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## **Briefing Rooms**

Fruit & Tree Nuts

The next release is July 26, 2007.

Approved by the World Agricultural Outlook Board.



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## **Fruit and Tree Nuts Outlook**

**Agnes Perez and Susan Pollack** 

# Combined Strawberry Production In California and Florida Down in 2007, California Stone Fruit Crops Larger

The grower price index for fruit and tree nuts in April reached a record high for the month, boosted by higher prices for most major citrus fruit except grapefruit, and continued strong prices for fresh apples, pears, and strawberries.

USDA's National Agricultural Statistics Service (NASS) released its first 2007 forecast for strawberry production in California and Florida. Combined production for these two States in 2007 is forecast down 2 percent from a year ago, totaling 2.3 billion pounds. Production in California is forecast to decline 3 percent, to 2.1 billion pounds. Florida's winter crop was estimated to increase 10 percent, reaching a record 225.0 million pounds.

NASS forecast California's 2007 peach crop at 1.68 billion pounds, 18 percent bigger than last year. Pre-season estimates from the California Tree Fruit Agreement (CTFA) indicate nectarine production will be up 12 percent and plum production up 1 percent. Heavy supplies of California peaches and nectarines so far this season have driven peach and nectarine prices lower than a year ago.

While things are looking good for the 2007 California peach crop, frigid temperatures across the Southeast over the Easter weekend in early April damaged peach crops in South Carolina and Georgia. The freezing temperatures also damaged blueberry crops in Georgia and North Carolina.

Fresh and processing orange grower prices averaged among the highest in recent years. The initial impact of the mid-January freeze in California caused fresh-market prices to nearly double between January and February. Due to the larger grapefruit crop this season, grower prices for fresh grapefruit from October through April declined by an average of 22 percent from the same time last season.

The first NASS forecast for the 2007 California almond crop was at 1.31 billion pounds (shelled basis), 17 percent bigger than in 2006 and setting another record. With the freeze and additional cold weather during the winter months, the almond trees had sufficient chill hours to help set the blooms. Growers were also fortunate that they had enough bees for pollination and optimal weather during pollination time.

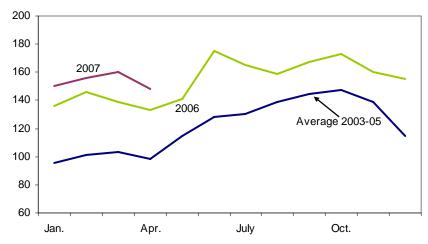
## April Grower Prices Held Strong for Most Fresh Fruit

The April index of prices received by growers of fruit and tree nuts declined 8 percent from the previous month to 148 (1990-92=100). Although the index has weakened from the previous month, it was the highest April index on record. The index was up 11 percent from the April 2006 index (fig. 1), boosted by higher prices for most major citrus fruit except grapefruit, and continued strong prices for fresh apples, pears, and strawberries (table 1). The April index dropped from the March index as price declines for fresh strawberries, processing oranges, and all grapefruit more than offset the price increases reported for fresh pears and oranges as well as for all lemons and tangerines.

Supply shortages caused by the mid-January freeze in California have contributed to the higher prices for fresh oranges, strawberries, and lemons so far this year. Moreover, the smaller orange crop in Florida has resulted in higher prices for processing oranges compared with a year ago, adding to the overall boost in orange prices. Processing orange prices, however, have declined in April from the previous month as processing plants began to close in Florida, weakening demand for the remaining Valencia crop. With the 2006/07 California Valencia orange crop also down significantly from the previous season, reduced supplies will likely keep fresh orange prices strong this summer. Likewise, as the demand for California lemons increases with the warmer weather approaching, a boost in lemon prices could occur in the coming months.

Strawberry prices normally weaken in April as the California season gets underway. In April this year, seasonal price declines were compounded by plenty of California strawberries that had remained in transport coolers out west because heavy rains across the eastern United States around the Easter weekend hindered the transport of these berries to these markets. In recent weeks, however, the flow of California supplies across the United States has been back on track, demand remains strong, and strawberry prices continue to hold above last year through mid-May.

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



Source: USDA, National Agricultural Statistics Service, Agricultural Prices.

Table 1Monthly fruit prices received by growers, l	s. United	States
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·	2006		2007		2006-07	Change
Commodity	March	April	March	April	March	April
		Dollars	per box		Pei	rcent
Citrus fruit: 1/						
Grapefruit, all	8.18	8.12	3.01	2.87	-63.2	-64.7
Grapefruit, fresh	12.76	12.15	7.91	7.65	-38.0	-37.0
Lemons, all	9.44	13.50	28.06	27.07	197.2	100.5
Lemons, fresh	16.00	23.82	37.71	36.71	135.7	54.1
Oranges, all	5.78	6.44	11.86	10.21	105.2	58.5
Oranges, fresh	8.37	10.53	22.07	22.11	163.7	110.0
		Dollars	per pound			
Noncitrus fruit:						
Apples, fresh 2/	0.198	0.193	0.284	0.284	43.4	47.2
Grapes, fresh 2/						
Peaches, fresh 2/						
Pears, fresh 2/	0.170	0.178	0.277	0.308	62.9	73.0
Strawberries, fresh	0.688	0.611	0.892	0.636	29.7	4.1

<sup>1/</sup> Equivalent on-tree price.

Brisk movement of fresh apples and pears so far this year, aided in part by supply setbacks of other fruit due to weather problems this winter and spring, has led to smaller cold storage inventories of apples and pears than a year ago, boosting prices for these fruit in the fresh market. As end-of-season supplies get tighter, apple and pear prices will likely continue to strengthen going into the summer months.

## Retail Fresh Fruit Prices Higher Than in April 2006

The Consumer Price Index (CPI) for fresh fruit in April 2007 was 324.3 (1982-84=100), compared with 305.5 in April 2006 (fig. 2). While down less than 1 percent from the March CPI of 326.2, the CPI in April 2007 was the highest reported for any April since 1989. A 6-percent increase to the April CPI may be attributed mostly to the sharply higher prices consumers paid for Navel oranges and lemons and to the higher retail prices for Red Delicious apples, bananas, Anjou pears, Thompson seedless grapes, and strawberries. Of the retail prices reported by the U.S. Department of Labor's Bureau of Labor Statistics, only grapefruit prices were reported lower in April compared to a year ago. The price increase for Navel oranges alone was more than enough to offset the price decline reported for grapefruit. Retail prices for most other variety of apples also were higher in April as reflected in the CPI for apples which in April was reported at 294.7 (1982-84=100), compared with 257.0 in April 2006.

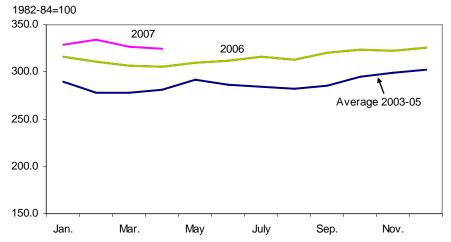
Although strong relative to a year ago, retail prices for Navel oranges, lemons, grapefruit, strawberries, and Thompson seedless grapes weakened in April from the previous month, driving down the April CPI for fresh fruit. Meanwhile, retail banana prices strengthened in April, along with retail prices for apples and pears. With the 2006/07 apple and pear marketing season almost ending and supplies of summer fruit yet to get underway, lighter supplies of apples and pears along with strong market demand have driven up their prices.

<sup>2/</sup> 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: USDA, National Agricultural Statistics Service, Agricultural Prices.

Figure 2 **Consumer Price Index for fresh fruit** 



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, (http://www.bls.gov/data/home.htm).

Table 2--U.S. monthly retail prices, selected fruit, 2006-07

	_	2006		2007		2006-07	Change	
Commodity	Unit	March	April	March	April	March	April	
			lars	Dolla	ars	Percent		
Fresh:								
Valencia oranges	Lb.							
Navel oranges	Lb.	0.888	0.876	1.301	1.243	46.5	41.9	
Grapefruit	Lb.	1.052	1.029	0.920	0.888	-12.5	-13.7	
Lemons	Lb.	1.419	1.384	1.845	1.791	30.0	29.4	
Red Delicious apples	Lb.	0.935	0.958	1.068	1.104	14.2	15.2	
Bananas	Lb.	0.508	0.508	0.510	0.517	0.4	1.8	
Peaches	Lb.	2.049		1.774				
Anjou pears	Lb.	1.052	1.089	1.245	1.283	18.3	17.8	
Strawberries 1/	12-oz. pint	1.864	1.708	1.763	1.717	-5.4	0.5	
Thompson seedless grapes	Lb.	2.590	1.757	2.591	1.957	0.0	11.4	
Processed:								
Orange juice, concentrate 2/	16-fl. Oz.	1.895	1.911	2.463	2.517	30.0	31.7	
Wine	liter	7.625	7.935	7.723	9.529	1.3	20.1	

<sup>--</sup> Insufficient marketing to establish price.

<sup>1/</sup> Dry pint.
2/ Data converted from 12 fluid ounce containers.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics (http://www.bls.gov/data/home.htm).

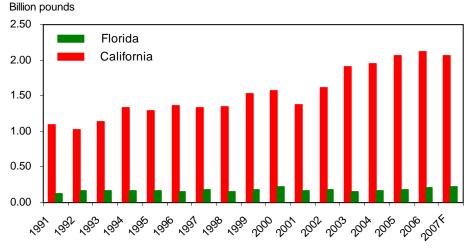
## **Fruit and Tree Nut Outlook**

## Combined Strawberry Production in Two Major Producing States Lower in 2007

USDA's National Agricultural Statistics Service (NASS) released its first forecast for 2007 strawberry production in California and Florida, the two leading production regions in the United States. The combined production for these two States in 2007 is forecast down 2 percent from a year ago, for a total of 2.3 billion pounds. After 5 consecutive years of positive growth, production in California, which accounts for about 88 percent of the Nation's crop, is forecast to decline 3 percent from the record-large crop last year, to 2.1 billion pounds (fig. 3). NASS revised down its initial forecast for California's strawberry harvested area in 2007, from 37,000 acres to 35,500 acres, partly accounting for the effects of the mid-January freeze that affected mostly the southern strawberry growing areas of the State. Average yields in California were also forecast lower, declining to 580 hundredweight per acre, about 2 percent lower than last year. Meanwhile, Florida's 2007 winter strawberry crop was estimated to increase 10 percent, reaching a record 225.0 million pounds. Both harvested area and average yields were up, increasing 3 percent and 7 percent, respectively. Florida's strawberry crop also experienced freezing temperatures around early February, slowing down shipments during that month, but growers were able to minimize freeze damage by using overhead sprinklers.

