Agricultural Finance

# Blueberry Industry Outlook

## Executive Summary

Since 2007, U.S. blueberry production has grown in tandem with increased domestic consumption. However, U.S. producers are far from the only growers benefitting from the surge in blueberry popularity. Blueberry imports, which historically were only relied upon during winter months when U.S. production was out-of-season, have grown significantly over the last decade and are now occurring year-round. As imports increasingly compete with domestic supply, some growers have transitioned to organic production to obtain a price premium.

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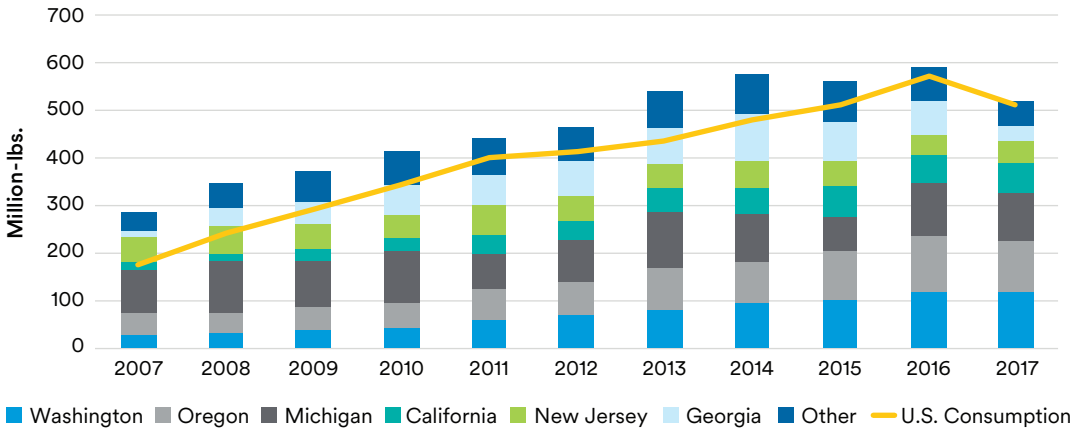
## Production responds to burst in demand

Since 2007, blueberry consumption has increased significantly, buoyed by healthier eating habits coming into vogue. Per capita consumption of fresh blueberries more than doubled from 0.6 pounds in 2007 to 1.6 pounds in 2017.[1] U.S. blueberry producers responded to the growing demand by increasing output from 287 million pounds to 522 million pounds over the same time span.[2] (Blueberry production and consumption are projected to recover in 2018 after frost damage negatively impacted both in 2017.)

