

A circular inset image showing several ripe, red apples with water droplets on their skin, surrounded by green leaves. The background of the entire page is a solid red color with a large, light red circular shape at the top and bottom.

Industry Outlook 2024

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Table of Contents

Foreword.....04

Core Findings05

Introduction.....08

U.S. Apple Production.....15

U.S. Apple Utilization23

U.S. Apple Trade27

Global Apple Production.....32

Appendix.....37

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Tables & Figures

TABLES

Table 1:	U.S. Apple Production & Utilization Summary
Table 2:	U.S. Fresh Apple Trade Summary
Table 3:	Global Apple Production Summary
Table 4:	U.S. Apple Acreage, Top 10 States
Table 5:	U.S. Apple Production, by State
Table 6:	U.S. Apple Production, by Variety
Table 7:	U.S. Apple Production, by Variety, by State
Table 8:	U.S. Apple Retail Prices, by Select Varieties, by Organics
Table 9:	U.S. Apple Market Shares, by State
Table 10:	U.S. Apple Utilization, by State
Table 11:	U.S. Apple Utilization, by Variety
Table 12:	U.S. Fresh Apple Trade
Table 13:	U.S. Apple Juice Concentrate Trade
Table 14:	European Apple Production, by Select Countries
Table 15:	European Apple Production, by Select Varieties
Table 16:	Canadian Apple Production, by Province
Table 17:	Canadian Apple Production, by Variety, by Province

FIGURES

Figure 1:	U.S. Apple Production, Varietal Summary
Figure 2:	U.S. Apple Labor Utilization
Figure 3:	U.S. Farm-Gate Prices, by Select Varieties: 2023/24 Season
Figure 4:	U.S. Annual Fresh Apple Exports
Figure 5:	U.S. Apple Production: 1948-2024 (F)
Figure 6:	U.S. Apple Production Trends, by Select Varieties
Figure 7:	U.S. Apple Utilization
Figure 8:	U.S. Fresh Apple Trading Partners
Figure 9:	U.S. Monthly Fresh Apple Trade

APPENDICES

Appendix A:	U.S. Apple Juice Concentrate Imports, by Top Countries
Appendix B:	Global Apple Production, by Country: 2022

Foreword

It is said that character is not built in times of ease and comfort, but through adversity and hardship. If that is so, the U.S. apple industry has been building quite a lot of character the past few years! Fortunately, the men and women who dedicate their lives to the noble pursuit of producing America's favorite fruit are nothing if not resilient. I am immensely proud to have spent my career working for such a passionate and capable community, serving an industry that does so much good for so many.

I have seen orchard rows that have been tipped over by the strength of the wind. Bowed down with a heavy burden of fruit, the support structure was insufficient to keep the trees upright against the force of the wind. Our industry faces many significant headwinds that threaten not only our way of life, but the lives of the many people we employ as an industry. We are fortunate to have a united voice for the apple industry through USApple. It is our organization. It will be as strong as we make it. It will be as loud as our combined voices, and it is, and will continue to be a strong support structure for our industry as we combat the headwinds of increasing labor costs, labor shortages, increasing costs of other inputs, global unrest, trade barriers, and the myriad other issues we face today.

I am encouraged to see the industry continue making strategic investments to do more with less. We are resourceful. We have found ways to increase productivity and the quality of our fruit, we have invested in new varieties, and are doing everything we can to secure our future. We want to continue to work the land and produce amazing fruit for the world to enjoy. To do this, we need to work together to wake up our legislators and policy makers to the fact that the U.S. apple industry is on the brink. No amount of wishful thinking is going to bring back a domestic labor force sufficient to pick twelve billion pounds of apples by hand. It is past time to fix the Temporary Agricultural Worker Program that is increasingly untenable, unaffordable and simply unsustainable. It is time to open and grow reliable export markets.

The threats we face extend beyond the 27,000 growers to a complex network of businesses that make up the U.S. apple supply chain including storage and packing operations, marketing and sales desks, processors and cider makers, and wholesalers and retailers, just to name a few. Taken together, the U.S. apple industry is responsible for creating more than 150,000 jobs, generating \$9 billion in wages and \$2 billion in tax revenues. In total, the industry contributes more than \$23 billion to the national economy.

The following report is a key resource for those with a stake in the U.S. apple industry, including pickers, packers and policymakers. Keeping up with the latest trends in production, utilization, prices, and trade helps guide the industry's strategic thinking and will help us ensure its long-term success. As we come together in this conference and as an association, I hope we can find new connections, insights, and partners to improve our businesses and our industry. Thank you for being here and for raising a strong and united voice for our industry.

STEVE CLEMENT
Chairman, USApple





Core Findings

Based on the most recent estimate from the U.S. Department of Agriculture (USDA), U.S. apple production for the 2024/25 crop year (CY) will be 11.1 billion pounds or 265 million bushels, a 2% decrease from last year. When accounting for states outside of USDA's coverage (the top seven apple-producing states), the total estimate increases to 282 million bushels.¹ These apples will have a farm-gate value of more than \$3.3 billion, generated primarily from fresh apple production (see **Table 1**).

At the state level, Washington will remain the nation's top producer with an estimated crop of almost 179 million bushels valued at nearly \$2.2 billion. This production level represents a 1% decrease from the 2023/24 CY. New York is projected to reclaim the number two spot with around 31 million bushels, a 4% increase from last season. Michigan, coming off two consecutive record years, is expected to decrease production by 10% to around 29 million bushels.

¹ Figures for production from additional states are estimated by USApple. For more information on the adjustment, refer to the **U.S. Apple Production** section in the body of this report.

Table 1: U.S. Apple Production & Utilization Summary

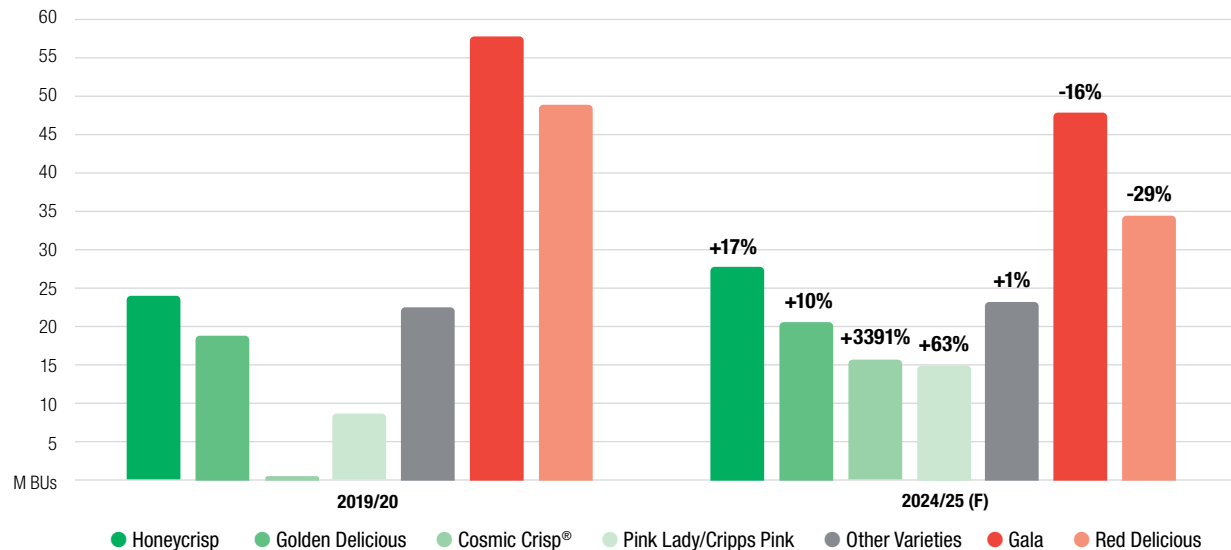
2024/25 (F)	LEVELS	VALUE	YR-OVER-YR % CHANGE
Total Production	282,243,442	\$3,325,079,636	-2.3%
Fresh	188,785,917	\$2,921,064,018	-5.1%
Processing	84,958,233	\$404,015,619	2.2%
Not Sold	8,499,293	\$-	24.7%
BY STATE			
Washington	178,571,429	\$2,180,379,761	-1.4%
New York	30,952,381	\$332,291,610	4.4%
Michigan	28,571,429	\$349,225,467	-10.4%
Pennsylvania	12,142,857	\$119,355,911	-7.8%
California	5,476,190	\$64,508,240	-4.2%
Virginia	5,238,095	\$53,839,731	4.3%
Oregon	3,571,429	\$36,837,338	-5.4%
Other	17,719,632	\$188,641,578	-3.7%

At the varietal level, Gala is expected to retain the top spot with more than 48 million bushels produced, accounting for around 17% of the U.S. apple market. Rounding out the top five are Red Delicious (35 m bu), Granny Smith (28 m bu), Honeycrisp (28 m bu) and Fuji (27 m bu).

Over the last five years, Honeycrisp, Cosmic Crisp® and Pink Lady/Cripps Pink have been on the rise at the expense of Gala and Red Delicious. **Figure 1** highlights these top varieties along with current production estimates and five-year growth rates.

Sources: USDA, National Agricultural Statistics Service; USApple
 Notes: Production levels are reported in 42-pound bushels.
 Utilization shares and value data are based on five-year averages: 2019-2023.
 Year-over-year changes are calculated on levels.

Figure 1: U.S. Apple Production, Varietal Summary



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

With respect to fresh apple imports and exports, the U.S. still retains a healthy positive trade balance. In the 2023/24 CY (July to June), the U.S. exported more than 46 million bushels of fresh apples while only importing around four million bushels. These net exports (42 m bu) are valued at almost \$918 million (see **Table 2**).

On a year-over-year basis, the balance of trade has increased with respect to both quantity and value. On the quantity side, imports have declined by 15% over 2022/23 CY levels while exports have grown by around 44%. On the value side, exports are also up around 35% while imports are down by around 18%.

As for global supply, China will continue to dominate the world market, producing and estimated 2.1 billion bushels in 2024/25. This represents a 2% increase compared to 2023/24 production levels. Europe is expected to decrease production, shrinking by 11% year over year to around 545 million bushels. South America, already well into their season, was expected to decline by 15% compared to last year's crop, producing around 116 million bushels. Mexico is predicted to have a slight increase in the coming crop year, with production growing to 43 million bushels up 1% from 2023/24. Finally, Canada is expected to increase production by 7% to almost 21 million bushels (see **Table 3**).²

Additional data and analyses regarding estimates for 2023/24 U.S. and global apple crop production, utilization and trade are contained in the following report.

Table 2: U.S. Fresh Apple Trade Summary

	2023/24	2022/23	YR-OVER-YR % CHANGE
LEVELS			
U.S. Balance of Trade	42,048,261	27,032,657	55.5%
Total Exports	46,361,537	32,119,182	44.3%
Total Imports	4,313,276	5,086,526	-15.2%
VALUE			
U.S. Balance of Trade	\$917,877,000	\$613,325,000	49.7%
Total Exports	\$1,064,125,000	\$791,404,000	34.5%
Total Imports	\$146,248,000	\$178,079,000	-17.9%

Sources: USDA, Foreign Agricultural Service; USApple
 Note: Trade levels are reported in 42-pound bushels.

Table 3: Global Apple Production Summary

	2024/25 (F)	2023/24	YR-OVER-YR % CHANGE
United States	282,243,442	288,811,216	-2.3%
China	2,106,146,973	2,064,836,594	2.0%
Europe	544,961,068	612,149,487	-11.0%
South America	116,162,478	137,211,350	-15.3%
Mexico	43,042,581	42,780,126	0.6%
Canada	20,715,946	19,460,160	6.5%

Sources: USDA, National Agricultural Statistics Service and Foreign Agricultural Service; USApple; United Nations, Food and Agricultural Organization; World Apple and Pear Association; Fruit & Vegetable Growers of Canada
 Notes: Production levels are reported in 42-pound bushels. South American crop year is earlier than northern hemisphere countries by approximately six months.

² The European total represents the production from 21 select countries. The South American total represents the production from three select countries. For more information about the countries included, refer to the **Global Apple Production** section in the body of this report.



Introduction

The 2023/24 season was a challenging one for U.S. apple growers. With domestic production at or near all-time highs and exports below historical levels, prices fell continuously throughout the season, echoing the effects of the last supply boom a decade ago. Unfortunately, the costs for inputs like fuel, fertilizer and particularly labor were rapidly inflating, putting pressure on margins and, in many cases, leading to negative returns. Fortunately, the industry has been able to take advantage of many technologies and techniques to increase the efficiency and productivity of their operations. To assist the industry in adapting to its challenges and leveraging its opportunities, 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.

