



April 2021

# California Tree Nut Outlook: Record Exports Expand Global Demand Base

## Key Points:

- California tree nut growers harvested record-large crops of almonds, walnuts, and pistachios in 2020, following a year of ideal growing conditions on expanded bearing acreage.
- The combination of lower nut prices and a weaker U.S. dollar have pushed exports to record-high volumes. This comes despite ongoing retaliatory tariffs in importing countries like China and India, and shipping logistics complicated by container shortages.
- Despite improved exports, a surplus of almonds is expected at the end of the 2021 crop year as sharp supply growth exceeded demand growth.
- Bearing acreage will continue to expand in years ahead. To handle future record crops, the sector will need to invest in shelling and hulling capacity and processing.
- While tree nut growers and handlers are expected to struggle with low prices through 2021, the payoff is coming. Consumers around the globe are adding nuts to their diets, which will boost demand and propel export momentum.



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## Introduction

California tree nut prices have dropped YoY following a record-breaking harvest for almonds, walnuts, and pistachios in 2020. Tree nuts depend heavily on exports, and shipping has been complicated by logistical issues stemming from the COVID-19 outbreak, uncertainty over demand stemming from COVID-19 disruptions, and ongoing retaliatory tariffs against the U.S. Nonetheless, lower tree nut prices – combined with the weaker dollar – have lifted tree nut exports to record highs as demand surged around the world, especially to China and the EU. Larger carryout supplies, particularly for almonds, at the end of the crop year in 2021 are still expected despite the exhaustive export pace. The increase in bearing acreage and potential for decent yields raises the prospects for yet another strong harvest later this year. It also raises the risk of low prices persisting through the 2021 crop year and stressing some California growers financially where yields did not offset lower prices. Prolonged low prices, though, are creating a much larger demand base around the world for growers and merchandizers to sell to in the future.



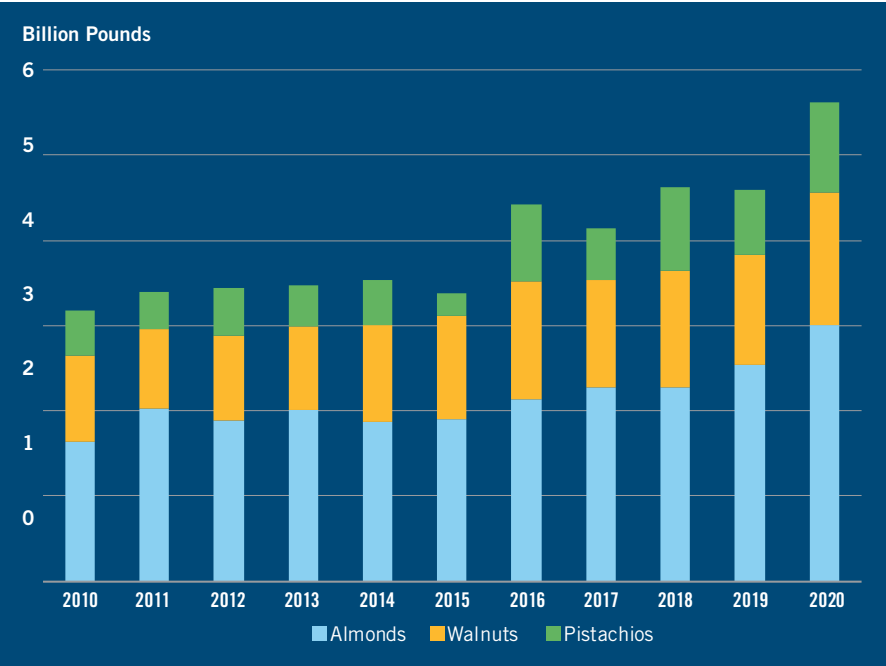
### Record Harvests

After experiencing a near-perfect growing season last year, California growers of almonds, walnuts, and pistachios harvested near-historic yields on record acreage to produce a monstrous crop in 2020. Almond growers produced a 3.1 billion pound crop, up 18% YoY; walnut growers harvested a 1.7 billion pound crop, up 19% YoY; and pistachio growers hauled in a crop of 1.0 billion pounds, up 40% (*Exhibit 1*). Pistachios are an alternate bearing crop, and compared to the last on-year in 2018, pistachio production for 2020 rose 5.6%. Local markets were challenged by lack of storage and processing capacity to handle the record tree nut crop.

