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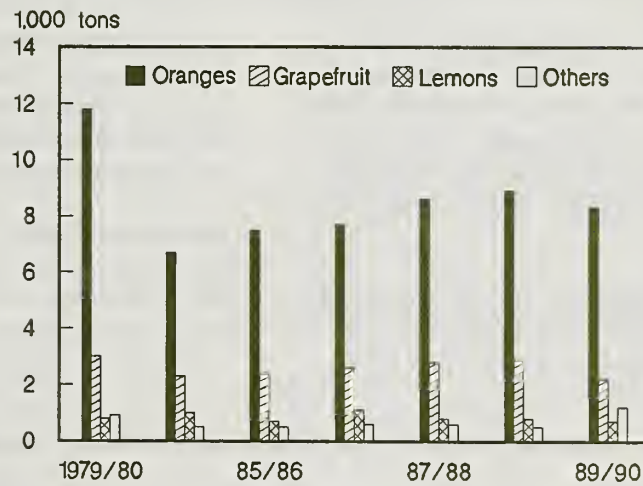
Economic
Research
Service

TFS-252
November 1989

Fruit and Tree Nuts

Situation and Outlook Report

U.S. Citrus Fruit Production



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Summary

Fruit Prices Likely Higher In 1989/90

Led by higher prices for citrus, apples, peaches, and strawberries, the index of grower prices for fresh and processed fruit rose sharply in September. The index strengthened again in October to reach its highest point this year. Expected smaller citrus supplies will provide additional upward pressure on prices. With shorter supplies and heavy demand for most noncitrus fruits, prices also are expected to remain above last year. Apples are an exception because of this year's large crop, which likely will keep apple prices depressed through the season.

Smaller U.S. Citrus Supplies Expected

U.S. citrus production (excluding grapefruit in California's "other areas") in 1989/90 is forecast at 11.7 million short tons (279 million boxes), down 9 percent from last season and 29 percent from 1979/80's record. The expected smaller crop largely reflects freeze damage to Florida groves in February. As of October 1, total citrus production is forecast down in all producing States except California. All citrus crops are expected to be smaller.

U.S. orange production is forecast at 8.3 million short tons (194 million boxes), down 7 percent from 1988/89 and 3 percent from 1987/88. Production in Florida and Arizona is forecast to decline 16 and 17 percent, respectively, from last season. Conversely, California and Texas production is expected to climb 7 and 5 percent. This year's smaller crop will largely affect the processing market.

On-tree prices in October were double a year ago, primarily reflecting shorter supplies of California valencias remaining from 1988/89. Even with heavier supplies from California's larger navel orange crop, prices likely will remain steady or rise slightly, because of the crop's high quality and strong export demand. Despite the smaller Florida orange crop, prices for Florida processing oranges may not show much strength because ample Brazilian supplies of frozen concentrated orange juice (FCOJ) are expected to supplement the smaller domestic pack.

Brazilian FCOJ exports in 1989/90 are forecast to be a near record at 271 million gallons (42 degrees Brix), up 16 percent from the previous season. Although U.S. imports of Brazilian FCOJ through September were running 43 percent

behind a year ago, the import pace will quicken as the Brazilian harvest moves into full swing and Florida processors begin packing 1989/90 season fruit. Brazilian processors lowered FCOJ prices in September in anticipation of larger supplies. Florida processors followed the lead in October. However, unless FCOJ movement picks up over the next month, 1989/90 carryin stocks held by Florida processors could be moderately above last season. Larger carryin stocks and the assurance of adequate alternative supplies should keep retail FCOJ prices steady through 1989/90.

The 1989/90 U.S. grapefruit crop, excluding California's "other areas" is forecast at 2.2 million short tons (54 million boxes), 17 percent below 1988/89 and 15 percent below 1987/88. Production in Florida is forecast down 20 percent from last season due to damage sustained during February's freezing temperatures. While Texas production is also forecast moderately lower, larger crops are expected in California's desert region and in Arizona.

Larger 1989/90 carryin stocks of most processed grapefruit products in Florida should help keep processing demand relatively soft this season. Fresh market supplies are likely adequate to meet domestic and export demand. Fresh and processed grapefruit prices will range higher due to smaller available supplies.

The 1989/90 forecast for the U.S. lemon crop places total California/Arizona production (tree crop available for harvest) at 749,000 short tons (20 million boxes). This is down 1 percent from last season and almost 5 percent below 1987/88. Shorter supplies boosted f.o.b. prices through mid-October, and prices are likely to remain above a year earlier through the rest of the season.

Tree Nut Crops Lower, Supply Ample

U.S. tree nut production is much lower this year due to smaller crops of almonds, hazelnuts (filberts), pecans, and pistachios. Larger macadamia and walnut crops are expected. Although total tree nut production will be down, supplies of most nuts for 1989/90 will be ample because of larger carryover stocks from 1988/89.

Grower prices are expected to be higher, even though exports may decline somewhat due to increased competition from major foreign suppliers.

Table 1--Economic indicators of the U.S. fruit and tree nut sectors

Indicator	1981/85 average	Annual			Quarter/Month	
		1986	1987	1988	1988	1989
					II Quarter 1/	II Quarter 1/
Gross National Product (1982 \$ bill.)	3,360.5	3,717.9	3,853.7	4,024.4	4,010.7	4,134.0
GNP implicit price deflator (% change)	2.48	2.6	3.2	3.3	4.8	4.6
Disposable personal income:						
Total (1982 \$ billion)	2,370.93	2,635.3	2,676.6	2,793.3	2,773.3	2,886.6
Per capita (dollars)	10,093.6	10,905	10,970	11,337	11,273	11,618
Personal consumption expenditures:						
Food and beverages (1982 \$ billion)	413.0564	447.1	452.7	460.0	459.8	461.9
Civilian population (mil.)	232.5422	239.4	241.7	244.1	243.8	246.1
			--1977=100--		Oct. 1988	Oct. 1989
Index of prices received by farmers:						
All farm products	135.4	123	126	138	143	144
Fruit, all	163.0	169	181	181	189	211
Fruit, fresh market	172.2	177	194	194	204	224
					Oct. 1988	Oct. 1989
Index of prices paid by farmers:						
All production items	151.4	144	147	157	162	164
Fertilizer	140.6	124	118	130	134	131
Ag chemicals	122.2	127	124	126	128	133
Fuels and energy	197.6	162	161	163	165	184
Interest payable per acre	239.2	211	190	186	186	190
Taxes payable per acre	128.2	138	139	142	142	144
Wage rates (seasonally adjusted)	146.8	160	167	172	170	191
			--1982=100--		Aug 1988	Aug 1989
Producer price indexes: 2/						
Fresh fruit	103.5	112.9	112.0	112.7	119.9	114.1
Dried fruit	96.4	91.9	95.0	99.1	99.8	102.8
Canned fruit	104.3	111.0	115.3	120.1	120.5	123.4
Frozen fruit and juice	106.4	103.0	113.3	129.9	130.7	129.0
			--1982-84=100--		Sept 1988	Sept 1989
Consumer price index:						
All food	99.7	109.6	113.6	118.3	119.8	125.0
Fresh fruit	99.8	109.0	113.5	118.2	120.2	126.1
Processed fruit	101.1	118.7	132.0	143.0	153.3	155.1
	100.2	106.3	110.6	122.0	123.8	127.8

--Continued

Table 1--Economic indicators of the U.S. fruit and tree nut sector 1/--Continued

Indicator	1981/85 Average	Annual			Quarter/Month		
		1986	1987	1988	1988	1989	
					Sept 1988	Sept 1989	
		-- 1982-84=100--					
Farm-retail price spread: 3/							
Market basket	100.2	112.5	119.4	125.3	127.0	136.0	
Fresh fruits	102.2	128.0	145.7	160.2	174.3	175.5	
Fresh vegetables	99.8	116.8	126.5	141.3	141.7	151.6	
Processed fruits and vegetables	98.6	106.4	108.3	111.7	113.1	123.1	
Fruit and tree nuts:							
Citrus							
Production (1,000 tons)	12,417.4	11,051	11,968	12,728	N.A.	N.A.	
Per capita consumption (lbs.)	109.12	117.25	112.82	113.61	N.A.	N.A.	
Noncitrus							
Production (1,000 tons)	13,672.2	13,408	15,454	15,259	N.A.	N.A.	
Per capita consumption (lbs.)	90.33	96.39	101.47	97.72	N.A.	N.A.	
Tree Nuts (shelled basis)							
Per capita consumption (lbs.)	2.23	2.24	2.24	2.51	N.A.	N.A.	
					Aug 1988	Aug 1989	
Exports, U.S.:							
Fruits, nuts, and prep. (mt)	5,477	3,652	4,364	5,497	607	426	
Fruit juices incl. frozen (mil. hl)	2,067	2,003	2,146	2,409	170	190	
Imports, U.S.:							
Fruits, nuts, and prep. (mt)	3,939	4,637	4,840	4,797	88	99	
Bananas (mt)	2,730	3,042	3,106	3,030	254	260	
Fruit juices incl. frozen (mil. hl)	25,567	31,539	34,059	26,754	2,664	1395	
		--units of currency per U.S. dollars--				Sept 1988	Sept 1989
Real exchange rates, selected countries: 4/							
Canada (dollar)	1.2926	1.3588	1.2894	1.1696	1.1975	1.1337	
Japan (yen)	228.6245	170.6977	151.8217	138.8924	146.5541	160.6565	
United Kingdom (pound)	0.6718	0.6722	0.6000	0.5460	0.5764	0.5970	
New Zealand (dollar)	1.7503	1.7221	1.3672	1.2018	1.2883	1.3301	
Hong Kong (dollar)	7.2616	7.7050	7.5830	7.3647	7.4970	7.0685	
Brazil (cruzado)	4.9308	5.6798	5.1318	4.5590	4.5904	5.8492	
Chile (peso)	112.6654	164.5885	162.0487	163.9135	164.4402	156.1027	
Taiwan (new dollar)	36.6061	38.3041	33.3030	30.6443	31.8967	28.3160	

N.A.=Not Applicable

1/ Quarterly data are seasonally adjusted at annual rates. 2/ Commodities ready for sale to ultimate consumer.

3/ Retail prices are based on indexes of retail prices for domestically produced farm foods published by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for by-products. 4/ Nominal exchange rates are adjusted by the ratio of the U.S. Consumer Price Index and the respective countries Consumer Price Index, with 1985 being the base year.

Legislative Issues

Proposed Legislation To Require Kiwifruit, Peach, Pear, Nectarine, and Plum Imports To Meet U.S. Minimum Quality Standards

Senator Cranston of California introduced a bill (S.992) to amend the Agricultural Adjustment Act (U.S.C. 608e-1, reenacted with amendments by the 1937 Agricultural Marketing Agreement Act), to add kiwifruit, peaches, pears, nectarines, and plums to the commodities listed under Section 8e. Commodities listed under Section 8e must meet the same or comparable grade, size, quality, and maturity requirements as may be in effect for domestic shipments under a marketing order. A companion bill also was introduced in the House (H.R.2026) in October by Rep. Quaylo of California.

In a related measure, Senator Inouye of Hawaii introduced S.1267 to add papayas to the list of commodities in Section 8e.

Proposed Grade Standards for Papayas

The Papaya Administrative Committee has requested the development of U.S. grade standards for papaya as a means to provide the industry with a more uniform basis for trading. USDA has proposed standards based on three grades:

U.S. Fancy, U.S. No. 1, and U.S. No. 2. Basic standards for each grade would include designations for variety, maturity, cleanliness, smoothness, soluble solids, and shape. The Fresh Products Branch of USDA's Agricultural Marketing Service (AMS) is accepting comments regarding the proposed standards through December 11, 1989.

Proposed Legislation To Assist U.S. Lime Industry

To expand domestic and foreign markets for U.S. limes, Senator Graham of Florida introduced a bill in the Senate (S.1194) in October to provide for a nationally coordinated research, promotion, and consumer information program for limes. A companion bill (H.R.3387) was also introduced in the House by Rep. Fascell of Florida.

USDA Issues Final Ruling on Kiwifruit Marketing Order Requirements

USDA has revised grade, pack, and container requirements for California kiwifruit to increase fruit quality and provide uniformity in marketing practices. The new requirements reduce the current allowances for misshaped fruit; establish minimum weights for tray-packed fruit; and reduce the amount of variance in diameters of kiwifruit permitted to be packed in volume-filled containers. Containers must also be marked with the established size designation of the fruit packed in the container.

General Fruit Price Outlook

The September index of grower prices for fresh and processing fruit rose sharply from the previous 2 months to its highest level this year. The 22-percent increase between August and September was induced by higher prices for oranges, lemons, limes, grapefruit, apples, peaches, and strawberries, which more than offset a moderate decline in fresh pear prices. The index rose again in October as grower prices for grapefruit, oranges, pears, and strawberries strengthened, offsetting lower prices for apples and lemons. Smaller citrus supplies expected throughout the season are likely to keep prices higher than last year through the winter, but heavier imports of frozen concentrated orange juice (FCOJ) from Brazil's expected bumper crop may moderate any price increases. Larger apple supplies and lower apple prices will keep some downward pressure on the index.

The Bureau of Labor Statistics' (BLS) Consumer Price Index (CPI) for fresh fruit continued to rise in September, boosted by higher retail prices for grapefruit, lemons, peaches, grapes, and strawberries. The September CPI stood at 155.1 (1982-84=100), 2 percent above August and 1 percent above a year ago. The index is likely to drop this fall

with seasonally increased supplies of apples, pears, and citrus, and may even fall below a year earlier due to heavy supplies of fresh market apples.

Owing to smaller packs of several canned and frozen fruits and higher retail prices, the CPI of processed fruit advanced

Figure 1
Prices Received by Producers

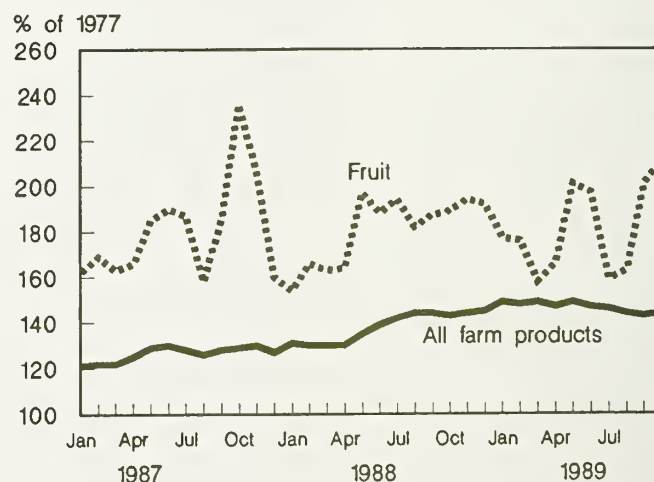


Table 2--Index of annual and quarterly prices received by growers for fresh and processing fruit, 1986-89

Year	Annual	Quarter			
		1st	2nd	3rd	4th
--1977=100--					
1986	169	154	161	175	188
1987	181	165	180	177	201
1988	181	161	183	188	192
1989		170	188	174	1/ 211

1/ October's figure.

Source: Agricultural Prices, NASS, USDA.

Table 3--Annual and quarterly Consumer Price Indexes for fresh fruit, 1986-89

Year	Annual	Quarter			
		1st	2nd	3rd	4th
--1982-84=100--					
1986	119	113	121	124	117
1987	132	129	138	132	129
1988	143	132	143	150	146
1989		148	154	152	

Source: Bureau of Labor Statistics, U.S. Department of Labor.

to 127.8 (1982-84=100) in September, up 0.7 percent from August and 3.2 percent from a year earlier. Retail prices of frozen fruit and juice averaged 3 percent above a year earlier, while canned and dried fruit were 4 percent higher.

Frozen fruit and berry prices are likely to be mixed due to differences in raw product availability and cold storage inventories. Frozen strawberry prices are likely to advance with tighter raw product supplies and significantly lower September cold storage holdings. Despite a smaller pack of frozen red sweet cherries this year, substantially larger cold storage holdings should keep downward pressure on frozen sweet cherry prices. FCOJ prices are likely to remain steady to lower as larger Brazilian supplies are anticipated to make up for the expected shortfall in pack from domestic fruit. Florida processors have already announced f.o.b. price declines for FCOJ at Florida plants in anticipation of rising Brazilian FCOJ imports later this year.

Retail prices for several canned fruits, including cling peaches and fruit cocktail, may soften somewhat later this fall if currently expected promotional allowances from processors to the trade materialize.

