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Fruit and Tree Nuts Outlook: March 2025

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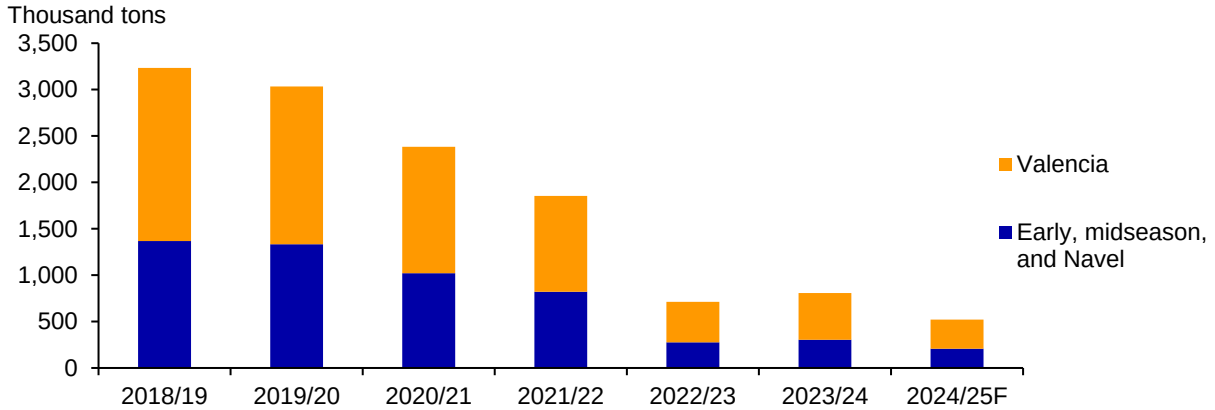
In this report:

Florida Orange Forecast Down in 2024/25

The most recent Florida all orange crop forecast (March 2025) for 2024/25 is 522,000 tons, down 35 percent from the 2023/24 final utilized total of 808,000 tons. If realized, the 2024/25 Florida orange crop would be the smallest in 95 years. The USDA, National Agricultural Statistics Service (NASS) *Crop Production* report forecasts Florida's combined early, midseason and Navel orange production and Valencia orange production will fall 32 and 38 percent, respectively, compared to 2023/24. In October 2024, Hurricane Milton ripped across the Florida peninsula and through prime citrus producing counties. The storm caused millions of dollars in damage, dealing further blows to Florida's citrus industry already beset with challenges from the devastating botanical disease Huanglongbing (citrus greening). Despite considerable attrition of the State's citrus industry, Florida oranges continue to play a major role in the U.S. orange juice industry, accounting for 49 percent of the oranges used in domestic production in the 2023/24 season.

Florida oranges: Hurricane Milton and citrus greening lower 2024/25 production



F = Forecast.
Note: Florida orange marketing year starts in October and ends in September of the following year.
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service, *Crop Production* (March 2025).

Weather Outlook

Summer and Fall Heat Fueled Drought in 2024, but Improvements are Forecast in 2025

According to U.S. Department of Commerce's National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI), 2024 was the warmest year in the contiguous United States since 1895. Though it was also the third wettest year, it was relatively dry during the summer in fruit and tree nut producing States like California and Washington. Throughout the late summer, extreme heat strained crops, and drought conditions intensified.

The weather outlook for spring 2025 is mixed. NOAA forecasts that northern California will remain drought free but that drought will persist in southern parts of the State. Though most of western Washington is currently in drought, NOAA expects conditions to ease in the spring. Water availability will be an important factor in both States, which represent more than 80 percent of fruit and tree nut value, particularly if summer temperatures reach last year's heights.

California: Drought was particularly severe in southern California in 2024. As of February 2025, all the land in the southeast interior was in moderate (D1), severe (D2), or extreme (D3) drought, according to U.S. Drought Monitor ratings. Conditions were less severe in the Sacramento Valley and San Joaquin Valley regions, where many fruits and tree nuts are grown.

In the Sacramento Valley, the percent of abnormally dry (D0) land rose from 0 to 100 percent from July 2024 to October 2024 (figure 1). However, low temperatures and higher than average levels of precipitation helped ease drought conditions in November. The San Joaquin Valley remained drought-free until September 2024 (figure 2). Subsequently, however, drought conditions have steadily worsened since. As of February 2025, approximately 99 percent of the San Joaquin Valley was in drought, with more than 60 percent at the D1 or D2 (moderate to severe drought) level. Currently, conditions in the Sacramento and San Joaquin valleys mirror those elsewhere in the State; it is warmer and drier in the south than in the north.

As of March 26, 2024, the California Department of Water Resources (DWR) reported that snowpack in the Sierra Nevada range was 96 percent of normal, year to date. Nonetheless, water allocations are on track to improve from 2023/24. To date, the DWR's State Water Project has allocated 40 percent of requested water supplies, a ten-percentage point increase over the 30 percent allocated in March 2024.

Figure 1

The Sacramento Valley was abnormally dry in the late summer and early fall, but drought free through early 2025

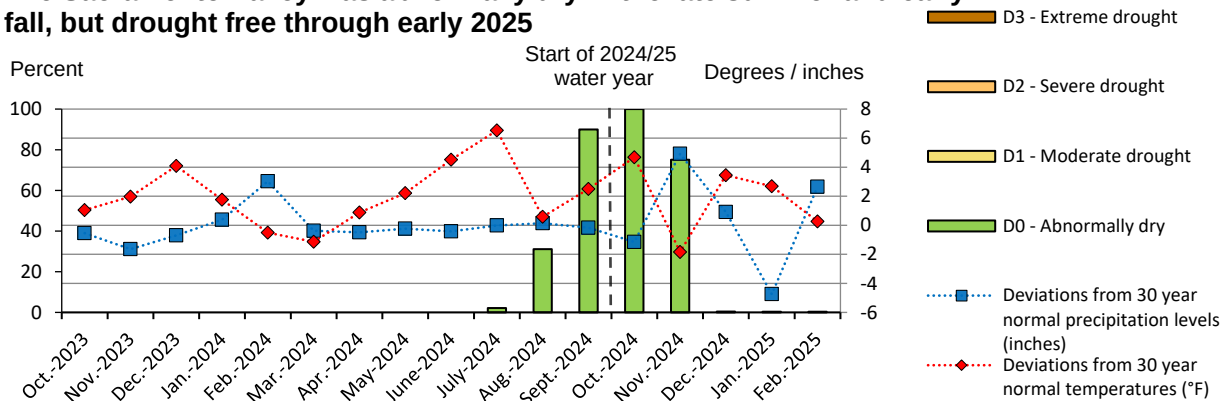
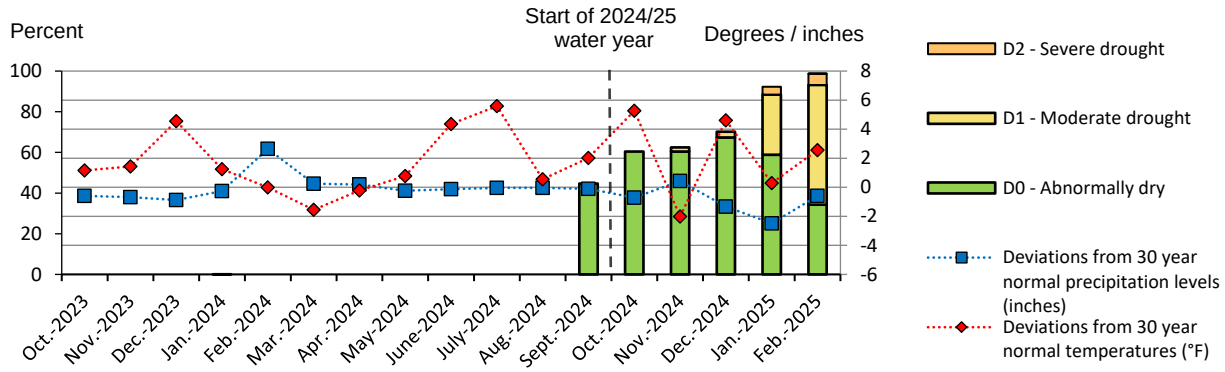


Figure 2

Drought pressure in the San Joaquin Valley increased from fall 2024 through early 2025



Note: The Sacramento Valley region reflects conditions in Butte, Colusa, Glenn, Sacramento, Sutter, Yolo, and Yuba counties. The San Joaquin Valley region reflects conditions in Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties.
Source: USDA, Economic Research Service using data from the U.S. National Integrated Drought Information System and the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI).

Washington: In February 2024, the Washington Department of Ecology warned residents to prepare for a dry spring. The first quarter of water year 2023/24 had been the sixth driest since 1895. High temperatures in December 2023 increased the amount of precipitation falling as rain, eroding Washington's snowpack and decreasing the amount of water available in the spring 2024.The Washington Department of Ecology declared a statewide drought in April 2024 due to low snowpack and a warm and dry forecast; a drought emergency was declared in July. Drought was worst in August 2024, when almost 90 percent of Washington was in drought, more than 50 percent of which was categorized as moderate to extreme.

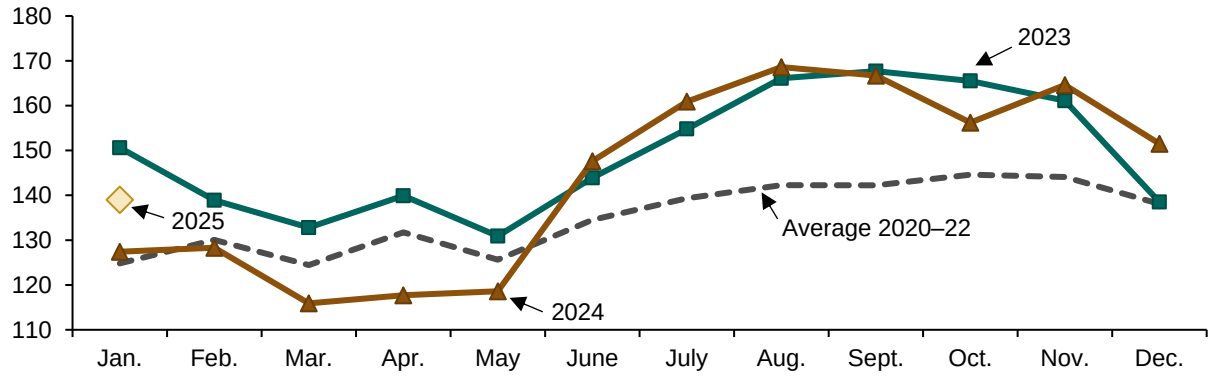
The first quarter of 2024/25 was 1.4 degrees above normal and 12 percent drier than usual. Nonetheless, temperatures are expected to be lower than normal this spring, and precipitation is expected to be higher than normal. If so, Washington will be drought-free at the start of the growing season. However, reservoirs in the Yakima Basin are currently at their third lowest levels since 1971 at 38 percent of average for this time of year. If reservoir levels remain low, less irrigation water will be available this spring.

Price Outlook

Fruit and Tree Nut Grower Prices Higher in Early 2025

In January 2025, the index of prices received by growers for fruit and tree nuts was 139 (2011=100), about 9 percent higher than January 2024 but 8 percent lower than January 2023 (figure 3). As in prior years, prices received by growers in 2024 increased in the late spring and early summer (June through August). This trend partially stems from seasonal production of fruit and tree nuts. Grower prices for apples, strawberries, and grapefruit were higher in early 2025 than they had been in early 2024. Lower year-over-year volumes for nut crops like almonds, walnuts, and pistachios also have put upward pressure on grower prices.