Florida's strawberry shipments tapered off by early April and supplies out of California started to pick up. Good growing weather in California following the January freeze had aided the strawberry crop, with many growing districts peaking at the same time. However, weather problems in the Eastern United States in early April limited the transport of California strawberries to Eastern U.S. markets for the heavy Easter weekend demand, leaving a large volume of fresh strawberries bound for these markets in coolers out West and driving fresh-market strawberry prices lower. Shipments during the first week in April far exceeded those of last year but

Figure 3
Strawberry production in California and Florida, 1991-2006



F=Forecast.

Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruits and Nuts Summary*, various issues.

had fallen behind through the rest of the month. U.S. strawberry grower prices have weakened from the strong prices received in January and February, averaging \$0.64 per pound in April but remaining slightly above the same time last year. Through mid-May, prices have remained higher than a year ago, with free on board (f.o.b.) shipping-point prices for a flat of 12 (1-pint) baskets of California strawberries through mid-May ranging from \$11.90-\$12.90 for medium-large berries, compared with \$8.90 per flat the same time last year. Barring any weather problems, there will be sufficient supplies from domestic production to meet market demand during much of the spring and summer months, likely keeping strawberry prices moderate.

Imports have aided in filling the domestic supply gap for fresh-use strawberries during the first three months in 2007. January-March fresh strawberry imports, mostly from Mexico, were up 7 percent from the same time last year. Although fresh strawberry imports remain a relatively small portion of what is consumed in the United States, they have slowly grown in share and along with consecutive U.S. production increases over the last 5 years, imports have also risen. In 2006, U.S. fresh strawberry imports were at a record 153.4 million pounds, up 25 percent from the previous year. Ninety-nine percent of the imports were from Mexico but supplies were also brought in from China, Argentina, Canada, New Zealand, Poland, and Peru.

USDA's Foreign Agricultural Service (FAS) forecast that Mexico's production will be up only slightly in 2006/07 and a larger quantity will be for processing than for fresh. In addition, although a larger proportion of fresh-market production in Mexico goes to export markets, primarily the United States, their domestic consumption in 2006/07 is forecast to increase, making fewer supplies available for the export market. While recent trade data from the U.S. Census Bureau was only through March at the time this report was prepared, weekly shipment data from USDA's Agricultural Marketing Service (AMS) have shown that imports from Mexico have fallen below a year ago in April and through mid-May.

The forecast smaller production in California in 2007 will likely limit the export potential for U.S. fresh strawberries this year. Cumulative exports through March were down 18 percent from the same time last year, with lower shipments reported to large markets like Canada, Mexico, Japan, and the United Kingdom. Export markets are a growing outlet for U.S. fresh strawberries. Exports have been increasing at an average rate of 8 percent annually over the last 10 years, increasing in volume from 115.8 million pounds in 1997 to a record 229.2 million pounds in 2006. While a majority of U.S. exports still go to Canada, and Mexico and Japan remain very important markets, there has been strong export growth to other markets such as Australia, China, Taiwan, and the Bahamas in recent years.

U.S. fresh strawberry exports in 2006 were up 10 percent from the previous year but the increase in both domestic fresh-use production and imports, along with lower strawberry prices, drove domestic consumption up 5 percent from the previous year, to an estimated 6.18 pounds per person. The forecast smaller crop in California will likely put downward pressure on domestic consumption for this year.

Overall supplies of U.S. frozen strawberries are up this season to date. As of April 1, supplies in cold storage were estimated by NASS at 135.5 million pounds, up 6 percent from the same time last year. Cumulative deliveries of freezer berries (Grade No. 1, California) to processors beginning in March through the second

week in May were more than double the quantity delivered the same time last year, as reported by the Processing Strawberry Advisory Board (PSAB) of California. Deliveries of juice berries, on the other hand, were down 15 percent. Because 2006 year-end cold storage inventories declined for the second consecutive year and were the lowest in the last 8 years, processor demand for strawberries was high at the beginning of the 2007 season, boosting freezer berry prices, according to the PSAB. For this reason, a large quantity of fresh-market strawberries was redirected to the processing sector, particularly around mid-April when a large volume of freshmarket strawberries could not be transported to Eastern U.S. markets due to weather problems. Freezer tonnage deliveries as of the second week in May declined 43 from mid-April as fresh shipments to the eastern markets resumed their normal pace. However, processor demand for freezer berries will likely remain high for the remainder of the season, as processors will want to build inventories back up to normal levels. U.S. consumption of frozen strawberries declined to an estimated 2.11 pounds per person in 2006. This year, continued tighter supplies will likely push consumption down again.

January-March imports of frozen strawberries in the United States declined 3 percent to 58.9 million pounds from the same time a year ago. Over 80 percent of the imports came from Mexico and Chile, whose shipments were up 6 percent and 20 percent, respectively. However, sharp declines from China, Peru, Spain, and Poland drove down overall imports for this season through March. Shipments from Mexico are expected to increase as that country enters its peak period for shipping frozen strawberries to the United States. Export growth of Mexican frozen strawberries to the United States in 2006/07 will likely be moderated by the forecast of only a slight increase in Mexico's strawberry production and strong domestic demand in that country, as was mentioned earlier.

The United States is a net importer of frozen strawberries. U.S. exports of frozen strawberries accounted for an average of 5 percent of domestic production during 2004-06. In those years, exports average 24 million pounds, 132 million pounds less than imports. January-March exports increased 24 percent to 6.9 million pounds, with strong demand in Canada, Mexico, and South Korea.

## Abundant Supplies of California Peaches, Nectarines, and Plums in 2007

Unlike last year, favorable winter and spring weather has given a good start to the 2007 growing season for California peaches, nectarines, and plums. The January freeze that heavily damaged California's citrus crop and resulted in losses to other fruit crops such as avocados and strawberries was beneficial to the State's peach, nectarine, and plum crops by providing enough chill hours to give trees more strength for the growing period. Often, trees that receive an average of 800 to 1,000 chill hours during the dormant period produce stronger, good quality fruit. The California Tree Fruit Agreement (CTFA), an organization that administers the marketing order programs on behalf of the State's peach, nectarine, and plum growers, reported that California's stone fruit trees received more than 1,000 chill hours this past winter. Although blooms came in strong and more uniformly, fruit set appears to be more average than heavy, especially for the mid-and late-season varieties. Nevertheless, the current fruit set, after the trees have been thinned, suggest that production will be up from last year. In addition, fruit quality is

expected to be very good because the ample chill hours during the winter and the swift transition to a warm spring was conducive to producing better, sweeter tasting fruit.

On May 12, NASS released its first forecast for the 2007 California peach crop set at 1.68 billion pounds, 18 percent bigger than the 2006 crop. Production of freestone peaches, mostly for fresh use, was forecast at 780 million pounds, 11 percent above a year ago. Production of clingstone peaches, used mostly for processing, was forecast to be up 25 percent, to 900 million pounds. Preliminary estimates from CTFA have the fresh-market peach crop up only slightly from a year ago. Production estimates from NASS for both California nectarines and plums in 2007 will not be available until January 2008. However, pre-season estimates from CTFA indicate nectarine production will be up 12 percent and plum production up 1 percent. Tables 3-5 provide a historical series for peach, nectarine, and plum production in California over the last 17 years.

Crop maturity is reported to be normal this season unlike last year when a cool, wet spring had the growing season fall about 2 weeks behind. Season-to-date pack out for peaches and nectarines through May 10, 2007, were well over the same time last year, based on CTFA estimates. Plum shipments, meanwhile, have not yet begun. The heavy supplies of California peaches and nectarines so far this season have driven peach and nectarine prices lower than a year ago.

As of May 14, the first reported prices for various varieties of yellow flesh California well-matured peaches in the State's Central and Southern San Joaquin Valley averaged about \$23.95 (f.o.b. shipping point) for a two-layer tray pack of size 48-50s, \$20.95 for 54-56s, and \$14.95 for 60-64s. Opening prices last year averaged \$30.95 for 48-50s, \$26.95 for 54-56s, and \$19.95 for 60-64s. For the same period, f.o.b. shipping-point prices for various varieties of yellow flesh California well-matured nectarines averaged \$28.95 for 54-56s and \$23.95 for 60-64s. Last year's nectarine prices averaged \$30.95 for 54-56s and \$27.95 for 60-64s.

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

Year	Production 1/	Uti	lization	Grow	er price
		Fresh	Processed	Fresh	Processed 2/
	Million pounds		Million pounds	Dolla	ars/pound
1990	1,555	384	1,171	0.22	0.11
1991	1,597	402	1,195	0.16	0.11
1992	1,759	430	1,329	0.14	0.11
1993	1,640	386	1,254	0.19	0.11
1994	1,717	440	1,277	0.12	0.09
1995	1,323	323	1,000	0.24	0.11
1996	1,715	459	1,256	0.28	0.11
1997	1,839	498	1,341	0.14	0.13
1998	1,712	432	1,280	0.20	0.11
1999	1,792	508	1,284	0.20	0.11
2000	1,808	538	1,270	0.19	0.13
2001	1,677	538	1,139	0.21	0.12
2002	1,870	556	1,314	0.21	0.12
2003	1,837	565	1,272	0.20	0.11
2004	1,858	518	1,340	0.17	0.13
2005	1,738	504	1,234	0.27	0.13
2006 3/	1,686	484	940	0.30	0.15

<sup>1/</sup> Utilized production. 2/ Prices are only for clingstones which represents about 80 percent of all California peaches processed. 3/ Preliminary.

Source: USDA, National Agricultural Statistics Service, Noncitrus Fruit and Nuts Summary, various issues.

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

Year	Production 1/	Util	ization	Grow er price			
		Fresh	Processed	Fresh	Processed		
	Short tons	,	Short tons	Dolla	rs/ton		
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	273,000	273,000		436.00			
2004	252,000	252,000		342.00			
2005	239,000	239,000		504.00			
2006 3/	228,000	228,000		517.00			

1/ Production all utilized. 2/ Not published to avoid disclosure of individual operations. 3/ Preliminary. Source: USDA, National Agricultural Statistics Service, Noncitrus Fruit and Nuts Summary, various issues.

