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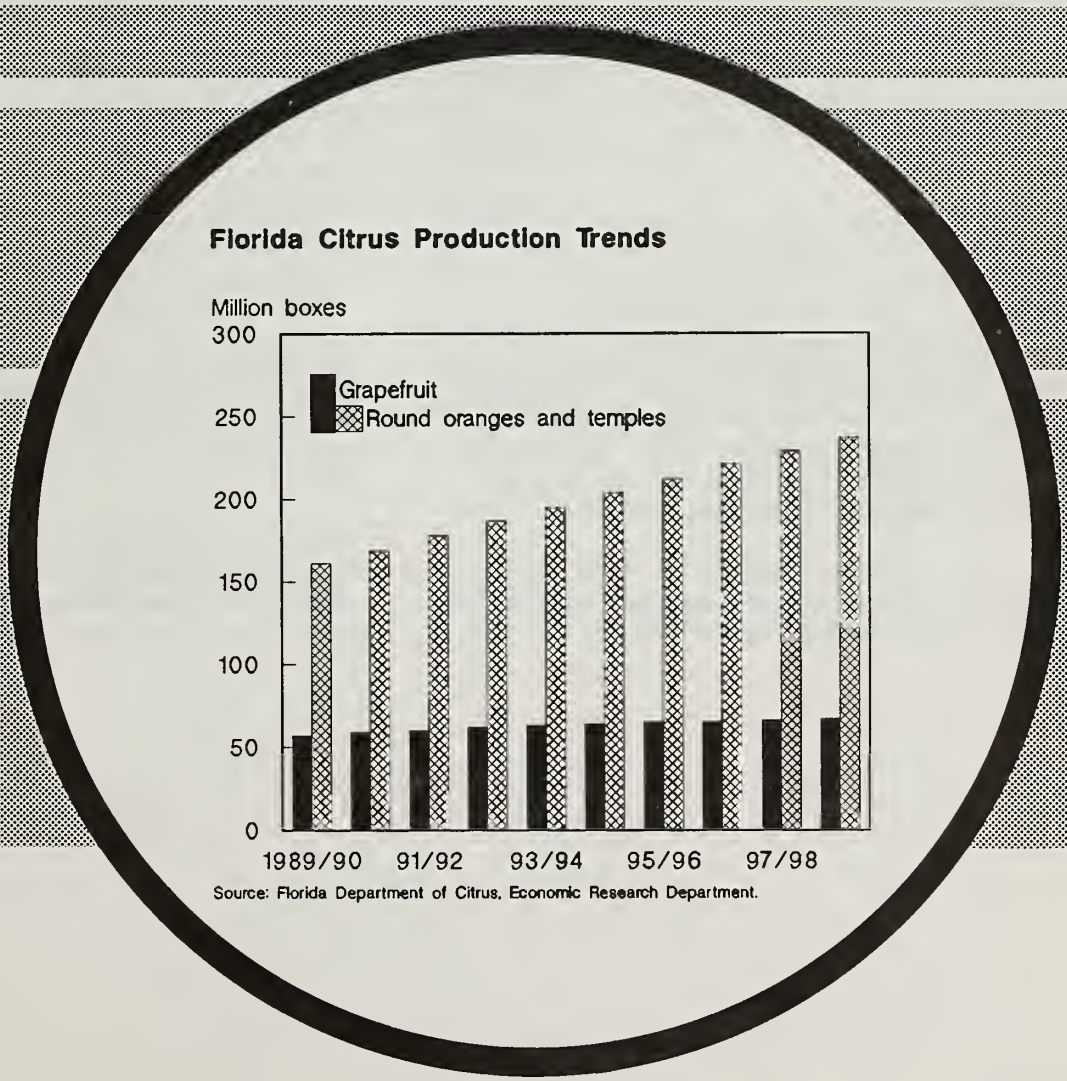
Fruit and Tree Nuts

Situation and Outlook Report



Fruit and Tree Nuts Situation and Outlook. Commodity Economics Division, Economic Research Service, U.S. Department of Agriculture, March 1989

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SUMMARY

After declining for 2 consecutive months, February grower prices for fresh and processing fruit increased almost 3 percent over January and 10 percent over a year earlier. Seasonally reduced supplies, combined with freeze damage to lemons and strawberries, should keep this spring's grower prices somewhat higher than a year earlier.

Retail prices for fresh fruit will remain above a year ago in light of stable demand for citrus and smaller supplies of apples. Tight supplies of canned fruit and strong demand for dried fruit will keep retail prices of processed noncitrus fruit strong. On the other hand, retail prices of processed citrus juice will probably weaken, reflecting recent f.o.b. price reductions. Overall, retail prices of processed fruit are expected to be somewhat higher than a year ago.

Remaining supplies of apples in cold storage have fallen sharply below a year ago, while supplies of pears are moderately larger. F.o.b. prices for fresh apples are expected to stay strong throughout the season. Seasonally reduced supplies will keep pear prices strong as well.

Supplies of processed noncitrus fruit are mixed for the remainder of the 1988/89 season. F.o.b. prices for canned fruit will remain strong, reflecting tight supplies and relatively heavy shipments. Brisk demand will keep dried fruit prices firm, while adequate supplies will maintain frozen fruit prices.

Greater supplies are keeping prices for most citrus below a year ago. U.S. season-average grower prices for oranges and grapefruit are expected to be lower than last season, while the average lemon price may be slightly higher.

The 1988/89 citrus crop will likely show a modest increase from 1987/88, primarily reflecting the continued recovery from the freeze damage Florida and Texas suffered in the early 1980's. Larger crops were reported for all citrus except tangelos. However, the forecast, which is based on conditions around February 1, did not reflect the subfreezing temperatures Arizona and California experienced early in that month.

Citrus exports, particularly to Japan, will probably continue to be strong in 1988/89, while apple shipments abroad will be substantially reduced from the previous year by smaller supplies, higher prices, and increased competition. Exports of processed noncitrus (canned and dried fruit) and citrus juices are expected to stay strong.

Larger carryin stocks and prospects for increased frozen concentrated orange juice (FCOJ) production in Florida will put the 1988/89 supply near the previous season, even though imports (mostly from Brazil) are expected to fall. Following price reductions for Brazilian FCOJ, Florida packers have also reduced prices to levels below a year ago. Prices are expected to remain weak if retail movement does not improve. Consumers have shifted their demand to chilled orange juice.

Total domestic production of tree nuts in 1988 dropped 9 percent below the 1987 record. Grower prices were higher in 1988 for almonds, macadamias, and pecans, but lower for filberts and pistachios. Prices are expected to remain firm as demand continues strong.

U.S. and world supplies of tree nuts for 1988/89 are very large following record crops in 1987 and large ones in 1988. However, consumption will likely rise to record levels, and year-end inventories will be reduced to nearly normal levels. U.S. exports are also expected to break record levels. Domestic shipments of most tree nuts are also projected to hit new highs.

GENERAL FRUIT PRICE OUTLOOK

After declining for 2 consecutive months, the February index of prices received by growers for fresh and processing fruit rose slightly to 182 (1977=100), up almost 3 percent from the preceding month and 10 percent from a year earlier. Prices rose from the previous month for apples, oranges, pears, and strawberries. Lower prices for grapefruit and lemons were only partially offsetting. Prices exceeding those of last year were indicated for apples, pears, lemons, and strawberries. Citrus fruit prices are expected to remain relatively weak through the early spring because of larger supplies. While seasonal increases in supplies of strawberries this spring will weaken prices, prices may hold relatively strong because of the freeze damage to strawberries in southern California. Prices of apples and pears will remain above year-earlier levels this winter. Overall, the grower price for fresh and processing fruit will likely average moderately higher this spring than a year ago (table 1).

Retail prices of fresh fruit were strong in 1988, averaging 8 percent above 1987. The January price, reversing a decline of 3 consecutive months, advanced 1.5 percent from December and is now 11.2 percent above a year ago. Prices were higher than a year ago for all fruits except grapefruit, with prices particularly strong for apples. Expected stable demand for citrus and smaller remaining supplies for apples should keep retail fresh fruit prices somewhat higher this spring than a year earlier (table 2).

Table 1--Index of annual and quarterly prices received by growers for fresh and processing fruit, 1986-89

Year	Annual	1st	2nd	3rd	4th
		1977=100			
1986	170	154	161	175	189
1987	181	165	180	177	201
1988	181	161	183	188	192
1989		1/ 172			

1/ Two-month average.

Source: Agricultural Prices, NASS, USDA.

Table 2--Annual and quarterly Consumer Price Indexes for fresh fruit, 1986-89

Year	Annual	1st	2nd	3rd	4th
		1982-1984=100			
1986	118.6	113.1	120.6	124.0	116.9
1987	132.0	128.5	137.8	132.5	129.3
1988	143.0	132.4	143.4	150.4	145.7
1989		1/ 143.2			

1/ January's figure only.

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

Retail prices of processed fruit in 1988 averaged 10 percent above 1987. The January price rose, averaging 1 percent above December, but still 9.1 percent above a year earlier. Higher prices were recorded for all items. Prices of fruit juice and frozen fruit have fluctuated within a very narrow range. However, retail prices of citrus juice will dip because f.o.b. prices for citrus juice have been reduced recently. The moderately larger stocks of frozen fruit being held in cold storage will probably maintain current prices this spring. On the other hand, retail prices for canned fruit will remain firm, reflecting tight supplies and relatively strong demand. Brisk demand has kept raisin prices strong even though supplies are adequate. Smaller remaining supplies of dried prunes and strong movement will hold prices firm. Overall, retail prices of processed fruit will likely surpass those of last year.

CITRUS

The February 1 forecast for the 1988/89 citrus crop (excluding California "other areas" grapefruit) is 13.2 million short tons, up 6 percent from 1987/88 and 13 percent from 1986/87. Although Florida and Texas are continuing to recover from freeze damage in the early 1980's, the citrus crop remains well below the record production of 16.5 million short tons in 1979/80. Larger crops are indicated for all citrus except tangelos. However, these estimates did not reflect the subfreezing temperatures in Arizona, California, and Texas of early February, which may have damaged some citrus. Although increased supplies have weakened prices for most citrus to levels below a year ago, the possibility of freeze damage to citrus may strengthen prices (table 3).

Oranges

Upward Production Trend Continues

As of February 1, the U.S. all oranges crop was projected at 214.8 million boxes for the 1988/89 season, virtually unchanged from the January 1 forecast and 7 percent more than the 1987/88 season. If realized, this would be the largest crop since 1983/84. Florida's all orange crop will likely be 150 million boxes, up 9 percent from the previous season and the highest since 1981/82. The 1987/88 Florida orange-bearing acreage rose to 574,600, up 1.2 percent from 1986/87. The yield per acre for the 1987/88 crop was 14.72 short tons--the highest in the last 28 years. Production prospects for early and mid-season oranges in Florida stood at 89 million boxes, 13 percent above a year earlier. Florida's Valencia crop is forecast at 61 million boxes, up 3 percent.

At 61 million boxes, the California all orange forecast exceeds last season's production by 4 percent. The navel orange output forecast of 35 million boxes is up 11 percent, while the Valencia orange crop forecast of 26 million boxes

is down 5 percent. As of February 1, one third of California's navel crop had been harvested, but the Valencia harvest had not yet begun.

The all orange forecast for Arizona, carried forward from January, should total 2 million boxes, 10 percent more than last season. Texas orange production continues to recover from the December 1983 freeze with an estimated crop of 1.85 million boxes in 1988/89, compared with 1.43 million boxes in 1987/88.

Prices Weak

Reflecting sluggish fresh market demand, f.o.b. prices for Florida fresh early and mid-season oranges have been below

Table 3--Citrus fruit: Production, 1986/87, 1987/88, and indicated 1988/89 1/

Crop and State	Boxes			Ton equivalent		
	Used		Indicated 1988/89	Used		Indicated 1988/89
	1986/87	1987/88		1986/87	1987/88	
	1,000 boxes 2/			1,000 short tons		
Oranges:						
Early, midseason, and navel varieties 3/:						
California	34,500	31,500	35,000	1,294	1,182	1,313
Florida	65,800	78,500	89,000	2,961	3,532	4,005
Texas	500	940	1,200	22	40	51
Arizona	1,000	610	550	37	23	21
Total	101,800	111,550	125,750	4,314	4,777	5,390
Valencias:						
California	23,400	27,300	26,000	878	1,024	975
Florida	53,900	59,500	61,000	2,425	2,677	2,745
Texas	375	490	650	16	21	28
Arizona	1,700	1,200	1,450	64	45	54
Total	79,375	88,490	89,100	3,383	3,767	3,802
All oranges:						
California	57,900	58,800	61,000	2,172	2,206	2,288
Florida	119,700	138,000	150,000	5,386	6,209	6,750
Texas	875	1,430	1,850	38	61	79
Arizona	2,700	1,810	2,000	101	68	75
Total	181,175	200,040	214,850	7,697	8,544	9,192
Grapefruit:						
Florida all	49,800	53,850	54,000	2,116	2,288	2,295
Seedless	46,900	51,100	51,500	1,993	1,171	2,189
Pink	20,000	21,900	23,000	850	930	978
White	26,900	29,200	28,500	1,143	1,241	1,211
Other	2,900	2,750	2,500	123	117	106
Texas	1,925	3,800	4,500	77	152	180
Arizona	2,200	1,500	1,300	70	48	42
California 4/	9,300	8,900	--	305	293	--
Desert Valleys	4,300	4,200	3,900	137	135	125
Other areas	5,000	4,700	4/	168	158	4/
Total	63,225	68,050	--	2,568	2,781	--
Lemons:						
California	21,500	17,000	18,500	817	646	703
Arizona	7,100	3,650	3,900	270	139	148
Total	28,600	20,650	22,400	1,087	785	851
Tangelos:						
Florida	4,000	4,200	3,900	180	189	176
Tangerines:						
Florida 5/	2,340	2,450	2,700	111	117	128
Arizona	700	450	500	26	17	19
California	2,230	2,090	1,800	83	78	68
Total	5,270	4,990	5,000	220	212	215
Temples:						
Florida	3,400	3,550	3,800	153	160	171
All citrus	285,670	301,480	6/ 313,650	11,905	12,671	6/ 13,247

-- = Not available. 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, 1989. 5/ Per program modification, Florida all tangerines includes the honey tangerine beginning with 1987/88 season. Estimates for previous seasons are revised to include the honey variety. 6/ Excludes California grapefruit in other areas.

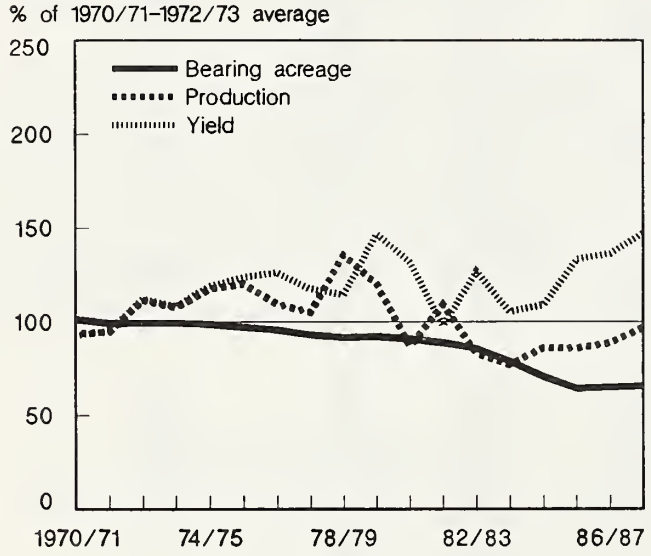
Source: Crop Production, NASS, USDA.

a year ago, averaging $6.18 a carton in mid-February, 12 percent below a year ago. However, because of strong prices early in the season, f.o.b. prices for Florida oranges this season through February 12 have averaged $6.26, down only slightly from the corresponding period last year. In contrast, processor demand has been strong, and Florida's orange sales to processors remained well above a year ago. Consequently, Florida's delivered-in prices for early and mid-season oranges for processing FCOJ have been strong. In mid-February, the delivered-in price was quoted at $9.10 a box, compared with $8.53 a year earlier. However, weakening prices for FCOJ will likely lower prices for processing oranges.

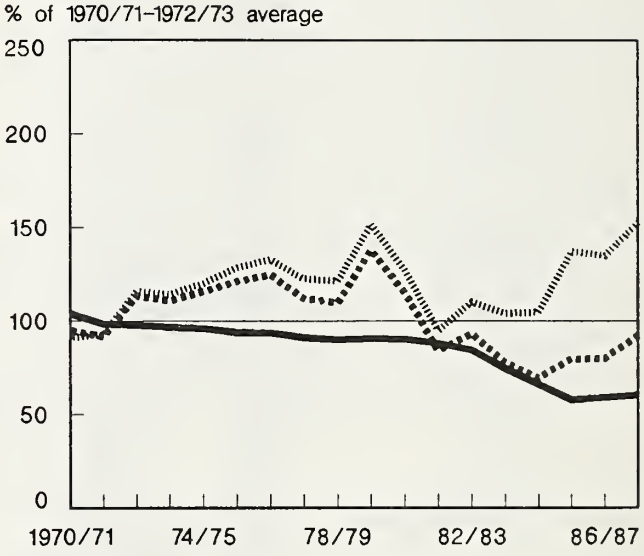
Shipments of California-Arizona navel oranges to the fresh market have been well below a year ago, with reduced volumes recorded for both domestic and export markets. Consequently, f.o.b. prices for California-Arizona navel oranges early in the season surpassed those of a year ago. However, increased shipments recently have weakened prices below year-earlier levels. In mid-February, the f.o.b. price for California-Arizona navel oranges was quoted at $6.45 a carton, compared with $6.81 a year ago. The healthy economy may keep domestic demand for fresh oranges stable. Foreign demand will probably exceed last season's depressed levels which were caused by inadequate supplies of preferred size fruit.