Figure 3
Index of prices received by growers for fruit and tree nuts
2011=100



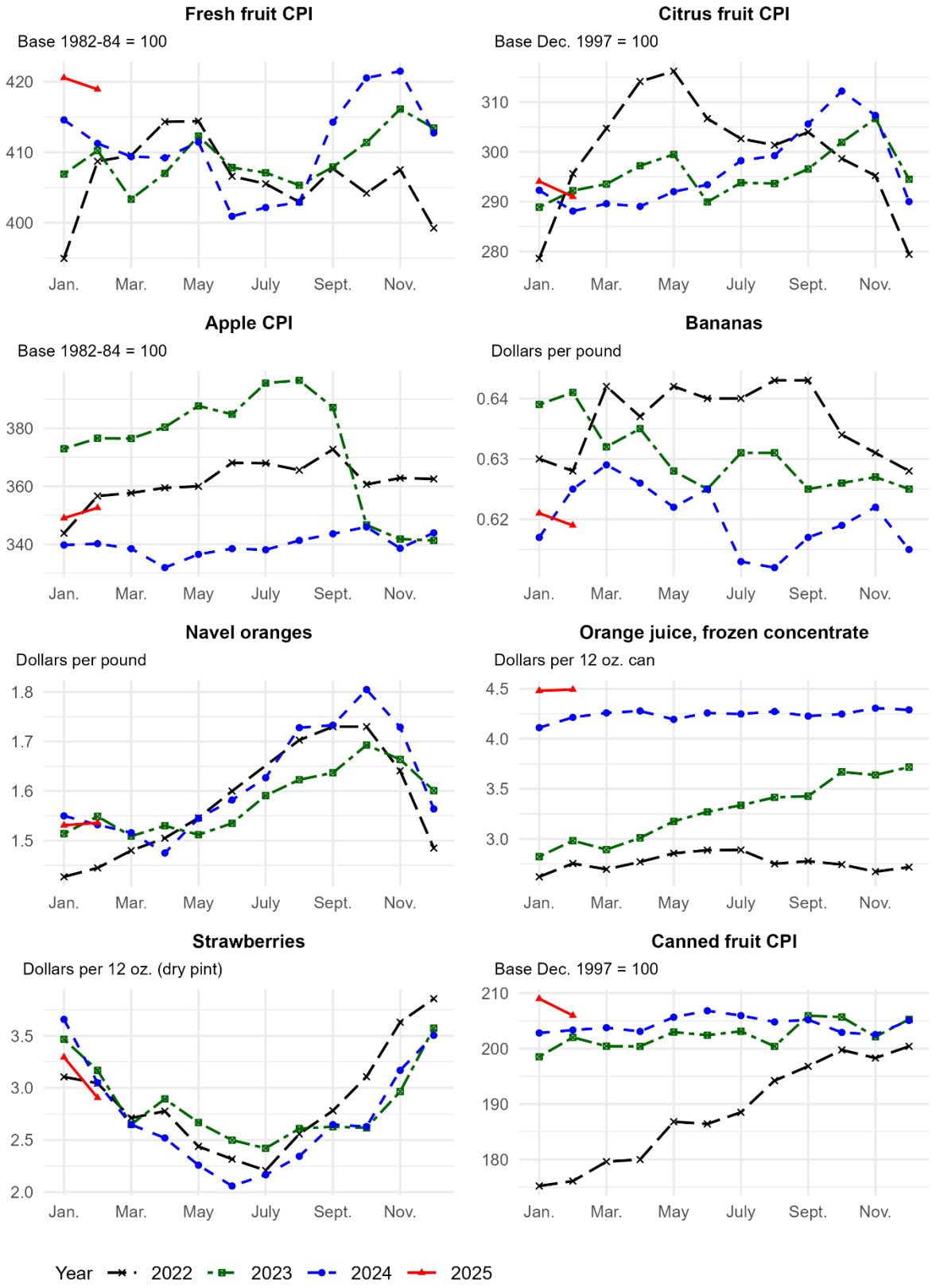
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service, *Agricultural Prices.*

Consumer Price Index for Fresh Fruit Up in Early 2025

The Consumer Price Index (CPI) for fresh fruit was reported at 418.9 (1982–84=100) in February 2025, up 2 percent from the same time last year (figure 4). Apples and bananas are two of the most heavily weighted prices in the fresh fruit CPI, together accounting for about 34 percent of the index relative importance—more than three times the weight of citrus fruit CPI (11 percent). The CPI for apples, which reflects changes in apple retail prices, was up 3.6 percent in February 2025 compared with February 2024, but lower than the same month in 2022 and 2023. A larger apple harvest in fall 2023 put downward pressure on retail prices, which dipped to a 3-year low in April 2024. In February 2025, banana average retail prices fell below year-ago prices for a decrease of 1.3 percent. In the first 2 months of 2025, USDA, Agricultural Marketing Service (AMS) banana shipment volumes were higher compared with the same period last year, despite slightly lower volumes from major suppliers Guatemala, Costa Rica, and Ecuador through the end of February.

Figure 4

U.S. monthly retail prices for selected fruit, 2022–25



Source: USDA, Economic Research Service based on data from U.S. Department of Labor, Bureau of Labor Statistics.

Citrus Fruit Outlook

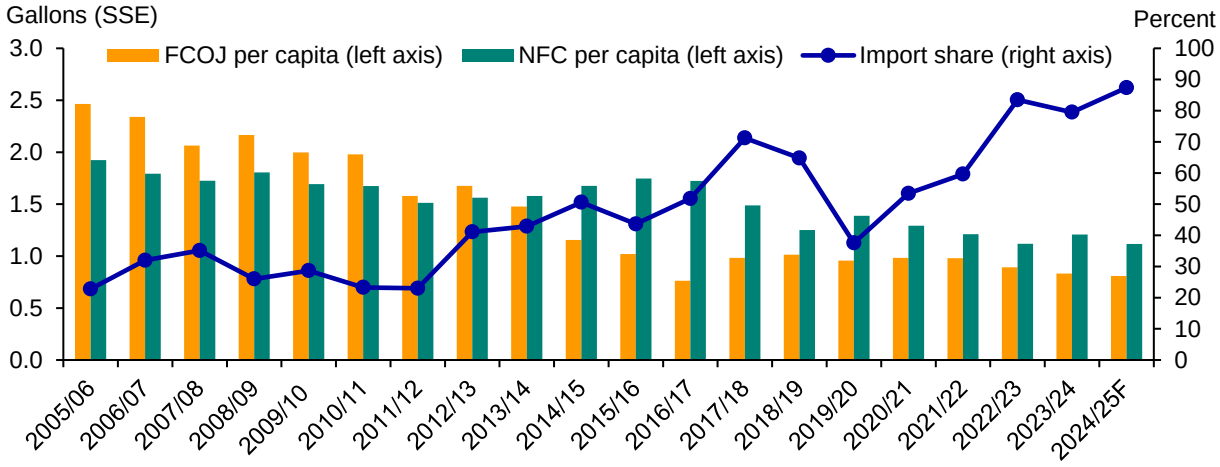
Imports Make Up Growing Share of U.S. Citrus Consumption

Fresh citrus per capita availability is expected to exceed 26 pounds in the 2024/25 season. If realized, this value will be the highest in the last 5 years, exceeding the 10-year average by 7 percent. Imports comprise a growing share of all the citrus consumed fresh in the United States. Two decades ago, the import share of domestic availability (imports divided by the domestic supply) was around 20 percent of fresh citrus. This value is expected to exceed 40 percent in the 2024/25 season. California plays an outsized role as a growing region and leads the nation in production of all major citrus commodities except for limes.

Consumption of citrus juices (particularly orange juice and grapefruit juice) has fallen considerably from a decade ago. Orange and grapefruit juice consumption declined 57 percent since 2005/06, with per capita availability on an annual basis expected to fall to 2 gallons single strength equivalent (SSE) in the 2024/25 season. Historically, most orange juice available for consumption in the United States was frozen concentrated orange juice (FCOJ), but by the 2013/14 season not-from-concentrate (NFC) varieties had surpassed FCOJ in terms of market share. As U.S. production of orange juice has declined, consumers have become more reliant on imports. The import share of orange juice availability is expected to reach nearly 90 percent in the current season (2024/25), with Brazil and Mexico continuing to supply 95 percent of U.S. orange juice imports (figure 5).

Figure 5

Orange juice per capita availability declines while import share of orange juice increases



F = Forecast; SSE = Single strength equivalent; FCOJ = Frozen concentrated orange juice; NFC = Not-from-concentrate.
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistiscs Service, U.S. Census Bureau Trade Data, and Florida Department of Citrus movement data.

Orange production forecast down in 2024/25: Orange varieties differ in fruit flavor, size and color, juice content, the presence of seeds, and ripening window. For purposes of tracking market data, USDA, NASS distinguishes between two main categories of oranges: 1) Valencia oranges, which typically have seeds and are excellent for juice production, and 2) non-Valencia oranges, which include Navels. Non-Valencia oranges include varieties that ripen earlier in the season and are popularly consumed in the fresh market. Although the marketing seasons vary by State, the U.S. national marketing year for oranges begins in November of the previous year and lasts through October of the current year.

The combined U.S. orange forecast for the 2024/25 season is estimated at 2.42 million tons, down 12 percent from last season's total utilized production. California's non-Valencia orange crop is forecast at 1.56 million tons, up 2 percent, while its Valencia crop is expected to decline 19 percent to 300,000 tons. Florida's Valencia orange crop is forecast at 315,000 tons, down 38 percent, and its non-Valencia crop is forecast at 207,000 tons, down 32 percent from last season (2023/24). Texas orange production is expected to fall 22 percent to 39,000 tons. The net decline in U.S. orange production is mostly attributable to Florida, which has seen year-over-year declines in production most years since the 2004/05 season. However, the California Valencia orange crop is also expected to be smaller than last year's crop by 72,000 tons, further contributing to the net U.S. production decrease.

Orange prices and trade outlook: Grower on-tree-equivalent prices for fresh oranges averaged $23.60 per box between September 2024 and January 2025, about 4 percent higher than last season's prices. Higher prices for fresh oranges reflect tighter domestic supply, given historically low production in Florida this season. Decreases in Florida's orange production for the processing market have elevated prices for processing oranges. The average on-tree-equivalent grower price for a box of oranges for the processing market reached $11.48 per box, a 74-percent increase year over year.

Fresh orange imports declined 6 percent early in the season (November 2024–January 2025) compared to the same period a year prior, largely on lower imports from Mexico (down 19 percent). Larger imports from Chile, Dominican Republic, and Morocco partially offset this decline. Fresh orange exports were down 1 percent during the same period as compared to the prior marketing year.

Orange juice market conditions: Hurricane Milton is the third tropical storm to cause major losses to Florida's citrus industry within the last 8 years. Damage from Milton came on the heels of a 20-year decline of Florida's citrus industry, which has been afflicted by citrus canker and the

even more devastating botanical disease Huanglongbing (citrus greening). Historically, Florida has dominated U.S. orange juice production with Florida-grown oranges accounting for around 90 percent of domestic orange juice production as recently as the 2016/17 season. Orange juice production is forecast at 108.3 million SSE gallons, the lowest since at least 1970/71 and a 22-percent drop from last season. Beginning stocks are 166 million SSE gallons—the lowest since 1991/92—and ending stocks are forecast to reach a 53-year low. Given reduced domestic availability, orange juice prices have continued to climb this season.

