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# December 2009: Temperature & Ice Wine Hours Summary

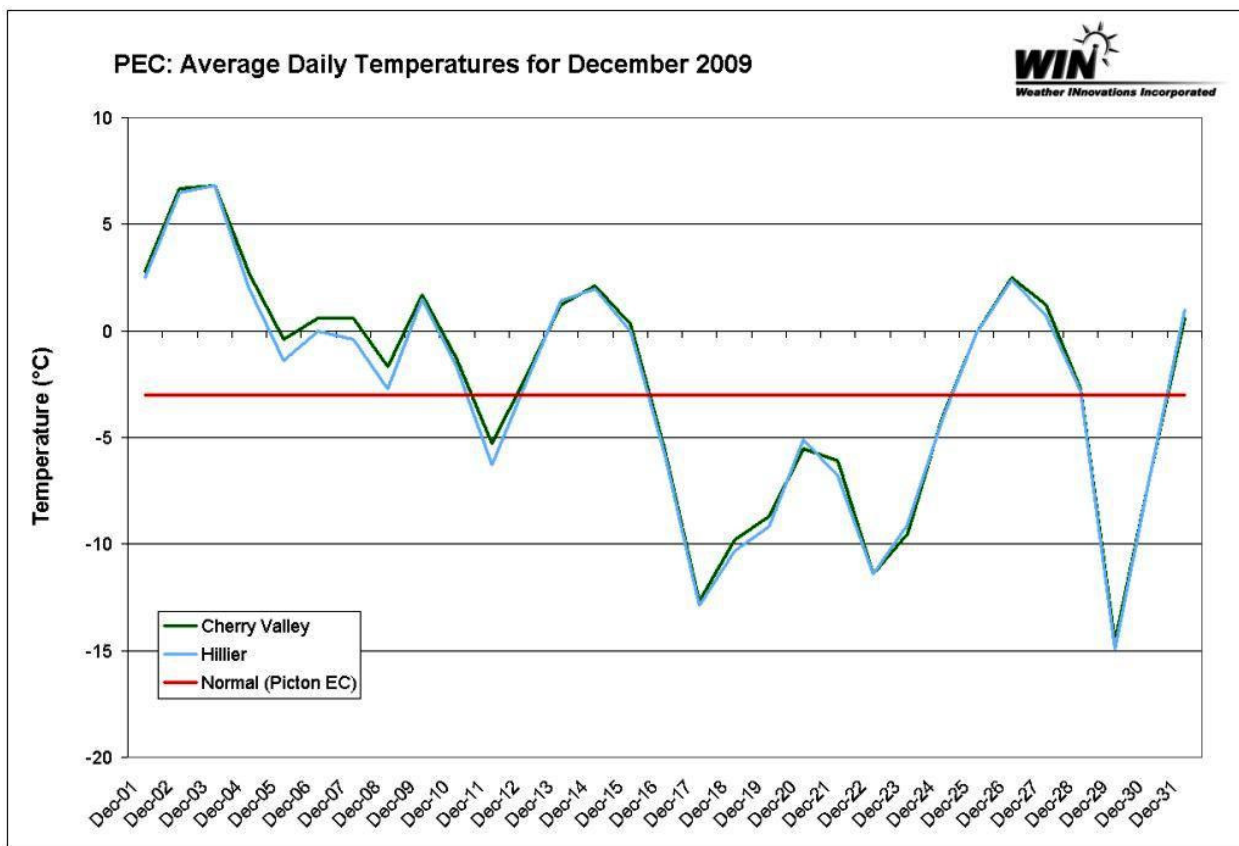
Prince Edward County

WIN Staff  
January 14, 2010



## OVERVIEW

December 2009 temperatures were very close to normal in Prince Edward County. In fact, temperatures were slightly above-normal, with average monthly temperatures of  $-2.5^{\circ}\text{C}$  at Cherry Valley and  $-2.8^{\circ}\text{C}$  at Hillier. Accordingly, the average monthly temperature at Cherry Valley was  $0.5^{\circ}\text{C}$  above-normal, while the average monthly temperature at Hillier was  $0.2^{\circ}\text{C}$  above-normal. These statistics are based on Environment Canada's 30-year normal for Picton. This summary illustrates minimum December 2009 temperatures, as well as the ice wine harvest opportunities that arose. For this report, ice wine hours are defined as instances when the average hourly temperature was between  $-8.0^{\circ}\text{C}$  and  $-12.0^{\circ}\text{C}$ , inclusive. Factors such as high average daily temperatures, prior to these ice wine hours, were not taken into account. Consequently, total ice wine hours reported may be higher than the number of hours that were *actually* suitable for ice wine harvesting.





## TEMPERATURE ANALYSIS

The monthly minimum temperature for each site in December 2009 was -18.0°C at the Cherry Valley station and -18.1°C at the Hillier station. These monthly minimum temperatures occurred on the 29<sup>th</sup> of December. There were 12 days when temperatures, at one or more stations, dipped into ice wine temperature ranges. This is shown in the following figure.

