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Fruit and Tree Nuts Outlook

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Abundant Supplies of Strawberries, Peaches, and Nectarines Expected in 2004

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The next release is
July 29, 2004

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World Agricultural
Outlook Board.

The lower prices growers received for strawberries, pears, and processing oranges in April 2004 relative to the same time a year ago more than offset the higher returns received from other fruit, pushing the April grower price index for fruit and nuts down 6 percent from the April 2003 index. At 90 (1990-92=100), the index was lower than a year ago for the first time this year and the lowest for the month since 1997. At the retail level, consumers paid higher prices in April for Red Delicious apples, Thompson seedless grapes, navel oranges, and grapefruit.

Commercial strawberry production in the two major producing States—California and Florida—is forecast at 2.1 billion pounds in 2004, up 3 percent from a year ago. In California, the crop is forecast to be 3 percent larger, surpassing the previous record crop in 2003. Production in Florida this past winter is estimated to be 5 percent larger than a year ago. Supplies out of California are currently running above a year ago and resulting in lower prices.

The U.S. Department of Agriculture (USDA) forecast the 2004 California peach crop to be 1.97 billion pounds, 5 percent larger than a year ago. Production data for both California nectarines and plums in 2004 will not be available until January 2005. However, pre-season estimates from the California Tree Fruit Agreement, a grower-funded organization that promotes the marketing of fresh-market peaches, nectarines, and plums, indicate nectarine production will be up 3 percent while plum production will be down 16 percent. Despite larger early-season supplies, good fruit quality and moderate demand have kept peach and nectarine prices strong.

January-March imports of bananas were lower than in January-March 2003 while imports for papayas, mangoes, and pineapples were all higher. Prices for most of these fruit in the U.S. market are currently averaging lower than a year ago.

California's almond growers are expecting a record-large almond crop for the 2003/04 season. Production is forecast at 1.1 billion pounds, 6 percent higher than last season and 1 percent higher than two seasons ago, when the last record was set.

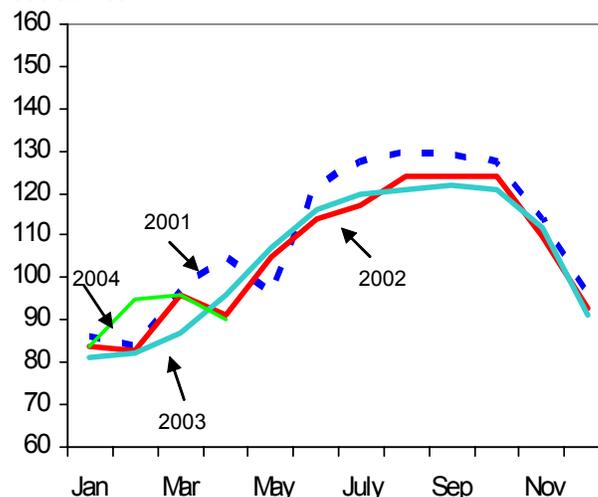
Price Outlook

Fruit Prices Lower in April

The lower prices growers received for strawberries, pears, and processing oranges in April 2004 relative to the same time a year ago more than offset the higher returns received from other fruit, pushing the April grower price index for fruit and nuts down 6 percent from the April 2003 index. At 90 (1990-92=100), the index was lower than a year ago for the first time this year and the lowest for the month since 1997 (fig. 1). The April grower price index was also lower than the previous month for the first time this year reflecting price declines for apples, strawberries, and fresh-market oranges (table 1).

With the California strawberry season underway with increased acreage and warm weather boosting production, increased supplies from the domestic crop and larger imports from Mexico are pushing strawberry prices lower. Strawberry grower prices in April dropped 29 percent from a year ago, to 49.5 cents per pound, the lowest average price for the month over the last 6 years. Strawberry prices also declined from the March average price of 69.1 cents

Figure 1
Index of prices received by growers for fruit and nuts
1990-92=100



Source: National Agricultural Statistics Service, USDA.

per pound. At the same time, grower prices for fresh-market pears averaged 1 percent below a year ago while grower prices for fresh-market apples remained significantly higher. The bigger U.S. pear crop

Table 1--Monthly fruit prices received by growers, United States

Commodity	2003		2004		2003-04 Change	
	Mar.	Apr.	Mar.	Apr.	Mar.	Apr.
	--Dollars per box--				Percent	
Citrus fruit: 1/						
Grapefruit, all	1.60	1.90	1.77	1.81	10.6	-4.7
Grapefruit, fresh	5.11	6.13	6.01	6.15	17.6	0.3
Lemons, all	0.47	4.60	4.49	7.85	855.3	70.7
Lemons, fresh	5.51	12.04	12.70	16.55	130.5	37.5
Oranges, all	4.17	4.43	3.37	3.62	-19.2	-18.3
Oranges, fresh	6.29	7.69	8.87	7.77	41.0	1.0
	--Dollars per pound--					
Noncitrus fruit:						
Apples, fresh 2/	0.226	0.234	0.307	0.299	35.8	27.8
Grapes, fresh 2/	--	--	--	--	--	--
Peaches, fresh 2/	--	--	--	--	--	--
Pears, fresh 2/	0.189	0.184	0.176	0.182	-6.9	-1.1
Strawberries, fresh	0.640	0.695	0.691	0.495	8.0	-28.8

1/ Equivalent on-tree price.

2/ Equivalent packinghouse-door returns for CA, NY (apples only), OR (pears only), and WA (apples, peaches, and pears). Prices as sold for other States.

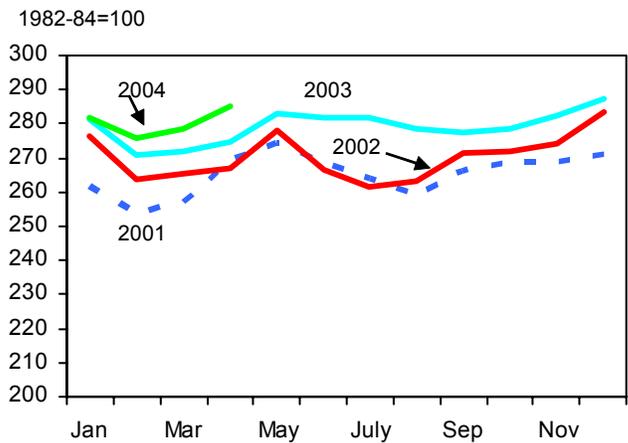
Source: National Agricultural Statistics Service, USDA.

harvested this past fall has put downward pressure on pear prices for this season, with prices averaging lower than a year ago in each month since August 2003. Pear stocks in cold storage entering the month of April were up 3 percent versus being down nearly 1 percent the same time last year. Apple stocks in regular and controlled-atmosphere storage remained light, limiting movement of apples to domestic and export markets.

Grower prices for fresh-market oranges remained higher than a year ago in April as in previous months since November 2003. Prices were strong as a result of the smaller orange crops harvested in California and Arizona this season (2003/04), the large high-quality fruit produced by these crops, and strong domestic and export demand. Meanwhile, with above average fruit size and low fruit droppage, Florida's Valencia orange production, used mostly for processing, is projected to be a record, at 5.4 million tons. This, combined with large beginning juice stocks for the 2003/04 season, has caused processing orange prices to fall below a year ago. Harvesting of the crop is in full swing and, with the expected increased supplies this summer, processing orange prices will likely continue to average lower than a year ago in the coming months. Fewer Valencia orange supplies out of California and Arizona, meanwhile, will likely hold prices strong for fresh-market oranges. Lemon prices were up sharply in April as supplies from California remained light, and both domestic and export demand continued strong.

