Roadmap

- U.S. Production Detail
- U.S. Utilization Detail
- U.S. Trade Detail
- Global Production Detail
- Other Trends & Forces

Industry Outlook 2022

#AppleOutlook2022
Roadmap

U.S. Production Detail

U.S. Utilization Detail

U.S. Trade Detail

Global Production Detail

Other Trends & Forces

U.S. Apple Production

According to a USApple analysis of USDA data, total U.S. apple production for the 2022/23 CY will be 255 million bushels, an increase of 8% from 2021/22 CY. This year’s production is expected to be higher than last year due to favorable weather conditions and increased yields. The production is also expected to be higher than the five-year production average of 245 million bushels.

#AppleOutlook2022
Sources: USDA, National Agricultural Statistics Service; USApple

#AppleOutlook2022
Washington Apple Production

2022/23 (F) Production: 155 m bu
Year-Over-Year Change: ▼ 4%

Washington State Tree Fruit Association 2022/23 (F)
103.5 million 42-lb fresh bushels (108.7 m boxes)

Causes: cold spring; poor pollination; hail events; June 2021 heatwave; low return bloom (smaller sizes/reduced tonnage)

Sources: USApple; USDA, NASS; WSTFA
New York Apple Production

2022/23 (F) Production: 35 m bu
Year-Over-Year Change: ▲ 8%

Premier Advanced Forecast (June 2022)

32 million bushels
6% below than USDA official estimate

Sources: USApple; USDA, NASS
Michigan Apple Production

2022/23 (F) Production: 26 m bu
Year-Over-Year Change: ▲ 68%

Premier Advanced Forecast (June 2022)
29 million bushels
11% above than USDA official estimate

Sources: USApple; USDA, NASS
Pennsylvania Apple Production

2022/23 (F) Production: 11 m bu
Year-Over-Year Change: ▼ 17%

Premier Advanced Forecast (June 2022)

11 million bushels

equal to USDA official estimate

Sources: USApple; USDA, NASS
California Apple Production

2022/23 (F) Production: 6 m bu
Year-Over-Year Change: ▲ 11%

Premier Advanced Forecast (June 2022)

1.1 million 42-lb fresh bushels (1.2 m boxes)
adjusted for total production ~5.4 m bu
5% below than USDA official estimate

Sources: USApple; USDA, NASS; CAC
Virginia Apple Production

2022/23 (F) Production: 4 m bu
Year-Over-Year Change: ▲ 13%

Premier Advanced Forecast (June 2022)
5 million bushels
11% above than USDA official estimate

Sources: USApple; USDA, NASS
Oregon Apple Production

2022/23 (F) Production: 4 m bu
Year-Over-Year Change: ▲ 13%

Premier Advanced Forecast (June 2022)
N/A

Sources: USApple; USDA, NASS

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U.S. Apple Production Forecast

Source: USApple

MAPE: 4.9%

95% CI: ~32 m bu

Source: USApple

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Gala still #1

▲ 8% YOY
▼ 20% YO3Y

Sources: USAapple; Washington State Tree Fruit Association; California Apple Commission
Note: Production levels are in millions of 42-pound bushels.
Five-year averages do not include 2022/23 (F) data.

#AppleOutlook2022
U.S. Apple Production

Sources: USApple; Washington State Tree Fruit Association; California Apple Commission

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usapple.org
U.S. Apple Utilization

Stable 5-year utilization ratios ...

Fresh 67%
Processing 30%
Not Sold 3%

Sources: USDA, National Agricultural Statistics Service; USApple
Notes: Fresh, processing and not sold utilization shares are based on five-year averages: 2017-2021.
Sub-processing utilization shares are based on five-year averages: 2013-2017.

#AppleOutlook2022
U.S. Apple Utilization

Sources: USDA, National Agricultural Statistics Service; USAApple
Notes: Fresh and processing production shares are based on five-year averages: 2017-2021.
U.S. Fresh Apple Trade

Exports
- 39 M BU
- ▼ 7% YOY

Net Trade
- 33 M BU
- ▼ 9% YOY

Imports
- 6 M BU
- ▲ 7% YOY

Sources: USDA, Foreign Agricultural Service; USApple

#AppleOutlook2022

usapple.org
In 2018, India became the #2 export market for U.S. fresh apples – 7.9 million bushels.

In 2021, that figure is down to 1.1 million bushels – an 86% decline.

Since 2018, the loss of the Indian market is estimated to have cost U.S. growers in excess of $500 million.

Sources: USDA, Foreign Agricultural Service; USApple
U.S. Fresh Apple Trade

**Exports**
- Mexico: 41%
- Other: 26%
- Canada: 19%
- Vietnam: 7%
- Taiwan: 7%
- Indonesia: 3%

**Imports**
- Chile: 52%
- New Zealand: 21%
- Canada: 19%
- Argentina: 5%
- China: 3%
- Other: 0%

Sources: USDA, Foreign Agricultural Service; USApple

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U.S. Apple Juice Concentrate Trade

**Imports**
- $509 M
- ▲23% YOY

**Exports**
- $53 M
- ▲15% YOY

**Net Trade**
- -$456 M
- ▲24% YOY

Sources: USDA, Foreign Agricultural Service; USApple

#AppleOutlook2022
Global Apple Production

These regions account for more than 70% of total global production.

14% YOY
475 M BU

Sources: USDA, Foreign Agricultural Service; USApple; United Nations Food and Agricultural Organization; World Apple and Pear Association; Canadian Horticultural Council

#AppleOutlook2022

usapple.org
China’s 2022 production is estimated to be 1.9 billion bushels.

A decrease of almost 500 million bushels from 2021 – almost 2x U.S. production.

