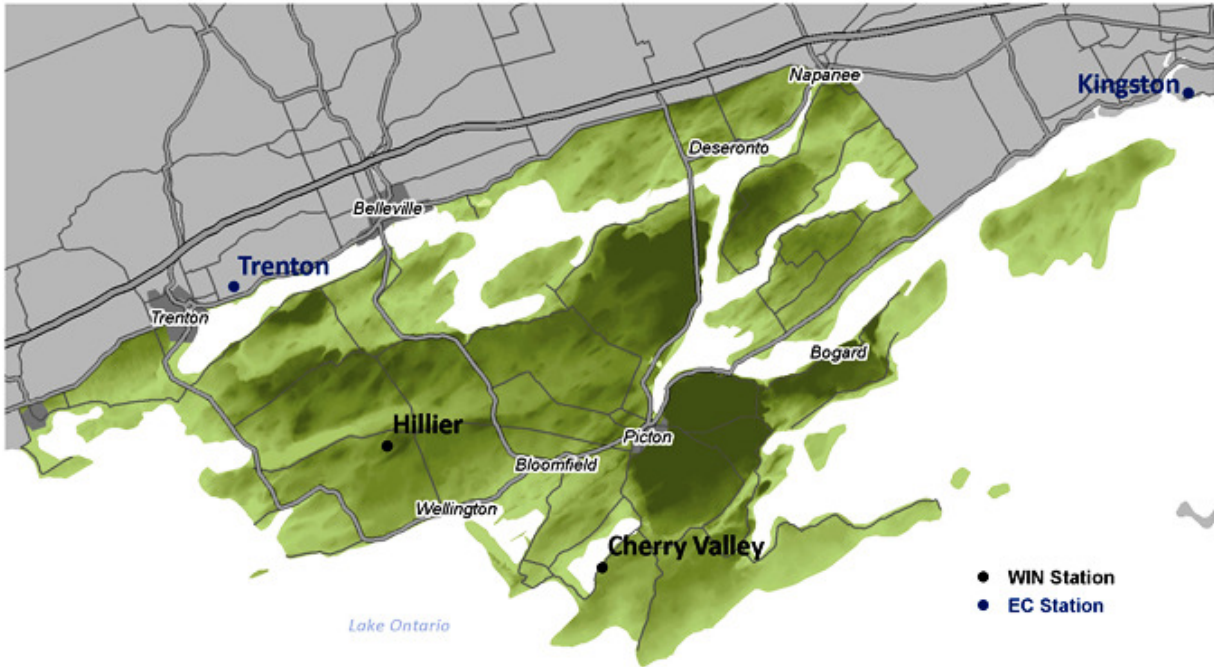




**Weather INnovations Incorporated**



# December 2010: Temperature & Icewine Hours Summary

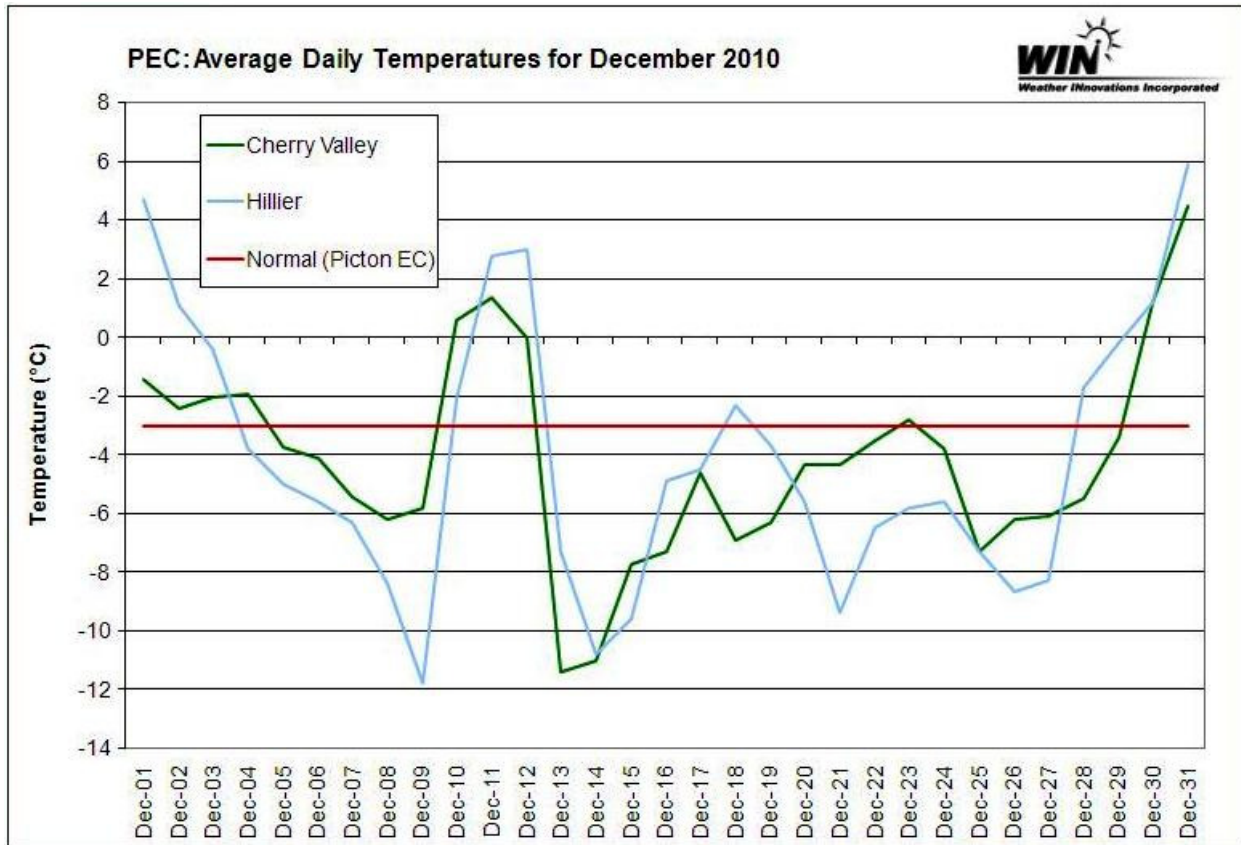
## Prince Edward County

WIN Staff  
January 13, 2011



### OVERVIEW

A colder than normal December 2010 meant an early harvest for producers in the Prince Edward County appellation, who chose to make icewine this year. The average monthly temperature was  $-4.1^{\circ}\text{C}$  at both Hillier and Cherry Valley:  $1.1^{\circ}\text{C}$  below normal. This is in contrast to December 2009, where conditions were slightly above normal:  $0.5^{\circ}\text{C}$  above normal at Cherry Valley and  $0.2^{\circ}\text{C}$  above normal at Hillier. These statistics are based on Environment Canada's 30-year normal for Picton. This summary illustrates minimum December 2010 temperatures, as well as the icewine harvest opportunities that arose. For this report, icewine hours are defined as instances when the average hourly temperature was between  $-8.0^{\circ}\text{C}$  and  $-12.0^{\circ}\text{C}$ , inclusive. Events are focused at opportunities encompassing a minimum 6 hour period.



