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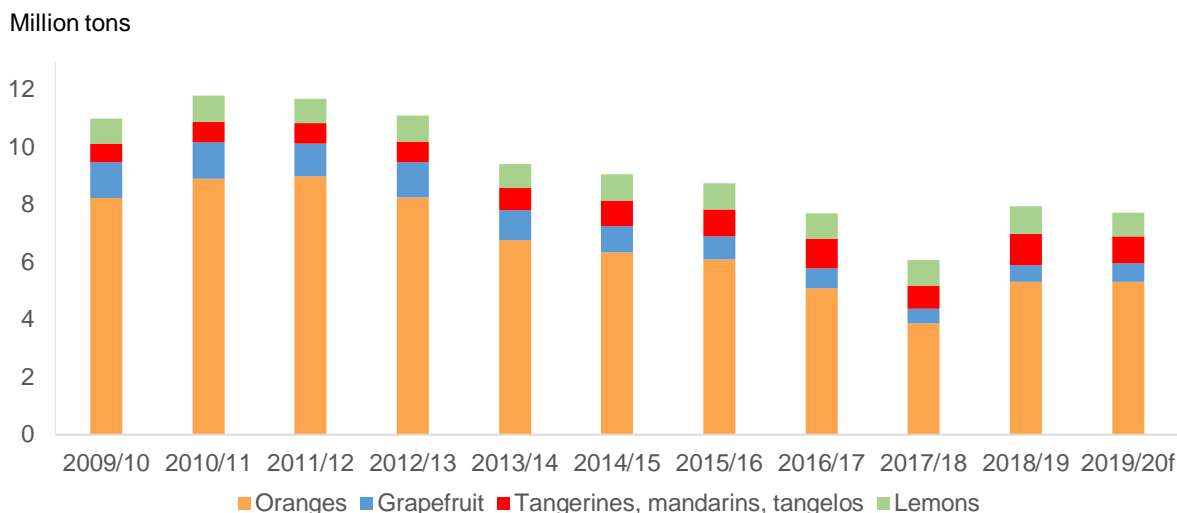
# Fruit and Tree Nuts Outlook

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## Supplies in U.S. Citrus Market Drop

The 2019/20 citrus crop is forecast to be 7.63 million tons, down 4 percent from the previous season. Declines in overall production can mostly be attributed to smaller lemon, tangerine, and mandarin crops in California. Orange production in California has remained stable since last season. Citrus production in Florida has also remained stable with a 1 percent decline in orange production, and significant increases in grapefruit, tangerine, mandarin, and tangelo production over last year. Overall decreases in production of lemons, tangerines, mandarins, and tangelos are expected to result in increased imports, and higher prices compared with last year.

**U.S citrus production declines by 4 percent**



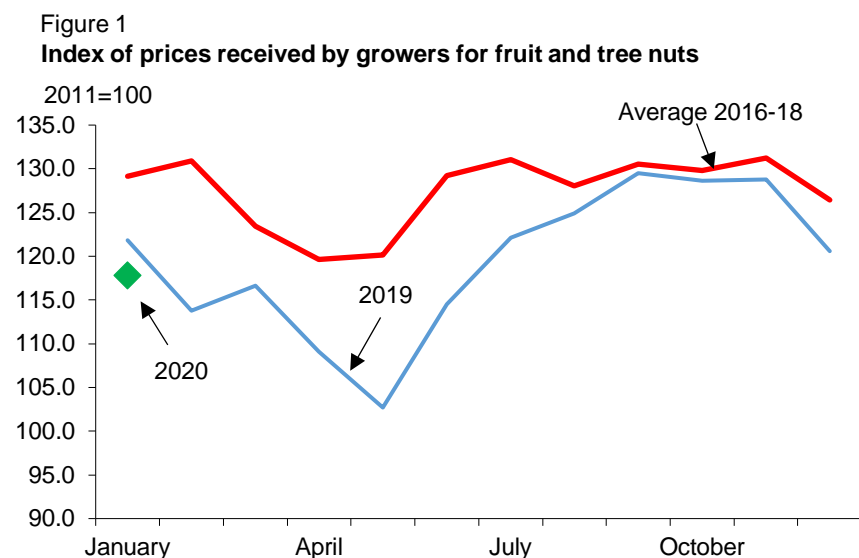
f = forecast.

Source: USDA, National Agricultural Statistics Service, *Crop Production*, March 2020 issue, and *Citrus Fruit Summary* various issues.

# Price Outlook

## Fruit and Tree Nut Grower Price Index Remains Weak

Fruit and tree nut grower prices began 2020 at low levels. At 117.8 (2011=100), the January 2020 index was down 10 percent from the January 2019 index and below the January average for 2016-18 (fig.1). The January 2020 index was the lowest since January 2013. Significantly lower grower prices for citrus fruit and apples drove down the index (table 1).



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

As of mid-March 2020, U.S. citrus exports were down except for orange juice and tangerines. Reduced exports have increased the domestic supply of citrus, putting downward pressure on prices. The January 2020 price of all- grapefruit is down 36 percent from the year before, and all-oranges and oranges for the fresh market are down by 6.9 and 9.4 percent respectively. All-lemon prices are down 28.5 percent, and fresh lemons prices are down by 8.6 percent.

Apple prices were down 21 percent in January 2020 from the year before. USDA, National Agricultural Statistics Service (NASS) estimates the 2019 total apple crop to be up 3.6 percent from 2018. The strong dollar and increased tariffs in several countries have reduced exports, putting downward pressure on prices.

Table 1--Monthly fruit prices received by growers, United States

Commodity	December		January		Year-to-year change	
	2018	2019	2019	2020	December	January
	-----Dollars per box-----				Percent	
Citrus fruit: <sup>1</sup>						
Grapefruit, all	18.68	12.81	15.99	10.23	-31.4	-36.0
Grapefruit, fresh	22.99	19.91	21.63	18.35	-13.4	-15.2
Lemons, all	26.23	22.43	22.58	16.14	-14.5	-28.5
Lemons, fresh	31.78	28.64	27.98	25.57	-9.9	-8.6
Oranges, all	10.46	10.2	10.10	9.4	-2.5	-6.9
Oranges, fresh	19.15	16.75	16.01	14.51	-12.5	-9.4
	-----Dollars per pound-----				Percent	
Noncitrus fruit:						
Apples, fresh <sup>2</sup>	0.401	0.336	0.397	0.313	-16.2	-21.2
Grapes, fresh <sup>2</sup>	0.570	1.045	--	--	83.3	--
Peaches, fresh <sup>2</sup>	--	--	--	--	--	--
Pears, fresh <sup>2</sup>	0.307	0.361	0.287	0.367	17.6	27.7
Strawberries, fresh	--	--	2.220	2.290	--	3.2

-- Insufficient number of reports to establish an estimate.

<sup>1</sup> Equivalent on-tree price.

<sup>2</sup> Equivalent packinghouse-door returns for CA, MI, NY, and PA (apples only), OR (pears only), and WA (apples, peaches, and pears).

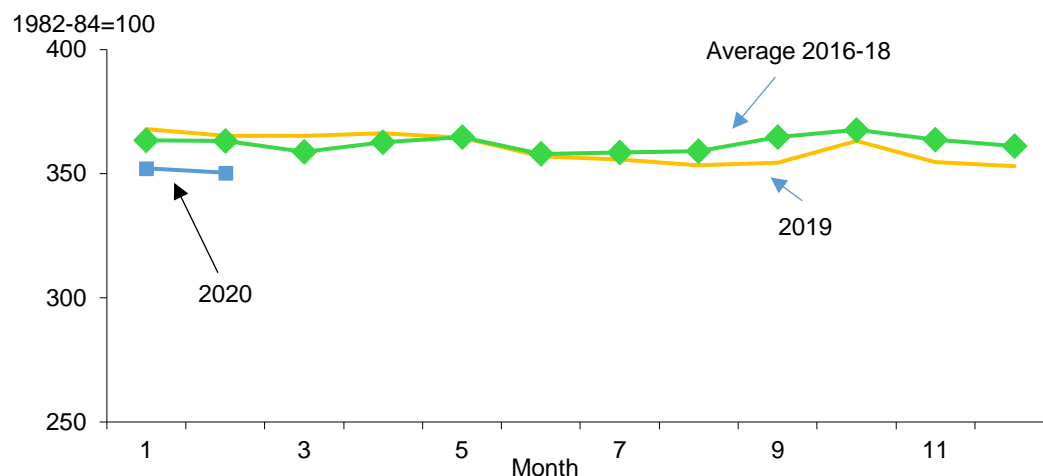
Prices as sold for other States.