Table 4--Annual and quarterly Producer Price Indexes for canned fruit, 1986-89

Year	Annual	Quarter			
		1st	2nd	3rd	4th
--1982-84=100--					
1986	110	109	110	110	109
1987	113	112	112	113	113
1988	115	114	114	115	117
1989		119	119	121	

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 5--Annual and quarterly Consumer Price Indexes for processed fruit, 1986-89

Year	Annual	Quarter			
		1st	2nd	3rd	4th
--1982-84=100--					
1986	106	108	106	105	106
1987	111	108	111	112	112
1988	122	118	123	123	125
1989		125	125	127	

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Figure 2
Fresh Fruit: BLS Consumer Price Index

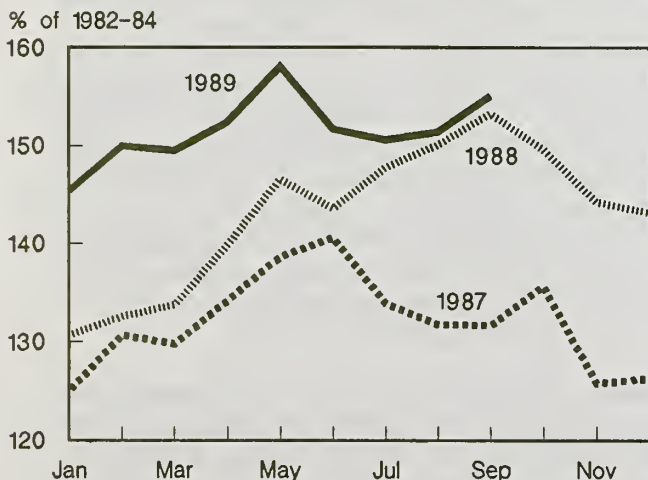


Figure 3
Canned Fruit: BLS Producer Price Index

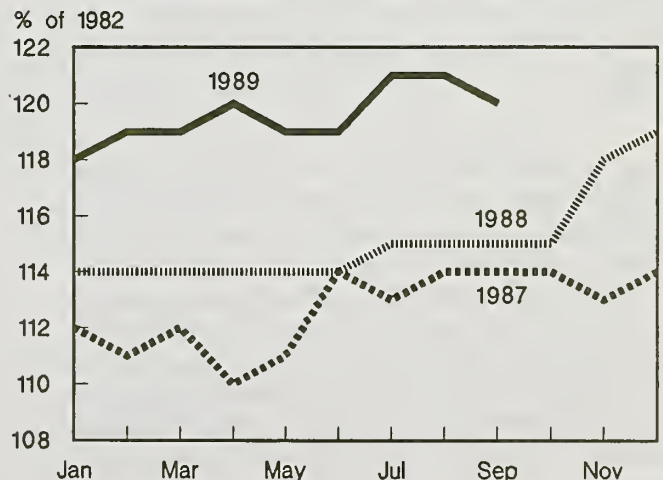


Table 6--Frozen fruit and berries: Cold storage holdings, September 30, 1987-89

Commodity	1987	1988	1989
--1,000 pounds--			
FRUIT:			
Apples	40,956	35,278	32,470
Apricots	10,785	10,260	12,011
Cherries	208,050	199,416	195,270
Grapes	4,049	3,692	1,819
Peaches	69,450	121,663	118,796
BERRIES:			
Blackberries	29,582	29,301	20,798
Blueberries	71,665	93,462	84,207
Boysenberries	5,553	5,202	4,079
Raspberries, red	46,748	55,012	47,159
Strawberries	301,469	312,026	230,433
Other fruit and berries	109,368	133,521	108,027
Total	897,675	998,833	855,069

Source: Cold Storage, NASS, USDA.

Citrus

The first forecast of the 1989/90 U.S. citrus crop places total production (excluding grapefruit in California's "other areas") at 11.7 million short tons (279 million boxes), down 9 percent from last season and 29 percent from 1979/80's record 16.5 million short tons. The lower crop expectation largely reflects the damage to Florida groves caused by freezing weather in February that killed open blooms and damaged new growth. As of October 1, Florida citrus production was forecast at 8.1 million short tons, 14 percent below 1988/89. Production of all citrus crops is also forecast down in Texas and Arizona, but total California production, at 3.1 million short tons (excluding grapefruit production from California's "other areas"), will be up 5 percent if the forecast is realized.

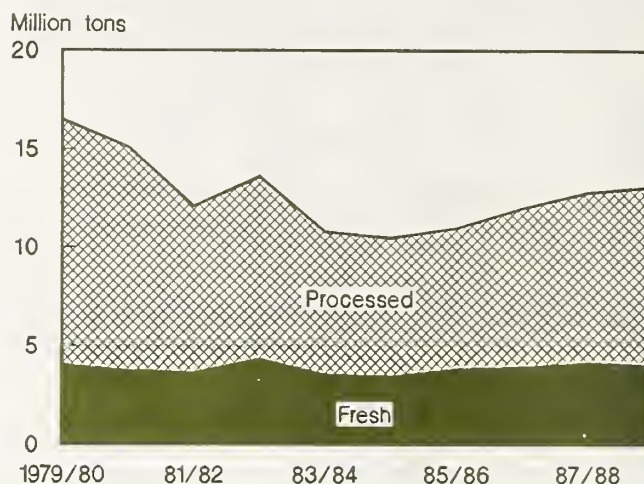
Smaller 1989/90 Crop Forecast

Dampened by prospects for significantly lower production in Florida and Arizona, U.S. production of all oranges for the 1989/90 season was forecast at 8.3 million short tons (194.4 million boxes) on October 1. If realized, the crop will be 7 percent smaller than 1988/89 and down 3 percent from 1987/88.

In Florida, production prospects were reduced by February's freezing weather. Early and mid-season varieties (including navels) sustained the most damage and production is forecast down 16 percent from last season, at 3.2 million short tons (72 million boxes). The impact on Florida's valencia crop was much less severe, and production is expected to drop only 5 percent from last season's 2.8 million short tons (61.3 million boxes). The smaller Florida crop will largely affect the processing market. Over 93 percent of Florida's orange production was processed during each of the previous three seasons.

Figure 4

U.S. Citrus Fruit Production and Utilization



Orange production in Arizona has dropped over the past three seasons due to declining bearing acreage in navels and other miscellaneous varieties, and lower average yields for all varieties, including valencias. Arizona's production of all oranges is forecast at 53,000 short tons (1.4 million boxes) in 1989/90, down 17 percent from last season. About three-fourths of Arizona's orange production went to the fresh market during each of the previous three seasons.

Conversely, prospects are favorable for larger crops of both navels and valencias in California. California's all-orange forecast for 1989/90, at 2.3 million short tons (61 million boxes), is 7 percent greater than last year. While California's navel crop is expected to total 1.3 million short tons (35 million boxes), 3 percent larger than last year, the State's valencia crop is expected to be 13 percent larger, at 975,000 short tons (26 million boxes). Similarly, orange production in Texas, at 83,000 short tons (1.95 million boxes), is forecast up 5 percent from last season due to an 8-percent larger crop of early and mid-season varieties—1989/90 season valencia production is forecast unchanged from last season. Production in both States is primarily for fresh market use.

Larger supplies of 1988/89 season oranges placed downward pressure on the season average grower price for all oranges. Equivalent on-tree returns for all oranges averaged \$6.83 a box during 1988/89, compared with \$7.18 in 1987/88. On average, growers received lower prices for both fresh and processing uses in 1988/89. The larger Florida crop weakened grower prices for processing oranges, causing average on-tree returns for all oranges in that State to drop from \$7.58 a box in 1987/88 to \$7.28 in 1988/89.

Similarly, the larger California navel crop last season weakened grower prices for fresh market use, which caused the season average on-tree return for all oranges in that State to drop 61 cents a box from 1987/88's \$6.03. Texas growers

Table 7--Citrus fruit: Production, 1987/88, 1988/89, and indicated 1989/90 1/

Crop and State	Boxes			Ton equivalent		
	Used		Indicated 1989/90	Used		Indicated 1989/90
	1987/88	1988/89		1987/88	1988/89	
	--1,000 boxes-- 2/			--1,000 short tons--		
ORANGES:						
Early, midseason, and Navel varieties 3/:						
Arizona	610	550	500	23	21	19
California	31,500	34,000	35,000	1,182	1,275	1,313
Florida	78,500	85,300	72,000	3,532	3,839	3,240
Texas	940	1,200	1,300	40	51	55
Total	111,550	121,050	108,800	4,777	5,186	4,627
Valencias:						
Arizona	1,210	1,150	900	45	43	34
California	27,500	23,000	26,000	1,031	862	975
Florida	59,500	61,300	58,000	2,677	2,759	2,610
Texas	490	650	650	21	28	28
Total	88,700	86,100	85,550	3,774	3,692	3,647
All oranges:						
Arizona	1,820	1,700	1,400	68	64	53
California	59,000	57,000	61,000	2,213	2,137	2,288
Florida	138,000	146,600	130,000	6,209	6,598	5,850
Texas	1,430	1,850	1,950	61	79	83
Total	200,250	207,150	194,350	8,551	8,878	8,274
GRAPEFRUIT:						
Florida, all						
Seedless	53,850	54,750	44,000	2,288	2,326	1,870
Pink	51,100	51,400	41,000	2,171	2,184	1,742
White	21,900	23,700	18,500	930	1,007	786
Other	29,200	27,700	22,500	1,241	1,177	956
Arizona	2,750	3,350	3,000	117	142	128
California 4/	1,950	1,950	2,100	63	63	67
Desert Valleys	9,100	8,500	3,700	298	280	118
Other areas	4,200	3,500	3,700	134	112	118
Texas	4,900	5,000	N/A	164	168	N/A
Total	3,800	4,800	4,400	152	192	176
Total	68,700	70,000	54,200	2,801	2,861	6/ 2,231
LEMONS:						
Arizona	3,650	3,800	3,200	139	144	122
California	17,000	16,200	16,500	646	615	627
Total	20,650	20,000	19,700	785	759	749
TANGELOS:						
Florida	4,200	3,800	3,500	189	171	158
TANGERINES:						
Arizona	600	650	700	23	25	26
California	2,090	2,040	1,750	78	76	66
Florida 5/	2,450	2,900	2,200	117	138	105
Total	5,140	5,590	4,650	218	239	197
TEMPLES:						
Florida	3,550	3,750	3,000	160	169	135
Total citrus	302,490	310,290	279,400	12,704	13,077	6/ 11,744

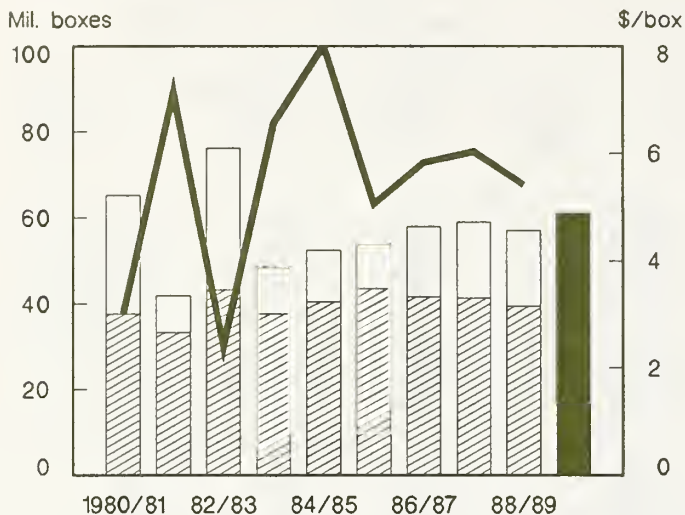
N/A= not available until April 1, 1990.

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year. 2/ Net content of box varies. Approximated averages are as follows: Oranges-California and Arizona, 75 lbs.; Florida, 90 lbs.; Texas, 85 lbs.; Grapefruit-California, Desert Valleys and Arizona, 64 lbs.; other California areas, 67 lbs.; Florida, 85 lbs.; Texas, 80 lbs.; Lemons, 76 lbs.; Tangelos, 90 lbs.; Tangerines-California and Arizona, 75 lbs.; Florida, 95 lbs.; and Temples, 90 lbs. 3/ Navel and miscellaneous varieties in California and Arizona. Early and midseason varieties in Florida and Texas, including small quantities of tangerines in Texas. 4/ The first forecast for California grapefruit "other areas" will be as of April 1, 1990. 5/ Florida "all tangerines" includes sunburst tangerines beginning with the 1989/90 crop year. 6/ Excludes California grapefruit in "other areas."

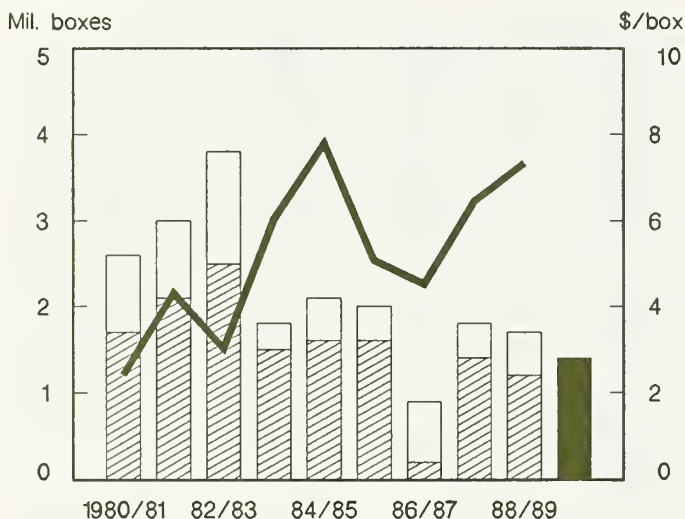
Source: October 1989, Crop Production, NASS, USDA.

Figure 5
Oranges: Production, Utilization, and Prices

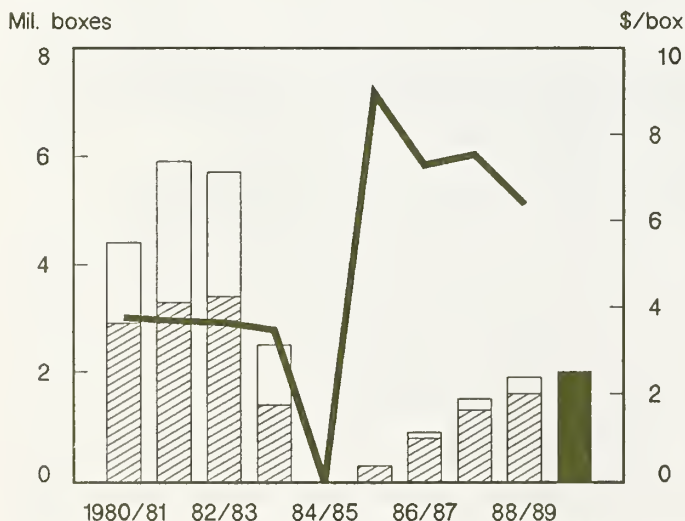
California



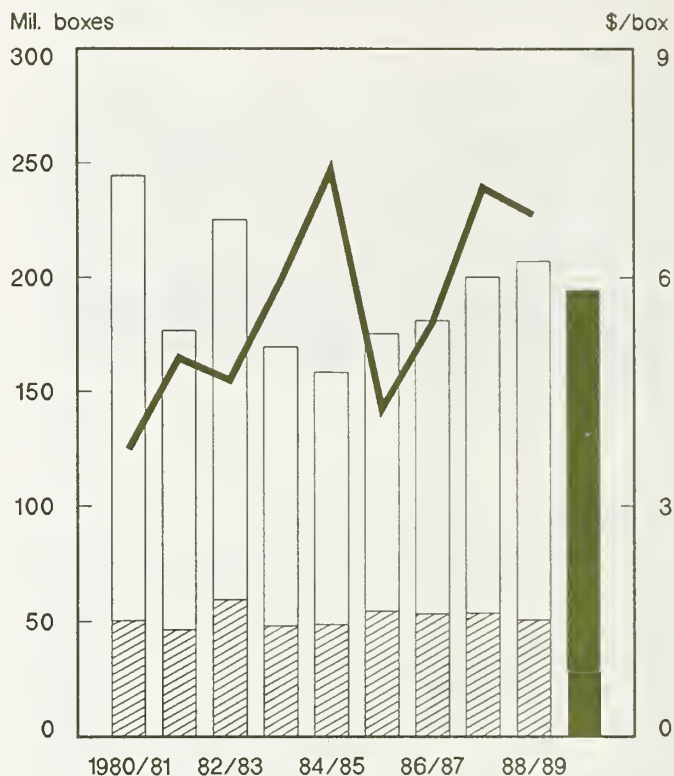
Arizona



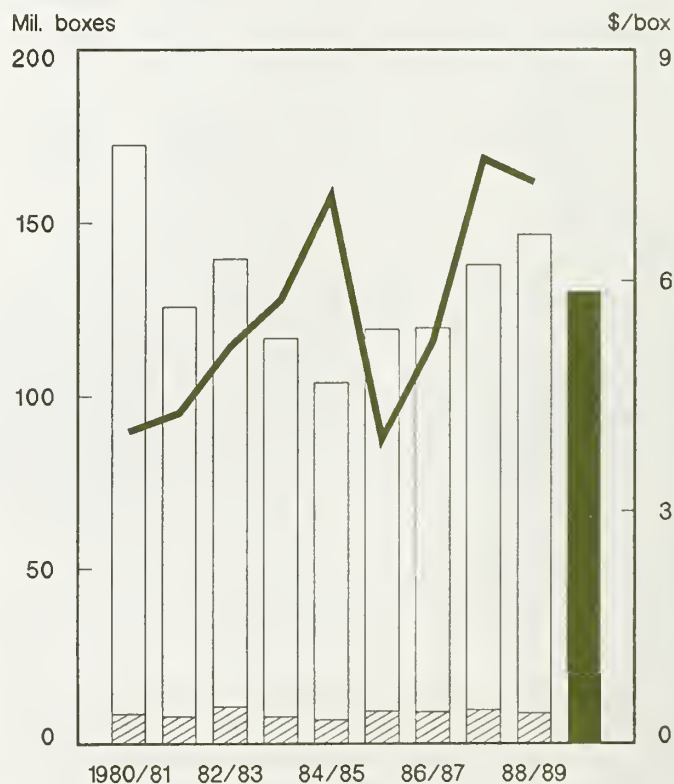
Texas



United States



Florida



Year beginning October 1. *Production having value. Prices: on-tree returns. 1989/90 data as of October 1. Indication of total production.

received lower average prices for both fresh and processing oranges, which together averaged \$6.40 a box in 1988/89 compared with \$7.53 in 1987/88. However, the smaller 1988/89 Arizona orange crop slightly boosted grower prices for fresh and processing uses in that State from \$6.45 the previous season to \$7.33 a box during 1988/89.

