United States Department of Agriculture

FTS-349

Sept. 30, 2011

A Report from the Economic Research Service

www.ers.usda.gov

# Fruit and Tree Nuts Outlook

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## U.S. Production of Apples, Pears, and Cranberries Up in 2011/12, Grape Crop Smaller



**Briefing Rooms**
Fruit & Tree Nuts

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The next release is November 29, 2011.

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Approved by the World Agricultural Outlook Board.

At 175 (1990-92=100), the index of prices received by fruit and tree nuts growers in August was the highest so far this year and a record high compared with previous August indices. August grower prices for major noncitrus fruit (apples, pears, grapes, peaches, and strawberries) as well as for fresh oranges and grapefruit were up significantly from the same time last year, boosting the August index up 16 percent from the August 2010 index. Harvest delays due to colder-than-normal and wet weather this spring resulted in generally tight early 2011/12 fruit supplies, strengthening their prices.

USDA's National Agricultural Statistics Service (NASS) initial forecast in August for the 2011 U.S. apple crop was 9.51 billion pounds, up 2 percent from last year's crop and about the same as the previous 5-year average. Production growth will come mainly from higher production in the central United States, led by Michigan. Fresh-market production will likely be down in 2011/12, mainly reflecting reduced production in Washington and in various other States. The anticipated smaller fresh-market crop, harvest delays, and dwindling supplies from the previous crop boosted early 2011/12 fresh apple prices.

Despite cool, wet conditions this spring, the 2011 U.S. pear crop was forecast by NASS at 1.78 billion pounds, 9 percent larger than last year. Major producing States all expect to rebound from last year's smaller crops. While harvest delays have resulted in tight early-season supplies, fairly significant supplies from the previous crop were still being moved to markets early into the 2011/12 season, driving fresh pear grower prices lower than a year ago in July. Strong prices for competing apples helped strengthen pear prices in August.

NASS forecast the 2011 U.S. grape crop at 14.4 billion pounds, down 3 percent from last year. While a number of grape-producing States are forecast to produce more grapes this year, production in the two leading States—California and Washington— are forecast to decline. California's smaller crop reflects reduced production of wine, table, and raisin grapes. U.S. fresh grape grower prices have held strong so far in 2011/12.

After two straight years of declining production, NASS had forecast U.S. cranberry production in 2011 at 750 million pounds, just off 5 percent from the record 787 million pounds harvested in 2008 and up 10 percent from a year ago. This increase, coupled with large carryover supplies, would likely drive down processing-use cranberry grower prices.

# Price Outlook

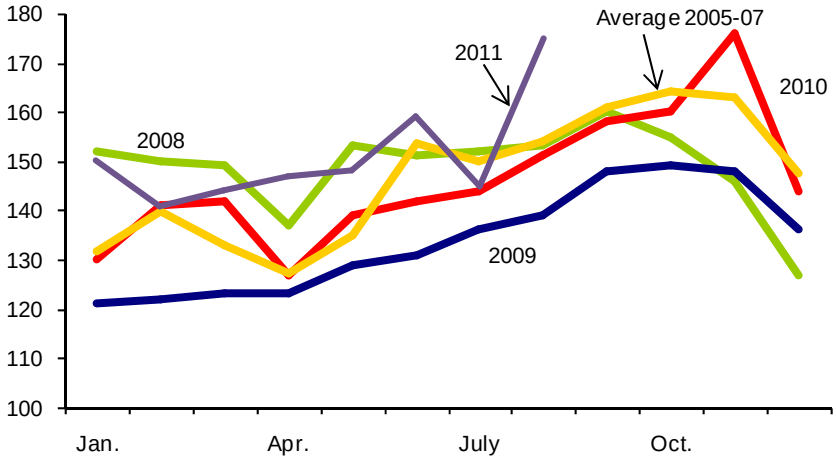
## *Fruit and Nut Grower Prices Held Strong in August*

The index of prices received by fruit and tree nut growers in August rose 21 percent from the previous month and also held strong relative to the same period a year ago (fig. 1). At 175 (1990-92=100), the index reported was the highest so far for this year and a record high compared with previous August indices. August grower prices for major noncitrus fruit (apples, pears, grapes, peaches, and strawberries) as well as for fresh oranges and grapefruit were up significantly from the same time last year, boosting the August index up 16 percent from the August 2010 index (table 1).

Colder-than-normal and wet weather this spring prolonged the growing period for many of this year's fruit crops and delayed harvests. As a result, early 2011/12 fruit supplies were generally tight, providing strength to their prices. Among noncitrus fruits, grower prices for fresh grapes in August posted the largest gain from a year ago, averaging $0.48 per pound—more than twice its value in August 2010. Although domestic grape shipments have picked up in August, a strong start to this season's prices, combined with robust market demand, diminished supplies from Mexico, and a good-quality domestic crop, aided in maintaining stronger prices relative to a year ago. The forecast smaller U.S. grape crop in 2011, especially in California, could limit overall availability for the fresh market, keeping upward pressure on 2011/12 grower fresh grape prices.

Dwindling supplies from the previous crop entering this year's apple marketing season (August-July) and tight early-season supplies provided a boost to fresh apple grower prices in August. Forecast reduced production in Washington State, the largest apple-producing State for the fresh and processed markets, along with anticipated overall smaller crops in the western and eastern United States, will likely keep prices from falling below a year ago in the coming months. Light early-

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 | 2010 | | 2011 | | 2010-11 change | |
|---|---|---|---|---|---|---|
| | July | August | July | August | July | August |
| | *Dollars per box* | | | | *Percent* | |
| Citrus fruit: 1/ | | | | | | |
| Grapefruit, all | 4.10 | 2.70 | 8.20 | 7.10 | 100.0 | 163.0 |
| Grapefruit, fresh | 4.10 | 2.70 | 8.20 | 7.10 | 100.0 | 163.0 |
| Lemons, all | 13.73 | 16.60 | 15.26 | 21.99 | 11.1 | 32.5 |
| Lemons, fresh | 24.96 | 26.93 | 22.43 | 25.09 | -10.1 | -6.8 |
| Oranges, all | 9.92 | 6.88 | 7.74 | 9.58 | -22.0 | 39.2 |
| Oranges, fresh | 12.60 | 9.29 | 7.53 | 10.95 | -40.2 | 17.9 |
| | *Dollars per pound* | | | | | |
| Noncitrus fruit: | | | | | | |
| Apples, fresh 2/ | 0.299 | 0.291 | 0.289 | 0.434 | -3.3 | 49.1 |
| Grapes, fresh 2/ | 0.230 | 0.215 | -- | 0.480 | -- | 123.3 |
| Peaches, fresh 2/ | 0.287 | 0.270 | 0.316 | 0.311 | 10.1 | 15.2 |
| Pears, fresh 2/ | 0.299 | 0.248 | 0.261 | 0.310 | -12.7 | 25.0 |
| Strawberries, fresh | 0.620 | 0.817 | 0.892 | 0.917 | 43.9 | 12.2 |

-- Insufficient number of reports to establish an estimate.
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* and *Noncitrus Fruit and Nuts 2010 Summary.*

season supplies due to harvest delays also occurred in the U.S. fresh pear industry, but overlapping large inventories from the previous crop made up for the lack of supplies and put downward pressure on fresh pear prices in July when the season started. Domestic pear shipments ran above a year ago in August when production transitioned from California to the Pacific Northwest, but strong overall demand and high prices for competing apples supported pear prices. Unlike apples, larger anticipated domestic production for pears in 2011/12 will likely put some downward pressure on fresh pear grower prices. However, the current price strength in competing apples should help temper this downward push.

Lower domestic shipments of peaches and strawberries lifted prices of those fruits in August relative to a year ago. For strawberries, prices this season have stayed above year-ago levels since April, partly reflecting robust demand and the slightly smaller crop in California, which mostly supplies the domestic fresh market in the early spring and summer period. Likewise, projected lower fresh-market supplies of U.S. peaches also influenced the overall upward push in their prices this season.

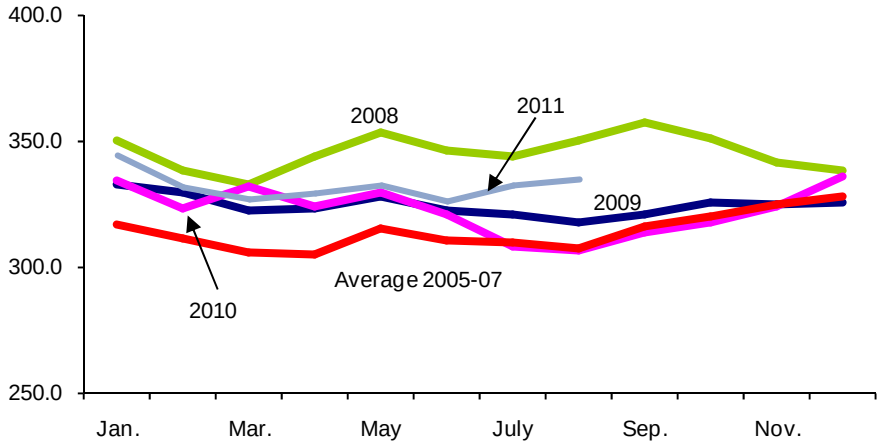
On the citrus side, the smaller California Valencia orange crop, which supplies the summer market, and reduced domestic grapefruit production tightened late-season supplies relative to last year, supporting their prices in August. Meanwhile, fairly sufficient supplies of California lemons in a wide selection of sizes have been offered so far this summer—the period when demand for the fruit is typically highest. Grower prices for fresh lemons have averaged below year-ago levels through most of the 2010/11 season, reflecting increased production. In August, lemon prices declined 7 percent to $25.09 per pound, also due to diminishing quality of late-season supplies, which will likely continue through September. Quality is anticipated to improve when the new crop of lemons becomes available beginning in October.

### *Fresh Fruit Retail Prices Continue Strong*

The U.S. consumer price index (CPI) for fresh fruit in August 2011 was 334.7 (1982-84=100), up nearly 1 percent from the previous month and the second-highest on record for the month over the last 20 years. Led by the year-to-year price gains seen in Thompson seedless grapes and Red Delicious apples in August, higher retail prices also for Navel oranges, grapefruit, and bananas boosted the August CPI 9 percent above the same time last year. Harvest delays and smaller anticipated production for U.S. grapes and apples resulted in a lack of retail promotable volume in August. Adding to the overall lack of supplies, retailers also faced nearly depleted supplies of 2010 Red Delicious apples and diminished imports of Mexican grapes.

Tight supplies of both Navel oranges and grapefruit bolstered their retail prices in August 2 percent compared to the previous month and 11 percent higher than the same time a year ago. Banana retail prices have declined almost every month this year since February. However, prices have remained higher than last year through August despite recovering early spring, summer supplies. USDA, Agricultural Marketing Service (AMS) data show combined U.S. banana imports from leading suppliers—Guatemala, Ecuador, Costa Rica, and Colombia—in September through mid-month are down slightly from a year ago, likely contributing to continued upward year-to-year strength in banana prices.

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, 2010-11

| Commodity | Unit | 2010 | | 2011 | | 2010-11 change | |
|---|---|---|---|---|---|---|---|
| | | July | August | July | August | July | August |
| | | --- *Dollars* --- | | --- *Dollars* --- | | --- *Percent* --- | |
| Fresh: | | | | | | | |
| Valencia oranges | Pound | -- | -- | -- | -- | -- | -- |
| Navel oranges | Pound | 1.149 | 1.242 | 1.078 | 1.268 | -6.2 | 2.1 |
| Grapefruit | Pound | 0.990 | 0.974 | 1.060 | 1.080 | 7.1 | 10.9 |
| Lemons | Pound | 1.672 | 1.664 | 1.554 | 1.626 | -7.1 | -2.3 |
| Red Delicious apples | Pound | 1.290 | 1.305 | 1.374 | 1.529 | 6.5 | 17.2 |
| Bananas | Pound | 0.583 | 0.576 | 0.611 | 0.606 | 4.8 | 5.2 |
| Peaches | Pound | 1.682 | 1.562 | 1.578 | 1.569 | -6.2 | 0.4 |
| Anjou pears | Pound | 1.304 | -- | 1.389 | -- | 6.5 | -- |
| Strawberries 1/ | 12-oz. pint | 1.675 | 1.839 | 1.618 | 1.794 | -3.4 | -2.4 |
| Thompson seedless grapes | Pound | 1.618 | 1.489 | 2.452 | 2.033 | 51.5 | 36.5 |
| Processed: | | | | | | | |
| Orange juice, concentrate 2/ | 16-fl. oz. | 2.464 | 2.514 | 2.734 | 2.730 | 11.0 | 8.6 |
| Wine | liter | 8.418 | 11.189 | 8.742 | 11.691 | 3.8 | 4.5 |

-- 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.

