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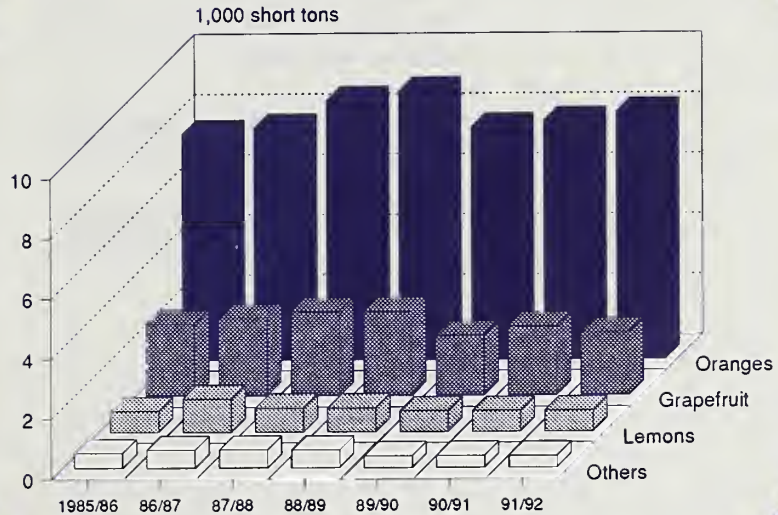
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November 1991

Fruit and Tree Nuts

Situation and Outlook Report

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U.S. Citrus Fruit Production



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Summary

Average orange prices rose abruptly in June 1991, when most of the lower priced processing oranges had been sold and a short California crop of fresh oranges remained on the market. Fresh-market orange prices (equivalent on-tree returns to growers) rose 60 percent from May to June, stayed high all summer, but fell 30 percent in October when the first 1991/92-crop Florida oranges were marketed.

The December 1990 California freeze reduced the fresh orange supply and raised fresh orange prices during the 1990/91 season, while the processing-orange crop in Florida rebounded from the December 1989 freeze, causing downward pressure on juice prices. Grower prices for fresh apples, lemons, and pears were also higher, boosting the grower index for fresh fruit.

U.S. Citrus Crop Forecast Up 2 Percent in 1991/92

USDA's first forecasts of U.S. citrus crops for 1991/92 point toward a 2-percent larger total crop than a year earlier. U.S. production of oranges, Temples, tangerines, and limes is expected to increase, while production of grapefruit, tangelos, and lemons is expected to decrease.

U.S. orange production for 1991/92 is forecast up 4 percent from 1990/91. California, the major producer of fresh oranges, is expected to nearly double its output, but Florida orange production is expected to decline 10 percent in 1991/92.

Florida orange juice production will likely decline 5-10 percent, and total U.S. orange juice production less than 5 percent, from the 1990/91 season.

Expectations of a smaller crop of Florida processing oranges have already raised the wholesale price of frozen concentrated orange juice (FCOJ), and grower prices are expected to be higher than in 1990/91. If higher prices attract 10-15 percent more imports, domestic availability of FCOJ in 1991/92 would be about the same as in 1990/91.

Fresh orange prices are likely to remain strong in 1991/92, despite the partial recovery of production in California. USDA's forecast of California's navel orange crop is nearly 85 percent larger than last year, but still only 65 percent of the prefreeze level in 1989/90. Valencia orange production in California is expected to be more than double last season's, which would be almost 90 percent of 1989/90 production.

Florida grapefruit production, normally over 80 percent of U.S. production, is expected to be down 6 percent. Grapefruit production in California's desert valleys is expected to be the same as in the prior two seasons. The forecast for California's "other regions" will be available in April.

Grapefruit prices are likely to be higher in the coming months, with the prospect of less production and strong export demand tightening supplies. However, the expected price rise may be moderated by relatively low utilization for processing, reflecting weak demand for grapefruit juice.

Prices for Noncitrus Crops Higher for Second Year

Prices for most noncitrus crops are higher, reflecting shorter crops, or, as with apples, strong demand. The final

forecast for the 1991 U.S. apple crop was 4 percent larger than the 1990 crop. Since the 1991 season began in July, grower prices averaged 20 percent higher than the same period last year. Grape production was up 2 percent from the September 1 forecast, but was still 5 percent less than in 1990.

The pear crop was down 8 percent from 1990, and, in September and October 1991, grower prices for fresh pears averaged nearly 25 percent higher than the same period last year. Peach production in 1991 was up 15 percent from last year, and the season-average grower price for fresh peaches was down less than 5 percent from 1990.

Reduced production in Europe and continued strong demand in Asia are expected to boost key U.S. fresh noncitrus exports in 1991/92. Fresh apple and pear exports as a proportion of U.S. fresh-market utilization have risen substantially in recent years.

Total 1991/92 Tree Nut Production Down

Record carryin stocks and reduced production of some U.S. tree nut crops have resulted in a 1991/92 total supply that is moderately lower than last season's record. U.S. almond and pistachio supplies are smaller, but hazelnut, pecan, and walnut supplies are larger, or nearly the same, as last season. Abundant U.S. tree nut supplies should maintain exports and domestic consumption at near-record levels.

World almond and hazelnut supplies are much smaller but world pistachio and walnut supplies are very large. U.S. export marketing opportunities remain excellent for tree nuts.

Grower Price Index for All Fruit Sets Record in June

Higher prices for fresh oranges, apples, pears, and lemons raised fresh fruit price indexes. Ample orange juice supplies lowered 1991 producer price indexes for processed fruit.

The index of prices received by growers for all fruit was record high in June 1991 and remained nearly double the year-earlier level through September. As the fall harvest of several crops progressed, the index fell 30 percent in October, but was still 50 percent above October 1990.

This year the margin between fresh and processing fruit prices widened, as the December 1990 California freeze reduced the fresh orange supply and raised fresh orange prices, while the 1990/91 processing orange crop in Florida rebounded from the December 1989 freeze, causing downward pressure on juice prices. During June-September 1990, the index for fresh market fruit was 4-6 percent above the all fruit index, but for June-September 1991 it was 12-14 percent higher.

The average price of all oranges rose abruptly in June as most of the Florida crop, mainly lower priced processing oranges, had been sold, with a short California crop of fresh oranges remaining on the market. Fresh market orange prices (equivalent on-tree returns to growers) averaged \$28 per box in June-September 1991, compared with \$8.90 for the same period in 1990. The price fell to \$14.68 in October when the first of the 1991/92 Florida orange crop was marketed.

Grower prices for fresh apples, lemons, and pears were also higher than last season, boosting the grower price index for fresh fruit. During June-September 1991, apple prices averaged 25-30 percent higher than a year earlier. However, fresh grapefruit prices were down about 25 percent and peach prices averaged nearly 10 percent below the same 4-month period of 1990.

Figure 1
U.S. Grower Prices for Oranges

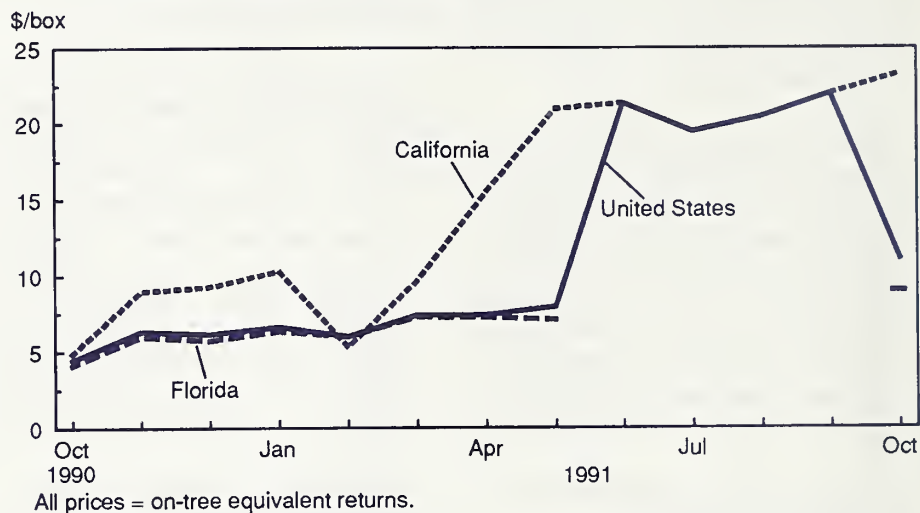


Table 1--U.S. monthly grower price indexes, 1989-91

Month	All fruit index			Fresh fruit index		
	1989	1990	1991	1989	1990	1991
	--1977=100--					
January	186	170	208	195	175	221
February	186	174	197	195	181	207
March	177	185	213	184	194	228
April	184	195	216	193	207	231
May	202	208	235	215	221	253
June	200	206	398	214	219	449
July	188	196	364	200	206	410
August	193	182	365	205	190	412
September	208	198	389	223	210	440
October	196	181	271	207	189	296
November	200	205		211	217	
December	182	200		190	211	
Average	192	192	286	203	202	315

Source: National Agricultural Statistics Service, USDA

Producer price indexes that distinguish between citrus and noncitrus prices indicate that higher citrus prices were largely responsible for elevating fresh fruit price indexes. Although the June 1991 producer price index for all fresh fruit was 20 percent higher than a year earlier, the index was up 50 percent for fresh citrus, but up less than 10 percent for noncitrus.

In contrast to the fresh market, the larger crop of Florida oranges available for juice brought the producer price index for frozen fruit juice down nearly 15 percent from October to November 1990, following the announcement of the Florida crop forecast. The index continued to drop, and between March and July 1991 averaged about 25 percent less than a year earlier. Processors of canned and dried fruits, which are mostly noncitrus, reported slightly higher prices during 1991. For example, the producer price index was up 5 percent for canned fruit and 7 percent for dried fruit in July 1991 compared to July 1990.

Retail prices of fresh and processed fruit reflected changes at the grower level, but did not move as sharply as grower and producer price indexes. The June 1991 consumer price index (CPI) for fresh fruit was 18 percent above June 1990. But by August, the fresh fruit CPI was just 10 percent above the previous year. The CPI for all processed fruit was down 6 percent from last year during June-August, due mostly to a 10-percent drop in frozen fruit and juice prices.

Figure 2

U.S. Producer Price Index for Fresh Fruit

% of 1982

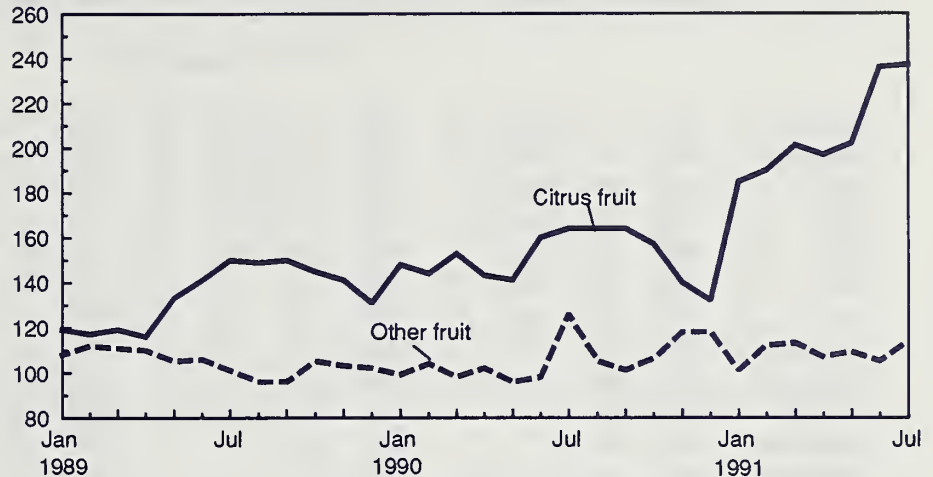


Figure 3

U.S. Producer Price Index for Processed Fruit

% of 1982

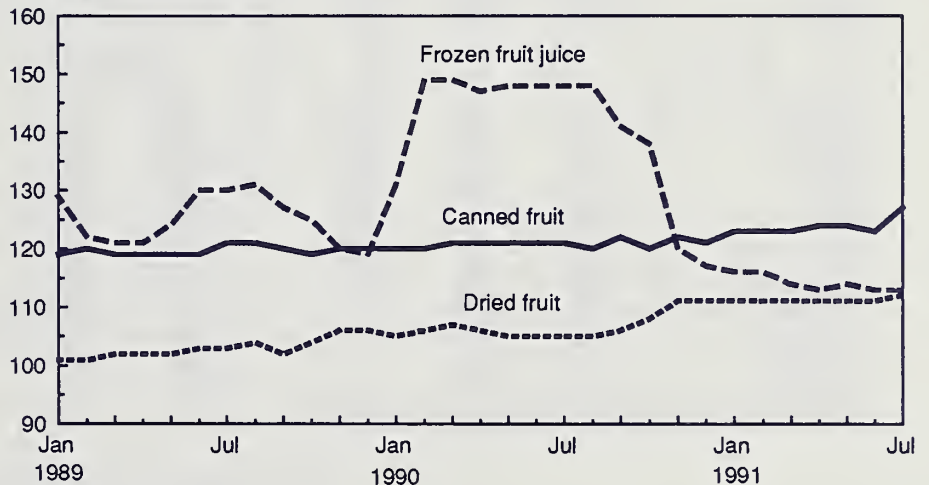


Table 2--U.S. monthly consumer price indexes for fruit, 1989-91

Month	Fresh fruit			Processed fruit			Frozen fruit and juice			Canned and dried fruit		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
--1982-84=100--												
January	145	171	190	126	125	135	128	126	137	117	121	124
February	150	170	191	126	132	133	127	134	135	118	121	124
March	150	171	196	125	137	132	126	140	134	118	121	124
April	152	176	202	125	138	132	126	142	134	119	121	125
May	158	175	205	125	139	132	126	144	133	119	121	125
June	152	173	204	126	140	131	127	145	132	120	121	126
July	151	177	199	126	140	131	127	145	131	120	122	127
August	151	170	187	127	140	131	128	144	131	121	123	127
September	155	169	194	128	140	131	129	144	132	121	123	128
October	157	163		127	140		128	144		121	123	
November	153	165		126	137		128	141		120	122	
December	155	171		125	135		126	137		120	123	

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

Table 3--U.S. monthly producer price indexes for fresh fruit, 1989-91

Month	Fresh citrus fruit			Other fresh fruit			Fresh fruit		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --									
January	119	148	185	108	99	108	111	112	127
February	117	144	190	112	104	112	113	114	132
March	119	153	201	111	98	113	114	113	135
April	116	143	197	110	102	107	112	113	130
May	133	141	202	105	96	109	113	108	132
June	141	160	236	106	98	105	115	115	138
July	150	164	237	101	126	114	114	136	145
August	149	164		96	105		110	121	
September	150	164		96	101		110	118	
October	145	157		105	106		121	120	
November	141	140		103	118		113	124	
December	131	132		102	118		110	122	

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

Table 4--U.S. monthly producer price indexes for processed fruit, 1989-91

Month	Canned fruit and juice			Frozen fruit and juice			Dried fruit		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --									
January	123	124	126	127	129	115	101	105	111
February	122	127	127	122	147	115	101	106	111
March	122	128	127	121	148	113	102	107	111
April	122	128	127	121	146	113	102	106	111
May	122	127	127	124	146	113	102	105	111
June	123	128	127	128	146	113	103	105	111
July	123	127	129	129	147	113	103	105	112
August	123	128		129	146		104	105	
September	123	129		125	140		102	106	
October	123	128		124	137		104	108	
November	123	125		119	119		106	111	
December	123	125		118	116		106	111	

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

Table 5--U.S. monthly producer price indexes for processed fruit, 1989-91

Month	Canned fruit			Frozen fruit			Canned fruit juice			Frozen fruit juice		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --												
January	119	120	123	116	118	106	127	129	130	129	131	116
February	120	120	123	117	134	106	125	133	132	122	149	116
March	119	121	123	117	136	105	125	134	131	121	149	114
April	119	121	124	117	133	106	125	134	131	121	147	113
May	119	121	124	117	133	105	126	133	132	124	148	114
June	119	121	123	117	134	105	127	134	132	130	148	113
July	121	121	127	118	134	105	127	135	132	130	148	113
August	121	120		118	134		127	136		131	148	
September	120	122		114	128		127	135		127	141	
October	119	120		113	125		127	135		125	138	
November	120	122		108	109		128	130		120	120	
December	120	121		108	106		128	130		119	117	

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

Table 6--U.S. monthly producer price indexes for fresh citrus fruit, 1989-91

Month	Grapefruit			Lemons			Navel oranges			Valencia oranges		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --												
January	155	202	167	117	116	157	80	81	168	107	157	142
February	140	188	171	114	119	154	77	81	179	112	152	141
March	134	209	175	120	126	145	82	81	204	112	163	135
April	135	198	153	120	136	140	77	74	207	110	153	129
May	156	194	158	123	149	162	92	80	--	124	141	135
June	--	251	236	146	149	175	105	100	--	--	--	185
July	213	270	244	149	159	184	--	--	--	--	--	--
August	--	--	--	135	168	188	--	--	--	--	--	--
September	--	--	--	149	165		--	--	--	--	--	--
October	183	251		140	156		--	--		--	132	
November	164	181		129	115		--	--		124	122	
December	183	167		130	113		80	91		124	120	

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

Table 7--U.S. monthly producer price indexes for frozen fruit juice, 1989-91

Month	Orange juice			Grapefruit juice			Lemonade			Grape juice		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --												
January	137	138	114	146	151	140	127	136	147	101	103	114
February	128	162	114	140	160	138	127	140	147	105	108	114
March	127	163	112	140	159	133	124	140	147	105	108	112
April	125	160	112	144	160	130	--	140	147	101	105	114
May	132	160	110	141	160	124	117	135	126	105	109	133
June	139	160	111	141	161	125	117	137	144	105	109	123
July	141	160	111	138	161	125	117	137	144	101	105	123
August	140	161	108	146	156	125	117	137	144	105	109	119
September	137	151		140	160		117	137		105	109	
October	134	147		140	158		131	142		101	102	
November	123	121		146	147		131	142		105	111	
December	122	118		147	143		131	142		105	111	

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

Table 8--U.S. monthly producer price indexes for fresh noncitrus fruit, 1989-91

Month	Delicious apples			McIntosh apples			Peaches			Pears		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --												
January	95	90	126	96	113	97	--	--	--	--	107	107
February	140	100	122	97	123	116	--	--	--	--	111	110
March	--	98	120	89	119	108	--	--	--	--	--	--
April	111	99	120	118	123	115	--	--	--	--	--	--
May	99	97	140	118	117	119	--	--	--	--	--	--
June	111	98	143	89	120	--	--	--	--	--	--	--
July	--	--	--	--	--	--	82	185	109	--	--	--
August	--	--	--	--	--	--	127	173	73	103	147	109
September	--	--	--	--	--	--	150	196	--	94	84	--
October	97	97	--	113	115	--	--	--	--	93	106	--
November	90	122	--	102	104	--	--	--	--	118	109	--
December	86	133	--	108	97	--	--	--	--	97	103	--

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

Table 9--U.S. monthly producer price indexes for selected fresh and dried fruit, 1989-91

Month	Fresh grapes			Fresh strawberries			Dried prunes			Dried raisins		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- 1982=100 --												
January	--	--	--	101	101	101	111	120	127	90	91	97
February	--	--	--	78	114	123	111	120	128	90	94	97
March	--	--	--	82	101	140	113	120	128	90	--	97
April	--	--	--	39	101	109	115	120	128	--	94	--
May	--	--	--	56	63	101	114	120	128	90	92	--
June	--	--	--	74	101	60	114	120	128	91	--	--
July	--	157	138	67	101	67	114	120	--	91	91	--
August	100	112	112	80	90	67	115	120	--	--	91	--
September	98	103	--	78	95	--	115	120	--	--	94	--
October	--	110	--	145	112	--	116	124	--	91	94	--
November	--	--	--	134	179	--	120	127	--	94	97	--
December	--	--	--	--	--	--	120	127	--	93	97	--

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

U.S. Citrus Crop Forecast Up 2 Percent in 1991/92

A much larger California orange crop forecast will more than offset a smaller Florida crop.

