Agricultural Statistics, 1981; Crop Reporting Service, USDA.

FARM COST ACCOUNT SUMMARY, 1981
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	18	52	3.2 tn.	7	1.70	0.86	-32	-1,710
Hay crop silage	18	149	7.9 tn.	4	2.79	0.94	-14	-2,129
Corn silage	20	111	16.0 tn.	5	5.97	0.99	- 5	- 556
<u>Grain:</u>								
Corn for grain	9	82	93 bu.	3	-12.79	0.77	-70	-5,778
High moist. corn	21	126	3.6 tn.	4	-0.45	0.92	-23	-2,819
Wheat	11	146	56 bu.	2	15.26	1.10	17	2,509
<u>Fruit:</u>								
Apples	12	99	406 bu.	84	8.97	1.13	191	18,721
Red tart cherries	7	38	2,815 lb.	37	13.76	1.35	291	11,008

*To grow and harvest the crop.

ENTERPRISE RATES OF RETURN

FARM COST ACCOUNT RECORDS, 1978-81

Enterprise	Return per hour of labor				Return per dollar of cost			
	1978	1979	1980	1981	1978	1979	1980	1981
	\$	\$	\$	\$	\$	\$	\$	\$
Livestock:								
Dairy cows	9.01	10.77	10.64	7.89	1.13	1.15	1.11	1.04
Dairy heifers	2.23	3.97	5.94	0.25	0.92	0.96	0.99	0.87
Forage:								
Hay	3.31	0.90	0.02	1.70	0.94	0.84	0.81	0.86
Hay crop silage	-2.52	0.39	5.82	2.79	0.79	0.87	1.00	0.94
Corn silage	4.46	9.05	5.86	5.97	0.98	1.07	0.99	0.99
Grain:								
Corn for grain	0.00	5.12	23.76	-12.79	0.92	1.00	1.28	0.77
High moisture corn	6.98	18.84	22.68	0.45	1.04	1.22	1.23	0.92
Oats	-3.92	-18.35	NA	NA	0.77	0.63	NA	NA
Wheat	-4.11	22.68	22.46	15.26	0.75	1.26	1.21	1.10
Fruits:								
Apples	7.61	7.39	5.52	8.97	1.19	1.07	0.91	1.13
Sweet cherries	7.45	NA	NA	NA	1.29	NA	NA	NA
Red tart cherries	43.59	33.16	17.29	13.76	3.43	2.80	1.62	1.35

Fruit Crops - Western New York

Growing costs begin accumulating with trimming and mousebaiting, etc. after harvest of the previous year's crop. The "orchard or vineyard overhead" cost is based on the value of the land and improvements and includes depreciation, if any, maintenance, drainage, taxes and interest on the investment.

Harvesting costs include costs for the normal harvest activities as performed on each farm. Cost accumulation ceases when the crop is loaded on a truck for hauling off the farm or when the crop is placed in storage or a processing or marketing facility on the farm.

Storing and selling costs include the cost of hauling the crop to an off farm destination at harvest time. Custom packing and storage costs, if any, are included. Costs related to major CA storage facility and/or processing and marketing activities on the farm are excluded from the fruit enterprise. A wide range of post-harvest costs are included in these fruit enterprises.

Returns represent the amount the grower received for his crop when sold at harvest time or the value when delivered to a farm marketing, processing or CA storage facility.

Most apple enterprises involve varying quantities marketed as fresh and processing fruit depending on market conditions. Cost and return allocation difficulties preclude any meaningful distinction between fresh and processing fruit.

