

# **Soft Fruit Sector** Market Assessment Report

Prepared by: Synthesis February 2024

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## Introduction

In September of 2023, Synthesis was contracted by the BC Fruit Growers' Association to undertake a market assessment of the BC soft fruit sector. This market assessment is undertaken to identify market opportunities and develop recommendations for the long-term sustainability of BC soft fruit production. The report supports BC Fruit Growers' Association's need to understand the opportunities and challenges in growing this sector from both the demand side – market channels, market size, specific variety demands – and the supply side – current production and volume, rootstocks available, anticipated production challenges.

For this report, both qualitative and quantitative data were collected, analyzed and synthesized from September 2023 through January 2024. Quantitative data was gathered from the following sources:

- Statistics Canada
- Canadian International Merchandise Trade Database
- BC Ministry of Agriculture and Food
- BC Tree Fruit Production Guide

Qualitative data was gathered in two phases. The first phase included interviews with the following stakeholders:

- 1 grower
- 2 packers
- 1 marketer
- 1 BCMAF industry specialist
- 1 horticulturist
- 1 representative from Summerland Varieties Development Centre
- 1 representative from a nursery

These interviews were conducted via zoom or over the phone with Synthesis consultants.

Data was also collected through a Stakeholder Workshop conducted in Osoyoos on December 13, 2023. This workshop was facilitated by Synthesis consultants and saw attendance from 15 farmers and 15 industry stakeholders.

Qualitative and quantitative data has been combined, analyzed and summarized for this report. The recommendations included are based on the analysis outlined.

## **Executive Summary**

BC is an important soft fruit producing province and the growth opportunities for the sector are significant. The most immediate growth opportunity is to displace in-season imports with BC soft fruits. BC consumers still rely on imported soft fruits in-season to meet the demand. Growers could increase production from 28% for nectarines to 7% for peaches and still only just be meeting the current in-season demand of local consumers.

There is growth potential in the long-term as well. BC and Alberta are anticipating significant population growth in the next 2 decades. Meeting the fresh, local fruit demands of this growing population will require growth in soft fruit acreage.



## BC & AB Soft Fruit Market Growth Potential 2020-2041

*Calculation by Synthesis based on data from Statistics Canada – Tables 32-10-0054-01 Food available in Canada.* 

## **Stability for Growers**

The soft fruit sector has demonstrated an attractive option for growers in BC as the farm gate value has remained relatively stable. While grapes and apples lead in terms of farm gate value, they have seen a steady drop in value over the past five years. In comparison, the farm gate value of soft fruits has been more stable. After inflation adjustment, farm gate value of nectarines slightly increased, while plums and prune plums remained at approximately the same level. The inflation adjusted farm gate value of peaches and apricots slightly decreased over the last five years.

## **Understanding Re-Plant Timeline Realities**

and to ensure benefits are passed to the grower.

One of the biggest challenges with growing the soft fruit sector in BC is accessing trees for new and replanted acres. As most growers are buying from nurseries, it is helpful to understand the realistic timelines for nurseries to supply growers with trees. These timelines are outlined later in this report.

The unique realities and market opportunities of the soft fruit sector necessitate reimagining a re-plant program that is applicable and predictable for nurseries and growers. A reimagined re-plant program will enable BC fruit growers to capture the growing market opportunity in the sector.

Through consultations with growers and industry stakeholders, 2 potential solutions are available to overcome re-plant challenges.

Nursery Based Program	Timeline Aligned Program
A unique way to tackle the timeline challenges of the soft fruit sector is to tackle the challenge at the nursery level. Removing risk of the up-front investment of ordering rootstock, grafting varieties and growing trees for nurseries today would ensure growers have access to trees when they are ready to plant them. This type of program would influence future planting availability rather than funding planting for decisions that have been made many	Aligning a re-plant program with the true timeline of tree decision-making, ordering and planting is also a potential solution. This type of program would run very similar to past re-plant programs, but timelines would be shifted. Growers would receive program funding approval when they commit to their soft fruit tree order. Program payout would happen after final inspection of trees planted 2 to 3 years in the future.
years ago.	This type of program maintains grower control of the decision-making process for their farms and enables
There are recognized risks that would need to be mitigated including limited varietal flexibility for growers and potential price gouging from nurseries on already funded trees. There would need to be standards and requirements to mitigate these risks	nurseries to meet demands. There are recognized administrative challenges with guaranteeing program approval for a payout so far in the future.

## The Soft Fruit Sector in BC

The BC soft fruit sector is currently small but strong prices in recent years have been attractive to growers. However, the industry is faced with many challenges such as extreme weather events, tree availability, diseases, labour cost and availability, and high land values.

As an important soft fruit producing province, BC accounts for 23% of peach production, 14% of nectarine production, 78% of apricot production, and 32% of plum and prune production in Canada.



**BC's Share of Soft Fruit Production** 

Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits

## **Market Research**

## **Demand Side Analysis**

### Market Size & Growth Potential

The past five years have seen a decline of per capita consumption of all four fruits of interest. On average, a Canadian consume 0.96kg of fresh peaches, 0.49kg of canned peaches, 0.5kg of nectarines, 0.46kg of fresh plums, 0.07kg of fresh apricots, and 0.02kg of canned apricots in a year. The government of BC projects that the provincial population will increase from 5.1 million to 6.5 million between 2020 and 2041. Meanwhile, the population of Alberta is projected to grow from 4.4 million to 6.2 million in the same period. Since Alberta is an important market for BC soft fruits, this growth would support a baseline market expansion. By 2041, the BC and AB demand for fresh peaches is expected to grow by 3,063 tons, canned peaches by 1,563 tons, fresh nectarines by 1,595 tons, and fresh plums by 1,468 tons.

