



Economic  
Research  
Service

Situation and  
Outlook

FTS-356

July 26, 2013

# Fruit and Tree Nuts Outlook

**Agnes Perez**

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

**Kristy Plattner**

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

## Tight Early Cherry and Peach Supplies Boosting Early-Summer Prices

### Contents

[Price Outlook](#)  
[Fruit and Tree  
Nut Outlook](#)  
[Trade Outlook](#)  
[Highlight: Organic  
Fruit and Berries](#)  
[Contacts and Links](#)

### Selected Tables

[Grower prices](#)  
[Retail prices](#)  
[Tropical fruit imports:](#)  
[Papayas](#)  
[Mangoes](#)  
[Bananas](#)  
[Pineapples](#)  
[Citrus production](#)  
[Supply and use:](#)  
[Orange juice](#)  
[Grapefruit juice](#)  
[Fruit exports](#)  
[Fruit imports](#)

### Topic Page

[Fruit & Tree Nuts](#)

-----  
The next release is  
December 20, 2013.  
-----

Approved by the  
World Agricultural  
Outlook Board.

Similar to last year, free-on-board shipping-point prices for domestic fresh blueberries late this spring strengthened relative to year-ago levels, influenced by an early finish to Chilean blueberry shipments to the United States and reduced supplies from Georgia, a major producer. Since then, increased shipments from larger producers—California, New Jersey, and Oregon—are holding early-summer prices steady to slightly below a year ago.

Marked by a very short season, California's 2013 cherry harvest started in early May and ended the season in June with overall lighter supplies. Production has transitioned to the U.S. northwest where tighter supplies are also anticipated, particularly in Washington State. Frosts and heavy rains earlier this spring and additional rains in late June have reduced the State's 2013 production potential. Lighter supplies in California and Washington State are supporting upward pressure on 2013 domestic cherry prices with an additional boost from strong exports of California cherries.

With summer upon us, the 2013 U.S. peach season is in progress. Early supplies were reported of good quality and fruit size but the mix of hot and cold weather over the growing season hindered early production from achieving its full potential. Nonetheless, this year's production will likely exceed last year's production when various growing regions had to cope with at least one or a combination of weather problems. Indications from the National Peach Council suggest that the U.S. freestone peach crop in 2013 will increase by about 9 percent from 2012's weather-reduced crop. If realized, this could mean that, despite tight early-season supplies, a rebound in supplies is likely into the summer, driving down peach prices from a year ago.

USDA's National Agricultural Statistics Service (NASS) California Field Office forecast California's 2013 dried plum (prune) crop at 105,000 tons, dried basis, down 24 percent from the 2012 revised estimate of 138,000 tons and the smallest crop in the past 5 years. Despite projected higher than average carry-in inventory volume, forecast low domestic production is anticipated to result to tight supplies for domestic and export needs, putting upward pressure on new-season grower prices for California prunes.

## Price Outlook

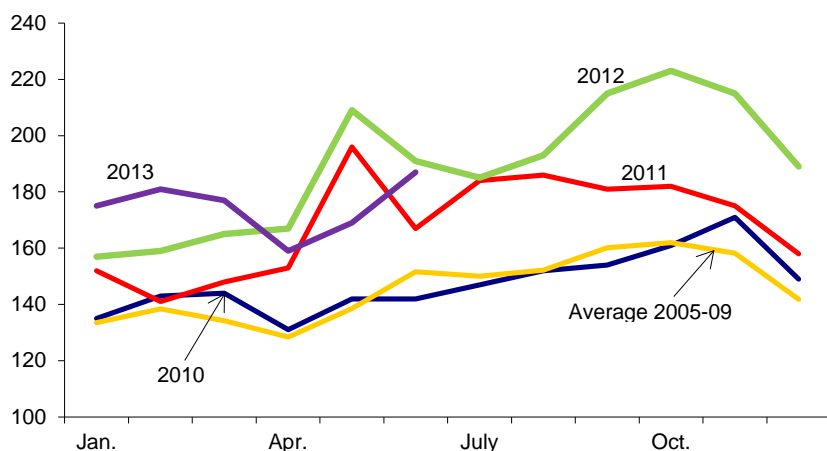
### *Fruit and Nut Grower Prices Lower in June*

After setting record highs during the first 3 months of 2013, the index of prices received by fruit and tree nut growers fell below year-ago levels from April through June (fig. 1). Though strengthening seasonally since April from the previous month, the index in June, at 187 (1990-92=100), fell 2 percent below the June 2012 index, attributed to lower prices for grapefruit, grapes, strawberries, and apples.

Based on NASS data, citrus grower prices continued to strengthen seasonally in June as supplies wound down for 2012/13 navel oranges, grapefruit, and lemons. Year-to-year comparisons, however, show fresh orange and lemon grower prices higher in June on account of tighter supplies, while grapefruit prices were down substantially, mostly due to increased domestic production and smaller fruit size (table 1). As with the domestic navel crop, reduced Valencia orange production will continue to limit available fresh orange supplies this summer, maintaining strong fresh orange prices. Because Valencia oranges are the most highly sought-after variety in the orange juice processing sector, lower Valencia supplies will also likely boost processed-orange prices in the coming months as juice processors continue efforts to rebuild inventory levels.

Producer price indices (PPI) for grapes and strawberries fell below year-ago levels in June (table 2). As indicated by the PPI, grape prices declined in June due to expectations of increased supplies brought on by the late start to both the harvest in California's Coachella Valley and Mexico's grape shipments to the United States and an earlier start to California's harvest in the San Joaquin Valley. Final U.S. grape volume in June, however, fell slightly below the same time last year as a heat wave in late June halted fruit growth, slowing down harvest. Strawberry volume through early July was up 5 percent from the same time last year, driving down strawberry prices. The California strawberry industry is anticipating another huge crop this year which should keep strawberry prices below a year ago this summer.

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

Commodity	2012		2013		2012-13 change	
	May	June	May	June	May	June
	-----Dollars per box-----				Percent	
Citrus fruit: 1/						
Grapefruit, all	9.62	15.43	8.26	8.76	-14.1	-43.2
Grapefruit, fresh	13.47	15.43	8.26	8.76	-38.7	-43.2
Lemons, all	17.19	16.10	14.45	16.77	-15.9	4.2
Lemons, fresh	21.29	22.29	21.92	24.62	3.0	10.5
Oranges, all	10.35	12.49	9.30	11.98	-10.1	-4.1
Oranges, fresh	24.73	14.81	14.08	16.13	-43.1	8.9
	-----Dollars per pound-----					
Noncitrus fruit:						
Apples, fresh 2/	0.300	0.384	N.A.	N.A.	N.A.	N.A.
Grapes, fresh 2/	--	0.865	N.A.	N.A.	N.A.	N.A.
Peaches, fresh 2/	0.550	0.418	N.A.	N.A.	N.A.	N.A.
Pears, fresh 2/	0.177	0.297	N.A.	N.A.	N.A.	N.A.
Strawberries, fresh	0.827	0.744	N.A.	N.A.	N.A.	N.A.

-- Insufficient number of reports to establish an estimate. N.A. = Not available.

1/ Equivalent on-tree price.

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

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

Table 2--Fresh fruit: Producer Price Indexes 1/

Commodity	2012		2013		2012-13 change	
	May	June	May*	June*	May	June
	----- Index -----				Percent	
Fresh fruit:						
Apples						
Red delicious	191.8	201.9	N.A.	N.A.	N.A.	N.A.
Golden delicious 2/	140.8	N.A.	N.A.	160.3	N.A.	N.A.
McIntosh	164.3	200.4	314.9	N.A.	91.7	N.A.
Grapes	117.9	129.3	129.0	120.2	9.4	-7.0
Peaches	N.A.	176.8	N.A.	184.3	N.A.	4.2
Pears	86.9	98.4	127.5	N.A.	46.7	N.A.
Strawberries	122.8	112.1	131.7	106.8	7.2	-4.7

\* = Preliminary. N.A. = Not available.

1/ Not seasonally adjusted. Data for 2013 are preliminary. Index base is 1982=100.

2/ Index base is December 1991=100.

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

Meanwhile, early-season peach volume was tight, driving up their prices in June but supplies are improving. Industry projections pointing to a 9-percent larger U.S. freestone peach harvest this year will likely put downward pressure on fresh peach grower prices this summer relative to a year ago.

Winding down for the 2012/13 season, the Washington apple crop was finishing with volumes exceeding earlier expectations. The U.S. Apple Association reported U.S. fresh apple holdings as of June 1 up 27 percent from the same time a year ago and 21 percent above the 5-year average. End-of-season supplies were higher than a year ago for many of the apple varieties, including those for Fuji (up 86 percent), gala (up 56 percent), Granny Smith (up 2 percent), Golden Delicious (up 27 percent), and Red Delicious (up 21 percent). The monthly PPI's, however, were spotty for apples. The very strong PPI in May for McIntosh apples reflect low supplies in the Northeast where this variety is mostly produced. By June, 2012/13

McIntosh supplies were already depleted. Extensive frost damage in the spring of 2012 curtailed last year's apple production in the eastern United States, causing 2012/13 apple prices to soar in the region. Larger than expected supplies from the Washington crop, especially at the end of the season, helped mitigate some of the shortages in other regions, reflecting some downward adjustments on prices, depending on variety. For instance, based on USDA, Agricultural Marketing Service (AMS) data, free-on-board (f.o.b.) shipping point prices in June for Red Delicious apples in Washington's Yakima and Wenatchee District averaged \$22-\$24 per carton tray pack (Washington Extra Fancy, various sizes) and those for Gala apples at \$29-\$31. For the same time last year, these prices averaged \$20-\$22 and \$32-\$35, respectively.

End-of-season pear supplies from Washington State are tight, putting upward pressure on prices. June f.o.b. prices for Washington Anjou pears averaged \$27-\$29 per 4/5 bushel carton wrapped (various sizes), up from \$18-\$20 the same time last year. As warm temperatures pushed the start of the 2013 California pear harvest about 10 days ahead in July compared to last year's, nearly depleted supplies from last season's Washington crop meant minimal overlap with new-crop early supplies from California, likely boosting pear prices early this summer. A majority of domestic pears, however, are produced in the Pacific Northwest. The Pear Bureau Northwest indicated that weather has been generally reasonable during this growing season, increasing production potential in the region for the 2013/14 season. If realized, increased production will likely put downward pressure on U.S. pear prices through the second half of this year.

### ***Overall Fresh Fruit Retail Prices in June Almost Flat From Last Year***

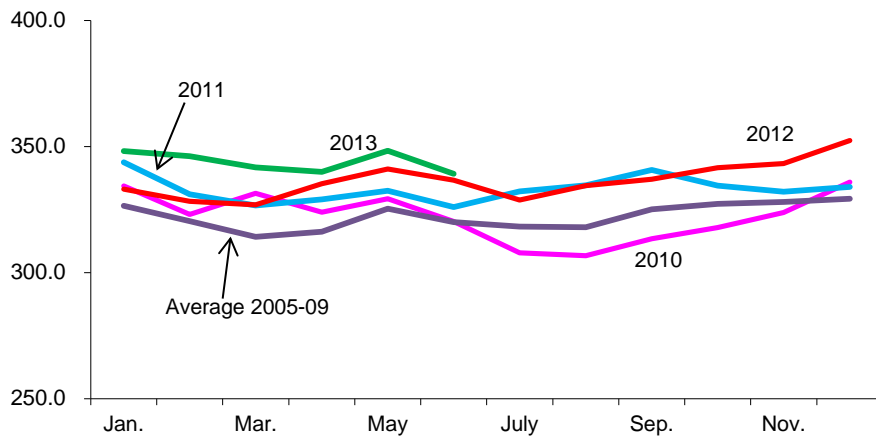
The U.S. consumer price index (CPI) for fresh fruit in June was 339.1 (1982-84=100), up less than 1 percent from the June 2012 CPI (fig. 2). Pulling up the CPI were higher June retail prices for navel oranges, peaches, and cherries relative to the same time last year (table 2). Retail price gains for these fruit more than compensated for price declines realized in grapefruit, lemons, strawberries, and Thompson seedless grapes.

Tight end-of-season supplies helped lift June retail prices for navel oranges from year-ago levels and same with tight early supplies of 2013 peaches and cherries. As export demand for U.S. sweet cherries continued strong into 2013, supplies diverted away from the domestic market further curtailing early domestic supplies. Frost and heavy rains have reduced this year's production potential, particularly in the Pacific Northwest, likely keeping 2013 sweet cherry retail prices higher than a year ago this summer. Promotable peach volumes are expected to improve as California's season goes into full swing and other regions come into production. Anticipated larger crops in most producing States should help soften retail peach prices over the summer compared to last. Despite slightly higher banana imports so far this year, retail banana prices averaged nearly unchanged from last year in June.

Red Delicious apple supplies were winding down for the 2012/13 season (August-July) with higher volumes than last year, but prices at retail held up almost unchanged from a year ago in June. The CPI for fresh apples in June, at 361.5 (1982-84=100), was 6 percent higher than in June 2012, suggesting continued firm retail prices for other apple varieties as has been throughout most of 2012/13.

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

1982-84=100



Source: U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/data/home.htm>.

Table 2--U.S. monthly retail prices for selected fruit, 2012-13

Commodity	Unit	2012		2013		2012-13 change	
		May	June	May	June	May	June
Fresh:							
Valencia oranges	Pound	--	--	--	--	--	--
Navel oranges	Pound	0.968	1.032	1.048	1.147	8.3	11.1
Grapefruit	Pound	1.044	1.172	0.979	1.053	-6.2	-10.2
Lemons	Pound	1.596	1.626	1.566	1.553	-1.9	-4.5
Red Delicious apples	Pound	1.294	1.377	1.406	1.382	8.7	0.4
Bananas	Pound	0.599	0.605	0.603	0.603	0.7	-0.3
Peaches	Pound	--	1.870	--	1.928	--	3.1
Anjou pears	Pound	--	--	--	--	--	--
Cherries	Pound	--	3.946	--	4.495	--	13.9
Strawberries 1/	12-oz pint	1.653	1.706	1.647	1.686	-0.4	-1.2
Thompson seedless grapes	Pound	3.054	2.617	3.008	2.533	-1.5	-3.2
Processed:							
Orange juice, concentrate 2/	16-fl. oz.	2.642	2.639	2.606	2.512	-1.4	-4.8
Wine	liter	8.854	12.188	10.015	11.200	13.1	-8.1

-- Insufficient marketing to establish price.

1/ Dry pint.

2/ Data converted from 12-fluid-ounce containers.

Source: U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/data/home.htm>.

Increased grape supplies in June drove retail grape prices down during the month. Despite light early-season grape supplies from California, import shipments from Mexico have already picked up by June at volumes similar to the same time last year. Furthermore, end-of-season supplies from Chile were up sharply in June than in June 2012 because the country's grape shipments to the United States finished early last year. As grape harvest gets fully underway in the San Joaquin Valley, California's main producing region, seasonal increases in summer supplies are expected, increasing retail promotional volumes. As of the second week of July, fresh domestic grape shipments were running higher than last year, which could signal steady-to-lower grape prices at retail for the month compared to last year.

### *Early-Summer Blueberry Prices Softening*

Blueberry imports from the Southern Hemisphere (primarily from Chile) have already wound down for the season and U.S. marketers have now switched to domestic production. Similar to last year, prices for domestic fresh blueberries late this spring strengthened relative to year-ago levels, influenced by an early finish to Chilean blueberry shipments to the United States and reduced supplies from Georgia, a major producer. Increased shipments from larger producers—California, New Jersey, and Oregon—are holding early-summer prices steady to slightly below a year ago.

