BRITISH COLUMBIA

Ministry of Agriculture,
Food and Fisheries

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# *An Overview of* ***British Columbia's Peach, Nectarine, Apricot, Plum and Prune Industries***

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## Industry Description

The majority of BC soft fruit is produced in the Okanagan Valley, from Salmon Arm south to Osoyoos and from the Similkameen Valley east to Creston.[13] Within this area the greatest concentration of soft fruit farms is in the Southern Okanagan Valley.[18] The South Okanagan has an ideal climate for soft fruits. Peaches, nectarines, apricots, plums and prunes need lots of sunshine and grow well on the sandy soils prevalent in the region.

Currently there are approximately 1,300 acres of peaches, 200 acres of nectarines, 400 acres of apricots in BC and 360 acres of plums and prunes.[34] There are approximately 1,800 commercial farms in BC that produce tree fruit.[6] The main varieties of peaches grown in BC are: ‘Red Haven’, ‘Glohaven’ and ‘Cresthaven’. For nectarines the majority of blocks are planted to ‘Redgold’ or ‘Firebrite’. The majority of apricots planted in BC are either ‘Goldbar’ or ‘Goldstrike’. Most of the plum/prunes that are grown are Italian types or Japanese types such as ‘Black Amber’.

The focus of tree fruit production has shifted to new varieties at higher planting densities in order to allow for easier picking and to capture the premium market prices paid for newer varieties. For comparison, in 1990, only 5% of marketed fruit were considered new varieties while now more than 40% are considered new varieties.[6] The soft fruit industry has many sellers rather than central sales agencies and sometimes competition from the different sellers may lead to lower prices for producers.

Soft fruits are all harvested by hand and experienced pickers are required. Fruit is harvested at a firm ripe stage to allow handling during packing and marketing. The vast majority of fruit is sold fresh and a very small portion is processed. Much (70%) of the fruit is sold through independent packers, fruit truckers, direct sales, and fruit stands. A smaller portion (30%) is sold through industry packinghouses and sold to wholesalers via BC Tree Fruits Ltd.

Most of the soft fruit produced in BC is sold in Western Canada, with a small portion either exported or sold to eastern Canada.

## Significance

### BC Production and Market

- Table 1 looks at the production of the various soft fruits over the past eleven years.
  - Peaches are the main soft fruit grown in BC, primarily due to demand and to the ease of growing, harvesting, and marketing peaches. In 2003 it’s estimated that over 11 million pounds were produced.
  - Most of the crops production volume has varied over the period. Plums are showing the strongest downward trend.

**Table 1: Total Production by Commodity, 1993-2003 (‘000 lbs)**

| Commodity | Peaches | Nectarines | Apricots | Prunes | Plums |
|---|---|---|---|---|---|
| **1993** | 10,517 | 280 | 1,567 | 1,512 | 187 |
| **1994** | 13,219 | 592 | 2,849 | 2,522 | 189 |
| **1995** | 12,633 | 1,000 | 3,003 | 1,897 | 234 |
| **1996** | 10,934 | 1,370 | 1,875 | 1,530 | 221 |
| **1997** | 9,782 | 1,605 | 1,567 | 1,619 | 84 |
| **1998** | 12,244 | 1,531 | 1,482 | 850 | 378 |
| **1999** | 9,942 | 1,054 | 1,250 | 215 | 215 |
| **2000** | 6,386 | 536 | 1,376 | 1,743 | 72 |
| **2001** | 11,020 | 1,051 | 1,296 | 1,837 | 38 |
| **2002** | 9,184 | 748 | 1,257 | 1,683 | 65 |
| **2003** | 11,058 | 1,194 | 2,124 | 2,176 | 94 |
| **2004 estimated** | 10,766 | 1,213 | 2,187 | 2,173 | 184 |

Source: BC Ministry of Agriculture, Food and Fisheries. Agriculture Statistics

## Production Volume/Gross Revenue

**PEACHES:**

- Peaches are grown in the southern areas of the Okanagan, Similkameen, and Creston valleys. Peach trees are susceptible to winter damage
- BC produces about 20% of the Canadian production
- In 2002, there were over 9 million pounds of peaches grown with a farm gate value of over $4 million. (Table 2)
- The main market is for the fresh wholesale market. It absorbs 71% of the production.
- Growers that shipped to the processing market lost money as shown by the negative value of $10,000.
- Peaches are harvested in multiple picks at a firm ripe stage.
- Fruit is packed into 20 pound boxes or 400 pound bins.
- Fruit picked into bins is sorted on the grading line and packed into 20 pound boxes for sales to the wholesale trade.
- Major varieties grown are ‘Red Haven’, ‘Early Red Haven’, ‘Glohaven’ and ‘Cresthaven’.

