



VineAlert Grape Bud Survival Results 2014/15

March 11, 2015



Brock University

As part of the VineAlert 2015 program, we are providing this bud survival data in response to the cold temperatures experienced across Ontario during potentially damaging events in January and February depending on location and topography. The lowest temperatures during each event were recorded during the early morning hours of January 14, 2015 as well as February 13, 16, 17 & 20, 2015. The following data has been accumulated through on-site sampling at participating VineAlert grower co-operators and real time bud hardiness and bud survival data can be accessed directly through the Tender Fruit Alert website located at <http://www.ccovi.ca/vine-alert>

The most recent data in the below charts reflect samples that were collected from March 2 to March 11, 2015 and will only reflect the damage present up to each location sample date. Be aware that wind machine effects were only investigated during the January 2015 sampling round. All bud survival samples, following the January sampling round, have been sampled from the same blocks however, canes selected for these samples were randomly selected and may or may not be influenced by a wind machine. Another bud survival sampling round will be conducted in April 2015 and wind machine influence will again be investigated at that time.

NIAGARA RIVER

The Niagara River sub-appellation is a small strip of land running along the Niagara river from old town Niagara-on-the-Lake south to Queenston and inland (west) approximately one kilometer.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	NR1	Y	95	58	54
	NR1	N	82		
	NR2	Y	90	59	23
	NR2	N	88		
Cabernet Franc	NR1	Y	86	47	51
	NR1	N	72		
	NR2	Y	79	55	32
	NR2	N	70		
Syrah	NR2	Y	67	47	NS
	NR2	N	63		
Sauvignon Blanc	NR2	Y	77	61	23
Riesling	NR1	Y	85	66	56
	NR1	N	84		

FOUR MILE CREEK

The Four Mile Creek sub-appellation makes up central Niagara-on-the-Lake. It lies slightly inland from the lake and below the bench of the Niagara Escarpment.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	FMC1	Y	90	69	28
	FMC1	N	88		
	FMC2	Y	73	48	46
Cabernet Franc	FMC1	Y	87	60	40
	FMC1	N	76		
	FMC2	Y	86	56	49
	FMC4	Y	81	66	64
	FMC5	Y	76	NS	NS
Merlot	FMC4	Y	82	58	57
	FMC6	Y	10	NS	NS
	FMC6	N	9		
Pinot Noir	FMC4	Y	86	65	NS
Sauvignon Blanc	FMC4	Y	81	65	60
Riesling	FMC4	Y	88	66	65
	FMC5	Y	87	NS	NS
Cabernet Sauvignon	FMC4	Y	89	64	63

NIAGARA LAKESHORE

Niagara Lakeshore sub-appellation follows the shoreline of Lake Ontario from the Welland Canal east to the Niagara River and inland for approximately 3 kilometers.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	NL1	N	80	85	45
	NL2	Y	78	76	31
Cabernet Franc	NL1	Y	79	63	28
	NL2	Y	37	79	47
Merlot	NL1	Y	80	75	57
	NL3	Y	33	NS	37
Pinot Noir	NL3	N	75	71	44
Sauvignon Blanc	NL3	Y	52	NS	10
	NL3	N	36		
	NL4	Y	12	NS	12
Riesling	NL3	Y	87	NS	26
	NL3	N	74		

ST. DAVID'S BENCH

St. David's Bench lies 10 km south of the shore of Lake Ontario and follows the contour lines that define the Niagara escarpment east of the Welland Canal to the Niagara River, with a complex topography.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	SDB1	Y	84	40	59
	SDB2	N	89	65	50
	SDB3	Y	88	75	NS
Cabernet Franc	SDB1	Y	71	37	62
	SDB2	N	65	50	48
Merlot	SDB1	Y	81	35	67
Pinot Noir	SDB1	Y	74	39	70
	SDB3	Y	88	72	NS
Syrah	SDB3	Y	72	52	NS
Sauvignon Blanc	SDB1	Y	70	38	55

CREEK SHORES

The Creek Shores sub-appellation is situated immediately west of St. Catharines with Lake Ontario to the north, Twelve Mile Creek to the east, Twenty Mile Creek and Jordan Harbour to the west.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	CS1	N	29	21	20
	CS2	N	47	23	42
Cabernet Franc	CS2	N	61	13	36
	CS3	Y	61	19	39
Merlot	CS1	N	76	20	37
Pinot Noir	CS1	N	78	18	59
Syrah	CS1	N	50	23	NS
Riesling	CS4	N	53	25	40
Cabernet Sauvignon	CS2	N	48	49	43
	CS4	N	65	19	29