U.S. Macroeconomic Conditions

While the worst effects of the COVID-19 pandemic are behind us, the aftershocks of the fiscal and monetary policies implemented to stave off a potentially devastating U.S. recession are still being felt. Fortunately, the unprecedented levels of federal stimulus money and two years of near-zero interest rates were effective in spurring consumer spending and incentivizing investment. Unfortunately, those policies also turbocharged inflation.

To combat these rising prices, the Federal Reserve raised interest rates eleven separate times between March 2022 and July 2023. Those rates, ending up between 5.25% and 5.5%, have been maintained for over a year as the central bankers wait for inflation to ease closer to their 2% target level. As of June, the consumer price index (CPI) for All Items – a common measure of inflation – was running at 3% annual growth. It is now expected that rate cuts will begin in September 2024 with more slowly rolling out in 2025 and 2026.

This potential easing is welcome news as leaving rates too high for too long could send the economy back into another recession. The latest data suggest the Federal Reserve is managing to walk that narrow line with four consecutive quarters of positive economic growth since interest rates reached those elevated levels a year ago.³

The labor markets are also sending (mostly) encouraging signs. Total nonfarm employment returned to pre-pandemic levels by June 2022 and has been growing steadily since then. Of some concern, however, is the unemployment rate that reached lows of 3.4% in early 2023 but has climbed to 4.3% as of July 2024.⁴

The resilient economy, persistent inflation and a hesitant Federal Reserve has also meant that the dollar continues to show strength compared to other global currencies. This has had the dual effect of making our exports relatively more expensive in foreign markets and making imports relatively cheaper here at home, both of which are problematic when there is an ample domestic supply.

U.S. Apple Market Conditions

While the nonfarm labor situation discussed above is relevant in a larger sense, it is the farm labor situation that is of greatest concern to the U.S. apple industry. By all accounts, domestic agricultural labor has been getting harder and harder to find. Over the last decade, crop production employment fell by 2.6% and, in apple orchards specifically, it declined by 24%.⁵

One reason for this is that agricultural workers are on average older and aging faster than U.S. workers in general. In 2023, the median age of crop production employees was 47.1 compared to 42.1 for all employees – a difference of 5 years. Just over a decade ago, that gap was only 3.5 years.⁶ Another often cited reason for this shortfall is the notion that current immigration policies do not prioritize individuals with agricultural backgrounds.

Perhaps the largest obstacle to finding and retaining local employees is the seasonal nature of the work. Based on an analysis of a medium-sized Michigan farm, 64% of the year's labor hours were utilized during the two months of harvest, approximately 20% of the season (see **Figure 2**). Without steady work during the other 80% of the year, it is unlikely that a sufficiently large domestic labor force would be willing or able to stand by and wait for an uncertain annual harvest.

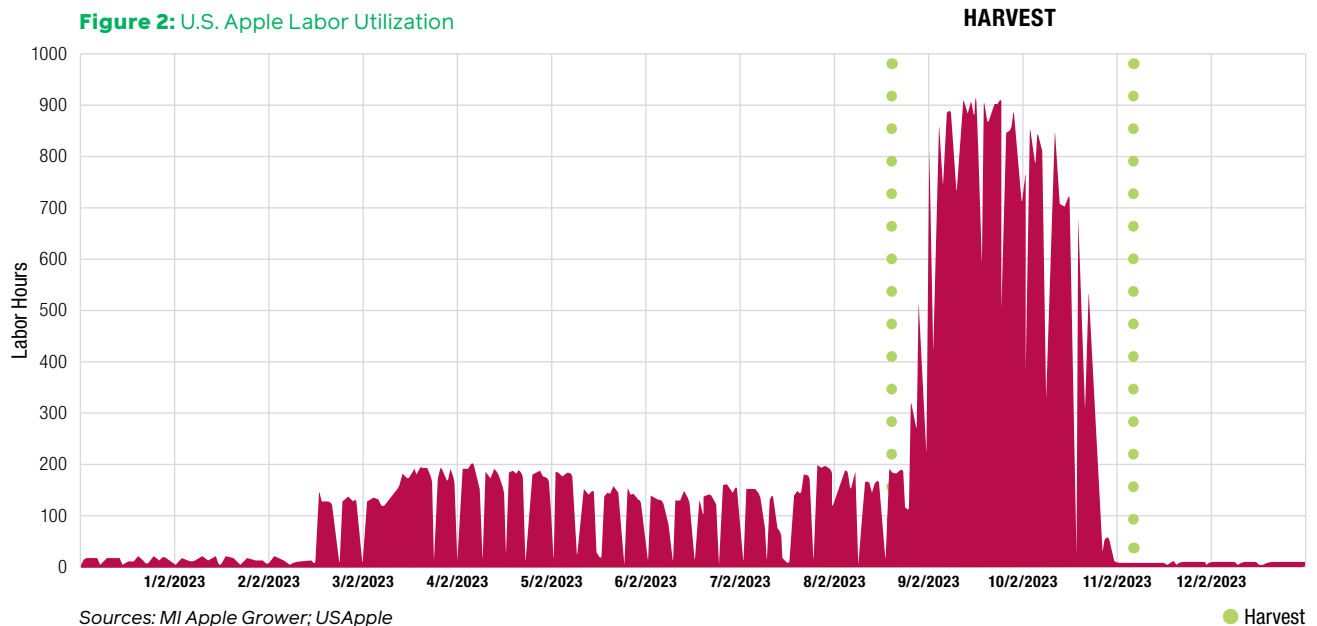
³ U.S. Department of Commerce, Bureau of Economic Analysis. Gross Domestic Product, Second Quarter 2024 (Advance Estimate) and Annual Update.

⁴ U.S. Department of Labor, Bureau of Labor Statistics. Current Employment Statistics and Current Population Survey: January 2020–July 2024.

⁵ U.S. Department of Labor, Bureau of Labor Statistics. Quarterly Census of Employment and Wages: 2014–2023.

⁶ U.S. Department of Labor, Bureau of Labor Statistics. Current Population Survey: Table 18b: 2011–2023.

Figure 2: U.S. Apple Labor Utilization



Sources: MI Apple Grower; USAApple

These forces combined mean that we are losing domestic workers faster than we can replace them. And so, increasingly, U.S. farms have had to turn to the Temporary Agricultural Worker Program (H-2A visas) to meet their needs. In 2014, there were almost 137,000 certified H-2A positions. That figure ballooned to nearly 379,000 certifications in 2023 – a 177% increase over the decade.⁷

While this program has been important for all crop types, it has been particularly well utilized by apple growers. In 2023, the average number of H-2A workers per contract was 19 – for apple orchards, that figure was nearly twice as large with 36 certified workers per application.

This is a critical issue for the U.S. apple industry because this source of labor is expensive and getting more so. Over the last five years, the U.S. average Adverse Effect Wage Rate (AEWR) – the minimum compensation rate for H-2A labor – has increased by 31% to \$17.00 per hour.

For the top seven apple-producing states, that average is even higher at \$18.22 per hour. In 2024, the top three AEWRs in the U.S. were in apple-producing states: California at \$19.75 per hour and Oregon and Washington at \$19.25 per hour. It is also worth noting that, beyond wages, H-2A employers must pay for transportation and housing as well as various additional application and visa fees that significantly increase the total cost of the program.⁸

Given these additional costs, it stands to reason that apple growers would prefer to hire domestic workers whenever possible. However, as noted above, for whatever reason, fewer and fewer Americans are turning up to do the job. With this trend unlikely to change anytime soon, the U.S. apple industry must have a well-functioning, affordable alternative.

⁷ U.S. Department of Labor, Employment and Training Administration. Office of Foreign Labor Certification: 2014-2023.

⁸ U.S. Department of Labor, Employment and Training Administration. Adverse Effect Wage Rates: 2019-2024.

Unfortunately, there are still no commercially viable technologies to harvest apples by machine and so, each year billions of pounds of U.S. apples are picked by hand. Labor now accounts for around 60% of total production costs and, thanks to the industry's reliance on the H-2A program, that share is rising.⁹ For the sake of the U.S. apple industry and the security of our nation's food supply, it is critical that policy makers work to immediately fix this program to minimize administrative burdens and limit the endlessly compounding increases to the AEWR.

According to the USDA's 2022 Census of Agriculture, over the last decade, total production expenses for Fruit and Tree Nut Farms grew by 49% or almost \$10 billion.¹⁰ During the same period, production expenses for All Farms grew by only 29%.¹¹ While much of this difference can be explained by the apple industry's relatively higher reliance on manual labor and the costs of the H-2A program described above, there are other factors of production that have also been putting pressure on the industry's bottom line.

Between 2012 and 2022, the cost of fertilizer and other soil conditioners used by apple growers increased by 92%. Utility expenses, including water for irrigation, were up 48%. The cost of nursery trees for new plantings grew by 42%. And the vaguely defined category for "other" expenses was up 40% – an increase of more than \$1.6 billion over the decade. In each of these cases, the ten-year percentage

increase for Fruit and Tree Nut Farms was greater than that for U.S. farms in general.

Since the 2022 Agricultural Census datapoint, the story has been much the same. In the year leading into the 2023/24 season (August 2022 to July 2023), the producer price index for apples – a metric tracking the overall cost to grow apples – was up by 34%.¹²

Unfortunately, while all these costs have been on the rise, the price of apples has been in decline. Season to date, (July 2023 to June 2024), the consumer price index for apples – a metric tracking the retail price – fell by 13.5%. For comparison, during the same period, the price of All Food was up 2% and the price for All Items was up 2.8%.¹³

It is important to note, however, that retail prices are not equivalent to the prices growers receive. Sadly, those prices, otherwise known as farm-gate or shipping-point prices, have fallen much further. From August 2023 to July 2024, grower prices for a carton tray pack (40 pounds) of Honeycrisps dropped from \$67.85 to \$30.55 – a decline of 55%. In the same period, prices for Granny Smith tray packs fell by 45% from \$59.45 to \$32.86. Red Delicious prices fell by 29%, followed by Golden Delicious and Fuji, down 20% and 18% respectively. The only bright spot has been Gala that, after bottoming out in December, has rebounded to \$37.31 to finish the season a meager \$0.13 above August prices (see **Figure 3**).¹⁴

⁹ This figure was quoted by several industry members with in-depth knowledge of apple cultivation expenses. According to USDA's Economic Research Service which reports income and expense data for a limited number of crop types, labor accounted for 44% of all variable expenses for specialty crops (fruits, vegetables and nuts) in 2022.

¹⁰ The Agricultural Census is limited in its ability to report at higher levels of specificity. The percentage increase in the total production expenses for Fruit and Tree Nut Farms would likely have been higher had the analysis not included tree nuts which are generally harvested by machine.

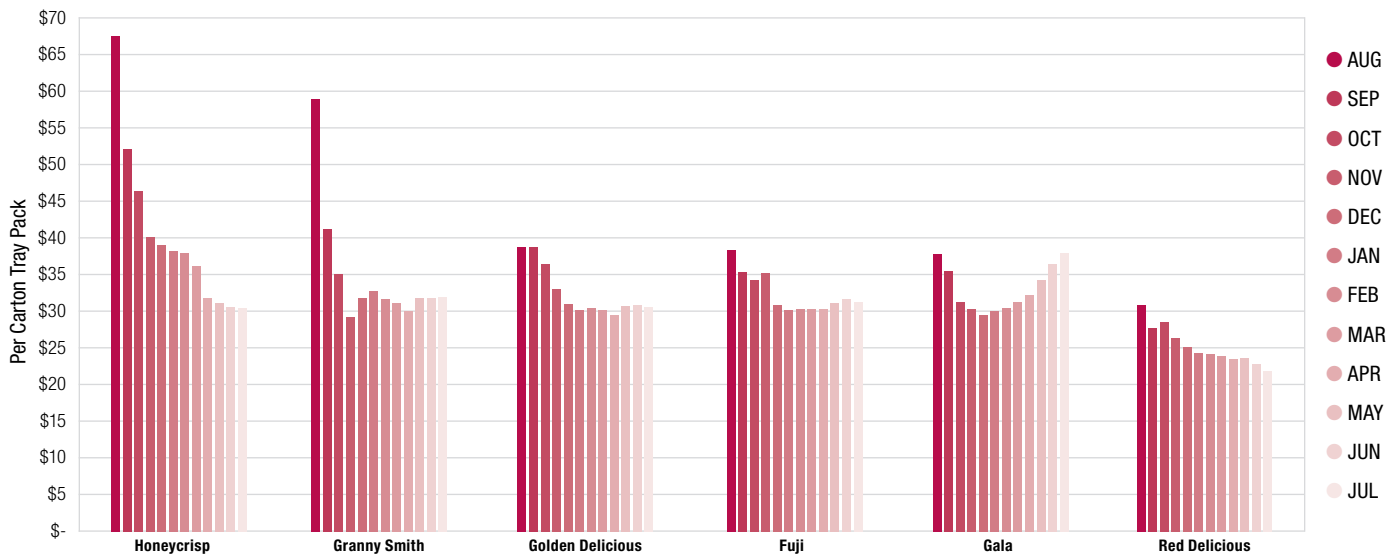
¹¹ USDA, National Agricultural Statistics Service. Census of Agriculture: 2022-2012.