Two months into the 1989/90 season, the average on-tree grower price for all oranges in October was \$6.22 a box, double that a year ago. The higher price primarily reflects shorter supplies of California valencias remaining from 1988/89. Even with the larger California navel orange crop expected this season, prices will likely remain steady or rise from last year, reflecting the crop's high quality and strong export demand. Despite the expected smaller orange crop in Florida, growers may not see a corresponding increase in prices if imports of frozen orange juice concentrate (FCOJ) from Brazil rise. In anticipation of a record large orange crop in Brazil, Brazilian processors announced a price decline for FCOJ in September from \$1.85 per pound solids to \$1.60. Further declines may be forthcoming.

U.S. Fresh Orange Exports Continuing To Expand, Imports Soft

Foreign demand for U.S. fresh oranges continues to strengthen in 1989 with lower prices and relatively favorable foreign exchange rates between the U.S. dollar and the currencies of several major importing countries. U.S. fresh orange exports through August of the 1988/89 marketing season (November/October) totaled 335,711 metric tons (including exports reported to Canada), up over 10 percent from a year earlier. Exports were heavier to all major markets except Canada, where following a downward trend of the past several years, reported exports dropped 5 percent from the previous season.

The Pacific Rim countries continue to be strong markets for U.S. fresh oranges, with Japan and Hong Kong alone accounting for 60 percent of exports during the first 10 months of 1988/89, up 3 percent from the same period last year. Japan is the largest single market, but exports to Hong Kong are growing at a much faster rate despite an increase in the Japanese import quota for U.S. fresh oranges. Through August, Hong Kong imported 87,242 metric tons, up 32 percent from the same 10 months last year. During the same period, exports to Japan were up only 4 percent, at 112,916 metric tons. U.S. fresh orange exports are likely to continue strong in 1989/90 with the outlook for a larger California crop.

Lower domestic fresh orange prices also helped curtail fresh orange imports into the United States during the first 10 months of 1988/89. U.S. fresh orange imports totaled 7,452 metric tons between November 1988 and August 1989,

down 65 percent from a year earlier. The decline is also partly due to a smaller crop in Spain, one of the largest suppliers of fresh oranges and clementines to U.S. markets. Larger U.S. supplies of high quality fruit may continue to constrain imports in 1989/90.

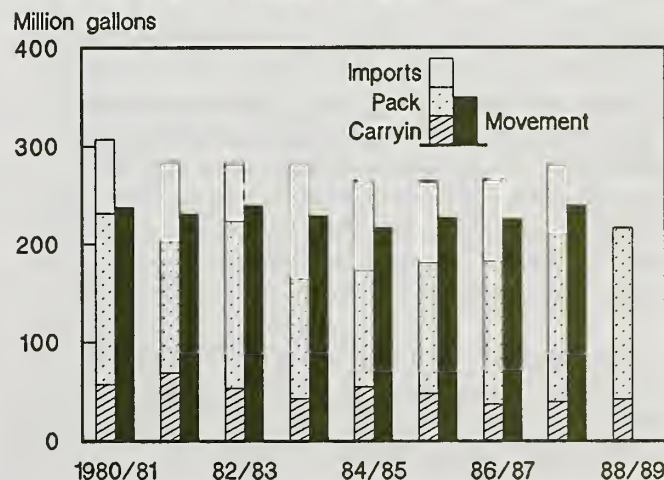
Processing Share of Total Crop Rising

Continuing strong demand for orange juice and larger crops have contributed to a steady rise in the proportion of U.S. orange production used for processing over the past 6 years. The share reached 78 percent in 1988/89, the highest since 1980/81. Although fresh market use accounts for the largest share of total orange production in California, Arizona, and Texas, the percentage of production diverted into processing uses is slowly increasing in each of these States. About 30 percent of 1988/89 orange production in these three States was processed, compared with 29 percent in 1987/88. Processors also took 94 percent of Florida's orange production in 1988/89, also up 1 percent from 1987/88.

FCOJ Imports Likely Higher in 1989/90

Although they recovered 1 percent less juice in 1988/89 than the 1.55 gallons of FCOJ per box (42 degrees Brix) attained in 1987/88, Florida processors packed 175 million gallons of FCOJ, 3 percent more than the previous season. Larger carryin stocks and pack in Florida, combined with tighter Brazilian stocks during the latter half of the U.S.'s 1988/89 season, held FCOJ imports into Florida and other U.S. ports at levels well below a year ago. The Florida Citrus Processors Association reported imports into the State, mostly from Brazil, totaled 35.4 million gallons (42 degrees Brix) as of mid-October, down 23 percent from a year ago. With the reduction in imports, total Florida FCOJ supplies at that time were 267.1 million gallons, about the same as last season's 267.5 million gallons.

Figure 6
Florida Supply and Movement of Frozen Concentrated Orange Juice



Through mid-October, FCOJ movement from Florida was running 1 percent below a year earlier, at 191.7 million gallons. Movement of FCOJ in retail packs was running almost 4 percent below a year ago due to higher prices and more competition from chilled orange juice (COJ). However, as demand for bulk FCOJ, which can be reprocessed into COJ, continued to strengthen, movement of bulk product increased slightly in 1988/89.

Because sluggish movement has not offset total available supplies, Florida processors were holding 60.9 million gallons of FCOJ in inventory as of mid-October, 2 percent more than a year ago. Following the lead set by Brazilian processors in September, Florida processors reduced private label list prices about 10 percent in mid-October. While movement may quicken in response to the lower prices, it appears that carryover stocks could be moderately above the 42 million gallons carried over from last season.

Florida's FCOJ output from domestic fruit will likely be curtailed in 1989/90 with the smaller Florida crop and expectations for a lower juice yield. With the 1989/90 juice yield forecast at 1.48 gallons per box at 42.0 degrees Brix, FCOJ output from domestic fruit this season may be near 146 million gallons.

While larger carryin stocks will help boost total FCOJ supplies heading into 1989/90, imports are likely to rise during the season, particularly from Brazil, where production is expected to reach record levels. Brazilian FCOJ production for export is forecast at 270.7 million gallons (42 degrees Brix) for Brazil's 1989/90 season (July/June), up 16 percent from its previous season. According to the Florida Department of Citrus, Brazilian FCOJ exports to the United States totaled 18.9 million gallons (42 degrees Brix) for the first 3 months of the 1989/90 Brazilian marketing season, 43 percent less than a year ago. However, the pace of Brazilian exports is likely to quicken as the harvest there moves into full swing. Exports to the United States will likely rise as the impact of a smaller Florida crop is realized.

Chilled Orange Juice Pack Much Larger in 1988/89

The Florida Citrus Processors Association reported that Florida processors packed 427 million gallons of COJ (including that processed from fresh fruit and reprocessed from single-strength juice and FCOJ) during 1988/89, 14 percent more than the 1987/88 pack and 18 percent more than 1986/87. Although data on COJ carryin stocks are not available from the industry, processors were likely holding more stocks at the end of 1988/89 than at the beginning of the season because heavier movement failed to offset the larger pack.

Increased domestic and foreign market demand for COJ boosted movement 8 percent from 1987/88. Prospects for relatively lower-priced Brazilian FCOJ imports for reconstitution should help moderate any retail price increases

stemming from the smaller Florida orange crop. Relatively stable prices and rising consumption should increase COJ movement in 1989/90. Per capita consumption of COJ processed from Florida oranges rose to 4.85 pounds in 1988, up 15 percent from 1987 and 37 percent from 1986.

Brisk Canned Juice Movement Reduces 1988/89 Carryover

Lighter 1988/89 season carryin and heavier movement more than offset a larger pack of canned orange juice in Florida, leaving only 791,766 cases of single-strength orange juice on hand at the end of the season, 7 percent less than the previous season. The smaller Florida orange crop is not expected to greatly affect f.o.b. prices for canned juice during 1989/90 as the domestic supply will be supplemented by Brazilian concentrate. F.o.b. prices at Florida canneries remained steady at \$14.00 a case of 12/46 ounces (private label, sweetened and unsweetened) during the latter half of 1988/89. However, f.o.b. prices were lowered to \$12.50 a case during mid-October, which may further increase movement in 1989/90.

U.S. exports of canned single-strength orange juice rose 61 percent between December 1988 and August 1989 to 36.0 million liters. Exports were up considerably to all major markets except Hong Kong and South Korea. Exports to Japan increased fourfold to 16.1 million liters, accounting for 45 percent of total U.S. exports to date. Exports to the EC, at 10.8 million liters, were up 37 percent from the same period last year. France is the largest EC market for U.S. canned single-strength orange juice, accounting for 94 percent of total EC imports from the United States this season to date.

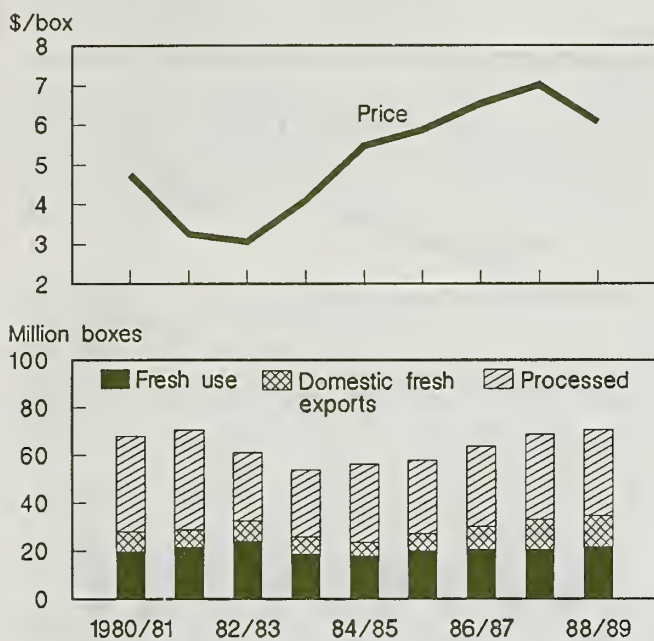
Grapefruit

1989/90 Crop Forecast Significantly Lower

The 1989/90 U.S. grapefruit crop, excluding production in California's "other areas," is forecast at 2.2 million short tons (54.2 million boxes), 17 percent below the previous season and 15 percent below 1987/88. Production in Florida, the largest producing State, is forecast at 1.87 million short tons (44 million boxes), down 20 percent from last season due to damage sustained during February's freezing temperatures. Florida's colored seedless crop suffered the largest setback and production is forecast down 22 percent, at 786,000 short tons (18.5 million boxes). While Texas grapefruit production is also forecast moderately lower, larger crops are expected in California's desert region and in Arizona.

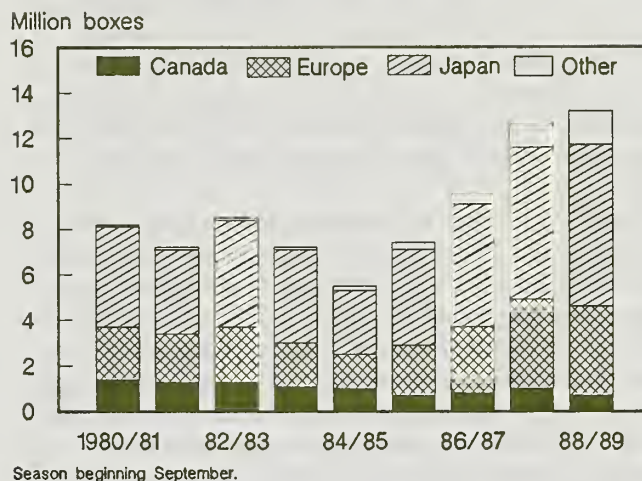
Reflecting smaller Florida supplies, early-season prices ranged higher than last season and are likely to remain strong as the season progresses. The f.o.b. price for Florida pink grapefruit was quoted at \$7.40 per carton in the Indian River district during mid-October, compared with \$6.39 a year ago. Larger carryin stocks of most processed grapefruit

Figure 7
U.S. Grapefruit Production, Use, and Price



Price is season average packinghouse-door returns. Year beginning September.

Figure 8
U.S. Exports of Fresh Grapefruit



between the U.S. dollar and their currencies. Exports are likely to continue strong in 1989/90 with prospects for excellent quality fruit available for export, declining import barriers in several major importing countries, and increased allocations for market development made available through the Targeted Export Assistance (TEA) program.

Movement Sluggish For Frozen Grapefruit Juice Concentrate in 1988/89

Florida processors packed 32.5 million gallons of frozen concentrated grapefruit juice (FCGJ) during 1988/89 (December/November), up only 2 percent from 1987/88. However, with 88 percent larger carryin stocks and total movement through mid-August virtually unchanged from last year, stocks in mid-October were 32 percent higher than a year ago, at 18.2 million gallons.

Movement in 1988/89 is down despite lower f.o.b. prices that remained steady at \$16.91 per case of 48/6-ounce size (private brand, Florida canneries) before prices were raised to \$18.97 a case in mid-October. U.S. exports of FCGJ between December 1988 and August 1989, at 39.3 million liters, were 45 percent behind last year. Demand is significantly down in all major export markets.

With stocks considerably higher than a year ago and expectations for heavy fresh market demand for smaller Florida grapefruit supplies, the 1989/90 season FCGJ pack is likely to slow. FCGJ supplies in 1989/90 are likely to be large enough to discourage any major price increases stemming from the smaller Florida grapefruit crop.

1989/90 Packs of Chilled and Canned Grapefruit Juice Higher

Despite movement that was virtually unchanged from the previous season, Florida processors packed 37.5 million gallons of chilled grapefruit juice (CGJ) (excluding single-

products in Florida should help keep processing demand relatively soft this season, and many in the industry feel that total 1989/90 grapefruit supplies will be adequate to satisfy both domestic and export market demand for fresh grapefruit.

About 50 percent of the 1988/89 U.S. grapefruit crop went to the processing market, down from 53 percent in 1986/87. In Florida, the proportion processed has declined by 1 percentage point each season since 1986/87 to reach 56 percent in 1988/89. Over three-fourths of grapefruit production in California, Arizona, and Texas moves to the fresh market—the proportion used for processing has declined in recent years. The share of production used in the fresh market will likely increase this year because of the smaller U.S. crop and strong foreign demand for fresh grapefruit.

Foreign Market Demand Continues To Expand Exports

U.S. fresh grapefruit exports totaled 477,880 metric tons for the 1988/89 marketing season (September/August), up 3 percent from the previous season. Japan remained the largest market, accounting for 54 percent of U.S. fresh grapefruit exports during the season. U.S. exports to Japan totaled 259,109 metric tons, up 7 percent from 1987/88. U.S. exports to the Netherlands rose sharply to 41,095 metric tons, 51 percent above the preceding season. Exports to Taiwan, the third largest U.S. market, were up only 1 percent from 1987/88, at 32,214 metric tons.