Sources: United Nations, Food and Agriculture Organization; World Apple and Pear Association; USApple
Global Apple Production

European Production: **639 m bu**

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (m bu)</th>
<th>Change YOY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>236</td>
<td>▲ 5%</td>
</tr>
<tr>
<td>Italy</td>
<td>113</td>
<td>▲ 5%</td>
</tr>
<tr>
<td>France</td>
<td>77</td>
<td>▲ 6%</td>
</tr>
<tr>
<td>Germany</td>
<td>56</td>
<td>▲ 6%</td>
</tr>
<tr>
<td>Turkey</td>
<td>244</td>
<td>▲ 6%</td>
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</tbody>
</table>

Sources: World Apple and Pear Association; USApple

#AppleOutlook2022
Global Apple Production

Chile
66 m bu
\(-3\%\) YOY

Brazil
56 m bu
\(-15\%\) YOY

Argentina
26 m bu
\(-6\%\) YOY

Sources: World Apple and Pear Association; USDA, Foreign Agricultural Service; USApple
Global Apple Production

Mexico
43 m bu

11% YOY

Canada
19 m bu

1% YOY

Sources: World Apple and Pear Association; USAapple

#AppleOutlook2022
Introduction

Despite the challenges of the past few years, the U.S. apple industry is alive and well in 2022. From the COVID-19 pandemic to labor shortages, natural disaster disruptions, additional labor regulations, and changing consumer buying behaviors, second, and dual income households, the U.S. apple industry continues to adapt. Learning from challenges and taking advantage of opportunities as they arise. To assist in that exploration, the following report provides users with the most up-to-date data and analysis on U.S. and global apple production, utilization, and trade. The remainder of this section is intended to provide those data and analyses with relevant context.
**Economy**

- **COVID-19** → March 2020
- **Recession / Job Losses** → 20.7 million / 14.7% unemployed
- **Stimulus** → $5.3 trillion
- **GDP Growth / Job Gains** → +5% average per quarter
- **Inflation** → CPI: Apples +15% / PPI: Apples +30%
- **Fed Raises Interest Rates** → 0.25% to 2.5% in 5 months
- **Recession** → Q1 & Q2 2022 (-)
Other Trends & Forces

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**Labor**

**Pricing/Organics**

**Yield**

**Climate/Weather**

**E-Commerce**

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usapple.org
Other Trends & Forces

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**COVID-19**

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#AppleOutlook2022
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usapple.org
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#AppleOutlook2022
Other Trends & Forces

Domestic agricultural labor aging out and not being replaced by new immigrants.

From 2016 to 2021, U.S. crop production employment down 3% – apple orchard employment down 22%.

In 2012, there were 100,000 H-2A visas, by 2021, that figure was 318,000 – a 216% increase.

H-2A labor rate (AEWR) increasing by 25% since 2017 – **+29% in the top-seven apple producing states.**

Apple growing and packing are labor intensive – **60%-70% of variable costs.**
Other Trends & Forces

Grower prices not increasing:

**AVG Farm-Gate Price**

- 2012-2016: $0.32
- 2017-2021: **$0.30**

*not accounting for inflation*

Retail prices increasing:

**June 2021 – June 2022 CPI**

- **Apples:** +6%
- Fresh Fruit: +7%
- All Food: +10%

Organics, on average, priced **54% more** than their conventional counterparts.

<table>
<thead>
<tr>
<th>2021/22</th>
<th>Regular</th>
<th>Organic</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>$1.35</td>
<td>$2.12</td>
<td>$0.71</td>
</tr>
<tr>
<td>Honeycrisp</td>
<td>$2.30</td>
<td>$3.31</td>
<td>$1.01</td>
</tr>
<tr>
<td>Granny Smith</td>
<td>$1.58</td>
<td>$2.14</td>
<td>$0.56</td>
</tr>
<tr>
<td>Gala</td>
<td>$1.50</td>
<td>$2.12</td>
<td>$0.62</td>
</tr>
<tr>
<td>Pink Lady/Cripps Pink</td>
<td>$1.49</td>
<td>$2.20</td>
<td>$0.71</td>
</tr>
<tr>
<td>Fuji</td>
<td>$1.41</td>
<td>$2.09</td>
<td>$0.68</td>
</tr>
<tr>
<td>Braeburn</td>
<td>$1.35</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Red Delicious</td>
<td>$1.32</td>
<td>$2.08</td>
<td>$0.76</td>
</tr>
<tr>
<td>McIntosh</td>
<td>$1.32</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Golden Delicious</td>
<td>$1.26</td>
<td>$2.34</td>
<td>$1.08</td>
</tr>
<tr>
<td>Jonagold</td>
<td>$1.18</td>
<td>$1.99</td>
<td>$0.81</td>
</tr>
<tr>
<td>Rome</td>
<td>$1.09</td>
<td>$1.69</td>
<td>$0.60</td>
</tr>
</tbody>
</table>

Sources: USDA, Agricultural Marketing Service; USApple
Note: Prices represent national averages in $/LB.
With costs rising and revenues flat, apple growers have to get more efficient…

Sources: USDA, National Agricultural Statistics Service; USApple
Growing uncertainty around the climate change/adverse weather events and the extent to which they are getting more frequent and/or more severe.

Over the last 30 years ...

Crop Insurance Claims: +46%
Average Indemnity: +218%
Other Trends & Forces

E-Commerce @ Grocery

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Billions of Dollars</th>
<th>Percentage of F&amp;B Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2018</td>
<td>$1.4 billion</td>
<td>0.8%</td>
</tr>
<tr>
<td>Q1 2021</td>
<td>$7.8 billion</td>
<td>3.8%</td>
</tr>
<tr>
<td>Q1 2022</td>
<td>$7.2 billion</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau; USApple

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Questions?

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cgerlach@usapple.org