### *Smaller Fresh-Market Apple Production To Boost 2011/12 Prices*

USDA's NASS initial forecast in August for the 2011 U.S. apple crop was pegged at 9.51 billion pounds, up 2 percent from the 2010 crop and about the same as the previous 5-year average crop size. Production in the western States is forecast at 5.88 billion pounds, down 3 percent from a year ago, including Washington—the leading apple-growing State (table 3). Forecast production for the eastern States is also lower, down 2 percent from a year ago to 2.36 billion pounds. Although some States in these two regions are anticipating bigger apple crops this year, much of the growth in U.S. apple production will come from the forecast increased production in the central United States, up 49 percent to 1.27 billion pounds. Growth in central U.S. apple production will be led by the region's largest producer, Michigan, where production, forecast at 1.05 billion pounds, will make up 78 percent of the regional total. Though up sharply, Michigan's crop was below average last year due to frost problems during the budding stage.

Approximately 92 percent of the production volume in the western region will come from Washington. This amounts to 5.4 billion pounds, down 3 percent from a year ago, a result of the cold and wet spring that hindered crop development. Other major producing States in the country, specifically New York and Pennsylvania, will also harvest smaller crops this year, moderating the growth in overall production. Excessive rains across New York early in the spring hampered pollination and disease control. Many growers were concerned with the summer drought-like conditions, but these concerns may have alleviated slightly due to recent significant rain events. In Pennsylvania, hail storms, drought, and frost have all contributed to smaller sized fruit this year.

Although this year's overall U.S. apple crop is forecast larger, fresh-market production will likely be down for the 2011/12 marketing season (August-July) compared to last year, mainly reflecting reduced production in Washington. Other States anticipating smaller crops (such as New York and Pennsylvania) will also contribute to the decline in fresh-market production, but Washington supplies over 70 percent of the fresh domestic crop. Based on forecast growth rates from the U.S. Apple Association on apple production shares designated for fresh and processing uses this season, the Economic Research Service (ERS) projects about 6.22 billion pounds of this year's U.S. utilized apple crop (between 1 to 2 percent of total production is not marketed) will be going to the fresh market, down 1 percent from last season (table 4). The balance of production will be destined for processing, estimated at 3.14 billion pounds and up 7 percent from a year ago.

Despite the projected decline in fresh-market production, total production is forecast to be nearly unchanged from the previous 5-year average volume, meaning there should be adequate supplies to sustain domestic and export demand (fig. 3). Domestic fresh apple consumption in the United States and exports averaged 16.3 pounds per person and 1.6 billion pounds, respectively, over the last 5 marketing seasons. Last year's smaller domestic crop, record-high fresh apple exports, and higher prices curtailed domestic fresh apple per capita use to 15.4 pounds, down from 16.3 in 2009/10.

Table 3--Apples: Total production and season-average price received by growers, 2008-10, and indicated 2011 production 1/

| States | Production | | | | Price | | |
|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2008 | 2009 | 2010 |
| | --------- *Million pounds* ---------- | | | | ---- *Cents per pound* ---- | | |
| Eastern States: | | | | | | | |
| Connecticut | 20 | 20 | 23 | 24 | 50.7 | 51.7 | 53.9 |
| Georgia | 12 | 2/ | 2/ | 2/ | 37.3 | 2/ | 2/ |
| Maine | 39 | 34 | 31 | 34 | 38.9 | 42.6 | 46.1 |
| Maryland | 42 | 47 | 43 | 40 | 18.9 | 15.4 | 18.2 |
| Massachusetts | 41 | 44 | 37 | 38 | 51.5 | 46.1 | 57.0 |
| New Hampshire | 37 | 30 | 21 | 22 | 46.6 | 45.1 | 46.3 |
| New Jersey | 43 | 43 | 43 | 44 | 38.1 | 49.9 | 48.0 |
| New York | 1,270 | 1,370 | 1,270 | 1,250 | 21.0 | 15.5 | 18.0 |
| North Carolina | 165 | 120 | 136 | 131 | 15.2 | 16.9 | 18.5 |
| Pennsylvania | 440 | 510 | 492 | 446 | 18.0 | 13.9 | 15.9 |
| Rhode Island | 2 | 2 | 3 | 3 | 67.3 | 61.0 | 82.0 |
| South Carolina | 7 | 2/ | 2/ | 2/ | 17.8 | 2/ | 2/ |
| Vermont | 44 | 40 | 35 | 38 | 35.6 | 23.7 | 30.9 |
| Virginia | 226 | 245 | 200 | 215 | 16.6 | 13.5 | 15.4 |
| West Virginia | 85 | 82 | 64 | 74 | 14.4 | 13.8 | 14.4 |
| Total | 2,471 | 2,586 | 2,397 | 2,358 | | | |
| Central States: | | | | | | | |
| Illinois | 46 | 46 | 52 | 45 | 46.4 | 51.8 | 58.8 |
| Indiana | 23 | 30 | 26 | 25 | 37.8 | 30.0 | 40.3 |
| Iowa | 5 | 5 | 4 | 4 | 54.5 | 66.2 | 71.9 |
| Kentucky | 8 | 2/ | 2/ | 2/ | 54.0 | 2/ | 2/ |
| Michigan | 590 | 1,150 | 590 | 1,050 | 20.0 | 13.1 | 17.6 |
| Minnesota | 27 | 23 | 19 | 22 | 73.4 | 59.1 | 79.6 |
| Missouri | 30 | 19 | 33 | 17 | 25.3 | 26.6 | 30.1 |
| Ohio | 104 | 116 | 83 | 55 | 42.3 | 35.2 | 38.3 |
| Tennessee | 10 | 8 | 8 | 9 | 34.4 | 32.7 | 30.5 |
| Wisconsin | 57 | 44 | 37 | 43 | 51.5 | 41.1 | 51.6 |
| Total | 900 | 1,440 | 852 | 1,270 | | | |
| Western States: | | | | | | | |
| Arizona | 18 | 6 | 17 | 12 | 22.3 | 23.7 | 17.9 |
| California | 360 | 265 | 280 | 280 | 30.5 | 23.5 | 20.7 |
| Colorado | 18 | 16 | 14 | 11 | 23.4 | 25.8 | 21.6 |
| Idaho | 85 | 45 | 60 | 60 | 20.2 | 21.8 | 23.2 |
| Oregon | 119 | 130 | 120 | 100 | 23.4 | 19.7 | 22.4 |
| Utah | 12 | 18 | 12 | 20 | 28.6 | 29.6 | 25.0 |
| Washington | 5,650 | 5,200 | 5,550 | 5,400 | 22.8 | 27.2 | 26.0 |
| Total | 6,262 | 5,680 | 6,053 | 5,883 | | | |
| United States | 9,633 | 9,705 | 9,302 | 9,512 | 23.2 | 23.1 | 24.1 |

1/ Commercial production from orchards of at least 100 bearing-age trees.

2/ Estimates discontinued in 2009.

Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts 2010 Summary* and *Crop Production* (August 2011 issue).

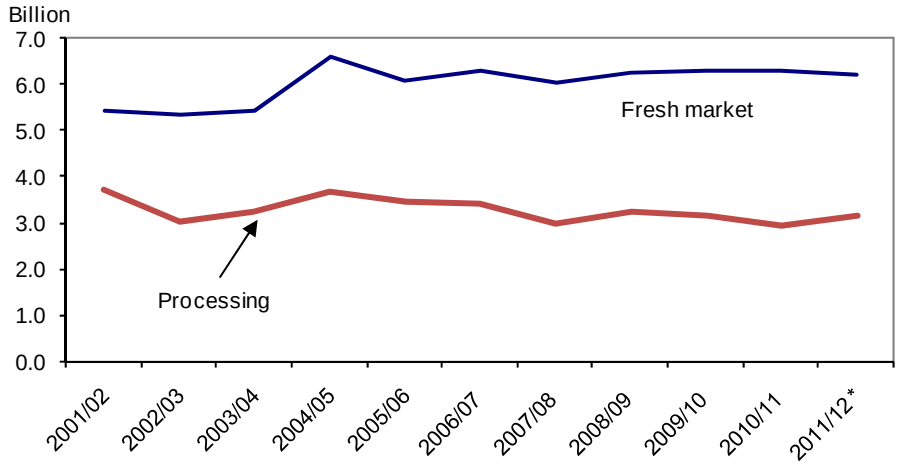
In anticipation of the smaller fresh-market crop, the U.S. apple industry also began the 2011/12 harvest late. The delayed harvest, combined with dwindling supplies of previous-year apples, resulted in tight overall supplies and boosted early-season fresh apple grower prices. NASS reporting of monthly cold storage for fresh fruit (including apples) was discontinued in January 2011. However, data from the U.S. Apple Association indicated that as the 2010/11 apple season wound down, fresh-

Table 4 --Fresh apples: Supply and utilization, 1990/91 to date

| Season 1/ | Supply | | | Utilization | | |
|---|---|---|---|---|---|---|
| | | | | | Consumption | |
| | Utilized production | Imports | Total supply | Exports | Total | Per capita |
| | | | -- *Million pounds* -- | | | *Pounds* |
| 1990/91 | 5,515.0 | 229.7 | 5,744.7 | 818.0 | 4,926.7 | 19.58 |
| 1991/92 | 5,447.0 | 303.0 | 5,750.0 | 1,132.0 | 4,618.0 | 18.11 |
| 1992/93 | 5,767.0 | 259.4 | 6,026.4 | 1,082.2 | 4,944.2 | 19.14 |
| 1993/94 | 6,124.6 | 238.9 | 6,363.5 | 1,390.6 | 4,972.9 | 19.01 |
| 1994/95 | 6,368.8 | 286.9 | 6,655.7 | 1,526.7 | 5,129.0 | 19.37 |
| 1995/96 | 5,840.2 | 383.4 | 6,223.6 | 1,217.2 | 5,006.4 | 18.69 |
| 1996/97 | 6,206.9 | 373.3 | 6,580.2 | 1,518.3 | 5,061.9 | 18.67 |
| 1997/98 | 5,814.5 | 356.4 | 6,170.9 | 1,209.1 | 4,961.8 | 18.09 |
| 1998/99 | 6,412.5 | 344.2 | 6,756.7 | 1,487.8 | 5,268.9 | 18.98 |
| 1999/2000 | 5,995.7 | 377.5 | 6,373.2 | 1,175.2 | 5,198.1 | 18.50 |
| 2000/01 | 6,265.5 | 358.9 | 6,624.4 | 1,667.1 | 4,957.3 | 17.46 |
| 2001/02 | 5,467.5 | 361.4 | 5,828.9 | 1,353.1 | 4,475.8 | 15.61 |
| 2002/03 | 5,366.0 | 412.4 | 5,778.4 | 1,144.9 | 4,633.5 | 16.01 |
| 2003/04 | 5,453.3 | 472.7 | 5,926.0 | 986.3 | 4,939.7 | 16.91 |
| 2004/05 | 6,619.0 | 262.8 | 6,881.8 | 1,339.0 | 5,542.8 | 18.81 |
| 2005/06 | 6,096.9 | 348.8 | 6,445.7 | 1,488.4 | 4,957.3 | 16.67 |
| 2006/07 | 6,308.5 | 427.9 | 6,736.4 | 1,407.3 | 5,329.1 | 17.74 |
| 2007/08 | 6,077.3 | 381.2 | 6,458.5 | 1,484.1 | 4,974.4 | 16.41 |
| 2008/09 | 6,273.9 | 363.8 | 6,637.7 | 1,767.6 | 4,870.1 | 15.92 |
| 2009/10 | 6,313.9 | 401.8 | 6,715.7 | 1,696.0 | 5,019.7 | 16.25 |
| 2010/11 | 6,296.8 | 328.7 | 6,625.5 | 1,821.3 | 4,804.2 | 15.41 |
| 2011/12F | 6,215.1 | 380.7 | 6,595.7 | 1,750.0 | 4,845.7 | 15.40 |

F= Forecast. 1/ Season begins in August.
Source: USDA, Economic Research Service calculations.

Figure 3
**U.S. apple production for fresh market and processing**




* 2010/11 production are forecast by the Economic Research Service, USDA.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts Summary,* various issues.

market apple holdings on June 1, 2011 were down 9 percent from the same period last year due to continued strong domestic and export demand. Apple harvesting for the 2011/12 season is already in progress for the earlier varieties, with AMS data showing fresh apple shipments this season through late August down 23 percent from the same period last season. With tight early-season supplies, fresh apple grower prices averaged $0.43 per pound in August, increasing from $0.29 in both the previous month and in August 2010. Prices are likely to decline seasonally in late summer and early fall when harvest peaks. The smaller fresh-market apple crop will likely keep 2011/12 fresh apple prices above last season in the upcoming months, although larger forecast production for competing pears could make up for some of the loss in fresh apple supplies over the rest of the season.