### TEMPERATURE ANALYSIS

The monthly minimum temperature for each site in December 2010 was -14.4°C at the Cherry Valley station (compared to -18.0°C in December 2009) and -16.9°C at the Hillier station (compared to -18.1°C in December 2009). Therefore, although average temperatures for December 2010 were colder than in December 2009, the monthly minimum temperatures remained warmer. There were 18 days when temperatures, at one or more stations, dipped into ice wine temperature ranges (compared to only 12 days in December 2009).

<b>Date &amp; Time</b>	<b>Cherry Valley</b>	<b>Hillier</b>
1-Dec	-3.7	0.1
2-Dec	-3.6	-0.2
3-Dec	-3.8	-3.5
4-Dec	-5.1	-6.8
5-Dec	-5.6	-6.8
6-Dec	-6.1	-7.2
7-Dec	-6.7	-9.2
8-Dec	-9.3	-12.9
9-Dec	-11.3	-15.8
10-Dec	-1.8	-13.4
11-Dec	-5.3	-0.6
12-Dec	-6.9	-0.4
13-Dec	-13.1	-11.5
14-Dec	-14.4	-12.6
15-Dec	-11.7	-13.4
16-Dec	-11.3	-8
17-Dec	-7.4	-9.7
18-Dec	-9.1	-3.4
19-Dec	-7.6	-4.6
20-Dec	-7.2	-16.8
21-Dec	-7	-16.9
22-Dec	-5.7	-14
23-Dec	-4.1	-9.7
24-Dec	-4.3	-10.4
25-Dec	-8.9	-8.9
26-Dec	-7.1	-10.6
27-Dec	-8.6	-12.3
28-Dec	-7.8	-5.6
29-Dec	-6.9	-1.4
30-Dec	-0.2	-4.6
31-Dec	1.9	3.4