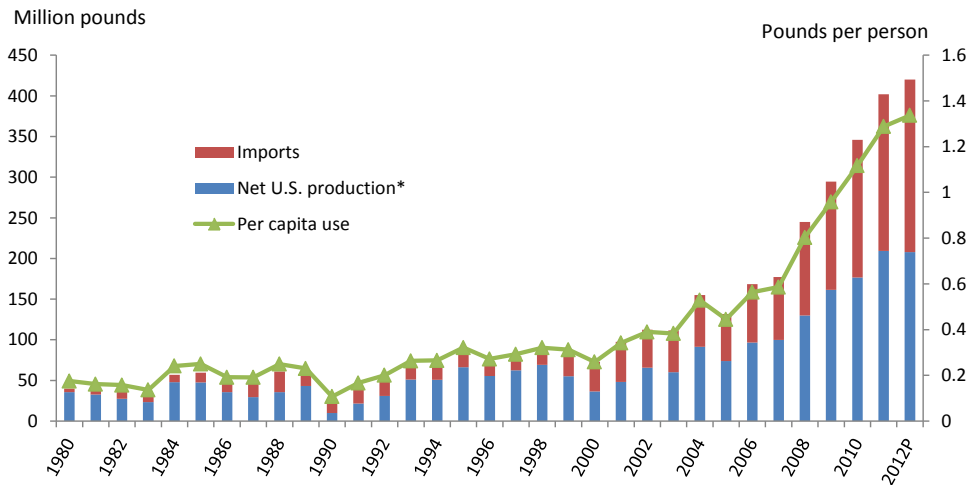
Florida blueberries are the first to become available during the U.S. blueberry season, typically having market presence until other producing States enter the market. There were no major weather issues affecting Florida's blueberry supplies in April but volumes in May were about 2 weeks early and overall crop size not as large as initially expected, according to the Florida Blueberry Growers Association. F.o.b. shipping-point prices for Florida blueberries opened in late March at \$32-\$35 per flat of 12 (6-oz) cups with lids (medium-large), higher than last year's opening price range of \$30-\$32. F.o.b. prices in April averaged \$23-\$27 (large), finishing around mid-May at \$21-\$25 (large). Last year, prices were at \$19-\$25 (large) in April, and closed at \$20-\$22 (large).

AMS data indicated that this year's blueberry shipment volumes from Georgia through June were down 4 percent from the same time last year. Volumes from other eastern producing States, including North Carolina and New Jersey, started off slow but were picking up through mid-July, with volume levels already exceeding those in July of last year. Season-to-date shipments in California are up 16 percent and in Oregon up more than 40 percent of volumes last year the same time. June blueberry f.o.b. shipping point prices in Eastern North Carolina averaged \$17-\$19 per 12 (1-pint) cups with lids, compared with \$15-\$19 in June 2012. Like in Florida, pricing for 2013 blueberries in South Georgia and in South and Central District California were slightly higher compared with last year. F.o.b. prices for South Georgia blueberries in May averaged \$30-\$35 per 12 (1-pint) cups with lids (large) and in June at \$19-\$21. Last year the same time, prices averaged \$26-\$31 in May and \$16-\$21 in June. California pricing in May averaged \$29-\$35 per 12 (1-pint) cups with lids (medium large) and \$19-\$23 in June, compared with \$23-\$29 and \$19-\$22, respectively, the same time last year. Tight early supplies in the eastern U.S. have contributed to bolstering blueberry prices in California during the spring.

Early July blueberry prices, however, are softening given improved supplies in New Jersey. Recent industry indications also suggest a large harvest in Washington State that could further dampen prices. Early July prices in South New Jersey and in Oregon and Washington were at \$14-\$15 and \$16-\$21, respectively, compared with \$17-\$19 and \$21-\$25 last year around the same time last year.

U.S. demand for fresh blueberries continues to grow, with domestic per capita use at record-breaking levels since 2006 (fig. 3). After 6 straight years of positive growth, per capita use reached 1.34 pounds in 2012—a new all-time high.

Figure 3  
**U.S. fresh blueberry demand increasing**



P = Preliminary.

\*Domestic production minus exports.

Source: USDA, Economic Research Service calculations.

International demand for U.S. fresh blueberries is also growing but reduced domestic production slowed export shipments in 2012, reducing total export volume by 6 percent from the record-high 78.5 million pounds in 2011. Export volumes to Canada and Japan were both down 9 percent, offsetting big gains to Hong Kong and Taiwan. Canada remains as the primary export destination for U.S. fresh blueberries, accounting for almost 90 percent of total export volume in 2012 while Japan also maintains status as the second-largest destination, accounting for 7 percent. Despite the decline in export volume, strong fresh-market prices, boosted total fresh blueberry export value in the United States to a record \$145.7 million in 2012, surpassing the previous record of \$124.6 million in 2011.

### ***Tight Sweet Cherry Supplies Driving Up Prices***

Marked by a very short season, the California 2013 cherry harvest started in early May and ended the season in June with overall lighter supplies. Based on AMS data, total California shipments this season were down by as much as 9 percent from a year ago.

Production has transitioned to the U.S. northwest where tighter supplies are also anticipated after a series of weather problems moved through the region. Mostly affected were the early varieties such as Bing and Chelan cherries in Washington State, the Nation's largest sweet cherry producing State, supplying more than half of the domestic crop. Frosts and heavy rains earlier this spring have reduced the State's 2013 production potential. Additional rains in June further lowered production potential in the State as harvest was already underway for the early varieties, causing some fruit to split, making them unmarketable. Washington cherry shipments this season through June were running 13 percent below the same time last year, offsetting significant shipment volume gains in other parts of the U.S. northwest such as in Oregon and Idaho.

Lighter supplies in California and Washington State are putting upward pressure on 2013 domestic cherry prices. Early-summer cherry prices are receiving an additional boost from strong exports of California cherries. Through June, more than one-third of this year's California cherry shipments have gone to the export market, with cumulative volume up 1 percent from the same time a year ago despite lighter overall supplies. June f.o.b. shipping-point prices for Bing cherries in California ranged from \$40-\$52 per 16-lb carton (10-row size) and \$38-\$45 (11-row size). Comparative prices for the same time last year ranged from \$42-\$46 and \$32-\$40, respectively. Prices for Washington State Bing cherries in mid to late June ranged from \$55-\$65 per 18-lb carton/lugs (10-row size), compared with \$38-\$40 a year ago. As harvest got more underway, early July prices for Washington Bing cherries declined from the previous month but tight supplies and the exit of California cherries in the market continued to hold f.o.b. prices strong in the range of \$48-\$55 (10-row size), compared with only \$28-\$30 the same time a year ago. Because the late varieties were not hit hard by bad weather, volumes will likely improve and quality for the late varieties is expected to be good, boding well for prices.

At the retail level, U.S. advertised prices for sweet cherries in June and early July averaged \$4.69 and \$4.05, over \$0.30 per pound higher than last year. As supplies in the second half of July and into August reach better promotable volumes, consumers will likely see more favorable prices for cherries in the coming weeks.

Estimates for annual U.S. sweet cherry per capita use have exceeded the 1-pound mark since 2006 (except in 2008). Support from expanding domestic production, small but increasing off-season imports, and increased consumer awareness of the importance of healthful diets, have fueled the positive growth trend in domestic sweet cherry demand. With record-high domestic production in 2012, domestic disappearance (proxy for consumption) for fresh sweet cherries was estimated at 1.49 pounds per person. This is up from 1.29 pounds per person during 2010 and 2011 but down from the record 1.55 pounds in 2009 as robust international demand pushed exports to a record-high 221 million pounds, up significantly from the previous year. Shipment volumes showed mostly big gains to leading export markets for U.S. cherries—Canada, Hong Kong, South Korea, Taiwan, Japan, and China. Though early 2013 export shipments continue higher, tighter domestic supplies in 2013 could limit this season's overall export potential.

### ***2013 Fresh Peach Supplies Likely Up from A Year Ago***

With summer upon us, the 2013 season for U.S. peaches is in progress. The total volume for domestic peach shipments this season through early July was down 16 percent from the same period in 2012, according to AMS data. Shipments to date were running lower in top producing States—California (down 10 percent), South Carolina (down 30 percent), and Georgia (down 5 percent). Besides the typical light shipments during the early harvest season, volume in May was also down sharply from year-ago levels. As more production areas were harvesting by June, supplies improved during the month although still slightly below year-ago levels.

Early supplies were reported of good quality (high sugar content and good color) and fruit size but the mix of hot and cold weather during the growing season was hindering early production from achieving its full potential. The heat wave in June also slowed harvest as fruit ripening halts when temperatures reach over 100



degrees F and face increased risk of sunburn damage. California growers applied heavy irrigation to their crop to mitigate the effects of the scorching heat. Although there have been some weather issues this growing season, this year's production will likely exceed last year's production when various growing regions had to cope with at least one or a combination of weather problems, including lack of chill hours, spring hailstorms, multiple spring freezes, and drought conditions over the growing season. Indications from the National Peach Council suggest that U.S. freestone peach production in 2013 (which accounts for a majority of the domestic peach crop for fresh use) will increase by about 9 percent from 2012's weather-reduced crop. If realized, this could mean that, despite tight early-season volume, summer supplies are likely to make a rebound, driving down peach prices. As of early July, peach volume showed improvement, with supplies in the top 3 States up from the same time last year.

Light early supplies have aided fresh peach prices. Although quantities increased seasonally in June from the previous month, f.o.b. shipping-point prices in California's central and southern San Joaquin Valley averaged in the range of \$18-22 per 2-layer tray pack carton (size 48-50s) of various yellow flesh varieties, relatively steady from June 2012 prices of \$19-\$22. For the same period, f.o.b. prices for Georgia and South Carolina peaches were slightly elevated from year-ago comparisons. A half bushel carton of various yellow flesh varieties in Central Georgia and South Carolina were at \$17-\$19 (2 1/2" up) in June, compared with \$16-\$18 in June 2012. Although prices have weakened from the start of the season, early-July prices in these southern States continue to reflect strength over last year as prices ranged from \$13-\$15, compared with \$9-\$11 and \$8-\$12, respectively. In California, early-July prices have also declined seasonally to \$13-\$14, but also show a drop from the \$16-\$17 range the same time last year.

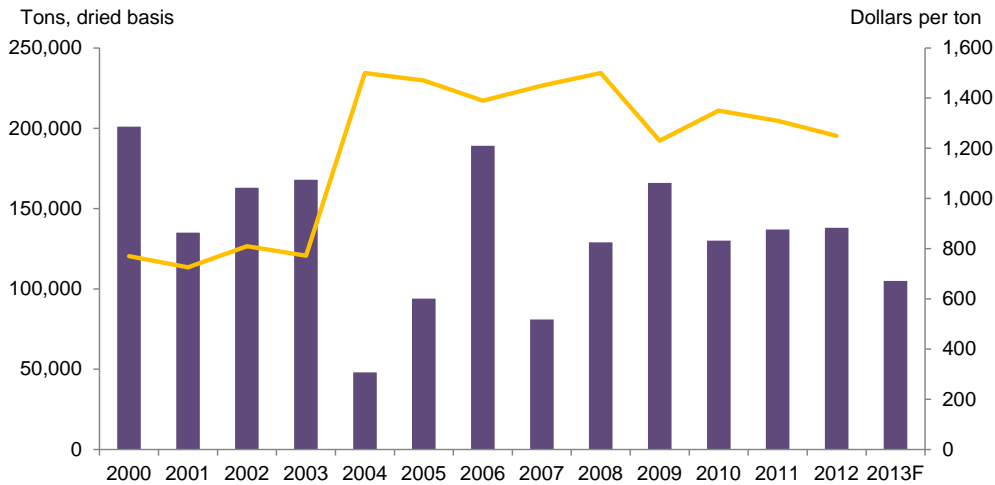
At the retail level, National advertised retail prices for yellow variety peaches from May through early July have averaged below year-ago levels, according to AMS data. Comparative prices for white flesh varieties, on the other hand, have averaged consistently above last year during the same period.

### ***2013 California Prune Crop Smallest in 5 Years***

The NASS California Field Office forecast California's 2013 dried plum (prune) crop at 105,000 tons, dried basis, down 24 percent from the 2012 revised estimate of 138,000 tons and the smallest crop in the past 5 years (fig. 4). Weather was generally decent for pollination although forecast yields still came off about 11 percent below the 5-year average at 2.06 tons per acre, dried basis. This year's forecast estimate for bearing acreage show a decline for the fourth consecutive year, down 7 percent from the 2012 acreage to 51,000 acres. If realized, these downward adjustments on yield and acreage will bring production 25 percent below the previous 5-year average crop of 140,000 tons.

California prune growers removed some trees again after the 2012 harvest due to continued declines in grower prices. Despite relatively steady production in 2012 from the previous year, grower prices for California prunes declined from an average \$1,310 per ton during the 2011/12 marketing season (August-July) to \$1,250 per ton in 2012/13. Declining for a third straight year in 2012/13, both averages (2011/12 and 2012/13 prices) remain below the average peak in 2008 of

Figure 4  
**Forecast California prune production well below the previous 5 years**



F = forecast.  
 Source: USDA, California NASS Field Office, 2012 California Dried Plum (Prune) Forecast, June 2013.

\$1,500 per ton. Due to the lower average price, total crop value in 2012 fell to a 4-year low of \$172.5 million, down 4 percent from the previous year.

As of April 30, 2013, remaining dried prune inventories in 2012/13 were running fairly unchanged from the same period in 2011/12, suggesting a fairly steady carry-in volume for the 2013/14 season. While the projected carry-in inventory volume remains higher than the previous 5-year average, forecast below-average domestic production is anticipated to result to tight supplies for domestic and export needs, putting upward pressure on new-season grower prices for California prunes.

ERS's preliminary estimate for domestic per capita use of dried plums (prunes) in 2012/13 is at 0.34 pound, consistent with the previous 5-year average which is still short of the highs achieved in the 1990s. Although production of California dried plums in 2012/13 remained relatively unchanged from the previous season, production channeled to the dried fruit sector declined by about 3 percent due to increased supplies diverted to manufacturing of by-products (includes juice and concentrate, paste, baby food, puree, and butter and diced prunes). Even as U.S. prune imports rose sharply in 2012/13, a decline in domestic production and carry-in inventories drove down overall domestic supplies. Exports in 2012/13, August through April, also are higher, with significant gains to Germany, Hong Kong, Russia, and Vietnam. International demand for California prunes is expected to strengthen again in 2013/34 as the industry report tighter harvests in the Southern Hemisphere. However, the smaller domestic crop will likely limit the industry's export potential for this upcoming season.

***Papaya Supplies Continue To Increase***

Following two consecutive years of increases, U.S. papaya imports continue to climb in 2013, with the volume of imports from January through May up 24 percent from the same period in 2012 (table 4). Most of the imports to date were from Mexico who is the No. 1 source for imported papayas in the United States. Mexico

supplies nearly 75 percent of the total U.S. papaya imports annually. Imports from Mexico from January through May of this year increased 20 percent from last year's below-average imports over the same period. Impeding imports from Mexico during much of the first 8 months of 2012 were the lingering recalls and import rejections related to a U.S. multi-State salmonella outbreak in 2011. Imports rebounded in the fall of 2012, pushing the total import volume from Mexico last year to 237 million pounds, up 6 percent from 2011. Along with Mexico, higher imports to date in 2013 are reported for other leading suppliers such as Belize, Guatemala, and Brazil. Year-to-date import gains from Belize and Brazil are an improvement over last year when volumes from these two countries in 2012 both declined from the previous year. Imports from the Dominican Republic and Jamaica, on the other hand, continue to be sluggish.

Greater availability of papayas in the U.S. market so far this year has put downward pressure on their prices. Terminal market prices for imported Maradol type papayas from Mexico and Belize in Philadelphia averaged in the range of \$24-\$25 per 30-35-lb carton in January, compared with \$28 (only from Belize) in January 2012. In May 2013, prices averaged from \$26-\$27, down from \$30-\$32 in May 2012. Despite year-round presence in this market, Mexican papaya supplies usually peak around April and May. Papaya prices held steady in June from the previous month and remained slightly below year-ago levels.