Although wide differences exist by States, USDA's first forecast of the total 1991/92 U.S. citrus crop points towards a 2-percent larger crop than a year earlier. U.S. production of oranges, Temples, tangerines, and limes is expected to increase, while production of grapefruit, tangelos, and lemons is expected to decrease. Forecasts of California citrus production surpass last year's freeze-reduced crop by 985,000 short tons. In contrast, Florida's citrus production forecast is down 766,000 short tons from 1990/91.

Although Florida citrus trees developed lush foliage this summer, the mild winter of 1990/91 did not provide the temperature change needed for normal citrus bloom, and the fruit count per tree was down from the 1990 record. Plentiful rainfall and mild temperatures contributed to the development of larger fruit this season.

Larger Supply of Fresh Market Oranges, but Fewer Processing Oranges Expected

U.S. orange production for 1991/92 is forecast up 4 percent from 1990/91, but situations will vary in the fresh and

processing markets. California, the major producer of fresh oranges, is expected to nearly double its output, but the crop is still only 74 percent of the record prefreeze production in 1989/90. In contrast, orange production in Florida will decline sharply. Forecasts of a larger crop in California and a 22-percent increase in the Arizona orange crop more than offset the expected 10-percent decline in Florida.

Florida Valencia trees carried a heavy crop in the 1990/91 season. After a heavy crop, the trees typically recuperate by growing more foliage and fewer oranges the following season. The Valencia crop is expected to be down 12-13 percent from 1990/91, while production of early and midseason varieties is expected to decline 8-9 percent.

U.S. production of Temples, tangerines, and tangelos is expected to total 440,000 short tons, 11 percent more than in 1990/91. In Florida, indicated production is up for tangerines (35 percent) and Temples (3-4 percent), while the tangelo crop is down about 2 percent. Tangerine production in California and Arizona will likely

increase, raising total U.S. tangerine production 26 percent from the last two seasons. California lemon production is forecast down 9 percent from 1990/91. A 12-percent increase in Arizona won't compensate, and U.S. lemon production will probably be down 5 percent. Florida lime production is expected to be up 10 percent.

Smaller Grapefruit Crop Likely in 1991/92

U.S. grapefruit production will probably decline in 1991/92. Florida grapefruit production, normally over 80 percent of U.S. production, is expected to be down 6 percent. The forecast for grapefruit from California's "other areas" will not be available until April, but production in California's desert valleys is expected to be the same as in the prior two seasons.

The December 1989 freeze caused enough tree damage to virtually eliminate the 1990/91 citrus crops in Texas. While the Texas citrus industry is recovering, production will be minimal in 1991/92. Oranges and grapefruit crops are expected to amount to 7 percent of 1989/90 production, and only 3-5 percent of prefreeze levels.

Table 10--U.S. citrus fruit production, 1989/90-1991/92 1/

Crop and State	Utilized			Utilized		
	1989/90	1990/91	Indicated 1991/92	1989/90	1990/91	Indicated 1991/92
	----- 1,000 boxes 2/ -----			----- 1,000 short tons -----		
All oranges	184,415	180,050	191,195	7,745	7,887	8,191
Arizona	1,610	1,750	2,100	59	65	79
California	71,400	26,800	53,000	2,677	1,005	1,988
Florida	110,200	151,500	136,000	4,958	6,817	6,120
Texas	1,205	3/	95	51	3/	4
All grapefruit	49,300	55,500	44,915	1,978	2,255	4/
Arizona	2,200	2,400	2,300	70	77	74
California	9,400	8,000	4/	310	262	4/
Florida	35,700	45,100	42,500	1,518	1,916	1,807
Texas	2,000	3/	115	80	3/	5
All lemons	18,600	19,000	18,100	706	722	688
Arizona	2,800	4,100	4,600	106	156	175
California	15,800	14,900	13,500	600	566	513
Limes:						
Florida	1,650	1,450	1,600	72	64	70
Tangelos:						
Florida	2,950	2,650	2,600	132	119	117
All tangerines	3,950	3,850	4,800	164	164	206
Arizona	600	600	700	22	23	26
California	1,650	1,300	1,500	62	49	56
Florida	1,700	1,950	2,600	80	92	124
Temples:						
Florida	1,400	2,500	2,600	63	113	117
U.S. total citrus 5/	262,265	265,000	265,810	10,860	11,324	9,389

1/ The crop year begins with bloom of the first year shown and ends with harvest. 2/ Net pounds per box: oranges-California and Arizona-75, Florida-90, Texas-85; grapefruit-California desert and Arizona-64, California other areas-67, Florida-85, Texas-80; lemons-76; limes-88; tangerines-California and Arizona-75, Florida-95; tangelos and Temples-90. 3/ Due to the severe freeze of December 1989, Texas had no commercial production for the 1990/91 season. 4/ The first forecast for California grapefruit "other areas" will be available as of April 1, 1992. 5/ California grapefruit production in 1989/90 used to calculate total for 1991/92.

Source: National Agricultural Statistics Service, USDA.

Florida Orange Crop Smaller Than Expected, Juice Price Will Rise

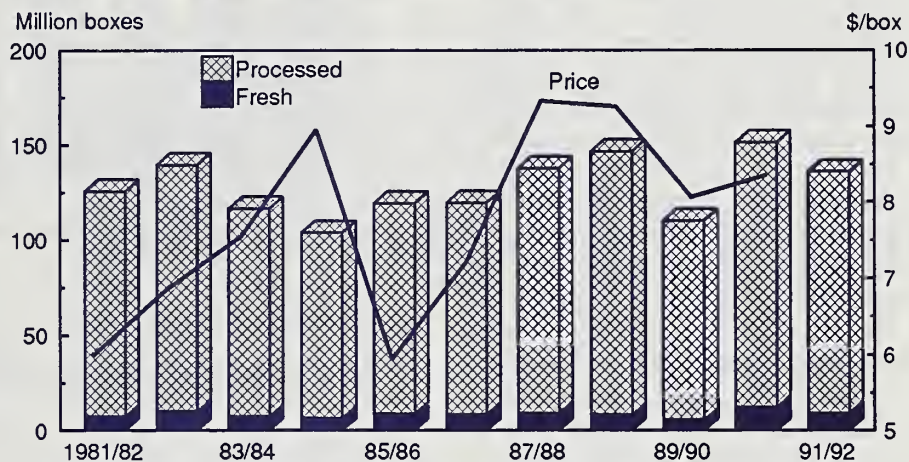
The first forecast for orange production in Florida was far below most expectations, causing orange juice futures to rise sharply.

Florida normally accounts for about 90 percent of U.S. orange juice production, and with Brazil, is a dominant player affecting orange juice prices in the world market. About 95 percent of Florida oranges is used for processing, with over 70 percent for frozen concentrate (FCOJ) and 20 percent for direct production of chilled juice. The Florida orange juice pack will decline less than the forecast decline of orange production because the juice yield is expected to rise to 1.5 gallons (45 degree Brix) per box, 3 percent higher than last year.

In addition, more temples and tangerines will be available for juice in Florida, and California and Arizona will likely increase juice production this year. The Florida Department of Citrus estimates that Florida orange juice

Figure 4

Florida Oranges: Production, Use, and Price



All price = season-average packinghouse-door returns. Year beginning October.

Table 11--Estimated utilization of round oranges, Florida, 1985/86-1991/92 1/

Item	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	Forecast 1991/92
-- Million boxes --							
Fresh	8.6	8.5	8.9	7.7	5.2	11.4	9.5
Frozen concentrate	91.9	90.5	103.9	107.4	70.1	100.4	87.7
Chilled juice	17.0	19.2	23.6	29.5	33.4	38.1	37.0
Canned juice	1.3	0.9	0.8	1.1	0.6	0.6	0.6
Blends	0.1	0.1	0.1	2/	2/	2/	2/
Non-certified	0.3	0.5	0.7	0.9	0.8	1.0	1.2
Total	119.2	119.7	138.0	146.6	110.2	151.5	136.0

1/ The total used in processed products does not agree exactly with the utilization reported by the Florida Citrus Processors Association because their orange utilization report includes some specialty fruit.

2/ Less than 50,000 boxes.

Source: Florida Department of Citrus.

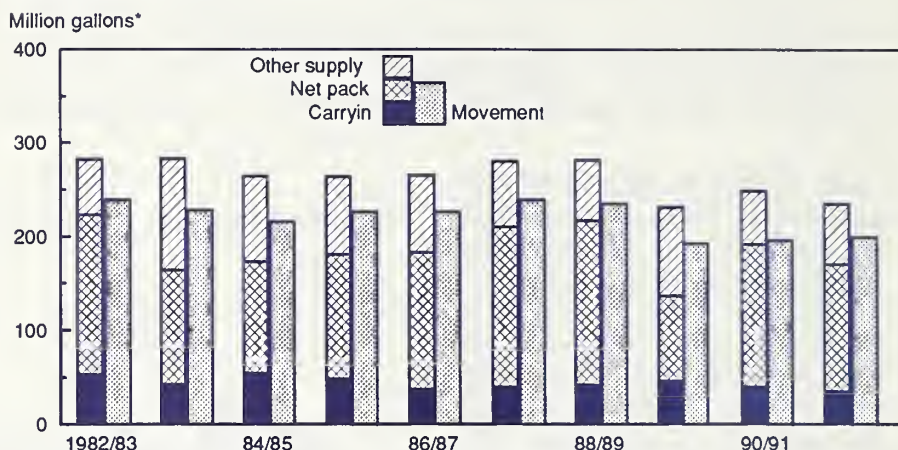
production will decline 5-10 percent, but total U.S. production less than 5 percent from the 1990/91 season.

The 1990/91 season will end with relatively low stocks of orange juice, although Florida orange production was up 38 percent from the freeze-reduced 1989/90 crop. On October 12, 1991, Florida processors reported a 13-percent increase in the FCOJ supply from October 13, 1990, but, with strong demand and increased movement, stocks were down 2 percent and remained 12-15 percent below those at the same time in the 3 previous years.

Orange juice prices reflected the tighter supply situation. Wholesale prices of FCOJ rose during 1990/91 as juice production failed to meet expectations. The futures price for FCOJ was about \$1.00 per pound solids in December 1990, \$1.15-\$1.20 during mid-March to mid-September 1991, and had risen to \$1.32 (for March 1992 delivery) in early October. A week after USDA's relatively small production forecast was released, the futures price was up 20 percent to \$1.59 per pound solids. By early November, the price was about \$1.65.

Expectations of a smaller crop of Florida processing oranges have already raised the wholesale price of FCOJ, and grower prices are expected to be higher than in 1990/91, when the season average price (equivalent packinghouse-door returns) of Florida processing oranges was \$8.14 per box, about 3 percent higher than in 1989/90. If higher prices attract 10-15 percent more imports, as expected by the Florida Department of Citrus, domestic availability of FCOJ in 1991/92 would be about the same as in 1990/91.

Figure 5
Florida Supply and Utilization of Frozen Concentrated Orange Juice



* 42 degrees Brix. Other supply includes imports. Year beginning December.

Table 12--U.S. orange juice supply, 1989/90-1991/92

Item	Estimate		
	1989/90	1990/91	1991/92
	--Million SSE gallons 1/--		
Florida production	542.9	841.7	779.3
Other U.S. production 2/ U.S. production	109.5	47.2	72.7
	652.4	888.9	852.0
U.S. imports	492.1	379.8	428.9
U.S. exports	90.0	100.0	110.3
Net imports	402.1	279.8	318.6
Domestic availability	1,054.5	1,168.7	1,170.3

1/ SSE: single strength equivalent.

2/ Estimated processed utilization for Texas, California, and Arizona multiplied by estimated yield.

Source: Florida Department of Citrus.

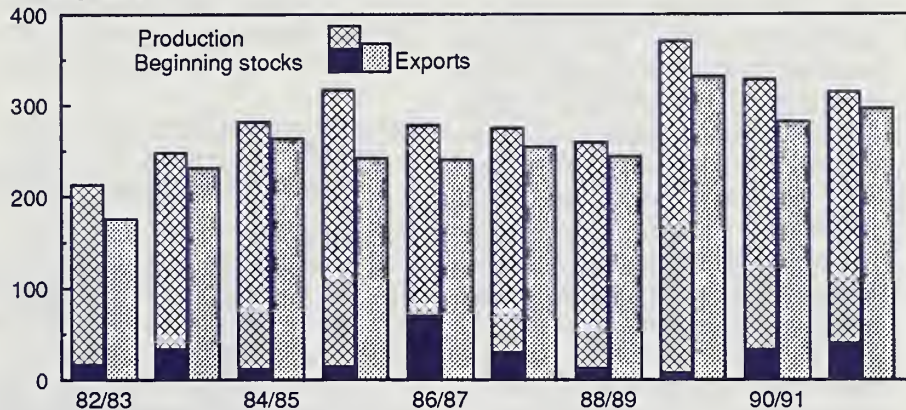
Imports From Brazil Are Expected To Rise

Brazil produces and exports more orange juice than any other country, and a large proportion comes to the United States. Brazil has demonstrated an ability to increase its exports to the United States in years when domestic production was below normal. In 1988/89, the United States imported 362 million gallons of orange juice (single strength equivalent) and nearly 85 percent was from Brazil. Because of the freeze-damaged Florida crop in 1989/90, U.S. orange juice imports rose 36 percent the next year, and over 85 percent was from Brazil. Although 1990/91 U.S. imports were down nearly 25 percent, according to the U.S. Bureau of the Census, Brazil was again the major supplier.

The FCOJ marketing year in Brazil begins in July and ends the following June, with peak marketings to the United States usually from September to November. Thus, supplies of FCOJ from Brazil are typically available towards the end of the U.S. season. Brazil's 1991/92 orange juice production is likely to be down 5-10 percent from 1990/91, and nearly 25 percent below 1989/90. Much of the 1991/92 crop currently being processed in Brazil reportedly has been committed to the European market. However, in the past, higher U.S. prices have diverted Brazilian juice from other markets. Reliable forecasts of Brazil's 1992/93 crop won't be available for several months.

Figure 6
Brazilian Supply and Utilization of Frozen Concentrated Orange Juice

Million gallons*



* 42 degrees Brix. Year beginning July.

Table 13--Orange juice production in Brazil and Florida

Season 1/	Brazil	Florida	Total
-- Million SSE gallons 2/ --			
1984/85	1,091.7	567.1	1,658.8
1985/86	1,218.6	639.4	1,858.0
1986/87	839.7	708.4	1,548.1
1987/88	988.7	828.4	1,817.1
1988/89	992.8	888.0	1,880.8
1989/90	1,462.1	542.9	2,005.0
1990/91	1,190.7	841.7	2,032.4
1991/92 3/	1,107.1	779.3	1,886.4

1/ Marketing season begins July 1 of the first year shown for Brazil and December 1 for Florida.

2/ SSE: single strength equivalent.

3/ Estimate.

Source: Florida Department of Citrus.

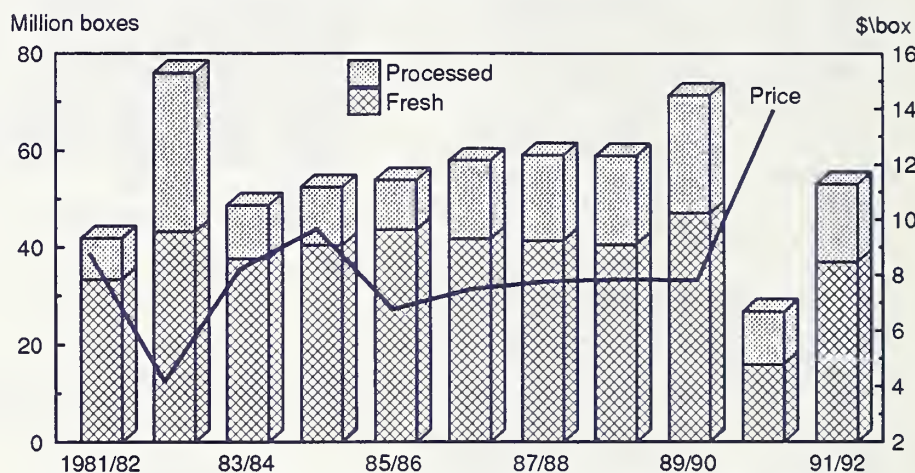
Fresh Orange Prices Move Up Sharply in 1990/91

Fresh orange prices are likely to remain strong in 1991/92, despite the partial recovery of production in California.

Most California oranges are targeted to the fresh market and California accounts for almost 80 percent of fresh utilization of U.S.-produced oranges. The quantity of oranges for fresh use was down 40 percent in 1990/91 due to the December 1990 freeze in California. Freezing temperatures reduced the 1990/91 navel and Valencia orange crops by 64 and 59 percent, respectively, from 1989/90.

The first USDA forecast for California's 1991/92 navel orange crop is 84 percent larger than last year, but still only 65 percent of the preefreeze (1989/90) level. Valencia orange production in California is expected to be more than double last season's 11 million boxes, and to be almost 90 percent of 1989/90 production. California and Arizona growers expect fresh shipments (domestic and export) to be 48 million cartons in 1991/92, still substantially less than the 65 million shipped in 1989/90, and 13 percent less than the 1986/87-1989/90 average.

Figure 7
California Oranges: Production, Use, and Price



All price = season-average packinghouse-door returns. Year beginning November.

Table 14--U.S. orange production, 1989/90-1991/92 1/

Variety and State	Utilized			Utilized		
	1989/90	1990/91	Indicated 1991/92	1989/90	1990/91	Indicated 1991/92
	----- 1,000 boxes 2/ -----			----- 1,000 short tons -----		
Early, midseason, and navels 3/				4,783	4,550	4,717
Arizona	390	550	700	14	20	26
California	44,300	15,800	29,000	1,661	593	1,088
Florida	68,100	87,500	80,000	3,064	3,937	3,600
Texas	1,050	4/	60	44	4/	3
Valencias:				2,962	3,337	3,474
Arizona	1,220	1,200	1,400	45	45	53
California	27,100	11,000	24,000	1,016	412	900
Florida	42,100	64,000	56,000	1,894	2,880	2,520
Texas	155	4/	35	7	4/	1

1/ The crop year begins with bloom of the first year shown and ends with harvest. 2/ Net pounds per box: orange-California and Arizona-75; Florida-90, and Texas-85. 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/ Due to the severe freeze of December 1989, Texas had no commercial production for the 1990/91 season.

Source: National Agricultural Statistics Service, USDA.

Short Supply of Fresh Oranges Elevated Prices

Increased imports, reduced exports, and increased fresh shipments of oranges from Florida during the 1990/91 season helped fill the gap created by the freeze in California. However, the short supply greatly raised prices from the year before.

F.o.b. prices for fresh oranges from California and Arizona shipping points have been relatively high since the December 1990 freeze. By December 28, 1990, the f.o.b. price for oranges was \$20.00 per box (113s), compared to \$6.50 the year before. F.o.b. orange prices stayed above \$15 for the following 8 months, rose to about \$22 per box by the end of August, and stayed there through mid-October.

The season-average price for fresh market oranges in 1990/91 was 67

percent higher than in 1989/90, \$17.21 per box (equivalent packinghouse-door returns) compared with \$10.32. The 1990/91 season-average price was 73 percent higher than the 1988/89 average price. Fresh orange prices declined about 10 percent in Florida between the 1989/90 and 1990/91 seasons, but rose 125 percent in California and over 100 percent in Arizona.

