Shire Capital Management

Apple Industry Overview

2024







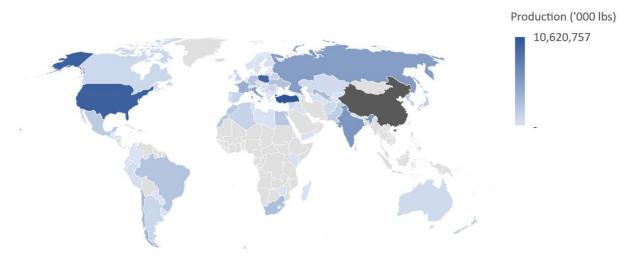
Executive Summary

- North America is the second largest apple producer (10B lbs/year) behind China (100B lbs/year)
- ~40% of Canadian fresh apple supply is imported, 80% of which from the US
- Ontario is Canada's largest producing region, producing ~350,000 lbs/year (40% of Canada's total)
- ~75% of Ontario production is sold fresh, in-line with the North American average
- There are over 700 apple growers in Ontario managing ~1,400 acres, ~300 growers farm < 10 acres
- Since 2017 Canadian apple consumption has remained relatively stable
- Canadian fresh apple prices have increased faster than inflation
- The fresh market is highly differentiated by variety (Honeycrisp price up to 2x the price of older varieties)
- Organic apples command a significant price premium and represent ~7% of the domestic market
- Cold storage capacity reduces the impact of harvest timing, but pricing is still somewhat seasonal

Global Production

Apples are the 4th most popular fruit globally, with over 200 billion pounds produced per year. Over 7,000 edible varieties ensure apples are suited to a range of climates and consumer preferences, supporting their widespread cultivation. China is by far the largest producer, with 100 billion pounds produced per year accounting for ~50% of total global production. North America is the second largest producer behind China, with apples being the most consumed fruit in both the US and Canada. The North American market is largely unaffected by Chinese supply, other than large imports of processed product including juice and concentrate.

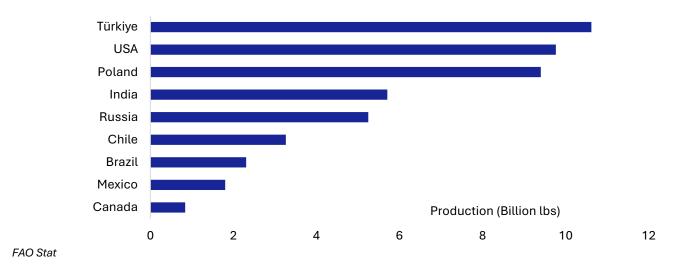
FIGURE 1. 200 BILLION POUNDS PRODUCED GLOBALLY, OVER HALF FROM CHINA 2022



FAO Stat



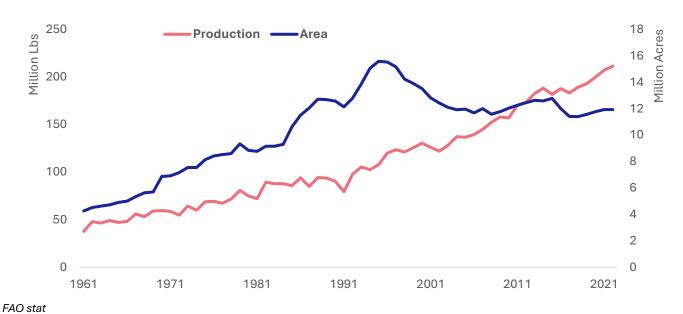
FIGURE 2. LARGEST PRODUCERS EX-CHINA 2022



Despite steadily increasing global demand, total acreage has fallen as innovations, particularly high-density tree planting, have improved yields.

FIGURE 3. GLOBAL PRODUCTION AND PLANTED ACREAGE







North American Production

North America is a net exporter of fresh apples, with over half of the 1.1B lbs exported in 2022 going to Mexico. The American and Canadian industries are very interconnected, with 80% of Canadian imports coming from the US, and 15% of America's from Canada.

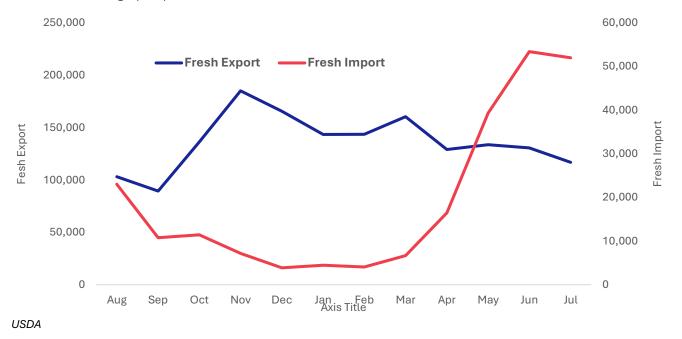
Despite the capacity for cold-storage, pricing and trade volumes remain seasonal. "Import season starts generally April-May, this year [2023] it's March to early April. Imports are largely coming from Chile while other countries such as New Zealand are not sending as much as they used to." (Don Roper, of Honeybear Brands, quoted in Fresh Plaza, 21st Feb 2023).