Figure 2

Consumer Price Index for fresh fruit



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

Fresh Fruit Retail Prices Strengthens

The Consumer Price Index (CPI) for fresh fruit in April was 285.2, compared with 274.5 in April 2003. On a year-to-year comparison, the CPI has been gaining strength this year and reached record-levels each month through April (fig. 2). The CPI remained stronger year-to-year since August 2002. At the retail level, consumers paid higher prices in April for Red Delicious apples, Thompson seedless grapes, navel oranges, and grapefruit (table 2). The April Consumer Price Index for apples was 6 percent higher,

Table 2--U.S. monthly retail prices, selected fruit, 2003-2004

Commodity	Unit	2003		2004		2003-04 Change	
		Mar.	Apr.	Mar.	Apr.	Mar.	Apr.
		--- Dollars ---		--- Dollars ---		--- Percent ---	
Fresh:							
Valencia oranges	Lb	--	--	--	--	--	--
Navel oranges	Lb	0.728	0.742	0.730	0.744	0.3	0.3
Grapefruit	Lb	0.639	0.620	0.670	0.694	4.9	11.9
Lemons	Lb	1.144	1.183	1.140	1.148	-0.3	-3.0
Red Delicious apples	Lb	0.948	0.972	1.050	1.040	10.8	7.0
Bananas	Lb	0.513	0.517	0.500	0.505	-2.5	-2.3
Peaches	Lb	--	--	--	--	--	--
Anjou pears	Lb	--	--	--	--	--	--
Strawberries 1/	12-oz pint	1.871	1.762	2.124	1.661	13.5	-5.7
Thompson seedless grapes	Lb	1.843	1.911	1.581	2.113	-14.2	10.6
Processed:							
Orange juice, concentrate 2/	16-fl. oz	1.809	1.783	1.829	1.861	1.1	4.4
Wine	liter	6.451	5.998	6.583	6.284	2.0	4.8

-- Insufficient marketing to establish price.

1/ Dry pint.

2/ Data converted from 12 fluid ounce containers.

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

suggesting that most apple varieties, besides the Red Delicious, were also more expensive. Meanwhile, consumers paid lower prices for bananas, strawberries, and lemons.

April strawberry prices averaged lower than a year ago for the first time this year as larger supplies became available to retail consumers. Banana prices averaged lower despite fewer imports as it did in the prior month. April trade data from the Bureau of the Census, U.S. Department of Commerce have not been released at the time of this report. However, based on weekly shipment data from the Agricultural

Marketing Service of the U.S. Department of Agriculture, banana shipments from international sources in April, particularly from Costa Rica and Ecuador, were well below last year.

Consumers should expect to continue to pay higher prices for apples and navel oranges as supplies continue to be limited by the smaller crops harvested in 2003/04. Moreover, apple and navel orange prices are also expected to continue to move up in the next couple of months as supplies tighten with the winding down of the season.

Fruit and Tree Nuts Outlook

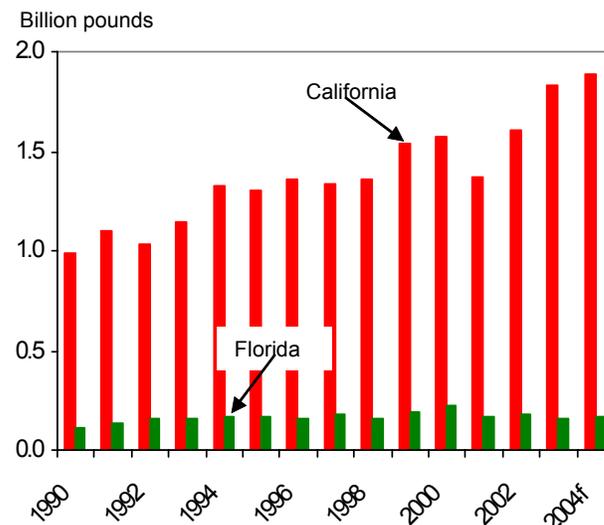
Strawberry Production Forecast Up for 2004

Commercial strawberry production in the two major producing States—California and Florida—is forecast at 2.1 billion pounds in 2004, up 3 percent from a year ago. In California, the crop is forecast to be 3 percent larger, reaching 1.9 billion pounds. If realized, this will be California's largest strawberry crop ever, surpassing the previous record crop in 2003 (fig. 3). Lower average yields are expected this season in California, but the forecast of a 12-percent increase in harvested acreage will more than make up for the decline in yields, resulting in increased production. Some weather problems affected mostly the southern growing districts earlier in the season, but warmer temperatures in March helped strengthen the plants, hastened berry maturity, and aided in achieving good size, color, and quality. Florida's crop benefited from good growing weather, and although harvested acreage remained unchanged at 7,100 acres, growers achieved higher average yields for their crop. Production in Florida this past winter is estimated at 163.3 million pounds, 5 percent larger than a year ago.

Some weather-related production disruptions this winter pushed California's shipments behind a year ago during the first 3 months of 2004. Although shipments increased markedly in March from earlier in the year, total volume for the month still lagged March 2003 shipments by 13 percent. However, prompted by persistent favorable weather, shipments in April increased 5 percent above the same time last year. Shipments out of Florida also lagged in January and February but rose sharply above a year ago in March, bringing overall supplies from the State's winter crop that finished in April slightly higher than a year ago.

Increased imports, mainly from Mexico, helped augment some of the lag in domestic shipments earlier in the year. However, overall supplies remained lower during the first 3 months of 2004, resulting in higher strawberry prices. The January-March average grower price for fresh strawberries was \$1.20 per pound, up 38 percent from the January-March 2003 average. As California's shipments got underway this season, however, prices have been declining monthly. Prices began to decline from their peak in January when growers received an average of \$1.51 per

Figure 3
Strawberry production in California and Florida



Source: National Agricultural Statistics Service, USDA.

pound. Prices declined to \$1.27 in February and to \$0.69 in March. Because shipments in April have rebounded, prices continued to weaken seasonally and at an average of 49.5 cents per pound, were considerably lower than a year ago. Prices for larger size berries this season were even averaging lower than smaller sized berries last year. Around mid-May, strawberry f.o.b. prices were reported to range from \$6.90 to \$8.90 per flat of 12 1-pint baskets of large- to extra-large berries in California's Salinas-Watsonville area, compared with \$7.90 to \$8.90 per flat of medium to large berries the same time last year. In the Santa Maria and South District growing areas, f.o.b. prices ranged from \$5.90 to \$7.90 (large-extra large) and \$4.90 to \$6.90 (medium-large) per flat, respectively. Compared with last year, prices in these two growing regions were at \$7.90 to \$8.90 and \$6.90 to \$7.90 per flat, both in the medium- to large-size category.

At the retail level, fewer supplies and strong market demand drove strawberry prices higher than a year ago. Consumers were paying record-high prices in February and March relative to the same months in recent years and throughout the 1990s. However, consistent with the trend in grower prices, retail prices have weakened over the last 4 months as supplies increased seasonally. With the California season in full swing, prices will likely continue to decline as supplies increase. If supplies continue to outpace last

season, season-average prices will likely average below a year ago.

Despite fewer supplies and higher prices during the first 3 months of 2004, international demand for U.S. fresh strawberries was strong. Cumulative exports for this period were 2 percent higher than the same period a year ago and more than double the previous 5-year average. Exports to Canada increased, and sharply higher shipments were made to Japan, Mexico, the Bahamas, Hong Kong, and Taiwan. U.S. fresh strawberry exports will likely continue strong in 2004 as increased production, lower prices, and the weak U.S. dollar all combine to boost international demand for the product.

Strawberry supplies for the processing sector are running well above the previous year. According to the Processing Strawberry Advisory Board of California, 2004 cumulative freezer tonnage in California through May 15 was already at 131.5 million pounds, compared with 40.7 million pounds the same time last year. Import data through March show the volume reported was down 14 percent. Fewer imports are currently needed to meet market demand due to the large quantity that is available from the domestic crop as well as inventories. Mexico supplied about 71 percent of the imports and shipments from that country were down 23 percent. Meanwhile, shipments from other important international suppliers were mostly higher. Because of the larger overall supplies, grower prices for processing strawberries are likely to average lower than last year.