At the retail level, U.S. fresh apple prices also strengthened. The average price for Red Delicious apples in August was about 16 cents per pound higher than the previous month at $1.53 per pound, and was also up from $1.31 in August 2010. Retail prices for other apple varieties were also generally higher in August than the previous year, as indicated by the Bureau of Labor Statistics (BLS) consumer price index (CPI) for apples. In August this year, the CPI for apples was reported at 337.7 (1982-84=100), up from 314.5 the same time last year.

The projected production increase in processing-use apples, if realized, will likely put downward pressure on overall processed apple grower prices during the 2011/12 season. Average price movements for six different processed apple products (juice and cider, canned, frozen, dried, fresh slice, and other), however, may vary depending on their corresponding projected output growth rates this season and market demand. Current projections are for processing-use apples to increase for juice and cider (up 4 percent from a year ago), the leading use for processed U.S. apples, accounting for over 40 percent of all U.S. apples processed. Projections are also up for processing–use apples for canned (up 11 percent), frozen (up 29 percent), and dried (up 21 percent) but down for fresh sliced (down 6 percent) and other (which include vinegar, wine, and slices for pie making; down 37 percent). Last season, the smaller U.S. apple crop led to a 7-percent decline in processing-use apple production, and the corresponding 2010/11 processed apple average grower price was $183 per ton, up from $132 in 2009/10. Prices for the different processed products averaged higher in 2010/11, even for dried and other, where production volumes were up from the previous season.

A 4-percent decline in U.S. juice-apple production in 2010/11 drove up the average grower price for juice apples to $147 per ton, the second highest from the record in 1995 of $153 and equal to the 1996 average price. Processor demand was strong in 2010/11 as reflected by the record-high grower prices for juice apples and the need to increase imports. U.S. apple juice imports increased to a record 587 million gallons single-strength equivalent (sse) in 2010/11, 8 percent above the previous season. The U.S. remains a net importer of apple juice, mostly in concentrate form. Imports from China, which constitute the bulk of apple juice shipments to the United States, increased 2 percent in 2010/11. Import growth from other leading suppliers such as Argentina, Chile, Brazil, and Canada outpaced the slight increase from China, however. Notably, imports also rose sharply (up 66 percent) from the Republic of South Africa, ranked as the fifth largest supplier of imported apple juice to the United States last season and surpassing import volumes from Canada, Mexico, and Turkey which have historically captured a larger share of U.S. apple juice imports. Imports from Mexico and Turkey posted significant declines in 2010/11.

U.S. apple juice exports declined 42 percent in volume in 2010/11 from the previous season, totaling 9.0 million gallons sse. In value terms, these exports amounted to $33.1 million, down from $36 million in 2009/10. Canada accounted for more than half of the total export volume in 2010/11 with a 2-percent increase from the previous season, gaining back its top rank in U.S. apple juice exports after losing it to the Netherlands in 2009/10. Among other leading export markets for U.S. apple juice, shipments to Japan and South Korea increased while those to Mexico and the Netherlands fell steeply after posting sharp increases the previous season. While projections are for increased U.S. apple juice production in 2011/12,

indications of bigger crops in Canada and Europe could slow export demand for U.S. apple juice this season.

### *Larger Production Weakens Fresh Pear Prices*

Despite cool and wet conditions this spring, the 2011 U.S. pear crop was forecast by NASS at 1.78 billion pounds, 9 percent larger than last year, with harvest delays expected in many growing areas and potentially smaller-size fruit (table 5). Major producing States—Washington, California, and Oregon—all expect to rebound from smaller crops harvested in 2010, with both their Bartlett and non-Bartlett crops (other pear varieties) forecast larger. The combined forecast for the 3-State Bartlett pear crop was set at 828 million pounds, up 8 percent from last year and the 3-State non-Bartlett crop at 914 million pounds, up 10 percent. Among minor-producing States, forecast steady production in Pennsylvania and a 76-percent larger crop in New York also will contribute to anticipated larger fresh-market pear supplies during the 2011/12 marketing season. Together with these two States, total production of non-Bartlett pears in 2011 is forecast at 949 million pounds, up 11 percent from a year ago.

Table 5--Pears: Total production and season-average price received by growers, 2008-10 and indicated 2011 production

| State | Production 1/ | | | | Price | | |
|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2008 | 2009 | 2010 |
| | --- *Million pounds* --- | | | | --- *Cents per pound* --- | | |
| Pacific Coast: | | | | | | | |
| California: | | | | | | | |
| Bartlett | 390 | 400 | 340 | 380 | 18.7 | 17.6 | 19.4 |
| Other | 96 | 110 | 100 | 114 | 34.5 | 21.1 | 23.4 |
| Total | 486 | 510 | 440 | 494 | 21.8 | 18.3 | 20.3 |
| Oregon: | | | | | | | |
| Bartlett | 113 | 132 | 94 | 98 | 19.8 | 22.0 | 23.2 |
| Other | 350 | 326 | 290 | 320 | 24.9 | 19.9 | 25.6 |
| Total | 463 | 458 | 384 | 418 | 23.7 | 20.5 | 25.0 |
| Washington: | | | | | | | |
| Bartlett | 332 | 372 | 336 | 350 | 18.4 | 15.5 | 18.4 |
| Other | 422 | 532 | 444 | 480 | 26.0 | 18.9 | 28.7 |
| Total | 754 | 904 | 780 | 830 | 22.7 | 17.5 | 24.3 |
| Three States: | | | | | | | |
| Bartlett | 835 | 904 | 770 | 828 | 18.7 | 17.4 | 19.5 |
| Other | 868 | 968 | 834 | 914 | 26.5 | 19.5 | 27.0 |
| Total | 1,703 | 1,872 | 1,604 | 1,742 | | | |
| Colorado | 4 | 2/ | 2/ | 2/ | 30.1 | 2/ | 2/ |
| Connecticut | 2 | 2/ | 2/ | 2/ | 67.0 | 2/ | 2/ |
| Michigan | 6 | 8 | 2 | 3/ | 20.7 | 17.2 | 17.4 |
| New York | 21 | 22 | 17 | 29 | 25.2 | 24.5 | 26.0 |
| Pennsylvania | 5 | 12 | 5 | 5 | 37.2 | 35.6 | 55.0 |
| Utah | 0.6 | 2/ | 2/ | 2/ | 36.5 | 2/ | 2/ |
| Total | 37 | 42 | 23 | 35 | | | |
| United States | | | | | | | |
| Bartlett | 835 | 904 | 770 | 828 | 18.7 | 17.4 | 19.5 |
| Other | 905 | 1,010 | 857 | 949 | 26.5 | 19.5 | 27.0 |
| Total | 1,740 | 1,914 | 1,627 | 1,777 | 22.8 | 18.6 | 23.5 |

1/ Includes unharvested production and production not sold. 2/ Forecasts discontinued in 2009.
3/ The first production estimate will be published in January 2012.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts 2010 Summary* and *Crop Production* (August 2011 issue).

Table 6--Fresh pears: Supply and utilization, 1990/91 to date

| Season 1/ | Supply | | | Utilization | | |
|---|---|---|---|---|---|---|
| | | | | | Consumption | |
| | Utilized production | Imports | Total supply | Exports | Total | Per capita |
| | | | *-- Million pounds --* | | | *Pounds* |
| 1990/91 | 931.2 | 101.0 | 1,032.2 | 222.4 | 809.7 | 3.22 |
| 1991/92 | 924.0 | 130.5 | 1,054.5 | 252.9 | 801.6 | 3.14 |
| 1992/93 | 884.4 | 142.8 | 1,027.2 | 221.3 | 805.9 | 3.12 |
| 1993/94 | 1,014.8 | 144.4 | 1,159.2 | 282.9 | 876.3 | 3.35 |
| 1994/95 | 1,102.0 | 105.9 | 1,207.9 | 297.1 | 910.8 | 3.44 |
| 1995/96 | 1,088.5 | 126.4 | 1,214.9 | 316.0 | 899.0 | 3.36 |
| 1996/97 | 919.1 | 171.9 | 1,091.0 | 263.4 | 827.6 | 3.05 |
| 1997/98 | 1,144.6 | 149.0 | 1,293.6 | 363.2 | 930.4 | 3.39 |
| 1998/99 | 1,067.6 | 190.5 | 1,258.1 | 305.2 | 952.9 | 3.43 |
| 1999/2000 | 1,130.0 | 199.0 | 1,328.9 | 336.8 | 992.1 | 3.53 |
| 2000/01 | 1,146.5 | 187.6 | 1,334.1 | 370.2 | 963.9 | 3.40 |
| 2001/02 | 1,136.6 | 175.8 | 1,312.4 | 380.3 | 932.1 | 3.25 |
| 2002/03 | 1,048.9 | 190.3 | 1,239.2 | 352.6 | 886.6 | 3.06 |
| 2003/04 | 1,119.9 | 147.1 | 1,267.0 | 367.1 | 899.8 | 3.08 |
| 2004/05 | 1,028.5 | 168.6 | 1,197.1 | 325.4 | 871.7 | 2.96 |
| 2005/06 | 1,008.8 | 184.6 | 1,193.4 | 326.5 | 866.9 | 2.91 |
| 2006/07 | 1,001.4 | 236.9 | 1,238.3 | 280.2 | 958.1 | 3.19 |
| 2007/08 | 1,103.9 | 189.2 | 1,293.2 | 356.2 | 937.0 | 3.09 |
| 2008/09 | 1,097.9 | 185.0 | 1,282.8 | 331.0 | 951.8 | 3.11 |
| 2009/10 | 1,207.6 | 138.3 | 1,345.9 | 361.7 | 984.2 | 3.19 |
| 2010/11 | 1,059.5 | 173.6 | 1,233.0 | 332.6 | 900.4 | 2.89 |
| 2011/12F | 1,132.8 | 160.0 | 1,292.8 | 340.0 | 952.8 | 3.03 |

F= Forecast. 1/ Season begins in August.
Source: USDA, Economic Research Service calculations.

With over 60 percent of total utilized production historically going to the fresh market, ERS projects domestic fresh pear production for the 2011/12 marketing season at 1.13 billion pounds, up 7 percent from the previous season but down by the same magnitude from record fresh-market production in 2009/10 (table 6). The projected larger production for fresh use would likely drive down fresh pear grower prices this season. Already, early-season prices are reflecting the expected production increase, with the July average price at $0.26 per pound down from the July 2010 average price of $0.30. While harvest delays have resulted in tight early season supplies, a fairly significant amount of supplies from last season's crop (2010/11) were still being moved to markets at the onset of the 2011/12 marketing season. Based on AMS data, overall shipment volumes in July from the top three producing States were down 2 percent from the same time last year, with almost three-quarters of the total volume consisting of last season's crop. Current crop shipments reflect supplies out of northern California's Sacramento Valley, with volumes down over 43 percent. Harvest in the Pacific Northwest began in mid-August, and continued into September and October with Anjou, Bosc, and other specialty-variety pears. The market strengthened in August even though shipments of new crop pears increased 9 percent compared with August 2010. Strong fresh pear demand was likely aided by tight fresh apple supplies, pushing fresh pear prices in August up to $0.31 per pound, from $0.25 the same time last year. The August average price also strengthened 19 percent from the previous month. With harvest peaking, seasonal increases in pear (and apple) supplies extending into September should put downward pressure on prices.

With the bigger crop this season, there should be adequate supplies available for both the domestic and export markets. In part due to increased availability, both U.S. consumption and exports of fresh pears will likely increase in 2011/12 from the previous season, whereas the need to import may be diminished. If U.S. fresh pear imports in 2011/12 decline by about 10 percent of the 5-year average import volume, the market will still see about a 5-percent increase in overall supplies over last season. Should exports continue to absorb one-third of fresh domestic production as has been the average share in the past decade, 2011/12 exports could

reach about 340 million pounds, up 3 percent from last season. Fruit sizing is potentially on the small side for this year's crop, according to Pear Bureau Northwest, but this should not diminish export opportunities for U.S. pears because many of its export markets prefer middle- and small-size fruit. Unlike last season, however, demand for U.S. fresh pears in Europe may be reduced by increased production in that region. In contrast, a resolution to the U.S.-Mexico cross border trucking dispute has reduced the 20-percent import tariff on U.S. fresh pears by half since July 2011. With a continued phasing out of the tariff, export opportunities are expected to expand to Mexico, the United States' top export market for fresh pears.

