



Economic  
Research  
Service

Situation and  
Outlook

FTS-362

June 30, 2016

# Fruit and Tree Nuts Outlook

**Agnes Perez**

[acperez@ers.usda.gov](mailto:acperez@ers.usda.gov)

**Gustavo Ferreira**

[Gustavo.Ferreira@ers.usda.gov](mailto:Gustavo.Ferreira@ers.usda.gov)

## Lower Supplies Boost Early-Summer Prices for Sweet Cherries and Melons

On June 22, USDA’s National Agricultural Statistics Service (NASS) released its first forecast for the 2016 U.S. sweet cherry crop at 318,000 tons, down 6 percent from a year ago. Smaller crops in the two largest producing States—Washington and California—are mostly behind the expected production decline. Reduced supplies have helped boost early-season sweet cherry prices thus far.

Peach harvesting is underway in the top three producing States—California, South Carolina, and Georgia. Domestic shipments through mid-June are up 2 percent from the same time last year, reflecting substantial increases in South Carolina and Georgia. Price gains from reduced California supplies have been mitigated by the large supplies from the Southeast and lower prices for off-season imports this winter. Mid-May hailstorms likely dampened earlier crop prospects in California.

California’s 2016 dried plum (prune) crop is forecast at 45,000 tons, dried basis, down sharply from last year and the smallest on record, if realized. Potential increased carryin inventories in 2016/17, partly due to sluggish exports in 2015/16, should help alleviate some of the supply impacts of the expected very small production this year.

The June NASS *Crop Production* report projected the total 2015/16 citrus crop at 8.52 million tons, down 6 percent from 2014/15. While Florida remains the main citrus producing State, its production levels are expected to decline 17 percent this year.

The 2016 U.S. melon season kicked off this spring with lighter supplies compared to last year, mostly on reduced watermelon supplies in most major producing States. Due to the tight early-season supplies, U.S. consumers are seeing some higher melon prices.

This year’s upcoming California almond harvest is forecast to bounce back to the 2.0-billion-pound mark due to increased bearing acreage and improved yields. Uncommitted inventories remain relatively high near the end of the 2015/16 season. Hence, a potential increase in carryin inventories going into 2016/17 and the forecast larger production will likely keep downward pressure on almond grower prices. Meanwhile, while the 2015/16 California pistachio season started out with record-high carryover stocks, the steep drop in production last year has limited the ability of the industry to meet market demand.

**Contents**

- [Price Outlook](#)
- [Noncitrus Fruit](#)
- [Citrus Fruit](#)
- [Melons](#)
- [Tree Nuts](#)
- [Trade Summary](#)
- [Contacts and Links](#)

**Selected Tables**

- [Grower prices](#)
- [Retail prices](#)
- [Production and price:](#)
  - [Sweet cherries](#)
  - [Tart cherries](#)
- [Tropical fruit imports:](#)
  - [Banana](#)
  - [Papayas](#)
  - [Mangoes](#)
  - [Pineapples](#)
- [Citrus production](#)
- [Orange juice supply and use](#)
- [U.S. trade](#)

**Topic Page**

[Fruit & Tree Nuts](#)

-----  
The next release is  
September 30, 2016.  
-----

Approved by the  
World Agricultural  
Outlook Board.

# Price Outlook

## Grower Price Index for Fruit and Nuts Weakened in Early Spring

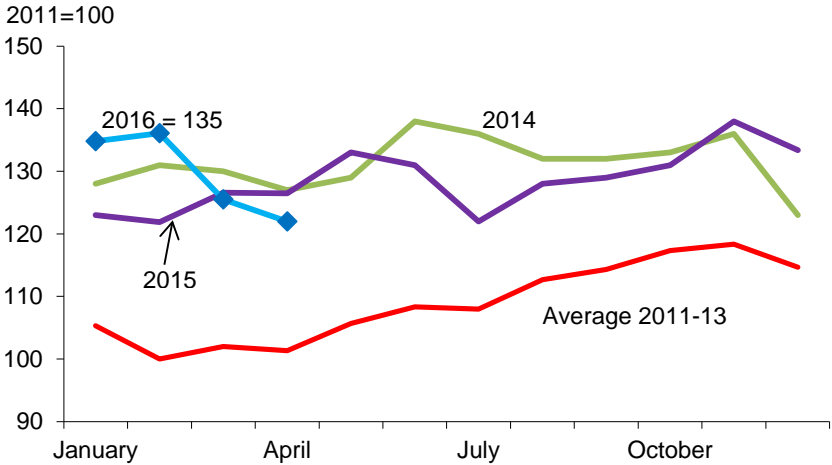
The 2016 grower price index for fruit and nuts slipped to 122 (2011=100) in April, down from 126 in March and from 127 in April 2015 (fig. 1). The grower price decline for fresh apples in April more than offset the increases for grapefruit and strawberries, pulling down the April index from the previous month. Relative to the same time last year, most major fruit prices were higher but the decline in orange prices was enough to drive down the overall index (table 1).

Orange grower prices fell in April from a year ago mostly on account of the larger production in California. Reduced overall supplies in most major producing States kept other citrus prices strong. Though lemon production for 2015/16 was forecast 2 percent larger in California, Arizona's crop was substantially down, putting upward pressure on prices since last fall. As the season is almost ending for lemons and oranges, diminishing supplies point to seasonal price gains through early summer but orange prices are likely to remain below year-ago levels.

Supplies are also winding down for 2015/16 U.S. apples and pears. Continued tighter supplies due to the smaller harvest last fall should keep fresh apple and pear grower prices above the previous season. Despite sluggish exports, fresh-apple holdings as of June 1, 2016 are reported by the U.S. Apple Association to be 24 percent below the same time last year and 4 percent lower than the 5-year average.

Harvest is underway in all of California's strawberry growing districts. Expected reduced acreage for this growing season could potentially lead to lower overall production. Following slowed movement earlier in the year, however, statewide shipment volumes, had surpassed year-ago levels in May and June, indicating some downward pressure on prices this spring.

Figure 1  
Index of prices received by growers for fruit and tree nuts



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

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

Commodity	Average 2011-13		March		April		Year-to-year change*	
	March	April	2015	2016	2015	2016	March	April
-----Dollars per box-----								
<i>Percent</i>								
Citrus fruit: <sup>1</sup>								
Grapefruit, all	5.78	6.80	5.34	8.46	5.33	10.48	58.4	96.6
Grapefruit, fresh	9.89	10.94	10.33	15.99	9.93	17.94	54.8	80.7
Lemons, all	8.52	10.94	16.14	24.64	21.65	24.33	52.7	12.4
Lemons, fresh	14.83	17.11	30.05	32.40	30.51	32.40	7.8	6.2
Oranges, all	8.90	9.51	11.32	9.19	10.78	9.19	-18.8	-14.7
Oranges, fresh	10.20	11.03	15.88	12.92	16.15	13.21	-18.6	-18.2
-----Dollars per pound-----								
Noncitrus fruit:								
Apples, fresh <sup>2</sup>	0.275	0.268	0.278	0.460	0.259	0.435	65.5	68.0
Grapes, fresh <sup>2</sup>	--	--	--	--	--	--	--	--
Peaches, fresh <sup>2</sup>	--	--	--	--	--	--	--	--
Pears, fresh <sup>2</sup>	0.213	0.219	0.326	0.375	0.305	0.397	14.9	30.2
Strawberries, fresh	1.061	0.883	0.636	0.810	0.768	0.843	27.4	9.8

\* Previous 3-year average price for noncitrus fruit calculated for the years 2010-12 because no monthly prices were reported for these commodities after the first quarter of 2013 and through the first quarter of 2014.

-- Insufficient number of reports to establish an estimate.

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

<sup>2</sup> Equivalent packinghouse-door returns for CA, MI, NY, and PA (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*.

### ***Consumer Price Index for Fresh Fruit Still Above a Year Ago***

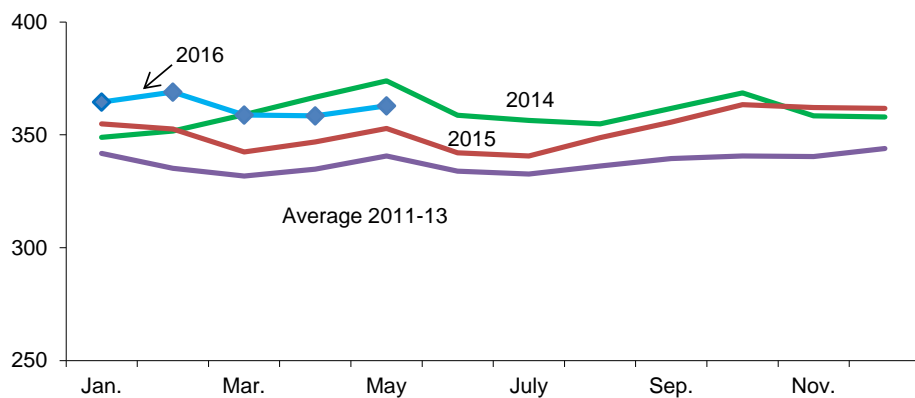
The Consumer Price Index (CPI) for fresh fruit in May 2016, at 362.8 (1982-84=100), remained strong relative to recent-year counterparts except in 2014 (fig. 2). Based on data from the U.S. Department of Labor, Bureau of Labor Statistics (BLS), year-to-year retail price gains for grapefruit, lemons, Red Delicious apples, strawberries, and Thompson seedless grapes more than offset the declines for navel oranges and bananas (table 2), boosting the fresh fruit CPI.