Demand for papayas in the United States continues to rise despite some annual supply fluctuations mostly due to weather impacts on production in import source countries. As with other tropical fruit, growing ethnic populations used to eating this fruit are the foundation for the increasing presence of papaya imports in the U.S. fresh fruit market. Other factors also help to expand U.S. consumer demand for papayas such as increased interest in health-promoting diets and trying non-traditional food. Domestic papaya per capita use has averaged approximately 1.0 pound in recent years, nearly three times higher than in the 1990s. Because domestic production is limited, market needs are met mostly by imports.

Table 4--U.S. imports of fresh papayas, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- 1,000 pounds -----							Percent
Mexico	187,175	275,008	254,003	222,432	236,649	97,969	117,292	20
Belize	62,104	52,353	62,983	58,141	40,823	14,582	24,611	69
Guatemala	8,204	4,656	8,559	13,658	24,739	10,605	13,745	30
Brazil	8,363	6,443	6,578	7,897	5,157	2,040	2,129	4
Dominican Republic	4,722	3,948	4,911	4,805	4,397	2,596	1,257	-52
Jamaica	2,416	1,730	1,664	1,207	1,711	1,019	603	-41
Other countries	1,171	650	575	91	20	0	1	--
World	274,155	344,789	339,271	308,231	313,495	128,811	159,637	24

-- = Not applicable.

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

## ***Mango Imports Rebounding in 2013***

Moving further into 2013, mango imports in the United States through May registered a 10-percent increase from the same 5 months in 2012, driving down domestic mango prices. Reflecting the boost in imports, volume received from top rank supplier Mexico during the first 5 months of 2013 posted a 3-percent gain from a year ago. Also adding to the overall growth were steeper increases in imports from relatively smaller but also key suppliers, Peru and Haiti (table 5).

Mango supplies in the U.S. market are virtually reliant on imports, with Mexico supplying over 60 percent of total import volume each year. Domestic production remains miniscule such that the USDA discontinued reporting official annual production data for this fruit since 1998. The international market remains a small outlet, with only 2-3 percent of total mango supplies in the United States moving through the export market each year, mostly to the European Union markets, Mexico, and Canada.

The most recent trade data available for this year from the U.S. Census Bureau was through May when this report was published. AMS data provide more recent indications on U.S. mango imports, with import shipments in 2013 through early July running 13 percent above the same period in 2012. Despite some rains that passed through some production regions during the growing season, Mexico's mango crop is in good shape, with the possibility of another record-large harvest, according to industry sources. Through early July, shipments from Mexico were 9 percent higher than the same time last year. Winding down for the season, shipments to date from Haiti remained over 30 percent higher than the same time last year, while Peru ended its 2013 mango shipments to the United States with over 50 percent more supplies than a year ago.

Even as imports from Mexico reached a historical peak in 2012, total U.S. mango imports for that year declined less than 1 percent from the record-high 810.4 million pounds in 2011. This decline reflects lower volumes received from other leading suppliers, including Peru, Brazil, Guatemala, and Haiti. Despite the drop in imports, overall supplies available in the U.S. market were still fairly sizeable, enabling the industry to meet domestic fresh mango demand levels of recent years. Domestic fresh mango per capita use in 2012 was relatively unchanged from the record 2.50 pounds achieved in 2011, but remained above the previous 5-year average of 2.20 pounds.

Table 5--U.S. imports of fresh mangoes, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- 1,000 pounds -----							Percent
Mexico	400,335	406,129	475,194	518,420	538,590	247,703	254,839	2.9
Ecuador	54,404	77,832	56,518	66,942	83,427	18,181	16,860	-7.3
Peru	84,296	38,172	70,925	99,609	59,421	52,738	80,993	53.6
Brazil	56,760	51,147	53,711	54,643	53,382	--	--	--
Guatemala	32,891	32,421	27,952	39,406	37,448	37,448	37,014	-1.2
Haiti	18,238	19,870	14,226	20,331	17,633	11,673	15,296	31.0
Other countries	8,902	8,134	8,166	11,055	14,344	13,499	14,672	8.7
World	655,826	633,705	706,691	810,405	804,246	381,243	419,673	10.1

-- = Not available.

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

F.o.b. shipping-point prices for Ataulfo mangoes from Mexico crossing through Texas opened at \$9-\$10 per 1-layer flat (12s) in late February, compared with \$8-\$9 the same time last year, partly a result of lower shipments from Mexico at the start of the season compared to the same time last year. By June, f.o.b. prices averaged \$6-\$7, compared with \$7-\$8 in June 2012.

Monthly U.S. retail advertised prices for mangoes in 2013 through June averaged mostly lower than last year's prices, except in January and April when the average monthly price remained relatively unchanged. The year-to-year drop in the average monthly price during the first half of 2013 ranged from 5-6 cents. Mango prices averaged \$1.14 each in January and February before declining consistently each month through June, reaching \$0.90 each, reflecting mostly seasonal increases in import supplies from Mexico. Barring unfavorable weather, anticipated continued large supplies of Mexican mangoes arriving here this summer will mean ample supplies for mango retail promotions, translating to more favorable prices for consumers.

### ***Banana Imports Higher During Most of First-Half 2013***

Demand for bananas in the United States is almost entirely dependent on imports. During the first 5 months into 2013, U.S. banana imports were up 4 percent in volume compared with the same months in 2012, based on data from the U.S. Census Bureau (table 6). During these 5 months, imports were consistently higher in each month compared with a year ago. Even with the higher imports, banana prices maintained almost steady pricing at the retail level, with the January-May average price at \$0.606 per pound, compared with \$0.603 per pound the same period in 2012. Among the United States' leading sources for bananas, higher imports from Guatemala, Honduras, and Colombia in 2013 through May relative to the same period a year ago more than offset import declines from Costa Rica and Ecuador. Together, these top 5 countries supply over 90 percent of U.S. banana imports each year. More recent AMS weekly banana import shipment information indicate that while volume shipments from Costa Rica and Ecuador remained sluggish into June compared with a year ago, those from Guatemala, Honduras, and Colombia remained higher, boosting overall supplies in the United States. AMS reported national advertised retail prices for bananas in June 2013 averaged \$0.42 per pound, unchanged from the June 2012 average price.

Table 6--U.S. imports of fresh bananas, excluding plantains, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- Million pounds -----							Percent
Guatemala	2,621	2,452	2,539	2,940	3,216	1,323	1,499	13
Costa Rica	1,928	1,241	1,841	1,862	1,870	743	709	-5
Ecuador	1,830	2,111	2,160	1,938	1,587	789	747	-5
Honduras	1,115	857	961	982	1,181	530	575	8
Colombia	994	930	1,016	848	970	409	430	5
Other countries	283	344	509	520	766	295	298	1
World	8,770	7,935	9,026	9,089	9,589	4,090	4,259	4

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

## *Pineapple Imports Continue Higher In 2013*

Combined U.S. imports of pineapple products (fresh and frozen, canned, and juice) during the first 5 months of 2013 rose 6 percent in volume from the same 5 months of 2012. Cumulative fresh pineapple (including frozen) imports held steady from last year during this 5 months while canned pineapple and pineapple juice imports were seeing gains of slightly over 10 percent.

Imports are a key component of the domestic market for fresh pineapples, maintaining a market share of over 90 percent annually in recent years. U.S. fresh pineapple imports increased consecutively year-after-year from 1996 through 2012, supporting the growing domestic demand for fresh pineapples. Import volumes were at record-breaking levels each year over this 17-year span, starting with 298 million pounds in 1996 and reaching the 2.0-billion-pound mark for the first time in 2012. This year's January through May imports from Costa Rica—the No. 1 source for fresh pineapples in the United States—accounted for over 80 percent of total import volume to date and was up 1 percent from the same period in 2012 (table 7). This showed only a slight increase over last year as imports from the country were below year-ago levels for most of the 5-month period, except in March. The slight increase in year-to-date imports from Costa Rica, along with bigger gains from Mexico and Honduras, offset declines from Guatemala, Panama, Ecuador, the Philippines, and Thailand. These countries also rank among the top import suppliers of fresh pineapples in the United States.

More recent data from AMS show cumulative 2013 import shipments from Costa Rica through early July continue higher. On a monthly basis, however, June shipments declined from May and continued sluggish compared to last year the same time until early July. Import gains from other countries such as Honduras are helping to fill this gap, likely providing retailers with adequate volumes to run promotions. The January-June average U.S. retail advertised price for pineapples was \$2.88 each, about 7 cents short of the average price the same 5 months of 2012. Warmer-than-average temperatures in Costa Rica in late 2012 accelerated natural flowering of the crop and has already advanced production, possibly slowing production potential this summer. This could translate to tighter supplies in the U.S. market this summer, likely putting upward pressure of fresh pineapple prices.

Increased canned pineapple imports in the United States during the first 5 months of 2013 reflect larger volumes received from Thailand and the Philippines—the country's top two sources for the canned product (table 8). Thailand supplied more

Table 7--U.S. imports of fresh and frozen pineapples, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- 1,000 pounds -----							Percent
Costa Rica	1,302,686	1,312,971	1,508,093	1,556,040	1,755,050	766,679	771,637	1
Mexico	86,185	101,933	111,574	80,939	122,089	64,481	78,519	22
Honduras	49,869	48,648	48,702	60,056	82,206	41,563	49,159	18
Guatemala	56,875	40,031	28,075	32,302	33,863	13,038	12,400	-5
Panama	20,448	25,479	35,721	31,113	32,356	16,408	6,981	-57
Ecuador	63,728	63,499	54,846	47,813	18,066	13,208	2,231	-83
Philippines	7,468	11,216	12,465	21,121	16,434	10,363	5,490	-47
Thailand	9,151	8,594	9,627	8,187	9,986	3,957	2,927	-26
Other countries	2,301	2,546	4,226	4,939	6,194	3,291	3,050	-7
World	1,598,711	1,614,917	1,813,328	1,842,510	2,076,244	932,987	932,393	-0.1

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

Table 8--U.S. imports of canned pineapples, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- 1,000 pounds -----							<i>Percent</i>
Thailand	315,380	348,363	309,359	333,593	354,108	136,703	168,383	23
Philippines	252,245	216,091	216,908	210,219	209,660	74,057	77,467	5
Indonesia	119,300	109,788	110,395	131,885	128,025	47,374	46,794	-1
China	75,038	65,195	52,744	40,577	26,153	9,624	14,822	54
Malaysia	11,059	9,013	9,071	6,067	5,473	2,696	2,370	-12
Vietnam	7,003	1,136	1,333	5,350	3,738	2,650	411	-84
Other countries	5,793	4,107	3,068	2,575	3,194	1,609	1,062	-34
World	785,818	753,693	702,879	730,266	730,351	273,105	311,310	14

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

Table 9--U.S. imports of pineapple juice, by country, 2008-13

Country	2008	2009	2010	2011	2012	Jan.-May 2012	Jan.-May 2013	Change 2012-13
	----- 1,000 single-strength gallons -----							<i>Percent</i>
Philippines	35,609	37,474	34,108	36,678	31,505	12,691	12,488	-2
Thailand	26,418	27,523	19,187	18,207	19,789	5,941	9,080	53
Costa Rica	7,142	4,849	5,037	7,321	11,377	5,184	5,126	-1
Indonesia	9,200	9,457	6,351	9,808	4,099	1,890	1,871	-1
Kenya	2,066	3,170	1,589	231	431	274	162	-41
Brazil	525	458	376	240	293	194	2	-99
Other countries	2,079	1,304	850	662	618	110	394	259
World	83,040	84,234	67,498	73,147	68,113	26,285	29,124	11

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

than half of the total import volume to date and posted a 23-percent gain over last year. The Philippines accounted for about one-fourth of total imports, with a smaller gain of 5 percent. Except for China, imports from other leading sources declined. For the same period, pineapple juice imports were up 11 percent (table 9). A huge gain from Thailand outweighed declines from all other leading suppliers of pineapple juice to the United States. Like in the fresh market, imports of canned pineapple and pineapple juice mostly provide for domestic demand for these products. While more pineapples in the United States are still consumed in canned and juice form combined, fresh weight basis, the rapid growth in fresh pineapple imports has it surpassing annual pineapple juice import volumes beginning in 2004 and canned pineapple imports since 2006. U.S. fresh pineapple per capita use in 2012 was estimated at around 6.0 pounds, while per capita use estimates for canned pineapple and pineapple juice ranged between 3-4 pounds.

### ***2012/13 U.S. Citrus Crop Estimate Revised Down***

The July edition of the NASS *Crop Production* report forecast the total 2012/13 U.S. citrus crop at 11.17 million tons, down 5 percent from the 2011/12 production estimate and down more than 8 percent from the initial October crop forecast (table 10). Total orange production is down 7 percent nationally, with declines in Florida reaching 9 percent and California down 3 percent when compared to last season. Declining in all states, Valencia orange production is estimated to be down more than 8 percent from the 2011/12 estimate. Florida has experienced declines in production for all citrus crops. U.S. grapefruit production is estimated up 3 percent to 1.19 million tons, mostly supported by gains in production from Texas of 27 percent. California grapefruit production is up 3 percent from last season and has been revised upward from the October 2012 initial estimate. Specialty citrus production—tangerines/mandarins—increased by 6 percent, with California negating losses experienced by Florida. National lemon production has bounced

Table 10--Citrus: Utilized production, 2010/11, 2011/12 and forecast for 2012/13 1/

Crop and State	Utilized		Forecast for	Utilized		Forecast for
	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13
	---- 1,000 boxes 2/ ----			----1,000 tons ----		
<b>Oranges:</b>						
Early/midseason and navel:						
California	48,000	45,500	45,000	1,920	1,820	1,800
Florida 3/	70,300	74,200	67,100	3,164	3,339	3,020
Texas	1,700	1,108	1,505	72	47	64
Total 4/	120,000	120,808	113,605	5,156	5,206	4,884
Valencia:						
California	13,500	13,500	12,500	540	540	500
Florida	70,000	72,400	66,300	3,150	3,258	2,984
Texas	249	311	289	11	13	12
Total	83,749	86,211	79,089	3,701	3,811	3,496
All oranges	203,749	207,019	192,694	8,857	9,017	8,380
<b>Grapefruit:</b>						
California	4,100	4,000	4,100	164	160	164
Florida	19,750	18,850	18,400	840	802	782
Texas	6,300	4,800	6,100	252	192	244
All grapefruit	30,150	27,650	28,600	1,256	1,154	1,190
<b>Tangerines and mandarins:</b>						
Arizona	300	200	200	12	8	8
California	9,900	10,900	13,000	396	436	520
Florida	4,650	4,290	3,350	221	204	159
All tangerines and mandarins	14,850	15,390	16,550	629	648	687
<b>Lemons:</b>						
Arizona	2,500	750	1,800	100	30	72
California	21,000	20,500	20,000	840	820	800
All lemons	23,500	21,250	21,800	940	850	872
<b>Tangelos</b>						
Florida	1,150	1,150	1,000	52	52	45
All citrus	273,399	272,459	260,644	11,734	11,721	11,174

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

2/ 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.

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

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

back from 2011/12's low production due to freeze damage in Arizona. This year the U.S. lemon crop is up 3 percent, totaling 872,000 tons. Arizona has more than doubled the quantity of harvested lemons in 2012/13, while California experienced a slight decline. Florida tangelo production has fared much like the rest of the States citrus crop in 2012/13, declining 17 percent from the initial forecast in October and down 13 percent compared to the previous season.

