Northern-Hardy Fruit Evaluation Project: 2016 Production

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In 2016, the Fruit Project interacted with approximately 1000 people through tours, presentations and consultations. Since the project started in 2006, over 8,200 people have received some kind of information from CREC regarding hardy fruits. Overall, 78% of our contacts are made through speaking engagements, with the remainder consisting of tours, emails and phone calls. This year, 1,624 pounds of fruit was available for product use by processors. Production was reduced by hail and fruit fly damage.

Fall 2015 tended toward dry with 1.68 inches of rain from September 1 until November 1. Only 17 nights were below zero, with the majority of those coming in January 2016. Snow depth was light, though better in the orchard than the surrounding area; a total of 35.9 inches of snow fell in 2015-16. Conditions were warmer than the average from March through May when plants began to grow. A cold period developed May 13 to 15 with a low of 25° F on May 14. Despite the freeze, there were no widespread reports of crop injury in the area nor much blossom and fruit loss in the orchard.

Summer was dry with 3 inches of rain from May through July 1, and a remaining 8 inches through August. Irrigation was applied to selected crops in early July. Fruit developed early this year and on July 9, most of it was injured by hail. Approximately 50% of currants and 70% of cherries were lost. Some fruit fell off and some was bruised or cut open on the plants. Spotted Wing Drosophila and other fruit flies and picnic beetles were attracted to the rotting fruit. Apples and plums were damaged but it is hard to estimate the extent as some were discarded immediately while some were left but then removed later when damage became more apparent. Fall 2016 was again dry with only 2.4 inches of rain falling since September 1. Temperatures were above normal through November 15.

Plants in the fruit project are starting to be removed if they are less than desirable due to hardiness or fruit quality/production. Over half the grapes have been removed after numerous winter injury events caused them to require special care for years, as well as their need for standard time-consuming care. Older honeyberries that don't produce well are being thinned out. Currant varieties that are cold-susceptible or don't grow in a way that makes harvest easy are also being removed.

Notable Events in the Fruit Orchard:

- Both spring and fall high temperatures were about 3°F warmer than the 30-year average while the low temperatures in this period were 4°F warmer.
- Juneberry production doubled to 762 pounds despite heavy height-and renewal-pruning.
- Hail reduced currant and cherry crops by approximately 50 and 70%, respectively.
- Spotted Wing Drosophila fruit flies were noticeable in the orchard July 8. Juneberry and early cherries were slightly affected and later cherries and currants were severely affected with crop loss. Ripening coincided with rains and it was hard to know if insecticides were ineffective or washed off.

Half the currant and Juneberry trials were irrigated once before it started raining in July. Production has not yet been affected by irrigation, though we are not applying maximum water.

Northern Hardy Fruit Project - Yearly Production Records

		No. of plants	2013		2014		2015		2016	
			Date	pounds	Date	pounds	Date	pounds	Date	pounds
Aronia	Nero	4	27-Aug	53.0	11-Sep	16.8	31-Aug	25.7	9/3-6	54.5
	Raintree Seedling	4	27-Aug	59.6	11-Sep	29.6	28-Aug	17.8	2-Sep	52.1
	Raintree Select	4	27-Aug	53.3	11-Sep	28.9	1-Sep	21.4	6-Sep	60.0
	Viking	4	28-Aug	55.6	11-Sep	19.1	1-Sep	19.7	9/2-7	63.2
	McKenzie	4	29-Aug	15.6	11-Sep	22.5	2-Sep	0.9	7-Sep	42.0
	Galicjanka	4							6-Sep	3.6
				237.1		**116.9**		**85.5**		**275.4**
							Freeze, hail, wind - All			
Hardy Cherries	SK Carmine Jewel	12	30-Jul	359.4	28-Jul	1.3	x	x	13-Jul	93.1
	SK Crimson Passion	12	1-Aug	3.2	28-Jul	2.4	x	x		32.2
				362.6		**3.7**		**0.0**		**125.3**
	2014 *- CJ crop apx. 7lb per shrub prior to Field Day tasting, high wind, birds and slight SWD damage*								*hail, SWD 70% loss*	
	Evans / Bali	3	5-Aug	**13.2**	x	**0.0**	x	**0.0**	19-Jul	**17.3**
	Reduced to 2 trees in 2013		*bird depredation: > 70%*						*hail, SWD 70% loss*	
Black Currant	*Ben Sarek*	12	x	x	x	x	x	x	x	x
Variety Trial	*Black Down*	16	22-Aug	64.6	11-Aug	74.2	x	x	7/22-28	36.7
	Hilltop Baldwin	16	13-Aug	11.1	8-Aug	15.9	x	x	25-Jul	17.5
	Swedish Black	11	9-Aug	30.9	29-Jul	41.0	x	x	15-Jul	x
	Titania	15	19-Aug	131.9	7-Aug	107.9	x	x	25-Jul	20.1
	Whistler	12	23-Aug	26.7	29-Jul	59.9	x	x	7/27-28	53.0
				265.2		**298.9**		**0.0**		**127.3**
	Whistler replaced Ben Sarek 2011								*hail, SWD ≥ 50% loss*	
Black Currant	*Blackcomb*	15							1-Aug	6.3
New	*Cheakamus*	15							28-Jul	6.7
Variety Trial	*Stikine*	15							1-Aug	0.1
	Tahsis	15							28-Jul	2.8
	Tiben	15							1-Aug	3.8
	Tofino	14							10-Aug	3.0
	Nechako -2 ft space	7							15-Aug	2.5
	Nechako -3 ft space	7							15-Aug	3.5
										28.7
	Whistler replaced Ben Sarek 2011								*hail, SWD ≥ 50% loss*	
Black Currant	Ben Lomand	4	14-Aug	6.6	1-Aug	11.9	x	x	26-Jul	8.3
	Blackcomb	4	22-Aug	4.1	4-Aug	13.3	x	x	26-Jul	21.4
	Champion	4	12-Aug	12.9	11-Aug	5.6	x	x	26-Jul	6.7
	Consort	4	x	x	x	x	x	x	x	x
	Minaj Smyriou	4	8-Aug	30.4	7/31-8/1	34.7	x	x	26-Jul	3.2
				54.0		**65.5**		**0.0**		**39.6**
	Blackcomb replaced Consort 2011								*hail, SWD ≥ 50% loss*	
Red Currant	Jhonkheer Van Tets	4	8-Aug	17.8	30-Jul	29.8	x	x	21-Jul	42.9
	Red Lake	4	8/13	37.0	1-Aug	x	x	x	x	x
	Redstart	4	14-Aug	21.5	8-Aug	19.0	x	x	x	x
	Rosetta	4	8/15	31.6	8/4-11	38.7	x	x	26-Jul	20.9
	Rovada	4	8/15	37.5	12-Aug	34.8	x	x	27-Jul	52.3
				145.4		**122.4**		**0.0**		**116.1**

