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# Fruit and Tree Nuts Outlook 

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## Warm, Dry Weather Reduces U.S. Citrus Production in 2012/13

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USDA's National Agricultural Statistics Service (NASS) released its March citrus production forecast for marketing year 2012/13 on March 8. Total U.S. citrus production is forecast at 11.4 million tons, down 3 percent from 2011/12 and 7 percent below the initial October citrus forecast. Production gains for lemons could not offset the across-the-board citrus production declines from Florida this season.

Current NASS forecast for California's all-orange crop in 2012/13 remains unchanged from last season, totaling 2.36 million tons. Navel orange production is forecast up 2 percent while Valencia orange production is forecast down 7 percent. The stable crop size has not tightened supplies enough to increase prices above year-earlier levels, due mainly to smaller sized fruit.

Florida’s 2012/13 all-orange crop, which consist of non-Valencia and Valencia oranges, is forecast at 6.3 million tons, down 5 percent from last season. The warm, dry winter, coupled with disease, has caused the fruit-laden citrus trees to be stressed and drop fruit, resulting in reduced harvest levels. Smaller fruit size is yielding less juice, pushing the USDA Economic Research Service (ERS) orange-juice production forecast down 6 percent to 903 million gallons, single-strength equivalent from 2011/12. It is also resulting in lower grower prices for the season to date.

Grapefruit production continues to decline, with total crop size in 2012/13 down 7 percent from last season to 1.1 million tons. Florida and California's production are down 10 percent and 9 percent, respectively. Fresh grapefruit grower prices are mostly higher than last season, while processing grapefruit prices have steeply declined due to smaller fruit sizes, causing low juice yields.

NASS forecast the U.S. lemon crop up 5 percent from last season to a total of 892,000 tons. California's lemon crop is expected to remain unchanged from last season at 820,000 tons while Arizona's crop rebounds to 72,000 tons, more than double the freeze-reduced crop in 2011/12. Monthly grower prices have been consistently lower in 2012/13 compared to 2011/12 prices, most likely due to the larger crop size.

## Grower Price Index for Fruit and Nuts Bolstered By Strong Fresh Apple and Pear Prices in Early 2013

The index of prices received by fruit and tree nut growers set record highs in January and February 2013 relative to any of the same time periods since the 1990s. The index was at 175 (1990-92=100) in January, up from 157 in January 2012 and further strengthened to 179 in February, up from 159 the same time last year (fig. 1). The increase in the index from January to February reflected strengthening of processed orange and fresh strawberry grower prices while, for the most part, the year-to-year gains in the index during the first 2 months of 2013 stemmed from the very strong grower prices for fresh apples and pears (table 1). Strawberry prices also rose above year-ago levels in February, contributing to the boost in the index that month. Most citrus grower prices, on the other hand, averaged below yearearlier levels during the first 2 months of 2013 (except fresh grapefruit prices in January).

Fresh apple and pear grower prices continued strong into 2013, with crop-price averages in January and February higher than any of their respective averages for the same months since the 1990s. Reduced domestic production mainly contributed to the grower price gains for apples and pears in early 2013. Freeze-reduced crops in a number of eastern U.S. apple-producing States, including New York and Michigan, along with strong export movement so far this season, have continued to bolster fresh apple grower prices in 2012/13, as have grower prices in Washington State, where a huge crop was harvested last fall. The domestic apple season is more than halfway finished and as of March 1, fresh apple holdings were running 13 percent ahead of last season and 15 percent above the 5 -year average, according to data from the U.S. Apple Association. The increased holdings, however, reflect the big supplies from Washington State. Except for the U.S. Northwest, fresh apple holdings remain tight, likely keeping fresh apple prices strong through much of the first half of 2013.


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

Table 1--Monthly fruit prices received by U.S. growers

| Commodity | 2012 |  | 2013 |  | 2012-13 change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | January | February | January | February | January | February |
|  | --------------------Dollars per box ----------------------- |  |  |  | Percent |  |
| Citrus fruit: 1/ |  |  |  |  |  |  |
| Grapefruit, all | 6.83 | 6.79 | 7.23 | 5.97 | 5.9 | -12.1 |
| Grapefruit, fresh | 10.04 | 10.30 | 12.21 | 9.61 | 21.6 | -6.7 |
| Lemons, all | 12.97 | 11.38 | 11.39 | 7.22 | -12.2 | -36.6 |
| Lemons, fresh | 21.12 | 18.50 | 15.76 | 14.34 | -25.4 | -22.5 |
| Oranges, all | 7.65 | 8.25 | 6.45 | 7.07 | -15.7 | -14.3 |
| Oranges, fresh | 11.55 | 11.14 | 11.24 | 9.96 | -2.7 | -10.6 |
| --------------------Dollars per pound ------------------------ |  |  |  |  |  |  |
| Noncitrus fruit: |  |  |  |  |  |  |
| Apples, fresh $2 /$ | 0.320 | 0.306 | 0.442 | 0.435 | 38.1 | 42.2 |
| Grapes, fresh $2 /$ | -- | -- | -- | -- | -- | -- |
| Peaches, fresh $2 /$ | -- | -- | -- | -- | -- | -- |
| Pears, fresh 21 | 0.214 | 0.193 | 0.387 | 0.389 | 80.8 | 101.6 |
| Strawberries, fresh | 1.380 | 1.130 | 1.090 | 1.170 | -21.0 | 3.5 |

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 .
With parallel marketing periods, the higher apple prices so far this season also are driving up fresh pear grower prices. Moreover, although tighter supplies have slowed U.S. fresh pear exports in recent months compared with last season, international demand appears to continue to be strong as export volume remains above the previous 5 -year average of recent months (except 2012).

A smaller domestic crop has kept 2012/13 fresh grapefruit grower prices higher than year-earlier levels through January but smaller fruit size is beginning to negatively affect prices, with average price in February dropping to $\$ 9.61$ per box, 7 percent below the same period last year. Induced by a series of cold snaps in January, temporary strawberry supply gaps in California leading up to Valentine's Day aided February fresh strawberry grower prices.

## Consumer Price Index for Fresh Fruit Strong During The First 2 Months of 2013

The Consumer Price Index (CPI) for fresh fruit in January and February 2013 rose above the CPI reported for those same months in 2012 and is holding strong relative to the same period of recent years. The January CPI, at 348.2 (1982-84=100), and the February CPI, at 346.2 (1982-84=100), were both up 5 percent from the same time last year (fig. 2). Higher retail prices for navel oranges, grapefruit, apples, bananas, and Thompson seedless grapes drove the CPI up during both months to above year-earlier levels. Higher retail prices for lemons in January compared with the same time last year also helped boost the CPI that month.

According to data from the U.S. Department of Labor, Bureau of Labor Statistics (BLS), the biggest retail price gains for fresh fruit in the first 2 months of 2013 were in Thompson seedless grapes, followed by navel oranges, grapefruit, and Red delicious apples. Banana prices only increased slightly from the same time a year ago while strawberry retail prices declined below a year ago in February (table 2).

Figure 2


Source: U.S. Department of Labor, Bureau of Labor Statistics, http://www.bls.gov/data/home.htm.
Grape supplies from Chile, which dominate the winter market for fresh grapes in the United States, continued to lag compared to last season, limiting overall availability for retail promotions. Though outside the scope of BLS pricing for fruit, advertised retail prices for other varieties of grapes were also averaging higher than a year ago during both months and generally remained strong through midMarch, based on data from USDA's Agricultural Marketing Service (AMS).

Reduced domestic production and good quality is keeping navel orange and grapefruit retail prices higher so far this season. As with grower prices, retail apple prices have held strong this season through February. The production shortages in some regional markets, slowing down of imports in recent months, and continued strong export demand are driving up apple prices in general. BLS reported the January and February consumer price index for apples at 346.7 and 348.5 (1982$84=100$ ), respectively, 11-12 percent higher than the same time a year ago. Supplies from regions other than the Northwest are likely to remain inadequate through the first half of this year, likely putting upward pressure on overall apple retail prices.

While light early-season supplies from California helped boost overall fresh strawberry grower prices in February, ample supplies from Florida and Mexico have provided downward pressure on strawberry prices at the retail level. Florida’s shipping season is ending while supplies in California are gradually picking up. Should weather remain mostly favorable, increased strawberry acreage in California points to increased overall production which should work to the benefit of U.S. consumers.

Despite higher year-to-year imports each month from June 2012 through January 2013, banana retail prices have averaged higher than year-earlier prices since November last year, also strengthening month to month since. Banana import volume fell below a year ago in February but banana prices continued to strengthen to $\$ 0.611$ per pound in February, up from $\$ 0.609$ per pound in January and up slightly over 1 percent from the same time a year ago. More recent shipment data from AMS shows that banana imports continue to fall below year-earlier levels through March, indicating continued strong banana retail prices for the month.

| Commodity | Unit | 2012 |  | 2013 |  | 2012-13 change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | January | February | January | February | January | February |
|  |  | --- Dollars --- |  | --- Dollars --- |  | --- Percent --- |  |
| Fresh: |  |  |  |  |  |  |  |
| Valencia oranges | Lb. | -- | -- | -- | -- | -- | -- |
| Navel oranges | Lb. | 0.929 | 0.852 | 0.991 | 0.998 | 6.7 | 17.1 |
| Grapefruit | Lb. | 0.847 | 0.876 | 0.976 | 0.992 | 15.2 | 13.2 |
| Lemons | Lb. | 1.466 | 1.485 | 1.557 | 1.415 | 6.2 | -4.7 |
| Red Delicious apples | Lb. | 1.272 | 1.282 | 1.350 | 1.433 | 6.1 | 11.8 |
| Bananas | Lb. | 0.604 | 0.603 | 0.609 | 0.611 | 0.8 | 1.3 |
| Peaches | Lb. | -- | -- | -- | -- | -- | -- |
| Anjou pears | Lb. | 1.316 | 1.284 | -- | -- | -- | -- |
| Strawberries 1/ | 12-oz. pint | 2.225 | 2.041 | 2.152 | 1.895 | -3.3 | -7.2 |
| Thompson seedless grapes | Lb. | 2.648 | 2.294 | 3.035 | 3.148 | 14.6 | 37.2 |
| Processed: |  |  |  |  |  |  |  |
| Orange juice, concentrate 21 | 16-fl. oz. | 2.753 | 2.769 | 2.511 | 2.487 | -8.8 | -10.2 |
| Wine | liter | 8.469 | 11.222 | 9.822 | 11.534 | 16.0 | 2.8 |

-- Insufficient marketing to establish price.
1/ Dry pint.
2/ Data converted from 12-fluid-ounce containers.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics (http://www.bls.gov/data/home.htm).

## Fruit and Tree Nuts Outlook

## Lower Total 2012/13 Citrus Production Is Forecast

The forecasted 2012/13 U.S. citrus crop of 11.4 million tons is down 3 percent from 2011/12's season total (table 3). USDA's NASS forecast the 2012/13 all-orange crop at 8.68 million tons, a 4 -percent decline from the previous season and down 7 percent from the initial October forecast for 2012/13's all-orange total of 9.4 million tons. The largest year-to-year declines are from Florida's citrus crops, with tangerines having the largest crop reduction of 14 percent compared to last year. Valencia orange production is down 2 percent as all States see a decline, with Texas down 8 percent, California down 7 percent, and Florida down 1 percent. All changes to the initial October forecast have pushed Florida production for all citrus down; Arizona lemon production was the only crop to see a slight increase in production since the October forecast.

| Crop and State |  Forecast for <br> Utilized $2012 / 13$ |  |  | Utilized |  | Forecast for 2012/13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010/11 | 2011/12 | as of 12-2012 | 2010/11 | 2011/12 | as of 12-2012 |
|  | ---- 1,000 boxes 2/ ---- |  |  | ----1,000 tons ---- |  |  |
| Oranges: |  |  |  |  |  |  |
| Early/mid-season and navel: |  |  |  |  |  |  |
| California | 48,000 | 45,500 | 46,500 | 1,920 | 1,820 | 1,860 |
| Florida 3/ | 70,300 | 74,200 | 67,000 | 3,164 | 3,339 | 3,015 |
| Texas | 1,700 | 1,108 | 1,220 | 72 | 47 | 52 |
| Total 4/ | 120,000 | 120,808 | 114,720 | 5,156 | 5,206 | 4,927 |
| Valencia: |  |  |  |  |  |  |
| California | 13,500 | 13,500 | 12,500 | 540 | 540 | 500 |
| Florida | 70,000 | 72,400 | 72,000 | 3,150 | 3,258 | 3,240 |
| Texas | 249 | 311 | 286 | 11 | 13 | 12 |
| Total | 83,749 | 86,211 | 84,786 | 3,701 | 3,811 | 3,752 |
| All oranges | 203,749 | 207,019 | 199,506 | 8,857 | 9,017 | 8,679 |
| Grapefruit: |  |  |  |  |  |  |
| California | 4,100 | 4,400 | 4,000 | 164 | 176 | 160 |
| Florida | 19,750 | 18,850 | 17,000 | 840 | 802 | 722 |
| Texas | 6,300 | 4,800 | 5,280 | 252 | 192 | 211 |
| All grapefruit | 30,150 | 28,050 | 26,280 | 1,256 | 1,170 | 1,093 |
| Tangerines and mandarins: |  |  |  |  |  |  |
| Arizona | 300 | 200 | 200 | 12 | 8 | 8 |
| California | 9,900 | 10,900 | 11,800 | 396 | 436 | 472 |
| Florida | 4,650 | 4,290 | 3,700 | 221 | 204 | 176 |
| All tangerines and mandarins | 14,850 | 15,390 | 15,700 | 629 | 648 | 656 |
| Lemons: |  |  |  |  |  |  |
| Arizona | 2,500 | 750 | 1,800 | 100 | 30 | 72 |
| California | 21,000 | 20,500 | 20,500 | 840 | 820 | 820 |
| All lemons | 23,500 | 21,250 | 22,300 | 940 | 850 | 892 |
| Tangelos |  |  |  |  |  |  |
| Florida | 1,150 | 1,150 | 1,000 | 52 | 52 | 45 |
| All citrus | 273,399 | 272,859 | 264,786 | 11,734 | 11,737 | 11,365 |

1 /The crop year begins with bloom of the first year shown and ends with completion of the harvest following year.
2/ Net pounds per box: oranges in California (CA)-80 (75 prior to the 2010-2011 crop year), Florida (FL)-90,
Texas (TX)-85; grapefruit in CA-80 ( 67 prior to the 2010-11 crop year), FL-85, TX-80; lemons-80 ( 76 prior to the 2010-11 crop year); tangelos-90; tangerines and mandarins in AZ and CA-80 (75 prior to the 2010-11 crop year), FL-95.
3 / Includes Temples. 4/ Totals may not be equivalent to the sum of the categories due to rounding.
Source: USDA, National Agricultural Statistics Service, Crop Production, various issues.

## California's Navel Production Projected To Rise In 2012/13

The March USDA-NASS Crop Production report forecasted California's utilized navel production at 1.9 million tons for 2012/13, a 2 percent increase over 2011/12. The forecast is unchanged from the original 2012/13 forecast in October. Some freezing temperatures affected the citrus region of California in January and February, but freeze damage to harvested oranges was minimal. According to the California Citrus Mutual, most frost damage was negligible, with only a small amount of rejected fruit resulting from a lack of adequate frost protection in some growing areas.

The start of the California navel season had prices at $\$ 15.20$ per 80-pound box, a-2 percent decline from the November 2011 price of $\$ 15.52$ per $80-\mathrm{lb}$ box, and less than 4 percent below the 5 -year average November price for fresh oranges (table 4). As the season continued, prices declined and remained below 2011/12 monthly grower prices, with February prices dropping 9 percent to $\$ 10.10$ per $80-\mathrm{lb}$ box from February 2012's average of $\$ 11.13$ per $80-\mathrm{lb}$ box-the highest February price since 2008/09. Prices for California fresh navels should be declining seasonally as supplies continue to reach market from the larger crop.

The average price for November 2012 through February 2013 was $\$ 12.43$ per 80-lb box, 4 percent below the 2011/12 average of $\$ 12.98$ per box. So far into the season, California orange shipments are only fractionally behind levels for the same 2011/12 period. Through early March, California shipped 91,420 tons of oranges, as harvest continued for navels. Harvest began for Valencias in mid-March.

