

Normal Farm Practices in a Developing Cherry Sector

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Summary

The cherry sector in BC has rapidly increased in production in the past 10 to 15 years with conversion of some apple orchards to cherries and new areas are being developed as cherry orchards. At the same time city dwellers are moving into rural areas with the expectation of pastoral lifestyle, and may be unaware that the area is in the Agriculture Land Reserve and that normal farm practices are protected from nuisance legal action with sole appeal to the Farm Industry Review Board (FIRB). The ensuing conflict regarding nuisance (i.e. noise, odor, dust) disputes is regulated by the Farm Practices Protection Act, which protects normal farm practices from nuisance legal processes, provided that growers are also aware of impact and seek to moderate impacts on neighbours.

In an emerging and developing agriculture sector like the cherry industry, there are several benchmarks that may determine normal farm practice:

- Normal or common practices in traditional cherry farming.
- Normal practices of progressive growers adopting new, late season varieties of cherries and new and innovative crop protection practices.
- Normal or common practices in farming, generally.

The clearing of any one of these benchmarks should satisfy the requirements of the Farm Practices Protection Act for Normal Farm Practice such that any action on nuisance be dismissed and further that the Farm Industry Review Board uphold the right of the farmer to practice normal farm practices.

Farm Practices in the BC Cherry Sector

This document will provide information on the development of the BC cherry sector and normal or traditional practices in cherry farming, consideration of progressive grower practices, and finally comparison of cherry farming to normal farm practices generally.

Development of the Cherry Sector

From the 1920's to 1980's, the BC cherry industry was composed primarily of small blocks of one to five acres, part of larger diversified orchards with 10 to 40 acres. Few growers relied entirely on cherries. The cherry sector declined in the 1980's and 1990's due to reliance on older, inferior varieties which were intolerant of rain and matured in the peak rainy period, late June to early July. Combined with the introduction of little cherry disease, by 1980 these factors dramatically reduced cherry production in the Okanagan, Similkameen and Creston valleys.

The advent of new, later season varieties resulted in the rebirth of the BC cherry industry. This is due to the much better rain tolerance of the new varieties, and the fact that they mature after the peak rainy period of the summer, further reducing vulnerability. The late ripening dates of the new cherry varieties also meant that they reached the market after the main glut of Washington state production, resulting in high demand in the marketplace. Access to domestic, USA and other international markets such as Europe and Asia also enhanced industry viability. The new cherry industry that has emerged since the late 90's is one where growers no longer rely on cherries only as a sideline, but grow cherries either as a sole enterprise or as very important

part of their total operation. Thus it has become imperative for growers to use all means available to reduce cullage of cherry crops, using pre existing and innovative farm practices.

Cherry Production in BC (Cansim 001-0009, selected years)

	2007	2011	2016
A. Marketed (tons)	8,447	10,329	16,470
B. Farmgate value (\$1,000's)	27,170	33,463	52,250
C. Cultivated area, total (acres)	3,114	3,378	3,994
D. Bearing Area (acres)	2,300	2,959	3,580
E. Yield (A/D)	3.7	3.5	4.6
F. Revenue Per Acre (B/D)	\$11,800	\$11,300	\$14,600
F. Farmland usage (D/C)	74%	88%	90%

The a 28.6% increase in bearing acreage occurred from 2007 to 2011, and a 21% increase in bearing acreage took place from 2011 to 2016. This rapid cherry sector growth was due to favourable premium prices for new late-season varieties with improved eating quality compared to traditional varieties. The utilization of farmland increased from 74% bearing acreage to 90% bearing acreage, primarily due to bringing fallow acreage into production, though year-to-year variation in farmland utilization occurs as non-bearing cherry acreage comes into production.

Cherry production requires a relatively high level of management, due to the sensitivity of the crop to complex crop protection scheduling, time-sensitive harvest and workforce scheduling, packing consistency, and the introduction of new automated high-tech packing

technologies. Producers with these advanced skills have tended to seek new, more productive or effective practices, and these practices then become widely adopted and common.

Normal Farm Practices in the Traditional Cherry Sector

Until the advent of new late season varieties of cherries, the variety Bing was king. This benchmark variety along with old varieties like Van and Lambert, was sensitive to rain damage, but protection of the cherries using modern practices (such as the use of helicopters and wind machines to dry off cherries after rain storms) was not widely adopted, probably due to low crop value not justifying the additional expense and the difficulty obtaining and justifying the expense of this equipment for small acreages. Spray frequency and use of air blast sprayers for crop protection for Bing cherries were similar to current usage, though crop protection products and the introduction of Spotted Wing Drosophila have placed greater demands on the choice of crop protection products and scheduling. Propane cannons and other noise emitting devices to scare birds were used commonly as normal farm practice to reduce bird damage to the cherry crop, causing frequent rural-urban conflict.