Commodity	Peaches fresh	Peaches canned	Nectarines fresh	Plums fresh	Apricots fresh	Apricots canned
2022 Per Capita Consumption (kg)	0.96	0.49	0.5	0.46	0.07	0.02
2041 BC & AB Growth Potential (tons)	3,063	1,563	1,595	1,468	223	64

#### Per Capita Consumption and Growth Potential

Source: Statistics Canada. Table 32-10-0054-01 Food available in Canada



### BC & AB Soft Fruit Market Growth Potential 2020-2041

Calculation by Synthesis based on data from Statistics Canada – Tables 32-10-0054-01 Food available in Canada.

#### **BC Peach Market Share**

The province of BC hasn't exported any peaches or nectarines in the past five years, indicating that all production was consumed by local consumers and neighboring provinces. Additionally, BC imported 1,654 tons of peaches on average in the past five seasons. We estimate the market size of BC peaches to be \$13.6M, which is the value of the five-year-average of BC production and import. In-season imports accounts for 7% of the market share for peaches, indicating an opportunity for import replacement from July to September. In 2018-2022, compared to total exports of \$0.4M processed peaches, the imports are much more substantial at \$5.3M a year on average, revealing a locally unmet demand for frozen, canned and preserved peaches.



Calculation by Synthesis from CIMT data Note: Some shipments may cross border multiple times

#### **BC Plum and Prune Market Share**

By estimation, the market size of BC plums and prune plums is \$4.2M. During the plum and prune plum season of August and September, imports account for 16% of the BC market, indicating an opportunity for import replacement.

Calculation by Synthesis from CIMT data Note: Some shipments may cross border multiple times



#### **BC Nectarine & Apricot Market Share**

The market size for nectarines is estimated at \$7.1M, and apricots at \$2.1M. With 28% and 22% market share in in-season imports, nectarine and apricot have significant growth potential in import replacement.



Calculation by Synthesis from CIMT data Note: Some shipments may cross border multiple times

## Market Location

Due to the perishable nature of soft fruits, the majority of the BC production is consumed within the province and adjacent Alberta and Saskatchewan, where there is virtually no soft fruit production. Although the province did not export any peaches or nectarines in recent years, the period from 2014 to 2017 saw some BC peach/nectarine exports to US, Singapore and Hong Kong. The shipments destined for Asian countries were in small quantities, but there is some market potential in bordering states to the south.

Year	Country	State	Value (\$)	Quantity (KG)
2014	United States	North Carolina	41,070	18,144
2014	United States	Washington	8,109	2,514
2015	Singapore	N/A	565	182
2016	Hong Kong	N/A	3,664	1,635
2016	Singapore	N/A	840	373
2017	Singapore	N/A	881	392

#### BC Exports of Peaches, including nectarines, fresh 2014-2023

Source: Statistics Canada. Canadian International Merchandise Trade Web Application

From 2017 to 2019 BC exported 2 to 4 tons of fresh plums and sloes each year to Washington state. However there has been no following shipments since then.

#### BC Exports of Plums and sloes, fresh 2014-2023

Year	Country	State	Value (\$)	Quantity (KG)
2017	United States	Washington	11,645	4,115
2018	United States	Washington	7,825	2,683
2019	United States	Washington	6,765	2,385

Although BC is the leading producer of apricots in Canada, no production was exported in the last decade. There were some dried apricot exports to Turkey and Hong Kong but these were sporadic. The past two years also saw some prepared/preserved apricot exported to the US, which may be worth exploring.

#### BC Exports of Apricots, dried 2019-2023

Year	Country	Value (\$)	Quantity (KG)
2019	Türkiye	60,015	27,739
2020	Hong Kong	3,551	1,652

Year	Country	State	Value (\$)	Quantity (KG)
2022	United States	Virginia	92,260	17,424
2022	United States	Ohio	99,002	17,469
2022	United States	Indiana	154,058	28,131
2022	United States	Colorado	4,713	813
2023	United States	Ohio	7,955	1,600
2023	United States	Oregon	18,711	3,794

BC Exports of Apricots not elsewhere specified otherwise prepared or preserved whether or not sugared, sweetened or spirited 2019-2023

## Market Barriers / Trade Limitations

The two biggest trade limitations are perishability and seasonality of the fruits. High perishability limits shelf life, and seasonality limits the time window that production is available to ship. In BC, peach harvest window starts in mid-July and lasts until late September, limiting the export window to summer months and early fall. Nectarine is harvested between early August and early September, making it more seasonal than peach. Apricot and plum have even shorter seasons. Apricot is harvested mid-July to early August, and plum/prune mid-August to September.

## **BC Soft Fruit Harvest Schedule**



Source: BC Tree Fruit Production Guide, Okanagan and Southern Interior Tree Fruit Blossom & Harvest Schedule

## Market Channels

The market channels for soft fruits include:

- Direct sales include farm and roadside sales to consumers.
- Peddlers that pick up from the farm and sell at roadside, parking lot markets and farmer's markets. They represent a significant portion of the market.
- Wholesale includes packing houses and sale agencies that market fruits to retailers.
- Single source wholesale where growers pack their own fruit and sell to supermarkets. There are very few grower packers that are big enough to deal directly with retail chains (estimated 10-15 in the valley).