Date	Cherry Valley	Hillier
01-Dec	-4.4	-4.3
02-Dec	2.7	-0.8
03-Dec	4.4	4
04-Dec	0.3	-0.9
05-Dec	-2.4	-5.6
06-Dec	-2.6	-4.6
07-Dec	-3.2	-5.4
08-Dec	-5.6	-7.7
09-Dec	-1.1	-2.2
10-Dec	-4.6	-5.4
11-Dec	-5.6	-7.1
12-Dec	-5.4	-6.6
13-Dec	0.3	0.6
14-Dec	-0.7	-1.2
15-Dec	-6	-6.4
16-Dec	-9.7	-9.8
17-Dec	-14.8	-15.2
18-Dec	-15	-15.1
19-Dec	-11.7	-12.6
20-Dec	-8.7	-8.4
21-Dec	-10.5	-12.3
22-Dec	-15.2	-15.1
23-Dec	-13	-13.1
24-Dec	-8.5	-10.7
25-Dec	-2.2	-1.9
26-Dec	0.6	0.3
27-Dec	-1.8	-1.5
28-Dec	-10.3	-10.2
29-Dec	-18	-18.1
30-Dec	-15.9	-17
31-Dec	-0.9	-0.6

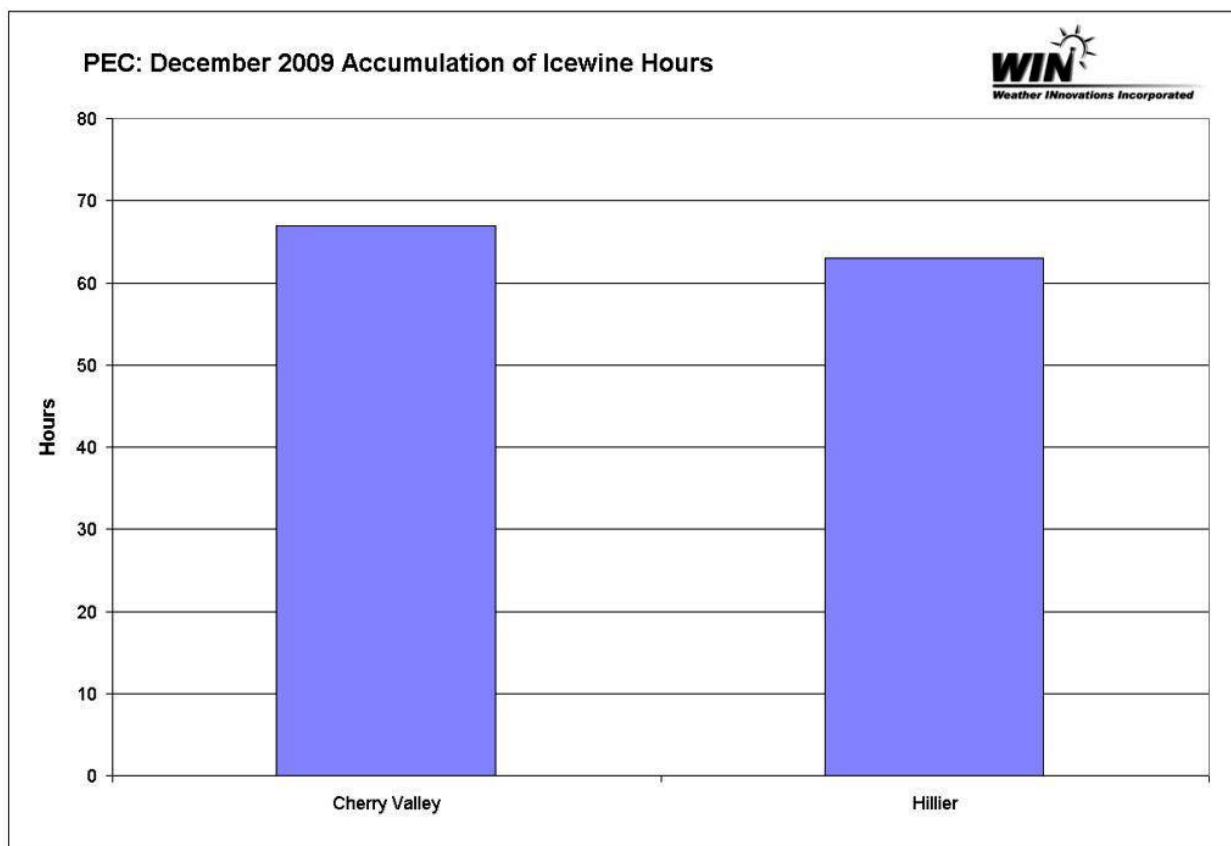
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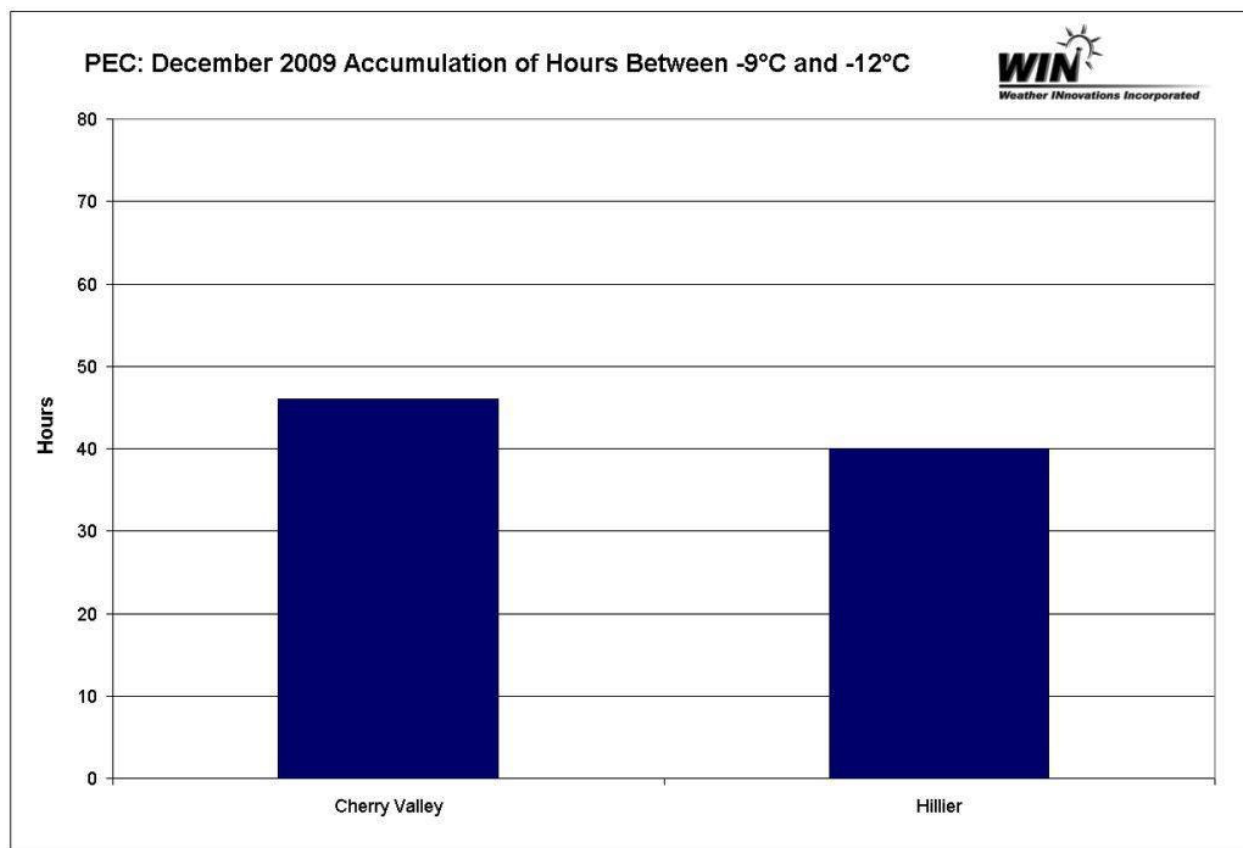
**Legend:**