Oranges: Acreage, Yield, and Production

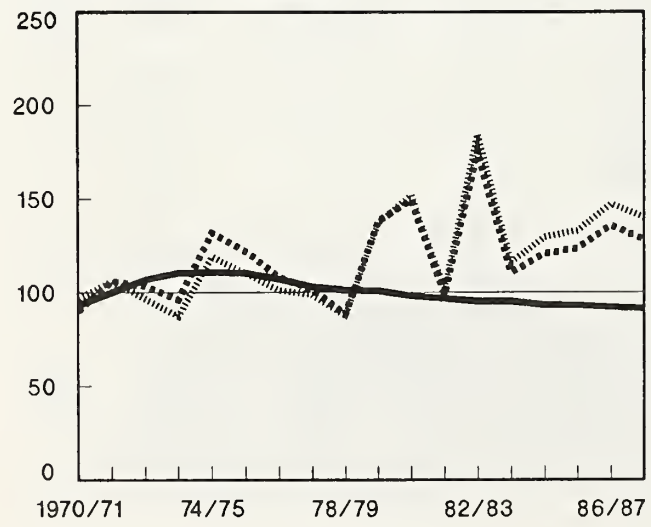
United States



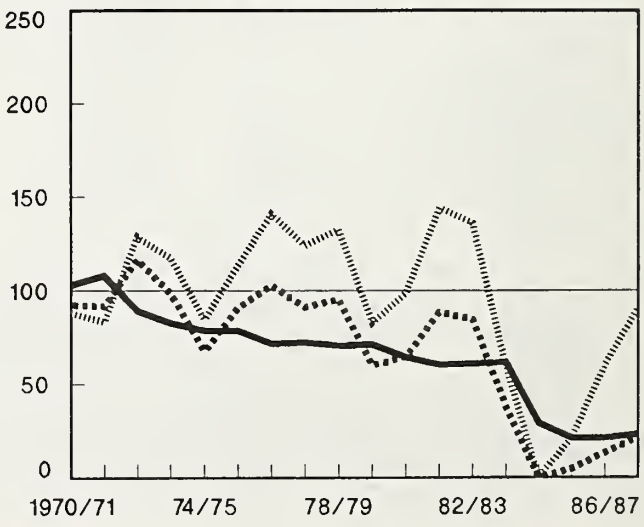
Florida



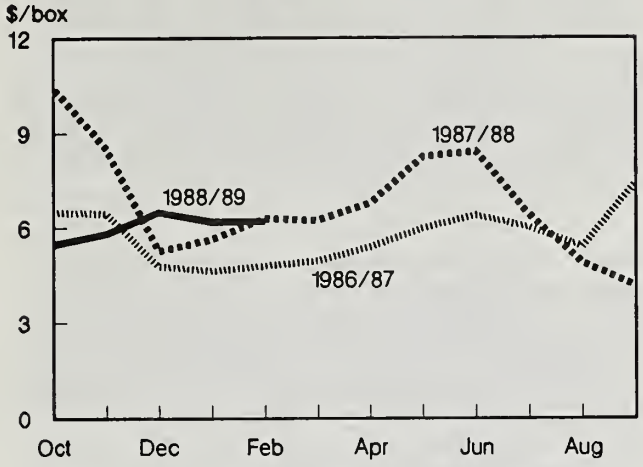
California and Arizona



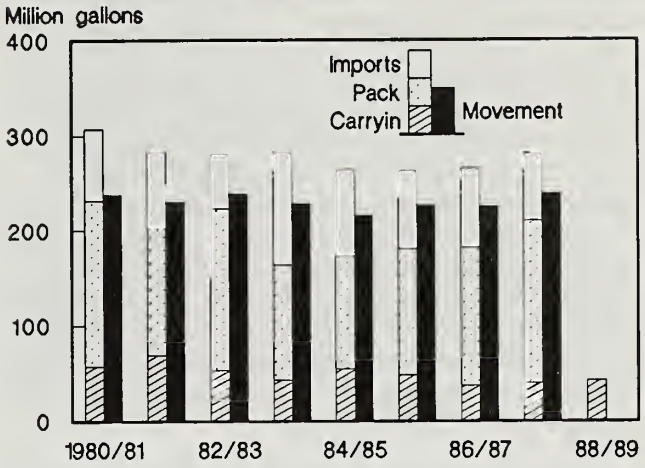
Texas



All Oranges: U.S. Equivalent On-Tree Returns Received by Growers



Florida Supply and Movement of Frozen Concentrated Orange Juice



Exports of fresh oranges to offshore destinations during 1988/89 are projected at 300,000 metric tons, compared with 240,000 the previous season. This winter's navel orange crop in California is expected to be the third largest on record. More important as far as exports are concerned, this season's harvest will favor smaller sized fruit. A year ago, more than half of California's navel crop consisted of larger size fruit--size 56 or greater. However, supplies of small navels, preferred by importers in Hong Kong and Japan, were tight. Also, fruit exports from the upcoming Valencia crop in California are not expected to be limited by an overabundance of smaller sizes as they were last year. Shipments to Japan will increase in response to the higher annual quota.

Strong early season f.o.b. prices for California-Arizona navel oranges have boosted retail prices. The Bureau of Labor Statistics (BLS) average retail price for fresh navel oranges in January 1989 was 52.1 cents per pound, 4 percent above last year. However, f.o.b. navel orange prices have weakened with the increased supplies. Thus, retail prices are likely to fall still further, although prices may average near last year's high levels through the early spring.

Moderately Larger FCOJ Pack Expected

As of February 1, the 1988/89 forecast of yield for all FCOJ from Florida oranges was 1.52 gallons per box at 42.0 degree Brix, compared with 1.55 gallons last season. Nevertheless, the larger Florida orange crop will still increase FCOJ output to nearly 178 million gallons in 1988/89, compared with 170 million in 1987/88. With moderately increased carryin stocks, this season's total domestic supplies will be moderately higher than a year earlier. FCOJ imports (mostly from Brazil) will likely decline from last season in anticipation of larger domestic supplies (table 4).

FCOJ production in Florida through mid-February easily outstripped last season's pace. However, product movement

Table 4--Oranges used for frozen concentrate, Florida, 1984/85-1988/89

Season	Orange and Temple production	Used for frozen concentrates 1/		Yield per box
	Million boxes		Percent	Gallons 2/
1984/85	107.2	86.1	80.3	1.38
1985/86	122.1	96.1	78.8	1.38
1986/87	123.1	96.2	78.1	1.51
1987/88	141.6	110.2	77.8	1.55
1988/89 3/	153.8	--	--	1.52

-- = Not available. 1/ Includes tangelos, Temples, tangerines, and K-early citrus.
2/ Gallons per box at 42.0 degrees Brix equivalent.
3/ Preliminary.

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

through the same period has been somewhat slower than last season. This decrease was chiefly attributed to sluggish demand for FCOJ in consumer-size packages. Movement of FCOJ in retail gallons through mid-February was running almost 18 percent below a year earlier. Consumers have probably shifted their demand to chilled orange juice (COJ) as more bulk FCOJ is reprocessed into COJ. Sluggish movement and larger pack have decreased FCOJ stocks as of February 11 to almost 24 percent above a year ago.

With sluggish movement, larger stocks, and weak Brazilian FCOJ prices, Florida packers have reduced f.o.b. prices of FCOJ again this season from $5.28 to $4.92 for a dozen 6-ounce cans, compared with a record high of $5.74 a year ago. This move should stimulate retail sales. According to press reports, the minimum reference f.o.b. export price for Brazilian FCOJ was again reduced to $1,245 per metric ton effective February 15, compared with $1,695 a year ago. However, the f.o.b. price for Brazilian FCOJ sold to Western Europe and the United States has also been reduced to $1,600 per metric ton. The 1988/89 Brazilian FCOJ production is forecast at 237.9 million gallons (42 degree Brix), down almost 3 percent from the previous season. The reduction in the FCOJ forecast can be attributed to a lower orange

production forecast of 210 million boxes, down from 249 million, caused by dry weather during July-October.

Increased Exports Expected

During 1987/88, exports of FCOJ totaled 13.7 million gallons, up 13 percent from the preceding season, with increases recorded for Western Europe, the East Asia and Pacific region, and the Middle East and North African region. Overall, European Community (EC) purchases rose 17 percent, with the Netherlands (the EC leader in this regard) taking 63 percent more than it did the previous season. However, most of the Netherlands' imports will go to trans-shipments rather than domestic use. Exports to the United Kingdom--the third largest customer--also showed a strong gain. In contrast, West Germany, the second largest customer, bought 20 percent less.

In 1987/88, shipments to the East Asia and Pacific region soared 57 percent over 1986/87, with significant increases recorded for Japan and Hong Kong. Japan, the leading customer, bought more than three times as much as it did the previous season. Shipments to Hong Kong rose almost 23 percent from a year earlier. Combined purchases from these two countries accounted for 51 percent of that region's total, compared with 38 percent the previous year.

Offshore exports of FCOJ during 1988/89 will remain strong due to the tight world juice supplies and the improved access terms for orange juice stipulated in the U.S.-Japanese Citrus Agreement of July 1988. The Agreement states that Japan's import quota system for FCOJ will be eliminated on April 1, 1992. During the period preceding this date, the Agreement calls for Japan to increase its market access for FCOJ to 15,000 metric tons during Japanese fiscal year (JFY) 1988, 19,000 metric tons in JFY 1989, 23,000 metric tons in JFY 1990, and 40,000 metric tons in JFY 1991. Although Brazil continues to be Japan's leading supplier of FCOJ, shipments from the United States are increasing.

Movement of COJ Strong

Strong movement has raised COJ pack through February 11. By that date, Florida packers had processed 155 million gallons of COJ (including fruit, single-strength reprocessed, and FCOJ), up 13 percent from a year ago. Despite higher prices, strong movement was recorded for both domestic and export markets. Total product movement through February 11 was up 8 percent, and exports have risen 91 percent. Following the recent price reductions for FCOJ, f.o.b. prices for COJ will likely fall. Movement will remain strong throughout the season due to weakening prices.

Canned Orange Juice Pack Up Significantly

Florida's pack of canned orange juice totaled 3.3 million cases (24/2's) through February 11, up 6 percent from a year ago and reversing the downward trend. The increased exports and reduced carryin stocks can probably be attributed to larger pack. Movement has remained sluggish, due primarily to consumer shift to COJ and FCOJ. Following the reduction of FCOJ prices, f.o.b. prices for canned orange juice were lowered to $12.90 a case (12/46 ounces, sweetened and unsweetened, Florida canneries) from $13.65. The increased pack and slower movement have more than offset decreased carryin stocks, leaving stocks as of February 11 slightly higher than a year ago.

During 1987/88 (December-November), exports of canned single-strength orange juice totaled 7.7 million gallons, up 75 percent from the previous season. Purchases from the East Asia and Pacific region increased almost fivefold over the year before, with all the major countries showing strong gains. Consequently, that region accounted for 38 percent of the U.S. total, compared with 14 percent in 1986/87. Japan, the leading customer in that region, increased its purchases by 555 percent, and prospects for further gains are bright. According to the recent U.S.-Japanese Agreement, single-strength orange juice not subject to blending requirements will be allowed special access as follows: 15,000 kiloliters in JFY 1988; 21,000 in 1989; and 27,000 in 1990. During JFY 1991, Japan will issue unlimited import licenses to meet any amount of domestic demand for single-strength orange juice. Also, under the agreement, the Japanese Government must create a system granting licenses for imports of single-strength orange juice in unlimited volume for use in Japanese hotels; such imports do not make up part of the overall single-strength orange juice quota.

EC purchases almost doubled from a year ago, with almost 88 percent of these imports going to France. Exports to Bermuda and the Caribbean countries also rose sharply, while shipments to Canada showed a drastic decline.

Grapefruit

Production Continues To Increase

Primarily due to larger crops in Florida and Texas, the February 1 grapefruit production prospect for the 1988/89 season (excluding California's "other areas") is 63.7 million boxes, up only marginally from last season, but almost 10 percent above 1986/87. The Florida all grapefruit forecast is 54 million boxes, up slightly from a year earlier. The 1987/88 Florida grapefruit bearing acreage continued to rise to 106,800, up 0.8 percent from the previous year. The yield per acre for the 1987/88 crop was 21.43 tons--the highest the in last 28 years. The Florida harvest had been about 30 percent completed as of February 1. The forecast for Texas is 4.5 million boxes, 18 percent above last season. In contrast, the California "Desert Valley" crop is projected to be 3.9 million boxes, 7 percent below last season, while the Arizona crop is expected to yield 1.3 million boxes, 13 percent below the 1987/88 crop.

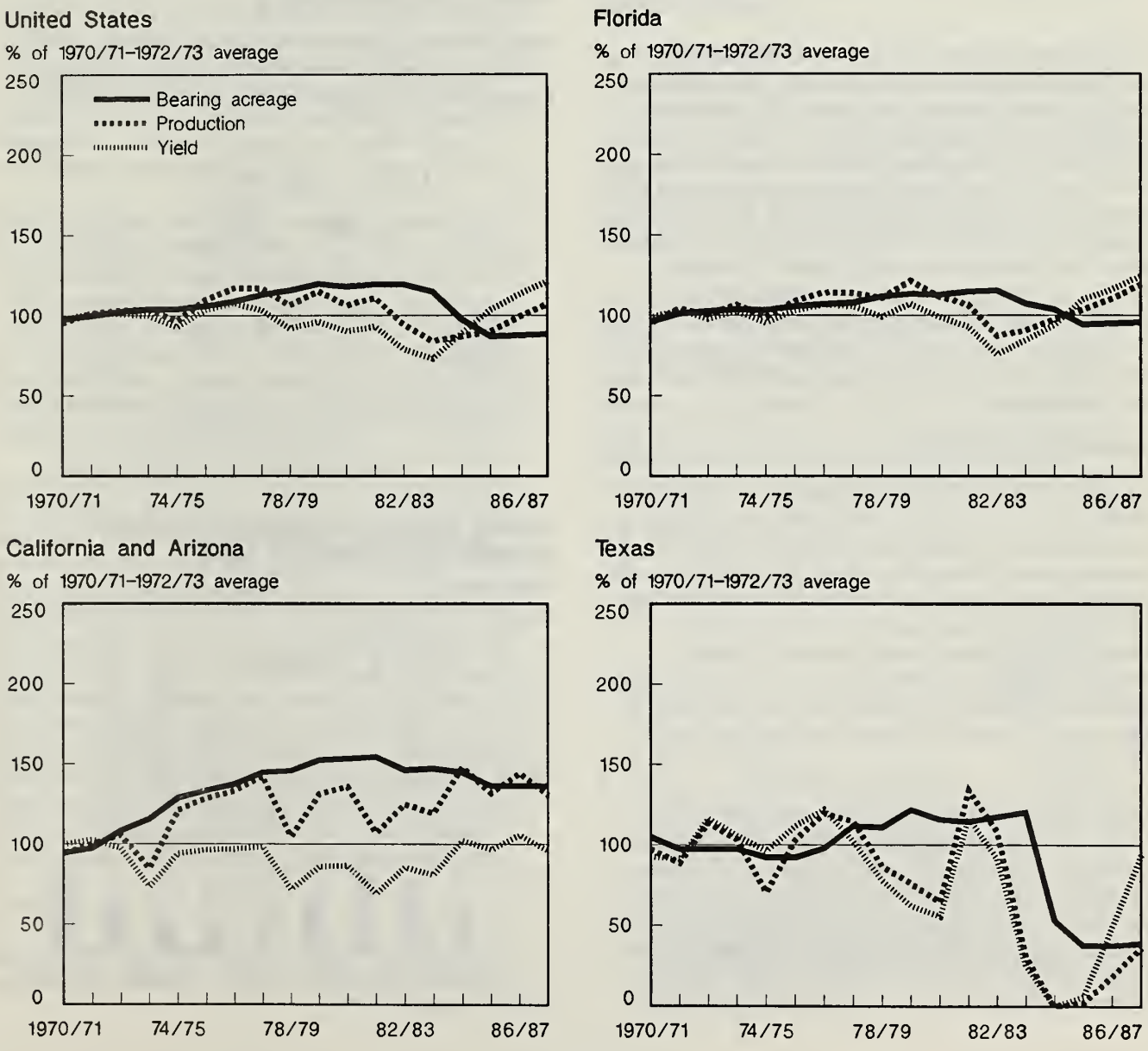
Prices Weak

F.o.b. prices for Florida fresh grapefruit have been below a year earlier, reflecting sluggish processor and export demand. The larger carryover stocks and sluggish movement of several grapefruit products have weakened processor demand. Smaller shipments of fresh grapefruit to Japan have reduced exports. In mid-February, the f.o.b. price for Florida pink seedless grapefruit was quoted at $5.67 a carton in Indian River, compared with $6.60 a year ago.

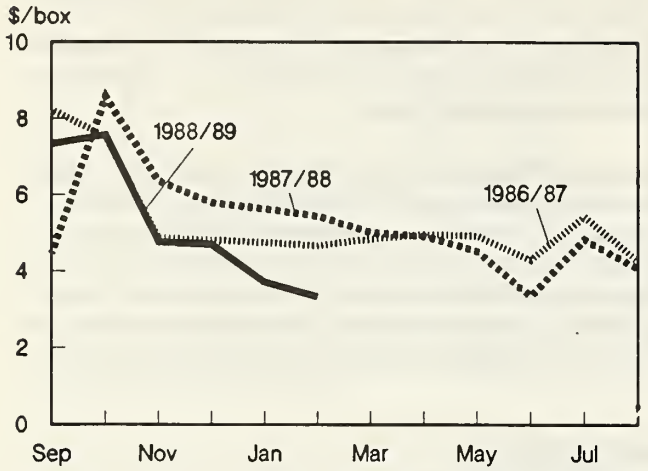
F.o.b. prices for Texas fresh grapefruit have been also moderately lower than last year, with a price of $5.57 a carton in early February, down 5 percent from a year earlier. Florida's delivered-in prices for processing grapefruit for frozen concentrated grapefruit juice (FCGJ) have also been weak. In mid-February, the delivered-in price was $4.08 per box, compared with $6.48 a year ago. Domestic demand for fresh grapefruit will likely remain stable because of the healthy economy. Larger remaining supplies and sluggish movement will probably keep grapefruit prices below year-earlier levels throughout the season.

Exports of fresh grapefruit have been running slightly behind last season's pace. During the first 3 months of 1988/89 (September-November), exports totaled 60,929 metric tons, slightly less than a year ago. The loss was primarily due to import reductions in the East Asia and Pacific region. Japan, the leading customer, bought 33 percent less than a year ago. However, prospects for grapefruit exports to Japan will im-

Grapefruit: Acreage, Yield, and Production



All Grapefruit: U.S. Equivalent On-Tree Returns Received by Growers



prove because of a staged decline in the grapefruit duty under the U.S.-Japanese Citrus Agreement. Japan's import duty for grapefruit entering the country in December-May will be reduced from its current rate of 25 percent to 15 percent on April 1, 1989, and to 10 percent on April 1, 1990. The duty on grapefruit entering Japan in June-December will be reduced from 12 percent to 10 percent on April 1, 1989. In contrast, shipments to the EC jumped 36 percent, with purchases from the Netherlands and Belgium-Luxembourg showing particularly strong gains. Grapefruit sales to Western Europe will likely exceed last year's levels. Overall, U.S. export growth in 1988/89 will probably not match that of the previous season, but shipments abroad should reach another record.

Grapefruit Juice Pack Mixed

The pack of Florida FCGJ through February 11 totaled 8.1 million gallons, up 11 percent from a year ago. Increased pack, coupled with sharply larger carryin stocks, have boosted supplies. Consequently, larger supplies and lower grapefruit prices have decreased FCGJ prices from $4.67 to $4.24 for a dozen 6-ounce cans (private brand, Florida canneries). This is the same price as last year. Through February 11, movement was up 16 percent from a year ago. Nevertheless, stocks as of February 11 were also higher. In light of larger supplies, FCGJ prices are likely to remain steady (table 5).

Larger carryin stocks and sluggish movement have caused the pack of Florida chilled grapefruit juice to fall substantially below a year earlier. Through February 11, 11.5 million gallons (excluding single-strength reprocessed) had been processed, down 10 percent from a year ago. Movement has been sluggish, but could improve somewhat because prices for chilled grapefruit juice could fall in wake of recently reduced f.o.b. prices for FCGJ. Larger carryin stocks and sluggish movement more than offset decreased pack--resulting in slightly larger stocks as of February 11.

In contrast, substantially reduced carryin stocks have caused the total pack of Florida canned grapefruit juice to increase to 3.5 million cases (No. 24/2's) as of February 11, compared with 3.1 million cases a year ago. Movement has been sluggish, reflecting higher prices and consumers' increasing preference for FCGJ and chilled grapefruit juice. Reduced movement and weak grapefruit prices have caused the Florida packers recently to reduce f.o.b. prices to $9.50 for canned white grapefruit juice and $8.50 for canned pink grapefruit juice for a dozen 46-ounce cans (Florida canneries). However, larger pack and sluggish movement more than offset reduced carryin stocks--boosting February 11 stocks well above a year earlier. If movement remains sluggish, prices could fall further.

Grapefruit Juice Exports Strong

During 1987/88, exports of FCGJ totaled 4.2 million gallons, up a drastic 49 percent from the previous season. Western Europe and the East Asia and Pacific region are the major

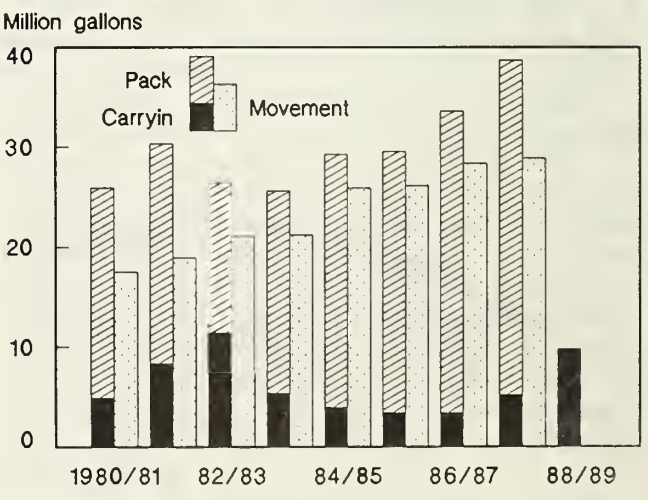
Table 5--Grapefruit used for frozen concentrate, Florida, 1984/85-1988/89

Crop year	Grapefruit	Used for frozen concentrate		Yield per box
	Million boxes		Percent	Gallons 1/
1984/85	44.0	23.0	52.3	1.08
1985/86	46.8	21.6	46.2	1.20
1986/87	49.8	24.1	48.4	1.20
1987/88	53.9	26.7	49.5	1.20
1988/89 2/	54.0	--	--	1.18

-- = Not available. 1/ Gallons per box at 40.0 degree Brix equivalent. 2/ Preliminary.