Table 5--Plums: Production, season-average grow er price, and crop value, California

	Utilized	Grow er	Crop
Year	production	price	value
	Short tons	Dollars/ton	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	209,000	418.00	87,362
2004	144,000	516.00	74,347
2005	171,000	541.00	92,463
2006 1/	158,000	698.00	110,217

1/ Preliminary.

Source: USDA, National Agricultural Statistics Service, Noncitrus Fruit and Nuts Summary, various issues.

Assuming favorable weather, supplies are expected to build up seasonally into the summer months, along with other summer fruit, likely putting downward pressure on prices.

While so far this is showing to be a better season for California peaches than last, it is not the same situation in the Southeastern United States. Frigid temperatures across the Southeast over the April 6-8 Easter weekend damaged peach crops in the region. Preliminary indications from different State agricultural officials are for significant crop losses. There are initial reports that about 90 percent of the peach crop in South Carolina and more than 50 percent in Georgia may have been damaged. Along with the expected sharp drop in production due to freeze damage, drought conditions in recent weeks have also worsened crop conditions in Georgia.

The persistent dry weather has led to fruit not sizing well and some are dropping off from the trees prematurely, lowering overall yields.

California is the dominant peach producer in the United States, accounting for nearly three-quarters of total production. South Carolina and Georgia are a distant second and third, with combined production accounting for 10 percent of the total. For both these States, however, peaches are their No. 1 fruit crop. The average crop size in South Carolina over the last 3 years was 50,000 tons and in Georgia, it was 41,000 tons. Peach production in these two States generates farm cash receipts of over \$30 million each annually. In 1996, a freeze also heavily damaged the peach crops in South Carolina and Georgia, destroying over 90 percent of their production. Although 1996 grower prices for South Carolina peaches more than tripled in value from the previous year, and in Georgia they were up 66 percent, the nearly wiped-out crops were only valued between \$3.0 million to \$4.0 million each, both down over 85 percent from 1995.

## April Freeze in the Southeastern United States Damages Blueberry Crops in Major Producing States in the Region

April typically marks the beginning of the season for U.S.-grown blueberries, with Florida the first State to enter the market. Warmer than normal temperatures early this winter and freeze in February have caused some damage to the blueberry crop in Florida, resulting in slightly lower shipments for this season through the second week in May. Opening-season prices for Florida blueberries were slightly lower than last year, likely due to the earlier expectation that this season's production will be much larger than last and that the larger supplies of imported blueberries throughout this winter, mostly from Chile, have put an overall downward pressure on blueberry prices. Although lower than expected, seasonal increases in supplies out of Florida in April drove down blueberry prices from earlier in the season. However, May prices have been holding up higher than last year as a result of the lighter production, the clearing out of Chilean imports, and continued strong market demand combining with the anticipation that supplies from other major blueberryproducing States in the Southeast also will be down significantly due to the freeze in April. As of the week ending May 14, f.o.b. shipping-point prices for blueberries in Central and North Florida were quoted at \$20.00-\$24.00 per flat of 12, 4.4-ounce cups with lids (medium-large berries), compared with an averaged of \$15.45 per flat the same time last year.

The early-April freeze across the Southeastern United States also damaged many fruit crops in the region, including the blueberry crops in Georgia and North Carolina. These two States are the fifth and sixth largest producers of blueberries in the country, after Michigan, Maine, New Jersey, and Oregon. Combined production in Georgia and North Carolina accounted for 17 percent of average annual production in the United States during 2004-06. Georgia typically begins shipping blueberries around mid-April for its early-season crop, overlapping somewhat with Florida's season, which ends in late May. Georgia starts harvesting its late-season varieties around the end of May lasting through early September. North Carolina's marketing season typically begins in mid-May and ends in early August.

Assessments of freeze damage in Georgia and North Carolina were still underway when this report was being prepared, but early indications are that the crop losses are widespread and severe, especially for the growers who did not have freeze protection. Preliminary reports have indicated that the hard freeze has likely diminished North Carolina's blueberry production for this year, with an expected crop loss of up to 50 percent. Last year, North Carolina produced 25.5 million pounds of blueberries valued at \$48.7 million. In Georgia, the damage appears to be more extensive, particularly in the South Central and Southeast growing districts where more than half of the State's blueberry acreage is located. The Georgia Cooperative Extension Service has indicated that blueberry crops that did not have frost or freeze protection may have succumbed to as much as 80 to 100 percent loss. In terms of the overall crop, production in Georgia may likely be down 80 percent from the previous year. The Georgia NASS field office production survey for blueberries in 2007, however, will not be conducted until the end of the year. Georgia produced 31.5 million pounds of blueberries in 2006, with a crop value amounting to \$59.8 million.

The blueberry crop in Georgia was hit hard by the freeze because although most of the blueberries grown in the State have irrigation, the late-season crop that accounts for a much larger share of total production mostly has drip irrigation and not overhead-type irrigation systems that are used for frost and freeze protection. This type of irrigation is present among the early-season crop. Georgia's blueberry growers have had better years in terms of fruit quality, but the quality of the 2007 early-season crop is reported as good enough for fresh use and the current supply shortage has helped sell the blueberries to the fresh market. Recent drought conditions have not had much of a negative impact on the blueberry crop because the crop is mostly irrigated. However, the drought will become more of a concern to growers should drought conditions continue to persist along with the onset of very warm temperatures as summer approaches.

As production moves up north and most major blueberry-producing States begin to enter the market, supplies are expected to increase and likely soften blueberry prices. Michigan, Maine, New Jersey, and Oregon are the largest-producing States for blueberries in the country, accounting for over 70 percent of the total during 2004-06.

### Banana Imports Higher

Unlike last year, there will likely be steady supplies of bananas for U.S. marketers in 2007 because of more favorable weather in Central America where most of the imported bananas in the United States originate. As of January-March 2007, banana imports in the United States were up 8 percent from the same time last year, with shipment increases from the top five foreign banana suppliers, except from Colombia and Ecuador. Imports from Costa Rica continued strong, with cumulative shipments through March up 6 percent. Those from Guatemala and Honduras were already showing an improvement from last year, with shipments up 49 percent and up 10 percent, respectively, from the same period a year ago. Total imports from both these countries were down 11 percent and 7 percent in 2006 from the previous year, along with shipments from Colombia that were down 8 percent (table 6).

Table 6115	imports of	f fresh bananas.	excluding	nlantains	by country	1997-2006
Table 60.5.	. III IDOI IS OI	i iresii bananas.	excludina	Diamains.	DV COUNTRY.	. 1997-2000

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
	Million pounds											
Ecuador	1,925	2,381	2,578	2,152	2,087	2,253	2,144	2,026	1,994	2,192		
Costa Rica	2,103	2,405	3,536	3,001	2,386	1,987	2,152	1,908	1,814	2,044		
Guatemala	1,020	1,443	1,107	1,518	1,834	2,040	2,059	2,250	2,269	2,013		
Colombia	1,028	915	1,336	1,329	1,045	1,117	1,035	1,024	1,133	1,045		
Honduras	1,243	831	184	608	841	990	953	1,120	999	932		
Other countries	998	651	720	279	275	227	209	210	223	238		
World	8,317	8,627	9,461	8,886	8,467	8,613	8,552	8,538	8,431	8,465		

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

U.S. banana marketers experienced supply disruptions last year as a result of tropical storms affecting Guatemala, Honduras, and Colombia during the latter part of 2005. For example, Guatemala's production in 2006 was negatively affected by Hurricane Stan in 2005. With the relatively mild hurricane season during 2006, supply disruptions will likely be less of an issue for U.S. banana marketers this year as production in countries like Guatemala, Honduras, and Colombia are expected to improve, granted no other weather problems arise.

Guatemala was the No. 1 source of imported bananas for the United States during 2004 and 2005, however because of hurricane damage it fell to third place in 2006, after Ecuador and Costa Rica. Colombia and Honduras complete the top five suppliers, and together they account for 97 percent of U.S. banana imports. Despite the decline in imports from three of the top five suppliers, U.S. banana imports in 2006, at 8.5 billion pounds, were fractionally higher than the previous year. Shipment increases from Ecuador (up 10 percent) and Costa Rica (up 13 percent) were enough to offset the declines from Guatemala, Honduras, and Colombia.

AMS shipment data for this season through early May indicate that banana import supplies were up 2 percent from the same period last year. The slightly higher supplies are putting downward pressure on banana prices. As of the second week in May, prices at the Philadelphia wholesale terminal market were quoted at \$15 per 40-pound carton, compared with \$21 the same time last year. These lower wholesale prices have not yet been translated at the retail level. U.S. consumers have been paying slightly higher prices for bananas this year. The average retail price during the first quarter of 2007 was 51 cents per pound, compared with 50 cents in first-quarter 2006. The low supplies and record-high prices of oranges and strawberries during this period likely drove up the demand for bananas, boosting prices. While banana retail prices have strengthened as well during the first three months of 2007, prices are likely to decline seasonally in the next few months heading into the summer months when a greater variety of fruit becomes available to U.S. consumers.

Bananas are still the most consumed fresh fruit in the United States, but per capita consumption has been declining in the last four years. Because the United States is almost virtually dependent on imports for banana consumption, the almost same level of imports in 2006 from the previous year drove last year's consumption down only by a fraction, reaching an estimated 25.1 pounds per person. Should imports continue to be ahead of last year through most of the year, the declining trend in domestic per capita banana consumption will likely be reversed in 2007.

## Mango Imports Picking Up After a Slow Start

The United States is also greatly dependent on imports for meeting domestic demand for mangoes. Mexico is the dominant supplier to the United States of imported mangoes, accounting for over 60 percent of total imports. In 2006, Mexico's shipments to the United States were at a record high, reaching 397.8 million pounds (table 7). Other key suppliers are Peru, Ecuador, Brazil, and Haiti, whose combined shipments make up about one-third of total U.S. mango imports.

Peru and Ecuador supply the U.S. market during the winter months, with Mexico also entering the market in February. Cold weather and heavy rains in Mexico's southern growing regions has delayed the country's early-season crop by 3 to 4 weeks and has resulted in reduced yields. At the same time, unfavorable weather also affected production in other mango-producing countries in South America, driving shipments to the United States down this winter. U.S. mango imports during the first 3 months of 2007 were down 23 percent from the same time last year, with declining shipments from Peru (down 27 percent), Ecuador (down 25 percent), and Mexico (down 18 percent).