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

## Consumer Price Index for Fresh Fruit Starts the Year Low

The Consumer Price Index (CPI) for fresh fruit was reported at 350.4 (1982-84=100) in February 2020, down 4.1 percent from last February 2019 and lower than the 2016-18 January average (fig. 2). Based on data from the U.S. Department of Labor, Bureau of Labor Statistics (BLS), consumers paid lower prices in January and February this year compared with 2019 for navel oranges, grapefruit, lemons, and strawberries. Consumer prices were higher for Anjou pears. Banana prices were nearly steady. Thompson seedless grapes prices were mixed, up in January, and lower in February. The BLS has not reported any prices for Red Delicious apples since November 2017. Providing an indication of apple retail prices in general, the CPI for apples was 317.3 in January 2020 and 315.2 in February 2020, both down from year-earlier levels.

Figure 2  
**Consumer price index for fresh fruit starts lower in 2020**



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Lower retail prices for citrus fruit reflect the lower grower prices this year compared to the same time last year (table 2). The BLS retail strawberry prices are lower than a year ago. The price for Anjou pears reflects the higher grower prices for pears.

Table 2--U.S. monthly retail prices for selected fruit, 2019-20

Commodity	Unit	2019		2020		2019-20 change	
		January	February	January	February	January	February
		-----1982-84 = 100 -----				--- Percent ---	
Fresh fruit		367.988	365.288	352.185	350.446	-4.3	-4.1
Apples		333.29	335.377	317.302	315.191	-4.8	-6.0
		--- Dollars ---		--- Dollars ---		--- Percent ---	
Fresh:							
Navel oranges	Pound	1.344	1.298	1.244	1.218	-7.4	-6.2
Grapefruit	Pound	1.305	1.315	1.226	1.189	-6.1	-9.6
Lemons	Pound	2.363	2.270	1.949	1.959	-17.5	-13.7
Red Delicious apples	Pound	na	na	na	na	na	na
Bananas	Pound	0.576	0.571	0.570	0.574	-1.0	0.5
Peaches	Pound	--	--	--	--	--	--
Anjou pears	Pound	1.634	1.586	2.751	2.572	68.4	62.2
Strawberries <sup>1</sup>	12-oz. pint	3.279	2.872	2.884	2.558	-12.0	-10.9
Thompson seedless grapes	Pound	2.589	2.763	2.751	2.572	6.3	-6.9

na = Not available.

-- Insufficient marketing to establish a price.

<sup>1</sup> Dry pint.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

# Citrus Fruit Outlook

## 2019/20 Citrus Production Down Slightly

The current U.S. citrus crop forecast for 2019/20 is 7.63 million tons, down 4 percent from the 2018/19 final utilized total of 7.94 million tons (table 3). This forecast is 1 percent below the initial USDA's National Agricultural Statistics Service (NASS) forecast of 7.74 million tons in October 2019.

Table 3--Citrus: Utilized production, 2017/18, 2018/19, and forecast for 2019/20<sup>1</sup>

Crop and State	Utilized		Forecast for	Utilized		Forecast for
	2017/18	2018/19	2019/20 as of 03-2020	2017/18	2018/19	2019/20 as of 03-2020
	---- 1,000 boxes <sup>2</sup> ----			---- 1,000 tons ----		
<b>Oranges:</b>						
Early/midseason and navel:						
California	35,900	40,800	40,000	1,436	1,632	1,600
Florida	18,950	30,400	30,000	853	1,368	1,350
Texas	1,530	2,210	1,950	65	94	83
Total <sup>3</sup>	56,380	73,410	71,950	2,354	3,094	3,033
Valencia:						
California	8,300	9,000	8,500	332	360	340
Florida	26,100	41,350	41,000	1,175	1,861	1,845
Texas	350	290	610	15	12	26
Total	34,750	50,640	50,110	1,521	2,233	2,211
All oranges	91,130	124,050	123,560	3,875	5,327	5,244
<b>Grapefruit:</b>						
California	3,800	3,200	4,100	152	128	164
Florida	3,880	4,510	5,400	165	192	230
Texas	4,800	6,100	6,200	192	244	248
All grapefruit	12,480	13,810	15,700	509	564	642
<b>Tangerines, mandarins, and tangelos:</b>						
California	19,200	26,000	22,000	768	1,040	880
Florida	750	990	1,050	36	47	50
All tangerines, mandarins, and tangelos	19,950	26,990	23,050	804	1,087	930
<b>Lemons:</b>						
Arizona	1,000	1,350	1,400	40	54	56
California	21,200	22,800	19,000	848	912	760
All lemons	22,200	24,150	20,400	888	966	816
All citrus <sup>3</sup>	145,760	189,000	182,710	6,076	7,944	7,631

<sup>1</sup>The crop year begins with bloom of the first year shown and ends with completion of harvest the following year.

<sup>2</sup>Net pounds per box: oranges in California (CA)-80, Florida (FL)-90, Texas (TX)-85; grapefruit in CA-80, FL-85, TX-80; lemons-80; tangelos-90; tangerines and mandarins in CA-80, FL-95.

<sup>3</sup>Totals may not be equivalent to the sum of the categories due to rounding.

Source: USDA, National Agricultural Statistics Service, *Crop Production*, March 2020, and *Citrus Fruits 2019 Summary* (August 2019).

## Florida and California Orange Production is Steady

All-orange production in the United States for 2019/20 is forecast about steady from last year with a slight decrease of 1.6 percent. This decrease in production is largely because of lighter navel and Valencia orange crops in California. Navel production in California is forecast to decrease by 32,000 tons (2 percent) from last season and Valencia production is expected to be down by 20,000 tons. The March 2020 issue of the NASS Crop Production report forecasts 2019/20 California all-orange production at 1.94 million tons, down 2.6 percent from 2018/19.

All-orange production in Florida is also about steady this season with a 1-percent decrease to 3.19 million tons. The early/mid-season non-Valencia crops are down by 400,000 boxes or 18,000 tons. At the same time, Valencia orange production is now projected to be down by 350,000 boxes or 16,000 tons from last year. This revised estimate for Florida Valencia production is mostly because of lower than average fruit size this season, and higher than average fruit drop. Relatively stable production levels of oranges this season may suggest that growers are succeeding at slowing continued losses caused by Huanglongbing (citrus greening disease) through improved cultivation and management practices. Although citrus greening disease is present in all significant citrus producing States in the United States including California, Arizona, and Texas, the effects of the disease are most observable in Florida where between 95 and 100 percent of groves are believed to be infected with the bacteria.

Although Texas accounts for only 2 percent of U.S. commercial orange production, all-orange production is up by 2.4 percent this season due to a more than 100 percent increase in the Valencia orange crop this year.

Despite a smaller crop in California this year, prices for fresh oranges have declined suggesting relatively weak domestic demand in the early part of this season. November and December 2019 prices for fresh California oranges (\$19.40 and \$17.80 per box) were 3 percent and 9 percent below last year's prices. More pronounced declines in fresh orange prices can be observed for Florida and Texas, where December 2019 per box prices are more than \$5.00 lower in Florida (32 percent), and \$6.50 lower (36 percent) in Texas compared with the same month last year.

Export volumes of fresh oranges are down from the previous year. Season-to-date exports (November 2019 – January 2020) are 3 percent below last season. The bulk of U.S. fresh orange exports occur in the spring and USDA's Economic Research Service (ERS) forecasts total U.S. fresh orange exports to reach 530,000 tons in 2019/20, down 2.5 percent from last

season. U.S. Census Bureau data show declines in exports to Canada, the largest U.S. export market, of 10 percent. So far, U.S. fresh orange exports to other trading partners are up this season with Mexico (38 percent), Japan (18 percent), and Singapore (9.5 percent) all up.

For the first three months of the season (November 2019 – January 2020), fresh orange imports were at 19,861 tons, 2 percent down from the same period last season. With orange production in Florida and California only slightly down so far this year, ERS predicts fresh orange imports at 215,000 tons in 2019/20, up 2 percent from last season. July to October are usually the most active months for fresh orange imports. Chile and Mexico are estimated to remain the largest suppliers of fresh market oranges to the U.S. market this season; shipments from Mexico are down 1 percent from this time last year and shipments from Chile are down nearly 37 percent.