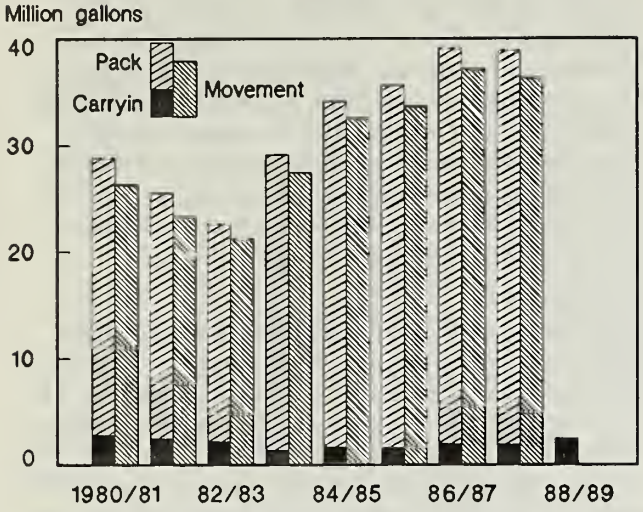
Sources: Citrus Fruit Annual, NASS, USDA and Florida Citrus Processors Association.

Florida Supply and Movement of Frozen Concentrated Grapefruit Juice



40° Brix. Pack includes imports.

Florida Supply and Movement of Chilled Grapefruit Juice



customers. Japan, which accounts for 55 percent of total U.S. FCGJ, increased its purchases to 2.3 million gallons, up 12 percent from 1986/87. Shipments to the EC totaled 858,000 gallons, surging 205 percent above last year. Exports to other Western European countries also showed strong gains. In contrast, shipments to Canada fell significantly.

During the same period, sales of canned single-strength grapefruit juice also expanded to 3.4 million gallons, 69 percent above 1986/87. The East Asia and Pacific region, the leading customer for this product, bought 64 percent of the U.S. total; Japan, the largest customer within the region, increased its purchases 13 percent. Shipments to Hong Kong, the second leading customer, soared 77 percent above a year earlier. Purchases from the EC rose 45 percent, with France taking 77 percent of the total in that region.

Prospects for grapefruit juice exports to Japan are bright for the years ahead. Japanese quota restrictions on imported citrus juice, together with insignificant production from domestically grown fruit, have kept most Japanese consumers from getting acquainted with the good taste of orange and grapefruit juice. Japanese consumption of citrus juice reaches no more than 10 percent of the average level recorded in developed economies of Western Europe and North America. Efforts by the United States in recent years to open the Japanese market to imported citrus juice have enhanced sales opportunities for U.S. exporters. Import quotas and licensing requirements for grapefruit juice were eliminated by the Brock-Yamamura Understanding of 1984. The United States supplies nearly all Japanese imports of grapefruit juice, and those imports have increased steadily.

Lemons

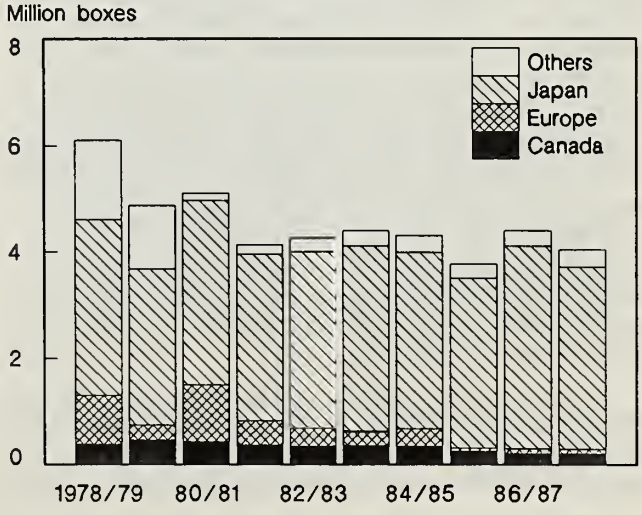
Lemon production in Arizona and California, carried forward from the January 1 forecast, will probably total 22.4 million boxes, 8 percent above last season's utilized production, but 21 percent below that of 1986/87. California will likely produce 18.5 million boxes, 9 percent more than last season. Freezing temperatures occurred in all three districts during the last week of December. Although most damage was light, some low-lying groves experienced heavier damage. The crop reduction caused by the frost is expected to be minimal because much of the fruit grown in the worst affected areas had already been picked. However, the freezing temperatures experienced by southern and central California in early February have probably damaged lemons more seriously than the cold weather in December. More fruit will probably be diverted to processing products because of its freeze damage.

The Arizona forecast is 3.9 million boxes, 7 percent above 1987/88, but 41 percent below 1986/87. The 4 to 5 nights of freezing temperatures at the end of December should not affect the Arizona lemon crop, since 80 percent of it had been harvested by January 1.

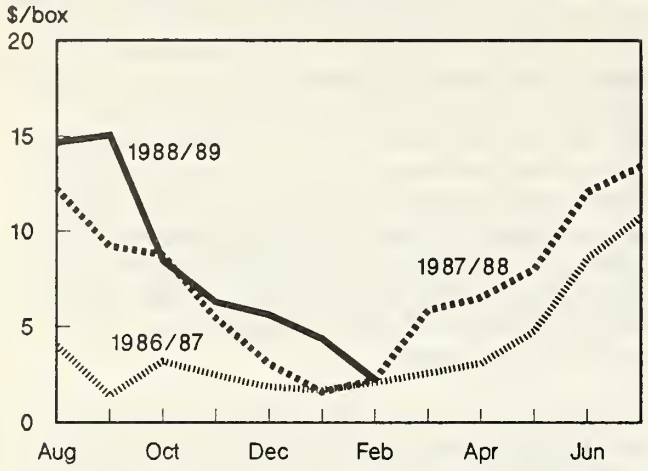
Despite a large crop, total utilization of lemons through mid-February was moderately below a year earlier. Reduced movement was due mostly to a sharp decrease for processing use. Deliveries to the domestic fresh market showed modest gains, while export shipments dipped slightly. However, processing use will likely increase because this freeze-damaged fruit will be diverted to processing products in California.

During August-November 1988, U.S. lemon exports to Japan rose sharply over the previous year. Approximately 90 percent of all offshore exports of lemons was sold to Japan. The United States supplies nearly all of Japan's lemons import requirements. Japan recently approved a temperature treatment for Spanish lemons which ended the prohibition against imports of this fruit. However, the protocol requires that the lemons receive a 16-day cold treat-

U.S. Exports of Fresh Lemons



All Lemons: U.S. Equivalent On-Tree Returns Received by Growers



ment in Spain before shipment. The expense and time involved in treating the lemons and transportating them from Spain to Japan should allow U.S. lemons to maintain their dominance in Japan. In addition, under the terms of the U.S.-Japanese Citrus Agreement, Japan will eliminate its 5-percent import duty on lemons in April, 1989. Thus, exports to Japan during 1988/89 will likely increase.

Because of strong domestic demand, f.o.b. prices for fresh lemons have averaged somewhat higher than a year ago. However, increased shipments have reduced prices from an early-season high. In mid-February, the f.o.b. price was $10.49 a carton, compared with $8.10 a year earlier. If California's lemon crop suffered severe damage, f.o.b. prices should remain strong.

Other Citrus

The February 1 forecast for the 1988/89 Florida temple crop of 3.8 million boxes remained unchanged from the January 1 forecast, but is 7 percent above last season. Harvest as of February 1 was about 18 percent complete. Through February 12, 1.12 million boxes had been utilized, down 17 percent from a year ago due to lagging maturity. The reduced utilization was mostly caused by fresh sales, which fell almost 32 percent. Consequently, fresh sales accounted for 49 percent of total sales, compared with 60 percent a year earlier. Nevertheless, the amount of the temple crop used for processing was also down slightly from last year. Opening f.o.b. prices in early January were well above a year earlier. By early February, increased shipments had reduced prices to levels moderately below a year ago. Larger supplies and weak orange prices should decrease the season-average price for temples to below that of last year.

February 1 prospects pointed to a Florida tangelo crop of 3.9 million boxes, including K-early citrus fruits, 7 percent below the 1987/88 season, but only slightly less than 1986/87. Producers harvested actively during January, and had completed about 91 percent of the harvest by the end of the month. Because of the smaller crop, utilization of tangelos totaled 3.6 million boxes through February 12, down 10 percent from a year ago. Most of the decline can be attributed to a substantial reduction in processing use. Smaller supplies have kept f.o.b. prices for this season's fresh tangelos moderately above a year ago; through mid-February, f.o.b. prices averaged $6.99 a carton, up 6 percent. The very limited supply for the remainder of the season will likely keep f.o.b. prices above those of last season.

As of February 1, the U.S. all tangerine forecast equaled 5 million boxes, unchanged from the previous forecast and virtually unchanged from last season's utilized production. The Florida forecast is 2.7 million boxes, the same as on January 1, but up 10 percent from last year. The forecast for all Florida tangerines includes Robinson, Dancy, and honey tangerines. Roughly 65 percent of the Florida crop had been harvested by February 1. The California crop forecast remained at 1.8 million boxes, but was down 14 percent from last season. The Arizona forecast is 500,000 boxes, as in the previous forecast, but 11 percent above the 1987/88 utilized production.

As usual, more tangerines have been sold for the fresh market than for processing. Through February 12, fresh shipments from Florida stood at 1.92 million boxes, up 18 percent from a year ago. However, sharply increased shipments were recorded for processing use. Consequently, total Florida processing tangerine shipments rose 46 percent from last season. F.o.b. prices have been mixed, because increased shipments lowered the average f.o.b. price for Robinson tangerines to $15.41 per carton for the 1988/89 season, moderately below last season. Reduced shipments for Dancy and honey tangerines have kept average f.o.b. prices through mid-February substantially higher than last year.

FRESH NONCITRUS

The nation's utilized production of the leading noncitrus fruit crops, excluding avocados, totaled 14.7 million short tons, 4 percent less than a year ago, but 12 percent more than in 1966. Increased production was indicated for bananas, cranberries, dates, grapes, kiwifruit, nectarines, olives, papayas, peaches, and prunes and plums. However, decreases in all other noncitrus fruit crops more than offset these increases. A 16-percent decline from the record high apple production of 1987 was mainly responsible for reduced noncitrus production.

The preliminary estimate for 1988 bearing acreage of noncitrus fruit, excluding avocados, is 1.9 million, down fractionally from 1987. Slight reductions were reported for both

Table 6--Bearing acreage, fruits and tree nuts, United States, 1980-88

Year	Citrus fruit 1/	Major deciduous fruits 2/	Minor fruits 3/	Tree nuts 4/	Total fruits and tree nuts 5/
			1,000 acres		
1980	1,129.5	1,654.5	178.7	559.0	3,521.7
1981	1,129.8	1,646.4	197.9	560.9	3,535.0
1982	1,116.1	1,658.5	199.4	577.6	3,551.6
1983	1,084.0	1,693.8	204.5	598.5	3,580.8
1984	1,002.6	1,716.4	204.6	622.9	3,545.0
1985	899.2	1,710.6	208.9	656.9	3,502.6
1986	819.0	1,742.6	214.5	668.9	3,445.0
1987	824.9	1,747.4	215.3	667.9	3,455.5
1988 6/	832.4	1,742.1	127.6	670.0	3,372.1

1/ Grapefruit, lemons, limes, oranges, tangelos, tangerines (including honey tangerines), and Temples. Acreage is for the year of harvest. 2/ Commercial apples, apricots, cherries, grapes, nectarines, peaches, pears, plums, and prunes. 3/ Avocados, bananas, cranberries, dates, figs, kiwifruit, olives, papayas, pineapples, and pomegranates. 4/ Almonds, filberts, macadamia nuts, pistachios, and walnuts. 5/ Some totals may not add due to rounding. 6/ Preliminary.

Source: Noncitrus Fruits and Nuts Annual, NASS, USDA.

major deciduous fruit and miscellaneous noncitrus acreage (table 6).

The value of utilized production for noncitrus fruit crops totaled $4 billion (excluding avocados, figs, pomegranates, and California prunes), up 16 percent from 1987 and 15 percent from 1986. Apples, cranberries, peaches, pears, and California plums registered the largest increases in value, with only apricots and sweet cherries showing value decreases.

Apples

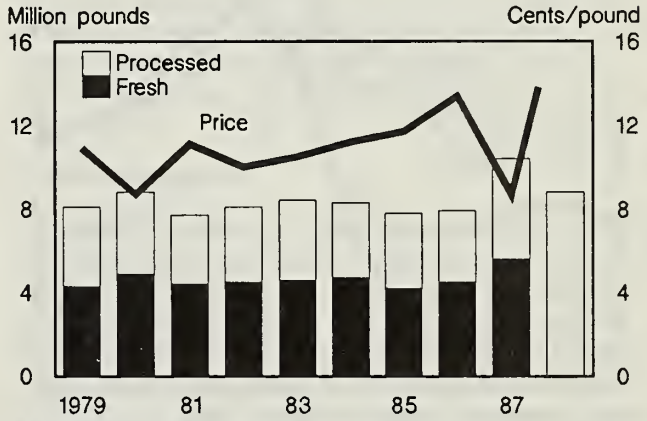
A Sharply Smaller Crop

U.S. commercial apple production totaled 8.9 billion pounds in 1988, 17 percent less than the previous year's record crop, but 12 percent more than the 1986 crop. Early spring frost, high temperatures, drought, hailstorms, and tree stress caused by last year's bumper crop all contributed to the smaller crop. However, production could reach another record in the next several years if good weather prevails. Also, more trees in several leading producing States, such as Michigan and Washington, will reach their full bearing potential.

Of total production, 8.81 billion pounds of apples were utilized, 16 percent less than in 1987. The East utilized 2.96 billion pounds, up 2 percent from a year earlier. Larger quantities of apples utilized in Pennsylvania and West Virginia of 7 and 9 percent, respectively, contributed most of the increase. However, New York, the leading State in the region, utilized 870 million pounds, off slightly. Utilized production in the Central States dropped 24 percent to 1.18 billion pounds. Most of the States showed decreases, but utilized production in Michigan, the region's leading producer, totaled only 800 million pounds, down 24 percent from 1987's big crop.

The Western States utilized 4.67 billion pounds, down 22 percent from 1987. Utilization in Washington, the nation's

U.S. Apple Production, Utilization, and Prices



Utilized production. Season-average grower prices. 1988 indicated total production.

leader in this area, totaled 3.7 billion pounds, down 23 percent from last year's record utilized production. Consequently, Washington accounted for 42 percent of total U.S. utilized production, compared with 46 percent in 1987. Production in California, the region's second leading producer, fell 15 percent from the proceeding year.

Significantly Reduced Supplies Remain

Because of the much smaller crop in Washington, stocks of fresh apples in cold storage at the beginning of February totaled 2.7 billion pounds, 16 percent less than a year ago. Significant reductions were indicated for both regular and controlled atmosphere storages. Approximately 84 percent of the apples were in controlled atmosphere storage, off 13 percent from a year ago. Apples in regular cold storage fell 27 percent. All regions recorded decreases in cold storage (table 7).

Higher Prices for the Balance of the Season Expected

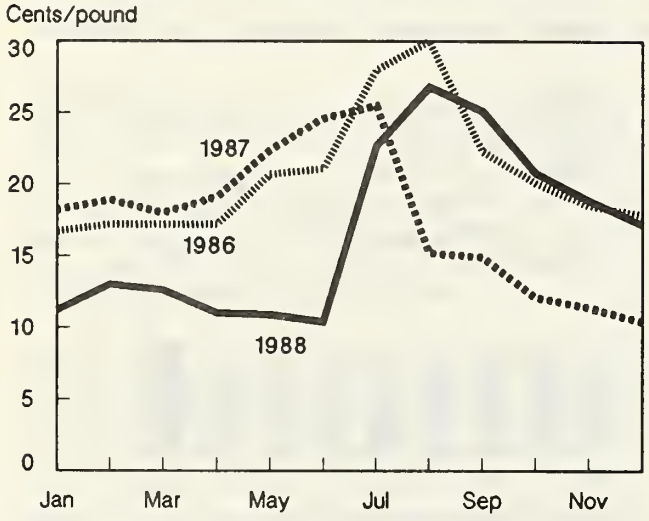
The smaller crop and reduced shipments have kept fresh apple prices well above a year ago. Through mid-February,

Table 7--Apples, fresh cold storage holdings at end of the month, 1986-88

Months	1986	1987	1988
	Million pounds		
January	2,307.2	2,307.2	3,158.9
February	1,550.2	1,720.8	2,417.4
March	1,039.3	1,174.5	1,584.1
April	612.6	751.9	1,092.7
May	266.9	386.3	552.2
June	118.8	203.8	248.1
July	25.4	74.9	95.0
August	7.9	4.2	5.1
September	2,349.5	2,687.1	1,857.7
October	4,124.5	5,390.2	4,601.8
November	3,532.2	4,697.2	3,904.3
December	2,891.7	3,944.3	3,265.8

Source: Cold Storage, NASS, USDA.

Fresh Apples: U.S. Average Price Received by Growers



total arrivals of fresh apples in 22 major cities equaled 702 million pounds, down 4 percent from a year earlier. F.o.b. prices for fresh apples at major shipping points were significantly above year-earlier levels. In mid-February, the f.o.b. price for red delicious apples at Yakima Valley-Wenatchee, Washington was quoted at $14.00 a tray pack for U.S. extra fancy, size 80, compared with $11.50 a year earlier. Smaller crops in the Central and East regions have also kept prices for both fresh and processing uses substantially higher than a year ago. In Michigan, the f.o.b. price for Jonathan apples in mid-February was quoted at $8.38 for a 12-3-pound film bag carton for U.S. fancy, sizes 2 1/4 inches and up, compared with $7.00 last year. Consequently, the 1988 U.S. season-average apple price received by growers for all sales will be around 13.8 cents per pound, up 59 percent from 1987 and 3 percent from 1986.

Higher f.o.b. prices have boosted retail prices of red delicious apples well above year-earlier levels. Prices have been higher since last August. In January, retail prices averaged 72.9 cents per pound, up 28 percent from a year earlier. With sharply reduced remaining supplies, fresh apple prices should remain high through the balance of the season.

Exports Weak, Imports Strong

The outlook for this year's exports of fresh apples is not as bright as last year because of smaller supplies and higher prices. Larger crops and trade regulations abroad will also cut U.S. apple exports. During the first 5 months of 1988/89 (July-November), U.S. apple exports totaled 104,778 metric tons, down almost 3 percent from a year ago. Reduced exports to most areas were recorded. A 7-percent reduction in exports to the East Asia and Pacific region was reported, with decreased shipments to both Taiwan and Hong Kong. Nevertheless, Taiwan still remains the leading customer of U.S. apples; this will probably continue, provided Taiwan does not impose import quotas on U.S. fruit. Although shipments to Hong Kong, the second largest U.S. export market, fell 37 percent, U.S. exports to that region should improve. The Philippines offer a new opportunity for apple exports, following liberalization of the import regime for several fresh noncitrus fruits in April 1988. As a result, apple exporters can move large quantities of apples to the Philippines this season. In addition, on January 1, Thailand lowered its duty on apple imports from 60 percent (50 baht) to 10 percent (3 baht) per kilogram (about $2.26 per 42-16 box). Thai customs officials may use the higher tariff. In practice, the specific duty usually is applied. This subtantially lower duty will give U.S. apple shippers access to a potentially lucrative market.

Fresh apple exports to the EC showed a sharp loss because its 1988 apple crop is forecast to be 20 percent larger than last year. A significant drop in exports to the Netherlands was recorded, while a sharp increase reported for the United Kingdom was only partially offsetting. Consequently, the United Kingdom replaced the Netherlands as the leading U.S. customer in that region. In contrast, exports to the other Western European countries were well above a year earlier, with all of the Scandinavian countries showing strong gains. Poor crops and early opening dates for apple imports in these countries will continue to boost exports in 1989. Canadian purchases also showed strong gains, while shipments to the Middle East and North Africa fell significantly.