The light supplies have led to higher mango prices in the United States this winter. However, Mexican supplies began to pick up in April when Mexico's other producing regions started to ship, putting downward pressure on mango prices in the United States. Around mid-March, f.o.b. shipping-point prices for Mexican Ataulfo mangoes crossing through Texas ranged from \$9.00-\$10.00 per 1-layer carton (12s), compared with \$6.00-\$7.75 per carton the same time last year. Prices for Mexican Haden and Tommy Atkins in late April ranged from \$3.00-\$4.00 per 1-layer carton (8s), compared with \$3.75-\$4.00 per carton last year. AMS shipment data indicate that imports from Mexico were ahead of last year in April through the second week in May. Continued higher imports should drive down mango prices. This, along with the National Mango Board's (NMB) proactive efforts to increase mango awareness and consumption in the United States, will help to continue to boost the domestic demand for mangoes. In 2006, U.S. per capita consumption of fresh mangoes was at a record-high, estimated at 2.1 pounds per person.

The recent opening of the U.S. market for imported mangoes from India, the world's largest mango producer and consumer, will likely be another factor to contribute to increased U.S. demand for mangoes, particularly among the ethnic Indian population in the country who are most familiar with the varieties grown in India. Indian mangoes have been banned from the United States for the last 17 years due to phytosanitary reasons. With the new agreement, mango imports from

Table 7--U.S. imports of fresh mangoes, by country, 1997-2006

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					1,000	pounds				
Mexico	348,045	356,240	360,105	366,856	344,744	361,485	381,953	383,760	350,476	397,802
Peru	7,378	8,007	25,090	27,111	34,288	45,227	45,375	66,857	65,816	74,104
Ecuador	1,936	11,596	22,910	38,922	42,037	47,311	60,177	55,194	53,093	68,498
Brazil	11,913	15,540	28,030	37,443	59,385	79,454	86,054	59,937	57,637	50,901
Haiti	22,721	15,748	20,159	22,397	12,957	18,456	13,368	17,779	20,703	22,632
Other countries	19,214	28,047	26,387	25,576	31,158	28,649	26,888	25,710	27,333	30,642
World	411,207	435,177	482,681	518,305	524,569	580,582	613,815	609,236	575,058	644,580

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

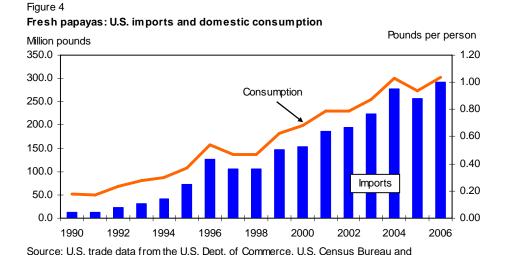
India are to be allowed into the United States under certain conditions specified by USDA, including irradiation phytosanitary treatment, to ensure that plants pests do not enter this country.

## Papaya Imports Continue Higher

Following record-high imports in 2006, U.S. papaya imports during the first quarter of 2007 remain above a year ago, increasing 52 percent from the same time last year. Shipments were up from four of the five leading suppliers to the United States, including Mexico (up 63 percent), Belize (up 36 percent), Jamaica (up 1 percent), and Guatemala (105 percent). Imports from Brazil were down 15 percent. AMS shipment data indicate that import supplies, mostly from Mexico, remained ahead of a year ago through the second week in May, putting downward pressure on papaya prices. Through mid-May, prices for Mexican Maradol variety papayas at the Philadelphia wholesale terminal market averaged about \$23.00 per 35-40 pound carton, compared with about \$29.00 per carton the same time last year.

There is an increasing trend in fresh papaya consumption in the United States (fig. 4). While imports have already served a dominant role in fulfilling domestic demand since the mid-1990s, declining production in Hawaii mostly as a result of disease problems, has given imports an even greater presence. Over the last 3 years, imports accounted for over 90 percent of the supplies available for domestic consumption, up from about 80 percent in the mid-1990s. Last year, imports were at an all-time high at 291.4 million pounds (table 8), providing plenty of supplies to meet demand despite a decline in Hawaiian production. After a decline in 2005, U.S. per capita consumption of fresh papayas also rose to a record-high in 2006, estimated at 1.03 pounds per person, similar to the record set in 2004.

Mexico is the United States' largest supplier of papayas, accounting for over 70 percent of total imports during 2004-06. Other producing countries, however, have shown rapid growth in shipments to the U.S. market in the last 10 years, especially Belize and Guatemala who are presently ranked among the United States' top 5 papaya suppliers. Imports from Mexico rose to 200.9 million pounds in 2006, up



consumption estimates derived by USDA, Economic Research Service.

Table 8U.S.	imports o	f fresh	nanavas h	v country	1997-2006

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
	1,000 pounds											
Mexico	88,233	87,438	123,307	121,527	151,879	147,632	164,494	207,703	176,772	200,929		
Belize	7,971	9,397	8,485	12,269	12,868	24,297	34,662	53,390	61,104	74,712		
Brazil	19	1,102	6,229	10,301	11,220	12,820	15,825	10,700	10,134	8,073		
Jamaica	4,582	4,562	4,194	3,411	3,480	4,189	3,294	2,197	2,277	2,907		
Guatemala	0	67	0	0	326	724	769	914	2,740	2,248		
Other countries	5,460	3,052	4,347	6,565	6,387	5,505	5,554	2,898	2,860	2,528		
World	106,264	105,620	146,561	154,073	186,160	195,166	224,598	277,803	255,886	291,397		

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

14 percent from the previous year but down 3 percent from the record-high shipments in 2004. Increased imports last year also received a boost from significantly larger shipments from Belize and Jamaica.

Hawaii's papaya production in 2006 was estimated at 28.7 million pounds, down from 32.9 million pounds in 2005 and breaking last year's production as the smallest crop since 1975. Although there were 85 more acres harvested in 2006 than the previous year, totaling 1,565 acres, papaya fruit and trees succumbed to damage due to soil erosion, flooding, and disease outbreaks brought by excessive rains from late February through April, driving down overall production during that year. Production in 2007 through April continues to lag by about 3 percent from the same time last year despite mostly favorable weather, holding papaya grower prices strong. January-March prices averaged \$0.42 per pound, compared with the average of \$0.38 per pound last year. Wet weather and increased disease presence during 2006 contributed to this year's lower acreage to date, driving down production. Also, cool, wet, and windy conditions earlier in January reduced yields.

## Pineapple Imports Lower Early Into 2007

Overall supplies of pineapple and pineapple products in the United States were down during the first 3 months of 2007 compared with the same period a year ago. The decline was attributed to lower imports of canned pineapple (down 14 percent) and pineapple juice (down 26 percent). For the same period, imports of fresh pineapples were up 16 percent. As with most other tropical fruit, imports make up a dominant share of supplies that are available for domestic consumption in the United States.

Most of the growth in U.S. pineapple demand is in the fresh market. U.S. per capita consumption of fresh pineapples increased annually in the last 6 years, reaching an all-time high estimated at 5.2 pounds per person in 2006. This is more than double the average consumption during 1990-95, estimated at 2.0 pounds per person annually. Domestic per capita consumption of canned pineapple, while increasing slightly in the last 3 years, has remained fairly steady since the 1990s, averaging close to 5.0 pounds per person, fresh-weight equivalent. Meanwhile, domestic demand for pineapple juice, has been declining, with per capita consumption dropping from an average of over 7.0 pounds per person (fresh-weight equivalent) from 1990-92 to about 4.0 pounds per person in 2004-06. Pineapple juice production in Hawaii has declined sharply from the early 1990s along with a general downward trend in imports.

Fresh-market production in Hawaii has been on a declining trend, especially in recent years with the exit of one of two remaining pineapple companies. U.S. fresh pineapple imports have risen sharply to meet the growing demand for fresh use. Imports have been increasing year-after-year for the last 11 years, reaching a record high of 1.4 billion pounds in 2006 (table 9). This was up 10 percent from the previous year and up sharply from an average of 270 million pounds during 1990-95. Costa Rica remained as the leading supplier of fresh pineapples to the United States, accounting for over 80 percent of total imports in 2006. Its shipments were up 19 percent from the previous year, along with those from Guatemala (up 2 percent), compensating for declines in shipments from other major suppliers such as Ecuador, Mexico, and Honduras, whose production in 2006 was negatively affected by unfavorable weather in 2005.

Fresh pineapple shipments from Costa Rica continue high early into 2007, while shipments from Ecuador, Mexico, and Honduras have shown much improvement. January-March shipments from Guatemala are about the same as last year. Industry sources have indicated that, overall, there will be plenty of supplies available during the spring and summer months. Should imports continue above a year ago for most of the year, independent of any weather problems, domestic per capita consumption of fresh pineapples will likely reach another record high in 2007.

U.S. imports of canned pineapple in 2006 increased 2 percent from the previous year (table 10). Of the top five foreign suppliers of canned pineapples to the United States, shipments rose 15 percent from Thailand and 4 percent from Malaysia. These increases more than made up for the declines in shipments from other major suppliers such as the Philippines, Indonesia, and China. In 2006, Thailand—the world's largest producer of canned pineapples—surpassed the Philippines in canned pineapple shipments to the United States, supplying an estimated 321.7 million pounds, product-weight, or 40 percent of total imports. Imports from the Philippines fell 6 percent, totaling 265.4 million pounds. Prior to last year, the Philippines had outranked Thailand since 1995, when the United States started imposing antidumping duties on imported canned pineapple from Thailand.