APPLES
COSTS AND RETURNS PER ACRE
1,179 ACRES ON 6 COST ACCOUNT FARMS, 1981

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 33 HR - - - - -	\$ 204
TRACTOR 7 HR - - - - -	42
TRUCK, EQUIP, CUSTOM WGRK, EQ RENT - -	57
ORCHARD OR VINEYARD OVERHEAD - - - - -	133
FERTILIZER - - - - -	39
SPRAY, DUST MATERIALS - - - - -	157
INTEREST - - - - -	26
ALL OTHER - - - - -	110
TOTAL GROWING COSTS - - - - -	768
HARVESTING:	
LABOR 51 HR - - - - -	363
TRACTOR, TRUCK - - - - -	39
EQUIPMENT - - - - -	106
CUSTOM WORK, EQUIP RENT - - - - -	2
ALL OTHER - - - - -	53
TOTAL HARVESTING COSTS - - - - -	563
TOTAL PRODUCTION COSTS - - - - -	\$ 1,331
STORING AND SELLING:	
LABOR 2 HR - - - - -	15
TRACTOR, TRUCK, EQUIP - - - - -	29
BUILDING USE - - - - -	2
DIRECT SELLING COSTS * - - - - -	36
ALL OTHER - - - - -	21
TOTAL STORING AND SELLING COSTS - -	103
TOTAL COSTS - - - - -	\$ 1,434
RETURNS:	
CROP - YIELD: 406 BU - - - - -	\$ 1,625
OTHER RETURNS - - - - -	0
TOTAL RETURNS - - - - -	\$ 1,625
PROFIT: - - - - -	\$ 191

	AVERAGE
OTHER FACTORS: COST PER BU TO: GROW	\$ 1.89
HARVEST	1.39
STORE AND SELL	0.26
NET** COST PER BU	3.45
NET** RETURN PER BU	3.92
PROFIT PER BU	0.47
LABOR RETURN PER ACRE	\$ 772
PRODUCTION PER HOUR OF LABOR	5 BU
RETURN PER HOUR OF LABOR	\$ 8.97
RETURN PER DOLLAR OF COST	1.13

* ADVERTISING, CONTAINERS, COMMISSION, CUSTOM PACKING,
STORAGE AND TRUCKING, AND EQUIPMENT RENTAL
** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 12 ENTERPRISES OF APPLES
6 COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENTR AC	AVERAGE		PROD	AVERAGE			
		PER YIELD	ACRE LABOR*	PER HR CF LABOR	SPRAY COST	PER ACRE PROD COST*	TOTAL COST	TOTAL RETURN
		BU	HR	BU	\$	\$	\$	\$
833	294.6	382	65	6	157	1,302	1,399	1,587
833	157.9	398	104	4	197	1,744	1,816	1,768
802	138.1	362	93	4	147	1,202	1,218	1,422
862	125.0	406	94	4	68	1,053	1,447	1,861
848	94.5	488	83	6	205	1,582	1,702	1,787
832	93.0	464	83	6	183	1,432	1,508	1,502
802	92.5	596	93	6	172	1,321	1,355	2,207
833	90.3	200	101	2	129	1,394	1,435	1,194
828	57.2	480	64	7	152	778	866	1,318
802	15.7	543	102	5	235	1,360	1,373	1,841
832	13.5	77	17	5	133	727	726	308
802	7.0	403	58	7	150	871	888	1,611

ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES

1981	98.7	406	84	5	157	1,331	1,434	1,625
1980	96.7	595	94	6	133	1,300	1,401	1,271
1979	110.5	540	92	6	101	1,192	1,296	1,393
1978	108.4	529	88	6	85	969	1,062	1,262
1977	97.2	437	75	6	96	815	899	1,227

* TO GROW AND HARVEST THE CROP

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 12 ENTERPRISES OF APPLES
6 CCST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER BU			RETURN PER HOUR		PROFIT ON		FARM NO
LABOR RETURN	HARV COST	NET** CCST RETURN	OF LABOR	OF COST	ENTER- PRISE				
\$	\$	\$	\$	\$	\$	\$	\$		
188	669	1.51	3.60	4.09	10.05	1.13	55,276	833	
47-	712	1.79	4.51	4.39	6.69	0.97	7,677-	833	
204	826	1.45	3.35	3.92	8.79	1.17	28,258	802	
414	956	1.33	3.13	4.15	9.71	1.29	51,728	862	
85	861	1.51	3.45	3.62	10.07	1.05	8,021	848	
5-	503	1.27	3.15	3.14	6.02	1.00	594-	832	
852	1,473	0.96	2.25	3.68	15.59	1.63	78,814	802	
240-	417	1.69	7.10	5.89	4.07	0.83	21,780-	833	
452	739	0.63	1.78	2.72	11.43	1.52	25,833	828	
468	1,209	1.24	2.53	3.39	11.86	1.34	7,350	802	
417-	316-	1.64	9.43	4.00	18.75-	0.42	5,646-	832	
723	1,136	1.32	2.20	4.00	19.11	1.82	5,066	802	

ANNUAL AVERAGES- ALL ENIR; WEIGHTED BY ACRES

191	772	1.39	3.45	3.92	8.97	1.13	18,721	1981
130-	536	1.07	2.31	2.09	5.52	0.91	12,544-	1980
97	698	1.16	2.33	2.51	7.39	1.07	10,679	1979
200	688	0.96	1.94	2.32	7.61	1.19	21,553	1978
328	700	0.92	1.98	2.73	8.72	1.36	31,662	1977

Sweet Cherries -

See Fruit Crop Notes on page 8.