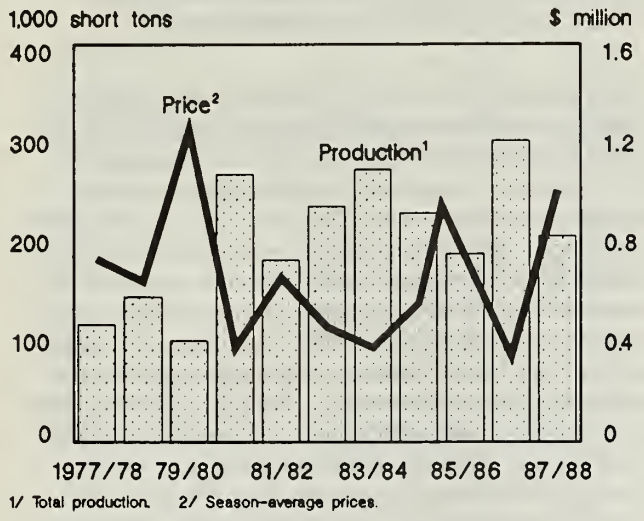
During the same period, U.S. imports of fresh apples totaled 31,705 metric tons, up 6 percent from a year ago. U.S. purchases from Canada rose sharply, but purchases from New Zealand and Argentina dropped considerably. Although imports from Chile constitute a small quantity, they had almost doubled from a year ago. Consequently, imports from Canada accounted for 70 percent of the total, compared with 61 percent last year.

Avocados

A Significantly Reduced 1987/88 Crop

Production of California and Florida avocados during 1987/88 totaled 207,000 short tons, down 32 percent from

U.S. Avocado Production and Prices



1/ Total production. 2/ Season-average prices.

1986/87, but still 10 percent above 1985/86. At 178,000 short tons, the California crop was 36 percent smaller and accounted for 86 percent of U.S. production, compared with 92 percent in 1986/87. The reduced crop can be attributed to the severe freeze in December 1987 which caused extensive tree damage. Consequently, bearing acreage in 1987/88 fell to 74,700, compared with 75,000 in 1986/87. The freeze reduced yield per acre to an average of 2.38 short tons in 1987/88, compared with 3.71 in 1986/87. In contrast, the Florida crop of 29,000 short tons was up 17 percent. Although bearing acreage in Florida remained unchanged, yield per acre increased sharply.

Because of the smaller crop, the U.S. average grower price rose to $1,010 a short ton as higher prices in California more than offset lower prices in Florida. Despite the smaller crop, sharply higher prices increased the value of total avocado production in California from $94 million in 1986/87 to $199 million in 1987/88, raising California's share of the total U.S. value from 90 to 96 percent. Lower prices caused the total value of Florida avocado production to decline to $9 million from $10 million in 1986/87.

Small California Crop Likely in 1988/89, but Larger Florida Crop Expected in 1988/89

The severe freeze of December 1987 caused extensive tree damage, and is likely to affect the 1988/89 California crop. In early December, southern California experienced strong winds, gusting to 80 miles per hour in some areas, which caused some fruit droppage. Damage from these events is still being assessed. In addition, another cold wave hit southern California in early February. Although no official estimate of avocado shipments for the 1988/89 season has been set, some industry analysts expect approximately 8 million bushels equivalent will be shipped, compared with 7 million the previous season.

Shipments through February 4, 1989 totaled 1.5 million bushels (with 50 pounds per bushel), down sharply from a year ago. The reduced shipments have held prices strong. The f.o.b. price in southern California in mid-February rose to $24.38 for a two-layer tray-pack carton for Hass variety, size 48, from $24.00 a year earlier. Although prices are likely to fall when shipments increase seasonally, they should remain higher than last season.

The forecast of Florida avocados for certified shipments during 1988/89, as reported by the Avocado Administrative Committee, is 1.1 million bushels, slightly below 1987/88. Shipments through January totaled 1.04 million bushels, up slightly from last season. Consequently, remaining supplies are much smaller than a year ago. Seasonally reduced shipments and small available supplies from California have somewhat strengthened prices for Florida avocados. The f.o.b. price was quoted at $7.00 (sizes 8-12) per one-layer carton in late January, compared with $5.25 a year ago. Smaller remaining supplies in Florida and high prices in California should maintain strong prices for the balance of the season.

Exports Strong

During the 1987/88 season (October-September), U.S. avocado exports totaled 13,327 metric tons, up 14 percent from the previous season. The increase was due to larger shipments to the EC, totaling 7,324 metric tons, 35 percent above year-earlier levels. Almost 54 percent of the EC shipments went to France, which replaced Japan as the leading U.S. customer. The United Kingdom, the second largest customer in the EC, increased its purchases 71 percent. These two countries accounted for 79 percent of all exports to the EC. Although exports to Japan during 1987/88 fell sharply, it remains the second largest U.S. customer. The larger crop in Japan probably has caused U.S. avocado shipments to fall there.

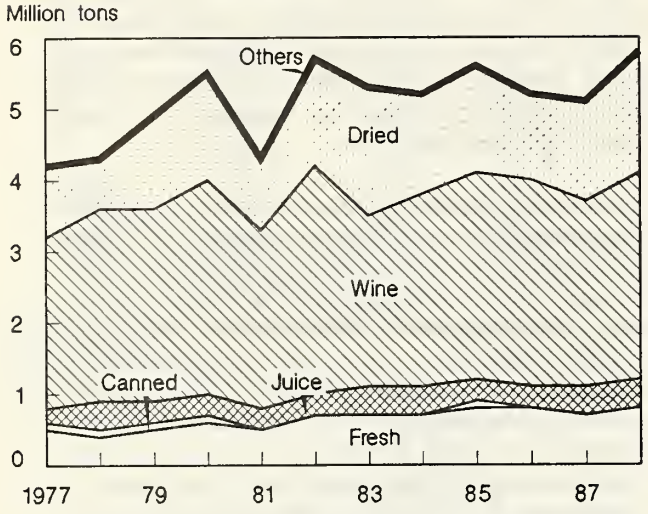
Increased shipments of U.S. avocados to the EC were caused by last season's Israel's small crop of 40,000 metric tons last season. Nearly 80 percent of the Israeli crop was destined for the Western European market in 1986/87. U.S. avocado exports, especially those to Western Europe for 1988/89, will show another sharp increase in 1988/89, because of the poor crop prospects in Israel this season.

Grapes

1988 Crop Up Substantially

U.S. grape production in 1988 was 5.74 million short tons, up 9 percent from 1987 and 10 percent from 1986, but still 12 percent below the record set in 1982. The increase was primarily due to expanded production in California. The 1988 yield per acre rose to 7.87 short tons, compared with 7.04 in 1987. However, the 1988 bearing acreage continued to fall to 754,780, down 1 percent from 1987. Reduced

U.S. Grapes: Utilization



acreage was recorded in Arizona, California, Michigan, and New York, while the acreage in Washington continued to expand. In California, some raisin grape acres have been enrolled in the Raisin Industry Diversion Program. In 1988, 25,000 acres were enrolled, compared with 15,000 in 1987 and 50,000 in 1986.

California grape production totaled 5.24 million short tons, 12 percent higher than the 1987 crop and the largest in the last 6 years. California increased its share of the U.S. crop to 91 percent from 88 percent in 1987. Utilized production of wine variety grapes in California (2.13 million short tons), was 9 percent higher than previous year. Utilized production of table variety grapes was 700,000 short tons, up 30 percent. Production utilized from raisin variety grapes, at 2.41 million short tons, was 11 percent above 1987.

Total production from other States, at 504,250 metric tons, was 16 percent below 1987, with all States except Arkansas, Missouri, and North Carolina showing decreases. With bearing acreage trending upward, Washington remains the second largest grape State. However, the grape crop of 182,000 short tons was 27 percent below 1987. Berry cluster counts and weights for concord grapes were average to below average, resulting from the long bloom period caused by the cool temperatures in spring and early summer. Grape production in New York, the third largest grape-producing State, was 157,000 short tons, off 12 percent. Pennsylvania's crop of 58,000 short tons was up 7 percent, while Michigan's was 53,000 short tons, down 12 percent.

The larger crop resulted in more grapes used in both fresh and processing outlets. The quantity of grapes used for the fresh market rose 11 percent from 1987 and, consequently, the share of total production for the fresh market increased from 13.6 to 13.9 percent. Despite an 11-percent jump in grapes used for the fresh market, sharply lower prices reduced the total value of fresh use by 12 percent.

Despite a 9-percent increase in processing use, the share of total production for processing outlets fell from 86.4 to 86.1 percent. Nevertheless, substantial gains in processing use more than offset a moderate decrease in prices, causing a 5-percent gain in the total value of processing use. The growth in tonnage of grapes for processing use resulted mainly from rising uses for drying and crushing for wine. About 35 percent of total grape tonnage processed was used for drying, compared with 32 percent in 1987. The strong raisin movement and the larger California raisin grape production contributed to greater use for drying. The larger California wine grape production and reduced wine inventories contributed to an 8-percent growth in grapes for crushing for wine. Despite a smaller crop, the volume of grapes crushed for wine in Washington State rose sharply, continuating the upward trend. In contrast, the quantity of grapes crushed for wine in New York fell substantially because of a much smaller crop.

Significantly decreased concord grape production in the Great Lake States and Washington State reduced the quantity of grapes crushed for juice in the United States to well below 1987. Conversely, the larger Arkansas crop increased the quantity of concord grapes crushed for juice in that State. The 1988 grape crop used for canning, 40,000 tons, remained unchanged from the previous year.

Prices Weak

Increased supplies cut grower prices for fresh market grapes sharply in 1988. The U.S. average price is estimated at $425 a short ton, down 20 percent from 1987, with prices ranging from $280 a short ton in Washington State to $1,480 in Arizona. California, the leading fresh market supplier, averaged $396 a short ton, compared with $519 in 1987. Total arrivals of domestic table grapes at 22 major markets through mid-February were running 3 percent ahead of last year's pace.

Likewise, U.S. grower prices for all grapes for processing use averaged $207 a short ton, down 4 percent from 1987. Grower prices among the States were mixed. Prices for California grapes ran 5 percent lower as reduced prices for table and raisin variety grapes more than offset higher prices for wine variety grapes. Strong demand from wineries, resulting from lower wine inventories, probably contributed to the 5-percent rise in wine variety grape prices. Prices of grapes used for canning and juice also rose slightly to moderately above those of last year. In contrast, with sharply increased dried ratio, grape prices for drying averaged $169 a short ton, off 18 percent from 1987.

Table 8--Pears: Utilized production by States and Pacific Coast, variety composition, 1986-88

State	1986	1987	1988	Pacific Coast	1986	1987	1988
	Short tons				Short tons		
Connecticut	1,600	1,450	1,600	Washington:			
New York	18,000	14,500	17,300	Bartlett	126,000	171,000	147,000
Pennsylvania	3,800	3,050	3,000	Other	140,000	165,000	160,000
Michigan	11,000	8,000	8,000	Total	266,000	336,000	307,000
				Oregon:			
				Bartlett	50,000	78,000	70,000
				Other	112,000	150,000	155,000
Colorado	1,750	6,400	3,700	Total	162,000	228,000	225,000
Utah	2,200	3,200	2,000	California:			
Washington	266,000	336,000	307,000	Bartlett	285,000	325,000	292,000
				Other	9,000	12,000	11,000
Oregon	162,000	228,000	225,000	Total	294,000	337,000	303,000
California	294,000	337,000	303,000	3 States:			
				Bartlett	461,000	574,000	509,000
				Other	261,000	327,000	326,000
United States	760,350	937,600	870,600	Total	722,000	901,000	835,000

Source: Noncitrus Fruits and Nuts Annual, NASS, USDA.

Exports Strong

During the first 6 months of 1988/89 (June-November), U.S. exports of table grapes totaled 105,332 metric tons, up 19 percent from a year earlier. The increase was partially due to sharply larger shipments to Canada, totaling 57,061 metric tons, 16 percent above a year earlier. Significantly greater shipments to the East Asia and Pacific region were also recorded. Almost 35 percent of that region's shipments went to Hong Kong, which replaced Taiwan as the United States' leading customer in that region. Purchases by Japan continue to rise, up 26 percent from a year ago. Canada and the East Asia and Pacific region accounted for 90 percent of total U.S. exports. In contrast, shipments to the EC and Latin America, excluding the Caribbean, fell substantially.

Pears

A Substantially Smaller Crop in 1988

U.S. pear production in 1988 totaled 870,950 short tons, down 7 percent from last year's record, but up 14 percent from 1986. Virtually all of the crop was utilized. The three Pacific Coast States produced 835,000 short tons, or 96 percent of the total. Bartlett production in these States totaled 509,000 short tons, 11 percent less than 1987, while other pear production, at 326,000 short tons, was down slightly. The total bearing acreage and yield for these three States were down from 1987. The July heat wave in California caused fruit size and quality to vary among orchards. Hail and early-season frost damage reduced quality in the Northern Coast area. In Oregon, fruit quality was generally good, while in Washington, fruit was smaller than normal. The 1989 bartlett production could fall again this year because of last year's fireblight problem (an infectious disease caused by a bacterium) and water shortages. Fruit production in other States was mixed. Crops in Colorado and Utah declined sharply from 1987, while Connecticut and New York reported substantially larger crops. Despite the summer drought, Michigan pears, at 8,000 short tons, remained unchanged from 1987 (table 8).

The smaller pear crop has reduced the amount available for use by both fresh and processing outlets, but processing use accounted for a slightly smaller share of the total crop. Bartletts used for processing fell 8 percent, but processing's share of the crop rose to 75.7 percent from 73.2 percent in 1987. The smaller crop and strong fresh market prices probably contributed to the decreased quantity for processing use.

Remaining Supplies Significantly Larger

The reduced shipments of fresh pears have contributed to somewhat larger stocks of winter pears. At the beginning of February, cold storage holdings of winter pears totaled 235 million pounds, up 19 percent from a year earlier (table 9).

Table 9--Pears, fresh cold storage holdings at end of the month, 1986-88

Months	1986	1987	1988
	1,000 pounds		
January	170,869	198,869	198,379
February	101,326	127,126	148,471
March	65,048	92,082	99,677
April	32,604	53,651	49,167
May	4,783	21,146	17,927
June	712	1,722	2,705
July	74,779	11,818	--
August	130,001	195,306	117,594
September	325,123	507,052	434,015
October	333,177	425,786	425,720
November	281,227	338,764	368,325
December	214,698	279,353	295,514

-- = Not available.
Source: Cold Storage, NASS, USDA.

Demand for winter pears has been sluggish because total arrivals at 22 major markets through mid-February were well below a year ago. Sluggish demand has weakened grower prices from $299 a short ton in December to $286 in January. Nevertheless, grower prices remained much higher than last year's low. Likewise, retail prices averaged an almost 12-percent gain in December. Prices are expected to be higher during the balance of the season.

The U.S. season average grower price for 1988 is estimated at $269 a short ton, up 36 percent from a year ago, with higher prices reported for both fresh and processing uses. Tight supplies of canned pears strengthened prices for bartletts for processing use, while prices for processing use for "other varieties" weakened. Smaller available supplies and strong demand for bartlett pears were chiefly responsible for higher fresh market prices.

PROCESSED NONCITRUS

Supplies of processed noncitrus fruit will be mixed during the balance of the 1988/89 season. Supplies of most canned fruit are tight, and shipments are running ahead of last season. Consequently, prices have been firm. Stocks of frozen fruit and berries in cold storage at the beginning of January were substantially higher than a year ago, due primarily to much larger stocks of blueberries, sweet cherries, and peaches. Nevertheless, prices should remain steady.

Supplies of overall dried prunes are adequate, but those for larger sized prunes are short. Movement has been strong. Consequently, strong demand has kept prices for large sized prunes firm. Supplies of raisins are also adequate. Offshore movement has been down slightly from a year ago, while domestic and Canadian shipments have remained strong. Prices at all levels are likely to remain stable for the balance of the season.

Canned

The 1988/89 pack of canned fruit will be mixed even though the packing season is not yet complete. The larger peach crop boosted the pack of canned peaches and fruit cocktail, while canned mixed fruit declined moderately. Despite smaller crops, a much greater canned apricot pack was reported, but the canned pear pack remained unchanged from 1987. Much lower production in California, Michigan, and Washington reduced the total output of canned sweet cherries only slightly. However, a sharp drop in the Michigan crop decreased the total pack of canned tart cherries substantially. The smaller apple crop will probably result in less canning. With low carryin stocks, supplies for most canned fruit during 1988/89 remain tight.

Shipments of several types of canned fruit are running relatively strong. Exports of most canned fruit have also been relatively strong this season, with some variations in performance among areas and items. Export shipments to the East Asia and Pacific region, the leading destination for most canned fruit, have been mixed. The weak dollar and the infusion of Target Export Assistance Program (TEA) funds have kept export markets relatively strong. Purchases from the EC have been also mixed, despite the Community's elimination of the processing element of its subsidy program in July 1987.

The value of canned fruit exports to offshore markets in 1989 should continue the upward trend of the past few years, although at a lower rate. Exports to the Pacific rim countries of Asia will rise in 1989. U.S. exports to the EC are expected to rise despite continued subsidization of canned fruit by the EC. In addition, continued TEA funding will likely improve U.S. canned fruit exports.

Imports of canned noncitrus fruit presented a mixed picture. To relieve the tight supply situation, imports of canned peaches during June-November 1988 more than doubled from a year earlier. Greece and Chile continued to be major suppliers, providing nearly 24 percent. Imports of canned fruit cocktail fell 4 percent during the same period. A strong gain in canned pear imports was reported, while canned apricot imports dipped slightly.

Strong shipments will keep supplies of most canned fruit tight through the rest of this marketing year. Supplies could remain tight through 1989/90 due to the current stock situation and the reduction in bearing acreage for cling peaches and Bartlett pears this year. As of January 10, 1989, a total of 1,159 acres of clingstone peaches had been pulled, 4.4 percent of the 1988 bearing acreage. However, the pullouts were down sharply from a year earlier. On the other hand, over 3,500 acres of clingstone peaches are expected to be planted in California this spring--the first time growers have planted more than 3,000 acres since 1976, according to the California Canning Peach Association. Bearing acreage in California this year is expected to total 28,373, which should produce 446,260 short tons at 7 percent offgrade (based on a 5-year average). Tight supplies and relatively strong shipments have kept canned prices firm. The 1988 Produce Price Index averaged 114.8 (1982=100), 2 percent above 1987 and 5 percent above in 1986. Tight supplies will probably hold prices firm for the rest of the season.

Dried Fruit

Supplies of dried fruit during the remainder of the 1988/89 season should be adequate. Demand for raisins has risen and, consequently, prices have been firm. The dried prune situation resembles that of last season because of the shortage of larger sized fruit. Movement has been strong and remaining supplies are moderately less than a year ago. Prices therefore have been firm for large sized dried prunes.

The high dry-away ratio and raisin diversion program have reduced the output of raisins to 339,400 short tons (dried basis), moderately below last season.

Combined raisin shipments to domestic and Canadian markets in August-January (1988/89) were up 9.4 percent from a year earlier, while offshore exports were down slightly. West Germany, Japan, the Netherlands, and Venezuela reduced their purchases. Increased exports to the United Kingdom, Sweden, Finland, and Taiwan only partially offset this reduction.

World raisin supplies for 1988/89 should remain almost the same as last season. Poor harvests in several of the world's major Northern Hemisphere raisin/sultana-producing countries during 1987/88 reduced world stocks to their lowest level in years. Raisin supplies in every major producing country except the United States were largely exhausted. However, abundant crops harvested in Greece and Turkey in 1988/89 have bolstered raisin supplies. Therefore, Greece, through various EC support measures, and Turkey, through very attractive prices, will direct their export sales programs to the EC market this year.

In contrast, U.S. raisin sales to Japan during 1988/89 will likely increase further. Exports to Singapore, Korea, and Taiwan should also expand. However, competition for these markets from Southern Hemisphere suppliers, such as South Africa and Australia, will stiffen once their 1989 crops are harvested. Relatively modest increases in export sales to the Middle East, Latin America, and even Eastern Europe may also occur in 1988/89.