From October 2024 to January 2025, U.S. orange juice volume imports are up 5 percent compared to a year prior and projected to reach around one of the highest levels in four decades (577 million SSE gallons). Brazil, Mexico, and Costa Rica supply nearly all U.S. orange juice imports. U.S. orange juice exports are up 29 percent this season to date (October 2024–January 2025), with increased quantities going to Canada, Mexico, and Costa Rica. This trend is expected to subside in the coming months, however, given a reduced Florida orange crop in 2024/25. U.S. orange juice producers rely on foreign consumers for a significant share of their sales each season, with the ratio of the volume of U.S. orange juice exports to the domestic production ranging from 9 to 28 percent between 2014/15–2023/24. Canada has been the top export destination for U.S. orange juice for decades and already accounts for 68 percent of U.S. juice exports in the first 4 months of the current (2024/25) season. Other important export markets for U.S. orange juice are Japan and Costa Rica.

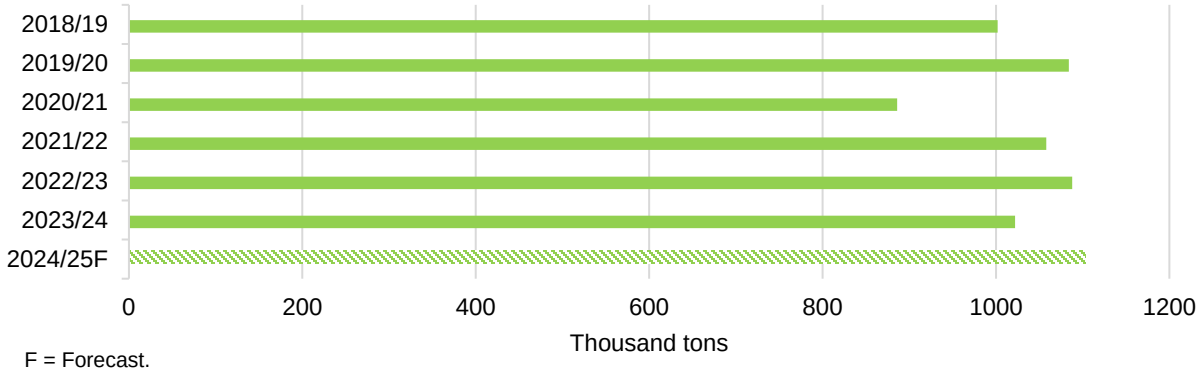
Grapefruit outlook: The U.S. marketing year for grapefruit begins in September and lasts through August. At one time, grapefruit was the second most popular fruit among U.S. consumers (after oranges), with annual production for the fresh market in the 1975/76 season exceeding 1.3 million tons and per capita availability more than 9 pounds. In the current season, (2024/25) combined production (fresh and processing) is forecast at 299,000 tons, the lowest level since 1922. For the 2024/25 season, California is expected to produce 148,000 tons (down 14 percent from 2023/24), Florida 51,000 tons (down 33 percent), and Texas 100,000 tons (up 4 percent).

The average on-tree-equivalent grower price for a box of fresh grapefruit was $43.16 per box (October–January), up 19 percent from the same period last season. Higher prices are supported by tighter supplies and reduced domestic availability. Fresh grapefruit imports fell 13 percent in the first 5 months of the 2024/25 season, while exports declined 16 percent. Shipments to Canada and South Korea dropped 8 percent and 48 percent, respectively; exports to Japan rose 9 percent.

Current ERS estimates suggest that grapefruit juice production for the 2024/25 season is projected to reach a historic low of 10.6 million SSE gallons. Per capita availability is expected to be 0.04 gallons. Imports are projected to reach 8 million gallons; exports are trending up and forecast at nearly 5 million gallons. Based on the first 5 months of trade data for the current season, exports to Canada, South Korea, and the United Kingdom (UK) are up 17 percent, 95 percent, and 71 percent, respectively.

Lemon outlook: Lemon production for 2024/25 is forecast at 1.1 million tons. California accounts for 1 million tons (up 6 percent from 2023/24), Florida for 27,000 tons (first year forecasted), and Arizona for 36,000 tons (down 5 percent) (figure 6). The on-tree-equivalent price for fresh lemons averaged $30.61 (August–January), down 8 percent. Lemon juice production for the 2024/25 season is forecast at 24.5 million SSE gallons (up 14 percent).

Figure 6
Lemons: Forecast up in 2024/25 thanks to a boost from Florida

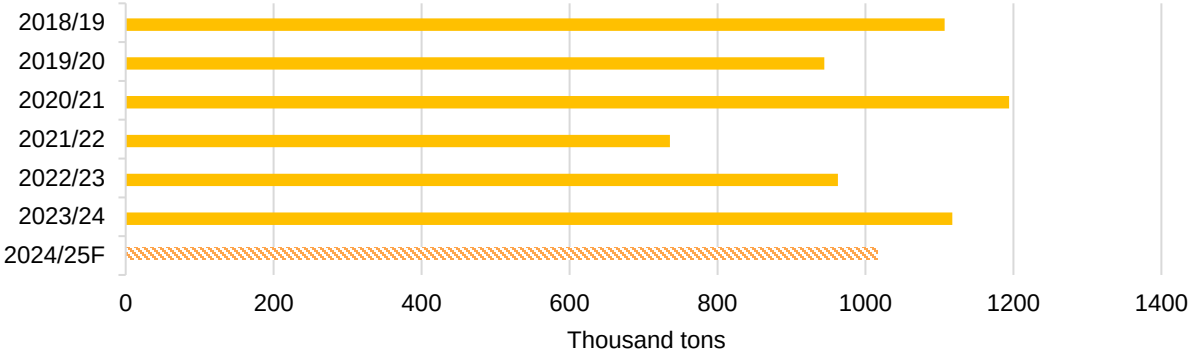


F = Forecast.
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service, Crop Production, March 2025 issue, and Citrus Fruit Summary, various issues.

Fresh lemon imports are up 8 percent season to date (August 2024–January 2025) but are expected to settle closer to the lower levels observed last year (423 million pounds) because of increased domestic production. Lemon juice imports are also up considerably (20 percent) compared with the same time last year. However, lemon juice import volumes are expected to trend downward in coming months. Chile led early season imports, though Argentina is expected to dominate later. Fresh lemon exports are down 3 percent season to date; exports to Canada are up 16 percent, while exports to Japan and South Korea have fallen relative to the same time a year prior. Lemon juice exports are expected to exceed last year's 4.56 million single strength equivalent gallons, on the strength of exports during the first part of the current season and increased domestic production. U.S. per capita availability of lemon juice is projected to exceed last year's 0.20 gallon.

Tangerine outlook: The tangerine commodity group includes various hybrids of the species citrus reticulata such as tangerines, mandarins and clementines. These fruits are typically smaller and easier to peel than oranges. Although tangerines have historically been important in East Asian markets, they have been gaining popularity in the United States for several decades. Production is forecast at 1.02 million tons in 2024/25, with California contributing 1 million tons (down 9 percent from 2023/24) and Florida 17,000 tons (down 19 percent) (figure 7). Although the combined U.S. tangerine crop is expected to be down 9 percent this year, it still exceeds the previous 5-year average. U.S. fresh market production is expected to reach 1.39 billion pounds, with per capita availability of fresh tangerines projected at 7.24 pounds.

Figure 7
Tangerines: forecast down 9 percent in 2024/25 compared to last year



F = Forecast.
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service, Crop Production, March 2025 issue, and Citrus Fruit Summary, various issues.

Given lower forecasted production, imports were up 53 percent during the first 3 months of the current season at a combined total of 113 million pounds. Imports have historically accounted for a large share of the domestic availability of tangerines. About 43 percent of the tangerines available for consumption in the United States in the 2023/24 season came from other countries. U.S. tangerine exports were up 47 percent during the first 3 months of the 2024/25 season (November 2024–January 2025), reaching a combined total of 47.5 million pounds. This trend is not expected to continue, however, given lower forecast domestic production. The primary destinations for U.S. grown tangerines are expected to remain Mexico, Canada, and South Korea in the 2024/25 season.

Noncitrus Fruit Outlook

Winter Strawberry Shipments Higher, Prices Lower

USDA, NASS reports annual strawberry production data for two major-producing States: California and Florida. California accounts for about 90 percent of national production, with shipments peaking in May or June. Florida produces strawberries in winter and spring, with shipments typically peaking in February. USDA, NASS will release its 2024 annual production estimates for strawberries in May 2025 in the *Noncitrus Fruits and Nuts 2024 Summary*. In the meantime, information on the 2024 season can be drawn from domestic shipment data from USDA, AMS:

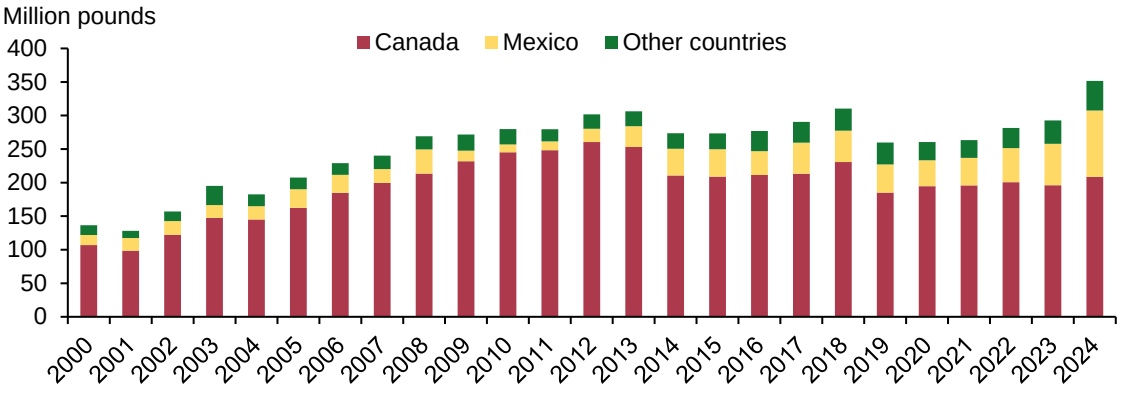
- Domestic shipments from California increased year-over-year in 2024, particularly in the major producing regions in Central Coastal California such as Salinas, Watsonville, and Santa Maria. Volumes from Southern California's Oxnard district were also higher compared with the prior year.
- Florida shipments in 2024 were lower year-over-year. Heavy rain, wind, and hail in early March 2024 were reported to have resulted in some crop loss for strawberries.
- Overall, with elevated shipments from California, domestic strawberry production in 2024 is expected to be higher than 2023 production.

Strawberry exports higher, imports lower in 2024: In 2024, fresh strawberry export volumes increased 20 percent year-over-year to 351.5 million pounds—the highest on record (figure 8). Fresh strawberry exports for 2024 were valued at $570.3 million, making strawberries the third most valuable fresh fruit export behind apples and grapes and ahead of oranges and cherries. Canada is the top destination for fresh strawberries from the United States, though the share and volume of domestic supplies destined for Mexico have both increased in recent years.

Processed strawberry exports make up about 8 percent of strawberry exports by value. Most processed strawberries are exported frozen. Frozen strawberry export volumes rebounded in 2024 after record lows in 2023, increasing 42 percent year-over-year to 31.1 million pounds. Almost all frozen strawberries were destined for four countries in 2024: Mexico (46 percent), Canada (30 percent), Japan (13 percent), and South Korea (7 percent).

Figure 8

Fresh strawberry exports reach record high volumes in 2024



Source: USDA, Economic Research Service based on data from U.S. Department of Commerce, Bureau of the Census.

In 2024, the volume of U.S. fresh strawberry imports decreased less than 1 percent year-over-year to 585.4 million pounds. This breaks a 5-year streak of increasing import volumes but is near 2023's record high of 588.6 million pounds. Fresh strawberry imports in 2024 were valued at $1.17 billion. Mexico supplies 98 percent of fresh strawberry import volume to the United States on average (2022–2024), with more than half of volume entering the U.S. during the first 3 months of the year when domestic supplies are lower. Mexico's strawberry production is expected to increase in 2025, driven by domestic and export demand, according to USDA, Foreign Agricultural Service's *Mexico: Berry Annual*. Much of Mexico's strawberry production is concentrated in Baja California and in central Mexico, including the States of Michoacán and Guanajuato.