Tight fresh-apple supplies are keeping retail apple prices strong compared to last season, especially as the 2015/16 season winds down. The CPI for apples remained consistently higher than year-ago levels since November 2015, and in May was at 353.4 (1982-84=100), up from 324.2 in May 2015. Lower grape imports from Chile, mostly due to weather-reduced production in the country, helped bolster prices through early spring. As import supplies transitioned to Mexican grapes, reduced shipments from Mexico thus far this spring have aided prices even though the 2016/17 early-grape harvest in California's Coachella Valley had slightly higher volume than the past season. USDA's Agricultural Marketing Service (AMS) data show continued lower grape shipments from Mexico through mid-June, signaling continued strong prices for the month.

Strawberry supplies are building up in California but so far, strong demand and dwindling supplies from Mexico helped bolster prices. Banana import volumes continue higher than last year, driving down prices during much of the first half of 2016. Increased fresh orange supplies from California and Mexico are also driving down orange prices.

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

1982-84=100



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

Table 2--U.S. monthly retail prices for selected fruit, 2015-16

Commodity	Unit	2015		2016		2015-16 change	
		April	May	April	May	April	May
		--- Dollars ---		--- Dollars ---		--- Percent ---	
<b>Fresh:</b>							
Navel oranges	Pound	1.165	1.208	1.176	1.148	0.9	-5.0
Grapefruit	Pound	1.067	1.070	1.074	1.155	0.7	7.9
Lemons	Pound	1.750	1.874	2.027	2.035	15.8	8.6
Red Delicious apples	Pound	1.245	1.301	1.456	1.428	16.9	9.8
Bananas	Pound	0.597	0.582	0.574	0.570	-3.9	-2.1
Peaches	Pound	--	--	--	--	--	--
Strawberries <sup>1</sup>	12-oz. pint	1.852	2.087	2.152	2.252	16.2	7.9
Thompson seedless grapes	Pound	2.737	3.001	2.810	3.411	2.7	13.7
<b>Processed:</b>							
Orange juice, concentrate <sup>2</sup>	16-fl. oz	2.662	2.709	2.747	2.796	3.2	3.2
Wine	liter	12.335	12.044	12.375	12.031	0.3	-0.1

-- Insufficient marketing to establish price.

<sup>1</sup> Dry pint.

<sup>2</sup> Data converted from 12-fluid-ounce containers.

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

## Noncitrus Fruit

### *Smaller U.S. Sweet Cherry Crop in 2016*

On June 22, NASS released its first forecast for the 2016 U.S. sweet cherry crop at 318,000 tons (or 636 million pounds), down 6 percent from a year ago and 11-percent below the previous 5-year average, if realized (table 3). Smaller crops in the two largest producing States—Washington and California—are mostly behind the expected production decline. Starting this year, NASS also dropped four of the eight States in the annual sweet cherry production survey, contributing to the lower forecast estimate for 2016. Together, these four States (Idaho, Montana, New York, and Utah) typically represented 2 percent of the U.S. sweet cherry crop.

In the U.S. Northwest, a very early harvest was reported this year due to warm weather. In California, heavy rains in early May led to fruit cracking, affecting both the marketability and size of the crop. The Washington crop is forecast to decline 7 percent from a year ago reaching 195,000 tons, while in Oregon, production is forecast to increase 2 percent. Industry sources indicated that the bloom stage was so compressed this spring, it affected pollination negatively. While crop quality was high, some varieties, including the Bing variety, were short of a full crop. Moreover, the very brief bloom period resulted in many varieties reaching harvest-ready stage at the same time, making for an early end to the season. As with the California crop, rainy events that occurred between the bloom and harvest time also made a dent on this year's production. In Michigan, crop growth was reported on schedule, unlike last year's crop, which suffered from a late-May freeze.

As with the previous 2 years, this year's sweet cherry harvest in California was lower than average, with forecast production pegged at 60,000 tons, down 12 percent from a year ago. California's season kicked off early, with initial shipments reported as of mid-April, finishing harvest by early June. Initial volumes from Washington State started reaching market early as well, in late May. Cumulative domestic shipment volumes for the season through mid-June were running 13 percent below what AMS had reported the same time last year; year-to-date shipments in California were down 13 percent while those in Washington were down 4 percent.

Table 3--Sweet cherries: Total production and season-average price received by growers, 2013-15 and indicated 2016 production

State	Production				Price		
	2013	2014	2015	2016	2013	2014	2015
	-- Tons --				-- Dollar per ton --		
California	82,000	33,200	68,000	60,000	3,390	4,840	<sup>1</sup>
Idaho	2,300	2,120	2,600	<sup>2</sup>	2,550	2,630	<sup>1</sup>
Michigan	22,900	29,860	15,900	21,000	964	941	<sup>1</sup>
Montana	2,015	2,090	<sup>1</sup>	<sup>2</sup>	2,070	2,070	<sup>1</sup>
New York	1,045	630	900	<sup>2</sup>	3,750	3,290	<sup>1</sup>
Oregon	52,000	57,900	41,000	42,000	1,980	1,430	<sup>1</sup>
Utah	830	1,050	85	<sup>2</sup>	2,490	1,680	<sup>1</sup>
Washington	169,000	237,000	210,000	195,000	2,630	2,120	<sup>1</sup>
United States	332,090	363,850	338,485	318,000	2,610	2,140	<sup>1</sup>

<sup>1</sup> The first estimate for 2015 will be released in July 2016 *Noncitrus Fruit and Nuts 2015 Summary*.

<sup>2</sup> Estimate discontinued in 2016.

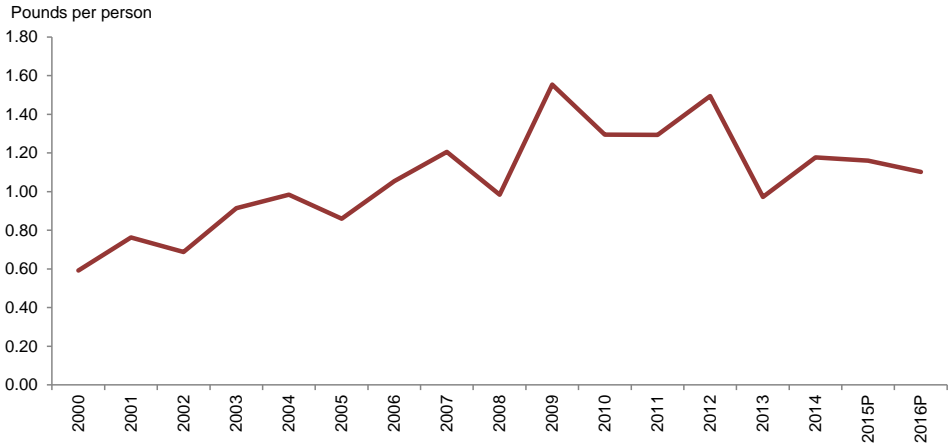
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts Summary*, various issues.

Reduced supplies have helped boost early prices for U.S. sweet cherries thus far. California Bing cherries, for example, fetched between 5 to 33 percent higher prices (free-on-board (f.o.b.) shipping-point) than last year, depending on fruit size. At the retail level, U.S. advertised retail prices for cherries in May averaged \$4.10 per pound for red varieties, same as last year’s level. As California’s season ended abruptly, prices strengthened to about \$5.00 per pound in early June when harvest in the Northwest was just getting started. As of the second week in June, seasonally increasing supplies from the Northwest have caused prices to weaken to around \$3.00 per pound. However, the average for the 2-week period was 29 percent higher than the same time last year, with far fewer stores running advertised promotions. With the expected compressed season in the Northwest this year, industry sources have indicated promotable volumes could be expected from around mid-June through mid-July, with sweet cherries finishing July with very tight supplies.

U.S. sweet cherry per capita use has, for the most part, exceeded the 1-pound mark since 2006, fueled by generally expanding domestic production, increased year-round availability from imports, and growing consumer awareness about the health benefits surrounding cherry consumption (fig. 3). The fresh market serves as the primary outlet for U.S. sweet cherries with over 90 percent of the fresh-market crop destined for the domestic market (fig. 4). The forecast smaller crop, if realized, will reduce domestic availability in 2016 as it did in 2015.

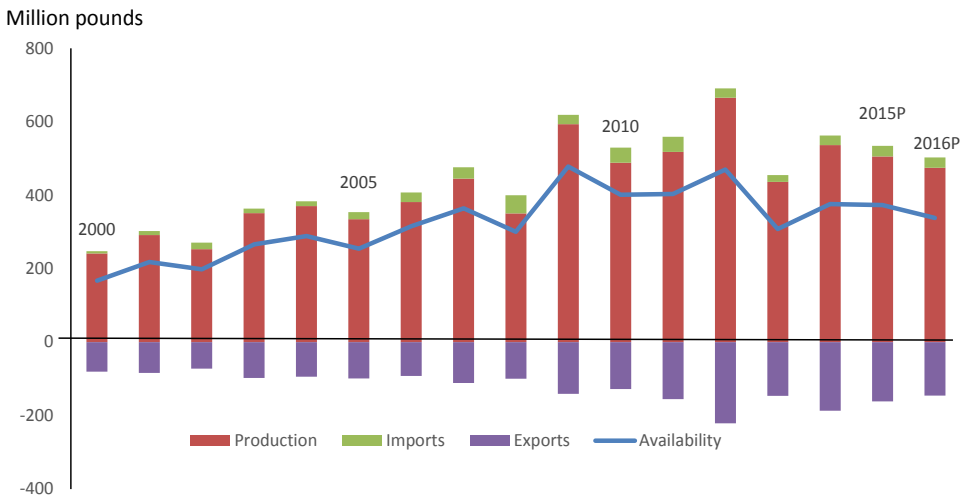
Fluctuations in domestic production play a major part in export trends. The U.S. Department of Commerce, U.S. Census Bureau reported export volume in April at 1.96 million pounds (or 979 tons), down 8 percent from the same time last year on substantial declines to major markets—South Korea and Canada. Early-season exports were strong to most other markets, including Japan.