**Table 2: BC Peach Production and Value, 2002**

| Market | Volume (‘000 lbs) | % of Total Volume | Value ($’000) | % of Total Value |
|---|---|---|---|---|
| **Fresh Sales - Wholesale** | 6,553 | 71% | 2,228 | 56% |
| **Fresh Sales – Farm and Roadside** | 2,530 | 28% | 1,783 | 44% |
| **Processed Sales** | 101 | 1% | -10 | 0% |
| **Total** | **9,184** | 100% | **4,001** | 100% |

Data Source: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

**NECTARINES**

- Nectarines are produced primarily in the South Okanagan/Similkameen regions.
- In 2002, there was close to three quarters of a million pounds of nectarines grown in BC with a farm gate value of $420,000. (Table 3)
- The majority of production goes into wholesale fresh sales.
- Nectarines are harvested in July and August and are generally sold to truckers, fruit stands and the wholesale market.
- There is good demand for nectarines in the current market.
- Early varieties such as ‘Fire Brite’, ‘Fantasia’ and ‘Independence’ are full red fruit but smaller in size than the more common ‘Red Gold’.
- The main varieties of nectarines grown in BC are ‘Redgold’, ‘Independence’ and ‘Fire Brite’.
- Washington State and California are the main competitors.

**Table 3: BC Nectarine Production and Value, 2002**

| Market | Volume (‘000 lbs) | % of Total Volume | Value ($’000) | % of Total Value |
|---|---|---|---|---|
| **Fresh Sales - Wholesale** | 527 | 71% | 274 | 65% |
| **Fresh Sales – Farm and Roadside** | 210 | 28% | 147 | 35% |
| **Processed Sales** | 11 | 1% | -1 | 0% |
| **Total** | **748** | 100% | **420** | 100% |

Data Source: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

**APRICOTS:**

- Apricots are produced primarily in the south end of the Okanagan Valley and the Similkameen Valley in the Cawston-Keremeos areas.[2]
- In 2002, there were 1.2 million pounds of apricots grown in BC with a farm gate value of over $700,000. (Table 4)
- The majority of production goes into the wholesale fresh market.
- Apricots are a short season, specialty crop that needs to be grown, harvested and marketed with special care.
- Fruit is harvested at a firm, ripe stage and is generally marketed in 18 to 20 pound boxes to wholesalers.
- Direst sales fruit may be sold in 20 pound cartons and various sized smaller cartons.
- 400 pound cardboard tote bins are also used for special, high volume markets. About 90% of these apricots are sold as fresh fruit; the other 10% go for processing.[2]
- Relatively few acres of apricots have been replanted as compared to other commodities.
- The major varieties grown include: 'Goldbar', 'Goldstrike', and 'Rival'.
- Stable production is expected.

**Table 4: BC Apricot Production and Value, 2002**

| Market | Volume ('000 lbs) | % of Total Volume | Value ($'000) | % of Total Value |
|---|---|---|---|---|
| **Fresh Sales - Wholesale** | 687 | 54% | 302 | 43% |
| **Fresh Sales – Farm and Roadside** | 450 | 36% | 405 | 58% |
| **Processed Sales** | 120 | 10% | -6 | -1% |
| **Total** | **1,257** | 100% | **701** | 100% |

Data Source: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

**PRUNES/PLUMS**

- About half of Canadian plums/prunes produced are grown in BC.[11]
- In 2002 there were 65,000 pounds of plums grown with a farm gate value of $43,000. (Table 5)
- Unlike the other tree fruits the main market is fresh sales through farm and roadside stands.
- Prune plantings are stable and current plantings are considered adequate.

- Older plantings have been removed and have been replaced under the orchard renovation replant program. The demand for prune plums is primarily from consumers of European origin.
- Demand for prune plums is stable and may be declining.
- Early and late Italian varieties are the main European plum grown in BC
- These Italian varieties are harvested during August and September and sold on the fresh market only.
- Japanese varieties such as ‘Black Amber’ and ‘Friar’ are large black plums and are also sold to fresh markets.

**Table 5: BC Plum Production and Value, 2002**

| **Market** | **Volume (‘000 lbs)** | **% of Total Volume** | **Value ($’000)** | **% of Total Value** |
|---|---|---|---|---|
| **Fresh Sales - Wholesale** | 25 | 38% | 13 | 30% |
| **Fresh Sales – Farm and Roadside** | 40 | 62% | 30 | 70% |
| **Processed Sales** | 0 | 0% | 0 | 0% |
| **Total** | **65** | 100% | **43** | 100% |

Data Source: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

- In 2002, there was 1.6 million pounds of Italian prunes grown in BC with a farm gate value of over a million dollars. (Table 6)
- The main sales market is fresh sales through wholesalers.