As for the processing side of the industry, this year's 8-percent bigger Bartlett pear crop should provide processors with increased raw material pears for the 2011/12 season, likely pushing down prices growers will be receiving for processing-use pears this season. The season-average grower price for processing-use pears has been at historical highs the past three seasons, peaking at $243 per ton in 2010/11when processed production declined 19 percent from the previous season.

### *Smaller U.S. Grape Crop Bolsters Fresh-Market Prices*

NASS forecast the 2011 U.S. grape crop at 14.4 billion pounds, down 3 percent from last year (table 7). While a number of grape-producing States are forecast to produce more grapes this year, production in the two leading States—California and Washington—is forecast to decline. Forecast crop size in California in 2011 is set at 12.9 billion pounds, down 4 percent from a year ago and accounting for 90 percent of total U.S. production, if realized. California's smaller crop reflects reduced production of all varietal types of grapes—wine grapes (down 6 percent from last year), table grapes (less than 1 percent), and raisin grapes (1 percent). A rainy and cool spring slowed overall crop growth.

Production in Washington will be significantly reduced in 2011 due to frost-related problems last fall. Wet, cool conditions this spring also delayed crop maturity. This year, Washington's grape crop is forecast down 18 percent from a year ago, totaling 550 million pounds. Forecast production in the State reflects fairly significant declines in wine grapes and juice grapes this year.

**Production for Fresh Use Projected to Decline:** With California supplying about 99 percent of all U.S. grapes for fresh use, the slightly reduced table grape crop forecast for the State likely will limit production moving through the fresh market during the 2011/12 marketing season (May-April). Anticipated smaller wine and raisin grape crops in California will also contribute to the decline in fresh-market production, as they represent nearly 20 percent of all U.S. grapes for fresh use. Based on current national- and State-level NASS forecasts for total grape production in 2011, ERS projects U.S. fresh-market grape production in 2011/12 to be down 4 percent from the previous season to 1.9 billion pounds. Despite this decline, the current projected fresh output, if realized, will still be 3 percent above the previous 5-year average (table 8). Production at this level would be adequate to meet current demand for domestic use and exports if there are slight-to-moderate gains in imports. Domestic fresh grape consumption averaged 2.4 billion pounds in the past 5 marketing seasons (estimated at 8.1 pounds on a per capita basis), and exports averaged 678 million pounds. Imports have risen to over 1.0 billion pounds

Table 7--Grapes: Total production and season-average price received by growers in principal States, 2008-10 and indicated 2011 production

| State | Production | | | | Price | | |
|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2008 | 2009 | 2010 |
| | -- *Million pounds* -- | | | | -- *Cents per pound* -- | | |
| Arizona | 2 | 1/ | 1/ | 1/ | 38.8 | 1/ | 1/ |
| Arkansas | 3 | 4 | 4 | 3 | 54.0 | 37.7 | 40.6 |
| Georgia | 7 | 8 | 9 | 8 | 56.5 | 74.0 | 63.5 |
| Michigan | 147 | 193 | 72 | 204 | 15.2 | 16.8 | 21.4 |
| Missouri | 10 | 9 | 10 | 11 | 48.1 | 45.1 | 44.3 |
| New York | 344 | 266 | 352 | 374 | 16.7 | 18.3 | 19.5 |
| North Carolina | 11 | 10 | 10 | 12 | 44.6 | 40.9 | 45.9 |
| Ohio | 11 | 11 | 7 | 12 | 17.8 | 48.7 | 35.6 |
| Oregon | 69 | 80 | 62 | 76 | 102.5 | 95.5 | 101.5 |
| Pennsylvania | 214 | 128 | 166 | 200 | 14.3 | 14.5 | 15.2 |
| Texas | 8 | 12 | 18 | 12 | 60.0 | 58.5 | 62.5 |
| Virginia | 14 | 17 | 13 | 17 | 76.5 | 80.0 | 85.0 |
| Washington | | | | | | | |
| Wine | 290 | 312 | 320 | 270 | 51.5 | 49.5 | 52.0 |
| Juice | 410 | 450 | 352 | 280 | 12.2 | 12.4 | 13.5 |
| All | 700 | 762 | 672 | 550 | 28.5 | 27.6 | 31.8 |
| Total 3/ | 1,543 | 1,501 | 1,396 | 1,479 | | | |
| California: | | | | | | | |
| Wine | 6,110 | 7,486 | 7,258 | 6,800 | 30.5 | 30.7 | 28.8 |
| Table | 1,946 | 1,752 | 2,016 | 2,000 | 20.3 | 23.2 | 19.2 |
| Raisin 4/ | 5,040 | 3,876 | 4,158 | 4,100 | 13.3 | 14.5 | 17.5 |
| All | 13,096 | 13,114 | 13,432 | 12,900 | 22.3 | 24.9 | 23.9 |
| United States | 14,639 | 14,615 | 14,828 | 14,379 | 22.8 | 25.3 | 24.5 |

1/ Estimates discontinued in 2009. 2/ Estimates not reported to avoid disclosure of individual operations.
3/ Sum of State production, excluding California. 4/ Fresh weight of raisin-type grapes.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts 2010 Summary* and *Crop Production* (August 2011 issue).

Table 8--Fresh grapes: Supply and utilization, 1990/91 to date

| Season 1/ | Supply | | | Utilization | | |
|---|---|---|---|---|---|---|
| | | | | | Consumption | |
| | Utilized production | Imports | Total supply | Exports | Total | Per capita |
| | | | -- *Million pounds* -- | | | *Pounds* |
| 1990/91 | 1,698.0 | 728.5 | 2,426.5 | 458.5 | 1,968.0 | 7.82 |
| 1991/92 | 1,600.8 | 690.2 | 2,291.0 | 438.6 | 1,852.4 | 7.26 |
| 1992/93 | 1,538.1 | 714.1 | 2,252.3 | 412.6 | 1,839.7 | 7.12 |
| 1993/94 | 1,601.0 | 680.7 | 2,281.7 | 455.3 | 1,826.5 | 6.98 |
| 1994/95 | 1,617.1 | 719.1 | 2,336.2 | 474.2 | 1,861.9 | 7.03 |
| 1995/96 | 1,705.2 | 792.6 | 2,497.8 | 500.2 | 1,997.5 | 7.46 |
| 1996/97 | 1,534.1 | 746.5 | 2,280.6 | 457.1 | 1,823.5 | 6.73 |
| 1997/98 | 1,874.2 | 862.2 | 2,736.4 | 606.6 | 2,129.8 | 7.76 |
| 1998/99 | 1,561.6 | 874.6 | 2,436.2 | 446.1 | 1,990.1 | 7.17 |
| 1999/2000 | 1,774.3 | 993.7 | 2,768.1 | 530.0 | 2,238.1 | 7.97 |
| 2000/01 | 1,813.7 | 954.9 | 2,768.6 | 655.7 | 2,112.9 | 7.44 |
| 2001/02 | 1,728.7 | 1,043.5 | 2,772.2 | 656.4 | 2,115.7 | 7.37 |
| 2002/03 | 1,964.7 | 1,174.4 | 3,139.1 | 702.4 | 2,436.6 | 8.40 |
| 2003/04 | 1,610.9 | 1,258.7 | 2,869.6 | 632.2 | 2,237.4 | 7.64 |
| 2004/05 | 1,765.2 | 1,225.7 | 2,990.8 | 691.5 | 2,299.4 | 7.78 |
| 2005/06 | 1,991.2 | 1,406.0 | 3,397.2 | 838.3 | 2,558.9 | 8.59 |
| 2006/07 | 1,595.2 | 1,291.2 | 2,886.4 | 604.3 | 2,282.1 | 7.59 |
| 2007/08 | 1,840.7 | 1,255.1 | 3,095.8 | 663.4 | 2,432.3 | 8.01 |
| 2008/09 | 1,970.4 | 1,379.2 | 3,349.6 | 739.5 | 2,610.2 | 8.52 |
| 2009/10 | 1,877.6 | 1,230.8 | 3,108.4 | 662.5 | 2,445.9 | 7.92 |
| 2010/11 | 1,986.2 | 1,278.9 | 3,265.2 | 720.3 | 2,544.8 | 8.16 |
| 2011/12 F/ | 1,902.9 | 1,300.0 | 3,202.9 | 665.0 | 2,537.9 | 8.07 |

F = forecast.
1/ Season beginning May from 1990/91 to date. A July-June marketing season used prior to 1990/91.
Source: USDA, Economic Research Service calculations.

annually since 2001/02, making up about half of all fresh grapes consumed in the United States.

U.S. fresh grape grower prices have held strong so far in 2011/12. NASS reported the June average grower price at $1,270 per ton (or 63.5 cents per pound), almost double in value compared with the June 2010 average price and the second-highest on record for the month. Besides lower shipments from California in June, competing imports were also short of last year's volume for the same period. The most recent data from the U.S. Census Bureau show a drastic slowdown in late-season fresh grape imports from Chile in June and July compared with imports this May and the same time last year. Moreover, imports from Mexico were also down significantly from year-ago levels, registering a 25-percent decline in June and a 68-percent drop in July. Typically, Mexican grape imports impart heavier competition with domestic production as peak shipments from Mexico coincide with the early grape season in California (May-July). Chile's heaviest shipments penetrate the U.S. market during the winter when there is hardly any domestic production.

NASS did not report any average price in July because of insufficient reports in domestic shipments. As California's production transitioned from the earliest growing region of the Coachella Valley to the main production region in the San Joaquin Valley, crop maturity delays were reported particularly in the latter region due to the cool, wet weather this spring, leaving little overlap between the two growing regions. Several growers in the main region began their harvest around mid-July, about 2 weeks later than usual. As harvest got underway in the San Joaquin Valley, the average grower price in August declined seasonally to $960 per ton. However, the market for U.S. fresh grapes remained strong, as the average price was more than double the August 2010 average price even though California shipments were running higher than the same time last year. Shipments continued higher than in 2010 through mid-September as the California grape harvest entered its heaviest period from September through early November, likely offsetting some of the strength in prices observed over the last several weeks.

At the retail level, BLS reported May through August prices for Thompson seedless grapes higher than a year ago each month since the start of the 2011/12 marketing season in May. The 2011/12 initial average was reported at $2.83 per pound and in August, prices averaged $2.03. AMS data on U.S. retail advertised prices for red/green grapes reveal prices were also consistently higher than a year ago in each of the months from May through August. These prices averaged $2.10 per pound in May to around $1.65 in August, and were at least 10 percent higher than their respective averages a year ago. Over this 4-month period, the highest price increase was in July (up 47 percent) when the average price peaked at $2.22 per pound due to tight promotable supplies. Grape retail advertised prices continued to run higher into September, with the average of the first three weeks at $1.67 per pound, compared with $1.46 the same time last year.

Partly reflecting the tighter supplies and high prices so far this season, the volume of U.S. fresh grape exports early in 2011/12, May through July, totaled 48.1 million pounds, down 21 percent from the same period a year ago. The higher prices, however, bolstered early-season export value to $57.2 million, up 4 percent from the first three months of 2010/11 but still lower than in the same period for most marketing seasons this past decade. Export volume so far this season slowed to principal U.S. market Canada (down 14 percent from a year ago) which took over

40 percent of the total thus far. However, exports to other leading markets, such as Mexico and Indonesia, posted gains. Exports also declined significantly to a handful of important markets in Asia, including Hong Kong, the Philippines, Malaysia, Taiwan, Thailand, and Singapore. The agreement signed on July 6, 2011 between the Governments of Mexico and the United States to resolve the cross-border trucking dispute halved the existing 20-percent tariff rate on imported U.S. fresh grapes into Mexico. An initial 45-percent import tariff was imposed in March 2009, successfully impeding export growth to this market. U.S. fresh grape exports to Mexico in 2009/10 fell 70 percent from the previous season to 32.6 million pounds, with export value also falling sharply from $61.3 million in 2008/09 to $16.6 million. Whereas in previous seasons Mexico was the second-largest export market for U.S. fresh grapes, in 2009/10, fresh grape export sales to Mexico were outranked by corresponding sales to Hong Kong, Australia, the Philippines, and Indonesia. The reduction of the initial tariff to 20 percent in August 2009 helped increase U.S. grape exports to Mexico in 2010/11 to 503,172 pounds, up 15 percent from the previous season but still not nearly as high as the volumes achieved prior to 2009/10. Export value last season increased 92 percent to $31.9 million. Under the new agreement, the remaining tariff will be eliminated when the first Mexican carriers are authorized to operate, providing much hope to the U.S. grape industry that Mexico will once again serve as a growing market for their product.