### **Florida All-Orange Crop Down 9 Percent in 2012/13**

In the final 2012/13 citrus production forecast in July's *Crop Production* report, Florida's all-orange estimate is down 9 percent from the 2011/12 harvest. As the 2012/13 season moved forward from the original October 2012 forecast, Florida experienced downward production revisions. Non-Valencia orange production is at 3.0 million tons, down nearly 10 percent from the 2011/12 total of 3.3 million tons. Drop rates were very high this season for the early-to-midseason varieties and navel oranges—at 18 percent and 27 percent, respectively. A similar situation occurred



for Valencia oranges which reached an average fruit drop rate of 22 percent that pushed total production down to 2.98 million tons, from 2011/12's 3.3 million tons.

As of mid-June, the early-to-midseason orange crop harvest was fully completed while 2 percent of Valencia's remained on the trees, according to the Florida Citrus Administrative Committee (FCAC). With so little fruit remaining on trees, focus has shifted from harvest to preparation of next season's crop. Rainfall in the citrus growing region has been ample, with many irrigation canals full, promoting good development of the 2013/14 crop.

Despite reduced production, grower prices for Florida processing oranges have averaged \$6.60 per 90-lb box this season to date, down 14 percent from last season (table 11). The 2012/13 season average grower price is 2 percent above the 5-year average price of \$6.49 per box. Prices are down compared to last season when demand for domestic oranges was high to supplement domestic orange juice supplies due to import restrictions imposed last year on imported orange juice.

### ***Orange Juice Production Forecast Down for 2012/13***

NASS revised down the 2012/13 Florida Valencia crop forecast by more than 15 percent from the initial October forecast. Current estimates peg the States' Valencia orange production at 3.5 million tons, down 8 percent from last season's total. With the expected decrease in production, orange juice production is forecast down to 862 million gallons single-strength equivalent (sse), 5 percent lower than the March forecast and down 10 percent from 2011/12 (table 12). The Florida all orange yield is forecast at 1.589 gallons per box (at 42.0 degrees Brix), down 1 percent from March and down 3 percent from 2011/12's final yield of 1.63 gallons per box. The substantially small fruit size has contributed to the lower juice yield this season.

Higher beginning stock levels have provided some cushion to total domestic orange juice supplies, which is forecast up 8 percent at 1.7 billion gallons. Orange juice imports are very strong this season, compared to the previous season, which was affected by the national attention to fungicide contamination in imported orange juice. Season-to-date imports total 335.3 million gallons, up 85 percent from the same period in 2011/12. All but one month so far in the 2012/13 orange juice season has imports up from the previous year, with import volume in May being the 3<sup>rd</sup> largest for that month since 1989, at 36.8 million sse gallons. Brazil remains the top supplier of imported orange juice in the United States, with 2012/13 season-to-date volumes shipped to this market at 187.6 million gallons, more than double those for the same period in 2011/12. Imports from Mexico were also up substantially, totaling 106.9 million gallons. Imports of Brazilian orange juice account for 56 percent of total orange juice imports so far this season, while imports from Mexico make up 32 percent. Given strong import volumes thus far, ERS forecast total U.S. orange juice imports to reach 400 million gallons in 2012/13, up from 232 million gallons in 2011/12. This increase, along with higher beginning stocks, will help bolster overall orange juice supplies in the United States in 2012/13, despite the decline in domestic production.

Table 11--Processing oranges: Average equivalent on-tree prices received by Florida growers, 2006/07-2012/13

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
---Dollars/90-lb box---						
October	--	0.81	--	--	--	--
November	5.16	4.75	3.73	4.74	6.28	4.00
December	5.47	5.10	5.15	5.38	6.24	5.10
January	5.81	5.04	5.99	5.60	7.05	5.30
February	6.10	4.95	6.09	6.20	8.10	6.30
March	6.95	6.31	7.10	6.94	8.30	7.30
April	7.32	6.63	7.90	7.25	9.00	7.70
May	7.39	6.53	8.10	7.70	9.20	8.30
June	7.17	6.87	8.00	8.50	--	8.80
Oct.-May average	6.42	5.22	6.51	6.54	7.74	6.60

-- = Not available.

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

Table 12 --United States: Orange juice supply and utilization, 1986/87 to present

Season 1/	Beginning stocks	Production	Imports	Supply	Exports	Domestic consumption	Ending stocks	Per capita consumption
-----Million sse gallons 2/-----								Gallons
1986/87	204	781	396	1,381	73	1,106	201	4.57
1987/88	201	907	296	1,404	90	1,103	212	4.52
1988/89	212	970	272	1,454	73	1,148	233	4.66
1989/90	233	652	350	1,235	90	920	225	3.70
1990/91	225	876	320	1,422	94	1,170	158	4.65
1991/92	158	930	286	1,374	107	1,096	170	4.30
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	1,431	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
1999/2000	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	1,250	291	2,233	103	1,426	705	4.93
2003/04	705	1,467	222	2,393	123	1,448	822	4.96
2004/05	822	974	358	2,153	119	1,411	623	4.79
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	406	1,938	136	1,155	647	3.80
2008/09	647	1,060	317	2,025	125	1,206	594	3.93
2009/10	694	837	328	1,859	147	1,155	557	3.75
2010/11	557	914	263	1,734	214	1,112	407	3.57
2011/12	404	959	223	1,586	152	985	449	3.13
2012/13 f/	449	862	400	1,711	170	1,071	470	3.39

f = forecast.

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

2/ SSE = single-strength equivalent.

Source: Prepared and calculated by USDA, Economic Research Service.

U.S. orange juice exports in 2012/13, October through May, are up 12 percent from 2011/12's export level, reaching 112.5 million gallons. Exports to Canada, the top market receiving U.S. orange juice, increased by 8 percent, and represented 56 percent of total season-to-date export volume. Gaining ground, South Korea, has moved up to be the 2<sup>nd</sup> largest export market for U.S. orange juice, receiving 14.7

million gallons season to date, demoting Belgium-Luxembourg to 3<sup>rd</sup> thus far this season, with volumes down 30 percent. Since exports are so strong so far this season, ERS forecast exports to hit 170 million gallons, a 12-percent increase from 2011/12.

Even with lower production and increased exports, domestic supply is anticipated to reach 1.07 million gallons, representing a 9-percent gain from the 23-year low in 2011/12. Nielsen scanner retail sales data show that total orange juice sales are lagging by 1 percent for the 2012/13 marketing year, compared with this time in 2011/12, but Not from Concentrate (NFC) retail sales are up 2 percent for the same period. Price per gallon of NFC is up 2 percent, with overall revenue up 4 percent. The decline observed in total orange juice is from declines in reconstituted orange juice. The slower movement of juice to domestic consumers, in combination with increased inventory through June, gives basis to the ERS 2012/13 ending stocks forecast rising 5 percent to 470 million gallons. After 2010/11's low ending inventory, efforts have been made to rebuild stocks over the past few seasons. If realized, the 2012/13 ending stocks will still be 16 percent lower than the 2009/10 ending stock level of 557 million gallons.

Even with low forecast orange juice production and increased exports, the increase in imports have provided enough supplies for domestic use. U.S. orange juice per capita use is forecast at 3.39 gallons in 2012/13, up from last season's 3.13 gallons, but remains below the previous 5-year average of 3.64 gallons.

### ***California Orange Production Projected Down 3 Percent in 2012/13***

Similar to Florida, California's overall orange crop in 2012/13 is projected down over 3 percent from the previous season, to total 2.3 million tons. Valencia oranges took the largest loss in production, with a 7- percent decline, reaching an estimated 500,000 tons. Navel orange production is forecasted down 1 percent to 1.8 million tons. The 2012/13 estimates for both orange varieties have been revised down, with both dropping between 3-4 percent from the initial forecast in October 2012. As of mid-June, the navel harvest was complete while the Valencia harvest began to pick up pace through early July, according to NASS's July *Pacific Region Crop Production Report*.

California fresh orange grower have averaged \$12.73 per 80-pound box through June this season, down 5 percent from last season's average for the same period of \$13.35 per box (table 13). Every month so far this season, except in June, prices for fresh California oranges were below the 2011/12 season. Fresh orange imports are strong this year, which can also be contributing to the decline in year to year prices.

From November 2012 through May 2013, U.S. fresh orange exports have totaled 669,188 tons, up from 660,562 tons for the same period in 2011/12. South Korea is currently the top export market for U.S. fresh oranges, U.S. exports to the country have declined 12 percent in volume from last season. Season-to-date exports to Canada increased to 145,661 tons. Similar to South Korea, exports to Japan were down, totaling 80,794 tons, a 22 percent decline. Factoring in that season-to-date export levels are similar to last year, domestic production is down and the seasonal nature of U.S. fresh orange exports being strongest during the winter, ERS forecasts

Table 13--Fresh oranges: Average equivalent on-tree prices received by California growers, 2007/08-2012/13

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
---Dollars/box--- 1/						
November	15.27	14.91	17.76	15.31	15.52	15.20
December	10.98	12.07	13.06	13.75	13.53	12.90
January	9.48	14.17	11.56	12.35	11.73	11.50
February	8.28	12.74	10.86	9.65	11.13	10.10
March	8.40	11.58	10.85	8.90	10.86	9.90
April	7.61	10.18	10.68	9.22	13.82	11.44
May	9.28	11.37	13.34	10.63	15.38	14.33
June	11.01	12.43	14.21	11.81	14.81	16.44
July	7.72	10.51	12.60	9.85	11.03	
August	7.72	11.01	9.29	10.75	10.23	
September	10.22	--	9.29	11.45	12.53	
October	10.12	--	9.29	11.15	12.13	
Nov.-June average	10.04	12.43	12.79	11.45	13.35	12.73

Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*, various issues.  
1/ 75-lb box prior to 2010/11; 80-lb box thereafter.

fresh orange exports to total 760,000 tons in 2012/13, down 1 percent from last season. Since fresh production is anticipated down this year and the last two months have seen export volumes dip, the forecasted 1 percent decline in total fresh orange exports assumes that 87 percent of all orange exports have already shipped this season through May.

Imports of fresh oranges for the season through May are very strong, with every month, except November, exceeding last season's import quantities. Both April and May imports were over double those for the corresponding months last year. The increase in imports can be partially attributed to the lower overall orange production and the shorter Valencia supply, which reduced domestically available fresh oranges in the spring and summer. Given the smaller fresh orange crop nationally and the current trade information available, ERS forecasts fresh orange imports to reach 148,000 tons, 13 percent above last season's marketing year total. On average, only 22 percent of all fresh oranges are imported from November through May, the remainder usually comes towards the end of the domestic marketing season when fresh supplies are light and can be supplemented by southern hemisphere supplies. If the import level forecasted is realized, it would be a new record for U.S. fresh orange imports.

### ***Grapefruit Production Gains Ground in 2012/13***

After the lowest production season in 2011/12 with 1.15 million tons, gains in production in California and Texas have boosted national grapefruit production up 3 percent to reach 1.19 million tons in 2012/13. All grapefruit producing states have had upward production adjustments since the March NASS forecast, but for Florida this still represents a low production year. Florida's production is currently estimated 3 percent below last season's 802,000 tons, and down 7 percent from 2010/11. Even though production in Florida is anticipated to be the second lowest level since 2004/05, it is remains 44 percent higher than that hurricane reduced production year. The Florida crop is comprised of 225,000 tons of white grapefruit and 557,000 tons of colored grapefruit, both down from last year. Both grapefruit crops have experienced relatively high fruit drop this season. The larger fruit sets

per tree might have led to the high drop rates. Overall Florida grapefruit sizes are smaller this season, needing 120 fruit per box for white grapefruit and 125 per box for colored, which were sized at 101 fruit per box and 105 fruit per box last season, respectively. Texas' production has gained substantial ground after last year's drought-reduced crop, increasing by 27 percent to 244,000 tons. California looks to increase production by 3 percent this season.

The anticipated smaller crop at the beginning of the season caused fresh grapefruit grower prices to start very strong, with October prices 57 percent above the same month in 2011/12 (table 14). But, as the season progressed and fresh grapefruit harvest peaked, production was exceeding initial expectations, deflating prices below last season's prices after January. The strong beginning prices kept the average price to date, October through June, 4 percent above last season's average.

According to data from the FCAC, Florida grapefruit harvest was virtually complete as of mid-May, with only less than 1 percent of white grapefruit remaining on trees as of June 16. Fresh utilization of total grapefruit remained steady as a representation of total share of grapefruit to the fresh market (at 40 percent), however due to the decline in production the total quantity fruit used in fresh utilization declined by 1 percent in 2012/13. Similarly, the quantity of grapefruit processed declined 3 percent for the same period, but processed share of total utilization remained the same as last season at 60 percent. The reduced crop and smaller fruit size have reduced processed grapefruit prices this season, with each month through May receiving significantly lower prices (table 15). Overall, the average price from October through May was \$1.55 per box, a 61 percent decrease from last season's average of \$3.93 per box.

Even though total U.S. grapefruit production is up this season, ERS forecasted total fresh grapefruit production in 2012/13 to be 1.13 billion pounds, down 8 percent from last season. This decline in fresh grapefruit production is due mostly to the smaller sized fruit as they tend to be less preferred in the fresh market and redirected into the processing market. California's crop, which is all virtually destined for the fresh market, only has under a 3-percent gain in production this season. Texas' production is also up this season, with an average share of 60 percent of the crop intended for fresh use. With the decline in fresh-use production,

Table 14--Fresh grapefruit: Average equivalent on-tree prices received by U.S. growers, 2005/06-2011/12

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	-----Dollars per box 1/-----					
October	13.16	11.96	19.80	8.08	10.44	16.42
November	14.01	8.18	13.95	15.26	10.09	12.20
December	11.16	7.89	12.33	10.91	10.14	10.64
January	9.35	7.08	13.56	10.56	10.04	12.21
February	8.26	7.44	12.63	9.50	10.30	9.61
March	7.66	8.00	11.35	10.31	11.64	8.68
April	8.53	8.07	9.03	11.05	12.65	7.06
May	9.44	7.00	7.50	10.45	13.47	8.26
Oct.-May average	11.19	8.51	14.45	10.86	10.20	10.64

1/ The net weight of a grapefruit box for Florida: 85 lb, for Arizona and California: 80 lb (67 prior to the 2010-11 crop year), for Texas: 80 lb.

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

Table 15--Processing grapefruit: Average equivalent on-tree prices received by Florida growers, 2007/08-2012/13

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
---Dollars per 85-lb box---						
October	-2.94	-1.27	-1.65	2.35	3.00	-0.47
November	-0.24	0.13	0.48	2.78	3.42	-0.19
December	-0.16	0.18	1.56	3.10	3.98	0.40
January	0.24	0.28	2.35	3.54	4.66	1.76
February	0.67	0.51	2.76	3.81	4.60	3.14
March	0.65	0.65	2.85	3.65	4.90	3.67
April	0.56	0.77	1.73	3.62	4.45	2.53
May	0.45	0.25	0.93	3.48	--	--
Oct.-May average	-0.49	-0.03	1.10	3.12	3.93	1.55

-- = Not available.

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

imports are forecasted to increase fivefold from the 2011/12 season to reach 13 million pounds. ERS projects exports in 2012/13 to total 414 million pounds by the end of August, down 10 percent from last season. Exports through May are down 11 percent from the same period in 2011/12, consistent with the projected decline for the season. The reduced exports will help mitigate the decline in total domestic supply of fresh grapefruit this season. Total domestic supply is forecast to decline 4 percent to 739.6 million pounds, bringing per capita use down 5 percent to drop to 2.34 pounds per person.

According to FCAC utilization data through early June, the share of grapefruit utilization for processing in 2012/13 was relatively unchanged from the same period in 2011/12 at 60 percent. Actual Florida grapefruit to processing quantity is down 3 percent, according to FCAC. Even with the decline in Florida grapefruit production, ERS forecast grapefruit juice production up 11 percent to 85.7 million sse gallons (table 16). The increase in production is partially attributed to the jump in Texas production.

