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FRUIT AND VEGETABLE CROPS

COSTS AND RETURNS

FROM

FARM COST ACCOUNTS

27 FARMS-1980
NEW YORK STATE

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REPORTS
from
FARM COST ACCOUNTS

27 Farms, 1980

Enterprise data from the 1980 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.	81-22
Livestock Costs and Returns	A.E. Res.	81-23
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WESTERN NEW YORK

FRUIT AND VEGETABLE CROPS COSTS AND RETURNS, A.E. Res. 81-25

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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 for individual enterprises and the averages of the enterprise costs and returns for all farms. They show not only the averages of costs and returns but also indications of the variations and reasons for them. The factors for individual enterprises are arranged according to size of enterprise. The 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 page 4 of this report was taken from A.E. Res. 81-10, Dairy Farm Management, Business Summary, New York, 1980, 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 1969-73	1978	1979	1980	Average 1969-73	1978	1979	1980
	-- thousand tons --							
Apples	422	540	518	550	3,116	3,798	4,072	4,414
Sweet Cherries	5	4	4	5	129	157	182	172
Tart Cherries	16	9	14	15	131	91	85	109
Grapes	141	188	165	175	3,555	4,567	4,989	5,595
Peaches	9	8	3	7	1,455	1,326	1,475	1,537
Pears	16	19	18	18	668	723	855	894

Source: Non-Citrus Fruits and Nuts, 1980 Annual Summary; Midyear Supplement; FrNt 1-3(81); CRB, SRS, USDA.

New York continues to rank second in the nation for the production of apples, tart cherries and grapes. In 1980, New York ranked fourth in pear and fifth in sweet cherry production. Apple production for 1980 set records in New York and the nation. New York tart cherry production increased for the third consecutive year to the highest level since 1972. Sweet cherry production also increased for the third year in a row to the highest level since 1975. Grape production improved over 1979 and peach production increased significantly over the poor crop of 1979. The pear crop was down slightly from 1979. Nationally, grapes as well as apples, increased significantly over the 1979 production.

AVERAGE FARM PRICES OF FRUITS
New York and United States

Fruit	New York				United States			
	Average 1969-73	1978	1979	1980	Average 1969-73	1978	1979	1980
	-- dollars per ton --							
Apples:								
Fresh	180	270	350	360	154	278	308	242
Processed	65	103	103	86	63	117	114	82
All Sales	105	170	200	188	115	208	218	172
Sweet Cherries	271	543	447	450	352	688	601	552
Tart Cherries	204	858	924	382	209	876	944	404
Grapes	174	244	236	217	117	233	237	239
Peaches	214	370	444	470	133	240	232	248
Pears	131	205	182	215	120	219	204	196

Source: Non-Citrus Fruits and Nuts, 1980 Annual Summary; Midyear Supplement; FrNt 1-3(81); CRB, SRS, USDA.

Although fresh apple prices increased somewhat in 1980, the large decrease in processed apple prices in New York resulted in the average price for all apples to be lower than for 1979 but still the second highest on record. U.S. apple prices were the lowest since 1976. Sweet cherry prices in New York for 1980 remained similar to 1979 but were well below prices in 1977 and 1978. Tart cherry prices declined dramatically from recent high levels and were the lowest since 1975. Prices for grapes also decreased in New York and remained steady for the U.S. Prices for both pears and peaches in New York rose to new highs for 1980.