Processed strawberry imports were valued at $373.4 million in 2024. Frozen strawberries make up the bulk of processed strawberry imports, with the rest prepared or preserved items such as jams, pastes, and purees. Frozen strawberry import volumes decreased slightly in 2024, down 1.8 percent from the year prior to 348.6 million pounds and down 18 percent from peak volumes in 2021. Until the late 2000s, frozen strawberry imports typically exceeded fresh strawberry volumes. This shift occurred as domestic demand for fresh berries increased in the 2000s.[1]

2024 strawberry pack higher year-over-year: The Processing Strawberry Advisory Board of California reported the 2024 pack estimate for U.S. frozen strawberries at 343.3 million pounds (product-weight equivalent), up slightly year-over-year and about two-thirds of peak pack volumes in 2007. There were 170.6 million pounds of strawberries in cold storage as of the end of December 2024, slightly higher than the previous year. In 2024, on average half of

[1] For more information on changes in U.S. berry production, consumption, and markets, see *The Changing Landscape of U.S. Strawberry and Blueberry Markets: Production, Trade, and Challenges from 2000 to 2020* by D. A. Yeh, J. Kramer, L. Calvin, and C. Weber (2023).

strawberries in cold storage were individually quick frozen as whole berries, with the remaining in barrels, pails, or frozen for juice.

U.S. strawberry acreage expected to increase in 2025: The California Strawberry Commission (CSC) conducts annual acreage surveys with estimates typically released in the fall or winter and updated the following summer. CSC data indicate that strawberry acreage in California is expected to increase in 2025, continuing an upward trend. In recent years, almost three-quarters of California strawberry acreage is planted in the fall for winter, spring, and summer production. The remaining acreage is planted in summer for fall production. In 2025, increases in summer-planted acreage are expected to more than offset decreases in fall-planted acreage.

Strawberry acreage in Florida is also expected to be higher in 2025, with CSC estimating an increase of 13 percent. This would mark the fifth consecutive year of increasing strawberry acreage and a 60-percent increase in acreage since 2019/20 in the Sunshine State. Almost 90 percent of this acreage is in Hillsborough County and Manatee County in the Tampa Bay area of Central Florida. Winter strawberries were still being planted when Hurricane Milton made landfall in Siesta Key in Central Florida in October 2024. Some growers were reported to have delayed planting in anticipation of the hurricane.

Winter strawberry domestic shipments higher, prices lower in early 2025: In January, Winter Storm Enzo dropped more than 8 inches of snow in the Florida Panhandle. Wintery weather led to reports of crop damage and slow growth for Florida strawberries in the first 2 months of 2025. Despite weather challenges, early season domestic strawberry shipments from Florida were up 2 percent year-over-year in the first two and a half months of 2025. In early 2024, Florida experienced crop loss in the Panhandle because of freeze events and rain and in Central Florida because of windy and rainy conditions. Including shipments from Central and Southern California, all domestic strawberry shipment volumes in the first two and a half months of 2025 were up 5 percent over the same period last year. USDA, NASS reported strawberries grew well during a warm and wet February in California.

Strawberry prices tend to have strong seasonal trends, with lower prices typical in the summer and higher prices typical in the winter. Monthly grower prices for fresh market strawberries were higher year-over-year for the last 8 months of 2024 (May to December). Grower prices were $225 per hundredweight (cwt) in January 2025, lower than a year before. Free-on-board (FOB) shipping point prices for conventional strawberries averaged between $13.86 and $15.71 per flat (eight 1-pound containers with lids) through mid-March 2025 and were lower year-over-year.

Similarly, U.S. monthly average retail prices for strawberries averaged $2.91 per 12-ounce package in February 2025, down 5 percent from $3.05 per 12-ounce package in February 2024.

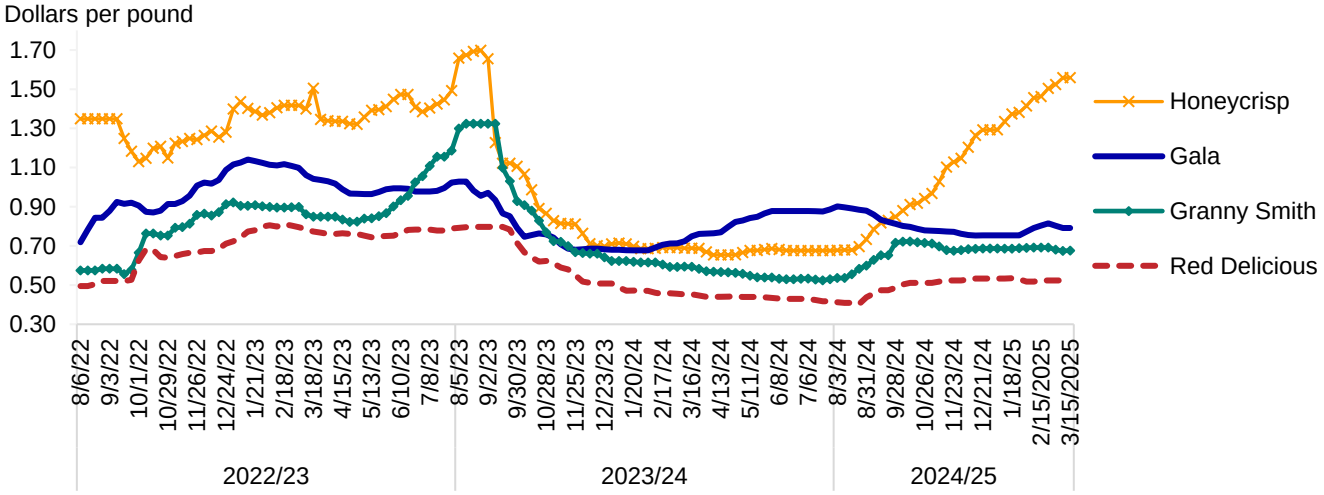
Apple Grower Prices Recovering From 4-year Low

Fresh apple grower prices reported by USDA, NASS began to slowly increase in the first 6 months of 2024/25 after falling to a 4-year low in April of the preceding season in both nominal and real terms. The January 2025 fresh apple grower price was 75 cents per pound—up 20 percent from the same month last year but 19 percent lower than 2023. In 2023/24 (August–July), total U.S. apple production increased 14 percent year-over-year after falling below 11 billion pounds for three consecutive seasons because of a combination of factors that included weather. While the 2024/25 production forecast is slightly lower than 2023/24, by volume, the apple harvest is still projected to be above average. U.S. total apple holdings (fresh and processing market) on February 1, 2024, were down 5 percent from last year but 26 percent above the same month 2 years ago, U.S. Apple Association reported.

In mid-March 2025, FOB prices for popular varieties such as Gala, Granny Smith, and Red Delicious were higher than the same week last year but remained below average prices during the same period in 2023 (figure 9). In the second half of 2023/24, Honeycrisp prices fell below Gala apples as higher than average storage volumes put downward pressure on prices. Honeycrisp apples were a patented cultivar until 2008 and have historically received a price premium compared with other common apple varieties. However, FOB prices for Honeycrisp have recovered in 2024/25, reflecting a year-over-year decrease in production volume.

Figure 9

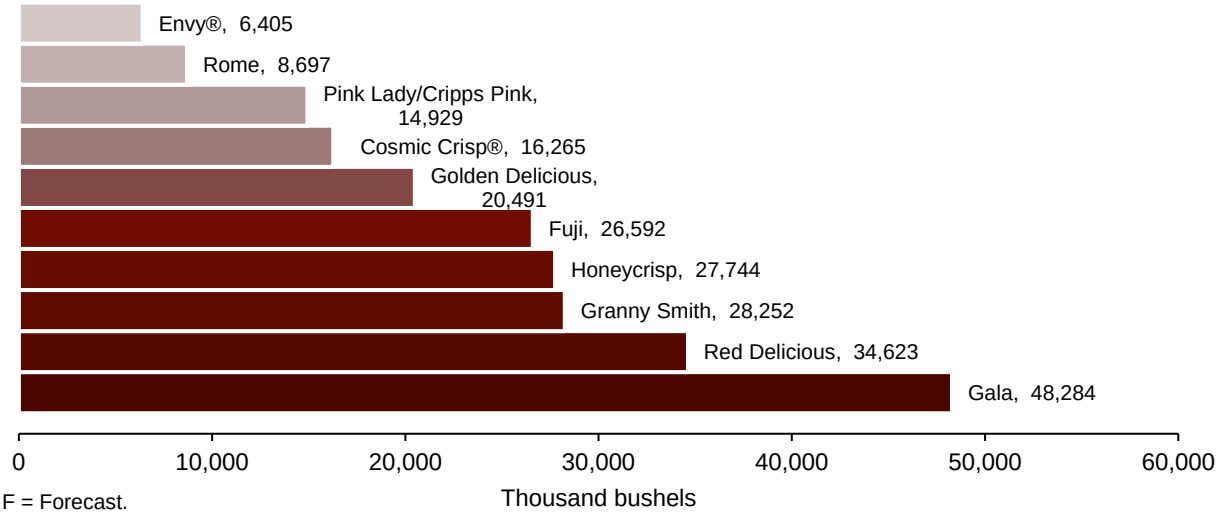
Washington apples: FOB prices for selected varieties, August 2022–mid-March 2025



FOB = Free-on-board.
Note: Domestic conventional apples, in 40-pound carton tray packs, item sizes 64-88, extra fancy.
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service, *Market News*, shipping-point prices.

Gala and Red Delicious remained top apple varieties in 2024/25: Gala and Red Delicious varieties are expected to account for almost one-third of U.S. apple production this season, according to the U.S. Apple Association (figure 10). After a record large Honeycrisp crop in 2023/24, Honeycrisp production is expected to fall back to fourth place behind Granny Smith. The Cosmic Crisp varietal (grown only in Washington) is forecast to set another production record in 2024/25 as bearing acreage continues to increase. Cosmic Crisp currently ranks seventh behind production of Fuji and Golden Delicious varieties.

Figure 10
Top apple varieties, production by the bushel in 2024/25F



F = Forecast.
Note. 1 bushel is equivalent to 42 pounds. Top 10 varieties represent approximately 91 percent of U.S. production in 2024/25F.
Source. USDA, Economic Research Service using data from U.S. Apple Association's *US Apple Industry Outlook 2024 Report.*

In the first half of 2024/25 (August–January), U.S. fresh apple exports fell 1 percent in value and 4 percent in volume compared with the same period last season. Decreases in fresh apple exports to top destinations Mexico, Canada, Taiwan, and India more than offset a 14-percent year-over-year increase to Vietnam. Through January 2025, organic apples represented about one-fifth of fresh export volume (181.5 million pounds) with 60 percent of organic apple volume going to Mexico. In the United States, about one in four fresh-market apples produced are destined for export. Fresh apple imports represent a relatively small share of the domestic market, accounting for 2 percent of domestic availability in 2023/24.

Fresh Blueberry Trade Hits Record Highs in 2024

USDA, NASS reports annual production of both cultivated and wild blueberries in the United States. Wild blueberries are grown in Maine, with production concentrated in Washington County in the eastern coastal region of the State. Most blueberries grown in the U.S. are cultivated blueberries, and production is reported for eight States, led by Washington (representing about 23 percent of production), Oregon (22 percent), and Georgia (14 percent).

