

Cherries: a B.C. Success Story

(a fly over at 15,000 feet)

Carl Withler P.Ag.
Industry Specialist: Treefruits and
Grapes

Sector Development Branch
Industry Development Unit
“Kelownafornia” sub-office





Presentation overview

- The cherry industry in B.C.: history and current state.
- Three keys to industry development
 - climate
 - science
 - market development
- The future and some predictions
- Questions and answers (made on the fly)



Trends in Treefruit Production in B.C.

(a fly over at 35,000 feet)



Carl Withler P.Ag.

Industry Specialist – Treefruits and Grapes
Sector Development Branch



Slight resemblance to Tin-Tin.





History and context of the industry

- Likely start of cherry pit plantings by Father Pandosy in 1860's as he settled into the Mission Creek area around Kelowna.
- The industry grew slowly from 1860-1950 with improved land clearing, pressurized water and a growing domestic population.
- From 1950 to 1970 cherry production showed on tax information and census information. Early cash return, reduced risk and grown as “part” of an orchard.

History and context continued.

- Industry almost removed from B.C. ag. landscape due to wet summers, little cherry virus and competition from sweet, soft Washington state cherries.
- Investment in cherry production as a commodity returns in late 80's/early 90's due to improved varieties, block planting and improved climate.
- The industry now runs on 5000 acres in the Okanagan, Similkameen, Creston and Thompson valleys.

The industry in numbers and context

B.C.'S TOP 30 AGRIFOOD AND SEAFOOD COMMODITIES

Rank	Commodity	2014 B.C. Receipts (\$'000)	2015 B.C. Receipts (\$'000)	2014 Canada Receipts (\$'000)	2015 Canada Receipts (\$'000)	B.C. Share of 2015 National (%)	B.C. Rank in 2015 National ⁵
1	Dairy Products	554,730	564,395	6,073,355	6,027,800	9.4%	3
2	Farmed Salmon	377,800	463,600	547,762	na	na	1
3	Chickens	367,595	358,626	2,383,410	2,399,987	14.9%	3
4	Beef	277,371	316,804	9,817,098	10,509,193	3.0%	6
5	Greenhouse Vegetables	296,591	308,277	1,266,979	1,303,433	23.7%	2
6	Floriculture	274,056	298,302	1,128,740	1,169,632	25.5%	2
7	Nursery	177,192	192,880	533,044	556,366	34.7%	2
8	Blueberries	112,210	140,290	264,350	262,302	53.5%	1
9	Eggs	119,978	121,095	933,099	984,405	12.3%	3
10	Mushrooms	114,740	114,740	376,097	373,886	30.7%	1
11	Sweet Cherries	45,696	55,785	47,711	57,813	96.5%	1
12	Crabs, Other ²	46,700	54,800	52,978	na	na	1
13	Halibut	46,900	53,800	51,051	na	na	1
14	Wild Salmon	124,700	51,900	109,169	na	na	1
15	Grapes	46,947	49,764	116,089	121,297	41.0%	2
16	Turkeys	50,447	49,346	388,006	395,871	12.5%	3
17	Apples	46,193	47,339	205,781	191,782	24.7%	3
18	Prawns and Shrimp ³	41,200	46,700	404,017	na	na	na
19	Cranberries	45,558	41,363	118,880	112,158	36.9%	2
20	Clams (Wild)	41,500	33,500	90,095	na	na	3
21	Hogs	36,537	31,992	5,091,392	4,224,744	0.8%	6
22	Hay and Clover	22,468	30,616	401,153	471,040	6.5%	4
23	Canola (Rapeseed)	39,789	29,791	7,367,227	7,995,287	0.4%	4
24	Potatoes	30,584	28,946	1,050,404	1,038,711	2.8%	7
25	Rockfish ⁴	24,300	26,700	32,453	na	na	1
26	Wheat	23,871	19,893	4,874,151	5,082,493	0.4%	6
27	Raspberries	18,031	17,703	30,770	31,473	56.2%	1
28	Honey	11,904	17,072	196,181	223,248	7.6%	5
29	Sod	9,557	10,662	152,699	164,001	6.5%	4
30	Lambs	7,374	10,643	148,942	174,022	6.1%	5

Source: Statistics Canada and Adapted from Statistics Canada. CANSIM Tables 002-0001; 001-0006; 001-0009; 001-0013; 001-0014 and direct files obtained from Statistics Canada, Division of Agriculture, B.C. Ministry of Agriculture, 2015 Seafood Year in Review, and Fisheries and Aquaculture Canada, Commercial Fisheries Landings.