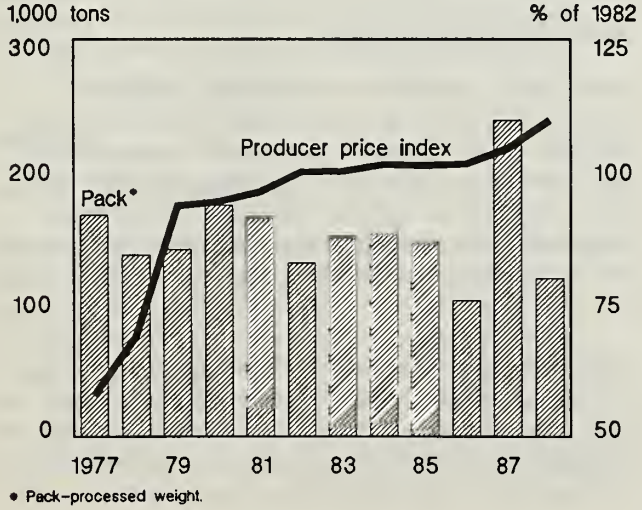
In response to strong demand, raisin prices have exceeded those of last year by an average of 4 percent. Raisin prices should stay strong throughout the season. Demand appears to be in balance with supplies for the first time in 4 years. Accordingly, the Raisin Administrative Committee has announced that there will be no Raisin Acreage Diversion Program in 1989.

The output of dried prunes was estimated at 155,000 short tons, down 32 percent from 1987, but still 57 percent above 1986. Total supplies of dried prunes during 1988/89 were only fractionally smaller than in 1987/88 because of huge carryin stocks.

Shipments of dried prunes through January of this season rose almost 11 percent from a year ago, with increases in both domestic and export markets (offshore destinations). Significantly larger purchases of dried prunes were made by Italy and several other European countries. Even though France's dried prune production is expected to reach a record high of 40,000 metric tons in 1988, up 32 percent from 1987 and 28 percent from the average for 1983-87, French purchases of U.S. dried prunes have been well above a year ago. Increased exports to Europe can probably be attributed to a relatively larger proportion of rust-damaged fruit harvested in France due to cold temperatures during spring development. Shipments to Asia presented a mixed picture, with Japan recording a 5-percent increase. Thus, Japan remains the leading customer for U.S. dried prunes. Exports to the regions of Europe and Asia accounted for almost 92 percent of the export total.

Domestic shipments (including those to Canada) through January rose 12 percent from a year ago. Pitted dried prunes have become increasingly popular, with shipments up 15 percent so far. Consequently, strong movement and the limited supplies of large-sized dried prunes have strengthened prices. The BLS January Produce Price Index of 113.2 (1982=100) was 2 percent above last year. Prices are expected to remain firm throughout the season in light of smaller supplies and strong demand.

U.S. Dried Prunes



* Pack-processed weight.

Frozen

As of February 1, cold storage holdings of frozen fruit and berries totaled 834 million pounds, up moderately from a year earlier. Many items, particularly blueberries, sweet cherries, and peaches, showed gains. Sluggish movement and sharply higher carryin stocks have kept frozen peach supplies well above a year ago. Larger deliveries of blueberries to freezers on the Pacific Coast contributed to increased stocks. In contrast, because of significant reductions in Michigan's tart cherry production, frozen cherry supplies in cold storage were moderately below a year earlier (table 10).

Supplies of frozen strawberries in cold storage were slightly below year-earlier levels on February 31. Deliveries of strawberries to freezers on the Pacific Coast were generally down. A total of 205 million pounds was used for processing, down 8 percent from 1987. Imports of frozen strawberries (mostly from Mexico) fell sharply in 1988. Strawberry

Table 10--Stocks of frozen fruit: End of January, 1986-89

Frozen fruit	1986	1987	1988	1989 1/
	1,000 pounds			
Apples	69,361	69,645	74,899	73,621
Apricots	5,638	3,498	6,490	5,867
Blackberries	11,485	15,655	19,649	22,119
Blueberries	55,079	43,972	44,015	62,815
Boysenberries	1,741	2,699	4,139	3,387
Cherries, tart	139,226	127,997	134,922	112,146
Cherries, sweet	13,315	11,158	11,722	18,381
Grapes	5,082	2,215	2,866	3,973
Peaches	35,019	32,371	72,586	89,308
Raspberries, red	21,606	23,862	33,036	34,438
Strawberries	137,719	128,042	212,150	205,974
Other	161,211	171,202	173,685	202,310
Total	656,482	632,316	790,159	834,339

1/ Preliminary.

Source: Cold Storage, NASS, USDA.

acreage in California has expanded, but fewer plantings of Northwest strawberries will likely affect production in 1989. There are indications that overall acreage in the Northwest could fall 20 percent. Nevertheless, current supplies of frozen strawberries are more than sufficient to meet demand, and f.o.b. prices have consequently been steady. Prices are not expected to strengthen until the spring, when the strawberry sizes are known.

BERRIES

Strawberries

1988 Production Up Moderately

The 1988 U.S. commercial strawberry crop was estimated at 1.17 billion pounds, up 5 percent from 1987 due to increased acreage and higher yields. The harvested acreage rose to 44,950 in 1988, up 0.7 percent from 1987 and 1.3 percent from 1986. The yield per acre has steadily increased to 26,000 pounds, up 4.4 percent from 1987 and 13 percent from 1986. Larger crops were indicated for all three principal States--California, Florida, and Oregon. California production, at 862 million pounds, was up about 5 percent from 1987 and accounted for 74 percent of the U.S. crop. Production in Florida and Oregon rose 13 and 8 percent, respectively. Production from these three States therefore accounted for 93 percent of the U.S. crop in 1988, up from 92 percent in 1987.

Larger beginning stocks have reduced use of strawberries for processing. Consequently, a substantially larger quantity of strawberries was sold fresh, up 9 percent from 1987. Approximately 73 percent of the 1988 crop went to the fresh market, compared with 70 percent a year earlier. The larger crop and reduced processor demand weakened grower prices for both fresh and processing uses substantially below 1987. The U.S. average price for strawberries for all sales was $46 per hundredweight, down 7 percent from 1987. Despite the larger crop, total value of production fell to $537 million, 2 percent less than in 1987.

Table 11--Strawberry imports, United States, 1981-88

Calendar year	Fresh	Frozen
	Million pounds	
1981	6.7	60.1
1982	4.5	34.9
1983	5.1	42.5
1984	8.8	50.9
1985	9.6	59.7
1986	12.9	50.7
1987	33.2	79.2
1988 1/	30.2	64.6

1/ Data through November.

Source: Bureau of the Census, U.S. Department of Commerce.

Imports Mixed

During the first 11 months of 1988, imports of fresh strawberries totaled 16,194 metric tons, up 17 percent from a year earlier. Total imports of frozen strawberries during 1987/88 (December-November) were off 18 percent. Most imports of fresh and frozen strawberries came from Mexico. Increased available supplies and the depreciation of the Mexican peso relative to the U.S. dollar have significantly boosted fresh strawberry imports. On the other hand, sharply larger early-season stocks of U.S. frozen strawberries reduced imports (table 11).

Exports Strong

U.S. exports of fresh strawberries totaled 13,684 metric tons during the first 11 months of 1988, up 31 percent from a year earlier. Larger shipments to almost all areas were recorded. Canada provided the largest market, increasing its purchases 32 percent and accounting for 68 percent of total shipments. Other important markets included Japan, West Germany, and the United Kingdom. Japanese shipments totaled 3,027 metric tons, up 19 percent, and accounted for more than one fifth of total exports.

1989 Winter Crop Prospects

As of January 1, Florida winter strawberry acreage is projected to be 5,300, up 6 percent from 1988. Transplanting began in early October. Good weather during October and November speeded planting and enhanced crop development. The last tropical storm in November caused some damage, and growers ran overhead sprinklers to limit freeze damage in December. Light harvesting began in late November.

Early-season shipments were very light, but f.o.b. prices approached year-earlier levels. The opening f.o.b. price for fresh strawberries in western and central Florida in early December was quoted at $21 per 12 pints, compared with $22 a year earlier. Prices have dropped sharply because of

larger shipments. In mid-February, the f.o.b. price was quoted at $10.30, compared with $11.00 a year ago. Prices will likely rise somewhat in the early spring because of reduced supplies. In addition, California strawberries will probably reach their markets later than usual this season, because the late December and early February freezes may delay strawberry shipments in the southern part of the State. It has been reported that the cold wave damaged strawberries in that area. Strawberry acreage in Oregon and Washington that was not protected by snow cover has also reportedly been damaged by subfreezing temperatures.

TREE NUTS

Nut Output Lower in 1988; Prices and Values Higher

U.S. tree nut production in 1988 totaled 869,600 tons, in-shell basis, down 9 percent from 1987 but 47 percent above 1986. Last year's production was the second highest on record, with almonds and walnuts returning to more normal levels. Combined with large inventories from record crops harvested in 1987, total supplies were extremely large for most tree nuts at the beginning of the 1988/89 marketing season (tables 12 through 15). However, domestic and export demand have been strong. U.S. tree nut exports for FY89 (October 1, 1988-September 30, 1989) are expected to rise to $901 million, 20 percent higher than the same period a year earlier. This follows a 33-percent increase in export sales between 1986/1987 and 1987/88.

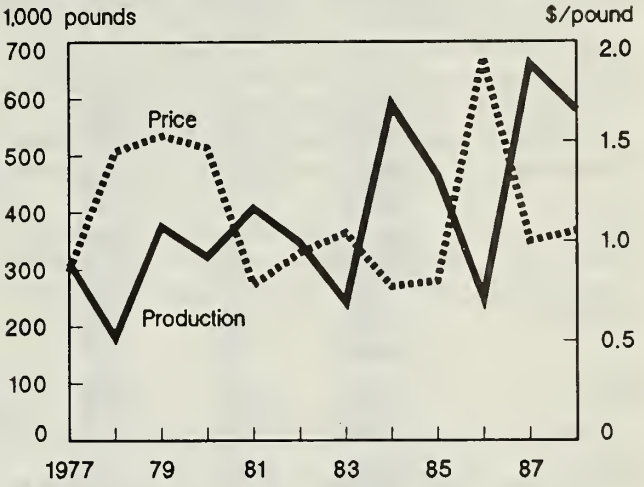
Despite record supplies for 1988/89, the total value of the 1988 utilized production of these edible nut crops, excluding walnuts, is estimated at $915 million at the grower level, up 3 percent from 1987 and 17 percent from 1986. Value of production increased for all 1988 tree nuts except almonds and filberts. The value for 1988 walnuts will not be estimated until July 10, 1989. Due to strong demand in domestic and export markets, the 1988 season average grower prices strengthened for 1988-crop almonds, pecans, and macadamias. The 1988/89 marketing season grower price is also expected to be higher for walnuts. However, prices weakened for the 1988 crops of filberts and pistachios because of large world supplies.

Almonds

Crop Was Third Largest Ever

California's 1988 almond crop is estimated at 580 million pounds shelled basis, 12 percent below the record 1987 production but 132 percent higher than 1986. The 1988 production represents the third largest on record. Bearing acreage, at 406,000, fell 1 percent from 1987 and continues on a downward trend from the peak of 413,000 in 1986. However, because of improving yields, production is expected to trend upward, even with reduced bearing acreage.

U.S. Almond Production and Prices Received by Growers



Shell basis.

Almond supplies at harvest began at levels substantially above a year earlier (table 12). However, record shipments to export and domestic markets have reduced the inventory to 325 million pounds as of January 1, according to the Almond Board of California (ABC). This is only 6 percent above the inventory on January 1, 1988. The ABC forecasts that 160 million pounds will be shipped during 1988/89 to domestic markets and 370 million to export, for total of 530 million pounds. This would result in a salable carryout of 113 million pounds on June 30, 1989.

However, depending on California weather conditions this spring and the prospects for 1989 crop size, the ABC may decide in May to release some of the reserve volume. This would reduce the carryout inventory and the supply for 1989/90. So far this season (July-December 1988), domestic shipments have been 12 percent and export shipments 23 percent above a year earlier. To date, the major import buyers have been West Germany, Japan, France, the Soviet Union, the United Kingdom, and the Netherlands. In spite of a very large world supply of low-priced filberts, almond export shipments are expected to continue at a record pace.

The EC has reduced the duty on the first 45,000 metric tons of almonds imported each year from the United States. The EC has recently set up a country-by-country allocation of this reduced 45,000-metric-ton quota. The duty on this quota went from 7 to 2 percent on January 1.

The record shipments and a 25-percent reserve have helped to firm the market and potential grower returns in 1988/89. The preliminary estimate of the average grower price for the 1988 almond crop is $1.05 per pound, compared with $1.00 in 1987. If this is the final price, then the value of production for 1988 almonds will be $590 million, or 9 percent below the record 1987 value of $648 million.

Table 12--Almonds: Production, supply, and distribution 1/

Country	Marketing Year 2/	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	500	8,040	2,813	11,353
	1988/89	2,813	22,000	0	24,813	5,500	13,800	5,513	24,813
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	9,000	24,500	3,000	17,500	4,000	24,500
	1988/89	4,000	18,000	4,000	26,000	5,000	18,000	3,000	26,000
Morocco	1986/87	250	7,052	0	7,302	2,196	4,506	600	7,302
	1987/88	600	6,280	0	6,880	1,350	4,700	830	6,880
	1988/89	830	5,400	0	6,230	1,000	4,600	630	6,230
Portugal	1986/87	256	3,200	13	3,469	1,334	1,940	195	3,469
	1987/88	195	3,600	700	4,495	1,500	2,000	995	4,495
	1988/89	995	1,400	1,000	3,395	1,200	2,100	95	3,395
Spain	1986/87	19,490	50,000	255	69,745	30,500	25,000	14,245	69,745
	1987/88	14,245	65,000	6,500	85,745	18,000	27,000	40,745	85,745
	1988/89	40,745	40,000	3,000	83,745	25,000	27,000	31,745	83,745
Tunisia	1986/87	2,800	15,000	174	17,974	2,756	13,718	1,500	17,974
	1987/88	1,500	16,429	0	17,929	821	15,608	1,500	17,929
	1988/89	1,500	12,500	100	14,100	500	12,400	1,200	14,100
Turkey	1986/87	5,000	12,000	0	17,000	1,000	12,000	4,000	17,000
	1987/88	4,000	9,000	0	13,000	1,000	10,000	2,000	13,000
	1988/89	2,000	13,000	0	15,000	1,000	12,000	2,000	15,000
United States 3/	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	263,080	300	367,839	167,831	83,399	116,609	367,839
Totals	1986/87	103,403	232,452	8,389	344,244	129,494	154,515	60,235	344,244
	1987/88	60,235	420,179	18,988	499,402	181,889	160,171	157,342	499,402
	1988/89	157,342	375,380	8,400	541,122	207,031	173,299	160,792	541,122

1/ U.S. Census Bureau export figures do not match these table data due to variations in actual dates of shipments.
2/ 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. 3/ U.S. export, stock, and consumption data are from the Almond Board of California.

Source: Horticultural Products Review, FAS, USDA.

Table 13--Filberts: Production, supply, and distribution 1/

Country	Marketing Year 2/	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	20,000	121,000	55,000	52,000	14,000	121,000
	1988/89	14,000	140,000	8,000	162,000	75,000	57,000	30,000	162,000
Spain	1986/87	10,140	19,000	446	29,586	15,986	10,600	3,000	29,586
	1987/88	3,000	32,000	575	35,575	10,500	10,500	14,575	35,575
	1988/89	14,575	25,000	275	39,850	15,000	11,000	13,850	39,850
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	210,000	75,000	45,000	330,000
	1988/89	45,000	360,000	0	405,000	250,000	80,000	75,000	405,000
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	15,374	4,511	26,434
	1988/89	4,511	16,330	5,000	25,841	6,500	15,000	4,341	25,841
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	25,025	513,009	282,049	152,874	78,086	513,009
	1988/89	78,086	541,330	13,275	632,691	346,500	163,000	123,191	632,691

1/ U.S. Census Bureau export figures do not match these table data due to variations in actual dates of shipments.
2/ Marketing years are as follows: August-July in United States; September-August in Spain, Italy, and Turkey.

Source: Horticultural Products Review, FAS, USDA.

Filberts

Normal Crop Harvested

Filbert production in Oregon and Washington during 1988 totaled 16,500 tons, in-shell basis, 24 percent less than 1987 production but 9 percent above 1986. The smaller harvest was entirely due to a lower yield; bearing acreage continues on an upward trend. The season average grower price is estimated at $836 per ton, lower than 1987's $959 but higher than most recent years.

World production earlier in the marketing season was forecast at 541,330 metric tons, 29 percent more than last year and the second highest on record behind the 1983/84 season (table 13). A bumper harvest of 360,000 metric tons was expected in Turkey, while an excellent crop of 140,000 tons was estimated for Italy. A short crop of 25,000 tons was forecast for Spain.

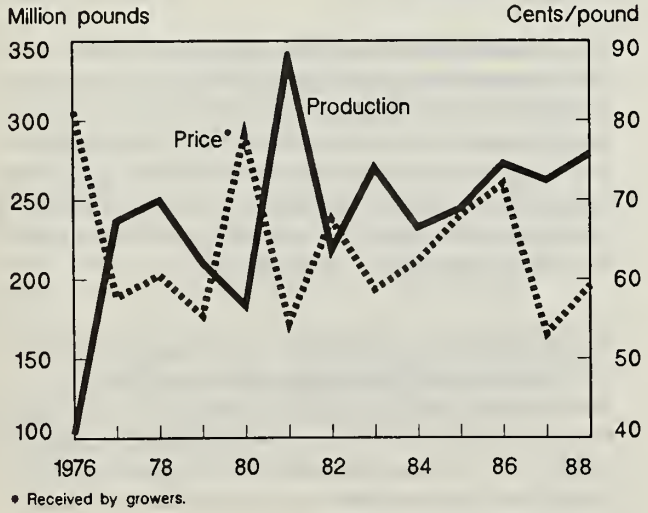
Pecans

Production and Price Higher

The preliminary estimate of pecan production in 1988 for 12 States is 279 million pounds, in-shell basis. This was an above-average crop, 6 percent more than in 1987 and 2 percent higher than 1986. Improved varieties have accounted for 69 percent of the total crop in both 1988 and 1987. Production was normal in most States, including Florida, New Mexico, and Texas; below- normal in drought-affected Alabama and Georgia; but bumper harvests were produced in Louisiana, Mississippi, and Oklahoma.

The value of production, estimated at $165 million, was 19 percent higher than in 1987 but 16 percent lower than in 1986. Grower price averaged 59.2 cents per pound for all pecans, compared with 53.1 cents in 1987. Prices were stronger for improved varieties than for seedling and native pecans. Pecan markets apparently improved because of higher prices for walnuts. However, consumption and price are expected to make only modest gains as the pecan supply continues large and world inventories of edible nuts are also very large, especially almonds and filberts. Imports of pecans from Mexico are expected to continue expanding, while U.S. pecan exports have shown very little growth.

U.S. Pecan Production and Prices



* Received by growers.

Cold storage stocks of shelled pecans, as of February 1, 1989, were 25.4 million pounds (26.3 million a year earlier) and in-shell pecans were 112.4 million (98.6 million a year earlier).

Pistachios

Production and Value Set Record, Grower Price Falls

The 1988 pistachio crop in California reached a record 92.0 million pounds, in-shell basis, 178 percent greater than the 1987 production and 23 percent above the previous in record 1986. Of the total 92.0 million pounds, 72.0 million or 78 percent of the crop was marketable in-shell. The 1988 yield of 2,070 pounds per acre was the second highest behind the record set in 1986, 2,170 pounds. Bearing acreage continues to climb; the 1988 acreage was 44,500 acres, or 10 percent higher than the previous year. However, the increases in pistachio bearing acreage in California will slow substantially in the next 5-10 years, as new plantings have fallen dramatically since 1982 and it takes approximately 6 years before newly planted trees come into commercial production.

The value of the 1988 production (grower level) soared to a record $103.4 million, more than twice the 1987 value and 30 percent above 1986. However, the preliminary estimate of the season average price to growers fell to $1.12 per pound, in-shell, compared with $1.43 in 1987 and $1.06 in 1986. Prices are expected to improve in 1989 because California will be in the off-year of its production cycle and likely will harvest a normal to below normal crop.