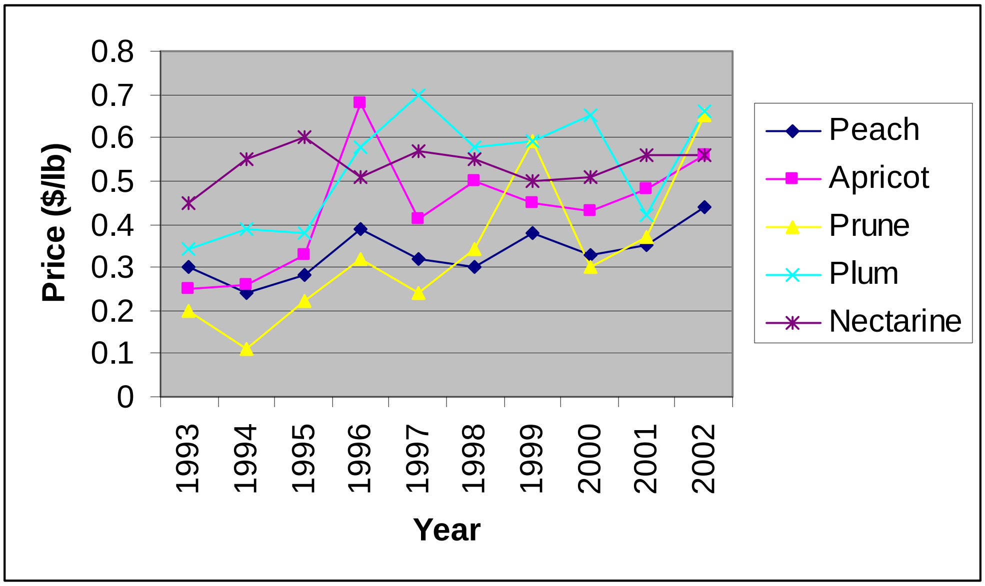
**Table 6: BC Italian Prune Production and Value, 2002**

| **Market** | **Volume (‘000 lbs)** | **% of Total Volume** | **Value ($’000)** | **% of Total Value** |
|---|---|---|---|---|
| **Fresh Sales - Wholesale** | 1,085 | 64% | 434 | 40% |
| **Fresh Sales – Farm and Roadside** | 550 | 33% | 660 | 60% |
| **Processed Sales** | 48 | 3% | -3 | 0% |
| **Total** | **1,683** | 100% | **1,091** | 100% |

Data Source: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

## Prices

**Figure 1: Prices Paid to Growers, 1993-2002**




Source: Ministry of Agriculture, Food and Fisheries. Agriculture Statistics.

- Figure 1 shows that prices fluctuate from year to year. The fluctuation is caused by production volume variation, competition from Washington and California, and quality issues.

## Rest of Canada Production and Market

- Table 7 looks at the BC, Ontario and Canadian production of soft fruits. Ontario dominates the Canadian soft fruit industry.
- BC is the major soft fruit producer for western Canada; Ontario is the major soft fruit producer for Central and Eastern Canada. There is some competition between BC and Ontario.
- Ontario currently produces peaches on 5,800 acres, apricots on 115 acres, and plums and prunes on 1,050 acres.[22]
- In 2003, farm value for peaches was $29 million, apricots $390,000 and plums and prunes was $3.3 million.
- When the difference in acreages between BC and Ontario is taken into account, Ontario receives greater farm values for their fruit crops.

Table 7: Canadian Soft Fruit Production 2003

| | BC | Ontario | Canada |
|---|---|---|---|
| **Peaches** | | | |
| **Bearing Area (acres)** | 1,315 | 5,800 | 7,150 |
| **Production (metric tons)** | 5,611 | 23,541 | 29,220 |
| **Farm Gate Value ($000)** | 4,855 | 29,300 | 34,230 |
| **Apricots** | | | |
| **Bearing Area (acres)** | 405 | 115 | 520 |
| **Production (metric tons)** | 1,021 | 200 | 1,220 |
| **Farm Gate Value ($000)** | 1,100 | 390 | 1,490 |
| **Plums and Prunes** | | | |
| **Bearing Area (acres)** | 365 | 1,050 | 1,600 |
| **Production (metric tons)** | 816 | 2,381 | 3,470 |
| **Farm Gate Value ($000)** | 715 | 3,300 | 4,365 |

Source: Statistics Canada, Catalogue no 22-003-XIB, June 2004

## World Production

- World leaders in peach production are: the US, Italy, Spain, and India.[16]
- Peach production is decreasing in the US, is stable in the EU, and is increasing in China and in South America, particularly in Chile.[23]
- In countries where production is decreasing, the main problems are: low quality and consequent consumption problems, high production costs compared to other fruit crops, and international competition, and over production.[23]
- Peaches/nectarines are 12$^{th}$ in world production for fruit crops, with production volume at 13,815,000 metric tons produced in 2002.[17]
- White flesh nectarines are increasing while peaches and canning clingstones are stable or decreasing.[23]
- 2,708,000 metric tons of apricots were produced world wide in 2002, making it number 20 on the list of most significant fruit crops.[17]
- Plums are ranked 14$^{th}$ in world tree fruit production by volume, with 9,315,000 metric tons produced in 2002.[17]

## Imports and Exports

- In 2003, BC exported only a small amount of peaches and nectarines, $52,608, all of which went to the United States.[14]
- BC apricots were also exported in 2003 in a small amount, $3,392, to the United States.[14]
- The large majority of the imports come into BC from the US.
- In 2003, BC imported peaches and apricots from: the US, New Zealand, and Chile.[14] (Table 8)
- In 2003 nectarines, prune plums and plums were imported into BC from: the US, China, and Chile.[14]
- The majority of Southern Hemisphere fruit is imported into Canada during off-season periods (winter and spring) when BC grown fruit is not available.
- The main impact of imported fruit during our season is on price; it generally results in lower prices for BC growers.