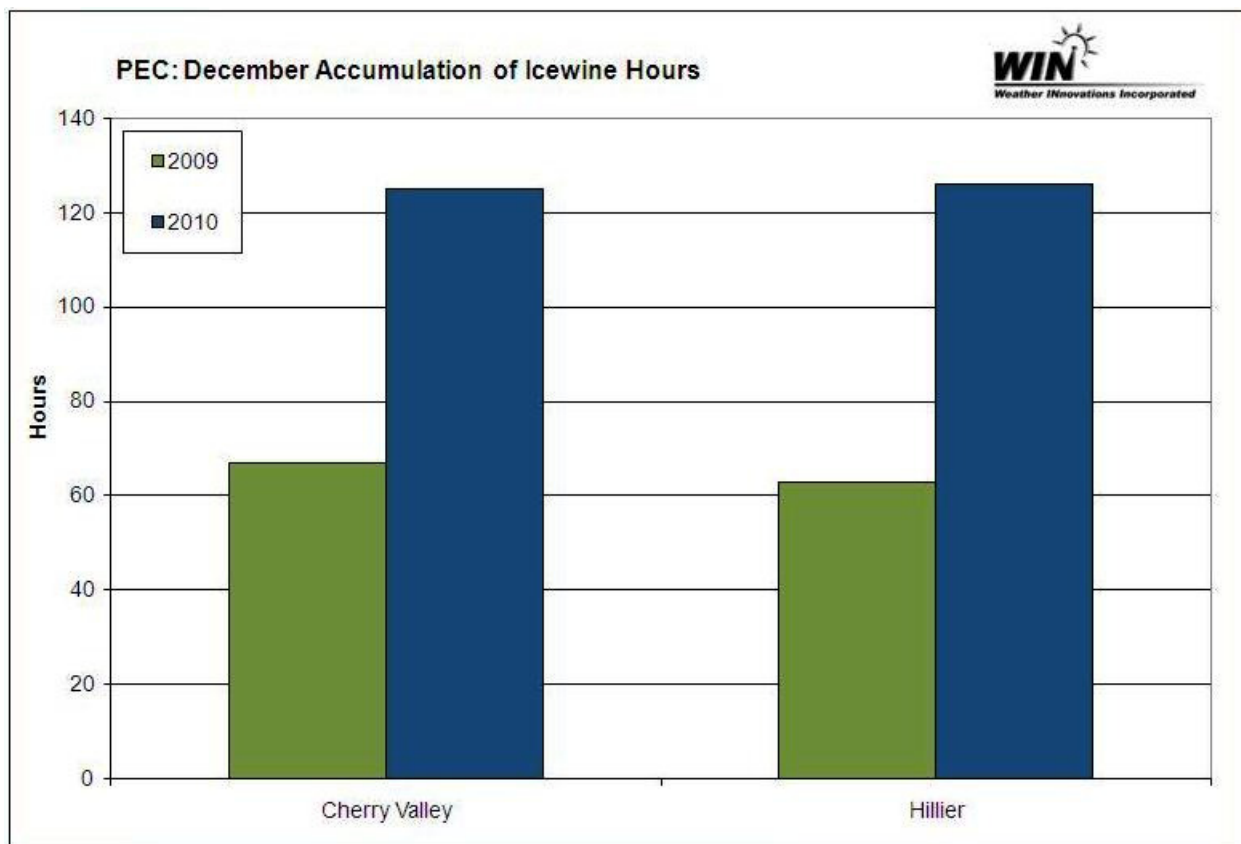
  

	Icewine Temperatures
	Below Icewine Temperatures



## ICEWINE HOURS ANALYSIS

There were a high number of suitably cold hours at each location for harvesting icewine grapes in December 2010; nearly twice as many hours as the previous December! The Cherry Valley station recorded 125 hours (compared to 67 hours in December 2009) and the Hillier station recorded 126 hours (compared to 63 hours in December 2009). The monthly accumulation of icewine hours between the two stations varied minimally in both December 2009 and 2010, as seen in the following figure.