**Figure 3**  
**U.S. sweet cherry per capita use per year mostly has exceeded 1 pound since mid-2000s**



P = projected.  
 Source: USDA, Economic Research Service calculations based on total production estimates from the USDA National Agricultural Statistics Service, *Cherry Production* (released June 22, 2016).

Figure 4  
**U.S. fresh-market sweet cherries mostly destined for the domestic market**



P = projected.

Source: USDA, Economic Research Service calculations based on total production estimates from the USDA National Agricultural Statistics Service, *Cherry Production* (released June 22, 2016) and U.S. trade data compiled from U.S. Department of Commerce, U.S. Census Bureau.

Off-season imports in the United States fell slightly behind in 2016, with January-April volume totaling 5.32 million pounds, down 51 percent from the same period a year ago on lower imports from Chile—the United States’ main source for cherry imports. Chile supplied 86 percent of total volume thus far, the rest mostly from other Southern Hemisphere suppliers such as Argentina, Australia, and New Zealand.

### ***Higher Yields in Michigan Boosts U.S. Tart Cherry Production in 2016***

Even though NASS dropped two States (Oregon and Pennsylvania) from the annual production survey for tart cherries beginning this year, the 2016 U.S. tart cherry crop is forecast to reach 309.1 million pounds, 39 percent above a year ago (table 4). As the largest producing State, Michigan’s crop is forecast at 222.7 million pounds, up substantially from the freeze-reduced crop in 2015. Contrary to last year, good growth on trees throughout the State were aiding yields. The crop in Wisconsin is also anticipated to have a rebound (up 17 percent from a year ago). In New York State, freeze-related damage during the bloom stage is expected to lead to below-average production, similar to last year. In the U.S. Northwest, production in Utah is forecast up 8 percent on good yields but down 2 percent in Washington.

A majority of U.S. tart cherries are destined for the frozen fruit market, taking over two-thirds of the crop, on average, in recent years. The forecast increased production, along with continued large beginning stocks, point to ample supplies of frozen tart cherries in 2016, likely putting downward pressure on grower prices. Based on NASS’s *Cold Storage 2015 Summary*, domestic frozen tart cherry stocks as of December 31, 2015 totaled 126.5 million pounds, down 9 percent from the same time the previous year but 20 percent higher than the previous 5-year average (fig. 5). NASS will publish the 2015 season-average grower price for tart cherries in the *Noncitrus Fruit and Nuts 2015 Summary* to be released on July 6, 2016.

Table 4 --Tart cherries: Total production and season-average price received by growers, 2013-15 and indicated 2016 production

State	Production				Price		
	2013	2014	2015	2016	2013	2014	2015
	-- Million pounds --				-- Cents per pound --		
Michigan	218.7	203.0	134.0	222.7	34.5	34.2	<sup>1</sup>
New York	12.0	10.0	8.2	8.0	35.8	30.4	<sup>1</sup>
Oregon	4.3	2.4	2.8	<sup>2</sup>	34.4	37.2	<sup>1</sup>
Pennsylvania	2.2	0.9	3.2	<sup>2</sup>	39.0	63.1	<sup>1</sup>
Utah	26.8	51.0	40.0	43.0	47.6	43.2	<sup>1</sup>
Washington	17.9	24.3	25.0	24.4	34.4	30.0	<sup>1</sup>
Wisconsin	12.3	12.3	9.4	11.0	35.7	39.4	<sup>1</sup>
United States	294.2	303.9	222.6	309.1	35.9	35.5	<sup>1</sup>

<sup>1</sup> The first estimate for 2015 will be released in July 2016 *Noncitrus Fruit and Nuts 2015 Summary*.

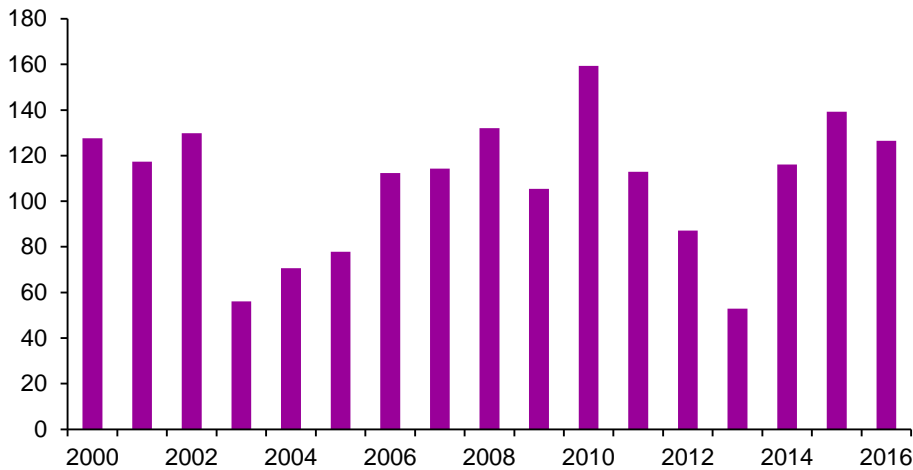
<sup>2</sup> Estimate discontinued in 2016.

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

Figure 5

### U.S. beginning stocks of frozen tart cherries in cold storage<sup>1</sup>

Million pounds



<sup>1</sup>Represents cold storage stocks on December 31 of the previous year.

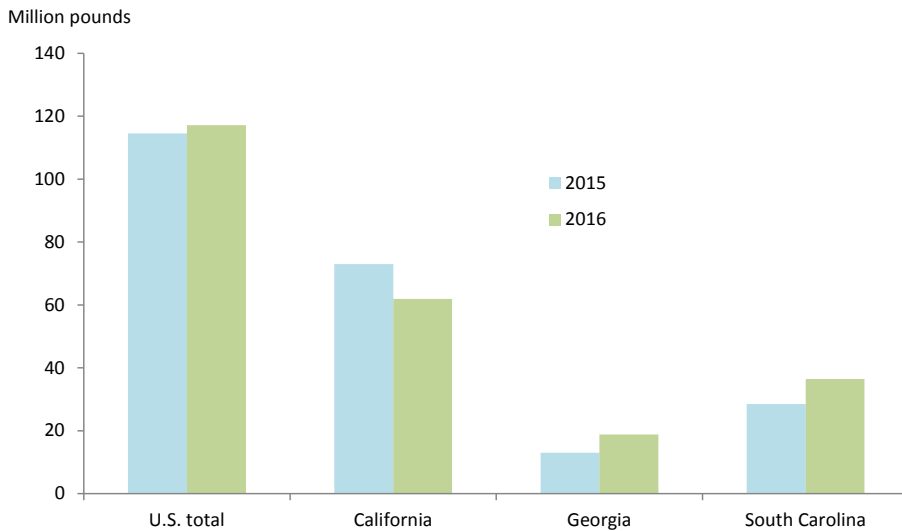
Source: USDA, National Agricultural Statistics Service, *Cold Storage Summary*, various issues.

### Early-Summer Peach Supplies Plentiful in the U.S. South

Peach harvesting is underway in the top three producing States—California, South Carolina, and Georgia. Data from USDA’s Agricultural Marketing Service (AMS) show overall domestic shipment volumes for the 2016 season through mid-June are up 2 percent from the same time last year, reflecting substantial increases in South Carolina and Georgia (fig. 6). Year-to-date shipment volumes out of California are down 15 percent. Adequate chill hours this winter and good pollination conditions contributed to favorable crop prospects in California but hailstorms in mid-May may have dampened earlier crop expectations for this year.



Figure 6  
**Fresh peach shipments through mid-June 2016 in top three producing States**



Source: USDA, Agricultural Marketing Service, Market News Portal.

In early May (prior to the hailstorm), NASS released the initial forecast of 580,000 tons (or 1.16 billion pounds) for California’s 2016 peach crop, up 4 percent from last year, reversing an 8-year declining trend in production, if realized. Both the freestone and clingstone peach crops are forecast to be larger than last year; freestone crop up 3 percent to 260,000 tons and clingstone production up 5 percent to 320,000 tons. Significant widespread losses to production from the hailstorm, if any, will likely be reflected in the production forecast that NASS will release in the August 2016 issue of the *Crop Production* report.

Price gains from reduced California supplies have been mitigated by the large supplies from South Carolina and Georgia, and from lower prices for off-season imported peaches from Chile this winter. Free-on-board (f.o.b.) shipping-point prices in California’s central and southern San Joaquin Valley averaged in the range of \$28-\$33 per 2-layer tray carton (size 48-50s) of various yellow flesh varieties in late May, compared with \$28-30 the same time last year. Through mid-June, prices dropped to an average of \$22-\$25 per tray pack on seasonally increasing supplies, compared with \$21-\$24. At the retail level, national advertised retail prices for yellow variety peaches in May averaged \$2.21 per pound, compared with \$2.47 per pound the same time a year ago, according to AMS data. Comparative prices for white flesh varieties averaged \$2.70 per pound in May 2016 versus \$2.75 in May 2015. Prices for both yellow and white varieties have weakened into June and remained below last year. Other producing States will come into production as the summer progresses, with industry indications of potential freeze-damaged crops in the Northeast.