Despite these antidumping duties, U.S. imports of canned pineapples from Thailand have increased annually in the last 5 years, increasing at an average rate of 14 percent. Without these duties, the rate of growth in imports may have been greater. Based on a five-year review of the antidumping order for canned pineapples from Thailand, the U.S. Department of Commerce and the U.S. International Trade

Table 9--U.S. imports of fresh and frozen pineapples, by country, 1997-2006

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
						1,000 pound	ds			
Costa Rica	344,342	446,029	504,018	574,663	581,531	765,120	888,956	873,559	978,920	1,162,254
Ecuador	9,281	5,268	11,785	14,341	18,788	40,405	65,713	76,817	83,291	80,148
Guatemala	333	1,018	3,846	1,681	5,581	1,617	6,471	38,840	71,889	73,107
Mexico	35,423	41,009	33,530	38,505	54,180	39,799	33,421	60,102	61,238	49,697
Honduras	54,460	59,414	73,976	72,570	44,690	45,478	54,516	75,911	73,072	28,047
Philippines	267	13	0	126	1	0	2	153	4,424	10,322
Thailand	5,299	6,505	4,722	6,255	8,021	6,845	9,255	8,894	10,032	7,769
Panama	564	299	0	275	561	930	1,062	3,884	8,321	7,437
China	0	0	258	442	41	251	256	335	204	738
Sri Lanka	0	0	0	28	80	48	91	60	406	658
Other countries	5,879	3,938	560	2,405	2,177	2,152	2,906	1,192	1,375	1,639
World	455,849	563,493	632,697	711,292	715,651	902,645	1,062,649	1,139,747	1,293,172	1,421,817

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

Table 10--U.S. imports of canned pineapples, by country, 1997-2006

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
	1,000 pounds										
Thailand	167,347	109,955	257,272	183,580	168,261	183,595	224,135	240,722	280,029	321,707	
Philippines	277,709	247,345	274,052	306,735	296,357	287,462	304,298	286,954	281,726	265,364	
Indonesia	145,840	108,676	144,861	146,360	122,026	135,323	117,412	113,174	129,213	124,656	
China	5,011	22,354	29,904	17,098	17,888	31,459	54,173	58,299	75,108	68,959	
Malaysia	20,915	15,084	15,077	9,556	10,000	11,322	17,877	16,463	16,037	16,712	
Other countries	44,382	44,985	37,258	41,046	33,604	35,297	26,845	10,108	8,736	10,063	
World	661,204	548,399	758,424	704,376	648,136	684,457	744,740	725,720	790,850	807,462	

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

Table 11--U.S. imports of pineapple juice, by country, 1997-2006

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006			
		1,000 pounds											
Philippines	37,673	33,963	33,459	34,971	39,319	38,754	48,821	40,820	36,971	38,098			
Thailand	23,045	17,203	29,573	22,522	21,454	20,213	19,535	16,732	17,384	21,512			
Indonesia	8,888	5,244	9,795	6,260	6,924	10,224	8,625	6,451	7,991	7,146			
Costa Rica	2,916	1,598	3,073	2,124	1,953	3,716	2,885	1,634	2,655	3,251			
Mexico	732	2,093	509	349	235	627	1,279	604	805	907			
Other countries	2,829	1,400	1,815	1,256	813	1,857	2,767	2,101	1,886	2,209			
World	76,082	61,502	78,224	67,482	70,698	75,391	83,912	68,343	67,692	73,123			

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

Commission have announced its continuation effective April 16, 2007. This will again likely limit the full growth potential for Thailand's exports of canned pineapples to the United States in the next few years.

January-March 2007 canned pineapple imports in the United States declined 14 percent from the same period last year mostly due to lower shipments from Thailand, the Philippines, Indonesia, and China. Cumulative U.S. imports of pineapple juice from the Philippines, Thailand, and Indonesia also have been down. Last year, U.S. imports of pineapple juice increased 8 percent from the previous year (table 11). Imports were up a moderate 3 percent from the United States' top supplier, the Philippines, along with significant increases from other leading suppliers, including Thailand (second-largest supplier), Costa Rica, and Mexico. Imports were down 11 percent from Indonesia, the third-largest supplier.

### Small California and Florida Orange Crops Boost Grower Prices

Fresh and processing orange grower prices averaged among the highest in recent years. Fresh orange prices for California growers, the major producers for the fresh market, averaged \$17.47 per 75-pound box this marketing season through April (table 12). Prices ranged from a high of \$9.49 in November when the season began as a relatively normal crop to a peak of \$24.69 per box in February shortly after a freeze damaged California citrus in mid-January. The initial impact of the freeze, when there was great uncertainty in the market as to the availability of enough quality fruit to meet fresh-market demand, caused prices to nearly double between January and February. Once growers were better able to assess the damage to the crop, and orange harvest resumed, although at a slower pace than earlier in the season, prices declined slightly. The slower movement of mostly navel oranges throughout April, kept prices higher than during average-sized crop years. The prices this season, however, have been in line with other recent freeze-damaged crops, such as those that occurred in 1991/92 and 1999/2000.

Table 12--Fresh oranges: Average equivalent on-tree prices received by growers, California, 2001/02-2006/07

Month	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
			Dollars/	75-lb box		
November	17.05	11.05	12.20	13.00	13.00	9.49
December	13.85	8.25	10.00	10.40	10.60	12.39
January	12.75	5.65	8.50	9.50	9.10	12.39
February	11.51	4.26	8.55	8.95	9.11	24.69
March	10.39	6.45	10.10	9.34	9.21	22.79
April	11.00	8.41	9.74	10.47	11.34	23.09
May	8.86	8.65	10.04	10.63	12.70	
June	5.43	7.09	11.22	9.02	13.33	
July	5.13	5.36	9.64	7.24	12.94	
August	6.23	5.64	11.04	6.84	14.84	
September	6.33	4.94	15.44	8.14	22.04	
October	6.63	4.84	21.23	7.84	19.04	
NovFeb. Average	12.76	7.35	9.85	10.28	10.39	17.47

Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

Table 13--Fresh oranges: Retail prices, 2001/02-2006/07

Month	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
			Dollars	s/pound		
November	0.87	1.00	0.97	1.08	1.17	1.20
December	0.71	0.74	0.86	0.87	0.89	0.96
January	0.72	0.71	0.79	0.84	0.84	1.09
February	0.76	0.71	0.73	0.80	0.92	1.38
March	0.71	0.73	0.73	0.78	0.89	1.30
April	0.75	0.74	0.74	0.82	0.88	1.24
May	0.85	0.80	0.77	0.90	0.99	
June		0.88	0.88	1.01	1.12	
July	0.54	0.57		0.91	0.93	
August	0.56	0.54	0.67	0.89	1.00	
September	0.57	0.59	0.71	0.88	1.08	
October	0.61	0.60		0.90	1.42	
		0.70				
NovFeb. Average	0.75	0.78	0.82	0.87	0.94	1.19

Source: U.S. Dept. of Labor, Bureau of Labor Statistics, (http://www.bls.gov/data/home.htm).

Consumers did not experience the full impact of the higher grower prices for fresh oranges. While grower prices have averaged 68 percent higher per pound than last season through April, consumers paid an average of 27 percent more per pound. Consumer prices this season ranged from a low of \$0.96 per pound in December to a high of \$1.38 per pound in February, which was about 50 percent above last February (table 13). Because fresh oranges are an important item at retail food establishments during the winter months, retailers appear to have been willing to accept a smaller mark up on their oranges to attract shoppers.

Processing orange prices received by Florida growers averaged \$7.74 per 90-pound box this season, October through April, even higher than in the late 1980s, early 1990s when back to back freezes changed Florida's orange industry by moving production southward (table 14). The combination of the smallest crop forecast

Table 14--Processing oranges: Average equivalent on-tree prices received by growers, Florida, 2001/02-2006/07

Month	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
			Dollars/90-	lb box		
October	2.35	1.68	1.13		0.40	
November	2.57	2.29	1.89	2.04	2.39	3.10
December	2.68	2.37	2.03	2.32	3.30	6.35
January	2.80	2.50	2.11	2.52	4.78	7.10
February	2.87	2.58	2.18	2.71	5.06	8.15
March	4.10	3.84	3.62	3.59	5.76	11.79
April	4.17	3.87	3.72	4.27	6.25	9.95
May	4.22	3.85	3.71	4.37	6.90	
June	4.16	3.74	3.85	4.26	6.80	
July					5.80	
OctFeb. Average	3.08	2.73	2.38	2.91	3.99	7.74

<sup>-- =</sup> Not available.

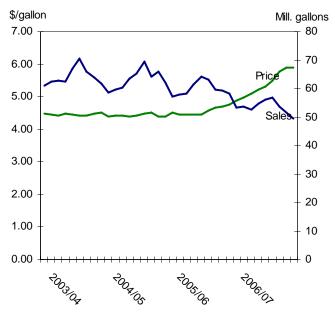
Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

since 1989/90 and tight orange juice inventories after several small crop seasons, boosted processor demand and drove monthly prices to among some of the highest in history. While a slightly larger share of Florida's crop went to the fresh market this season than during the past 2 seasons, the fresh market accounts for only about 3 percent of the crop and would be only a minor factor in increasing prices for processing oranges. Much of Florida's crop is grown for processing and these oranges cannot be easily moved to the fresh market because of quality issues, such as fruit appearance. Therefore, most of the growers could not take advantage of the strong demand for the higher valued fresh market.

## Orange Juice Demand Continues Sluggish This Season

Both the supply and demand for orange juice has been below average throughout the 2006/07 season. The small Florida orange crop, along with the lowest beginning juice stocks in almost a decade, resulted in supply this year estimated by USDA's Economic Research Service (ERS) to be at only 1.7 billion single-strength gallons, 9 percent below last year's already small supply and the lowest since the freeze years of 1989/90 and 1990/91 (table 15). The small juice supplies this season have been the driving force behind the high prices processors have been paying the growers for their oranges. In turn, processors have been passing on these higher prices to consumers. Retail prices for all forms of orange juice this season, according to Nielsen Scan Track data, have been averaging about 21 percent above last season through April (fig. 5). The average price consumers paid for a gallon of orange juice reached \$5.91 in March and April, with the price of a gallon of notfrom-concentrate orange juice (NFC) reaching \$6.67 in March and coming down slightly in April. Inversely, the very high retail prices have driven down retail demand for all orange juice, most of which is NFC. Since most orange juice is consumed at home, indicating most domestic orange juice is purchased at retail, ERS estimates that the slump in retail demand for orange juice will translate into consumption declining 5 percent, to 4.11 gallons per person. If realized, this would be the lowest consumption since 1989/90.

Figure 5
Orange juice retail sales, August-April 2003/04-2006/07



Source: Florida Department of Citrus, http://www.floridajuice.com/.

Table 15--United States: Orange juice supply and utilization, 1995/96 to present

	Beginning					Domestic	Ending	Per capita
Season 1/	stocks	Production	Imports	Supply	Exports	consumptior	stocks 2/	consumption
			Million	sse gallons 3	3/			Gallons
1995/96	434	1,271	261	1,967	119	1,431	417	5.34
1996/97	417	1,437	256	2,110	148	1,398	564	5.16
1997/98	564	1,555	281	2,400	150	1,571	679	5.73
1998/99	679	1,236	350	2,265	147	1,585	534	5.71
1999/00	534	1,493	339	2,366	146	1,575	645	5.60
2000/01	645	1,389	258	2,292	123	1,471	698	5.18
2001/02	698	1,435	189	2,322	181	1,448	692	5.05
2002/03	692	1,251	291	2,235	103	1,427	705	4.93
2003/04	705	1,467	223	2,395	123	1,450	822	4.96
2004/05	822	976	358	2,155	119	1,426	609	4.83
2005/06	609	985	299	1,894	138	1,286	470	4.31
2006/07	470	890	366	1,726	110	1,236	380	4.11

<sup>1/</sup> Season begins in October of the first year shown as of 1998/99, prior year season begins in December.

data includes chilled as well as canned and frozen concentrate juice.