FACTORS FROM 4 ENTERPRISES OF SWEET CHERRIES
3 COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENIR AC	AVERAGE		PRDD	AVERAGE			
		PER YIELD LB	ACRE LABOR* HR	PER HR OF LABOR LB	SPRAY COST \$	PER PROD COST* \$	ACRE TOTAL COST \$	TOTAL RETURN \$
833	20.9	3,141	47	66	146	1,074	1,108	722
833	10.5	3,897	30	128	159	794	831	794
848	4.5	5,540	177	31	202	1,538	1,634	1,419
802	3.2	4,238	115	37	215	1,424	1,440	749

ANNUAL AVERAGES- ALL ENIR; WEIGHTED BY ACRES

1981				NOT AVERAGED				
1980	11.1	7,576	122	62	181	1,456	1,766	1,837
1979				NOT AVERAGED				
1978	17.5	49,37	95	52	108	912	940	1,208
1977	14.1	2,707	34	78	50	479	500	616

* TO GROW AND HARVEST THE CROP

** DIRECT SELLING COSTS DEDUCTED

Red Tart Cherries -

See Fruit Crop notes on page 8.

RED TART CHERRIES
 COSTS AND RETURNS PER ACRE
 264 ACRES ON 4 COST ACCOUNT FARMS, 1981

ITEM	AVERAGE PER ACRE
COSTS: GROWING:	
LABOR 18 HR - - - - -	\$ 101
TRACTOR 6 HR - - - - -	33
TRUCK, EQUIP, CUSTOM WORK, EQ RENT - -	42
ORCHARD OR VINEYARD OVERHEAD - - - - -	154
FERTILIZER - - - - -	47
SPRAY, DUST MATERIALS - - - - -	86
INTEREST - - - - -	16
ALL OTHER - - - - -	82
TOTAL GROWING COSTS - - - - -	561
HARVESTING:	
LABOR 19 HR - - - - -	115
TRACTOR, TRUCK - - - - -	8
EQUIPMENT - - - - -	75
CUSTOM WORK, EQUIP RENT - - - - -	6
ALL OTHER - - - - -	21
TOTAL HARVESTING COSTS - - - - -	225
TOTAL PRODUCTION COSTS - - - - -	\$ 786
STORING AND SELLING:	
LABOR 1 HR - - - - -	8
TRACTOR, TRUCK, EQUIP - - - - -	14
BUILDING USE - - - - -	0
DIRECT SELLING COSTS * - - - - -	2
ALL OTHER - - - - -	22
TOTAL STORING AND SELLING COSTS - -	46
TOTAL COSTS - - - - -	\$ 833
RETURNS:	
CROP - YIELD: 2,815 LB - - - - -	\$ 1,124
OTHER RETURNS - - - - -	0
TOTAL RETURNS - - - - -	\$ 1,124
PROFIT: - - - - -	\$ 291
AVERAGE	
OTHER FACTORS: COST PER LB TO:	
GROW	\$ 0.20
HARVEST	0.08
STORE AND SELL	0.02
NET** COST PER LB	0.30
NET** RETURN PER LB	0.40
PROFIT PER LB	0.10
LABOR RETURN PER ACRE	\$ 516
PRODUCTION PER HOUR OF LABOR	78 LB
RETURN PER HOUR OF LABOR	\$ 13.76
RETURN PER DOLLAR OF COST	1.35

* ADVERTISING, CONTAINERS, COMMISSION, CUSTOM PACKING,
 STORAGE AND TRUCKING, AND EQUIPMENT RENTAL
 ** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 7 ENTERPRISES OF RED TART CHERRIES
4 COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENIR AC	AVERAGE		PROD PER HR OF LABOR LB	SPRAY COST \$	AVERAGE PER ACRE		
		PER YIELD LB	ACRE LABOR* HR			PROD COST* \$	TOTAL COST \$	TOTAL RETURN \$
832	79.5	4	13	0	45	555	558	2
833	58.5	2,770	43	65	140	887	971	918
802	40.7	4,930	44	112	85	774	809	2,303
833	39.3	6,090	46	135	107	1,051	1,161	2,019
802	25.7	2,744	44	62	67	866	891	1,565
802	12.1	3,337	25	132	46	416	440	1,578
848	8.5	3,612	124	29	125	1,378	1,428	1,286