More Fresh Market Oranges From Florida and Mexico in 1991/92

Florida sold twice as many boxes of fresh oranges in the 1990/91 season (about 8 percent of the total crop) than in 1989/90. The increase in fresh sales was mostly in response to sharply reduced supplies from California. In the previous 2 seasons, only 5-6 percent of the Florida crop was sold fresh. For the 1991/92 season, more Florida growers are reportedly using cultural practices to target fruit for the fresh

market, and reports from the industry indicate additional packinghouse capacity will be available this season. The Florida Department of Citrus estimates that 7 percent of production will be utilized fresh in 1991/92.

The shortfall in California orange production in 1990/91 greatly reduced the supply of high quality fresh fruit required for export and increased fresh orange imports. Exports of fresh oranges, including Temples, from November 1990 to August 1991 were down 50 percent from a year earlier, to 229,711 short tons. Imports of fresh oranges from November 1990 to July 1991 were well ahead of last season: 66,326 short tons compared with 12,088. About half of the increased volume was from Mexico, with lesser amounts from Spain and Morocco. Fresh orange imports amounted to about 5 percent of 1990/91 fresh utilization.

Table 15--Oranges: Monthly equivalent on-tree prices received by growers, 1989-91

Month	Fresh oranges			Processing oranges			All oranges		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- Dollars per box --									
January	6.91	8.57	18.56	6.45	5.59	5.40	6.51	5.92	6.35
February	6.18	8.33	15.21	6.50	5.20	5.23	6.45	5.82	6.81
March	6.57	7.72	13.72	6.09	5.31	6.71	6.26	6.01	7.48
April	6.88	7.33	14.26	7.39	6.16	6.94	7.28	6.48	7.66
May	8.71	9.60	17.52	8.33	5.83	6.67	8.39	7.01	8.34
June	9.90	9.55	28.03	8.17	2.55	-0.10	8.51	6.78	16.76
July	10.36	9.33	26.89	2.54	2.16	-0.10	7.27	5.98	16.09
August	9.76	8.16	28.19	2.12	0.96	-0.10	6.52	4.62	20.81
September	9.96	8.56	28.89	1.70	0.76	-0.10	6.54	4.71	21.97
October	9.55	7.16	14.68	1.56	4.53	2.95	6.29	5.31	11.09
November	9.56	10.40		4.74	5.60		7.34	6.44	
December	8.38	10.84		5.70	5.35		6.34	6.31	

Source: National Agricultural Statistics Service, USDA.

Grapefruit Output To Remain Below Prefreeze Level

Smaller grapefruit crop is expected to strengthen prices in 1991/92.

The 1991/92 U.S. grapefruit crop is forecast to dip about 5 percent from 1990/91. Florida grapefruit production is expected to be down 6 percent. Although 1990/91 grapefruit production was up 14 percent from the 1989/90 crop that was reduced by freezes in Florida and Texas, it was only 80 percent of the previous 2 years' crops.

California grapefruit production in 1990/91 fell 15 percent from the prior season, because of cold weather in December 1990. Production of summer grapefruit in California's "other areas" was down nearly 25 percent.

Grapefruit production in California's desert valley areas is expected to be the same as in the prior two seasons. The forecast for grapefruit production in California's "other areas" will not be available until April 1992, but the industry anticipates a good recovery.

Bigger Share of Grapefruit Crop Utilized Fresh

In 1990/91, more than half of U.S. grapefruit was utilized fresh, for the first time since 1982/83. The Florida Department of Citrus estimated that total utilization was up 26 percent from

the freeze-reduced 1989/90 season. Fresh utilization of grapefruit increased 80 percent, with 10 percent fewer boxes processed for frozen concentrated grapefruit juice (FCGJ). Processing accounted for 49 percent of total utilized production, compared with 64 percent in 1989/90. Because of higher juice yields, the total pack of FCGJ reported near the end of the 1990/91 season by the Florida Citrus Processors Association was about the same as in 1989/90. Lower carryin and higher movement left FCGJ stocks down nearly 30 percent.

Table 16--U.S. grapefruit production, 1989/90-1991/92 1/

Variety and State	Utilized			Utilized		
	1989/90	1990/91	Indicated 1991/92	1989/90	1990/91	Indicated 1991/92
	----- 1,000 boxes 2/ -----			----- 1,000 short tons -----		
Florida grapefruit	35,700	45,100	42,500	1,518	1,916	1,807
Seedless	34,300	43,500	41,000	1,458	1,848	1,743
Pink	16,300	21,800	21,000	693	926	893
White	18,000	21,700	20,000	765	922	850
Other	1,400	1,600	1,500	60	68	64
Arizona grapefruit	2,200	2,400	2,300	70	77	74
California grapefruit	9,400	8,000	3/	310	262	3/
Desert Valleys	3,500	3,500	3,500	112	112	112
Other areas	5,900	4,500	3/	198	150	3/
Texas grapefruit	2,000	4/	115	80	4/	5

1/ The crop year begins with bloom of the first year shown and ends with harvest. 2/ Net pounds per box: grapefruit-California desert and Arizona-64, California other areas-67, Florida-85, Texas-80. 3/ The first forecast for California grapefruit "other area" will be available as of April 1, 1992.

4/ Due to the severe freeze of December 1989, Texas had no commercial production in 1990/91.

Source: National Agricultural Statistics Service, USDA.

Fresh Grapefruit Exports Rebound

Fresh grapefruit exports for the 1990/91 marketing year (September/August) were 62 percent above 1989/90, reflecting a sharp recovery from the December 1989 Florida freeze that reduced the quantity of export quality grapefruit in 1989/90. Fresh grapefruit exports reached 464,874 metric tons during 1990/91, compared with 287,330 metric tons a year earlier. Florida expects to export about 2 percent fewer cartons of grapefruit in 1991/92 than in 1990/91.

Grapefruit Prices Expected To Rise in 1991/92

Monthly prices (equivalent on-tree returns to growers) for all grapefruit averaged \$4.41 per box in 1988/89, and climbed to \$5.86 in 1989/90 with freeze-damaged crops in Florida and Texas. Since February 1991, monthly prices have been below a year earlier as the Florida grapefruit supply recovered from the freeze. Grower prices in 1990/91 averaged \$5.26 per box, down 10 percent from 1989/90.

Grapefruit prices are likely to be higher in the coming months with the prospect of less production and as strong export demand for larger size and better quality fruit tightens supplies.

However, the expected price rise may be moderated by relatively low utilization for processing, reflecting weak demand for grapefruit juice.

Figure 8
U.S. Grapefruit Production, Use, and Price



Table 17--Estimated utilization of grapefruit, Florida, 1985/86-1991/92

Item	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	Forecast 1991/92
-- Million boxes --							
Fresh	19.3	20.6	22.6	23.2	12.9	23.2	21.0
Canned	3.0	2.4	2.0	1.6	1.0	0.8	0.6
Frozen concentrate	21.6	24.1	26.7	26.6	19.4	17.4	17.2
Chilled juice	1.2	1.3	1.1	1.7	1.2	2.1	2.2
Blends	1.3	1.0	0.9	0.9	0.7	0.8	0.7
Non-certified	0.3	0.4	0.6	0.8	0.5	0.7	0.8
Total	46.8	49.8	53.9	54.8	35.7	45.1	42.5

Source: Florida Department of Citrus.

Table 18--Grapefruit: Monthly equivalent on-tree prices received by growers, 1989-91

Month	Fresh grapefruit			Processing grapefruit			All grapefruit		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- Dollars per box --									
January	5.39	10.81	9.01	3.13	2.83	1.56	4.40	5.03	5.45
February	5.11	11.91	8.61	3.24	3.07	2.14	4.00	5.00	4.64
March	5.09	13.15	9.58	3.26	3.58	1.88	3.83	7.02	5.67
April	5.75	12.34	9.27	2.75	1.53	0.09	4.24	7.37	5.25
May	6.13	13.83	7.92	2.01	-0.69	-0.54	4.29	7.48	4.18
June	6.12	13.54	9.48	-1.35	-0.91	-1.95	3.32	7.95	5.22
July	8.68	10.02	7.84	-1.44	-0.52	-1.94	5.44	5.63	3.94
August	10.06	7.15	6.55	-1.54	-1.74	-2.00	6.26	3.17	2.86
September	10.03	7.75	4.55	-0.59	-0.83	-1.98	7.61	5.73	1.38
October	7.74	8.44	8.00	1.74	0.76	0.40	6.09	6.52	6.24
November	7.63	8.14		2.02	1.23		5.94	6.03	
December	9.15	7.38		2.23	1.75		6.57	5.17	

Source: National Agricultural Statistics Service, USDA.

Table 19--Lemons: Monthly equivalent on-tree prices received by growers, 1989-91

Month	Fresh lemons			Processing lemons			All lemons		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
-- Dollars per box --									
January	9.43	12.83	21.08	-0.96	0.24	0.37	4.33	8.67	6.83
February	10.56	15.42	19.89	-0.96	0.38	-0.05	4.75	9.89	9.41
March	12.28	17.03	17.74	-0.92	0.44	-0.87	5.87	10.24	13.08
April	13.47	17.53	20.55	-0.90	0.44	-0.87	8.03	11.19	16.56
May	16.17	18.13	27.45	-0.88	0.44	-0.87	11.96	12.20	23.06
June	18.77	19.33	29.25	-0.88	0.44	-1.01	14.95	13.24	23.46
July	20.17	20.03	28.95	-0.88	0.52	-1.01	15.57	13.40	21.23
August	21.73	18.05	30.45	-0.72	0.51	-1.01	16.70	11.70	20.51
September	22.76	19.18	31.35	-0.72	0.57	-0.95	17.22	13.53	22.00
October	22.00	18.06	26.33	-0.72	0.57	-0.95	15.11	11.49	19.45
November	15.97	7.68		-0.46	0.23		9.71	4.46	
December	12.43	8.55		-0.04	-0.67		7.17	3.63	

Source: National Agricultural Statistics Service, USDA.

Lemon Prices Expected To Remain Strong in 1991/92

A smaller lemon crop and some recovery in exports are expected to tighten lemon supplies and raise prices.

The first USDA forecast of 1991/92 U.S. lemon production is 688,000 short tons, down 5 percent from last year, but only 3 percent less than the 1989/90 crop. In California, lemon production is forecast 9 percent below last season and 15 percent below 1989/90. Lemon trees were damaged by the December 1990 freeze in the Central District of California, where little production is expected for 2 more years. Arizona's lemon production is expected to be up 12 percent in 1991/92.

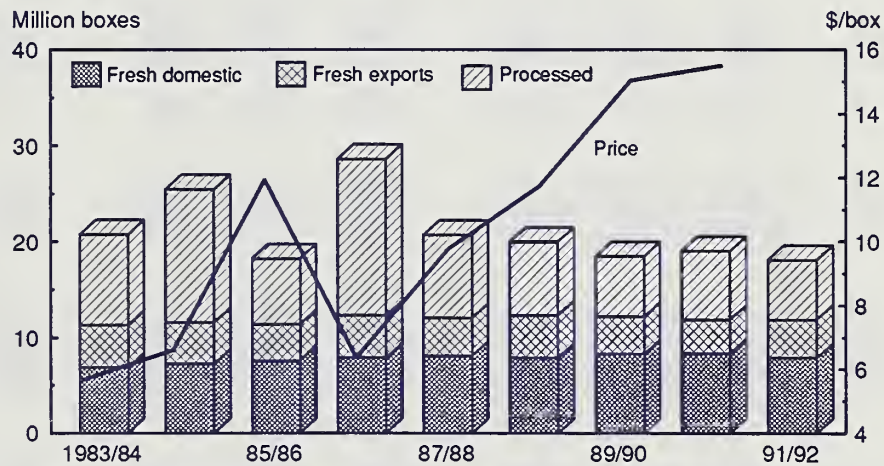
For the first 7 months of 1991, U.S. lemon exports were down 30 percent from a year earlier. The December 1990 California freeze adversely affected both the size of the California lemon crop and the quality of fruit needed for export markets. U.S. lemon imports more than doubled for the first 7 months of 1991, but still amounted to less than 10 percent of U.S. exports.

Lemon prices received by growers rose each month following the December

freeze in California, and peaked at \$23.46 per box in June 1991, well above the \$13.24 in June 1990. Prices dipped slightly in July and August, but remained above \$20 per box, and climbed to \$22.00 in September. The smaller crop and better quality of lemons, which should expand exports, are expected to signal higher prices than in 1990/91.

Figure 9

U.S. Lemon Production, Use, and Price



All price = season-average packinghouse-door returns. Year beginning August.

Table 20--Citrus fruit: Season-average equivalent on-tree returns received by growers, by State, variety and use, 1988/89-1990/91 1/

Variety and State	Fresh			Processing			All		
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91
-- Dollars per box 1/ --									
ORANGES:									
Florida	7.61	10.31	8.96	7.40	5.98	6.29	7.41	6.21	6.50
Early and midseason	7.65	9.55	8.75	6.63	5.74	5.79	6.69	6.01	5.99
Valencia	7.55	13.75	9.15	8.45	6.34	6.99	8.41	6.53	7.21
California	8.37	8.31	20.92	1.15	1.72	-0.61	6.12	6.07	12.17
Navel and miscellaneous	7.69	7.97	15.56	0.17	1.91	-0.83	5.90	6.33	8.71
Valencia	9.56	9.06	28.29	1.92	1.53	-0.26	6.43	5.64	17.13
Arizona	9.33	8.50	20.68	0.86	2.38	-0.77	6.91	6.78	16.61
Navel and miscellaneous	11.29	9.97	14.16	-0.70	0.88	-0.83	10.20	9.06	12.44
Valencia	7.96	7.86	24.09	1.04	2.52	-0.76	5.34	6.06	18.52
Texas	6.92	7.92	2/	3.67	3.00	2/	6.40	5.71	2/
Early and midseason	7.39	7.92	2/	4.09	3.23	2/	6.90	6.19	2/
Valencia	6.02	2/	2/	3.03	2.43	2/	5.49	2.43	2/
United States 3/ Early, midseason, and navel	8.21	8.57	15.39	6.76	5.27	5.85	7.08	6.16	7.31
Valencia	7.74	8.23	12.63	6.12	5.21	5.37	6.52	6.14	6.38
Valencia	9.03	9.36	18.43	7.58	5.35	6.54	7.86	6.21	8.59
GRAPEFRUIT:									
Florida	6.03	10.00	8.79	3.24	3.06	1.63	4.45	5.65	5.43
Seedless	6.03	10.00	8.79	3.18	3.00	1.52	4.50	5.73	5.52
Seeded	4/	4/	4/	3.68	3.84	2.92	3.68	3.84	2.92
Texas	5.06	7.34	2/	0.57	0.56	2/	4.21	6.00	2/
California	7.33	10.49	7.49	-1.54	-1.13	-1.97	4.55	6.28	4.17
Arizona	4.76	11.35	7.45	-1.57	-1.31	-2.00	2.76	8.27	4.66
United States 3/	6.05	10.00	8.55	2.84	2.53	1.22	4.41	5.86	5.26
LEMONS:									
California	15.37	18.23	21.35	-1.11	0.16	-0.47	9.37	12.17	13.44
Arizona	12.67	17.93	15.45	-1.15	-0.23	-0.33	6.05	11.21	8.95
United States	14.93	18.19	20.16	-1.12	0.10	-0.44	8.74	12.02	12.47
TANGERINES:									
Florida	19.10	24.40	25.60	4.24	2.29	3.13	12.64	15.28	17.27
California	16.86	22.56	24.39	0.34	1.03	-1.22	12.28	17.21	19.07
Arizona	16.96	18.96	21.09	-0.41	0.90	-1.22	13.49	14.75	17.26
United States 3/	18.02	22.79	24.47	3.02	1.79	1.87	12.61	15.93	17.80
TANGELOS:									
Florida	8.25	8.05	10.15	5.25	3.30	3.20	6.31	5.10	6.31
TEMPLES:									
Florida	7.15	17.75	11.15	4.95	4.30	3.53	5.46	5.64	5.94
LIMES:									
Florida	15.24	14.83	22.52	-1.22	-2.10	-1.26	11.29	8.26	13.99

1/ 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 and Temples, 90 lbs.; tangerines-California and Arizona, 75 lbs.; Florida, 95 lbs. 2/ Sales insignificant due to December 1989 freeze damage. 3/ U.S. average price is weighted by the size of the container. 4/ Fresh sales insignificant and included in processed.

Source: National Agricultural Statistics Service, USDA.

Table 21--Citrus fruit: Season-average equivalent P.H.D. returns received by growers, by State, variety, and use, 1988/89-1990/91 1/

Variety and State	Fresh			Processing			All		
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91
-- Dollars per box 2/ --									
ORANGES:									
Florida	9.46	12.16	10.81	9.25	7.83	8.14	9.26	8.06	8.35
Early and midseason	9.50	11.40	10.60	8.48	7.59	7.64	8.54	7.86	7.84
Valencia	9.40	15.60	11.00	10.30	8.19	8.84	10.26	8.38	9.06
California	10.08	10.06	22.71	2.89	3.49	1.18	7.85	7.82	13.95
Navel and miscellaneous	9.36	9.67	17.28	1.84	3.61	0.89	7.57	8.03	10.43
Valencia	11.36	10.91	30.17	3.72	3.38	1.62	8.23	7.49	19.01
Arizona	11.08	10.30	22.50	2.65	4.22	1.08	8.67	8.60	18.44
Navel and miscellaneous	12.96	11.67	15.88	0.97	2.58	0.89	11.87	10.76	14.16
Valencia	9.76	9.71	25.97	2.84	4.37	1.12	7.14	7.91	20.40
Texas	7.99	9.10	3/	5.11	4.10	3/	7.53	6.85	3/
Early and midseason	8.46	9.10	3/	5.52	4.33	3/	8.02	7.34	3/
Valencia	7.09	3/	3/	4.46	3.53	3/	6.62	3.53	3/
United States 4/ Early, midseason, and navel	9.94	10.32	17.21	8.59	7.10	7.70	8.90	7.98	9.15
Valencia	9.43	9.94	14.40	7.96	7.03	7.21	8.32	7.93	8.21
	10.82	11.21	20.29	9.42	7.20	8.39	9.69	8.06	10.44
GRAPEFRUIT:									
Florida	7.63	11.60	10.39	4.88	4.72	3.29	6.08	7.29	7.06
Seedless	7.63	11.60	10.39	4.83	4.67	3.19	6.13	7.37	7.15
Seeded	5/	5/	5/	5.28	5.44	4.52	5.28	5.44	4.52
Texas	6.04	8.44	3/	1.77	1.56	3/	5.23	7.08	3/
California	8.99	12.22	9.22	0.12	0.60	-0.24	6.21	8.01	5.90
Arizona	6.42	13.08	9.18	0.09	0.42	-0.27	4.42	10.00	6.39
United States 4/	7.59	11.60	10.18	4.47	4.18	2.89	6.00	7.49	6.90
LEMONS:									
California	18.38	21.25	24.38	1.90	3.18	2.56	12.38	15.19	16.47
Arizona	15.68	20.95	18.48	1.86	2.79	2.70	9.06	14.23	11.98
United States	17.94	21.21	23.19	1.89	3.12	2.59	11.75	15.04	15.50
TANGERINES:									
Florida	21.60	27.00	28.20	7.14	5.29	6.13	15.31	18.35	20.02
California	18.66	24.41	26.27	2.14	2.88	0.66	14.08	19.06	20.95
Arizona	18.76	20.81	22.97	1.39	2.75	0.66	15.29	16.60	19.14
United States 4/	20.17	24.96	26.71	5.58	4.36	4.55	14.92	18.23	20.17
TANGELOS:									
Florida	10.10	9.90	12.00	7.25	5.30	5.20	8.26	7.04	8.24
TEMPLES:									
Florida	9.00	19.60	13.00	6.95	6.30	5.53	7.43	7.62	7.89
LIMES:									
Florida	21.60	21.20	28.20	3.18	2.30	3.14	17.18	13.87	19.21

1/ P.H.D.--Packinghouse-door. 2/ Net content of box varies. Approximated average as follows: oranges-California and Arizona, 75 lb.; 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 and Temples, 90 lbs.; tangerine-California and Arizona, 76 lbs.; Florida, 95 lbs. 3/ Sales insignificant due to December 1989 freeze damage.