**Figure 1 | U.S. Blueberries–Fresh**

**Production by State & Consumption**



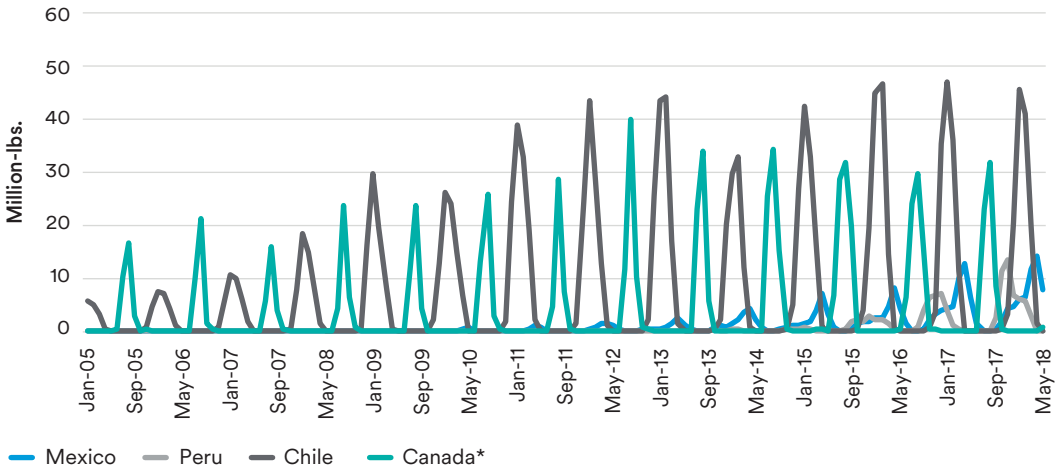

*Sources: USDA NASS, MIM*

The growth in domestic production has occurred primarily in states in the Western U.S. Between 2007 and 2017, blueberry production in Washington, Oregon, and California increased a combined 217%, growing their share of U.S. production from 32% to 56%.[3] Blueberry production in Washington alone increased 295% during that period, catapulting the state to the top blueberry producer in the U.S.[4] For context, blueberry acreage was 46% larger in Michigan than Washington in 2017, but Washington's production was 17% greater, a testament to the superior yields achieved by growers in the West.[5]

## Year-round imports have constrained retail blueberry price appreciation

U.S. producers harvest large enough crops to supply the annual demand for fresh blueberries. However, when accounting for production seasonality and demand for frozen and processed blueberry products, a seasonal deficit emerges that must be met through imports. Including frozen, 781 million pounds of blueberries were consumed in the U.S. in 2016, about 200 million pounds more than the domestic harvest.[6] Additionally, U.S. consumers demand fresh fruit year-round and the U.S. blueberry season lasts only three months, prompting countries like Chile, Peru, and Mexico to fulfill a significant portion of annual U.S. demand. Chile's ideal climate combined with its geographic dispersion across 2,600 miles north to south allows their blueberry growing season to last approximately eight months. As shown in Figure 2, the U.S. imports blueberries from Chile between September and April with volume typically peaking in January. As consumer preferences have shifted towards fresh foods in recent years, U.S. imports of fresh blueberries from Chile in January have soared from 6 million pounds in 2005 to 47 million pounds this year.[7] In total, 2017-18 winter imports from Chile hit 135 million pounds, just shy of the 2016 record (137 million pounds).[8]

**Figure 2 | U.S. Blueberry Imports (By Month and Country)**




*Includes wild blueberries
*Source: USDA FAS*

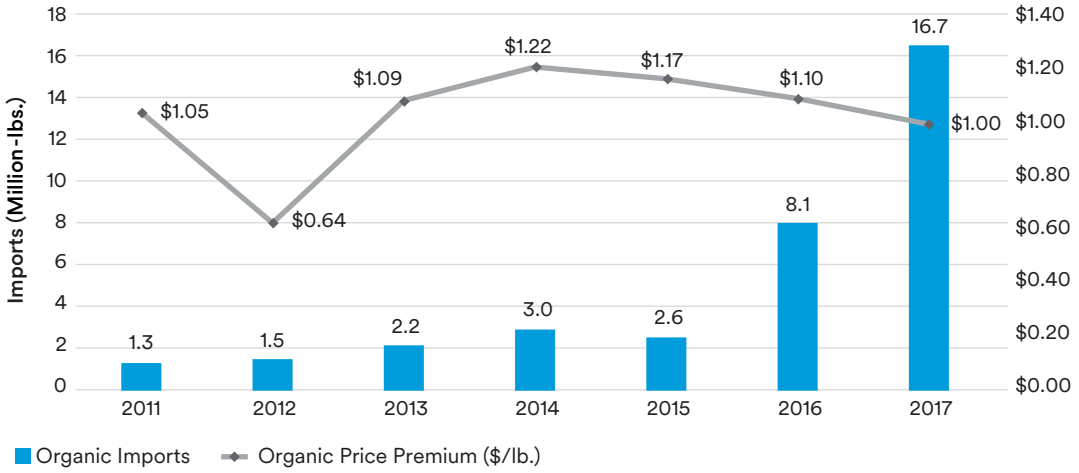
In the past, blueberry imports were a compliment to the U.S. industry, helping sustain appetites for the fruit during periods of low domestic supplies. However, as demand for blueberries has increased, U.S. producers increasingly find themselves competing with imports from countries like Canada and Peru during their domestic harvest. Canadian exports to the U.S. between June and September increased 103% between 2005 and 2017.[9] Similarly, imports of Peruvian blueberries this past winter jumped to 50 million pounds—a greater amount than all blueberry imports from the country prior to 2017.[10] The increase in blueberry imports has pressured domestic blueberry prices, which have trended lower since their peak in 2008. Furthermore, increased blueberry plantings abroad suggest imports will likely continue to grow in the coming years and limit the potential for higher prices.

