



COVID-19 Series
Apple Inventories and Prices
June 2020 Update

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The COVID-19 pandemic has severely disrupted the food supply chain, preventing farmers from getting their products to the market at a normal pace. One stressor facing apple growers across the nation is the movement of inventories. At the national level, as of June 1, 2020, the U.S. Apple Association reported a record 35.8 million 40 lb boxes in storage; this number is 23% higher compared to June 1, 2019 (Washington State Tree Fruit Association 2020). Washington apple inventories for June 2018, 2019, and 2020 can be observed in Figure 1. For June 1, 2020, the Washington apple industry reported a total of 33.7 million 40 lb boxes, 24% higher compared to last year and 11% higher compared to the three-year average. Not all apple varieties hold the same inventory. Larger inventories are seen for Fuji, Gala, Granny, and Golden Delicious. As of June 1, 2020, Fuji holds 7.4 million 40 lb boxes compared to the 3.4 million 40 lb boxes in 2019. Fuji holds an inventory 120% higher compared to last year and 49% higher compared to the three-year average. The Gala inventory, at 6.7 million 40 lb boxes, is 24% higher compared to last year and 18% higher compared to the three-year average. The Granny inventory, with 5.4 million 40 lb boxes, is 41% higher than last year and 1% higher than the three-year average. Golden Delicious, with 2.8 million 40 lb boxes, is 169% higher than last year and 42% higher than the three-year average (Washington State Tree Fruit Association 2020).

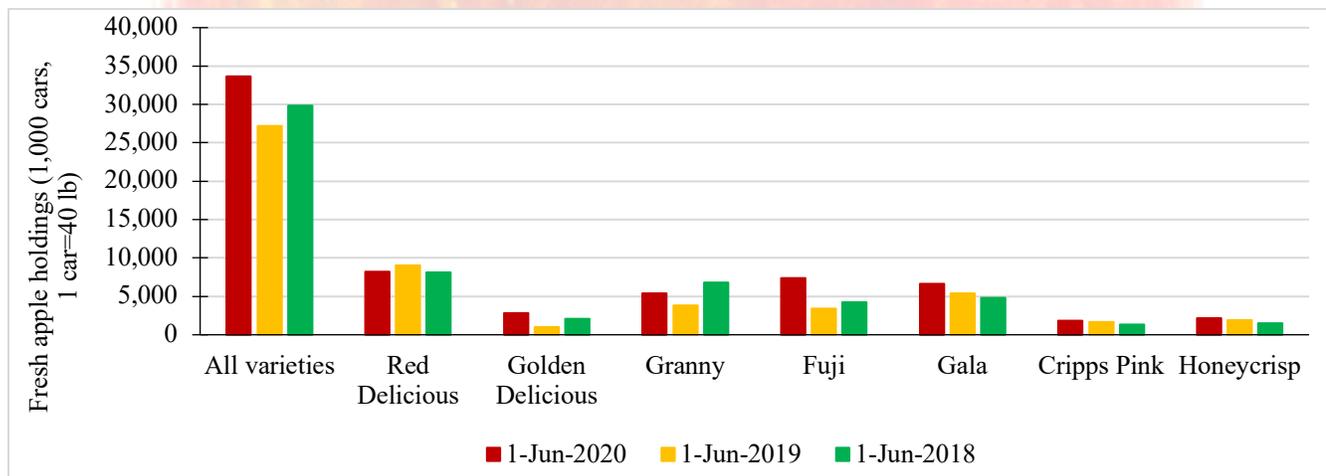


Figure 1. Washington State apple inventory comparison across 2018, 2019, and 2020.

The U.S. government has launched programs to help farmers cope with the pandemic. The details of the assistance can be found at the [Coronavirus Food Assistance Program](#). Specialty crops are included in the program and are grouped into three categories to be granted assistance. The first category includes crops that suffered a 5% or greater price decline between mid-January and mid-April as a result of COVID-19. The second category includes produce that has been shipped but consequently spoiled due to the loss of a marketing channel. And the third category includes crop shipments that did not leave the farm or mature crops that remain unharvested. Accordingly, apples and blueberries fall into category two and three, whereas pears fall into categories one, two, and three. Sweet cherries did not appear in the list (USDA 2020).