4/ U.S. average price is weighted by the size of the container. 5/ Fresh sales insignificant and included in processed.

Source: National Agricultural Statistics Service, USDA.

Table 22--U.S. citrus fruit: Production, use, and value, 1986/87-1990/91

Fruit and season	Production	Use of production				Value of production
		Fresh		Processed		
		Quantity	Percentage	Quantity	Percentage	
	--1,000 short tons--			1,000 short tons		Million dollars
Oranges:						
1986/87	7,697	2,070	26.9	5,627	73.1	1,322.5
1987/88	8,551	2,085	24.4	6,466	75.6	1,773.7
1988/89	8,949	2,016	22.5	6,933	77.5	1,848.5
1989/90	7,745	2,103	27.2	5,642	72.8	1,468.9
1990/91	7,887	1,205	15.3	6,682	84.7	1,672.0
Grapefruit:						
1986/87	2,586	1,200	46.4	1,386	53.6	414.4
1987/88	2,801	1,332	47.6	1,469	52.4	478.6
1988/89	2,844	1,395	49.1	1,449	50.9	416.0
1989/90	1,978	882	44.6	1,096	55.4	371.9
1990/91	2,255	1,240	55.0	1,015	45.0	380.8
Lemons:						
1986/87	1,087	469	43.1	618	56.9	182.2
1987/88	785	459	58.5	326	41.5	202.0
1988/89	759	466	61.4	293	38.6	235.0
1989/90	706	466	66.0	240	34.0	279.8
1990/91	722	453	62.7	269	37.3	294.5
Limes:						
1986/87	63	37	58.7	26	41.3	19.6
1987/88	57	38	66.7	19	33.3	23.3
1988/89	55	42	76.4	13	23.6	21.5
1989/90	72	44	61.1	28	38.9	22.9
1990/91	64	41	64.1	23	35.9	27.9
Tangelos:						
1986/87	180	59	32.8	121	67.2	24.6
1987/88	189	63	33.3	126	66.7	32.6
1988/89	171	61	35.7	110	64.3	31.4
1989/90	132	50	37.9	82	62.1	20.8
1990/91	119	53	44.5	66	55.5	21.8
Tangerines: 1/						
1986/87	228	157	68.9	71	31.1	69.7
1987/88	218	153	70.2	65	29.8	80.4
1988/89	239	153	64.0	86	36.0	83.1
1989/90	164	111	67.7	53	32.3	72.1
1990/91	164	116	70.7	48	29.3	77.8
Temple:						
1986/87	153	47	30.7	106	69.3	20.5
1987/88	160	58	36.3	102	63.8	27.9
1988/89	169	39	23.1	130	76.9	27.8
1989/90	63	6	9.5	57	90.5	10.7
1990/91	113	36	31.9	77	68.1	19.7
Total: 2/						
1986/87	11,994	4,039	33.7	7,955	66.3	2,053.5
1987/88	12,761	4,188	32.8	8,573	67.2	2,618.6
1988/89	13,186	4,172	31.6	9,014	68.4	2,663.2
1989/90	10,860	3,662	33.7	7,198	66.3	2,247.0
1990/91	11,324	3,144	27.8	8,180	72.2	2,494.5

1/ Per program modification, all tangerines include honey tangerines beginning with the 1987/88 season, and beginning with the 1989/90 season includes sunburst tangerines.

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

Source: National Agricultural Statistics Service, USDA.

Table 23--Percentage of total production used for processing, selected citrus fruit, by State, 1983/84-1990/91

State and variety	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
	--Percent--							
ORANGES:								
Florida--	93.5	93.6	92.5	92.6	93.1	94.2	94.6	91.8
Early and midseason	92.9	92.0	92.0	92.0	92.5	93.6	92.9	93.2
Valencia	94.3	95.4	93.0	93.3	93.9	95.0	97.5	90.0
Temples	73.7	80.7	69.1	69.0	63.6	76.8	90.1	68.4
California--	22.6	22.9	19.1	28.0	30.0	31.1	34.0	40.7
Navel and miscellaneous	24.8	11.8	19.7	23.2	21.0	23.8	27.1	41.8
Valencia	17.6	34.0	18.2	35.0	40.4	41.0	45.4	39.1
Texas--	44.6	0.0	6.5	10.3	10.8	15.9	45.0	0.0
Navel and miscellaneous	28.1	0.0	5.0	8.0	10.9	14.9	36.9	0.0
Valencia	100.0	0.0	9.1	13.3	10.6	17.7	100.0	0.0
Arizona--	16.2	21.7	19.0	27.4	21.7	28.5	28.0	19.0
Navel and miscellaneous	12.5	6.0	11.8	14.0	6.6	9.1	10.0	11.5
Valencia	17.6	26.8	21.6	35.3	29.3	37.8	33.8	22.4
GRAPEFRUIT:								
Florida--	59.3	65.9	58.0	58.0	57.1	56.3	62.6	47.0
Seedless	54.2	63.7	55.0	55.4	54.8	53.5	61.1	45.0
Colored	32.7	37.0	28.4	30.7	31.1	33.0	43.0	27.8
White	66.8	78.4	73.7	73.7	72.5	71.0	77.5	62.3
Other seeded	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California--	36.2	29.5	29.6	37.1	34.1	31.3	36.2	35.0
Desert Valley	39.5	31.6	33.3	39.5	38.1	27.1	31.4	28.6
Other areas	33.3	28.0	26.7	35.0	30.6	34.4	39.0	40.0
Arizona	32.0	34.9	35.7	36.7	33.3	31.5	24.3	29.5
Texas	10.6	0.0	9.1	19.2	26.7	19.0	19.8	0.0
TANGERINES:								
Florida 1/	37.5	48.6	39.0	37.5	34.1	43.5	41.2	37.1
California	50.3	31.8	29.4	26.8	27.1	27.7	24.8	20.8
Arizona	21.9	18.2	24.2	19.4	16.7	20.0	23.3	17.2
Total	37.9	35.3	32.4	30.2	29.2	35.0	31.7	28.5
LEMONS:								
California	46.4	52.8	37.1	53.5	40.6	36.4	33.5	36.2
Arizona	42.0	60.2	39.0	67.0	46.2	47.9	37.0	41.2
Total	45.7	54.4	37.4	56.8	41.6	38.6	34.1	37.3

1/ Per program modification, all tangerines include honey tangerines beginning with the 1987/88 season. Estimates starting with the 1982/83 season have been revised to include the honey variety. Beginning with the 1989/90 season includes sunburst tangerines.

Source: National Agricultural Statistics Service, USDA.

Table 24--Frozen concentrated citrus juices: Cannery stocks, packs, supplies, and movement, Florida, 1986/87-1990/91

Item and season	Carryin	Pack		Other supplies 1/		Supply		Movement		Stocks 2/
		To date 2/	Total season	To date 2/	Total season	To date 2/	Total season	To date 2/	Total season	
-- 1,000 gallons 3/ --										
Oranges:										
1986/87	36,995	145,056	145,056	70,198	82,972	252,249	265,023	193,284	225,233	58,965
1987/88	39,790	169,973	169,973	57,772	70,815	267,535	280,578	207,940	238,494	59,595
1988/89	42,084	174,717	174,717	50,329	64,388	267,130	281,189	206,184	234,950	60,946
1989/90	46,306	90,285	90,285	82,550	94,461	219,141	231,052	166,149	191,060	52,992
1990/91	39,933	151,396		56,911		248,240		196,273		51,967
Grapefruit:										
1986/87	3,422	28,875	28,875	1,206	1,369	33,503	33,666	25,043	28,450	8,460
1987/88	5,216	31,906	31,906	1,342	1,557	38,464	38,679	24,684	28,881	13,780
1988/89	9,798	32,466	32,466	594	656	42,858	42,920	24,699	27,602	18,159
1989/90	15,152	21,774	21,774	735	905	37,661	37,831	22,003	25,365	15,658
1990/91	12,465	21,672		322		34,459		23,221		11,238
Tangerines:										
1986/87	279	373	373	463	98	1,115	750	993	660	122
1987/88	90	583	583	659	659	1,332	1,332	882	1,007	450
1988/89	325	495	495	92	97	912	917	802	836	110
1989/90	81	371	371	233	233	685	685	463	569	222
1990/91	116	279		221		616		435		181

1/ Includes domestic production received by members from nonmembers, foreign product imported by members, reprocessed tangerine juice, and chilled orange juice used in FCOJ.

2/ For 1990/91 season, week ending October 12; 1989/90, October 13; 1988/89, October 14; 1987/88, October 8; and 1986/87, October 10. These respective dates include data through the 45th week of each season.

3/ Oranges--42.0 degrees Brix, grapefruit--40 degrees Brix, and tangerines--42 degrees Brix.

Source: Florida Citrus Processors Association.

Table 25--Canned citrus juices: Cannery packs, supplies, and movement, Florida, 1986/87-1990/91

Item and season 1/	Carryin	Pack	Total supply	Movement	Carryout
-- 1,000 cases, 24 # 2 cans 2/ --					
Oranges: 3/					
1986/87		8,122	9,108	8,084	1,024
1987/88	986	7,256	8,280	7,425	855
1988/89	1,024	8,164	9,019	8,227	792
1989/90	855	6,640	7,432	6,817	615
1990/91	792	7,130	7,745	7,199	545
Grapefruit: 3/					
1986/87		8,982	10,497	9,027	1,471
1987/88	1,515	7,724	9,195	7,871	1,323
1988/89	1,471	7,956	9,279	7,885	1,394
1989/90	1,323	5,986	7,380	6,581	799
1990/91	1,394	6,678	7,477	6,669	808
Blend:					
1986/87		533	659	533	126
1987/88	126	449	575	458	117
1988/89	117	434	551	426	116
1989/90	116	334	450	374	76
1990/91	76	450	526	481	45

1/ Season beginning approximately October 1.

2/ Single-strength.

3/ Includes reconstituted juice.

Source: Florida Citrus Processors Association.

Table 26--Orange and grapefruit processed, Florida, 1982/83-1990/91

Crop and season	Frozen concentrates	Chilled products	Other processed 1/	Total processed
-- 1,000 boxes --				
Oranges: 2/				
1982/83	114,627	18,254	2,665	135,546
1983/84	94,547	16,981	2,909	114,437
1984/85	86,112	14,903	1,907	102,922
1985/86	96,061	17,267	1,361	114,689
1986/87	96,182	19,661	948	116,791
1987/88	110,206	23,325	904	134,435
1988/89	113,732	29,902	1,141	144,775
1989/90	73,640	33,836	659	108,135
1990/91	104,136	38,366	568	143,070
Grapefruit:				
1982/83	13,977	- 1,731	5,379	21,087
1983/84	18,728	1,320	4,191	24,239
1984/85	22,996	1,065	4,951	29,012
1985/86	21,572	1,189	4,369	27,130
1986/87	24,143	2,295	2,424	28,862
1987/88	26,690	1,965	2,085	30,740
1988/89	26,621	2,626	1,601	30,848
1989/90	19,405	1,931	1,019	22,355
1990/91	17,413	3,396	373	21,182

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

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

Source: National Agricultural Statistics Service, USDA.

Smaller Crops and Strong Demand Boost Noncitrus Price

Prices for many noncitrus crops are generally higher for the second consecutive year.

The 1991 production forecasts for major noncitrus fruits indicated smaller crops of grapes, pears, cherries (sweet and tart), nectarines, and olives. Slightly larger crops of apples, peaches, prunes, cranberries, and strawberries are expected. Prices for most noncitrus crops are higher, reflecting shorter crops, or, as with apples, strong demand. Prices for stored noncitrus fresh fruit are expected to remain firm throughout the marketing season because of strong domestic and export demand.

1991 Apple Crop Forecast Revised Up

The final forecast for the 1991 U.S. apple crop was 10.1 billion pounds, 4 percent larger than the 1990 crop. The estimate was increased fractionally in October following a larger than expected pick-out in Michigan.

Increased production in the Central and Eastern States offset declines in the Western States. Limited spring freeze damage and generally favorable growing conditions through the entire season in the Eastern States led to a 21-percent increase in apple output. In the Central States, apple production was 13 percent greater than last year, and the harvest was almost a month ahead of normal in Michigan. However, production in the Western States, which typically provides over one-half of the U.S. total, was 4 percent less than in 1990 because of winter damage.

As harvest progressed in October, the U.S.-average grower price for fresh apples dropped to 24.9 cents per pound from September's season high of 29.1 cents. U.S. retail prices for apples reported by the Bureau of Labor Statistics averaged 97.4 cents per pound in September, 10 percent above a year earlier.

The late harvest in Washington contributed to cumulative season total U.S. shipments through the end of October of 268.3 million pounds, compared with 373.4 million pounds at the same time last year. Strong domestic demand and increased export opportunities because of a smaller European apple crop are expected to keep apple prices at least as high as in the 1990/91 marketing season.

1991 Grape Forecast Revised Up Slightly, but Still Less Than Last Year

U.S. grape production is expected to be 5.39 million short tons, up 2 percent from the September 1 forecast, but still 5 percent less than in 1990. California's crop suffered less damage from the hot weather in July than previously thought.

California's all-grape production is expected to be 4.83 million tons, 2 percent above the September estimate, but still 7 percent below last year. The Washington grape forecast is 187,000 tons, 4 percent higher than the 1990 crop. New York and Pennsylvania production is up 32 percent and 42 percent, respectively, from last year.

Table 27--U.S. noncitrus fruit production, 1988-91

Commodity	1988	1989	1990	Indicated 1991
	--1,000 short tons--			
Apples	4,564	4,981	4,848	5,064
Apricots	102	120	122	95
Cherries, sweet	186	194	157	120
Cherries, tart	118	132	104	80
Cranberries	204	187	172	201
Grapes	6,034	5,931	5,660	5,387
Nectarines	200	200	211	210
Olives	88	123	131	60
Peaches	1,307	1,167	1,103	1,273
Pears	861	917	964	882
Plums and prunes	738	1,018	733	776
Strawberries 1/	590	549	604	635
Total	14,991	15,520	14,808	14,782

1/ Major producing States only.

Source: National Agricultural Statistics Service, USDA.

Michigan's grape forecast of 46,000 tons is unchanged from last year.

Production of California raisin-type grapes, forecast at 1.95 million tons, was 17 percent below last year, and table-type grape production was down 10 percent. On the other hand, 1991 California wine-type grapes were not affected by the summer heat wave and are expected to total 2.30 million tons, up 5 percent from last year.

1991 Pear Crop Down

The final forecast for the 1991 U.S. pear crop was 882,100 short tons, down 8 percent from 1990. A severe freeze in December 1990 dropped production 12 percent in the Pacific Coast region. The shorter crop and late harvest led to much higher prices earlier this fall. The U.S. grower price for fresh pears averaged \$477 per ton in September, 25 percent higher than last year. In October, grower prices dropped to \$411 per ton, but remained 23 percent above October 1990.

Wholesale prices in New York for Bartlett pears (100 size) averaged \$16 per 36-lb. carton at the end of September. Throughout October, wholesale prices ran \$5 to \$7 higher than last year. Also indicative of the shorter crop and later harvest was total shipments, which as of October 26, 1991, were 126,900 short tons, compared with 159,150 short tons at the end October 1990. The short crop in the Northwest has also led to higher processed pear prices. In late September, canners raised pack prices from 3 to 7 percent.

With the aid of a third-party conciliator appointed by the American Arbitration Association, the California Pear Growers Association finally reached an agreement with Del Monte Foods on the cannery price for 1991 Bartlett pears. California's shorter crop and heavy demand for California pears from canners in the Northwest contributed to a price of \$229 per ton, the second highest in history. Growers will receive \$227 per ton and \$2 will go into a research fund.

The 1991 cannery price for Pacific Northwest pears is \$225 per ton for Grade #1, up from \$215 per ton in 1990.

Larger Peach Crop in East Lowers Prices, but Late Season Prices Rebound

U.S. peach production in 1991 is expected to be 2.55 billion pounds, up 15 percent from last year when a spring freeze reduced production in the East. The larger crop lowered grower prices in July and August to 20-30 percent below last year. However, as the 1991 season concluded, grower prices rose above 1990, leaving the U.S. season-average grower price for fresh peaches down less than 5 percent from 1990.

According to the California Cling Peach Advisory Board, 1991 cling peach deliveries were up less than 1 percent from last year. Although deliveries were up, the California Canning Peach Association reported the pack was 5-6 percent smaller than last

Table 28--U.S.-average monthly prices received by growers for fresh-market fruit, 1989-91 1/

Month	Fresh apples			Fresh peaches			Fresh pears			Fresh strawberries		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Dollars per pound			Dollars per pound			Dollars per ton			Dollars per pound		
January	0.181	0.122	0.200	--	--	--	336	303	351	0.830	1.150	1.250
February	.179	.124	.203	--	--	--	362	345	358	.938	.832	1.010
March	.165	.123	.202	--	--	--	368	357	395	.682	.740	.682
April	.144	.120	.199	--	--	--	350	370	390	.448	.503	.734
May	.135	.126	.225	0.266	0.292	0.344	397	438	431	.350	.352	.500
June	.108	.137	.242	.220	.244	.306	491	589	754	.559	.469	.425
July	.115	.203	.248	.196	.273	.164	375	410	--	.311	.407	.460
August	.159	.223	.246	.223	.250	.191	295	273	399	.350	.500	.350
September	.167	.245	.291	.266	.246	.260	331	385	477	.650	.550	.350
October	.143	.193	.249	.225	--	.240	347	335	411	.950	.750	.450
November	.133	.196	--	--	--	--	299	344	--	1.660	1.250	--
December	.121	.208	--	--	--	--	285	333	--	1.160	1.090	--

-- = Not available.

1/ Equivalent packinghouse-door returns for California, New York (apples only), Oregon (except peaches), and Washington. Prices as sold for other states.

Source: National Agricultural Statistical Service, USDA.

An increased incidence of pit fragments and bruising that accompanied this year's somewhat larger fruit reduced packout yields. Cannery adjusted the 1991 base price of commercial contracts to \$224 per ton by mid-November. The 1991/92 supply is estimated to be about 7 percent below last season's. Canned peach prices should remain firm through next spring.

The U.S. Department of Agriculture held a public meeting in September 1991 to discuss whether to continue Federal marketing orders for peaches and nectarines grown in California. Growers narrowly approved the continuation of marketing orders in a January 1991 referendum. Both orders

authorize grower advertising and promotion, production and marketing research, package and container requirements, and grade and size requirements for fruit. Written comments were received from nearly 200 interested persons. The Department will decide, based on all information provided, about continuing either or both marketing orders.

Cherry Production Cut by Freeze, Record Strawberry Crop

Freezing temperatures in April followed by poor pollinating weather dropped expected tart cherry production to 80.3 short tons, 23 percent lower than last year. A cold wave in December 1990,

cool spring temperatures, and heavy June rains combined to reduce the expected 1991 sweet cherry crop by 24 percent.

The major strawberry-producing States had a record-large crop of 636,000 short tons in 1991, up 6 percent from 1990. Spring strawberry production in the five major producing States (California, Michigan, New Jersey, Oregon, and Washington) was forecast up from 540,000 short tons in 1990 to 570,000 in 1991. Because of the large crop, grower prices did not show as much seasonal increase as usual in the fall.

U.S. Exports of Fresh Noncitrus Fruit Continue To Grow

Reduced production in Europe and continued strong demand in Asia should boost key U.S. fresh noncitrus exports in 1992.