## Florida Orange Juice Production Forecast Down

Most oranges grown in the United States (69 percent) go to processing; and Florida leads production of oranges for processing. According to USDA's National Agricultural Statistics Service (NASS), 98 percent of the early midseason orchard rows were harvested by late February. As of mid-February 2020, harvest of Valencia oranges was still in the early stages. The average processing Florida orange price reported by NASS in January 2020 was \$8.40 per box, 10 cents higher than the same time last year. Prices are up despite relatively high beginning stocks of frozen concentrated orange juice this season.

USDA's Economic Research Service (ERS) forecasts orange juice production in 2019/20 to be down from last year, with total production at 445 million single-strength equivalent gallons. ERS forecasts orange juice imports to fall to 326 million gallons. Year-over-year decreases in import volume have already been reported for the first 3 months of the current marketing year, down 32 percent from the same period last season. Season-to-date shipments are down by 12 percent from Brazil. Monthly exports of U.S. orange juice are up 5 percent in the first four months of the season relative to 2018/19

Nielsen retail sales data through February from the Florida Department of Citrus show a continued trend of declining sales volume and overall increased price per gallon. Total orange juice sales volume from October 2019 through mid-February 2020 were down 4.3 percent with prices up 2.1 percent, compared with the same period last season. Not-from-concentrate (NFC) orange juice sales constitute nearly two-thirds of total sales volume to date. NFC orange juice prices for the season so far are averaging \$8.65 per gallon, compared with \$8.41 per gallon in 2018/19.

## Higher Grapefruit Production Expected for 2019/20

Total U.S. grapefruit production is projected up 17 percent to 663,000 tons in 2019/20 from 564,000 tons in 2018/19 (fig 3). This volume is 8 percent higher than NASS's October 2019 forecast. Production is bolstered by larger crops in California, Florida, and Texas.

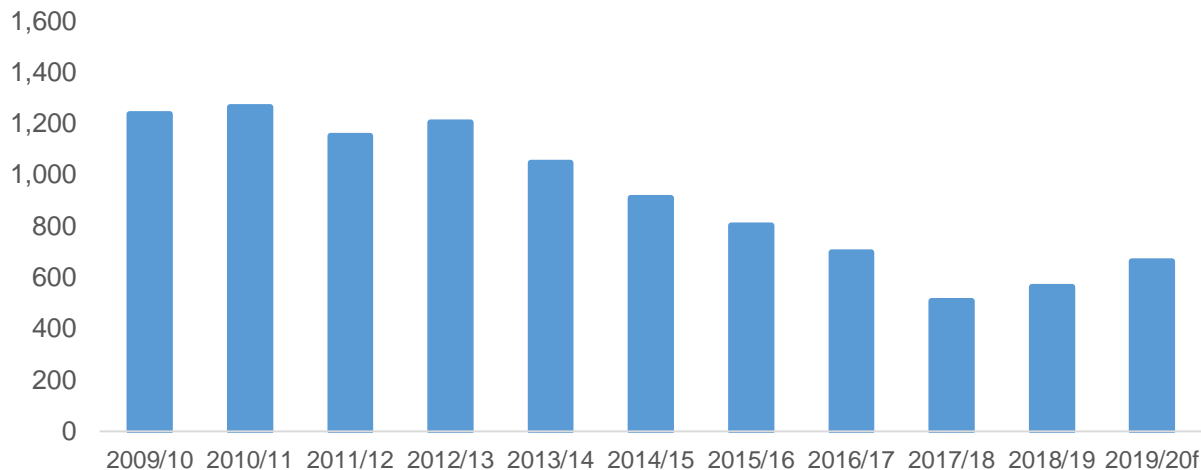
The Row Count Survey conducted by NASS in late February indicated that 69 percent of the red grapefruit rows and 71 percent of the white grapefruit rows were already harvested. Current fresh grapefruit prices are registering lower than the 5-year average. The October 2019 to January 2020 average price was \$20.34 per box, 14 percent below the average price from last season for the same period (table 4). This year-over-year price decrease reflects increased production since the historical low of the 2017/18 season.

So far, U.S. fresh grapefruit import volumes for the current season (September 2019 – January 2020), were up 22 percent compared with the same period in 2018/19. This increase in imports includes higher volumes from Mexico, South Africa, and Peru. Additionally, Chile has supplied the U.S. with fresh grapefruit for the first time in 3 years. Despite improved domestic production, season-to-date fresh grapefruit exports were down nearly 2 percent, mostly because of 1,736 fewer tons being sent to Japan.

Florida grower prices for processed grapefruit (November – December 2019) are lower than the same period last season. Larger grapefruit crops domestically and higher imports this season are likely to keep prices below the last two years. Season-to-date retail grapefruit juice sales volume is down 7 percent from the previous season despite improved availability, with juice prices up by 5.4 percent to \$8.40 per gallon, according to the Florida Department of Citrus's February Nielsen sales report.



Figure 3  
**Total U.S. grapefruit production 2009/10-2019/20**  
 Thousand tons



f = forecast.

Sources: USDA, National Agricultural Statistics Service, *Crop Production*, March 2020 issue, and *Citrus Fruit Summary*, various issues.

Table 4--Fresh grapefruit: Average equivalent on-tree prices received by U.S. growers, 2014/15-2019/20

Month	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
	----- Dollars/box <sup>1</sup> -----					
October	15.42	17.54	22.63	26.67	26.03	22.22
November	12.99	16.22	16.33	25.00	24.32	20.87
December	12.49	15.43	16.18	23.17	22.99	19.91
January	10.92	15.01	16.48	23.45	21.63	18.35
February	10.43	14.63	16.76	23.03	20.90	--
March	10.34	14.32	18.19	23.08	18.81	--
April	9.92	--	20.90	22.46	18.4	--
May	--	--	--	--	--	--
Oct.-Jan. average	12.96	16.05	17.91	24.57	21.87	20.34

<sup>1</sup>The net weight of a grapefruit box for Florida: 85 lb, for California: 80 lb, for Texas: 80 lb.

Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*, various issues.

## Lemon Production Forecast Down in 2019/20

The U.S. lemon crop for the 2019/20 marketing season (August – July) is anticipated to be 816,000 tons, down 15.5 percent from the 2018/19 final utilized production total. This overall smaller volume is driven exclusively by a 17 percent reduction in California’s production.

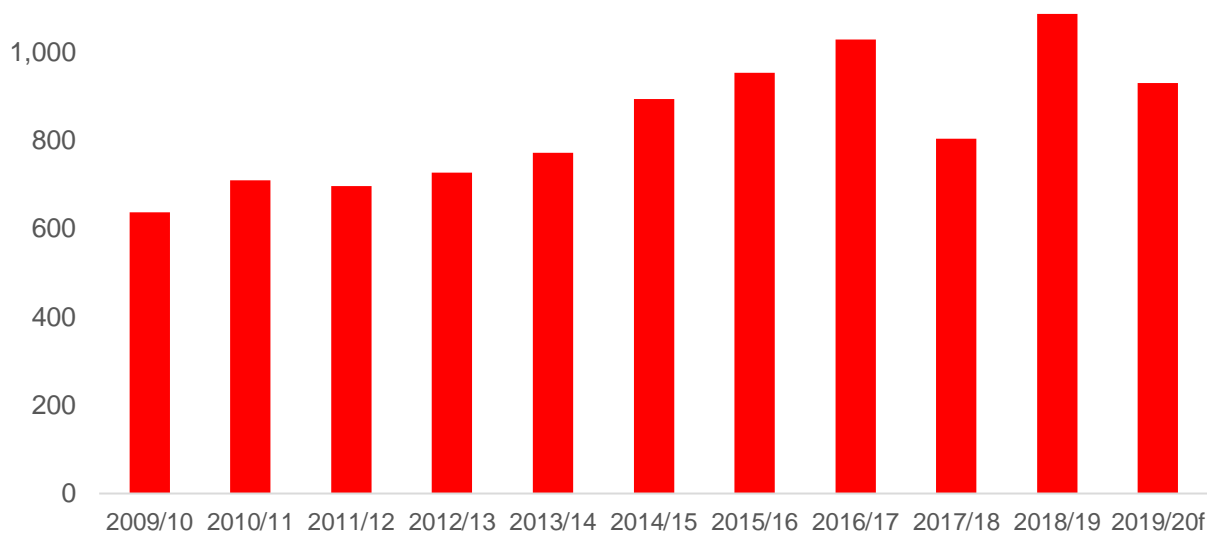
Conversely, the Arizona lemon crop is forecast to grow 4 percent up to 56,000 tons. Fresh lemon grower prices for the first six months of the current season averaged \$31.64 per box,

compared to \$40.45 over the same period in 2018/19. Imports for the months of October, November and December are at the highest levels observed in 10 years with imports from Mexico up 33 percent, and imports from Argentina up 75 percent (August 2019 – January 2020). Despite lower domestic production levels this season, prices are substantially lower than the same time last year. Fresh lemon exports are up 3.5 percent year-to-date at 45,821 tons, with significant quantities going to Japan, Canada, and South Korea.