The 2012/13 California Valencia Orange Objective Measurement Report from NASS' California Field Office was released earlier in March. In the report, bearing acreage faces another year of decline from 40,000 acres in 2011 to 39,000 acres in 2012. While acreage has declined, the average trees per acre have increased to 125 , with average fruit set per tree up over 3 percent to 632 . Fruit size is smaller than previous seasons, roughly 2.5 inches in diameter compared to last season's 2.6

Table 4--Fresh oranges: Average equivalent on-tree prices received by California grow ers,

| Month | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ---Dollars/box--- 1/ |  |  |  |  |  |  |
| November | 15.27 | 14.91 | 17.76 | 15.31 | 15.52 | 15.20 |
| December | 10.98 | 12.07 | 13.06 | 13.75 | 13.53 | 12.90 |
| January | 9.48 | 14.17 | 11.56 | 12.35 | 11.73 | 11.50 |
| February | 8.28 | 12.74 | 10.86 | 9.65 | 11.13 | 10.10 |
| March | 8.40 | 11.58 | 10.85 | 8.90 | 10.86 |  |
| April | 7.61 | 10.18 | 10.68 | 9.22 | 13.82 |  |
| May | 9.28 | 11.37 | 13.34 | 10.63 | 15.38 |  |
| June | 11.01 | 12.43 | 14.21 | 11.81 | 14.81 |  |
| July | 7.72 | 10.51 | 12.60 | 9.85 | 11.03 |  |
| August | 7.72 | 11.01 | 9.29 | 10.75 | 10.23 |  |
| September | 10.22 | -- | 9.29 | 11.45 | 12.53 |  |
| October | 10.12 | -- | 9.29 | 11.15 | 12.13 |  |
| Nov.-Feb. average | 11.00 | 13.47 | 13.31 | 12.77 | 12.98 | 12.43 |

Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.
1/ 75-lb box prior to 2010/11; 80-lb box thereafter.
inch diameter. The forecast utilized production is 500,000 tons (equivalent to 25 million cartons), down 7 percent from 2011/12.

From November through January 2013, fresh orange exports totaled 164,076 tons, up 11 percent from the same time last season. So far, shipments are fractionally larger than in 2010/11, when fresh orange exports reached a record 826,991 tons for the entire marketing year. Though the first 3 months of the season are strong this year, ERS forecasts exports at 716,000 tons, 7 percent below last season's marketing year total of 766,116 tons. The decline in exports is attributed to the lower overall domestic supply of oranges. Canada remains the top export market for California fresh oranges, with 55,115 tons, up 11 percent over the same time last year. Hong Kong and South Korea represent the second and third largest export markets for California fresh oranges in 2012/13.

Fresh orange imports from November through January were 9,132 tons, less than 1 percent below the same time last season. Mexico is the United States' largest supplier of imported fresh oranges through January, at 8,215 tons or 90 percent of all imports so far this season. Mexican orange shipments to the United States are up 50 percent so far compared to last season, aided by a rebound in the country's orange production. The Dominican Republic is the second largest supplier with 559 tons, followed by Chile with 254 tons ( 84 percent lower than last season). Total imports last season were very strong totaling 131,300 tons, the highest on record. The current season has the California all-orange crop level with last season, aiding in the ERS forecast for total imports to reach 130,000 tons, one percent less than last season's record import total but 16 percent above the 5 -year average.

## Florida Orange Production Down

Florida's 2012/13 all-orange crop is forecast at 6.3 million tons, down 5 percent from last seasons' 6.6 million ton utilized production total. The forecast all-orange crop is comprised of 3.02 million tons of non-Valencia oranges and 3.24 million tons of Valencia oranges. The non-Valencia orange crop is projected down 10 percent from last season, while the projected Valencia orange crop is fractionally smaller. The current forecast for the non-Valencia crop has been adjusted down by 9 percent from the initial October citrus crop forecast. The Valencia crop has also been adjusted downward since October, with the revised forecast down 4 percent. In the March issue of USDA-NASS Citrus Maturity Test Results and Fruit Size report, 99 percent of the non-Valencia orange crop has been harvested, while the Valencia orange harvest began in late February. The Florida Citrus Administrative Committee (FCAC) has estimated that 7 percent of the Valencia's have been harvested through the first week of March.

As the season has progressed, drought conditions moved southward into Florida's citrus-producing regions. Currently, growers are irrigating for soil moisture and to maintain fruit water levels. The heavy fruit sets, coupled with drought and disease pressure, has stressed the trees, resulting in higher than usual fruit droppage this season. Since January, fruit droppage has increased substantially, with NASS projecting a 22-percent droppage rate for Valencia's, 27-percent droppage rate for navels, and 18-percent droppage rate for early to midseason oranges.

As a majority of Florida's orange production is utilized for processing, ERS forecasts that the 5-percent decline in production will result in lower domestic orange juice production at 903 million gallons (single-strength equivalent, sse) (table 5). If realized, orange juice production would be 6 percent less than last season's 959 million gallons sse total. Smaller-size fruit is affecting juice production levels this season, steering the industry to supplement with more imports. ERS forecast U.S. orange juice imports to reach 300 million gallons sse, a bump of 34 percent from last season's 223 million gallons sse. Imports are strong for the first quarter of 2012/13, supporting the increased forecast. Also, the carbendazim contamination-which affected all frozen concentrate orange juice (FCOJ) imports, particularly focusing on Brazil-has been minimized and, instead of sampling all shipments, the Food and Drug Administration is just operating at a surveillance capacity, with random sampling but no inhibition of product movement into country. The relaxation of sampling is allowing more orange juice into the country as more foreign producers have complied with U.S. law and reduced use of the restricted fungicide (http://www.fda.gov/Food/FoodSafety/ProductSpecificInformation/FruitsVegetablesJuices/ucm287783.htm).

The growth in imports and larger beginning stocks is projected to lead to a 4 percent increase in domestic orange juice supplies, for a total of 1.65 million gallons sse, if realized. With the larger total supply, ERS forecasts more exports of orange juice in 2012/13, reaching 170 million gallons sse, up 12 percent from last season.

| Season 1/ | Beginning stocks | Production | Imports | Supply | Exports | Domestic consumption | Ending stocks | Per capita consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ------ | n sse gald | s 2/- |  |  | Gallons |
| 1986/87 | 204 | 781 | 396 | 1,381 | 73 | 1,106 | 201 | 4.57 |
| 1987/88 | 201 | 907 | 296 | 1,404 | 90 | 1,103 | 212 | 4.52 |
| 1988/89 | 212 | 970 | 272 | 1,454 | 73 | 1,148 | 233 | 4.66 |
| 1989/90 | 233 | 652 | 350 | 1,235 | 90 | 920 | 225 | 3.70 |
| 1990/91 | 225 | 876 | 320 | 1,422 | 94 | 1,170 | 158 | 4.65 |
| 1991/92 | 158 | 930 | 286 | 1,374 | 107 | 1,096 | 170 | 4.30 |
| 1992/93 | 170 | 1,207 | 324 | 1,701 | 114 | 1,337 | 249 | 5.18 |
| 1993/94 | 249 | 1,133 | 405 | 1,787 | 107 | 1,320 | 360 | 5.04 |
| 1994/95 | 360 | 1,257 | 198 | 1,815 | 117 | 1,264 | 434 | 4.77 |
| 1995/96 | 434 | 1,271 | 261 | 1,967 | 119 | 1,431 | 417 | 5.34 |
| 1996/97 | 417 | 1,437 | 256 | 2,110 | 148 | 1,398 | 564 | 5.16 |
| 1997/98 | 564 | 1,555 | 281 | 2,400 | 150 | 1,571 | 679 | 5.73 |
| 1998/99 | 679 | 1,236 | 350 | 2,265 | 147 | 1,585 | 534 | 5.71 |
| 1999/2000 | 534 | 1,493 | 339 | 2,366 | 146 | 1,575 | 645 | 5.60 |
| 2000/01 | 645 | 1,389 | 258 | 2,292 | 123 | 1,471 | 698 | 5.18 |
| 2001/02 | 698 | 1,435 | 189 | 2,322 | 181 | 1,448 | 692 | 5.05 |
| 2002/03 | 692 | 1,250 | 291 | 2,233 | 103 | 1,426 | 705 | 4.93 |
| 2003/04 | 705 | 1,467 | 222 | 2,393 | 123 | 1,448 | 822 | 4.96 |
| 2004/05 | 822 | 974 | 358 | 2,153 | 119 | 1,411 | 623 | 4.79 |
| 2005/06 | 623 | 986 | 299 | 1,909 | 138 | 1,312 | 459 | 4.41 |
| 2006/07 | 459 | 889 | 399 | 1,747 | 123 | 1,248 | 376 | 4.15 |
| 2007/08 | 376 | 1,156 | 406 | 1,938 | 136 | 1,155 | 647 | 3.80 |
| 2008/09 | 647 | 1,060 | 317 | 2,025 | 125 | 1,206 | 594 | 3.93 |
| 2009/10 | 694 | 837 | 328 | 1,859 | 147 | 1,155 | 557 | 3.75 |
| 2010/11 | 557 | 914 | 263 | 1,734 | 214 | 1,112 | 407 | 3.57 |
| 2011/12 | 404 | 959 | 223 | 1,586 | 152 | 985 | 449 | 3.13 |
| 2012/13 f/ | 449 | 903 | 300 | 1,652 | 170 | 1,037 | 445 | 3.28 |
| $\mathrm{f}=$ forecast. |  |  |  |  |  |  |  |  |
| 1/ Season begins in October of the first year show $n$ as of 1998/99, prior-year season begins in December. <br> 2/ SSE = single-strength equivalent. <br> Source: Prepared and calculated by USDA, Economic Research Service. |  |  |  |  |  |  |  |  |

Domestic consumption is forecast at 1.04 million gallons, up 5 percent from last season's 22-year low of 985 million gallons, but still 8 percent below the previous 5 -year average of 1.13 billion gallons sse. Ending stocks are expected to remain somewhat steady at 445 million gallons sse, less than 1 percent below 2011/12 levels. The overall domestic per capita use of orange juice is forecast to increase to 3.28 gallons per person, up 5 percent from last season's 25 -year low but down 14 percent from the earlier 5-year average (excluding 2011/12).

Nielsen retail sales data reported by the Florida Department of Citrus (FDOC) shows that total orange juice sales volume from October through mid-February this season are almost unchanged compared to the same time last season, with prices up 1 percent. Despite the lack of growth, orange juice sales should increase as the season continues and prices for processing oranges remain below last season's levels. Even with total orange juice sales sluggish, not-from-concentrate (NFC) orange juice sales are up 5 percent through mid-February, with prices 2 percent stronger than last year (fig. 3). Prices for the season-to-date are averaging $\$ 7.31$ per gallon, with prices stronger each month than the previous season's monthly prices

Florida grower prices for processing oranges averaged 24 percent lower this October through February over the same period last season, averaging $\$ 5.06$ per box (table 6). The price received in November was $\$ 3.64$ per box, 35 percent lower than in November 2011 and 24 percent less than the 5 -year average November price of $\$ 4.76$ per box. As the season has continued, prices have gradually inclined but have remained below last season's monthly prices. The smaller sized fruit producing lower yields-FCOJ yield is now 1.61 gallons per box down from 1.63 gallons per box last year- in conjunction with the smaller Florida crop has had a downward effect on prices.


[^0]Source: Florida Department of Citrus, www.fdocgrower.com

| Table 6--Processing oranges: Average equivalent on-tree prices received by Florida grow ers, <br> 2007/08-2012/13 | $2007 / 08$ | $2008 / 09$ | $2009 / 10$ | $2010 / 11$ | $2011 / 12$ | $2012 / 13$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | --- Dol/ars/90-Ib box--- |  |  |  |  |  |
|  | -- | 0.81 | -- | -- | - |  |
| October | 5.16 | 4.75 | 3.73 | 4.59 | 5.59 | 3.64 |
| November | 5.47 | 5.10 | 5.15 | 6.45 | 6.05 | 4.98 |
| December | 5.81 | 5.04 | 5.99 | 6.60 | 6.75 | 5.30 |
| January | 6.10 | 4.95 | 6.09 | 6.39 | 8.10 | 6.30 |
| February | 6.95 | 6.31 | 7.10 | 7.50 | 7.85 |  |
| March | 7.32 | 6.63 | 7.90 | 8.50 | 8.70 |  |
| April | 7.39 | 6.53 | 8.10 | 8.77 | 11.90 |  |
| May | 7.17 | 6.87 | 8.00 | 8.87 | -- |  |
| June | 5.64 | 4.13 | 5.24 | 6.01 | 6.62 | 5.06 |

-- = Not available.
Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

## Continued Decline in Grapefruit Production for 2012/13

Total U.S. grapefruit production is projected at 1.09 million tons, down 7 percent from last season and 13 percent lower than in 2010/11. The current production estimate is down 11 percent from the initial October crop forecast of 1.23 million tons. California is experiencing another season of declined grapefruit production, with crop size down 9 percent from the previous season. Texas is expecting a 10percent production gain for grapefruit this season while Florida is currently expecting a 10-percent decline. According to the March Citrus Maturity Test Results and Fruit Size, grapefruit droppages are at the highest they have ever been in a season not affected by a significant weather event, averaging 20 percent for colored and 22 percent for white.

Through the first week of March, Florida fresh-grapefruit utilization this season was up from last season, with share of production headed to fresh market at 48 percent as opposed to a 43 -percent share last year. Grapefruit fruit size is the smallest observed since the series originated in 1968/69. About 51 percent of all white grapefruits are sizes 63 or more, close to double the same amount of last year. Colored grapefruit has 56 percent sized 63 or more, up from 32 percent that were classified as small fruit last season.

Though the Florida crop is smaller, the 10-percent reduction in harvest has led to higher grower prices this season through February. The October through February equivalent on-tree prices for U.S. fresh grapefruit received by growers is $\$ 12.22$ per box, 20 percent above the same period last year (table 7). Prices started out very strong with $\$ 16.42$ per box in October and remaining above last season's grower prices through January, which was attributable to the smaller domestic crop. In February, prices dipped 7 percent below February 2011/12 prices, as harvest increased marketable supplies.

The FDOC 2012/13 shipment data through mid-February showed domestic and export movement down 13 percent compared to last season. Exports were down 19 percent while domestic shipments were down 9 percent since October. At the time of the FDOC shipment report in mid-February, FCAC had 50 percent of grapefruits still left for harvest. By early March, FCAC reported 27 percent of fruit was still

Table 7--Fresh grapefruit: Average equivalent on-tree prices received by U.S. grow ers,

| Month | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ------------Dollars per box 1/----------- |  |  |  |  |  |  |
| October | 13.16 | 11.96 | 19.80 | 8.08 | 10.44 | 16.42 |
| November | 14.01 | 8.18 | 13.95 | 15.26 | 10.09 | 12.20 |
| December | 11.16 | 7.89 | 12.33 | 10.91 | 10.14 | 10.64 |
| January | 9.35 | 7.08 | 13.56 | 10.56 | 10.04 | 12.21 |
| February | 8.26 | 7.44 | 12.63 | 9.50 | 10.30 | 9.61 |
| March | 7.66 | 8.00 | 11.35 | 10.31 | 11.64 |  |
| April | 8.53 | 8.07 | 9.03 | 11.05 | 12.65 |  |
| May | 9.44 | 7.00 | 7.50 | 10.45 | 13.47 |  |
| Oct.-Feb. average | 11.19 | 8.51 | 14.45 | 10.86 | 10.20 | 12.22 |

1/ The net w eight of a grapefruit box for Florida: 85 lb , for Arizona and California: 80 lb ( 67 prior to the 2010-11 crop year), for Texas: 80 lb .
Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.
left on trees while AMS movement reports indicated domestic shipments were up 6 percent over the same period last year. Heavy harvest of grapefruit has been occurring since late February, according to NASS Florida field office, providing supplies for domestic shipments and making up for the slower movement earlier in the season.

Processing-use grapefruit is at 52 percent of utilized production this season through mid-March, down from a 57-percent share last year. The decrease in grapefruit processing-use share can be partially attributed to the smaller fruit size from this season's harvest resulting from the warm, dry winter in Florida. This weather, however, while reducing fruit size, has aided fruit appearance, steering more fruit toward the fresh market.