U.S. fresh apple, pear, peach, and nectarine exports have accounted for a larger share of U.S. fresh market utilization creating a closer relationship between the domestic fresh fruit industry and the international market. Fresh apple exports as a proportion of U.S. fresh market utilization rose from 8 percent in 1985/86 to nearly 15 percent in 1990/91. Also during that period, pear exports rose from 9 percent to 23 percent of U.S. fresh market utilization. The proportion of peaches and nectarines exported also rose, from about 2 to almost 7 percent. The U.S. market share of world exports of these fresh fruits has also been on a general upward trend during the last 20 years.

Strong Apple Export Market Ensured

A combination of more liberalized trade policies especially in Pacific Rim nations and a much smaller 1991 European apple crop is expected to boost fresh apple exports to a record high during the 1991/92 marketing year. Since 1988, the Philippines, Mexico, Indonesia, Venezuela, Sweden, and Thailand have reduced trade barriers and are fast becoming significant markets for U.S. apples. According to the Foreign Agricultural Service (FAS), markets in these countries in the Pacific Rim are opening more each year and are far from saturation. Import license

restrictions in Korea and plant health concerns in Japan and Korea continue to restrict access to these promising U.S. apple export markets.

The traditionally large U.S. markets, Taiwan and Canada, however, together receive about 40 percent of U.S. apple exports. In 1990, the United States supplied about 80 percent of total Canadian apple imports, up from 60 percent in 1986. U.S. apple exports to Canada were \$57.1 million during the marketing year beginning July 1990, up from \$39.4 million the year before. Total U.S. apple exports were up 35 percent from the previous year.

Apple exports to the EC-12 in 1990/91 were \$25.1 million, up from \$15.5 million in 1989/90. A substantial increase is expected this year because unseasonably cold weather in April and May 1991 reduced Western Europe apple production by an estimated 28 percent from last year. The apple crop in France, Europe's largest producer and the world's leading exporter, if intra-EC trade is considered, is expected to be cut in half. In early October, U.S. shippers reported increased interest in exporting Granny Smith and other apple varieties to the United Kingdom and other parts of Europe. FAS estimates that the short crop in Europe could increase total U.S. apple exports 5-10 percent during the 1991/92 marketing season that began in July.

Pear Exports Climb as Well

Since 1985, a lower-valued dollar, export promotion, market liberalization, and expanded U.S. production have helped increase the U.S. share of the world pear export market. The U.S. market share of world fresh pear exports was 11 percent in 1990/91, up from 8 percent in 1987/88.

Fresh pear exports in 1990/91 (July/June) surged 18 percent over 1989/90. During the 1991/92 marketing season, U.S. pear exports are expected to be up 5-10 percent. Canada remains the largest market with 38 percent of U.S. fresh pear exports.

In the last several years, production shortfalls, U.S. market promotion, and more liberalized trade policies have increased fresh pear exports to Mexico. In 1990/91, the U.S. exported 23,611 metric tons to Mexico, or about 25 percent of U.S. pear exports. During 1991, pear production in Mexico is expected to drop 37 percent, caused in part by the removal of old trees. Mexican imports in 1991/92 are expected to reach 30,000 metric tons.

The EC is the third largest export market for U.S. fresh pears, accounting for nearly 10 percent of fresh pear exports in 1990/91. The 1991 spring freeze reduced the EC pear crop by almost 25 percent.

Smaller Peach Crop in Canada Offers Opportunities in 1991

Because of storage limitations and requirements for gentle handling and transport, fresh peaches and nectarines are shipped mainly to the geographically close markets of Canada (about 80 percent of U.S. exports) and Mexico (14 percent). The 1991 Canadian peach crop, estimated at 43,000 metric tons, was down 12 percent from the relatively large 1990 crop. Less Canadian production in 1991 and a reduction in the Canadian import duty from 12.5 percent in 1988 to 8.75 percent in 1991 contribute to expectations of increasing U.S. peach exports. USDA's Foreign Agricultural Service expects total U.S. peach exports to be up 25 percent in 1991 from the previous year.

In October, Canada removed a snapback duty on peaches that was imposed in July 1991, when the price of imported peaches fell below the benchmark price for each of 5 consecutive working days in mid-July. The snapback brought the duty up to the 12.5-percent rate that prevailed before the U.S.-Canada Free Trade Agreement.

Figure 10

U.S. Share of World Fresh Fruit Trade

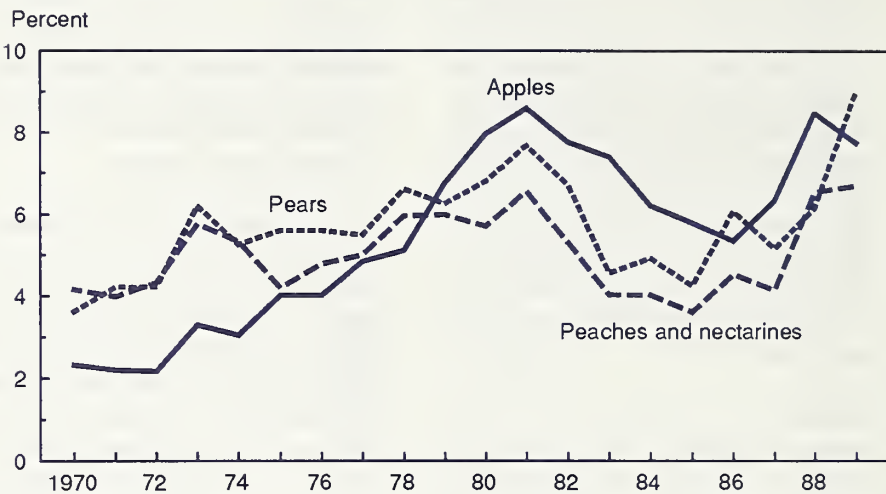


Table 29--U.S. exports of selected fresh fruit and export share 1/ of U.S. fresh use, 1985/86-1990/91

Commodity	Unit	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
Apples 2/	Million pounds	327.3	369.1	654.7	575.5	734.8	810.6
	Percent	7.8	8.3	11.7	11.0	12.5	14.6
Peaches and nectarines 3/	Million pounds	32.0	43.0	44.7	65.4	88.7	86.7
	Percent	2.4	3.0	3.0	4.0	6.2	6.6
Pears 4/	Million pounds	65.4	80.2	96.6	134.0	166.7	217.0
	Percent	9.4	10.7	10.6	15.7	18.4	23.2

1/ Exports to Canada prior to 1990/91 are underreported.

2/ Apple season begins in August.

3/ Peach season is calendar year beginning with first year listed.

4/ Pear season begins in July.

Sources: Commodity Economics Division, ERS and Foreign Agricultural Service, USDA.

Table 30--Apples: Commercial production 1/ and season-average prices received by growers, 1989-91

Area and State	Total production			Price per pound	
	1989	1990	Indicated 1991	1989	1990
	-- Million pounds --			-- Cents --	
Eastern States:					
Maine	69	88	79	21.1	22.4
New Hampshire	41	48	45	23.1	24.2
Vermont	45	43	48	19.2	21.3
Massachusetts	78	85	78	21.8	23.9
Rhode Island	6	6	5	24.4	25.8
Connecticut	24	33	27	24.3	26.4
New York	960	990	1,010	10.4	12.9
New Jersey	48	60	100	15.3	13.0
Pennsylvania	320	450	510	10.7	14.3
Delaware	15	17	25	11.3	11.6
Maryland	37	33	75	11.2	13.7
Virginia	325	210	420	10.2	10.1
West Virginia	115	150	190	9.8	9.6
North Carolina	220	230	320	8.8	10.2
South Carolina	35	34	45	12.0	12.7
Georgia	25	22	35	14.0	13.2
Total	2,363	2,499	3,012		
Central States:					
Ohio	125	120	120	17.9	17.4
Indiana	64	57	60	18.7	20.0
Illinois	91	60	79	13.0	17.5
Michigan	950	750	850	8.2	10.3
Wisconsin	65	48	61	15.6	25.0
Minnesota	31	20	23	27.8	37.4
Iowa	12	10	10	20.8	22.1
Missouri	55	41	37	13.6	16.9
Kansas	13	8	11	20.9	21.5
Kentucky	16	9	20	18.0	20.5
Tennessee	12	9	14	14.7	17.9
Arkansas	9	12	11	18.8	19.1
Total	1,442	1,143	1,295		
Western States:					
Idaho	158	165	130	7.9	13.5
Colorado	70	35	75	9.6	14.7
New Mexico	5	7	3	20.0	17.9
Utah	56	24	45	12.0	18.8
Washington	5,000	4,800	4,600	9.3	16.2
Oregon	160	180	115	5.0	11.2
California	675	780	800	15.0	15.6
Arizona 2/	34	64	53	7.4	8.0
Total	6,158	6,055	5,821		
United States	9,963	9,697	10,128	10.4	15.0

1/ In orchards of 100 or more bearing age trees. Includes unharvested production and harvested, not sold: U.S. 1989-45.4, 1990-38.6.

2/ Estimates begin with the 1989 crop.

Source: National Agricultural Statistics Service, USDA.

Table 31--Grapes: Total production and season-average price received by growers in principal States, 1989-90, and indicated 1991 production

States	Total production			Price per ton	
	1989	1990	Indicated 1991	1989	1990
	-- 1,000 short tons --			-- Dollars --	
Arizona	26.5	26.0	25.0	674	870
Arkansas	6.5	5.1	8.3	319	327
Georgia	2.8	2.9	3.2	781	777
Michigan	43.0	46.0	46.0	265	291
Missouri	3.6	1.3	2.7	348	354
New York	152.0	144.0	190.0	277	286
North Carolina	1.7	1.5	1.8	406	533
Ohio	8.0	7.7	7.9	266	304
Oregon	7.5	7.0	9.5	740	780
Pennsylvania	60.0	53.0	75.0	274	285
South Carolina	0.3	0.4	0.4	810	803
Washington	229.0	180.0	187.0	302	316
Total 1/	540.9	474.9	556.8		
California:					
Wine	2,190.0	2,195.0	2,300.0	340	308
Table	630.0	645.0	580.0	449	429
Raisin 2/	2,570.0	2,345.0	1,950.0	258	233
All	5,390.0	5,185.0	4,830.0	314	289
United States	5,930.9	5,659.9	5,386.8	314	294

1/ Some figures may not add due to rounding.

2/ Fresh basis.

Source: National Agricultural Statistics Service, USDA.

Table 32--U.S. monthly retail prices for selected fresh-market fruits and juice, 1989-91

Month	Valencia oranges			Navel oranges			Orange juice, concentrate 1/			Grapefruit		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Dollars per pound			Dollars per pound			Dollars per pound			Dollars per pound		
January	--	--	--	0.521	0.501	0.823	1.868	1.817	2.005	0.443	0.532	0.611
February	--	--	--	.464	.580	.930	1.834	1.980	1.971	.423	.579	.595
March	--	--	--	.471	.570	--	1.834	2.150	1.902	.411	.626	.603
April	--	--	--	.511	.560	--	1.837	2.214	1.909	.417	.690	.615
May	--	--	0.756	.534	.578	--	1.867	2.241	1.877	.467	.737	.625
June	--	--	.871	--	.621	--	1.854	2.276	1.848	.520	.778	.686
July	0.613	0.575	.927	--	--	--	1.857	2.289	1.807	.587	.828	.695
August	.603	.571	.983	--	--	--	1.900	2.227	1.767	.664	.755	.676
September	.588	.561	1.053	--	--	--	1.920	2.262	1.756	.728	.664	.662
October	.590	.524	--	--	--	--	1.893	2.210	--	.638	.575	--
November	--	--	--	.585	.585	--	1.835	2.102	--	.532	.551	--
December	--	--	--	.528	.563	--	1.797	2.021	--	.473	.564	--
	Lemons			Red delicious apples			Bananas			Peaches		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Dollars per pound			Dollars per pound			Dollars per pound			Dollars per pound		
January	0.888	0.925	1.133	0.729	0.601	0.810	0.394	0.429	0.438	--	--	--
February	.873	.933	1.096	.749	.632	.838	.415	.492	.485	--	1.313	1.243
March	.953	1.015	1.079	.741	.652	.843	.450	.500	.577	--	1.284	1.273
April	.959	1.127	1.183	.697	.650	.860	.523	.481	.547	--	--	--
May	.961	1.101	1.271	.697	.653	.892	.522	.462	.584	--	--	--
June	1.040	1.103	1.296	.692	.697	.936	.479	.447	.532	0.915	.811	.999
July	1.043	1.179	1.338	.682	.750	.956	.456	.529	.516	.756	.895	.786
August	1.041	1.155	1.294	.740	.832	.964	.434	.463	.416	.746	.924	.693
September	1.102	1.158	1.288	.719	.877	.974	.428	.465	.432	.923	.940	.788
October	1.100	1.145	--	.649	.765	--	.432	.432	--	--	--	--
November	1.021	1.076	--	.590	.741	--	.435	.429	--	--	--	--
December	.960	.974	--	.573	.772	--	.416	.430	--	--	--	--
	Anjou pears			Thompson seedless grapes			Strawberries 2/					
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Dollars per pound			Dollars per pound			Dollars per 12 oz. pint					
January	0.677	0.675	0.739	--	--	1.942	--	--	--	--	--	--
February	.668	.736	.795	1.381	1.380	1.483	--	1.638	1.467	--	--	--
March	.710	.757	.812	--	1.144	1.432	1.218	1.338	1.268	--	--	--
April	.743	.787	.827	1.144	1.108	1.502	.966	1.109	1.112	--	--	--
May	.774	.783	.849	1.337	1.455	--	.831	.781	.976	--	--	--
June	.797	.814	.976	1.272	1.369	--	1.055	.987	.924	--	--	--
July	--	--	--	1.121	1.238	1.376	1.117	.965	.948	--	--	--
August	--	--	--	.958	.993	1.073	.986	1.081	.961	--	--	--
September	--	--	--	.970	1.064	1.019	1.087	1.210	1.014	--	--	--
October	--	--	--	1.166	1.266	--	--	--	--	--	--	--
November	--	--	--	1.494	1.544	--	--	--	--	--	--	--
December	.759	.789	--	--	--	--	--	--	--	--	--	--

-- = Not available.

1/ Per 16 ounce in 12 ounce cans.

2/ Dry pint.

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

Table 33--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the Northeast region, season average, 1988/89-90/91 1/

Commodity, production area, and season	Retail price	Marketing spreads		Grower-packer return (f.o.b. shipping point price) 2/	
		Absolute	Percent of retail price	Absolute	Percent of retail price
		Cents	Cents	Percent	Cents
Apples, Red Delicious,					
Washington--					
Oct.-June					
1988/89	81.8	51.8	63	30.0	37
1989/90	74.1	50.6	68	23.5	32
1990/91	90.5	51.3	57	39.2	43
Grapefruit,					
Florida--					
Nov.-Apr.					
1988/89	42.8	30.1	70	12.7	30
1989/90	50.8	33.4	66	17.4	34
1990/91	55.1	40.1	73	15.0	27
Lemons,					
California--					
Aug.-July					
1988/89	97.6	62.8	64	34.8	36
1989/90	104.9	67.6	64	37.3	36
1990/91	125.0	82.5	66	42.5	34
Oranges, navel,					
California--					
Dec.-May					
1988/89	49.4	30.3	61	19.1	39
1989/90	59.7	40.0	67	19.7	33
1990/91	83.3	44.4	53	38.9	47
Oranges, Valencia,					
California--					
May-Nov.					
1988	63.3	43.8	69	19.5	31
1989	61.7	40.6	66	21.1	34
1990	59.9	40.9	68	19.0	32

1/Season average prices are weighted averages (monthly average prices weighted by monthly arrivals in New York City).

2/ Adjusted to account for waste and spoilage incurred during marketing.

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

Table 34--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the North Central region, season average, 1988/89-90/91 1/

Commodity, production area, and season	Retail price	Marketing spreads		Grower-packer return (f.o.b. shipping point price) 2/	
		Absolute	Percent of retail price	Absolute	Percent of retail price
		Cents	Cents	Percent	Cents
Apples, Red Delicious,					
Washington--					
Oct.-June					
1988/89	76.0	46.1	61	29.9	39
1989/90	67.6	43.8	65	23.8	35
1990/91	84.3	46.7	55	37.6	45
Grapefruit,					
Florida--					
Nov.-Apr.					
1988/89	48.7	35.7	73	13.0	27
1989/90	56.9	40.3	71	16.6	29
1990/91	59.4	44.2	74	15.2	26
Lemons,					
California--					
Aug.-July					
1988/89	102.4	68.8	67	33.6	33
1989/90	111.0	73.8	66	37.2	34
1990/91	119.5	81.4	68	38.1	32
Oranges, navel,					
California--					
Dec.-May					
1988/89	56.0	36.7	66	19.3	34
1989/90	56.7	36.9	65	19.8	35
1990/91	76.8	43.5	57	33.3	43
Oranges, Valencia,					
California--					
May-Nov.					
1988	61.6	42.0	68	19.6	32
1989	61.0	39.9	65	21.1	35
1990	57.1	38.2	67	18.9	33

1/ Season-average prices are weighted averages (monthly average prices weighted by monthly arrivals in Chicago).

2/ Adjusted to account for waste and spoilage incurred during marketing.

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

Near-Record U.S. Tree Nuts Supplies for 1991/92

Abundant U.S. tree nut supplies should maintain exports and domestic consumption at near-record levels. World tree nut supplies are much smaller for almonds and hazelnuts, but are very large for pistachios, pecans, and walnuts. U.S. marketing opportunities remain excellent for all tree nuts.

1991/92 Production Normal, but Record Stocks Sustain Supply

Record carryin stocks and near normal production of most U.S. tree nut crops have resulted in a total tree nut supply that is moderately lower than last season's record. U.S. almond and pistachio supplies are smaller but hazelnut, pecan, and walnut supplies are larger or nearly the same as last season. The marketable quantity of all U.S. tree nuts will total 1.4 billion pounds, shelled basis, down 6 percent from the record 1990/91 season and nearly equal to 1988/89. These abundant supplies are available at a time when foreign supplies are lower for most tree nut crops, especially almonds and hazelnuts. U.S. use is expected to exceed last season's record, but exports will likely fall below the 1990/91 record.

Total U.S. tree nut production in 1991, at 832 million pounds, shelled basis, is about 20 percent below the 1987 record, but still above the average for the previous 10 seasons. Beginning stocks, at 410 million pounds, are the highest-ever due to last year's record production of all tree nuts.

World Almond Supply Declines

Almond production in 1991/92 by the world's leading producers is expected to total 316,900 metric tons, shelled basis. This is 23 percent lower than last season's record of 412,900 tons.

Almond production in Spain and Portugal is expected to return to normal while record crops are forecast in Morocco and Turkey. However, these

increases are more than offset by substantially smaller crops in the United States, Greece, and Italy.

U.S. almond production is forecast at 208,700 metric tons (460 million pounds), shelled basis, potentially the smallest crop since 1986. The 1991 crop is down 30 percent from last year's record due to fewer bearing acres and March rains that eased the drought situation, but caused widespread flower loss. Cool weather in April also resulted in higher-than-normal nut drop and delayed maturity.

Domestic almond consumption is expected to surge past last season's record and exports are also likely to be record high according to industry sources. This will result in low ending stocks for the 1991/92 season. Likewise, world almond consumption and exports are expected to exceed previous records and 1991/92 ending stocks will be much lower than normal.

U.S. grower prices for almonds will strengthen during the 1991/92 season. With improving demand, the price outlook is excellent for 1992/93.