Beginning in 1998/99, ending stocks reflect stocks on hand as of the first week in October.

3/ SSE = single-strength equivalent. To convert to metric tons at 65 degree brix, divide by 1.40588.

Source: USDA, Economic Research Service analysis.

## High-Quality Fruit and Small Crop Bring High Grower Prices for Fresh Grapefruit

Although the 2006/07 grapefruit crop is forecast to be larger than the previous 2 seasons, if realized, it would be the third smallest in recent history. NASS's May 1 forecast for the present crop reduced the number of grapefruit expected to be produced this season from its April forecast. The new forecast expects almost 1.6 million tons of grapefruit to be harvested, 3 percent below the April 1 forecast, but

<sup>2/</sup> Data may not add due to rounding. Beginning with 1994/95 ending stocks, stock

Table 16--Fresh grapefruit: Average equivalent on-tree prices received by growers, 2002/03-2006/07

Month	2002/03	2003/04	2004/05	2005/06	2006/07
		Do	llars per 80-l	b box	
October	7.50	9.72	16.05	16.20	18.07
November	5.70	6.86	19.93	13.99	14.00
December	5.01	6.26	18.87	13.84	11.37
January	5.05	6.14	19.41	15.01	10.04
February	5.10	6.52	18.93	14.01	7.83
March	5.18	7.46	18.32	12.76	7.91
April	6.04	6.75	18.91	12.15	7.65
May	10.13	7.54	17.78	15.13	
OctApr. Average	5.65	7.10	18.63	13.99	10.98

Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*, various issues.

28 percent higher than last season's hurricane-reduced crop. Due to the larger crop this season, grower prices for fresh grapefruit from October through April declined by an average of 22 percent from the same time last season, and 41 percent from the same time 2 seasons ago, another hurricane-damaging crop season (table 16). However, in comparison to grower prices in 2003/04 when crop size was more normal, 2006/07 grower prices have been averaging about 55 percent higher, or about \$3.88 more per 80-pound box. The relatively strong grower prices this season plus the increase in the share of the crop going to the fresh market due to the high quality of the fruit should boost grower returns this season.

The high fruit quality and bigger crop helped boost fresh grapefruit exports so far this season. From October 2006 through March 2007, exports ran 60 percent ahead of the same time in 2005/06. Although 8 percent behind the 2003/04 season, the last normal crop year before the hurricanes, exports so far this season are greater than any other previous season since 1999/2000. While the crop was much smaller this season than during any of these years, a larger share of the crop was being exported due to strong international demand. Japan continued to be the No. 1 export market for U.S. fresh grapefruit, however, its share has been declining in recent years, from 55 percent in 2003/04 to 46 percent this season. The big surprise market this season has been South Korea, which now ranks No. 2. Fresh grapefruit exports to South Korea nearly doubled this season through March over the same period last season. Until 2001/02, the South Korean market was small relative to Japan, Canada, and Europe, especially France and the Netherlands. While South Korea's demand has been increasing rapidly, especially the past 2 seasons, Canada's and Europe's demand has remained sluggish over the past several seasons.

## A New Record High Is Forecast for the 2007 California Almond Crop

The first NASS forecast for the 2007 California almond crop was released May 9. The initial estimate is for 1.31 billion pounds (shelled basis) to be produced. If realized, the crop would be 17 percent bigger than in 2006 and will set another record. The new crop estimate is based on new records set for bearing acreage at 615,000 bearing acres, 5 percent above last year and yields per acre forecast at

2,130 pounds, 12 percent above last year. The California freeze that occurred this past January, while creating misfortune for growers of crops ready for harvest, was beneficial to many of the later producing, deciduous tree fruit crops, including the almond trees. With the freeze and additional cold weather during the winter months, the almond trees had sufficient chill hours to help set the blooms. Growers were also fortunate that they had enough bees for pollination and optimal weather during pollination time, all of which are vital for producing such a big crop.

In its May 2007 *California Almond Forecast* report, NASS revised the 2006 almond crop to 1.12 billion pounds (shelled basis), 2 percent above what was reported in the *Noncitrus Fruits and Tree Nuts 2006 Preliminary Summary* published in January 2007. With the higher crop forecast and the price per pound remaining unchanged, the value of the crop also increased 2 percent to \$2.2 billion, the second highest value on record.

Based on the new data for the 2006 crop, ERS estimates that during the 2006/07 marketing year, Americans increased their almond consumption to 1.05 pounds per person (table 17). While the forecast would indicate almost a doubling of consumption between 2005/06 and 2006/07, the big 2006 crop should provide for enough supplies to meet both strong domestic and export demand and return domestic consumption to early 2000 levels.

Table17--Almonds: Supply and utilization (shelled basis), 1995/96 to date

				Sup	pply				Domestic co	nsumption
Season		Loss								
1/	Utilized	and	Marketable		Beginning	Total	Ending			Per
	production	exempt	Production	Imports	stocks	supply	stocks	Exports	Total	Capita
					1,000 pounds					Pounds
1995/96	370,000	18,562	351,438	564	204,849	556,851	92,799	335,100	128,952	0.48
1996/97	510,000	23,696	486,304	1,248	92,799	580,351	48,287	374,512	157,553	0.58
1997/98	759,000	32,790	726,210	116	48,287	774,613	171,976	447,864	154,774	0.56
1998/99	520,000	24,600	495,400	184	171,976	667,560	91,834	410,388	165,339	0.60
1999/2000	833,000	34,400	798,600	226	91,834	890,660	175,850	439,534	275,275	0.98
2000/01	703,000	26,000	677,000	540	175,850	853,390	107,266	513,344	232,780	0.82
2001/02	830,000	29,300	800,700	882	107,266	908,848	80,922	585,723	242,203	0.84
2002/03	1,090,000	20,200	1,063,500	1,993	80,922	1,146,415	162,045	673,616	310,754	1.07
2003/04	1,040,000	21,800	1,011,100	3,248	162,045	1,176,393	148,940	698,896	328,557	1.12
2004/05	1,005,000	39,922	958,117	6,750	148,940	1,113,806	137,684	712,680	263,443	0.89
2005/06	915,000	36,470	875,275	10,677	137,684	1,023,636	121,000	728,204	174,432	0.59
2006/07 f/	1,115,000	23,700	1,091,300	2,100	121,000	1,214,400	155,700	742,768	315,932	1.05

1/ Season beginning July 1. Beginning in 1999/00, season begins August 1.

Source: USDA, Economic Research Service analysis.

## **Fruit and Tree Nut Trade Outlook**

## California's Mid-January Freeze Lowers Exports of Fresh Oranges and Strawberry in 2006/07 Through March

Cumulative exports of 2006/07 U.S. fresh oranges and strawberries through March were down 33 percent and 18 percent, respectively, from the same time the previous season (table 18). The high-quality oranges harvested at the start of the 2006/07 season, prior to the mid-January freeze in California, aided in boosting international demand for the fruit, pushing fresh orange exports through January ahead of the previous season, even though the California Navel orange crop was forecast smaller. Freeze damage has reduced production for this season much further but the industry has been very diligent in making sure only good-quality fruit gets sold for fresh use in the domestic and export markets. The resulting tight supplies have sharply reduced exports in February and March, driving overall exports for the season to date down from the previous season. February exports fell 62 percent from January and were down 71 percent from February 2006. Exports regained in March from the previous month but were still well below the previous year. Overall exports for the season to date were down to all the top markets—Canada, South Korea, Japan, Hong Kong, and China. The availability of export supplies during the summer will likely remain limited as the 2006/07 California Valencia orange crop also succumbed to freeze damage and is expected to be 26 percent smaller than the previous season.

Supplies of U.S. strawberries are usually low during the first 3 months of the year when California's marketing season is just getting started. Nevertheless, lighter supplies due to the mid-January freeze also curtailed early-season U.S. strawberry exports. Fresh strawberry exports through March were down 18 percent from the same time last year, due to lower shipments in February and March. Almost all of the January-March exports were to Canada, where shipments fell 18 percent. Shipments were also down to Mexico, Japan, and the United Kingdom, among the leading markets.

Despite a slightly larger U.S. apple crop in 2006/07, strong domestic prices for fresh-market apples have contributed to lower apple exports during the season thus far compared to last. U.S. fresh apple shipments were down to its major international markets such as Mexico, Taiwan, and Hong Kong. Additionally, U.S. apple exports slowed this winter partly due to seasonal declines in U.S. production and the domestic shortage of fresh oranges and strawberries that provided additional boost to the domestic demand for fresh apples. Total cold storage supplies have been down from a year ago since January and with the 2006/07 U.S. apple marketing season ending in early summer, exports are likely to continue to taper off in the coming months. Facing mostly a similar situation with the U.S. fresh apple market, U.S. pear exports have also been down in 2006/07.

Increased almond exports are boosting overall U.S. tree nut exports so far in 2006/07. With the record-large California almond crop this season, U.S. almond exports in 2006/07 through March were up 4 percent from a year ago. Exports increased to Japan, the Netherlands, Canada, and Hong Kong, but were down to major markets such as Spain, India, and Germany. The potential for the United States to export almonds will likely remain strong in 2007/08 given the forecast that domestic production will set a new record-high.