## Lower Tangerine, Mandarin, and Tangelo Crops for 2019/20

Total production of U.S. tangerines, mandarins, and tangelos is estimated at 930,000 tons in 2019/20 (October–September) down 14 percent from last year (fig. 4). California production fell 15 percent from last season to 880,000 tons in 2019/2020. Although Florida production levels are forecast at 50,000 tons, up 6 percent relative to last season, this has little offsetting effect as almost 95 percent of commercial U.S. production is in California. Due to lighter tangerine, mandarin, and tangelo crops in the European Union and Morocco this season, a tighter global supply is expected. Imports of these fruit are down 45 percent below last season year to date. If present trends continue, lower total imports may reduce total domestic supply. Year to date exports are up by 38 percent.

Figure 4  
**Total U.S. tangerine, mandarin, and tangelo production 2009/10-2019/20**  
 Thousand tons



f = forecast.

Sources: USDA, National Agricultural Statistics Service, *Crop Production*, March 2020 issue, and *Citrus Fruit Summary*, various issues.

# Noncitrus Fruit Outlook

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## Early Season Strawberry Supplies Up in 2020

January 2020 strawberry supplies increased from the same time last year, which had low supplies and the highest January grower price since the early 1990s. For the first two months of 2020, USDA Agricultural Marketing Service (AMS) data show total strawberry shipments up 20 percent from the same time period in 2019. Florida fresh strawberry shipments grew 22 percent. One factor potentially favoring larger volume in Florida is the use of a new variety that yields more early-season fruit. Mexico shipments were down 3 percent partly because of rain. Very small 2020 winter shipments from California were up 111 percent. USDA, National Agricultural Statistics Service (NASS) reported the January 2020 grower price up from a year ago but it is not consistent with other prices that reflect a higher supply with lower prices. AMS strawberry shipping point prices and U.S. Department of Labor, Bureau of Labor Statistics (BLS) strawberry retail prices were down in January and February 2020 compared to a year ago. Prices began to fall in mid-February with increases in fresh strawberries from Florida, Mexico, and California (fig. 5).

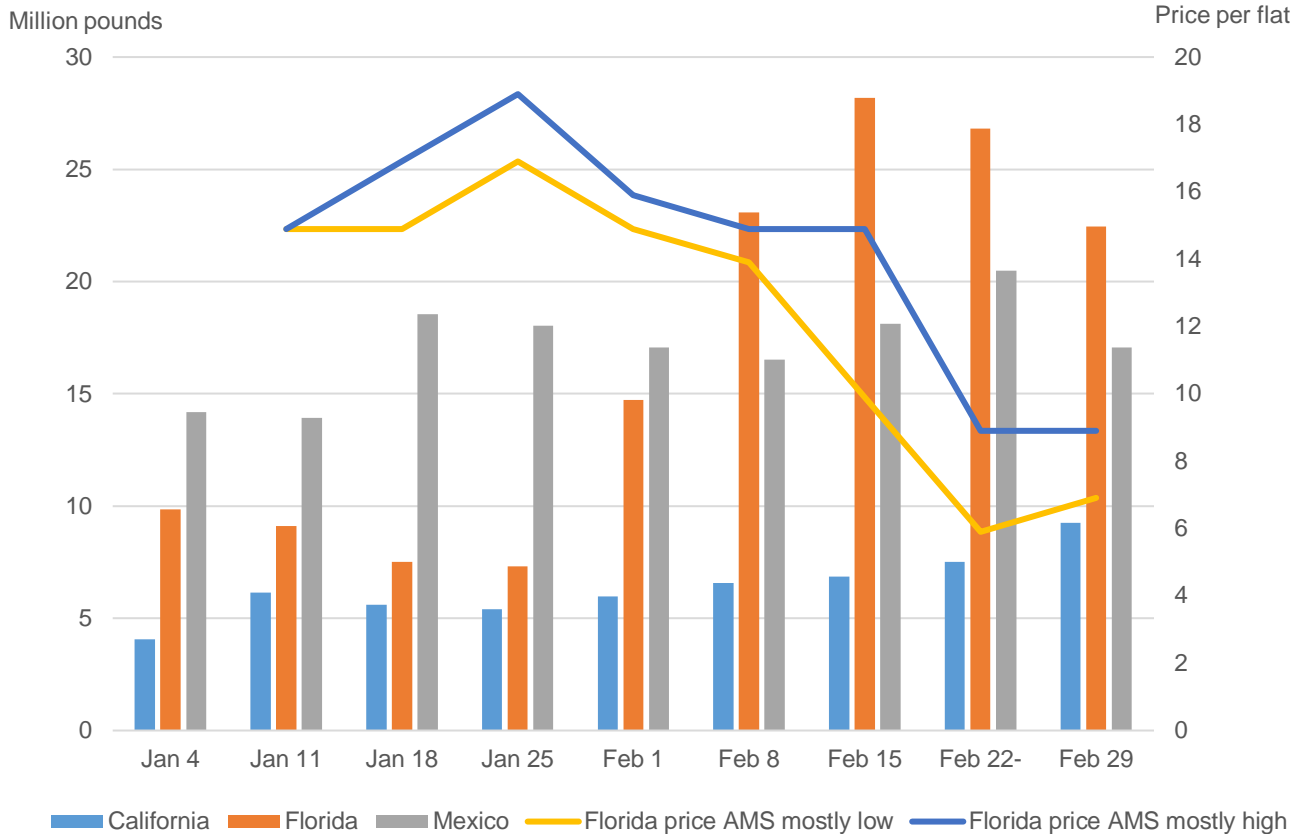
Based on the annual acreage survey conducted by the California Strawberry Commission, total California strawberry acreage statewide in 2020 is expected to be up 3.7% from 2019. This increase follows 2 years of decreases in strawberry acreage. The use of higher-yielding berry varieties boosted production despite the reductions in acreage.

**Fresh and processing supplies down in 2019:** The California Strawberry Commission reports that total State shipments in 2019 —1,818.5 million pounds, were down 10% from the previous year because of unusual rain that reduced production during late May to early June. Total shipments from Florida for calendar year 2019 were down 14 percent from the previous year. Fresh strawberry import volume in 2019 (almost all from Mexico) increased 15 percent over the previous year. This did not raise the total U.S. supply above the 2018 level. Average annual grower prices in 2019 were the highest since 2012. With the lower U.S. supply and higher prices, exports were down 16 percent.

The quantity of strawberries used for processing also declined in 2019. When production decreased in California in 2019, fresh grower prices increased, and strawberries diverted to processing declined. The U.S. frozen strawberry pack was 369 million pounds, down 14 percent from the year before and the lowest since 1997. Frozen strawberry imports were up 13 percent

in 2019 compared to the previous year. Mexico, the largest supplier (with 79 percent of import volume in 2019), was down 5 percent. With higher prices for fresh berries in the U.S. market fewer Mexican berries were diverted to processing. With lower production and higher prices, U.S. frozen strawberry exports were down 25 percent in 2019.

Figure 5  
**Fresh strawberry January and February 2020 weekly shipments and Florida prices**



AMS = Agricultural Marketing Service.

Note: Data are for the week ending with the indicated date. No price data were available for the week ending January 4, 2020. Flat is a flat of 8 1-lb containers with lids. Prices are based on conventional strawberries and a mix of medium and medium large size berries. Mostly low and mostly high prices-represent at least 50 percent of sales in the market and not the absolute lowest or highest price.

Source: USDA Agricultural Marketing Service.

## 2020 Began with Lower Blueberry Prices

**2019:** The North American Blueberry Council (NABC) estimates the 2019 total U.S. blueberry crop at 670 million pounds with 371.7 million pounds for fresh market and 298.3 million pounds for processing. Based on NABC data, U.S. blueberry production increased 22 percent from 2018 to 2019. The top 8 blueberry-producing States—Washington, Oregon, Georgia, Michigan, California, New Jersey, North Carolina, and Florida—accounted for 98 percent of production in 2019; all but two grew in both fresh and processing utilization.

U.S. fresh blueberry imports rose to a record 472 million pounds, up 20 percent from the previous year's record volume. In 2019, U.S. blueberry exports increased 73 percent from 2018 (the lowest level since 2004) to 80 million pounds, the second largest export level ever. Canada accounted for 92 percent of U.S. exports. Per capita consumption of fresh blueberries increased to 2.32 pounds in 2019, up 16 percent from the previous year.