U.S. grapefruit juice imports this season through May are up 57 percent, totaling 708,469 gallons. Mexico is currently the largest supplier of imported grapefruit juice in the U.S. market. Import volumes from Mexico are at 604,156 gallons to date, 56 percent higher than in 2011/12 the same time and roughly 85 percent of total imports to date. The jump in overall imports and larger beginning stocks have supplemented total U.S. grapefruit juice supplies in 2012/13, which is forecast at 126.5 million gallons—an increase of 11 percent from last season. Exports are forecast to reach 14.5 million sse gallons, a decline of 3 percent year over year. This drop reflects the observed current trade levels which are 3 percent below last season to date. With the higher production level and imports, ending stocks are anticipated to rise slightly to 40.5 million gallons, which pushes domestic supply up 21 percent to 71.6 million gallons. The domestic supply is more in line with the previous 5 year average of 75.1 million gallons, since last year represented a record low. With the forecast domestic supply up, per capita use also rises 20 percent to 0.226 gallons per person.

Table 16--Grapefruit juice: Supply and utilization 1991/92-2012/13

Year 1/	Supply				Utilization			
	Production	Imports	Beginning stocks	Total	Ending stocks	Exports	Total	Per capita
					Million use gallons 1/----- Gallons			
1991/92	120	4	42	165	39	23	104	0.40
1992/93	186	2	39	227	70	22	134	0.52
1993/94	169	1	70	240	59	17	163	0.62
1994/95	191	1	59	251	72	22	157	0.59
1995/96	171	1	72	244	66	27	151	0.56
1996/97	192	0	66	258	86	21	151	0.55
1997/98	166	0	86	252	68	18	167	0.60
1998/99	171	1	68	240	54	24	161	0.58
1999/2000	203	5	54	263	82	33	148	0.52
2000/01	183	1	82	266	75	39	152	0.53
2001/02	179	0	75	255	84	36	135	0.47
2002/03	140	0	84	224	72	38	114	0.39
2003/04	147	0	72	219	65	42	111	0.38
2004/05	49	11	65	126	35	24	67	0.22
2005/06	81	6	35	122	42	19	61	0.21
2006/07	121	1	42	164	58	20	86	0.29
2007/08	109	0	58	167	60	16	92	0.30
2008/09	84	1	60	144	48	16	81	0.26
2009/10	77	1	48	125	45	13	68	0.22
2010/11	84	0	45	129	37	16	77	0.24
2011/12	77	0	37	114	40	15	59	0.19
2012/13 f	86	1	40	127	41	14	72	0.23

1/single-strength equivalent. f = forecast.

Source: Prepared by USDA, Economic Research Service.

### ***The 2012/13 Lemon Crop Makes Small Gains in Production***

The July *Crop Production* forecast has total U.S. lemon production up 3 percent this season from the previous, with Arizona's production rebounding following a freeze-reduced crop in 2011/12. Overall, Arizona's lemon crop is expected to more than double to 72,000 tons, while California's crop is expected down 2 percent to 800,000 tons.

The larger lemon crop has promoted lower grower prices this season, with an average of \$18.01 per box through June, roughly 12 percent less than the average price for the same time period last year (table 17). Monthly grower prices for the 2012/13 season have all been lower than the corresponding months in 2011/12, except in May and June, when seasonal tightening of supplies supported prices. Lemon prices should remain strong through the remainder of the high-demand summer period.

AMS shipment data shows that movement of lemons through early July is coming exclusively from Southern California. While domestic lemon harvest is completed, lemons from storage and imports have been supplying the market. Increased domestic production lowered import demand this season, with imports from August to May totaling 43,609 tons, down 14 percent. Though overall imports are down season to date, imports from Mexico has increased 7 percent to reach 31,738 tons through May, while volumes from Chile have declined 45 percent. So far this

Table 17--Fresh lemons: Average equivalent on-tree prices received by U.S. growers, 2007/08-2012/13

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	--Dollars per box 1/--					
August	43.40	35.58	24.26	25.43	25.09	19.15
September	46.10	29.81	27.06	25.83	22.59	17.75
October	47.98	20.15	24.77	25.43	19.59	19.36
November	48.00	17.85	25.37	26.73	19.09	17.36
December	42.66	14.06	22.41	19.03	19.79	16.46
January	45.50	14.24	22.43	15.13	21.29	15.76
February	47.10	11.27	22.27	12.63	18.50	14.34
March	45.90	8.85	21.26	12.93	17.89	13.72
April	43.20	8.68	22.86	14.83	18.89	17.62
May	44.40	11.48	23.36	16.13	21.29	21.92
June	45.90	17.38	23.86	17.93	22.29	24.62
July	43.00	22.78	24.96	22.43	20.59	
Aug.-June average	45.47	17.21	23.63	19.28	20.57	18.01

1/ 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.

season, exports have been strong, with every month, except in December, showing volumes exceeding 2011/12 monthly levels. Total fresh lemon exports through May were up 18 percent, reaching 102,736 tons. U.S. exports to Japan were up 4 percent and those to Canada and South Korea were each 22 percent higher.

### ***Tangerine Production Up With Strong Grower Prices for the Season***

Current estimates for the 2012/13 U.S. tangerine/mandarin season have production up 6 percent from 2011/12, with gains in California production negating losses from Florida. California continues the trend of increased production this season. If realized, this will be the largest specialty citrus harvest in California at 520,000 tons, 19 percent higher than in 2011/12, which was also a record season. Arizona's production remained stable at 8,000 tons this season, while Florida witnessed a 22-percent decline. If realized, Florida's tangerine harvest of 159,000 tons could be the lowest harvest level since 2000. Tangerine harvest is over in Florida for the season.

Despite the national increase in production, grower prices have remained very strong for the 2012/13 season, with each month from October through May receiving higher prices than the same months in 2011/12 (table 18). The season-average price to date for 2012/13 of \$23.83 per box is 13 percent higher than the average over the same period in 2011/12.

Total tangerine/mandarin imports have increased this season to date by 4 percent. Spain has increased shipments of specialty citrus to the United States marginally this season through May, while Chile's shipments also to this market has increased 50 percent over last season. Total exports are up 15 percent season to date, reaching 46,306 tons. Canada is currently the top receiver of U.S. tangerine exports, with 22,389 tons through May. Japan is the second largest market but season-to-date U.S. shipments are down 15 percent from last season.

Tangelo production, much like other Florida citrus production, is down this year by almost 14 percent. The current estimate for production is 45,000 tons. According



Table 18--Fresh tangerines and mandarins: Average equivalent on-tree prices received by U.S. growers, 2007/08-2012/13

Month	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	--Dollars per box 1/--					
October	15.65	17.48	14.00	11.90	9.55	15.05
November	23.88	22.24	26.31	34.53	21.99	23.98
December	21.21	15.19	25.05	30.30	26.88	28.21
January	21.18	18.46	19.43	21.41	19.18	22.97
February	19.52	23.76	11.22	18.51	22.03	24.36
March	20.39	18.96	16.40	15.99	26.82	28.43
April	17.45	--	18.55	18.66	--	--
May	6.65	--	--	--	--	--
Oct.-May average	18.24	19.35	18.71	21.61	21.08	23.83

1/ The net weight of a tangerine box for Florida: 95 lbs, for Arizona and California: 80 lbs (75 prior to the 2010-11 crop year).

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

to FCAC, harvest is fully complete on tangelos and roughly 57 percent of this year's harvest has gone to processing, a much lower share than last season's 68 percent.

### ***Almond Crop Revised Downward in July but Remains Strong***

As the 2012/13 California almond season winds down, the *2013 California Almond Objective Measurement Report*, released in early July estimates the upcoming crop at 1.85 billion shelled pounds. This represents a downward adjustment of 8 percent to the estimate since May and 2 percent less than last season's total harvest of 2.0 billion shelled pounds. Though the production level has dropped, this would be the third largest harvest on record. Weather seems to be the largest cause of the declined production, with a cold winter prompting a late and very short bloom period, reducing effective pollination. As the nuts developed, high winds caused nut drop in early April with some industry sources reporting 50 pounds of nuts lost per acre. Reduced water allotment to some growers and lower rainfall this year also poses a concern for California growers. These factors have all contributed to the lowest average kernel weight in 40 years and lower average nut set per tree. Despite the challenges grower face this season, estimated bearing acreage has increased 4 percent to 810,000 acres.

Imports of inshell almonds are up substantially through May at 37.7 million pounds, up 28 times from last season. A bulk of the inshell almonds originated from Australia with 36.7 million pounds. Shelled almond imports were down by 46 percent, with Australia the top supplier to the U.S. market, sending 1.6 million pounds.

Exports are down for the season to date, with 824.5 million shelled pounds, a drop of 11 percent from the same time last season. At the same time, inshell almond exports have increased 3 percent to 407.9 million pounds. India is the major market for U.S. inshell almonds with 146.9 million pounds, followed by Hong Kong with 123.7 million pounds. Spain is the top market for shelled almonds this year, but has received 12 percent less shelled almonds than last season. Germany is the second largest market for U.S. shelled almonds.

## Higher Imports Boost U.S. Melon Supplies During First Half of 2013

Total melon supplies in the United States (domestic and imports) through the first half of 2013 were up 2 percent from the same period a year ago, resulting in lower melon prices for consumers (table 19), based on AMS data. Much of the year-to-date supply growth reflects an 18-percent increase in imports compared with the same period a year ago. Domestic shipments during this first 6 months of 2013 declined 12 percent on account of lower early shipments of U.S. watermelons and honeydew melons. Year-to-date supply volumes were almost equally split between domestic shipments and imports, although imports accounted for virtually all the winter supplies. Historically, over 80 percent of U.S. melon imports occur during the first six months of the year while U.S. melons begin shipping in the spring, with heaviest volumes fulfilling peak demand in the summer.

Harvest delays in some southern U.S. production areas slowed early watermelon shipments. Watermelon supplies, however, have improved during the first week in July, with higher shipment volumes in Georgia, Florida, Texas, and Alabama in the South. At the same time, volumes continued higher in California and Arizona. With the supply boost from imports, national advertised retail prices for watermelons have averaged lower than last year almost every month during the first half of 2013, with average declines ranging from \$0.15 to as much as \$0.82 each for miniature watermelons and \$0.45 to \$0.80 each for seedless watermelons (table 19). By early July, prices remain below a year ago. Red flesh seeded watermelons were advertised at around \$4.14 each, about 30 cents lower than the average in early July last year while red flesh seedless varieties averaged \$4.18 each, about 5 cents cheaper than last year. Advertised prices for miniature varieties were around \$2.94 each, about 26 cents higher than in early July last year. Meanwhile, early July cantaloupe prices averaged \$2.21 each, compared with \$2.57 the same time a year ago.

In the United States, over 90 percent of watermelon imports come from Mexico while more than half of cantaloupe imports are from Guatemala. Mexico is also among the leading suppliers of cantaloupe imports in this market but volumes fall behind those from Honduras and Costa Rica. From January through June 2013, AMS data show watermelon import shipments were up 17 percent from the same period a year ago, reflecting increased supplies of seedless watermelons. Seeded watermelon imports declined significantly. Seedless watermelons represented approximately 60 percent of all imported watermelons. For the same period, year-to-year import shipments of cantaloupes and honeydew melons rose 21 percent and 16 percent, respectively.

Table 19 --U.S. advertised retail prices for melons, 2012-13

	Quarters				Months		
	Jan-Mar		Apr-Jun		Early-July		July change
	2012	2013	2012	2013	2012	2013	2012-2013
	---- \$ per melon ----						Percent
Cantaloupe	2.38	2.22	2.45	2.35	2.57	2.21	-14.01
Honeydew	3.60	3.21	3.22	3.15	3.01	2.97	-1.33
Watermelon, miniature	3.35	3.16	3.07	2.79	3.20	2.94	-8.13
Watermelon, seedless	4.05	4.24	5.18	4.80	4.79	4.35	-9.19

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

## Fruit and Tree Nuts Trade Outlook

### Strong Production Boosts Exports in 2012/13

As is typically the case, exports of U.S. fruit and tree nuts for the 2012/13 marketing season are mixed, with crops with strong production levels exporting higher quantities. Lemons are a prime example, with exports from August through May up 18 percent from the same time a year ago, boosted by the expected 3-percent increase in domestic production. Export volume gains partly driven by higher production are also evident in strawberries, orange juice, pecans, and pistachios (table 20).

Following abundant supplies in Florida this winter, increased strawberry acreage in California is aiding increased production. California strawberry shipment volumes this year through early July were up 2 percent from the same time a year ago. As last year's domestic production was at a record high, increases this year could mean ample supplies once again for both the domestic and export markets. The 2012 U.S. strawberry season finished with record-breaking fresh strawberry exports totaling 301.6 million pounds valued at \$386.4 million—also an all-time high. In 2013, export volume through May was up 6 percent compared with last year, with very strong gains to Mexico, the United Kingdom, Saudi Arabia, and the Dominican Republic. Exports also increased to other leading markets, including Hong Kong, the United Arab Emirates, Taiwan, and Japan. Thus far, both volume and value of exports in 2013 are at record-setting levels.

Table 20—U.S. exports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through May)		Year-to-date change
		2012	2013	
		----- 1,000 pounds -----		Percent
<b>Fresh-market:</b>				
Oranges	November-October	1,338,503	1,356,310	1.3
Grapefruit	September-August	443,483	395,296	-10.9
Lemons	August-July	174,867	205,467	17.5
Apples	August-July	1,643,744	1,750,621	6.5
Grapes	May-April	2,010	1,598	-20.5
Pears	July-June	404,810	392,658	-3.0
Peaches (including nectarines)	January-December	20,742	17,709	-14.6
Strawberries	January-December	140,295	148,119	5.6
Sweet cherries	January-December	26,154	42,801	63.6
		----- 1,000 sse gallons 1/ -----		
<b>Processed:</b>				
Orange juice, frozen concentrate	October-September	39,078	45,075	15.3
Orange juice, not-from-concentrate	October-September	61,060	67,444	10.5
Grapefruit juice	October-September	10,030	9,759	-2.7
Apple juice and cider	August-July	8,342	7,889	-5.4
Wine	January-December	43,651	43,565	-0.2
		----- 1,000 pounds -----		
Raisins	August-July	248,555	223,858	-9.9
Canned pears	June-May	18,030	18,740	3.9
Canned peaches	June-May	62,333	56,548	-9.3
Frozen strawberries	January-December	18,895	24,120	27.7
		----- 1,000 pounds -----		
<b>Tree nuts:</b>				
Almonds (shelled basis)	August-July	1,168,577	1,068,804	-8.5
Walnuts (shelled basis)	September-August	239,052	267,888	12.1
Pecans (shelled basis)	October-September	53,945	70,816	31.3
Pistachios (shelled basis)	September-August	117,440	123,548	5.2

1/ Single-strength equivalent.

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

Through the first 5 months of 2013, U.S. sweet cherry exports have jumped more than 63 percent year over year. Despite lower supplies in California—the first to come into season for the domestic crop—early export volumes showed gains to all major markets which include Canada, South Korea, Japan, Taiwan, and Hong Kong. Anticipated production declines in Washington due to frost and rain damage will likely impede overall exports for this season. Weather induced crop losses in the early summer have boosted prices for cherries nationwide which could also affect export demand for the remainder of the season.

U.S. fresh grape exports have dropped 21 percent when compared to last season, but this only accounts for the first month of the marketing year. Harvest delays in California's Coachella Valley slowed early-season domestic supplies but above-normal-temperatures in late June have advanced shipments from the San Joaquin Valley, the main producing region. AMS shipments report marginally higher volumes through early July 2013 than for the same period in 2012, likely resulting in higher available supplies for exports.