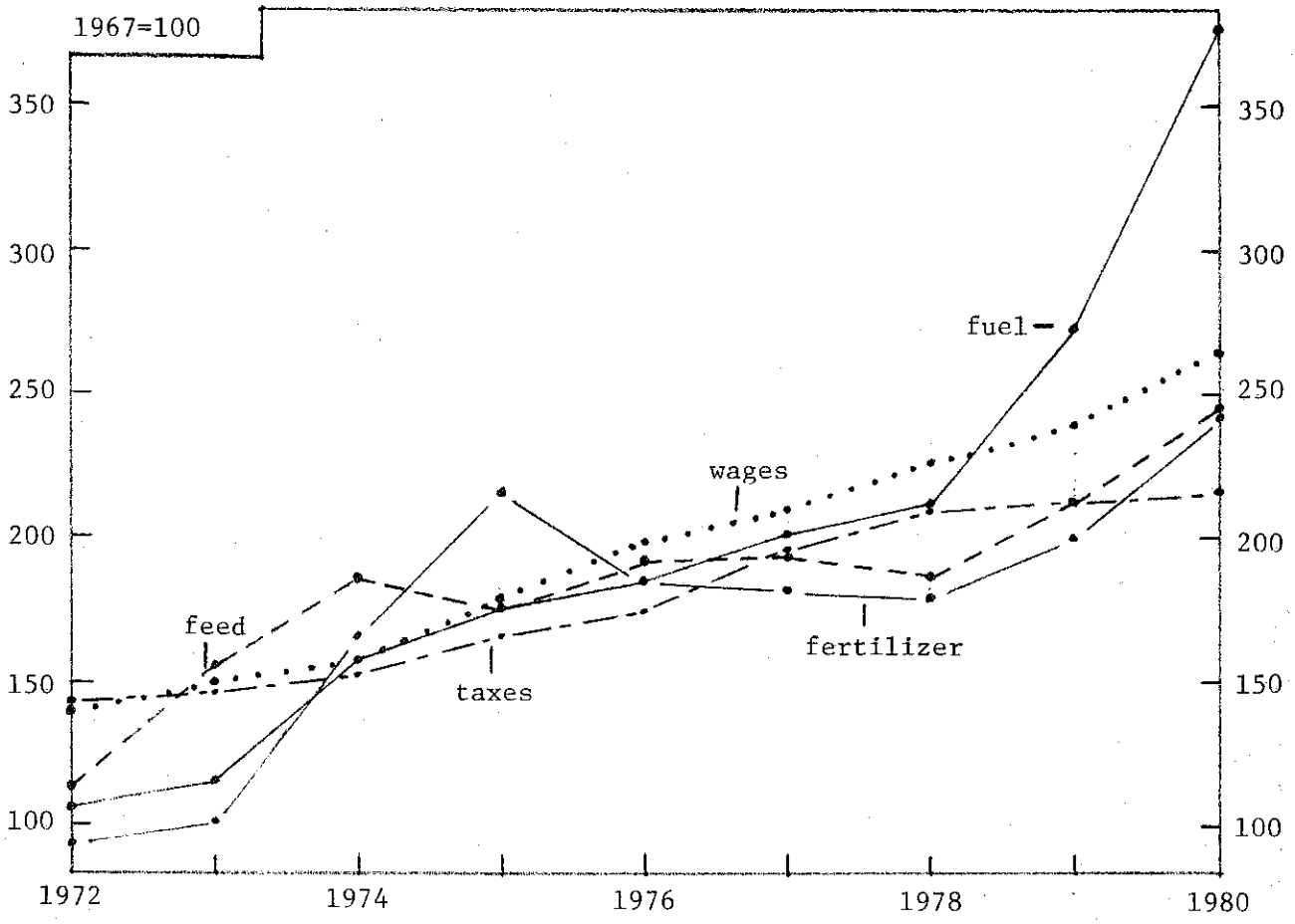
VEGETABLES FOR PROCESSING AND FRESH MARKET
Acreage, Yield and Value per Unit
New York

Crop	1980% of U.S. Total Production	Acres Harvested			Yield per Acre			Value per Unit		
		1978	1979	1980	1978	1979	1980	1978	1979	1980
	%	- 1,000 acres -			- tons -			- $/ton -		
Processing vegetables:										
Beans, snap	16	51	46	46	2.1	2.3	2.4	150	161	169
Beets	32	5.0	5.0	3.8	15	16	17	40	37	43
Cabbage, kraut	40	4.0	3.4	3.4	21	25	25	30	30	32
Sweet corn	4	20	21	17	4.9	5.3	5.1	45	47	49
Peas	2	5.7	6.2	6.0	1.4	1.7	1.7	250	249	278
	%	- 1,000 acres -			- cwt -			- $/cwt -		
Fresh market vegetables:										
Beans, snap	8	6.0	6.1	5.5	40	39	45	25.90	27.40	29.60
Cabbage - Summer, L.I.	3	0.6	0.8	0.7	247	270	240	9.70	8.27	10.40
Upstate	10	1.0	1.0	1.5	438	355	320	7.21	5.58	8.71
- Fall, L.I.	3	0.7	0.7	0.6	266	300	245	4.52	8.25	11.60
Upstate	40	6.0	6.5	5.9	427	400	325	11.20	4.73	10.10
Carrots*	2	1.2	1.1	1.0	300	290	365	4.76	4.55	8.56
Cauliflower* - Summer	11	1.0	1.1	1.3	65	80	90	21.00	20.50	19.20
- Fall	11	1.6	1.9	1.9	100	105	110	17.10	15.60	20.20
Celery* - Summer	6	0.6	0.5	0.6	420	480	425	15.70	9.11	9.49
Cucumbers	6	2.5	2.7	3.2	105	115	110	11.40	12.10	10.40
Lettuce	1	3.5	3.6	3.8	190	195	210	9.95	12.00	13.60
Onions*	13	13.9	14.6	14.3	310	330	310	7.85	7.85	15.10
Sweet corn	12	21	22	22	63	65	75	6.69	8.43	9.51
Tomatoes	2	3.0	3.0	3.2	110	130	130	20.20	25.40	28.60

Source: Vegetables, 1980, Annual Summary; Vg 1-2(81); CRB, ESCS, USDA.