**2020:** The U.S. blueberry market started the year with very low prices in January because of the large volume of imported berries in the market. Peru and Chile are the two largest foreign suppliers to the U.S. market. Imports from Peru were up 61 percent in November 2019 compared to the year before and up 156 percent in December 2019. While total January imports were down 6 percent from January 2019 (down 3 percent from December 2019) carry-over inventories in January were above normal. January imports from Peru were up 7 percent above the previous January; and imports from Chile were down 17 percent. Chile's conventional exports to the United States were down 20 percent while organic exports grew 17 percent. Shipping point prices declined through the week ending January 18, 2020 to mostly \$9-\$12 per flat (compared to an average mostly \$15.62-\$18.82 in the month of January 2019) and then began to increase. Early domestic blueberry production started with the Florida crop, which supplies the markets with good volume from April through early May. USDA's Agricultural Marketing Service (AMS) reported the first shipments from Florida in 2020 for the week ending March 14. California produces a small amount of blueberries in January and February, with increases in production in March.

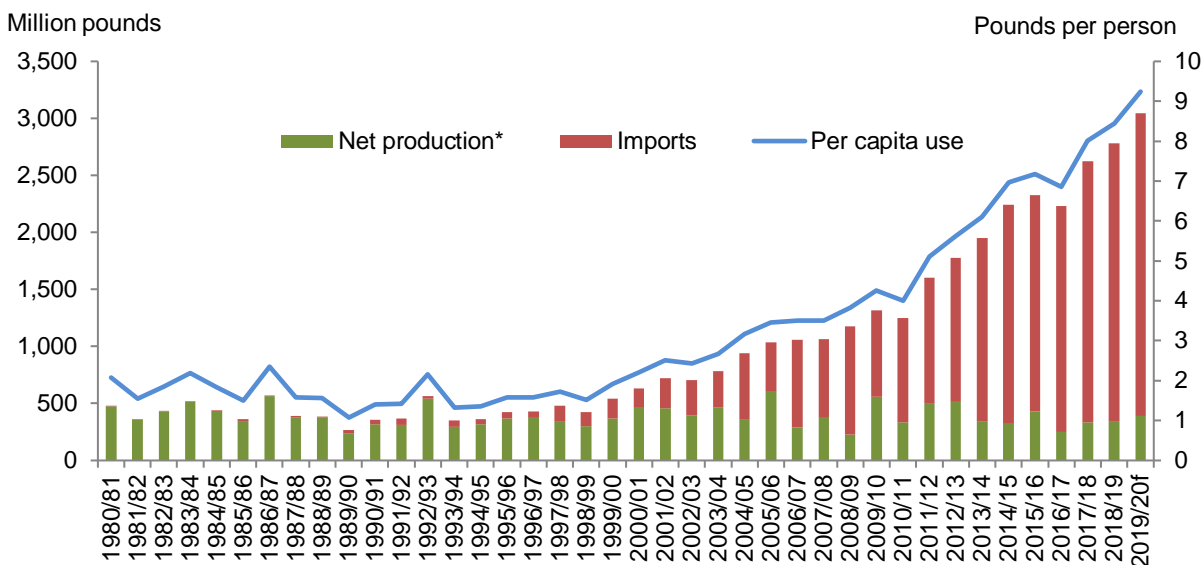
## Bumper Crop of Avocados Expected

Early projections from the California Avocado Commission (CAC) indicate statewide avocado production for the 2019/20 season (November-October) increasing to 369 million pounds, up 70 percent from their estimate of the 2018/19 crop of 216.6 million pounds. Because of the alternate-bearing nature of the tree, after last year's low harvest this harvest tends to increase. In addition, the trees are healthy after heavy rains last winter which should boost production. Typically, avocado shipments occur from spring through summertime. USDA's Agricultural Marketing Service data show that this year January and February 2020 shipments are above normal, because of the large crop and high prices. In 2019, California avocado shipments in January and February totaled 1.14 million pounds while shipments for the same time period in 2020 reached 22.63 million pounds. Since avocados can mature on the tree for an extended period, U.S. growers look for opportunities when fruit quality is at its peak and market conditions are optimal. California accounts for over 80 percent of the U.S. utilized avocado production.

U.S. per capita consumption of avocados is rising rapidly which has tempered the effect of growing supply on price. In the 2010/11 season per capita consumption was 4 pounds and by 2018/19 it more than doubled to 9.24 pounds (fig. 6). In January and February 2020, Mexican avocado shipments totaled 434.87 million pounds, up 4.5 percent from the same period a year ago and California shipments also increased. Despite the growth in supply, shipping point prices for a 2-layer carton of Mexican avocados-Hass, all sizes, and conventional/organic — over the two months ranged from an average of \$31.64 (mostly low price) to an average of \$41.14 (mostly high price) compared with 2019 prices over the two months with an average of \$22.82 mostly low to an average of \$26.55 mostly high. U.S. fresh avocado imports, mainly from Mexico, continue to grow. During the 2018/19 season, imports reached a new high of 2,437 million tons, up 6 percent from the previous year, and accounted for 88 percent of domestic supply.

In December 2019, USDA's Foreign Agricultural Service reported that for the Mexican avocado season 2019/20 (July-June) production is forecast to be 2.26 million metric tons (or 4.98 billion pounds) up slightly from the 2018/19 season production of 2.18 million metric tons. Peru is now the second largest import supplier; it accounted for 8 percent of total import volume in 2019 and shipped from May to August.

Figure 6  
**Imports play dominant role to meeting growing U.S. demand for avocados**



f = forecast.

\*Domestic production minus exports.

Source: USDA, Economic Research Service.

## Adverse Weather Affects Some Early Tropical Fruit Imports in 2020

2020 started out with slightly lower volumes of bananas in the U.S. market because of cooler weather in parts of Mexico and Central America. USDA's AMS shipment data show January imports down 6 percent from 2019 and February imports up 18 percent. Imports from Ecuador were up 15 percent in January. BLS reports early 2020 retail prices were about steady—down 1 percent in January from a year ago and up 0.5 percent in February from a year ago.

The U.S. Census Bureau reported pineapple imports in January 2020 to be 22 percent lower than a year ago because of adverse weather. Price per pound for the January imports was up 4 percent from 2019. As expected, January 2020 retail prices for pineapple were higher than the same time a year ago.

Early 2020 imports of mangoes were up 54 percent from January 2019 and 93 percent from February 2019, with an overall increase over the two months of 76 percent (based on USDA's AMS shipment data). Shipments from Peru surged in early 2020; January shipments were up 3 percent in compared to January 2019 and February shipments were up 119 percent from last year. Ecuador's season ran late extending into January which added to the volume in the

market. In February 2020, average shipping point prices for 1-layer flats of Kent mangoes ranged from a mostly low of \$3.97 to mostly high of \$4.49, down 42.5 and 39.6 percent from the same numbers the year before. Peruvian shipments peaked in February and began winding down in mid-March as shipments from Mexico began to increase.

According to the U.S. Census Bureau, January 2020 imports of papaya were up 2.5 percent from the previous January. Imports from Mexico were steady from a year ago, while imports from Guatemala increased 15.2 percent. In 2019, Mexico accounted for 76 percent of U.S. imports in January, Guatemala accounted for 21 percent. USDA's AMS shipping price data show that in January 2020 the average mostly low price was \$18 per carton of Maradol papayas and mostly high was \$20.25 per carton, down from \$21.75 and \$25.50 in 2019.