With lower overall grapefruit production and a smaller share of grapefruit sent to processing so far (with only a quarter of fruit left on trees through mid-March), ERS forecasts a decrease in grapefruit juice production in 2012/13 to 74 million gallons sse. If realized, the current projected forecast level would be 4 percent lower than last seasons 77 million gallons sse (table 8). Beginning stocks were built up last year through increased imports and production, coupled with lower exports to start the 2012/13 season at 40 million gallons, 9 percent larger than in 2011/12. NASS Cold Storage report shows juice stocks increasing this season, supporting the forecasted ending stocks figure of 41 million gallons. U.S. grapefruit juice imports are projected to increase as import volumes are very strong for the first quarter of this season while exports are forecasted to remain steady from last season, placing total domestic use down less than half a percent to 59 million gallons, from 59.2 million gallons in 2011/12. U.S. grapefruit juice per capita use is forecast down 1 percent to 0.186 gallons per person, from 0.188 gallons per person in 2011/12, braced by the FDOC retail sales report showing total grapefruit juice sales down this marketing season through mid-February.

Florida's processing-grapefruit growers' prices have been faring poorly this season through February. During the beginning of the season, prices were in negative territory but have since gained some ground and reached a high of $\$ 3.14$ per box in February (table 9). All monthly prices are below last season's prices, with the
season average in 2012/13 being $\$ 0.93$ per box, a 76 percent decline from last year. The 2011/12 season had strong grower prices for processing grapefruit but the current season is experiencing smaller than average fruit sizes, reducing juice content and reducing processing use. FCAC reports that, currently, 52 percent of all grapefruit harvested are heading to processing, down from last year's share of 57 percent.

Table 8--Grapefruit juice: Supply and utilization 1991/92-2011/12

| Year 1/ | Supply |  |  |  | Utilization |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Beginningstocks |  |  | Ending <br> stocks | Exports | Consumption |  |
|  | Production |  |  | Total |  |  | Total | Per capita |
|  |  |  |  | ------ | Million sse | allons 1/ | ---- | Gallons |
| 1991/92 | 120 | 4 | 42 | 165 | 39 | 23 | 104 | 0.40 |
| 1992/93 | 186 | 2 | 39 | 227 | 70 | 22 | 134 | 0.52 |
| 1993/94 | 169 | 1 | 70 | 240 | 59 | 17 | 163 | 0.62 |
| 1994/95 | 191 | 1 | 59 | 251 | 72 | 22 | 157 | 0.59 |
| 1995/96 | 171 | 1 | 72 | 244 | 66 | 27 | 151 | 0.56 |
| 1996/97 | 192 | 0 | 66 | 258 | 86 | 21 | 151 | 0.55 |
| 1997/98 | 166 | 0 | 86 | 252 | 68 | 18 | 167 | 0.60 |
| 1998/99 | 171 | 1 | 68 | 240 | 54 | 24 | 161 | 0.58 |
| 1999/2000 | 203 | 5 | 54 | 263 | 82 | 33 | 148 | 0.52 |
| 2000/01 | 183 | 1 | 82 | 266 | 75 | 39 | 152 | 0.53 |
| 2001/02 | 179 | 0 | 75 | 255 | 84 | 36 | 135 | 0.47 |
| 2002/03 | 140 | 0 | 84 | 224 | 72 | 38 | 114 | 0.39 |
| 2003/04 | 147 | 0 | 72 | 219 | 65 | 42 | 111 | 0.38 |
| 2004/05 | 49 | 11 | 65 | 126 | 35 | 24 | 67 | 0.22 |
| 2005/06 | 81 | 6 | 35 | 122 | 42 | 19 | 61 | 0.21 |
| 2006/07 | 121 | 1 | 42 | 164 | 58 | 20 | 86 | 0.29 |
| 2007/08 | 109 | 0 | 58 | 167 | 60 | 16 | 92 | 0.30 |
| 2008/09 | 84 | 1 | 60 | 144 | 48 | 16 | 81 | 0.26 |
| 2009/10 | 77 | 1 | 48 | 125 | 45 | 13 | 68 | 0.22 |
| 2010/11 | 84 | 0 | 45 | 129 | 37 | 16 | 77 | 0.24 |
| 2011/12 | 77 | 0 | 37 | 114 | 40 | 15 | 59 | 0.19 |
| 2012/13 f | 74 | 1 | 40 | 115 | 41 | 15 | 59 | 0.19 |

$1 /$ single-strength equivalent. $f=$ forecast.
Source: Prepared by USDA, Economic Research Service.

Table 9--Processing grapefruit: Average equivalent on-tree prices received by Florida grow ers, 2007/08-2012/13

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

[^1]
## Lemons Gain Ground With Increased Production in 2012/13

Current NASS reports forecast the U.S. lemon crop in 2012/13 up 5 percent from last season to total 892,000 tons. California's lemon crop is expected to remain unchanged from last season at 820,000 tons while Arizona's crop rebounds to 72,000 tons, more than double the freeze-reduced crop of 30,000 tons in 2011/12. Arizona's larger lemon crop is attributed to more favorable weather this growing season, after the 2011/12 crop was hampered by winter freezes. AMS movement reports through early March shows that lemon shipments out of Arizona have already ended while harvest continues in Southern California. Domestic movement of lemons is up 2 percent through early March, explained by the larger crop.

Fresh lemon grower prices have averaged $\$ 17.17$ per box from August through February, 17 percent below the season-to-date average price last season (table 10). Monthly grower prices have been consistently lower in 2012/13 compared to 2011/12 prices, most likely due to the larger crop size. Prices peaked in October at $\$ 19.36$ per box, only 1 percent below the October 2011 price, and declined to a low so far this season in February at $\$ 14.34$ per box. As the season continues and the market moves into the high demand summer months, prices should rise again but will likely remain below last season's low-supply driven, high prices.

Fresh lemon exports from August through January 2013 are up 12 percent compared to last season, totaling 51,360 tons. Japan is the top market for U.S. lemon exports with 17,902 tons to date, slightly down from the same period last year, while Canada received 12 percent more than last season at 15,883 tons. Australia rounds out the top three export markets for U.S. fresh lemons. U.S. lemon imports totaled 43,154 tons through January, down 12 percent from the same time period last season. Import declines are partially due to the larger domestic crop. Currently, Mexico is the largest supplier of fresh lemons to the United States with 31,674 tons, up 8 percent from last season due mostly to Mexico's larger crop. Chile is the second largest supplier with 10,564 tons, but this is down 45 percent over the same time last year. Spain rounds out the top three suppliers of imported fresh lemons to the United States with 286 tons.

Table 10--Fresh lemons: Average equivalent on-tree prices received by U.S. grow ers,

| 2007/08-2012/13 | $2007 / 08$ | $2008 / 09$ | $2009 / 10$ | $2010 / 11$ | $2011 / 12$ | $2012 / 13$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Month |  | --Dollars per box |  |  |  |  |
|  | $1 /--$ |  |  |  |  |  |
| August | 43.40 | 35.58 | 24.26 | 25.43 | 25.09 | 19.15 |
| September | 46.10 | 29.81 | 27.06 | 25.83 | 22.59 | 17.75 |
| October | 47.98 | 20.15 | 24.77 | 25.43 | 19.59 | 19.36 |
| November | 48.00 | 17.85 | 25.37 | 26.73 | 19.09 | 17.36 |
| December | 42.66 | 14.06 | 22.41 | 19.03 | 19.79 | 16.46 |
| January | 45.50 | 14.24 | 22.43 | 15.13 | 21.29 | 15.76 |
| February | 47.10 | 11.27 | 22.27 | 12.63 | 18.50 | 14.34 |
| March | 45.90 | 8.85 | 21.26 | 12.93 | 17.89 |  |
| April | 43.20 | 8.68 | 22.86 | 14.83 | 18.89 |  |
| May | 44.40 | 11.48 | 23.36 | 16.13 | 21.29 |  |
| June | 45.90 | 17.38 | 23.86 | 17.93 | 22.29 |  |
| July | 43.00 | 22.78 | 24.96 | 22.43 | 20.59 |  |
|  |  |  |  |  |  |  |
| Aug.-Feb. average | 45.82 | 20.42 | 24.08 | 21.46 | 20.57 | 17.17 |

1/ Beginning in 2010/11, boxes are 80 lb . Prior to 2010/11, box size w as 76 lb .
Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

Table 11--Fresh tangerines and mandarins: Average equivalent on-tree prices

| received by U.S. grow ers, 2007/08-2012/13 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| Month | $2007 / 08$ | $2008 / 09$ | $2009 / 10$ | $2010 / 11$ | $2011 / 12$ | $2012 / 13$ |
|  | 15.65 | 17.48 | 14.00 | 11.90 | 9.55 | 15.05 |
| October | 23.88 | 22.24 | 26.31 | 34.53 | 21.99 | 23.98 |
| November | 21.21 | 15.19 | 25.05 | 30.30 | 26.88 | 28.21 |
| December | 21.18 | 18.46 | 19.43 | 21.41 | 19.18 | 22.97 |
| January | 19.52 | 23.76 | 11.22 | 18.51 | 22.03 | 24.36 |
| February | 20.39 | 18.96 | 16.40 | 15.99 | 26.82 |  |
| March | 17.45 | -- | 18.55 | 18.66 | -- |  |
| April | 6.65 | -- | -- | -- | -- |  |
| May |  |  |  |  |  |  |
|  | 20.29 | 19.43 | 19.20 | 23.33 | 21.08 | 22.91 |
| Oct.-Feb. average |  |  |  |  |  |  |

1/ The net w eight of a tangerine box for Florida: 95 lbs , for Arizona and California: 80 lbs ( 75 prior to the 2010-11 crop year).
Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

## Mandarin Production Up Slightly in 2012/13

Total U.S. production of tangerines and clementines is forecast up over 1 percent in 2012/13 to 656,000 tons. Arizona's production is estimated to remain unchanged from last season while California anticipates an 8-percent increase over last season's total crop size. The combination of California and Arizona's crop outweighed the 14-percent decline in Florida's tangerine production. Florida has finished harvest of early tangerine varieties but harvest of Honey tangerines is ongoing, with fruit size reported as being the smallest since the data series started in 1980/81. The smaller fruit sizes translate into fewer packed boxes for the fruit. AMS reports tangerine movement from Florida down 23 percent from last season through mid-March. California is continuing to harvest and, according to California Citrus Mutual, mandarins are in good condition and have excellent eating quality.

Grower prices have remained above last season's monthly grower prices from October through February, with the season average grower prices 9 percent higher at $\$ 22.91$ per box (table 11). At $\$ 28.21$ per box, the December grower price was the highest so far this season and the second-highest December grower price received in the past 5 seasons. While prices were strong in December for tangerines/mandarins, the season also started strong, with prices at $\$ 15.05$ per box, 58 percent above the received prices in 2011/12. The higher prices can be somewhat explained by the smaller harvest in Florida which was dominated by smaller fruit sizes, making the higher quality, larger sized fruit fetch better prices at market. California and Arizona mandarins are in good quality this season also aiding in the higher received grower prices.

## California Supplies Gradually Picking Up For Spring/Summer Strawberry Demand

After a string of cold, wet weather in January slowed the start to California's 2013 strawberry season, the State's strawberry supplies are gradually picking up as drier and milder weather in February promoted crop growth. Supply volumes in the State, however, remain below year-earlier levels through mid-March, according to weekly shipment data from AMS. Florida supplies, which dominate the winter
strawberry market and have been in abundance this winter, were winding down in March the same time California supplies continued to build up for the spring and summer market. According to the California Strawberry Commission's 2013 Acreage Survey, the industry expects about a 7-percent increase in the State's strawberry acreage from a year ago. With this growth rate and last year's NASS acreage data, strawberry planted area in California in 2013 is projected at 41,000 acres. Over the past 3 years, this top strawberry-producing State accounted for slightly over 65 percent of total strawberry acreage in the United States.

Data from the California Strawberry Commission's survey indicated that while acreage planted in the fall (referring to fall 2012, which produces for winter, spring, and summer 2013) will account for 88 percent of total acreage, its growth continues to be more moderate (up 5 percent from acreage in the fall of 2011) than summer planted acreage. Summer 2013 acreage is projected up 25 percent from acreage planted last summer. Summer plantings are mostly in the Oxnard and Santa Maria growing districts where much of the growth in fall plantings is also occurring.

With the anticipated increase in acreage in California and yield-per-acre assumption using the 2010-12 average, ERS projects strawberry production in the State to be up about 2 percent in 2013 from a year ago to 2.8 billion pounds, barring any major weather problems for the rest of the season. At this level, production will be the highest on record for California strawberries, if realized. Supplies from Florida's 2013 strawberry winter crop are showing a 20-percent lead over a year ago through mid-March, according to AMS data. Given these supply increases in the top two strawberry-producing States, ERS projects U.S. strawberry production to match or slightly exceed the record-high 3.0 billion produced in 2012.

AMS data indicate shipments of California strawberries were up 16 percent in January from the same period a year ago. While increasing in February and through mid-March from the previous month, shipments fell below year-ago levels by as much as 39 percent and 21 percent, respectively, during this period. As Florida supplies also came in stronger than last year in January, U.S. fresh strawberry grower prices that month declined 20 percent to $\$ 1.37$ per pound relative to the January 2011 price. Heightened demand for strawberries leading up to Valentine's Day and short supplies in California boosted grower prices in February to $\$ 1.17$ per pound, up 4 percent from the same time a year ago, despite increased supplies from Florida. In contrast, BLS reported fresh strawberry retail prices in the United States at an average $\$ 2.15$ per 12-ounce dry pint in January 2013, down from $\$ 2.23$ in January 2012. In February 2013, retail prices averaged $\$ 1.90$ per pint, down from $\$ 2.04$ the same time last year. In comparison, strawberry retail advertised prices tracked by AMS also show the same movement from February through mid-March (fig. 4), with prices lower than last year and down from the previous month. Prices are likely to continue to weaken in the next few months with seasonal supply increases from California.

Fresh strawberry demand in the United States continues to grow, fueled by a growing population seeking to maintain a healthy diet, increased year-round availability, new varieties that promote quality and shelf life, and more packagingsize choices for consumers. U.S. fresh strawberry per capita use in 2012 broke the

Figure 4
U.S. retail advertised prices for strawberries lower


Source: USDA, Agricultural Marketing Service, National Fruit and Vegetable Retail Report,
http://www.ams.usda.gov/mnreports/fvwretail.pdf

| Year | Supply |  |  | Utilization |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Utilized production | Imports | Total supply | Exports | Consumption |  |
|  |  |  |  |  | Total | Per capita |
|  | -- Million pounds -- |  |  |  |  | Pounds |
| 1980 | 482.1 | 12.7 | 494.8 | 47.1 | 447.7 | 1.97 |
| 1981 | 537.5 | 6.7 | 544.2 | 44.4 | 499.8 | 2.17 |
| 1982 | 589.6 | 4.5 | 594.1 | 44.0 | 550.1 | 2.37 |
| 1983 | 585.4 | 5.1 | 590.5 | 46.4 | 544.1 | 2.32 |
| 1984 | 748.2 | 8.8 | 757.0 | 56.3 | 700.7 | 2.96 |
| 1985 | 754.1 | 9.6 | 763.7 | 51.5 | 712.2 | 2.99 |
| 1986 | 734.8 | 13.0 | 747.8 | 51.5 | 696.3 | 2.89 |
| 1987 | 780.4 | 33.2 | 813.6 | 57.1 | 756.5 | 3.12 |
| 1988 | 855.5 | 39.4 | 894.9 | 78.0 | 816.9 | 3.33 |
| 1989 | 861.6 | 36.0 | 897.6 | 93.0 | 804.7 | 3.25 |
| 1990 | 863.6 | 32.2 | 895.8 | 85.7 | 810.1 | 3.24 |
| 1991 | 968.2 | 31.5 | 999.7 | 95.2 | 904.4 | 3.57 |
| 1992 | 999.7 | 23.8 | 1,023.5 | 102.3 | 921.2 | 3.59 |
| 1993 | 1,010.8 | 31.4 | 1,042.2 | 102.1 | 940.1 | 3.62 |
| 1994 | 1,147.7 | 43.7 | 1,191.4 | 126.4 | 1,065.0 | 4.05 |
| 1995 | 1,145.6 | 58.8 | 1,204.4 | 111.4 | 1,093.1 | 4.10 |
| 1996 | 1,212.6 | 67.3 | 1,279.9 | 116.0 | 1,163.9 | 4.32 |
| 1997 | 1,201.8 | 31.9 | 1,233.7 | 115.8 | 1,117.9 | 4.10 |
| 1998 | 1,132.2 | 58.1 | 1,190.3 | 109.3 | 1,081.1 | 3.92 |
| 1999 | 1,305.2 | 94.8 | 1,400.0 | 124.3 | 1,275.7 | 4.57 |
| 2000 | 1,433.3 | 76.2 | 1,509.5 | 136.5 | 1,373.0 | 4.86 |
| 2001 | 1,259.7 | 70.7 | 1,330.4 | 128.1 | 1,202.3 | 4.21 |
| 2002 | 1,406.3 | 89.9 | 1,496.2 | 156.9 | 1,339.3 | 4.65 |
| 2003 | 1,642.4 | 90.3 | 1,732.7 | 194.8 | 1,537.9 | 5.29 |
| 2004 | 1,694.4 | 94.4 | 1,788.8 | 182.6 | 1,606.3 | 5.48 |
| 2005 | 1,811.0 | 122.7 | 1,933.7 | 207.6 | 1,726.1 | 5.83 |
| 2006 | 1,910.9 | 153.4 | 2,064.3 | 229.1 | 1,835.2 | 6.14 |
| 2007 | 1,973.3 | 157.7 | 2,131.0 | 240.3 | 1,890.7 | 6.26 |
| 2008 | 2,091.1 | 143.0 | 2,234.1 | 269.2 | 1,964.9 | 6.45 |
| 2009 | 2,288.0 | 187.2 | 2,475.2 | 271.8 | 2,203.3 | 7.17 |
| 2010 | 2,320.8 | 198.3 | 2,519.1 | 279.8 | 2,239.4 | 7.23 |
| 2011 | 2,334.8 | 243.5 | 2,578.3 | 279.4 | 2,298.9 | 7.37 |
| 2012 | 2,419.0 | 351.3 | 2,770.3 | 301.5 | 2,468.8 | 7.86 |

1/Preliminary.
Source: USDA, Economic Research Service calculations.
previous year's record and climbed 7 percent to 7.9 pounds in 2012 (table 12). Fresh per capita use has achieved record levels each year since 2002 and at the present peak, the estimate is up from the 4.7-lb annual average 10 years earlier, double the 1990s average, and more than twice the 1980s average.