2004 California Peach and Nectarine Supplies Up This Year

California tree fruit growers are anticipating ample supplies of high quality peaches and nectarines for the 2004 season. The sizes of the crops are expected to be about average and sufficient to fulfill market demand. Unlike last year, California tree-fruit orchards received 858 chilling hours (temperatures below 45 degrees) this past winter. The amount of chill hours was adequate enough for the trees to achieve full dormancy, an essential stage for the development and production of strong fruit. Warm and dry weather through most of March and April were also conducive for good pollination.

While adequate chilling hours and favorable pollination weather helped boost production, other

factors worked to limit potential output growth. According to the California Tree Fruit Agreement (CTFA), a grower-funded organization that promotes the marketing of fresh-market peaches, nectarines, and plums, the warmer-than-average temperatures during the spring shortened the bloom period that started late this year by about 7 days. With the shorter window of opportunity for pollination, plum trees yielded a lighter fruit set. This and the removal of some plum orchards already signal decreased production of California plums for this year compared with a year ago.

The shorter bloom period did not have the same impact on trees of early-variety peaches and nectarines. However, some middle to late varieties encountered problems with incomplete pollination. Moreover, fruit set was not as heavy as would have been anticipated due to the stress on the trees caused by a lot of very hot days in August and September of last year. The trees yielded many double buds that had to be removed. In addition, a higher proportion of orchards is being newly grafted and as a result will not be bearing fruit this year.

The U.S. Department of Agriculture forecast the 2004 California peach crop to be 1.97 billion pounds, 5 percent larger than the 2003 crop. Production of freestone peaches, mostly for fresh use, is forecast at 820 million pounds, 3 percent above a year ago and the largest on record. Production of clingstone peaches, used mostly for processing, is forecast to be up 7 percent, to 1.15 billion pounds. Production data for both California nectarines and plums in 2004 will not be available until January 2005. However, pre-season estimates from the CTFA indicate nectarine production will be up 3 percent while plum production will be down 16 percent.

Harvesting of freestone peaches began during the first week of April in the Coachella Valley (consisting of a small amount of proprietary varieties) and around mid-April in the Central Valley (representing industry-wide production). Early-variety nectarines were also harvested beginning around mid-April, while early-variety plum picking began in early May. The warmer-than-normal temperatures this spring have pushed crop maturity about 5 days earlier than a year ago. Season-to-date packout through May 10, 2004, for peaches and nectarines, based on CFTA estimates, were 93 percent and 54 percent ahead of the same time last year, respectively. For the same period, cumulative packout for plums totaled 1,758

package equivalents, compared with zero the same time last year. Despite larger early-season supplies, good fruit quality and moderate demand have kept peach and nectarine prices strong, averaging at or near last year's levels.

As of May 10, various varieties of yellow flesh California well-matured peaches were priced at \$24.00 to \$26.00 (f.o.b. shipping point) for a two-layer tray pack of size 48-50s, \$22.00 to \$24.00 for 54-56s, and \$15.00 to \$18.00 for 60-64s. Around the same time last year, prices ranged from \$22.00 to \$26.00 for 48-50s, \$20.00 to \$22.00 for 54-56s, and \$16.00 to \$20.00 for 60-64s. F.o.b. shipping-point prices for various varieties of yellow flesh California well-matured nectarines ranged from \$26.00 to \$27.00 for 54-56s and \$24.00 to \$26.00 for 60-64s. Last year's nectarine prices ranged from \$28.00 to \$30.00 for 54-56s and \$22.00 to \$26.00 for 60-64s. Barring any weather problems that may disrupt seasonal increases in supplies, prices are likely to decline as supplies increase steadily into the summer months. As the season gets into full swing along with other summer fruit, peach and nectarine prices may fall below a year ago. The typical seasonal pattern of

declining supplies in September and October will likely be observed, but market availability of these fruits during these 2 months are anticipated to be much larger than in previous years as a result of increased plantings of late-season varieties in recent years.

Tables 3, 4, and 5 provide historical production and price data for California peaches, nectarines, and plums. Expected larger supplies and lower prices will help promote increased domestic consumption and higher exports of peaches and nectarines this year. Meanwhile, the reverse is expected for plums. The anticipated lower production will likely push grower prices for plums higher and both will work to limit domestic consumption and exports for this year. During 2003, domestic consumption of fresh peaches (including nectarines) declined 3 percent from the previous year, to 5.20 pounds per person, with decreased production of both peaches and nectarines. Although domestic production increased, U.S. per capita consumption for fresh plums in 2003 was only up fractionally from the previous year because of strong demand in international markets.

Table 3--Peaches: Production, utilization, and season-average grower price, California

Year	Production 1/ --Million pounds--	Utilization		Grower price	
		Fresh --Million pounds--	Processed	Fresh --Dollars/pound--	Processed 2/ --Dollars/ton--
1990	1,555	384	1,171	0.22	214.00
1991	1,597	402	1,195	0.16	218.00
1992	1,759	430	1,329	0.14	215.00
1993	1,640	386	1,254	0.19	218.00
1994	1,717	440	1,277	0.12	180.00
1995	1,323	323	1,000	0.24	213.00
1996	1,715	459	1,256	0.28	219.00
1997	1,839	498	1,341	0.14	260.00
1998	1,712	432	1,280	0.20	219.00
1999	1,792	508	1,284	0.20	225.00
2000	1,808	538	1,270	0.19	250.00
2001	1,677	538	1,139	0.21	244.00
2002	1,870	556	1,314	0.21	247.00
2003	1,809	537	1,272	0.20	215.00

1/ Utilized production. 2/ Prices are only for clingstones which represents over 80 percent of all California peaches processed.

Source: National Agricultural Statistics Service, USDA.

Table 4--Nectarines: Production, utilization, and season-average grower price, California

Year	Production 1/ --Short tons--	Utilization		Grower price	
		Fresh --Short tons--	Processed	Fresh --Dollars/ton--	Processed
1990	232,000	229,500	2,500	2/	2/
1991	215,000	211,000	4,000	2/	2/
1992	236,000	233,000	3,000	2/	2/
1993	205,000	201,000	4,000	2/	2/
1994	242,000	238,000	4,000	2/	2/
1995	176,000	170,000	6,000	2/	2/
1996	247,000	239,800	7,200	2/	2/
1997	264,000	258,500	5,500	2/	2/
1998	224,000	207,600	16,400	2/	2/
1999	274,000	256,300	17,700	437.00	27.90
2000	267,000	260,700	6,300	407.00	24.00
2001	275,000	265,400	9,600	480.00	26.00
2002	300,000	300,000	--	382.00	--
2003	278,000	278,000	--	436.00	--

1/ Production all utilized. 2/ Not published to avoid disclosure of individual operations.

Source: National Agricultural Statistics Service, USDA.

Table 5--Plums--Production, season-average grower price, and crop value, California

Year	Utilized	Grower	Crop
	production Short tons	price Dollars/ton	value 1,000 dollars
1990	223,000	603.00	134,412
1991	218,000	449.00	97,894
1992	250,000	252.00	63,033
1993	185,000	508.00	93,954
1994	247,000	321.00	79,358
1995	124,000	950.00	117,849
1996	228,000	420.00	95,831
1997	246,000	312.00	76,825
1998	188,000	529.00	99,388
1999	196,000	419.00	82,041
2000	197,000	442.00	87,115
2001	210,000	306.00	64,362
2002	201,000	386.00	77,586
2003	212,000	418.00	88,616

Source: National Agricultural Statistics Service, USDA.