On the other hand, U.S. exports to Canada and the EC dropped slightly because of less favorable exchange rates

strength reprocessed) in 1988/89 (October/September), up 2 percent from 1987/88. The slightly larger pack, combined with larger carryin stocks and only a very small change in movement, left processors holding 3.8 million gallons of CGJ heading into 1989/90, 52 percent more than last year. Although demand may remain soft due to higher CGJ prices, the smaller 1989/90 grapefruit crop may result in a smaller pack and allow processors to deplete excess CGJ stocks.

The larger Florida pack of canned single-strength grapefruit juice during the 1988/89 season (October/September) more than offset relatively lower carryin stocks and heavier movement to leave 2.3 million cases (24-2s) on hand at the end of the season, 5 percent more than a year ago. Pack is likely to decline in 1989/90 with the smaller Florida crop and shifting consumer preferences to chilled and frozen concentrate products. As of mid-October, processors had not announced changes in canned grapefruit juice prices in response to the smaller forecast Florida grapefruit crop, and representative list prices remained at \$10.25 (12/46 ounce sweetened and unsweetened white, f.o.b. Florida canneries), compared with \$11.25 a year ago.

Lemons

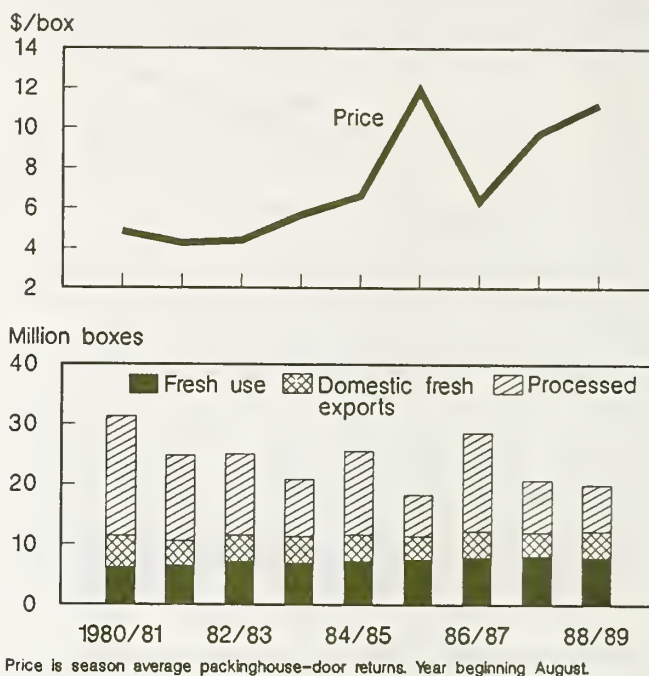
Shorter Supplies, Higher Prices Likely In 1989/90

Domestic lemon supplies will continue tight during 1989/90 (August/July) with production (tree crop available for harvest) forecast at 749,000 short tons (19.7 million boxes), down 1 percent from last season and almost 5 percent from 1987/88. The smaller crop expectation reflects a 16-percent decline in Arizona production from the previous season, at 122,000 short tons, which more than offsets an expected 2-percent increase in California production. If the forecast is realized, California will account for 84 percent of the U.S. lemon crop this season, up 3 percentage points from 1988/89.

Because of smaller domestic supplies over the past two seasons, a larger proportion of the U.S. lemon crop has gone into the fresh market. In 1988/89, 61 percent of the crop went for fresh market use, compared with 58 percent in 1987/88 and 43 percent in 1986/87. The proportion of the total crop used for fresh market is likely to increase again in 1989/90 with the expected smaller crop and higher fresh market prices.

Despite the smaller crop expectations, movement from the California/Arizona region through mid-October was about even with a year ago, with heavier shipments from Central California, California's desert region, and Arizona offsetting slower movement from Southern California. As of mid-October, fresh market deliveries and export market shipments were both up 4 percent from a year ago, accounting for 50 and 26 percent of total shipments, respectively.

Figure 9
U.S. Lemon Production, Use, and Price



Early-season f.o.b. prices, while highly variable at the beginning of the season, were significantly higher than last year as of mid-October. The f.o.b. price for fresh lemons averaged \$14.69 in the third week of October, compared with \$10.57 last year. Shorter supplies will likely keep strong pressure on f.o.b. prices for the remainder of the season, pushing the season average price higher than last season.

Other Citrus

1989/90 Tangerine Crop Significantly Lower

The October 1 forecast for the 1989/90 U.S. tangerine crop (all varieties including Dancy, Robinson, Honey, and Sunburst in Florida, and California and Arizona tangerines) is 197,000 short tons (4.7 million boxes). This is the first year that Sunburst has been included in the crop estimate. Even with the addition of Sunburst, the total crop is forecast 18 percent less than last season. The smaller crop expectation is attributable to Florida's freezing weather in February and a continuing decline in California's bearing acreage. Consequently, Arizona is the only producing State expecting increased production this season. Arizona's bearing acreage reached a record 3,600 acres in 1988/89.

The increase in the domestic tangerine supply from last season's larger production was primarily diverted into processing. Overall, packers took 35 percent of the 1988/89 U.S. crop, compared with 29 percent in 1987/88, and 30 percent in 1986/87. Most of the increase in processing use was in Florida, where packers processed 44 percent of production, 10 percent more than the previous year. The share of

production processed in Arizona and California also increased by 3 and 1 percent, respectively, to account for 20 and 28 percent of the crop in both States.

As a result of increased processing demand, grower on-tree prices for the processing market averaged \$2.78, 18 percent higher than in 1987/88, while fresh market prices were 0.3 percent lower, at \$17.88. Smaller supplies should boost grower on-tree prices for both the fresh and processing markets in 1989/90.

Florida Tangelo Crop Also Sustains Damage from February Freeze

Reflecting damage sustained during the February freeze, the 1989/90 Florida tangelo crop was forecast at 158,000 short tons (3.5 million boxes) on October 1, 8 percent less than 1988/89. This will be the second consecutive decline in Florida stemming primarily from smaller yields, because bearing acreage has remained relatively steady.

The majority of tangelos is used for processing rather than for fresh market consumption. However, fresh market share increased to 35 percent in 1988/89, up from 33 percent in 1987/88. Despite the slightly larger crop last season and the gain in fresh market share, season average grower on-tree prices for fresh market increased \$0.50 to \$8.15 between 1987/88 and 1988/89. On-tree prices for processing rose to \$4.59 from 1987/88's \$4.55. Consequently, on-tree prices for all sales averaged \$5.85 in 1988/89, \$0.27 more than the previous season. Prices are likely to strengthen in 1989/90 in light of the smaller crop and with shorter Florida orange supplies.

1989/90 Temple Supplies Likely Tight

The 1989/90 Florida temple crop was forecast at 135,000 short tons (3.0 million boxes) on October 1, 20 percent less than last season. The smaller crop is the result of February's freezing weather, which limited any potential for increased yields.

Heavier processing demand for temples in 1988/89 increased the share of production going for this use. Processing use accounted for 77 percent of production last season, compared with 64 percent in 1987/88, and 69 percent in 1986/87. The larger 1988/89 crop slightly depressed average grower on-tree prices for both fresh and processing uses, resulting in a \$1.25-per-box decline in grower prices for all sales from the 1987/88 season average of \$5.69.

Noncitrus

Apples

Fresh Market Prices Significantly Lower

Supported by continuing good crop conditions in the Western States, the final forecast for the 1989/90 U.S. apple crop is 9.63 billion pounds, down 1 percent from the early-season August 1 forecast, but 5 percent more than 1988/89. Production in the seven States that comprise the Western area (California, Washington, Oregon, Idaho, Utah, New Mexico, and Colorado) is expected to reach 5.6 billion pounds, down fractionally from the August forecast, but 14 percent more than last season's crop.

Production in the Central region (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Montana, Missouri, Ohio, Kentucky, Tennessee, Arkansas, and Wisconsin), although mixed among States, is also expected to be up 20 percent from last season's drought-reduced crop, at 1.5 billion pounds. The larger 1989/90 crop in these two regions is likely to keep downward pressure on fresh market prices during the current marketing season.

The October forecast for apple production in the Eastern States (Connecticut, Delaware, Georgia, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and South Carolina) was lowered 4 percent from August as the extent of damage caused by weather-related factors became more evident.

Poor pollination and set early in the season caused by heavier than normal rainfall, followed by disease problems through the summer, reduced crop prospects from Pennsylvania to Maine. Hurricane Hugo further reduced expected pro-

Table 8--U.S. noncitrus fruit: Total production, 1987, 1988, and indicated 1989

Commodity	1987	1988	1989
--1,000 short tons--			
Apples	5,374	4,579	4,813
Apricots	115	102	118
Cherries, sweet	215	186	183
Cherries, tart	179	118	132
Cranberries	166	204	196
Grapes	5,264	5,986	5,879
Nectarines	191	200	190
Peaches	1,195	1,310	1,138
Pears	940	861	842
Plums and prunes	979	750	866
Total	14,619	14,296	14,357

Source: October 1989, Crop Production, NASS, USDA.

Table 9--Apples: Regional production
1987, 1988, and indicated 1989

Area	1987	1988	1989
--Billion pounds--			
East	2.95	2.98	2.52
Central	1.58	1.24	1.48
West	6.22	4.95	5.62
Total 1/	10.75	9.17	9.62

1/ Some figures may not add to total due to rounding.

Source: October 1989, Crop Production, NASS, USDA.

duction in Virginia and North Carolina in September, while high winds and scant rainfall resulted in higher than normal fruit drop in West Virginia. Consequently, production in the region was forecast at 2.5 billion pounds on October 1, down 15 percent from last season. The smaller Eastern crop likely will boost grower prices for processing apples this season, but any impact on retail prices for processed apple products is not likely to be felt until later next year due to heavier season carryin of many processed apple products.

Because of the record-large crop expected in Washington, shipments from that State during the beginning of October were at their highest ever. Consequently, prices are sharply lower than last year. In mid-October, the f.o.b. price for Red Delicious apples in Yakima Valley-Wenatchee, Washington, was mostly \$9-\$10 a tray pack, size 80-113's, U.S. Extra Fancy, compared with about \$14 a year ago. F.o.b. prices are also substantially lower at other major shipping points due to the heavier supplies. Similarly, the October average grower price was 15.9 cents per pound for fresh apples, compared with 18.3 cents in 1988. Prices for the remainder of the season will depend upon how well demand rebounds from the slump created earlier this year following public concerns about Alar residues in apples.

Avocados

Florida Crop Significantly Larger

The 1989/90 (April/March) Florida avocado crop for certified shipments is forecast at 1.4 million 50-pound bushels, 32 percent more than last season's shipments. This would be a new record, surpassing 1982/83's mark by 8 percent. The production increase is due to yield improvements stemming from optimal weather conditions during the bloom and fruit set period.

Reflecting the larger crop, certified shipments between April and September were 617,300 bushels, up 17 percent from a year ago, and 3 percent from 1982/83. Larger supplies have meant lower f.o.b. shipping point prices for Florida growers than last year. In mid-October, f.o.b. shipping point prices for Florida avocados were ranging between \$4.50 and \$5.00 a 1-layer flat for various greenskin varieties sizes 7-16, compared with about \$6.00 the same time last year. With 56 percent of the forecast 1989/90 season shipments remaining to be shipped, prices are likely to remain steady to lower for the remainder of the season.

As the 1988/89 avocado season (November/October) winds down in California, industry analysts project season shipments at 6.4 million bushel-equivalents, 10 percent less than 1987/88. In mid-August, the industry reported 880,000 bushel-equivalents remained to be shipped, 33 percent less than in August 1988. Lighter shipments have kept some upward pressure on f.o.b. prices at California shipping points, but prices were ranging below a year ago in mid-October—mostly \$32-\$33.50 for Hass size 40 in 2-layer place or tray packs, compared with \$45-\$49 a year earlier.

Table 10--Red Delicious apples: Shipping point prices for selected regions,
1987, 1988, and 1989

Shipping point	Mid-October f.o.b. prices			Units
	1987	1988	1989	
--Dollars--				
Western Michigan	6.50	9-9.50	6.50-7.00	Per carton, U.S. fancy 2 1/4" up, 12-3 pound film bag.
Appalachian District	7-8	10-11	9-9.50	U. S. Comb. Extra fancy and fancy, tray pack, 88-113's.
Yakima Valley, Washington	8-9	14.00	9-10	Per carton tray pack, Wash. State Extra fancy, 80-113's.

Source: National Shipping Point Trends.

Although an official forecast is also not available for California's 1989/90 season, industry analysts estimate shipments will range between 6 and 6.5 million bushels. Crop prospects were reduced in April after unseasonably high temperatures resulted in some loss of bloom and lowered fruit set.

Exports Fall Off With Smaller 1988/89 Supplies

U.S. avocado exports for the first 10 months of the 1988/89 season (October/September), at 6,779 metric tons, were 46 percent less than a year ago. The decline was due to smaller California supplies and heavy domestic demand. Exports were significantly down to all major U.S. export markets except Canada.

Bananas

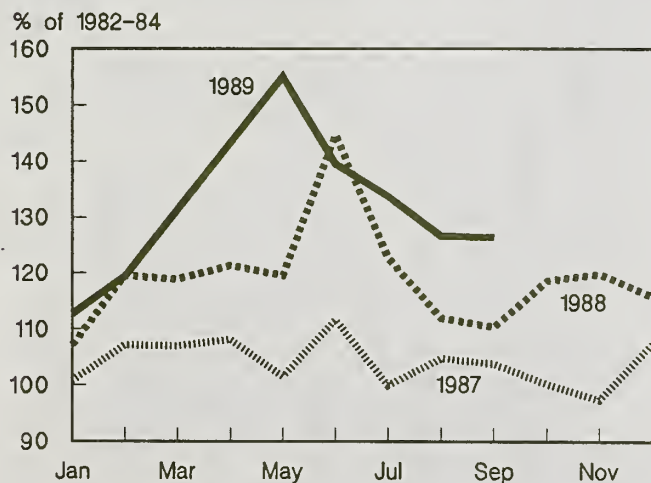
Smaller Supplies and Higher Prices

U.S. banana imports reached 1.96 million metric tons during the first 8 months of 1989, less than 1 percent more than a year ago. Imports from Ecuador, the largest supplier, were up 12 percent from the 516,650 metric tons received during the same period last year. Because of slower imports from Honduras, Costa Rica has become the second largest supplier to the United States this year. Imports from Costa Rica between January and August totaled 422,765 metric tons, up 14 percent from last year. Imports from Honduras were off 11 percent, at 384,822 metric tons.

Colombian banana exports resumed after the end of last year's labor strike, which shut down shipments. Exports to the United States resumed after resolution of the labor strike and growers were able to reduce the incidence of shipments contaminated with scarab beetles and crickets. However, as of August, U.S. banana imports from Colombia were only 300,745 metric tons, almost even with those last year.

Figure 10

Bananas: BLS Consumer Price Index



Shorter banana supplies kept retail prices well above last year during most of the first 9 months of 1989. Retail prices peaked in April at 52.3 cents a pound, 10.0 cents higher than the previous April. Since then, retail prices steadily declined to 42.8 cents a pound in September in response to increased supplies of summer fruit. Banana prices are likely to remain higher than last year through 1989 because of only moderately heavier imports, but larger supplies of fresh apples and pears may provide some downward pressure.

Although bananas remain the most popular fresh fruit with U.S. consumers, lower imports and relatively high prices have caused banana consumption to decline for the past 2 years and may cause a further drop in 1989. U.S. per capita banana consumption has declined from a record 25.72 pounds in 1986, to 24.15 pounds in 1988.

Grapes

The 1989 U.S. grape crop is forecast 2 percent below last year but still larger than 1987. Smaller crops of table- and wine-type grapes in California more than offset a larger crop of raisin-type grapes. California is expected to account for 91 percent of the U.S. crop this year. Drought in 1988 hurt certain varieties in New York, lowering the State's total grape crop about 1 percent from last year. In Michigan, the grape crop is forecast down 15 percent from last season.

Fresh Grape Shipments Up

Shipments of fresh grapes through October 1 were almost 8 percent ahead of the same period a year ago. Demand has been strong reflecting the high quality grapes of good size, and active promotion and advertising by the industry, wholesalers, and retailers this season. September 30 stocks of grapes in cold storage were 23 percent below the same date a year ago. Increased shipments through October 1, a smaller crop of table varieties, and lower stocks likely will lead to a tighter market as the season progresses.