U.S. fresh apple exports continue strong in 2012/13 despite reduced overall production due to frost-damaged crops in the Central and Eastern States. Available supplies for fresh use are up on account of the larger crop in Washington State. Among major market, 2012/13 exports through May show significant volume gains to Canada, Mexico, and Taiwan. As of June 1, 2013, fresh apple holdings have remained above the previous 5-year average, suggesting above-average fresh apple supplies late in the season continuing to support increased exports.

U.S. fresh pear exports continue at near record levels in 2012/13 but volumes through May are down 3 percent from the previous season. Part of this decline may be attributed to reduced domestic production. Among countries receiving the most U.S. pears during the season, volumes are down to Mexico, Brazil, and Colombia. Exports, however, show gains to Canada, Russia, and the United Arab Emirates. Early indications from industry suggest that this year's production will improve in the Pacific Northwest, likely aiding export prospects for the 2013/14 marketing season, along with recent market access to China.

For the citrus crops, the slight increase in grapefruit production has not pushed exports above last year's level for the same period. Apart from increased competition from South Africa and China, another reason behind this decline is the smaller-sized grapefruit obtained from the domestic crop. Smaller-sized grapefruit can lead to more bitter tasting fruit and is less desired among some export markets. Lemon production has rebounded this season leading to the increase in exports (up 18 percent season-to date), with Japan, Canada and South Korea all receiving higher lemon volumes from the United States. Despite the decline in total orange production, fresh oranges (from California and Texas) are slightly up in production, pushing exports above the same period last season.

Orange juice exports for both frozen concentrate and not-from-concentrate have seen gains, mostly attributed to freer product movement as the import ban on orange juice was lifted prior to the start of the current season. With the increased available juice supply through imports, processors are able to send more orange juice abroad without reducing the available supplies for domestic consumption. Unfortunately, other processed commodities are not faring as well on the export market with apple juice volume dropping 5 percent below 2011/12 levels.

After a very strong production season, pecans continue to do well on the export market, increasing international shipments by 31 percent through May compared with the previous season. As the United States is the top global producer in 2012/13, pistachios also continue the upward trend in exports, with a 5 percent jump in export volume this season thus far. Even though almonds had a good production season in 2012/13, exports are down 9 percent, potentially due to strong production in Australia.

### ***Strong Imports Mark 2012/13 Season Through May***

U.S. fresh fruit imports in 2012/13 through May were up for all but two fruit crops when compared to the same period in 2011/12 (table 21). Only fresh lemon and peach imports were down through May, while others were all performing stronger than last year.

Grape imports were up 5 percent in May, the first month of the season, with Mexico supplying the most volume in 2013. Increased volumes of late-season Chilean grapes have offset declines in early imports from Mexico due to weather-delayed harvests in the country. AMS data indicate volumes from Mexico have improved in June. Once the domestic season is in full swing and supplies move to market, imports should decline seasonally.

U.S. imports of fresh oranges are up 47 percent this season to date, mainly due to the tight supplies in the domestic market. This continues the trend of increased imports over the past two years. While tangerine imports are up slightly, from last year due mainly to strong December and January shipments when domestic supplies

Table 21--U.S. imports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through May)		Year-to-date change
		2012	2013	
		----- 1,000 pounds -----		Percent
<b>Fresh-market:</b>				
Oranges	November-October	38,223	56,172	47.0
Tangerines (including clementines)	October-September	176,626	183,735	4.0
Lemons	August-July	101,850	87,219	-14.4
Limes	January-December	375,584	375,991	0.1
Apples	August-July	170,013	213,176	25.4
Grapes	May-April	152,677	160,789	5.3
Pears	July-June	120,801	154,809	28.2
Peaches (including nectarines)	January-December	80,541	77,336	-4.0
Bananas	January-December	4,090,137	4,258,747	4.1
Mangoes	January-December	381,243	419,673	10.1
		----- 1,000 case gallons 1/ -----		
<b>Processed:</b>				
Orange juice, frozen concentrate	October-September	181,438	335,319	84.8
Apple juice and cider	August-July	348,652	421,166	20.8
Wine	January-December	127,942	126,140	-1.4
		----- 1,000 pounds -----		
Canned pears	June-May	50,285	58,859	17.1
Canned peaches (including nectarines)	June-May	117,886	173,785	47.4
Canned pineapple	January-December	277,835	312,882	12.6
Frozen straw berries	January-December	141,896	132,192	-6.8
		----- 1,000 pounds -----		
<b>Tree nuts:</b>				
Brazil nuts (shelled basis)	January-December	2,760	6,662	141.3
Cashew s (shelled basis)	January-December	92,111	93,373	1.4
Pine nuts (shelled basis)	January-December	219	163	-25.6
Pecans (shelled basis)	October-September	59,602	60,701	1.8

1/ Single-strength equivalent.

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

were on the lighter side, the good-sized domestic crop could put downward pressure on imports during the remainder of the season. Lemon imports are down due to the rebound in domestic production and should remain below last season's high import levels.

Orange juice imports have witnessed a large jump in volume over the same period last year, nearly 85 percent more juice has been received. The 2011/12 import restriction on orange juice by the Food and Drug Administration has been removed for a year now, and the market rebounding back towards normal levels is evident.

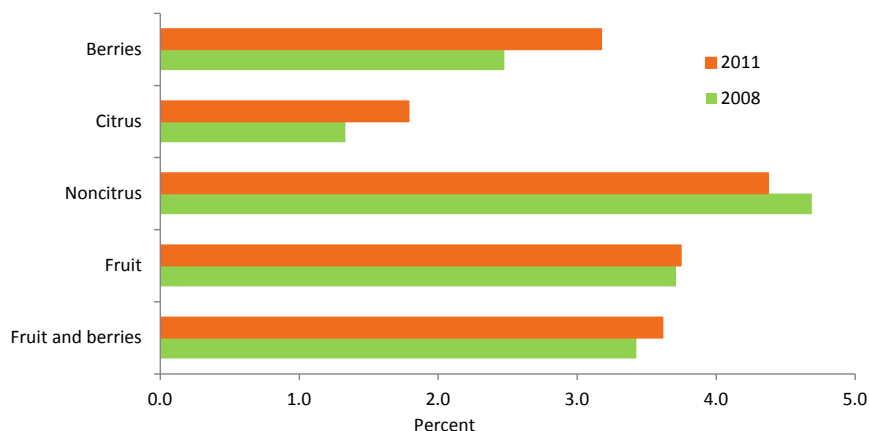
# Commodity Highlight: Organic Fruit and Berries<sup>1</sup>

The U.S. organic food sector grew by \$2.5 billion in 2011, and nearly half of this growth was in the fruit and vegetable category (Organic Trade Association, 2012). In October 2012, USDA NASS released the 2011 Certified Organic Production Survey, an update to the initial 2008 Organic Production Survey, which was an addendum survey to the 2007 Census of Agriculture. Based on this most recent organic survey, U.S. organic fruit and berry gross value of sales from certified organic farms totaled \$620.1 million, up 25 percent from 2008 and represented approximately 18 percent of the total value of sales of organically produced crop and livestock commodities in the country.<sup>2</sup> Organic fruit and berry sales grew at a faster pace than for all organic crop and livestock commodities which experienced a 12-percent increase in total farm value sales.

Despite continued positive growth, farmgate sales for organic fruit and berries continue to range between 3-4 percent of the total for all U.S. fruit and berries, suggesting room for future growth (fig. 1). As with conventional production, California leads the nation in organic fruit and berry production, with \$391.8 million in farm sales in 2011—slightly over 60 percent of total U.S. organic fruit and berry gross value of sales (fig. 2).

1/ Agnes Perez and Kristy Plattner, Crops Branch, Market and Trade Economics Division, Economic Research Service, USDA.

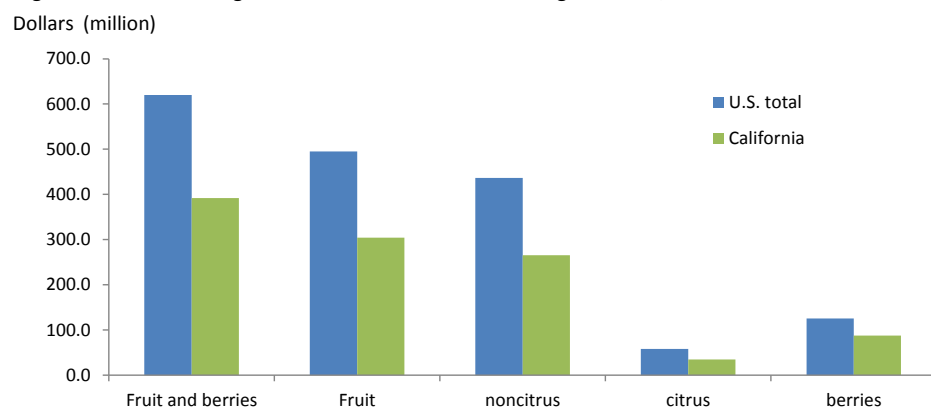
Figure 1  
**U.S. farm value share: Organic fruit and berry sales remain small relative to the conventional crop**



Source: USDA, Economic Research Service calculations using USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys, Noncitrus Fruit and Nuts Summary, and Citrus Fruit Summary*, various issues.

<sup>2</sup> Because of the small size and concentration of the organic sector, findings from the USDA Certified Organic Production Survey may underestimate the quantity and value of organic production in the United States. NASS surveyed 9,140 organic producers in 2011 versus the over 12,400 certified organic producers reported by USDA’s National Organic Program that year. Also, the response rate for the 2011 survey declined. But, because fruit and berries is one of the largest organic sectors, any discrepancy for this sector may be smaller.

Figure 2  
**Organic fruit and berries gross value of sales from certified organic farms, 2011**



Source: USDA, National Agricultural Statistics Service, 2011 USDA Certified Organic Production Survey.

### ***Organic Fruit Overview***

Farmgate sales for U.S. organic fruit (excluding berries) increased 20 percent between 2008 and 2011 totaling \$494.8 million (table 1). This is almost 4 percent of the total crop value generated from all conventionally-produced domestic fruit in 2011. The bulk (88 percent) of sales of organic fruit was noncitrus, but sales of organic citrus are growing at a faster pace. Sales of organic noncitrus fruit increased 18 percent to \$436.2 million, while those for organic citrus climbed 34 percent to \$58 million during the same 4-year period. While both amount to only a small proportion of corresponding total crop value of conventional noncitrus and citrus fruits, the relative share for organic citrus fruit inched slightly higher while falling slightly for organic noncitrus fruit (back to fig. 1).

Of the 15 individual commodities included in the most recent NASS organic survey, grapes remain the leading organically produced fruit in the United States, accounting for roughly one-third of the total gross value of sales for all organic fruit in 2011, followed by apples with 25 percent (fig. 3). Oranges, pears, and sweet cherries round out the top five organically produced fruit in the country for a combined share of 75 percent (including grapes and apples).

Total harvested area for organic fruit and berries in the United States declined 3 percent to 81,537 acres from 2008 to 2011. Most of this decline reflects reduced tree fruit acreage. Among organic fruit (excluding berries), grapes accounted for 42 percent of the total harvested acres in 2011, apples 18 percent, and oranges 9 percent. All other individual organic fruit commodities represented a less than 5-percent share each in the same year. Although area harvested for organic grapes grew 17 percent from 2008 to 2011 and additional acres were reported for peaches, lemons, figs, and tangerines, remaining organic fruit commodities experienced acreage declines during this 4-year period, reducing total U.S. harvested organic fruit acres (excluding berries) by roughly 4 percent to 75,486 acres in 2011.



Table 1--Organic fruit and berries: Harvested acreage and production and gross value of sales from certified organic U.S. farms

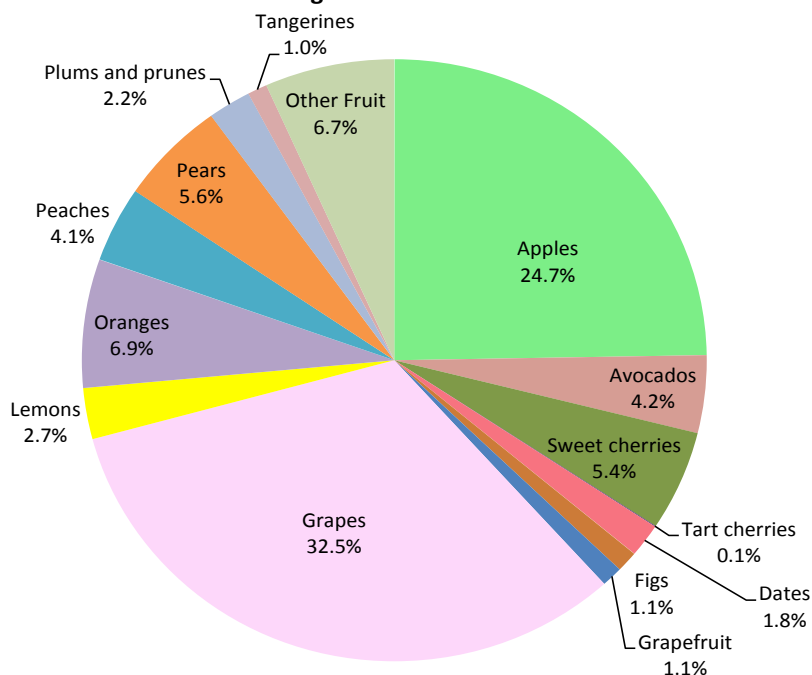
	Harvested acreage			Harvested quantity			Total gross value of sales		
	2008	2011	Change 2008-11	2008	2011	Change 2008-11	2008	2011	Change 2008-11
	---Acres---		Percent	----- Pounds -----		Percent	----- Dollars -----		Percent
<b>Fruit:</b>									
Apples	20,009	13,363	-33	488,194,548	297,926,981	-39	136,798,533	122,212,499	-11
Avocados	3,709	3,682	-1	11,744,000	16,372,000	39	15,221,397	20,564,558	35
Sweet cherries	2,061	1,965	-5	10,922,000	14,220,000	30	15,659,183	26,534,966	69
Tart cherries	264	226	-14	377,430	311,657	-17	291,325	255,071	-12
Dates	485	342	-29	2,764,000	2,664,000	-4	8,603,159	8,803,461	2
Figs	1,268	1,451	14	6,230,000	5,480,000	-12	4,248,766	5,458,976	28
Grapefruit	1,641	1,146	-30	30,472,000	24,254,000	-20	9,782,191	5,367,836	-45
Grapes	27,111	31,771	17	183,194,000	338,574,000	85	122,233,449	160,624,499	31
Lemons	1,407	1,740	24	19,236,000	30,234,000	57	7,398,431	13,471,127	82
Oranges	6,947	6,610	-5	84,008,000	123,034,000	46	22,649,404	34,154,479	51
Peaches	1,838	2,735	49	19,750,000	42,744,000	116	14,246,837	20,024,687	41
Pears	2,145	1,990	-7	43,794,000	53,082,000	21	16,239,511	27,507,140	69
Plums and prunes	3,284	2,198	-33	21,336,000	16,042,000	-25	11,891,004	11,025,614	-7
Tangerines	830	855	3	5,512,000	9,440,000	71	3,335,593	4,982,390	49
Other fruit	5,361	5,241	-2	34,152,833	44,309,614	30	25,225,495	33,174,738	32
U.S. all fruit 1/	78,358	75,486	-4	N.A.	N.A.		413,824,278	494,831,251	20
<b>Berries:</b>									
Blackberries and dewberries	492	308	-37	1688497	2015513	19	4,570,853	5,249,078	15
Tame blueberries	1953	2780	42	5949541	13745771	131	16,426,717	39,743,808	142
Cranberries	340	363	7	2811900	1764000	-37	3,635,144	2,728,691	-25
Raspberries	663	645	-3	4666612	4264253	-9	12,882,980	(D)	
Strawberries	1577	1638	4	42436800	37788700	-11	43,700,241	66,471,615	52
Other berries	470	22	-95	1630817	40546	-98	2,017,558	89,238	-96
U.S. all berries	5495	6051	10	N.A.	N.A.		83,233,493	125,250,030	50

N.A. = Not applicable. (D) = Withheld to avoid disclosing data for individual operations.