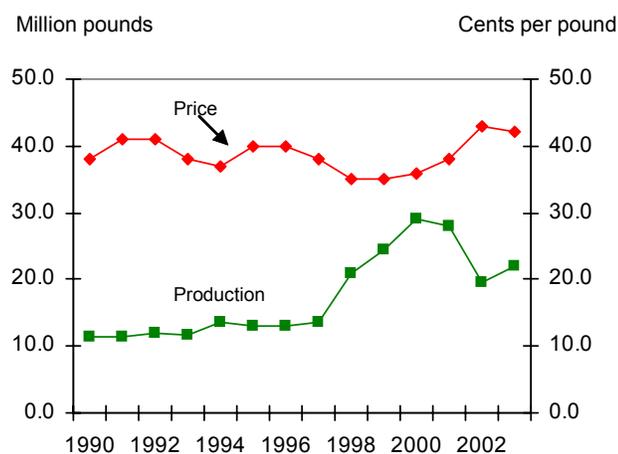
U.S. exports of fresh plums in 2003 increased 9 percent from the previous year. Canada remained the largest market for U.S. plums last year, but shipments to that market declined 3 percent. However, strong exports to Europe and some countries in Central America helped boost overall plum exports. Meanwhile, U.S. exports of fresh peaches (including nectarines) were down fractionally in 2003 from the previous year. This decline may be largely attributed to decreased shipments to Canada and Taiwan whose combined purchases accounted for 74 percent of total exports.

Banana Supplies Down, But Prices Averaging Lower

Banana imports were down fractionally in 2003 from the previous year. Imports from the United States' largest supplier--Costa Rica--increased 8 percent but fewer shipments from Ecuador, Colombia, and Honduras, also major suppliers, pushed overall imports down less than 1 percent, to 8.5 billion pounds (table 6). While imports from Ecuador were down 5 percent, the quantity shipped nearly equaled those from Costa Rica. Shipments from both these countries each accounted for one-fourth of total imports. Between 10 and 11 percent of all imports are re-exported annually to other foreign markets, mainly to Canada. Of the total fresh banana imports in 2003, approximately 943 million pounds were re-exported, pushing domestic supplies down about 1 percent despite increased Hawaiian production. The decline in domestic supplies did not have any significant impact on banana retail prices during 2003. Consumers continued to pay an average of about 51 cents per pound for fresh bananas, relatively unchanged from the previous 2 years. Meanwhile, domestic per capita consumption of fresh bananas in 2003 declined by 2 percent, to 26.1 pounds.

U.S. banana imports during the first 3 months of 2004 were down 2 percent from the same period a year ago. The decrease reflects lower imports from major suppliers to the United States, specifically Ecuador, Costa Rica, and Colombia. Imports dropped below a year ago in March, but retail prices continued to

Figure 4
Banana production in Hawaii and season-average grower price



Source: National Agricultural Statistics Service, USDA.

average lower as they did in January and February when imports were actually running ahead of a year ago, possibly due to weak market demand. Low prices continued in April and may likely remain the case into the next few months as growing supplies of other summer fruit enter the market.

Hawaii's banana production is very small relative to imports. In 2003, the domestic crop grew to 22.5 million pounds, 13 percent larger than the prior year but smaller than in 1999 to 2001. There were 20 more acres harvested last year than in 2002, and average yields were 11 percent higher. The increase in production resulted in lower grower prices, averaging \$0.42 per pound (fig. 4). While 3 percent lower than

the previous year, the 2003 average grower price for all banana varieties was the second highest on record, following the 2002 average of \$0.43 per pound. The growth in production more than compensated for the decline in grower returns, raising the value of the 2003 crop to \$9.2 million, up 7 percent from the previous year. Banana production in 2004 continues to grow, with output in January up 13 percent from the same time a year ago. All the growth in production reflects output expansion of the dominant Cavendish variety. Cavendish production increased 23 percent while production of apple bananas declined almost 10 percent. Prices for both varieties are holding up strong.

Continuing Higher Demand Drives Up Papaya Imports

Since the mid-1990s, fresh papaya imports have become increasingly crucial to fulfill U.S. consumer demand. This greater role came about as domestic growers in Hawaii faced growing problems with papaya ring spot virus that has resulted in below average Hawaiian production in the mid- to late-1990s. The domestic market has remained heavily reliant on imports even with the introduction of papaya ring spot virus-resistant varieties in the late 1990s. The quantity of imported papayas has increased sharply in the last decade from 11.5 million pounds in 1990 to over 100 million pounds annually since 1996. Imports' share of domestic supplies have increased from less than 10 percent prior to the mid-1990s to more than 50 percent in the years that followed, reaching a high of 84 percent in 2003.

Table 6--U.S. imports of fresh bananas, excluding plantains, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Million pounds									
Costa Rica	2,154	2,112	2,138	2,103	2,405	3,536	3,001	2,386	1,987	2,146
Ecuador	1,733	2,054	1,871	1,925	2,381	2,578	2,152	2,087	2,253	2,143
Guatemala	970	1,022	1,114	1,020	1,443	1,107	1,518	1,834	2,040	2,052
Colombia	1,388	969	841	1,028	915	1,336	1,329	1,045	1,117	1,035
Honduras	1,096	1,285	1,410	1,243	831	184	608	841	990	948
Nicaragua	0	1	42	48	129	88	4	62	65	92
Other countries	803	635	910	950	523	633	274	212	161	118
World	8,144	8,077	8,327	8,317	8,627	9,461	8,886	8,467	8,613	8,533

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

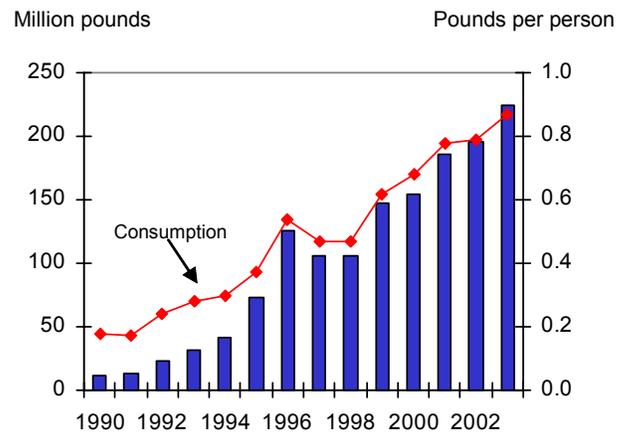
With continued increasing domestic demand, papaya imports rose for the fifth consecutive year in 2003 (table 7). Record-high imports raised fresh papaya consumption to 0.87 pound per person in 2003, 11 percent above 2002 and the highest so far (fig. 5). Total imports increased to 224.6 million pounds in 2003, up 15 percent from the year before and increasing by more than five fold from 1994. Imports from the top three foreign suppliers of fresh papayas to the United States--Mexico, Belize, and Brazil--were each at an all-time high. Mexican shipments reached 164.5 million pounds, nearly three-quarters of all the imports.

The growth in imports during 2003 more than compensated for a 9-percent reduction in harvested acreage that brought Hawaii's papaya production that year to 43.0 million pounds, down 6 percent from the prior year. Fresh use accounted for 97 percent of all utilized production in 2003 and amounted to 41.5 million pounds, 1.2 million pounds less than in 2002. Processed utilization declined to a record low of 1.5 million pounds, down 53 percent. The decline in production helped raise grower prices for fresh-market papayas to 32.4 cents per pound in 2003, 17 percent higher than the previous year. Grower prices for processing papayas, however, remained unchanged at 3.0 cents per pound, the same returns growers have been receiving over the last 10 years.