US Production 2022 ('000 lbs)		
Washington	6,500,000	
New York	1,450,000	
Michigan	1,100,000	
US States Other	598,266	
Pennsylvania	460,000	
California	240,000	
Virginia	185,000	
Oregon	175,000	
Total	10,708,266	

Canadian Production 2022 ('000 lbs)		
Ontario	318,150	
Quebec	231,504	
British Columbia	133,062	
Nova Scotia	87,615	
New Brunswick	8,698	
Total	779,030	

FIGURE 4. US FRESH TRADE

2019-2023 Average (LBS)





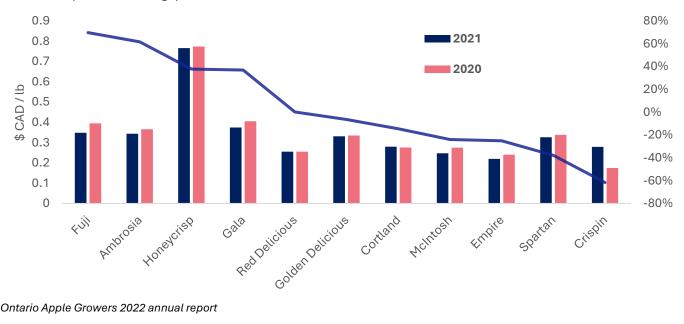
Pricing and Production

Varieties

The apple market is largely characterized by three factors: the capacity to cold-store fresh fruit for up-to a year (limiting seasonal pricing), the proliferation of value-added products, and the number of differentiated varieties. In-demand varieties (e.g. Honeycrisp) can command high price premiums as it takes up to 5 years for orchards to reach maturity, and supply to adjust to changing demand trends. This creates opportunities for large scale operations to experiment and anticipate these demand trends.

FIGURE 5. VARIETY PRICING

2020-2021 (Ontario Average)



Ontario Apple Growers 2022 annual report

FIGURE 6. VARIETY TRENDS

2017-2023 (US)



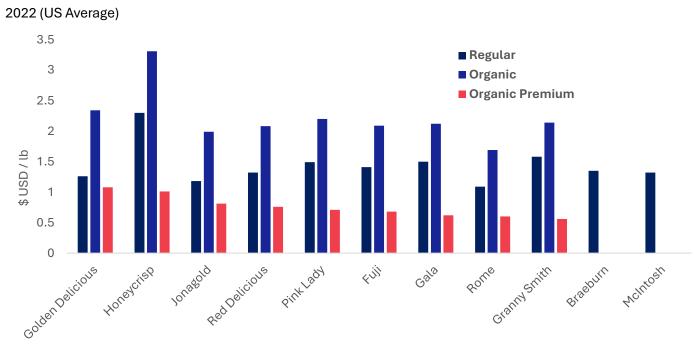
Chart from 'US Apple Industry Outlook 2022' US Apple Growers' Association



Organic

Organic apples are a relatively small but growing section of the North American market. Due to the highly differentiated nature of the fresh product, and attention to branding and labelling, organic apples have the potential to stand out to consumers. They already command a significant retail price premium (54%) and apples managed under certified organic farming systems account for ~7% of total U.S. apple acreage.

FIGURE 7. ORGANIC PRICE PREMIUM



US Apple Growers' Association 2022 annual report

Processing

Apples are very versatile and can be processed into numerous value-added products. The high fresh fruit price inflation of 2022/2023 may lead more consumers to substitute fresh apples for processed goods.

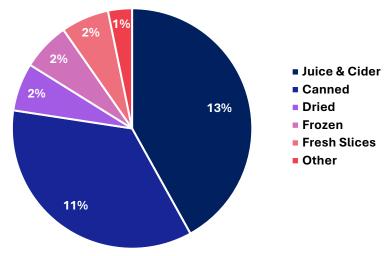
	% of US sales by volume	US Average Farmgate Price 2022 (USD/lb)
Fresh	70%	\$0.40
Processed	30%	\$0.14

USDA



FIGURE 8. PROCESSING MARKET

2021 (US Market Share by volume)



US Apple Growers' Association 2022 annual report

Canadian Apple Industry

Apples were first cultivated in Canada by early French settlers, with the first planted trees appearing in Nova Scotia's Annapolis Valley around 1633. The McIntosh variety was found in the wild in Ontario in 1811. Introduced to BC in 1910, it now accounts for ~25% of Canadian production. Ambrosia was found in Similkameen Valley, BC, in the 1990s.

Apples are Canada's most popular domestically grown fruit, with an average of 4.5 kg consumed per person each year. Total national consumption has remained stable over the past 20 years while prices for fresh fruit have risen faster than inflation.