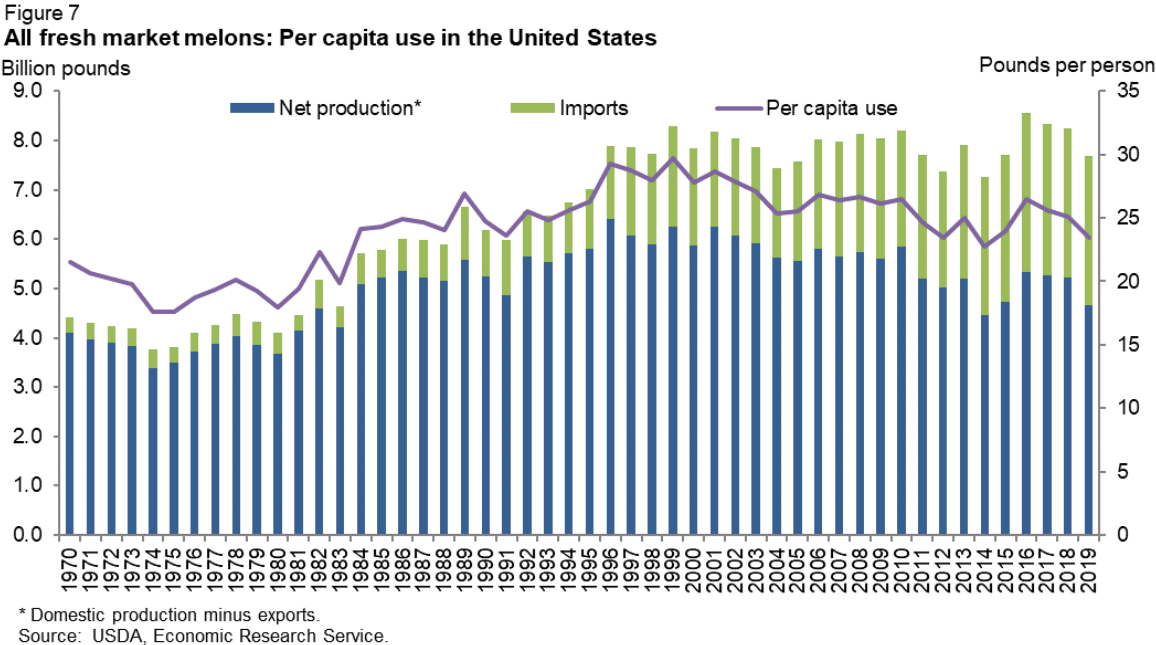
Banana per capita use is estimated at 28 pounds annually in 2017-19, while fresh pineapples, mangoes, and papayas average less than 10 pounds for each. Bananas continue to outrank all other tropical fruit in U.S. fresh import volume and fresh per capita use. Between the periods 2011-2013 and 2017-2018, average banana per capita use increased 5 percent, while mango, papaya, and pineapple per capita use rose from 22 to 25 percent.



# Melon Outlook

## Melon Supplies Down Slightly in 2019

Estimated domestic disappearance (also known as net domestic availability) which is a proxy for consumption of fresh melons totaled 7.26 billion pounds in 2019, down 6 percent from 2018. This estimate translates to 23.5 pounds per person, down 6 percent from 25.1 pounds last year and slightly lower than the previous 5-year average (fig. 7). The United States remains a net importer of melons, with total melon imports averaging 3 billion pounds annually during 2015-2019. Overall 2019 supplies were affected by decreases in domestic production and lower imports.



**Watermelons:** Domestic watermelon production totaled 3.7 billion pounds in 2019, down 2 percent from the previous year (table 5). Declines in key producing States, such as California and North Carolina, outweighed increases. Production increases in Florida and Georgia were attributed to good weather conditions. Nearly all watermelons produced are for the fresh market, where grower prices averaged \$0.15 per pound in 2019, decreasing from \$0.17 per pound in 2018.

Table 5--U.S. melons: Supply and utilization, by type and all, 2015-2019

Year	Supply			Utilization		Per capita use	Trade shares of:	
	Production <sup>1</sup>	Imports <sup>2</sup>	Total	Exports <sup>2</sup>	Domestic		Use imported	Supply exported
----- Million pounds -----			----- Pounds -----		----- Percent -----			
<b>Cantaloupe</b>								
2015	1,355.2	939.8	2,295.0	122.8	2,172.2	6.8	43.3	5.4
2016	1,512.5	1,041.4	2,554.0	115.3	2,438.6	7.5	42.7	4.5
2017	1,539.2	1,026.3	2,565.5	179.4	2,386.1	7.3	43.0	7.0
2018	1,460.3	992.6	2,452.8	146.2	2,306.6	7.0	43.0	6.0
2019	1,270.6	873.4	2,143.9	130.1	2,013.9	6.1	43.4	6.1
<b>Honeydew<sup>3</sup></b>								
2015	376.9	204.6	581.5	38.6	542.9	1.7	37.7	6.6
2016	393.3	262.5	655.8	56.9	598.9	1.9	43.8	8.7
2017	336.4	256.9	593.3	54.9	538.4	1.7	47.7	9.2
2018	384.4	235.9	620.3	56.3	564.0	1.7	41.8	9.1
2019	283.1	211.6	494.7	37.5	457.2	1.4	46.3	7.6
<b>Watermelon</b>								
2015	3,547.5	1,555.3	5,102.8	332.2	4,770.7	14.8	32.6	6.5
2016	3,987.8	1,709.6	5,697.4	350.0	5,347.4	16.5	32.0	6.1
2017	4,003.3	1,595.4	5,598.7	340.2	5,258.5	16.1	30.3	6.1
2018	3,898.0	1,595.0	5,492.7	326.1	5,166.7	15.8	31.0	6.0
2019	3,666.6	1,729.2	5,395.8	321.2	5,074.7	15.4	34.1	6.0
<b>All melons</b>								
2015	5,279.6	2,967.2	8,246.8	542.3	7,704.5	24.0	38.5	6.6
2016	5,893.5	3,239.9	9,133.4	570.8	8,562.6	26.5	37.8	6.2
2017	5,878.9	3,076.7	8,955.6	615.9	8,339.7	25.6	36.9	6.9
2018	5,742.7	3,038.0	8,780.7	579.5	8,201.2	25.1	36.8	6.5
2019	5,220.3	3,032.1	8,252.4	526.2	7,726.1	23.5	39.2	6.4

<sup>1</sup> Source: USDA, National Agricultural Statistics Service. Production data were estimated by ERS for 1982-91 based on available State available State data adjusted to the national level. Includes all uses.

<sup>2</sup> Source: U.S. Dept. of Commerce, U.S. Census Bureau.

<sup>3</sup> Honeydews do not have a separate tariff code. From 1970-1979, trade was estimated as 50 percent of the category called "other melons." Since 1980, shipment data were used to estimate the distribution of the "other melon" category (ranged from 42-97 percent). From 2001-15, trade was kept at 44 percent of "other melon" because the Mexican market share was not captured by shipment data. Since 2016, shipment data were used to estimate distribution of the "other melon" category (ranged from 54-60 percent).

Source: USDA, Economic Research Service (ERS).

U.S. watermelon imports were strong in 2019, totaling 1.73 billion pounds, up 8 percent from the previous season. Mexico's supply was tight (source for over 80 percent of U.S. watermelon imports annually on average), most likely affected by Storm Lorena followed by colder temperatures. The Guatemala supply decreased as a result of cooler weather. Honduran exports increased 45 percent compared to 2018. Watermelon exports, totaling 321 million pounds and valued at \$72 million, were down 2 percent. With lower domestic production in 2019, and lower exports, total domestic disappearance (total supply minus exports) and per capita use declined 2-3 percent in 2019 from the previous year.

USDA Agricultural Marketing Service (AMS) data show continued lower imports in 2020 with the cumulative volume through mid-March down almost 40 percent from the same time a year ago. Overall import shipments to date from Mexico were down significantly from the same time last year; and volumes from Guatemala and Honduras were also down. The shortage of supplies has led to higher prices. U.S. advertised retail prices for miniature type seedless watermelons

per fruit through mid-March 2020 averaged \$3.55 each, compared with \$3.30 for the same period last year. Prices for conventional red flesh seedless type watermelons, averaged over \$5 each, higher than last year's price.

**Cantaloupe:** Total U.S. crop size was down to 1.27 billion pounds in 2019, the third year of production declines. Production in California, the top producing State, was affected by below normal temperatures and above average rainfall resulting in a slow start and cold temperatures slowing the growth of the crop. The crop in Arizona, a major producing State, started slowly because of cooler temperatures and ended earlier with extreme heat causing the fruit to mature more rapidly although the fruit quality was reported good

U.S. fresh cantaloupe import volume declined 12 percent in 2019 from the previous year to 873.4 million pounds mostly because of lower shipments from dominant supplier Guatemala, (typically accounts for more than 50 percent of cantaloupe imports). At the same time, Mexican and Honduran shipments increased from 2018. Export volume declined in 12 percent in 2019 from the previous year with exports falling to leading markets Canada (down 13 percent from 2018) and Mexico (down 12 percent). Total 2019 supply in the United States fell significantly from the previous year to 2.14 billion pounds. The estimated domestic disappearance in 2019 was reduced by more than 12 percent from the previous year to 2.0 billion pounds.