The bumper 1988 California crop and a much smaller harvest in Turkey have created an excellent export opportunity for the United States. However, Syria's crop is projected to be substantially larger than 1987 (table 14). Production estimates are not available for Iran and Afghanistan, though trade reports indicate that production in Iran will be up despite 1988 being an off-year in Iran's production cycle.

U.S. imports of pistachios have continued to decline, going from a high of 16,869 metric tons in 1985/86 (September/August) to only 2,258 tons in 1987/88. This decline was due to the imposition of countervailing and antidumping duties on Iranian pistachios in summer 1986 and the total ban on imports from Iran in fall 1987.

Table 14--Pistachios: Production, supply, and distribution 1/

Country	Marketing Year 2/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
				Metric tons, in-shell basis					
Greece	1986/87	100	2,296	200	2,596	36	2,530	30	2,596
	1987/88	30	3,200	100	3,330	35	2,900	395	3,330
	1988/89	395	4,000	30	4,425	800	3,150	475	4,425
Italy	1986/87	2,900	300	1,470	4,670	547	2,723	1,400	4,670
	1987/88	1,400	4,300	3,000	8,700	1,100	4,200	3,400	8,700
	1988/89	3,400	300	4,000	7,700	500	5,500	1,700	7,700
Syria	1986/87	460	14,300	1,000	15,760	0	15,000	760	15,760
	1987/88	760	15,000	1,000	16,760	0	16,000	760	16,760
	1988/89	760	18,000	500	19,260	500	17,500	1,260	19,260
Turkey	1986/87	17,000	20,000	0	37,000	2,000	17,000	18,000	37,000
	1987/88	18,000	25,000	0	43,000	7,000	20,000	16,000	43,000
	1988/89	16,000	15,000	0	31,000	5,000	18,000	8,000	31,000
United States	1986/87	1,996	33,970	2,472	38,438	3,544	23,237	11,657	38,438
	1987/88	11,657	15,010	2,258	28,925	4,926	18,670	5,329	28,925
	1988/89	5,329	43,090	1,000	49,419	6,000	31,419	12,000	49,419
Totals	1986/87	22,456	70,866	5,142	98,464	6,127	60,490	31,847	98,464
	1987/88	31,847	62,510	6,358	100,715	13,061	61,770	25,884	100,715
	1988/89	25,884	80,390	5,530	111,804	12,800	75,569	23,435	111,804

1/ U.S. Census Bureau export figures do not match these table data due to variations in actual dates of shipments.
2/ Marketing years are as follows: September-August in Italy, Syria, and United States; October-September in Greece and Turkey.

Source: Horticultural Products Review, FAS, USDA.

According to the California Pistachio Commission, year-to-date in-shell shipments (September 1 to December 31, 1988) totaled 24.8 million pounds to domestic markets (88 percent of the total) and 3.4 million pounds to export markets. Shipments of edible kernels totaled 983,109 pounds, domestic and 97,825 pounds, export. The in-shell inventory as of December 31 was 52.0 million pounds, of which 23.1 million were committed to buyers, leaving a balance of 28.9 million pounds. In addition, the edible kernel inventory stood at 10.3 million pounds, with commitments of 1.8 million. California is shipping significant quantities of pistachios to export outlets, with Taiwan, Hong Kong, Japan, and other Far East countries as the major buyers, followed by Europe and Canada.

Macadamia Nuts

Acreage, Production, and Value Are Records

Production of Hawaiian macadamias in 1988 reached a record 47.0 million pounds, in-shell basis, 10 percent higher than 1987 and 7 percent above 1986. Bearing acreage increased 1,000 acres to 16,600, continuing its upward trend. Total planted acreage for the 1987/88 crop year was 21,500, of which 15,600 was of bearing age; therefore, harvested acreage should continue to increase in the next several years. The 1988 yield of 2,830 pounds per bearing acre was up 3 percent from 1987 but still well below the excellent yield of 3,440 pounds obtained in 1983.

Average grower prices and the farm value of the crop have also increased each year. The value of production in 1988 was $43.2 million, up 20 percent from 1987 and nearly double the 1983 value. A record grower price was established at 92.0 cents per pound in 1988, compared with 84.0 cents in 1987 and 65.7 in 1983.

Walnuts

Production Lower; Supplies Continue Near Record

The 1988 California walnut production is estimated at 200,000 tons, in-shell basis, 19 percent below the record 1987 crop but 11 percent above 1986. Bearing acreage in 1988, at 176,400, increased slightly from 1987 but was 2 percent lower than 1986. Bearing acreage likely will increase modestly for the next several years, then stabilize and decline for several more years; plantings have decreased sharply in the last 3 years.

The estimate of the average grower price for the 1988 California walnut crop is not yet available, but it is expected to rebound from the $984 per ton in 1987, which was reduced by the record production that year. Demand has been strong this season in both domestic and export markets, but has been hindered by the near-record U.S. and world supply of walnuts (table 15). Likewise, global supplies of most other edible nuts are at record levels.

Walnut exports should continue to grow because of promotional activities in West Germany, Japan, and Spain, financed by $6.5 million in TEA funds. Higher prices are expected to result in an increase in the value of exports to $124 million. U.S. walnut exports will face increased competition from China, where another record crop has again increased supplies available for export.

Table 15--Walnuts: Production, supply, and distribution 1/

Country	Marketing Year 2/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
				Metric tons, in-shell basis					
China (mainland)	1986/87	0	136,000	0	136,000	47,700	88,300	0	136,000
	1987/88	0	147,000	0	147,000	47,000	100,000	0	147,000
	1988/89	0	155,000	0	155,000	53,000	102,000	0	155,000
France	1986/87	0	27,900	6,600	34,500	10,700	23,800	0	34,500
	1987/88	0	26,500	6,400	32,900	12,000	20,900	0	32,900
	1988/89	0	26,500	7,000	33,500	10,500	23,000	0	33,500
India	1986/87	4,480	23,000	0	27,480	12,000	12,000	3,480	27,480
	1987/88	3,480	20,000	0	23,480	11,000	11,000	1,480	23,480
	1988/89	1,480	17,000	0	18,480	9,000	9,000	480	18,480
Italy	1986/87	100	12,000	7,838	19,938	1,944	17,894	100	19,938
	1987/88	100	20,000	8,000	28,100	1,800	20,300	6,000	28,100
	1988/89	6,000	10,000	6,500	22,500	1,500	20,500	500	22,500
Turkey	1986/87	5,000	68,000	0	73,000	5,000	63,000	5,000	73,000
	1987/88	5,000	65,000	0	70,000	2,000	62,000	6,000	70,000
	1988/89	6,000	64,000	0	70,000	3,000	61,000	6,000	70,000
United States	1986/87	65,762	163,290	3,088	232,140	68,143	131,080	32,917	232,140
	1987/88	32,917	224,070	549	257,536	72,706	115,514	69,316	257,536
	1988/89	69,316	181,440	2,000	252,756	75,000	125,000	52,756	252,756
Totals	1986/87	75,342	430,190	17,526	523,058	145,487	336,074	41,497	523,058
	1987/88	41,497	502,570	14,949	559,016	146,506	329,714	82,796	559,016
	1988/89	82,796	453,940	15,500	552,236	152,000	340,500	59,736	552,236

1/ U.S. Census Bureau export figures do not match these table data due to variations in actual dates of shipments.
2/ Marketing years are as follows: August-July in United States; September-August in Italy and Turkey; October-September in China, France, and India.

Source: Horticultural Products Review, FAS, USDA.

According to the Walnut Marketing Board, exports of in-shell walnuts from August 1, 1988 through January 31, 1989 were 97.1 million pounds, 5 percent below a year earlier. Future exports are likely to reduce further if the EC places a 100-percent duty on walnut imports in retaliation for U.S. sanctions. The EC is, by far, the largest importer, taking 85 percent of total U.S. in-shell exports and 63 percent of all in-shell walnuts shipped domestic and export. As for shelled walnuts, the EC imported 45 percent of total U.S. exports, but this is only 6 percent of total shelled shipments, including domestic. Prices in California are up slightly from last year with combination halves and pieces trading around $1.60 per pound, f.o.b. West Coast.

Other Tree Nuts

Harvest of Brazil's crop of cashews was underway in January, with production expected to be near last year's 130,000 metric tons. Brazilian production has been increasing steadily since the early 1980's, when the crop was only around 75,000 metric tons. India is the world's largest producer of cashews, but in 1988 the harvest was short, only about 120,000 tons. The U.S. imports more than 10 percent of total world exports of cashews. In 1987, the U.S. imported 42,762 metric tons, less than in 1986 or 1985. However, in 1988 the U.S. imported much higher levels than 1987. New supplies are arriving in volume in the United States, with size 320's offered around $2.90-$2.95 per pound, and 240's at $3.00-$3.05 per pound, export-wholesaler, New York.

U.S. imports of in-shell Brazil nuts were sharply lower for the first 10 months of 1988, while shelled Brazil nut imports were slightly higher. The in-shell Brazil nuts are imported entirely from Brazil, while shelled nuts are imported from Brazil, Bolivia, and Peru.

VALUE OF FRUIT AND TREE NUT PRODUCTION

Fruit Growers Do Better In 1988 Than In 1987

The 1988 value of major fruit and tree nut crops exceeded $8 billion even before numbers were reported for walnuts, avocados, pomegranates, dried prunes, and figs. When the numbers for these crops are in, the total could reach $8.6 billion.1/ This would represent an increase of $1 billion above 1987 and $1.5 billion over 1986. The numbers so far in 1988 represent over 11 percent of the total value of all principal crops grown in the United States and reported by the National Agricultural Statistics Service.

The major increase was due to a large rise in the value of apples and oranges. The total value of the apple crop jumped 34 percent, from about $0.9 billion to over $1.2 billion, as higher prices more than offset the smaller 1988 crop (table

1/ The value of many minor fruit and tree nut crops not included in the estimates program could add an additional $500 million to the $8.6 billion total.

16). A larger orange crop combined with more favorable prices increased the 1988 value of all oranges 28 percent over 1987. Significant gains in crop value were reported for all citrus and most deciduous fruit and tree nut crops. The exceptions were almonds, filberts, sweet cherries, apricots, and strawberries.

The top five states (California, Florida, Washington, Oregon, and Michigan) accounted for more than 83 percent of the total U.S. fruit and nut crop value in 1988. California, the leading State, had about 46 percent of the U.S. total, followed by Florida with 22, Washington with 10, Oregon with 2.3, and Michigan with 2.2 (table 17).

Noncitrus fruits accounted for about 57 percent of the 1988 crop value, with about 32 percent from citrus crops and 11 percent from nut crops. The top five commodities were oranges, grapes, apples, almonds, and strawberries. Oranges accounted for 21 percent of the total crop value of reported fruits and nuts (table 18). Grapes, the next most important, represented over 17 percent, while apples represented about 15 percent.

Table 16--Summary of crop values, United States, 1987, 1988, and percent change

Commodity	1987	1988	Percent change
	1,000 dollars		
Figs, California	16,006	1/	--
Pomegranates	5,617	1/	--
Dates, California	15,889	17,871	12
Kiwifruit, California	18,886	22,989	22
Avocados	208,408	1/	--
Cranberries	147,798	178,861	21
Pecans	139,109	164,962	19
Pistachios, California	47,419	103,400	118
Walnuts, California	243,048	1/	--
Almonds, California	648,000	589,575	-9
Filberts	20,902	13,800	-34
Macadamia, Hawaii	35,868	43,240	21
Apples	906,353	1,219,037	34
Peaches	320,202	395,165	23
Bananas, Hawaii	3,386	3,828	13
Papayas, Hawaii	11,050	12,475	13
Pineapples, Hawaii	99,286	107,402	8
Pears	185,712	234,104	26
Grapes	1,361,872	1,364,559	0
Cherries, sweet	159,140	145,418	-9
Cherries, tart	22,282	53,861	142
Apricots	37,113	34,151	-8
Plums, California	75,361	102,661	36
Prunes, dried, California	168,315	1/	--
Prunes and plums, ex. Calif.	6,667	8,805	32
Nectarines, California	65,545	78,861	20
Olives, California	42,192	49,319	17
Strawberries	549,050	537,289	-2
Oranges	1,322,623	1,690,363	28
Grapefruit	412,234	471,558	14
Lemons	182,076	202,854	11
Limes, Florida	19,569	23,314	19
Tangelos, Florida	24,626	32,687	33
Tangerines	67,290	78,197	16
Temples, Florida	20,513	26,631	30
Total	7,609,407	8,007,237	5

-- = Not available. 1/ Available July 10, 1989.

Source: Crop Value 1988 Summary, NASS, USDA.

Table 17--Leading fruit and nut-producing States, crop value, 1988

State	Million dollars	Percent of U.S.
California	3,690	46.1
Florida	1,786	22.3
Washington	813	10.2
Oregon	183	2.3
Michigan	173	2.2
Total	6,645	83.0

Source: Crop Value 1988 Summary, NASS, USDA.

Table 18--Leading fruit and nut commodities, crop value, 1988

Commodity	Million dollars	Percent of U.S.
Oranges	1,690	21.1
Grapes	1,365	17.0
Apples	1,219	15.2
Almonds	590	7.4
Strawberries	537	6.7
Total	5,401	67.4

Source: Crop Value 1988 Summary, NASS, USDA.

Table 19--Fresh fruit: Consumer price indexes, United States, by months, 1986-89

Item and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						(1982-1984=100)						
Apples:												
1986	115.7	120.5	120.9	122.8	129.9	139.9	146.0	168.0	151.9	119.3	115.5	116.9
1987	123.7	125.8	135.6	136.1	139.0	151.1	158.6	151.3	129.5	113.6	103.5	103.6
1988	109.3	116.4	119.4	121.7	121.9	127.9	144.7	178.6	167.7	139.2	131.2	132.4
1989	138.8											
Bananas:												
1986	92.3	103.1	110.4	125.8	125.9	101.6	101.0	100.1	104.6	102.3	101.3	91.8
1987	100.8	107.2	107.0	108.2	101.6	111.7	100.0	104.8	103.8	100.2	97.4	107.4
1988	107.2	119.6	118.9	121.4	119.6	144.7	122.7	112.0	110.4	118.6	119.9	115.9
1989	112.7											
Oranges:												
1986	103.8	100.3	98.5	101.2	105.5	110.0	114.5	115.2	112.3	115.7	115.4	110.4
1987	114.1	111.2	114.1	112.6	120.0	141.4	152.8	156.8	160.3	166.8	154.8	126.3
1988	122.3	121.3	124.4	126.5	143.7	149.5	155.7	157.5	164.5	169.8	155.5	144.4
1989	131.1											

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

Table 20--Frozen concentrated citrus juices: Stocks, packs, supplies, and movements, Florida, 1985/86-1988/89

Item and season	Carryin	Pack	Total supply	Total season movements	Carryout
			Million gallons 1/		
Orange:					
1985/86	48.3	215.1	263.4	226.4	37.0
1986/87	37.0	227.9	264.9	225.1	39.8
1987/88	39.8	240.9	280.7	238.5	42.2
1988/89	42.2				
Grapefruit:					
1985/86	3.4	26.2	29.6	26.2	3.4
1986/87	3.4	30.2	33.6	28.4	5.2
1987/88	5.2	33.5	38.7	28.9	9.8
1988/89	9.8				
Tangerine:					
1985/86	.6	1.0	1.6	1.3	.3
1986/87	.3	.5	.8	.7	.1
1987/88	.1	1.2	1.3	1.0	.3
1988/89	.3				

1/ Oranges and tangerines, 42 degree Brix; Grapefruit, 40 degree Brix.

Source: Florida Citrus Processors Association.

Table 21--Selected fresh citrus prices, f.o.b., packed fresh, by months, 1986-89

Item and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						$/box						
Oranges:												
Florida												
1986	11.30	11.10	10.50	10.10	10.00	13.50	--	--	--	--	13.40	13.30
1987	11.70	11.40	12.20	12.40	12.70	16.60	--	--	--	--	14.60	14.00
1988	13.30	14.10	15.10	14.30	14.40	17.20	--	--	--	--	15.90	14.30
1989	12.90											
Arizona												
1986	13.60	12.90	13.60	13.10	12.20	10.80	8.46	--	--	18.00	16.80	14.30
1987	12.20	10.60	11.60	12.00	13.20	11.90	12.20	--	--	33.20	19.90	15.70
1988	14.90	13.50	14.30	15.00	14.40	8.90	16.00	--	--	--	25.40	19.00
1989	16.50											
California												
1986	15.10	13.70	13.80	12.90	13.10	12.10	12.10	12.40	13.10	14.60	16.20	14.80
1987	14.60	14.00	13.70	13.70	15.80	16.80	17.20	15.20	17.80	21.20	19.70	14.90
1988	15.60	14.40	14.20	15.50	19.30	18.80	16.60	15.10	13.80	16.50	15.90	16.80
1989	14.80											
Grapefruit:												
Florida												
1986	10.90	11.20	11.80	12.20	12.80	--	--	--	--	--	15.20	12.00
1987	12.10	11.70	11.30	11.90	12.10	13.40	--	--	--	16.40	13.30	13.00
1988	12.60	12.90	12.60	12.30	12.50	--	--	--	--	18.00	12.80	12.90
1989	10.80											
California												
1986	16.10	14.90	14.70	12.00	14.20	15.50	15.30	15.20	16.00	--	13.40	13.20
1987	12.60	13.00	12.80	12.30	13.80	15.60	15.60	13.40	14.60	14.30	15.70	13.00
1988	14.70	13.00	11.60	11.10	12.10	12.90	14.90	14.10	14.80	16.00	12.80	11.40
1989	11.10											
Lemons:												
Arizona												
1986	20.80	16.10	12.80	9.42	20.30	12.80	--	--	15.30	17.00	16.40	16.50
1987	16.70	19.20	19.50	10.90	5.14	--	--	--	30.20	26.10	23.60	19.70
1988	17.30	18.50	24.30	9.94	--	--	--	--	31.30	21.40	19.90	20.60
1989	21.30											
California												
1986	22.00	18.60	17.70	18.60	18.20	22.90	24.20	18.20	13.90	17.60	18.80	18.40
1987	18.40	19.50	21.10	20.70	20.60	23.70	27.30	30.00	28.90	23.60	20.20	18.20
1988	17.10	18.40	21.30	22.00	23.50	27.50	29.70	31.80	32.30	30.20	26.20	23.40
1989	19.50											

-- = Not available.

Source: Agricultural Prices, NASS, USDA.

Table 22--Citrus fruit: Exports of selected fresh items, by areas of destination, United States, 1985/86-1988/89

Item and season 1/	Canada	Europe					Hong Kong	Japan	Other	Total
		France	Netherlands	Other EC 2/	Other	Total				
					1,000 metric tons					
Fresh fruit:										
Oranges										
1985/86	112	--	--	7	1	8	126	109	39	394
1986/87	111	--	--	18	2	20	104	121	40	396
1987/88	95	--	--	4	1	5	78	115	42	335
1987/88 thru Nov.	9	--	--	--	--	--	2	6	2	19
1988/89 thru Nov.	8	--	--	--	--	--	6	3	1	18
Grapefruit										
1985/86	27	45	20	14	3	82	--	152	9	270
1986/87	28	59	22	21	3	104	--	195	20	347
1987/88	37	62	27	51	3	143	--	242	40	462
1987/88 thru Nov.	8	11	4	8	--	23	--	28	2	61
1988/89 thru Nov.	7	12	12	8	--	32	--	19	3	61
Lemons										
1985/86	9	--	--	1	1	2	--	111	8	130
1986/87	7	--	--	3	--	3	--	130	11	151
1987/88	7	--	--	3	--	3	--	118	11	139
1987/88 thru Nov.	2	--	--	--	--	--	--	38	4	44
1988/89 thru Nov.	3	--	--	--	--	--	--	42	5	50

-- = Not available. 1/ Season beginning August 1 for lemons, September 1 for grapefruit, and November 1 for oranges. 2/ Belgium-Luxembourg, Denmark, West Germany, Italy, Ireland, Greece, and the United Kingdom.

Source: Horticultural Products Review, FAS, USDA.