The industry in numbers (thanx stats unit)

TREE FRUITS, continued

Crop	Variables	2012	2013	2014	2015	2016	2017	Average 2012–2016	2017 vs. 2016 % Change	2017 vs. Average % Change
Cherries, Sour	Farm Gate Value (\$'000)	x	x	F	x	199	F	na	na	na
	Cultivated Area ¹ (hectares)	x	x	F	x	55	F	na	na	na
	Harvested Area (hectares)	x	x	F	x	45	F	na	na	na
	Production (tonnes)	x	x	F	x	186	F	na	na	na
	Yield (kg/ha)	na	na	na	na	4,133	na	na	na	na
	Price (\$/kg)	na	na	na	na	1.07	na	na	na	na
	Farm Gate Value per Harvested Hectare (\$/ha)	na	na	na	na	4,422	na	na	na	na
Cherries, Sweet	Farm Gate Value (\$'000)	44,423	44,848	49,618	61,083	56,608	84,744	51,316	49.7%	65.1%
	Cultivated Area ¹ (hectares)	1,750	1,809	1,869	1,928	1,987	1,942	1,869	-2.3%	3.9%
	Harvested Area (hectares)	1,686	1,712	1,805	1,841	1,858	1,739	1,780	-6.4%	-2.3%
	Production (tonnes)	14,935	11,652	15,198	16,990	15,871	23,484	14,929	48.0%	57.3%
	Yield (kg/ha)	8,858	6,806	8,420	9,229	8,542	13,504	8,371	58.1%	61.3%
	Price (\$/kg)	2.97	3.85	3.26	3.60	3.57	3.61	3	1.2%	4.6%
	Farm Gate Value per Harvested Hectare (\$/ha)	26,348	26,196	27,489	33,179	30,467	48,731	28,736	59.9%	69.6%
	Farm Gate Value (\$'000)	872	800	1,265	1,325	1,589	1,135	1,170	-28.6%	-3.0%