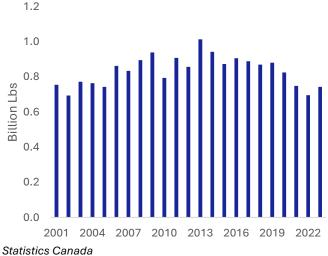
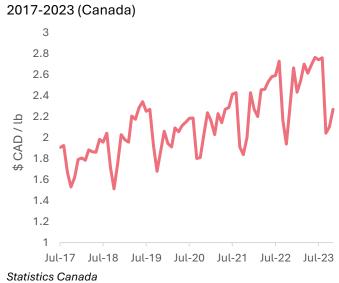


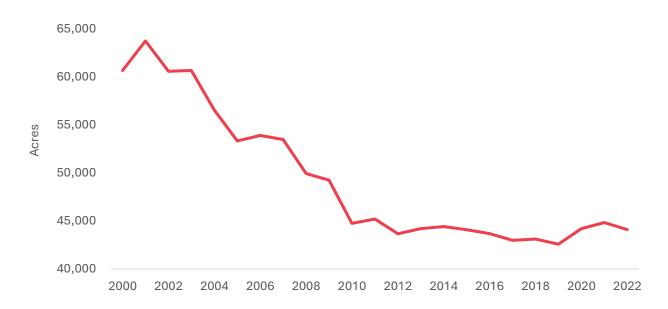
FIGURE 10. FRESH APPLE RETAIL PRICE





A number of challenges facing the domestic industry have contributed to falling cultivated acreage over the past five years. Increasing competition from American imports have put pressure on prices. BC has been particularly affected by this, with Washington state being the largest fresh apple producer and Washington growers receiving a \$0.07/lb subsidy during Covid. This led BC prices to fall as low as \$0.12/lb in 2021. BC has also been adversely affected by climate risks and labour supply issues. Labour can account for up to 70% of the variable costs for apple growers.

FIGURE 11. CANADIAN CULTIVATED APPLE ACREAGE 2000-2022



Statistics Canada

This presents an opportunity for large, vertically integrated growers to consolidate production and service the domestic market.

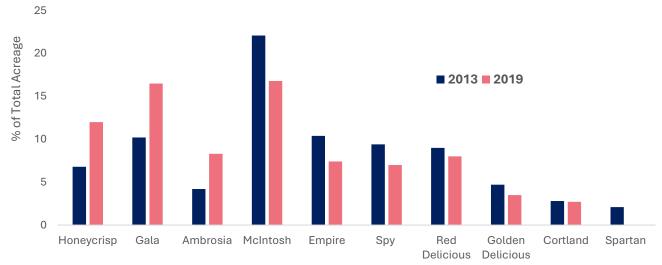


Ontario

There are approximately 700 apple growers in Ontario managing over 14,000 acres. While some growers manage orchards larger than 100 acres, the average size is approximately 20 acres. Over 400 growers farm less than 10 acres.

FIGURE 12. ONTARIO PLANTED APPLE VARIETIES

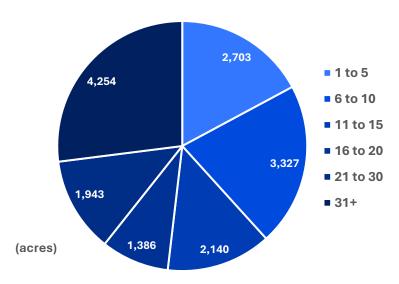




Ontario Apple Growers' Association

Higher input prices and more volatile yields have hampered the ability of smaller growers to replant their orchards. This creates opportunities for larger commercial growers to benefit from supply shortages in newer, higher-yielding varieties which consumers demand.

FIGURE 13. AGE OF ONTARIO APPLE PLANTINGS 2022



Ontario Apple Growers' Association Annual Report 2022



2023 Global Production Overview

- https://www.freshplaza.com/north-america/article/9504175/global-market-overview-apples/

US Apple Association

- https://usapple.org/industry-at-a-glance
- https://usapple.org/wp-content/uploads/2022/08/USAPPLE-INDUSTRYOUTLOOK-2022.pdf

USDA

- Trade: https://apps.fas.usda.gov/psdonline/circulars/fruit.pdf
- Trade stats:

https://data.ers.usda.gov/reports.aspx?programArea=fruit&top=5&HardCopy=True&RowsPerPage=25&groupName=Noncitrus&commodityName=Apples&ID=17851#P852fac1257c7471588e0cbf7127db0f2_3_292

Canadian Government Sources

- https://www.ontario.ca/page/what-you-should-know-about-fruit-production-ontario
- https://www.statcan.gc.ca/o1/en/plus/2127-peeling-back-numbers-canadas-apple-statistics

Ontario Apple Growers Association

- https://onapples.com/uploads/images/files/OAG%20Annual%20Report%202022%20FINAL%20w%20 cover%20-%20email%282%29.pdf
- https://onapples.com/uploads/images/files/Ontario%20Apple%20Growers%20Economic%20Impact% 20Study%20handout%20FINAL%20July%202020.pdf