Figure 11
Almonds: Production and Season-Average Grower Price

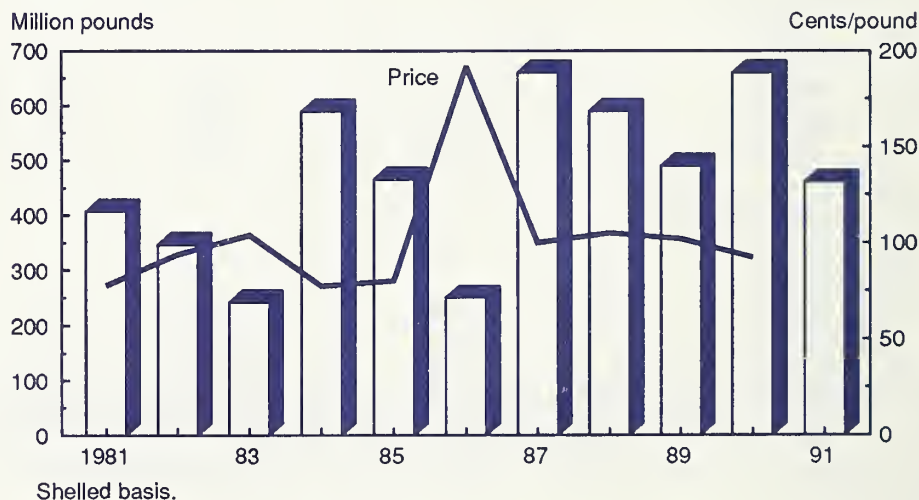


Table 35--Tree nuts: Production in principal States, 1988-91

Crop and State	1988	1989	1990	Indicated 1991
		1,000 pounds (shelled basis)		
Almonds:				
California	590,000	490,000	660,000	460,000
		(in-shell basis)		
Macadamia nuts:				
Hawaii	45,500	50,500	50,000	--
Pistachios:				
California	94,000	39,000	118,000	48,000
		Short tons (in-shell basis)		
Hazelnuts:				
Oregon	16,300	12,800	21,500	25,000
Washington	200	200	300	300
2 States	16,500	13,000	21,800	25,300
Walnuts, English:				
California	209,000	229,000	227,000	250,000
		1,000 pounds (shelled basis)		
Pecans:				
North Carolina	5,500	700	400	2,500
South Carolina	6,500	1,000	500	3,000
Georgia	110,000	85,000	65,000	95,000
Florida	6,000	7,000	3,600	4,200
Alabama	10,000	22,000	5,000	13,000
Mississippi	10,000	8,500	2,200	7,000
Arkansas	3,000	1,000	250	1,200
Louisiana	22,000	14,000	6,000	15,000
Oklahoma	47,000	9,000	5,000	15,000
Texas	60,000	55,000	60,000	65,000
New Mexico	26,000	29,000	34,000	29,000
California	2,200	2,000	2,800	2,800
Other 1/		16,300	20,250	18,300
Total	308,200	250,500	205,000	271,000
Improved varieties 2/	185,500	161,000	143,500	166,100
Native and seedling	122,700	73,200	41,250	86,600

-- = Not available.

1/ Arizona, Kansas, Missouri, and Tennessee, beginning with the 1989 crop.

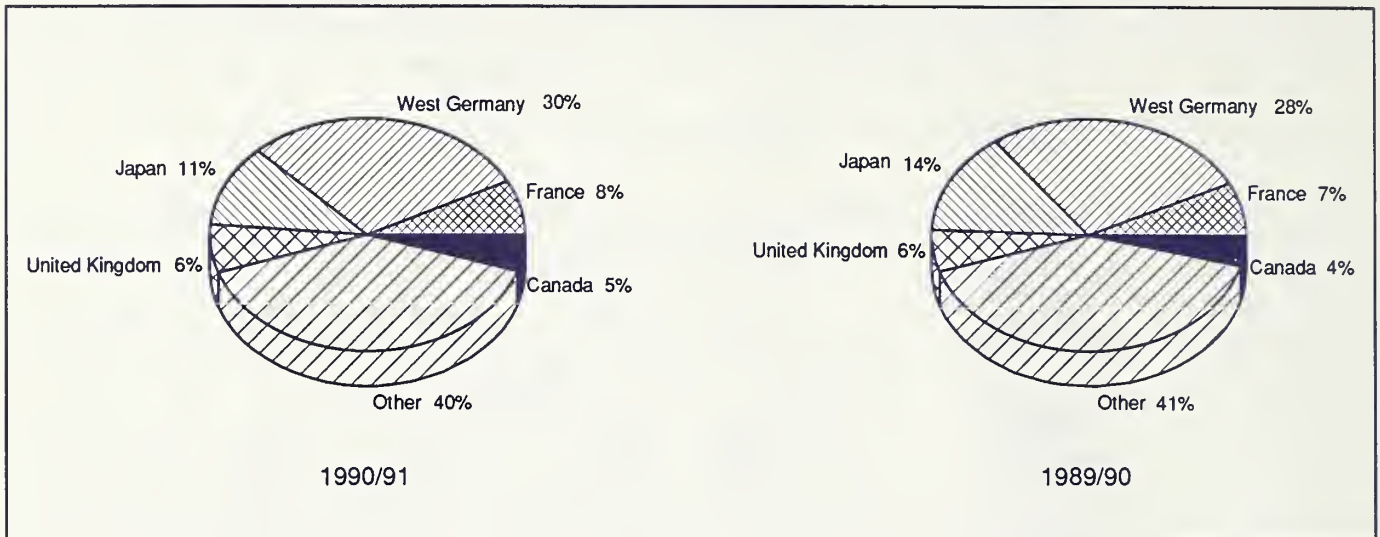
No breakdown between varieties available.

2/ Budded, grafted, or topworked varieties.

Source: National Agricultural Statistics Service, USDA.

Figure 12

California Almonds: Exports by Destination



World Hazelnut Supply Down Substantially

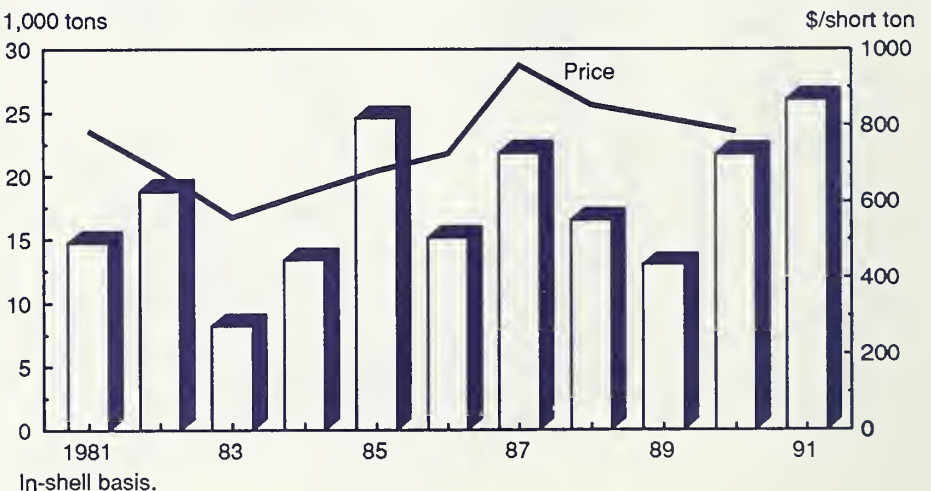
World beginning stocks of hazelnuts for the 1991/92 season are substantially lower than a year ago, resulting in a much smaller supply than the two previous seasons.

Total production of hazelnuts (filberts) in the four major producing countries in 1991 is forecast at 530,600 metric tons, in-shell basis, moderately higher than last year, but 22 percent below the 1989/90 record. This is due to lower production in Turkey and Spain, although larger crops are forecast in Italy and the United States.

U.S. production is forecast at a record 25,300 short tons, in-shell basis, 3 percent above the previous record in 1985 and 17 percent above last year. Dry weather in September aided crop development and provided excellent harvesting conditions.

Figure 13

Hazelnuts: Production and Season-Average Grower Prices



Pecan Supplies Larger Than Last Year

The October 1 forecast for the U.S. pecan crop was 271 million pounds, in-shell basis, 7 percent lower than the September forecast, but 32 percent above last season's small crop. In many of the major producing areas of the Southeast, the crop has been plagued by disease, insect, and dry weather problems that together have caused early, heavy nut drop as well as heavy shedding of foliage. The lack of significant rainfall has continued to adversely affect pecan yields, nut sizes, and nut quality.

Beginning stocks for the 1991/92 season were very low and grower prices started out near the very high prices of 1990/91. Since the 1991 crop harvest began in September, prices have declined seasonally. Imports from Mexico are expected to fall below last season due to a much larger U.S. crop and a smaller Mexican crop. Total pecan use (domestic and export) likely will match last year, resulting in near-normal ending stocks.

World Walnut Supplies Steady In 1991/92, but U.S. Supply Higher

Walnut production in 1990/91 for the six leading producing countries (the United States, France, Italy, India, China, and Turkey) totaled 483,100 metric tons, in-shell basis. Production in 1991/92, is estimated at 485,800 metric tons, slightly higher than last season. The 1991/92 supply, including carryover stocks, will reach 572,600 tons, the same as the previous season's record.

The 1991 walnut crop in California is forecast at a record 250,000 short tons, in-shell basis, up 10 percent from last year. The forecast is equivalent to 226,800 metric tons or about 47 percent of the world total. Last year, California's crop accounted for about 43 percent of world production.

U.S. walnut exports will exceed the record established during the two previous seasons. The United States is expected to provide nearly two-thirds of the world's walnut exports. U.S. domestic consumption will also likely exceed last season's record. Higher demand for walnuts stems from

reduced foreign supplies, increasing tree nut use by industrial firms, and much improved walnut quality this year. However, U.S. and world ending stocks for the 1991/92 marketing season are expected to be historically high, which will dampen the grower price outlook for next year.

Figure 14
Pecans: Production and Season-Average Grower Prices

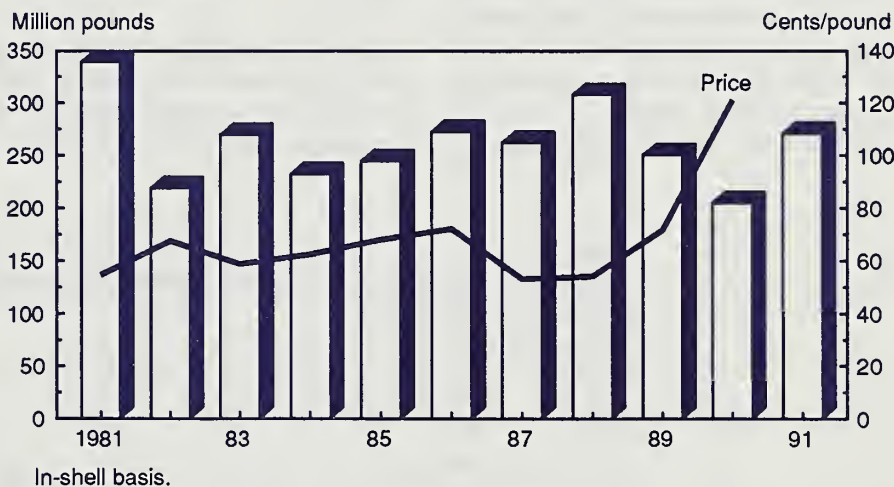
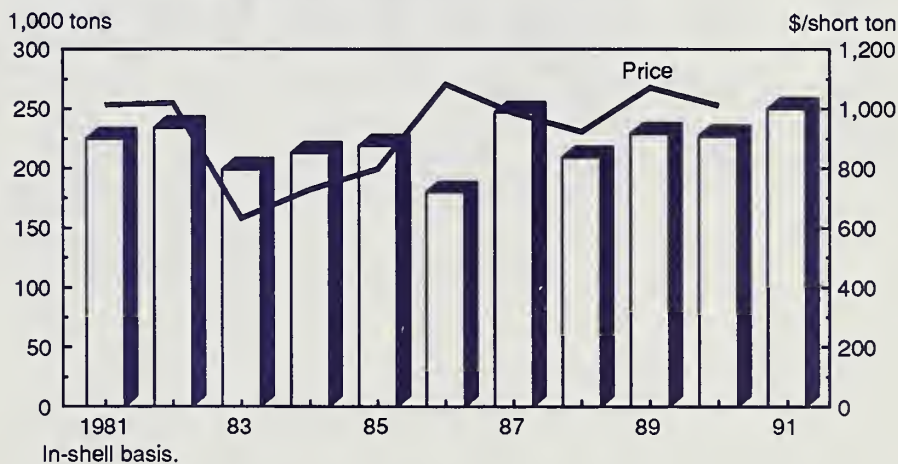


Figure 15
Walnuts: Production and Season-Average Grower Prices



U.S. Pistachio Crop Falls Sharply, but World Supply Steady

The 1991 California pistachio crop is forecast at 48 million pounds, in-shell basis. This is down 59 percent from last year's record 118 million pounds. The drop results primarily from the alternate-year bearing characteristic of pistachio trees.

Although California's crop is much lower, the 1991/92 supply will be moderated by record-large beginning stocks. Both domestic consumption and exports of pistachios are expected to decline from last season, resulting in modest ending stocks. However, grower prices will rise sharply this

season because supply will not be adequate to meet demand.

Total production for five major pistachio producing countries, excluding Iran, is forecast at 89,900 metric tons, slightly lower than in 1990/91. Adding stocks to production, the total supply is expected to be 129,500 tons, nearly the same as last season, for Greece, Italy, Syria, Turkey, and the United States.

Macadamia Supplies Continue Upward

Supplies of macadamia nuts from the United States and other leading world producers are expected to continue increasing in the 1990's. Consumer

demand from Japanese, American, and other developed country marketplaces is making strong gains. The trend will continue for this luxury nut.

Last year, Hawaiian macadamia production reached 50 million pounds, in-shell basis, slightly lower than the record 1989 crop. The 1991 crop is not officially forecast but the trend projection indicates production could potentially hit 52-54 million pounds. Trade expectations are below this range, however. Production will increase as new acreage planted in 1985 begins bearing commercial quantities in the next few years.

Figure 16
Pistachios: Production and Season-Average Grower Prices

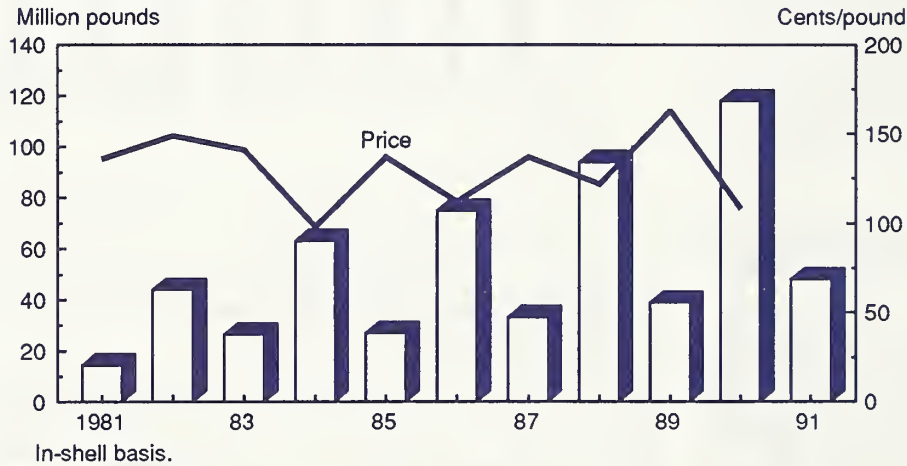


Table 36--Almonds: Production, supply, and distribution, by country, 1989/90-1991/92

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
--Metric tons, shelled basis--									
Greece	1989/90	2,783	17,160	1,600	21,543	4,500	14,200	2,843	21,543
	1990/91	2,843	15,500	2,600	20,943	1,800	14,200	4,943	20,943
	1991/92	4,943	11,000	2,800	18,743	2,000	14,200	2,543	18,743
Italy	1989/90	6,000	18,000	9,569	33,569	3,603	23,966	6,000	33,569
	1990/91	6,000	19,000	12,000	37,000	2,000	27,000	8,000	37,000
	1991/92	8,000	11,000	13,000	32,000	1,500	27,500	3,000	32,000
Morocco	1989/90	600	11,110	54	11,764	1,226	9,638	900	11,764
	1990/91	900	11,540	120	12,560	1,200	10,410	950	12,560
	1991/92	950	12,200	100	13,250	1,200	10,950	1,100	13,250
Portugal	1989/90	168	3,500	206	3,874	1,116	2,300	458	3,874
	1990/91	458	2,500	1,050	4,008	900	2,450	658	4,008
	1991/92	658	3,000	200	3,858	1,100	2,550	208	3,858
Spain	1989/90	38,445	80,000	2,700	121,145	32,000	35,000	54,145	121,145
	1990/91	54,145	50,000	4,000	108,145	30,000	35,000	43,145	108,145
	1991/92	43,145	55,000	2,000	100,145	35,000	35,000	30,145	100,145
Turkey	1989/90	2,000	15,000	0	17,000	503	13,497	3,000	17,000
	1990/91	3,000	15,000	0	18,000	500	14,500	3,000	18,000
	1991/92	3,000	16,000	0	19,000	600	15,400	3,000	19,000
United States 2/	1989/90	121,211	222,260	268	343,739	155,302	96,491	91,946	343,739
	1990/91	91,946	299,370	113	391,429	163,525	107,399	120,505	391,429
	1991/92	120,505	208,650	59	329,214	167,831	127,517	33,866	329,214
Totals	1989/90	171,207	367,030	14,397	552,634	198,250	195,092	159,292	552,634
	1990/91	159,292	412,910	19,883	592,085	199,925	210,959	181,201	592,085
	1991/92	181,201	316,850	18,159	516,210	209,231	233,117	73,862	516,210

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

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

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

Source: Horticultural Products Review, FAS, USDA.

Table 37--Hazelnuts: Production, supply, and distribution, by country, 1989/90-1991/92

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
--Metric tons, in-shelled basis--									
Italy	1989/90	30,000	140,000	12,128	182,128	94,496	67,632	20,000	182,128
	1990/91	20,000	80,000	27,000	127,000	47,000	70,000	10,000	127,000
	1991/92	10,000	140,000	10,000	160,000	80,000	72,000	8,000	160,000
Spain	1989/90	4,790	25,000	1,700	31,490	15,800	11,000	4,690	31,490
	1990/91	4,690	18,000	6,000	28,690	5,000	15,000	8,690	28,690
	1991/92	8,690	17,000	1,500	27,190	6,000	15,000	6,190	27,190
Turkey	1989/90	90,000	500,000	0	590,000	209,000	181,000	200,000	590,000
	1990/91	200,000	390,000	0	590,000	320,000	170,000	100,000	590,000
	1991/92	100,000	350,000	0	450,000	200,000	150,000	100,000	450,000
United States 2/	1989/90	1,914	11,800	8,049	21,763	3,792	15,158	1,351	21,763
	1990/91	1,351	19,700	12,687	33,738	5,991	23,606	3,521	33,738
	1991/92	3,521	23,300	5,000	31,821	6,120	23,607	2,094	31,821
Total	1989/90	126,704	676,800	21,877	825,381	323,088	274,790	226,041	825,381
	1990/91	226,041	507,700	45,687	779,428	377,991	278,606	122,211	779,428
	1991/92	122,211	530,300	16,500	669,011	292,120	260,607	116,284	669,011

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

2/ U.S. export, stock, and consumption data are from the Hazelnut Marketing Board.

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

Source: Horticultural Products Review, FAS, USDA.