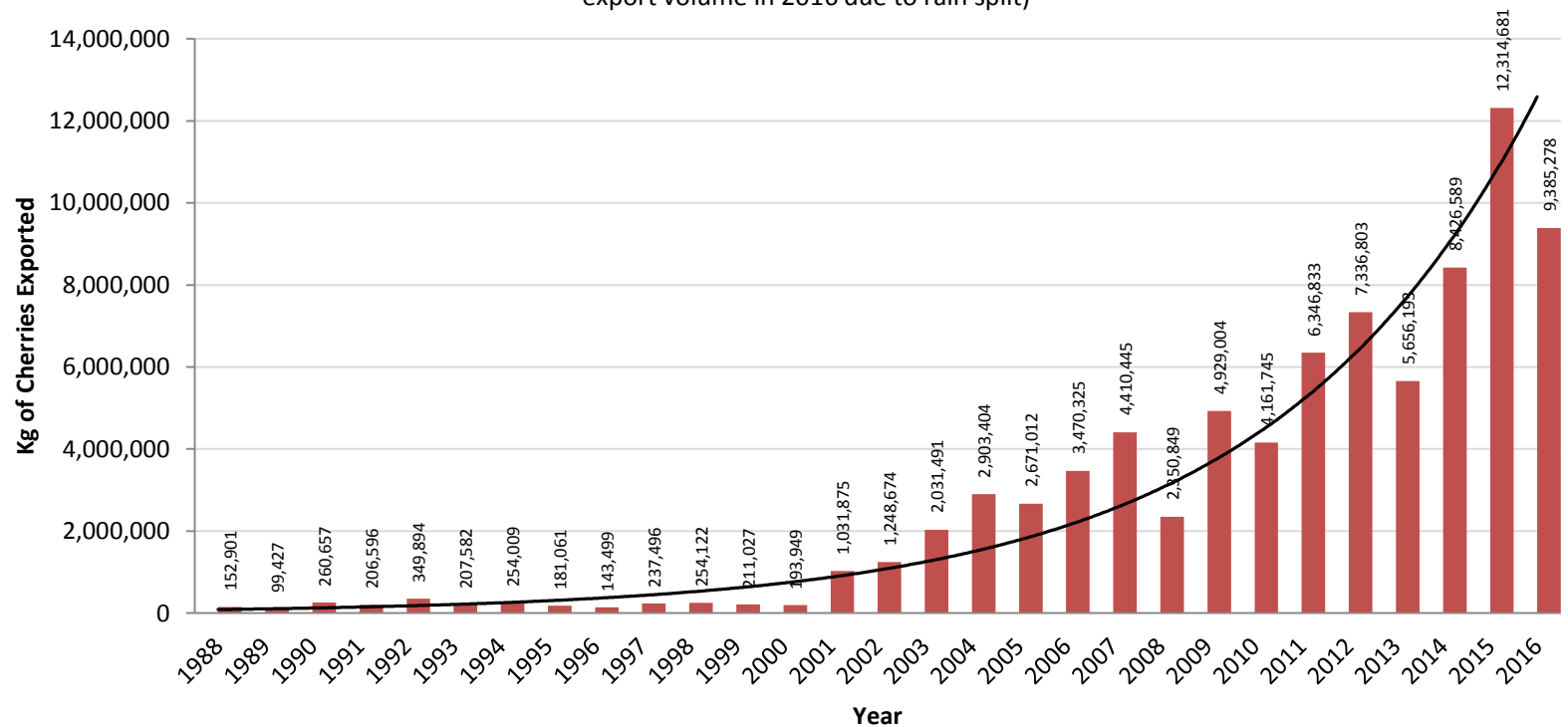


Table 1. General production information in Canada, 2016

	Sweet Cherry	Sour Cherry
Canadian production¹	16,688 metric tonnes	6,125 metric tonnes
	2,193 hectares	1,052 hectares
Farm gate value¹	\$60.3 Million	\$4.6 Million
Fresh Consumption²	0.76 kg/ person/ year	
Processed Consumption²	0.39 kg/ person/ year	
Exports³	9,403 metric tonnes	575 metric tonnes
	\$77.6 Million	\$5.3 Million
Imports³	N/A	N/A
	\$142.3 Million	\$0.2 Million

BC Cherry Exports (Quantity) to the World, 1988-2016

Demonstrates increased cherry production during the 1980's and subsequent market access to sell crop. (Note drop in export volume in 2016 due to rain split)



The Science of cherries: Summerland Research and Development Center (SuRDC)



SuDRC behind the scenes



New Cherry Variety development; details.

- 1936 breeding program starts

Dr. Karlis O Lapins (Lapins-1983)

Dr. David Lane

Dr Frank Kappel

Dr. Amirimit Singh



- 10,000 seedlings start out, 200 or so move to stage 2 and about 10-15 make it to stage three. One might succeed.
- Successful Summerland varieties include :Lapins, Van, Stardust, Staccato,, Sofia, Skeena, Santana, Satin, SPC136 (Suite Note), SPC 103 (Sentennial)
- A quick lit review suggests 85% of the world's cherries currently grown come from Summerland breeding.

Summerland cherries differ.

- Spread risk across growing season. (June-Sept)
- Dark red coloring, sweet, crisp “snap”, high sugar content and able to withstand rain events.
- Mature late to capture last of Northern Hemisphere market.
- Transport well by ship, air and truck.

Upon his retirement-this!!

Frank Kappel: 1995 to 2011

- 1997 and 1998: Sandra Rose, Santina, Skeena, Sonnet, Sonata™, Cristalina™, Samba™, Symphony
- 2000 to 2004: Satin™, Stardust™, Staccato™
- 2006: Sovereign™ and Sentennial™

King of late-season cherries!