¹² Federal Reserve Bank of St. Louis. FRED Economic Data: August 2022-July 2023.

¹³ U.S. Department of Labor, Bureau of Labor Statistics. Consumer Price Index: July 2023-June 2024.

¹⁴ USDA, Agricultural Marketing Service. Market News, Shipping Point: August 2023-May 2024.

Figure 3: U.S. Farm-Gate Prices, by Select Varieties: 2023/24



Sources: USDA, National Agricultural Statistics Service; USApple

These price levels are simply not sustainable as, in many cases, they are below the cost of production. A great number of U.S. apple farms will lose money this season, having to pay for the privilege of working all year to provide Americans with their favorite fruit. If this continues for multiple seasons, many U.S. apple farms will call it quits, unable to recapitalize when their limited cash reserves run out. What can be done, must be done to ensure their survival and our nation's food security.

With increasing expenses and revenues falling, the U.S. apple industry has had no choice but to get more efficient. In 2007, there were almost 351,000 apple-bearing acres in the U.S. By 2023, that number had shrunk to around 297,000 acres – a 15% decrease. At the same time, production increased from 216 million bushels to 270 million bushels – a 25% increase. This means that, in less than 20 years, U.S. apple growers have increased their yields by 48% or 293 bushels per acre.¹⁵

While there may be some relatively low-cost technologies and techniques to modestly

increase productivity, it is likely that the majority of these gains are due to significant reinvestments to develop higher density orchards. The funds needed to make such improvements are increasingly being provided by public companies, pension funds and/or private equity firms (rather than debt). As is always the case in challenging and uncertain times, the rate of consolidation and influx of outside capital is expected to continue and may likely accelerate in the years to come.

This trend is borne out in the most recent Agricultural Census data that show the acreage in small (1-49 acres) and medium (50-179 acres) sized apple orchards has been on the decline since 2002, down 40% and 33% respectively. Conversely, the acreage in extra-large farms (2,000+ acres) has increased by 42% in the same period.¹⁶

Up to this point, the discussion of U.S. apple market conditions has been primarily concerned with factors impacting the supply of apples, but there are a number of demand-side factors that also deserve consideration.

¹⁵ USDA, National Agricultural Statistics Service. Apple Bearing Acres and Production: 2007-2023.

¹⁶ USDA, National Agricultural Statistics Service. Agricultural Census: 2002-2022.

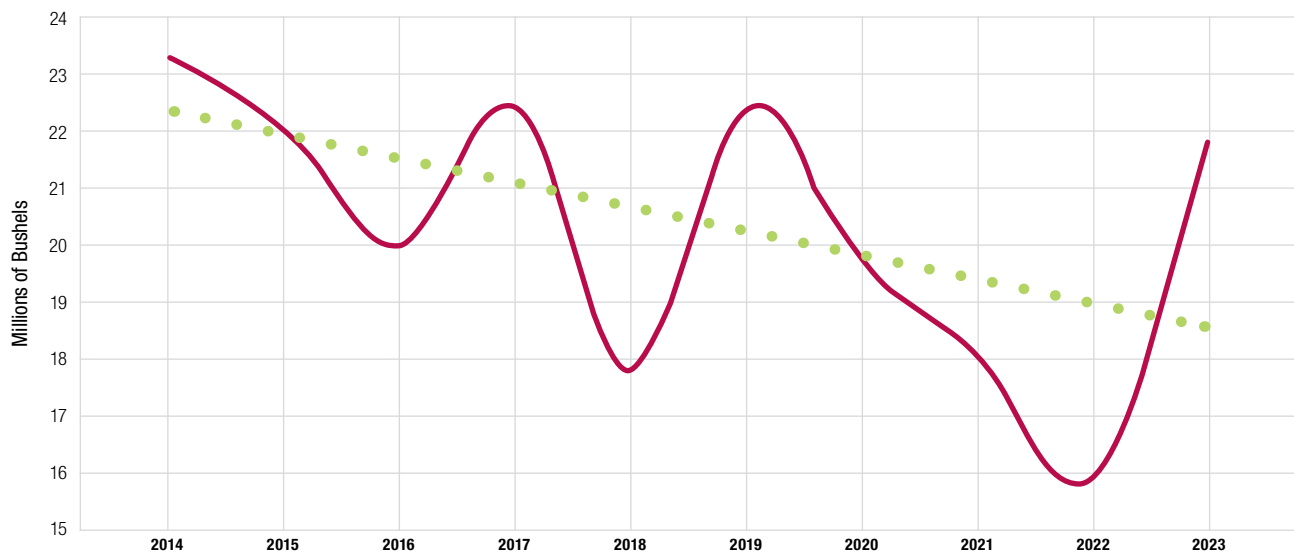
Although considerable space has been dedicated to this topic in a later section of this report, the importance of export markets to U.S. apple growers cannot be understated. These foreign markets play a crucial role in helping to regulate domestic supply levels and maintain prices here at home. Over the last decade, due to a number of factors including COVID-19 disruptions, a strong dollar and trade disputes, U.S. growers have seen many of their export markets crumble. From 2014 to 2022, fresh apple exports fell by 31% (see **Figure 4**).



Perhaps the most significant of these disruptions occurred when, in response to U.S. tariffs on Indian steel and aluminum, India placed a retaliatory tariff on U.S. apples (among other products). In a few short years (2018–2022), India went from our second largest fresh apple export market to near zero costing U.S. growers an estimated \$658 million in lost sales.¹⁷

In June 2023, India announced that they would be removing the retaliatory tariffs on U.S. apples just in time for the 2023/24 season. Amazingly, that market has bounced back into the fifth spot taking around \$42 million in fresh U.S. apples through June 2024. However, while that is encouraging news, it is a far cry from the \$157 million in annual exports they were buying before low-cost providers like Iran and Türkiye got their foot in the door.

Figure 4: U.S. Annual Fresh Apple Exports



Sources: USDA, Foreign Agricultural Service

¹⁷ USDA, Foreign Agricultural Service. Global Agricultural Trade System: Apple Exports: January 2018–June 2024.

On the domestic demand front, aggressive promotional pricing by retailers likely drove increased sales volume in the 2023/24 season. It is unlikely that these volumes can be maintained once the promotions are rolled back. Rather it seems, there is a longer-term trend towards less apple consumption per capita, particularly among the younger generations. This will be something worth watching to ensure that the next generation of consumers are aware of the exciting new varieties and beneficial qualities of U.S. apples as the older generations phase out.

The other unique component of domestic demand in the 2023/24 season was the extraordinary quantity of federal government purchases. In any given year, the government regularly buys apples for school lunch programs, the military and food banks, among others. But, in years with excess supply, USDA has the authority to buy additional apples through a special Section 32 provision.

As a result of encouragement by and consultation with USApple, the USDA authorized two separate Section 32 purchases in this crop year: the first, for \$56 million worth of fresh apples; the second, for \$21 million of processed apple products. These, along with likely-inflated regular buys, brings this season's total government apple purchases to around \$138 million.¹⁸ More recently, USApple has convinced USDA to make another Section 32 buy sometime in the fall of 2024 to relieve the pressure an overhanging crop may have on the 2024/25 harvest – the value of that purchase is expected to be around \$20 million.

From H-2A labor force issues to Section 32 apple buys, the trends and forces detailed above are helping to shape the U.S. apple industry in real time. Users of this report should keep these factors in mind as they evaluate the production, utilization and trade data that follow.



¹⁸ USDA, Agricultural Marketing Service. Open Purchase Requests: July 2023–May 2024.

U.S. Apple Production

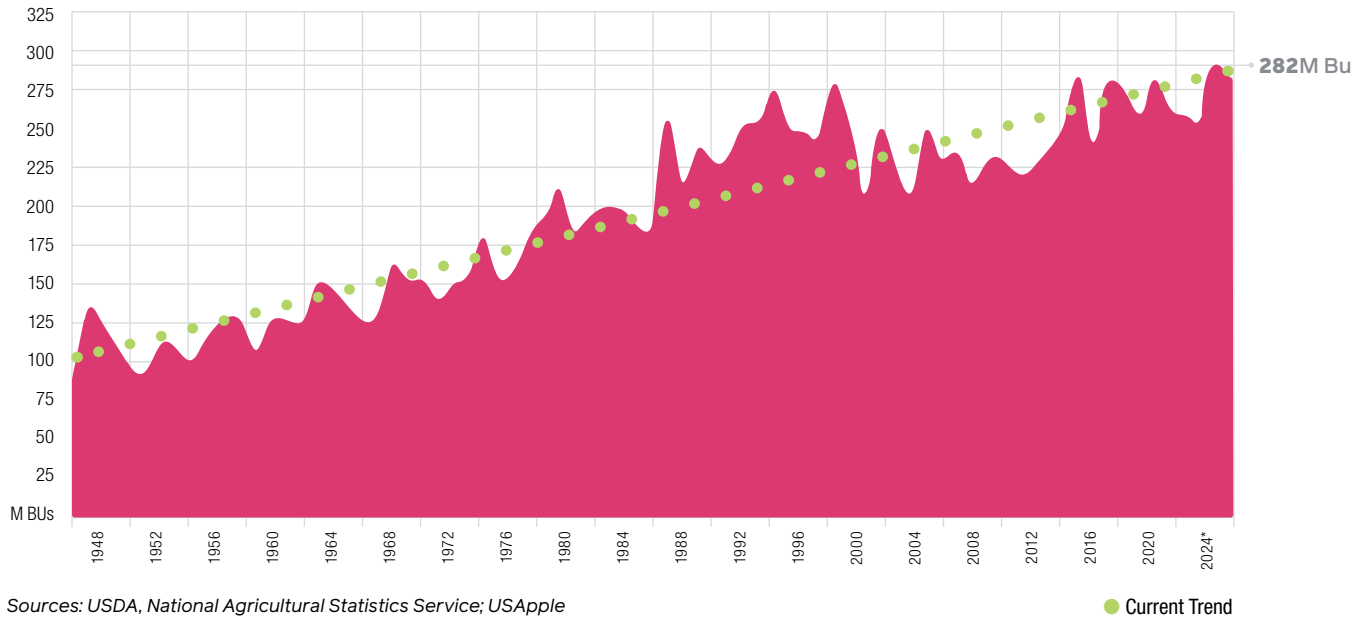
According to a USApple analysis of USDA data, total U.S. apple production for the 2024/25 CY will be around 11.1 billion pounds or 282 million bushels¹⁹. This represents a 2% decrease compared to last year's production figure and is 5% greater than the five-year production average (see **Figure 5**).

282

MILLION BUSHELS
PRODUCED

¹⁹ Each August, USDA releases an estimate of apple production by state for the coming crop year. In 2018, it limited the number of estimates to only the top seven apple producing states: California, Michigan, New York, Oregon, Pennsylvania, Virginia and Washington. This means that, from 2018 onward, USDA's total national production figure only represents a sum of these seven states. Prior to 2018, USDA's total national production figure included data for a far greater number of states – 20 in 2017. In an effort to maintain continuity of the dataset, USApple has estimated production for the "other" states from 2018–2023 and added it back to USDA's national production figures to arrive at a new, more comprehensive USApple production estimate.

Figure 5: U.S. Apple Production: 1946-2024 (F)



Sources: USDA, National Agricultural Statistics Service; USApple

● Current Trend

These production levels, while still significant, are down year over year as they come on the heels of what was likely a record year for the U.S. apple industry. At this point last year, USDA was estimating a 2023/24 crop of around 236 million bushels (from the top seven apple producing states). In May 2024, the final total was revised upward to 270 million bushels – an increase of more than 34 million bushels, a sum larger than New York’s average annual production.

With USDA numbers alone, this would not be enough to qualify as a record year. The final data for the 2014/15 season show a production volume of more than 282 million bushels. However, as (foot)noted above, during that season, USDA was still collecting data from at least a dozen additional states including North Carolina, Wisconsin, Ohio and almost all New England. The comparison is not apples to apples, so to speak.

To make a more accurate comparison and truly judge the capacity of U.S. apple growers, USApple has been estimating the missing

production from these additional states since the USDA stopped tracking them in 2018. With no additional datapoints on which to base assumptions regarding volume increases or decreases in the intervening years, USApple has had to rely solely on anecdotal accounts.

Fortunately, the Census of Agriculture, released every five years, provides detailed state-level data on bearing and non-bearing acreage by crop type.²⁰ The 2022 figures give the industry its first objective glimpse into how these other states have been developing in terms of apple acreage since the last reported datapoint in 2017.