Table 23--Production and utilization of specified noncitrus fruit, United States, 1986-88

Commodity and year	Production			Utilization 1/								
				Processed (fresh equivalent)								
	Total	Utilized 2/	Fresh	Canned	Frozen	Brined	Crushed for			Dried	Other 3/	Total processed 2/
							Wine	Juice	Oil			
	1,000 short tons											
Apricots:												
1986 4/	55.2	55.1	10.8	27.0	7.2	--	--	--	--	9.5	--	44.4
1987 4/	115.0	106.8	16.6	53.0	13.1	--	--	--	--	23.6	--	90.3
1988 4/	102.3	94.1	18.8	44.5	12.2	--	--	--	--	17.7	--	75.3
Bananas:												
1986	4.9	4.9	4.9	--	--	--	--	--	--	--	--	--
1987	5.7	5.7	5.7	--	--	--	--	--	--	--	--	--
1988	5.8	5.8	5.8	--	--	--	--	--	--	--	--	--
Cherries, sweet:												
1986	137.7	136.8	68.6	7.4	--	50.2	--	--	--	--	6/10.5	68.1
1987	214.8	212.8	108.3	12.2	--	74.5	--	--	--	--	6/17.8	104.5
1988	186.2	184.5	87.5	15.0	--	67.3	--	--	--	--	6/14.7	97.0
Cherries, tart:												
1986	112.1	109.2	2.8	22.0	79.8	--	--	--	--	--	4.8	106.5
1987	179.3	142.8	4.5	35.7	94.1	--	--	--	--	--	8.6	138.3
1988	118.1	116.8	2.5	27.9	80.8	--	--	--	--	--	5.6	114.3
Dates:												
1986	17.8	17.8	17.8	--	--	--	--	--	--	--	--	--
1987	19.4	19.4	19.4	--	--	--	--	--	--	--	--	--
1988	21.0	21.0	21.0	--	--	--	--	--	--	--	--	--
Figs:												
1986	50.0	50.0	1.4	--	--	--	--	--	--	48.6	--	48.6
1987	48.8	48.8	1.7	--	--	--	--	--	--	47.1	--	47.1
1988	46.5	46.5	1.5	--	--	--	--	--	--	45.0	--	45.0
Grapes:												
1986	5,225.9	5,225.3	779.4	40.0	--	--	2,907.5	309.9	--	1,188.5	--	4,445.9
1987	5,264.0	5,250.5	716.3	40.0	--	--	2,647.6	407.5	--	1,439.0	--	4,534.1
1988	5,744.3	5,744.2	796.4	40.0	--	--	2,860.7	350.1	--	1,697.0	--	4,947.7
Kiwifruit:												
1986	24.3	23.4	23.4	--	--	--	--	--	--	--	--	--
1987	29.0	26.6	26.6	--	--	--	--	--	--	--	--	--
1988	31.0	29.1	29.1	--	--	--	--	--	--	--	--	--
Nectarines:												
1986	172.0	172.0	170.0	--	--	--	--	--	--	--	--	2.0
1987	191.0	191.0	190.5	--	--	--	--	--	--	--	--	.5
1988	200.0	200.0	199.0	--	--	--	--	--	--	--	--	1.0
Olives:												
1986	111.5	111.5	.5	7/85.0	--	--	--	--	6.0	--	8/20.0	111.0
1987	67.5	67.5	.5	7/55.0	--	--	--	--	3.0	--	8/9.0	67.0
188	87.5	87.5	.5	7/70.0	--	--	--	--	3.0	--	8/14.0	87.0
Papayas:												
1986	30.5	30.5	25.1	--	--	--	--	--	--	--	--	5.5
1987	33.5	33.5	28.0	--	--	--	--	--	--	--	--	5.5
1988	33.8	33.8	27.5	--	--	--	--	--	--	--	--	6.3
Peaches:												
1986	1,164.2	1,120.0	556.4	463.5	68.2	--	--	--	--	16.3	15.7	563.6
1987	1,195.4	1,124.1	561.7	438.4	72.5	--	--	--	--	17.5	34.1	562.5
1988	1,309.9	1,229.5	615.9	491.0	67.5	--	--	--	--	20.6	34.6	613.6
Pears:												
1986	766.4	760.4	375.4	9/375.9	--	--	--	--	--	9.0	--	384.9
1987	940.3	937.6	456.4	9/473.3	--	--	--	--	--	8.0	--	481.3
1988	871.0	870.6	438.6	9/424.0	--	--	--	--	--	8.0	--	432.0
Pineapples:												
1986	646.0	646.0	132.0	--	--	--	--	--	--	--	--	514.0
1987	692.0	692.0	134.0	--	--	--	--	--	--	--	--	558.0
1988	659.0	659.0	133.0	--	--	--	--	--	--	--	--	526.0
California plums:												
1986	152.0	152.0	--	--	--	--	--	--	--	--	--	--
1987	245.0	245.0	--	--	--	--	--	--	--	--	--	--
1988	216.0	216.0	--	--	--	--	--	--	--	--	--	--
California prunes:												
1986	291.1	291.1	--	--	--	--	--	--	--	291.1	--	291.1
1987	682.4	682.4	--	--	--	--	--	--	--	682.4	--	682.4
1988	482.1	482.1	--	--	--	--	--	--	--	482.1	--	482.1
Other prunes & plums 5/:												
1986	48.1	44.1	20.4	13.2	1.3	--	--	--	--	9.2	--	23.7
1987	51.5	47.2	23.6	11.9	1.2	--	--	--	--	10.5	--	23.6
1988	52.0	48.1	24.0	13.4	1.3	--	--	--	--	9.4	--	24.1
Strawberries:												
1986	509.7	509.7	367.4	--	--	--	--	--	--	--	--	142.3
1987	555.9	555.9	387.6	--	--	--	--	--	--	--	--	168.3
1988	583.5	583.5	421.7	--	--	--	--	--	--	--	--	161.8

1/ For all items except bananas and California apricots, dates, plums, and prunes, some quantities canned, frozen, or otherwise processed are included in other utilization categories to avoid disclosure of individual operations. 2/ Some totals do not add due to rounding. 3/ Tart cherries, juice, wine, and brined; sweet cherries, frozen, juice, etc.; and olives, chopped, minced, brined, and other cures. 4/ Missing data not published to avoid disclosure of individual operations, but included in total. 5/ Michigan, Idaho, Oregon, and Washington. 6/ Frozen juices. 7/ Includes chopped, sliced, and other cures. 8/ Limited and undersized. 9/ Mostly canned, includes small quantities dried; other, excluding California dried pears, uses not published by States to avoid disclosure of individual operations.

Sources: Noncitrus Fruits and Nuts Annual and Vegetables, NASS, USDA.

Table 24--Fruit and edible tree nuts: Utilized production, 1987 and 1988

Commodity	Unit	1987			1988 1/		
		Fresh	Processed	All	Fresh	Processed	All
Noncitrus:							
Apples, commercial	Mil lbs.	5,631.6	4,820.2	10,451.8	5/	5/	8,811.0
Apricots, 3 States	Tons	16,550	90,250	106,800	18,800	75,300	94,100
Avocados 2/	Tons	207,000	8/	207,000	5/	8/	5/
Avocados, California 2/	Tons	178,000	8/	178,000	5/	8/	5/
Bananas, Hawaii	1,000 lbs.	11,400	--	11,400	11,600	--	11,600
Cherries, sweet	Tons	108,330	104,490	212,820	87,520	96,990	184,510
Cherries, tart	Mil.lbs.	9	277	286	5	229	234
Cranberries	Bbls.	296,300	2,969,000	3,321,000	6/	6/	4,019,000
Dates, California	Tons	19,400	8/	19,400	21,000	8/	21,000
Figs, California	Tons	1,700	47,100	48,800	1,500	45,000	46,500
Grapes	1,000 tons	716	4,534	5,250	796	4,948	5,744
Grapes, California	1,000 tons	685	3,975	4,660	766	4,474	5,240
Kiwifruit, California	Tons	26,600	8/	26,600	29,100	8/	29,100
Nectarines, California	Tons	190,500	500	191,000	199,000	1,000	200,000
Olives, California	Tons	500	67,000	67,500	500	87,000	87,500
Papayas, Hawaii	1,000 lbs.	56,000	11,000	67,000	55,000	12,500	67,500
Peaches	Mil.lbs.	1,123	1,125	2,248	1,232	1,227	2,459
Pears	Tons	456,351	7/481,250	937,600	438,640	7/431,960	870,600
Pineapples, Hawaii	Tons	134,000	558,000	692,000	133,000	526,000	659,000
Plums, California	Tons	245,000	8/	245,000	216,000	8/	216,000
Pomegranates, California	Tons	8/	8/	16,500	8/	8/	12,000
Prunes, California	Tons	--	229,000	229,000	--	155,000	155,000
Prunes and plums, other States	Tons	23,600	23,600	47,200	24,000	24,100	48,100
Strawberries	Mil.lbs.	775	337	1,112	843	324	1,167
Citrus: 3/							
Oranges	1,000 boxes	53,315	127,860	181,175	54,616	143,124	197,740
Tangerines	1,000 boxes	3,659	1,611	5,270	3,513	1,477	4,990
Grapefruit	1,000 boxes	29,733	33,492	63,225	33,095	34,955	68,050
Lemons	1,000 boxes	12,345	16,255	28,600	12,065	8,585	20,650
Limes	1,000 boxes	850	600	1,450	860	440	1,300
Tangelos	1,000 boxes	1,310	2,690	4,000	1,395	2,805	4,200
Temples	1,000 boxes	1,053	2,347	3,400	1,292	2,258	3,550
Tree Nuts:							
Almonds, California 4/	1,000 lbs.	--	--	660,000	--	--	580,000
Filberts, 2 States	1,000 lbs.	--	--	21,800	--	--	16,500
Macadamia nuts, Hawaii	1,000 lbs.	--	--	42,700	--	--	47,000
Pistachios	1,000 lbs.	--	--	33,100	--	--	92,000
Pecans, all	1,000 lbs.	--	--	262,200	--	--	278,800
Improved	1,000 lbs.	--	--	179,650	--	--	191,400
Native and seedling	1,000 lbs.	--	--	82,550	--	--	87,400
Walnuts, 2 States	Tons	--	--	247,000	--	--	200,000

-- = Not available. 1/ Preliminary. 2/ 1987 indicated 1987/88. 3/ 1987 indicated 1986/87. 4/ Shelled basis. 5/ Data available July 10, 1989. 6/ Data available August 23, 1989. 7/ Processed mostly canned but includes small quantities of dried and other uses. 8/ Missing data not published to avoid disclosure of individual operations.

Sources: Noncitrus Fruits and Nuts Annual, Citrus Annual, and Vegetables, NASS, USDA.

Table 25--Fruit and edible tree nuts: Season-average prices per unit received by growers, 1987 and 1988

Commodity	Unit	1987			1988 1/		
		Fresh	Processed	All	Fresh	Processed	All
		Dollars					
Noncitrus: 2/							
Apples, commercial	Lb.	.127	6/79.30	.087	7/	7/	.138
Apricots, 3 States	Ton	652.00	285.00	348.00	658.00	282.00	363.00
Avocados 3/	Ton	1,010.00	--	1,010.00	7/	--	7/
Avocados, California 3/	Ton	1,120.00	--	1,120.00	7/	--	7/
Bananas, Hawaii	Lb.	.297	--	.297	.330	--	.330
Cherries, sweet	Ton	952.00	536.00	748.00	1,100.00	509.00	788.00
Cherries, tart	Lb.	.230	.073	.078	.439	.226	.231
Cranberries	Bbl.	--	--	44.50	--	--	8/
Dates, California	Ton	819.00	--	819.00	851.00	--	851.00
Figs, California	Ton	--	--	328.00	--	--	7/
Grapes	Ton	534.00	216.00	259.00	425.00	207.00	238.00
Grapes, California	Ton	519.00	214.00	259.00	396.00	204.00	232.00
Kiwifruit, California	Ton	710.00	--	710.00	790.00	--	790.00
Nectarines, California	Ton	344.00	26.00	343.00	396.00	57.00	394.00
Olives, California	Ton	500.00	626.00	625.00	500.00	564.00	564.00
Papayas, Hawaii	Lb.	.193	.022	.165	.220	.030	.185
Peaches	Lb.	.185	6/200.00	.142	.213	6/216.00	.161
Pears	Ton	227.00	9/172.00	198.00	347.00	9/191.00	269.00
Pineapples, Hawaii	Ton	362.00	91.00	143.00	416.00	99.00	163.00
Plums, California	Ton	10/	10/	308.00	10/	10/	475.00
Pomegranates, California	Ton	10/	10/	340.00	10/	10/	7/
Prunes, California	Ton	--	735.00	735.00	--	7/	7/
Prunes and plums, other States	Ton	175.00	108.00	141.00	249.00	117.00	183.00
Strawberries	Lb.	.585	.285	.494	.540	.252	.460
Citrus: 4/							
Oranges	Box	9.70	6.41	7.29	10.18	7.94	8.49
Tangerines	Box	17.00	3.95	12.91	20.26	5.13	15.70
Grapefruit	Box	7.84	5.44	6.55	8.36	5.70	6.97
Lemons	Box	12.56	1.66	6.37	16.20	.86	9.82
Limes	Box	20.70	3.29	13.50	25.80	2.56	17.93
Tangelos	Box	8.10	5.21	6.16	10.00	6.68	7.78
Temples	Box	7.40	5.42	6.03	9.20	6.53	7.50
Tree Nuts:							
Almonds, California 5/	Lb.	--	--	1.000	--	--	1.050
Filberts, 2 States	Ton	--	--	959.00	--	--	836.00
Macadamia nuts, Hawaii	Lb.	--	--	.840	--	--	.920
Pistachios	Lb.	--	--	1.430	--	--	1.120
Pecans, all	Lb.	--	--	.531	--	--	.592
Improved	Lb.	--	--	.601	--	--	.675
Native and seedling	Lb.	--	--	.377	--	--	.410
Walnuts, 2 States	Ton	--	--	984.00	--	--	7/

-- = Not available. 1/ Preliminary. 2/ Fresh fruit prices are equivalent returns at packing house door for Washington and Oregon, equivalent first delivery point returns for California, and prices as sold for other States. Processing fruit prices for all States are equivalent returns at processing plant door. 3/ 1987, indicated 1987/88. 4/ Equivalent packing house door 1987, indicated 1986/87. 5/ Shelled basis. 6/ Dollars per ton. 7/ Data available July 10, 1989. 8/ Data not available. 9/ Processed mostly canned but includes small quantities of dried and other uses. 10/ Missing data not published to avoid disclosure of individual operations.

Sources: Noncitrus Fruits and Nuts Annual, Agricultural Prices, and Vegetables, NASS, USDA.

Table 26--Fruit for processing: Season-average price per ton received by growers for selected noncitrus fruit, by type of use, principal States, 1986-88 1/

Fruit, use, and States	1986	1987	1988
		Dollars	
Apricots:			
Canning			
California	263.00	286.00	282.00
Freezing			
California	307.00	291.00	294.00
Drying			
California (fresh basis)	271.00	310.00	314.00
Cherries, tart:			
Processing, all			
New York	452.00	132.00	444.00
Pennsylvania	460.00	178.00	452.00
Michigan	394.00	148.00	462.00
Wisconsin	402.00	88.00	382.00
Cherries, sweet:			
Processing, all			
Oregon	606.00	593.00	579.00
Michigan	520.00	500.00	512.00
Washington	498.00	506.00	386.00
Canning			
Washington	575.00	667.00	644.00
Oregon	580.00	740.00	660.00
Michigan	590.00	500.00	512.00
Brining			
Washington	471.00	531.00	391.00
Michigan	496.00	500.00	512.00
Oregon	612.00	580.00	555.00
Grapes--California			
All processing	182.00	214.00	204.00
Grapes--California (cont'd):			
Dried (fresh basis)	177.00	206.00	169.00
Wine	183.00	219.00	226.00
Peaches, clingstone:			
Canning			
California	197.00	216.00	237.00
Peaches, freestone:			
Canning			
California	177.00	176.00	181.00
Freezing			
California	165.00	178.00	165.00
Drying			
California (fresh basis)	96.00	101.00	117.00
Pears, Bartlett:			
Canning			
Washington	162.00	190.00	184.00
California	190.00	182.00	218.00
Drying			
California (fresh basis)	105.00	106.00	147.00
Prunes and plums:			
Canning			
Michigan	115.00	83.00	138.00
Prunes:			
Drying (fresh basis)			
California	279.00	247.00	3/

1/ Prices are basis bulk fruit at first delivery point for all California fruits except prunes and pears for drying and processed grapes. Prices for California prunes and pears for drying and grapes and for fruits in other States are equivalent processing plant door returns. 2/ All grape varieties used for processing and wine; raisin varieties for dried (fresh basis). 3/ To be published July 10, 1989. 4/ Missing data not published to avoid disclosure of individual operations.

Source: Noncitrus Fruits and Nuts Annual, NASS, USDA.

Table 27--Apples, commercial crop 1/: Total production and season-average prices received by growers, 1986, 1987, and indicated 1988

State and area	Production 2/			Price per pound		
	1986	1987	1988	1986	1987	1988
	Million pounds			Cents		
Eastern States:						
Maine	88.0	75.0	94.0	19.2	19.1	21.2
New Hampshire	50.0	50.0	57.0	20.0	22.4	24.4
Vermont	49.0	44.0	43.0	17.7	18.0	20.3
Massachusetts	95.0	96.0	99.0	19.6	20.6	23.1
Rhode Island	5.5	5.0	5.5	22.3	23.3	26.2
Connecticut	47.0	45.0	49.0	19.3	20.9	24.2
New York	900.0	880.0	890.0	10.1	9.2	9.9
New Jersey	100.0	80.0	70.0	12.4	12.4	7.7
Pennsylvania	620.0	460.0	500.0	8.3	9.0	9.7
Delaware	27.0	26.0	25.0	9.1	10.6	15.9
Maryland	87.0	40.0	44.0	11.3	10.3	15.8
Virginia	460.0	481.0	480.0	9.7	9.3	10.1
West Virginia	230.0	180.0	215.0	10.6	7.5	10.3
North Carolina	120.0	390.0	375.0	8.5	6.4	7.3
South Carolina	30.0	45.0	40.0	13.5	8.4	12.2
Georgia	30.0	50.0	35.0	16.0	11.3	12.8
Total	2,938.5	2,947.0	3,021.5			
Central States:						
Ohio	90.0	150.0	95.0	17.4	15.8	16.1
Indiana	37.0	72.0	56.0	18.6	17.0	20.0
Illinois	90.0	103.0	85.0	16.0	11.9	15.5
Michigan	700.0	1,050.0	800.0	9.3	7.6	10.0
Wisconsin	58.0	65.0	45.0	17.1	15.5	21.5
Minnesota	19.0	26.0	14.0	30.5	23.0	28.9
Iowa	5.5	10.0	8.5	26.8	20.3	21.5
Missouri	37.0	53.0	56.0	20.5	9.9	15.2
Kansas	3.0	12.0	12.0	23.9	14.7	16.6
Kentucky	4.0	21.0	11.0	20.8	15.3	15.8
Tennessee	9.0	15.0	12.5	18.5	13.4	15.7
Arkansas	10.0	4.0	10.0	13.3	11.9	16.8
Total	1,062.5	1,581.0	1,205.0			
Western States:						
Idaho	94.0	155.0	135.0	22.2	10.6	19.0
Colorado	18.0	125.0	70.0	9.7	6.7	11.1
New Mexico	6.0	12.6	11.0	19.0	15.6	23.3
Utah	34.0	68.0	40.0	13.8	7.4	11.5
Washington	3,160.0	5,000.0	3,700.0	15.5	7.3	15.9
Oregon	105.0	210.0	165.0	10.6	5.4	15.3
California	515.0	650.0	550.0	16.3	11.1	15.6
Total	3,932.0	6,220.6	4,671.0			
United States	7,933.0	10,748.6	8,897.5	13.4	8.7	13.8

1/ In orchards of 100 or more bearing trees. 2/ Includes unharvested production and harvested not sold. In the United States, this was 25.7 million pounds in 1986, 296.8 in 1987, and 86.5 in 1988.

Source: Noncitrus Fruits and Nuts, NASS, USDA.