Table 18--U.S. exports of selected fruit and tree nut products

·		Season-to-date (thr		Year-to-date
Commodity	Marketing season	2006	2007	change
		1 000	pounds	Percent
Fresh-market:		1,000	pourius	rereem
Oranges	November-October	652,081	437,254	-32.9
Grapefruit	September-August	437,027	697,579	59.6
Lemons	August-July	151,002	169,501	12.3
Apples	August-July	1,143,125	1,065,415	-6.8
Grapes	May-April	828,875	599,146	-27.7
Pears	July-June	293,734	254,771	-13.3
Peaches (including nectarines)	January-December	1,936	1,501	-22.5
Straw berries	January-December	49,617	40,514	-18.3
Sw eet cherries 1/	January-December	1,434	23	-98.4
		1,000 \$	sse gallons 2/	
Processed:				
Orange juice, frozen concentrate	October-September	33,700	14,155	-58.0
Orange juice, not-from-concentrate	October-September	32,899	32,468	-1.3
Grapefruit juice	October-September	8,050	7,884	-2.1
Apple juice and cider	August-July	4,880	4,729	-3.1
Wine	January-December	21,991	24,640	12.0
		1,000	pounds	
Raisins	August-July	158,751	169,449	6.7
Canned pears	June-May	21,598	18,220	-15.6
Canned peaches	June-May	56,578	35,958	-36.4
Frozen straw berries	January-December	5,561	6,876	23.7
		1,000	pounds	
Tree nuts:				
Almonds (shelled basis)	August-July	592,561	616,383	4.0
Walnuts (shelled basis)	August-July	165,155	121,135	-26.7
Pecans (shelled basis)	October-September	15,783	23,766	50.6
Pistachios (shelled basis)	September-August	37,480	35,613	-5.0

<sup>1/</sup> Beginning July 2005, includes tart cherries.

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

Despite reduced domestic production, 2006/07 pecan exports through March have held strong, increasing shipments mostly to Mexico, Hong Kong, the Netherlands, United Kingdom, and China. U.S. walnut and pistachio exports remain down for the season thus far due to their smaller crops.

### U.S. Fresh Grape Imports Down, Peach and Lime Imports Up

U.S. fresh grape imports in 2006/07 through March declined 4 percent from the previous season (table 19). Shipments from Mexico fell 37 percent and that is why most of the decline in overall imports to date occurred within the first half of the season when most Mexican grapes enter the U.S. market. Fresh grape imports have rebounded through most of the second half of the season, increasing by about 10 percent from the same period in 2005/06. Although Chilean grapes make up the majority of the imports during this period, the growth in imports may be attributed to increased imports from Peru, South Africa, and Brazil. Imports from Chile this winter were down fractionally from last as a result of a slow start to their season and lower shipments in March. Chilean grape shipments to the United States ended in April. While trade data for that month were not yet available from the U.S. Census Bureau at the time this report was prepared, AMS shipment data indicated that the volume of imports from Chile in April continued lower than a year ago. Early indications are that the 2006/07 (January-December 2007) Mexican grape crop is progressing well due to favorable weather, and along with a larger harvested area, total production in that country will be up from the previous season. Because of the bigger crop, there will likely be more Mexican grape supplies available for export this spring and summer, particularly to the United States which is their largest export market for grapes.

<sup>2/</sup> Single-strength equivalent.

January-March imports of fresh peaches (including nectarines) in the United States increased 9 percent from the same time last year. Almost all of the imports were from Chile. Although Chile's 2006/07 crop was down slightly from last season, strong demand in the United States for imported fresh fruit due to small fresh orange and strawberry crops this season helped boost imports of fresh peaches and nectarines.

U.S. lime imports increased 28 percent in January through March from the same period a year ago. Ninety-five percent of the imports were from Mexico, whose shipments were up 29 percent. Imports were also up from Guatemala and Colombia whose combined shipments accounted for most of the remaining imported volume. Although shipments were much smaller than those from the above-mentioned suppliers, imports from El Salvador and Honduras showed the largest growth thus far, increasing over 600 percent and over 100 percent, respectively.

Table 19--U.S. imports of selected fruit and tree nut products

·	. co nat producto	Season-to-date (th	rough March)	Year-to-date
Commodity	Marketing season	2006	2007	change
		1 000	pounds	Percent
Fresh-market:		1,000	poundo	roroom
Oranges	November-October	12,386	71,027	473.4
Tangerines (including clementines)	October-September	156,786	194,433	24.0
Lemons	August-July	52,110	79,443	52.5
Limes	January-December	131,234	167,525	27.7
Apples	August-July	105,402	121,785	15.5
Grapes	May-April	1,157,695	1,114,182	-3.8
Pears	July-June	100,980	137,269	35.9
Peaches (including nectarines)	January-December	108,427	118,129	8.9
Bananas	January-December	2,058,412	2,226,596	8.2
Mangoes	January-December	142,113	109,455	-23.0
· ·	,	1.000 ss	e gallons 1/	
Processed:		,	3	
Orange juice, frozen concentrate	October-September	128,423	175,019	36.3
Apple juice and cider	August-July	269,932	313,432	16.1
Wine	January-December	44,444	55,054	23.9
		1,000	pounds	
Canned pears	June-May	47,426	65,321	37.7
Canned peaches (including nectarines)	June-May	86,655	142,066	63.9
Canned pineapple	January-December	217,612	187,729	-13.7
Frozen straw berries	January-December	60,890	58,924	-3.2
	,	1.000	pounds	
Tree nuts:		.,	,	
Brazil nuts (shelled basis)	January-December	2,539	5,877	131.4
Cashews (shelled basis)	January-December	60,067	63,057	5.0
Pine nuts (shelled basis)	January-December	2,117	2,153	1.7
Pecans (shelled basis)	October-September	51,683	39,592	-23.4

<sup>1/</sup> Single-strength equivalent.

Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

## **Commodity Highlight**

## Hazelnut or Filbert—Two Names for the Same Nut

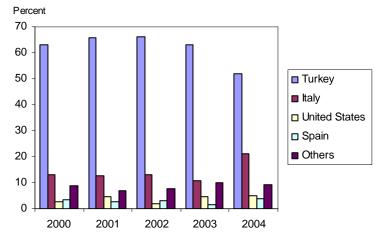
The hazelnut, also called the filbert, originated along the Black Sea region around Turkey through the Mediterranean region in Italy and Spain. Today, this region is still the center of hazelnut production, with Turkey producing about 60 percent of the world's total. The United States ranks third in production, behind Italy but ahead of Spain (fig. 6).

Production in the United States is concentrated in Oregon. There is also a small amount of production in Washington State. However, data are not available for Washington. In terms of tree nuts grown in the United States, hazelnut production is the smallest crop. In Oregon, however, it is the only tree nut produced on a commercial basis.

In 2005 and 2006, hazelnuts grew on 28,300 bearing acres, slightly lower than in 2004 but more than any time prior to 1995. The industry has been battling Eastern Filbert Blight (EFB), a fungal disease that reduces production and eventually kills the trees, as well as urbanization, which has been limiting available acreage. The industry is developing new varieties that show resistance to EFB, and while acreage increases may be limited by competition for land use and demand factors, many growers are removing the EFB-infected orchards and replanting with new varieties. With ongoing research into more-resistant varieties, the industry continues to respond with new plantings, and boosting the health of the industry.

Hazelnuts are an important crop for Oregon. Between 2003 and 2005, cash receipts for Oregon's hazelnuts averaged \$62 million, less than pears but higher than other fruit and tree nut crops the State is known for, such as cherries, grapes, and apples.

Figure 6
World hazelnut production by country, 2000-04



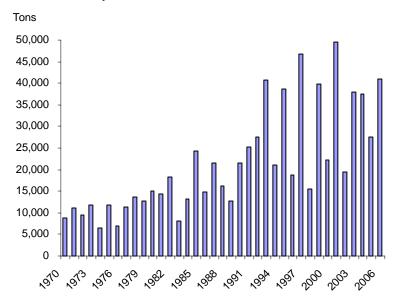
Source: United Nations' Food and Agriculture Organization http://faostat.fao.org/.

## Oregon's Production Continues Upward Trend

Hazelnut trees are by nature alternate-bearing—that is, if there is a big crop one year the following year's crop will likely be considerably smaller as the trees regain their energy. In Oregon, while the alternate-bearing nature of the trees' production is evident, the trend in production has been steadily upward since the 1970s (fig. 7). While the number of bearing acres has been on an upward trend since 1983, the big spikes in production have been driven by record high yields produced in 1993, 1997, and 2001 (fig. 8). In 2003 the number of bearing acreage dropped to the lowest level in 8 years as a result of orchards being removed due to damage from EFB.

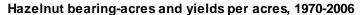
Production is concentrated in Oregon's Willamette Valley. This area provides the ideal climate for hazelnut production. It has a moderate climate similar to the Black Sea region, which is necessary to produce the crop because the trees blossom in mid winter. At the same time, this area provides sufficient numbers of chill hours without frequent extreme cold temperatures, all necessary conditions for the blooms to mature into nuts. Yamhill, Marion, Washington, Clackamas, and Lane counties account for most of the hazelnut acreage in the State. While Yamhill, Marion, and Clackamas have the most trees, Marion has the greatest number of hazelnut operations (having orchards with 50 or more trees), followed by Yamhill and Washington. The number of operations declined 5 percent between 2000/01 and 2004/05 as growers left the industry due to EFB.

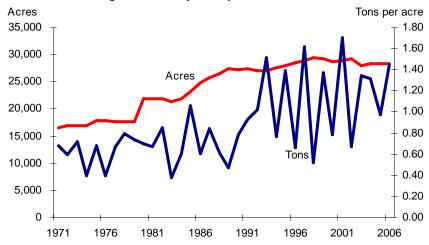
Figure 7
U.S. hazeInut production, 1970-2006



Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Tree Nuts Summary*, various issues.

Figure 8





Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Tree Nuts Summary*, various issues.

With the Eastern Filbert Blight such an issue in hazelnut production, growers have been planting new, more-resistant tree varieties developed at Oregon State University. The Barcelona variety still dominates plantings, accounting for about 67 percent of all trees in 2004/05. In recent years, however, new varieties such as the Lewis, which has shown to be resistant to EFB, has begun to be planted at a more rapid pace. While each variety produces slightly different size and shape of nuts, the Lewis is compatible with the Barcelona, the industry standard, for marketing purposes.

## Hazelnuts Marketed Inshell Bring the Highest Price

Hazelnuts are sold inshell or as kernels—whole, diced, sliced, ground into flour, or paste. The highest quality and highest valued nuts are those sold inshell. According to the industry, the domestic inshell hazelnut market brings growers the highest price. Since domestic demand for hazelnuts is not very high, by limiting the quantity going to the U.S. market as inshell prevents oversupply and its affiliated price effects. To help maintain grower prices, the Oregon industry created the Hazelnut Marketing Board (HMB) which is administered by USDA's Agricultural Marketing Service under a Federal marketing order. The order contains volume controls and quality regulations governing hazelnuts sales each year. The board makes an annual determination to have regulations in effect. The regulations determine the quantity of the year's crop that can be sold inshell to the U.S. market. This percentage is called free, because the handler can sell it any way it wants, the remaining share is called restricted because its use is restricted to shelling or exporting. For the 2006/07 crop, the HMB established 8.3 percent of the crop as free and 91.7 percent as restricted.