The trend in net exports of fresh grapes has been down sharply in the 1980's as Chile has become a major supplier during the off-season. Imports of fresh grapes from Mexico, entering during the first part of the domestic harvest, were off over 33 percent this year. Although imports of fresh grapes from Chile arrive in the United States mostly during the off-season, there is some evidence that the amount imported does influence the U.S. all-grape price received by growers. Imports from Chile were off last season compared to the year before. This likely contributed to a more favorable price than would have otherwise existed.

For the week of October 13, the average f.o.b. price for 23-pound lugs of Thompson seedless grapes in the Central San Joaquin Valley, at \$12.50, was \$5.50 higher than the year before. Earlier in the season, prices were below a year ago. Compared with the previous year, f.o.b. prices for flame

Table 11--Grapes: Total production and season-average prices received by growers in principal States, 1987, 1988, and indicated 1989 production

States	Production 1/			Price per ton	
	1987	1988	1989	1987	1988
	--1,000 short tons--			--Dollars--	
New York	178.0	157.0	155.0	228	230
Pennsylvania	62.5	58.0	60.0	235	215
Ohio	10.0	8.9	9.8	216	264
Michigan	60.0	53.0	45.0	260	256
Missouri	2.8	3.3	3.1	351	311
North Carolina	1.8	3.3	2.3	360	330
Georgia	2.7	2.5	2.8	870	911
South Carolina	0.7	0.5	0.3	344	394
Arkansas	5.0	7.0	5.0	269	300
Arizona	31.0	25.5	26.0	1,010	1,250
Washington	249.5	182.0	220.0	225	245
Total	604.0	501.0	529.3		
California:					
Wine	1,950.0	2,180.0	2,050.0	248	297
Table	540.0	755.0	700.0	435	262
Raisin 2/ 3/	2,170.0	2,550.0	2,600.0	223	201
All	4,660.0	5,485.0	5,350.0	258	247
United States	5,264.0	5,986.0	5,879.3	259	251

1/ Includes unharvested production and harvested not sold (tons): U.S.-1987-13,500; 1988-1,600. 2/ Fresh basis. 3/ Excludes production from approximately 15,000 acres of thompson seedless vineyards in the Voluntary Raisin Industry Diversion (RID) programs for 1987 and 25,000 acres in 1988. There is no RID program for the 1989 season.

Sources: October 1989, Crop Production and Noncitrus Fruit and Nuts, Midyear Supplement, NASS, USDA.

Figure 11
Grape Production by Type

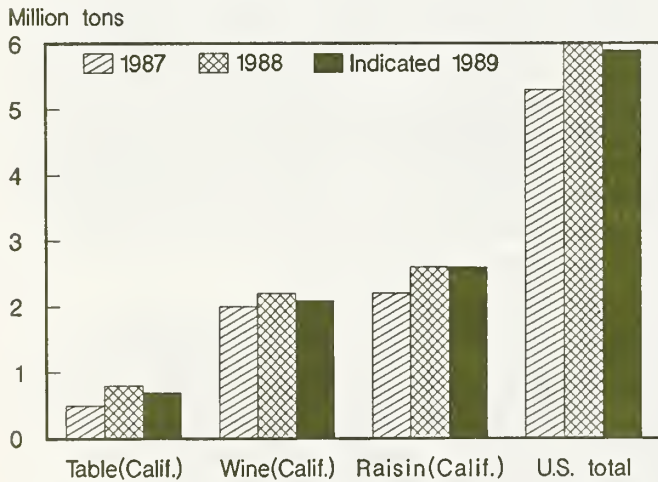
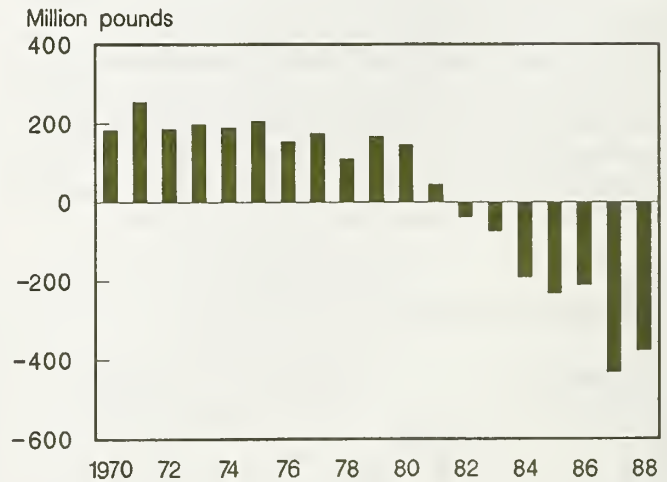


Figure 12
U.S. Net Exports of Table Grapes



seedless grapes were off about 30 cents per lug for the week ending October 6.

September Rains Hit California Raisin Crop

Rain and high humidity made for poor drying conditions for several days in September, and caused variable damage to California raisin-type grapes. An estimated 40 percent of the raisin crop was exposed at the time. The greatest damage was in the Merced and Madera areas. The exact damage is still uncertain. However, excellent drying conditions before and after the period greatly moderated what might have been a disaster for the raisin crop. Minimal damage to the grape crop, including table and wine grapes, was reported elsewhere.

Raisin supplies should be adequate despite a smaller carryover of raisin stocks. Good quality grapes that tend to increase the tonnage of raisins produced and success in reconditioning raisins affected by the rain and adverse drying conditions, will help moderate the impact on the size of this year's raisin crop. The larger crop of raisin-type grapes and less competition from wineries for them, left more grapes for drying. The raisin crop likely will be the largest in recent years despite the adverse weather.

Smaller Crush Expected

As of early October, total crush for wine was about 3 percent behind the same time a year ago, reflecting the smaller wine-type grape crop and smaller crush of both table- and raisin-type grapes. Prices paid by wineries in the San Joaquin Valley areas were running below a year ago for most varieties. Lower shipments and high inventories of wine from the large 1988 crush softened the demand for crushing grapes this year compared to last.

Figure 13
**U.S. Raisin Pack and
BLS Producer Price Index**

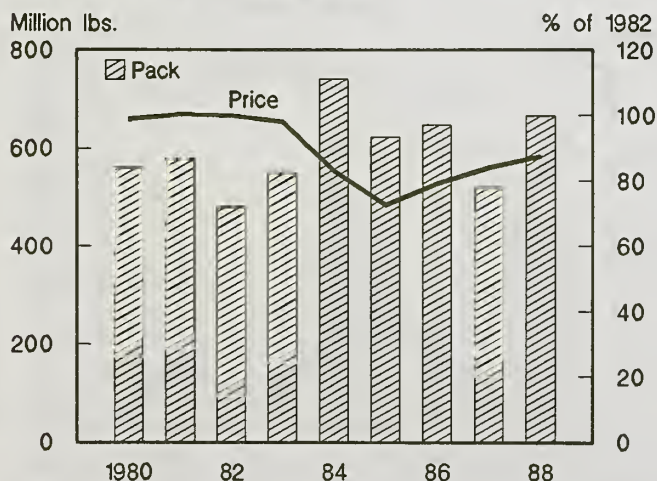
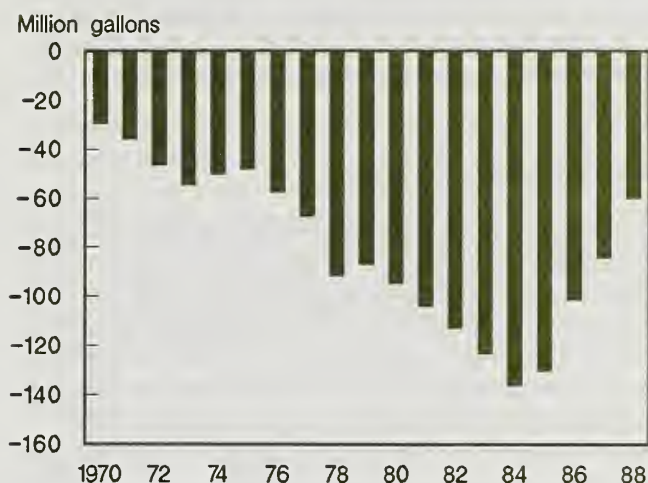


Figure 14
U.S. Net Exports of Wine



Wine Exports Improve

Exports of grape wine for the first 8 months of 1989 were 21 percent ahead of the year before while imports were about 8 percent behind. This has improved the net export position of the United States. Exports were up to all major countries despite the somewhat stronger dollar in some markets. According to U.S. trade data, exports to Canada were up over 35 percent as the U.S. dollar weakened against the Canadian dollar and provisions of the U.S.-Canadian free trade agreement took effect.

Season Average Prices Likely Lower

The average all-grape price received by growers will likely be somewhat lower this season than last despite the smaller grape crop and reduced carryover of raisins. The lower all-grape price is expected because of lower fresh grape prices early in the season compared to last, and somewhat lower prices paid by wineries for crushing grapes this year.

Kiwifruit

Kiwifruit has gained a foothold in many markets around the world, including the United States due to growing consumer awareness and popularity. Per capita consumption in the United States was estimated at 0.26 pounds in 1988, up from .15 pounds in 1984 when per capita consumption was first estimated. Per capita consumption has increased sharply in other countries, especially Europe and Japan, and now far exceeds that in the United States. With the growth in demand, kiwifruit has become an important commodity in world trade, and production has increased in many parts of the world. Competitive forces are now causing production adjustments among world suppliers.

The main trade flows in kiwifruit are from New Zealand to Europe and Japan. For the 1987/88 season (July/June), New

Zealand accounted for about three-fourths of total exports from the major producing countries. Sharp growth in Italian production made Italy the number two exporting country. U.S. exports have grown and now total about one-third of those from Italy, making the United States the third largest exporter.

World Competition Increasing

Information from the Organization For Economic Co-Operation and Development (OECD) indicates that Italy has overtaken New Zealand in total area planted to kiwifruit.

Acreage in Italy jumped from about 15,000 acres in 1985 to over 47,000 in 1988. Acreage in New Zealand has been quite flat since 1985, with just over 40,000 acres reported in 1988. Total acreage in Chile has also jumped, increasing from about 5,000 acres in 1985 to almost 25,000 in 1988. Because much of this acreage is not yet in production, Chile will most certainly become a major factor in future world trade in kiwifruit. Because Chile's and New Zealand's harvest seasons coincide, New Zealand will face stronger competition for the Northern Hemisphere markets in Europe, the United States, and some Pacific Rim countries.

In addition to Italy, acreage planted in kiwifruit has expanded in France, Greece, and Portugal. Although consumption has increased in those countries, production will likely outstrip the expansion in domestic demand. As Europe becomes more self-sufficient, market opportunities there will become tighter for the United States. The U.S. market share in Europe has already declined.

U.S. Production Continues To Rise

When first estimated in 1980, there were 1,600 acres of kiwifruit grown in California. By 1988 acreage had increased to 6,900 and is expected to be about 7,100 this

year. Favorable prices and growing market opportunities led to substantial investment in kiwifruit in the 1970's and early 1980's. Total production grew from 5,300 short tons in 1980 to 32,700 in 1988. Although the United States is a net importer, imports from the Southern Hemisphere between May and October have been largely offset with exports during the U.S. marketing season from October to April. Generally, imports from New Zealand have not competed directly with the U.S. crop due to differences in the marketing season.

U.S. Grower Prices Trend Down

Increasing supplies have put downward pressure on prices received by kiwifruit growers. The season average grower price in 1988 was \$760 per ton, up slightly from the decade low of \$710 in 1987, but much lower than the \$1,030 in 1986 and previous years.

Good Crop Expected This Year

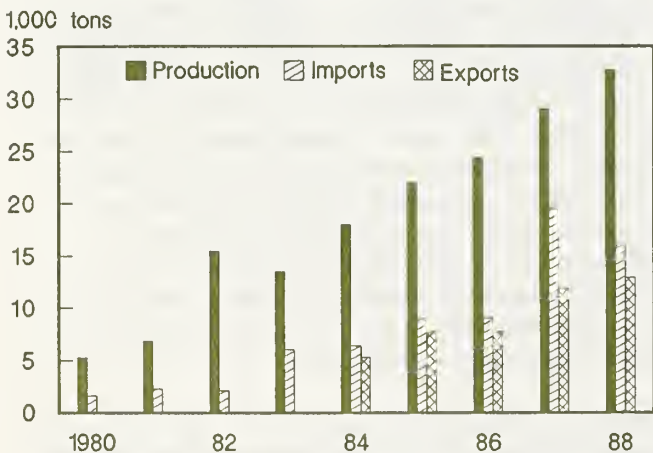
The kiwifruit harvest got underway in California in early October. Crop prospects are good due to the mild summer weather, and reportedly, there has been less scarring of the fruit than normal. Yields should be above average and the fruit of good size. Industry sources indicate that 1989 production could be 8 percent above 1988.

Grower Prices May Exceed Last Year

Despite the larger crop, U.S. grower prices for kiwifruit likely will be somewhat higher this year than last. Prices for New Zealand kiwifruit were strong as its season ended and the harvest here began. Strong domestic and foreign demand, especially in Japan and Taiwan, will help move the larger crop this season. The kiwifruit crop in Japan was adversely affected by a typhoon, as well as a light bloom and fruit set this year. This should help U.S. sales to Japan this season.

Figure 15

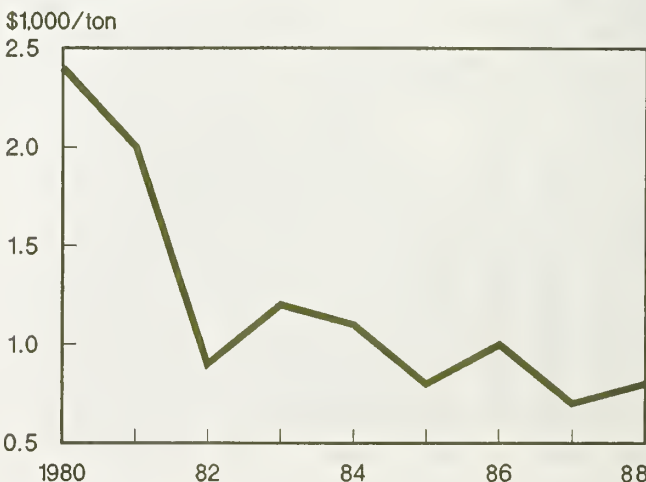
U.S. Kiwifruit: Production, Imports, and Exports



Export data not available for 1980-83.

Figure 16

Kiwifruit: Season Average Grower Prices



Tree Nuts

Almonds

1989 Crop Significantly Lower

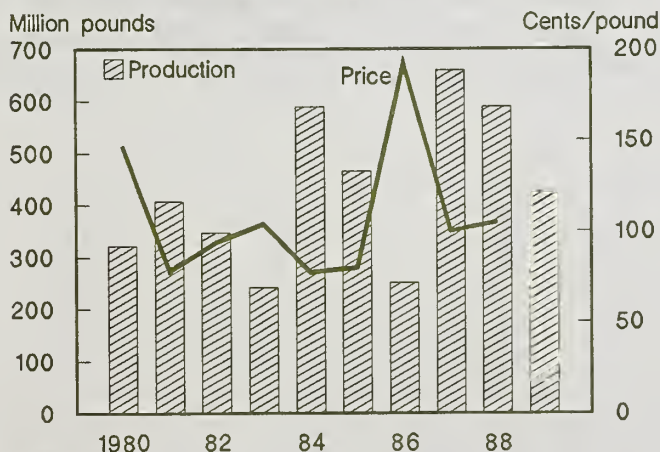
The USDA forecast, as of July 1, for the 1989 California almond crop was 425 million pounds, shelled basis, down 28 percent from last year's crop of 590 million pounds. The 1989 almond yield was forecast at 1,057 pounds per acre, compared with a final yield of 1,450 pounds in 1988.

Trade sources indicate harvest may fall below the early-season forecast of 425 million pounds. Rains in September occurred when 30 percent of the almond crop was still unharvested. Some tonnage likely will be lost due to the wet conditions. Warm temperatures and high humidity also contributed to mold growth, which will lower the quality of the tonnage that remained to be harvested. In late September, major suppliers withdrew from sales of industrial grades of almonds. Prior to the rains, opening f.o.b. prices had been announced at levels moderately above the previous year.