Image courtesy of M. Weis

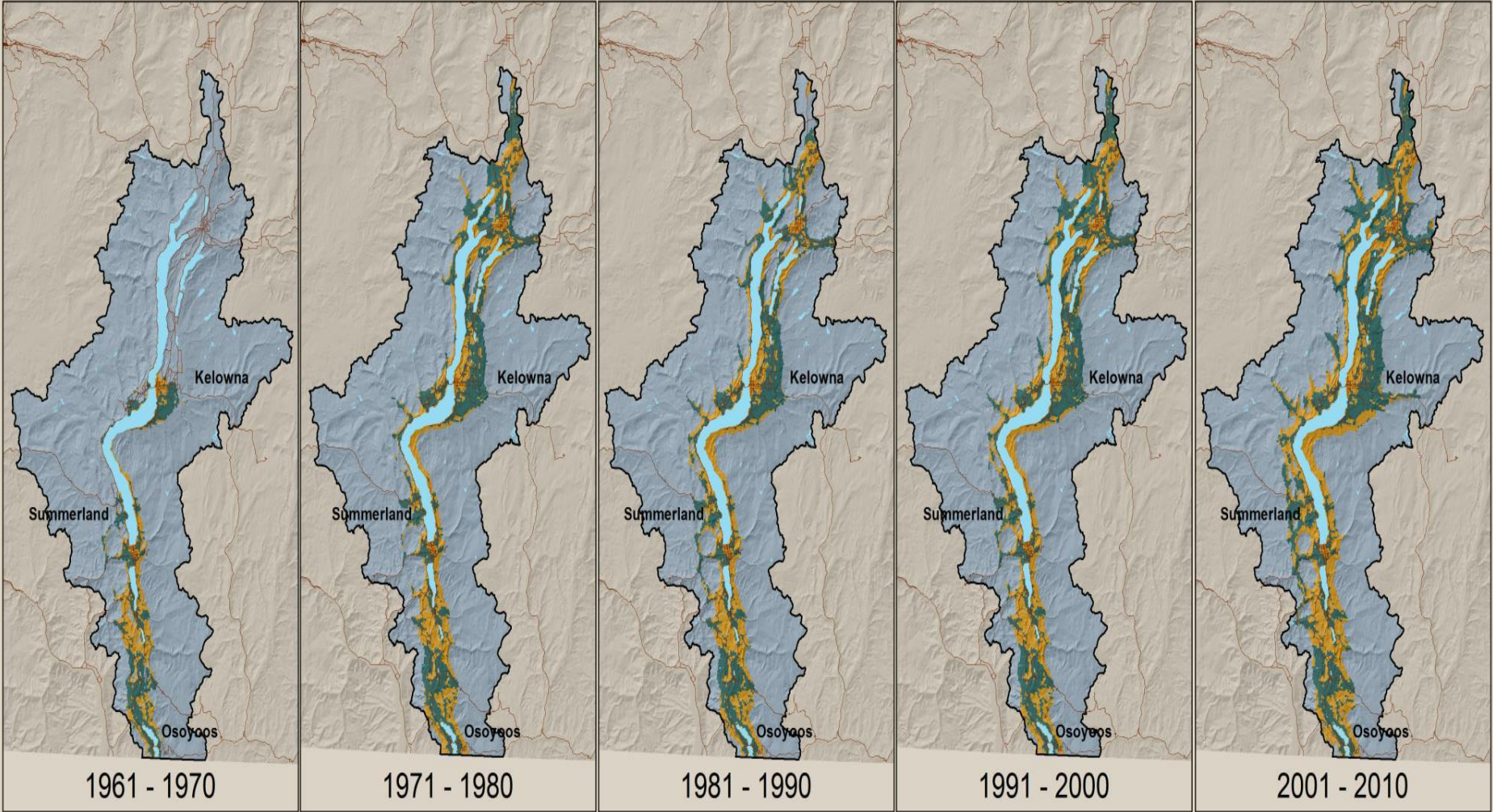
Sweet cherries - climate and soil suitability