In some instances, the quality of the 2020 California tree nut crop was slightly diminished. Nut sizes were smaller for some growers who harvested record yields. Heat stress over the summer darkened walnut kernels and increased losses to shriveling, while the shorter shelf-life of walnuts due to the high oil content raised the urgency to sell the record crop.

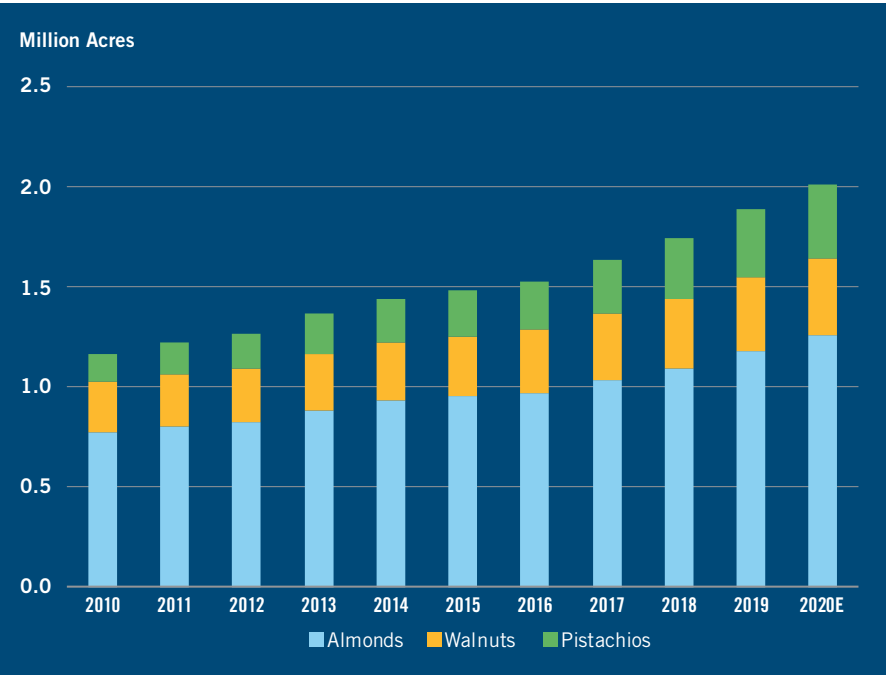
Because of limited infrastructure to process and handle the record crop, growers stored more almonds than normal in stockpiles waiting for processing. Growers and handlers also struggled with an increase in high-moisture nuts. Smoke from wildfires in California last year led to more overcast days and a loss in radiant heat on the orchard floor, which is needed to dry the crop before processing. Ground piles of high-moisture nuts stored under