As of September 30, about 240 million pounds of almonds had been received by handlers, compared with 324 million pounds a year earlier. Shipments to domestic buyers from July 1 to September 30, 1989, totaled 47.7 million pounds (43.3 million for the same period in 1988) while export shipments through the same date were 87.9 million pounds (125.8 million for the year earlier). Export shipments for the entire 1989/90 marketing season may fall 5 to 10 percent from last year's record because of strong domestic demand and a large Spanish crop. Spain should increase its shipments this year reflecting the record large crop. However, primarily due to a good carryover supply of 1988 almonds, California is expected to have record domestic shipments.

Figure 17

Almonds: Production and Season-Average Grower Prices



Shelled basis.

World production of almonds is expected to total 345,000 metric tons this season, 5 percent lower than 1988/89. However, beginning stocks are higher than a year earlier resulting in a total supply only 1 percent lower than 1988/89.

Almond consumption in the major producing countries reached 168,000 metric tons in 1988/89 and is expected to increase to more than 170,000 metric tons in 1989/90. World almond exports this season, at 220,000 metric tons, are expected to be 15 percent higher than in the 1988/89 season. This should reduce world almond supplies substantially and leave world carryout at about 141,000 metric tons heading into the 1990 harvest.

Walnuts

1989 Walnut Crop Slightly Larger

The USDA forecast, as of September 1, for 1989 California walnut production was 210,000 tons, in-shell basis, 2 percent above last year's crop, but 15 percent below the 1987 record.

Walnut in-shell shipments to domestic and export markets during August-September (the first 2 months of the marketing year) totaled 14.9 million pounds, compared with 11.2 million pounds a year earlier. Shelled walnut shipments during August-September totaled 24.1 million pounds, compared with 22.8 million pounds a year earlier. This is an early indication that demand continues strong for both domestic and export outlets, which should help boost prices as the season progresses.

Pecans

Weather Adversely Affects 1989 Pecan Crop

USDA's forecast, as of October 1, for the pecan crops in 12 producing States was 240 million pounds, in-shell basis, 22 percent below 1988. Heavy rains in the Southeastern States caused significant damage and loss to this year's crop. Also, dry weather occurred in a number of areas at a critical time when trees needed moisture for the nuts to fill properly.

Mexico expects to harvest 60-70 million pounds of pecans this year and may export as much as 50 percent of its production to the United States. Mexico shipped only a small quantity of pecans to U.S. suppliers last season due to abundant U.S. supplies and a short Mexican crop.

Hazelnuts (Filberts)

1989 U.S. Crop Expected Down

Oregon and Washington hazelnut (filbert) growers are expecting to harvest 13,500 tons, in-shell, in 1989 compared with 16,500 tons last year. Harvest was active in early October and conditions were good. Nut size and quality are also reportedly good.

Figure 18

California Almond Exports by Destination

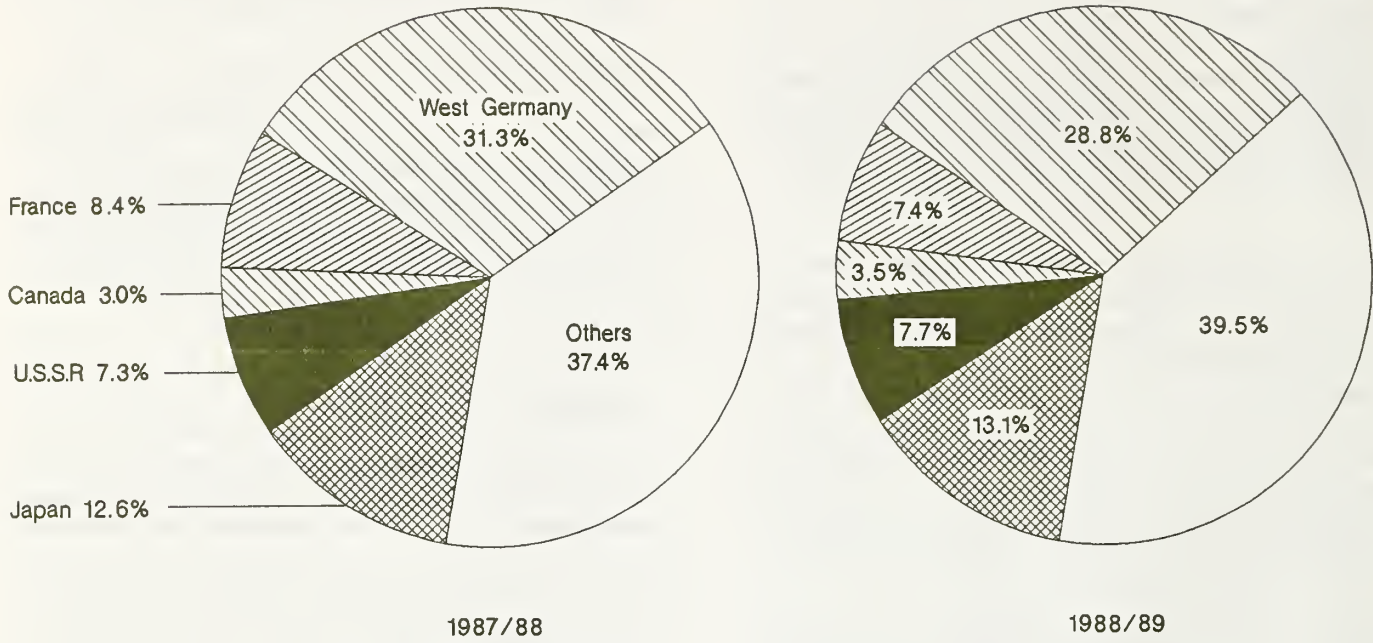


Figure 19

Walnuts: Production and Season-Average Grower Prices

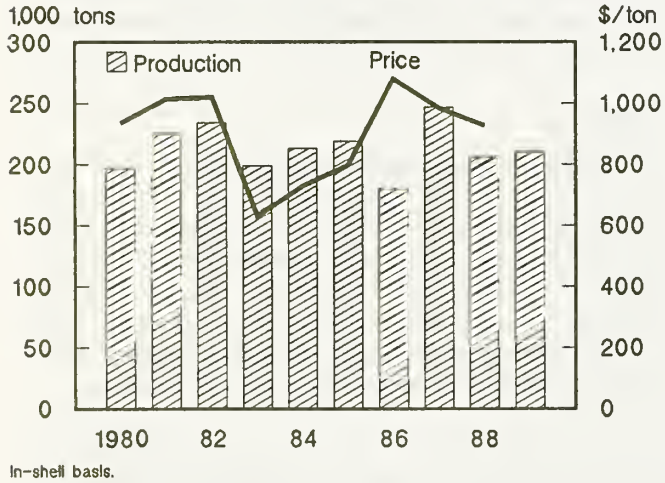


Figure 20

Pecans: Production and Season-Average Grower Prices

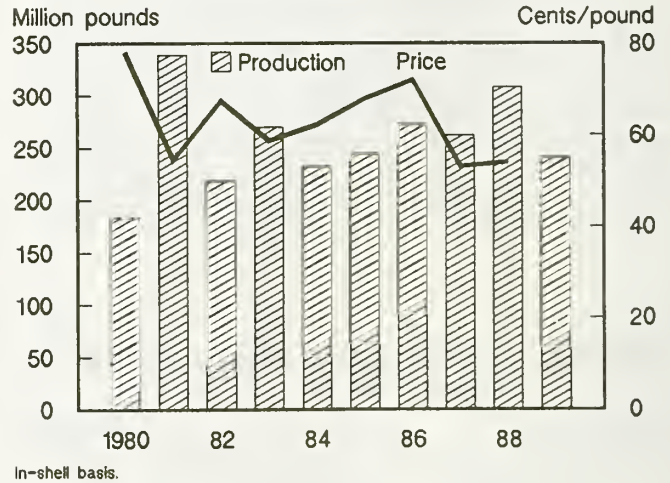
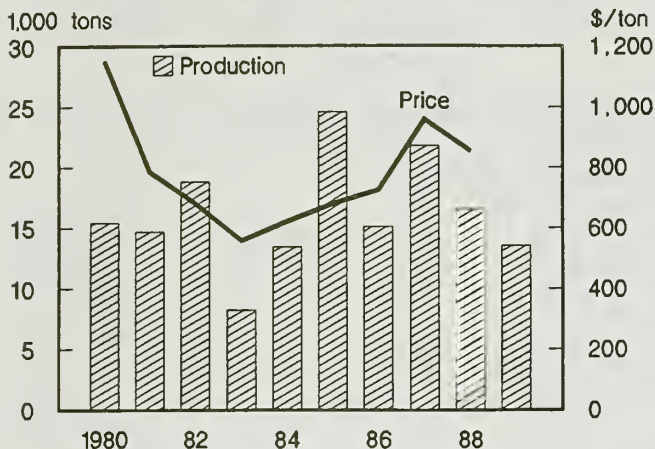


Figure 21

Hazelnuts: Production and Season-Average Grower Prices



In-shell basis

World hazelnut production is expected to total 645,000 metric tons, up 9 percent from last season. Beginning stocks are also up sharply at 114,000 metric tons, which will result in a total supply of 790,000 metric tons, up 14 percent from the 1988/89 season. World exports should increase to about 393,000 tons and domestic consumption in the four major producing countries of Italy, Spain, Turkey, and the United States is expected to increase 27 percent to 249,000 tons. Ending stocks next August should approximate 147,000 tons for the four major countries, up sharply from carryout in previous seasons.

Pistachios

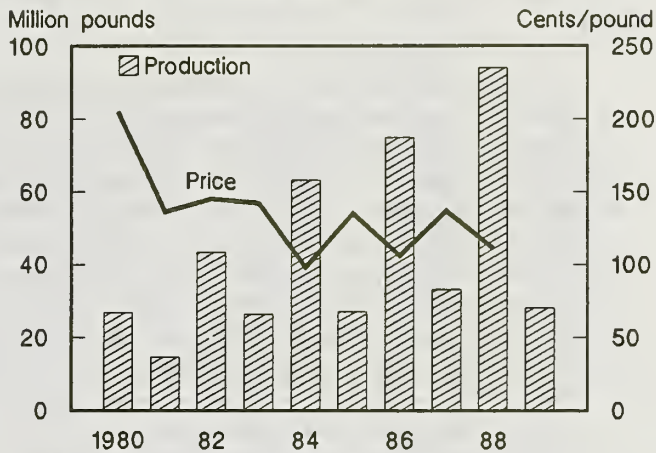
1989 U.S. Pistachio Crop Down Sharply

USDA's forecast as of September 1 for the 1989 California pistachio crop was 28.0 million pounds, sharply below the record 94.0 million harvested last year. This is the "off-year" in the alternating production cycle of this crop. The 1989 forecast is based on 46,500 bearing acres yielding 602 pounds per acre, the lowest yield since 1981. Early harvest reports indicate excellent quality and size.

Based on deliveries through the end of October, the California Pistachio Commission now estimates that 29.9 million

Figure 22

Pistachios: Production and Season-Average Grower Prices



In-shell basis.

pounds of in-shell pistachios will be harvested this year. The industry reports a carryover of 23.3 million pounds of snack types from the 1988 harvest, which will provide a total supply of 53.2 million pounds for the 1989/90 marketing year. Increasing demand and record shipments to domestic and export outlets of 59 million pounds this past year will firm prices during 1989/90.

Other Tree Nuts

Macadamia production in Hawaii and other producing areas, such as Australia, Costa Rica, Guatemala, South Africa, and Malawi, is expected to continue increasing each year due to additional planted acreage. In the next decade, many areas are expected to double or triple their output. California, which produces very few macadamias, will continue to make very slow gains.

Supplies of Brazil nuts this season are reported to be severely short, which will likely push prices sharply higher. Supplies of cashews, pignolias (pine nuts) and other tree nuts are unknown at this time, although imported quantities this year have been reported higher than in 1988.

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Table 12--Tree nuts: Production in principal States, 1987, 1988, indicated 1989

Crop and State	1987	1988	Indicated 1989	Crop and State	1987	1988	Indicated 1989
Almonds:				Pecans:			
California	660,000	590,000	425,000	North Carolina	2,000	5,500	2,000
		--Short tons-- in-shell basis		South Carolina	3,400	6,500	1,200
				Georgia	115,000	110,000	95,000
Hazelnuts:				Florida	5,500	6,000	5,000
Oregon	21,500	16,300	13,300	Alabama	25,000	10,000	20,000
Washington	300	200	200	Mississippi	12,000	10,000	10,000
2 States	21,800	16,500	13,500	Arkansas	1,300	3,000	1,500
Macadamia nuts:				Louisiana	19,000	22,000	13,000
Hawaii	21,350	22,750	N/A	Oklahoma	12,000	47,000	12,000
				Texas	42,000	60,000	50,000
Pistachios:				New Mexico	25,000	26,000	29,000
California	16,550	47,000	14,000	California 1/		2,000	1,700
Walnuts, English:				Total	262,200	308,000	240,400
California	247,000	206,000	210,000	Improved varieties 2/	179,650	185,300	172,950
				Native and seedling	82,550	122,700	67,450
				Total 5 tree nuts 3/	568,900	600,250	4/ 477,900

N/A=not available.

1/ Estimates began with the 1988 crop.

2/ Budded, grafted, or topworked varieties.

3/ Excludes almonds.

4/ Excludes macadamia nuts.

Sources: October 1989, Crop Production and Noncitrus Fruit and Tree Nuts, Midyear Supplement, NASS, USDA.

Table 13--Almonds: Production, supply, and distribution, by countries, 1986/87-1989/90

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
--Metric tons, shelled basis--									
GREECE	1986/87	253	14,800	400	15,453	3,000	12,100	353	15,453
	1987/88	353	8,500	2,500	11,353	5,000	8,040	2,813	11,353
	1988/89	2,813	19,000	1,160	21,973	5,800	14,000	2,173	21,973
	1989/90	2,173	16,300	1,000	19,473	4,000	13,800	1,673	19,473
ITALY	1986/87	3,000	17,000	6,700	26,700	6,323	16,877	3,500	26,700
	1987/88	3,500	12,000	11,705	27,205	3,008	18,197	6,000	27,205
	1988/89	6,000	14,000	11,000	31,000	6,700	19,300	7,000	31,000
	1989/90	7,000	20,000	7,000	34,000	7,000	20,000	7,000	34,000
MOROCCO	1986/87	250	7,052	0	7,302	2,196	4,506	600	7,302
	1987/88	600	6,280	0	6,880	1,262	5,018	600	6,880
	1988/89	600	7,417	0	8,017	1,150	6,267	600	8,017
	1989/90	600	8,500	0	9,100	2,000	6,500	600	9,100
PORTUGAL	1986/87	256	3,200	13	3,469	1,334	1,940	195	3,469
	1987/88	195	2,700	662	3,557	3,534	2,028	995	3,557
	1988/89	995	1,400	920	3,315	420	2,100	795	3,315
	1989/90	795	2,500	500	3,795	1,000	2,150	645	3,795
SPAIN	1986/87	19,490	50,000	255	69,745	30,500	25,000	14,245	69,745
	1987/88	14,245	65,000	5,400	84,645	16,600	30,000	38,045	84,645
	1988/89	38,045	40,000	6,500	84,545	14,000	30,000	40,545	84,545
	1989/90	40,545	90,000	1,000	131,545	35,000	30,000	66,545	131,545
TURKEY	1986/87	5,000	12,000	0	17,000	1,000	12,000	4,000	17,000
	1987/88	4,000	10,000	0	14,000	1,000	11,000	2,000	14,000
	1988/89	2,000	13,000	0	15,000	1,000	12,000	2,000	15,000
	1989/90	2,000	15,000	0	17,000	1,000	13,000	3,000	17,000
UNITED STATES 2/	1986/87	72,354	113,400	847	186,601	82,385	68,374	35,842	186,601
	1987/88	35,842	299,370	288	335,500	155,718	75,323	104,459	335,500
	1988/89	104,459	267,620	733	372,812	165,051	84,530	123,231	372,812
	1989/90	123,231	192,777	900	316,908	170,000	85,000	61,908	316,908
TOTALS	1986/87	100,603	217,452	8,215	326,270	126,738	140,797	58,735	326,270
	1987/88	58,735	403,850	20,555	483,140	178,622	149,606	154,912	483,140
	1988/89	154,912	362,437	19,313	536,662	192,121	168,197	176,344	536,662
	1989/90	176,344	345,077	10,400	531,821	220,000	170,450	141,371	531,821

1/ Marketing years are as follows: July-June in United States, Morocco, and Tunisia; September-August in Spain, Italy, and Turkey; October-September in Greece; and January-December in Portugal.

2/ U.S. export, stock, and consumption data are from the Almond Board of California.

Note: U.S. Census Bureau export figures do not match the data due to variations in actual dates of shipments.