Climate and Soil Suitable
covered by more than
65 percent suitable soils

Climate and Soil Suitable
covered by less than
65 percent suitable soils

Not Suitable

Okanagan Valley

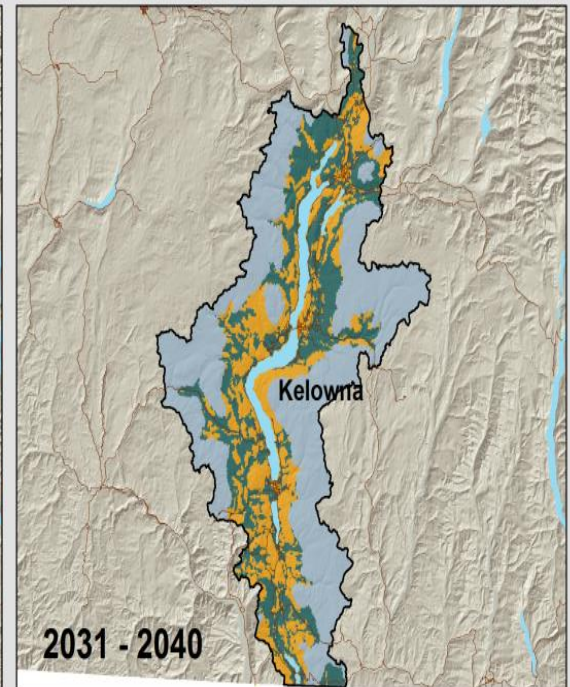
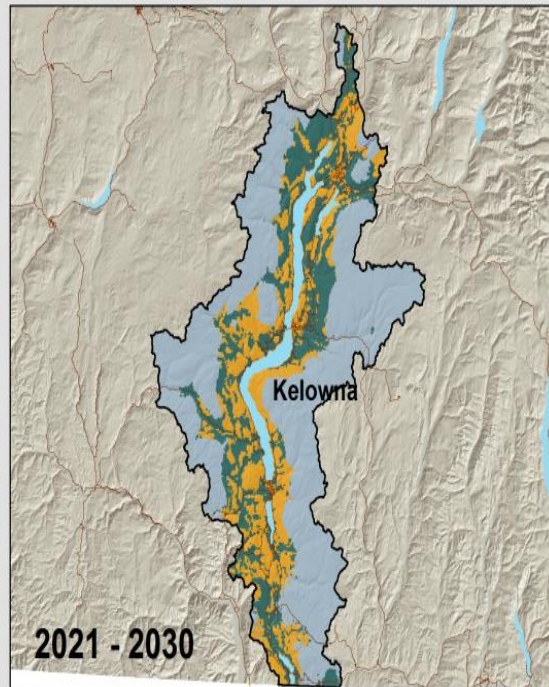
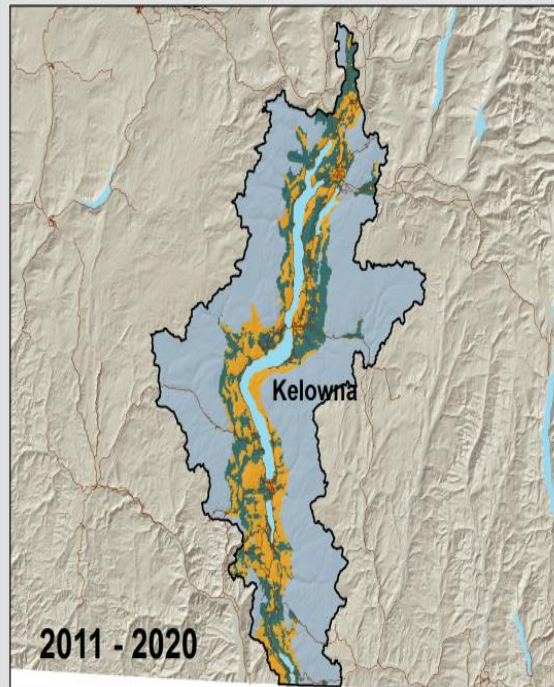