For the four soft fruits of interest in this report, there is no apricot or nectarine volume moved through processing, and minimal processing for peach and plum. Data on how much product is moved through each market channel doesn't exist in official statistical sources. However, estimates were gathered through expert interviews and the stakeholder workshop. Those engaged estimate that approximately 20% of soft fruits go through wholesale, 30% go through single source whole, 30% go through peddlers, and 20% are direct sales.



#### BC Soft Fruit Market Channel

Source: Synthesis Interviews and Stakeholder Workshop

## Sales Volume and Pricing

For peaches, both sales volume and value experienced a gradual decline over the last decade. On average, only 3% of peaches went through processing. When adjusted for inflation, fresh and processing prices both remained relatively steady despite some fluctuations.



Peach Sales by Market Channel, Inflation Adjusted

*Source: BC Ministry of Agriculture and Food Notes: 2013 and 2020 volumes were not separated between fresh and processing* 



*Source: BC Ministry of Agriculture and Food Notes: Pricing data is fairly limited especially for processing* 

Since 2014 plum and prune sale volume and value have seen a downward trend, however 2022 brought a small rebound. On average, only 6% of plums and prunes are processed. After inflation adjustment, both fresh and processing prices show a strong increasing trend.



Plum & Prune Sales by Market Channel, Inflation Adjusted

*Source: BC Ministry of Agriculture and Food Notes: 2018 data were not available through our source* 



*Source: BC Ministry of Agriculture and Food Notes: Pricing data is fairly limited especially for processing*  When adjusted for inflation, prices of nectarine, plum and prune still show an upward trend. Deflated peach and apricot prices remain rather steady over the years. In comparison, prices of fresh and wine grapes show a lot more fluctuations. In general, soft fruits prices provide the stability that farmers seek for their operations. Industry stakeholders also noted that prices received vary greatly depending on the vertical integration of each operation. Farms with their own packing or marketing can net higher values than those without.



#### BC Fruit Price 2012-2022, Inflation Adjusted

*Source: BC Ministry of Agriculture and Food Notes: 2021 apricot price and 2018 plum and prune price are unavailable through our source* 

## **Supply Side Analysis**

## Current Acreage & Production

In Canada, peach acreage is led by Ontario (77%) and BC (22%). BC farms are smaller in size, accounting for 68% of Canadian peach farms. Within the province, most of the acreage is in Okanagan-Similkameen, representing 18% of the total Canadian acres. Peach production in Central Okanagan, Kootenay and the rest of BC are small-scale operations, where 31% of peach farms grow merely 4% of the national acreage.



Source: Statistics Canada. Table 32-10-0315-01 Fruits, Census of Agriculture, 2021

BC represents 55% of Canadian plum and prune farms, which grow 28% of the national acreage. Most of the plum and prune acres are in the Okanagan-Similkameen, where 14% of farms grow 17% of total acres. Again, scale of production is small in areas outside of Okanagan-Similkameen.



Source: Statistics Canada. Table 32-10-0315-01 Fruits, Census of Agriculture, 2021

BC is an important apricot producer, taking up 64% in acreage and 74% in farm count. As much as 43% of the acreage is planted in the Okanagan-Similkameen region, where 38% of apricot farms are located. Central Okanagan is also important for apricot production, representing 14% in acreage and 13% in farm count.



Source: Statistics Canada. Table 32-10-0315-01 Fruits, Census of Agriculture, 2021

In contrast to Ontario farms, BC peach farms are significantly smaller operations. Plum and apricot farms are also smaller in BC, although the size difference is not as significant. Within the province, Okanagan-Similkameen has the largest farm size, followed by Central Okanagan.



Source: Calculation from Statistics Canada

As an important origin of BC soft fruit imports, Washington State sits right across the border with a longer growing season. As land price has been identified as a major cost for BC soft fruit growers, we compare the farmland prices of BC, ON and Washington. The BC soft fruit growing regions of Okanagan-Similkameen and Kootenay face the highest farmland price in the range of \$22,400 to \$34,000. Southeast Ontario including the soft fruit growing Niagara region pays \$19,200 per acre. Comparatively, Washington State only pays \$4,200 per acre, a fraction of the BC land price. This extra cost BC farmers pay in land price limits the farm size we observe in the BC soft fruit sector.



#### Source: FCC, USDA

Note: Washington price was converted to CAD for comparison

Both total and marketed production of all four soft fruits have seen a downward trend over the last five years, except a small rebound in plums and prune plums in 2022.



Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits



When deducting marketing production from total production, peach is showing a decreasing trend for pack-out.

Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits

Although cultivated area for peaches was climbing from 2019 to 2021, bearing area remained stable, showing a future increase when new trees start bearing. The other fruits did not have significant change in either cultivated or bearing acreage.



Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits

In this report we used the difference between cultivated area and bearing area as an approximate for newly planted acreage. It is obvious that peach acres expanded aggressively from 2019 to 2021. Plums and prune plums also had a modest expansion in 2019. There were some new acreages for apricots and nectarines in 2021-2022, but these were very small scale.



Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits

#### **Data Limitations**

Establishing a robust pricing estimate of nursery plants for select cultivars and the minimum operations size by market channel is challenging with the data currently available and within the confines of this project.

Nursery plant and cultivar pricing are not fixed values and nurseries and growers are reluctant to share freely. This is especially hampered by the small size of this market. There are so few players that even the promise of anonymity is not compelling.

This data limitation extends to establishing a minimum operation size by market channel for profitability. Soft fruit farms are small in BC and the data available indicates they provide stable returns. Establishing a proper minimum size would require much more advanced work in developing a cost of production calculator for each fruit.