Table 28--Fresh noncitrus fruit: Exports of selected fresh items, by areas of destination, United States, 1985/86-1988/89

Item and season 1/	Canada	Western Europe 2/	East Asia and Pacific	Middle East and North Africa	Other	Total
			Metric tons			
Apples:						
1985/86	25,202	21,144	78,300	13,634	14,512	152,792
1986/87	42,072	25,079	71,098	14,456	15,569	168,274
1987/88	41,099	58,063	145,140	27,553	21,356	293,211
1987/88 thru Nov.	14,467	19,484	51,426	14,801	7,190	107,368
1988/89 thru Nov.	19,015	21,568	48,018	9,426	6,751	104,778
Grapes:						
1985/86	64,870	2,064	31,451	496	5,317	104,198
1986/87	56,665	5,683	33,681	478	5,568	102,075
1987/88	64,862	8,147	32,465	611	5,503	111,588
1987/88 thru Nov.	49,048	6,924	29,116	474	2,954	88,516
1988/89 thru Nov.	57,061	6,563	37,825	1,211	2,672	105,332
Pears:						
1985/86	14,749	6,318	721	4,389	3,512	29,689
1986/87	18,742	8,249	781	4,115	4,478	36,365
1987/88	18,997	12,080	2,029	5,596	5,128	43,830
1987/88 thru Nov.	8,673	5,287	1,345	2,724	2,111	20,140
1988/89 thru Nov.	13,407	6,198	531	2,665	1,528	24,329

1/ Season beginning July 1 for apples and pears, and June 1 for grapes. 2/ Including the EC countries.

Source: Foreign Agricultural Service, USDA.

Table 29--Canned noncitrus fruit: Canners' stocks, packs, supplies, and shipments, 1985/86-1988/89

Item and season 1/	Carryin	Pack	Total supply	Shipments to Dec. 1	Dec. 1 stocks	Total season shipments	Carryout
			1,000 equivalent cases 24 No. 2 1/2's				
Total:							
1985/86	8,709	39,264	47,973	16,558	31,611	34,904	13,069
1986/87	13,069	33,000	46,069	19,740	26,329	38,060	8,009
1987/88	8,009	37,012	45,021	21,594	23,427	39,305	5,716
1988/89	5,716	39,902	45,618	21,046	24,572		
Apricots 2/:							
1985/86	544	1,532	2,076	985	1,091	1,712	364
1986/87	364	505	869	611	258	831	38
1987/88	38	1,281	1,319	712	607	1,187	132
1988/89	132	1,381	1,513	680	833		
Fruit cocktail 2/:							
1985/86	1,658	10,058	11,716	4,092	7,573	8,743	2,973
1986/87	2,973	8,976	11,949	4,695	7,254	9,679	2,270
1987/88	2,270	9,344	11,614	5,116	6,498	9,932	1,682
1988/89	1,682	9,748	11,430	5,250	6,180		
Fruits for salad and mixed 2/:							
1985/86	671	2,509	3,180	918	2,149	2,114	1,066
1986/87	1,066	1,845	2,911	1,061	1,850	2,210	701
1987/88	701	2,433	3,134	1,514	1,620	2,565	569
1988/89	569	2,273	2,842	1,425	1,417		
Peaches, clingstone 2/:							
1985/86	4,191	17,352	21,543	7,411	14,492	15,895	5,648
1986/87	5,648	14,465	20,113	8,470	11,643	16,779	3,334
1987/88	3,334	14,829	18,163	9,475	8,688	16,811	1,352
1988/89	1,352	17,331	18,683	8,622	10,061		
Pears:							
1985/86	1,645	7,813	9,458	3,152	6,306	6,440	3,018
1986/87	3,018	7,209	10,227	4,903	5,324	8,561	1,666
1987/88	1,666	9,125	10,791	4,777	6,014	8,810	1,981
1988/89	1,981	9,169	11,150	5,069	6,081		

1/ Season beginning June 1. 2/ California only.

Sources: California League of Food Processors, Northwest Food Processors Associations, and California Cling Peach Advisory Board.

Table 30--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the Northeast and North Central regions, indicated months, 1987-1988

Commodity, production area and month	Retail price	Marketing spreads		Grower-packer return 1/ (f.o.b. shipping point price)	
		Absolute	Percentage of retail price	Absolute	Percentage of retail price
	Cents			Cents	
NORTHEAST					
Apples, Washington, red delicious:					
December 1987	60.3	35.5	59	24.8	41
December 1988	81.6	51.4	63	30.2	37
November 1988	77.0	47.0	61	30.0	39
Grapefruit, Florida, white seedless:					
December 1987	48.3	35.0	72	13.3	28
December 1988	43.5	30.5	70	13.0	30
November 1988	52.5	39.1	75	13.4	25
Lemons, California:					
December 1987	87.0	58.7	67	28.3	33
December 1988	85.0	55.8	66	29.2	34
November 1988	92.0	63.4	69	28.6	31
Oranges, California, Valencia:					
October 1987	63.2	40.0	63	23.2	37
October 1988	65.5	42.3	65	23.2	35
September 1988	63.0	42.2	67	20.8	33
NORTH CENTRAL					
Apples, Washington, red delicious:					
December 1987	60.9	36.1	59	24.8	41
December 1988	75.3	45.1	60.	30.2	40
November 1988	74.6	44.6	60	30.0	40
Grapefruit, Florida, white seedless:					
December 1987	54.6	41.3	76	13.3	24
December 1988	51.8	38.8	75	13.0	25
November 1988	56.0	42.6	76	13.4	24
Lemons, California:					
December 1987	103.5	75.2	73	28.3	27
December 1988	107.4	78.2	73	29.2	27
November 1988	112.2	83.6	74	28.6	26
Oranges, California, Valencia:					
October 1987	66.4	43.2	65	23.2	35
October 1988	66.9	43.7	65	23.2	35
September 1988	62.2	41.4	67	20.8	33

1/ Adjusted to account for loss incurred during marketing due to waste and spoilage.

Sources: Bureau of Labor Statistics, Department of Labor, and Economic Research Service, USDA.

Table 31--Fresh fruit: 1988 representative truck rates for selected fruits 1/

Commodity, shipping point, and market	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Dollars per package											
Apples (tray packed ctn.)												
Washington, Central to:												
Atlanta	2.88	2.85	2.85	2.85	2.85	2.85	2.83	2.83	2.85	2.85	2.85	2.85
Chicago	2.13	2.05	2.05	2.05	2.05	2.05	2.18	2.18	2.18	2.18	2.10	2.10
Dallas	2.30	2.30	2.30	2.30	2.30	2.30	2.43	2.50	2.43	2.45	2.30	2.35
Denver	1.50	1.50	1.50	1.50	1.50	1.50	1.55	--	--	--	1.55	1.65
Los Angeles	1.50	1.75	1.55	1.55	1.55	--	--	--	--	1.60	1.60	1.65
New York City	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.25	3.25	3.33	3.33	3.35
New York, Eastern to:												
Atlanta	1.25	1.25	1.25	1.25	1.25	--	--	--	--	1.25	1.25	1.25
New York City	.58	.58	.58	.58	.58	--	--	--	--	.58	.58	.58
W. Virginia and Virgina, to:												
Atlanta	.94	.94	.94	.94	--	--	--	--	--	.93	.93	.93
New York City	.76	.76	.76	.76	--	--	--	--	--	.74	.74	.74
Grapefruit (4/5 bu. ctn.)												
Florida to:												
Atlanta	.68	.65	.65	.65	.83	.88	--	--	--	--	.63	.75
Chicago	1.30	1.33	1.33	1.33	1.50	1.73	--	--	--	--	1.20	1.35
New York City	1.38	1.35	1.35	1.35	1.53	1.75	--	--	--	--	1.20	1.38
Grapes (23 lb. lug)												
California, Kern district to:												
Atlanta	1.15	--	1.18	1.24	1.26	1.82	1.94	1.62	1.50	1.29	1.21	1.18
Chicago	1.09	--	1.09	1.15	1.12	1.59	1.79	1.47	1.29	1.26	1.12	1.06
Dallas	.79	--	.82	.85	.94	1.06	1.29	1.09	1.00	1.03	.94	.91
New York City	1.53	--	1.62	1.68	1.74	2.26	2.62	2.15	2.00	1.85	1.68	1.65
Citrus (7/10 bu. ctn.)												
California, southern to:												
Atlanta	1.90	1.95	1.95	2.15	2.05	2.45	3.05	2.60	2.65	2.40	2.15	2.15
Chicago	1.70	1.70	1.70	1.85	1.85	2.45	3.00	2.40	2.20	2.10	1.95	1.75
Dallas	1.30	1.35	1.50	1.65	1.65	1.85	2.05	1.70	1.75	1.70	1.50	1.45
New York City	2.60	2.70	2.85	2.90	2.95	3.80	4.20	3.55	3.30	3.00	2.75	2.70
Oranges (4/5 bu. ctn.)												
Florida to:												
Atlanta	.70	.68	.68	.68	.83	.88	--	--	--	--	.63	.77
Chicago	1.33	1.33	1.33	1.33	1.55	1.78	--	--	--	--	1.20	1.40
New York City	1.40	1.25	1.35	1.38	1.55	1.78	--	--	--	--	1.20	1.40

-- = Not available. 1/ Reported from a sample of shippers and/or truck brokers in specified areas for shipments during the first week of each month.

Source: Fruit and Vegetable Truck Rate Report, AMS, USDA.

Table 32--Monthly average fruit prices received by growers, United States, 1988-89

Commodity and unit	1988												1989	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Noncitrus:														
Apples for fresh use (cts./lb.)	.112	.130	.126	.110	.109	.104	.227	.268	.251	.208	.189	.172	.179	.181
Pears for fresh use ($/ton)	144.00	212.00	227.00	249.00	437.00	527.00	410.00	383.00	418.00	406.00	373.00	299.00	286.00	292.00
Peaches for fresh use (cts./lb.)	--	--	--	--	.354	.192	.195	.181	.219	.210	--	--	--	--
Strawberries for fresh use (cts./lb.)	.800	.763	.588	.409	.499	.454	.504	.550	.600	.700	1.60	1.40	.996	1.29
Citrus:														
Oranges: ($/box) 1/														
Fresh use	7.54	6.78	6.92	7.81	10.89	11.43	9.52	8.02	6.72	9.40	9.05	8.90	6.97	5.44
Processing	5.30	6.22	5.80	6.51	7.76	7.86	.50	.50	.50	.51	2.35	5.34	6.13	6.35
All	5.64	6.30	6.24	6.79	8.25	8.42	6.41	4.90	4.17	5.48	5.82	6.50	6.20	6.21
Grapefruit: ($/box) 1/														
Fresh use	6.48	6.63	6.18	5.92	6.12	6.13	8.21	7.44	8.16	11.45	6.62	6.49	4.56	4.06
Processing	4.71	4.79	4.57	3.99	2.09	-.42	-.39	-.38	-.38	-.29	.70	2.06	2.44	2.53
All	5.63	5.45	5.02	4.92	4.53	3.36	4.85	4.09	7.34	7.57	4.77	4.71	3.72	3.34
Lemons: ($/box) 1/														
Fresh use	6.70	7.95	10.91	11.52	13.04	17.04	19.24	21.20	21.77	17.16	13.68	11.88	9.17	8.52
Processing	-2.09	-2.11	-2.12	-2.12	-2.12	-2.12	-2.12	-2.26	-2.12	-2.26	-2.26	-2.26	-2.26	-2.26
All	1.59	2.23	5.88	6.53	8.01	12.07	13.40	14.67	15.05	8.47	6.30	5.63	4.37	3.41
Tangerines: ($/box) 1/														
Fresh use	14.51	17.18	16.83	18.50	12.62	9.82	9.82	--	--	--	21.66	18.36	18.72	17.69
Processing	2.99	3.66	2.67	2.18	-.38	-.38	-.38	--	--	--	1.49	1.86	2.91	2.80
All	11.54	13.40	12.01	10.64	4.28	2.17	1.71	--	--	--	15.88	13.30	11.71	11.16

-- = Not available. 1/ Equivalent on-tree returns.

Source: Agricultural Prices, NASS, USDA.

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SITUATION AND PROSPECTS FOR FRESH APPLE MARKETS

by Amy Larsen Sparks

ABSTRACT: U.S. and world supplies of apples are increasing due to heavy tree plantings in the late 1970's and early 1980's. Demand, however, is growing slowly. Consequently, competition for market shares is increasing in both the United States and abroad. These factors are putting downward pressure on prices. Lower prices are good for the consumer and, according to economic theory, will lead to greater quantities demanded. However, apple producers are facing a situation in which the prices they receive may not cover their production costs.

KEYWORDS: Apples, trade, production, competition, demand, consumption, prices.

Introduction

The United States is a major producer of fresh apples. Domestic and foreign production levels are growing rapidly. Domestic demand is staying relatively stable and there is increasing competition for international markets. These forces are putting downward pressure on prices, underscoring the need to strengthen both domestic and foreign demand for U.S. apples. If efforts in this regard are not successful, domestic apple producers will be forced to adjust, possibly causing many to leave the business.

Domestic Supplies

Domestic apple production in the 1987 calendar year totaled 4.87 million metric tons. This was the largest crop in U.S. history and can be attributed to high production in Washington State. U.S. production for 1985 and 1986 amounted to 3.59 and 3.60 million metric tons, respectively. Preliminary estimates for 1988 are 4.04 million metric tons, approximately halfway between 1986 and 1987 levels. New trees bearing fruit, good weather, and high yields combined to produce the very high level in 1987. In the late 1970's and early 1980's, many new trees were planted. Trees come into production after 5 or 6 years and produce at nearly full capacity after 8 or 9 years. When recent plantings come into production, levels comparable to that of 1987 will be the norm.

Although U.S. imports of apples have expanded in the past 11 years, U.S. exports have not. In the 1976/77 marketing year, 47,775 metric tons were imported. By 1987/88, that had increased to 140,000 metric tons, more than a twofold increase. U.S. exports of fresh apples have gone up from 120,063 metric tons in 1976/77 but have declined since 1980/81. In that year, the United States exported 305,428 metric tons of apples. At 293,000 metric tons, exports for the 1987/88 marketing year rose 70 percent over the previous year. This surge can be partly explained by the low prices caused by the record high yields. This trend is not expected to continue because the U.S. crop is at a more normal size for this year. However, the softening of trade barriers to U.S. products in several countries strengthen export prospects for the 1988/89 crop and beyond. Nevertheless, over the years the lack of steady growth in exports, combined with more imports and higher U.S. production, has increased the domestic supply of apples. These factors all put downward pressure on prices.

Foreign Competitors and Overseas Markets

Several foreign nations, including Chile, New Zealand, and South Africa, have been increasing their apple production and exports (table 1). These Southern Hemisphere producers export fresh apples when the United States is drawing on its cold storage supplies. They therefore have a competitive edge in markets where they compete with U.S. apples because consumers generally prefer fresh apples to those from storage. The major apple import markets are Canada, the EC, and the Far East. In each, the United States faces direct competition from the three countries in the Southern Hemisphere for market shares (table 2).

As a result of dumping allegations, Canada has imposed a normal value requirement on U.S. apple imports. It covers red and golden delicious apples and imposes a minimum price requirement. While higher quality apples will likely be

Table 1--Apple production and exports, by country, marketing years, 1976/77 and 1988/89

Country	Market year	Production	Exports
		Metric tons	
Chile	1976/77	132,500	29,203
	1988/89	678,000	345,000
New Zealand	1976/77	145,546	66,632
	1988/89	385,000	200,000
South Africa	1976/77	288,561	172,600
	1988/89	510,000	210,000
United States	1976/77	3,415,533	108,470
	1988/89	4,035,880	259,000

Source: Horticultural Product Review, FAS, USDA.

Table 2--Imports of major apple markets, by supplying and demanding regions, calendar years, 1982 and 1987

Suppying region	Calendar year	Demanding region: Canada	EEC	Hong Kong	Singapore	Taiwan	Thailand	United States
		Metric tons						
Chile	1982	4,320	114,137	10	18	2,931	0	14,004
	1987	12,774	107,066	10,004	302	12,428	0	15,811
New Zealand	1982	3,016	79,477	2,869	5,259	1,181	9	17,019
	1987	22,199	139,258	3,605	6,191	2,711	89	35,630
South Africa	1982	3,693	171,126	1,035	0	0	0	77,030
	1987	6,413	152,798	3,003	1,010	0	0	80,348
United States	1982	87,118	13,941	19,411	8,136	36,009	1,433	9,912
	1987	41,573	12,801	26,328	7,867	42,701	3,461	10,794

Source: United Nations Trade Statistics, 1982 and 1987.

sold for this or a higher price, the lower grades may not. Consequently, the normal value stipulation restricts entry of lower grade apples into the Canadian market. This will probably dampen U.S. exports.

The EC trades a large volume of apples among its members. France, Italy, and Germany are surplus producers and supply many of the other members. This marketing year, the community has a crop 20 percent larger than last year.

If internally produced apples were substitutes for imports, the large crop would imply that exports to the EC would likely decline. However, imported apples are usually of higher quality than the domestically produced varieties. Also, the EC does not use controlled atmosphere storage so their stored apples are not of good quality. Consequently, it can be argued that there are two separate markets for apples in the EC, that for the internally produced product and that for the externally grown product. A large domestic crop does not, therefore, imply that imports will decline.

The primary market for U.S. apples in the EC is the United Kingdom, a major deficit producer. In the 1987/88 marketing year, the United States made inroads into the continental EC, probably due to the relatively low price resulting from the large crop. The same amounts of U.S. apples are not being sold throughout the EC this year, nor were they prior to 1987/88. Chile, New Zealand, and South Africa are the EC's major foreign suppliers (table 2).

The EC applied quotas to apple imports in 1986/87. U.S. sales were curtailed as the quota was filled the day it was announced. For the 1987/88 marketing year there will be no quotas. Voluntary restraint agreements have been reached with all of the Southern Hemisphere producers. No restraint is placed on the U.S. as it is a relatively small supplier to the EC market.

The markets of interest in the Far East are Taiwan, Hong Kong, Singapore, Thailand, the Philippines, and Japan. Taiwan, Hong Kong, and Singapore have been important U.S. apple markets for at least 10 years (table 2). While Taiwan imposes quotas on apples from other suppliers, it allows the United States virtually unlimited access. On January 1, 1989, Thailand lowered its apple tariff, which had been in effect for several years and was quite restrictive. The reduced tariff will likely increase Thailand's market for imports. The Philippines began granting import licenses for apples last April and since then has purchased a considerable quantity from the United States. This market is expected to grow. There is a plant protection quarantine problem impeding U.S. sales to the Japanese market. However, it is close to being resolved and the Japanese market will likely be open to U.S. apple exporters in the near future.

One year of U.S. negotiations with Sweden has resulted in concessions regarding its opening dates. Prior to this marketing year, Sweden allowed imports into its market only when local supplies had been exhausted, usually in mid-December. In 1988/89, according to the agreement, Sweden was required to open its market no later than December 15. In 1989/90 the opening date is November 15, and in subsequent years the Swedish market will be open for apple imports year-round. These changes will probably increase apple exports to Sweden.

Implications for the Domestic Industry

Because both domestic and international production levels and competition for markets are expected to increase, efforts to increase demand for U.S. apples must be made. Advertising and promotion campaigns are being conducted domestically for that purpose. There is some evidence that these are having an effect. In the marketing years 1985/86 and 1986/87, domestic consumption was 2.12 and 2.02 million metric tons, respectively. In 1987/88 that figure jumped to 2.55 million metric tons. It is possible that the low prevailing prices, due to the large crop, may have been responsible for these high levels of quantities demanded. It is not clear that U.S. consumers will demand large quantities of apples at higher prices. Without some factor contributing to an increased demand and therefore higher prices, it is possible

that the low prices likely to prevail in the near future will cause many orchard owners to go out of business in the next 5 to 10 years.

The TEA is being used to promote U.S. apple exports. For the 1987/88 marketing year, the Apple Commission's international promotions budget received $1.5 million from the TEA. In 1988/89, the level will slightly exceed $2 million. Washington State is also contributing a little more than $1 million, raising the total budget to a little more than $3 million. The primary promotional efforts are being aimed at the United Kingdom; approximately $500,000 will be spent to increase the U.S. share of this market. Another $300,000 each will be spent in cultivating the markets in Taiwan, the Nordic Region (Sweden, Finland, and Norway), West Germany, and Hong Kong.

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