SHORT HILLS BENCH

Short Hills Bench sub-appellation encompasses the land rising up from the plain of the peninsula (south of the Regional Road 81) to the Escarpment Brow and situated between Twelve Mile Creek and Fifteen Mile Creek.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	SHB1	Y	90	24	30
	SHB1	N	86		
	SHB2	Y	89	25	54
Cabernet Franc	SHB1	Y	93	22	45
	SHB1	N	71		
	SHB2	Y	76	23	57
Merlot	SHB1	Y	86	62	52
Sauvignon Blanc	SHB1	Y	94	16	42
	SHB1	N	91		
Riesling	SHB1	Y	88	73	64

TWENTY MILE BENCH

The Twenty Mile Bench area stretches east to west from Fifteen Mile Creek to west of Cherry Avenue (Vineland). Bisected by Twenty Mile Creek, it has a distinctive double bench formation west of Twenty Mile Creek, and short, varied slopes that roll to the brow of the escarpment.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	TMB1	Y	85	21	27
	TMB1	N	80		
	TMB2	N	46	22	37
Cabernet Franc	TMB1	Y	92	35	43
	TMB1	N	45		
	TMB2	N	54	13	33
Sauvignon Blanc	TMB1	Y	70	24	45
	TMB1	N	66		

LINCOLN LAKESHORE

The Lincoln Lakeshore sub-appellation runs along the Lake Ontario shore from Winona Road to Jordan Harbour and Twenty Mile Creek. This area is backed by the foot of the escarpment bench on its south boundary.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	LL1	N	87	29	57
	LL2	N	89	15	29
Cabernet Franc	LL1	N	72	33	40
	LL2	N	74	23	43
Merlot	LL2	N	83	29	20
Pinot Noir	LL2	N	71	53	50

BEAMSVILLE BENCH

The Beamsville Bench, runs along the Niagara escarpment from just west of Cherry Avenue to Park Road west of Beamville. This is the narrow plateau sloping gradually from the cliff of the Niagara Escarpment northwards to Regional Road 81.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	BB1	N	88	19	48
	BB2	N	85	51	32
Cabernet Franc	BB1	N	63	29	36
	BB2	N	68	51	64
Riesling	BB2	N	89	51	62

VINEMOUNT RIDGE

Vinemount Ridge lies just above and south of the brow of the Niagara Escarpment. This appellation covers two prominent geological features - the Fonthill Kame to the east and the Vinemount Moraine on its western edge.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	VR1	Y	87	14	13
	VR1	N	75		
	VR2	N	58	10	31
Cabernet Franc	VR1	Y	59	20	41
	VR1	N	39		
	VR2	N	50	17	37
Riesling	VR2	N	51	32	27

LAKE ERIE NORTH SHORE

COLCHESTER

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	LENS1	Y	95	NS	9
	LENS 4	Y	97	82	9
	LENS6	Y	NS	38	3
Cabernet Franc	LENS1	Y	95	NS	6
	LENS4	Y	97	80	13
Merlot	LENS1	Y	92	NS	4
	LENS4	Y	97	76	2
	LENS6	Y	NS	12	4
Pinot Noir	LENS2	Y	NS	NS	33
Sauvignon blanc	LENS1	Y	94	77	7
Riesling	LENS2	Y	NS	NS	15
	LENS4	Y	92	61	30
Cabernet Sauvignon	LENS6	Y	NS	28	6
Gewurztraminer	LENS6	Y	NS	23	2
HG01	LENS4	Y	NS	NS	23
HG04	LENS4	Y	NS	NS	31

KINGSVILLE

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Jan 20-28	Feb 17-25	Mar 2-11
Chardonnay	LENS3	Y	98	77	8
Cabernet franc	LENS3	Y	95	74	7

PRINCE EDWARD COUNTY
HILLIER

Note: Bud survival data in Prince Edward County are sampled from exposed canes and do not represent bud survival below ground on any buried canes.

Cultivar	Grower Code	WM Influence	% Primary Buds Alive 2015		
			Dec 1	Feb 17-25	Mar 2-11
Chardonnay	PEC1	N	95	NS	3
	PEC2	N	99		
Cabernet Franc	PEC1	N	99	NS	3
	PEC2	N	92		
Pinot noir	PEC1	N	97	NS	2
	PEC2	N	94		
Riesling	PEC2	N	97	NS	4