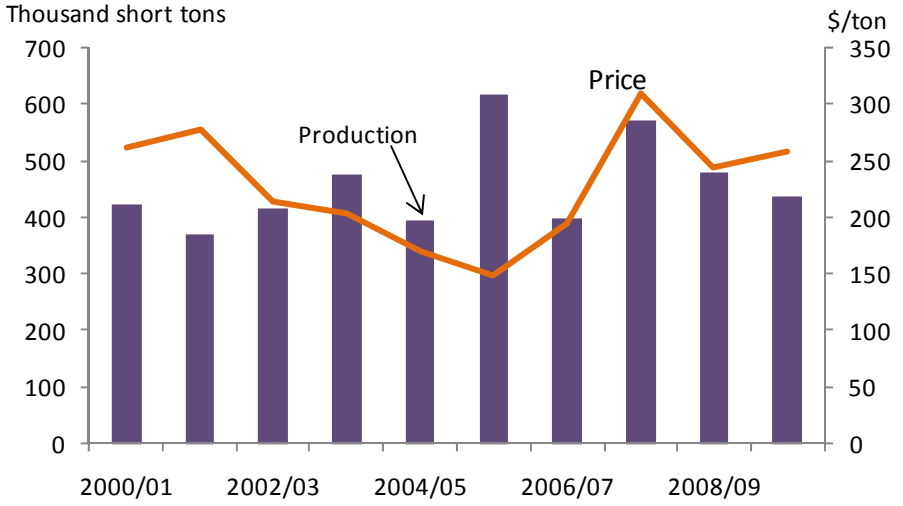
**Grapes Crushed for Wine Likely Down:** Even though increased amounts of California raisin- and table-grapes may be diverted to wineries this year compared to last year, reduced wine grape production in the State and in Washington would drive down the total volume of grapes crushed for wine in the United States in 2011/12, likely putting upward pressure on overall prices growers will be receiving for grapes sold to wineries this season. While California utilizes some of its raisin and table grapes in wine production, its wine grapes account for over 80 percent of all U.S. grapes utilized for wine making. Washington's wine grape crop, meanwhile, represents about 4 percent. Demand for California wine grapes from wineries was lackluster in 2010/11. Despite the decline in California wine grape volume produced for wineries last season, prices growers received averaged $574 per ton for the season, a drop from $612 per ton in 2009/10. While average grower prices were mostly higher in other States, including Washington, Michigan, New York, Oregon, Pennsylvania, and Virginia, the lower average price in California drove down the overall 2010/11 average grower price.

**Grape Use for Juice Likely To Make a Rebound:** Despite two consecutive years of reduced juice grape production in Washington, recovering production levels in Michigan and Ohio and increases in New York and Pennsylvania should raise the total quantity of grapes available for juice processors from this year's harvested crop. This increase will likely drive down the prices growers will be receiving from juice processors in 2011/12, reversing the trend in prices the past two seasons when U.S. grape production for juice was declining (fig. 4). Utilized production for juice declined to 438,300 tons in 2009/10 and to 399,900 tons in 2010/11, while U.S. average juice-grape grower prices during these two previous seasons were reported at $258 per ton and $277 per ton, respectively.

Presently, California grapes represent a major portion of U.S. grape juice production. However, California's production for this specific market is not being reflected in the NASS annual national level data for grape tonnage produced for

Figure 4

**U.S. utilized grape production for juice and average grower price**




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

juice, even though annual tonnage of California grapes crushed for concentrate production has been reported by the California NASS Field Office since 1999. In 2010, the tonnage of grapes crushed for concentrate production in California totaled 535,794 tons, up from 499,323 tons in 2009.

With domestic grape juice consumption generally trending upward over the past two decades, two consecutive recent years of reduced domestic juice grape production and lower imports in 2008/09 and 2009/10 point to a tightening in grape juice inventories in the United States. Juice processors in the United States have responded by increasing their international grape juice purchases last season by 13 percent from the previous season, totaling 56.6 million gallons sse. Nearly three-quarters of this volume was sourced from Argentina, the United States' main supplier of imported grape juice. Imports from Argentina posted a 32-percent increase from 2009/10, followed by steeper increases from Spain and Italy. In contrast, imports, from other leading suppliers—including Chile, Canada, and Mexico—fell significantly. Imports in 2011/12 could see a downward adjustment as domestic juice grape output returns to normal levels in 2011/12.

U.S. grape juice exports rose in 2010/11 despite reduced domestic production for juice. Exports increased 10 percent to 15.2 million gallons sse, also gaining in value by 5 percent from the previous season to $86.6 million. Among the United States' leading markets for grape juice exports, shipment volume increased at least 22 percent to Canada, Japan, and Mexico. Additionally, modest growth to the United Kingdom in 2010/11 offset significantly lower exports to China, South Korea, and Taiwan compared with the previous season.

**U.S. Raisin Production Likely To Decline for a Second Year:** Based on the *2011 California Raisin Grape Objective Measurement Report*, bearing acreage for the California raisin grape crop was unchanged from a year ago at 210,000 acres but there were 20 percent more bunches per vine at 38.7. The cool, wet weather in the early summer has resulted in some mildew problems, likely lowering yields. Back

in August, NASS forecast the 2011 California raisin grape crop at 4.1 billion pounds (or 2.05 million tons, fresh weight), down 1 percent from a year ago.

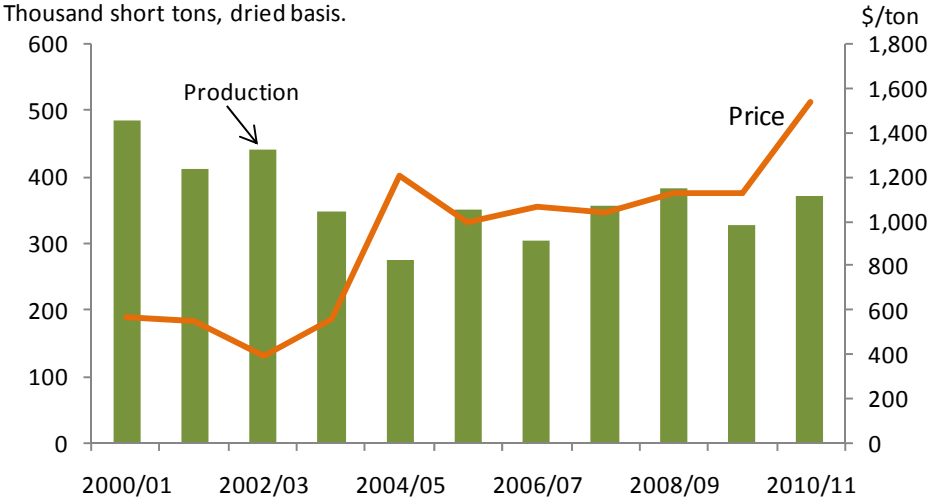
California's raisin grape crop is not entirely utilized for raisin production. It is also not the only type of grape dried into raisins, although it constitutes the majority. Over the past 5 seasons (2006/07-2010/11), the share of the raisin crop dried into raisins ranged from 70 percent to 85 percent, with the remainder moving through the fresh market, wineries, and canners. About 4 percent of California's table grapes are also used in raisin production. Hence, the forecast smaller harvest for raisin and table grapes in California this year is expected to lower the quantity of available grapes for drying. Moreover, the reported cool, wet weather early this summer also delayed crop maturity by about two weeks, which is expected to increase the drying ratio and consequently lower U.S. raisin production for the 2011/12 marketing season. USDA forecast U.S. raisin production to be down 4 percent in 2011/12 from the previous season, totaling 738.5 million pounds, dried weight (equivalent to 369,000 short tons or 355,000 metric tons as reported by the Foreign Agricultural Service).

Following the low prices in the early 2000s, U.S. grower prices for raisin grapes dried into raisins have held strong, averaging at least $1,000 per ton (dried basis) (fig. 5). In 2010/11, prices averaged $1,540 per ton, up from $1,130 the previous season and the highest since 2004. While domestic raisin production increased in 2010/11, tight inventories coming into the season drove down overall raisin supplies in the United States, supporting raisin-grape grower prices and contributing to lower domestic consumption and exports than in 2009/10. U.S. raisin exports fell significantly to most major European markets and were down slightly to Japan and China in 2010/11, driving overall U.S. exports last season down 13 percent from the record-high 370.5 million pounds (dried basis) in 2009/10.

Figure 5

**California raisin grape production dried into raisins and average grower price**

Thousand short tons, dried basis.




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

While this season's domestic raisin production is anticipated to decrease, exports of U.S. raisins in 2011/12 are forecast to increase 6 percent from last season to 343.0 million pounds (dried weight) on expanded exports to Europe and China. If realized, this will still be down from the record exports in 2009/10, but nonetheless strong relative to the previous 10-year average. U.S. raisin imports in 2011/12 are forecast to remain relatively unchanged from last season's 42.8 million pounds (dried basis) as higher beginning inventories will be able to cover for the anticipated decline in domestic production. In 2010/11, imports were down 8 percent from the previous season. Imports from the United States' largest supplier—Chile—declined 36 percent last season to 16.3 million pounds, more than offsetting the increases from most other international sources, including the Republic of South Africa, Mexico, Argentina, and China.

### *2011 U.S. Cranberry Production Bounces Back to Near-Record High*

After two straight years of declining production, NASS had forecast back in August U.S. cranberry production in 2011 at 750 million pounds (or 7.50 million barrels where 1 barrel=100 pounds), just off 5 percent from the record 787 million pounds harvested in 2008 (table 9). If realized, this year's production will be up 10 percent from a year ago and 8 percent larger than the 2009 crop. Relative to last year, production forecasts are up in Massachusetts (up 11 percent from a year ago), Oregon (33 percent), Washington (60 percent), and Wisconsin (9 percent), but down in New Jersey (down 4 percent). Reduced harvested acres and possible sun scalding of fruit from above normal August temperatures are behind the forecast lower production in New Jersey. Cool spring conditions lengthened the growing period for cranberries in Wisconsin and Oregon, although the crops have progressed well. Favorable weather during pollination benefitted the Massachusetts crop.

Reduced domestic production, combined with relatively strong sales to domestic and international markets, left the U.S. cranberry industry with 2010/11 ending inventories at 4.08 million barrels, 11 percent below the previous year, based on data provided by the Cranberry Marketing Committee (CMC). While the industry begins the 2011/12 marketing year with a reduction in carryover volume, this volume remains well over the average 3.2 million barrels that they feel sufficient to meet their marketing needs throughout the year over the last 5 years. This large

Table 9--Cranberries: Total production and season-average prices received by growers, 2008-10, and indicated 2011 production

| | Production | | | | Price | | |
|---|---|---|---|---|---|---|---|
| State | 2008 | 2009 | 2010 | 2011 | 2008 | 2009 | 2010 |
| | -- Million pounds -- | | | | -- Cents per pound -- | | |
| Massachusetts | 237 | 182 | 189 | 210 | 58.6 | 47.1 | 43.3 |
| New Jersey 1/ | 51 | 56 | 56 | 54 | 53.6 | 56.1 | 55.6 |
| Oregon | 40 | 43 | 29 | 39 | 91.5 | 36.3 | 34.5 |
| Washington | 11 | 16 | 11 | 17 | 57.4 | 60.6 | 62.3 |
| Wisconsin | 447 | 395 | 396 | 430 | 55.4 | 48.5 | 47.1 |
| United States | 787 | 691 | 681 | 750 | 58.1 | 48.2 | 46.5 |

1/ Small quantities of fresh cranberries are included in processed to avoid disclosure of individual operations.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruit and Nuts 2010 Summary* and *Cranberries* (released August 2011).

carryover volume, along with anticipated increased production in the United States and Canada, will likely put downward pressure on U.S. cranberry grower prices, particularly for cranberries destined for the processing sector. In the previous marketing year, a carryover volume of 4.61 million barrels was partly behind the lower prices growers received for processing-use cranberries, along with increased production among the largest producing States—Wisconsin, Massachusetts, and New Jersey. NASS reported the 2010/11 average grower price for processing-use cranberries at $45.5 per barrel (or about 46 cents per pound), down from $46.8 in 2009/10. This reduction in price occurred even though overall domestic production and imports (primarily from Canada) declined in 2010/11 from the previous year. The lower price, however, motivated increased demand, driving total industry sales up to a 10-year record 8.56 million barrels in 2010/11.

CMC data show U.S. cranberry sales were up 8 percent in volume from the previous year, increasing to both domestic and international markets. While the domestic market serves as the primary market for U.S. cranberries, export growth was more robust in 2010/11, increasing 21 percent whereas domestic sales grew 3 percent. The growth in exports in 2010/11 was in processed cranberries as volume sales to foreign markets of fresh cranberries declined about 5 percent. Exports normally account for about 20 percent of the industry's total annual sales volume. In 2011/12, CMC projects total U.S. cranberry sales for the industry to remain fairly flat from record-breaking sales in 2010/11, mostly reflecting processed cranberry sales which account for over 95 percent of total sales. With demand projected to remain stagnant this year, the forecast increase in domestic production and likely increased supplies from Canada would result in continued large ending inventories in 2011/12.