About half of blueberry production each year is processed, with the remainder sold in the fresh market. USDA, NASS will release its 2024 annual production estimates for blueberries in May 2025 in the *Noncitrus Fruits and Nuts 2024 Summary*. In the meantime, USDA, AMS shipment data for 2024 fresh blueberries indicate production in Washington, Oregon, and Georgia was higher year-over-year.

The North American Blueberry Council (NABC) estimated that the 2024 U.S. blueberry crop reached 735.5 million pounds, up 23 percent from the previous year's production estimate. Of this, 394.7 million pounds (54 percent) are destined for the fresh market, with the remaining 340.8 million pounds intended for processing. With both market segments expected to have expanded year-over-year in 2024, NABC estimates that production of blueberries for processing increased by 44 percent.

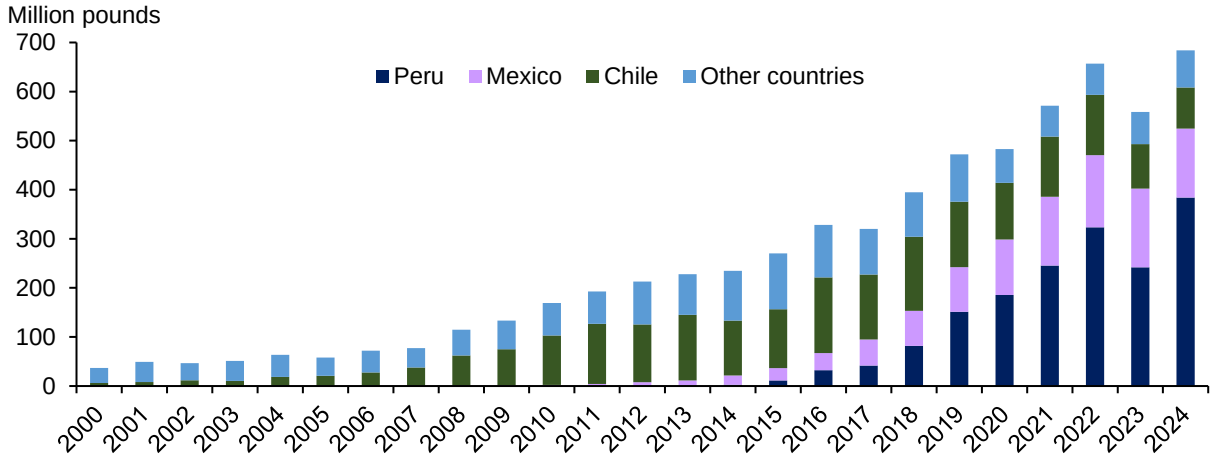
Fresh blueberry exports and imports hit record highs in 2024: In 2024, fresh blueberry export volumes increased 36 percent year-over-year to 104 million pounds—the highest on record and exceeding 100 million pounds for the first time. Typically, almost three-quarters of this volume is cultivated blueberries, with wild varieties making up the remaining share. Fresh blueberry exports were valued at $163 million in 2024. Canada is the top destination for U.S. fresh blueberries exports, accounting for about 94 percent of volume in recent years (2022–2024).

Processed blueberry exports (excluding juice) make up about half of blueberry exports by volume. Of these processed exports, more than 90 percent are frozen blueberries, with the remaining either canned or dried. In 2024, frozen blueberry export volume decreased 6 percent year-over-year to 75.2 million pounds. About 80 percent of these exports are cultivated blueberries, up from one-third in the early 2000s when most frozen blueberry exports were wild. Two-thirds of this volume is destined for Canada, followed by South Korea (19 percent) and Japan (5 percent).

In 2024, the volume of fresh blueberries imported by the United States increased 22 percent year-over-year to 684 million pounds—surpassing 2022's record high. Almost all (about 98 percent) of this volume is cultivated blueberry varieties, and about 15 percent is organic. On average, about 66 percent of fresh blueberries available in the U.S. are imported each year. Fresh blueberry imports were valued at $2.18 billion in 2024—making blueberries the United States' fourth most valuable imported fresh fruit behind avocados, bananas, and grapes. Just three countries supply nearly 90 percent of imported blueberries to the United States by volume—Peru, Mexico, and Chile. Peru's blueberry production and shipments to the U.S.

rebounded in 2024 after warmer weather severely limited flowering and led to reduced fruit in 2023 (figure 11).

Figure 11
Fresh blueberry imports reach record high volumes in 2024



Note: Fresh blueberry imports include both cultivated and wild blueberries.
Source: USDA, Economic Research Service based on data from U.S. Department of Commerce, Bureau of the Census.

Blueberry shipment volumes higher, prices slightly lower in early 2025: Domestic blueberries typically are available from April to September with peak shipments in July, so almost all early 2025 shipment volumes to date were imported. In the first two and a half months of 2025, blueberry shipments were higher than the same period a year ago with more supplies from the top three importers: Peru, Chile, and Mexico. Conventional blueberry FOB shipping point prices averaged between $19.60 and $22.20 per flat (12 1-pint cups with lids) by mid-March 2025, similar to last year. U.S. advertised national retail prices for conventional blueberries averaged $3.00 per 6-ounce package in the first two and a half months of 2025, down slightly from $3.08 per 6-ounce package in the same period in 2024.

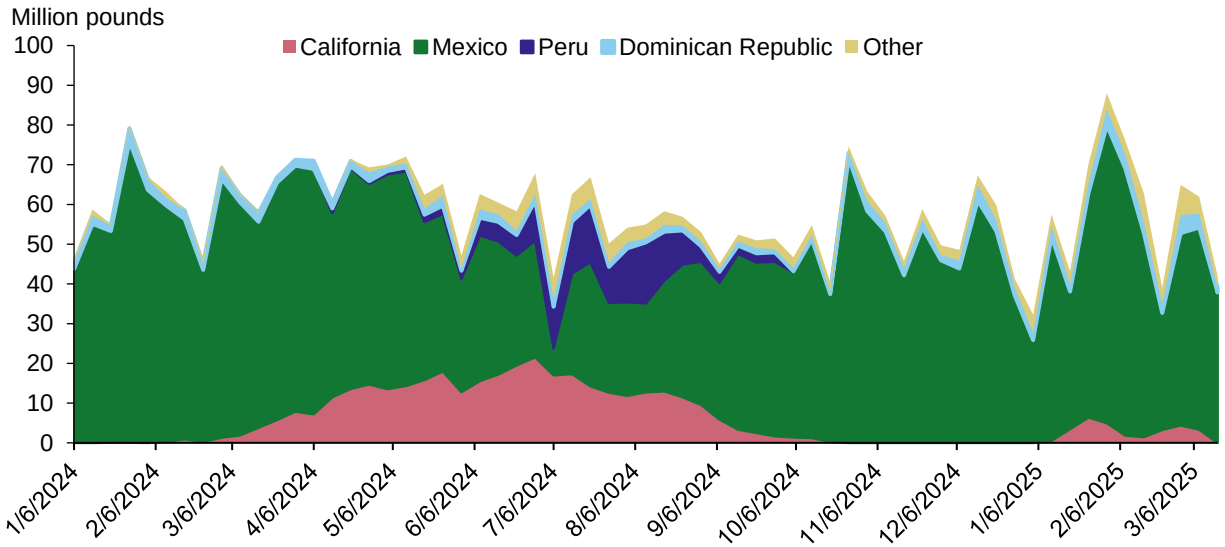
California Avocado Production Forecast Up in 2025

The California Avocado Commission (CAC) estimates that California will produce 375 million pounds of avocados in marketing year 2024/25 (November–October), up 3 percent (11.4 million pounds) from 2023/24 and 44 percent above the previous 3-year average. If realized, the 2024/25 California avocado crop would be the third largest in the last decade behind 2015/16 and 2019/20. In 2024/25, Hass avocados are expected to account for 95 percent (355 million pounds) of California's crop volume, with Lamb, Gem, and other avocado varieties accounting for the remainder. California produces approximately 90 percent of the avocados grown in the U.S. each year. U.S. net production (domestic production minus exports) represents about 10 percent of U.S. fresh avocado availability.

2024 sets import value record high: In calendar year 2024, the United States imported a record $3.8 billion of fresh avocados, the highest in nominal and inflation-adjusted terms. Fresh avocados from Mexico accounted for 91 percent of import value. U.S. avocado imports are identified as either Hass-like or non-Hass like. Hass-like conventional ($3.5 billion) and Hass-like organic avocados ($240.5 million) represented 99 percent of total fresh avocado import value. Approximately 1 percent of fresh avocado import value was non-Hass-like avocados ($49 million), primarily from the Dominican Republic. In terms of import volume, U.S. fresh avocado imports totaled 2.7 billion pounds, down 4 percent from a record high 2.8 billion pounds in 2023. Most fresh avocado imports continued to enter the United States through the Laredo customs district in South Texas (86 percent by volume), with all avocados originating from Mexico. In contrast, the majority of avocado imports in the Philadelphia, Pennsylvania, customs district (6 percent of U.S. fresh avocado imports by volume) came primarily from Peru and Colombia. Imports at the Miami, Florida, customs district (5 percent) came mainly from the Dominican Republic and Colombia.

Avocado shipments and prices: Despite a larger domestic crop in California, lower year-over-year shipment volumes from Mexico and Peru led to tighter midyear domestic supplies in 2024 and put upward pressure on prices, according to AMS *Market News* data. Shipments from Mexico began to increase seasonally during the fall and winter months, with weekly volume peaking during the end of January (week ending February 1, 2025) at 75 million pounds, about two weeks before the Super Bowl (figure 12).

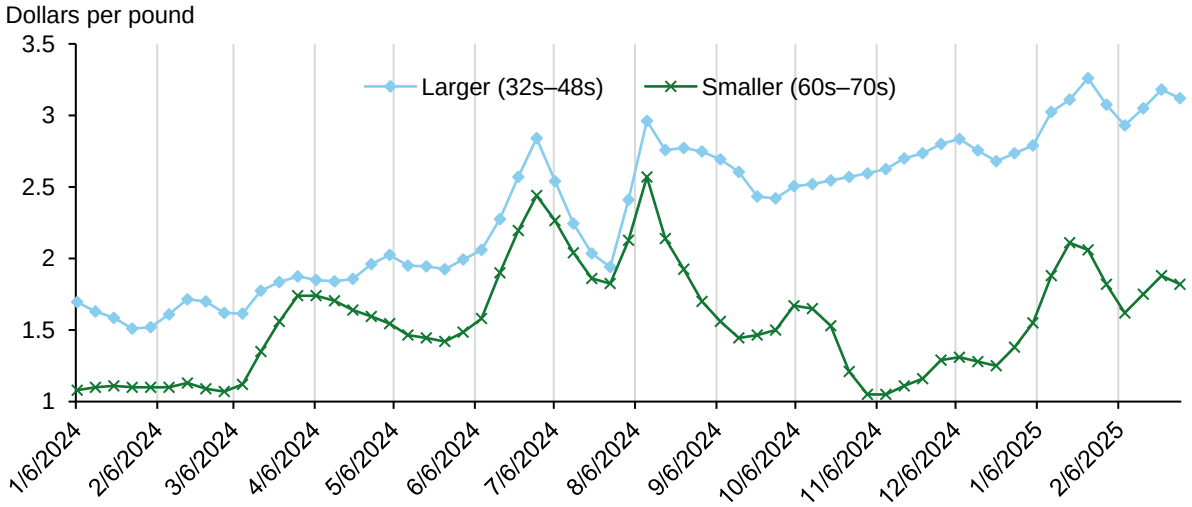
Figure 12
Weekly shipment volumes for avocados, January 2024–mid-March 2025



Note: Volumes include all fresh avocado varieties. Other destinations include imports and domestic shipments from Florida.
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service, *Market News,* movement data.