* Includes data for both fresh market and processing crops.

PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1980



Prices of major farm inputs have all increased since 1972 but only wages paid by farmers have increased at a fairly constant rate. Feed prices rose 15 percent in 1980. Fertilizer prices increased 20 percent in 1980. Fuel prices jumped 29 percent in 1979 following four years of single digit increases and increased by 39 percent in 1980.

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

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	212	229	210
1979	213	202	273	241	213
1980	245	242	380	264	216
Percent increase: 1972 to 1979 (average per year)	13%	16%	22%	10%	8%
1979 to 1980	15%	20%	39%	9%	1%

SOURCE: USDA Agricultural Prices

Table 1. TEMPERATURE, PRECIPITATION AND GROWING SEASON
Selected Stations, New York, 1941-70 and 1980

Station	Average temperature May - Sept.		Precipitation May - Sept.		Precipitation Total Annual		Length of growing season*	
	1941-70	1980	1941-70	1980	1941-70	1980	1947-67	1980
	degrees		inches				days	
Albany	65.7	65.7	15.4	17.3	33.4	32.6	---	169
Alfred	61.8	62.0	17.2	14.1	36.7	33.2	125	123
Aurora	64.6	64.5	13.8	15.6	40.0	31.7	160	170
Batavia	64.1	65.2	15.3	17.8	32.6	31.5	154	156
Binghamton	63.3	64.8	17.9	13.7	37.4	34.8	154	170
Canton	63.0	61.9	16.5	15.7	34.5	34.0	127	107
Glens Falls	----	63.4	17.8	11.0	39.3	26.1	---	136
Ithaca	63.8	63.6	17.2	13.1	34.8	31.4	145	136
Lowville	62.5	62.3	16.5	16.9	38.5	42.2	123	136
Utica	63.5	64.1	18.1	15.1	40.6	36.1	157	170

* 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, 1980, Vol. 92, No. 13.

Weather is a factor to be considered when studying a farm business for a specific year. The growing conditions have a market effect on the crops for that year. It is for this reason that data are presented on the growing conditions for 1980 and for the period 1941-70.

The 1980 growing season in New York resulted in a good crop year with average season temperatures and somewhat less than average precipitation. Low moisture levels from a short snowfall during the winter were made up by above normal rainfall in March and early April. The most notable variations in weather during the growing season were abnormally warm, dry conditions in May and August. June and October were notably cooler than normal. Good planting conditions in May were followed by cool, wet weather during June. Fall harvest conditions were generally good throughout September and October.

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

Table 2. GROWING SEASON RAINFALL
Selected Stations, New York, 1941-70 and 1980

Station	May		June		July		August		September	
	1941-70	1980	1941-70	1980	1941-70	1980	1941-70	1980	1941-70	1980
	inches									
Albany	3.26	1.05	3.00	4.90	3.12	2.69	2.87	6.45	3.12	2.24
Alfred	3.76	1.39	3.76	3.44	3.73	1.16	3.00	5.49	2.93	2.65
Aurora	2.98	1.03	2.54	5.63	3.03	3.24	2.81	2.85	2.46	2.87
Batavia	3.17	1.70	2.69	8.01	3.05	2.31	3.50	1.55	2.87	4.23
Binghamton	3.83	1.54	3.59	5.68	3.83	2.09	3.61	1.58	3.02	2.81
Canton	3.37	0.93	2.91	2.22	3.43	4.43	3.47	3.35	3.31	4.78
Glens Falls	3.63	1.10	3.77	2.92	3.68	2.07	3.42	1.94	3.31	2.99
Ithaca	3.55	1.37	3.40	4.13	3.67	3.43	3.49	1.98	3.08	2.21
Lowville	3.42	1.98	2.94	3.89	3.26	6.42	3.58	1.07	3.31	3.49
Utica	3.52	1.37	3.55	4.56	4.17	5.26	3.54	1.47	3.32	2.41

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1980, Vol. 92, No. 13.