As production is expected to increase in most cranberry-producing States, there should be ample supplies available for the fresh market this fall. Fresh-market cranberry production in the United States for the 2011/12 marketing year will likely be up from the 219,000 barrels (or 21.9 million pounds) produced last year, likely driving down fresh-market prices. The domestic market accounts for over 80 percent of all U.S. fresh cranberry sales.

### *California Navel Orange Production Forecast Down in 2011/12*

On September 12, NASS released its first estimate for the 2011/12 California navel orange crop, forecasting production at 88.0 million cartons (40 pound equivalent), or 1.76 million tons. The crop is currently forecast down 8 percent from last year's record crop of 1.92 million tons. Despite the reduction, the 2011/12 crop is still forecast to be the third largest on record. The NASS forecast was reported in the *2011-12 California Navel Orange Objective Measurement Report*, based on a survey of Central Valley orange groves conducted between July 15 and September 2, 2011. Approximately 97 percent of California's navel orange crop comes from the Central Valley.

Bearing acreage in the Central Valley is forecast to be unchanged from 2010/11 at 133,500 acres. While this is slightly lower than the record 135,000 acres reported from 2006/07 to 2008/09, higher tree densities per acre have helped to increase overall production quantities. Survey data indicated an average fruit set per tree of

318—nearly even with the survey's previous 5-year average of 320, but well below last season's average set of 418.

While average fruit set is forecast down, fruit size is projected to be larger than in 2010/11. At an average diameter of 2.27 inches, Central Valley navels are projected to be 6 percent larger than last year and one percent larger than the 5-year average. Larger fruit size could translate to higher exports in 2011/12, despite the smaller crop, since consumers in many international markets prefer larger oranges. U.S. fresh orange exports through July of this marketing year (November-October) have risen markedly, up 13 percent compared to 2009/10, and representing record shipments-to-date. Many of the largest gains were seen in Asian markets, including South Korea, China, Malaysia, and India. Through July, shipments to Canada (23 percent of total exports), South Korea (20 percent), Japan (13 percent), Hong Kong (12 percent), and China (6 percent) account for the bulk of U.S. fresh orange exports. A weak dollar and a smaller crop in South Africa (the world's leading orange exporter) have helped boost U.S. orange shipments this year.

The 2011 *Citrus Summary*, released September 22, reports that the season-average equivalent-on-tree price for California navels in 2010/11 was $8.11 per 75-pound box, down 24 percent from the $10.73 per box recorded in 2009/10. The smaller crop forecast for 2011/12 could help support grower prices in the coming year, particularly if the record export pace of 2010/11 continues into the new marketing year.

### *Florida Fresh Citrus Shipments Down in 2010/11*

The Florida Department of Citrus released its final weekly fresh citrus shipment report for the 2010/11 season on August 15. The report indicates that Florida fresh citrus shipments declined for a fourth straight year, down 6 percent to 30.5 million 4/5-bushel cartons. Fresh grapefruit shipments accounted for most of the decline, falling 11 percent from 2009/10 to 15.5 million cartons. Despite the reduction in grapefruit shipments, grapefruit still represent 51 percent of Florida's fresh citrus shipments. Shipments of fresh oranges, accounting for 29 percent of the total, were down less than one percent from the previous season. Shipments of specialty citrus—including tangelos and tangerines—rose marginally year-to-year and now make up 20 percent of the State's total fresh citrus shipments. Though total shipments were down, a slightly higher share went to the domestic market: 63 percent versus 62 percent in 2009/10. For both oranges and specialty citrus, shipments are overwhelmingly destined for the domestic market (representing 93 percent of total shipments of these fruits). Leading markets include Florida, New York, New Jersey, and Georgia. In contrast, 65 percent of Florida grapefruit shipments are exported. Leading markets include Japan, Belgium, the Netherlands, and Canada. The full report can be accessed at: http://www.fdocgrower.com/economics/economic-research/shipments-fresh-citrus/.

### *Florida Citrus Acres Projected Down 2 Percent in 2011*

Although the first official NASS estimate for Florida's 2011/12 citrus crops will not be released until October, the first data regarding the upcoming year's crop was released on September 22 in the Florida NASS Field Office *Commercial Citrus Industry Preliminary Report*. This report is the first estimate of commercial citrus

acreage in 2011 for oranges, grapefruits, tangerines, and tangelos. Of the 30 counties covered by the survey, 23 recorded citrus acreage losses for the upcoming year, while 5 counties registered acreage gains and 2 counties were unchanged. Net acreage loss from 2010 is estimated at 12,709 acres (down 2.3 percent from last year), with both a lower gross loss in acres (down 21,769 acres) and fewer new plantings (9,060 acres) compared with the previous survey. New plantings of Florida citrus are the lowest in more than 30 years. Oranges led the acreage declines in absolute terms, down 10,332 acres (2 percent) from last year. This is the lowest Florida orange acreage reported since 1986. The slide in grapefruit acreage slowed somewhat this year with a 2 percent reduction to 48,990 acres compared to a 7 percent decline between 2009 and 2010. Specialty citrus (tangerines and tangelos) acres dropped 6 percent to 19,252 – less than half the acres reported as recently as 2002.

Despite these reductions in acreage, Florida growers report that the implementation of foliar nutrition programs to combat citrus greening has helped increase fruit sizes in 2011. If realized, these larger fruit sizes could help increase overall production this year, offsetting some of the reductions in area reported by NASS.

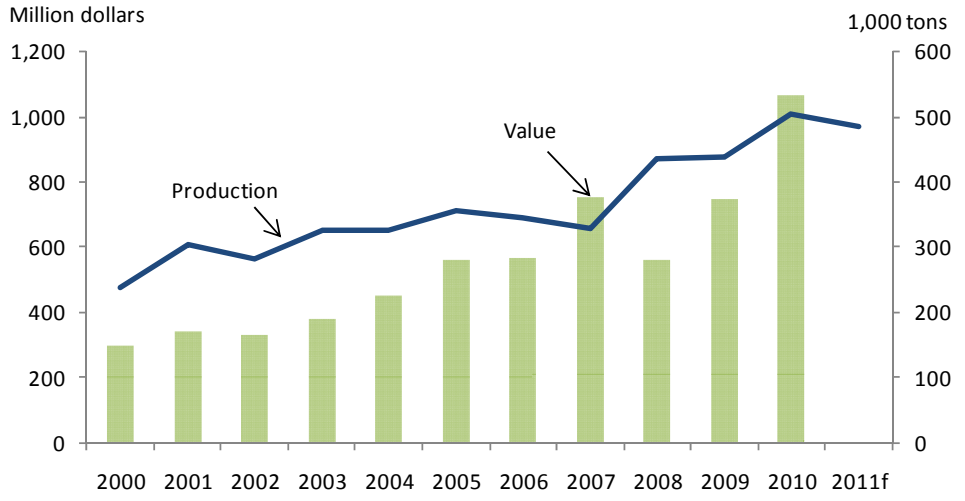
### *Walnut Production Slightly Down*

The 2010/11 California walnut marketing season (September-August) had two recordbreaking figures in both production size and crop value. NASS final crop estimate was 503,000 tons, the largest crop harvest on record. With the large harvest, average grower prices increased 23 percent from last season to $2,110 per ton, the second-highest price received next to $2,290 in 2007. With the large crop and high grower price total crop value for the 2010 crop was $1.06 billion. Demand was high for U.S. walnuts, with a record-breaking 138,506 tons of inshell walnuts exported through July. So far, inshell shipments are 40 percent above 2009/10 season shipments of 98,988 tons. Hong Kong has received 33,917 tons, representing 24 percent of total exports. Turkey and mainland China rounded out the top three export markets for U.S. walnuts in 2010. Shelled shipments are also up, with 85,936 tons exported through July, a 16 percent increase over 2009/10. Germany, Japan and South Korea represent the top three destinations for shelled California walnuts.

California NASS field office released the *2011 California Walnut Objective Measurement Report* earlier this month, estimated production at 485,000 tons (fig. 6). This seasons harvest is down 4 percent compared to 2010's harvest, but is above the 2005-09 average harvest size of 380,400 tons. Bearing acreage is estimated at 227,000 acres, relatively unchanged since 2009. With acreage remaining the same, the production per acre dropped to 2.14 tons per acre from 2.22 in 2010. The average nut set is down 18 percent to 1,388 per tree in 2011. The sound kernels in-shell was averaged at 99 percent statewide.

So far the 2011 walnut growing season received adequate chilling hours and generous rainfall, including plenty of snowmelt for irrigation which has been an issue for the past few years in California agriculture. The summer was mild, with rain and cool weather delaying bloom by about one week. This weather also caused a shorten bloom period which initially caused concern among growers but the crop has shaped up to be of excellent quality. Harvest is expected to be about two weeks

Figure 6
**Walnut total production and value, 2000-11**




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

behind normal. As of September 19th, walnut orchards were undergoing weed, husk fly and mite control. Some orchards in Southern California already started shaking for harvest of the earlier varieties.

Current studies demonstrate walnut consumption slowed growth and development of breast cancer tumors in mice, published in a Nutrition and Cancer report. The study was conducted across two stages and showed the development of breast cancer at less than half the rate of a control group fed a corn oil diet. In addition, the number and size of tumors was significantly smaller in the group who consumed a human equivalent of 2 ounces of walnuts daily. With more consumers seeking healthy food products, the increased domestic walnut production and in time lower prices, should continue to support strong, demand for walnuts in the coming years.

## *Almond Harvest in Full Swing*

The 2011 almond harvest is underway for all nonpareil almonds across California. Other varieties are beginning to reach harvest stage. Overall, the San Joaquin Valley almond harvest was 2 weeks late, putting pressure on growers to harvest before fall rains arrive. Industry sources cite yields are high but nut sizes are smaller than usual. Cold and wet weather early this spring could have played a role in the smaller nut sizes this season, including some rust issues. Other pests have been of little concern in the San Joaquin Valley. For the month of September through the 21st, free-on-board shipping-point prices have ranged from $1.50 to $2.00 per pound.

The 2010/11 season ended July 31st with record production on books at 1.64 billion shelled pounds (fig. 7). Exports were also a record, 1.2 billion shelled pounds, with Spain receiving 151 million pounds. Spain increased shipments by 11 percent from the previous season. Germany received 117 million shelled pounds, 9 percent above 2009/10 shipments. Hong Kong rounds out the top three markets with 90

Figure 7
**Utilized almond production and total exports, 2000-10**


P = preliminary.
Source: USDA, National Agricultural Statistics, *Noncitrus Fruits and Nuts Summary,* various issues; U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

million pounds. India was the top market for 2010/11 inshell almonds with 128 million pounds. Hong Kong shipped 104 million inshell pounds in 2010/11, a 33-percent increase from 2009/10 and a 6-fold increase from 2007/08 shipments of 18 million pounds. United Arab Emirates rounds out the top 3 inshell export markets with 28 million inshell pounds. As production continues to rise, given increased bearing acres in recent years, export levels will likely continue to increase to meet greater global demand.

### *Drought Continues To Concern Pecan Growers*

As harvest approaches for the 2011 U.S. pecan crop, rain is still needed in the top three pecan-producing States. Most of Texas remains under serious drought conditions. These same conditions are extending over into New Mexico's central and southeastern areas. Most of Georgia is also under serious drought conditions, especially in the southern half of the State. As these harsh conditions continue, many crops have been affected, including pecans. Some pecan trees in the Trans-Pecos region of Texas are dropping nuts due to lack of precipitation. Texas industry estimates range from 40 to 45 million pounds inshell harvest, down 43 percent from a year ago.

Concerns are high about a short crop this year and the potential for another in 2012 if rains do not return in time to recharge aquifers and soil moisture throughout the State. Irrigation should be high through September due to plant water demands, and the short crop can be viewed as a good thing under such dry conditions as to not overstress water systems. Some tree loss may occur if trees are bearing a heavy crop on dry or limited irrigated soil, which will affect production potential for upcoming crop years. The drought, coupled with high temperatures and winds, have added even more concern to growers as trees become more stressed during nut development and drop. In fact, Texas has set a new record for the most consecutive days above 100 degrees Fahrenheit, through August, with more hot days expected into September. On top of all the weather issues, pests have been a problem in

Texas pecan orchards as well, with the pecan nut casebearer (PNC) being particularly hard to control this season. With the low crop and high prices, any other major lose of nuts can be a serious problem for Texas producers.