**Table 8: Value of BC Imports by Country of Origin, 2003 (in $CDN)**

| | US | New Zealand* | China* | Chile* |
|---|---|---|---|---|
| **Peaches** | 3,752,938 | 6,594 | 0 | 497,160 |
| **Nectarines** | 6,403,854 | 0 | 0 | 1,216,237 |
| **Apricots** | 854,357 | 58,618 | 0 | 3,580 |
| **Plums** | 3,999,816 | 0 | 858 | 973,422 |
| **Prune Plums** | 569,571 | 0 | 0 | 59,279 |

Source: BC Stats – Ministry of Management Services

## Employment

- 5,000 jobs are generated from the 1,800 BC tree fruit farms and an additional 2,500 jobs are a result of packing houses and support industries.[6]

# Structure

## Number of producers/Size of Operations

- Soft fruit blocks are often small and are part of larger orchards.
- Most soft fruit growers also produce other crops such as apples, pears and/or cherries.
- There are approximately 333 peach growers.
- There are around 180 apricot growers, producing on approximately 275 acres.
- There are 97 plum/prune producers.

## Industry Concentration

- There are a few large soft fruit growers in the industry but primarily soft fruit is grown in mixed orchard operations. Most growers will have a combination of peaches, nectarines, apricots, plums and apples rather than exclusively peaches..
- Most soft fruit production occurs in the southern part of the Okanagan Valley.

## Industry Organizations

**BC Fruit Growers Association**
An industry organization set up to protect and promote fruit growers interests.

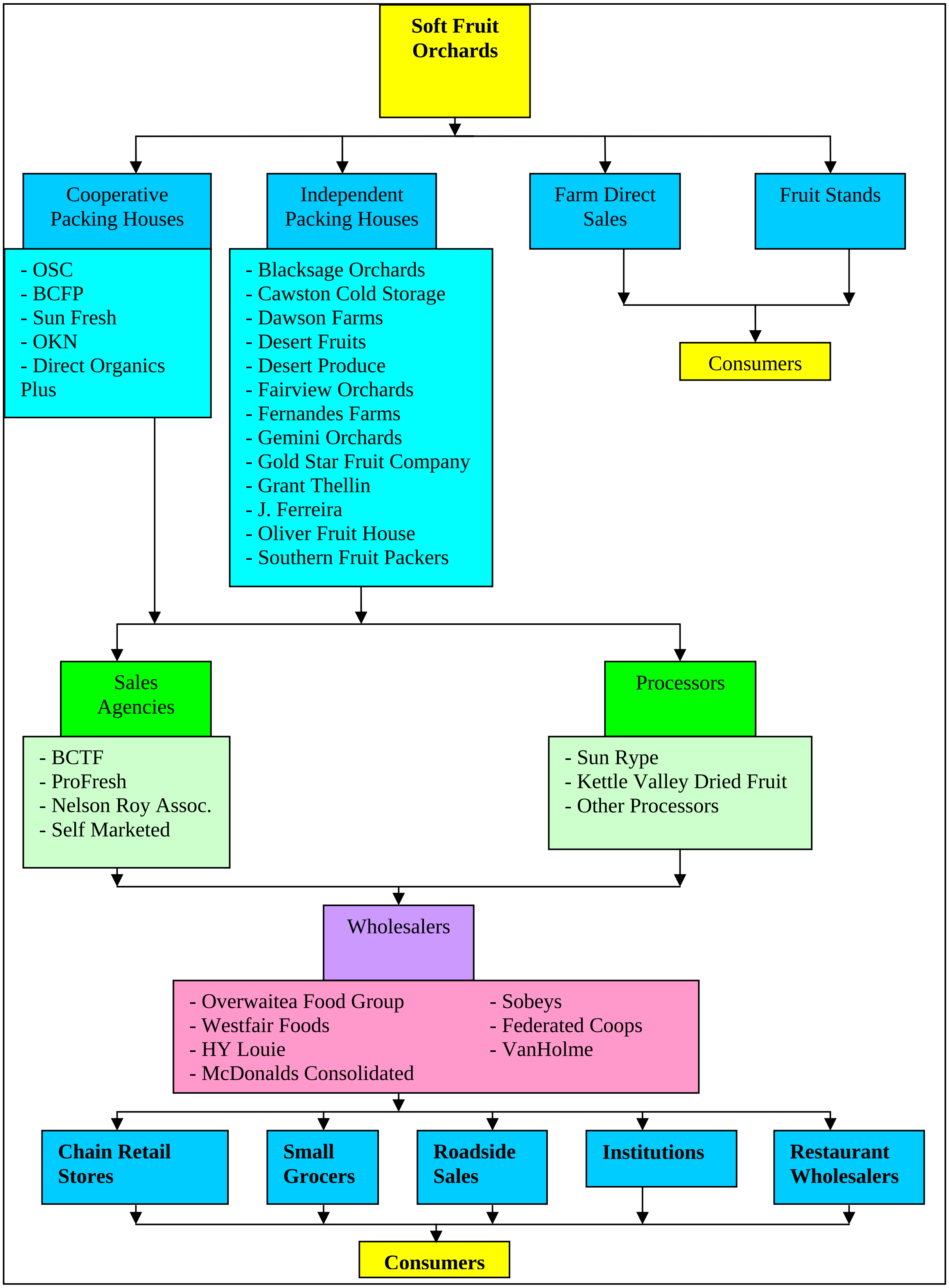
**Cooperative Packinghouses**
BC Fruit Packers Cooperative (BCFP), Okanagan North Cooperative (OKN), Sun-Fresh Cooperative Growers, and Okanagan Similkameen Cooperative Growers (OSC) all collectively own BC Tree Fruits Ltd (BCTF).[25]