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

Item	Unit	New York State*				Cost Account
		1957-61	1967-71	1979	1980	1980
Hay	tons	1.9	2.2	2.3	2.4	2.8
Corn silage	tons	11	14	13.0	14.5	14.6
Corn grain	bu.	57	85	85	93	99
Oats	bu.	52	60	62	64	---
Wheat	bu.	32	39	41	40	50
Milk per cow	lbs.	7,914	10,361	11,746	12,026	15,894

*Source: New York Agricultural Statistics, 1980; Crop Reporting Service, USDA.

FARM COST ACCOUNT SUMMARY, 1980

Crop Enterprises

Crop	Number of enter-prises	Average acres per enter-price	Yield per acre	Hours of labor per acre*	Return per Hour of labor	Return per Dollar of cost	Profit per acre	Profit on enter-prise
					$	$	$	$
Forage:								
Hay	19	70	2.8 tn	7	0.02	0.81	- 38	-2,632
Hay crop silage	16	157	7.2 tn	4	5.82	1.00	- 1	- 152
Corn silage	18	122	14.6 tn	5	5.86	0.99	- 3	- 417
Grain:								
Corn for grain	6	55	100 bu	3	23.76	1.28	72	3,907
High moist. corn	14	144	3.6 tn	4	22.68	1.23	59	8,578
Oats	--	--	---	--	---	--	--	--
Wheat	11	150	50 bu	2	22.46	1.21	35	5,236
Fruit:								
Apples	13	97	595 bu	94	5.52	0.91	-130	-12,544
Red tart cherries	8	34	8,171 lb	55	17.29	1.62	659	22,267

* To grow and harvest the crop.

ENTERPRISE RATES OF RETURN

FARM COST ACCOUNT RECORDS, 1977-80

Enterprise	Return per hour of labor				Return per dollar of cost			
	1977	1978	1979	1980	1977	1978	1979	1980
	$	$	$	$	$	$	$	$
Livestock:								
Dairy cows	5.07	9.01	10.77	10.64	1.03	1.13	1.15	1.11
Dairy heifers	-1.43	2.23	3.97	5.94	0.78	0.92	0.96	0.99
Forage:								
Hay	5.15	3.31	0.90	0.02	1.05	0.94	0.84	0.81
Hay crop silage	3.19	-2.52	0.39	5.82	0.96	0.79	0.87	1.00
Corn silage	6.73	4.46	9.05	5.86	1.07	0.98	1.07	0.99
Grain:								
Corn for grain	-0.99	0.00	5.12	23.76	0.87	0.92	1.00	1.28
High moisture corn	7.10	6.98	18.84	22.68	1.07	1.04	1.22	1.23
Oats	-17.76	-3.92	-18.35	NA	0.54	0.77	0.63	NA
Wheat	-2.13	-4.11	22.68	22.46	0.84	0.75	1.26	1.21
Fruits:								
Apples	8.72	7.61	7.39	5.52	1.36	1.19	1.07	0.91
Sweet cherries	7.32	7.45	NA	NA	1.23	1.29	NA	NA
Red tart cherries	17.71	43.59	33.16	17.29	1.64	3.43	2.80	1.62

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 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
1,252 ACRES ON 7 COST ACCOUNT FARMS, 1980

ITEM		AVERAGE PER ACRE	
COSTS: GROWING:			
LABOR	30 HR	$ 190	
TRACTOR	7 HR	41	
TRUCK, EQUIP, CUSTOM WORK, EQ RENT		45	
ORCHARD OR VINEYARD OVERHEAD		120	
FERTILIZER		35	
SPRAY, DUST MATERIALS		133	
INTEREST		23	
ALL OTHER		79	
TOTAL GROWING COSTS			666
HARVESTING:			
LABOR	64 HR	461	
TRACTOR, TRUCK		49	
EQUIPMENT		69	
CUSTOM WORK, EQUIP RENT		3	
ALL OTHER		52	
TOTAL HARVESTING COSTS			634
TOTAL PRODUCTION COSTS			$ 1,300
STORING AND SELLING:			
LABOR	2 HR	16	
TRACTOR, TRUCK, EQUIP		34	
BUILDING USE		2	
DIRECT SELLING COSTS *		25	
ALL OTHER		24	
TOTAL STORING AND SELLING COSTS			101
TOTAL COSTS			$ 1,401
RETURNS:			
CROP - YIELD:	595 BU	$ 1,271	
OTHER RETURNS		0	
TOTAL RETURNS			$ 1,271
PROFIT:			$ 130-