When the USDA cut back its data collection, it did so for budgetary concerns and reasoned that the data on the top seven apple states represented the overwhelming majority of apple production in the U.S. Based on the 2022 Agricultural Census data, it seems that the landscape has shifted somewhat from just five years ago and it may be time for USDA to reevaluate their sample.

²⁰ The Census of Agriculture provides a wide range of data beyond acreage including income and expense statistics by various farm types. Much of the data is available down to the county level.

Since 2017, both North Carolina and Wisconsin have each added around 1,000 acres of apple orchards while Oregon has removed almost 600 acres (see **Table 4**). This means that, at least from a capacity standpoint, it may make sense to collect data on these two states rather than/ in addition to Oregon. Additionally, Ohio, already around the same size as Oregon, is putting in more acres than they are taking out. If these trends continue through the next datapoint in 2027, it may be another state deserving of USDA's attention.

A few other notable five-year acreage changes include New York, up by more than 12,000 acres and California, down almost 2,700 acres. Data from the 2002 Agricultural Census show just how far California has fallen, losing more than 27,000 acres over the last two decades – a decrease of 71%.

While data regarding acreage is useful and indeed critical in the absence of production data, it is no substitute. The characteristics of acreage will differ significantly from state to state. The age of the trees, density of the planting systems and relevance of the varieties are just a few of the differences that will radically impact the quantity and quality of the apples produced. Without corresponding production data to go along with these acreage reports, it is very difficult to know how yields and utilizations are evolving in these increasingly important other states.

Among the top apple producing states in the 2024/25 CY, Washington is expected to produce around 179 million bushels²¹, followed by New York (31 m bu) and Michigan (29 m bu). As detailed above, the significance of the states no longer tracked by USDA is growing and that group is expected to produce around 18 million bushels, well ahead of Pennsylvania's estimated 12 million bushels. Rounding out the top eight states (including "other") are California (5 m bu), Virginia (5 m bu) and Oregon (4 m bu) (see **Table 5**).

Table 4: U.S. Apple Acreage, Top 10 States

	2022 LEVELS	2017-2022 CHANGE
United States	411,262	29,544
Washington	188,973	9,074
New York	62,521	12,071
Michigan	44,985	6,422
Pennsylvania	25,457	2,944
Virginia	11,149	270
California	10,975	(2,662)
North Carolina	6,962	940
Wisconsin	5,783	1,110
Oregon	5,202	(589)
Ohio	5,034	185

Sources: USDA, National Agricultural Statistics Service, Census of Agriculture; USApple

Notes: Acreage levels represent the sum of bearing and non-bearing acres.

The five-year Agricultural Census is concerned with counting all apple acres, not just the commercial bearing acres captured in the annual NASS survey. For this reason, the Census acreage will be greater than the NASS acreage.



²¹ WSTFA also releases an annual estimate for apple production in Washington. Those estimates are based solely on fresh apples so they are not equivalent to the USDA figure, but an adjustment can be made based on historical utilization shares to allow for a reasonable comparison. Using the state's five-year average fresh apple utilization rate of 75.6%, the USDA's figure can be revised down to 135 million bushels. The 2024/25 WSTFA fresh apple forecast is 118 million bushels – a difference of almost 17 million bushels or 14%.

With respect to year-over-year changes, Washington's production is expected to fall by 1% – a decrease of around 3 million bushels. USDA attributed this slight decline to weather conditions that were similarly favorable relative to last season. In New York, USDA noted that “the season got off to a slow start in some areas, [but] that changed as unusually warm weather accelerated growth causing many growers to experience early ripening and some premature maturation.”²²



179M
BUSHELS

DOWN
1% YOY



31M
BUSHELS

UP
4% YOY



29M
BUSHELS

DOWN
10% YOY

That state's crop is projected to be up more than 4% compared to last year, increasing to almost 31 million bushels. In Michigan, USDA commented that “the apple crop had only minor frost damage, and development has been slightly ahead of average [with] the potential for very good crop size.” Despite these favorable conditions, because Michigan is coming off a near-record year, production is estimated to fall by more than 10% to around 29 million bushels. Pennsylvania is expected to decrease its apple output by almost 8% to 12 million bushels. California, Oregon and the

Table 5: U.S. Apple Production, by State

	2024/25 (F)	2023/24	5-YR. AVERAGE
LEVELS			
United States	282,243,442	288,811,216	269,285,135
Washington	178,571,429	181,190,476	167,190,476
New York	30,952,381	29,642,857	32,428,571
Michigan	28,571,429	31,904,762	26,138,095
Pennsylvania	12,142,857	13,166,667	11,942,857
California	5,476,190	5,714,286	5,295,238
Virginia	5,238,095	5,023,810	4,728,571
Oregon	3,571,429	3,773,810	3,652,381
Other	17,719,632	18,394,549	17,908,945
PERCENT CHANGE (VS. 2024/25)			
United States		-2.3%	4.8%
Washington		-1.4%	6.8%
New York		4.4%	-4.6%
Michigan		-10.4%	9.3%
Pennsylvania		-7.8%	1.7%
California		-4.2%	3.4%
Virginia		4.3%	10.8%
Oregon		-5.4%	-2.2%
Other		-3.7%	-1.1%
MARKET SHARE			
United States	100.0%	100.0%	100.0%
Washington	63.3%	62.7%	62.1%
New York	11.0%	10.3%	12.0%
Michigan	10.1%	11.0%	9.7%
Pennsylvania	4.3%	4.6%	4.4%
California	1.9%	2.0%	2.0%
Virginia	1.9%	1.7%	1.8%
Oregon	1.3%	1.3%	1.4%
Other	6.3%	6.4%	6.7%

Sources: USDA, National Agricultural Statistics Service; USApple
 Notes: Production levels are reported in 42-pound bushels.
 Five-year averages do not include 2024/25 (F) data.
 USDA U.S. total revised to include imputed production from “other” states.
 “Other” states’ production calculated based on 2022 share of U.S. total.

“other” States are also predicted to decrease production, shedding a combined 1 million bushels over last year's levels. Virginia's production is estimated to grow to more than 5 million bushels, an increase of 4%.

²² USDA, National Agricultural Statistics Service. Crop Production. Released August 12, 2024.

In terms of varietal mix, in 2024/25, Galas are expected to hold on to the top spot at around 17% of total U.S. apple production followed by Red Delicious (12%) and Granny Smith

(10%). **Table 6** details the expected 2024/25 production by variety and highlights the shifts in composition as compared to the 2023/24 CY and the five-year average.²³

Table 6: U.S. Apple Production, by Variety

	2024/25 (F)		2023/24		5-YR. AVERAGE	
Total Varieties	282,243,442		288,811,216		269,285,135	
Gala	48,283,554	17.1%	49,498,152	17.1%	50,419,854	18.7%
Red Delicious	34,622,640	12.3%	38,957,294	13.5%	39,735,236	14.8%
Granny Smith	28,252,464	10.0%	27,762,121	9.6%	24,957,121	9.3%
Honeycrisp	27,744,247	9.8%	33,588,906	11.6%	26,074,765	9.7%
Fuji	26,591,928	9.4%	27,279,470	9.4%	27,100,241	10.1%
Others	23,552,029	8.3%	24,742,411	8.6%	23,261,863	8.6%
Golden Delicious	20,490,932	7.3%	20,817,719	7.2%	18,074,785	6.7%
Cosmic Crisp®	16,265,171	5.8%	10,681,436	3.7%	5,209,833	1.9%
Pink Lady/Cripps Pink	14,928,869	5.3%	13,810,423	4.8%	11,430,692	4.2%
Rome	8,697,208	3.1%	8,881,103	3.1%	9,344,168	3.5%
Envy®	6,405,311	2.3%	5,899,677	2.0%	3,133,345	1.2%
Idared	5,477,948	1.9%	5,587,046	1.9%	6,341,391	2.4%
McIntosh	4,900,019	1.7%	4,910,475	1.7%	6,243,646	2.3%
York	4,163,886	1.5%	4,360,149	1.5%	4,905,692	1.8%
Empire	3,500,394	1.2%	3,516,533	1.2%	4,371,298	1.6%
Ambrosia	3,450,687	1.2%	3,588,947	1.2%	3,170,781	1.2%
Cortland	1,528,473	0.5%	1,482,285	0.5%	1,739,636	0.6%
Mutsu/Crispin	1,161,526	0.4%	1,127,917	0.4%	1,138,885	0.4%
Newtown Pippin	761,648	0.3%	792,643	0.3%	704,498	0.3%
Jonathan	582,085	0.2%	634,227	0.2%	788,670	0.3%
Spartan	371,821	0.1%	364,981	0.1%	489,579	0.2%
Stayman	269,080	0.1%	277,868	0.1%	383,959	0.1%
Rome Sport	241,522	0.1%	249,434	0.1%	265,196	0.1%

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

Notes: Production levels are reported in 42-pound bushels.

Five-year averages do not include 2024/25 (F) data.

²³ The U.S. totals were derived as the sum of the state-level data shown in **Table 7**.

Table 7 details 2024/25 estimated production by variety, by state.²⁴

Table 7: U.S. Apple Production, by Variety, by State

2024/25 (F)	U.S.	CA	MI	NY	OR	PA	VA	WA	OTHER
Total Varieties	282,243,442	5,476,190	28,571,429	30,952,381	3,571,429	12,142,857	5,238,095	178,571,429	17,719,632
Gala	48,283,554	2,587,204	6,067,140	3,162,019	454,269	955,027	96,393	33,825,799	1,135,703
Red Delicious	34,622,640	-	3,268,807	2,242,378	603,244	942,061	763,065	23,231,846	3,571,239
Granny Smith	28,252,464	726,399	-	506,964	71,430	351,271	134,476	25,909,122	552,802
Honeycrisp	27,744,247	-	3,501,593	1,504,777	1,214,218	103,017	4,659	21,159,117	256,867
Fuji	26,591,928	387,446	1,791,228	1,763,225	777,485	1,143,724	113,981	18,856,083	1,758,755
Others	23,552,029	12,451	5,072,286	4,508,165	210,136	812,024	609,708	11,371,226	956,032
Golden Delicious	20,490,932	836,971	3,303,112	2,474,643	-	3,213,696	1,179,511	6,290,159	3,192,840
Cosmic Crisp®	16,265,171	-	-	-	-	-	-	16,265,171	-
Pink Lady/Cripps Pink	14,928,869	239,092	132,321	384,594	240,646	266,621	331,890	12,090,924	1,242,780
Rome	8,697,208	-	1,293,801	2,918,694	-	1,132,726	844,867	-	2,507,121
Envy®	6,405,311	-	-	-	-	-	-	6,405,311	-
Idared	5,477,948	-	1,786,327	2,975,346	-	246,408	153,152	-	316,715
McIntosh	4,900,019	-	1,085,518	3,267,041	-	40,002	8,450	-	499,007
York	4,163,886	-	-	157,667	-	2,504,690	828,356	-	673,174
Empire	3,500,394	87,312	830,679	2,275,457	-	22,355	12,977	-	271,614
Ambrosia	3,450,687	-	-	161,908	-	114,222	-	3,166,671	7,887
Cortland	1,528,473	-	-	1,258,645	-	6,829	44,697	-	218,302
Mutsu/Crispin	1,161,526	-	-	1,021,673	-	115,279	13,163	-	11,411
Newtown Pippin	761,648	599,315	-	-	-	2,916	17,477	-	141,941
Jonathan	582,085	-	438,618	69,386	-	24,018	324	-	49,738
Spartan	371,821	-	-	256,190	-	2,552	6,624	-	106,455
Stayman	269,080	-	-	16,701	-	124,471	74,326	-	53,582
Rome Sport	241,522	-	-	26,905	-	18,949	-	-	195,667

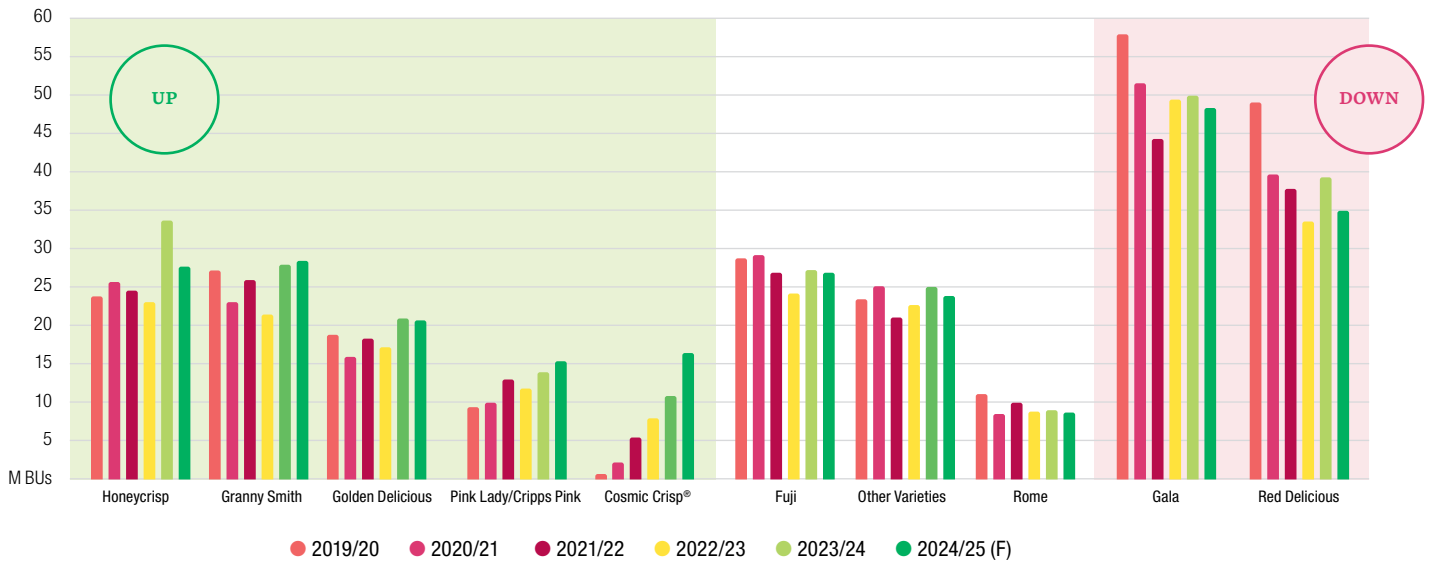
Sources: USApple; California Apple Commission; Washington State Tree Fruit Association
 Note: Production levels are reported in 42-pound bushels.