Industry sources cite that in Georgia, even irrigation is struggling to maintain water demand in the tree. As of September 19, 40 percent of Georgia pecans were estimated in fair condition, with 37 percent in good and excellent condition. Current industry estimates for Georgia pin production between 80 and 90 million pounds inshell, roughly the same as 2010's off-year harvest, representing the effect of drought on production. New Mexico is down this year, with production estimated at 57 to 63 million pounds inshell, a decline up to 14 percent from 2010. Industry estimates for total inshell pecan harvest range from 246.5 million pounds to 261.0 million pounds as of July 12, down from 2010's 293.7 million pounds inshell harvest. With the smaller anticipated crop, met with high demand both domestically and abroad, prices should be high this season, perhaps being a bright spot on an otherwise drought affected crop.

### *Hazelnut Crop Rebounds*

After a poor crop of 28,000 inshell tons in 2010, the upcoming 2011 Oregon hazelnut crop looks much more promising with a forecast of 41,000 tons. The 2011 crop is 46 percent above 2010's harvest but is above the 5-year average of 37,400 tons. Grower prices in 2010 were the highest on record at $2,410 per ton, an increase of 8 percent above the previous record of $2,240 per ton in 2005. Yield per acre was 0.97 tons, the lowest since 2002's 0.67 tons. Hazelnut bearing acreage was reported up 1 percent from 28,700 to 29,000 acres.

The tighter supply and higher price caused reduced exports in 2010/11 down by 43 percent to 19,603 inshell tons from 34,619 inshell tons in 2009/10. Competition in the world market from Turkey in 2010, which produced 628,000 inshell tons in 2010 representing 78 percent of total world production, can affect domestic exports. Overall 77 percent of utilized hazelnut production went to the export market with Hong Kong receiving 8,300 inshell tons, a decrease of 58 percent from 2009/10 shipments. Hong Kong purchased 30 percent of Oregon's hazelnut crop in 2010, while in the previous season Hong Kong shipped 42 percent. Vietnam represented the second-largest export market with 3,485 inshell tons shipped, followed by mainland China with 2,247 inshell tons. Shelled shipments were down 39 percent from last season to 775 tons. Canada was the top U.S. market for 2010 shelled hazelnut shipments with 487 tons, representing 63 percent of total shelled exports. Hong Kong represents the second major shelled export destination with 89 tons. Mexico shipped 40 tons in 2010/11. Another year of above average production should be met with strong demand and good prices.

### *Exports Up for Fresh Cherries and Pears; Higher Prices More Than Offset Export Volume Declines for Grapes and Strawberries*

Despite harvest delays in major U.S. production regions causing tight early supplies and higher prices, U.S. fresh cherry exports through July of this marketing year (January-December 2011) have increased moderately, likely aided by the weakness of the U.S. dollar, increased domestic production, and a good quality crop out of the Northwest. Export volume to date rose 3 percent from the same time a year ago to 118.6 million pounds (table 10), valued at $323.9 million—the highest for this first-half period over the last 10 years and almost matching last season's overall record export sales of $326.8 million. Among leading export markets for U.S. cherries, increased demand in Canada and Taiwan, continued strong demand from South Korea, and recent growth-market China have helped drive up U.S. cherry export sales this season. Shipment volume to-date to the industry's top export market—Canada—increased 4 percent over the same time in 2010/11, while shipments to Taiwan, South Korea, and China increased more significantly. Meanwhile, shipment volumes to Japan and Hong Kong have fallen compared to last year.

Export demand appears to be rebounding for U.S. fresh pears this marketing year (July-June 2011/12) as indicated by the industry's strong early-season shipments. Export volume in July totaled 11.5 million pounds, up 32 percent from the same period last year, with a value of almost $5 million – a gain of 24 percent over 2010/11. Although harvest was delayed by the cool, wet weather this spring, 2010/11 season-ending supplies were still available to make up for the lack of new-crop supplies early into the 2011/12 season. Almost 70 percent of export volume in July went to Mexico, where U.S. export growth has been hampered over the past two marketing years by the high import tariff imposed as a result of the cross-border trucking dispute between the two governments. The recent agreement to phase out the tariff rate would likely lead to positive export growth for the U.S. pear industry in this market. Other factors that may help the industry achieve increased exports this season include a bigger domestic crop and smaller-size fruit, which is favored in several export markets. Export volume in July to Mexico is up sharply from July 2010. Export volumes to other markets in Central America and to Russia are also showing significant gains thus far, while exports to Canada continue to decline.

The volume of U.S. fresh-grape exports in 2011/12, May through July are down 21 percent from the same period in 2010/11, hampered by harvest delays, lower production, and higher prices. In value terms, however, this season's exports through July grew 4 percent from the same time last year, although they remain lower than the 10-year average. Export volume slowed to Canada and to several important Asian markets. Prospects of soon eliminating the currently reduced 10 percent import tariff on U.S. fresh grape exports to Mexico will likely help promote increased exports to this market in 2011/12.

U.S. fresh strawberry exports are down 2 percent in volume during the first 7 months of this marketing year (January-December 2011) compared with the same period last year. High strawberry prices in recent months, however, boosted the value of this year's U.S. strawberry exports, January-July, up 6 percent over the

Table 10--U.S. exports of selected fruit and tree nut products

| Commodity | Marketing season | Season-to-date (through July) 2010 | Season-to-date (through July) 2011 | Year-to-date change |
|---|---|---|---|---|
| | | ---------- *1,000 pounds* ---------- | | *Percent* |
| Fresh market: | | | | |
| Oranges | November-October | 1,404,882 | 1,587,438 | 13.0 |
| Grapefruit | September-August | 529,483 | 497,561 | -6.0 |
| Lemons | August-July | 199,048 | 220,081 | 10.6 |
| Apples | August-July | 1,695,993 | 1,821,283 | 7.4 |
| Grapes | May-April | 60,610 | 48,107 | -20.6 |
| Pears | July-June | 8,675 | 11,479 | 32.3 |
| Peaches (including nectarines) | January-December | 112,841 | 112,967 | 0.1 |
| Strawberries | January-December | 198,896 | 194,970 | -2.0 |
| Cherries | January-December | 114,846 | 118,559 | 3.2 |
| | | ------ *1,000 sse gallons 1/* ------- | | |
| Processed: | | | | |
| Orange juice, frozen concentrate | October-September | 71,959 | 112,076 | 55.7 |
| Orange juice, not-from-concentrate | October-September | 51,761 | 68,359 | 32.1 |
| Grapefruit juice | October-September | 9,401 | 12,446 | 32.4 |
| Apple juice and cider | August-July | 15,835 | 9,472 | -40.2 |
| Wine | January-December | 60,443 | 64,789 | 7.2 |
| | | ---------- *1,000 pounds* ---------- | | |
| Raisins | August-July | 370,510 | 323,406 | -12.7 |
| Canned pears | June-May | 3,168 | 2,682 | -15.3 |
| Canned peaches | June-May | 4,770 | 5,730 | 20.1 |
| Frozen strawberries | January-December | 17,070 | 22,465 | 31.6 |
| | | ---------- *1,000 pounds* ---------- | | |
| Tree nuts: | | | | |
| Almonds (shelled basis) | August-July | 1,040,186 | 1,168,150 | 12.3 |
| Walnuts (shelled basis) | September-August | 222,238 | 282,672 | 27.2 |
| Pecans (shelled basis) | October-September | 63,262 | 84,935 | 34.3 |
| Pistachios (shelled basis) | September-August | 91,594 | 95,291 | 4.0 |

1/ Single-strength equivalent.

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

same time last year. A slightly smaller crop in California will likely continue to limit U.S. export shipments as demand also continues strong in the U.S. market, which receives an overwhelming share of domestic production. Among the U.S. strawberry industry's leading export markets, shipments to-date are down to Canada and Japan, offsetting gains to Mexico, the United Kingdom, and Hong Kong. Despite the reduced volume, shipments to Canada still posted a 6-percent increase in export value.

A weak dollar and strong offshore demand has dramatically boosted U.S. exports of several citrus fruits this marketing year. Season-to-date fresh orange exports (November-July) were reported at 1.6 billion pounds, 13 percent higher than the same period in 2009/10. With three months remaining in the marketing season, fresh orange exports have already achieved a marketing year record. While shipments to leading market Canada were reported down 5 percent compared to last year, exports to number two market—South Korea—have increased 21 percent, more than compensating for decreased shipments to Canada. Shipments also increased substantially to most other top-10 markets, particularly to China, Malaysia, Australia, and India. Larger U.S. production in 2010/11 and smaller shipments from top exporters South Africa and Egypt has also contributed to larger U.S. export volumes this marketing year.

U.S. exports of fresh tangerines/mandarins have followed a similarly bullish path this year. Season-to-date shipments (October-July) were reported at 113.7 million pounds, up nearly 50 percent from the same period last year. Though two months remain in the marketing season, shipments for the marketing year should be virtually finished. Nevertheless, as with fresh oranges, shipments of tangerines/mandarins to-date have shattered last year's marketing year export record of 75.8 million pounds. In addition to a favorable exchange rate and strong

international demand, a much smaller crop in leading exporter China helped create additional export opportunities for U.S. tangerines/mandarins this year. While exports to No. 1 market Canada were largely unchanged, shipments to the next five leading markets have all more than doubled compared to last year. Shipments to No. 2 market Japan nearly tripled to 42.3 million tons.

### *Imports of Oranges, Lemons Fall in 2010/11*

With a large domestic crop in 2010/11 and the largest supplies since 2002/03, U.S. demand for fresh orange imports has fallen this marketing season (table 11). Fresh-orange imports fell 28 percent between 2009/10 and 2010/11, November through July to 64 million pounds. Shipments from leading import source Mexico fell nearly 50 percent, while imports from South Africa were down 7 percent.

The 2010/11 U.S. lemon season (August-July) finished with imports 3 percent lower than in 2009/10 at 94.8 million pounds and a 17-percent higher value amounting to $29.5 million. Mexico remains the top supplier of imported lemons in the United States, after surpassing Chile in ranking in 2007/08. Mexican lemons accounted for 60 percent of all imported lemons in the U.S. market this past season. Import gains from Mexico continue to diminished market share of Spanish lemons in the United States. Import volume from Mexico in 2010/11 increased 7 percent while those from Spain fell 16 percent. Import volume from Chile declined for a second straight year.

Table 11--U.S. imports of selected fruit and tree nut products

| Commodity | Marketing season | Season-to-date (through July) 2010 | 2011 | Year-to-date change |
|---|---|---|---|---|
| | | ---------- *1,000 pounds* ---------- | | *Percent* |
| Fresh market: | | | | |
| Oranges | November-October | 89,379 | 63,988 | -28.4 |
| Tangerines (including clementines) | October-September | 226,149 | 267,710 | 18.4 |
| Lemons | August-July | 92,353 | 94,837 | 2.7 |
| Limes | January-December | 452,241 | 440,955 | -2.5 |
| Apples | August-July | 401,813 | 328,678 | -18.2 |
| Grapes | May-April | 352,755 | 304,012 | -13.8 |
| Pears | July-June | 3,129 | 2,162 | -30.9 |
| Peaches (including nectarines) | January-December | 96,574 | 94,208 | -2.4 |
| Bananas | January-December | 5,353,887 | 5,430,855 | 1.4 |
| Mangoes | January-December | 524,589 | 633,261 | 20.7 |
| | | ------ *1,000 sse gallons 1/* ------- | | |
| Processed: | | | | |
| Orange juice, frozen concentrate | October-September | 235,757 | 158,975 | -32.6 |
| Apple juice and cider | August-July | 540,981 | 586,817 | 8.5 |
| Wine | January-December | 136,013 | 142,094 | 4.5 |
| | | ---------- *1,000 pounds* ---------- | | |
| Canned pears | June-May | 11,698 | 7,092 | -39.4 |
| Canned peaches (including nectarines) | June-May | 28,313 | 17,553 | -38.0 |
| Canned pineapple | January-December | 384,154 | 439,287 | 14.4 |
| Frozen strawberries | January-December | 149,767 | 150,284 | 0.3 |
| | | ---------- *1,000 pounds* ---------- | | |
| Tree nuts: | | | | |
| Brazil nuts (shelled basis) | January-December | 11,579 | 8,567 | -26.0 |
| Cashews (shelled basis) | January-December | 145,268 | 135,285 | -6.9 |
| Pine nuts (shelled basis) | January-December | 1,688 | 1,130 | -33.1 |
| Pecans (shelled basis) | October-September | 68,856 | 92,512 | 34.4 |

1/ Single-strength equivalent.
Source: U.S. trade data provided by the U.S. Department of Commerce, U.S. Census Bureau.