## SUMMARY

December 2010 temperatures were below normal; average temperatures for the month were 1.1 °C below the 30-year normal for Picton. The coldest December event took place on the 21<sup>st</sup> of December, reaching -16.9°C at the Hillier station. This was actually warmer than the previous year when the coldest December event reached -18.1°C at the Hillier station. There were 18 days when temperatures, at one or more stations, dipped into ice wine temperature ranges. These conditions provided an early harvest for growers who chose to produce icewine this year. In addition, the monthly minimum was reasonably warm, rendering nearly ideal December conditions for 2010.

APPENDIX - Potential Icewine Harvest Opportunities for Prince Edward County:

PEC: Icewine Opportunities (6 Hour Minimum)		
Date & Time	Cherry Valley	Hillier
<b>Potential Icewine Opportunity</b>		
12/7/2010 22:00	-6.6	-6.8
12/7/2010 23:00	-7	-7.5
12/8/2010 0:00	-7.4	-8.6
12/8/2010 1:00	-7.5	-9.7
12/8/2010 2:00	-7.8	-9.1
12/8/2010 3:00	-8.2	-9.5
12/8/2010 4:00	-8.6	-9.6
12/8/2010 5:00	-9	-9.8
12/8/2010 6:00	-9.2	-10
12/8/2010 7:00	-9.5	-9.6
12/8/2010 8:00	-9.6	-10.4
12/8/2010 9:00	-9.8	-10
12/8/2010 10:00	-9	-8.4
12/8/2010 11:00	-7.9	-7.1
12/8/2010 12:00	-6.9	-5.9
<b>Potential Icewine Opportunity</b>		
12/8/2010 17:00	-6.8	-7
12/8/2010 18:00	-6.9	-7.6
12/8/2010 19:00	-7.3	-8
12/8/2010 20:00	-7.5	-8.2
12/8/2010 21:00	-8	-9
12/8/2010 22:00	-9	-9.9
12/8/2010 23:00	-10	-10.4
12/9/2010 0:00	-11	-12
12/9/2010 1:00	-11.3	-12.9
12/9/2010 2:00	-10.8	-11
12/9/2010 3:00	-10.4	-11.6
12/9/2010 4:00	-10.7	-12.3
12/9/2010 5:00	-11.4	-12.7
12/9/2010 6:00	-12.1	-15.1
12/9/2010 7:00	-12.9	-15.2
12/9/2010 8:00	-14.4	-14.7
12/9/2010 9:00	-12.5	-12.1
12/9/2010 10:00	-10.8	-10.2
12/9/2010 11:00	-9.3	-9.3
12/9/2010 12:00	-8.8	-8.4
12/9/2010 13:00	-8.2	-7.6



	Icewine Temperatures
	Below Icewine Temperatures

### PEC: Icewine Opportunities (6 Hour Minimum)

Date & Time	Cherry Valley	Hillier
12/9/2010 14:00	-7.3	-7
12/9/2010 15:00	-7.2	-6.7
12/9/2010 16:00	-7.6	-7.1
12/9/2010 17:00	-8.9	-9
12/9/2010 18:00	-11.4	-12.7
12/9/2010 19:00	-13.2	-14
12/9/2010 20:00	-13.7	-14.7
12/9/2010 21:00	-14.2	-15
12/9/2010 22:00	-14.9	-14.9
12/9/2010 23:00	-14.6	-14.6
12/10/2010 0:00	-13.3	-13.6
12/10/2010 1:00	-12.5	-13.2
12/10/2010 2:00	-11.2	-11.2
12/10/2010 3:00	-8.7	-9.4
12/10/2010 4:00	-5.4	-7.2
12/10/2010 5:00	-3.8	-4.2