## Blueberry growers, domestic and abroad, look to capture organic price premium

As competition from imports has accelerated, attractive retail prices for organic blueberries has led some producers to convert their acres. Washington State leads organic blueberry production in the U.S., increasing output by 318% between 2011 and 2016.[11] Eastern Washington, in particular, has become a profitable region for organic production. Under a set of 2015 price and yield assumptions[12] as well as utilizing crop budgets from Washington State University,[13] the net revenue per acre for blueberries was roughly 5 times higher for organic acres compared to conventional acres in the same region. These attractive returns helped drive growth in organic blueberry production, which tripled nationally from 14 million pounds in 2011 to 42 million pounds in 2016.[14]

Premium prices for organic blueberries creates an opportunity for producers, both domestically and abroad. As shown in Figure 3, retail prices for organic blueberries commanded an approximate one-dollar premium compared to conventionally grown blueberries between 2011 and 2017, peaking at $1.22/lb. in 2014. However, this premium has come under pressure in recent years due to the growing volumes of organic blueberry imports. Organic blueberry import hit a record volume in 2017, and year-to-date 2018 imports are up 74% yoy through June.[15] While increased import volumes could further diminish the price premium for organic blueberries, for the time being, organic represents a profitable alternative for some producers seeking to differentiate their product.

**Figure 3 | U.S. Organic Blueberry Imports: Volumes & Retail Price Premium**




*Sources: USDA FAS, USDA AMS, MIM*

## Endnotes

[1] MIM internal estimate using Haver Analytics and USDA blueberry production and consumption data.

[2] USDA NASS Quick Stats, August 2018.

[3] USDA NASS Quick Stats, August 2018.

[4] USDA NASS Quick Stats, July 2018.

[5] USDA NASS Quick Stats, August 2018.

[6] USDA Economic Research Service, July 2018.

[7] USDA Foreign Agricultural Service Global Agricultural Trade System, August 2018.

[8] USDA Foreign Agricultural Service Global Agricultural Trade System, August 2018.

[9] USDA Foreign Agricultural Service Global Agricultural Trade System, August 2018.

[10] USDA Foreign Agricultural Service Global Agricultural Trade System, August 2018.

[11] USDA NASS Quick Stats, August 2018.

[12] Assumptions:

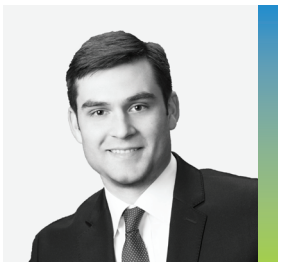
- Organic blueberry yield is 8,850 pounds per acre (USDA NASS Organic Blueberry Yield, Washington, 2015). We assume organic blueberry yield is 2,000 pounds per acre lower. However, organic farms can, and have, obtained similar yields to conventional blueberry operations.
- Average national, retail organic blueberry price is $3.68 per pound and conventional is $2.51 per pound (USDA AMS, 2015).
- Annual production cost for organic blueberries is 15% higher than conventional. Annual organic production cost at full production is $31,909 per acre, so conventional is assumed to be $27,122 (Trends and Economics of Washington State Organic Blueberry Production, 2015, Washington State University).

[13] Washington State University Extension, 2015 Organic Blueberry Cost Estimates, 2016.

[14] USDA NASS Quick Stats, August 2018.

[15] USDA Foreign Agricultural Service Global Agricultural Trade System, August 2018.

## Authors



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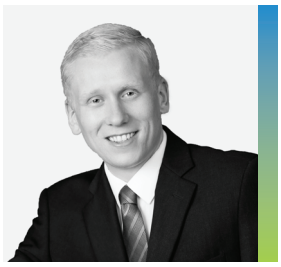

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