1/Includes coffee.

Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

Figure 3  
Share of U.S. farm value sales of organic fruit in 2011



Source: USDA, National Agricultural Statistics Service, *2011 USDA Certified Organic Production Survey*.

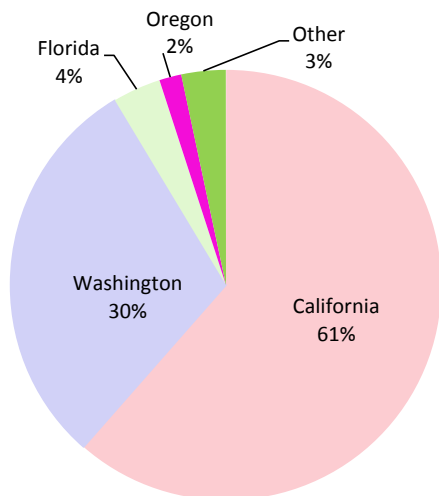
## ***California and Washington Lead in Organic Fruit Production***

Climatic conditions and reduced pest pressure are behind the large presence of organic tree fruit production in the semi-arid irrigated regions of the western United States (Kirby and Granatstein, June 2011). California and Washington State top the list of organic fruit production regions (fig.4). In 2011, 61 percent of U.S. organic fruit sales were produced in California while Washington State accounted for 30 percent. In general, California ranks No. 1 in U.S. grape production, has similar top ranking for avocados, peaches, dates, and figs, and is a major producer of apples, pears, sweet cherries, and citrus. Washington State leads in U.S. apple, pear, and sweet cherry production and No. 2 in grape production. Florida and Oregon are the next two leading producing States for organic fruit with the former relying mostly on citrus and avocados and the latter counting heavily on grapes, sweet cherries, and pears. The number of States reporting reduced organic fruit harvested acres in 2011 outnumbered those that experienced an expansion but gains reported in top producer, California (up 15 percent), and in Oregon (up 3 percent), moderated the overall decline in harvested acreage (fig. 5).

## ***Except for Grapes, Lesser Produced Fruit Experience Larger Growth in Organics***

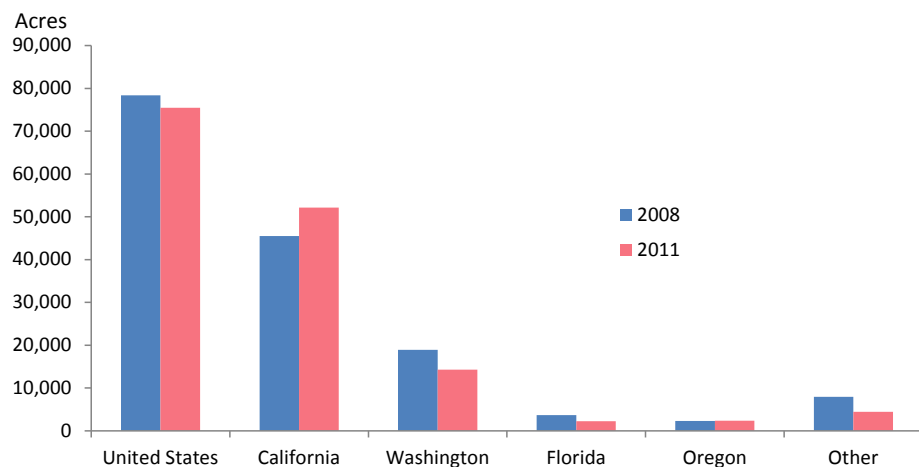
While grapes and apples together account for more than half of total organic fruit farm sales and harvested acres, growth in organic production has been reported for several fruit commodities outside the top five. Some of these lesser-produced fruit have experienced larger expansion between 2008 and 2011 (back to table 1). In terms of growth in harvested quantity, these include peaches, tangerines, lemons, and avocados. Along with grapes, apples, oranges, and sweet cherries, below are some of the trends in organic production for these selected fruit.

Figure 4  
**Organic fruit: Top States in terms of value of farm sales, 2011**



Source: USDA, National Agricultural Statistics Service, 2011 USDA Certified Organic Production Survey.

Figure 5  
Trends in organic fruit harvested acreage, United States and selected States



Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

**Organic grapes:** By far, grapes continue to be the top organic fruit produced in the United States, having the most acreage and quantity harvested and the highest farm sales value (table 1). In 2011, U.S. farmgate sales of organic grapes totaled \$160.6 million, up 31 percent from 2008 and representing 32 percent of the total gross value of U.S. organic fruit (excluding melons and berries) sales from certified organic farms. This share is up slightly from the 30-percent share in 2008. Both harvested acreage and quantity of organic grapes also grew from 2008 to 2011, increasing 17 percent and 85 percent, respectively. These gains far outpaced those for conventional grapes which were up 3 percent for bearing acres and up 6 percent for production during the same 4-year period. Still, both harvested organic area and quantity remain fairly small relative to U.S. conventional grape bearing acreage and production, amounting to about 3 percent and 1 percent, respectively. In terms of farm value sales, the share for organic grapes amount to 4 percent of the total for all U.S. grapes in 2011.

As the predominant grape-producing State, California accounted for roughly 87 percent of the Nation's harvested organic grape acreage in 2011, supplying over 90 percent each of harvested quantity and value of sales for organic grapes. In the same year, Oregon had about 6 percent of the harvested acres and 2 percent of harvested quantity which generated over \$5.4 million in farm sales. As with California, there has been an expansion in organic grape harvested acreage, quantity, and farm sales value in Oregon from 2008 to 2011. In comparison to other grape-producing States, organic grape production in Oregon is 8 percent the size of its conventional grape production, outpacing corresponding relative sizes of other producing States, including California (at 2 percent) and Washington (at 3 percent). Although Washington State continues to surpass Oregon in organic grape acreage and production volume, farm sales of organic grapes in the State fell significantly (down 31 percent) behind Oregon's in 2011, totaling approximately \$3.8 million.

**Organic apples:** Next to grapes, apples are the second most widely produced organic fruit in the country, with 297.9 million pounds harvested from 13,363 acres in 2011. The 2011 production generated \$122.2 million in farm sales, or about a

quarter of the nation's total value of organic fruit sales from certified organic farms. Unlike grapes, however, organic apple production has declined relative to the size of the conventional U.S. apple crop between 2008 and 2011, falling to 3 percent of production volume (from 5 percent in 2008) and to 4 percent of the value of farm sales (from 6 percent in 2008). A very wet spring affected production in many apple-producing States, including top-ranking Washington State. Harvested organic apple acreage, quantity, and value of farm sales all have declined between 2008 and 2011 (table 1). Consistent with U.S. conventional apples, increased adoption of high density plantings and some acreage removal of widely-planted varieties that have become less popular over the years are partly behind the downward trend in acreage. Organic apple harvested acreage declined 33 percent over the 4-year period, falling in share of total organic fruit harvested area from 26 percent to 18 percent. Organic apple volume declined 39 percent over the same period, with a corresponding 11-percent drop in farm value sales. Almost all reporting States experienced a decline in harvested area, volume, and/or value of farm sales, including Washington State.

Washington accounts for more than 60 percent of U.S. harvested acreage for organic apples. Other key States with organic apple acreage include California (18 percent of total harvested acres in 2011), Arizona (6 percent), Michigan (4 percent), and Colorado (3 percent). Eastern U.S. organic apple growers face bigger challenges, particularly with regards to pest and disease pressures, mostly because of frequent rainfall and overall high humidity during the region's growing season (Herrick, June 2013). Although New York and Pennsylvania also report organic apple harvested acres, they each account for less than 1 percent of the total. In 2011, there were 8,770 acres of organic apples harvested in Washington, yielding 245.0 million pounds of organic apples and valued at \$102.6 million, or over 80 percent the total volume and value of U.S. organic apples. While Washington remains a main player in U.S. organic apple production, harvested quantity has declined 42 percent between 2008 and 2011 partly as a result of a 32-percent reduction in harvested acreage. Transition acres (refers to acres currently managed as organic but have not yet met the National Organic Program 3-year organic management requirement) for apples fell to just over 600 in 2010, likely in response to depressed prices for both conventional and organic apples during the 2008/09 marketing year and/or growers' downward acreage adjustments on some varieties experiencing diminished market demand such as Red Delicious and Golden Delicious (Kirby and Granatstein, 2011). Washington State reported 725 apple transition acres in 2011 and 1,064 in 2012, still way below the 4,256 acres reported in 2008 (Kirby and Granatstein, 2012), signaling slower but upward growth in the next few years.

**Organic Oranges:** U.S.-produced organic oranges showed strong gains in harvested quantity between 2008 and 2011, rising 46 percent from 42,004 tons (or 84 million pounds) to 61,517 tons (or 123 million pounds). Though there was a jump in quantity, acreage declined 5 percent, following the current pattern in conventional orange production of higher density orchards and removal of acreage from orange production reducing overall harvested acres. California and Florida are the predominant domestic citrus growing States for both conventional and organic citrus. Organic oranges are the 3rd most produced organic fruit in the United States, with California accounting for 62 percent of all harvested organic oranges in 2011 and Florida claiming the remainder. California organic acreage increased 20 percent from 2008 to 2011, pushing production up 18 percent to reach 37,991 tons

in 2011. While Florida experienced a 3.5-fold increase in harvested quantity, acreage dropped 56 percent over the same 4-year period. Even with harvest increases, organic oranges account for less than 1 percent of total orange quantity grown on 1 percent of total orange acreage in 2011.

Organic orange farmgate sales also increased over the 2008 to 2011 period, starting at \$22.6 million and rising 51 percent to \$34.2 million. California's organic orange sales made up 61 percent of the total. While California is the largest organic orange producer, Florida witnessed the largest gains in value, with an almost threefold increase from 2008 to top \$12.4 million in 2011. The growth in value for the United States still represents a very small share of overall orange sales value which fell below \$2 billion in 2011—organic orange value representing just below 2 percent. Organic orange production is limited due to disease pressure in growing regions, with citrus greening having a strong hold in Florida and now has been detected in California. As the industry combats this disease, there are numerous other pest and disease issues of concern creating challenges to conventional and organic producers alike. Regardless, organic orange production has room to expand in the future but may have a more difficult time expanding within the confines of organic production restrictions under heavy disease pressure.

**Organic peaches:** While representing only 4 percent of total U.S. harvested area and value of farm sales of organic fruit, peaches experienced the largest production growth between 2008 and 2011. Organic peach harvested acreage grew 49 percent during these 4 years, producing 42.7 million pounds (or 21,372 tons) in 2011, more than twice the 2008 crop size. Value of sales reached \$20 million, up 41 percent from 2008. As the Nation's chief peach-producing State, organic peaches in California accounted for most of this growth. There were 1,809 acres of organic peaches harvested in California in 2011, up 50 percent from 2008 and representing almost 70 percent of the U.S. total. Organic peaches in California more than doubled over the 4-year period, totaling 18,024 tons, with farm sales worth \$13.9 million. Acreage and production gains indicate average yields per acre have improved by about 45 percent between 2008 and 2011. Growth trends in acreage and crop size are the reverse for California's conventionally-produced peaches and while the State's share of U.S. conventional peaches has remained fairly steady at nearly 75 percent over this 4-year period, its organic counterpart has expanded its share of all U.S. organic peaches from 73 percent in 2008 to 84 percent in 2011. California's organic peaches, however, remains small at 2 percent of all peaches produced in the State in 2011.

South Carolina and Georgia are distant second and third in U.S. peach production. Together, these two States account for over one-tenth of all U.S. conventionally produced peaches. NASS, however, does not report organic peach production in Georgia and has not disclosed most organic information for South Carolina peaches in the two organic surveys. Based on the two surveys, other States contributing to the expansion in organic peach production include Washington State, Oregon, and New Mexico. Between 2008 and 2011, Washington State also experienced significant growth in harvested acreage (up 98 percent to 448 acres), crop size (up 28 percent to 2,181 tons), and farm sales value (up 48 percent to approximately \$2.9 million). This expansion boosted the relative size of Washington's organic peach crop from about 10 percent of total peach production in the State in 2008 to 17 percent in 2011.

Washington State's production share in the organic peach sector outpaces its contribution to U.S. conventional peach production where its share is at roughly 1 percent. In 2011, Washington State accounted for 16 percent of total organic peach harvested acres in the country, up slightly from 12 percent in 2008. Similar to the developments in California, positive growth trends in organic peach production in Washington State are paralleled by declines in their conventional counterparts (for acreage, production volume, and farm sales value) over the 4-year period.

Although production was not reported by NASS for Oregon's organic peaches, organic peach harvested acreage in the State increased 75 percent between 2008 and 2011 to total 56 acres and farm sales for the same period increased 35 percent to \$144,660. Organic peach production in New Mexico is very small, accounting for only less than 1 percent of all U.S. organic peaches. Harvested acreage in the State declined from 7 acres in 2008 to only 2 acres in 2011, but harvested quantity tripled to 12 tons over this 4-year period, generating 37-percent more in gross farm sales totaling \$16,019.

**Organic lemons:** Commercial conventional lemon production is concentrated in California with limited acreage in Arizona. Over 98 percent of 2008's harvested organic lemons come from California with remaining harvested quantities of production in Florida, Hawaii and Arizona. Harvested organic lemon quantity has increased 57 percent between 2008 and 2011. Organic lemons harvested account for less than 2 percent of total conventional lemon production, with harvested quantity for organics at 15,117 tons while conventional harvested lemons totaled at 850,000 tons. Conventional production changed 66 percent in 2011 from 2008, but the 5-year average (2007-2011) production level is 533,300 tons, since harvest levels fluctuate annually. Acreage increased by 24 percent over the same period to 1,740 acres in 2011. Organic acreage was 3 percent of total lemon acreage in 2011, an increase from the 2-percent share in 2008.

Value of sales for U.S. organic lemons was \$13.5 million in 2011, up 82 percent from the \$7.4 million in sales during 2008. While sales value has risen over time, so has the relative share of organic sales—from 2 percent of total conventional value in 2008 to 3 percent in 2011. Still, organic lemons remain a small fraction of overall lemon sales and quantity sold in 2011.

**Organic tangerines:** Similar to lemons, tangerines are limited in production in the United States with the bulk of the groves found in California and Florida. Organic tangerine/mandarin quantity harvested has increased 71 percent to 4,720 tons in 2011 from 2,756 tons in 2008. Conventional production has increased 35 percent over the same period, complimenting the overall trend of increased production and per capita use for specialty citrus. Even with increased organic production, organic tangerines account for less than 1 percent of total U.S. produced tangerines. Organic acreage has increased at a rate much slower than production, rising only 3 percent between the two time periods.

Value of organic tangerine sales has increased 50 percent since 2008 to total \$4.9 million in 2011. The growth in sales has not increased the share of organic tangerine sales compared to conventional value. Organic tangerines in both periods represent just over 1 percent of total tangerine value. Organic citrus is a niche market and will most likely remain that way in the domestic market due to increased pest pressure from the Asian citrus psyllid which carries the citrus

greening disease. The disease has been particularly hard on Florida citrus and has yet to gain a stronghold in California where the insect was discovered in early 2012. With no known cure for the citrus greening disease, pesticides are one of the main treatments reducing the feasibility of producing citrus fruits organically in the United States.