Overall U.S. fresh strawberry supplies were at an all-time high in 2012. Domestic fresh strawberry production in 2012 was up 4 percent from the previous year
reaching a record 2.42 billion pounds. While Florida's production dropped 26 percent from the record-large crop in 2011, California's production increased 7 percent and several other strawberry-producing States also registered production increases. U.S. fresh strawberry imports (almost entirely from Mexico) also set a new high, totaling 351 million pounds, surpassing the previous record of 244 million pounds in 2011. Although fresh strawberry grower prices in 2012 averaged 4 percent higher than in 2011 (mostly due to the higher average grower price in California), ample supplies, both from domestic and import sources, translated to lower prices for consumers. The U.S. average retail price for fresh strawberries was $\$ 1.99$ in 2012, compared with $\$ 2.08$ in 2011. These same supply-price conditions are anticipated to apply throughout most of this year, once again aiding domestic and export demand.
U.S. fresh strawberry export volume reached a record high in 2012, increasing 8 percent from the previous year to 302 million pounds and valued at an all-time high of $\$ 386$ million. A 5 -percent increase in export volume to the top U.S. export market, Canada, was matched by a much greater gain to the No. 2 market, Mexico, up 52 percent from the previous year. Along with these increases, strong exports to France and Taiwan and to a number of markets in the Middle East and the Caribbean also aided overall export growth in 2012, offsetting declines to the United Kingdom and to major markets in the Far East-Japan and Hong Kong.
U.S. strawberry imports from Mexico were at a record high in 2012 at 350 million pounds, up 44 percent from the year before. Only a minute share of total imports was sourced from seven other countries, including Canada, Peru, and Chile. While Mexican strawberries have an almost year-round presence in the U.S. market, approximately 85 percent of Mexico's U.S.-bound shipments enter this market during the winter and spring. U.S. Census Bureau trade data indicate that in January 2012, U.S. fresh strawberry imports were up 15 percent in volume from the same period last year and higher than any January volume in the past decade. More recent import data from the U.S. Census Bureau was not yet available at the time this report was released but AMS weekly shipment data show volumes from Mexico this season through early March at 9 percent above those from the same period a year ago.

Like in the fresh market, frozen strawberry supplies in the United States also reached an all-time high in 2012 due to near-record-high domestic frozen packed volume, record-large imports (also mostly from Mexico), and increased beginning stocks. Estimated overall frozen supplies in 2012 rose 10 percent from the previous year, reaching the 1.0 billion-pound mark (table 13). Last year started off with frozen strawberry stocks at 291.7 million pounds, up from 263.1 million pounds in 2011 and the third highest since 2000, based on NASS cold storage data. The Processing Strawberry Advisory Board of California reported total U.S. frozen strawberry pack in 2012 at 497.9 million pounds, 9-percent above the previous-year pack and only less than 1 percent short of the 2007 pack of 502.2 million-the highest by far since 1992. With increased overall supplies, the average price U.S. growers received for processing-use strawberries declined 4 percent to $\$ 0.33$ per pound in 2012 relative to the year-earlier average.

End-of-year frozen strawberry stocks climbed for a second straight year to 303.0 million pounds, up 4 percent from 2011 ending stocks and 16 percent higher than the previous 5-year average, perhaps as processors stocked up to take advantage of

| Year | Industry pack $2 /$ | Imports | Beginning stocks | Total supply | Ending stocks 3/ | Exports | Consumption |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Total | Per capita product weight |
|  |  | ---------- | Million poun |  | , | ---------- |  | unds |
| 1980 | 253.1 | 83.5 | 132.5 | 469.1 | 151.9 | 4.4 | 312.8 | 1.37 |
| 1981 | 210.6 | 60.1 | 151.9 | 422.6 | 115.2 | 6.6 | 300.8 | 1.31 |
| 1982 | 272.7 | 34.9 | 115.2 | 422.8 | 139.9 | 7.1 | 275.8 | 1.19 |
| 1983 | 292.7 | 42.6 | 139.9 | 475.2 | 176.6 | 5.9 | 292.7 | 1.25 |
| 1984 | 231.4 | 50.9 | 176.6 | 458.9 | 166.0 | 8.0 | 284.9 | 1.21 |
| 1985 | 229.2 | 59.7 | 166.0 | 454.9 | 167.1 | 6.6 | 281.2 | 1.18 |
| 1986 | 237.6 | 52.5 | 167.1 | 457.2 | 146.6 | 8.5 | 302.1 | 1.26 |
| 1987 | 334.4 | 75.3 | 146.6 | 556.3 | 236.0 | 10.8 | 309.5 | 1.27 |
| 1988 | 274.6 | 64.3 | 236.0 | 574.9 | 235.2 | 17.8 | 321.9 | 1.31 |
| 1989 | 238.2 | 55.0 | 235.2 | 528.4 | 167.2 | 20.5 | 340.7 | 1.38 |
| 1990 | 305.9 | 72.1 | 167.2 | 545.2 | 198.3 | 32.8 | 314.1 | 1.26 |
| 1991 | 330.2 | 70.5 | 198.3 | 599.1 | 219.9 | 26.1 | 353.1 | 1.39 |
| 1992 | 268.5 | 58.2 | 219.9 | 546.6 | 173.8 | 30.0 | 342.8 | 1.34 |
| 1993 | 365.7 | 54.5 | 173.8 | 594.0 | 214.1 | 40.4 | 339.5 | 1.31 |
| 1994 | 369.0 | 55.2 | 214.1 | 638.3 | 244.7 | 63.1 | 330.4 | 1.26 |
| 1995 | 371.1 | 73.5 | 244.7 | 689.4 | 255.1 | 53.1 | 381.2 | 1.43 |
| 1996 | 330.1 | 56.9 | 255.1 | 642.1 | 212.0 | 46.9 | 383.2 | 1.42 |
| 1997 | 328.2 | 61.0 | 212.0 | 601.1 | 220.5 | 47.3 | 333.3 | 1.22 |
| 1998 | 373.8 | 54.2 | 220.5 | 648.6 | 201.4 | 59.6 | 387.6 | 1.40 |
| 1999 | 419.8 | 89.8 | 201.4 | 711.0 | 277.7 | 55.6 | 377.7 | 1.35 |
| 2000 | 439.7 | 78.0 | 277.7 | 795.4 | 310.5 | 42.8 | 442.2 | 1.57 |
| 2001 | 422.4 | 76.0 | 310.5 | 808.8 | 243.7 | 42.9 | 522.2 | 1.83 |
| 2002 | 415.9 | 112.7 | 243.7 | 772.2 | 263.7 | 45.4 | 463.1 | 1.61 |
| 2003 | 429.1 | 120.1 | 263.7 | 812.9 | 247.2 | 22.9 | 542.8 | 1.87 |
| 2004 | 433.6 | 125.7 | 247.2 | 806.4 | 293.6 | 22.0 | 490.9 | 1.67 |
| 2005 | 416.5 | 161.6 | 293.6 | 871.7 | 218.8 | 22.2 | 630.7 | 2.13 |
| 2006 | 458.5 | 181.5 | 218.8 | 858.8 | 202.5 | 28.1 | 628.2 | 2.10 |
| 2007 | 502.2 | 182.2 | 202.5 | 886.8 | 280.2 | 32.0 | 574.6 | 1.90 |
| 2008 | 424.9 | 173.8 | 280.2 | 878.9 | 235.2 | 35.0 | 608.6 | 2.00 |
| 2009 | 482.4 | 170.3 | 235.2 | 887.9 | 322.5 | 32.1 | 533.4 | 1.74 |
| 2010 | 459.0 | 188.0 | 322.5 | 969.5 | 263.1 | 34.2 | 672.1 | 2.17 |
| 2011 | 458.3 | 193.1 | 263.1 | 914.6 | 291.7 | 45.1 | 577.7 | 1.85 |
| 2012 | 497.9 | 215.6 | 291.7 | 1005.2 | 303.0 | 53.5 | 648.7 | 2.06 |

1/ Preliminary.
2/ After 2002, estimates from the Processing Stra wberry Advisory Board of California. Previous estimates from the American Frozen Food Institute. 3/ Stock data from USDA, National Agricultural Statistics Service, Cold Storage Summary. Source: USDA, Economic Research Service calculations.
the lower prices last year. Even with the higher ending stocks, both domestic and export movement rose last year from the year before. Total domestic disappearance increased 12 percent to 648.7 million pounds, with estimated annual per capita use up 11 percent to 2.1 pounds. Although showing year-to-year fluctuations, domestic frozen strawberry per capita use has remained relatively flat since 2002, the year when estimates on per capita fresh use began a consistent annual upward path.

Increased availability and lower prices helped promote exports of U.S. frozen strawberries, with total export volume up 19 percent to 53.5 million pounds in 2012 from the previous year valued at a record high $\$ 40.1$ million. The top five export markets for U.S. frozen strawberries last year included Canada, Japan, Mexico, South Korea, and New Zealand. Together, these markets took 94 percent of total U.S. export volume, with gains to all but Japan. The domestic market remains the primary market for U.S. frozen strawberries, with exports only accounting for less than one-tenth of U.S. frozen pack each year.

## Continued Large Supplies To Soften 2012/13 Avocado Prices

The California Avocado Commission indicated the State's avocado crop will likely increase again in 2012/13, with volume up around 11 percent from last season. On the basis of this expected growth rate and NASS's 2011/12 production estimate, ERS projects production in California for this season at around 257,000 tons (or around 514 million pounds), relatively above average of the past 10 years (even with the huge crops in 2005/06 and 2009/10). Last season's "on year" crop rose by
as much as 53 percent from the "off year" crop in 2010/11, reaching 231,500 tons (equal to 463 million pounds)—also fairly above average in size.

Aided in part by moderately higher production, Mexico's Hass avocado exports to the United States are expected to continue to increase in 2012/13. Supported by good weather over the growing season, the mild winter, and continued implementation of phytosanitary pest control programs, USDA's Foreign Agricultural Service (FAS) forecast Mexico's 2012/13 production to increase to a record 1.30 million metric tons ( 2.87 billion pounds), up 3 percent from 2011/12. Favorable demand in both domestic and international markets continue to encourage avocado growers in Mexico to expand production area, with planted area up 6 percent in 2011/12 from the previous year and another 6 percent increase projected in 2012/13, reaching 150,000 hectares. Hence, in the absence of major weather problems, avocado production potential in Mexico is likely to grow in the years ahead as these new orchards come into production. Most of Mexico’s production is destined for the domestic market but favorable pricing in international markets and full-year access to the U.S. market have driven the growth in exports.

Meanwhile, Chile is faced yet with another year of reduced avocado production in 2012/13 (shipments to the United States run from July-June of the marketing year). In addition to the removal of old, unproductive orchards in recent years, the decline in Chile's production may be attributed to adverse drought conditions that have already destroyed some orchards and is affecting a larger production area in 2012/13 than the previous year, according to FAS.

Severe drought conditions also were behind lower production and exports in Chile in 2011/12, along with that year being an "off year" for some of Chile’s production areas. Still, U.S. Census Bureau data show U.S. avocado imports from Chile in 2011/12 (July-June) increased 38 percent from the previous year, totaling 165 million pounds. This increase was likely influenced by fairly strong U.S. prices during most of Chile's shipping period. The increase in Chilean imports partly coincided with California's absence in the market and which immediately followed a below-average production year for the California avocado industry. California supplies almost 90 percent of domestic production.

Chile's main export market for avocados is still the United States even though that country continues to lose share of this market and expand export opportunities beyond this market. Unlike last season, U.S. avocado imports from Chile in 2012/13 thus far, July-January, are at 30.7 million pounds, down 76 percent from the same period in 2011/12. In addition to the smaller crop in Chile, declining revenues from exports, California's above-average production, and continued large U.S. imports from Mexico were constraints to increased exports of Chilean avocados to the U.S. market this season.

Hass avocado prices in the United States have fallen below year-ago levels so far in 2012/13 due to large supplies. Free-on-board (f.o.b.) shipping-point prices for Mexican avocados crossing through Texas averaged \$16-\$18 per 2-layer carton (size 32s and 36s) in January and February, compared with being in the low-to-mid\$30’s the same time in a year ago. With an earlier finish to Chile’s shipments this season, Mexican avocado f.o.b. prices in early March rose slightly to around \$19$\$ 23$ but remained well below the $\$ 30-\$ 31$ ranged achieved the same time a year ago. F.o.b. prices for Chilean avocados were also dampened by these lower prices,
even though volumes received from Chile were lower during the 2012/13 season. F.o.b. shipping-point prices for Chilean Hass avocados entering through the Port of Los Angeles were in the $\$ 22-\$ 24$ per 2-layer carton (size 32s) range from November 2012 through January 2013, compared with \$32-\$36 for the same time a year ago. There were no prices reported after January.

Given the expected large harvest in California and forecast increased exports from Mexico, growing demand for avocados in the United States will continue to be met with abundant supplies in 2012/13. While harvest in California is still around the corner, increased supplies from Mexico are already resulting in slightly lower avocado prices for U.S. consumers. Averaging at or slightly over $\$ 1$ each from January through March, U.S. advertised retail prices for Hass avocados averaged unchanged from a year ago in January but were 5 cents and 12 cents lower in February and March, respectively, from a the same time a year ago, based on AMS data. Barring unfavorable weather, new crop supplies from California are expected to reach promotable volumes beginning in April, meaning there should be plenty of supplies to move throughout the spring and summer, maintaining favorable prices for U.S. consumers.

Domestic avocado demand continues to grow, with per capita use in 2011/12 reaching 5.0 pounds per person, up 25 percent from the previous year, already about double the estimate of a decade ago, and setting a new record high (fig. 5). The previous record high was 4.25 pounds per person in 2009/10. Though domestic production rose substantially in 2011/12, imports supplied 70 percent of the available supplies for domestic use, mostly from Mexico. Fueled by Mexico gaining year-round, full access to the U.S. avocado market, the United States became a consistent net importer of avocados during the past 6 years. Other suppliers include Chile, Peru, the Dominican Republic, and New Zealand. Imports from Peru increased significantly in 2011 (calendar year) from the previous year, encouraged not just by the strong market in the United States that year, but also by the relaxation of U.S. import requirements for Peruvian Hass avocados which now


Source: USDA, Economic Research Service.
can enter the U.S. market without cold treatment or fumigation. Peru's exports to the United States continued to improve in 2012, with shipment volume up 73 percent from the previous year at 35 million pounds, furthering competition in this market.