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		No. of plants	2013		2014		2015		2016	
			Date	pounds	Date	pounds	Date	pounds	Date	pounds
White Currant	Blanka	4	14-Aug	40.4	31-Jul	30.8	x	x	22-Jul	15.0
	Swedish White	4	2-Aug	48.8	7/25-28	53.0	x	x	21-Jul	20.5
				89.2		**83.8**		**0.0**		**35.5**
									SWD loss	
Ore. Haskap	22-37	3/ 2 2016	15-Jul	7.0	17-Jul	3.6	7-Jul	1.8	1-Jul	5.8
	41-100	3/ 1 2016	22-Jul	4.4	17-Jul	8.8	7-Jul	1.8	30-Jun	3.0
	43-87	3/ 2 2016	15-Jul	5.3	14-Jul	1.8	1-Jul	2.0	30-Jun	1.2
	43-97	3/ 2 2016	20-Jul	4.1	17-Jul	4.2	9-Jul	2.3	5-Jul	3.6
	45-57	3/ 1 2016	18-Jul	5.7	17-Jul	2.2	9-Jul	1.6	5-Jul	1.2
	85-26	3/ 2 2016	22-Jul	7.0	14-Jul	9.0	7-Jul	8.3	5-Jul	8.8
	20-04	3							30-Jun	3.8
	21-20	3							6-Jul	1.9
	22-14	3							6-Jul	2.8
	22-26	3							6-Jul	3.4
	41-75	3							6-Jul	3.7
	44-19	3							6-Jul	2.2
	57-49	3							6-Jul	4.6
	88-92	3							30-Jun	2.0
	88-102	2							30-Jun	0.9
	108-23	3							30-Jun	4.8
	131-08	3							6-Jul	2.8
	142-30	3							6-Jul	1.9
				33.5		**29.5**		**17.8**		**58.4**
					Wind loss 43-87, all					
Rus. Honeyberry	Berry Blue	4	10-Jul	4.6	6/27-7/1	26.0	30-Jun	7.5	21-Jun	12.4
	Blue Belle	4	10-Jul	3.7	6/18-26	23.5	6/22-25	12.4	13-Jun	10.1
	Blue Moon	4	22-Jul	9.9	25-Jul	10.6	x	x	x	x
	Blue Velvet	4/ 2 2016	22-Jul	6.7	x	x	x	x	1-Jul	1.8
	Kamchatka	4	x	x	6/20-26	17.1	25-Jun	7.4	15-Jun	9.2
	Cinderella	4	x	x	x	x	22-Jun	1.3	14-Jun	6.0
				24.9		**77.2**		**28.6**		**39.5**
					Wind loss B Blue					
Haskaps	Borealis	4/ 2 2016	15-Jul	7.9	9-Jul	4.6	7-Jul	0.8	30-Jun	0.7
- Canadian	Tundra	5/ 3 2016	15-Jul	3.6	3-Jul	6.0	1-Jul	2.8	27-Jun	2.8
	Indigo Gem (9-15)	5/ 4 2016	11-Jul	4.4	2-Jul	12.3	1-Jul	6.1	22-Jun	12.4
	Indigo Treat (9-91)	5/ 2 2016	15-Jul	0.6	3-Jul	1.2	7-Jul	0.2	27-Jun	0.5
				16.5		**24.2**		**9.9**		**16.4**
					Wind loss Tundra, Treat					
Juneberry	*Honeywood*	20	17-Jul	86.8	16-Jul	53.3	7/16-20	19.5	7/9-12	144.6
Variety Trial	*JB30*	20	to	73.1	to	28.3	7/9-10	25.4	7/6-7	174.3
	Martin	20	25-Jul	55.6	17-Jul	36.6	7/9-10	32.5	7/5-7	131.4
	Smoky	20		102.7		19.8	7/16-19	71.8	7/8-12	147.3
	Thiessen	20		66.3		32.5	7/9-13	35.4	7/5-8	164.9
				384.5		**170.4**		**184.6**		**762.5**
					Pruned spring 2014		*Freeze, hail, wind - All*		*Some SWD after 7/8*	

The Project was planted in 2007, except Juneberries 2006.