**Organic sweet cherries:** Sweet cherries rank fifth among U.S. organic fruits in terms of value of farm sales, with a 5 percent share of the total in 2011. As demand for organic food continues to grow, organic sweet cherry production in the United States has expanded significantly from 2008 and 2011, both in terms of harvested quantity and farm sales value. Although harvested acreage for organic sweet cherries declined 5 percent over this 4-year period, production volume rose 30 percent, totaling 14.2 million pounds (or 7,110 tons) with a value of \$26.5 million, up 69 percent. Organic production grew in tandem with increased domestic and export demand for U.S. conventional sweet cherries. However, as with other fruit, value of organic sweet cherry sales has remained relatively small at about 3 percent of the total production value of U.S. conventional sweet cherries.

Made feasible by the introduction of effective fruit fly controls that conform to organic standards, Washington State is the Nation's largest producer of organic cherries, accounting for more than half of both harvested acreage and quantity. However, disease pressure (for example, from brown rot and powdery mildew) created challenges in recent years, prompting growers to move some organic acres to conventional production by 2010 (Kirby and Granatstein, 2011). Moreover, recent pest concerns (such as the spotted wing drosophila and brown marmorated stink bug) may also have impelled growers to scale back or hold off putting additional acres into organic production. From 2008 to 2011, the State's harvested area declined 30 percent to 1,045 acres. Quantity harvested, however, rose 2 percent to 4,558 tons during the 4 years, generating farm sales in the amount of \$13.1 million in 2011, relatively unchanged from 2008.

Meanwhile, California—the second-largest producer—experienced tremendous production growth during the same 4-year period, with harvested quantity for organic sweet cherries up almost fivefold to 2,094 tons and value of farm sales up more than eightfold to \$11.3 million. Hence, California's organic sweet cherry production share grew from 7 percent to 29 percent of the U.S. total for harvested quantity and 8 percent to 42 percent of the total for farm sales value over this 4-year period.

**Organic avocados:** Demand for avocados in the United States continues to grow at a rapid pace, hitting record-breaking levels almost every year since 2000. Production is limited to California, Florida, and Hawaii, with over 85 percent of all conventional avocados produced in California (primarily the hass variety) and Florida supplying slightly over 10 percent (but of the green skin varieties). Hawaii's production is very small at less than 1 percent of the total crop. Over the past few years, imports have become a key player in fulfilling domestic demand, largely fueled by Mexico gaining year-round access to this market. Even so, while there are annual fluctuations in conventional production due to weather impacts and the alternate-bearing nature of the crop, domestic production continues to trend upwards in response to increasing demand. Similarly, organic avocado production is also expanding, with harvested quantity up from 5,872 tons in 2008 to 8,186 tons in 2011. Farm sales of organic avocados also grew during this 4-year period, from

\$15.2 million to \$20.6 million—the sixth highest returns for all U.S. organic fruit. In 2011, organic avocado production equaled about 3 percent and 5 percent of U.S. conventional avocado production volume and value, respectively.

As with most other fruit, top producing States for conventional production are also the key players in organic production. California dominates U.S. organic avocado production, accounting for well over 90 percent of total harvested acreage, harvested quantity, and value of farm sales. From 2008 to 2011, harvested acreage in the State declined 1 percent to 3,533 acres, reducing overall organic avocado harvested acreage by the same magnitude to total 3,682 acres. Despite reduced acreage, both harvested quantity and farms sales in California increased by over 30 percent each during this 4-year period. California's conventional avocados, however, still experienced far larger production growth rates during the same period.

Although small relative to California's production and producing entirely different varieties, organic avocado production has seen tremendous growth in Florida. Area harvested for Florida's organic avocados increased 72 percent to 110 acres from 2008 to 2011, with a corresponding nearly-triple growth in quantity harvested and more than double-growth in value of farm sales, outpacing growth rates for their conventional crop. In 2011, organic avocado production in Florida totaled 7,875 tons and valued at \$20.1 million in farm sales. Production in Hawaii, on the other hand, has declined significantly during this 4-year period.

### ***Organic Berry Overview***

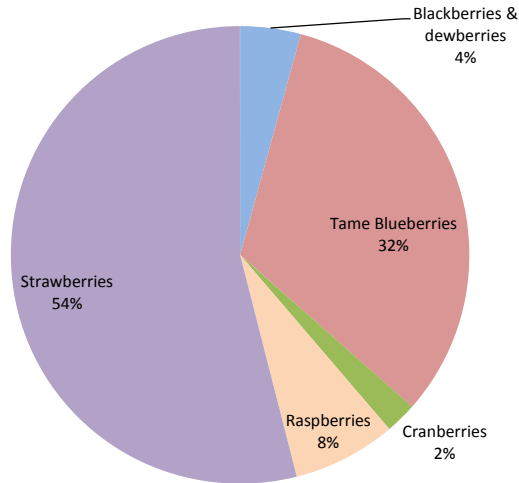
The total value of U.S. organic berry farm sales increased 50 percent from 2008 to 2011, totaling \$125.2 million—roughly 3 percent of the total production value for all U.S. conventional berries (back to fig. 1). Strawberries accounted for more than half of the farm value sales for organic berries, or \$66.5 million (fig.6). In 2011, 37.8 million pounds of strawberries were harvested from 1,638 acres, or nearly one-third of organic berry harvested acreage in the United States (back to table 1). While strawberries' share of organic berry sales has remained fairly steady, increasing from 52 percent in 2008 to 53 percent in 2011, blueberries' share of total sales rose from 20 percent to 32 percent over the same period. Organic production is also reported separately for raspberries, blackberries (including dewberries), and cranberries, and although dwarfed by strawberry and tame blueberry sales, they accounted for 8 percent, 4 percent, and 2 percent of total farm value sales of organic berries in the country, respectively.

### ***California Also Dominate in Organic Berry Production***

California also leads the Nation's organic berry production with 70 percent of the total gross value of organic berry farm sales from certified organic farms in 2011 or \$87.6 million (fig. 7). This share is up slightly from 68 percent in 2008. California's continued dominance in organic berry production is supported by the heavy concentration of strawberry production in the State. Moreover, California is also regarded as the No.1 producing State for raspberries and among the major producers of blueberries. Of the total harvested organic berry acreage in the United States in 2011, California reported 2,558 acres, or 42 percent. All other States with reported harvested organic berry acreage, including Oregon, Georgia, Maine,

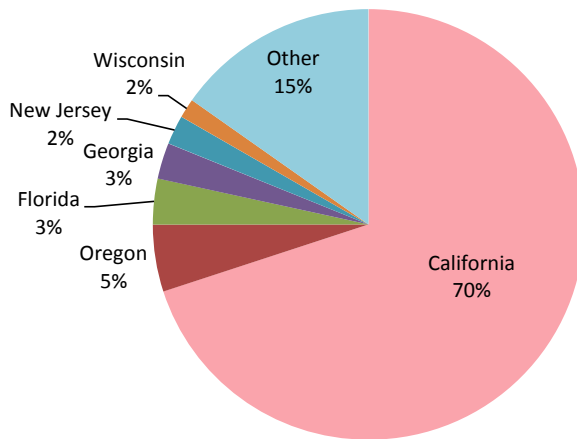


Figure 6  
**Share of U.S. farm value sales for organic berries in 2011**



Source: USDA, National Agricultural Statistics Service, *USDA 2011 Certified Organic Production*

Figure 7  
**Organic berries: Top States in terms of value of farm sales, 2011**

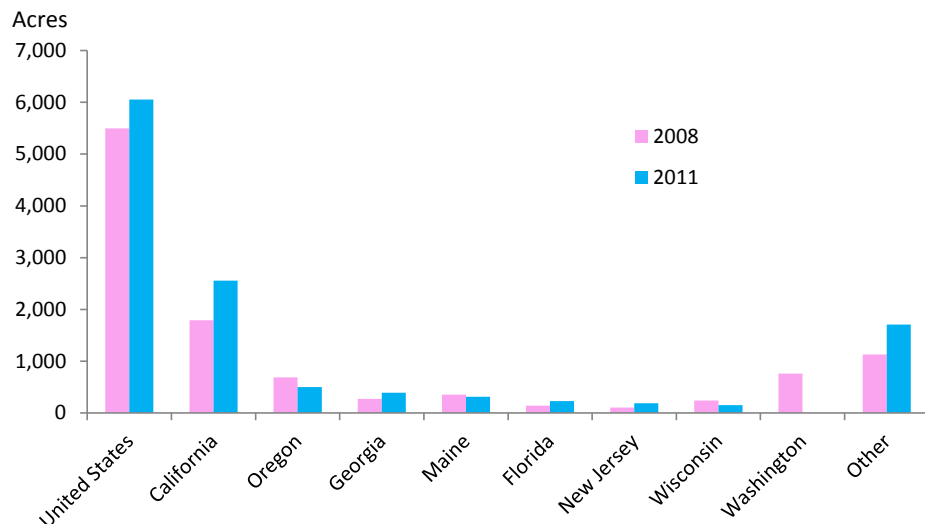


Source: USDA, National Agricultural Statistics Service, *2011 USDA Certified Organic Production Survey*.

Florida, New Jersey, and Wisconsin accounted for less than 10 percent each of the total. Between 2008 and 2011, harvested area in these smaller-producing States grew in New Jersey (up 80 percent), Florida (up 63 percent), and Georgia (up 44 percent), mostly on account of blueberry production (fig. 8).

Harvested acreage for organic strawberries, raspberries, and blueberries increased significantly in California from 2008 to 2011, with corresponding significant growth in harvested quantity particularly for blueberries and blackberries. Although harvested quantity for California strawberries and raspberries declined over the same period, corresponding organic farm sales value grew, indicating

Figure 8  
**Organic berries: Trends in harvested acreage, United States and selected States**



Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

grower prices for California organic strawberries and raspberries were higher in 2011 than in 2008. In 2011, California accounted for 96 percent (or \$63.5 million) of all organic strawberry farm value sales in the United States and 85 percent (or \$10.7 million) of those for blackberries and dewberries. Although NASS did not report total value of farm sales for organic raspberries in 2011, in terms of harvested quantity, California supplied 89 percent (or 3.8 million pounds) of all the harvested organic raspberries that year.

**Organic strawberries:** From 2008 to 2011, organic strawberry harvested acreage in the United States increased by 4 percent, but quantity harvested declined by 11 percent. Nonetheless, farm sales of organic strawberries rose 52 percent over this 4-year period to \$66.5 million. While this growth is significant, the value of organic strawberry farm sales remain relatively small at 3 percent of the total crop value of all U.S. conventionally-produced strawberries. The same relative share is reported for organic strawberries in terms of total strawberry harvested acres in the United States in 2011. Apart from the price premiums associated with organic berries, organic strawberry production is a viable marketing option for growers who are willing to adopt alternative production methods, especially as growers continue to raise concerns about the current lack of technical or economically feasible alternatives to methyl bromide—a preplant soil fumigant against weeds, nematodes and pathogens in strawberry production (Boriss, Brunke, and Keith, June 2012).

Of the eight states that reported harvested organic acreage in 2011 (there were five States that did not disclose 2011 data on harvested acreage), California and Maryland were the only ones reporting more acreage from 2008. New York, North Carolina, Oregon, Vermont, Washington, and Wisconsin reported huge declines in harvested acreage between 2008 and 2011.

**Organic blueberries:** Fresh blueberry consumption has increased 56 percent in 4 years (2008-2011), with production increasing 86 percent over the same period. Organic blueberry production is on a parallel course with its conventional

counterpart, with total domestic organic quantity harvested more than doubling since 2008 to total 13.7 million pounds in 2011. Still a niche market, U.S. organic blueberries represent 3 percent of total blueberry production. California observed the largest jump in organic blueberry production. In 2008, total harvested organic blueberries were just below 200,000 pounds and in 4 years production jumped to 3.1 million pounds. With the increase, the share of organic production to conventional went from 1 percent to 7 percent of the total quantity of California blueberries harvested.

Florida has also witnessed a dramatic jump in organic harvest, starting at 75,645 pounds to 794,466 pounds, supported by a doubling of acreage in the same period. Washington represents the largest producer of organic blueberries in the Nation, with a harvest of 4.6 million pounds in 2011, a 73-percent increase from 2008. While Michigan is the top conventional producer of blueberries, it is not in the top five in organic blueberry production. While harvested organic quantities increased 5 percent since 2008, the harvested organic blueberries accounted for less than 1 percent of their total blueberry production in 2011. New Jersey was the 4th largest producer of conventional blueberries in 2011 but organic production in the state represented less than 2 percent of total harvested berries. Even though organic production was not large in the State between the 2 time periods, harvested organic blueberries expanded fourfold, reaching 1.1 million pounds from 269,015 pounds in 2008.

Value of organic blueberry sales more than doubled since 2008 to reach \$39.7 million in 2011, representing a 5-percent share of total blueberry crop value in the most recent period. Washington leads the way in the value of sales at \$11.5 million, up 32 percent from \$8.7 million. California produced the second most valuable organic blueberry crop in 2011, valued over \$10.6 million, just over 9 times larger than in 2008. Florida's organic blueberry crop pulled in \$264,630 in 2008 and by 2011, the crop was valued over \$3.9 million, more than a fifteenfold increase in 4 years. Michigan's organic blueberry sales value grew 25 percent to reach \$699,340 but only represents less than a percent of the State's total blueberry sales value of \$118.7 million in 2011. Organic blueberry sales value in New Jersey expanded from \$137,246 in 2008 to \$2.7 million in 2011. Though organic blueberry production volumes and values have grown substantially between the 2 organic survey periods, the organic blueberry sector still represents a niche market with continued room for growth.

### **Summary**

Demand for organic food continues to climb, fueling continued opportunities for U.S. fruit and berry growers to expand their organic production. Currently, domestically produced organic fruit and berries value amount to a 3-4 percent share of total fruit and berry farmgate value in the United States. Having the most ideal climate for growing fruit, California and Washington State are leaders in organic tree fruit production. California also supplies more than half of U.S. organic berries. Noncitrus fruit account for the bulk of organic fruit farmgate sales but growth in organic citrus fruit sales between 2008 and 2011 outpaced its noncitrus fruit counterpart. The top five U.S. organic fruit, based on value of farm sales, include grapes, apples, oranges, pears, and sweet cherries. While grapes and apples together account for more than half of the total organic fruit farm sales and harvested acres, some lesser produced fruit have experienced significant growth

such as peaches, tangerines, lemons, and avocados. For organic berries, blueberries experienced tremendous growth between 2008 and 2011 although strawberries still represent more than half of the total value of organic berry farm sales.

### ***References***

- Boriss, H., Brunke, H., and M. Keith. Commodity Profile: Strawberries. Agricultural Issues Center, University of California. Agricultural Marketing Resource Center. 2006. <http://aic.ucdavis.edu/profiles/Strawberries-2006.pdf>
- Herrick, C. Eastern Organic Apples Are Possible. *American Fruit Grower*, Vol. 133, No. 6, June 2013. <http://www.GrowingProduce.com>
- Kirby, E. and D. Granatstein. Status of Organic Tree Fruit in Washington State and Other Regions, 2010. June 2011. <http://www.tfrec.wsu.edu/pdfs/p2191.pdf>
- Kirby, E. and D. Granatstein. Recent Trends in Certified Organic Tree Fruit, Washington State 2012. April 2013. <http://www.tfrec.wsu.edu/pdfs/P2767.pdf>
- Organic Trade Association's 2012 Organic Industry Survey. 2012 Press Release. [http://www.organicnewsroom.com/2012/04/us\\_consumer\\_driven\\_organic\\_mark.html](http://www.organicnewsroom.com/2012/04/us_consumer_driven_organic_mark.html)

## Contacts and Links

### Contact Information

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

Kristy Plattner (Citrus and tree nuts), (202) 694-5190, [kplattner@ers.usda.gov](mailto:kplattner@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.