Source: Horticultural Products Review, FAS, USDA.

Table 14--Hazelnuts: Production, supply, and distribution, by countries, 1986/87-1989/90

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
--Metric tons, in-shell basis--									
ITALY	1986/87	10,000	90,000	14,659	114,659	53,881	49,778	11,000	114,659
	1987/88	11,000	90,000	24,035	125,035	55,131	51,902	18,002	125,035
	1988/89	18,002	140,000	17,000	175,002	86,000	57,000	32,002	175,002
	1989/90	32,002	120,000	18,000	170,002	80,000	58,000	32,002	170,002
SPAIN	1986/87	10,140	19,000	446	29,586	15,986	10,600	3,000	29,586
	1987/88	3,000	32,000	590	35,590	13,560	10,200	11,830	35,590
	1988/89	11,830	18,000	500	30,330	10,500	11,000	8,830	30,330
	1989/90	8,830	33,000	500	42,330	9,000	12,000	21,330	42,330
TURKEY	1986/87	65,000	300,000	0	365,000	241,000	74,000	50,000	365,000
	1987/88	50,000	280,000	0	330,000	199,000	91,000	40,000	330,000
	1988/89	40,000	420,000	0	460,000	280,000	110,000	70,000	460,000
	1989/90	70,000	480,000	0	550,000	300,000	160,000	90,000	550,000
UNITED STATES	1986/87	4,644	13,700	4,918	23,262	6,171	14,887	2,204	23,262
	1987/88	2,204	19,780	4,450	26,434	6,549	16,911	2,974	26,434
	1988/89	2,974	14,969	10,364	28,307	6,550	18,222	3,535	28,307
	1989/90	3,535	12,247	11,524	27,306	4,306	19,000	4,000	27,306
TOTALS	1986/87	89,784	422,700	20,023	532,507	317,038	149,265	66,204	532,507
	1987/88	66,204	421,780	29,075	517,059	274,240	170,013	72,806	517,059
	1988/89	72,806	592,969	27,864	693,639	383,050	196,222	114,367	693,639
	1989/90	114,367	645,247	30,024	789,638	393,306	249,000	147,332	789,638

1/ Marketing years are as follows: August-July in United States; September-August in Spain, Italy, and Turkey.

Note: U.S. Census Bureau export figures do not match the data due to variations in actual dates of shipments.

Source: Horticultural Products Review, FAS, USDA.

Table 15--Seven citrus fruits: Production, use, and value, United States, 1981/82-1988/89

Fruit and season	Production --1,000 short tons--	Use of production				Value of production 1,000 dollars
		Fresh		Processed		
		Quantity	Percentage	Quantity 1,000 short tons	Percentage	
Oranges:						
1981/82	7,600	1,817	23.9	5,783	76.1	1,167,301
1982/83	9,519	2,323	24.4	7,196	75.6	1,317,056
1983/84	7,243	1,867	25.8	5,376	74.2	1,303,885
1984/85	6,719	1,876	27.9	4,843	72.1	1,455,410
1985/86	7,476	2,112	28.3	5,364	71.7	1,090,428
1986/87	7,697	2,070	26.9	5,627	73.1	1,322,499
1987/88	8,551	2,085	24.4	6,466	75.6	1,773,681
1988/89	8,878	1,970	22.2	6,908	77.8	1,776,367
Grapefruit:						
1981/82	2,878	1,158	40.2	1,720	59.8	227,592
1982/83	2,465	1,297	52.6	1,168	47.4	186,197
1983/84	2,184	1,028	47.1	1,156	52.9	220,196
1984/85	2,266	911	40.2	1,355	59.8	310,530
1985/86	2,352	1,088	46.3	1,264	53.7	341,957
1986/87	2,586	1,200	46.4	1,386	53.6	414,395
1987/88	2,801	1,332	47.6	1,469	52.4	478,588
1988/89	2,861	1,397	48.8	1,464	51.2	424,236
Lemons:						
1981/82	942	401	42.6	541	57.4	105,688
1982/83	950	436	45.9	514	54.1	109,298
1983/84	788	428	54.3	360	45.7	117,408
1984/85	967	441	45.6	526	54.4	168,276
1985/86	692	433	62.6	259	37.4	217,065
1986/87	1,087	469	43.1	618	56.9	182,171
1987/88	785	459	58.5	326	41.5	202,046
1988/89	759	466	61.4	293	38.6	223,504
Limes:						
1981/82	58	28	48.3	30	51.7	16,170
1982/83	75	43	57.3	32	42.7	22,255
1983/84	63	36	57.1	27	42.9	17,506
1984/85	72	45	62.5	27	37.5	19,901
1985/86	76	39	51.3	37	48.7	21,901
1986/87	63	37	58.7	26	41.3	19,569
1987/88	57	38	66.7	19	33.3	23,314
1988/89	55	42	76.4	13	23.6	21,474
Tangelos:						
1981/82	229	80	34.9	149	65.1	27,865
1982/83	171	85	49.7	86	50.3	24,102
1983/84	162	72	44.4	90	55.6	22,796
1984/85	162	66	40.7	96	59.3	34,354
1985/86	133	60	45.1	73	54.9	19,141
1986/87	180	59	32.8	121	67.2	24,626
1987/88	189	63	33.3	126	66.7	32,605
1988/89	171	61	35.7	110	64.3	30,913
Tangerines: 1/						
1981/82	288	150	52.1	138	47.9	53,125
1982/83	291	179	61.5	112	38.5	56,457
1983/84	262	163	62.2	99	37.8	52,020
1984/85	193	122	63.2	71	36.8	65,554
1985/86	196	131	66.8	65	33.2	61,952
1986/87	228	157	68.9	71	31.1	69,720
1987/88	218	153	70.2	65	29.8	80,400
1988/89	239	153	64.0	86	36.0	73,378
Temples:						
1981/82	144	38	26.4	106	73.6	18,862
1982/83	211	70	33.2	141	66.8	28,056
1983/84	130	34	26.2	96	73.8	21,489
1984/85	146	28	19.2	118	80.8	26,225
1985/86	133	41	30.8	92	69.2	16,052
1986/87	153	47	30.7	106	69.3	20,513
1987/88	160	58	36.3	102	63.8	27,940
1988/89	169	39	23.1	130	76.9	25,219
Total: 2/						
1981/82	12,139	3,672	30.2	8,467	69.8	1,616,603
1982/83	13,682	4,433	32.4	9,249	67.6	1,743,421
1983/84	10,832	3,628	33.5	7,204	66.5	1,755,300
1984/85	10,525	3,489	33.1	7,036	66.9	2,080,250
1985/86	11,058	3,904	35.3	7,154	64.7	1,768,496
1986/87	11,994	4,039	33.7	7,955	66.3	2,053,493
1987/88	12,761	4,188	32.8	8,573	67.2	2,618,574
1988/89	13,132	4,128	31.4	9,004	68.6	2,585,091

1/ Per program modification, all tangerines include honey tangerines beginning with the 1987/88 crop year. Estimates starting with the 1981/82 season have been revised to include the honey variety.

2/ Does not include Florida lemons and k-early citrus fruit.

Source: Citrus Fruits, NASS, USDA.

Table 16--Selected citrus fruit: Used for processing by percentages of total production, 1981/82-1988/89

State and variety	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
--Percent--								
ORANGES:								
Florida								
Temples	73.8	66.7	73.7	80.7	69.1	69.0	63.6	76.9
Early and midseason	93.3	91.4	92.9	92.0	92.0	92.0	92.5	93.6
Valencia	94.8	93.9	94.3	95.4	93.0	93.3	93.9	95.1
Total	93.9	92.6	93.5	93.6	92.5	92.6	93.1	94.2
California								
Navel and miscellaneous	20.0	32.3	24.8	11.8	19.7	23.2	21.0	23.8
Valencia	20.8	55.3	17.6	34.0	18.2	35.0	40.4	41.3
Total	20.3	43.2	22.6	22.9	19.1	28.0	30.0	30.9
GRAPEFRUIT:								
Florida								
Seedless	60.3	47.1	54.2	63.7	55.0	55.4	54.8	53.5
Colored	43.3	27.6	32.7	37.0	28.4	30.7	31.1	33.1
White	69.5	58.5	66.8	78.4	73.7	73.7	72.5	71.0
Other seeded	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	65.2	53.5	59.3	65.9	58.0	58.0	57.1	56.4
Texas	48.0	30.4	10.6	0.0	9.1	19.2	26.7	19.0
TANGERINES:								
Florida 1/ California	53.2 35.3	36.2 47.0	37.5 50.3	48.6 31.8	39.0 29.4	37.5 26.8	34.1 27.1	43.5 27.7
LEMONS:								
California Arizona	56.9 59.0	54.4 52.9	46.4 42.0	52.8 60.2	37.1 39.0	53.5 67.0	40.6 46.2	36.4 47.9

1/ Per program modification, all tangerines include honey tangerines beginning with the 1987/88 crop year. Estimates starting with the 1981/82 season have been revised to include the honey variety.

Source: Citrus Fruits, NASS, USDA.

Table 17--Orange and grapefruit processed, Florida, 1981/82-1988/89

Crop and season	Frozen concentrates	Chilled products	Other processed 1/	Total processed
--1,000 boxes--				
ORANGES: 2/				
1981/82	105,150	16,518	4,473	126,141
1982/83	114,627	18,254	2,665	135,546
1983/84	94,547	16,981	2,909	114,437
1984/85	86,112	14,903	1,907	102,922
1985/86	96,061	17,267	1,361	114,689
1986/87	96,182	19,661	948	116,791
1987/88	110,206	23,325	904	134,435
1988/89	113,732	29,936	1,141	144,809
GRAPEFRUIT:				
1981/82	20,052	2,406	8,923	31,381
1982/83	13,977	1,731	5,379	21,087
1983/84	18,728	1,320	4,191	24,239
1984/85	22,996	1,065	4,951	29,012
1985/86	21,572	1,189	4,369	27,130
1986/87	24,143	2,295	2,424	28,862
1987/88	26,690	1,965	2,085	30,740
1988/89	26,621	2,639	1,601	30,861

1/ Includes cannery juice, blends, sections and salads.

2/ Includes tangelos, temples, tangerines and k-early citrus.

Source: Citrus Fruits, NASS, USDA.

Table 18--Oranges used for frozen concentrate, Florida, 1985/86-1989/90

Season	Orange and temple production	Used for frozen concentrates 1/		Yield per box 2/
		--Million boxes--	Percent	
1985/86	122.2	96.1	78.6	1.38
1986/87	123.1	96.2	78.1	1.51
1987/88	141.6	110.2	77.8	1.55
1988/89	150.4	113.7	75.6	1.53
1989/90	133.0	N/A	N/A	1.48

N/A=not available.

1/ Includes tangelos, temples, tangerines, and K-early citrus.

2/ Gallons per box at 42.0 degrees Brix equivalent.

Sources: October 1989, Crop Production and Citrus Fruits, NASS, USDA.

Table 19--Citrus fruit: Season-average equivalent returns per box received by growers, by variety and use, by State and United States, 1987/88-1988/89

Variety and State	1987/88						1988/89					
	Equivalent P.H.D. 1/			Equivalent on-tree			Equivalent P.H.D. 1/			Equivalent on-tree		
	Fresh	Processed	All	Fresh	Processed	All	Fresh	Processed	All	Fresh	Processed	All
--Dollars per box-- 2/												
ORANGES:												
Florida												
Early and midseason	9.40	8.39	8.47	7.65	6.64	6.72	9.50	8.32	8.40	7.65	6.47	6.55
Valencia	10.20	10.50	10.48	8.45	8.75	8.73	9.30	10.20	10.16	7.45	8.35	8.31
All	9.71	9.31	9.33	7.96	7.56	7.58	9.43	9.11	9.13	7.58	7.26	7.28
California												
Navel and miscellaneous	9.58	1.20	7.82	7.84	-0.44	6.11	9.34	0.79	7.30	7.64	-0.91	5.60
Valencia	11.38	2.26	7.70	9.62	0.50	5.94	10.84	1.44	6.96	9.04	-0.36	5.16
All	10.29	1.86	7.77	8.55	0.15	6.03	9.85	1.14	7.16	8.12	-0.61	5.42
Arizona												
Navel and miscellaneous	11.08	1.20	10.43	9.34	-0.44	8.70	13.04	2.45	12.08	11.34	0.75	10.38
Valencia	9.08	2.26	7.08	7.32	0.50	5.32	9.84	4.09	7.67	8.04	2.29	5.87
All	9.88	2.15	8.20	8.13	0.41	6.45	11.16	3.92	9.09	9.40	2.13	7.33
Texas												
Early and midseason	9.61	4.28	9.03	8.52	2.85	7.91	8.46	5.52	8.02	7.39	4.09	6.90
Valencia	8.21	5.51	7.92	7.15	4.08	6.82	7.09	4.46	6.62	6.02	3.03	5.49
All	9.13	4.70	8.65	8.05	3.27	7.53	7.99	5.11	7.53	6.92	3.67	6.40
United States												
Early, midseason, and Navel	9.58	7.88	8.33	7.86	6.13	6.59	9.41	7.73	8.14	7.70	5.89	6.34
Valencia	11.00	9.29	9.67	9.25	7.54	7.92	10.39	9.12	9.36	8.60	7.27	7.52
All	10.15	8.52	8.92	8.41	6.78	7.18	9.76	8.33	8.65	8.02	6.49	6.83
GRAPEFRUIT:												
Florida												
Seedless	8.45	6.22	7.23	6.85	4.57	5.60	8.28	4.40	6.21	6.68	2.75	4.58
Seeded	(3)	6.59	6.59	(3)	4.99	4.99	(3)	5.28	5.28	(3)	3.68	3.68
All	8.45	6.25	7.19	6.85	4.61	5.57	8.28	4.50	6.15	6.68	2.85	4.52
Texas	7.60	4.52	6.78	6.61	3.32	5.73	6.04	1.77	5.23	5.06	0.57	4.21
California	8.90	1.08	6.24	7.43	-0.41	4.76	8.98	1.01	6.23	7.51	-0.44	4.76
Arizona	6.18	1.16	4.51	4.58	-0.44	2.91	6.74	1.06	4.95	5.14	-0.54	3.35
United States	8.37	5.77	7.01	6.84	4.16	5.43	8.08	4.16	6.07	6.56	2.53	4.50
LEMONS:												
California	16.32	0.84	10.04	13.44	-2.04	7.16	17.92	0.84	11.70	14.96	-2.12	8.74
Arizona	15.20	0.92	8.61	12.24	-2.04	5.65	15.42	1.89	8.94	12.32	-1.21	5.84
United States	16.14	0.86	9.78	13.24	-2.04	6.89	17.52	1.09	11.18	14.53	-1.91	8.19
TANGERINES:												
Florida	20.40	7.25	15.91	17.65	4.00	12.99	21.60	7.17	15.32	18.75	3.82	12.25
California	20.68	1.38	15.45	18.92	-0.38	13.69	18.74	2.16	14.15	16.94	0.36	12.35
Arizona	17.78	2.26	15.19	16.02	0.50	13.43	18.84	2.22	15.52	17.04	0.42	13.72
United States	20.18	5.03	15.67	17.93	2.36	13.29	20.21	5.66	14.96	17.88	2.78	12.43
TANGELOS:												
Florida	9.80	6.75	7.76	7.65	4.55	5.58	10.40	6.89	8.14	8.15	4.59	5.85
TEMPLES:												
Florida	9.20	7.11	7.87	7.05	4.91	5.69	9.00	6.04	6.73	6.75	3.74	4.44
LIMES:												
Florida	25.80	2.56	17.93	20.12	-1.84	12.69	21.60	3.18	17.18	15.24	-1.22	11.29

1/ P.H.D.--Packinghouse-door. 2/ Net content of box varies. Approximated average are as follows: Oranges-California and Arizona, 75 lbs.; Florida, 90 lbs.; Texas, 85 lbs.; Grapefruit-California, Desert Valleys and Arizona, 64 lbs.; other California areas, 67 lbs.; Florida, 85 lbs.; Texas, 80 lbs.; Lemons, 76 lbs.; Tangelos, 90 lbs.; Tangerines-California and Arizona, 75 lbs.; Florida, 95 lbs.; and Temples, 90 lbs. 3/ Fresh sales insignificant and included in processed.

Source: September 1989, Agricultural Prices, NASS, USDA.