## Production Value

By far grapes and apples lead the farm gate value of BC tree fruits. The last five years have seen a steady drop in the farm gate value of grapes and apples. In comparison, the farm gate value of soft fruits has been more stable. After inflation adjustment, farm gate value of nectarines slightly increased, while plums and prune plums remained at approximately same levels. The inflation adjusted farm gate value of peaches and apricots slightly decreased over the last five years.



BC Soft Fruits Farm Gate Value, Inflation Adjusted



BC Apple and Grape Farm Gate Value, Inflation Adjusted

Source: Statistics Canada. Table 32-10-0364-01 Area, production and farm gate value of marketed fruits

At the stakeholder workshop, there was consensus that soft fruit yields are much higher than what Statistics Canada data suggests. The significant difference between industry estimates and data available through Statistics Canada and BCMAF is an important knowledge gap identified for soft fruit production.



**Yields Comparison** 

Source: Calculation from Statistics Canada, BCMAF BRMB data, and Stakeholder Workshop Input

It is worth noting that, as in yield comparison, industry stakeholders pointed out that value per acre data from Statistics Canada and BCMAF are also significantly lower than industry norms. It is agreed that value per acre fluctuates greatly year to year, acre to acre, and area to area.



Source: Calculation from Statistics Canada and BCMAF BRMB data

## **SWOT Analysis**

A Strengths-Weaknesses-Opportunities-Threats (SWOT) exercise was facilitated at the industry stakeholder workshop. Below is the summary of the SWOT analysis and discussion captured. These findings have been integrated throughout the recommendations.

#### Helpful

#### **Strengths**

- Consistent returns
- Nimble, small production = high quality
- Able to meet later markets because of later production
- Four strong, equal market channels well diversified
- Existing local research community
- Summerland Varieties Corp.

#### **Opportunities**

- Growing population
- Producer Value-Added Processing (small scale)
- Technology: Frost machines, wind machines, misters, retractable roof systems, weather apps, etc.
- Ministry Programs to encourage technology adoption
- New cultivars and rootstocks trials
- Market confidence: stability of soft fruit as a commodity
- Innovative canopy training systems
- Fixed pricing system / increased control system for a specific cultivar
- Work with retailers to extend peach window later, extend nectarine market earlier
- Foreign skilled labour skill carryover records
- Extension services, horticultural training (e.g. pruning)
- Grower controlled variety development

#### Harmful

#### Weaknesses

- Tree availability
- Tight margins discourage experimentation
- High average age of farmers
- Labour high cost; skilled labour; high turnover
- Few government incentive programs for soft fruit
- Phytosanitary restrictions
- Difficult cultivar differentiation
- Risks of new rootstocks and cultivars
- Washington production costs are lower
- Little oversight of US grown fruit marketed as BC
- No pan-BC marketing

#### **Threats**

- Volatile weather events
- External Processing
- Lack of funding for new technologies
- Washington imports
- CUSMA enforcement for product sold below production cost
- Government laws impacting succession planning
- Invasive pests and prevalent diseases (cytospora and bacterial canker)

Internal Within the Sector

External Outside Forces

## Varieties Recommendation

Attendees of the Stakeholder Workshop were led through an exercise to identify which varieties are good options for BC soft fruit growers looking to expand acreage. The discussion was active and many in the group had their own favourite varieties and their own negative experiences with some varieties. The recommendations below should be taken as a snapshot in time of a small sample size of growers and industry stakeholders.



As there are many peach varieties, workshop participants were challenged to rank each variety in a matrix with two axes: Ease of Production and Consumer Demand.

Below is the matrix that the group ultimately agreed on. However, it is important to note that there was not consensus achieved for each variety.



The group did identify the following varieties with relative consensus:

- Glohaven is a winner. They are harvested at the peak of peach season and are a free stone which consumers value.
- Redhaven and Early Redhaven are good varieties. Both have excellent colour and flavour for consumer demands, and they are relatively easy to produce.

**Glowing Star** 

- Cresthaven is also a popular choice, but it doesn't store as long and dries out quickly.
- Seasonality is a big driver for peach variety selection. The prime season is late July through end of August. The earlier peaches aren't as high of quality; they lack the size and storability. After Aug 20, wholesalers are gearing up for apple season and are less keen to take peaches. For those selling direct, the market shrinks significantly after Labour Day as people tend to be returning to work and school.



Workshop participants identified the following nectarine varieties:

- Redgold is easy to produce and demand is strong. But, it does come later in the season and prices can soften at this time.
- Independence has high consumer demand but can be more challenging to produce.
- Sweet Scarlet is early in the season which gets stronger prices but its medium size limits its potential.
- Consumers want more early nectarines with good size and colour.

## **Apricot Varieties**

Workshop participants identified the following about apricot varieties:

- All apricot varieties are very weather and location dependent. Even small differences within a region altitude, proximity to the lake can dictate variety choice. They are very sensitive to frost timing.
- Goldbar, Tomcot, Gold Strike, Perfection are all good varieties with regards to ease of production and consumer demand.
- Gold Rich and Telton are reliable choices as well.

## **Prune Varieties**

Very little was discussed about prune varieties at the workshop as there are only two varieties – early Italian and late Italian. These varieties are consistent, and the market holds throughout the season. They are relatively easy to produce, easy to pick and there is always a market for them.

## **Recommendations for Growth**

## **Replant Timeline Alignment**

## Current Challenges

One of the biggest challenges with growing the soft fruit sector in BC is accessing trees for new and replanted acres. Most growers in BC purchase finished trees from nurseries. Some growers may source their own rootstock and do grafting themselves, but this is increasingly less common as it's more viable to transplant a finished tree. Many growers do not have capacity to dedicate the land and labour required to do their own grafting and grow outs.