Hawaiian production continues to decline in 2004, resulting in slightly higher prices. During the first 4 months of 2004, harvested acreage was 20 percent smaller, and Hawaiian production for the fresh market was 23 percent less than the same period a year ago. Abundant rainfall in March increased humidity levels, providing a conducive environment for diseases such as black spot and *Phytophthora* to thrive. These diseases cause damage to papaya leaves and roots and eventually reduces output over time.

Figure 5

Fresh papayas: Imports and domestic consumption



Source: Bureau of the Census, U.S. Department of Commerce and Economic Research Service, U.S. Department of Agriculture.

Grower prices for fresh papaya averaged 36.3 cents per pound from January through April, about 11 percent higher than the same time a year ago. Meanwhile, more papayas have been imported from foreign sources. U.S. papaya imports from January through March were already 29 percent higher than the same period in 2003, reflecting strong shipments from Mexico, Belize, Jamaica, and Thailand. More recent imports, based on weekly shipment data from the Agricultural Marketing Service, continue at much higher levels than a year ago. F.o.b. shipping-point prices for Mexican Maradol variety papayas as of May 11 ranged from \$11.00 to \$13.00 per 35-40 pound carton, compared with \$15.00 per carton the same time last year. Continued increased imports along the year will mean another record-breaking year for U.S. papaya consumption in 2004.

Table 7--U.S. imports of fresh papayas, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1,000 pounds										
Mexico	32,996	67,156	110,661	88,233	87,438	123,307	121,527	151,879	147,632	164,494
Belize	3,962	1,438	5,347	7,971	9,397	8,485	12,269	12,868	24,297	34,662
Brazil	0	0	0	19	1,102	6,229	10,301	11,220	12,820	15,807
Jamaica	2,588	3,462	5,244	4,582	4,562	4,194	3,411	3,480	4,189	3,294
Dominican Republic	783	1,251	2,517	2,122	1,152	2,608	5,579	6,342	5,323	5,470
Other countries	847	82	2,326	3,338	1,967	1,738	986	371	907	852
World	41,176	73,388	126,095	106,264	105,620	146,561	154,073	186,160	195,166	224,580

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

Mango Supplies Surpass Last Year

Domestic mango supplies, which are almost entirely based on imports, surpassed the same period last year in January through March. Cumulative imports for this period were up 12 percent, reflecting significant increases in shipments from top suppliers, specifically Peru, Guatemala, and Brazil.

Entering the U.S. market beginning in February, cumulative imports from Mexico, the United States' largest supplier of fresh mangoes, were down fractionally. Mexico's crop in the Chiapas growing region matured earlier than last year due to ideal growing weather. However, much of the remaining crop from other growing regions in Mexico is delayed and has resulted in slightly lower shipments through April. Although increasing seasonally, Mexican mango shipments to the United States, based on data from the U.S. Department of Agriculture's Agricultural Marketing Service, have fallen below last year by 15 percent in April. Mango prices, however, also averaged slightly lower. F.o.b shipping-point prices for Mexican Haden and Tommy Atkins mangoes crossing through Texas during the first 2 weeks of April ranged from \$4.00 to \$4.50 per carton layer (for size 8s and 9s), compared with \$5.00 to \$6.50 the same time last year. Along with seasonal declines, the year-to-year differences in prices as of early May were much smaller, with prices ranging from \$2.75 to \$4.00 per carton layer, compared with \$2.50 to \$4.00 the same time a year ago. If higher imports continue throughout the year and prices remain lower, domestic consumption will likely break

last year's record of 1.97 pounds per person, increasing for the 12th consecutive year.

U.S. fresh mango imports in 2003 were up 6 percent from the previous record of 580.6 million pounds in 2002, reaching 613.8 million pounds and continuing the trend of rising imports during the previous 10 years (table 8). Mexico accounted for 62 percent of 2003 imports, totaling a record 382.0 million pounds, 6 percent above the year before. Combined shipments from Brazil, Ecuador, Peru, Guatemala, Haiti, Nicaragua, and Costa Rica made up 38 percent of total U.S. imports in 2003, with mostly increased shipments except from Guatemala and Haiti.

Pineapple Imports Continue To Increase in 2004

Total U.S. pineapple imports increased 11 percent in 2003 from the previous year, with increases in shipments of all pineapple products: fresh and frozen, up 17 percent; pineapple juice, up 10 percent; and canned pineapple, up 9 percent (tables 9-11). Representing the bulk of domestic pineapple supplies, this increase in imports meant that more supplies were available to fulfill domestic demand. The estimated total pineapple consumption in the United States increased 8 percent in 2003 from a year ago, to an estimated 14.1 pounds per person, fresh-weight equivalent. Fresh pineapple use increased 15 percent to a record-high, estimated at 4.4 pounds per person. Pineapple juice and canned pineapple use increased 10 percent and 9 percent, respectively, to an estimated 5.0 pounds and 4.7 pounds per person, fresh-weight equivalent.

Table 8--U.S. imports of fresh mangoes, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	1,000 pounds									
Mexico	238,948	252,870	306,842	348,045	356,240	360,105	366,856	344,744	361,485	381,953
Brazil	4,859	6,457	10,773	11,913	15,540	28,030	37,443	59,385	79,454	86,054
Ecuador	1,933	3,285	8,569	1,936	11,596	22,910	38,922	42,037	47,311	60,177
Peru	7,602	8,447	9,896	7,378	8,007	25,090	27,111	34,288	45,227	45,375
Guatemala	5,239	12,823	15,175	14,921	22,555	21,051	18,262	22,739	21,053	18,207
Haiti	6,044	21,937	18,132	22,721	15,748	20,159	22,397	12,957	18,456	13,368
Nicaragua	395	1,650	2,081	1,708	3,236	1,495	3,409	3,870	3,150	4,813
Costa Rica	33	41	802	1,263	891	2,393	3,223	4,384	2,940	3,046
Other countries	6,320	4,851	5,508	1,323	1,365	1,447	682	165	1,506	822
World	271,373	312,361	377,777	411,207	435,177	482,681	518,305	524,569	580,582	613,815

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

Table 9--U.S. imports of fresh and frozen pineapples, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1,000 pounds										
Costa Rica	185,352	172,995	192,305	344,342	446,029	504,018	574,663	581,531	765,120	883,096
Ecuador	289	3,241	8,939	9,281	5,268	11,785	14,341	18,788	40,405	65,713
Honduras	63,977	73,375	60,126	54,460	59,414	73,976	72,570	44,690	45,478	54,402
Mexico	13,148	13,599	17,849	35,423	41,009	33,530	38,505	54,180	39,799	33,421
Thailand	6,782	4,000	6,179	5,299	6,505	4,722	6,255	8,021	6,845	9,255
Guatemala	748	1,202	877	333	1,018	3,846	1,681	5,581	1,617	6,471
Panama	298	92	5,627	564	299	--	275	561	930	1,062
Colombia	11	7	39	97	77	104	98	137	80	1,007
Dominican Republic	23,396	7,488	9,106	1,106	331	64	1,568	1,135	327	696
Other countries	608	2,777	4,050	4,943	3,543	650	1,335	1,027	2,044	1,552
World	294,609	278,775	305,098	455,849	563,493	632,697	711,292	715,651	902,645	1,056,675

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

Table 10--U.S. imports of pineapple juice, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1,000 single-strength gallons										
Philippines	36,796	43,718	36,806	37,673	33,963	33,459	34,971	39,319	38,754	48,821
Thailand	27,121	30,440	31,131	23,045	17,203	29,573	22,522	21,454	20,213	19,518
Indonesia	3,423	3,951	6,771	8,888	5,244	9,795	6,260	6,924	10,224	8,640
Costa Rica	1,874	1,780	1,704	2,916	1,598	3,073	2,124	1,953	3,716	2,897
Mexico	94	523	640	732	2,093	509	349	235	627	1,279
Brazil	52	--	11	--	43	904	298	21	657	739
Vietnam	--	--	--	--	--	--	--	--	76	275
Honduras	112	48	970	472	114	78	66	57	241	193
China	--	52	--	21	121	80	22	180	189	120
Republic of South Africa	372	315	475	310	286	442	233	42	63	95
Other countries	3,370	4,191	5,337	2,025	836	310	636	513	632	556
World	73,215	85,019	83,846	76,082	61,502	78,224	67,482	70,698	75,391	83,133