On the export side, the expected production gains in California should help promote U.S. avocado exports in 2012/13, especially as the domestic market more consistently receives year-round supplies from imports. Exports in 2011/12 bounced back up to 30.4 million pounds, from 16.0 million pounds in 2010/11, but still not surpassing the recent near-record high of 41 million pounds in 2009/10.
U.S. avocado exports in 2012 saw substantial gains to its top three export marketsCanada, Japan, and Mexico-along with strong gains to 25 other minor markets. Canada accounted for slightly over half of total export volume, while Japan and Mexico accounted for almost 40 percent.

## Melon Per Capita Use Down Slightly in 2012

In 2012, estimated domestic disappearance (also known as net domestic use, which is a proxy for consumption) of melons totaled 7.70 billion pounds, declining for a second consecutive year with a 1-percent drop from the prior year. With annual population continuing to grow at less than 1 percent last year, this disappearance estimate translates to 24.5 pounds per person, down from 25.1 pounds in 2011 and the lowest by far since the estimate of 24.9 pounds in 1993. While overall domestic production in 2012 remained nearly unchanged from the previous year, imports were down 6 percent, enough to drive down overall supplies. Both domestic disappearance and exports declined in 2012 partly as a result. Domestic disappearance includes both domestically produced melons and net imports. Lack of data, however, precludes this measure to account for the domestic production of miscellaneous melons such as Crenshaw (muskmelon).

Watermelons: Total U.S. watermelon supply (domestic production plus imports) and domestic disappearance (total supply minus exports) rose above the previous 5year average in 2012 but were slightly short of the record highs in 2010 (table 14). While the average watermelon yield per acre in 2012 remained relatively unchanged from the previous year, greater acreage boosted domestic production up by 5 percent to 3.9 billion pounds. As with production, imports rose at the same pace, reaching 1.1 billion pounds. Imports from Mexico, which account for nearly 90 percent of total watermelon imports in the United States, rose 3 percent in 2012 from the previous year and though smaller in scale, shipments from Guatemala, Honduras, and the Dominican Republic increased more significantly, all contributing to the overall boost in U.S. supplies. U.S. watermelon exports continued strong in 2012 but, at 343.7 million pounds, were relatively flat from the previous year, increasing availability in the domestic market. Total domestic disappearance rose by 5 percent to 4.65 billion pounds and per capita use by 4 percent to 14.8 pounds, down slightly from the previous 5-year average.

Despite the growth in total U.S. watermelon imports in 2012, seedless watermelon imports fell to a 4-year low at 798.5 million pounds, losing market share from 80 percent of total imports in 2011 to 73 percent last year. Seedless watermelon import volumes were down from Mexico and from smaller scale sources-Costa Rica, Nicaragua, and Canada. USDA, AMS data show this year's imported

|  | Supply |  |  | Utilization |  |  | Trade shares of: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{gathered} \text { Production } \\ 1 / \\ \hline \end{gathered}$ | Imports $21$ | Total | $\begin{aligned} & \text { Exports } \\ & 2 / \\ & \hline \end{aligned}$ | Domestic | Per capita use | Use imported | Supply exported |
|  |  | -- | illion pou |  | -------- | Pounds | -------- P | t -------- |
| 1970 | 2,737.3 | 119.1 | 2,856.4 | 91.2 | 2,765.2 | 13.5 | 4.3 | 3.2 |
| 1971 | 2,709.4 | 113.2 | 2,822.6 | 114.7 | 2,707.9 | 13.0 | 4.2 | 4.1 |
| 1972 | 2,528.0 | 159.1 | 2,687.1 | 103.0 | 2,584.1 | 12.3 | 6.2 | 3.8 |
| 1973 | 2,617.0 | 168.5 | 2,785.5 | 86.3 | 2,699.2 | 12.7 | 6.2 | 3.1 |
| 1974 | 2,346.6 | 166.5 | 2,513.1 | 92.9 | 2,420.2 | 11.3 | 6.9 | 3.7 |
| 1975 | 2,439.5 | 145.6 | 2,585.1 | 114.7 | 2,470.4 | 11.4 | 5.9 | 4.4 |
| 1976 | 2,645.9 | 191.5 | 2,837.4 | 84.3 | 2,753.1 | 12.6 | 7.0 | 3.0 |
| 1977 | 2,688.5 | 175.3 | 2,863.8 | 84.7 | 2,779.1 | 12.6 | 6.3 | 3.0 |
| 1978 | 2,527.0 | 199.6 | 2,726.6 | 79.9 | 2,646.7 | 11.9 | 7.5 | 2.9 |
| 1979 | 2,407.6 | 219.1 | 2,626.7 | 61.9 | 2,564.8 | 11.4 | 8.5 | 2.4 |
| 1980 | 2,271.6 | 205.7 | 2,477.3 | 51.9 | 2,425.4 | 10.7 | 8.5 | 2.1 |
| 1981 | 2,612.8 | 125.7 | 2,738.5 | 58.8 | 2,679.7 | 11.7 | 4.7 | 2.1 |
| 1982 | 2,733.9 | 237.4 | 2,971.3 | 73.9 | 2,897.4 | 12.5 | 8.2 | 2.5 |
| 1983 | 2,534.0 | 186.2 | 2,720.2 | 69.5 | 2,650.7 | 11.3 | 7.0 | 2.6 |
| 1984 | 3,190.5 | 283.4 | 3,473.9 | 65.3 | 3,408.6 | 14.4 | 8.3 | 1.9 |
| 1985 | 3,043.8 | 220.0 | 3,263.8 | 44.5 | 3,219.3 | 13.5 | 6.8 | 1.4 |
| 1986 | 2,929.6 | 197.4 | 3,127.0 | 58.2 | 3,068.8 | 12.8 | 6.4 | 1.9 |
| 1987 | 2,893.1 | 307.6 | 3,200.7 | 48.1 | 3,152.6 | 13.0 | 9.8 | 1.5 |
| 1988 | 3,115.5 | 262.4 | 3,377.9 | 59.0 | 3,318.9 | 13.6 | 7.9 | 1.7 |
| 1989 | 3,094.9 | 359.9 | 3,454.8 | 85.2 | 3,369.6 | 13.6 | 10.7 | 2.5 |
| 1990 | 3,187.1 | 228.6 | 3,415.7 | 94.4 | 3,321.3 | 13.3 | 6.9 | 2.8 |
| 1991 | 3,097.4 | 230.9 | 3,328.3 | 101.8 | 3,226.5 | 12.7 | 7.2 | 3.1 |
| 1992 | 3,778.3 | 211.4 | 3,989.7 | 212.1 | 3,777.6 | 14.7 | 5.6 | 5.3 |
| 1993 | 3,691.7 | 216.2 | 3,907.9 | 215.4 | 3,692.5 | 14.2 | 5.9 | 5.5 |
| 1994 | 3,923.2 | 271.2 | 4,194.4 | 242.4 | 3,952.0 | 15.0 | 6.9 | 5.8 |
| 1995 | 3,942.6 | 336.4 | 4,279.0 | 239.2 | 4,039.8 | 15.2 | 8.3 | 5.6 |
| 1996 | 4,272.4 | 455.3 | 4,727.7 | 255.3 | 4,472.4 | 16.6 | 10.2 | 5.4 |
| 1997 | 3,992.3 | 504.2 | 4,496.5 | 268.9 | 4,227.6 | 15.5 | 11.9 | 6.0 |
| 1998 | 3,720.5 | 484.2 | 4,204.7 | 244.8 | 3,959.9 | 14.3 | 12.2 | 5.8 |
| 1999 | 4,058.8 | 481.6 | 4,540.4 | 292.2 | 4,248.2 | 15.2 | 11.3 | 6.4 |
| 2000 | 3,749.4 | 446.0 | 4,195.4 | 293.3 | 3,902.1 | 13.8 | 11.4 | 7.0 |
| 2001 | 4,047.8 | 483.5 | 4,531.3 | 249.4 | 4,281.9 | 15.0 | 11.3 | 5.5 |
| 2002 | 3,958.5 | 451.3 | 4,409.8 | 364.5 | 4,045.4 | 14.0 | 11.2 | 8.3 |
| 2003 | 3,832.7 | 489.2 | 4,321.9 | 383.7 | 3,938.3 | 13.5 | 12.4 | 8.9 |
| 2004 | 3,688.0 | 546.9 | 4,234.9 | 424.0 | 3,810.9 | 13.0 | 14.4 | 10.0 |
| 2005 | 3,702.3 | 659.8 | 4,362.1 | 349.9 | 4,012.2 | 13.5 | 16.4 | 8.0 |
| 2006 | 3,986.5 | 830.5 | 4,817.0 | 297.4 | 4,519.6 | 15.1 | 18.4 | 6.2 |
| 2007 | 3,734.9 | 902.7 | 4,637.6 | 286.0 | 4,351.6 | 14.4 | 20.7 | 6.2 |
| 2008 | 4,000.3 | 1,057.1 | 5,057.4 | 307.1 | 4,750.3 | 15.6 | 22.3 | 6.1 |
| 2009 r | 3,891.1 | 1,002.6 | 4,893.7 | 307.9 | 4,585.8 | 14.9 | 21.9 | 6.3 |
| 2010 | 4,173.6 | 988.1 | 5,161.7 | 296.1 | 4,865.6 | 15.7 | 20.3 | 5.7 |
| 2011 | 3,721.5 | 1,044.3 | 4,765.8 | 343.3 | 4,422.5 | 14.2 | 23.6 | 7.2 |
| 2012 3/ | 3,903.6 | 1,092.6 | 4,996.2 | 343.7 | 4,652.6 | 14.8 | 23.5 | 6.9 |

$r=$ revised. 1/Source: USDA, National Agricultural Statistics Service. Production data were estimated by ERS for 1982-91 based on
available State data adjusted to the national level. Includes all uses. 3/ Source: U.S. Dept. of Commerce, U.S. Census Bureau.
3/Preliminary.
Source: USDA, Economic Research Service calculations
seedless volume from Mexico and Nicaragua through early March appear to be bouncing back up, likely helping to recoup lost share of the market should import gains continue through most of 2013. On the export end, volumes sent to Canada, the United States' largest export market for watermelons rose 1 percent in 2012 from the prior year and accounted for almost all U.S. watermelons exports. Of the remaining 21 export markets for U.S. watermelons in 2012, export volumes showed significant gains to 6 of these markets, including such countries as China, Panama, the United Arab Emirates, and Hong Kong. Meanwhile, export declines were reported to Mexico, Japan, Bahamas, and Bermuda-the next four largest export markets, accounting for about 1 percent of total U.S. export volume.

Cantaloupe: Domestic disappearance of cantaloupe in 2012 declined 12 percent from the previous year to 2.4 billion pounds (table 15). With the slight growth in population, per capita use was estimated down 13 percent to 7.6 pounds-a 24 -year low. In 1983, per capita use was estimated at 6.5 pounds. From then on, 1984 was the only year when annual per capita use fell below 8 pounds but that year's level still slightly exceeded the 2012 estimate.

More cantaloupe-producing States reported either unchanged to slightly higher average yields per acre in 2012 than those reporting lower yields, for an overall average of 265 pounds per acre, relatively steady from the average yield in 2011. However, overall planted and harvested acreage declined around 2-3 percent from the previous year, driving down domestic production to a total 1.70 billion pounds, 10 percent short of the previous year and the lowest since 1984 ( 1.65 billion pounds). In addition to significant acreage reductions experienced in Colorado, Arizona, and Indiana, declines were slight to moderate in South Carolina and California. Production was down in seven of the nine States included in NASS's annual survey enumeration for cantaloupe, including top-producing States California and Arizona. Those two States represented 85 percent of the national volume.

As domestic production fell, lower imports placed additional downward pressure on U.S. supplies. Import volume declined by as much as 18 percent in 2012 from the year before to 842 million, the lowest since the 1996 level of 740.8 million pounds (from 1997-2011, imports averaged 1.01 million pounds). Import volume declined from nearly all sources, including top suppliers to the United States-Guatemala and Honduras. Providing slightly over half of total U.S. imports, import volume

|  | Supply |  |  | Utilization |  |  | Trade shares of: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{gathered} \text { Production } \\ 1 / \\ \hline \end{gathered}$ | Imports $21$ | Total | $\begin{aligned} & \text { Exports } \\ & 2 / \\ & \hline \end{aligned}$ | Domestic | Per capita use | Use imported | Supply exported |
|  |  |  | ion poun |  |  | Pounds | ------- P | t------- |
| 1970 | 1,328.2 | 148.8 | 1,477.0 | 39.3 | 1,437.7 | 7.0 | 10.3 | 2.7 |
| 1971 | 1,238.2 | 180.8 | 1,419.0 | 39.5 | 1,379.5 | 6.6 | 13.1 | 2.8 |
| 1972 | 1,304.5 | 155.2 | 1,459.7 | 38.3 | 1,421.4 | 6.8 | 10.9 | 2.6 |
| 1973 | 1,130.2 | 157.5 | 1,287.7 | 41.8 | 1,245.9 | 5.9 | 12.6 | 3.2 |
| 1974 | 972.0 | 168.2 | 1,140.2 | 41.1 | 1,099.1 | 5.1 | 15.3 | 3.6 |
| 1975 | 985.8 | 138.9 | 1,124.7 | 33.5 | 1,091.2 | 5.1 | 12.7 | 3.0 |
| 1976 | 1,014.0 | 141.0 | 1,155.0 | 54.5 | 1,100.5 | 5.1 | 12.8 | 4.7 |
| 1976 | 1,089.9 | 182.8 | 1,272.7 | 57.6 | 1,215.1 | 5.5 | 15.0 | 4.5 |
| 1977 | 1,331.8 | 195.5 | 1,527.3 | 62.0 | 1,465.3 | 6.6 | 13.3 | 4.1 |
| 1979 | 1,242.1 | 194.6 | 1,436.7 | 59.6 | 1,377.1 | 6.1 | 14.1 | 4.1 |
| 1980 | 1,224.2 | 169.9 | 1,394.1 | 62.7 | 1,331.4 | 5.9 | 12.8 | 4.5 |
| 1981 | 1,334.6 | 138.0 | 1,472.6 | 65.5 | 1,407.2 | 6.1 | 9.8 | 4.4 |
| 1982 | 1,682.4 | 182.5 | 1,864.9 | 83.7 | 1,781.2 | 7.7 | 10.2 | 4.5 |
| 1983 | 1,453.7 | 166.1 | 1,619.8 | 87.8 | 1,532.0 | 6.5 | 10.8 | 5.4 |
| 1984 | 1,651.6 | 246.7 | 1,898.3 | 86.5 | 1,811.8 | 7.7 | 13.6 | 4.6 |
| 1985 | 1,874.3 | 246.0 | 2,120.3 | 100.4 | 2,020.0 | 8.5 | 12.2 | 4.7 |
| 1986 | 2,056.2 | 319.9 | 2,376.1 | 105.8 | 2,270.3 | 9.4 | 14.1 | 4.5 |
| 1987 | 2,027.3 | 300.8 | 2,328.1 | 107.1 | 2,221.0 | 9.2 | 13.5 | 4.6 |
| 1988 | 1,691.6 | 327.0 | 2,018.6 | 93.2 | 1,925.4 | 7.9 | 17.0 | 4.6 |
| 1989 | 2,171.4 | 476.2 | 2,647.6 | 84.1 | 2,563.5 | 10.4 | 18.6 | 3.2 |
| 1990 | 1,856.7 | 530.3 | 2,387.0 | 78.8 | 2,308.1 | 9.2 | 23.0 | 3.3 |
| 1991 | 1,664.0 | 602.5 | 2,266.5 | 75.7 | 2,190.8 | 8.6 | 27.5 | 3.3 |
| 1992 | 1,811.1 | 481.9 | 2,293.0 | 115.9 | 2,177.1 | 8.5 | 22.1 | 5.1 |
| 1993 | 1,898.7 | 458.1 | 2,356.8 | 116.2 | 2,240.7 | 8.6 | 20.4 | 4.9 |
| 1994 | 1,795.7 | 523.9 | 2,319.6 | 112.7 | 2,206.9 | 8.4 | 23.7 | 4.9 |
| 1995 | 1,896.2 | 613.1 | 2,509.3 | 118.1 | 2,391.2 | 9.0 | 25.6 | 4.7 |
| 1996 | 2,157.2 | 740.8 | 2,898.0 | 126.8 | 2,771.2 | 10.3 | 26.7 | 4.4 |
| 1997 | 2,084.0 | 921.6 | 3,005.6 | 134.4 | 2,871.2 | 10.5 | 32.1 | 4.5 |
| 1998 | 2,144.0 | 938.6 | 3,082.6 | 144.0 | 2,938.6 | 10.6 | 31.9 | 4.7 |
| 1999 | 2,223.0 | 1,108.1 | 3,331.1 | 153.9 | 3,177.2 | 11.4 | 34.9 | 4.6 |
| 2000 | 2,177.4 | 1,119.2 | 3,296.6 | 155.5 | 3,141.0 | 11.1 | 35.6 | 4.7 |
| 2001 | 2,261.3 | 1,070.1 | 3,331.4 | 146.0 | 3,185.4 | 11.2 | 33.6 | 4.4 |
| 2002 | 2,244.3 | 1,108.6 | 3,352.9 | 156.1 | 3,196.8 | 11.1 | 34.7 | 4.7 |
| 2003 | 2,206.9 | 1,079.2 | 3,286.1 | 147.3 | 3,138.8 | 10.8 | 34.4 | 4.5 |
| 2004 | 2,129.8 | 910.8 | 3,040.6 | 160.7 | 2,879.9 | 9.8 | 31.6 | 5.3 |
| 2005 | 2,046.5 | 952.0 | 2,998.5 | 162.2 | 2,836.3 | 9.6 | 33.6 | 5.4 |
| 2006 | 1,949.8 | 962.8 | 2,912.6 | 146.4 | 2,766.1 | 9.3 | 34.8 | 5.0 |
| 2007 | 2,042.6 | 1,008.2 | 3,050.8 | 157.9 | 2,893.0 | 9.6 | 34.9 | 5.2 |
| 2008 | 1,929.4 | 931.0 | 2,860.4 | 157.7 | 2,702.7 | 8.9 | 34.4 | 5.5 |
| 2009 r | 1,927.9 | 1,045.0 | 2,972.9 | 169.9 | 2,803.0 | 9.1 | 37.3 | 5.7 |
| 2010 | 1,883.8 | 949.2 | 2,833.0 | 186.1 | 2,646.9 | 8.5 | 35.9 | 6.6 |
| 2011 | 1,887.0 | 1,033.1 | 2,920.1 | 202.0 | 2,718.1 | 8.7 | 38.0 | 6.9 |
| 2012 3/ | 1,695.2 | 842.0 | 2,537.2 | 150.1 | 2,387.1 | 7.6 | 35.3 | 5.9 |