**Independent Packinghouses**
Blacksage Orchards, Cawston Cold Storage, Dawson Farms, Desert Fruits (Demelo's), Desert Produce, Fairview Orchards, Fernandes Farms, Gemini Orchards, Gold Star Fruit Company, Grant Tellien, J. Ferreira, Oliver Fruit House, Southern Fruit Packers

## Value Chain

- Figure 2 shows the value chain within the BC soft fruit industry. Production is sold to four different outlets; cooperative packing houses, independent packing houses, farm direct sales or through fruit stands.
- Once the product leaves the packing houses, it is shipped either to processors or through other sales agencies.
- From the processors and sales agencies, product enters the wholesale retail sector and then the chain stores, grocers, roadside stands, institutions or restaurants.
- **Cooperative Packing Houses:** BC Fruit Packers Cooperative (BCFP), Okanagan North Cooperative (OKN), Sun-Fresh Cooperative Growers, and Okanagan Similkameen Cooperative Growers (OSC) all collectively own BC Tree Fruits Ltd (BCTF).[4]
- BC Tree Fruits Ltd sells 75% of the apples and 30% of soft fruits produced by the BC tree fruit industry.[4]
- The remaining 25% of apples and 70% of soft fruits are marketed through the independent packing houses and farm direct sales.[4]

**Figure 2: BC Soft Fruit Value Chain**



## Performance/Direction

### Industry Trends

- The general trend is static to a slight increase
- For most of the soft fruits production has increased slightly in the last few years, most likely due in part to the replant program which gives financial incentive for farmers to replace older trees.

**Peach Trends and Issues**

- Current plantings are considered adequate.
- New varieties may increase sales.
- New plantings in recent years will increase production.
- Promotion of BC peaches is needed to increase sales.
- Peach markets remain strong and demand for peaches is stable[10] although during large crop years marketing can become unstable.[18]
- The 2003 season provided a 4% increase in farm cash receipts because of higher sales in cherries, peaches and apricots.[3]
- New peach and nectarine plantings will increase production.

**Peach/Nectarine Trends**

- Recent new plantings will increase production dramatically.
- New markets and/or promotions are required.
- Market season is spread out from July to September with new later varieties.

**Apricot Trends and Issues**

- Present plantings are considered adequate.
- Currently apricot production is fairly stable with a limited amount of new plantings.
- Future expansion is dependant on promoting and expanding markets and possibly new varieties.

**Plum/Prune Trends and Issues**

- Recent plantings of plums and prunes will increase production in future years.
- The demand for large plums is considered good.
- New varieties may increase sales.
- Italian plums may have limited markets

## Regulatory Framework

- The BC Tree Fruit Industry is regulated under various legislative acts at all levels of government (see section on Regulatory Challenges for an overview of these).

## Research, Technology and Innovation

**Pacific Agri-Food Research Centre (Summerland, BC)**
The Agriculture and Agri-Food Canada research centre has research projects on crop diversification, apple breeding, post harvest pathology, soil fertility and plant chemistry, tree fruit nutrition/soil chemistry, integrated control, insect behavior ecology, integrated pest management, and pesticide resistance as well as numerous projects on biotechnology that may be of benefit to tree fruit growers in BC.

## Challenges

### Production

- Increased production is expected for peaches, nectarines and plums; the challenge is to successfully market the increase
- Pest issues
    - Peach twig borer is an ongoing problem for peaches, nectarines and plums
    - Thrips are a special problem with nectarines
    - Aphid control is a problem for all soft fruits, but special attention is required for peaches and nectarines
- Fruit quality and harvest maturity standards need reinforcing, particularly during large production years.

### Marketing

- Fruit is sold through a variety of agencies, so there is a limited comprehensive overall promotion or quality standard.
- Competition from agencies, direct sales from growers, and imports from Washington State are some of the factors in price variation.
- Increasing sales from local fruit stands and truckers is becoming the driving factor for soft fruit marketing.
- Different packaging of all soft fruit might encourage new sales.

## Trade

- Production from central Canada competes with BC production at least in the peach market.
- Competition from Washington State is a factor, but local pricing within BC is a larger issue for BC producers.
- Sometimes low priced product from Washington or California is a concern, particularly in years of large US production.
- A limited amount of BC fruit is exported into the US, but as a rule most of our product is sold into Western Canadian markets.
- Fruit from the southern hemisphere does not compete with BC fruit because it is only available during the BC off season.