The Mexican Hass Avocado Importer Association (MHAIA) reported lower volumes of larger size fruit through week 32 of the Mexican crop season (July 2024–February 2024) compared with the same period a year ago. MHAIA reported that larger fruit sizes represented 41 percent of season-to-date shipments, which is lower than last season (2023/24, 45 percent) and almost half of volume a decade ago (2015/16, 71 percent). Since mid-August 2024, average FOB shipping point prices[2] for larger size Hass avocados from Mexico have remained elevated, while smaller size fruit has fluctuated between $1 and $2 dollars per pound (figure 13). On a per-pound basis, Hass avocados for small size fruit are less expensive than larger fruit and are primarily destined for retail as opposed to foodservice.

Figure 13
FOB prices for Hass avocados from Mexico, January 2024–mid-March 2025



FOB = Free-on-board shipping point.
Note: Average weekly FOB prices by fruit size for conventional Hass avocados in two-layer cartons. The item size (ex. 32s) represents the approximate fruit count in a 25-pound case holding two layers of fruit.
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service, *Market News,* shipping-point prices.

Outlook for mid-2025: Avocado shipment volumes from California were off to an early start with shipments beginning in mid-January. By March 9, 2025, the California Avocado Commission reported season-to-date avocado shipments from California were 8 percent of the forecasted crop—up from the previous 4-year historical average of 5 percent. If California shipments follow a similar pattern to 2022's early start, this season's shipments would wind down earlier than normal during late summer. Mexican avocado shipments are expected to continue as harvest in the States of Michoacán and Jalisco move to orchards at higher elevations. If avocado imports from Mexico follow previous seasonal patterns, shipments to the United States will gradually decline toward the middle of 2025.

[2] USDA, AMS *Market News* FOB shipping point prices of imported produce represent the sale price at the crossing point or port of import, with any duties, crossing charges, or import fees paid prior to the reported sale.

Melons Outlook

The United States produced 5.02 billion pounds of melons (watermelon, cantaloupe, and honeydew melons) in 2024. Domestic availability of melons was 7.42 billion pounds in 2024, down less than 1 percent from the previous year (table 1). Per capita availability fell by slightly less than half a pound year-over-year to 21.8 pounds per person. Watermelon continued to account for just over two-thirds of melon per capita availability at 14.9 pounds per person, up from about half in the early 2000s. Melon availability has trended downward since peaking at 29 pounds per person in 1999.

Table 1—U.S. melons: Supply and availability, by type and all, 2020–24

Year	Supply				Availability		Trade share of:	
	Utilized production	Imports[1]	Total supply	Exports[2]	Domestic availability	Per capita availability	Availability imported	Supply exported
			--Million pounds--			*--Pounds--*	*--Percent--*	
Cantaloupe								
2020	1,238	753	1,991	105	1,886	5.7	39.9	5.3
2021	1,157	762	1,920	103	1,817	5.5	42.0	5.4
2022	1,277	786	2,064	91	1,973	5.9	39.9	4.4
2023	1,047	832	1,879	132	1,747	5.2	47.7	7.0
2024	1,063	811	1,874	135	1,738	5.1	46.6	7.2
Honeydew								
2020	245	231	475	46	430	1.3	53.6	9.6
2021	195	357	552	66	486	1.5	73.5	12.0
2022	184	408	592	66	526	1.6	77.6	11.1
2023	235	459	694	69	625	1.9	73.5	10.0
2024	261	418	679	82	596	1.8	70.0	12.1
Watermelon								
2020	3,522	1,658	5,179	360	4,820	14.5	34.4	6.9
2021	3,503	1,788	5,290	376	4,914	14.8	36.4	7.1
2022	3,547	1,766	5,314	329	4,985	14.9	35.4	6.2
2023	3,648	1,810	5,457	378	5,079	15.1	35.6	6.9
2024	3,691	1,782	5,473	400	5,073	14.9	35.1	7.3
All melons								
2020	5,004	2,784	7,789	539	7,250	21.8	38.4	6.9
2021	4,855	2,918	7,773	548	7,226	21.7	40.4	7.0
2022	5,008	2,971	7,979	487	7,492	22.4	39.7	6.1
2023	4,929	3,119	8,048	581	7,467	22.2	41.8	7.2
2024	5,015	3,025	8,040	620	7,420	21.8	40.8	7.7

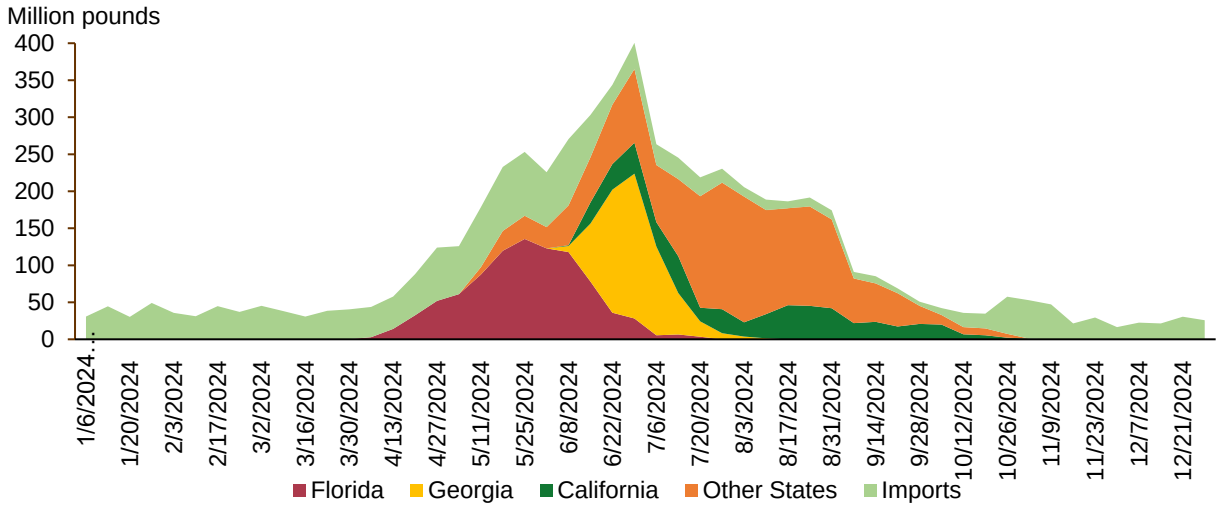
[1] Prior to July 2023, honeydew melon imports were included in "other melon" Harmonized System (HS) trade codes. USDA, Agricultural Marketing Service import shipment data was used to estimate the portion of honeydew melons from 2020 to July 2023. In July 2023, honeydew import trade codes were added.
[2] Honeydew melon exports are included in "other melon" HS trade codes. Shipment data from USDA, Agricultural Marketing Service was used to estimate the portion of honeydew melons from 2020 to 2024.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service; USDA, Agricultural Marketing Service; and U.S. Department of Commerce, Bureau of the Census.

Watermelon

USDA, NASS reports annual production data for 10 States: Florida, Georgia, California, Texas, Indiana, North Carlina, Arizona, South Carolina, Maryland, and Delaware. Data for Maryland and Delaware are new for 2024 after having been discontinued in 2019. Florida is the top producing State and accounts for about 28 percent of domestic watermelon production in recent years. Georgia and California collectively make up an additional 35 percent of U.S. production. Domestically grown watermelons are available from April to October, with shipments typically peaking in July (figure 14).

Figure 14

Watermelon shipments spike in summer during peak domestic harvest



Source: USDA, Economic Research Service based on data from USDA, Agricultural Marketing Service, *Market News*, movement data.

In 2024, watermelon utilized production was 3.69 billion pounds, up 1 percent year-over-year with the addition of production data from Maryland and Delaware. Comparing production for only the eight States that were surveyed in 2023 and 2024, utilized production fell 4 percent. Watermelon production in two of the major producing States, Florida and California, fell 14 percent for each State year-over-year. Flooding and strong winds in late spring 2024 disrupted Florida's early watermelon harvest, resulting in a slow start to the season. In California, yields fell 17 percent below the 5-year average with heat waves affecting the State before and during harvest.

The 2024 watermelon crop was valued at $686 million, down 12 percent from a year before. Grower prices decreased from $21.30 per hundredweight (cwt) in 2023 to $18.60 per cwt in 2024. Prices decreased for growers in all surveyed States except Texas and Indiana.

Fresh watermelon exports higher, imports lower in 2024: In 2024, the volume of fresh watermelons exported by the U.S. rose 6 percent to 400 million pounds, the second highest

volume on record. More than half of watermelon exports leave the U.S. in June and July as domestic production peaks, with almost all destined for Canada. About 10 percent of domestic production is typically exported. Fresh watermelon exports were valued at $115.9 million in 2024, unchanged from a year ago.

The volume of fresh watermelons imported in 2024 fell 2 percent to 1.78 billion pounds, down from 2023's record high volume of 1.81 billion pounds. Fresh watermelon imports peak in May and spike again in October as the domestic season winds down. Mexico has accounted for 82 percent of watermelon imports to the U.S. by volume in recent years. Watermelon is grown throughout Mexico, with major producing areas in the north (Sonora and Chihuahua) and in the central region of the country (Veracruz and Jalisco). Fresh watermelon imports were valued at $440 million in 2024, also unchanged from a year ago.

Watermelon shipment volumes higher, prices lower in early 2025: In the first two and a half months of 2025, watermelon shipments (all imported) were 10 percent higher than the same period last year according to AMS shipment data. About 56 percent of this shipment volume to date is from Mexico. Conventional red flesh seedless watermelon FOB shipping point prices typically averaged between $227.86 and $256.10 per 24-inch bin (approximately 35 count) through mid-March, lower than a year before. U.S. advertised retail prices for conventional red flesh seedless watermelons averaged $6.09 each from January through mid-March 2025, down from $7.39 during the same period in 2024. Retail prices for conventional red flesh seedless miniature watermelons were also lower year-over-year, averaging $3.88 each through mid-March 2025.

Cantaloupe

USDA, NASS surveys annual cantaloupe production for four States: California, Arizona, Georgia, and Texas. In 2024, production estimates were discontinued for Florida and added for Texas. California accounted for 59 percent of production, followed by Arizona (34 percent). Domestic cantaloupes are available from April to November, with shipments typically peaking in July.

In 2024, cantaloupe utilized production was 1.06 billion pounds, a 2-percent increase year-over-year. In California, production declined 7 percent in 2024. Planted acreage in California decreased to 24,200 acres, about half of what it was 20 years ago. The 2024 cantaloupe crop was valued at $302 million, down 5 percent from a year before. Grower prices decreased from $30.30 per hundredweight (cwt) in 2023 to $28.40 per cwt in 2024.

Fresh cantaloupe exports higher, imports lower in 2024: Fresh cantaloupe export volume rose 2 percent to 135.2 million pounds in 2024, the highest since 2018. Higher volumes to top destination Canada (up 13 percent) more than offset lower volumes to Mexico (down 9 percent). Fresh cantaloupe exports were valued at $40 million in 2024, down slightly year-over-year from $40.4 million in 2023.

Fresh cantaloupe import volume fell 3 percent to 810.6 million pounds in 2024. Cantaloupe import volume peaked in 2000 at 1.12 billion pounds. About 65 percent of fresh cantaloupe imports by volume came from Guatemala in recent years (2022–2024), up from 36 percent in 2002–2004. Guatemala is the sixth-largest global producer of cantaloupes (including melons other than watermelons) and sends 95 percent of its fresh melons for export (excluding watermelons) to the United States. Honduras is the second-largest exporter to the United States, accounting for about 20 percent of volume. Tropical Storm Sara caused flooding in Central America in November 2024, reducing yields and delaying shipments for cantaloupes. Fresh cantaloupe imports were valued at $245.1 million in 2024, down 7 percent from $263.8 million in 2023.