# Commodity Highlight

## *Pistachio Nut: A Background*

The pistachio nut originated far from its current U.S. production area, in western Asia, where it can still be found growing wild (Ferguson et. al., 2005). The nut grows in hot, dry locations throughout the Middle East. From here the tree was introduced to the Mediterranean and eventually brought over to the continental United States by the USDA in 1890. The pistachio nut finally made its way to California's Northern Sacramento Valley in 1904 but commercial production did not develop until the mid-1970s.

The pistachio nut is a drupe, similar to almonds, peaches, apricots, cherries, and plums. Similar to almonds, the pistachio seed is what is consumed, whereas for the other drupes, the actual fleshy fruit is consumed. To reproduce, both a male and female tree are required. Pistachios are anemophilous (wind pollinated). They have an extensive root system which helps them withstand droughts. Pistachio nuts thrive best in areas with long, hot, dry summers and moderate winters, but a minimum requirement of chilling hours must be met to achieve good, even bud break, growth, and good fruit set. When this requirement is not met, yield suffers. Because of these growth requirements, global production of pistachio nuts is limited to only five major producing countries.

The U.S. pistachio nut industry is based in California's San Joaquin Valley where cultivation requirements of long, hot summers, and cold enough temperatures to break bud dormancy in pistachio trees are met. As of 2007, over 98 percent of total pistachio production acres were in California, with the remaining acreage in Arizona, Nevada, New Mexico, Texas, and Utah. California reported 1,141pistachio farms on over 151,000 acres, while Arizona had 50 farms on over 1,500 acres. New Mexico followed as the third-largest producer with 70 farms on 767 acres, as of 2007 (Census of Agriculture, 2007).

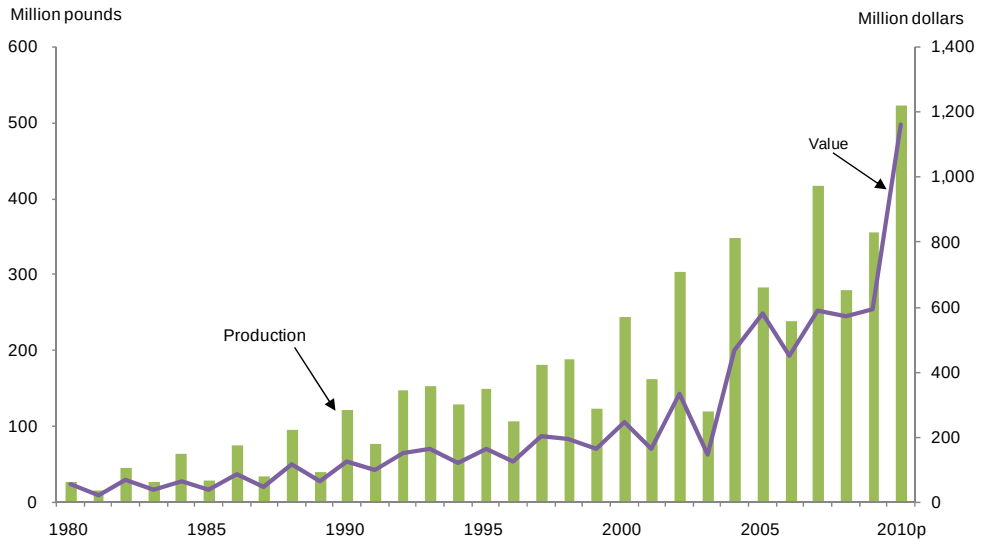
Pistachio trees do not reach full bearing stage until 10 to 12 years of age and are considered juvenile until 5 years old. Pistachios exhibit an alternate bearing pattern, especially in the earlier years of the U.S. pistachio industry, where production levels are rising and dropping year to year (fig. 8). Some variations on this occur, explained mostly by new trees reaching nut-bearing age and natural causes, such as inadequate chilling hours and extreme drought.

Pistachio nuts naturally split open when mature, usually around the end of July through mid-September. The splitting occurs 1 month prior to full fruit maturity. Final nutmeat maturity is when the hull separates from the shell with the most obvious indicator of maturity being the appearance of red color in the hull. Development of the nutmeat in size helps open the shell. The chemistry behind the natural shell split cannot be aided with manmade chemical agents before, during, or after harvest.

## *Pistachio Production in U.S. and Abroad*

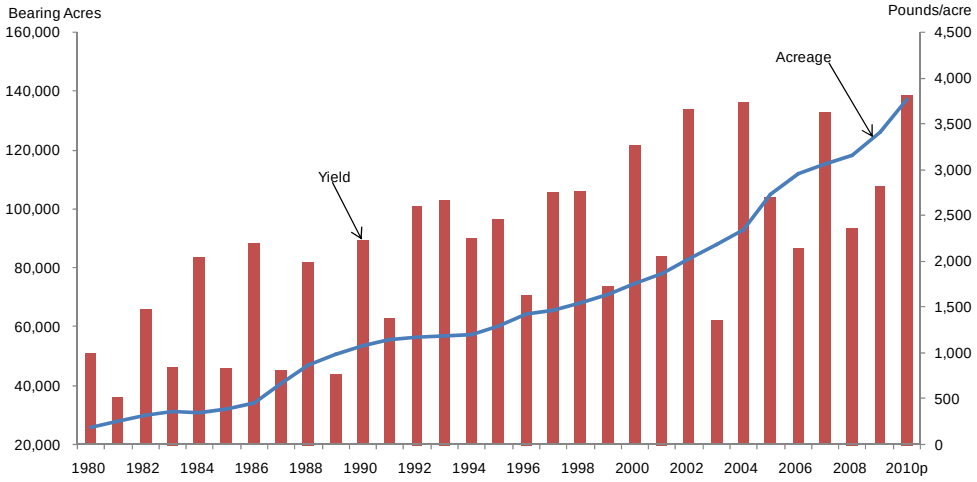
Since 1977, U.S. production has increased rapidly, starting at 1.8 million pounds (shelled basis) to 250.1 million pounds in 2010—a recordbreaking harvest. With production, bearing acreage has also increased from 26,000 acres in 1980 to

Figure 8
**Pistachio total production and value of production, 1980-2010**




P=preliminary.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruits and Nut Summary*, various issues.

Figure 9
**Pistachio bearing acreage and yield per acre**



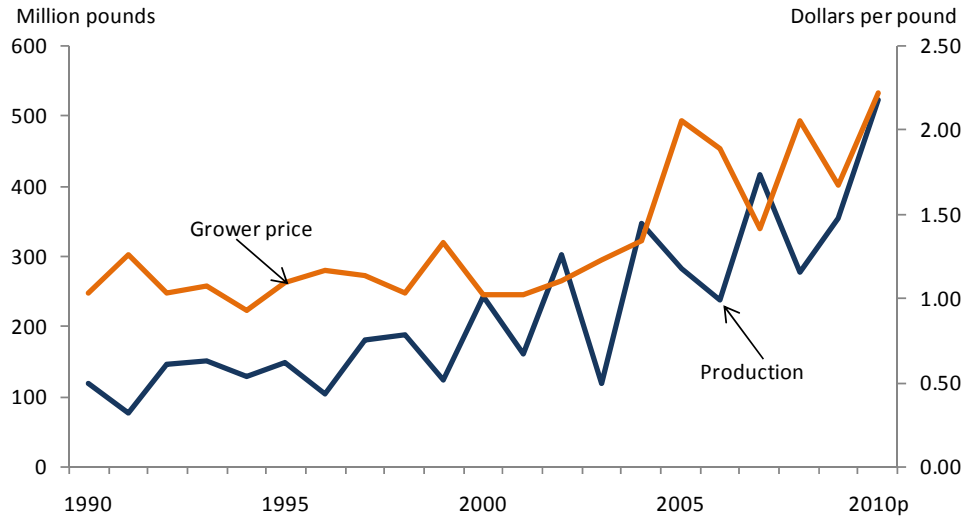

P=preliminary.
Source: USDA, National Agricultural Statistics Service, *Noncitrus Fruits and Nut Summary*, various issues.

137,000 acres in 2010 (fig. 9). As domestic production and acreage has increased, crop value has gone up topping $1.16 billion in 2010. Average grower price reached a record in 2010 at $2.22 per pound (fig. 10).

The rapid growth in U.S. pistachio production has made it the second largest producer in the world, after Iran (fig. 11). From 2005 to 2009, Iran provided 42 percent of the world total and the United States providing 24 percent. Previously the average of 1998-2001 world production had the U.S. producing 20 percent. Since then, the United States has increased its share of global production as well as Turkey and Syria, while Iran has seen a decline in average production.

Figure 10

**Pistachio total production and average grower prices, 1990-2010**

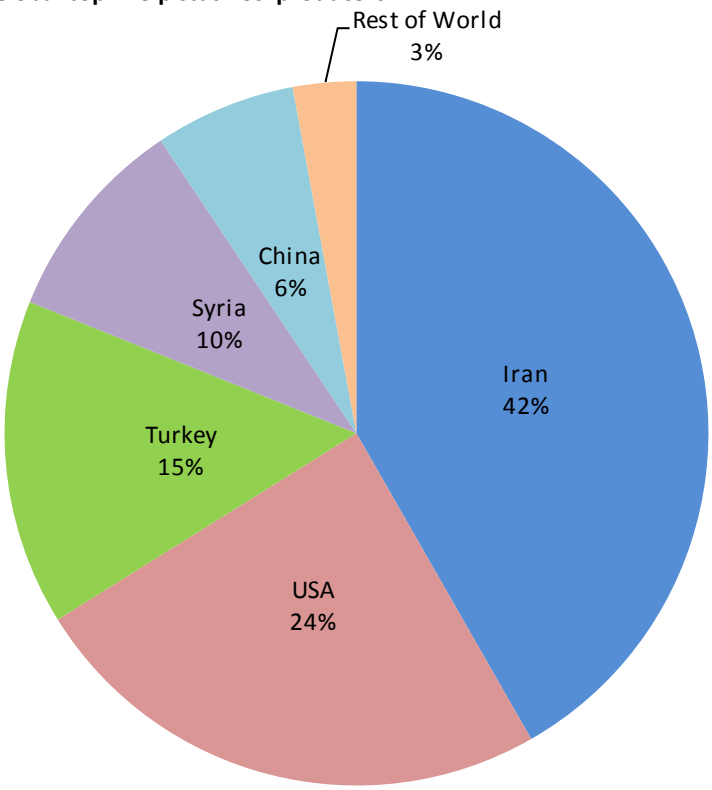



P = preliminary.

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

Figure 11

**Global top five pistachios producers***




*Average share of 2005-09 world production.

Source: United Nations, Food and Agricultural Organization.

### *Pistachio Nut in Export Markets*

Since 2000, an average of 54 percent of the U.S. inshell pistachio crop has been exported each season. Hong Kong is a major market for pistachios, followed by Belgium, the Netherlands, mainland China, and Luxembourg. It is assumed that the bulk of the shipments to Hong Kong go to mainland China, making that the largest destination for U.S. inshell pistachios. Netherlands, Luxembourg and Hong Kong are the top markets for shelled pistachios since 2000.

### *Domestic Pistachio Consumption*

Most Americans are not big nut eaters, with total per capita nut consumption peaking at 3.72 pounds per person in 2009 that is lower than per capita use estimates for many individual fruits. For example, per capita strawberry use was estimated at 7.17 pounds in 2009 and for avocados 4.1 pounds. In terms of domestic tree nut per capita consumption pistachios fall behind almonds, walnuts, and pecans. In 2009, consumption was 0.18 pounds per person compared with per capita consumption reaching 1.4 pounds for almonds, walnuts at 0.55 pounds, and pecans at 0.44 pounds. From 2000 to 2009, consumption has averaged 0.19 pounds per person, with the highest consumption levels occurring in 2004 with 0.26 pounds per person when production reached 170 million pounds (a record at the time). Consumption is tightly related to production, in years with high production consumption increases, usually accompanied by lower prices.

Consumer perceptions and current findings of the health benefits of pistachios has aided in their demand both abroad and domestically. Research has found that pistachios can support a healthy cardiovascular system and include antioxidants, phytosterols, unsaturated fats, high calcium, iron phosphorus, thiamin, manganese, copper, fiber, and vitamin B-6. Because pistachios are also touted as one of the lowest calorie, lowest fat nuts, they are considered part of a weight management diet. Also the pistachio nut coming in a shell, as one eats and leaves the shell, there is visual evidence of consumption, which in turn reduces the risk of overeating. This has been referred to as the "Pistachio Principle." Eating 2 ounces a day can lower an adult's cholesterol level. Due to continued research into health benefits and increased production, which over time should lower pistachio prices, consumption of this nut can be expected to increase in the future.

# Contacts and Links

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## *Data*

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

## *Related Websites*

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