		AVERAGE
OTHER FACTORS: COST PER BU TO:	GROW	$ 1.12
	HARVEST	1.07
	STORE AND SELL	0.17
NET** COST PER BU		2.31
NET** RETURN PER BU		2.09
PROFIT PER BU		0.22-
LABOR RETURN PER ACRE		$ 536
PRODUCTION PER HOUR OF LABOR		6 BU
RETURN PER HOUR OF LABOR		$ 5.52
RETURN PER DOLLAR OF COST		0.91

* ADVERTISING, CONTAINERS, COMMISSION, CUSTOM PACKING, STORAGE AND TRUCKING, AND EQUIPMENT RENTAL

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 13 ENTERPRISES OF APPLES
7 COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD BU	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR BU	AVERAGE PER ACRE SPRAY COST $	AVERAGE PER ACRE PROD COST* $	AVERAGE PER ACRE TOTAL COST $	TOTAL RETURN $
833	356.6	537	74	7	111	1,124	1,172	1,082
833	164.1	803	143	6	219	1,983	2,092	1,806
802	138.1	398	84	5	123	1,174	1,215	980
862	125.0	546	94	6	63	1,090	1,362	1,399
832	97.0	714	112	6	106	1,438	1,502	1,253
802	92.5	596	75	8	128	1,242	1,337	1,280
848	72.5	756	125	6	157	1,711	1,887	1,499
833	70.3	410	97	4	161	1,367	1,436	1,150
828	57.2	628	70	9	99	721	834	1,172
863	42.0	985	124	8	270	1,306	1,548	1,726
802	15.7	568	70	8	132	1,064	1,162	1,192
832	13.5	74	38	2	74	637	637	222
802	7.0	432	76	6	90	1,034	1,068	1,080
ANNUAL AVERAGES- ALL ENTR: WEIGHTED BY ACRES								
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
1976	69.3	459	73	6	95	819	945	1,253

* TO GROW AND HARVEST THE CROP
** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 13 ENTERPRISES OF APPLES
7 COST ACCOUNT FARMS, 1980
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE PROFIT $	AVERAGE PER ACRE LABOR RETURN $	AVERAGE PER BU HARV COST $	AVERAGE PER BU NET** COST $	AVERAGE PER BU NET** RETURN $	RETURN PER HOUR OF LABOR $	RETURN PER $ OF COST $	PROFIT ON ENTER-PRISE $	FARM NO
89-	459	0.96	2.18	2.01	6.16	0.92	32,377-	833
285-	819	1.21	2.61	2.25	5.52	0.86	47,054-	833
234-	410	1.65	3.02	2.43	4.82	0.81	32,514-	802
37	605	1.09	2.26	2.33	6.01	1.03	4,661	862
248-	363	0.91	2.06	1.71	3.23	0.83	24,119-	832
56-	533	0.90	2.17	2.08	6.88	0.96	5,257-	802
387-	621	1.34	2.44	1.93	4.82	0.79	28,125-	848
285-	413	1.27	3.50	2.81	4.16	0.80	20,057-	833
338	675	0.56	1.31	1.85	9.37	1.41	19,342	828
178	783	0.64	1.56	1.74	6.00	1.11	7,451	863
30	609	1.29	1.98	2.03	8.45	1.03	478	802
414-	236-	0.38	8.60	3.00	6.28-	0.35	5,597-	832
12	573	1.25	2.47	2.50	7.40	1.01	87	802
ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES								
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
308	682	0.84	1.95	2.63	8.63	1.33	21,274	1976

Sweet Cherries -

See Fruit Crop Notes on page 8.

SWEET CHERRIES
COSTS AND RETURNS PER ACRE
53 ACRES ON 3 COST ACCOUNT FARMS, 1980

ITEM		AVERAGE PER ACRE	
COSTS: GROWING:			
LABOR	16 HR	$ 103	
TRACTOR	10 HR	89	
TRUCK, EQUIP, CUSTOM WORK, EQ RENT		35	
ORCHARD OR VINEYARD OVERHEAD		123	
FERTILIZER		39	
SPRAY, DUST MATERIALS		181	
INTEREST		24	
ALL OTHER		142	
TOTAL GROWING COSTS			736
HARVESTING:			
LABOR	106 HR	554	
TRACTOR, TRUCK		11	
EQUIPMENT		85	
CUSTOM WORK, EQUIP RENT		0	
ALL OTHER		70	
TOTAL HARVESTING COSTS			720
TOTAL PRODUCTION COSTS			$ 1,456
STORING AND SELLING:			
LABOR	8 HR	56	
TRACTOR, TRUCK, EQUIP		19	
BUILDING USE		0	
DIRECT SELLING COSTS *		174	
ALL OTHER		61	
TOTAL STORING AND SELLING COSTS			310
TOTAL COSTS			$ 1,766
RETURNS:			
CROP - YIELD:	7,576 LB	$ 1,837	
OTHER RETURNS		0	
TOTAL RETURNS			$ 1,837
PROFIT:			$ 71