In general, the varieties on the rise include Honeycrisp, Pink Lady/Cripps Pink and Cosmic Crisp®. Fuji, Rome and “other” varieties have remained relatively consistent compared to

2019/20 production volumes. Varieties on the decline include Gala and Red Delicious. **Figure 6** charts the yearly production growth or decline for select top varieties.

²⁴ For Michigan, New York, Oregon, Pennsylvania, Virginia and Other States, the 2024/25 production values by variety were derived using USApple’s state-specific December 1, 2023 storage ratios – the percentage of total storage by variety at that point in time. CAC provided estimates for the fresh varieties in California, while December 1, 2023 storage ratios in the state were used to estimate processing varieties. Washington’s estimated varietal shares were provided by WSTFA. Users should be aware that estimates made using the December storage shares may tend to undercount certain varieties: on the high end, growers/marketers may want to sell the newer, more valuable varieties quickly and so those may move before the December 1 report; on the low end, processing apples may not be worth the cost of storage and so are moved quickly or may have never gone through storage facilities at all.

Figure 6: U.S. Apple Production Trends, by Select Varieties



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

When viewed alongside retail price data, there is a loose correlation with these varietal shifts. **Table 8** lists the weighted average price, sorted in descending order, of six varieties tracked by USDA nationwide. In general, the most expensive varieties towards the top of the list are those enjoying production growth. Conversely, the least expensive varieties are those in decline.

However, as the data show, every one of these varieties took a significant hit compared to last year. This tracks with the consumer price index data for apples showing a 13.5% season-to-date decline. Unfortunately, as shown above in **Figure 3**, prices that the growers received were down by far greater amounts.

The data also show the retail premium for organics versus conventional apples – generally between 40% and 70% higher depending on variety. Organics also have seemed to hold their price better, dropping only 4% year over year compared to the 8% decline for conventional apples.

Regarding Honeycrisp in particular, it seems as though the dramatic 51% increase in production last season led to larger than

Table 8: U.S. Apple Retail Prices, by Select Varieties, by Organics

	2023/24	2022/23	YR-OVER-YR % CHANGE
Conventional	\$1.46	\$1.58	-8%
Honeycrisp	\$1.88	\$2.24	-16%
Granny Smith	\$1.58	\$1.73	-9%
Fuji	\$1.50	\$1.66	-10%
Gala	\$1.49	\$1.62	-8%
Red Delicious	\$1.26	\$1.48	-15%
Golden Delicious	\$1.24	\$1.36	-9%
Organic	\$2.43	\$2.54	-4%
Honeycrisp	\$3.18	\$3.37	-6%
Granny Smith	\$2.17	\$2.40	-10%
Fuji	\$2.18	\$2.38	-8%
Gala	\$2.16	\$2.35	-8%
Red Delicious	\$1.92	\$1.93	-1%
Golden Delicious	\$2.49	\$2.79	-11%

Sources: USDA, Agricultural Marketing Service; USApple
 Note: Prices represent national averages in dollars per pound.

average discounts with prices down 16% year over year. Without access to actual point-of-sale data, it is difficult to tell if those promotions were successful in driving the additional sales needed to absorb all that extra fruit, but the USAppleTracker monthly storage data suggests it was not.

In November 2023, there were 30 million bushels of Honeycrisp in U.S. holdings, a 62% increase over the previous November's value. By June 2024, there were almost 8 million bushels left, which was 87% above the prior June's storages suggesting that the movement of Honeycrisp had slowed through the season.

With annual production volumes now much closer to Gala and Red Delicious, it will be interesting to see how much longer Honeycrisp can hang on to its premium pricing. For now, it appears that, at 25% to 50% above the price of those other varieties, retailers are finding it difficult to move that much fruit.

Understandably, the decision to grow certain varieties or organic versus conventional apples depends in large part on topography, climate, operational sophistication, etc. and so not every grower could or should move their operations towards producing solely organic Honeycrisp, for example. But the regions and growers that can take advantage of these premium apples are able to reap oversized rewards.

Table 9 shows the market share by state when calculated on production quantities versus value. By bushels produced, Washington has a 63% market share. By value, that share increases to 66% – a three-percentage point gain. That gain is realized by drawing market

share from almost every other state except Michigan and Oregon.

It should be noted, however, the varietal mix and availability of organics are not the only factors driving this shift in market share. As important, if not more so, is how the apples are ultimately utilized. Will they be used for fresh consumption, or will they be processed? The following section takes a closer look at apple utilization in the U.S., providing additional detail at the state and varietal levels.

Table 9: U.S. Apple Market Shares, by State

2024/25 (F)	PRODUCTION		VALUE	
United States	282,243,442		\$3,325,079,636	
Washington	178,571,429	63.3%	\$2,180,379,761	65.6%
New York	30,952,381	11.0%	\$332,291,610	10.0%
Michigan	28,571,429	10.1%	\$349,225,467	10.5%
Pennsylvania	12,142,857	4.3%	\$119,355,911	3.6%
Oregon	3,571,429	1.3%	\$64,508,240	1.9%
California	5,476,190	1.9%	\$53,839,731	1.6%
Virginia	5,238,095	1.9%	\$36,837,338	1.1%
Other	17,719,632	6.3%	\$188,641,578	5.7%

Sources: USDA, National Agricultural Statistics Service; USApple
 Notes: Production levels are reported in 42-pound bushels.
 USDA U.S. total revised to include imputed production from "other" states.
 "Other" states' production calculated based on 2017 share of U.S. total.
 Value data are based on five-year averages: 2018-2022.



Given the pricing challenges many faced during the 2023/24 season, it begs the question, how and why did we have so many apples in the U.S. last year? While there is no one answer, there are several driving forces that, when combined, made a big year inevitable. First, we are adding new acreage as shown in **Table 4**. Between 2017-2022, the U.S. added 29,544 net new apple acres. Second, we are replacing an untold number of older, less productive acres with newer, higher-density orchards. Both the new and the replaced acreage will be at least as efficient, but likely more efficient and higher yielding than the farm average. Third, we are increasingly growing for the fresh market. When selecting a variety to replant, a grower will take out one fresh variety for another or they will take out a processing variety for a fresh one – it is highly unlikely that they will remove a fresh variety to plant processing block. Fourth, packouts are improving dramatically. The quality of the apples at harvest and the improvements in storage protocols mean that a higher percentage of apples stay fresher, longer and fewer late-season apples get culled for processing. The combination of these factors mean that, in the absence of a localized hail or frost event, the supply of fresh apples in any given year is at least as large, if not larger than a comparable year.

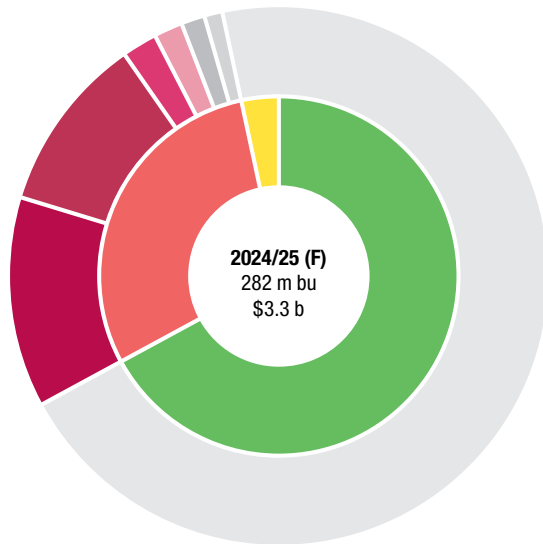


U.S. Apple Utilization

The ratio of fresh to processing apples has remained remarkably consistent over the last 15 years, at least. Fresh apples account for around 67% of total production while processors make up roughly 30%. The remaining 3% of apples go unsold every year.

67%
FRESH

Figure 7: U.S. Apple Utilization



- **Fresh 67%** | 189 m bu | \$2.9 b
- **Not Sold 3%** | 8 m bu | \$0
- **Processing 30%** | 85 m bu | \$404 m
 - **Juice & Cider 13%** | 36m bu | \$132 m
 - **Canned 11%** | 30 m bu | \$169 m
 - **Dried 2%** | 6 m bu | \$28 m
 - **Frozen 2%** | 5 m bu | \$30 m
 - **Fresh Slices 2%** | 4 m bu | \$37 m
 - **Other 1%** | 3 m bu | \$9 m

Sources: USDA, National Agricultural Statistics Service; USApple

Notes: Utilization shares and values for fresh, processing and not sold are based on five-year averages: 2019-2023.

Utilization shares for the sub-processing types are based on five-year averages: 2013-2017.

Values for the sub-processing types are based on 2017 price ratios. Numbers may not sum to total due to rounding.

In the 2023/24 season, the percentage of apples that qualified as fresh jumped up to 69% from 65% the year before. This tracks with anecdotal reports at the start of the 2023/24 CY that there was no processor market to speak of. That is, by all accounts, the 2022/23 crop had been a good one for processors and they were able to fill their long-term storages. By the time the next year's crop rolled around, they were still relatively full and were not buying as much product. This would skew the 2022/23 fresh figure abnormally low and the 2023/24 figure abnormally high.

The opposite was true for processing apples. In the 2022/23 CY when the market was good, the utilization rate for processing apples was slightly above normal at 32%. In the following year when the processors stopped buying, that figure fell slightly below normal to 29%.

Given that USDA's August forecast does not estimate utilization, the five-year averages were applied to the 2024/25 CY production forecast to approximate values for fresh, processing and not sold apples. **Figure 7** displays these estimated utilization shares, quantities and values along with a breakout of processing apple usage.²⁵



As noted above, one of the primary contributing factors to the 2023/24 season's record production was the increasing tendency to grow for the fresh market. Per the Agricultural Census, the ratio of bearing to non-bearing acres for apple orchards has remained fairly consistent over the past 20 years even as the total number of acres fluctuates. In any given year, it can be expected that between 10% to 14% of an apple orchard will be non-bearing trees with the other 86% to 90% being of bearing age. This signals a long-standing tradition of U.S. apple growers continuing to reinvest in their orchards – removing older, less productive blocks with out-of-date varieties and replacing them with new, more productive systems with more marketable varieties. Over time, as the legacy blocks of processors come out, they are, more often than not, being replaced with higher-value varieties for the fresh market. The economics of modern-day apple growing demand it. This trend can be seen at the state level as both Oregon and Virginia have been making significant improvements in their utilization ratios. In 2018, 79% of Oregon's apple crop went for fresh use. By 2023, that figure had increased to 88%. In Virginia, fresh apples accounted for 41% of total production in 2018. In 2023, that share increased to 57% fresh – a 16-percentage point gain in just five years.

²⁵In 2018, USDA discontinued the collection of data on specific processed apple products. The processor utilization data in **Figure 7** represent a five-year average from 2013-2017 and are applied to the 2023/24 CY forecast.

At the state level, the ratios of fresh to processing apples can vary dramatically. In Oregon, for example, 88% of the 2023/24 crop went to the fresh market. In contrast, only 21% of California's apple crop was utilized as fresh. In Washington, the sheer magnitude of their crop makes big swings in the utilization ratios less likely. For the last decade, Washington has consistently produced 76% fresh and 20% processing with the remainder being left unsold.