$r=$ revised. cwt-hundredweight. 1/ Source: USDA, National Agricultural Statistics Service. Production data were estimated by ERS for 1982-91 based on available State data adjusted to the national level. Includes all uses. 2/Source: U.S. Dept. of Commerce, U.S. Census Bureau. Exports for 1978-89 adjusted using Canadian import data. 3/ Preliminary.
Source: USDA, Economic Research Service calculations.
from Guatemala was down 7 percent yet were matched by even greater declines from Honduras, Costa Rica, Mexico, and Canada. Valued at $\$ 40.2$ million, exports also declined in 2012 from the previous year, totaling 150.1 million pounds, about one-fourth less of the record-high volume shipped to export markets in 2011. Lower overall exports reflected reduced shipments to Canada and Mexico where nearly all of the volume went. Gains were reported to relatively minor markets beyond North America, including Japan, Panama, and Chile.

Honeydew: Higher overall yields for honeydew melons only partially offset a decline in acreage, consequently resulting in a 3-percent smaller crop. The smaller domestic crop was accompanied by relatively flat imports and a slight boost to exports, driving down domestic disappearance by 2 percent in 2012 from the previous year. This has corresponded to a 2-percent decline in honeydew per capita use in the United States last year, more consistent with the general downward trend depicted since a record-high estimate of 2.5 pounds in 1989 (table 16). As domestic production has declined in general over the years, imports (mostly from Mexico) have gradually shown increasing presence in the U.S. markets. Exports, meanwhile, have held fairly steady, taking away part of the overall growth in supplies available for domestic use.

| Year | Supply |  |  | Utilization |  |  | Trade shares of: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Production } \\ 1 / \end{gathered}$ | Imports <br> $2 /$ | Total | $\begin{aligned} & \text { Exports } \\ & 21 \\ & \hline \end{aligned}$ | Domestic | Per capita use | Use imported | Supply exported |
|  |  | ----- | n poun |  | ------- | Pounds |  |  |
| 1970 | 193.1 | 18.9 | 212.0 | 26.2 | 185.8 | 0.9 | 10.2 | 12.4 |
| 1971 | 203.9 | 14.9 | 218.8 | 26.3 | 192.5 | 0.9 | 7.7 | 12.0 |
| 1972 | 230.7 | 13.0 | 243.7 | 25.5 | 218.2 | 1.0 | 6.0 | 10.5 |
| 1973 | 245.3 | 17.6 | 262.9 | 27.9 | 235.0 | 1.1 | 7.5 | 10.6 |
| 1974 | 218.5 | 24.1 | 242.6 | 27.4 | 215.2 | 1.0 | 11.2 | 11.3 |
| 1975 | 239.5 | 12.0 | 251.5 | 22.3 | 229.2 | 1.1 | 5.2 | 8.9 |
| 1976 | 234.6 | 15.0 | 249.6 | 27.2 | 222.4 | 1.0 | 6.7 | 10.9 |
| 1977 | 259.1 | 18.1 | 277.2 | 28.8 | 248.4 | 1.1 | 7.3 | 10.4 |
| 1978 | 341.3 | 24.4 | 365.7 | 19.6 | 346.1 | 1.6 | 7.0 | 5.4 |
| 1979 | 347.7 | 28.7 | 376.4 | 19.3 | 357.1 | 1.6 | 8.0 | 5.1 |
| 1980 | 318.0 | 26.5 | 344.5 | 22.1 | 322.4 | 1.4 | 8.2 | 6.4 |
| 1981 | 341.9 | 29.0 | 370.9 | 17.2 | 353.7 | 1.5 | 8.2 | 4.6 |
| 1982 | 378.0 | 78.6 | 456.6 | 31.7 | 424.9 | 1.8 | 18.5 | 6.9 |
| 1983 | 391.8 | 39.9 | 431.7 | 17.8 | 413.9 | 1.8 | 9.6 | 4.1 |
| 1984 | 403.1 | 41.3 | 444.4 | 15.2 | 429.3 | 1.8 | 9.6 | 3.4 |
| 1985 | 475.8 | 42.7 | 518.5 | 20.0 | 498.5 | 2.1 | 8.6 | 3.9 |
| 1986 | 543.8 | 62.7 | 606.5 | 20.6 | 585.9 | 2.4 | 10.7 | 3.4 |
| 1987 | 481.1 | 77.8 | 558.9 | 27.6 | 531.3 | 2.2 | 14.6 | 4.9 |
| 1988 | 524.1 | 83.8 | 607.9 | 32.0 | 576.0 | 2.4 | 14.5 | 5.3 |
| 1989 | 513.1 | 134.3 | 647.4 | 30.6 | 616.8 | 2.5 | 21.8 | 4.7 |
| 1990 | 450.3 | 115.0 | 565.3 | 49.6 | 515.7 | 2.1 | 22.3 | 8.8 |
| 1991 | 373.7 | 160.2 | 533.9 | 53.3 | 480.5 | 1.9 | 33.3 | 10.0 |
| 1992 | 474.0 | 111.2 | 585.2 | 45.5 | 539.7 | 2.1 | 20.6 | 7.8 |
| 1993 | 379.2 | 118.4 | 497.6 | 46.0 | 451.6 | 1.7 | 26.2 | 9.2 |
| 1994 | 472.4 | 114.5 | 586.9 | 59.7 | 527.2 | 2.0 | 21.7 | 10.2 |
| 1995 | 433.2 | 123.2 | 556.4 | 51.4 | 505.0 | 1.9 | 24.4 | 9.2 |
| 1996 | 473.7 | 126.7 | 600.4 | 49.5 | 550.9 | 2.0 | 23.0 | 8.2 |
| 1997 | 482.8 | 162.8 | 645.6 | 39.8 | 605.8 | 2.2 | 26.9 | 6.2 |
| 1998 | 501.3 | 184.6 | 685.9 | 39.4 | 646.5 | 2.3 | 28.6 | 5.7 |
| 1999 | 516.0 | 214.3 | 730.3 | 46.0 | 684.3 | 2.5 | 31.3 | 6.3 |
| 2000 | 511.6 | 174.1 | 685.7 | 46.8 | 638.9 | 2.3 | 27.3 | 6.8 |
| 2001 | 472.0 | 139.9 | 611.9 | 48.6 | 563.2 | 2.0 | 24.8 | 8.0 |
| 2002 | 506.5 | 171.5 | 678.0 | 47.3 | 630.6 | 2.2 | 27.2 | 7.0 |
| 2003 | 507.5 | 163.9 | 671.4 | 39.4 | 632.1 | 2.2 | 25.9 | 5.9 |
| 2004 | 478.1 | 165.6 | 643.7 | 42.2 | 601.5 | 2.0 | 27.5 | 6.6 |
| 2005 | 424.3 | 175.7 | 600.0 | 45.6 | 554.4 | 1.9 | 31.7 | 7.6 |
| 2006 | 422.1 | 187.3 | 609.4 | 46.2 | 563.2 | 1.9 | 33.3 | 7.6 |
| 2007 | 414.4 | 180.8 | 595.2 | 42.3 | 552.9 | 1.8 | 32.7 | 7.1 |
| 2008 | 369.0 | 191.5 | 560.5 | 46.3 | 514.2 | 1.7 | 37.2 | 8.3 |
| 2009 r | 358.7 | 171.8 | 530.5 | 40.2 | 490.4 | 1.6 | 35.0 | 7.6 |
| 2010 | 320.4 | 188.8 | 509.2 | 43.1 | 466.1 | 1.5 | 40.5 | 8.5 |
| 2011 | 353.8 | 181.4 | 535.2 | 42.6 | 492.6 | 1.6 | 36.8 | 8.0 |
| 2012 3/ | 344.2 | 182.1 | 526.3 | 43.3 | 483.0 | 1.5 | 37.7 | 8.2 |
| 1/ Source: USDA, National Agricultural Statistics Service. <br> 2/ Source: Bureau of the Census, Dept. of Commerce. Honeydews do not have a separate HS code. From 1970-79, trade was estimated as 50 percent of the category called "other melons." From 1980-91, shipment data were used to estimate the distribution of the "other melon" category (ranged from 42 to 59 percent. Exports were not adjusted due to data limitations. 4/Preliminary. <br> Source: USDA, Economic Research Service calculations. |  |  |  |  |  |  |  |  |

## Record Pistachio Harvest for 2012 Season

At the end of the 2012 harvest, California pistachios totaled 551 million pounds (inshell), the largest harvest to date. The utilized production for the season was 24 percent higher than 2011's harvest of 444 million pounds (in-shell). The harvest is the largest on record but the value of production is not record breaking, estimated at $\$ 1.11$ billion, up 27 percent from 2011 but 4 percent below 2010’s record crop value of $\$ 1.16$ billion. Average grower price per pound was $\$ 2.02$ per ton in 2012, representing a 2 percent per unit price increase over 2011. While grower prices were up, f.ob. prices for pistachios remained strong, with prices in 2012 receiving higher prices on average, with that trend continuing into early 2013 similar to walnuts over the same period (table 17).

Along with the increase in production, 2012 bearing acreage has increased to a record 177,738 acres in California, according to the Administrative Committee for Pistachios. This increase is accompanied by a 25 percent increase in new plantings totaling 13,710 acres. The continued expansion of new acres bodes well for continued large harvests for the next 5 years.

Demand remains strong for pistachios, with exports reaching just under 138 million pounds in-shell for September 2012 through January 2013. The shipments of inshell are 20 percent above the same period last year, with shelled pistachio exports 70 percent larger than the previous period totaling 12.8 million pounds. Hong Kong is the largest market for U.S. in-shell pistachios for the season to date, with 61 million pounds, roughly 44 percent of total in-shell pistachio exports for 2012/13. The exports to Hong Kong are up almost 60 percent from 2011/12 shipments through January. The Netherlands received 10.9 million pounds of in-shell pistachios, more than double the same time last year. Belgium rounds out the top three markets for U.S. pistachios at 9.9 million in-shell pounds for September

| Month | Almonds <br> (Peerless) |  |  |  |  |  | Pecans(Various varieties) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Dollars per pound |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 1.30-1.50 | 1.08-1.76 | 1.10-2.34 | 1.25-1.84 | 1.00-3.40 | 1.70-2.40 | 1.20-2.90 | 1.50-3.00 | 1.20-3.04 | 1.40-3.60 | 1.50-5.20 | 1.80-5.60 |
| February | 1.30-1.40 | 1.10-1.50 | 1.20-1.30 | 1.50-1.80 | 1.25-1.87 | 1.70-2.06 | 1.30-1.80 | 2.10-2.60 | 1.90-2.00 | 1.40-3.60 | 2.50-4.00 | 2.00-3.75 |
| March 1/ | 1.30-1.40 | 1.10-1.30 | 1.20-1.40 | 1.50 | 1.70-2.10 | 1.70-2.06 | 1.40-1.80 | 2.10 | 1.90-2.00 | 2.00-3.20 | 3.40-4.00 | 2.50-3.75 |
| April | 1.30-1.40 | 1.20-1.30 | 1.30-1.40 | 1.50 | 1.70-1.84 |  | 1.40-1.80 | 2.10 | 1.90-2.00 | 3.10 | 3.40-4.00 |  |
| May | 1.30 | 1.20-1.30 | 1.30-1.40 | 1.50 | 1.60-1.87 |  | 1.40-1.80 | 2.10 | 1.90-2.20 | 2.00-3.10 | 3.80-4.00 |  |
| June | 1.30 | 1.20-1.30 | 1.40 | 1.50 | 1.60-1.87 |  | 1.40-1.80 | 2.10 | 2.10-2.20 | 2.00-3.10 | 3.60-4.00 |  |
| July | 1.30 | 1.20-1.30 | 1.40 | 1.50 | 1.60-1.87 |  | 1.40-1.80 | 2.10 | 2.10-2.20 | 2.00-3.10 | 3.60 |  |
| August | 1.30 | 1.20-1.30 | 1.40 | 1.50 | 1.60-1.87 |  | 1.40-1.80 | 2.10 | 2.10-2.20 | 2.00-3.10 | 3.60 |  |
| September | 1.30 | 1.20-1.30 | 1.40 | 1.80 | 1.60-1.87 |  | 2.80 | 2.10 | 2.10-2.20 | 2.00-4.30 | -- |  |
| October | 1.24-1.94 | 0.95-2.40 | 1.40-1.80 | 1.27-3.40 | 1.35-4.20 |  | 2.20-3.00 | 1.90-2.72 | 2.10-3.60 | 2.90-5.20 | 2.50-3.60 |  |
| November | 0.93-1.76 | 0.95-2.40 | 1.25-1.80 | 1.27-3.40 | 1.35-4.20 |  | 1.61-3.05 | 1.44-2.72 | 2.50-3.60 | 1.60-5.20 | 1.75-4.50 |  |
| December | 1.02-1.72 | 0.95-2.34 | 1.25-1.80 | 1.27-3.40 | 1.35-4.20 |  | 1.60-3.05 | 1.20-3.04 | 2.50-3.60 | 2.00-5.20 | 1.75-4.50 |  |
|  | Walnuts <br> (Mostly Hartley) |  |  |  |  |  | Pistachios(Various varieties) |  |  |  |  |  |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|  | -------------Dollars per pound------------ |  |  |  |  |  |  |  |  |  |  |  |
| January | 1.40-2.42 | 1.50-2.60 | 1.50-2.00 | 1.58-2.54 | 2.20-3.00 | 2.10-3.00 | 2.88-3.44 | 2.44-4.40 | 3.89-4.20 | 4.20-5.83 | 4.80-5.00 | 4.80-6.78 |
| February | 1.90-2.38 | 1.50-2.25 | 1.70-2.00 | 1.70-2.25 | 2.20-2.63 | 2.40-2.92 | 3.20-3.44 | 3.00-4.40 | 3.89-4.20 | 4.20 | 5.00 | 5.00-6.40 |
| March 1/ | 2.20-2.38 | 1.50-2.25 | 1.80-2.00 | 1.70-2.71 | 2.50-2.63 | 2.40-2.92 | 3.20-3.44 | 4.00-4.40 | 3.89-4.20 | -- | 5.00 | 5.00-6.40 |
| April | 2.20-2.38 | 1.50-2.25 | 1.80-2.00 | 1.70-2.71 | 2.50-2.63 |  | 3.20-3.44 | 4.00-4.20 | 4.20 | 5.00 | 5.00 |  |
| May | 2.20-2.38 | 1.50-2.00 | 1.80-2.05 | 2.50-2.70 | 2.50-2.63 |  | 3.20-3.44 | 4.00-4.20 | 4.20 | 5.00 | 5.00 |  |
| June | 2.30-2.33 | 1.60-2.00 | 2.00-2.05 | 2.50-2.70 | 2.50 |  | 3.20-3.44 | 4.00-4.20 | 4.20 | -- | 5.00 |  |
| July | 2.30-2.33 | 1.60-2.00 | 2.00-2.05 | 2.50-2.70 | 2.50 |  | 3.20-3.44 | 4.00-4.20 | 4.20 | -- | 5.00 |  |
| August | 2.60-2.50 | 1.60-2.00 | 2.00-2.05 | 2.50-2.70 | 2.00-2.50 |  | 3.20-3.44 | 3.89-4.20 | 4.20 | 5.00 | 5.00 |  |
| September | 2.60 | 1.60-2.00 | 2.00-2.05 | 2.20-2.70 | 2.00-2.60 |  | 3.20-3.33 | 3.89-4.20 | 4.20 | 5.00-5.38 | 5.00 |  |
| October | 1.64-4.50 | 1.32-2.33 | 1.60-2.20 | 1.80-2.71 | 2.00-2.92 |  | 2.44-4.40 | 1.76-4.20 | 4.20-5.00 | 2.64-5.38 | 3.00-5.00 |  |
| November | 1.52-2.60 | 1.32-2.33 | 1.58-2.19 | 1.80-5.94 | 2.00-2.92 |  | 2.24-4.40 | 1.76-4.20 | 4.20-4.44 | 2.40-6.64 | 2.68-6.78 |  |
| December | 1.52-2.69 | 0.99-2.33 | 1.58-2.60 | 1.90-5.94 | 2.00-3.52 |  | 2.24-5.67 | 1.76-4.20 | 3.89-5.00 | 4.80-6.64 | 2.68-6.78 |  |