## Regulatory Issues

The Tree Fruit Industry is under a variety of government regulations as follows:

**Provincial Government** –

Ministry of Agriculture, Food and Fisheries -

- *Plant Protection Act* – "The Act provides for the prevention of the spread of pests destructive to plants in British Columbia including the powers of inspectors and the authority to establish quarantine areas"
- *Farm Practices Protection Act* (Right to Farm) – "The Act ensures that farmers can farm in the agricultural land reserve by protecting them from nuisance lawsuits, nuisance bylaws and prohibitive injunctions when they are using normal farm practices."
- *Soil Conservation Act* – "The Act is intended to protect soil on land in an agricultural land reserve by regulating its removal & the placement of fill."
- *Weed Control Act* – "The Act places responsibility for control of noxious weeds upon occupiers of land."
- *Food Products Standards Act* – "This Act allows the Province to establish compositional and quality standards for processed foods"
- The Invasive Plant Strategy – "A strategy to build cooperation and coordination to protect BC's environment and minimize negative social and economic impacts caused by the introduction, establishment and spread of invasive plant species."

Ministry of Skills, Development and Labour

- *Employment Standards Act* – "The main purpose of this Act is to set minimum standards for wages and terms of employment for all workers in British Columbia."
- *Workers Compensation Act* - "The Act sets out safety related criteria and conditions for all workers in BC."

Ministry of Sustainable Resource Management –

- *Environmental Management Act* – "This Act provides the ministry with the authority to manage protect and enhance the environment. The Act also requires the preparation of plans for flood control, drainage, soil conservation, water resource management, fisheries and aquatic life management, wildlife management, waste management, and air management. The Act provides for the regulation of some environmental assessments, the issuance of environmental protection orders; the declaration of environmental emergencies and the allocation of required resources to control emergencies and the recovery of moneys spent during an emergency from the responsible party."
- *Land Commission Act* – regulates land in the Agricultural Land Reserve (ALR)

Ministry of Water, Land and Air Protection

- *Fish Protection Act* – Protection of all fish inhabited waterways

**Federal Government –**

Agriculture and Agri-Food Canada –

- *Canada Agriculture Products Standards Act* – Fresh fruit and vegetable regulations: regulations respecting the grading, packing and marking of fresh fruit and vegetables

Health Canada –

- *Pest Control Products Act* – "Requires that all products imported, manufactured, sold or used in Canada to control pests must be registered."

## Opportunities

- There is opportunity to avoid mid season surpluses by planting different varieties to extend the harvest period.[10]
- In addition, there are opportunities for marketing with new packaging and promotion strategies.
- There are opportunities for processing fruit into value added products.
- Agri-tourism can allow farmers to capture more of the consumer's dollar.

## Government and Industry Actions and Initiatives

**Investment Agriculture Foundation (IAF)**
An industry led initiative which invests government funds in projects which will help agriculture industries continue to successfully compete in world markets. The IAF has taken over the Orchard Renovation Program from the Okanagan Valley Tree Fruit Authority and will continue to run the program until March 31, 2006.[9]

**Orchard Renovation Program**
The program is being wound down with the final year in 2005. The program is fully subscribed for the 2005 season.

- *Replant Program* –
  - Table 9 looks at how many acreages of each soft fruit were replanted under the program fro the past 13 years. Appendix A, Tables A1 to A4 provide details of the replant program by commodity and area.
- *Grafting Program* –
  - The program provides financial support for grafting new cultivars onto old cultivars.
- *Transitional Production Adjustment Program (TRAP)* – "compensates tree fruit growers for a portion of revenue losses they may experience during the unproductive years following replanting."[5]

**Table 9: Replant Summary 1991-2003 by Commodity (Acres)**

| Year | **Peach** | **Nectarine** | **Apricot** | **Plum** |
|---|---|---|---|---|
| **1991** | 27 | 17 | 25 | 3 |
| **1992** | 44 | 9 | 10 | 2 |
| **1993** | 18 | 6 | 15 | 0 |
| **1994** | 29 | 5 | 15 | 6 |
| **1995** | 36 | 7 | 22 | 6 |
| **1996** | 47 | 6 | 29 | 5 |
| **1997** | 43 | 8 | 25 | 11 |
| **1998** | 28 | 5 | 8 | 2 |
| **1999** | 66 | 11 | 10 | 9 |
| **2000** | 60 | 7 | 14 | 10 |
| **2001** | 70 | 31 | 5 | 14 |
| **2002** | 95 | 38 | 6 | 18 |
| **2003** | 53 | 25 | 6 | 21 |
| **Total** | **616** | **175** | **190** | **107** |

Source: BC Investment Agriculture Foundation. Orchard Renovation Program
- Refer to the appendices for a breakdown of replant acres by commodity and location area.

**Canadian Agriculture Income Stabilization (CAIS) Program**

The CAIS program was developed to provide a permanent disaster program which farmers can rely on instead of the ad hoc programs that were available in the past; and to offer more stability by protecting both small and large drops in income. The CAIS Program also replaces the NISA program.