#### Potential Icewine Opportunity

12/13/2010 8:00	-5.6	-6.5
12/13/2010 9:00	-6.8	-7.6
12/13/2010 10:00	-7.9	-8.6
12/13/2010 11:00	-8.6	-9.3
12/13/2010 12:00	-9.2	-9.6
12/13/2010 13:00	-9.6	-9.7
12/13/2010 14:00	-9.9	-10
12/13/2010 15:00	-10.3	-10.4
12/13/2010 16:00	-10.6	-10.7
12/13/2010 17:00	-11	-10.8
12/13/2010 18:00	-11.1	-11
12/13/2010 19:00	-11	-10.8
12/13/2010 20:00	-10.8	-10.6
12/13/2010 21:00	-10.7	-10.6
12/13/2010 22:00	-10.6	-10.8
12/13/2010 23:00	-10.9	-10.9
12/14/2010 0:00	-11	-11.3
12/14/2010 1:00	-11.4	-11.5
12/14/2010 2:00	-11.8	-11.9
12/14/2010 3:00	-12.1	-12.2
12/14/2010 4:00	-12.2	-12.3



	Icewine Temperatures
	Below Icewine Temperatures



### PEC: Icewine Opportunities (6 Hour Minimum)

Date & Time	Cherry Valley	Hillier
12/14/2010 5:00	-12.6	-12.4
12/14/2010 6:00	-12.5	-12.3
12/14/2010 7:00	-12.5	-12.5
12/14/2010 8:00	-12.5	-12.4
12/14/2010 9:00	-12.4	-12.2
12/14/2010 10:00	-11.7	-11.5
12/14/2010 11:00	-11.4	-11
12/14/2010 12:00	-11.1	-10.8
12/14/2010 13:00	-11.2	-10.7
12/14/2010 14:00	-10.7	-9.8
12/14/2010 15:00	-10.2	-9.6
12/14/2010 16:00	-9.9	-9.5
12/14/2010 17:00	-9.8	-9.7
12/14/2010 18:00	-9.8	-9.6
12/14/2010 19:00	-9.5	-9.4
12/14/2010 20:00	-9.3	-9.3
12/14/2010 21:00	-9.3	-9.4
12/14/2010 22:00	-9.6	-9.7
12/14/2010 23:00	-9.9	-10.1
12/15/2010 0:00	-10.4	-10.7
12/15/2010 1:00	-11	-11.2
12/15/2010 2:00	-11.3	-11.7
12/15/2010 3:00	-11.7	-12.2
12/15/2010 4:00	-12.2	-12.6
12/15/2010 5:00	-12.5	-12.8
12/15/2010 6:00	-12.9	-13
12/15/2010 7:00	-13	-13.3
12/15/2010 8:00	-13	-13.1
12/15/2010 9:00	-12.8	-12.9
12/15/2010 10:00	-12.2	-12.2
12/15/2010 11:00	-11.7	-11.3
12/15/2010 12:00	-10.8	-9.8
12/15/2010 13:00	-8.7	-8.1
12/15/2010 14:00	-7.4	-7.2
12/15/2010 15:00	-7.3	-6.9
<b>Potential Icewine Opportunity</b>		
12/16/2010 22:00	-6.9	-5.8
12/16/2010 23:00	-7.1	-6.5



	Icewine Temperatures
	Below Icewine Temperatures



### PEC: Icewine Opportunities (6 Hour Minimum)

Date & Time	Cherry Valley	Hillier
12/17/2010 0:00	-8.2	-7.7
12/17/2010 1:00	-9.7	-8.6
12/17/2010 2:00	-11.3	-8.9
12/17/2010 3:00	-12	-9.1
12/17/2010 4:00	-13.9	-9.6
12/17/2010 5:00	-12.2	-9
12/17/2010 6:00	-9.9	-8.8
12/17/2010 7:00	-9.5	-8.6
12/17/2010 8:00	-9.3	-8.3
12/17/2010 9:00	-8.7	-7.7
12/17/2010 10:00	-7	-6.5
12/17/2010 11:00	-5	-5.4