ANNUAL AVERAGES- ALL ENIR; WEIGHED BY ACRES

1981	38.2	2,815	37	78	86	786	833	1,124
1980	34.2	8,171	55	148	101	940	1,063	1,722
1979	32.0	6,396	66	96	83	941	1,049	2,941
1978	32.3	5,715	47	121	69	684	785	2,697
1977	23.5	3,082	24	128	65	483	531	874

* TO GROW AND HARVEST THE CROP

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 7 ENTERPRISES OF RED TART CHERRIES
4 COST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER LB			RETURN PER HOUR \$		PROFIT ON	
LABOR	HARV	NET**	OF	OF	ENTER-	FARM		
PROFIT RETURN	COST	COST RETURN	LABOR	COST	PRICE	NO		
\$	\$	\$	\$	\$	\$	\$	\$	
555-	480-	0.09	127.57	0.47	37.06-	0.00	44,230-	832
53-	222	0.10	0.35	0.33	4.99	.95	3,114-	833
1,494	1,747	0.06	0.16	0.47	38.24	2.85	60,794	802
858	1,155	0.06	0.19	0.33	24.47	1.74	33,719	833
674	938	0.11	0.32	0.57	20.53	1.76	17,322	802
1,138	1,279	0.06	0.13	0.47	48.22	3.59	13,768	802
141-	659	0.20	0.39	0.35	5.23	0.90	1,204-	848

ANNUAL AVERAGES- ALL ENIR; WEIGHIED BY ACRES

291	516	0.08	0.30	0.40	13.76	1.35	11,008	1981
659	982	0.05	0.13	0.21	17.29	1.62	22,267	1980
1,892	2,240	0.08	0.16	0.46	33.16	2.80	59,734	1979
1,912	2,136	0.06	0.14	0.47	43.59	3.43	60,880	1978
343	449	0.06	0.17	0.28	17.71	1.64	7,878	1977

FACTORS FROM OTHER FRUIT ENTERPRISES
COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENIR AC	AVERAGE		PROD PER HR OF LABOR TN	SPRAY COST \$	AVERAGE			
		PER YIELD TN	ACRE LABOR* HR			PER PROD \$	TOTAL COST \$	TOTAL RETURN \$	
GRAPES									
802	11.8	4.6	95	0.05	49	1,146	1,235	967	
PEACHES									
833	34.7	132	128	1	138	1,516	1,667	1,370	
802	9.0	32	42	1	124	679	679	246	
828	4.0	56	69	1	25	591	660	497	
PEARS									
833	30.6	215	27	8	141	739	760	826	
833	10.0	174	54	3	135	936	984	670	
PRUNES									
802	7.0	41	9	4	79	427	427	199	

* TO GROW AND HARVEST THE CROP

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM OTHER FRUIT ENTERPRISES
COST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER IN			RETURN PER HOUR \$		PROFIT ON	
LABOR	HARV	NET**			OF	OF	ENTER-	FARM
PROFIT RETURN	COST	COST RETURN			LABOR	COST	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	\$	\$

GRAPES /

267-	209	43	252	193	2.19	0.78	3,173-	802
------	-----	----	-----	-----	------	------	--------	-----

PEACHES

296-	523	3.60	12.57	10.32	4.00	0.82	10,314-	833
432-	222-	2.22	21.00	7.62	5.32-	0.36	3,892-	802
163-	141	4.24	10.60	7.69	2.04	0.75	654-	828

PEARS

66	237	0.85	3.52	3.82	8.48	1.09	2,009	833
313-	40	1.06	5.62	3.82	0.70	0.68	3,142-	833

PRUNES

227-	167-	1.30	10.31	4.80	18.04-	0.47	1,598-	802
------	------	------	-------	------	--------	------	--------	-----

FACTORS FROM VEGETABLE CROP ENTERPRISES
COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF CRCP)