As most growers are buying from nurseries, it is helpful to understand the realistic timelines for nurseries to supply growers with trees.



This timeline reflects the current reality of the nursery ordering process. In the past, nurseries would grow out soft fruit trees on speculation of sales. Today, that is not a viable business plan, and they need to secure orders from growers before ordering rootstocks and grafting.

Understanding this timeline is key to developing an effective replant program. Past programs did not account for the multi-year decision-making and advance ordering process. These programs only benefited growers who had committed to new trees from nurseries before the program was announced. Growers who learned of the program and then ordered trees would not be invoiced within the program requirements to participate. Even if accepted invoice dates were adjusted, there is a significant risk that program funding would run out before the trees are arriving on the farm.

## Potential Solutions

The unique realities and market opportunities of the soft fruit sector necissitate reimagining a re-plant program that is applicable and predictable for nurseries and growers. While it may be administratively beneficial for cross-commodity programs to have commesurate requirements, the reality of the soft fruit sector is very different from other orchard commodities. The soft fruit sector's comparably small acreage compounds the risks for nurseries to grow trees on speculation. A program that fails to account for tree ordering timeline realities will drive two outcomes:

- Growers will re-plant their available acres into cherries or apples which have tree availability on shorter timelines
- The program will only benefit growers who have made their soft fruit orders in previous years. While this outcome does benefit soft fruit growers, it does not influence sector growth and it does not provide predictability for the sector.

By contrast, a reimagined re-plant program will enable BC fruit growers to capture the growing market opportunity in the sector.

Through the analysis of this report, there are two potential solutions:

### **Nursery Based Program**

A unique way to tackle the timeline challenges of the soft fruit sector is at the nursery level. Removing risk of the up-front investment of ordering rootstock, grafting varieties and growing trees for nurseries today would ensure growers have access to trees when they are ready to plant them. This type of program would influence future planting availability rather than funding planting for decisions that have been made many years ago.

There are recognized risks that would need to be mitigated including limited varietal flexibility for growers and potential price gouging from nurseries on already funded trees. There would need to be standards and requirements to mitigate these risks and to ensure benefits are passed to the grower. Such requirements should cover:

- Tree caliper
- Survivability rate
- Established pricing
- First come, first served grower availability for funded trees

Program success would also depend on growers committing to certain requirements:

- Marketing plan with appropriate varieties chosen
- Appropriate planting location

This type of program would meet the unique needs of the entire soft fruit sector, would influence growth and would benefit growers.

## **Timeline Aligned Program**

A second option for an effective re-plant program is to better align the program with the true timeline of tree decision-making, ordering and planting. This type of program would run very similar to past re-plant programs, but timelines would be shifted. Growers would receive program funding approval when they commit to their soft fruit tree order. Program payout would happen after final inspection of trees planted 2 to 3 years in the future.

This type of program maintains grower control of the decision-making process for their farms and enables nurseries to meet demands. There are recognized administrative challenges with guaranteeing program approval for a payout so far in the future.

## **Tree Supply**

In addition to re-plant alignment, there are also opportunities to improve tree supply overall. While the main mechanics driving the years-in-advance ordering systems are unlikely to change – small market making it inaccessible for nurseries to grow on speculation of sales – it may be possible to shorten the process. One of the big limitations for nurseries is the limited supplier options for rootstock. Nurseries rely on only a handful of rootstock suppliers in Washington state to supply the needs for the industry. There are more rootstock suppliers in Washington, other states and in Ontario but most are unwilling to meet the fumigation needs required to import into BC. As BC is an Oriental fruit moth quarantine region, any rootstock coming in must be fumigated. This is a significant barrier for rootstock suppliers and as the market in BC is quite small, most are unwilling to make the investment.

A systems approach to managing Oriental fruit moth may provide a more accessible solution for rootstock suppliers. This would in turn provide more options for BC nurseries and reduce the advanced ordering timeline.

An alternative approach to improving the tree supply challenge is to examine effective ways to increase Canadian production of rootstock through innovation.

### **Growth Focused Research & Extension**

Several gaps in the current research were identified through the information gathering of this report.

**Volatile Weather** is a significant barrier to growth for soft fruit in BC. Research focused on mitigation technology and production practices could lead to improved stability for growers as they manage through increasingly common weather events.

**Innovative Production Systems** such as high-density trellis systems are used commonly in other soft fruit growing regions – such as Pennsylvania. More research on the suitability of these systems in BC would benefit growers.

#### **Trellis System Costs & Opportunities**

Trellis systems are not commonly used for soft fruit production in BC. A few stakeholders indicated there may be one or two growers using or experimenting with them, but there is no wide-spread use.

The qualitative data collected indicated growers found trellis systems unnecessary to achieve the yield needed to be profitable.

There is some interest in research into the capability of trellis systems to improve quality and reduce labour needs but the consensus seems to be that the few growers in BC who tried trellis ended up abandoning them. **Variety evaluation trials** are always of keen interest to growers. The right variety choice is a decision with multidecade implications for a grower. More access to variety evaluation trials that account for environmental suitability and consumer demands would support growers' interest in growing the soft fruit market in BC.

**Diseases** are a common limiting factor in any agriculture production system. In soft fruit production, cyctspora canker is a challenge for growers along with nematodes. Finding solutions to these diseases would benefit the sector.