Table 38--Pistachios: Production, supply, and distribution, by country, 1989/90-1991/92

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
-- Metric tons, in-shelled basis --									
Greece	1989/90	870	4,940	150	5,960	80	3,500	2,380	5,960
	1990/91	2,380	2,640	500	5,520	100	3,500	1,920	5,520
	1991/92	1,920	2,100	800	4,820	90	3,500	1,230	4,820
Italy	1989/90	1,400	3,300	6,600	11,300	2,285	7,315	1,700	11,300
	1990/91	1,700	300	8,000	10,000	1,600	8,100	300	10,000
	1991/92	300	4,000	7,000	11,300	2,000	8,300	1,000	11,300
Syria	1989/90	460	15,800	2,500	18,760	1,000	17,500	260	18,760
	1990/91	260	20,000	1,500	21,760	1,500	19,000	1,260	21,760
	1991/92	1,260	22,000	1,000	24,260	2,000	20,000	2,260	24,260
Turkey	1989/90	10,000	35,000	0	45,000	4,389	24,611	16,000	45,000
	1990/91	16,000	14,000	0	30,000	500	24,500	5,000	30,000
	1991/92	5,000	40,000	0	45,000	5,000	28,000	12,000	45,000
United States 2/	1989/90	14,017	17,690	3,172	34,879	5,007	22,294	7,578	34,879
	1990/91	7,578	53,520	1,422	62,520	11,975	30,178	20,367	62,520
	1991/92	20,367	21,770	2,000	44,137	8,500	24,998	10,639	44,137
Total	1989/90	26,747	76,730	12,422	115,899	12,761	75,220	27,918	115,899
	1990/91	27,918	90,460	11,422	129,800	15,675	85,278	28,847	129,800
	1991/92	28,847	89,870	10,800	129,517	17,590	84,798	27,129	129,517

1/ Marketing years are as follows: September-August in Syria, Italy, and the United States; and October-September in Greece and Turkey

2/ U.S. stock, and consumption data are from the California Pistachio Commission.

Source: Horticultural Products Review, FAS, USDA.

Table 39--Walnuts: Production, supply, and distribution, by countries, 1989/90-1991/92

Country	Marketing year 1/	Beginning stocks	Production	Imports	Total supply	Exports	Domestic consumption	Ending stocks	Total distribution
-- Metric tons, in-shelled basis --									
China (Mainland)	1989/90	0	160,050	0	160,050	39,533	120,517	0	160,050
	1990/91	0	149,560	0	149,560	34,000	115,560	0	149,560
	1991/92	0	152,500	0	152,500	34,500	118,000	0	152,500
France	1989/90	0	25,800	7,400	33,200	11,900	16,300	5,000	33,200
	1990/91	5,000	24,600	7,700	37,300	14,000	23,300	0	37,300
	1991/92	0	11,500	12,000	23,500	2,000	21,500	0	23,500
India	1989/90	980	17,000	0	17,980	8,500	9,000	480	17,980
	1990/91	480	20,000	0	20,480	10,000	9,800	680	20,480
	1991/92	680	17,000	0	17,680	9,000	8,500	180	17,680
Italy	1989/90	1,500	18,000	9,508	29,008	5,327	22,681	1,000	29,008
	1990/91	1,000	18,000	11,500	30,500	1,800	25,700	3,000	30,500
	1991/92	3,000	12,000	13,000	28,000	1,500	26,000	500	28,000
Turkey	1989/90	5,000	64,000	0	69,000	2,879	62,121	4,000	69,000
	1990/91	4,000	65,000	0	69,000	1,500	63,500	4,000	69,000
	1991/92	4,000	66,000	0	70,000	2,000	64,000	4,000	70,000
United States 2/	1989/90	51,183	207,800	161	259,144	82,276	117,116	59,752	259,144
	1990/91	59,752	205,900	108	265,760	82,222	129,550	53,988	265,760
	1991/92	53,988	226,800	90	280,878	88,500	131,142	61,236	280,878
Totals	1989/90	58,663	492,650	17,069	568,382	150,415	347,735	70,232	568,382
	1990/91	70,232	483,060	19,308	572,600	143,522	367,410	61,668	572,600
	1991/92	61,668	485,800	25,090	572,558	137,500	369,142	65,916	572,558

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

2/ U.S. stock, and consumption data are from the Walnut Marketing Board.

Source: Horticultural Products Review, FAS, USDA.

Table 40--Tree nut production (in-shell basis): U.S. share of world, 1990 and 1991 crop years

Crop	United States				Other countries				World	
	Quantity		Share		Quantity		Share		Quantity	
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991
	Million metric tons		Percent		Million metric tons		Percent		Million metric tons	
Almonds	996.9	694.8	73	66	378.1	360.3	27	34	1,375.0	1,055.1
Hazelnuts	19.7	23.3	4	4	488.0	507.0	96	96	507.7	530.3
Pistachios 1/	53.5	21.8	59	24	36.9	68.1	41	76	90.5	89.9
Walnuts	205.9	226.8	43	47	277.2	259.0	57	53	483.1	485.8
Total	1,276.0	966.7	52	45	1,180.2	1,194.4	48	55	2,456.2	2,161.1

1/ Excludes Iran.

Source: Economic Research Service, USDA.

Table 41--Tree nut exports (in-shell basis): U.S. share of world, 1990 and 1991 crop years

Crop	United States				Other countries				World	
	Quantity		Share		Quantity		Share		Quantity	
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991
	Million metric tons		Percent		Million metric tons		Percent		Million metric tons	
Almonds	544.5	558.9	82	80	121.2	137.9	18	20	665.8	696.7
Hazelnuts	6.0	6.1	2	2	372.0	286.0	98	98	378.0	262.1
Pistachios 1/	12.0	8.5	76	48	3.7	9.1	24	52	15.7	17.6
Walnuts	82.2	88.5	57	64	61.3	49.0	43	36	143.5	137.5
Total	644.7	662.0	55	58	558.2	482.0	46	42	1,203.0	1,113.9

1/ Excludes Iran.

Source: Economic Research Service, USDA.

U.S.- Mexico Fruit Trade

by

Dennis A. Shields and Joani Dong*

Abstract: Fruit trade between the United States and Mexico increased from \$146 million in 1986 to \$334 million in 1990. The United States exported \$48 million of fruit, mostly deciduous fruit, to Mexico and imported \$286 million from Mexico, primarily orange juice, mangoes, strawberries, and grapes.

Keywords: Fruit, exports, imports, Mexico, United States.

Negotiations for the North American Free Trade Agreement (NAFTA) may reduce or eliminate trade restrictions between Canada, Mexico, and the United States. Trade ministers from the three countries met in June 1991 to begin the talks, and later met in October. The Agricultural Negotiating Group has held working meetings throughout the fall to discuss the exchange of tariff offers and requests on nontariff measures. Higher level talks are scheduled to resume early next year.

Trade flows of many agricultural commodities, including fruit, would be affected by such an agreement. The U.S. fruit industry is particularly concerned about trade between the United States and Mexico. For some fruits, Mexico may gain market share in the United States, but for others, the United States may be able to increase exports to Mexico. This paper examines fruit trade between Mexico and the United States during the last 5 years.

U.S.-Mexico Trade Increases

Agricultural trade between Mexico and the United States increased from \$2.3 billion in 1982 to \$5.3 billion in 1990.

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About 10 percent of all U.S. agricultural imports come from Mexico, while about 7 percent of all U.S. exports go to Mexico. Mexico is the fifth largest market for U.S. agricultural exports, and the United States is by far the largest export market for Mexico. The balance of agricultural trade has switched between the two countries, but U.S. exports have led imports in the last 3 years. In 1990, the United States had a \$760-million agricultural trade surplus with Mexico.

Mexico Dominates Fruit Trade, but U.S. Gains Ground

Although trade of fresh and processed fruit between Mexico and the United States has been only about 5 percent of total agricultural trade between the two countries, it increased from \$146 million in 1986 to \$334 million in 1990 (calendar year). In 1990 Mexico's fruit exports of \$286 million to the United States consisted primarily of orange juice, mangoes, strawberries (fresh and frozen), grapes, and limes. U.S. fruit exports to Mexico in 1990 were \$48 million, only 2 percent of total U.S. fruit exports, but were up from only \$5.7 million in 1986. Fresh apples, pears, prunes (fresh and dried), raisins, and peaches make up the bulk of U.S. exports to Mexico.

Mexico's Orange Exports Top the List

Oranges and orange products represent the largest commodity group of

Mexican fruit exports to the United States at over \$90 million in 1990, up from \$21 million in 1986. Frozen concentrated orange juice (FCOJ) imports from Mexico represent less than 15 percent of total U.S. imports, but they are the second largest, behind FCOJ imports from Brazil. Like Mexican FCOJ exports to the United States, Mexican fresh orange exports have been quite variable and depend upon supply conditions in both countries. In 1990 the United States received about 28 percent of its fresh orange imports from Mexico, compared with 13 percent in 1989. However, Mexican imports account for less than 1 percent of U.S. domestic consumption. Total U.S. citrus imports from Mexico increased from \$25.2 million in 1986 to \$101.8 million in 1990, the largest value increase of all U.S. fruit imports from Mexico.

Mango imports from Mexico have more than doubled from \$24.7 million in 1988 to \$52.4 in 1990, returning to pre-1986 levels. A change in the phytosanitary requirement that restricted and then eliminated the use of ethylene dibromide (EDB) on U.S. mango imports in 1986-87 significantly reduced U.S. mango imports; however, U.S. mango imports then increased as exporters gained experience using the required treatment, a hot water dip. About 95 percent of the U.S. mango supply is imported, with about 80 percent coming from Mexico and the remainder from the Caribbean Basin Initiative group (primarily Haiti). U.S.

per capita mango consumption has increased from 0.05 pounds in 1970 to 0.42 pounds in 1989.

Strawberries (fresh and processed), at \$31.2 million in 1990, are the third largest U.S. fruit import from Mexico, up from \$23.1 million in 1986. Exports of fresh strawberries from Mexico represent about 9 percent of Mexican production and about 4 percent of U.S. consumption. In 1990, frozen strawberries accounted for 60 percent by value of Mexico's strawberry exports to the United States.

U.S. fresh grape imports from Mexico were \$18.9 million in 1990 but reached \$43.8 in 1988. Limes, \$7.8 million in 1990 compared with only \$3.5 million in 1986, round out the top five Mexican fruit exports to the United States. Mexico is one of the world's largest lime producers, and its lime exports to the world have grown at an annual-average rate of 9 percent. U.S. lime imports, mostly from Mexico, account for almost half of U.S. consumption.

Deciduous and Dried Fruit Lead U.S. Fruit Exports to Mexico

Mexico produces small crops of apples, pears, peaches, and nectarines relative to its population and is a net importer of these fruits. Shortfalls in Mexican domestic production, strengthening demand, and eased trade restrictions have increased Mexican deciduous fruit imports. Fresh pears are the highest valued U.S. fruit exported to Mexico, representing about one-fourth of the 1990 total value, or \$12.6 million. Pear exports to Mexico in 1986 were less than \$1 million. About 25 percent of U.S. fresh-pear utilization is exported, primarily to Canada and Mexico.

U.S. fresh apple exports to Mexico have also grown explosively, increasing from \$0.75 million in 1986 to almost \$7 million in 1990. However, the Mexico market accounts for only about 3 percent of U.S. apple exports, while Canada, Taiwan, and Hong Kong are the largest U.S. markets.

Figure A-1

Value of U.S. Fruit Imports From Mexico, 1990

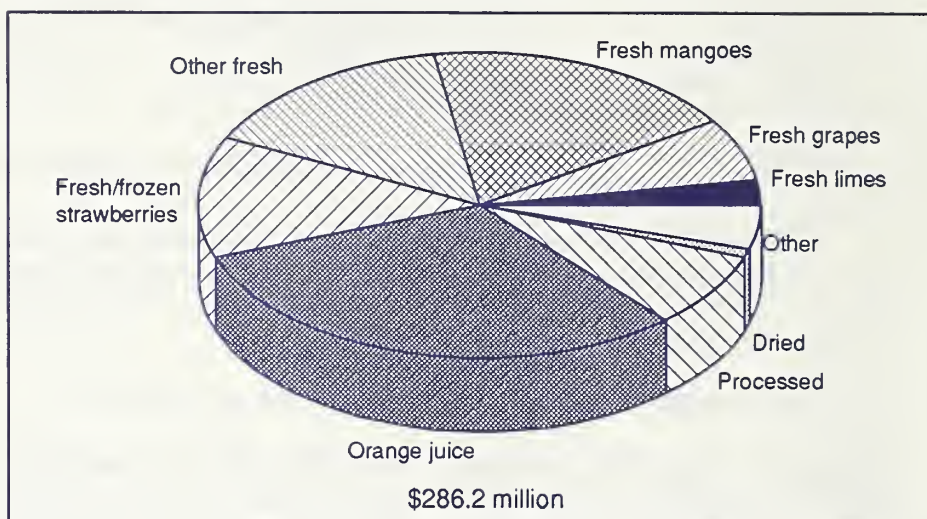


Figure A-2

Value of U.S. Agricultural Imports from Mexico, 1990

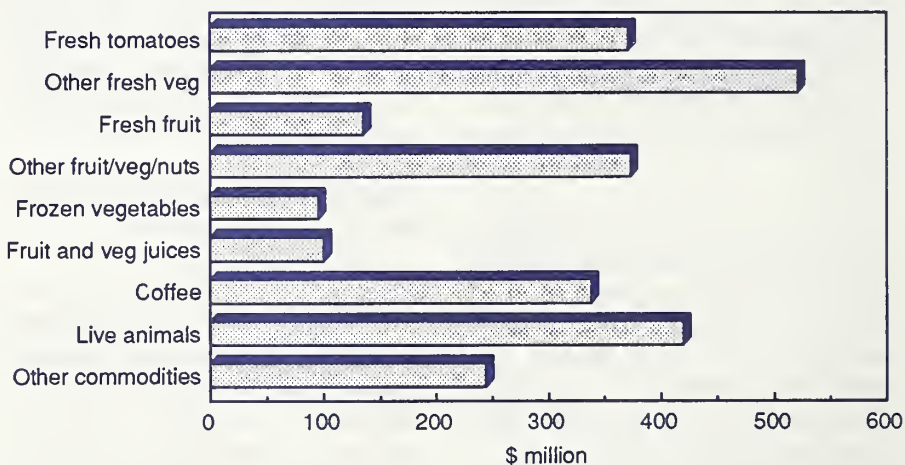
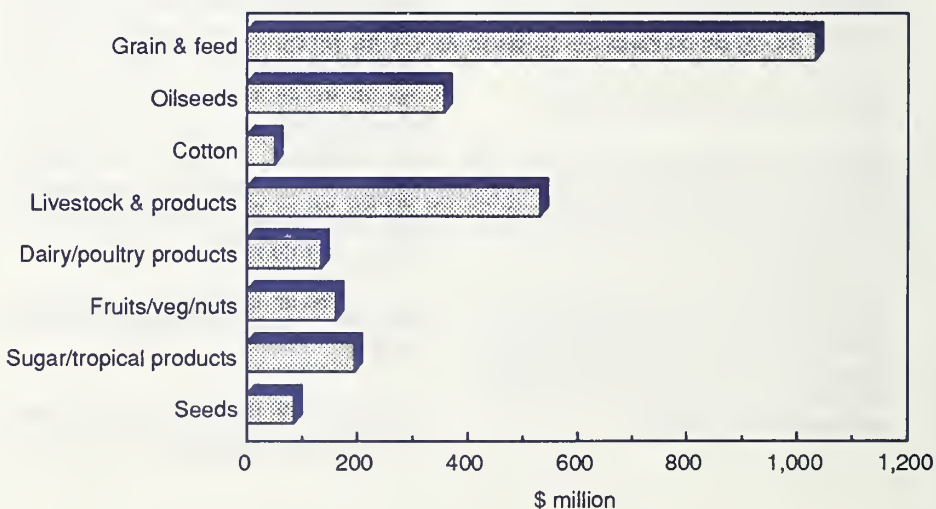


Figure A-3

Value of U.S. Agricultural Exports to Mexico, 1990



Dried prune exports to Mexico almost doubled from \$1.6 million in 1986 to \$3.0 million in 1990. Raisins had more dramatic gains, from \$18,000 to \$3.4 million in the same period. U.S. fresh-peach exports to Mexico rose from \$184,594 in 1986 to \$4.2 million in 1990. Many of these peaches are used for processing in Mexico.

Growing Seasons in Both Countries Are Similar

Because the growing seasons in Mexico and the United States are similar, Mexico's mango and citrus exports compete directly with Florida production. The season for other fruits is slightly earlier in Mexico. For example, the Mexican grape harvest begins just before peak U.S. harvesting in July and August, but closely follows California's desert area production. Mexican strawberries enter the United States mainly between September and June, usually peaking in March and April.

Most fresh fruit is seasonally scarce in Mexico City, where about 20 million people consume over 50 percent of the horticultural products marketed in the country. Mexico has little or no controlled-atmosphere storage, so U.S. apples from storage are shipped between March and July. Pear shipments to Mexico usually peak in April. Stone fruit is shipped to Mexico during the summer months when it is available from U.S.-producing areas.

U.S. Fruit Trade Restrictions

U.S. tariffs on fruit imports vary considerably by commodity. Fresh oranges are subject to a tariff of 2.2 cents per kilogram, or roughly an 8-percent tariff on an ad valorem equivalent basis. FCOJ imports are assessed at 9.25 cents per liter, single-strength-equivalent basis, or about 25 percent ad valorem equivalent. Lime imports have a 2.2-cents per kilogram import tariff, or about 15 percent ad valorem equivalent. Mangoes enter at 8.27 cents per kilogram, or about 10 percent ad valorem equivalent. A list

Figure A-4

U.S. Shipments of Limes by Origin, 1990

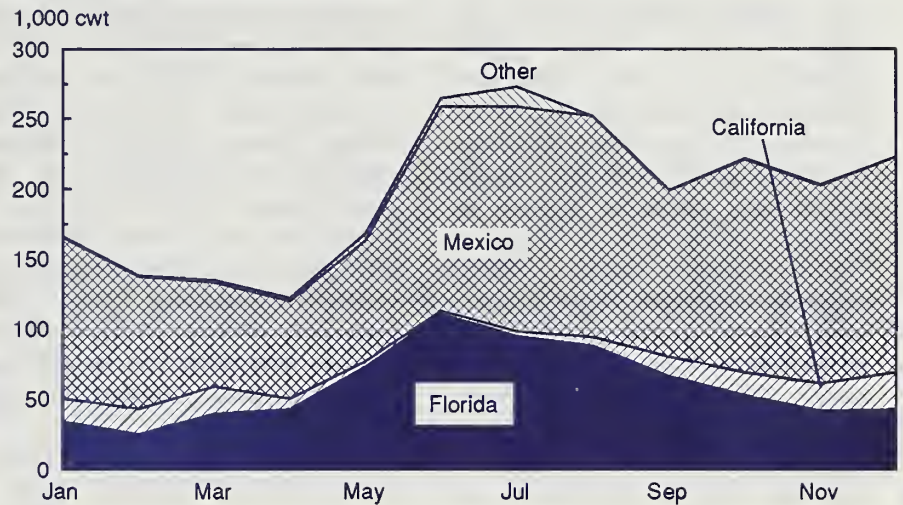
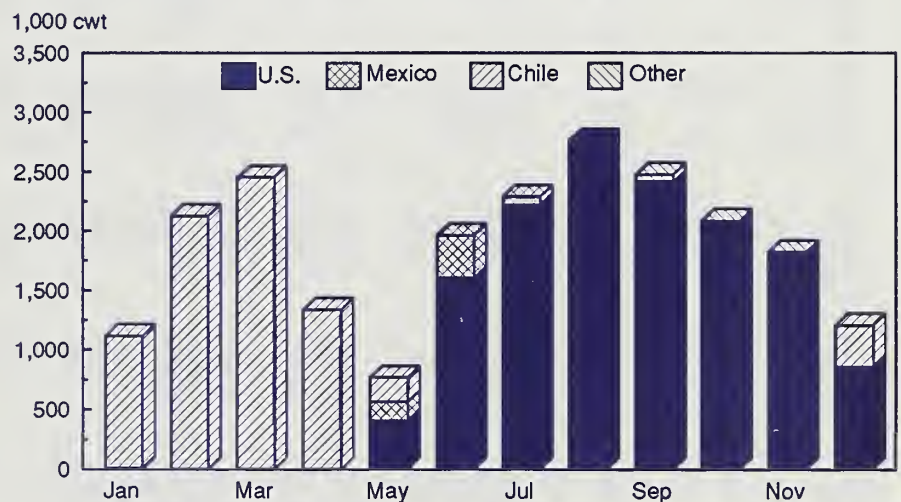


Figure A-5

U.S. Shipments of Table Grapes by Origin, 1990



of U.S. tariffs on fruit imports are shown in table A-9.