Inshell hazelnuts have the longest shelf life among the different forms in which the nut is marketed. An important market for inshell hazelnuts is the snack market, the highest value among all the uses. Inshell nuts are also sold to processors who store the nuts to have sufficient supplies during the off-cycle years. Since hazelnut production is on an alternate bearing cycle, processors buy more nuts than they need

during an "on" cycle when more is available and less expensive, to use during the "off" years. Shelled hazelnuts are sold in many forms, including whole kernels that are roasted, blanched, or natural, as well as in diced, paste, meal, and oil forms. Different forms have different uses. The most popular use for hazelnuts is with chocolate—in candies and hazelnut butter products. Diced, meal, and paste hazelnuts are sold to be used in making baked goods, cakes and cookies, and well as for ice cream. The oils are used in high-end restaurants, for home cooking, and in salads. Whole kernels are used as snack food, either alone or in mixed nuts.

## Grower Price Increases Steadily Over Past 3 Decades

Figure 9

The average price per ton of hazelnuts has steadily increased from the 1970s through the mid-2000s, growing at an annual average rate of 4 percent and reaching an all-time high in 2005 (fig. 9). At the same time, the value of the crop increased at an average rate of 21 percent annually. The quantity of hazelnuts produced and stocks play an important role in the price growers receive per ton each year. Since the biggest share of each year's crop is exported, however, Turkey's and Italy's production play critical roles in establishing the world price and therefore influences the price U.S. hazelnut growers will receive for their crop each year. While the value of the U.S. annual crop is correlated with the size of each season's crop, this pattern has become very strong since the mid-1990s. A deviation from this pattern is apparent in 2004 and 2005 when U.S. prices responded to a shortage in world supplies after several years of below average production in Turkey. In 2006, Turkey's crop returned to normal size at the same time the U.S. crop was the biggest in 5 years. As a result, U.S. prices dropped by about a half and the value of the crop in 2006 fell to \$45.1 million, lower than the previous 2 years but still the third highest on record.

Hazelnut grower price and crop value, 1970-2006 Dollars per ton \$1,000 2,500 70,000 60,000 2,000 50,000 1,500 40,000 30,000 1,000 20,000 500 10,000 1980 1985 1990 1995 2000 2005

and Tree Nuts Summary, various issues.

## U.S. Hazelnut Industry Is Third-Biggest in World Market

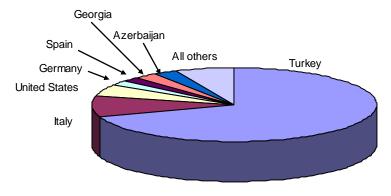
The United States ranks third behind Turkey and Italy in providing the world with hazelnuts, but the U.S. share of the market is significantly smaller than Turkey's share (fig. 10). During the first half of the 2000s, Turkey accounted for an average of 70 percent of all hazelnuts on the world market, Italy 10 percent and the United States 5 percent. Germany, Spain, Georgia, Azerbaijan, France, Belgium, and China round out the top 10 hazelnut exporters. Germany and Belgium do not produce hazelnuts, but act as transhippers to other European countries.

Turkey produces more hazelnuts than its citizens consume. As a result, it exports much of each year's production. To help maintain grower prices, Turkey's hazelnut growers cooperative, FISKOBIRLIK, purchases much of the crop, setting the market price, and maintaining stocks so that supplies will not flood the market during surplus production years. Until 2003, FISKOBIRLIK was run by the Government of Turkey, funding the cooperatives purchases. Since going private, the cooperative has had financial problems and cannot always pay its producers. Also, other channels have opened up in Turkey, purchasing hazelnuts at often higher prices and reducing the influence FISKOBIRLIK may have on prices in the future. Turkey also finances the Istanbul Hazelnut and Products Exporters Union which coordinates a share of Turkey's hazelnut exports. Virtually all of Turkey's hazelnut exports are shipped to Europe, with Germany, Italy, and France as the major recipients.

In the United States, an average of half of each year's hazelnut supplies (production plus stocks and imports) is exported. In recent years, between a half and two-thirds of the exports are inshell hazelnuts (on a shelled basis). Since 2000, Hong Kong has been the major export market for U.S. inshell hazelnuts, accounting for over 50 percent of the total. Much of what is being shipped to Hong Kong is said to likely wind up in China. The Hong Kong market barely existed prior to 1993, when Germany was the major destination for hazelnut exports. Germany remains the

Figure 10

Major hazeInut exporters, by country, 2000-04 average



Source: United Nations' Food and Agriculture Organization http://faostat.fao.org/

second-biggest market, receiving an average of 13 percent of the total shipments throughout the 2000s, followed by Italy, Canada, and Spain, although their order shifts from year to year. These 5 countries account for about 85 percent of the export shipment of U.S. inshell for the past 6 years.

International markets for shelled hazelnuts vary annually. In 2005, Canada received about 30 percent of the shipments and was the leading destination for export, followed by Israel, Mexico, and Australia. In 2003 and 2004, however, Hong Kong was the major destination, receiving 70 percent of the shipments in 2003 but just 28 percent in 2004. Canada and Israel were among the other big markets.

## Imports Trending Up Since Late 1990s

Although the annual quantity of hazelnut imports generally demonstrates an inverse relationship to the quantity of nuts produced that year, the overall trend is for increased imports, especially since the late 1990s. While imports peaked at 16 million pounds in 2002/03 in response to very low U.S. production, they have been averaging about 12.5 million pounds annually since 1998, about 68 percent higher than the average quantity imported during the rest of the nineties. Despite the growth in recent years, imports still average about half the amount of exports each year during the 2000s. While shelled hazelnuts account for about three-quarters of the imports, their share of the total has been declining in recent years as importers have been increasing their shipments of prepared and preserved and inshell hazelnuts. Imported hazelnuts are used in making snack foods, with many hazelnut importers also importing dried fruit and other nuts, as well as an ingredient in chocolates, baking, ice cream, and other items such as the popular hazelnut/chocolate spread Nutella. The import data underestimates hazelnut consumption in the United States because the data are not able to capture hazelnuts as an ingredient in imported processed products, especially chocolates.

### Americans Consume Fewer Hazelnuts Relative to Other Tree Nuts

Hazelnut consumption is low in the United States relative to other tree nuts. Throughout the 2000s, per capita consumption has averaged about 0.06 pound, less than any other domestically-produced tree nut. In comparison, Americans consumed about 1 pound of almonds and half a pound of walnuts a year during the same time. Hazelnuts are not as often used in nut mixes, a popular nut snack in the United States, as other tree nuts, contributing to the lower level of consumption. In 2005/06, despite sufficient supply availability to maintain the average quantity of domestic use, consumption fell to 0.03 pounds per capita as a result of a record-high quantity shipped to export markets (table 20). Domestic use will likely increase in the coming season as export demand for U.S. hazelnuts slackens with an anticipated bigger Turkey crop. The hazelnuts consumed from imported confectionaries are not included in the consumption data and therefore domestic use is likely undercounted as it is for most tree nuts consumed in imported candies and other processed products.

Season		Loss							Domestic con	sumption
1/	Utilized	and	Marketable		Beginning	Total	Ending			Per
	production	exempt	production 2/	Imports 3/	stocks 4/	supply 5/	stocks 4/	Exports 3/	Total	capita
				1	,000 pounds -					Pounds
1990/91	15,537	1,869	13,668	10,116	579	24,364	1,098	5,618	17,647	0.07
1991/92	19,866	943	18,923	6,173	1,098	26,194	3,026	8,213	14,955	0.06
1992/93	22,132	1,073	21,059	8,808	3,026	32,893	2,956	9,289	20,648	0.08
1993/94	32,464	1,471	30,993	7,835	2,956	41,784	1,687	14,354	25,743	0.10
1994/95	16,960	1,066	15,894	12,284	1,687	29,865	438	10,423	19,004	0.07
1995/96	30,186	1,591	28,595	11,182	438	40,214	4,085	13,268	22,861	0.09
1996/97	14,641	838	13,803	3,165	4,085	21,054	398	13,923	6,733	0.02
1997/98	34,136	2,712	31,423	8,628	398	40,449	1,380	20,308	18,760	0.07
1998/99	12,477	744	11,733	12,466	1,380	25,579	1,024	10,167	14,387	0.05
1999/00	31,561	1,040	30,520	12,713	1,024	44,257	5,609	11,327	27,322	0.10
2000/01	18,052	639	17,414	11,650	5,609	34,673	1,398	14,701	18,574	0.07
2001/02	39,600	1,512	38,088	15,195	1,398	54,681	2,543	22,529	29,609	0.10
2002/03	15,600	338	15,262	16,387	2,543	34,192	2,447	9,929	21,815	0.08
2003/04	30,224	734	29,490	10,902	2,447	42,838	2,046	25,589	15,203	0.05
2004/05	28,548	1,359	27,189	12,768	2,046	42,004	1,945	21,687	18,372	0.06
2006/06	20,806	783	20,023	12,515	1,945	34,482	1,073	25,919	7,490	0.03
2006/07 6/	31,606	1,388	30,218	11,345	1.073	42,636	2,600	17,136	22,900	0.08

<sup>2006/07 6/ 31,606 1,388 30,218 11,345 1,073 42,636 2,600 17,136 22

1/</sup> Season beginning July. 2/Utilized production minus loss and exempt. 3/ U.S. Census Bureau, U.S. Department of Commerce.

<sup>4/</sup> Hazelnut Marketing Board. 5/ Marketable production, plus imports, plus beginning beginning stocks. 6/ Preliminary estimates.

Source: USDA, Economic Research Service analysis.

## **Contacts and Links**

#### **Contact Information**

Agnes Perez (Noncitrus and tropical fruit), (202) 694-5255, acperez@ers.usda.gov Susan Pollack (Citrus fruit and tree nuts), (202) 694-5251, pollack@ers.usda.gov

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#### Data

The *Fruit and Tree Nuts Situation and Outlook Yearbook* has over 130 tables of annual or monthly time-series data on specific fruit commodities. Data include bearing acreage, production, prices, trade, per capita use, and more. To order a copy call 1-800-999-6779.

### **Related Websites**

Fruit and Tree Nuts Briefing Room, http://www.ers.usda.gov/Briefing/FruitAndTreeNuts/

Organic Farming and Marketing <a href="http://www.ers.usda.gov/Briefing/Organic/">http://www.ers.usda.gov/Briefing/Organic/</a>

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