**Pruning** is a critical and complex part of soft fruit production. There is significant appetite for more access to pruning best management practices and training for labour.

## **Marketing and Market Development**

There is opportunity to support the growth of the soft fruit sector in the realm of marketing and market development.

**Market Research & Data** is lacking for this sector. Consumer needs and demands are typically based in historic experience rather than reliable market research. There are also significant gaps in pricing and market channel data that require the sector to rely on anecdotal data.

#### **Processing Market**

Stakeholders consulted in this process made it clear that the processing market is not an attractive avenue for market growth. There is some soft fruit processing done as there is evidence in export data but it's unclear if this is reliable reporting or perhaps soft fruits processed elsewhere exported through BC ports. There is some understanding among stakeholders that there are a few very small, niche processors but the size of this market is undetermined.

While processing may not be as attractive as the fresh market, there is benefit to having a market for culled fruit. There is also risk in the expansion of processing for soft fruit. Growers identified that there are costs associated with delivering culls and that the existence of a processing sector can result in downgrades to fruit that is marketable as fresh. More exploration into the processing market would be needed to understand whether it's an opportunity or a threat.

#### In-Season Marketing Support

Stakeholders keenly identified the opportunity for more in-season promotion support from channel partners and BC Fruit at the retail level. Soft fruits have a short shelf life and promoting them to consumers in-season is key to any growth opportunity. It is also important to remember that consumption of soft fruits has been declining over the years. In-season marketing support could help stem that decline and reverse consumption trends.

## **Appendix A: Interview Summary**

Interviews were conducted with 8 people from the soft fruit sector in November and December 2023. The interviews were conducted by Claire Cowan and Rachel Luo via phone or Zoom. The following industry representatives were interviewed:

- 1 grower
- 2 packers
- 1 marketer
- 1 BCMAF industry specialist
- 1 horticulturist
- 1 representative from Summerland Varieties Development Centre
- 1 representative from a nursery

## **Market Supply**

#### The Soft Fruit Opportunity

All interviewees identified that there is excellent market opportunity for the soft fruit sector. Volatility and softening of other tree fruits is driving more growers into stone fruit. Cherries have seen significant growth in the last decade but with the cherry glut in the US and volatility more people are turning to stone fruit. Growers need crops that will reliably deliver returns and be confident in their long-term decisions.

Right now at the nursery level it's cherries or peaches. Nectarine trees and apricot trees are also filling in. More and more plum trees are wanted in the Fraser valley. Last year 20-30% of trees were stone fruit. This year 50% of trees are stone fruit.

Many interviewees identified that high soft fruit prices were a significant driver for growers' interest in expanding the market:

- Peaches and apricot prices have increased significantly compared to 5 years ago. They are now among the most profitable and reliable commodities.
- Prunes are less attractive as the market shrinks; younger people don't have a liking in prunes, no big opportunities. Interviewees identified that they can sell what we have but end use market is shrinking and not likely to expand.
- Nectarines have strong prices and demand is high.

## Growing acreage

#### If soft fruit market acreage was to expand, what regions could support that growth?

There was no clear consensus from interviewees on what regions could support soft fruit production expansion. Areas all along the Okanagan and Similkameen valleys were identified as potential growth areas. Some general feedback that indicates the following:

**More expansion expected in the south** – Interviewees reported that growers have pushed the northern limits for soft fruit and been punished. Growers are wary of expansion past Summerland without new cultivars and

rootstock adapted better to the environment. Apricots are especially vulnerable to more northern regions as bloom timing is more susceptible to frost.

The south also has an economic benefit with an earlier growing season that can capture the higher returns earlier in the season.

**North can grow new acres and different varieties** – Stakeholder workshop identified that majority of new acres will be planted in the north as south is planted out. Growers need to choose varieties appropriately if they are expanding in the north to ensure they are not too late for the season.

**Proximity to the lake** – Interviewees also identified that beyond the north-south geographic designation, there can be significant differences in opportunity based on proximity to lakes and elevation of orchards. Some regions that are otherwise inappropriate for soft fruit production have pockets of excellent production very close to lakes. Unfortunately, this also correlates with premium land prices.

#### What crops would be replaced?

**Soft fruit renewal** – Interviewees identified that the biggest and most likely target for new soft fruit acres is renewing older, less productive soft fruit acres.

**Apples** – Interviewees identified apples as the crop likely to be displacement with new soft fruit acres. There is a large footprint of McIntosh and Spartans that could be replaced with tender fruit to provide growers a higher return on investment.

**Grapes in the north** – Interviewees mentioned that many vineyards in the north were damaged last winter and there may be an opportunity to shift those acres to peaches. Peach trees can withstand a little colder than grapes, but not a lot. Peaches are also more competitive with grapes than in the past as the peach price is up and demand is there. The challenge with displacing grapes with soft fruit is the infrastructure and production differences. But some interviewees identified that many grape growers grew soft fruit in the past and they could be enticed back if it makes sense economically.

In the south, interviewees identified that grapes are still very attractive – it's easy to get plant material quickly in the right variety. Market assessment for grape industry shows the industry can absorb more.

## Who would be capable of expanding soft fruit production? Are there avenues for new entrants? Would current soft fruit growers expand and grow their operation?

Most interviewees were clear that expansion would come from renewal of current soft fruit acres and current soft fruit growers replacing other crops to expand their soft fruit acres.

There is some capacity for new entrants, but they will likely be the younger generation expanding their family operations as opposed to entirely new entrants into the sector.

Interviewees did think there may be some opportunity to attract current growers who do not have any soft fruit acres – apple and wine grape growers – to putting in some soft fruit acres. It does take a different skillset but if the returns are attractive enough, some growers will make the investment in learning.