Normal Farm Practice for the Modern BC Cherry Industry

Cherry growers recognize, as a sector, the impact that some pest reduction practices have on neighbours, and have invested to reduce both the pest populations and impact on neighbours. An example is the Starling Control Program, in operation since 2003, captures and humanely euthanizes about 40,000 of these pest, non-indigenous birds each year in the Okanagan (<https://www.grapegrowers.bc.ca/starling-control-program>). The starling control program has reduced propane cannon use (“Research Supports Year-Round Starling Traps”, Country Life in

BC, February 2018, p. 23), which reduces nuisance noise for neighbours of orchards and vineyards. The Starling Control Program is funded by industry and Regional Districts. Other types of bird damage cannot presently be avoided without some nuisance impact on neighbours, though several growers are investigating the use of falcons and lasers to deter birds from entering orchard areas.

Spotted Wing Drosophila is a new (2010) invasive pest in BC that infests cherry and berry crops. An egg is laid on a cherry and the larvae burrows into the cherry, causing damage to the flesh and making the cherry unmarketable. The retail market has 'zero tolerance' for any larvae in cherries - one larvae discovered can result in the rejection of an entire load of cherries and multiple detections can lead to delisting of the farm supplier from the retailer qualified producers list for a season. In this instance, continuous protection of cherries from the insect damage is primarily by use of protective crop protection products. Continuous coverage requires regular application of crop protection products using airblast sprayers, powered via the Power Take-Off on a tractor. Applications of pesticides using 'crop duster' airplanes is not a practice used nor under consideration by BC cherry orchardists, but is permitted at present in the US. While research is ongoing to find solutions to the Spotted Wing Drosophila, there is no apparent alternate solution to eliminate or reduce the damage to the zero-tolerance threshold. In other words, if cherry production is to continue on a commercial basis in BC, regular use of airblast sprayers is required, at the appropriate timing and during times of day when temperatures and winds are ideal. Without use of normal farm practice to control SWD, infestation of the crop by SWD would result in catastrophic and total loss of income.

Rain damages cherries by causing the skin of the cherry to split. This damage is reduced by drying cherries using helicopters. Growers implement a variety of practices which all play a role in reducing damage. Firstly, the practice of helicopter drying is now common and considered a normal farm practice. The safety of the practice is regulated by Transport Canada. Further regulation of safety by the FPPA is not within scope of the regulation. Noise as a nuisance is regulated by the FPPA, but is exempt from control as it is considered a normal farm practice. Wind machines are primarily used for protection of spring frost damage, by circulated ground-hugging cold air. Use of wind machines for drying is more recent and innovative growers have observed the winds created will knock off droplets of water from cherry fruits, reducing splits. The use of wind machines is considered by growers to be a normal farm practice - cherry farms with wind machines implement this practice. The use of anti-wetting coatings on cherries is relatively new in the last 5 years. Growers have not achieved consistent results with anti-wetting coatings, as different formulations enter the market, anticipation of rain events and timing of sprays prior to rain events, and other environmental conditions (length of rain, temperature, humidity) all impact performance of the anti-wetting coatings. Lastly, growers will use tractor drawn blowers or airblast sprayers to knock water droplets off of cherries.

Comparison of Farm Practices, generally, to Cherry Production Practices

Farm practices in several commodities have advanced, due to changes in technology, introduction of invasive pests, and consolidation of farms into larger units. The following schedule shows differences in farm practices evolution, the size of farm and relative intensity of residential development in the rural area. As shown, late cherries are the most sensitive in terms of the level of change and sensitivity to recent urbanization of local farm areas, with new

neighbours originating from non-farm areas that are not familiar with newer farm practices or the degree of consolidation that continues to take place in most commercial farming.

Farm Practices Sensitivity for Selected Commodities

Commodity	Change in Farming Practices over the past 20 years	Degree of Consolidation	Sensitivity to Recent Urbanization of Local Farm Areas
Late Season Cherry Production	High	High	High
Dairy and Chicken Production	High	High	High
Grain Production	High	High	Low
Berry Production	Moderate	Moderate	High
Beef Production	Low	Low	Low
Vegetable Production	Moderate	Moderate (BC)	Moderate

Conclusion.

Normal farm practices are protected under the Farm Practices Protection Act. This protection from nuisance legal action was implemented to assist in making actively farmed areas in the ALR economically viable. The agriculture industry also recognizes that it has a role to play in moderating impact of practices on neighbours. Normal farm practices evolve with the introduction of new technology and new farm products such a late season cherries, and changes in pest populations and structure of farms (i.e. consolidation). These changes generally encourage the development of progressive farmers who professionally manage their farms to use

a combination of available means to protect their crops. There are several benchmarks that result in normal farm practice for cherry farming:

- Historic practices in traditional cherry farming.
- Practices of progressive growers adopting new late season varieties of cherries and utilizing modern technology to protect their crops.
- Normal or common practices in farming, generally.

The clearing of any one of these benchmarks should satisfy the requirements of the Farm Practices Protection Act for Normal Farm Practice and that any action on nuisance be dismissed.

The Farm Industry Review Board upholds the right of the farmer to practice normal farm practices as part of the social compact that preserves agricultural land and commits to make farming viable in the Agricultural Land Reserve.