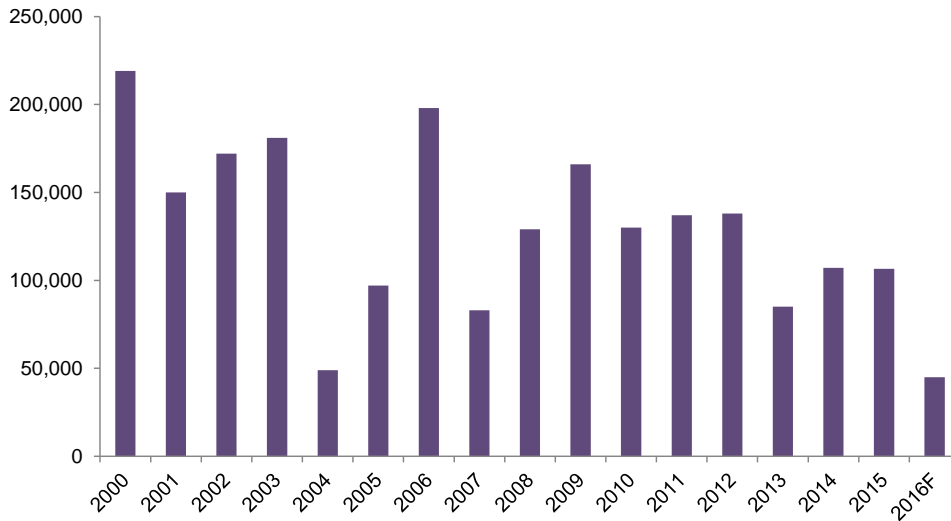
### ***California Prune Crop Forecast Down Sharply in 2016***

The NASS Pacific Regional Office forecast California’s 2016 dried plum (prune) crop at 45,000 tons, dried basis, down by more than half its size from last year due to adverse weather during pollination (fig. 7). If realized, crop size will be well

Figure 7

**Forecast 2016 California prune production smallest on record**

Tons, dried basis



F = forecast.

Source: USDA, California National Agricultural Statistics Service Field Office, *2016 California Dried Plum (Prune) Forecast*, June 2016

below the previous 5-year average of 114,000 tons and the smallest crop on record. Cold temperatures, high winds, and heavy rains in March interrupted pollination causing low yields. In addition, bearing acreage declined from 48,000 acres in 2015 to 45,000 acres in 2016.

As of January 31, 2016, ending inventories for the 2015/16 season (August-July) remained significantly higher than in 2014/15, suggesting potential increased carry-in inventories for the upcoming season (2016/17) that will help alleviate some of the supply impacts of the expected very small production this year. Despite fairly flat production in 2015/16 compared with the previous year, overall supplies were bolstered by the large carry-in volume from 2014/15. Current-season exports, however, have been sluggish, particularly to key European Union markets, Japan, Canada, Hong Kong, and China, not to mention the continued loss of market access to Russia given the 1-year extension of the Russian Ban on imports of a variety of agricultural products from the United States and several other countries. Weak export demand has kept inventory levels elevated and prune grower prices likely at lower levels than the \$2,240 per ton average in 2014/15. Recommended minimum pricing set by the Prune Bargaining Association for the 2015 crop has prices consistently lower than those set for the 2014 crop across all grades and size count. NASS will report the 2015/16 season-average grower price for California prunes in July 2016.

***Overlapping Supplies Weaken Blueberry Prices***

Spring marks the period when the U.S. blueberry market shifts from off-season Southern Hemisphere imports to domestic production. Harvest delays in Florida caused overlaps with early-supply build in Georgia and North Carolina, dampening 2016 early-season prices. The late start to the Florida season is attributed to unseasonably warm weather this winter followed by a cold snap in early spring that stalled crop growth. Likewise, production in other producing States along the

Eastern Seaboard were affected by multiple freeze events this spring. Weekly AMS data show cumulative domestic shipments through mid-June down 15 percent from the same time last year, with supplies from Florida, Georgia, North Carolina, and New Jersey all registering significant declines. Despite lower supplies thus far, prices are down from last year. Harvesting will be in progress among other large producers such as Michigan, Oregon, and Washington in July.

First to be on the market among eastern U.S. producing States, prices for Florida blueberries started the season strong due to very light supplies. In April, f.o.b. shipping-point prices for Florida blueberries ranged from \$33-\$36 per flat of 12 (6-ounce) cups with lids (medium-large), from \$16-\$18 in April 2015. As the State's harvest gained momentum well into May when harvest also began to move up north, Florida prices for the month quickly dipped to about \$13, fairly unchanged from the same time last year. F.o.b. prices in South Georgia and North Carolina fell below year-ago levels, fetching around \$15-\$19 and per 12 (1-pint) cups with lids, compared with \$18-\$24 about the same time last year. F.o.b. prices in California's south and central districts also averaged lower than last year, fetching around \$9-\$12 per flat of 12 (6-oz) cup with lids (medium-large) from mid-May through early June. Industry sources indicated the California blueberry growers are on track for a record-large harvest in 2016. Based on AMS data, year-to-date shipment volumes in California were up 15 percent as of mid-June.

At retail markets, AMS data show U.S. advertised retail prices declining from April to early June due to the supply buildup from more States harvesting their crop. However, when compared with year-ago levels, price patterns varied depending on packaging size. April to early June prices averaged \$3.15 for a 1-pint package, up from \$2.66 the same time a year ago. A 6-oz package, meanwhile, averaged \$2.52 for the same period, down from \$2.58 last year.

### ***Tropical Fresh Fruit Supplies Abundant***

Tropical fresh fruit supplies in the United States are plentiful through most of the first half of 2016, commanding generally favorable prices for U.S. consumers. During the first 4 months of 2016, combined import volumes for major fresh tropical fruit (i.e., bananas, papayas, mangoes, and pineapples) totaled 4.61 billion pounds, based on U.S. Census Bureau data. Those volumes were up 2 percent from the same 4 months in 2015—the year annual import volumes in the United States broke record highs for bananas and papayas (tables 5 and 6) and were just short of record volumes achieved in 2013 and 2014 for mangoes and pineapples, respectively (tables 7 and 8). Except for mangoes, year-to-date volumes this year have outpaced those for the same period in 2015.

**Banana market:** Import volumes from Guatemala and Colombia slowed during the first 4 months of 2016, partly due to adverse weather that has affected their production. These declines, however, were outweighed by increases from Ecuador, Costa Rica, Honduras, and Peru, resulting in a 1-percent rise in total import volume. According to industry reports, most banana-producing regions in Ecuador were not affected by the recent catastrophic earthquake in the country. Year-to-date imports from Ecuador are 10 percent higher than last year. With increased overall supplies, U.S. banana retail prices, as reported by BLS, were consistently lower than a year ago each month from January through April 2016 and averaged \$0.58 per pound for

Table 5--U.S. imports of fresh bananas, excluding plantains, by country, 2011-16

Country	2011	2012	2013	2014	2015	Jan-Apr	Jan-Apr	Change
						2015	2016	2015-16
						<i>Million pounds</i>		
Guatemala	2,940	3,216	3,555	3,686	3,805	1,284	1,197	-7
Ecuador	1,938	1,587	1,682	1,715	1,855	673	740	10
Costa Rica	1,862	1,870	1,759	1,808	1,473	432	564	30
Honduras	982	1,181	1,330	1,263	1,383	459	470	2
Colombia	848	970	1,004	826	694	238	189	-21
Other countries	520	766	715	794	953	317	285	-10
World	9,089	9,589	10,046	10,091	10,163	3,402	3,444	1

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

Table 6--U.S. imports of fresh papayas, by country, 2011-16

Country	2011	2012	2013	2014	2015	Jan-Apr	Jan-Apr	Change
						2015	2016	2015-16
						<i>1,000 pounds</i>		
Mexico	222,432	236,685	246,843	280,852	319,325	96,434	114,455	19
Guatemala	13,658	24,776	32,628	27,768	50,887	14,662	23,130	58
Belize	58,141	40,823	52,191	32,157	29,310	11,826	3,813	-68
Brazil	7,897	5,157	5,588	6,622	6,713	2,451	2,328	-5
Jamaica	1,207	1,711	1,199	1,039	1,344	487	422	-13
Dominican Republic	4,805	4,405	3,341	2,537	1,233	1,233	122	-90
Other countries	91	20	167	78	82	37	--	--
World	308,231	313,576	341,957	351,052	408,894	127,129	144,271	13

-- = Not applicable.

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

Table 7--U.S. imports of fresh mangoes, by country, 2011-16

Country	2011	2012	2013	2014	2015	Jan-Apr	Jan-Apr	Change
						2015	2016	2015-16
						<i>1,000 pounds</i>		
Mexico	518,420	538,590	615,710	517,309	559,823	169,148	132,629	-21.6
Ecuador	66,942	83,427	101,156	75,856	83,988	11,175	18,729	67.6
Peru	99,609	59,421	90,967	98,425	73,706	68,963	80,071	16.1
Brazil	54,643	53,382	52,739	49,298	71,010	1,914	--	--
Guatemala	39,406	37,448	37,363	45,862	34,269	24,900	13,990	-43.8
Haiti	20,331	17,633	22,548	21,800	23,567	3,547	3,965	11.8
Other countries	11,055	14,344	15,272	14,205	14,688	12,395	10,550	-14.9
World	810,405	804,246	935,755	822,754	861,051	292,043	259,933	-11.0

-- = Not available.