The method used by the U.S. Department of Agriculture to establish if growers were adversely impacted by COVID-19 was to compare prices in mid-January to mid-April within 2020; if a difference of 5% or greater was observed, then the grower could access government help under category one. We consider appropriate to compare prices across years. Figure 2 shows the price trend for the period from the second week of January to the second week of April, 2018, 2019, and 2020, for all the varieties and disaggregated by variety: Red Delicious, Gala, and Honeycrisp. All prices are reported in dollars per 40 lb box. A Tukey statistical test was conducted to compare average prices across years, all differences reported are statistically significant. For all apple varieties, the average price for mid-January to mid-April in 2020 was \$5.40 lower than in 2019 and \$1.20 lower than in 2018, both statistically significant. Prices across varieties behave differently. Average Red Delicious prices for the same time period in 2020 was \$2.90 lower than in 2019 but no different from 2018. The average Gala price in 2020 was \$6.50 lower than in 2019 and \$1.90 lower than in 2018, both statistically significant. The average Honeycrisp price in 2020 was \$10.70 lower than in 2019 and \$7.90 lower than in 2018, both statistically significant.

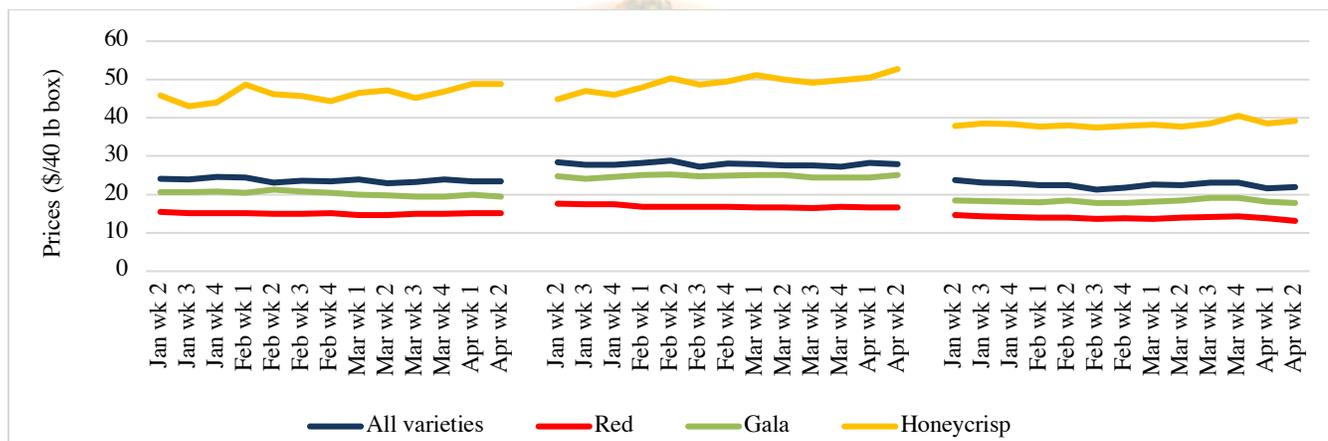


Figure 2. Washington State apple prices comparison across representative varieties and years 2018, 2019, and 2020. Note that FOB=Free on board.

Further we compared the prices in mid-January to mid-April 2020. Considering the average price for all apple varieties at \$23.7/40 lb box in mid-January and at \$21.97/40 lb box in mid-April, the decline in prices is 8%. This implies that Washington apple growers do comply with the first category to receive assistance under the Coronavirus Food Assistance Program for specialty crops, as the price decline experienced during the period in question, surpassed the 5% threshold established. The percent difference in prices is not consistent across varieties. For example, for Red Delicious, the apple variety with the largest acreage in the state, the price decline between mid-January and mid-April was at 11%, whereas Gala prices experienced a price decline at 3%, and Honeycrisp saw an increase of 3%.

References

USDA (U.S. Department of Agriculture). 2020. [Coronavirus Food Assistance Program](#).
 Washington State Tree Fruit Association. 2020. Various reports.