Table 10: U.S. Apple Utilization, by State

2024/25 (F)	UTILIZATION	% OF STATE PRODUCTION	% OF NATIONAL USE TYPE
FRESH			
United States	188,785,917	66.9%	
Washington	135,000,258	75.6%	71.5%
New York	16,243,559	52.5%	8.6%
Michigan	14,062,877	49.2%	7.4%
Pennsylvania	5,523,072	45.5%	2.9%
Oregon	3,026,375	84.7%	1.6%
Virginia	2,399,458	45.8%	1.3%
California	1,180,732	21.6%	0.6%
Other	11,349,586	64.1%	6.0%
PROCESSING			
United States	84,958,233	30.1%	
Washington	36,071,429	20.2%	42.5%
New York	14,510,167	46.9%	17.1%
Michigan	14,348,564	50.2%	16.9%
Pennsylvania	6,566,642	54.1%	7.7%
California	4,245,969	77.5%	5.0%
Virginia	2,794,427	53.3%	3.3%
Oregon	521,931	14.6%	0.6%
Other	5,899,104	33.3%	6.9%

Sources: USDA, National Agricultural Statistics Service; USApple
Notes: Utilization levels are in 42-pound bushels.
Fresh and processing production shares are based on five-year averages: 2019-2023.
The sum of fresh, processing and not sold apples equals total production.

State-level data also help to confirm the narrative described above regarding an unusually poor market for processing apples at the start of the 2023/24 CY. In New York, for example, the utilization ratio went from 49% fresh and 50% processing in the 2022/23 season when processors were stocking up, to 55% fresh and 44% processing the following year when processor buying largely dried up. In Virginia, the shift was even more pronounced as utilization ratios moved from 47% fresh and 52% processing in the 2022/23 CY to 57% fresh and 43% processing the following year. Of course, there are likely several factors at play contributing to the displacement of processors in favor of fresh production, but these data suggest that growers, packers and sellers have some measure of control to adapt to market conditions.

In terms of market share, Washington continues to lead the U.S. in production for both fresh and processing apples. In the 2024/25 CY, it is expected that the state will be responsible for 72% of the fresh apples and 42% of the processing apples grown in the U.S. **Table 10** details utilization levels, shares of production and shares of use by state.

²⁶ The data in **Table 11** were derived using USApple's December 1, 2019-2023 average storage ratios – the percentage of total storage by variety at that point in time. Just as with **Tables 6** and **7**, users should be aware that estimates made using the December storage shares may tend to undercount certain varieties at the high- or low-end of the spectrum.



Just as the utilization shares vary by state, so too do they vary by type. As shown in **Table 11**, a number of apple varieties like Ambrosia, Fuji and Gala, for example, are primarily utilized as fresh while other varieties like Idared, Rome and York are primarily utilized for processing.

As noted above, the differentiation between fresh and processing apples is a key driver of value. Understanding this is central to appreciating how U.S. apple growers and processors engage with the global community through trade. The following section examines U.S. apple imports and exports, detailing how they have changed over time and what that means for the balance of trade.

Table 11: U.S. Apple Utilization, by Variety

2019-2023 AVERAGE	FRESH	PROCESSING
Total Varieties	70.9%	29.1%
Ambrosia	81.5%	18.5%
Cortland	40.3%	59.7%
Cosmic Crisp®	78.2%	21.8%
Empire	69.2%	30.8%
Envy®	90.4%	9.6%
Fuji	79.8%	20.2%
Gala	82.6%	17.4%
Golden Delicious	52.5%	47.5%
Granny Smith	77.0%	23.0%
Honeycrisp	61.0%	39.0%
Idared	6.5%	93.5%
Jonathan	33.2%	66.8%
McIntosh	62.2%	37.8%
Mutsu/Crispin	14.7%	85.3%
Newtown Pippin	40.0%	60.0%
Pink Lady/Cripps Pink	80.9%	19.1%
Red Delicious	82.1%	17.9%
Rome	7.9%	92.1%
Rome Sport	47.6%	52.4%
Spartan	94.2%	5.8%
Stayman	15.0%	85.0%
York	2.6%	97.4%
Others	67.0%	33.0%

Source: USApple

Note: Shares do not match those in **Table 10** as December storages are inclusive of “not sold” apples.



46

MILLION BUSHELS
EXPORTED

U.S. Apple Trade

According to USDA trade data, fresh apple exports totaled 46.4 million bushels in the 2023/24 CY (July to June). This is around 14 million bushels higher than 2022/23 export levels – an astonishing 44% year-over-year increase. During the same period, fresh apple imports dropped by around one million bushels, a 15% decline. The joint effects of increasing exports and decreasing imports caused the already net positive fresh apple trade balance to grow to more than 42 million bushels. These effects together also meant that there were 15 million fewer bushels to compete against domestically – an amount greater than the combined average annual production of California, Oregon and Virginia (see **Table 12**).

Valued at almost \$1.1 billion, only 16% of the exported apples were certified organic with the remaining 84% being conventional or non-organic. Conversely, the value of the imports – 22% organic and 78% conventional – was less than \$150 million, leading to an almost \$918 million trade surplus.

However, it should be noted that, just because U.S. growers are shipping fruit abroad, it doesn't necessarily mean that they are making a profit. In many cases, exporters may sell at a loss in the hopes of opening markets to larger, more profitable shipments in the future. Or they may be selling at below market prices to keep foreign buyers happy at a time when the U.S. has plenty of fresh apples going around. By weight, fresh apple exports were up 44% from last season. By value, they were only up 34%.

Taken as a whole, the average price per bushel for U.S. exports in the 2023/24 CY was \$22.95 while the price for imports was averaging \$33.91 per bushel. This is not necessarily what one would expect to see at a time when the dollar is so strong relative to other currencies. Rather, it seems that the competitive price

pressures seen here at home this season extended abroad. Hopefully, the inroads and goodwill bought during the 2023/24 CY will be maintained in years of lower supply and sustainable prices.

In the case of India, while it is wonderful news that the retaliatory tariffs were dropped and fresh apple exports are up almost 4,000%, the value of those exports was around \$18.41 a bushel. Without knowing the varieties, grades and sizes they were buying, it is difficult to know if that price is below the cost of production and delivery, but if it is, the margins are likely razor thin.

Beyond India, other bright spots for fresh apple exports include Taiwan and Vietnam, up 94% and 23% respectively with better-than-average per-bushel pricing. Of some concern is Canada, reporting exports down 2% year over year. **Table 12** further details the fresh apple trade levels and values for select export and import partners.

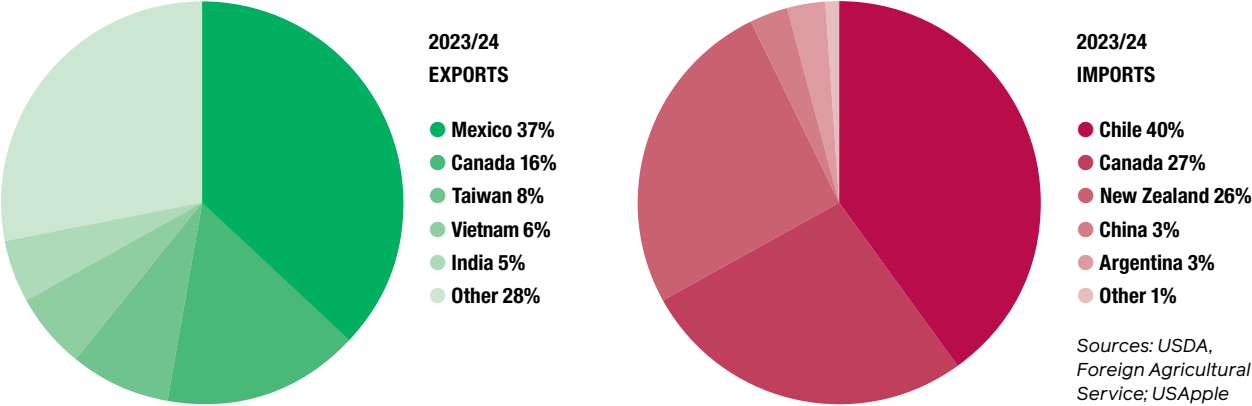
Table 12: U.S. Fresh Apple Trade

	2023/24	2022/23	YR-OVER-YR % CHANGE	2023/24 \$	2023/24 \$/ BU
Total U.S. Exports	46,361,537	32,119,188	44%	\$1,064,125,000	\$22.95
Conventional Exports	38,883,229	27,690,437	40%	\$892,181,000	\$22.95
Organic Exports	7,478,307	4,428,751	69%	\$171,944,000	\$22.99
Mexico	17,308,440	12,549,332	38%	\$383,922,000	\$22.18
Canada	7,369,997	7,515,140	-2%	\$166,793,000	\$22.63
Taiwan	3,846,931	1,978,589	94%	\$97,752,000	\$25.41
Vietnam	2,563,228	2,080,279	23%	\$65,477,000	\$25.54
India	2,280,658	58,076	3827%	\$41,993,000	\$18.41
Dominican Republic	1,335,386	1,132,561	18%	\$34,465,000	\$25.81
Guatemala	1,289,913	543,014	138%	\$26,745,000	\$20.73
Colombia	1,062,711	326,667	225%	\$23,969,000	\$22.55
Hong Kong	936,444	609,861	54%	\$21,182,000	\$22.62
Thailand	834,869	528,164	58%	\$20,643,000	\$24.73
Other	7,532,961	4,797,505	57%	\$181,184,000	\$24.05
Total U.S. Imports	4,313,281	5,086,515	-15%	\$146,247,000	\$33.91
Conventional Imports	3,379,063	3,942,412	-14%	\$107,772,000	\$31.89
Organic Imports	934,218	1,144,103	-18%	\$38,475,000	\$41.18
Chile	1,700,828	2,350,398	-28%	\$55,530,000	\$32.65
Canada	1,176,952	1,300,269	-9%	\$30,890,000	\$26.25
New Zealand	1,130,865	1,142,019	-1%	\$53,620,000	\$47.42
China	144,214	98,867	46%	\$2,866,000	\$19.87
Argentina	138,928	190,406	-27%	\$2,526,000	\$18.18
Other	21,495	4,556	372%	\$815,000	\$37.92
U.S. Balance of Trade	42,048,255	27,032,673	56%	\$917,878,000	\$21.83
Conventional Balance of Trade	35,504,166	23,748,025	50%	\$784,409,000	\$22.09
Organic Balance of Trade	6,544,089	3,284,648	99%	\$133,469,000	\$20.40

Sources: USDA, Foreign Agricultural Service; USAApple | Notes: Trade levels are reported in 42-pound bushels.

Figure 8 highlights the primary export and import markets for U.S. apples in the 2023/24 crop year.

Figure 8: U.S. Fresh Apple Trading Partners



Despite having record production volumes at the start of the 2023/24 season, the U.S. still imported more than 4 million bushels of fresh apples throughout the crop year (see Table 12). While this may seem counterintuitive, it appears that it is the new normal. A decade ago, when the U.S. had its last record production year (2014/15), fresh apple imports were almost 10 million bushels, but 98% of those occurred between March and August 2014 in the months leading up to the U.S. harvest. Only 2% of the season’s imports, around 200,000 bushels, were brought in after it was clear that the U.S. had more than enough apples to satisfy their own demand. Fast forward to the 2023/24 season and total imports are way down (-45%), which is great, but the pattern has changed. March to August 2023 only accounted for 68% of the season’s fresh apple imports. An additional 1.75 million bushels, around 32% of the 2023/24 imports, continued to filter in after the record-breaking August harvest. It is unlikely that this is all due to later harvest dates and varieties as the data show remarkable consistency for import levels through the fall, winter and summer. Rather it seems, U.S. retailers and sales desks are forming strategic partnerships with foreign growers to ensure a steady supply in down production years. But those arrangements are not easily put aside in years of high production. The obligations to those foreign suppliers must continue to be honored regardless given that they have likely made significant investments of their own to ensure that they can deliver when they are called to do so.