## What's the biggest limiting factor for growers wanting to get into/expand their soft fruit production?

**Biggest issue is tree availability** – There was consensus on this from interviewees. If more trees were available, the sector will expand. Unlike apples and cherries, nurseries cannot order trees on speculation for the market. Trees are ordered based on grower orders which means expansion decisions need to be made years in advance. Interviewees identified that some growers are keeping old blocks because there is nothing available to replant them with. If they must pull out blocks, they will be replanted with cherries, apples or grapes because of availability. With high interest rates growers cannot afford to wait for soft fruit trees.

**Labour** – Many interviewees identified labour and managing the timing of harvest as a potential limiting factor. Peaches and apples can be complimentary with shifted harvest timings. As can grapes and soft fruits. Cherries and peaches can be a challenge if cultivars are not chosen carefully for the region.

Interviewees also identified that soft fruits require more skilled labour compared to other crops likes grapes. Growers need to invest in training labour, and it can take some time before labour is effectively skilled.

**Management** – Some interviewees identified that the increased management required for soft fruit can be a barrier for those looking to expand from grapes. This can be overcome by limiting the transition – start with small acres.

Interviewees also identified land prices and lack of information on return-on-investment as a limiting factor in the expansion of the soft fruit sector.

#### Thinking of the current replant program, what is working well? How should it be improved?

Interviewees identified that the last program was well administered with timely approval but didn't cover as much as this one. It covered trees only and the price per tree hadn't change for 25 years. The new program covers a lot more – trellis systems and removal – and coverage increased from 70 to 100 percent. There is a concern among some interviewees that as the new replant program covers all perennial crops and more expenses, there will be fewer acres covered before the funding runs out.

The biggest challenge with the current re-plant program identified by interviewees is lack of **transparency and involvement with the nurseries.** As nurseries cannot maintain a large supply of soft fruit trees without confirmed grower orders, there is significant lead time needed to scale up production. Launching a replant program without aligning the timing of the order and tree delivery based on nursery timelines would be unsuccessful and would result in many frustrated growers.

Interviewees had differing opinions on the role of **horticulturists in the re-plant decisions**. Some interviewees wanted horticulturalists involved in ensuring appropriate geographies and appropriate fallow time between removal and replant to avoid re-plant disease. Other interviewees identified that 1 year fallow is not feasible for growers and there are other ways to manage re-plant disease.

## Production needs

#### In those expanded acres, are there any unique or new production challenges growers would be faced with (e.g. disease vectors from previous crops, soil type, urban access, etc)?

**Nematodes** –Interviewees identified that there are fumigation limitations, and the expense is inaccessible. Some interviewees identified that good tillage management and old root removal is effective. This is only a problem if you are renewing peaches into peaches.

**Canker** – Interviewees identified canker as a challenge, especially if nursery trees were grown in a humid environment. It's more of a challenge in plums as some peach and nectarine varieties are more canker resistant.

Urban encroachment is a challenge but is not unique to soft fruit.

**Replant disease** is an issue identified by several interviewees. Replanting is complex and there is a complex risk of disease that cannot be isolated. When you take out a large tree and put in a baby tree, you're putting it into all those pathogens. 30 years ago, growers would have just fumigated but that is no longer economical and is harder with the urban buffering required. Apples have certain rootstocks resistant to replant complex but that's less available in soft fruit.

A few interviewees identified an opportunity to **match rootstock to the soil type**. This is not a common consideration for growers.

Interviewees also emphasized the need for clean nursery material which can be a significant challenge.

Interviewees don't recommend a full fruit basket on the farm as its too much to manage. When renewing farmers should only add 0.5-1 acre a time so it's manageable and the trees aren't all coming into production at the same time.

## Tell me about the latest production trends for top-of-the-line soft fruit production (e.g. high density, special equipment needed, etc)

**High density is not a trend, but still worth investigating** – No interviewees recommended growers to move into high density production systems for soft fruit. There are significant challenges with high density systems for soft fruit and it hasn't paid off for BC growers. However, a few interviewees identified that there is value in continuing to explore and understand high density production systems. It's common for peaches in Pennsylvania and there is potential it could be adapted to BC conditions with more research.

#### Who are the plant material providers accessible to BC farmers?

Most interviewees identified that growers are most likely to purchase finished trees from nurseries. Some growers may source their own rootstock and do grafting themselves, but this is increasingly less common as it's more viable to transplant a finished tree and many growers do not have capacity to dedicate the land and labour required to do their own grafting and grow outs.

The two main nurseries that supply the soft fruit market are Byland Nurseries and Similkameen Nurseries. These nurseries source their rootstock and grafting materials from a variety of places and grow some from seed in BC. Interviewees did identify that there are significant challenges in rootstock supply due to the fumigation requirements for rootstock coming in from the US. Only a few Washington rootstock suppliers are willing to meet the fumigation requirements.

Nurseries can also source rootstock from Ontario but that also has the same fumigation challenges as BC is a quarantine zone for Oriental fruit moth.

Many interviewees are keenly interested in efforts underway to find a systems approach to pest management rather than the current fumigation requirement.

Interviewees identified that some growers source trees direct from US nurseries, but they are also significantly limited due to the fumigation requirement. It's challenging for BC growers to represent a big enough order to justify Washington nurseries to meet the fumigation requirements.

#### What rootstock varieties are accessible to BC farmers?

- Baileys main rootstock
- St. Julien US import is limited, potential supplier in Ontario, also grown from seed
- K86 has more supply but also more expensive. It's new and people don't know about it.

