



VineAlert Grape Bud Survival Results 2017/18

January 18, 2018



As part of the Vine Alert 2017/18 program, we are providing this bud survival data in response to the cold temperatures experienced across Ontario in December and early January 2018. The lowest temperatures recorded during each of the cold events are displayed in the table below. For growers reviewing this information, be aware that these temperatures are reflective of the location where they were recorded and may not be representative of what was experienced at your individual location(s).

Sub-Appellation	Lowest Recorded Temperature (°C)		
	Dec. 14-15, 2017	Dec. 27, 2017 –Jan. 1, 2018	Jan. 4-7, 2018
NOTL Niagara River	-13.6	-18.9	-18.5
NOTL Four Mile Creek	-17.3	-18.9	-19.8
NOTL Lakeshore	-16.4	-16.8	-18.9
NOTL St. David's Bench	-16.8	-19.9	-19.5
Creek Shores	-17.0	-22.1	-21.3
Lincoln Lakeshore	-14.0	-23.5	-22.3
Short Hills Bench	-14.8	-22.6	-21.2
Twenty Mile Bench	-14.7	-21.4	-21.5
Beamsville Bench	-13.6	-22.6	-22.1
Vinemount Ridge	-17.6	-24.7	-24.6
Colchester	-19.2	-19.0	-23.0
Hillier	-18.0	-31.3	-29.2

Source - Weather INnovations Consulting (<http://www.vineandtreefruitinnovations.com/>)

The data in the below charts reflect samples that were collected between January 8-18, 2018 and will only reflect the damage present up to each locations sample date. The following data has been accumulated through on-site sampling at participating VineAlert grower co-operator vineyards and real time bud hardiness and bud survival data can be accessed directly through the VineAlert website located at <http://www.ccovi.ca/vine-alert>.

NIAGARA RIVER

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

Cultivar	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	93	79
	91	57
Cabernet Franc	93	72
	87	40
Syrah	57	30
Sauvignon Blanc	87	53
Riesling	95	74

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	89	57
	90	62
Cabernet Franc	88	57
	92	76
Merlot	85	57
Pinot Noir	90	69
Sauvignon Blanc	83	58
Riesling	85	67
Cabernet Sauvignon	87	69

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	90	61
	89	67
Cabernet Franc	86	49
	88	62
Merlot	96	72
Pinot Noir	94	64

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	92	72
	94	71
Cabernet Franc	89	64
	88	84
Merlot	97	88
Pinot Noir	98	63
Syrah	65	31
Sauvignon Blanc	84	60

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	71	60
	87	74
Cabernet Franc	88	78
	81	63
Merlot	91	63
Pinot Noir	93	78
Syrah	71	47
Riesling	79	67
Cabernet Sauvignon	88	60

LINCOLN LAKESHORE

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

Cultivar	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	87	74
	88	55
Cabernet Franc	87	77
	83	52
Merlot	92	57
Pinot Noir	91	58
Riesling	77	58
Sauvignon blanc	78	30
Cabernet Sauvignon	84	61

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	93	76
	85	71
Cabernet Franc	78	69
	79	60
Merlot	85	26
Sauvignon Blanc	73	68
Riesling	87	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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	87	79
	93	78
Cabernet Franc	81	78
	91	71
Sauvignon Blanc	74	72

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	83	61
	87	62
Cabernet Franc	78	57
	81	61
Riesling	89	76

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	82	27
	77	62
Cabernet Franc	81	47
	61	42
Riesling	73	49

LAKE ERIE NORTH SHORE
COLCHESTER

Cultivar	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	83	65
	82	70
Cabernet Franc	85	68
	75	40
Riesling	84	63
Merlot	80	46
Cabernet Sauvignon	100	70
Syrah	60	5
Sauvignon blanc	74	37

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	% Primary Buds Alive Dec 11-21, 2017	% Primary Buds Alive Jan 8-18, 2018
Chardonnay	65	2
Cabernet Franc	68	1
Riesling	56	3
Pinot noir	66	5



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