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

Table 8--U.S. imports of fresh pineapples, by country, 2011-16<sup>1</sup>

Country	2011	2012	2013	2014	2015	Jan-Apr	Jan-Apr	Change
						2015	2016	2015-16
						<i>1,000 pounds</i>		
Costa Rica	1,538,799	1,738,262	1,882,513	2,067,457	1,911,454	601,987	628,871	4
Mexico	80,336	121,743	119,451	89,493	164,172	59,965	81,735	36
Honduras	60,056	82,206	85,747	84,115	105,234	32,506	28,084	-14
Guatemala	32,262	31,096	30,433	32,756	35,177	13,553	15,871	17
Ecuador	47,525	17,362	7,029	8,561	13,166	3,036	3,059	1
Panama	31,113	32,356	11,227	9,969	11,632	1,679	2,880	71
Dominican Republic	551	2,245	3,772	4,272	5,937	2,477	2,491	1
Colombia	1,879	1,449	2,339	1,276	5,799	611	996	63
Thailand	8,143	9,956	7,196	7,642	5,213	2,090	1,445	-31
Chile	148	228	511	946	2,952	1,506	188	-87
Other countries	1,606	1,329	590	711	1,799	1,029	153	-85
World	1,802,418	2,038,231	2,150,808	2,307,197	2,262,535	720,439	766,074	6.3

<sup>1</sup> Includes dried pineapples.

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

this 4-month period, compared with \$0.59 the same time last year. Recent AMS shipment data show sluggish imports in May and June but retail advertised prices remained lower to fairly steady from the same time last year.

**Papaya market:** Import volumes rose from a year ago during the first 4 months of 2016 but, with the exception of February and March, papaya prices have leaned less favorably to consumers. U.S. advertised retail prices for Maradol and Tainung papayas averaged \$2.19 each in April and \$2.48 each in May, compared with \$1.14 and \$2.22 for the same months last year. U.S. consumers are also seeing an uptick in Solo-type papaya prices, a result of drought-reduced production in Brazil. Imports were up 19 percent from Mexico—the main supplier of papayas to the United States—as with those from Guatemala, which showed the largest growth.

**Mango market:** With seasonally increasing supplies from Mexico this spring, U.S. advertised retail prices for mangoes have weakened from the average of \$1.21 each both in February and March to \$1.01 in April and \$0.94 in May. Relative to last year, however, prices have improved during the latter 2 months due to reduced overall imports from Mexico to date. Peru mostly serves the U.S. winter market, with increases reported so far this year and representing 48 percent of total import volume from January through March. Overall, more than half of mangoes imported into the United States each year come from Mexico, with heaviest volumes in the spring and early summer. Colder-than-average temperatures has slowed maturity of Mexico's 2016 mango crop and wet weather during bloom may potentially reduce the country's overall production. Volumes are expected to pick up in June and July, resulting in continued seasonal weakening in prices from earlier in the year. However, should U.S. imports from Mexico continue lower into the summer months, retail pricing for mangoes will likely remain higher than last year's prices.

**Pineapple market:** Costa Rican pineapples constitute a majority of U.S. supplies and are mostly behind the overall 6-percent surge in total import volume during the first 4 months of 2016. Nevertheless, imports from other producing countries such as Mexico, Guatemala, Ecuador, Panama, the Dominican Republic, and Colombia are also up and together provide ample supplies for retail promotions. National advertised retail prices for pineapples were consistently lower than last year each month from January to April, with the 4-month average price at \$2.69 each, compared with \$2.76 for the same time last year. Although seasonal increases in supplies are expected going into the warm summer months to fulfill pineapple demand, more recent AMS shipment data show imports have declined from year-ago levels in May and June due to slowed shipments from Costa Rica, resulting in higher prices.

### ***Total U.S. Citrus Production Forecast Down for 2015/16***

The June NASS *Crop Production* report projected the total 2015/16 citrus crop at 8.52 million tons, down 6 percent from the 2014/15 production estimate, and down 3 percent from the season's initial forecast in October (table 9). While Florida remains the main citrus producing state, its production levels are expected to decline 17 percent this year. On the other hand, citrus production is forecast up 8 percent in California and 19 percent in Texas.

Total orange production remains unchanged from the May forecast, but is down 8 percent from last year due to production declines in Florida's navel and Valencia orange output. California orange production experienced an increase from last season, up 7 percent for navel and 11 percent for Valencia oranges. Overall grapefruit production is down 7 percent for 2015/16, but production increases out of Texas have partially offset the declines experienced in California (down 9 percent) and Florida (down 16 percent). U.S. tangerine production is up this season, with increased production in California potentially reaching 880,000 tons, and a lower tangerine crop forecasted for Florida. Total lemon production remained unchanged relative to last season. California produced a slightly larger lemon crop this season, whereas Arizona production declined 25 percent relative to 2014/15. The forecast for tangelos shows a 41 percent from last year.

### ***Florida All-Orange Crop Down From Last Season***

The June forecast for the 2015/16 Florida all-orange crop is down 17 percent from last season, with production losses expected for both early-to mid-season orange crop and Valencia oranges. As the season progressed, Florida experienced downward production revisions for navel oranges from the original October 2015 forecast. As of the June *Crop Production* report, Florida Valencia production is anticipated at 2.04 million tons, 9 percent below last season and down 12 percent from 2013/14. Non-Valencia orange production is estimated at 1.63 million tons, down 24 percent from 2014/15, and 2 percent below the initial October forecast. Such continuous decreases in all-orange production are mostly due to the citrus greening disease. According to a survey recently administered to 200 growers by the University of Florida's Institute of Food and Agricultural Sciences, greening has affected as much as 90 percent of citrus acreage and 80 percent of trees. Furthermore, weather conditions brought on by El Niño resulted in more rain than normal this past winter. All these conditions have caused the fruit to drop before it is ripe. According to the June issue of NASS's *California Fruit & Nut Review*, Florida growers are now focusing on the next season's crop, and many of them are replacing trees or entire groves severely impacted by greening. Most healthy trees are holding fruit that is golf-ball size or larger.

According to the Florida Citrus Administrative Committee (FCAC), as of late-May, the early-midseason and Valencia orange crops were nearly fully harvested, with only a fraction of the crop remaining on trees to be harvested, respectively. The season begun winding down in early June and will wrap up before July. AMS data shows movement of oranges out of Florida through mid-June below last season for the same week. Despite the lower production, Florida grower prices for processing oranges have averaged \$6.77 per 90-pound box, down 17 percent compared to the

Table 9--Citrus: Utilized production, 2013/14, 2014/15 and forecast for 2015/16<sup>1</sup>

Crop and State	Utilized		Forecast for	Utilized		Forecast for
	2013/14	2014/15	2015/16 as of 06-2016	2013/14	2014/15	2015/16 as of 06-2016
	---- 1,000 boxes <sup>2</sup> ----			----1,000 tons ----		
Oranges:						
Early/mid-season and navel:						
California	38,700	39,100	42,000	1,548	1,564	1,680
Florida <sup>3</sup>	53,300	47,400	36,100	2,399	2,133	1,625
Texas	1,401	1,170	1,350	60	50	57
Total <sup>4</sup>	93,401	87,670	79,450	4,006	3,747	3,362
Valencia:						
California	10,800	9,500	10,500	432	380	420
Florida	51,400	49,550	45,300	2,313	2,230	2,039
Texas	376	282	220	16	12	9
Total	62,576	59,332	56,020	2,761	2,622	2,468
All oranges	155,977	147,002	135,470	6,767	6,369	5,830
Grapefruit:						
California	3,850	4,300	3,900	154	172	156
Florida	15,650	12,900	10,850	665	548	461
Texas	5,700	4,250	5,200	228	170	208
All grapefruit	25,200	21,450	19,950	1,047	890	825
Tangerines and mandarins:						
Arizona	150	170	discontinued	6	7	-
California	14,700	18,500	22,000	588	740	880
Florida	2,900	2,265	1,430	138	108	68
All tangerines and mandarins	17,750	20,935	23,430	732	855	948
Lemons:						
Arizona	1,800	2,000	1,500	72	80	60
California	18,800	20,600	21,000	752	824	840
All lemons	20,600	22,600	22,500	824	904	900
Tangelos						
Florida	880	665	390	41.80	30	18
All citrus <sup>4</sup>	220,407	212,652	201,740	9,412	9,048	8,520

<sup>1</sup>The crop year begins with bloom of the first year shown and ends with completion of the harvest following year.

<sup>2</sup>Net pounds per box: oranges in California (CA)-80 (75 prior to the 2010-2011 crop year), Florida (FL)-90, Texas (TX)-85; grapefruit in CA-80 (67 prior to the 2010-11 crop year), FL-85, TX-80; lemons-80 (76 prior to the 2010-11 crop year); tangelos-90; tangerines and mandarins in AZ and CA-80 (75 prior to the 2010-11 crop year), FL-95.

<sup>3</sup>Includes Temples. <sup>4</sup>Totals may not be equivalent to the sum of the categories due to rounding.

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

Table 10--Processing oranges: Average equivalent on-tree prices received by Florida growers, 2010/11-2015/16

Month	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	----- Dollars per 90-pound box -----					
October	--	--	--	--	--	3.60
November	5.96	8.10	5.38	7.08	5.05	4.60
December	6.77	8.60	5.82	7.90	6.90	6.30
January	6.89	8.80	6.00	8.20	7.75	7.21
February	7.20	9.60	6.17	8.20	8.16	8.09
March	9.16	10.90	8.40	10.35	10.30	8.71
April	9.50	11.20	8.60	10.75	10.50	8.90
May	9.70	11.10	8.70	10.95	10.60	
June	10.10	--	8.80	11.45	10.60	
Oct.-April average	7.58	9.53	6.73	8.75	8.11	6.77

-- = Insufficient data to establish price.

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

same period in 2014/15 (table 10). Prices should remain stable for the remainder of season as is typically observed in late spring and summer.