### EXHIBIT 1: Almond, Walnut, and Pistachio Production



Source: USDA-NASS, Administrative Committee for Pistachios

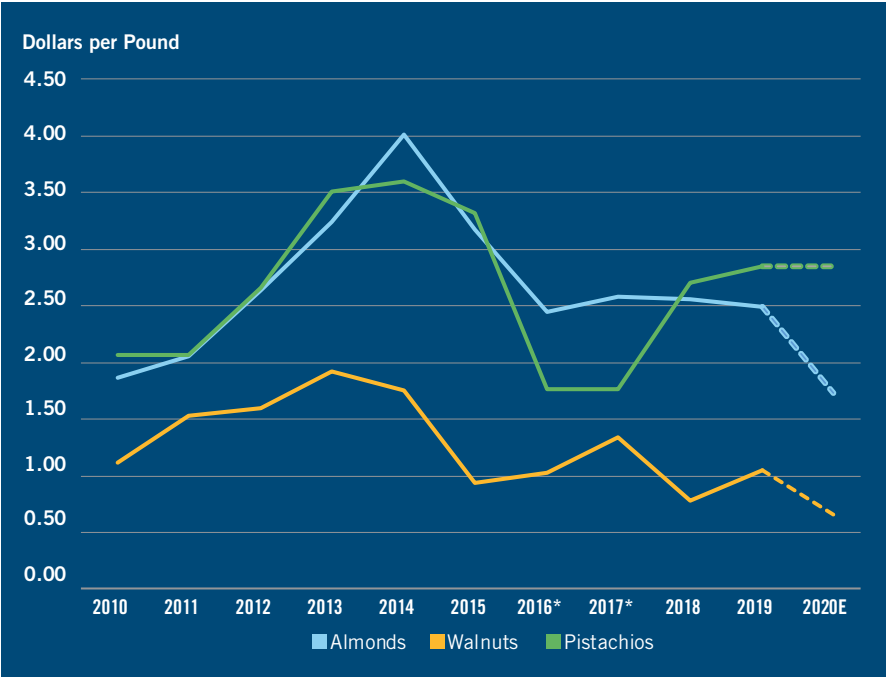
### EXHIBIT 2: Bearing Acreage



Source: USDA-NASS



EXHIBIT 3: Tree Nut Prices



Source: USDA-NASS, and industry estimates for 2020. \*USDA pistachio prices are considered preliminary for 2016 and 2017.

tarps commonly resulted in high levels of condensation, causing fungal growth and raising the risk of salmonella and E.coli outbreaks.

Over the years, California growers have continued to shift acres to tree nuts, especially almonds, (Exhibit 2) and away from less profitable crops like dairy feed. Perpetual scarcity of labor has also incentivized growers to plant tree nuts that are mechanically harvested instead of fruit and vegetables that rely heavily on manual labor for planting and harvesting. As a result, bearing acreage for almonds, walnuts, and pistachios has continued climbing, hinting at more record crops in years ahead. USDA will release the first survey-based forecast on the 2021 harvest in the Objective Measurement Report in July.

Tree nut handlers note that acreage has grown too fast to harvest in a timely manner, so hulling/shelling capacity and processing must expand to handle future record crops. While acreage of nonbearing trees (one to three years) for almonds and pistachios has trended higher in recent years and walnut nonbearing acreage has fallen,

new plantings are expected to slow in some regions as nurseries report declining tree sales. Older acreage redevelopment has also slowed in recent years, while lower prices and reduced water allocations have motivated some growers to remove older, low-producing plantings.

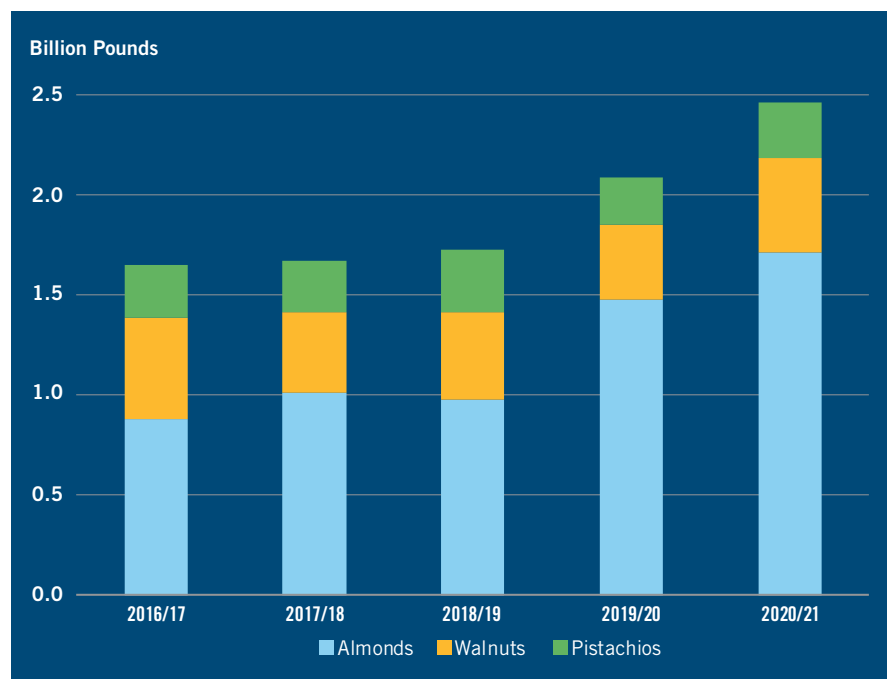
Prices

Prices received by growers have slipped for almonds and walnuts. Almond prices fell by roughly 30% from the year prior and walnut prices were down 40% YoY (Exhibit 3). Pistachio prices have been steady to moderately lower YoY, supported by extraordinary exports and lower carry-in from the previous off-year harvest.