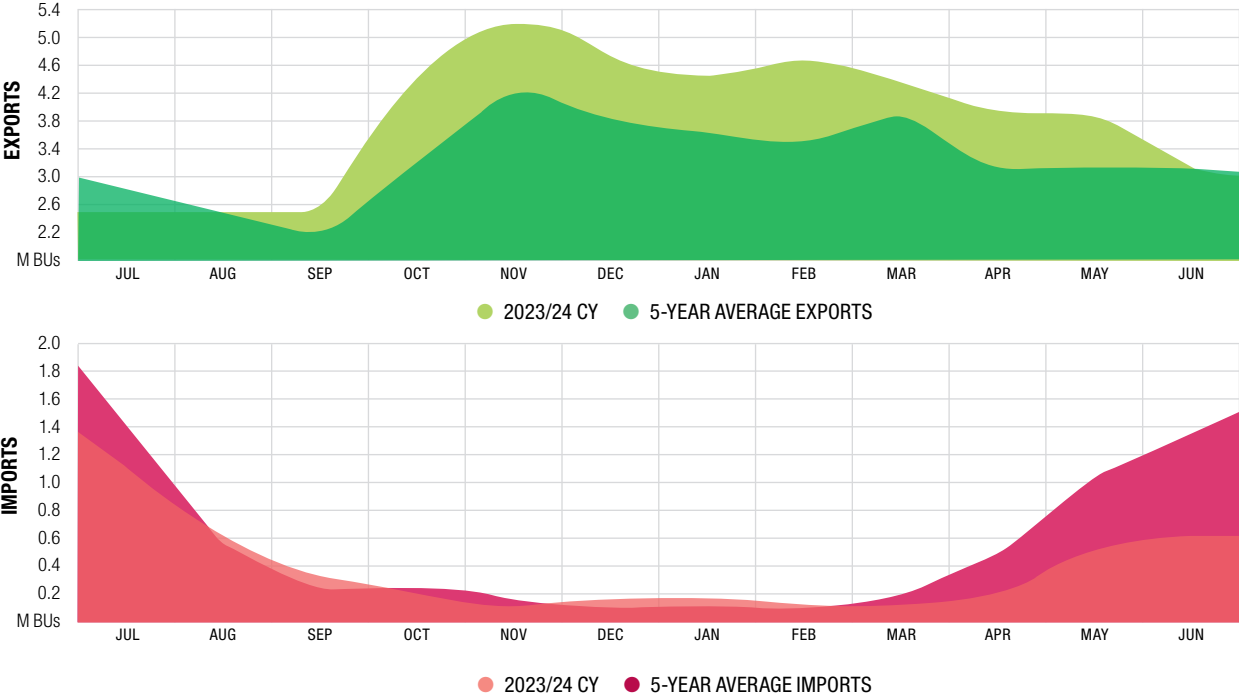
Similar to the results of the year-over-year comparison, on a monthly basis, exports for the 2023/24 CY are up and imports are down relative to their five-year averages (see **Figure 9**). As noted above, the huge gains in fresh apple exports were due in no small part to the domestic supply situation and competitive pricing abroad. On the import side, the declines were almost certainly to do with high production levels in the U.S., but a strong dollar and strategic partnerships likely kept them from falling further.

Given the value discrepancy between fresh and processing apples, a focus on the fresh market is certainly warranted, but it leaves out a huge sector of apple-related trade: apple juice concentrate – a sector dominated by overseas competitors.

In 2023, the U.S. imported more than 436 million gallons of apple juice concentrate. At a conversion rate of 8.35 pounds per gallon, the conversion weight for water, which is likely low, those imports equate to more than 3.6 billion pounds. U.S. fresh market exports weigh in at around 2 billion pounds (46.4 million bushels). What the processing market loses in price, it makes up for in quantity. The value of these imports – almost \$650 million.

On a year-over-year basis, in 2023, imports of apple juice concentrate were down by 22% by weight and 5% by value. Exports were also down 7% by weight and 2% by value. Given the enormity of the import market, this caused net trade to actually shift in our favor, reducing the apple juice concentrate trade balance by almost \$35 million (see **Table 13**).

Figure 9: U.S. Monthly Fresh Apple Trade



Sources: USDA, Foreign Agricultural Service; USApple

China, the world's largest apple producer, had long been the dominant supplier of apple juice concentrate into to the U.S. In 2021, however, U.S. imports from Türkiye more than doubled while those from China fell by almost half. In 2022, Türkiye continued its growth, just edging out China to take over the top spot as our largest apple juice concentrate supplier. In 2023, imports from Türkiye fell by 17% to 147 million gallons, but China's fell further. Between 2022 and 2023, China's apple juice concentrate imports went from 161 million gallons to just 57 million gallons – a decline of more than 103 million gallons or 64%.

When measured by value, Türkiye (35%) has a significantly greater share of the U.S. apple juice concentrate import market compared to China (10%). This means that, not only are we bringing in more concentrate from Türkiye, but we are paying more per unit than we do for Chinese juice. For additional details on U.S. apple juice concentrate import trading partners, see **Appendix A**.

The following section explores global apple production more closely, highlighting a number of international 2024/25 apple crop forecasts and completing the picture of worldwide apple supply in the year to come.

Table 13: U.S. Apple Juice Concentrate Trade

	2023	2022	YR-OVER-YR % CHANGE
LEVELS			
U.S. Balance of Trade	(422,006,026)	(540,343,353)	-21.9%
Total Exports	14,181,044	15,289,509	-7.2%
Total Imports	436,187,069	555,632,862	-21.5%
VALUE			
U.S. Balance of Trade	\$(591,180,000)	\$(622,738,000)	-5.1%
Total Exports	\$58,562,000	\$59,831,000	-2.1%
Total Imports	\$649,742,000	\$682,569,000	-4.8%

Sources: USDA, Foreign Agricultural Service; USApple
 Note: Trade levels are reported in gallons.



5+

BILLION BUSHEL
PRODUCED

Global Apple Production

According to United Nations (UN) data, worldwide apple production surpassed 5 billion bushels for the first time in 2022 (the latest available datapoint). These 211 billion pounds of apples were grown on more than 11.9 million acres (19,000 square miles) resulting in an average yield of around 422 bushels per acre.²⁷

²⁷ UN, Food and Agriculture Organization: FAOSTAT: 1961-2022.

Over the course of the 60 years for which the UN has data, production has been increasing continuously with an average annual growth rate of 3%. Despite the production increases, the global number of acres harvested reached its pinnacle in 1995. As a result, global average apple yield has been rapidly increasing since that time. From 1995 to 2022, apple production has increased by 96%, acres harvested has fallen by 23% and average yield has increased by 156%.

In 2022, China alone was responsible for producing 2.5 billion bushels, around half of the world's total supply. In 2021, Türkiye overtook the U.S. to become the world's second largest apple producer and maintained that spot in 2022, even widening the gap between us (253 million bushels, 5%). The U.S., in the third spot, was credited with 232 million bushels and 4.6% of world production. Rounding out the top five were Poland (4.4%) and India (2.7%). A complete list of apple production by country is shown in **Appendix B**.

In terms of area harvested, China still tops the list at almost 5.3 million acres, but by this metric, the U.S. falls to seventh in the world with slightly less than 290,000 acres. India takes the number two spot, followed by Russia, Türkiye, Poland and Uzbekistan.

This effectively means that the U.S. is far more efficient at growing apples than these other producers. In terms of yield, the U.S. is producing 806 bushels per acre compared to 475 for China or 175 for India, for example. By this measure, the U.S. ranks twelfth in the world. New Zealand tops the list at 1,246 bushels per acre with Switzerland, Chile, Belgium and Libya rounding out the top five. For reference, the global average is 386 bushels per acre.

The remaining portion of this section provides details on the 2024/25 CY production forecasts for select countries and regions.

As discussed above, in the wake of the U.S. placing tariffs on imported steel and aluminum, India responded by instituting their own tariffs on imported American apples. Prior to the move, the U.S. was supplying 45% of all Indian fresh apple imports worth around \$157 million. By 2022, U.S. shipments to India had fallen by 97%. In our absence, Türkiye and Iran stepped in to fill the void. In 2018, Iran and Türkiye combined were responsible for 7% of India's fresh apple imports. By 2022, those countries controlled 48% of the market. To make matters worse, while we were gone, India's fresh apple import market had grown by nearly 20%, so now Iran and Türkiye controlled a larger piece of a larger pie.

Just prior to the 2023/24 CY, India announced that it would be rolling back those tariffs and U.S. exporters went to work. Fortunately, their efforts have borne fruit. Fresh apple exports to India totaled almost 2.3 million bushels in the 2023/24 season, up from just 58,000 bushels the year before (see **Table 12**). Unfortunately, it seems that this was achieved through aggressive, potentially unsustainable pricing. The takeaway here is that foreign markets are exceedingly competitive. Given the cost of production in the U.S. relative to many of our foreign competitors, we can ill afford to give up markets we've already won. Over the last decade, Türkiye has nearly doubled its production and recently supplanted the U.S. as the world's second largest apple producer. They are standing by and would be happy to take any business we are foolish enough let them have through bad trade policies.

CORE
INSIGHTS

China

Despite the fact that the U.S. does not conduct a great deal of fresh apple trade with China, it is nevertheless important to keep an eye on their production numbers as a way of gauging world-wide supply.

According to the World Apple and Pear Association (WAPA), China's 2024/25 production is estimated to be up by 2% year over year to around 2.1 billion bushels. If accurate, this would represent an increase of around 41 million bushels – roughly equivalent to the combined annual production of Michigan and Pennsylvania. As with the U.S., China is seeing an influx of private sector investment, consolidating orchards into large specialized, corporate farms that adopt modern production models and technologies to increase productivity and quality. At this point, it is estimated that these corporate farms represent around 20% of the acreage in China with the remainder being traditional operations with limited access to the capital needed to make significant improvements.²⁸

Europe

Taken as a group, Europe would be the second largest apple producing region behind China. According to WAPA, the major European apple-growing countries listed in **Table 14** will produce almost 545 million bushels in the 2024/25 CY. This is 11% below 2023/24 production levels and 10% lower than the five-year average.

Within Europe, Poland is the largest apple-producing country expected to produce around 167 million bushels – a 20% decrease from last year and 25% decrease from the 2022/23 season. This two-year decline reverts Poland back to 2014 levels of production, the year Russia first invaded Ukraine and annexed the Crimean Peninsula. Following Poland's condemnation of that aggression, Russia cut Polish apple imports to near zero. Prior to that move, Poland had exported 36 million bushels to Russia, accounting for 22% of their annual production and 56% of their fresh apple exports. A decade out from the event, Polish fresh exports have still not recovered. As of 2022, Polish apple exports to Russia were still below one million bushels and their total fresh apple exports are down close to 40%.

Table 14: European Apple Production, by Select Countries

	2024/25 (F)		2023/24		5-YR. AVERAGE	
Europe Total	544,961,068		612,149,487		606,029,042	
Poland	167,446,138	30.7%	208,389,081	34.0%	200,357,965	33.1%
Italy	113,485,439	20.8%	114,167,821	18.7%	110,871,390	18.3%
France	76,794,263	14.1%	79,156,356	12.9%	76,321,845	12.6%
Germany	41,625,325	7.6%	49,393,986	8.1%	52,826,894	8.7%
Spain	29,762,370	5.5%	27,190,313	4.4%	25,962,025	4.3%
Romania	23,673,420	4.3%	27,872,696	4.6%	28,324,118	4.7%
Hungary	17,322,014	3.2%	28,870,024	4.7%	22,592,106	3.7%
Portugal	15,747,286	2.9%	15,484,831	2.5%	16,650,130	2.7%
Greece	15,064,903	2.8%	9,605,844	1.6%	13,710,637	2.3%
Netherlands	10,340,718	1.9%	10,445,700	1.7%	12,272,385	2.0%
United Kingdom	9,185,917	1.7%	7,873,643	1.3%	9,427,375	1.6%
Belgium	6,981,297	1.3%	10,655,663	1.7%	11,569,006	1.9%
Croatia	3,201,948	0.6%	3,464,403	0.6%	3,180,952	0.5%
Austria	3,096,966	0.6%	6,088,950	1.0%	6,918,308	1.1%
Slovenia	3,096,966	0.6%	2,467,075	0.4%	2,341,096	0.4%
Slovakia	1,889,674	0.3%	1,417,256	0.2%	1,627,220	0.3%
Lithuania	1,837,183	0.3%	1,417,256	0.2%	2,015,653	0.3%
Sweden	1,679,710	0.3%	1,679,710	0.3%	1,543,234	0.3%
Czech Rep	1,259,783	0.2%	5,301,586	0.9%	5,983,969	1.0%
Denmark	1,102,310	0.2%	787,364	0.1%	1,007,826	0.2%
Latvia	367,437	0.1%	419,928	0.1%	524,910	0.1%

Sources: World Apple and Pear Association; USApple

Notes: Production levels are reported in 42-pound bushels.

Five-year averages do not include 2023/24 (F) data.

²⁸USDA, Foreign Agricultural Service. "Fresh Deciduous Fruit Annual: China". November 2023.