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

Table 11--U.S. imports of canned pineapples, by country, 1994-2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1,000 pounds										
Philippines	284,619	274,709	276,574	277,709	247,345	274,052	306,735	296,357	287,462	304,298
Thailand	339,949	219,508	172,067	167,347	109,955	257,272	183,580	168,261	183,595	222,187
Indonesia	53,819	61,580	120,862	145,840	108,676	144,861	146,360	122,026	135,323	117,412
China	666	1,051	3,907	5,011	22,354	29,904	17,098	17,888	31,459	54,137
Malaysia	11,741	18,340	18,044	20,915	15,084	15,077	9,556	10,000	11,322	17,877
Other countries	49,346	79,790	68,387	44,382	44,985	37,258	41,046	33,604	35,297	26,845
World	740,139	654,977	659,840	661,204	548,399	758,424	704,376	648,136	684,457	742,755

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

Hawaiian pineapple production declined for the third consecutive year in 2003, totaling 630 million pounds, 2 percent less than in 2002. Fresh-market production was up 13 percent while processing disposition was down 10 percent as the industry continued to shift production to the higher valued fresh market due to poor economic conditions in the processing sector. Although processing production has declined significantly from the 1980s, the resulting higher nominal prices growers received for processing pineapples in recent years have not risen as much as those received for the fresh market. The difference in price between what growers received for fresh-market and processing pineapples grew from around \$299 per ton in the early 1980s to around \$473 per ton in the most recent 5 years.

U.S. fresh and frozen pineapple imports were record-high in 2003, totaling over 1.0 million pounds. Key suppliers to the United States shipped larger quantities last season, except for Mexico. Imports of juice and canned pineapples from the top supplier, the Philippines, were at an all-time high, compensating for the decline in shipments from other major suppliers. The Philippines provided 59 percent of total pineapple juice imports and 41 percent of all canned pineapple imports in 2003. Supplies of imported pineapple and pineapple products continue larger in 2004. Cumulative imports from January through March were up 10 percent for pineapple juice, up 3 percent for canned pineapples, and up 1 percent for fresh and frozen pineapples.

Almond Growers Expecting Another Bumper Crop

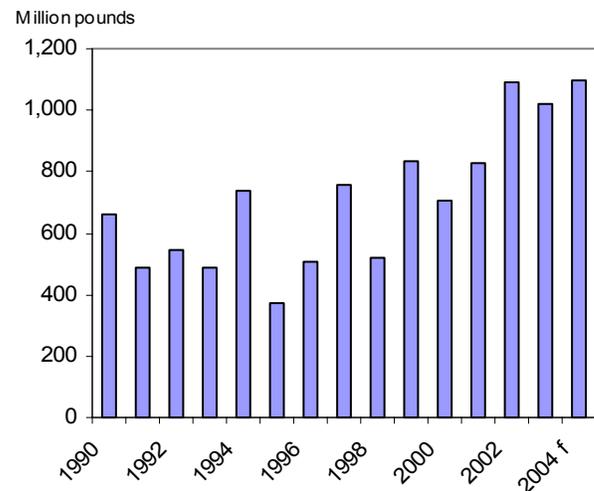
California's almond growers are expecting a record large crop for the 2003/04 season. The first National Agricultural Statistics Service (NASS) estimates for this season were released in May. The forecast put production at 1.1 billion pounds, 6 percent higher than last season and 1 percent higher than two seasons ago, when the last record was set.

Several factors contributed to the high estimate. This past winter the trees produced a very intense bloom, with overlapping among varieties. The blooms were strong and stayed on the trees longer than usual, allowing for better pollination. Heavy rains and strong winds in February were expected to affect bee activity, which is necessary for pollination. The longer set this season, however, gave the bees more opportunities to pollinate, increasing expected yields

from last season. Yields this season are expected to reach 2,000 pounds per acre, tying with the last record yield in 2002. Added to the high yield is the forecast for bearing acreage to reach 550,000; 5,000 more than in 2002.

Very warm weather in early March has advanced crop development, and this season's crop is estimated to be 2 weeks ahead of normal. The leading variety remains the Nonpareil. The industry reports that Nonpareil production may be a little lower than last year, but higher production from other varieties, such as Carmel, Butte, Monterey, and Texas/Mission, among others, are expected to offset the Nonpareil decline.

Figure 6
U.S. almond production, 1990-2004f



Source: National Agricultural Statistics Service, USDA.

Fruit and Tree Nut Trade Outlook

Exports Up for Most Citrus Fruit but Down for Leading Noncitrus Fruit

U.S. exports of most citrus fruit this season through March 2004 are up from the same time last season (table 12). Meanwhile, exports of leading noncitrus fruit, specifically apples and grapes, are falling behind. U.S. apple and grape shipments to international markets are limited due to reduced domestic production and higher prices. Total apple production in the United States is up for the season but the apple crop in Washington, which supplies the bulk of fresh-market apples, is smaller than a year ago. Apple shipments to leading markets, including

Canada, Mexico, and Hong Kong, were reduced. The 2004 applied tariff on U.S. apple exports to Mexico is zero. However, U.S. apple shipments to that country continue to be restricted by the antidumping duties for Red and Golden Delicious apples that remain at 46.58 percent.

The almond industry is benefiting from strong export demand in 2003/04. The quantity of almonds exported through March 2004 is up 5 percent even though production for the season was 5 percent lower. Forecast larger production this year raises the potential for another season of increased exports.

Table 12--U.S. exports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through March)		Year-to-date change
		2003	2004	
		--- 1,000 pounds ---		Percent
Fresh-market:				
Oranges	November-October	745,491	878,754	17.9
Grapefruit	September-August	672,456	760,177	13.0
Lemons	August-July	138,358	154,883	11.9
Apples	August-July	830,315	758,204	-8.7
Grapes	May-April	695,343	619,311	-10.9
Pears	July-June	298,671	317,059	6.2
Peaches (including nectarines)	January-December	6,952	3,302	-52.5
Strawberries	January-December	40,384	41,015	1.6
Sweet cherries	January-December	186	342	84.1
		--- 1,000 gallons ---		
Processed:				
Orange juice, frozen concentrate	October-September	18,351	32,035	74.6
Orange juice, not-from-concentrate	October-September	27,544	29,453	6.9
Grapefruit juice	October-September	17,013	16,147	-5.1
Apple juice and cider	August-July	3,722	3,677	-1.2
Wine	January-December	22,752	21,733	-4.5
		--- 1,000 pounds ---		
Raisins	August-July	172,766	181,707	5.2
Canned pears	August-July	8,196	6,247	-23.8
Canned peaches	July-June	36,919	83,229	125.4
Frozen strawberries	January-December	4,181	2,365	-43.4
		--- 1,000 pounds ---		
Tree nuts:				
Almonds (shelled basis)	August-July	554,129	583,395	5.3
Walnuts (shelled basis)	August-July	137,844	97,075	-29.6
Pecans (shelled basis)	September-August	16,521	16,110	-2.5
Pistachios (shelled basis)	September-August	19,208	18,248	-5.0

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

Imports Down for Many Fresh Fruit

Despite reduced domestic production, specifically for the fresh-market, imports of oranges, lemons, and apples are down this season through March 2004, compared with the same time last season. These declines may be influenced by the weakening of the U.S. dollar which has made foreign products more expensive for the United States. U.S. lime and pear imports are also lagging (table 13). Increased domestic production has also contributed to lower pear imports this season. Shipments are down from all the major suppliers of fresh pears to the United States, including Argentina, South Korea, China, and New Zealand.