### ***Reduction in Florida Orange Juice Production Forecast in 2015/16***

In June 2016, Florida's Valencia orange crop was revised upward 13 percent from the initial October forecast of 1.8 million tons (3.6 million pounds). However, the current forecast, totaling 2.04 million tons (4.08 million pounds), is down 9 percent from last season's total. As of the June NASS *Crop Production* report, the Florida all-orange yield forecast for the 2015-2016 season is final at 1.41 gallons per box (at 42.0 degrees Brix), down 6 percent from last season's final yield of 1.50 gallons per box. Smaller fruit sizes are producing less juice, ultimately reducing the USDA, Economic Research Service (ERS) forecast of 2015/16 orange juice production to 533 million gallons single-strength equivalent (sse), down 13 percent from 2014/15. This could potentially be the lowest production level since the 1987/88 season (table 11). Beginning stocks during the 2015/16 season increased 4 percent from the previous season to 483 million gallons sse. The higher beginning stocks may only partially compensate for reduced domestic production and lower imports so far this season.

Orange juice imports from October through April are down 15 percent from the same period in 2014/15. Overall, January and February were the only months where orange juice imports were above last season's monthly volumes, demonstrating the slow import season so far. Brazil has decreased orange juice shipments to the United States by 45 percent through April. This may be due to an appreciation of real against the U.S. dollar, which discourages sales as producers wait for more favorable exchange rates. Using historical import volume through April and current weak imports so far, ERS forecasts orange juice imports to reach 410 million gallons sse, down 10 percent from last year, if realized. In a context of reduced production, higher stocks, and lower imports, overall domestic supply is anticipated down 7 percent to 1,446 million gallons sse.

Export volumes fell below year-ago and 5-year average levels every month of the 2015/16 season to date. With a lower U.S. consumption and lower overall Brazilian exports of orange juice from this season, ERS forecasts 2015/16 total orange juice exports to reach 113 million gallons sse. Under these market conditions, ERS forecasts orange juice ending stocks at 450 million gallons sse, 10 percent below last season. Furthermore, ERS forecast that U.S. orange juice consumption will continue to decline in 2015/16 down, to 2.74 gallons per person.

This decline in domestic consumption of orange juice can be traced back to the previous decade. For instance, an ERS report found that per capita fruit consumption in the United States fell in 2005-08, mainly because of the declining consumption of oranges and orange juice. Over the same period, adults' orange juice consumption dropped from 36.6 to 30.5 pounds. The Florida Department of Citrus released data from research firm Nielsen, which reveals a 5 percent decline years-to-date in gallons of orange juice sold.



Table 11 --United States: Orange juice supply and utilization, 1986/87 to present

Season <sup>1</sup>	Beginning		Imports	Supply	Exports	Domestic consumption	Ending stocks	Per capita consumption
	stocks	Production						
	-----Million sse gallons <sup>2</sup> -----							Gallons
1986/87	202	773	396	1,371	72	1,099	200	4.55
1987/88	200	899	296	1,394	89	1,095	210	4.49
1988/89	210	961	272	1,443	72	1,140	231	4.63
1989/90	231	646	350	1,227	89	914	223	3.68
1990/91	223	868	320	1,411	94	1,161	156	4.61
1991/92	156	921	286	1,363	107	1,086	170	4.26
1992/93	170	1,207	324	1,701	114	1,337	249	5.18
1993/94	249	1,133	405	1,787	107	1,320	360	5.04
1994/95	360	1,257	198	1,815	117	1,264	434	4.77
1995/96	434	1,271	261	1,967	119	1,425	423	5.32
1996/97	423	1,437	256	2,116	148	1,397	571	5.15
1997/98	571	1,555	281	2,407	150	1,720	537	6.27
1998/99	537	1,236	350	2,124	147	1,447	530	5.21
1999/00	530	1,493	339	2,362	146	1,571	645	5.59
2000/01	645	1,387	258	2,291	123	1,470	698	5.18
2001/02	698	1,433	189	2,321	181	1,452	688	5.06
2002/03	688	1,250	291	2,229	103	1,419	707	4.90
2003/04	707	1,467	222	2,395	123	1,451	822	4.96
2004/05	822	970	358	2,149	119	1,407	623	4.77
2005/06	623	986	299	1,909	138	1,312	459	4.41
2006/07	459	889	399	1,747	123	1,248	376	4.15
2007/08	376	1,156	404	1,935	136	1,152	647	3.80
2008/09	647	1,060	317	2,025	125	1,221	679	3.99
2009/10	679	840	328	1,848	147	1,143	557	3.70
2010/11	557	919	265	1,742	210	1,140	391	3.67
2011/12	391	959	223	1,574	154	971	449	3.10
2012/13	449	847	421	1,717	159	1,024	534	3.25
2013/14	534	663	418	1,615	158	974	483	3.07
2014/15	483	610	458	1,551	111	937	502	2.93
2015/16F	502	533	410	1,446	113	883	450	2.74

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

<sup>2</sup>SSE = single-strength equivalent.

Source: USDA, Economic Research Service.

### ***California Orange Production Projected Up 8 Percent in 2015/16***

California's overall orange crop in 2015/16 is projected up 8 percent to 2.1 million tons due to increases in both navel and Valencia crops. Navel crop increased 7 percent to 1.68 million tons. The Valencia crop is up 11 percent to 420,000 tons. The navel crop estimate has been revised downward from the original October forecast, whereas the Valencia crop has been raised 11 percent. The June issue of NASS's *California Fruit & Nut Review* reported that the navel and Valencia oranges continued to be harvested. Furthermore, navel oranges are being packed for the domestic market, while late varieties will be exported. While there were some concerns due to a warm February, this navel season has been characterized by good quality and flavor. The larger crop has lowered grower prices this season (table 12). California fresh orange prices have averaged \$16.21 per 80-lb box through April this season, down from \$17.78 over the same period in 2014/15.

From November 2015 through April 2016, U.S. fresh orange exports have totaled 484,615 tons, an increase of 20 percent from the same period last season. South Korea and Canada remain the top two export markets for U.S. fresh oranges, accounting for 56 percent of total, season to date.

Table 12--Fresh oranges: Average equivalent on-tree prices received by California growers, 2010/11-2015/16

Month	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	----- Dollars/box <sup>1</sup> -----					
November	15.31	15.52	15.20	18.17	20.14	21.20
December	13.75	13.53	12.90	15.97	19.24	19.40
January	12.35	11.73	11.50	21.77	17.84	16.90
February	9.65	11.13	10.10	23.67	16.74	14.30
March	8.90	10.84	10.13	23.41	16.14	12.58
April	9.22	13.81	11.45	23.90	16.60	12.86
May	10.63	15.47	14.05	23.70	16.90	
June	11.81	14.92	15.31	20.74	15.85	
July	9.85	11.03	11.90	18.17	14.20	
August	10.75	10.23	12.30	17.67	16.34	
September	11.45	12.53	14.80	18.27	20.04	
October	11.15	12.13	15.30	15.77	21.24	
Nov.-April average	11.53	12.76	11.88	21.15	17.78	16.21

<sup>1</sup>75-lb box prior to 2010/11; 80-lb box thereafter.

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

### ***U.S. Total Grapefruit Production Down in 2015/16***

U.S. grapefruit production is expected to total just 825,000 tons, down 7 percent from last season's total of 890,000 tons. If realized, the 2015/16 U.S. grapefruit crop would be the lowest in the past 30 years, behind only the 2014/15 season. California's production was 9 percent lower relative to the 2014/15 season, whereas Texas' production increased 22 percent to 208,000 tons. While Florida remains the primary source of U.S. grapefruit, it also accounts for the largest decline in production, with an estimated crop volume of 461,000 tons, down 16 percent year over year. Of this estimate, 106,000 tons were for white grapefruit and 355,000 tons for colored grapefruit. Output levels for both varieties declined 13 percent and 23 percent, respectively. According to AMS data, by the end of the second week of June, total grapefruit shipments were down 14 percent in comparison to the volume registered during the same period in 2015.

As of late May, FCAC estimates that virtually all grapefruit has been harvested for the season. The smaller grapefruit harvest this year has significantly bolstered producer prices this season (October-May). Specifically, prices for fresh grapefruit were the strongest in the past 5 years and have averaged \$5.38 per box, up 314 percent from last season (table 13). According to FCAC utilization data through late May, the share of grapefruit for processing in 2015/16 is 56 percent, lower by 2 percent than the previous year. Actual quantity of grapefruit sent to processing is down 80 percent, following the trend in total Florida grapefruit production.

The Florida Department of Citrus released data from the research firm Nielsen showing a 4-percent decline year-to-date in gallons of grapefruit juice sold. Domestic consumption continues to decline, with occasional increases, but the overall trend remains downward since the peak in 1975/76, with 9.26 pounds per person.

Table 13--Processing grapefruit: Average equivalent on-tree prices received by Florida growers, 2010/11-2015/16

Month	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	----- Dollars per 85-pound box -----					
October	--	3.00	-0.47	--	-0.08	--
November	2.06	3.82	-0.19	1.36	-0.08	2.74
December	2.43	3.59	0.40	2.27	0.01	4.11
January	2.90	3.91	3.23	2.58	1.91	5.90
February	3.33	4.34	3.55	2.95	1.51	6.36
March	3.06	4.41	3.47	2.91	2.62	6.22
April	2.78	0.20	3.25	2.48	3.18	6.95
May	3.48	--	--	--	--	--
Oct.-Apr. average	2.86	3.32	1.89	2.43	1.30	5.38

-- = Insufficient data to establish price.