And moving to the future: the South Cariboo

OKANAGAN

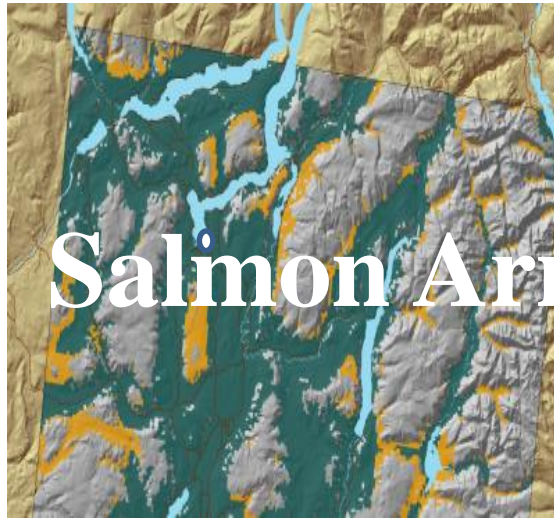
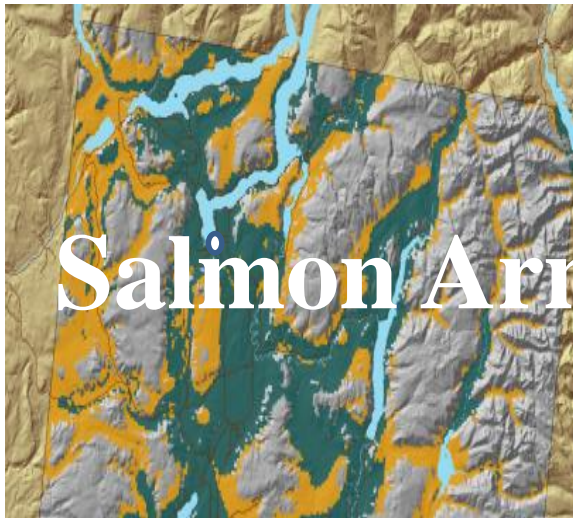
Sweetheart cherries - climate suitability CANESM85 canesm2_rcp85

- Climate and Soil Suitable
- Climate Suitable
- Unsuitable



And into the North end of the Okanagan.

- Soil and climate suitable for sweet cherry production; the industry is already there.





Climate change: a two edged sword

- Expansion of potential growing area is mainly based on lack of killing temperatures in winter. (the good edge of the sword)
- The cutting edge of the sword is that increased June rainfall requires increased input costs to ensure harvest (Vietnam year-2016)
- Helicopters (\$2000/machine/hour), wind machines, blowers, calcium sprays etc.

Market access to support and encourage production.

- Until the early 90's all cherries were consumed by local (western Canada) markets.
- In the early 90's export programming found markets in London, Taiwan and Toronto
- 2003-2012 B.C. cherries into Hong Kong...grey market access to China. (remember the graph)
- 2013 agreement with Chinese government to access market directly
- Agreements with Thailand/Vietnam for access
- Loss of France market due to dimethoate ban. (Spain/Germany?)
- 2019 access to Japan, 2020 Korea? India (cold treatment required), Australia (fumigation)
- Continued focus on California market (40 million people less than 24 hours on truck)
- The federal government in cooperation with B.C. Cherry Association has ensured market access through trade missions, good science and consultative processes to focus energy. AGRI staff assist with marketing efforts (external-ie. Fruit Logistica, PMRA etc) and hosting brokers/trade missions (internal). We also administer the export program to California...

And a little luck (synergy)...just to finish up.

- Climate change has been moving in a direction beneficial to the industry. It is measured, mapped and made known to the industry.
- Cherry breeding programs which are “years long” efforts delivered on time and where the market wanted it.
- Government programming focussed on accessing markets was in step with increased production.

The secret bits: on the horizon

- Marketers will work to differentiate Canadian cherries from others who we compete against. As well, cherries will go from a “commodity” to variety selection by consumers. (i.e I like Sentennials, but do not like Suite Notes)
- The Federal government will negotiate an agreement with France to allow dimethoate registered countries to export cherries to France again.
- Continued focus on access to California markets and ultimately Mexico will ensure diverse marketing opportunities for B.C. cherry growers.
- Trade agreements will be negotiated with South Korea and other S.E. Asian countries with stable or developing middle classes.
- The industry will continue to push north challenging BRMB programming and keep our R.A’s busy in FIRB hearings and the rural/urban interface.

Questions?

Carl Withler (a.k.a. Tin-Tin)

Industry Specialist: Treefruits and Grapes

Kelowna, B.C.

250-861-7229

Carl.Withler@gov.bc.ca