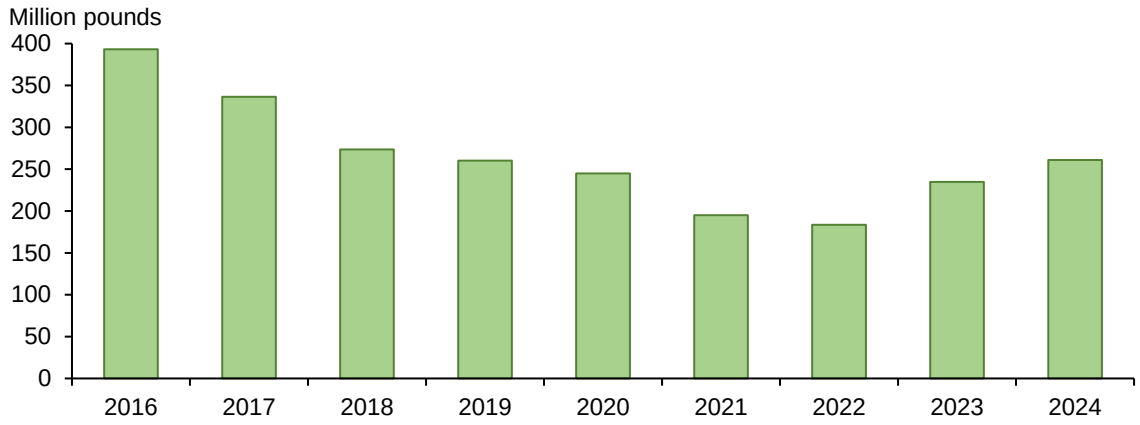
Cantaloupe shipment volumes lower, prices higher in early 2025: In the first two and a half months of 2025, cantaloupe shipment volumes were down 16 percent compared with the same period last year. All shipments to date were of imported cantaloupe, and about 63 percent originated from Guatemala. Conventional cantaloupe FOB shipping point prices typically averaged between $19.52 and $21.04 per carton (half cartons containing sizes 9s and 12s) through mid-March, higher than a year prior. U.S. advertised retail prices for conventional cantaloupes averaged $3.21 each from January through mid-March 2025, up from $3.04 each during the same period in 2024.

Honeydew

USDA, NASS reports annual honeydew production estimates for California. Domestic honeydew melons are available from May to November, with shipments typically peaking in late summer (August or September). In 2024, honeydew utilized production was 261 million pounds, up 11 percent year-over-year and up 42 percent from 2022's historic low production (figure 15). Honeydew acreage in California increased 7 percent to 9,000 acres in 2024—the highest since 2019. The 2024 honeydew melon crop was valued at $82.5 million, up 13 percent from a year before. Unlike watermelon and cantaloupe, grower prices for honeydew increased from $31.20

per hundredweight (cwt) in 2023 to $31.60 per cwt in 2024—up 1 percent year-over-year but down 20 percent from 2022's high.

Figure 15
Honeydew utilized production in 2024 was the highest in 6 years



Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service.

Fresh honeydew exports higher, imports lower in 2024: About 32 percent of domestic honeydew has been exported in recent years. With increased domestic production, fresh honeydew export volume rose 19 percent to 82.3 million pounds in 2024. Of these exports, 73 percent were destined for Canada, followed by South Korea (10 percent) and Taiwan (7 percent). Fresh honeydew import volume fell 9 percent to 417.6 million pounds in 2024. Like cantaloupe, honeydew yields and shipments from Central America were affected by flooding from Tropical Storm Sara in November 2024. Almost all (99 percent) of fresh honeydew imports came from three countries in 2024: Guatemala (47 percent), Mexico (37 percent), and Honduras (16 percent). Fresh honeydew imports were valued at $134.7 million in 2024.

Honeydew shipment volumes lower, prices higher in early 2025: In the first two and a half months of 2025, honeydew shipment volumes were down 8 percent from the same period last year. All shipments to date were imported, and about 52 percent originated from Guatemala. Conventional honeydew FOB shipping point prices typically averaged between $13.78 and $16.00 per carton (two-thirds cartons containing sizes 5s and 6s) through mid-March, higher than a year prior. U.S. advertised retail prices for conventional honeydew melons averaged $4.09 each from January through mid-March 2025, up from $4.00 each during the same period in 2024.

Tree Nuts Outlook

Spring weather influences flower bloom conditions and pollination efficacy for tree nuts. Almond pollination typically begins in early to mid-February and ends in mid-March. Pollination events for walnuts and pistachios typically follow the almond bloom and begin in late March and end in mid-April. Hazelnut pollination begins in January and lasts through February; flowers begin to form on hazelnut trees in June and July but do not mature until November or December.

In 2025, almond trees broke dormancy during first week of February. However, variation in weather conditions drove differences in the timing of bloom and the level of bee activity between orchards in the northern Central Valley (the Sacramento Valley) and the southern Central Valley (the San Joaquin Valley). Almond orchards in the Sacramento Valley bloomed first this year and about a week earlier than usual. In early February, cool temperatures slowed bloom progression and reduced bee activity. Bee activity in the San Joaquin Valley was further suppressed by dry conditions, which reduced the number of flowers on cover crops. In late February, warm weather and good conditions accelerated bloom across the Central Valley. By early March, bloom had peaked in most almond orchards and petal fall had begun. Hailstorms concentrated in the Northern San Joaquin Valley are reported to have damaged some trees in local orchards.

Though hazelnuts, walnuts, and pistachios are wind pollinated, almonds tend to be pollinated using honeybees. However, the share of acreage planted with self-fertilizing almond varieties, like Independence and Shasta, has risen rapidly over the last decade. Industry estimates suggest that approximately 15 percent of almond production is currently attributable to self-fertilizing varieties (the vast majority of which are Independence). Following a winter when commercial honey bee colony losses were reported to be especially high, pollination servers may have been harder to contract than usual. Growers of self-pollinating almond varieties were largely insulated from decreases in production and increases in operating costs.

As discussed in previous spring *Fruit and Tree Nuts Outlook* reports, walnuts have one of the highest chill requirements of the tree nuts grown in California. While some types of almonds require only 250 to 350 hours between 32 degrees to 45 degrees Fahrenheit to blossom productively, some walnut cultivars, such as Chandlers, require between 700 and 1,000 chill hours each winter. In 2022/23, the average number of hours between 32 and 45 degrees exceeded 1,100 in both the Sacramento and San Joaquin Valleys, where almost 90 percent of domestic walnut acreage is located. The cold weather helped support yields that were almost 10 percent higher than the 5-year average. Last year, in 2023/24, average chill hours were below 800 in the Central Valley and yields dropped appreciably. In 2024/25, chill hours in the

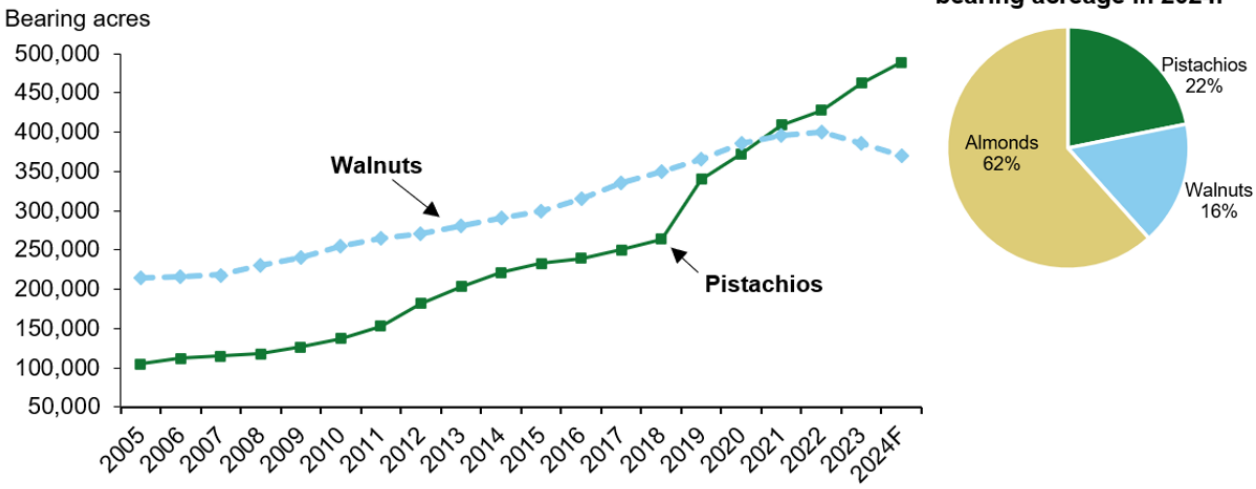
California Central Valley averaged more than 900 hours from November through February, a substantial increase from last year. However, some southern counties in the San Joaquin Valley—such as Kern county—did not see significant increases in total chill hours.

Pistachio 2024/25 Forecast: Production 3rd Largest on Record

Total production for the 2024/25 (September–August) U.S. pistachio crop is forecast at 1.1 billion pounds (in-shell), based on data from the Administrative Committee for Pistachios (ACP). If realized, the 2024/25 crop will be the third largest on record behind 2023/24 and 2021/22 and will mark the 9th straight year the United States has led the world in pistachio production. The current crop is 26 percent smaller than last season, reflecting an off-year in alternate bearing production. Yield was similar to other off-years in the past decade despite lower chill hours and higher than normal summer temperatures.

California pistachio bearing acres reached a record high in 2024, totaling approximately 488,000—a 25,000-acre increase from the previous year. Acreage has increased nearly fivefold in the last two decades, surpassing walnut acreage in 2021 to rank second in California tree nut bearing acres (figure 16). In 2024, almond bearing acreage totaled 1.38 million, accounting for 62 percent of total California tree nut acres, followed by pistachios (22 percent) and walnuts (16 percent). Pistachio bearing acreage is expected to increase in the coming years. In 2024, the ACP estimated there were approximately 124,000 non-bearing pistachio acres (immature plantings in their first through fifth year) and 7,500 newly planted pistachio acres in California.

Figure 16
California pistachio bearing acreage surpassed walnuts in 2021



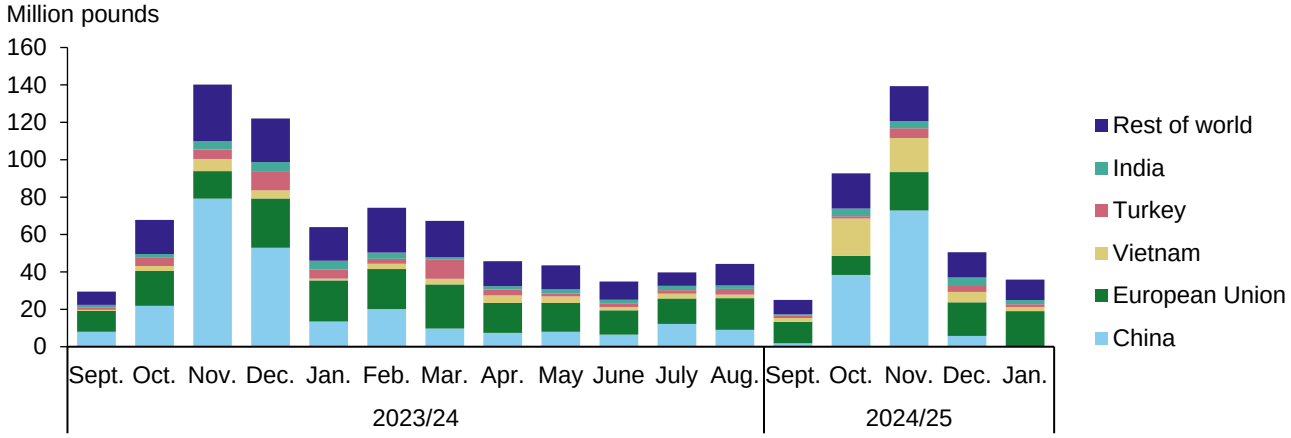
F = Forecast.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service and the Adminstrative Committee for Pistachios.