U.S. banana imports are down while imports of mangoes, papayas, and pineapples are up. Lower

shipments from Guatemala, Ecuador, Costa Rica, Colombia, Mexico, and Peru in March pushed season-to-date banana imports below a year ago.

Higher grape imports in 2003/04 may be attributed to sharply increased shipments from Mexico earlier in the season and to a 5-percent rise in shipments from Chile, the United States' largest international supplier of fresh grapes. Imports from Chile enter the U.S. market during the winter, coinciding with the off-season for domestic production. Chile supplied 71 percent of the import volume thus far, while Mexico made up 28 percent. Other smaller suppliers to the United States shipped fewer grapes in 2003/04, except for Brazil which notably shipped 45 percent more.

Table 13--U.S. imports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through March)		Year-to-date change
		2003	2004	
		--- 1,000 pounds ---		Percent
Fresh-market:				
Oranges	November-October	14,832	11,972	-19.3
Tangerines (including clementines)	October-September	162,116	168,862	4.2
Lemons	August-July	36,921	30,668	-16.9
Limes	September-August	318,121	309,986	-2.6
Apples	August-July	134,881	134,547	-0.2
Grapes	May-April	994,134	1,105,884	11.2
Pears	July-June	135,166	80,832	-40.2
Peaches (including nectarines)	January-December	120,102	136,207	13.4
Bananas	January-December	2,142,022	2,098,074	-2.1
Mangoes	January-December	86,619	97,233	12.3
		--- 1,000 gallons ---		
Processed:				
Orange juice, frozen concentrate	October-September	141,996	101,281	-28.7
Apple juice and cider	August-July	233,656	272,629	16.7
Wine	January-December	36,844	36,204	-1.7
		--- 1,000 pounds ---		
Canned pears	August-July	20,756	28,627	37.9
Canned peaches (including nectarines)	July-June	83,084	56,347	-32.2
Canned pineapple	January-December	175,051	180,140	2.9
Frozen strawberries	January-December	49,465	42,737	-13.6
		--- 1,000 pounds ---		
Tree nuts:				
Brazil nuts (shelled basis)	January-December	2,097	3,302	57.4
Cashews (shelled basis)	January-December	55,743	63,075	13.2
Pine nuts (shelled basis)	January-December	1,745	3,452	97.8
Pecans (shelled basis)	September-August	30,294	44,450	46.7

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

Commodity Highlight

Lemon Production and Consumption

Lemons are a member of the citrus fruit family, along with oranges, grapefruit, and limes. Unlike oranges and grapefruit, however, lemons are rarely consumed alone. The high acid content in lemons makes them unpalatable for most people to consume the same as oranges or grapefruit. Therefore, most lemons are consumed as an ingredient in cooking, as garnish, and as juice in lemonade, carbonated beverages, and other drinks. The lemon peel is often candied, or used as an ingredient in cooking and baking. The oil from the peel is used for its essence to add to beverages and candies. The oil is also very popular for industrial uses, such as furniture polish, perfumes, and as a bleaching agent.

Lemon production in the United States is concentrated in California and Arizona. While it is believed that lemons were first introduced into the United States in Florida, freezes in the 1800s destroyed the trees, and commercial lemon production in Florida vanished. California is now the leading producer in the United States with an estimated 49,000 bearing acres in 2002 (fig. 7). As a subtropical fruit tree, lemon production is limited to areas where temperatures do not drop much below 30⁰F. Temperatures just below 30⁰F can kill the young fruit and blossom. Lower temperatures can kill mature fruit and damage the tree itself. As a result, California's lemon production is concentrated in the southern parts of the State, in Ventura, Riverside, Kern, Tulare, and San Diego counties. Arizona's

lemon production is much smaller than California's. In Arizona, lemons are produced on 14,000 acres, mostly in Yuma County.

United States is the World's Fifth Biggest Lemon Producer

The United States ranks fifth in the world in lemon production behind India, Argentina, Spain, and Iran (fig. 8). Whereas, U.S. growers produced an average of 879,000 short tons of lemons annually during 2000-02, India produced an average of 1.5 million tons, Argentina 1.3 million tons, and Iran and Spain each produced 1 million tons.

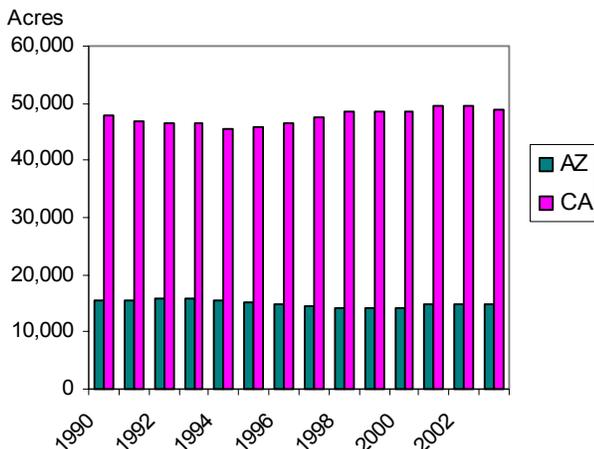
Lemon harvested acreage has grown steadily in many parts of the world since 1990, but has remained relatively unchanged in the United States and Spain. Among the top 10 world producers, harvested acreage has increased most rapidly in Argentina, India, Iran and China. Most of these countries have lower average yields than the United States and therefore require more acreage to meet growing domestic needs. Argentina, however, is as efficient as the United States and a large share of its production is destined for export markets.

U.S. Fresh Lemons Are Available To Consumers Year Round

The lemon season runs from August through July. Harvesting starts in Arizona and the desert area of California and as the season progresses, it moves into

Figure 7

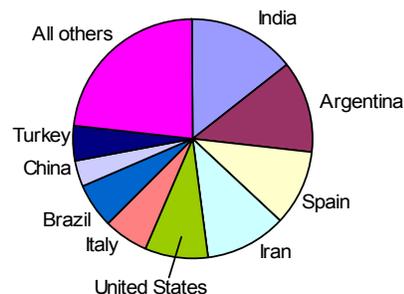
Lemon bearing acreage by State, 1990-2003



Source: National Agricultural Statistics Service, USDA.

Figure 8

World lemon production, by leading countries, 2000-02 average



Source: Food and Agriculture Organization, United Nations.

Ventura, Kern, Tulare and other California counties. Lemons can be picked from these latter counties at the end of the harvest season and stored throughout the summer. The summer is very important to lemon growers because demand is the highest.

Imports Strongest During the Summer Months

During the summer months, the quantity of lemon imports peaks, partially due to the strong seasonal demand and partially due to the decline in the quantity of the domestic crop available as harvesting of a new crop just gets underway in Arizona and California. The share of imports as a proportion of domestic consumption has increased since the 1970s and 1980s, when there were virtually no fresh lemon imports, to recent years when they account for about 9 percent of consumption. Imports still, however, make up only a small share of lemon consumption relative to other fresh fruit.

During the summer and early fall months (July through October) Chile, Spain, and the Bahamas are the major import suppliers to the U.S. market. Spain's presence in the U.S. market has grown over time, expanding from a seasonal presence in the early 1990s to a year-round supplier since 1997/98.

During the summer of 2000, the first shipments from Argentina were permitted in the U.S. market. Argentina quickly took over as the top supplier from outside the United States. Argentine imports again arrived in the summer of 2001, and imports reached their highest July and August levels on record. Shipments lasted through September. After this strong appearance of Argentine lemons competing with domestic product during the peak demand season, U.S. citrus growers brought legal action against USDA's Animal and Plant Health Inspection Service (APHIS) to again ban Argentine lemons based on phytosanitary concerns. The lawsuit questioned the validity of the science behind the APHIS study used as a basis to allow Argentine citrus into the United States. Since this action was taken, no Argentine lemons have been allowed entry.