		AVERAGE
OTHER FACTORS: COST PER LB TO:	GROW	$ 0.10
	HARVEST	0.09
	STORE AND SELL	0.04
NET** COST PER LB		0.21
NET** RETURN PER LB		0.22
PROFIT PER LB		0.01
LABOR RETURN PER ACRE		$ 785
PRODUCTION PER HOUR OF LABOR		62 LB
RETURN PER HOUR OF LABOR		$ 6.03
RETURN PER DOLLAR OF COST		1.04

* ADVERTISING, CONTAINERS, COMMISSION, CUSTOM PACKING, STORAGE AND TRUCKING, AND EQUIPMENT RENTAL

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 5 ENTERPRISES OF SWEET CHERRIES
3 COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD LB	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR LB	AVERAGE PER ACRE SPRAY COST $	AVERAGE PER ACRE PROD COST* $	AVERAGE PER ACRE TOTAL COST $	AVERAGE PER ACRE TOTAL RETURN $
833	20.9	10,202	203	50	105	1,939	2,587	2,985
833	19.5	6,381	43	150	279	1,174	1,286	1,139
848	5.5	6,218	182	34	137	1,430	1,527	1,533
833	4.2	2,461	26	97	75	539	568	335
802	3.2	6,759	99	68	296	1,254	1,313	1,089
ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES								
1980	11.1	7,576	111	62	181	1,456	1,766	1,837
1979	- - - - - - - - - - - - - - - - NOT AVERAGED - - - - - - - - - - - - - - - -							
1978	17.5	4,937	95	52	108	912	940	1,208
1977	14.1	2,707	34	78	50	479	500	616
1976	11.6	2,512	41	61	88	555	574	339

* TO GROW AND HARVEST THE CROP
** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 5 ENTERPRISES OF SWEET CHERRIES
3 COST ACCOUNT FARMS, 1980
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE PROFIT $	AVERAGE PER ACRE LABOR RETURN $	AVERAGE PER LB HARV COST $	AVERAGE PER LB NET** COST $	AVERAGE PER LB NET** RETURN $	RETURN PER HOUR OF LABOR $	RETURN PER $ OF COST $	PROFIT ON ENTER-PRISE $	FARM NO
398	1,559	0.11	0.21	0.25	7.23	1.15	8,315	833
146-	179	0.06	0.20	0.18	3.63	0.89	2,873-	833
6	874	0.17	0.25	0.25	4.70	1.00	32	848
232-	48-	0.04	0.23	0.14	1.73-	0.59	978-	833
223-	369	0.05	0.19	0.16	3.63	0.83	715-	802
ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES								
71	785	0.09	0.21	0.22	6.03	1.04	756	1980
- - - - - - - - - - - - - - - - - -			NOT AVERAGED		- - - - - - - - - - - - - - - - - -			1979
268	720	0.10	0.19	0.24	7.45	1.29	4,567	1978
116	266	0.08	0.18	0.23	7.32	1.23	1,579	1977
235-	41-	0.09	0.23	0.13	0.98-	0.59	2,614-	1976

Red Tart Cherries -

See Fruit Crop notes on page 8.

RED TART CHERRIES
COSTS AND RETURNS PER ACRE
270 ACRES ON 5 COST ACCOUNT FARMS, 1980

ITEM		AVERAGE PER ACRE	
COSTS: GROWING:			
LABOR	13 HR	$ 75	
TRACTOR	5 HR	26	
TRUCK, EQUIP, CUSTOM WORK, EQ RENT		27	
ORCHARD OR VINEYARD OVERHEAD		152	
FERTILIZER		32	
SPRAY, DUST MATERIALS		101	
INTEREST		15	
ALL OTHER		66	
TOTAL GROWING COSTS			494
HARVESTING:			
LABOR	42 HR	237	
TRACTOR, TRUCK		26	
EQUIPMENT		106	
CUSTOM WORK, EQUIP RENT		23	
ALL OTHER		54	
TOTAL HARVESTING COSTS			446
TOTAL PRODUCTION COSTS			$ 940
STORING AND SELLING:			
LABOR	2 HR	10	
TRACTOR, TRUCK, EQUIP		16	
BUILDING USE		0	
DIRECT SELLING COSTS *		14	
ALL OTHER		83	
TOTAL STORING AND SELLING COSTS			123
TOTAL COSTS			$ 1,063
RETURNS:			
CROP - YIELD:	8,171 LB	$ 1,722	
OTHER RETURNS		0	
TOTAL RETURNS			$ 1,722
PROFIT:			$ 659