In January and February 2020, cantaloupe shipments, all imports, were up from the same time a year ago—up 50 percent. Costa Rica was down 36 percent in January-February from a year ago, Guatemala was up 80 percent, and Honduras was up 18 percent. With increases in shipments prices decreased. In January 2020, shipping point prices (\$ per half carton) averaged mostly \$10.95-\$11.68, compared to an average of mostly \$13.20-\$15.12 in January 2019. February 2020 prices were only slightly up from a year ago.

**Honeydew:** The 2019 domestic honeydew melon production declined to 283.1 million pounds, 26 percent below 2018. Planted area and area harvested were down 10 percent from 2018. California is the main producer, but colder temperatures and heavy rainfall pushed back planting and slowed growth throughout the season. 2019 per capita consumption dropped nearly 20 percent as a result of declines in production and imports.

U.S. honeydew shipments for the first two months of 2020 were up 65 percent from the same period last year, with increases in shipments from Costa Rica, Guatemala, Honduras and Mexico. Based on USDA Agricultural Marketing Service data average retail prices averaged \$3.08 year to date, about 33 cents less than the same time last year. The 2020 U.S. honeydew melon season is underway, with peak harvest expected in the summer months.

# Tree Nuts Outlook

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## U.S. Pecan Production Totals Higher in 2019/20

In January 2020, USDA's National Agricultural Statistic Service (NASS) reported U.S. pecan production for the 2019/20 marketing season (October-September) at 264.5 million pounds utilized in-shell basis, 6 percent above the previous year, but down from the October 2019 forecast of 281 million pounds. The change in production reflects increases in domestic production in pecan-producing States, including strong gains in Texas and Arizona.

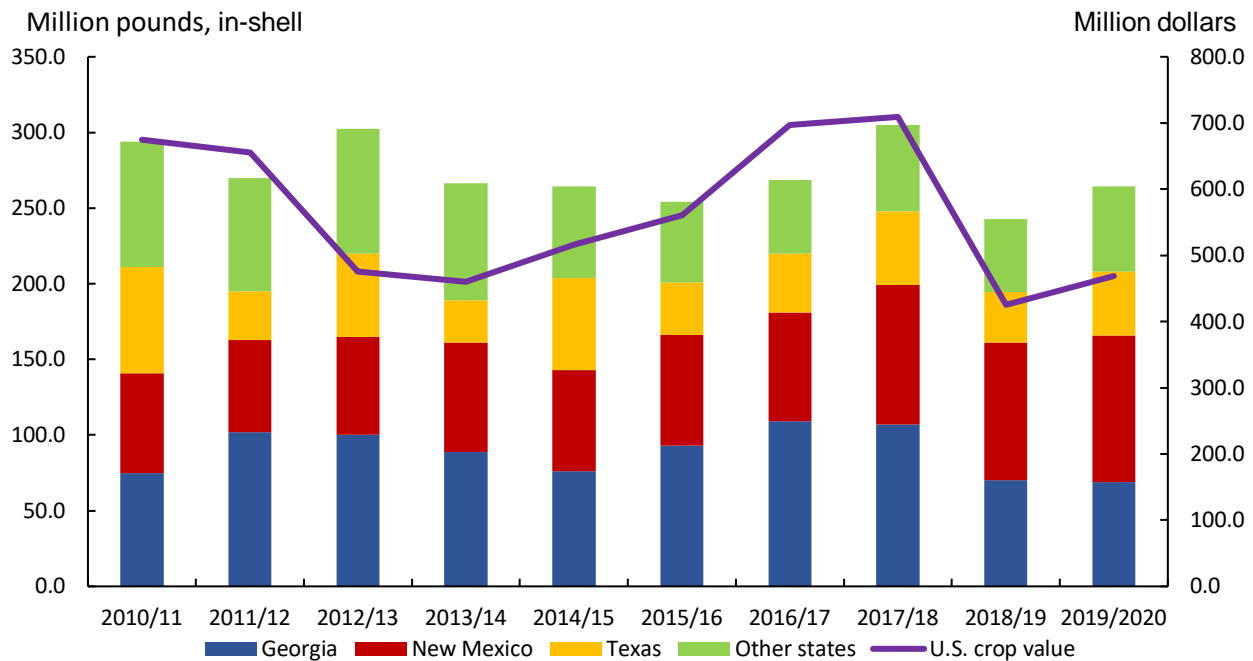
Georgia is outranked by New Mexico in 2019/2020 for a second consecutive year, after being the leading producer of U.S. pecans for the past several years (fig. 8). Estimated at 69 million pounds, production in Georgia in 2019/20 is down 1 percent from the previous year. Georgia is still recovering from 2018 Hurricane Michael's negative effects including broken tree limbs and loss of fruiting limbs. In addition, hot dry weather in late August through October affected yields. Statewide bearing acreage has increased from 120,000 acres in 2018 to 129,000 acres in 2019.

In New Mexico and Texas, 2019/20 production is estimated at 97 million pounds (up 6 percent from 2018/19) and 43 million pounds (up 27 percent), respectively. In these States, along with Arizona, Louisiana, and Oklahoma, pecan production is in the "on-year" of the crop's alternate-bearing cycle, which has partly contributed to the rise in production.

The U.S. average grower price for pecans rose slightly from \$1.75 per pound in 2018 to \$1.77 per pound in 2019. Relative price stability could be explained by lower beginning stocks—down 10 percent—compared to last year.

With the larger domestic crop in 2019/20, import demand for in-shell pecans is down, while shelled imports—mostly from Mexico—are holding steady in October to January 2020 compared with the same period the previous season. At the same time, there has been an increase in the cumulative volume of in-shell pecan exports in 2019/20 compared with same period the previous season as well as a slight increase in shelled pecan exports. In 2019, China returned as one of the top markets for US pecans and has over a 40 percent share of U.S. in-shell pecan exports.

Figure 8  
**U.S. pecan production and crop value up in 2019/20**



Source: USDA, National Agricultural Statistics Service, *Pecan Production*, January 2020.

## U.S. Pistachio Production Shows Off-Year Lows

Based on data from the Administrative Committee for Pistachios (ACP), the U.S. pistachio crop for the 2019/20 season (September-August) is forecast to decline to 731 million pounds (in-shell basis), down 26 percent from record production the previous season. Yields have decreased because it is an “off-year” for the alternate-bearing crop cycle for pistachios. ACP reports average per acre yields are down 30 percent in 2019 to 2,566 pounds from the previous year. Almost 25,000 bearing acres were added in 2019 from the previous year.

The USDA Foreign Agricultural Service forecasts Iran’s pistachio production to rise sharply in 2019/20. Iran, a major producer and exporter of pistachios has recovered from last year’s weather conditions, adding competition to U.S. top markets; China and the European Union. The United States is expected to have an increase in import demand, while exports are forecasted to decline because of greater global production (table 6).

Table 6--Pistachios: Supply and utilization (shelled basis), 2000/01 to 2019/20

Season <sup>2</sup>	Utilized production	Loss and exempt <sup>3</sup>	Marketable production	Imports	Beginning stocks	Total supply	Ending stocks	Exports	Utilization	
									Domestic	Per capita
----- 1,000 pounds -----										
2000/01	114,164	0	114,164	920	10,462	125,547	33,329	32,641	59,577	0.21
2001/02	80,733	0	80,733	532	33,329	114,594	12,425	44,744	57,426	0.20
2002/03	149,513	0	149,513	764	12,425	162,702	56,180	44,449	62,073	0.21
2003/04	56,217	0	56,217	1,459	56,180	113,857	22,941	35,551	55,365	0.19
2004/05	170,515	0	170,515	798	22,941	194,254	42,317	74,550	77,387	0.26
2005/06	139,003	0	139,003	912	42,317	182,233	56,066	69,332	56,834	0.19
2006/07	119,000	0	119,000	1,388	56,066	176,454	56,629	80,061	39,764	0.13
2007/08	206,998	0	206,998	943	56,629	264,569	67,304	128,494	68,771	0.23
2008/09	135,392	0	135,392	941	67,304	203,637	32,922	139,797	30,918	0.10
2009/10	174,769	0	174,769	1,294	32,922	208,986	21,213	133,177	54,596	0.18
2010/11	250,125	0	250,125	550	21,213	271,887	72,472	145,884	53,531	0.17
2011/12	222,000	0	222,000	920	72,472	295,392	45,331	172,788	77,273	0.25
2012/13	278,255	0	278,255	1,198	45,331	324,784	55,102	185,858	83,824	0.27
2013/14	234,484	0	234,484	542	55,102	290,128	38,471	194,980	56,677	0.18
2014/15	246,332	0	246,332	910	38,471	285,714	79,032	139,538	67,144	0.21
2015/16	134,593	0	134,593	1,151	79,032	214,776	51,133	90,456	73,188	0.23
2016/17	446,299	0	446,299	1,363	51,133	498,795	126,769	231,847	140,179	0.43
2017/18	226,915	0	226,915	1,585	126,769	355,269	39,548	178,953	136,768	0.42
2018/19	487,457	0	487,457	1,284	39,548	528,289	65,247	303,516	159,526	0.49
2019/2020F	352,507	0	352,507	1,320	65,247	419,074	37,219	213,176	168,679	0.51

F = Forecast.