through January. China has received 40 percent of shelled pistachio exports this season with just over 5 million pounds, season to date, followed by Hong Kong with 1.5 million pounds and Australia with 917,535 pounds.

## Fruit, Melon, and Tree Nuts Crop Value Up in 2012

Based on the NASS report, Crop Value 2012 Summary, released on February 15, 2013, the preliminary estimate for the value of U.S. fruit, melon, and tree nut production rounds up to $\$ 28.0$ billion in 2012, up 7 percent from the previous year (table 18). Even though official NASS 2012 crop value estimates were not available for avocados, bananas, figs, guavas, kiwifruit, papayas, and walnuts, assumed crop values for these seven commodities were included in the aggregated total for fruit and nuts as explained in footnote 4 of table 18.

Excluding the above-mentioned seven commodities for which crop value estimates in 2012 were not available, grapes, almonds, apples, strawberries, and oranges ranked as the top five U.S. fruit and tree nut crops (including melons) in terms of value of production. Crop values for these 5 leading crops ranged from \$2.0-\$5.0 billion in 2012 or 64 percent of the total. Pistachios, sweet cherries, cultivated blueberries, peaches, and watermelons round out the remaining top 10 crops, accounting for another 15 percent of the total.

Estimated at $\$ 3.44$ billion, the U.S. citrus crop value in 2012 was 6 percent higher than in 2011. All citrus crops generated higher production values in 2012, with tangelos (entirely produced in Florida) having the largest gain of 44 percent over the previous year and grapefruit the least, increasing only by less than 1 percent. Being the largest component in the U.S. citrus crop value (accounting for 77 percent of citrus total in 2012), the value of U.S. orange production increased 5 percent in 2012 from the previous year. While total bearing area for oranges declined slightly in 2012 to 619,200 acres, a 2-percent increase in average yields boosted production volume and, together with higher fresh-market orange prices, drove up overall crop value. Orange crop values were higher than year-ago levels in California and Texas as higher grower prices more than offset declines in production. For Florida oranges, it was the reverse. Similarly, crop value increases in 2012 for other U.S. citrus crops-grapefruit, lemons, tangelos, and tangerines and mandarins-reflect higher grower prices resulting in part to reduced production (except for the tangelo crop size, which remained unchanged from the previous year).

Among noncitrus fruit crops, the largest increases in crop value in 2012 were for California olives and plums, pears, grapes, and nectarines. Grower price gains for these fruits more than offset smaller quantities produced to boost their respective crop values higher in 2012, except for olives, for which price gains were accompanied by higher production volume. Grapes ranked No. 1 among noncitrus fruit crops in terms of crop value and also topped the list for U.S. fruit and tree nut crop value. The value of U.S. grape production totaled $\$ 4.91$ billion in 2012, up 14 percent from the previous year. The 1-percent decline in U.S. grape production in 2012 was more than offset by strong prices both for fresh-market and processinguse grapes, boosting the overall crop value last year.

| Commodity | Crop value |  |  | Share of total value |  |  | Percent change 2011-12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |  |
|  | --------------1,000 dollars------------------ |  |  | ------------- Percent ------------- |  |  | Percent |
| Grapefruit | 291,424 | 283,441 | 285,181 | 1.3 | 1.1 | 1.1 | 0.6 |
| Lemons | 395,339 | 386,514 | 448,698 | 1.8 | 1.5 | 1.7 | 16.1 |
| Oranges | 1,997,188 | 2,230,412 | 2,343,760 | 9.0 | 8.9 | 8.8 | 5.1 |
| Tangelos (FL) | 6,761 | 9,930 | 14,299 | $1 /$ | $1 /$ | 1/ | 44.0 |
| Tangerines \& mandarins | 274,519 | 330,503 | 351,351 | 1.2 | 1.3 | 1.3 | 6.3 |
| Apples | 2,313,588 | 2,823,401 | 3,088,915 | 10.5 | 11.2 | 11.5 | 9.4 |
| Apricots | 47,876 | 41,056 | 40,879 | 0.2 | 0.2 | 0.2 | -0.4 |
| Avocados | 479,068 | 406,047 | -- | 2.2 | 1.6 | -- | -- |
| Bananas (HI) | 10,680 | 11,310 | -- | 1/ | $1 /$ | -- | -- |
| Blackberries (OR) | 33,291 | 42,783 | 44,520 | 0.2 | 0.2 | 0.2 | 4.1 |
| Cultivated blueberries | 593,407 | 807,576 | 781,808 | 2.7 | 3.2 | 2.9 | -3.2 |
| Wild blueberries (ME) | 50,600 | 72,690 | 69,075 | 0.2 | 0.3 | 0.3 | -5.0 |
| Boysenberries | 1,834 | 2,638 | 2,044 | 1/ | 1/ | $1 /$ | -22.5 |
| Sw eet cherries | 715,684 | 834,585 | 843,311 | 3.2 | 3.3 | 3.2 | 1.0 |
| Tart cherries | 40,741 | 69,072 | 50,520 | 0.2 | 0.3 | 0.2 | -26.9 |
| Cranberries | 299,123 | 345,561 | 385,506 | 1.4 | 1.4 | 1.4 | 11.6 |
| Dates (CA) | 36,830 | 43,956 | 41,674 | 0.2 | 0.2 | 0.2 | -5.2 |
| Figs (CA) | 22,185 | 20,336 | -- | 0.1 | 0.1 | -- | -- |
| Grapes | 3,634,915 | 4,293,607 | 4,911,335 | 16.5 | 17.1 | 18.3 | 14.4 |
| Guavas (HI) | 220 | 323 | -- | 1/ | 1/ | -- | -- |
| Kiw ifruit (CA) | 24,961 | 28,439 | -- | 0.1 | 0.1 | -- | -- |
| Nectarines | 129,075 | 130,973 | 144,906 | 0.6 | 0.5 | 0.5 | 10.6 |
| Olives (CA) | 136,796 | 52,168 | 130,038 | 0.6 | 0.2 | 0.5 | 149.3 |
| Papayas (H) | 11,123 | 9,722 | -- | 0.1 | 0.0 | -- | -- |
| Peaches | 618,566 | 588,330 | 631,223 | 2.8 | 2.3 | 2.4 | 7.3 |
| Pears | 386,955 | 366,552 | 437,113 | 1.8 | 1.5 | 1.6 | 19.2 |
| Plums (CA) | 78,422 | 64,320 | 79,940 | 0.4 | 0.3 | 0.3 | 24.3 |
| Dried prunes (CA) | 175,500 | 179,470 | 156,250 | 0.8 | 0.7 | 0.6 | -12.9 |
| Prunes and plums (4 States) 3/ | 4,915 | 4,767 | 6,552 | $1 /$ | $1 /$ | $1 /$ | $1 /$ |
| Black raspberries (OR) | 2,185 | 5,510 | 5,689 | 1/ | 1/ | 1/ | $1 /$ |
| Red raspberies | 56,426 | 50,736 | 44,515 | 0.3 | 0.2 | 0.2 | -12.3 |
| Raspberries (CA) | 200,288 | 223,200 | 239,820 | 0.9 | 0.9 | 0.9 | 7.4 |
| Straw berries | 2,262,353 | 2,394,724 | 2,405,478 | 10.3 | 9.5 | 9.0 | 0.4 |
| Melons |  |  |  |  |  |  |  |
| Cantaloupes | 319,176 | 350,208 | 325,337 | 1.4 | 1.4 | 1.2 | -7.1 |
| Honeydews | 55,007 | 77,443 | 69,826 | 0.2 | 0.3 | 0.3 | -9.8 |
| Watermelons | 499,800 | 518,787 | 520,799 | 2.3 | 2.1 | 1.9 | 0.4 |
| Tree nuts |  |  |  |  |  |  |  |
| Almonds | 2,903,380 | 4,007,860 | 4,347,200 | 13.2 | 16.0 | 16.2 | 8.5 |
| Hazelnuts | 67,480 | 89,705 | 63,420 | 0.3 | 0.4 | 0.2 | -29.3 |
| Macadamia nuts | 30,000 | 38,220 | 35,200 | 0.1 | 0.2 | 0.1 | -7.9 |
| Pecans | 674,828 | 655,889 | 476,781 | 3.1 | 2.6 | 1.8 | -27.3 |
| Pistachios | 1,158,840 | 879,120 | 1,113,020 | 5.3 | 3.5 | 4.2 | 26.6 |
| Walnuts | 1,028,160 | 1,336,900 | -- | 4.7 | 5.3 | -- | -- |
| Totals 4/ | 22,069,509 | 25,108,784 | 26,767,724 | 100.0 | 100.0 | 100.0 | 100.0 |

- Not available.

1/ Equal to or less than 0.05 percent. 2/ Estimates discontinued in 2009
3 / Idaho, Michigan, Oregon, and w ashington.
4/ Sum of all commodities listed on the table. In 2012, total includes estimated value of production for avocados, bananas, figs, guavas, kiw ifruit, papayas, and w alnuts. For figs, kiw ifruit, and w alnuts, used 2011 price to compute the 2012 value. The 2011 values for avocados, bananas, guavas, and papayas w ere carried forw ard.
Source: USDA, National Agricultural Statistics Service, Crop Values 2012 Summary and Noncitrus Fruit and Nuts 2012 Preliminary Summary
Apples, strawberries, sweet cherries, and cultivated blueberries round out the top five noncitrus fruit crops in 2012, and together with grapes, accounted for 83 percent of the value of noncitrus fruit production. Crop values for these leading crops rose in 2012, except for cultivated blueberries which received downward pressure from lower grower prices for processing use. Freeze-reduced apple crops, particularly in the eastern half of the United States, bolstered apple grower prices enough to offset the production decline, boosting crop value by 9 percent in 2012. Meanwhile, strawberries and sweet cherries experienced the reverse-a bigger crop more than offset the resulting decline in grower prices.

Total crop value for U.S. melons in 2012 fell 3 percent from the previous year to $\$ 916$ million. Although the watermelon crop value, which accounted for nearly 60 percent of total melon value, remained relatively steady from the previous year, declines of 7 to 10 percent for cantaloupes and honeydews were enough to push down the overall melon value in 2012. Except for watermelons, acreage planted
and harvested declined in 2012, forcing crop size to be reduced last year for cantaloupes and honeydews. While the production decline for cantaloupes more than offset the resulting higher average grower price in 2012, honeydew prices dropped along with production.

The overall tree nut crop value in 2012 is estimated at $\$ 7.40$ billion, up 6 percent from last year's final value of $\$ 7.01$ billion. This increase may be attributed to higher crop values for almonds and pistachios, with pistachio grower returns up more significantly than for almonds. Still, the 2012 almond crop, valued at $\$ 4.35$ billion at the farm level, continue to account for more than half of U.S. tree nut production. Though the quantity of almonds produced in California declined slightly in 2012 from the previous year, the resulting higher grower prices led to another record-breaking year for the almond industry in terms of crop value. Almond prices rose even though large carry-in inventories bumped up overall supplies during the 2012/13 marketing season from the previous season, reflective of continued strong demand in the industry. As with almonds, California pistachios also experienced strong demand in 2012/13, with grower prices up despite increased domestic production, bolstering overall crop value in 2012.

Crop values for hazelnuts and pecans fell nearly 30 percent each in 2012 and dropped 8 percent for macadamia nuts. The downward pressure on grower prices, partly resulting from increased crop size, influenced the decline in hazelnut and pecan crop values in 2012. Meanwhile, quantity produced in 2012 declined for macadamia nuts but corresponding higher prices were not sufficient to boost grower returns above the previous year.

## Fruit and Tree Nuts Trade Outlook

## U.S. Experiences Strong Exports Through January 2013

Exports of fresh fruit and tree nuts through January 2013 have increased for oranges, lemons, apples, grapes, strawberries, cherries, walnuts, pecans and pistachios compared to the same period last year (table 19). Fresh orange exports are up 11 percent season to date, but are expected to slow as the season continues and supplies decline seasonally.

Lemon exports are strong this season due to the forecasted larger crop from Arizona, a rebound after last season's freeze-induced crop losses. Grapefruit exports are down 3 percent to date due mainly to lighter supplies this season. Japan remains the main export market for U.S. grapefruit, followed by Canada and France. These leading markets generally prefer smaller sized grapefruits, which are more predominant in this season's U.S. harvest and thus, likely encouraging demand from these markets. While the volume of grapefruit exports are down 10 percent to Japan, exports are up significantly to Canada and have held fairly steady to France.

Early-season strawberry exports are up 26 percent as Florida, the major supplier of winter strawberries, had ample supplies. Accounting for most of this growth, export volume to Canada increased to 17.2 million pounds, roughly 98 percent of all U.S. strawberry exports in January 2013. Despite a slow start to the season, strawberry supplies from California are anticipated stronger this season provided favorable weather prevails, likely leading to continued larger export volumes in the coming months.
U.S. fresh apples continue to experience strong demand in the international market despite some regional shortages in domestic production. The size and quality of the apple crop in Washington State continues to encourage increased demand globally, including to top export markets for U.S. apples-Mexico and Canada-where production potential is expected to be down this season. Season-to-date exports to these two markets are up 50 percent and 27 percent, respectively, from the same time last season. Exports to both markets together make up almost 40 percent of total export volume to date.

Season-to-date U.S. fresh grape exports are up 3 percent, partly due to a larger fresh-market crop. Increased California raisin grapes diverted to fresh use contributed to the larger fresh-market crop as California's table grape crop (mostly for fresh use) remained unchanged from the previous season. Export volumes are lagging to Mexico but show positive growth to Canada and several markets in Central America and the Caribbean.