		AVERAGE
OTHER FACTORS: COST PER LB TO:	GROW	$ 0.06
	HARVEST	0.05
	STORE AND SELL	0.02
NET** COST PER LB		0.13
NET** RETURN PER LB		0.21
PROFIT PER LB		0.08
LABOR RETURN PER ACRE		$ 982
PRODUCTION PER HOUR OF LABOR		148 LB
RETURN PER HOUR OF LABOR		$ 17.29
RETURN PER DOLLAR OF COST		1.62

* ADVERTISING, CONTAINERS, COMMISSION, CUSTOM PACKING, STORAGE AND TRUCKING, AND EQUIPMENT RENTAL

** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 8 ENTERPRISES OF RED TART CHERRIES
5 COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD LB	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR LB	AVERAGE PER ACRE SPRAY COST $	AVERAGE PER ACRE PROD COST* $	AVERAGE PER ACRE TOTAL COST $	TOTAL RETURN $
832	68.8	7,965	56	143	111	947	1,036	1,849
833	68.8	9,281	69	133	58	906	1,058	1,533
802	39.0	3,715	58	64	73	1,069	1,151	1,124
833	34.3	10,511	25	411	156	964	1,160	1,858
802	32.7	9,163	40	230	130	781	909	2,352
802	12.1	8,314	27	309	106	508	633	2,165
848	8.5	9,220	177	52	151	1,963	2,094	2,012
863	6.0	6,230	7	934	99	560	610	825
ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES								
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
1976	27.4	3,768	29	130	44	510	546	1,045

* TO GROW AND HARVEST THE CROP
** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM 8 ENTERPRISES OF RED TART CHERRIES
5 COST ACCOUNT FARMS, 1980
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER LB			RETURN PER HOUR	$	PROFIT ON	
PROFIT	LABOR RETURN	HARV COST	NET** COST	RETURN	OF LABOR	OF COST	ENTER-PRISE	FARM NO
$	$	$	$	$	$	$	$	
813	1,109	0.05	0.13	0.23	19.83	1.78	55,947	832
475	852	0.05	0.11	0.16	12.09	1.45	32,661	833
26-	413	0.15	0.31	0.30	6.90	0.98	1,033-	802
698	877	0.03	0.11	0.17	32.32	1.60	23,949	833
1,452	1,666	0.04	0.10	0.26	38.90	2.61	47,471	802
1,532	1,698	0.03	0.08	0.26	54.65	3.42	18,548	802
81-	894	0.14	0.23	0.22	4.88	0.96	699-	848
215	268	0.05	0.10	0.13	33.52	1.35	1,290	863
ANNUAL AVERAGES- ALL ENTR; WEIGHTED BY ACRES								
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
499	641	0.06	0.14	0.28	21.18	1.91	13,462	1976

FACTORS FROM OTHER FRUIT ENTERPRISES
COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF FRUIT)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD TN	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR TN	AVERAGE PER ACRE SPRAY COST $	AVERAGE PER ACRE PROD COST* $	AVERAGE PER ACRE TOTAL COST $	AVERAGE PER ACRE TOTAL RETURN $
GRAPES								
802	11.8	4.3	63	0.07	0	734	807	560
863	7.5	4.7	46	0.10	104	744	744	1,275
PEACHES								
833	34.7	154	129	1	151	1,464	1,750	1,780
802	5.6	51	59	1	51	634	644	371
828	4.0	70	56	1	44	514	604	584
PEARS								
833	30.6	270	109	2	127	1,138	1,162	551
833	10.0	261	81	3	251	1,209	1,255	1,091
PRUNES								
802	7.0	154	26	6	57	565	581	614