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

### ***Smaller Lemon Crop and High Prices in 2015/16***

The June NASS *Crop Production* forecast has total U.S. lemon production in 2015/16 at 900,000 tons, down only 0.5 percent, year over year. Production losses in Arizona and small gains in California are expected. Despite relatively stable production, grower prices have been 58 percent above the previous 5-year average each month through April. The season-to-date average grower price for fresh lemons is \$35.98 per 80-lb box, 3 percent below the 2014/15 August to April average. However, since November of 2015, lemon prices have been the highest of the five latest seasons (table 14).

The slow and steady price increases in the most recent months will likely be maintained for the remainder of the summer as supplies decline during the traditional high summer demand. Furthermore, these higher prices are also the result of high prices for fresh limes, in particular those produced in Mexico. This is because lemons and limes are considered substitutes, and consumers are likely to purchase lemons in lieu of the high-priced limes. Furthermore, there was a significant lower volume of lemon imports from January to April of 2016, down 41 percent relative to the same period in 2015. Spain has shipped 2.4 million pounds of lemons to the U.S. market this season, and accounted for 59 percent of U.S. total lemon imports. Mexico remains the second most important supplier, with 31 percent of U.S. total lemon imports originating from that country. Moreover, the USDA Animal and Plant Health Inspection Service is proposing to allow lemon imports from Argentina, which have been banned since 2001 due to concerns over sanitary and phytosanitary standards. The proposed rule will be published in the Federal Register on Tuesday, May 10. Comments will be due July 11, 2016. U.S. lemon exports this season through April are down 7 percent relative to the same period last year.

The lemon harvest is winding down and movement from California during the second week in June was above the last season's volume for the same period, based on AMS data. Overall movement for the season through the second week of June 2016 is 71 percent above last season's for the same period.

Table 14-Fresh lemons: Average equivalent on-tree prices received by U.S. growers, 2010/11-2015/16

Month	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	----- Dollars per box <sup>1</sup> -----					
August	25.43	25.09	21.62	31.62	43.81	39.40
September	25.83	22.59	20.25	33.38	44.45	36.10
October	25.20	19.50	19.47	35.17	44.88	39.91
November	26.06	18.97	17.30	32.94	39.86	40.27
December	18.78	19.77	16.48	30.53	34.69	36.13
January	14.80	21.12	15.82	31.71	32.84	33.63
February	12.46	18.50	14.37	30.79	31.24	33.59
March	12.87	17.89	13.72	30.73	30.05	32.40
April	14.83	18.89	17.62	32.92	30.51	32.40
May	16.13	21.29	21.92	35.02	37.81	
June	17.93	22.29	24.62	38.52	45.01	
July	22.43	20.59	25.82	44.22	44.91	
Aug.-April average	19.58	20.26	17.41	32.20	36.93	35.98

<sup>1</sup>Beginning in 2010/11, boxes are 80 lb. Prior to 2010/11, box size was 76 lb.

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

### ***Tangerine Production Up, Tangelo Production Down in 2015/16***

Production for all tangerines and mandarins is forecast at 948,000 tons in 2015/16, 11 percent above the 2014/15 crop of 855,000 tons. AMS tangerine shipment data show a slowdown from 118 million pounds in 2015 to 78 million pounds in 2016. A continuous decline in production in Florida was offset by a 19 percent production increase in California. According to Florida NASS *Citrus Forecast* for June 2016 and FCAC, harvest of all tangerines and mandarins is complete for the season. Florida tangerine and mandarin grower prices remained at around \$25 per box for the duration of the season, with April fresh-on-tree prices at \$24.55 per box. This represents a slight decline relative to the \$26.05 per box registered in April 2015.

Volume of tangerines exported continues to fluctuate, with 2013/14 season registering a lower exported volume of 19,468 tons, which was followed by a 4 percent increase in the 2014/15 season. This season, tangerine exports are down through April, with 13,637 tons shipped globally, with Japan and Canada being the main recipients. On the other hand, tangerine imports are up 144 percent this season through April. For the tangerine market, imports typically rebound from June through January. Hence, there is still the potential for import volumes to continue to grow as the season continues into high demand period when domestic supplies dwindle.

Tangelo production is estimated to decrease from last season at 18,000 tons. This is confirmed by AMS data showing significantly lower shipments this year relative to the previous season, with 18.4 million pounds this season in comparison to 24.5 million pounds in 2015. Tangelos are usually marketed from November through February.

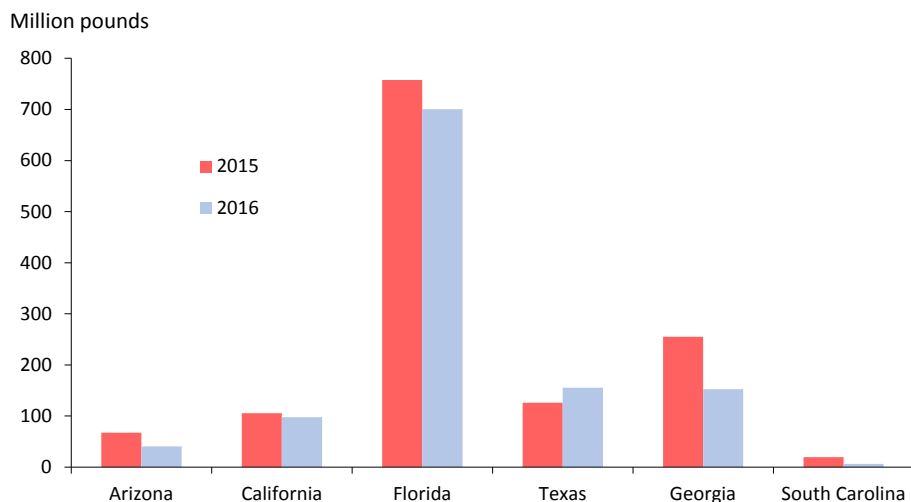
# Melons

## Early Domestic Melon Shipments Sluggish

The 2016 U.S. melon season kicked off this spring with lighter supplies compared to last year. AMS data show this year's cumulative domestic shipments through mid-June down 7 percent, reflecting reduced supplies of watermelons—the most predominantly produced melon in the United States and accounting for nearly 90 of the domestic shipments thus far.

Watermelon supplies are down in a number of major producing States (fig.8). Heavy rains in January disrupted watermelon plantings in southern Florida, delaying the crop by about 2 weeks and lowering yields. As production moved up north, yields fared better in central Florida but supplies in Georgia were hampered by May hailstorms. Year-to-date shipments in Florida show a 7-percent reduction and in Georgia a 40-percent decline. Likewise, other major watermelon-producing States in the west are experiencing declines thus far. Cantaloupe supplies are also down in the U.S. southeast, particularly in Florida and Georgia. However, increases in Arizona and California have driven up overall supplies. Due to the tight early-season supplies, U.S. consumers are seeing some higher melon prices, even when imports, particularly from Mexico, are helping to fill in for the lack of supplies (table 15).

Figure 8  
Watermelons: 2016 cumulative shipments through June 18, selected States



Source: Data from the USDA, Agricultural Marketing Service, Market News Portal database.

Table 15--U.S. advertised retail prices for melons, 2015-16

	Quarters		Months						June change 2015-2016 Percent
	Jan-Mar		Apr		May		Mid-June		
	2015	2016	2015	2016	2015	2016	2015	2016	
	----- Dollars per melon -----								
Cantaloupe	2.39	2.46	2.23	2.08	2.34	2.36	2.26	2.28	1
Honeydew	3.16	3.24	3.01	3.02	3.18	2.94	2.71	2.73	1
Seedless watermelon									
Red flesh, miniature	3.45	3.49	3.04	3.11	2.86	3.02	2.59	2.87	11
Red flesh	4.36	5.03	4.67	4.97	4.62	4.44	4.53	4.62	2

Source: USDA, Agricultural Marketing Service, *National Fruit and Vegetable Retail Report*, various issues.

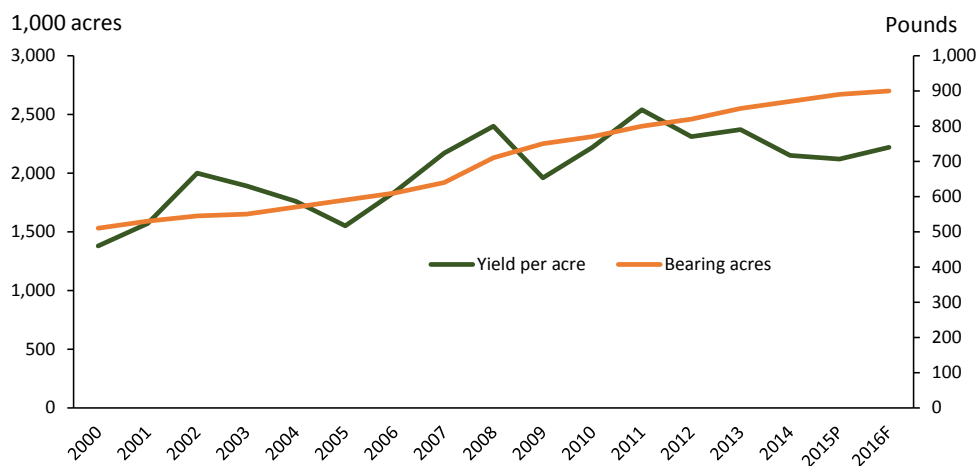
# Tree Nuts

## Almond Production Forecast Higher for 2016/17 Season

Based on the *2016 California Almond Forecast Report*, released on May 10 by the NASS Pacific Regional Office (PRO), this year’s upcoming harvest is forecast to bounce back to the 2.0-billion-pound mark due to increased bearing acreage and improved yields. If realized, production for the 2016/17 season (August-July) will be up 6 percent from 2015/16 and just shy of the record 2.03 billion pounds produced for 2011/12 and the 2.01 billion pounds in 2013/14. NASS-PRO reported a preliminary 2016 estimate of 900,000 bearing acres, an increase of 10,000 acres from 2015 (fig. 9). The average yield is forecast at 2,220 pounds per acre, nearly 5 percent higher than in 2015. Despite continuing drought conditions in California, rains this winter and spring lessened almond grower concerns over water compared to last year. Blooms started a bit later than last year, with timing more uniform across varieties and spanning a short period—favorable for cross-pollination. Heavy winds in May, however, have some growers concerned over some early nut drop.