Pecan exports are up 28 percent from last season. Pecan production was strong for 2012/13 at 302.8 million pounds (in-shell), providing ample supplies for export. Hong Kong remains the top export market for in-shell pecans receiving 53 million pounds season to date, up 74 percent from last season. Vietnam received 13.8 million in-shell pounds through January, a slight decrease from last season. Canada and Mexico remain the largest markets for shelled pecan shipments.

| Commodity | Marketing season | Season to date (through January) |  | Year-to-date change |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 | 2013 |  |
|  |  | ---------- | unds ---------- | Percent |
| Fresh market: |  |  |  |  |
| Oranges | November-October | 296,783 | 328,151 | 10.6 |
| Grapefruit | September-August | 248,880 | 240,829 | -3.2 |
| Lemons | August-July | 91,598 | 102,721 | 12.1 |
| Apples | August-July | 923,507 | 1,010,986 | 9.5 |
| Grapes | May-April | 758,703 | 783,811 | 3.3 |
| Pears | July-June | 293,915 | 295,778 | 0.6 |
| Peaches (including nectarines) | January-December | 2,837 | 532 | -81.2 |
| Straw berries | January-December | 13,895 | 17,475 | 25.8 |
| Cherries | January-December | 147 | 389 | 164.6 |
|  |  | ------ 1,000 | lons 1/ ------- |  |
| Processed: |  |  |  |  |
| Orange juice, frozen concentrate | October-September | 9,065 | 13,746 | 51.6 |
| Orange juice, not-from-concentrate | October-September | 27,101 | 30,994 | 14.4 |
| Grapefruit juice | October-September | 3,908 | 3,362 | -14.0 |
| Apple juice and cider | August-July | 4,418 | 4,266 | -3.4 |
| Wine | January-December | 7,290 | 8,212 | 12.7 |
|  |  | ---------- | unds ---------- |  |
| Raisins | August-July | 160,336 | 146,630 | -8.5 |
| Canned pears | June-May | 13,270 | 14,749 | 11.1 |
| Canned peaches | June-May | 44,663 | 38,980 | -12.7 |
| Frozen straw berries | January-December | 2,921 | 3,743 | 28.1 |
|  |  | ---------- 1, | unds ---------- |  |
| Tree nuts: |  |  |  |  |
| Almonds (shelled basis) | August-July | 754,133 | 721,169 | -4.4 |
| Walnuts (shelled basis) | September-August | 174,742 | 195,105 | 11.7 |
| Pecans (shelled basis) | October-September | 36,667 | 46,804 | 27.6 |
| Pistachios (shelled basis) | September-August | 65,158 | 81,752 | 25.5 |

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

## 2012/13 Season Seeing Moderately Strong Imports

Most fresh fruit imports are up this season through January (table 20). Tangerine imports are up 5 percent due mainly to the nearly unchanged crop size and smaller sized fruit from Florida. California mandarins/tangerines are in good condition and are experiencing strong supply, so most of the growth in imports is aimed to offset the smaller crop in Florida. Lemon imports are down so far this season due to a larger domestic crop. Import demand returns to a more normal pace as Arizona's production recovers from last season's freeze-reduced crop.

Reduced domestic production and strong exports has led to very strong fresh apple imports so far this season, with a 31-percent increase over last year. Imports from Chile account for the largest volume so far this season through January, with 50.4 million pounds, up 50 percent from last season. Canada and New Zealand have also increased apple shipments to the United States.
U.S. fresh grape imports are up slightly over 1 percent thus far in 2012/13, mostly due to larger shipments from Mexico which made presence mostly during the first half of this season. Imports from Mexico rose 19 percent above last season and accounted for more than half of total import volume to date. Despite this fairly large growth from Mexico, lagging shipments from Chile, which dominate the U.S. fresh grape market during the winter, are slowing the overall import growth for fresh grapes this season thus far. Imports have also slowed from a few smaller supplying countries, including Peru.

The beginning of the banana marketing year has seen a good start with imports to the U.S. market up 5 percent. Guatemala has increased shipments by 11 percent this season, totaling 273.5 million pounds, providing over a third of total import
volume thus far. Ecuador has also increased shipments to the United States by 7 percent, while Costa Rica has reduced shipments by 6 percent. More recent shipment data from AMS, however, indicate banana import supplies are slowing down, with shipment volumes falling below year-earlier levels in February and into March.

Mango imports have seen a substantial increase, with a 40-percent growth in January 2013. Peru has increased shipments by almost double to 27.5 million pounds, representing 60 percent of all mango imports for January. Shipments from Ecuador have experienced a slight decline to the United States but Ecuador remains a top supplier of fresh mangoes to this market.
U.S. orange juice imports are rebounding (up 41 percent season to date) after last season's ban on carbendazim-contaminated imported FCOJ reduced total import volume to its lowest levels since 2003/04 at 223 million gallons sse. Slightly less than three-quarters of all imported orange juice in 2012/13 originated from Brazil, the largest supplier of orange juice to the United States. Imports from Brazil increased 50 percent from 2011/12 to 2012/13, as the import restriction has been eased. Mexico has also increased shipments by 29 percent compared to last season. The smaller domestic crop and strong domestic prices should continue to hold imports strong for the remainder of this season.

| Commodity | Marketing season | Season to date (through January) |  | Year-to-date change |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 | 2013 |  |
|  |  | ---------- 1 | ds ---------- | Percent |
| Fresh market: |  |  |  |  |
| Oranges | November-October | 18,364 | 18,263 | -0.5 |
| Tangerines (including clementines) | October-September | 159,505 | 167,444 | 5.0 |
| Lemons | August-July | 98,404 | 86,307 | -12.3 |
| Limes | January-December | 63,781 | 70,729 | 10.9 |
| Apples | August-July | 73,732 | 96,572 | 31.0 |
| Grapes | May-April | 596,691 | 604,357 | 1.3 |
| Pears | July-June | 29,817 | 31,277 | 4.9 |
| Peaches (including nectarines) | January-December | 23,876 | 22,337 | -6.4 |
| Bananas | January-December | 847,257 | 887,666 | 4.8 |
| Mangoes | January-December | 33,436 | 46,289 | 38.4 |
|  |  | ------ 1,000 | Ilons 1/ ------- |  |
| Processed: |  |  |  |  |
| Orange juice | October-September | 112,716 | 158,902 | 41.0 |
| Apple juice and cider | August-July | 212,658 | 251,506 | 18.3 |
| Wine | January-December | 26,205 | 23,314 | -11.0 |
|  |  | ---------- | ds ---------- |  |
| Canned pears | June-May | 32,458 | 36,310 | 11.9 |
| Canned peaches (including nectarines) | June-May | 86,874 | 112,532 | 29.5 |
| Canned pineapple | January-December | 58,753 | 73,993 | 25.9 |
| Frozen straw berries | January-December | 15,863 | 13,222 | -16.7 |
|  |  | ---------- 1 | nds ---------- |  |
| Tree nuts: |  |  |  |  |
| Brazil nuts (shelled basis) | January-December | 430 | 2,611 | 507.1 |
| Cashew s (shelled basis) | January-December | 16,787 | 19,773 | 17.8 |
| Pine nuts (shelled basis) | January-December | 19 | 64 | 231.4 |
| Pecans (shelled basis) | October-September | 39,735 | 38,931 | -2.0 |

[^2]Source: U.S. trade data provided by U.S. Department of Commerce, U.S. Census Bureau.

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## Approved by the World Agricultural Outlook Board.

## Organic Tree Nuts

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# Fruit and Tree Nuts Outlook: Commodity Highlight 

Organic agriculture continued to grow at a rapid pace in the United States through 2012, with 10-percent growth in 2011 (Organic Trade Association, 2012). U.S. organic food sales more than doubled in the 8-year period from 2004 to 2011, increasing from $\$ 11$ billion to $\$ 25$ billion (Osteen, et.al., 2012). In October 2012, USDA NASS released the 2011 Certified Organic Production Survey, an update to the initial 2008 Organic Production Survey, which was a follow up survey to the 2007 Census of Agriculture also conducted by NASS. Based on this most recent organic survey, California leads the nation in organic production, with $\$ 1.4$ billion in organic farm sales, roughly 40 percent of total gross value of sales of organically produced crop and livestock commodities in the United States in 2011 (NASS, 2012). As the organic sector continues to find ways to grow and expand, California is also leading the way in U.S. organic fruit and vegetable production, representing 61 percent of total U.S. organic fruit and vegetable gross value of sales.

## Organic tree nut overview

Organic fruit and tree nut sales (including berries) have increased 26 percent between 2008 and 2011, totaling $\$ 667$ million (fig. 1). During the same period, organic tree nut sales were valued at $\$ 47$ million, which is a mere 7 percent of total organic fruit and tree nut sales in the United States, but 52 percent higher than the category's 2008 total sales value of $\$ 30.9$ million. California fruit and tree nuts (including berries) account for 65 percent of total U.S. organic fruit and nut sales.

California is the largest producer of tree nuts in the United States, being the predominant supplier of almonds, walnuts and pistachios. In 2011, California’s organic tree nut sales totaled $\$ 40$ million, up 44 percent from 2008 and representing 85 percent of total U.S. organic tree nut sales. Growers in 20 other States reported production and sales of tree nut crops in 2011, although total sales were under $\$ 1$ million dollars in most of these States. Tree nut production has been expanding rapidly in the United States and abroad in response to strong export demand, especially for almonds, pistachios and walnuts. Organic production, while growing rapidly, still accounts for a small share of this acreage.

Total organic tree nut acreage increased 10 percent since 2008 to reach 17,478 acres in 2011, demonstrating a trend toward increased organic tree nut production over the years. It is fairly common for producers to establish tree nut orchards using conventional weed and disease management practices in order to increase tree survival and growth and then transition the orchards to organic production practices around their third year (Brodt et al., 2009).

## Organic Almonds

The value of organic almond production accounts for the largest share of organic tree nut production, representing 45 percent of 2011 organic tree nut sales in the United States (fig. 2), followed by walnuts ( 21 percent) and pistachios ( 20 percent). From 2008 to 2011, the value of organic almond farm sales rose 69 percent to $\$ 21$ million. This is similar to the change in conventional almond production, the value of which also has increased by 70 percent over the same period (fig. 3).

In terms of quantity, 8.2 million pounds of organic almonds were harvested in 2011, up 25 percent from 2008, but still a small volume compared to the over 2 billion pounds of conventional almonds produced for the same year. Even with this growth, organic almond production still remains very small relative to conventionally produced almonds, with organic crop size and gross value of farm sales each reaching only half a percent of those for total conventional almonds in 2011.

Overall, organic almonds represent 43 percent of total organic tree nuts harvested in 2011 (fig. 4). Almond acreage accounts for 30 percent of total planted organic tree nut acreage. Acreage of organic almonds has increased 5 percent from 4,937 acres in 2008 to 5,196 in 2011.

## Organic Walnuts

U.S. organically grown walnuts have lost some ground in farm sales value over the 4 -year period from 2008-11, declining 11 percent from $\$ 11.2$ million (nearly 36 percent of total organic tree nut sales) to $\$ 9.9$ million ( 21 percent of total organic tree nut sales) in 2011—approximately less than 1 percent of the 2011 record-breaking $\$ 1.3$ billion U.S. conventional walnut crop value (fig. 5). Likewise, the quantity of organic walnuts harvested also has declined during this period, down 18 percent. This, however, does not necessarily suggest a sustained downward trend in organic walnut production: while production value and quantity have declined for organic walnuts, overall acreage has gone up 19 percent from 4,321 acres in 2008 to 5,150 acres in 2011.

Walnuts, as well as other tree nuts, struggle with blight and need intensive treatments in seasons with wet springs. New growth is the most susceptible to the disease and in very wet winter and springs, significant damage can occur. Risk of loss due to these disease pressures might reduce many growers interest in organic production. However, the disease can be treated organically so it cannot be the only reason behind the decline in quantity and value produced of organic walnuts.

## Organic Pistachios

Unlike walnuts, organic pistachio production has demonstrated tremendous growth during the 4-year period from 2008-11, with gross farm sales more than doubling from $\$ 3.9$ million to $\$ 9.3$ million, and outpacing growth for conventional pistachios, which increased just over 50 percent to $\$ 879$ million (fig. 6). Though still small relative to conventional pistachios, organic pistachio farm sales grew from 0.6 percent to slightly over 1 percent of the value of conventional pistachio production over the 4 -year period. On a year-to-year basis, however, farm sales may have demonstrated large swings in increases and decreases due to the alternate-bearing pattern natural to pistachio trees. Overall, organic pistachio sales in 2011 account for 20 percent of total organic tree nut sales value, up from 2008 when they only accounted for 13 percent.

The size of the organic pistachio harvest almost doubled from 2008 to 2011, increasing from 1.5 million pounds to 2.9 million pounds, driven by a 36 -percent increase in harvested acreage, reaching 1,221 acres in 2011. California
has the largest production area for organic pistachios, accounting for 93 percent of the total harvested acreage. While organic pistachio production has increased over the years, it still remains only a fraction of a percent of total conventional production.

## Organic Pecans

Between 2008 and 2011, the value of organic pecan production has increased from just 8 percent of total organic tree nut sales value to 13 percent. In 2011, U.S. organic pecan production generated $\$ 5.9$ million in farm sales, more than double its farms sales reported in 2008 at $\$ 2.3$ million (fig. 7). While the crop value has increased over time, it has remained near the equivalent value of 0.9 percent of conventional pecan farm sales during both these years as the conventional value has increased at nearly the same pace.

As with farm sales, the quantity of organically produced pecans also more than doubled from 2008 to 2011, reaching 2.8 million pounds. The amount of organic pecans harvested in 2011 represents just over 1 percent of total conventionally harvested pecans; making pecans the tree nut with the largest share of organic production. Organic pecan acreage has increased 14 percent between the two observation periods to total 5,526 acres in 2011, representing 32 percent of total organic tree nut acreage.

## Organic Hazelnuts

Organic hazelnuts represent less than 1 percent of 2011 total organic tree nut gross farm sales in the United States. Even though the organic hazelnut crop value is small, it has increased 56 percent since 2008 to total $\$ 455,424$ in 2011 (fig. 8), roughly 0.51 percent of the gross value of farm sales or conventional hazelnuts for the same year. That year was a record breaking year for conventional hazelnuts in terms of farm sales, increasing 73 percent over the 4year period and totaling $\$ 89.7$ million.

While value increased, quantity harvested declined by less than 1 percent between 2008 and 2011. The loss of organic production could be associated with the 12-percent decline in harvested acres (reduced from 154 acres to 135 acres). Hazelnuts are plagued by Eastern Filbert Blight, which has constrained conventional production to less than 30,000 acres annually. Filbert worm is the main concern for organic producers and poses the largest hurdle to the increase in organic hazelnut production (DeFrancesco, 2006). As new cultivars are introduced with filbert-blight resistance and further investigation into organic pest controls are researched, organic hazelnut production could overcome these obstacles to production.

## Summary

Currently, organic tree nut production amounts to less than 1 percent of total conventional tree nut production, with 85 percent of organic tree nut farm sales originating from California. Organic acreage has increased 9 percent during the two observation periods of 2008 and 2011. Value of farm sales has also increased 52 percent during the same time frame. As organic producers and scientists find more effective pest control methods, organic tree nut production will continue to increase in the future as there is continued room for market growth.

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Figure 1
Organic fruit and tree nut value of sales, 2011
Million dollars


Source: USDA, National Agricutlure Statistics Service, 2011 USDA Certified Organic Production Survey.
Figure 2
Share of organic tree nut sales values, 2011


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

Figure 3
Organic almond value and quantity harvested, 2008-2011


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

Figure 4
Share of organic tree nut harvested production, 2011


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

Figure 5
Organic walnut value and quantity harvested, 2008-2011


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

Figure 6
Organic pistachio value and quantity harvested, 2008-2011


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

Figure 7
Organic pecan value and quantity harvested, 2008-2011


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

Figure 8
Organic hazelnut value and quantity harvested, 2008-2011


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


[^0]:    NFC= Not from concentrate.

[^1]:    -- = Not available.
    Source: USDA, National Agricultural Statistics Service, Agricultural Prices, various issues.

[^2]:    1/ Single-strength equivalent.