Recap on 2023/24 pistachio marketing year: The 2023/24 season set record highs in production, domestic consumption, and exports. Domestically, USDA, ERS estimates 2023/24

per capita availability for pistachios at 0.74 pounds per person (shelled basis), more than three times higher than a decade ago. In 2023/24, pistachio per capita availability was estimated to be higher than both walnuts and pecans for the first time since estimates were published. U.S. pistachio export volume (shelled basis) totaled 487 million pounds in 2023/24, a 49-percent increase from 2022/23. Pistachio exports accounted for 57 percent of total U.S. supply, which is the highest share in 5 years. Despite increased domestic consumption and exports in 2023/24, the NASS average grower price fell to $2 per pound—the lowest inflation-adjusted price in 15 years. The larger crop offset lower prices, increasing the value of production to a record high $2.98 billion.

2024/25 exports started strong: For 2024/25, a larger carry-in than last season was unable to offset the decline in production, resulting in inventories falling about 20 percent year-over-year. Similar to 2023/24, U.S. pistachio exports in 2024/25 rose seasonally following the September harvest (figure 17). In the first quarter of the 2024/25 season (September–November), U.S. export volume of in-shell pistachios totaled 257 million pounds, 8 percent higher than the same time last year. However, export volumes in December 2024 and January 2025 were both lower than the same months a year ago, reflecting smaller U.S. inventories.

Figure 17
U.S. in-shell pistachio export volume peaks following fall harvest



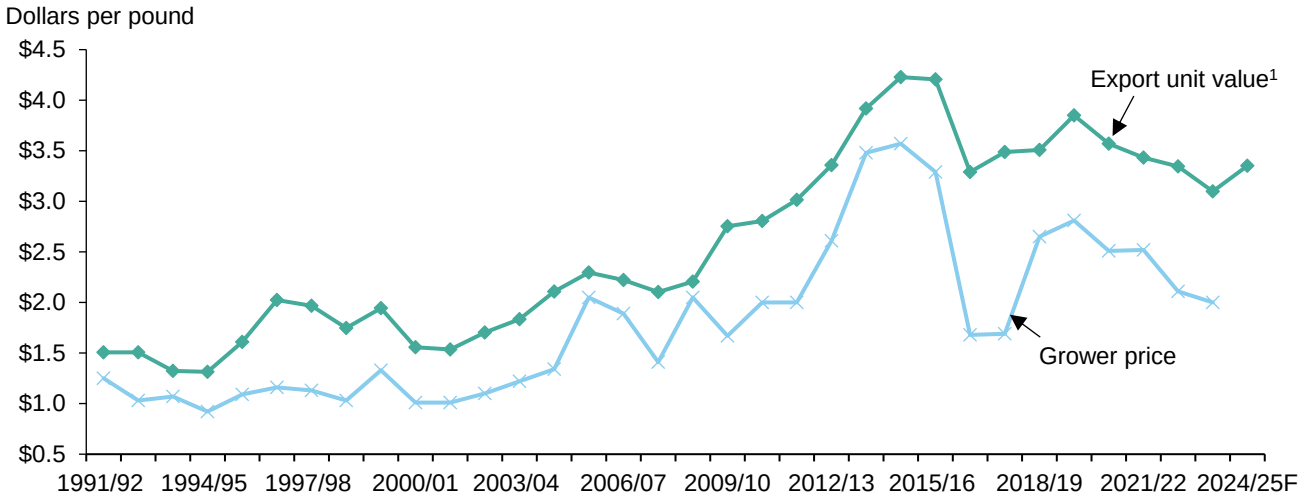
Note: Pistachio marketing year begins in September and ends in August of the following year. Export volume for in-shell pistachios only.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

In the first 5 months of the 2024/25 (September–January) marketing year, in-shell pistachio export volume fell by double-digits year-over-year to top pistachio destinations China, European Union, Turkey, and India, but increased 220 percent to Vietnam. China accounted for the largest share (35 percent) of U.S. pistachio export volume (119 million pounds) with more than half of volume (73 million pounds) shipping in November. The United States exported more in-shell pistachios to Vietnam during September–January 2024/25 (48 million pounds) than any

previous 12-month marketing year. However, the USDA, Foreign Agricultural Service indicates most U.S. tree nuts imported by Vietnam are further processed and re-exported to other countries.

In-shell pistachio export volumes represent about 80 percent of U.S. export volume when converted on an equal basis (either in-shell or shelled equivalent), making in-shell pistachio exports an important indicator of international demand for U.S. pistachios and a key variable in the determination of domestic prices. Last season, the export unit value for in-shell pistachios in the first months of the season was an early indicator of lower prices received for California pistachio growers. Comparing the USDA, NASS pistachio season average grower price to export unit value (in-shell), preliminary trade data indicate that 2024/25 grower prices are trending higher than 2023/24 and are similar to 2022/23 (figure 18).

Figure 18
U.S. pistachio season average grower prices and export unit value (in-shell)



F = Forecast.
Note: Pistachio marketing year begins in September and ends in August of the following year.
1. Export unit value is calculated by dividing total export value by total export volume for in-shell pistachio trade code 0802510000. 2024/25 export unit value calculated from data from September 2024 through January 2025.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census and USDA, National Agricultural Statistics Service.

Outlook for 2025 crop: California pistachio bloom typically occurs in early to mid-April. Unlike almonds, pistachio pollen is spread by wind. Male and female trees are planted in a pistachio orchard, where male trees pollinate the nut-producing female trees. The California pistachio harvest usually takes place in September. Industry sources are currenty expecting the 2025 pistachio crop will be an “on-year” in the alternate bearing cycle, which is supportive of elevated yields and production. With an increase in bearing acreage from 2023 to 2025, this year’s pistachio harvest is on track to meet or exceed the record-high 2023 harvest.

2024 Pecan Production Down in Five Surveyed States

USDA, NASS reported that the 2024 U.S. pecan production forecast was 270.9 million pounds (utilized in-shell basis) in its October 2024 *Crop Production* report. NASS did not release an updated December 2024 pecan forecast, or a *Pecan Production* report in January 2025. A revised estimate of 2024 pecan production will be published in the *Noncitrus Fruits and Nuts 2024 Summary* in May 2025.

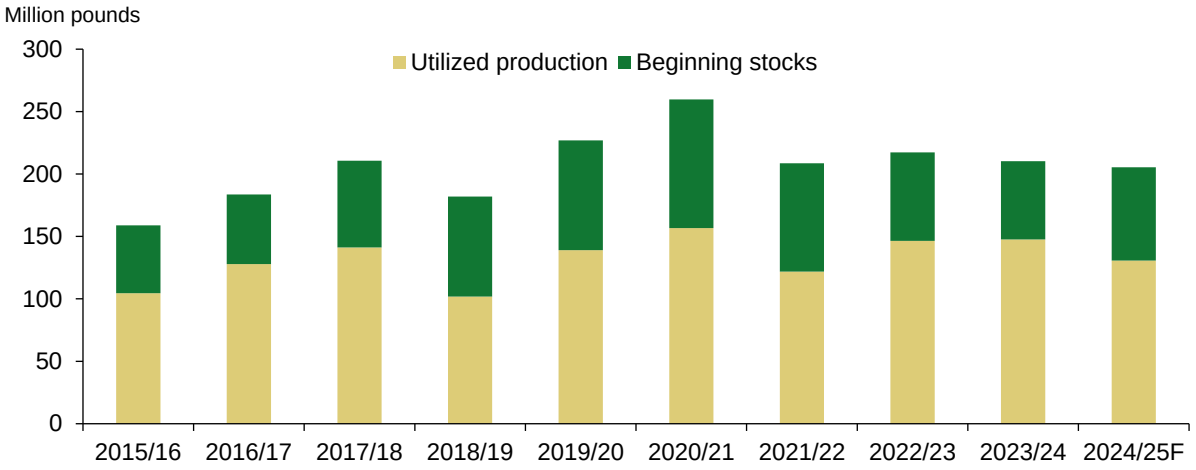
Georgia pecans and Hurricane Helene: Based off the October 2024 forecast, the top pecan producing State—Georgia—is expected to have an 8 percent year-over-year decline due in part to the effects of Hurricane Helene. Hurricane Helene made landfall in Florida on September 26, 2024, as a Category 4 hurricane and swept through Georgia as a Category 1 hurricane. The USDA, NASS October 2024 pecan forecast survey occurred from September 28 to October 7, and the *Crop Production* report noted the full impact of the storm might not be reflected until future reports. Typically, the pecan harvest in Georgia begins at the end of September. University of Georgia Extension and industry reports indicated strong winds knocked pecans off trees leaving them unlikely to be harvested. Reports also indicated older pecan orchards (i.e., taller mature trees) suffered higher amounts of tree loss than younger orchards. The combined impacts of these factors on the Georgia and U.S. pecan production estimates will be clearer in USDA, NASS' May 2025 *Noncitrus Fruits and Nuts 2024 Summary.*

Pecan production down in New Mexico and three other States: The October 2024 USDA, NASS forecast for 2024 New Mexico pecan production is down 15 percent year-over-year, but at 91 million pounds would be its third-largest crop on record behind 2023 and 2017. According to NASS crop progress data, pecan harvest in New Mexico began at the end of October 2024 and was 93 percent complete by the first week of March. Nut set for the 2024 crop was above the 5-year average, indicating average nut sizing may be smaller than last year's crop. State-level pecan production in 2024 is also forecast down in the remaining NASS surveyed-States (Arizona, Texas, and Oklahoma), which collectively account for 30 percent of the current U.S. production forecast.

Based on USDA, NASS cold storage data, 2023/24 ending stocks (September 30, 2024) had increased for shelled (up 18 percent) and in-shell pecans (up 27 percent) compared with 2022/23. After reaching a record high per capita availability in 2022/23 (0.67 pounds, shelled basis), per capita availably fell back to 0.5 pounds, which is closer to the previous 5-year average USDA, ERS estimates. The dip in 2023/24 per capita availability is associated with a 63-percent year-over-year increase in pecan export volume (shelled basis). For 2024/25, larger

beginning stocks partially offset the smaller crop, putting the starting total shelled basis inventory at 205 million pounds, which is 2 percent lower than last season (figure 19).

Figure 19
U.S. pecan production and beginning stocks (shelled basis), 2015/16–2024/25F



F = Forecast.
Note: U.S. pecan marketing year begins in October and ends in September of the following year. 2024/25 production is based off the USDA, NASS October 2024 pecan production forecast.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service.

Early 2025 outlook: In the first 4 months of the 2024/25 marketing year (October–January), in-shell pecan export volume totaled 14.4 million pounds, a 70-percent decline from the same period last year. Shelled pecan exports totaled 12.4 million pounds (down 6 percent year-over-year), with the European Union and Canada accounting for 26 and 24 percent of volume, respectively. The value of shelled pecan exports was unchanged as unit values rose 6 percent during this period. Pecan imports (almost all from Mexico) were also down during this period for shelled (12 percent) and in-shell (18 percent). According to the American Pecan Council's January 2025 *Pecan Industry Position Report*, season-to-date pecans received by handlers totaled 209 million pounds, down 26 percent from the same month last year. Total pecans in inventory were also down (4 percent), with shelled shipments remaining similar to last year and in-shell exports down.

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