Sporadically over the 1990s and more steadily in recent years, Mexico, along with Spain, plays a major role in providing lemon imports during the early winter months. Interestingly, Mexicans do not consume lemons, preferring like most Central American and Caribbean nations, to consume limes.

Mexico's lemon production is solely intended for export to the United States and Europe either as fresh product or processed.

Exports Play Less Important Role in Lemon Markets in Recent Years

Export markets have been playing a lesser role in overall fresh lemon sales in the late 1990s and 2000s than in the 1970s to mid-1980s. In 2001-02, about 21 percent of the crop was sold in export markets compared with over 50 percent in the mid-1970s. Over this period, production grew about 39 percent, indicating domestic demand rose for fresh lemons, replacing the quantity available for export.

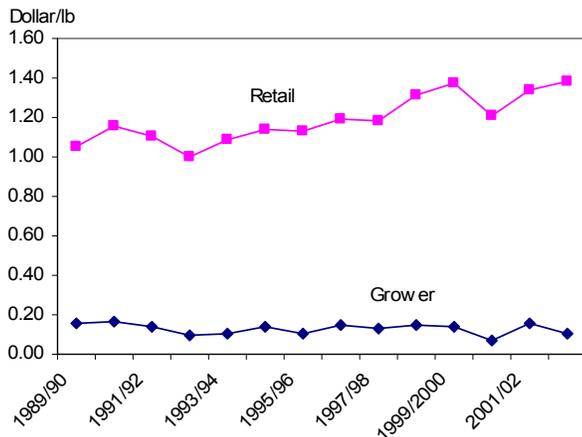
Japan is the major export market, however, their shipments have been declining in recent years. Shipments to Japan have accounted for about two-thirds of total exports since the mid-1990s. In recent years, however, the quantity shipped has been declining. At the same time, other markets are growing in importance. The Canada market, while only about half the size of Japan's, has increased steadily over the past decade. The third largest market, Hong Kong, has been losing market share, as shipments have gone directly to Mainland China. China's market has been growing rapidly since it opened to U.S. citrus during the 1999/2000 season. During the 2002/03 season, China ranked sixth in shipments. Rounding out the top five destinations, South Korea and Australia both are growing markets.

Lemon Marketing Centralized

Agricultural cooperatives play a very strong role in the U.S. lemon industry. Many grower cooperatives and private packinghouses market their fruit through Sunkist Cooperative. Sunkist does not own any groves or packinghouses, but is affiliated with the majority of them to market the fruit. Sunkist was created to help growers best market their fruit to achieve optimal prices. By using a cooperative marketing system, the industry is able to control supply movement to obtain strong prices and to ensure there will be sufficient stock available for the high-demand summer months.

Figure 9

Annual average retail and grower prices, for all lemons, 1989/90-2002/03



Sources: National Agricultural Statistics Service, USDA and Bureau of Labor Statistics, U.S. Dept. of Labor.

Grower Prices Stable Over Time as Retail Prices Rise

Grower prices for fresh lemons averaged about 13 cents a pound from 1998/99 through 2002/03, the same as from 1990/91 through 1994/95 (fig. 9). The industry has been able to maintain prices even as production increased over this period. The industry was able to achieve this partially due to strong demand and partially with the use of the processing sector as a residual market to offset any increases in overall supply (fig. 10).

While grower prices have stayed unchanged throughout the 1990s and early 2000s, retail prices have climbed. Retail prices averaged \$1.32 a pound during 1998/99 through 2002/03, up from an average of \$1.10 during 1990/91 through 1994/95. As a result of the growth in retail prices, the retailers' portion of the price consumers pay for lemons increased from 79 percent during the early nineties to 82 percent during 1998/99 to 2002/03 (table 14).

Lemon Consumption on the Rise

U.S. lemon consumption has been growing since the early 1980s, mostly due to the growth in demand for fresh lemons. Per capita consumption of fresh lemons has increased from an average of 2.04 pounds in the 1970s to 2.28 pounds in the 1980s to 2.64 pounds in the 1990s. During the first 4 years of the 2000s, per capita lemon consumption has jumped to 3.23 pounds. The initial estimate for 2003/04 is for fresh

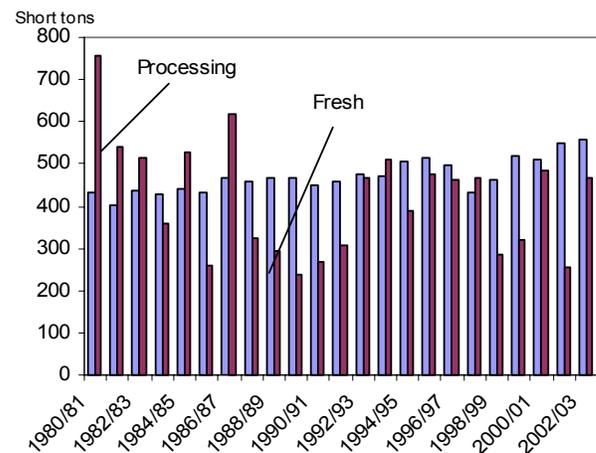
lemon consumption to average 3.31 pounds per person, marginally lower than the previous season.

Among all major fresh fruit eaten in the United States, lemon consumption ranked eighth, with per capita consumption, on a per-pound basis, a fraction of the very popular fruit, such as bananas, apples, and oranges. On the other hand, Americans consumed more fresh lemons than many other fruit, despite the fact that lemons are not usually directly consumed. In 2002, fresh lemon consumption exceeded tangerines and tangelos (including clementines), limes, apricots, avocados, blueberries, cherries, mangoes, pears, and plums and prunes, among others.

Lemon juice consumption has remained relatively stable over the last several decades, averaging 0.16 gallon per person during 1998/99 to 2002/03. In 2003/04, lemon juice consumption is estimated to average 0.25 gallon per person, mostly due to expected high imports.

Figure 10

Lemon production, by end-use, 1980/81-2002/03



Source: National Agricultural Statistics Service, USDA.

Table 14--Fresh lemons: U.S. monthly retail prices, marketing spread, and grower prices, 1989/90-2002/03 1/

Year 2/	Marketing spread			Grower price	
	Retail value 3/ Dollars/lb	Actual	Portion of retail Percent	Actual Dollars/lb	Portion of retail Percent
1989/90	0.96	0.72	75.30	0.24	23.71
1990/91	1.03	0.78	75.17	0.26	23.84
1991/92	1.18	0.95	80.98	0.22	18.26
1992/93	0.97	0.79	81.52	0.18	17.74
1993/94	1.04	0.83	79.77	0.21	19.42
1994/95	1.06	0.83	78.38	0.23	20.75
1995/96	1.09	0.88	80.52	0.21	18.70
1996/97	1.07	0.83	77.86	0.24	21.25
1997/98	1.20	0.97	80.74	0.23	18.49
1998/99	1.15	0.91	78.87	0.24	20.28
1999/00	1.32	1.08	82.01	0.24	17.27
2000/01	1.16	0.99	85.12	0.17	14.28
2001/02	1.28	1.04	80.69	0.25	18.54
2002/03	1.33	1.12	84.38	0.21	15.00

1/ Prices are simple 12-month averages. 2/ Marketing year is August of first year through July of second year shown.

3/ Adjusted to allow 4 percent for waste and spoilage incurred during marketing.

Sources: Bureau of Labor Statistics, U.S. Dept. of Labor; National Agricultural Statistics Service and Economic Research Service, USDA.

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