Walnut growers in particular have continued to struggle with low prices in recent years, and many growers anticipate another year of losses in the next crop season. Prices are expected to rise from impressive shipments, but not necessarily reach profitable levels for growers.

Growing conditions for almonds have mostly been favorable throughout much of the bloom season in 2021. Some growers note that last year’s heavy production has meant a weaker bloom this year, particularly in the northern Central Valley. If almonds and walnuts achieve average yields on record acreage, another record or near-record crop still is possible this fall. Pistachio production is expected to be down following a strong production year. Weather notwithstanding, off-year production for pistachios is typically one-third to one-fourth lower in the year following a big production year. Water allocations for crop irrigation in California may also impact yields of the 2021 crop. Handlers anticipate prices will be relatively stable for almonds, walnuts, and pistachios heading into the next crop year and that the low-price environment will build a stronger demand base that will carry over into future marketing seasons.

## EXHIBIT 4: California Tree Nut Exports by Crop Year through February



Source: Almond Board of California, California Walnut Board, Administrative Committee for Pistachios.

Season begins in August for almonds, September for pistachios and walnuts.

### Demand

Subdued prices may persist through the next marketing year. However, the combination of lower tree nut prices and a weaker U.S. dollar has driven substantial export growth to meet the rising consumer global demand (*Exhibit 4*). Domestic demand for tree nuts has also been robust. But with roughly 60% of the almond crop, 70% of the walnut crop, and half of the pistachio crop exported each year, growers and handlers are banking on export momentum to carry over into future crop years to absorb rising production.

For the current marketing year through February, California almond exports have jumped 20% in nearly all regions of the globe. Western Europe – by far the biggest export destination for U.S. almonds – increased imports by 8% YoY, while exports to India and China – the second and third top destinations – jumped more than 50% YoY, despite ongoing retaliatory tariffs on U.S. tree nuts imposed in 2018.

Walnut exports are also moving at a faster clip with shipments for the marketing year up nearly 25% YoY for shelled and in-shell combined. Turkey – the top destination for in-shell walnuts – took 24% more walnuts YoY, while exports to India – the next top market for in-shell – were up 129% YoY. Pistachio exports are up 16% YoY, with top destinations China and Europe both taking more than one-third more pistachios than last year.

Logistical constraints with containers, though, have held exports back from achieving a faster pace. Tree nut traders figure that the dearth of shipping containers has delayed 10%-20% of shipments. Uncertainty over the future of COVID-19 and the impact on consumption has also

been a constraint on demand, and buyers have delayed purchases. Production capacity abroad is expanding, specifically walnut acreage in Chile, which is also creating headwinds to U.S. exports.

### Outlook

Shipping issues with containers and the unknown impacts from COVID-19 cloud the long-term outlook on general consumption. However, tree nut growers, processors, and handlers anticipate that two years of low prices means more consumers around the globe have permanently added more almonds, walnuts, and pistachios to their diets, and increased their demand for dairy-free food and beverage alternatives. Following the massive 2021 supply, paired with low prices and a weak U.S. dollar, global demand will reach a new plateau.



However, the California tree nut crop has tripled in the last 20 years and is expected to continue expanding as more bearing acres come into production in regions where water has not been limited. Expanding the export base is key to finding a home for further increases in production, and investing more in harvesting machinery, hulling and shelling capacity, and processing is needed to market future tree nut crops in a timely manner. ■

**The following Farm Credit institutions provided valuable insights integral to the paper's outlook:**

- American AgCredit, ACA
- Farm Credit Services of Colusa-Glenn, ACA
- Farm Credit West, ACA
- Fresno-Madera Farm Credit, ACA
- Golden State Farm Credit, ACA
- Yosemite Farm Credit, ACA

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