**Production (Crop) Insurance**

Crop insurance offers financial protection for growers against unforeseen specified damage conditions, such as hail damage, winter loss, or other specified problems.

**Okanagan Plant Improvement Company (PICO)**
Okanagan Plant Improvement Company provides nursery plant material to growers and nurseries. It also markets new varieties from the breeding program at PARC as well as private varieties such as Ambrosia.[1]

**Pacific Agri-Food Research Centre (PARC) Summerland –** (see research, technology and innovations section).

**Agricultural Land Reserve (ALR)**
Between 1973 and 1976, the ALR was created to protect the declining agricultural land in BC. The primary objective is to "preserve agriculture land and encourage the establishment and maintenance of farms" and the secondary objective to: "create parks, acquire greenbelts and assemble land for urban and industrial uses". Currently the ALR is approximately 4.8 million hectares and has not fluctuated significantly from this number since its establishment.[19]

**The BC Fruit Growers Association (BCFGA)**
The BCFGA provides a number of services and products (products often available at a fee) to tree fruit growers. The major ones are:

**Deer Fencing Program**

- Deer fencing is used to protect fruit trees and grapevines from damage caused by browsing ungulates, especially deer
- The program provides a grant to partially off-set the expense of installing deer fencing.
- It is administered by the BCFGA. BCFGA members receive a reduction in the administration fee for the program.[6]

**BC Good Agriculture Practices (BCGAP)**

- The goals are:
  1. To reduce chemical use in tree fruit production.[7]
  2. To have growers using Integrated Fruit Production methods by 2005.[7]

**Tree Fruit Industry Development Fund**

- Provides matching funds for research and development projects.[13]

**The Canadian On-Farm Food Safety (COFFS) Program**
An industry/government partnership designed to help commodity groups develop programs which include the use of Hazard Analysis Critical Control Point (HACCP) and the Canadian Food Inspection Agency's Food Safety Enhancement Program principles.[8] This program is administered by the Canadian Federation of Agriculture.

## Conclusions

- Currently the soft fruit tree industry in BC is stable.[18]
- Marketing for all soft fruits has been quite successful during recent years.
- The removal of older blocks of soft fruits and replanting to newer varieties has benefited the industry.
- There exists potential to improve marketability of BC soft fruits with innovative packaging and increased promotion.
- BC is a net importer of tree fruits, with most of the imports during the BC off season.[18]
- There is some potential for growth in the industry with new varieties and promotion of BC fruit.[18]

## Industry Specialist Responsible:

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## Useful Publications for Growers

- *Tree Fruit Production Guide for Commercial Growers 2004 Edition* – BC Ministry of Agriculture, Food and Fisheries in conjunction with BC Fruit Growers.
- *Tree Fruit Variety Information* – PICO
- *Farm Practices in BC Reference Guide - Tree Fruit* –
- *Okanagan and Southern Interior Tree Fruit Blossom & Harvest Schedule* – BC Ministry of Agriculture, Food and Fisheries
- *Enterprise Budgets Planning for Profit* – BC Ministry of Agriculture, Food and Fisheries
- *Integrated Fruit Production Guidelines for Apple Orchards in Canada* – Canadian Horticulture Council
- *Organic Tree Fruit Production Guide* – Certified Organic Association of BC

# Appendices:

### Appendix A: Orchard Renovation Replant Tables by Commodity and Area

Areas are - North: Kelowna to Salmon Arm; Central: Peachland to Okanagan Falls; South: Oliver, Osoyoos, Keremeos, Cawston

**Table A1: Regional Replant Report by Variety for Peaches: 1991-2001 (Acres)**

| | North | Central | South | Creston | Total Acres |
|---|---|---|---|---|---|
| **Cresthaven** | 2 | 9 | 61 | 0 | **72** |
| **Early Redhaven** | 1 | 3 | 57 | 0 | **61** |
| **Glohaven** | 12 | 15 | 69 | 1 | **97** |
| **Redhaven** | 4 | 11 | 74 | 4 | **94** |
| **Other** | 9 | 14 | 119 | 4 | **146** |
| **Total** | **28** | **51** | **381** | **9** | **469** |

Source: Investment Agriculture Foundation. Orchard Renovation Replant Program

**Table A2: Regional Replant Report by Variety: Nectarines – 1991-2001 (acres)**

| | North | Central | South | Creston | Total Acres |
|---|---|---|---|---|---|
| **Redgold** | 2 | 4 | 44 | 0 | 50 |
| **Other** | 2 | 4 | 56 | 0 | 62 |
| **Total** | **4** | **8** | **100** | **0** | **112** |

Source: Investment Agriculture Foundation. Orchard Renovation Replant Program

**Table A3: Regional Replant Report by Variety for Apricots: 1991-2001 (Acres)**

| | North | Central | South | Creston | Total Acres |
|---|---|---|---|---|---|
| **Goldbar** | 1 | 11 | 29 | 0 | **41** |
| **Goldstrike** | 0 | 11 | 28 | 0 | **40** |
| **Perfection** | 0 | 5 | 17 | 0 | **22** |
| **Rival** | 7 | 1 | 12 | 0 | **21** |
| **Other** | 5 | 9 | 39 | 0 | **54** |
| Total | **14** | **38** | **125** | **1** | **178** |