## What are the biggest production risks and challenges (weather, investment, etc) for new soft fruit production?

For peaches and nectarines, big issue is disease. Cytospora canker shortens life span of the tree.

Apricots are challenging to grow due to pest pressure. New blocks have been planted and then pulled out 3-4 years later because of pest issue. Apricots are very sensitive to Peach Tree Borer and there is also risk with early frost. Apricots are very attractive due to the demand and price, but they are challenging to grow.

The big challenge with plums is biannual traits – one year of high production, one year of low production. Growers need to choose variety carefully as there have been more frequent frost events impacting production. Production location is key with plums.

## What do you see as the most important knowledge gaps in soft fruit production for future research?

Disease issue needs research. Interviewees identified that growers are seeing more and more peach tree borer issues. The extreme weather events weaken the trees and make them more prone to disease and insects.

Split stone was also identified as a knowledge gap. The cause is known but existing research needs to be accessible for new entrants all in one spot.

Interviewees also expressed the need for ROI models to help potential and current growers justify investment decisions.

## **Market Demand**

## Market channels

What are the current market channels (e.g. fresh via wholesalers, fresh farm gate, on-farm processing, etc)?

Interviewees identified that all soft fruits go to the fresh market. There is no processing left after Jimmy Pattison's canning business shut down.

There are more packers in Similkameen, who decided to add a packing line to their orchards. These new packers are not as experienced with marketing and sometimes struggle to compete with the more established. The packers sell to Loblaws, Sobeys, Associated Grocers. The wholesalers have consolidated, and the packers did the opposite. This puts downward pressure on price. Packers have become price takers and that's a challenge for growers.

#### Main players:

Peddlers – They come to the farm to pick up and sell at roadside and parking lots. There are lots of them and they represent a significant portion of the market.

Packing houses – most of them collect from hundreds of farms

BC Tree Fruits – our largest player, they have 300 growers.

Sanders – vertically integrated

Wholesalers – have a lot of power with soft fruit because of perishability - can't store peaches beyond 2 weeks.

#### What % of current soft fruit production goes through each market channel?



## **BC Soft Fruit Market Channel**

30% minimum peddlers – cash business hard to pin down
30% single source wholesale - Growers pack their own fruit and sell to supermarkets. There are very few grower packers that are big enough to deal directly with retail chains (10-15 in the valley).
20% wholesale
20% direct to retail

#### Which channel has the greatest potential for absorbing increased supply?

Biggest growth comes from co-op and independent packers that have contracts with the bigger retailers.

Second biggest growth is peddlers. They move a lot of products. Consumers really like them. They are able to take it fairly fresh to consumers. Big percentage of the soft fruit. Open mid-June to end of September.

#### Are there infrastructure limitations for these market channels?

No limitations. Just need a cooler/cold storage and a small facility for packing. The infrastructure is there, the packing lines are there.

## Product demand

#### What variety characteristics are most important for each market channel?

Favoured characteristics are the same across the board - size, color, aroma, and flavor

Peach - Everyone wants freestone, once freestone is out semi-stone demand drops. Early reds start in the south and when they are finished, red havens then you get into red star. It would be great to get a freestone variety that come out at same time as red havens.

Sizing comes down to where farmer/wholesaler is selling to – retailers want different sizes. Some prefer soft ball size because it's hard to sell small size peaches.

#### Is the current production delivering on these variety characteristics?

Higher colour – some new varieties have better colour, but they risk getting picked on the immature side. If you pick peaches too early, they don't ripen properly. If you're going to plant a high colour variety, you need to be careful at harvest.

Plums – over the years, locally grown plums are becoming less and less popular. Wholesalers are importing different varieties from California that taste phenomenal. It would be great if BC could get some of those new varieties.

#### What varieties meet these market characteristics?

Peaches:

Glow haven (early August, free stone) is a winner. They are the peak of peach season. Early red havens Redhaven is best for colour and flavour and it's a cling stone. Cresthaven is also popular but goes dry quicker.

Prime season is late July – end of august. The earlier peaches aren't as high of quality – don't have the size or storability. After Aug 20, wholesalers are gearing up for apple season.

Nectarines – people want more early nectarines with good size and colour Sweet Scarlet is early but size is medium. Redgold (main, later varieties) - that's when the prices soften.

Prunes only have two varieties – early Italian and late Italian. Nothing else on the horizon.

## **Other Comments**

- Packaging hasn't changed for decades, needs to be consumer friendly and environment friendly. Leaders for packaging are Japan, Korea and China, superior to North America.
- Need more promotions to consumers in tandem with growth in supply. Costco does small farm packs of produce leader for moving volume in North America.
- Need better extension efforts. Could learn from Chili biggest stone fruit producers in the world. Chile exports everything they have incredible shelf life.
- BCFGA is investigating an orderly market solution for apples. But it's the same in soft fruit.
- Older generations don't embrace new technology, need to adapt as climate changes, consumers change, and technology changes.
- Need better grading- a ridge on the side means the stone inside is split and earwigs can get in.
- Buyers needs better cold chain –shouldn't pick above 28 Celsius, fruits release field heat and it kills shelf life. Need to cool immediately. Hydro cooling and wind tunneling are production practices that can improve shelf life. It's inexpensive to follow cold chain procedures. Job is not finished until food is in hands of consumers.
- Tree fruits or Sanders run on a packing line, and they get beat up so they have to pick early the fruits are green and have no flavour. Solution pack in trays in the orchard "tree ripened"