Table 20--Frozen concentrated citrus juices: Canners' packs, supplies, and movement, Florida, 1986/87-1988/89

Item and season	Carryin	Pack		Supply		Movement		Stocks 1/
		To date 1/	Total season	To date 1/	Total season	To date 1/	Total season	
--1,000 gallons 2/--								
Oranges:								
1986/87	36,995	215,254	227,871	252,249	264,866	193,284	225,076	58,965
1987/88	39,790	227,745	240,861	267,535	280,651	207,940	238,567	59,595
1988/89	42,084	225,046		267,130		206,184		60,946
Grapefruit:								
1986/87	3,422	30,081	30,244	33,503	33,666	25,043	28,453	8,460
1987/88	5,216	33,247	33,463	38,463	38,679	24,683	28,881	13,780
1988/89	9,798	33,060		42,858		24,699		18,159
Tangerines:								
1986/87	279	836	471	1,115	750	993	660	122
1987/88	90	1,242	1,242	1,332	1,332	882	1,007	450
1988/89	325	587		912		802		110

1/ For 1988/89 season, week ending October 14; 1987/88, October 8; and 1986/87, October 10. These respective dates include data through the 45th week of each season.

2/ Oranges--42.0 degree Brix, grapefruit--40 degree Brix, and tangerines--42 degree Brix.

Source: Florida Citrus Processors Association.

Table 21--Canned citrus juices: Canners' packs, supplies, and movement, Florida, 1986/87-1988/89

Item and season 2/	Carryin	Pack	Total supply	Movement	Carryout
--1,000 cases, 24 No. 2's--					
Oranges: 3/					
1986/87	986	8,122	9,108	8,084	1,024
1987/88	1,024	7,256	8,280	7,425	855
1988/89	855	8,164	9,019	8,227	792
Grapefruit: 3/					
1986/87	1,515	8,982	10,497	9,027	1,471
1987/88	1,471	7,724	9,195	7,871	1,323
1988/89	1,323	7,956	9,279	7,885	1,394
Blend:					
1986/87	126	533	659	533	126
1987/88	126	449	575	458	117
1988/89	117	424	541	426	116

1/ Single-strength.

2/ Season beginning approximately October 1.

3/ Includes reconstituted juice.

Source: Florida Citrus Processors Association.

Table 22--U.S. Producer Price Indexes of selected dried and frozen juice items, by months, 1986-89

Items and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
--1982=100--												
Dried fruit:												
Prunes												
1986	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5
1987	101.5	101.5	101.9	101.9	101.9	101.9	105.5	105.5	105.5	106.5	109.6	109.6
1988	109.6	109.6	109.6	109.6	109.6	109.6	109.6	109.6	110.3	110.3	110.3	110.3
1989	111.3	111.3	112.6	114.9	114.0	114.0	114.0	115.3	115.3			
Raisins												
1986	75.6	75.6	77.6	76.5	76.5	77.8	79.3	81.4	79.6	82.5	83.9	83.9
1987	83.9	83.9	83.9	83.9	83.9	83.0	83.9	83.9	82.2	82.2	86.4	88.2
1988	85.8	85.8	85.8	N.A.	88.2	88.2	88.2	88.2	88.2	84.2	89.9	89.9
1989	89.9	89.9	89.9	N.A.	N.A.	90.8	90.8	N.A.	N.A.			
Frozen juice:												
Orange, conc.												
1986	104.4	102.2	97.6	94.4	94.1	94.3	94.2	94.2	93.7	96.0	98.6	101.4
1987	106.9	106.9	107.4	109.5	109.7	110.0	110.1	111.0	110.6	110.6	117.2	129.9
1988	132.1	140.5	142.4	141.0	142.0	144.0	118.8	142.0	141.7	140.7	140.8	139.1
1989	137.3	127.7	126.5	125.4	131.7	138.8	140.7	139.7	137.3			
Grapefruit, conc.												
1986	134.5	134.1	129.4	136.9	138.5	146.0	150.7	153.2	153.2	153.2	153.2	153.3
1987	154.8	148.4	151.2	151.7	158.8	156.5	159.1	153.4	156.5	153.1	155.0	158.1
1988	159.6	160.0	155.5	153.6	161.4	160.2	162.2	161.1	161.1	148.9	155.5	147.5
1989	146.3	140.4	139.6	144.0	141.4	141.4	137.6	146.2	140.1			

N.A.= Not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 23-U.S. monthly average price indexes for fruits, selected months, 1988-89

Items	1988												1989																											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.														
---1982=100---																																								
Producer Price Index:																																								
Fresh fruits	119.9	111.8	125.1	119.9	107.8	110.0	113.5	104.5	112.5	112.2	114.1	107.3	107.7	151.8	172.0	143.2	121.3	118.5	116.8	119.1	115.7	132.9	141.4	149.9	149.0	149.9	151.8	172.0	143.2	121.3	118.5	116.8	119.1	115.7	132.9	141.4	149.9	149.0	149.9	
Citrus fruits	108.5	90.1	118.6	119.3	103.9	111.8	111.4	100.5	100.9	105.1	101.2	92.3	92.6	108.5	90.1	118.6	119.3	103.9	111.8	111.4	100.5	100.9	105.1	101.2	92.3	108.5	90.1	118.6	119.3	103.9	111.8	111.4	100.5	100.9	105.1	101.2	92.3	92.6		
Other fruits	120.5	120.6	121.8	122.4	121.8	121.9	121.8	122.0	122.0	122.1	123.4	123.3	123.2	120.5	120.6	121.8	122.4	121.8	121.9	121.8	122.0	122.0	122.1	123.4	123.3	123.2	120.5	120.6	121.8	122.4	121.8	121.9	121.8	122.0	122.0	122.1	123.4	123.3	123.2	
Canned fruit and juices	114.8	115.2	117.8	118.8	117.5	119.4	119.4	119.6	119.4	119.1	121.1	118.4	120.4	114.8	115.2	117.8	118.8	117.5	119.4	119.4	119.6	119.4	119.1	121.1	118.4	120.4	114.8	115.2	117.8	118.8	117.5	119.4	119.4	119.6	119.4	119.1	121.1	118.4	120.4	
Canned fruit juices	126.3	126.2	126.3	126.6	126.5	124.9	125.0	125.9	125.5	125.9	126.6	126.8	126.8	126.3	126.2	126.3	126.6	126.5	124.9	125.0	125.9	125.5	125.9	126.6	126.8	126.8	126.3	126.2	126.3	126.6	126.5	124.9	125.0	125.9	125.5	125.9	126.6	126.8	126.8	
Frozen fruits and juices	130.7	129.6	130.0	128.6	127.3	122.1	121.1	119.6	122.3	123.7	129.0	129.1	127.4	130.7	129.6	130.0	128.6	127.3	122.1	121.1	119.6	122.3	123.7	129.0	129.1	127.4	130.7	129.6	130.0	128.6	127.3	122.1	121.1	119.6	122.3	123.7	129.0	129.1	127.4	130.7
Frozen fruits	117.1	116.5	116.3	116.3	116.2	117.4	117.0	117.7	116.9	117.7	118.3	118.4	116.9	117.1	116.5	116.3	116.3	116.2	117.4	117.0	117.7	116.9	117.7	118.3	118.4	116.9	117.1	116.5	116.3	116.3	116.2	117.4	117.0	117.7	116.9	117.7	118.3	118.4	116.9	
Frozen juices	132.3	131.2	131.8	130.1	128.5	122.1	121.0	119.2	122.4	124.2	130.2	130.3	128.6	132.3	131.2	131.8	130.1	128.5	122.1	121.0	119.2	122.4	124.2	130.2	130.3	128.6	132.3	131.2	131.8	130.1	128.5	122.1	121.0	119.2	122.4	124.2	130.2	130.3	128.6	
Dried fruits	99.8	97.4	100.7	100.8	101.1	101.1	101.9	102.9	102.3	102.8	102.8	103.3	105.4	99.8	97.4	100.7	100.8	101.1	101.1	101.9	102.9	102.3	102.8	102.8	103.3	105.4	99.8	97.4	100.7	100.8	101.1	101.1	101.9	102.9	102.3	102.8	102.8	103.3	105.4	
---1982-84=100---																																								
Consumer Price Index:																																								
Fresh fruits	153.3	149.7	144.3	143.2	145.4	150.0	149.5	152.4	158.1	151.7	150.6	151.4	155.1	153.3	149.7	144.3	143.2	145.4	150.0	149.5	152.4	158.1	151.7	150.6	151.4	155.1	153.3	149.7	144.3	143.2	145.4	150.0	149.5	152.4	158.1	151.7	150.6	151.4	155.1	
Processed fruits	123.8	124.3	125.0	124.4	125.6	125.5	124.7	124.6	125.1	125.6	126.0	126.9	127.8	123.8	124.3	125.0	124.4	125.6	125.5	124.7	124.6	125.1	125.6	126.0	126.9	127.8	123.8	124.3	125.0	124.4	125.6	125.5	124.7	124.6	125.1	125.6	126.0	126.9	127.8	
Fruit juices and frozen fruits	125.3	126.0	126.8	126.2	127.5	127.1	126.0	125.6	126.4	126.7	127.2	128.1	129.2	125.3	126.0	126.8	126.2	127.5	127.1	126.0	125.6	126.4	126.7	127.2	128.1	129.2	125.3	126.0	126.8	126.2	127.5	127.1	126.0	125.6	126.4	126.7	127.2	128.1	129.2	
Canned and dried fruits	116.5	116.4	116.7	115.9	117.0	117.7	118.2	118.9	118.7	119.7	120.0	120.7	120.6	116.5	116.4	116.7	115.9	117.0	117.7	118.2	118.9	118.7	119.7	120.0	120.7	120.6	116.5	116.4	116.7	115.9	117.0	117.7	118.2	118.9	118.7	119.7	120.0	120.7	120.6	
---1977=100---																																								
Index of all fruit prices received by growers 1/	187	189	194	192	177	176	158	166	201	197	159	163	201	187	189	194	192	177	176	158	166	201	197	159	163	201														
1/ Index for fresh and processed.																																								

Sources: Bureau of Labor Statistics, U.S. Department of Labor and Agricultural Prices, NASS, USDA.

Table 24--U.S. monthly average price received by growers, 1988-89

Commodity	Units	1988												1989											
		Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		
Apples, fresh use	\$/lb.	0.183	0.181	0.180	0.166	0.144	0.135	0.108	0.098	0.161	0.191	0.159													
Pears, fresh use	\$/ton	394.00	336.00	362.00	368.00	350.00	391.00	493.00	480.00	398.00	382.00	387.00													
Peaches, fresh use	\$/lb.	0.210	---	---	---	---	0.310	0.219	0.227	0.261	0.317	---													
Strawberries, fresh use	\$/lb.	0.700	0.996	1.020	0.712	0.441	0.350	0.554	0.310	0.350	0.650	0.950													
Oranges 1/																									
Fresh use	\$/box	5.75	6.97	6.22	6.58	6.91	8.76	9.94	10.34	7.94	8.94	10.11													
Processing	\$/box	0.53	6.29	6.50	5.66	7.03	8.39	8.19	0.27	-1.02	0.36	1.10													
All	\$/box	3.11	6.38	6.45	5.98	7.01	8.44	8.53	6.56	3.91	5.62	6.22													
Grapefruit 1/																									
Fresh use	\$/box	9.55	5.94	5.65	5.63	6.35	6.84	5.92	9.21	9.32	12.96	10.84													
Processing	\$/box	0.82	2.32	3.04	3.12	2.49	1.99	-0.41	-0.21	-0.23	-0.24	0.51													
All	\$/box	7.58	4.35	4.10	3.91	4.40	4.65	3.51	5.65	5.63	6.10	8.18													
Lemons 1/																									
Fresh use	\$/box	14.38	8.97	10.33	11.87	12.96	15.66	18.66	19.86	20.32	21.68	21.70													
Processing	\$/box	-2.21	-1.69	-1.98	-2.06	-2.12	-2.12	-2.12	-2.12	-2.26	-0.58	-0.62													
All	\$/box	8.44	3.74	4.08	5.24	7.20	11.32	14.66	15.17	15.23	17.80	13.47													
Tangerines 1/																									
Fresh use	\$/box	24.65	18.21	17.33	15.28	14.22	11.54	11.54	---	---	---	27.70													
Processing	\$/box	0.95	2.79	3.35	3.65	3.51	0.36	0.36	---	---	---	0.40													
All	\$/box	18.14	12.21	12.09	10.38	10.24	3.82	3.41	---	---	---	21.73													

1/ Equivalent on-tree returns.

Source: Agricultural Prices, NASS, USDA.

Table 25.--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the Northeast region, season average, 1986/87-88/89 1/

Commodity, area, and season	Retail price	Marketing spreads		Grower-packer return 2/ (f.o.b .shipping point price)	
		Absolute	Percent of retail price	Absolute	Percent of retail price
		--Cents--	Percent	Cents	Percent
Apples, Red Delicious, Washington: Oct.-June					
1986/87	73.8	38.7	52	35.1	48
1987/88	68.0	43.5	64	24.5	36
1988/89	81.8	51.8	63	30.0	37
Grapefruit, Florida: Nov.-Apr.					
1986/87	41.9	29.5	70	12.4	30
1987/88	46.5	33.3	72	13.2	28
1988/89	42.8	30.1	70	12.7	30
Lemons, California: Aug.-July					
1986/87	82.0	53.2	65	28.8	35
1987/88	89.6	56.9	64	32.7	36
1988/89	97.6	62.8	64	34.8	36
Oranges, navel: California Dec.-May					
1986/87	55.0	36.0	66	19.0	34
1987/88	59.6	39.7	67	19.9	33
1988/89	49.4	30.3	61	19.1	39
Oranges, valencia: California May-Nov.					
1986	48.1	30.7	64	17.4	36
1987	63.6	42.3	67	21.3	33
1988	63.3	43.8	69	19.5	31

1/ Season average prices are weighted averages (monthly average prices weighted by monthly arrivals in New York City). 2/ Adjusted to account for waste and spoilage incurred during marketing.

Sources: Bureau of Labor Statistics, Department of Labor, and Commodity Economics Division, ERS, USDA.

Table 26.--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the North Central region, season average, 1986/87-88/89 1/

Commodity, area and season	Retail price	Marketing spreads		Grower-packer return 2/ (f.o.b. shipping point price)	
		Absolute	Percent of retail price	Absolute	Percent of retail price
		--Cents--	Percent	Cents	Percent
Apples, Red Delicious, Washington:					
Oct.-June					
1986/87	74.3	39.0	52	35.3	48
1987/88	68.6	44.0	64	24.6	36
1988/89	76.0	46.1	61	29.9	39
Grapefruit, Florida:					
Nov.-Apr.					
1986/87	46.6	34.3	74	12.3	26
1987/88	48.9	35.4	72	13.5	28
1988/89	48.7	35.7	73	13.0	27
Lemons, California:					
Aug.-July					
1986/87	86.0	57.8	67	28.2	33
1987/88	104.0	71.3	69	32.7	31
1988/89	102.4	68.8	67	33.6	33
Oranges, navel: California					
Dec.-May					
1986/87	53.6	35.0	65	18.6	35
1987/88	56.1	35.7	64	20.4	36
1988/89	56.0	36.7	66	19.3	34
Oranges, valencia: California					
May-Nov.					
1986	52.3	34.9	67	17.4	33
1987	60.6	39.3	65	21.3	35
1988	61.6	42.0	68	19.6	32

1/Season average prices are weighted averages (monthly average prices weighted by monthly arrivals in Chicago). 2/ Adjusted to account for waste and spoilage incurred during marketing.

Sources: Bureau of Labor Statistics, Department of Labor, and Commodity Economics Division, ERS, USDA.

Table 27--U.S. exports of selected dried fruits and almonds, by destination, 1986/87-1988/89

Item and season 1/	Canada	Other EC 2/	Germany Federal	Japan	Other	Total
--Metric tons--						
Prunes:						
1986/87	3,136	20,021	7,506	9,120	14,644	54,427
1987/88	3,261	18,710	9,652	9,925	17,479	59,027
1988/89	3,883	20,689	8,118	9,898	14,743	57,331
Raisins:						
1986/87	3,105	26,613	7,696	19,249	23,853	80,516
1987/88	4,311	33,987	9,909	24,305	24,934	97,446
1988/89	---	33,685	8,628	22,565	31,418	96,296
Almonds, shelled						
1986/87	4,646	14,441	13,648	12,394	16,925	62,054
1987/88	2,688	34,826	40,581	14,256	35,262	127,613
1988/89	---	49,550	49,611	22,266	50,025	171,452

1/ Season beginning August 1 for prunes and raisins, and July 1 for almonds.
2/ Belgium-Luxembourg, France, United Kingdom, Italy, Netherlands, Denmark, Ireland, Greece, Spain, and Portugal.

Source: Horticultural Products Review, FAS, USDA.

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