FARM NO	ACRES PER ENIR AC	AVERAGE		PROD	AVERAGE			
		PER YIELD UNIT	ACRE LABOR* HR	PER HR CF LABOR UNIT	GROW COST \$	PER HARV COST \$	ACRE TOTAL COST** \$	TOTAL RETURN \$
SNAP BEANS- PRCC								
		IN		IN				
827	1945.5	2.0	5	0.5	264	52	339	387
848	802.0	2.3	4	0.5	286	63	380	442
864	570.4	1.9	4	0.5	314	96	437	356
TABLE BEETS								
		IN		IN				
827	266.0	22.4	13	1.8	379	220	789	852
CABBAGE- MKT								
		IN		IN				
864	118.3	3.3	35	0.1	757	142	1,024	269
828	21.0	6.2	72	0.1	532	455	1,118	355
827	20.0	17.4	82	0.2	631	590	2,039	2,060
CABBAGE- PRCC								
		IN		IN				
827	122.0	17.5	46	0.4	565	218	894	655
848	19.0	16.3	46	0.4	895	234	1,169	569
CARRCTS								
		IN		IN				
827	177.0	19.5	22	0.9	543	247	1,000	1,003
PEAS- PRCC								
		IN		IN				
827	405.0	1.7	9	0.2	287	145	474	645
836	41.4	1.1	1	0.9	234	112	374	366

* 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 VEGETABLE CROP ENTERPRISES
COST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER UNIT***		RETURN PER HOUR \$		PROFIT ON	
PROFIT	LABOR	NET COST	NET RETURN	OF LABOR	OF COST	ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
SNAP BEANS- PROC							
		PER--IN					
48	88	171	195	18.37	1.14	94,182	827
62	107	163	190	21.80	1.16	49,987	848
81-	54-	230	188	12.88-	0.82	45,959-	864
TABLE BEETS							
		PER--IN					
63	223	35	38	11.47	1.08	16,822	827
CABBAGE- MKT							
		PER--IN					
755-	514-	313	82	11.30-	0.26	89,325-	864
763-	433-	181	57	5.81-	0.32	16,024-	828
21	869	118	119	8.41	1.01	407	827
CABBAGE- PROC							
		PER--IN					
239-	174	51	37	3.46	0.73	29,228-	827
600-	222-	72	35	4.69-	0.49	11,399-	848
CARROTS							
		PER--IN					
3	251	51	51	8.32	1.00	577	827
PEAS- PROC							
		PER--IN					
171	254	274	373	24.92	1.36	69,094	827
8-	4	344	336	3.31	0.98	324-	836

FACTORS FROM VEGETABLE CROP ENTERPRISES
COST ACCOUNT FARMS, 1981
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE		PROD	AVERAGE			
		PER YIELD	ACRE LABOR*	PER HR CF LABOR UNIT	GROW COST \$	PER HARV COST \$	ACRE TOTAL COST** \$	TOTAL RETURN \$
POTATCES- MKT								
827	16.3	<u>Cb</u> 413	25	<u>Cb</u> 16	938	276	2,637	2,110
POTATOES- PRCC								
827	167.7	<u>CW</u> 262	25	<u>Cb</u> 10	1,014	296	1,627	959
SWEET CORN- PRCC								
105	73.0	<u>IN</u> 4.0	2	<u>IN</u> 1.8	200	36	240	232
836	29.4	2.8	1	2.0	192	27	249	222

* TC GROW AND HARVEST THE CRCP

** INCLUDES STORING AND SELLING COSTS

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

(RECEIPTS FROM GOVERNMENT PROGRAMS NOT INCLUDED)

FACTORS FROM VEGETABLE CROP ENTERPRISES
 COST ACCOUNT FARMS, 1981
 (READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER UNII***		RETURN PER		PROFIT	
LABOR	RETURN	NET COST	NET RETURN	HOUR OF LABOR	\$ OF COST	ON ENTER- PRISE	FARM NO
\$	\$	\$	\$	\$	\$	\$	
POTATOES- MKT							
527-	98	6.38	5.11	1.29	0.80	8,578-	827
		PER CW					
POTATOES- PROC							
668-	379-	6.20	3.66	10.79-	0.59	112,072-	827
		PER CW					
SWEET CORN- PROC							
8-	4	60	58	1.80	0.97	590-	105
27-	3-	89	80	1.49-	0.89	801-	836