U.S. Federal marketing orders can affect the terms of trade. Under Section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, U.S. imports of certain items are subject to the same size, quality, and maturity standards imposed on domestic production of fruits by Federal marketing orders. Federal marketing orders that affect Mexico's major exports to the United States include Florida limes, California desert grapes, and California raisins. As an example, limes imported from Mexico must comply with the Florida lime marketing order for size, quality, and maturity standards.

Limes, as well as most other fruit, must also meet phytosanitary regulations that minimize the threat of insect or disease infestation of domestic production areas and are designed to protect consumer and producer health and welfare. Mexican Persian lime exports to the United States currently undergo treatment for fruit flies at the packinghouse. The Secretariat of Agriculture and Water Resources (SARH) supervises the treatments, and USDA's Agricultural Plant Health Inspection Service (APHIS) makes periodic inspections to ensure that proper procedures are being followed.

Mexican Key lime imports were banned between 1983 and mid-1991, when

APHIS determined they might be infected with citrus canker.

Mexican Fruit Trade Restrictions

A standard 20-percent tariff applies to almost all fruit imported into Mexico. Mexico significantly reduced tariffs and officially eliminated import licenses for most fruits after acceding to the GATT in 1987. The lifting of import permit requirements helped increase U.S. pear exports to Mexico from 1,882 metric tons in 1986 to 26,798 in 1990. Import permits were required for fresh apples until May 31, 1991, but, due to tight domestic supplies, imports without permits were allowed during restricted periods in 1988, 1989, and 1990.

Table A-2--Value of U.S. fruit exports to Mexico, 1990

Item and crop	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
							\$1,000						
Citrus, fresh:													
Grapefruit	0	0	0	17	8	18	19	0	0	0	0	0	62
Lemons	6	0	0	0	6	5	0	0	0	88	131	136	373
Oranges	0	43	35	150	155	48	10	108	61	28	13	50	700
Temples	28	17	6	35	29	54	71	32	30	0	17	0	318
Mandarines/tangerines	5	10	0	13	0	8	0	0	0	0	0	0	35
Total citrus, fresh	39	70	41	214	198	134	99	140	91	116	161	186	1,489
Deciduous, fresh:													
Apples	482	670	624	655	870	1,197	367	837	327	208	244	371	6,852
Cherries, sweet	0	36	6	0	17	44	7	0	0	0	0	12	120
Grapes	112	164	120	174	157	0	19	121	42	67	130	488	1,593
Peaches/nectarines	193	393	245	52	518	1,343	124	543	335	90	77	253	4,167
Pears	1,063	1,386	1,236	1,343	1,624	974	948	373	853	646	980	1,168	12,595
Prunes/plums	172	250	213	94	30	87	346	241	410	133	50	85	2,113
Subtotal	2,021	2,900	2,443	2,318	3,216	3,646	1,811	2,114	1,968	1,144	1,481	2,377	27,441
Other	13	87	13	0	80	296	251	37	34	25	0	24	859
Total deciduous, fresh	2,035	2,987	2,456	2,318	3,296	3,942	2,062	2,151	2,002	1,169	1,481	2,401	28,300
Other, fresh:													
Strawberries	37	12	6	0	0	0	6	77	25	24	0	5	192
Kiwi fruit	18	56	56	14	26	0	7	29	45	33	39	35	358
Pineapples	5	3	3	0	7	3	0	0	0	0	0	0	20
Papayas	0	0	0	0	7	0	0	0	0	0	0	0	7
Subtotal	60	71	64	14	39	3	13	106	70	57	39	40	576
Other (0)	(0)	6	0	11	3	7	8	6	0	11	34	15	100
Total other, fresh	60	77	64	26	42	10	21	112	70	67	73	55	677
Frozen:													
Berries	3	0	10	0	0	0	0	0	0	0	0	0	13
Cherries, sweet	0	0	0	0	8	0	0	0	3	0	12	0	22
Subtotal	3	0	10	0	8	0	0	0	3	0	12	0	36
Other	15	0	6	27	22	60	0	0	0	3	21	5	158
Total frozen	18	0	17	27	30	60	0	0	3	3	32	5	193
Processed:													
Grapefruit	6	0	0	0	0	0	0	3	0	0	0	0	9
Peaches	76	59	85	155	136	68	27	51	20	74	55	3	808
Pears	82	0	27	0	18	96	22	28	11	0	20	5	310
Pineapples	3	0	40	16	5	5	4	0	0	0	29	35	132
Subtotal	168	59	151	171	154	170	53	81	31	74	104	44	1,259
Other	129	38	32	29	198	182	109	109	132	150	54	169	1,330
Total processed	296	97	183	200	352	352	162	190	163	224	158	213	2,590
Olives	0	0	0	4	0	0	21	4	0	4	3	3	39
Misc. preparations 1/	378	196	112	511	670	161	122	173	108	419	293	325	3,469
Dried:													
Figs	0	0	0	0	0	19	5	5	0	0	5	0	35
Raisins	70	110	51	207	1,384	8	1,072	192	126	96	68	55	3,438
Prunes	667	355	240	108	116	74	124	160	278	222	350	359	3,054
Subtotal	736	465	291	314	1,500	101	1,201	357	404	318	423	415	6,527
Other	22	35	62	45	72	133	36	64	61	258	487	348	1,625
Total dried	758	500	354	359	1,572	234	1,238	421	465	577	911	763	8,152
Juice:	59	409	330	266	418	130	485	114	240	169	290	72	2,981
Grand total	3,643	4,335	3,556	3,924	6,578	5,023	4,209	3,305	3,141	2,748	3,404	4,023	47,889

1/ Includes jams, jellies, pastes, and other preparations.

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

Table A-4--Value of U.S. fruit imports from Mexico, 1986-90

Commodity	1986	1987	1988	1989	1990
			\$1,000		
Citrus, fresh:					
Grapefruit	96	0	11	0	11
Lemon	60	28	8	0	10
Limes	3,520	4,356	5,689	4,729	7,768
Oranges	1,545	1,594	1,405	250	908
Mandarines/tangerines	1,619	2,798	3,010	3,167	4,550
Total citrus, fresh	6,839	8,775	10,122	8,146	13,248
Deciduous, fresh:					
Apples	0	5	71	0	0
Apricots	0	0	8	0	0
Grapes	24,252	36,023	43,780	31,547	18,925
Peach	490	1,372	1,259	219	40
Pears	3	0	2	0	4
Total deciduous, fresh	24,745	37,400	45,120	31,766	18,968
Other, fresh:					
Mangoes 1/	24,968	25,952	24,746	37,042	52,354
Papayas	314	249	380	607	774
Pineapple	326	168	313	456	554
Strawberries	4,286	13,754	14,694	13,548	13,074
Subtotal	29,895	40,123	40,133	51,653	66,756
Misc./2	18,969	15,618	17,031	20,310	35,582
Total other, fresh	48,864	55,741	57,164	71,962	102,338
Frozen:					
Strawberry	13,482	21,654	14,034	12,535	23,689
Other	0	0	1	238	406
Total Frozen	13,482	21,654	14,035	12,773	24,095
Processed:					
Grapefruit	3,242	2,246	2,701	2,974	2,201
Orange	1,501	1,815	1,637	1,842	1,468
Pineapple	2,519	5,198	4,130	689	479
Subtotal	7,262	9,259	8,469	5,504	4,149
Other	6,674	7,912	8,337	13,619	18,694
Total processed	13,936	17,171	16,806	19,123	22,842
Olives	373	1,669	1,302	748	693
Misc. preparations 3/	653	872	847	1,708	1,452
Dried:					
Raisin	2,441	5,273	4,815	4,871	2,352
Other	47	355	491	388	248
Total dried	2,487	5,629	5,306	5,258	2,600
Juice:					
Orange	18,358	34,269	62,421	57,494	88,577
Other juice	10,633	10,797	16,010	5,016	11,336
Total juice	28,991	45,065	78,431	62,510	99,914
Grand total	140,370	193,975	229,134	213,994	286,150

1/ Includes guavas and mangosteens beginning 1989. 2/ Includes bananas.

3/ Includes jams, jellies, pastes, and other preparations.

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

Table A-5--Quantity of U.S. fruit exports to Mexico, 1986-90

Commodity	1986	1987	1988	1989	1990
	Metric tons 1/				
Citrus, fresh:					
Grapefruit	33	114	128	298	157
Lemons	548	1,084	917	1,851	1,454
Limes	0	0	0	24	0
Oranges	465	418	2,517	1,267	1,249
Mandarines/tangerines	7	0	0	32	39
Subtotal	1,053	1,616	3,562	3,472	2,899
Other	3	0	317	156	295
Total citrus, fresh	1,056	1,616	3,879	3,628	3,194
Deciduous, fresh:					
Apples	1,541	2,996	7,596	9,220	12,027
Cherries, sweet	19	33	73	96	143
Grapes	1,121	1,040	1,331	1,552	2,246
Peaches/nectarines	253	2,951	3,225	9,667	8,045
Pears	1,882	2,401	3,265	20,875	26,798
Prunes/plums	124	358	919	2,905	3,595
Subtotal	4,940	9,779	16,409	44,315	52,854
Other	0	6	0	1,143	1,260
Total deciduous, fresh	4,940	9,785	16,409	45,458	54,114
Other, fresh:					
Avocados	18	42	2	0	0
Strawberries	3	0	30	298	211
Kiwi fruit	0	0	71	110	362
Pineapples	0	0	0	54	17
Papayas	0	0	0	17	9
Subtotal	21	42	103	479	599
Other	26	84	389	333	165
Total other, fresh	47	126	492	812	764
Frozen:					
Berries	0	0	21	6	6
Strawberries	17	27	0	195	0
Cherries, sweet	41	6	25	89	27
Subtotal	58	33	46	290	33
Other	23	71	84	51	146
Total frozen	81	104	130	341	179
Processed:					
Grapefruit	22	8	17	153	21
Oranges	0	0	0	0	0
Peaches	33	37	110	1,219	1,096
Pears	43	12	8	229	358
Pineapples	1	30	63	317	154
Subtotal	99	87	198	1,918	1,629
Other	470	145	978	1,318	1,227
Total processed	569	232	1,176	3,236	2,856
Olives	4	5	22	154	29
Misc. preparations 2/	114	1,248	759	2,564	3,862
Dried:					
Figs	0	0	0	90	79
Raisins	6	53	52	312	1,466
Prunes	1,245	1,729	1,644	1,590	2,505
Subtotal	1,251	1,782	1,696	1,992	4,050
Other	234	179	482	615	1,119
Total dried	1,485	1,961	2,178	2,607	5,169
Total juice	624	843	1,527	3,706	7,757
Grand Total 3/	8,296	15,077	25,045	58,800	70,167

1/ Juice units in kiloliters. 2/ Includes jams, jellies, pastes, and other preparations.

3/ Excludes juice.

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

Table A-6--Value of U.S. fruit exports to Mexico, 1986-90

Commodity	1986	1987	1988	1989	1990
			\$1,000		
Citrus, fresh:					
Grapefruit	10	18	56	131	62
Lemons	103	384	311	556	373
Limes	0	0	0	24	0
Oranges	131	91	829	825	700
Mandarines/tangerines	4	0	0	10	35
Subtotal	247	493	1,196	1,546	1,171
Other	2	0	159	118	318
Total citrus, fresh	249	493	1,355	1,664	1,489
Deciduous, fresh:					
Apples	749	1,169	2,892	4,755	6,852
Cherries, sweet	14	31	82	123	120
Grapes	727	545	769	1,140	1,593
Peaches/nectarines	185	1,359	1,392	4,791	4,167
Pears	960	908	1,267	8,902	12,595
Prunes/plums	82	197	481	1,766	2,113
Subtotal	2,717	4,208	6,883	21,477	27,441
Other	0	4	0	942	859
Total deciduous, fresh	2,717	4,212	6,883	22,420	28,300
Other, fresh:					
Avocados	31	21	4	0	0
Strawberries	3	0	46	347	192
Kiwi fruit	0	0	84	112	358
Pineapples	0	0	0	54	20
Papayas	0	0	0	13	7
Subtotal	34	21	133	526	576
Other	16	55	238	238	100
Total other	50	76	372	765	677
Frozen:					
Berries	0	0	14	7	13
Strawberries	20	9	0	105	0
Cherries, sweet	43	8	34	99	22
Subtotal	63	17	48	211	36
Other	22	43	77	82	158
Total frozen	84	60	124	293	193
Processed:					
Grapefruit	8	6	7	128	9
Oranges	0	0	0	0	0
Peaches	25	33	78	1,027	808
Pears	35	10	7	174	310
Pineapples	1	4	54	277	132
Subtotal	69	52	145	1,605	1,259
Other	291	199	998	1,265	1,330
Total processed	360	251	1,143	2,870	2,590
Olives	5	7	34	204	39
Misc. preparations 1/	110	883	688	2,563	3,469
Dried:					
Figs	0	0	0	32	35
Raisins	18	135	170	635	3,438
Prunes	1,627	2,246	2,151	2,161	3,054
Subtotal	1,646	2,381	2,321	2,827	6,527
Other	343	383	840	1,124	1,625
Total dried	1,989	2,763	3,161	3,951	8,152
Juices:	125	396	585	1,703	2,981
Grand total	5,690	9,140	14,344	36,433	47,889

1/ Includes jams, jellies, pastes, and other preparations.

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

Table A-7--Import share of selected U.S. fruit utilization, 1970-90

	1970	1975	1980	1985	1990
Million pounds					
Oranges, fresh:					
Imports	58.0	27.3	22.2	27.5	26.3
Total supply	3894.0	4501.3	4564.2	3835.5	4446.3
Import share (%)	1.5%	0.6%	0.5%	0.7%	0.6%
Tangerines, fresh:					
Imports	24.3	52.6	42.7	15.0	37.2
Total supply	348.7	461.9	496.7	259.0	267.2
Import share (%)	7.0%	11.4%	8.6%	5.8%	13.9%
Limes					
Imports	4.8	7.6	34.9	50.5	87.1
Total supply	39.6	56.0	93.1	163.2	191.1
Import share (%)	12.1%	13.6%	37.5%	30.9%	45.6%
Mangoes					
Imports	5.8	17.8	43.2	85.7	
Total supply	9.7	32.2	52.1	94.4	1/
Import share (%)	59.8%	55.3%	82.9%	90.8%	
Strawberries:					
Imports	51.1	34.6	12.7	9.6	32.2
Total supply	367.5	404.6	494.8	763.7	899.4
Import share (%)	13.9%	8.6%	2.6%	1.3%	3.6%

1/ Data not available.

Source: Commodity Economics Division, Economic Research Service, USDA.

Table A-8--Import/export market shares for major fresh fruits traded with Mexico

	1986	1987	1988	1989	1990
Mexico's share of U.S. imports --					
	Percent				
Limes, fresh	85.3	92.1	92.5	86.0	91.3
Oranges, fresh	16.6	14.1	31.1	7.7	25.2
Mangoes, fresh	85.8	83.9	85.7	87.7	90.0
Strawberries, fresh	56.9	80.1	80.0	75.7	77.6
Mexico's share of U.S. exports --					
Apples, fresh	0.7	1.2	2.1	3.5	3.2
Pears, fresh	4.6	5.1	5.4	25.9	20.5
Peaches/nectarines, fresh	1.1	8.0	5.4	18.8	7.7
Prunes, dried	2.2	2.6	2.3	2.1	2.6
Raisins	0.0	0.1	0.1	0.4	2.0

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

Table A-9--U.S. tariffs of fruit and fruit products, 1990

U.S. tariff number	U.S. tariff line product description	Tariff: Specific	Tariff:	Ad valorem equivalent	
			Ad valorem	1989	1990
			Dollars per kilogram	-----Percent-----	
<u>Fresh fruit</u>					
08030020	Bananas		0.0		
08041020	Dates whole/pitted weighing <= 4.6 kg in container	0.1650			
08041040	Dates with pits, over 4.6 kg.	0.0220		1.1	1.8
08041060	Dates, pitted, over 4.6 kg.	0.0440		3.6	8.8
08042040	Whole figs, over .5 kg. cont.	0.0990		9.1	9.9
08042060	Whole figs, <= .5 kg. cont.		0.0*		
08043020	Pineapple, not reduced, bulk	0.0064		4.5	5.7
08044000	Avocados	0.1320			6.0
08045040	Guavas, mangos, mangosteens entered 9/1-5/31 inclusive	0.0827		8.6	7.6
08045060	Guavas, mangos, mangosteens entered other time	0.0827		10.5	8.3
<u>Citrus</u>					
08051000	Oranges fresh/dried	0.0220		8.6	8.3
08052000	Mandarins, inc. tangerines, clementines, wilkings & other	0.0220		8.3	6.0
08053020	Lemons	0.0275			3.6
08053040	Limes	0.0220		16.6	14.1
08054040	Grapefruit entered 8/1-9/30	0.0220			
08054060	Grapefruit entered in Oct.	0.0180			
08054080	Grapefruit entering 11/1-7/31	0.0290		2.9	8.7
			Dollars per cubic meters		
<u>Fresh & dried grapes</u>					
08061020	Fresh grapes entered 2/15-3/31 inclusive	1.4100			
08061040	Fresh grapes entered 4/1-6/30		0.0		
08061060	Fresh grapes, 7/1-2/14	2.1200		0.5	0.7
			Dollars per kilogram		
08062010	Raisins from seedless grapes, currants, sultanas, other	0.0220		2.4	3.1
<u>Other fresh fruit</u>					
08081000	Apples		0.0		
08082020	Pears, quinces enter 4/1-6/30		0.0		
08082040	Pears, quinces enter 7/1-3/31	0.0110			2.2
08091000	Apricots	0.0040			
08092000	Cherries sweet/tart		0.0		
08093020	Peaches, nectarines entered 6/1-11/30	0.0040			
08093040	Peaches, nectarines, 12/1-5/31		0.0		
08094020	Plums entered 1/1-5/31		0.0		
08094040	Plums entered 6/1-12/31	0.0110			
08101020	Strawberry entered 6/15-9/15	0.0040		0.9	1.4
08101040	Strawberries entered 9/16-6/14	0.0170		1.7	1.6
<u>Frozen fruit</u>					
08111000	Frozen strawberries		14.0		
08112020	Frozen raspb., loganberries, black currants & gooseberries		0.0*		
08112040	Other frozen berries		14.0		
08119040	Frozen papayas		17.5		
08119050	Frozen pineapples	0.0055		0.7	0.9
<u>Dried fruit</u>					
08131000	Dried apricots		0.0*		
08132010	Prunes soaked in brine, dried	0.0440		4.4	0.9
08132020	Other dried prunes	0.1750		9.7	7.2
08133000	Dried apples		0.0*		
08134040	Dried peaches	0.0220			
<u>Preserved olives</u>					
20057011	Green, ripe, unpitted olives container <13kg	0.0540-drained			
20057015	Green, ripe, unpitted olives container >= 13 kg	0.0740-drained		11.1	
			Dollars per liter		
<u>Citrus juices</u>					
20091100	Frozen orange juice	0.0925		27.9	23.8
20091920	Nonconc. o.j., not made of concn. of 1.5 or more	0.0530		14.5	18.4
20091940	Other orange juice	0.0925		29.9	21.4
20092020	Grapefruit juice nonconcentrate nor made of concentrate of 1.5 or more	0.0530		11.2	12.6
20092040	Other grapefruit juice	0.0925		38.0	40.9

*Duty-free status for Mexican imports.

Sources: Harmonized Tariff Schedule of the United States, 1990, and U.S. Department of Commerce, Bureau of the Census.

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