Source: Investment Agriculture Foundation. Orchard Renovation Replant Program

**Table A4: Regional Replant Report by Variety: Plum/Prune – 1991-2001 (Acres)**

| | North | Central | South | Creston | Total Acres |
|---|---|---|---|---|---|
| **Plum – Other** | 13 | 7 | 24 | 1 | 46 |
| **Total** | **47** | **14** | **37** | **8** | **106** |
| **Prune – Italian** | 2 | 2 | 30 | 1 | 36 |
| **Prune – Other** | 5 | 2 | 25 | 0 | 31 |
| **Total** | **7** | **4** | **55** | **1** | **67** |

Source: Investment Agriculture Foundation. Orchard Renovation Replant Program

## Credits /Sources of Information


[1] BC Ministry of Agriculture, Food and Fisheries. Peaches. Online. Available at: http://www.agf.gov.bc.ca/aboutind/products/plant/peaches.htm

[2] BC Ministry of Agriculture, Food and Fisheries. Apricots. Online. Available at: http://www.agf.gov.bc.ca/aboutind/products/plant/apricots.htm

[3] British Columbia 2003 (Year End) Farm Income Estimate Highlights. (January 2004). Online. Available at: http://www.agf.gov.bc.ca/stats/finance/2003yearend.pdf.

[4] A Plan to Establish a New Variety Development Council for Tree Fruit Growers. (2001). Online. Available at: http://www.agf.gov.bc.ca/treefrt/product/newvar06-01.pdf.

[5] Tree Fruit Industry Revitalization Strategy: Results of the Tree Fruit Industry Consultation Forum. Okanagan Valley Tree Fruit Authority. (October 27, 1995).

[6] BC Fruit Growers Association website. Online. Available at: http://www.bcfga.com

[7] Silicon Vineyard Grapevine. (January 2002). BC Tree Fruit Growers Association – "Growing with Care". Online. Available at: http://www.ostec.ca/resourceviewer.php?source=grapevine&id=9.

[8] Canadian Federation of Agriculture. The COFFS Program. Online. Available at: http://www.cfa-fca.ca/english/programs_and_projects/onfarm_food_safety.html.

[9] Investment Agriculture Foundation. Online. Available at: http://www.iafbc.ca/index.htm

[10] BC Ministry of Agriculture, Food and Fisheries. Planning for Profit: Peaches. (2001). Online. Available at: http://www.agf.gov.bc.ca/busmgmt/budgets/budget_pdf/tree_fruits/peaches_summer2001.pdf.

[11] BC Ministry of Agriculture, Food and Fisheries. Plums. Online. Available at: http://www.agf.gov.bc.ca/aboutind/products/plant/plums.htm

[12] Okanagan Biotechnology Inc. Online. Available at: http://www.okanaganbiotechnology.com/corporate.html

[13] BC Ministry of Agriculture, Food and Fisheries. Profile of the BC Tree Fruit Industry. Online. Available at: http://www.agf.gov.bc.ca/treefrt/profile/ind_profile.htm

[14] BC Stats – Ministry of Management Services... Tree Fruit Statistics raw data prepared by Heather Anderson. (Personal communication via email May 19th, 2004)

[15] USDA. Dried Plum (Prune) Situation and Outlook in Selected Countries. (2002). Online. Available at: http://www.fas.usda.gov/htp/circular/2002/02-12/Dried%20Plum.htm

[16] FVSU. Peaches. Online. Available at: http://www.aginfo.fvsu.edu/publicat/commoditysheets/fvsu001.htm

[17] University of Georgia. World's Top 20 Fruit Crops – Production and Value, 2002. (2002). Online. Available at: www.uga.edu/fruit/top20.pdf

[18] Ministry of Agriculture, Food and Fisheries. Personal communication with Jim Campbell – Tree Fruit and Grape Industry Specialist.

[19] Provincial Agricultural Land Commission. Agricultural Land Reserve. Online. Available at: http://www.alc.gov.bc.ca/

[20] BC Ministry of Agriculture, Food and Fisheries. BC Fruit Production Ranked by Value – 2002. Online. Available at: BC Ministry of Agriculture, Food and Fisheries, Tree Fruit Statistics

[21] Farm Value of Fruit Crops, Ontario. Ontario Ministry of Agriculture and Food. Online. Available at: http://www.gov.on.ca/OMAFRA/english/stats/hort/value_fruit.html

[22] Harvested Area of Fruit Crops, Ontario. Ontario Ministry of Agriculture and Food. Online. Available at: http://www.gov.on.ca/OMAFRA/english/stats/hort/harv_fruit.html

[23] ISHS Acta Horticulturae 465: IV International Peach Symposium; THE PEACH INDUSTRY IN THE WORLD: PRESENT SITUATION AND TREND; C. Fideghelli, G. Della Strada, F. Grassi, G. Morico