Meanwhile, production in 2015/16 is higher than initially expected, now showing a 1 percent increase over the previous year at 1.89 billion pounds. Current-season total shipments through May 2016 are down almost 3 percent from the same time in 2014/15; domestic shipments are down 8 percent while export shipments are relatively flat. To date, uncommitted inventory is up 29 percent, based on data from the Almond Board of California. With the current season nearly over and the industry still with a significant volume of uncommitted inventory, this indicates likely higher carryin inventories going into the 2016/17 season. This potential inventory increase and the forecast larger production will likely keep downward pressure on almond grower prices, especially should the U.S. dollar remain strong and continue to dampen international demand for California almonds.

Figure 9  
California almonds: Bearing acreage and yield per acre forecast up in 2016



P = Preliminary.

F = Forecast.

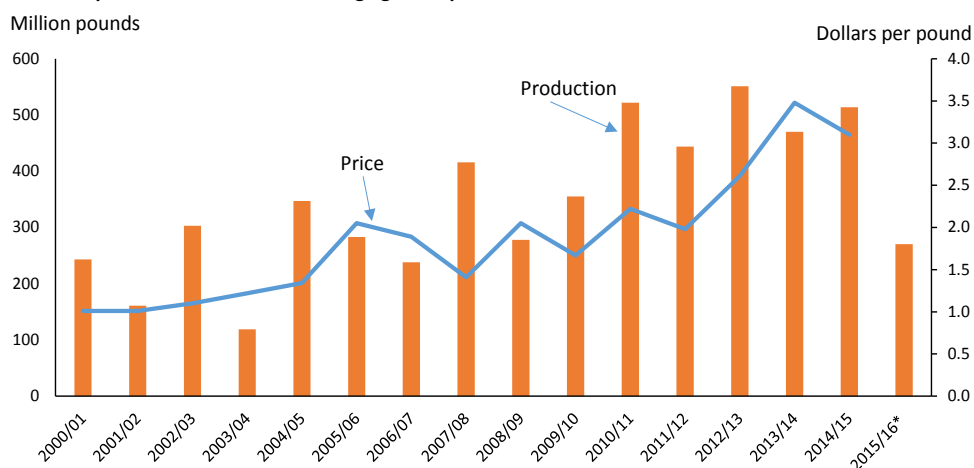
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts Summary*, various issues.

## Poor Yields Lead To a Smaller Pistachio Crop in 2015/16

Despite increasing acreage for California pistachios, low yields are hampering production for the current 2015/16 season (September-August). While the first official NASS release of the production estimate for 2015/16 is a month away, data from the Administrative Committee for Pistachios (ACP) indicate that the 2015/16 crop will be down by nearly half from the 2014/15 bumper harvest of 513.6 million pounds, reaching only 270.1 million pounds. If realized, this would be the smallest crop harvested in nearly a decade (fig. 10). In addition to yields being in the off-year cycle of the pistachio crop's alternate-bearing nature, lack of chill hours in the winter of 2015 and the drought had contributed to below-average yields this season (ACP reports the average yield at 1,161 pounds per acre, down 60 percent from the previous 5-year average).

While the 2015/16 season started out with record-high carryover stocks, the steep drop in production has limited the ability of the industry to meet market demand, which has generally seen positive growth both on the domestic and export side over the last decade. Domestic shipments for the season through April are down 10 percent from the previous year at the same time that export shipments to date are down by 43 percent, according to ACP data. Tight supplies have likely aided 2015/16 pistachio grower prices. NASS suspended the January 2016 release of the report, *Noncitrus Fruit and Nuts 2015 Preliminary Summary*, so the first official estimate for the 2015/16 California pistachio crop and season-average grower price will be reported in July when NASS publishes the final estimates.

Figure 10  
Pistachio production and season-average grower price <sup>1</sup>



<sup>1</sup> In-shell basis.

\* Estimate based on indications from the Administrative Committee for Pistachios (ACP). Historical ACP production estimates match closely NASS production estimates.

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

# Trade Summary Tables

Table 16--U.S. exports of selected fruit and tree nut products

Commodity	Marketing season	Season to date (through April)		Year-to-date change
		2015	2016	
		----- 1,000 pounds -----		Percent
<b>Fresh market:</b>				
Oranges	November-October	913,137	1,085,560	18.9
Grapefruit	September-August	294,742	256,183	-13.1
Lemons	August-July	202,218	180,982	-10.5
Apples	August-July	1,705,703	1,347,968	-21.0
Grapes	May-April	858,278	725,048	-15.5
Pears	July-June	353,258	317,624	-10.1
Peaches (including nectarines)	January-December	2,956	1,847	-37.5
Strawberries	January-December	93,353	66,627	-28.6
Cherries	January-December	2,363	2,555	8.1
Cantaloupe	January-December	7,873	8,126	3.2
Watermelon	January-December	13,612	12,510	-8.1
<b>Processed:</b>				
Orange juice, frozen concentrate	October-September	12,164	25,808	112.2
Orange juice, not-from-concentrate	October-September	47,923	28,400	-40.7
Grapefruit juice	October-September	6,232	5,835	-6.4
Apple juice and cider	August-July	7,444	7,436	-0.1
Wine	January-December	35,470	32,797	-7.5
Raisins	August-July	218,814	184,138	-15.8
Canned pears	June-May	10,287	9,841	-4.3
Canned peaches	June-May	41,289	23,371	-43.4
Frozen straw berries	January-December	15,434	15,422	-0.1
<b>Tree nuts:</b>				
Almonds (shelled basis)	August-July	943,005	878,151	-6.9
Walnuts (shelled basis)	September-August	293,887	349,582	19.0
Pecans (shelled basis)	October-September	72,680	61,171	-15.8
Pistachios (shelled basis)	September-August	96,078	49,285	-48.7

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

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

Table 17--U.S. imports of selected fruit and tree nut products

Commodity	Marketing season	Season to date (through April)		Year-to-date change
		2015	2016	
		----- 1,000 pounds -----		Percent
<b>Fresh market:</b>				
Oranges	November-October	63,570	85,272	34.1
Tangerines (including clementines)	October-September	212,349	204,264	-3.8
Lemons	August-July	118,240	129,207	9.3
Limes	January-December	325,286	356,756	9.7
Apples	August-July	138,919	149,719	7.8
Grapes	May-April	1,205,951	1,169,508	-3.0
Pears	July-June	149,119	139,219	-6.6
Peaches (including nectarines)	January-December	77,036	89,094	15.7
Cantaloupe	January-December	651,337	724,058	11.2
Watermelon	January-December	674,395	774,901	14.9
Bananas	January-December	3,402,045	3,444,105	1.2
Mangoes	January-December	292,043	259,933	-11.0
<b>Processed:</b>				
Orange juice, frozen concentrate	October-September	222,593	130,826	-41.2
Apple juice and cider	August-July	321,421	383,957	19.5
Wine	January-December	95,612	96,852	1.3
Canned pears	June-May	69,176	71,658	3.6
Canned peaches (including nectarines)	June-May	218,568	239,396	9.5
Canned pineapple	January-December	248,871	260,500	4.7
Frozen straw berries	January-December	147,673	149,822	1.5
<b>Tree nuts:</b>				
Brazil nuts (shelled basis)	January-December	3,619	3,827	5.8
Cashews (shelled basis)	January-December	80,586	75,311	-6.5
Pine nuts (shelled basis)	January-December	281	215	-23.4
Pecans (shelled basis)	October-September	29,657	35,502	19.7

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

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



## Contacts and Links

### Contact Information

Agnes Perez (Noncitrus and tropical fruit; melons, and tree nuts), (202) 694-5255, [acperez@ers.usda.gov](mailto:acperez@ers.usda.gov)

Gustavo Ferreira (Citrus fruit), (202) 694-5125, [Gustavo.Ferreira@ers.usda.gov](mailto:Gustavo.Ferreira@ers.usda.gov)

### Subscription Information

Subscribe to ERS' e-mail notification service at <http://www.ers.usda.gov/subscribe-to-ers-e-newsletters.aspx> to receive timely notification of newsletter availability. Printed copies can be purchased from the National Technical Information Service by calling 1-800-999-6779 (specify the issue number or series SUB-FTS-4036).

### E-mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to <http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do> and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.

- Receive weekly notification (on Friday afternoon) via the ERS website. Go to <http://www.ers.usda.gov/subscribe-to-ers-e-newsletters.aspx> and follow the instructions to receive notices about ERS outlook reports, Amber Waves magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to <http://www.ers.usda.gov/rss.aspx> to get started.

### 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 Outlook

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1378>

Fruit and Tree Nuts Topic Page

<http://www.ers.usda.gov/topics/crops/fruit-tree-nuts.aspx>

Organic Farming Topic Page

<http://www.ers.usda.gov/topics/natural-resources-environment/organic-agriculture.aspx>

Vegetable and Pulses Topic Page

<http://www.ers.usda.gov/topics/crops/vegetables-pulses.aspx>

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.