<sup>1</sup> Conversion factor from in-shell to shelled basis varies year to year for production, stocks, and exports. For imports, the conversion factor is a constant 0.40.

<sup>2</sup> Season begins in September.

<sup>3</sup> Utilized production minus marketable production.

Source: USDA, Economic Research Service calculations.

# Commodity Feature

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## Trends in U.S. Blueberry Imports

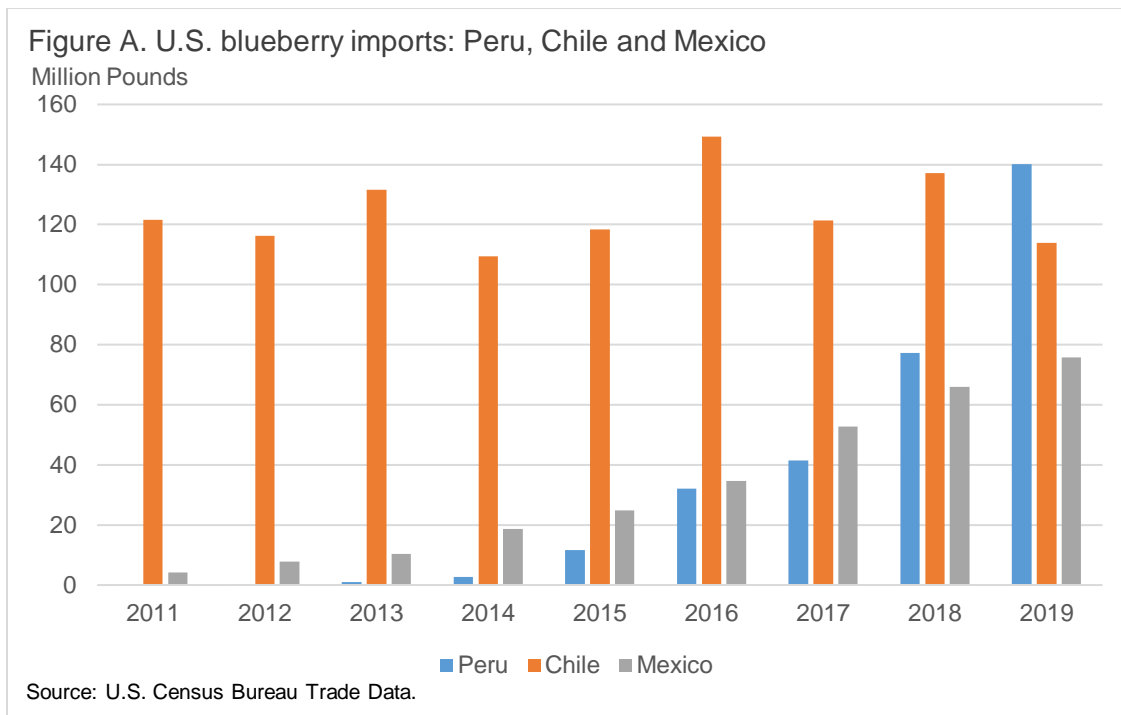
**Jaclyn Kramer**

According to a 2019 study in USA Today, consumers are health conscious and have a higher awareness of the benefits of eating berries. The average blueberry per capita consumption in 2016-18 increased 457 percent from 2000-02. Domestic supplies and imports of fresh blueberries have grown to meet domestic demand and support year-round availability. Total U.S. imports of fresh blueberries grew 1,177 percent since 2000 to 472 million pounds in 2019. In 2018, U.S. imports of fresh berries accounted for 67 percent of domestic fresh blueberry consumption.

U.S. blueberry production has been trending upward, rising 284% since 2000. In 2019, the North American Blueberry Council estimated fresh blueberry utilized production at 371.7 million pounds. The top producing States have different seasons throughout the year. California produces blueberries year-round, with larger supplies from May to July. Florida's peak production is during the early spring. New Jersey produces blueberries in the summer, while Michigan, Washington, and Oregon produce blueberries in the fall. Countries exporting to the United States during U.S. production's off-season have expanded their seasons to capture market share and higher prices, increasing competition for some U.S. producers.

Latin America has emerged as a major growing region for blueberries, where recent plantings have resulted in rapid production expansion and increased supply to export markets. The leading Latin American suppliers of U.S. blueberry imports are Peru, Chile, and Mexico (fig. A). Each country has different advantages including seasons, weather conditions, and shipping costs.

Peru is now the number one foreign blueberry supplier to the United States. Peru's favorable weather conditions have played a significant role in the large increase in production. In 2019, Peru accounted for 30% of U.S. blueberry imports. Peruvian shipments in the fall overlap with late-season production in Oregon and Washington State.



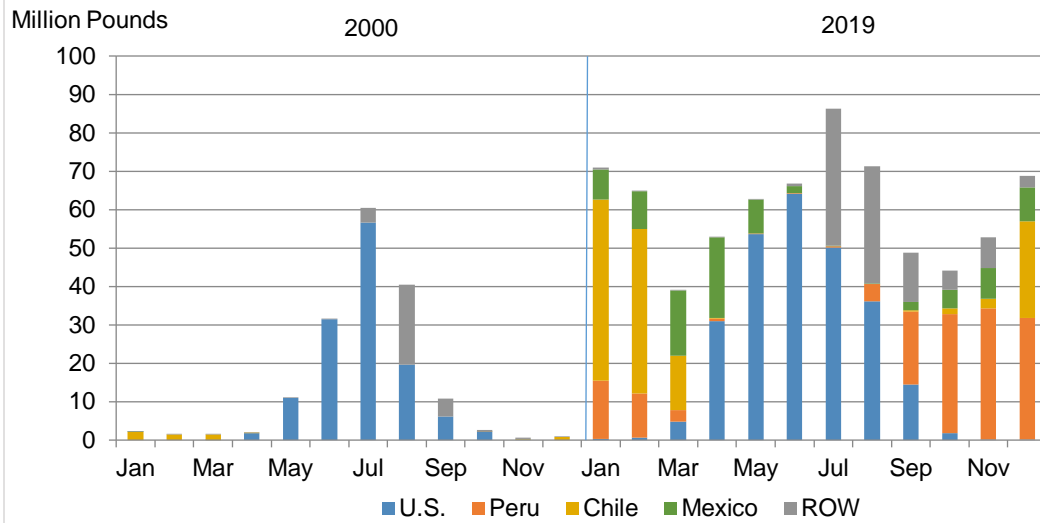
Prior to 2019, Chile had been the main supplier of fresh blueberries to the United States. In 2019, Chile accounted for less than 30 percent of these imports. At the same time, Chile is the leading supplier of U.S. imports of organic blueberries. U.S. organic imports from Chile have grown by more than 300 percent compared with 2016

In 2019, Mexico accounted for 19 percent of U.S. blueberry imports. Mexico's exports to the United States overlap with Florida's production in early spring (fig. B). Location is an advantage for Mexican suppliers since others have longer supply chains. The United States-Mexico-Canada Agreement —the successor agreement to the North American Free Trade Agreement (NAFTA)—will continue the duty-free access that NAFTA provides Mexican and Canadian exporters to the U.S. blueberry market.<sup>1</sup>

<sup>1</sup> As of March 13, 2020, all three member countries have ratified the United States-Mexico-Canada Agreement (USMCA). The USMCA will take effect shortly after each country has notified the others that it has completed the internal procedures required for the agreement to enter into force.



Figure B. U.S. blueberry shipments: domestic and imports, 2000 and 2019 by month



\*Note: ROW = Rest of the World, includes Canada cultivated and wild blueberries with large blueberries shipments in July and August.  
 Source: Agricultural Marketing Service Shipment Data, U.S. Census Bureau Trade Data.

The U.S. blueberry market is changing rapidly as demand continues to rise. Domestic production and imports are growing. Blueberry production in Peru, Chile and Mexico is increasing rapidly for the export market. Consumers are benefiting from year-round supply availability and competitive prices. With this growth comes stronger competition from abroad for U.S. producers.

## Suggested Citation

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