Table 15: European Apple Production, by Select Varieties

	2024/25 (F)		2023/24		5-YR. AVERAGE	
Europe Total	544,961,068		612,149,487		606,029,042	
Golden Delicious	103,512,158	19.0%	115,217,640	18.8%	120,361,754	19.9%
Gala	70,915,277	13.0%	79,733,757	13.0%	76,563,303	12.6%
Red Delicious	32,334,427	5.9%	31,442,080	5.1%	35,221,429	5.8%
Idared	26,402,949	4.8%	32,386,918	5.3%	34,916,982	5.8%
Shampion	18,686,779	3.4%	22,151,182	3.6%	22,865,059	3.8%
Granny Smith	17,899,415	3.3%	17,741,942	2.9%	19,243,183	3.2%
Red Jonaprince	17,217,032	3.2%	24,670,748	4.0%	24,859,715	4.1%
Cripps Pink	16,219,704	3.0%	16,692,123	2.7%	15,274,867	2.5%
Fuji	16,062,231	2.9%	16,114,722	2.6%	16,545,148	2.7%
Elstar	14,592,485	2.7%	15,379,849	2.5%	17,605,465	2.9%
Jonagold	14,487,503	2.7%	18,529,306	3.0%	20,324,497	3.4%
Ligol	8,398,552	1.5%	11,548,010	1.9%	11,757,973	1.9%
Braeburn	8,398,552	1.5%	9,920,790	1.6%	11,243,562	1.9%
Jonagored	6,246,423	1.1%	9,763,317	1.6%	11,978,435	2.0%
Other	173,587,580	31.9%	190,857,103	31.2%	175,729,210	29.0%

Sources: World Apple and Pear Association; USApple
 Notes: Production levels are reported in 42-pound bushels.
 Five-year averages do not include 2023/24 (F) data.

On a varietal basis, Golden Delicious accounts for 19% of all European apples. The next largest varieties include Gala, Red Delicious, Idared and Shampion. The estimated 2024/25 CY production by variety is featured in **Table 15**.

South America

Together, Chile, Brazil and Argentina are responsible for around 93% of total South American apple production. According to WAPA, in the 2024/25 CY²⁹, Chile is thought to have produced almost 48 million bushels, down 8% from last season. Brazil's production was also off from last season, estimated to be down 27% to 42 million bushels. Similarly, Argentina's apple production was down, falling 5% from last year to around 26 million bushels.

Mexico

While Mexico only produces around 1% of the world's apples, it is an exceedingly important export market for the U.S. (see **Figure 8**). As such, it is critical that U.S. growers and marketers have some understanding of Mexico's production levels that will affect the quantity of U.S. apples they need to bring in to satisfy their domestic demand.

According to WAPA, Mexico's 2024/25 crop will be around 1% above last year's figure with production totaling 43 million bushels. If true, this would be a great year for Mexico, marking their highest production levels since 2013.

²⁹ Given South America's position in the Southern Hemisphere, the crop year begins approximately six months earlier than in Northern Hemisphere countries. As such, South America's 2024/25 crop has already been harvested and the remaining apples are in storage.

Canada

Just as was the case for Mexico, U.S. growers and marketers must pay close attention to the Canadian production situation given its importance as an export market (see **Figure 8**). According to the Fruit and Vegetable Growers of Canada, Canadian production will increase to 20.7 million bushels – a 6% drop from 2023/24 levels (see **Table 16**). This represents a 7% decrease from the five-year production average.

At the sub-national level, Ontario, the nation's largest apple-growing province, is expected to produce at around the same volume as last season with 8.8 million bushels. Quebec's production is estimated to increase by 29% to 5.7 million bushels. Nova Scotia is the only province with projected year-over-year declines, falling 5% to 2.2 million bushels. Of some note is the production figure out of British Columbia that expected to be up 1% from last season. That figure includes the apples from around 300 growers previously affiliated with the largest packing operation in the province that recently closed. At present, those apples, if picked, do not have a place to be stored, packed, shipped or sold. The final production figures from British Columbia will depend on how many of those growers can find a home for their apples before harvest is complete.

On a varietal basis, Gala is the number one apple grown in Canada with an expected 2024/25 production volume of more than 4 million bushels, around 21% of total production. Rounding out the top five are McIntosh, Honeycrisp, Ambrosia, and Cortland (see **Table 17**).

Table 16: Canadian Apple Production, by Province

	2024/25 (F)	2023/24	5-YR. AVERAGE
LEVELS			
Canada	20,715,946	19,460,160	19,295,004
Ontario	8,761,000	8,709,000	7,938,200
Quebec	5,722,000	4,437,000	5,196,799
British Columbia	3,769,050	3,732,269	3,859,518
Nova Scotia	2,241,896	2,359,891	2,116,395
New Brunswick	222,000	222,000	184,092
PERCENT CHANGE (VS. 2024/25)			
Canada		6.5%	7.4%
Ontario		0.6%	10.4%
Quebec		29.0%	10.1%
British Columbia		1.0%	-2.3%
Nova Scotia		-5.0%	5.9%
New Brunswick		0.0%	20.6%
MARKET SHARE			
Canada	100.0%	100.0%	100.0%
Ontario	42.3%	44.8%	41.1%
Quebec	27.6%	22.8%	26.9%
British Columbia	18.2%	19.2%	20.0%
Nova Scotia	10.8%	12.1%	11.0%
New Brunswick	1.1%	1.1%	1.0%

Source: Fruit & Vegetable Growers of Canada
Notes: Production levels are reported in 42-pound bushels.
Five-year averages do not include 2024/25 (F) data.

In total, the estimates for the U.S., China, Europe (including the U.K.), South America, Mexico and Canada represent approximately 72% of total world apple production. By understanding the outlook for these key nations and regions, U.S. growers and marketers will be well positioned to maximize their current opportunities both at home and abroad.

Table 17: Canadian Apple Production, by Variety, by Province

2024/25 (F)	CANADA	BRITISH COLUMBIA	NEW BRUNSWICK	NOVA SCOTIA	ONTARIO	QUEBEC
Total Varieties	20,715,946	3,769,050	222,000	2,241,896	8,761,000	5,722,000
Gala	4,277,299	1,679,530	20,000	112,769	2,279,000	186,000
McIntosh	3,202,290	117,683	55,000	180,607	848,000	2,001,000
Honeycrisp	2,841,335	196,713	75,000	969,422	1,439,000	161,200
Ambrosia	2,739,319	1,401,811	12,000	128,208	1,125,000	72,300
Cortland	1,356,378	-	38,000	96,378	191,000	1,031,000
Empire	1,029,359	-	2,500	9,859	492,000	525,000
Spartan	1,027,700	151,293	2,500	6,907	36,000	831,000
Spy	627,136	-	-	208,136	419,000	-
Red Delicious	586,679	41,321	-	58,358	487,000	-
Others	3,028,451	180,699	17,000	471,252	1,445,000	914,500

Source: Fruit & Vegetable Growers of Canada
Note: Production levels are reported in 42-pound bushels.

Appendix

Appendix A: U.S. Apple Juice Concentrate Imports, by Top Countries

2023	LEVELS		VALUES		YEAR-OVER-YEAR % CHANGE
APPLE JUICE CONCENTRATE					
World Total	374,426,086		\$525,713,000		-21%
Türkiye	120,592,590	32%	\$176,158,000	34%	-24%
Poland	54,846,572	15%	\$73,103,000	14%	16%
China	52,032,083	14%	\$61,281,000	12%	-61%
Chile	40,296,004	11%	\$56,226,000	11%	55%
Ukraine	29,983,046	8%	\$40,074,000	8%	-39%
APPLE JUICE CONCENTRATE - FROZEN					
World Total	37,233,511		\$55,486,000		-43%
Brazil	20,198,485	54%	\$25,655,000	46%	-6%
Türkiye	10,809,786	29%	\$11,376,000	21%	-31%
China	4,903,164	13%	\$11,049,000	20%	-82%
Ukraine	1,079,962	3%	\$5,496,000	10%	N/A
Moldova	192,132	1%	\$1,821,000	3%	N/A
APPLE JUICE CONCENTRATE - BRIX < 20					
World Total	22,453,986		\$62,980,000		60%
Türkiye	14,246,400	63%	\$35,723,000	57%	622%
Canada	3,907,183	17%	\$12,917,000	21%	80%
Poland	2,012,964	9%	\$6,776,000	11%	2301%
Ukraine	1,282,027	6%	\$4,343,000	7%	-83%
Mexico	738,123	3%	\$2,318,000	4%	-45%
APPLE JUICE CONCENTRATE - FROZEN, ORGANIC					
World Total	2,073,486		\$5,563,000		31%
Türkiye	1,577,477	76%	\$4,958,000	89%	413%
China	495,190	24%	\$593,000	11%	-40%
Brazil	819	0%	\$12,000	0%	48%
Argentina	0	0%	\$-	0%	-100%
Austria	0	0%	\$-	0%	N/A

Sources: USDA, Foreign Agricultural Service, USApple

Notes: Trade levels are reported in gallons.

Year-over-year changes are calculated on levels.

Appendix B: Global Apple Production, by Country: 2022

World Total		5,030,521,074	
1	China	2,497,162,576	49.6%
2	Türkiye	252,875,163	5.0%
3	United States of America	232,499,750	4.6%
4	Poland	223,858,165	4.4%
5	India	135,899,076	2.7%
6	Russian Federation	124,923,218	2.5%
7	Italy	118,432,186	2.4%
8	Iran (Islamic Republic of)	104,443,035	2.1%
9	France	93,730,994	1.9%
10	Chile	77,669,992	1.5%
11	Uzbekistan	68,932,845	1.4%
12	South Africa	64,661,865	1.3%
13	Ukraine	59,268,584	1.2%
14	Germany	56,216,760	1.1%
15	Brazil	54,969,418	1.1%
16	Egypt	49,048,266	1.0%
17	Morocco	48,439,703	1.0%
18	Mexico	42,927,414	0.9%
19	Democratic People's Republic of Korea	42,073,210	0.8%
20	Pakistan	39,803,807	0.8%
21	Japan	38,691,081	0.8%
22	New Zealand	30,211,304	0.6%
23	Republic of Korea	29,712,031	0.6%
24	United Kingdom	29,184,851	0.6%
25	Romania	28,522,534	0.6%
26	Algeria	28,337,364	0.6%
27	Belarus	27,961,930	0.6%
28	Spain	26,053,884	0.5%
29	Serbia	25,521,888	0.5%
30	Republic of Moldova	23,500,199	0.5%
31	Argentina	22,221,677	0.4%
32	Canada	19,976,534	0.4%
33	Hungary	18,377,082	0.4%
34	Syrian Arab Republic	17,417,600	0.3%
35	Azerbaijan	16,702,474	0.3%
36	Afghanistan	16,692,123	0.3%
37	Australia	15,774,483	0.3%
38	Portugal	15,284,840	0.3%
39	Greece	15,179,334	0.3%
40	Kazakhstan	14,063,345	0.3%
41	Austria	13,679,667	0.3%
42	Lebanon	13,028,714	0.3%
43	Belgium	12,524,341	0.2%
44	Tajikistan	12,472,694	0.2%
45	Netherlands	12,387,865	0.2%
46	Bosnia and Herzegovina	11,080,893	0.2%
47	Switzerland	10,972,131	0.2%
48	North Macedonia	8,636,336	0.2%
49	Kyrgyzstan	7,196,614	0.1%
50	Peru	6,982,432	0.1%
51	Czechia	6,894,687	0.1%
52	Tunisia	6,666,351	0.1%
53	Israel	5,459,059	0.1%
54	Albania	5,440,425	0.1%
55	Armenia	4,595,137	0.1%
56	Iraq	4,083,785	0.1%
57	Georgia	4,026,056	0.1%
58	Turkmenistan	3,403,020	0.1%
59	Lithuania	2,699,085	0.1%
60	Nepal	2,623,970	0.1%
61	Uruguay	2,616,149	0.1%
62	Slovenia	2,563,658	0.1%
63	Croatia	2,457,101	0.0%
64	Bulgaria	2,435,580	0.0%
65	El Salvador	2,330,968	0.0%
66	Denmark	2,153,704	0.0%
67	Yemen	1,822,188	0.0%
68	Sweden	1,655,565	0.0%
69	Slovakia	1,630,894	0.0%
70	Guatemala	1,367,028	0.0%
71	Ireland	1,217,790	0.0%
72	Norway	896,388	0.0%
73	Jordan	848,112	0.0%
74	Colombia	701,113	0.0%
75	Libya	529,385	0.0%
76	Latvia	527,009	0.0%
77	Ecuador	378,456	0.0%
78	Madagascar	376,087	0.0%
79	Finland	367,962	0.0%
80	Zimbabwe	358,226	0.0%
81	Estonia	172,695	0.0%
82	Malawi	165,955	0.0%
83	Cyprus	152,224	0.0%
84	Bolivia	146,720	0.0%
85	Bhutan	116,684	0.0%
86	Kenya	104,982	0.0%
87	Saint Vincent and the Grenadines	86,336	0.0%
88	Montenegro	80,564	0.0%
89	Luxembourg	72,438	0.0%
90	Palestine	42,456	0.0%
91	Paraguay	35,428	0.0%
92	Grenada	24,819	0.0%
93	Honduras	10,038	0.0%
94	Malta	525	0.0%

Sources: United Nations, Food and Agriculture Organization; USApple
 Note: Production levels are reported in 42-pound bushels.



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