* TO GROW AND HARVEST THE CROP
** DIRECT SELLING COSTS DEDUCTED

FACTORS FROM OTHER FRUIT ENTERPRISES
COST ACCOUNT FARMS, 1980
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE PROFIT $	AVERAGE PER ACRE LABOR RETURN $	AVERAGE PER IN HARV COST $	AVERAGE PER IN NET** COST $	AVERAGE PER IN NET** RETURN $	RETURN PER HOUR OF LABOR $	RETURN PER $ OF COST $	PROFIT ON ENTER-PRISE $	FARM NO
GRAPES								
246-	92	10	171	114	1.45	0.69	2,909-	802
531	735	52	159	273	15.84	1.71	3,980	863
PEACHES								
30	871	3.21	8.85	9.04	6.56	1.02	1,041	833
272-	9-	2.84	12.52	7.20	0.16-	0.58	1,532-	802
19-	240	0.53	7.32	7.03	4.32	0.97	81-	828
PEARS								
610-	41	1.49	4.31	2.04	0.37	0.47	18,687-	833
163-	350	1.69	4.82	4.19	4.30	0.87	1,640-	833
PRUNES								
33	259	1.55	3.79	4.00	9.70	1.06	230	802

FACTORS FROM VEGETABLE CROP ENTERPRISES
COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD UNIT	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR UNIT	AVERAGE PER ACRE GROW COST $	AVERAGE PER ACRE HARV COST $	AVERAGE PER ACRE TOTAL COST** $	AVERAGE PER ACRE TOTAL RETURN $
SNAP BEANS- PROC		TN		TN				
827	2020.0	2.0	5	0.4	230	50	301	344
848	741.5	2.4	4	0.6	254	57	341	419
864	592.9	3.2	3	1.0	244	97	390	545
863	123.0	2.4	7	0.3	308	77	404	436
TABLE BEETS		TN		TN				
827	336.0	16.7	10	1.7	349	166	679	689
CABBAGE- MKT		TN		TN				
864	87.2	18.7	29	0.7	724	42	1,512	1,704
827	46.0	21.1	73	0.3	633	520	1,803	2,565
863	40.0	17.1	84	0.2	1,161	293	1,657	1,109
828	11.9	12.5	66	0.2	402	286	1,048	2,479
CABBAGE- PROC		TN		TN				
827	105.0	24.5	43	0.6	587	163	899	807
848	18.0	26.9	37	0.7	623	220	955	848
CARROTS		TN		TN				
827	240.0	14.1	16	0.9	422	187	774	939
CUCUMBERS- MKT		BU		BU				
848	22.0	350	83	4	331	563	933	677

* 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, 1980
(READ ACROSS BOTH PAGES)

AVERAGE PER ACRE		AVERAGE PER UNIT***		RETURN PER		PROFIT ON	
PROFIT	LABOR RETURN	NET COST	NET RETURN	HOUR OF LABOR	$ OF COST	ENTER-PRISE	FARM NO
$	$	$	$	$	$	$	
SNAP BEANS- PROC		PER TN					
43	83	151	172	16.42	1.14	86,859	827
78	116	144	177	26.25	1.23	58,158	848
155	180	124	173	41.09	1.40	92,018	864
32	88	165	178	11.57	1.08	3,893	863
TABLE BEETS		PER TN					
10	127	41	41	8.61	1.01	3,241	827
CABBAGE- MKT		PER TN					
192	569	81	91	8.65	1.13	16,753	864
762	1,541	86	122	15.75	1.42	35,072	827
548-	106-	97	65	1.15-	0.67	21,916-	863
1,431	1,761	84	198	24.94	2.36	17,021	828
CABBAGE- PROC		PER TN					
92-	287	37	33	6.02	0.90	9,706-	827
107-	225	36	32	5.56	0.89	1,911-	848
CARROTS		PER TN					
165	333	55	67	15.79	1.21	39,632	827
CUCUMBERS- MKT		PER BU					
256-	246	2.67	1.93	2.86	0.73	5,634-	848

FACTORS FROM VEGETABLE CROP ENTERPRISES
COST ACCOUNT FARMS, 1980
(ARRANGED BY ACRES OF CROP)

FARM NO	ACRES PER ENTR AC	AVERAGE PER ACRE YIELD UNIT	AVERAGE PER ACRE LABOR* HR	PROD PER HR OF LABOR UNIT	AVERAGE PER ACRE GROW COST $	AVERAGE PER ACRE HARV COST $	AVERAGE PER ACRE TOTAL COST** $	TOTAL RETURN $
PEAS- PROC		IN		IN				
827	327.0	0.4	5	0.1	226	79	317	210
836	44.3	1.6	1	1.3	178	154	367	561
POTATOES- MKT		CW		CW				
827	5.0	246	28	9	815	334	3,018	2,174
POTATOES- PROC		CW		CW				
827	170.0	294	28	10	814	358	1,477	1,658
SWEET CORN- PROC		IN		IN				
864	346.0	4.1	2	1.5	164	39	262	283
105	70.0	2.7	2	1.1	185	31	241	188
836	38.0	4.2	1	3.0	146	32	208	290

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