#### Potential Icewine Opportunity

12/21/2010 16:00	-3.6	-2.4
12/21/2010 17:00	-5.8	-6.9
12/21/2010 18:00	-7.4	-12
12/21/2010 19:00	-8	-13.5
12/21/2010 20:00	-7.5	-14.5
12/21/2010 21:00	-8.6	-15.3
12/21/2010 22:00	-9.3	-15.8
12/21/2010 23:00	-9.1	-14.8
12/22/2010 0:00	-9.4	-13
12/22/2010 1:00	-9.6	-9.9
12/22/2010 2:00	-8.8	-10.2
12/22/2010 3:00	-9.1	-9.2
12/22/2010 4:00	-9.5	-8.6
12/22/2010 5:00	-9.4	-8.3
12/22/2010 6:00	-8.5	-8.2
12/22/2010 7:00	-9	-12.1
12/22/2010 8:00	-10.1	-12.2
12/22/2010 9:00	-9.2	-8.9
12/22/2010 10:00	-8	-7.4
12/22/2010 11:00	-6.6	-6.2
12/22/2010 12:00	-5.6	-5.2

#### Potential Icewine Opportunity

12/24/2010 23:00	-7.7	-7.4
12/25/2010 0:00	-6.9	-7.6
12/25/2010 1:00	-6.9	-8.1



	Icewine Temperatures
	Below Icewine Temperatures





### PEC: Icewine Opportunities (6 Hour Minimum)

Date & Time	Cherry Valley	Hillier
12/25/2010 2:00	-7.7	-8.3
12/25/2010 3:00	-8.3	-8.2
12/25/2010 4:00	-8.4	-7.8
12/25/2010 5:00	-8.6	-8.1
12/25/2010 6:00	-8.5	-8.6
12/25/2010 7:00	-8.6	-8.7
12/25/2010 8:00	-8.9	-8.7
12/25/2010 9:00	-8.9	-8.8
12/25/2010 10:00	-8.5	-8.4
12/25/2010 11:00	-7.8	-7.9
12/25/2010 12:00	-7	-7

#### Potential Icewine Opportunity

12/25/2010 22:00	-7.6	-7.6
12/25/2010 23:00	-7.8	-7.7
12/26/2010 0:00	-8.6	-8.1
12/26/2010 1:00	-8.3	-7.9
12/26/2010 2:00	-8.5	-8.1
12/26/2010 3:00	-9.1	-8.9
12/26/2010 4:00	-9.9	-8.6
12/26/2010 5:00	-9.6	-8.4
12/26/2010 6:00	-9.2	-8.6
12/26/2010 7:00	-9.2	-8.7
12/26/2010 8:00	-9.5	-9.2
12/26/2010 9:00	-9.6	-9.4
12/26/2010 10:00	-9.1	-8.6
12/26/2010 11:00	-8.7	-8.5
12/26/2010 12:00	-8.5	-8.5
12/26/2010 13:00	-8.1	-7.9
12/26/2010 14:00	-8.1	-7.7
12/26/2010 15:00	-7.3	-7.2

#### Potential Icewine Opportunity

12/26/2010 16:00	-7.4	-6.9
12/26/2010 17:00	-8.2	-8.1
12/26/2010 18:00	-9.3	-9
12/26/2010 19:00	-9.5	-9
12/26/2010 20:00	-9.9	-9.6
12/26/2010 21:00	-10.5	-9.8
12/26/2010 22:00	-10.7	-10



	Icewine Temperatures
	Below Icewine Temperatures

### PEC: Icewine Opportunities (6 Hour Minimum)

Date & Time	Cherry Valley	Hillier
12/26/2010 23:00	-10.2	-10
12/27/2010 0:00	-10.7	-10.5
12/27/2010 1:00	-11.1	-11.4
12/27/2010 2:00	-11.7	-11.6
12/27/2010 3:00	-11.9	-11.9
12/27/2010 4:00	-12.2	-11.9
12/27/2010 5:00	-12.4	-12.1
12/27/2010 6:00	-12.1	-11.9
12/27/2010 7:00	-12.1	-12
12/27/2010 8:00	-12.2	-12.2
12/27/2010 9:00	-11.7	-11.5
12/27/2010 10:00	-10.3	-9.9
12/27/2010 11:00	-8.6	-8.1
12/27/2010 12:00	-6.6	-6.2
12/27/2010 13:00	-6.5	-6.1



	Icewine Temperatures
	Below Icewine Temperatures