	Days with Ice Wine Temperatures
	Monthly Minimum

## ICE WINE HOURS ANALYSIS

Both stations accumulated a similar number of ice wine hours in December 2009, as seen in the following two figures. The Cherry Valley station recorded 67 hours and the Hillier station recorded 63 hours. December 2009 also shows a large number of hours between  $-9^{\circ}\text{C}$  and  $-12^{\circ}\text{C}$ . Thus, there were a reasonable number of suitably cold hours for harvesting ice wine grapes in December.





The December ice wine hours accumulated during a number of ice wine “opportunities”, as outlined in the following tables. All of these hours may not have been suitable for grape harvesting, due to factors such as preceding warmer daily temperatures.

Date/ Time	Cherry Valley	Hillier
<b>Possible Icewine Opportunity: Dec 16-18</b>		
12/16/2009 18:00	-6.0	-6.3
12/16/2009 19:00	-6.8	-7.0
12/16/2009 20:00	-7.2	-7.6
12/16/2009 21:00	-7.7	-8.1
12/16/2009 22:00	-8.3	-8.7
12/16/2009 23:00	-9.0	-9.2
12/17/2009 0:00	-9.5	-9.5
12/17/2009 1:00	-10.0	-10.0
12/17/2009 2:00	-10.3	-10.2
12/17/2009 3:00	-10.8	-10.9
12/17/2009 4:00	-11.8	-12.0
12/17/2009 5:00	-12.6	-12.8
12/17/2009 6:00	-13.2	-13.5
12/17/2009 7:00	-13.7	-14.0
12/17/2009 8:00	-14.4	-14.7
12/17/2009 9:00	-14.5	-14.7
12/17/2009 10:00	-13.8	-14.0
12/17/2009 11:00	-13.3	-13.6
12/17/2009 12:00	-12.6	-12.7
12/17/2009 13:00	-12.1	-12.0
12/17/2009 14:00	-11.7	-11.6
12/17/2009 15:00	-11.1	-10.5
12/17/2009 16:00	-11.4	-10.5
12/17/2009 17:00	-12.1	-11.9
12/17/2009 18:00	-12.7	-13.4
12/17/2009 19:00	-13.8	-14.2
12/17/2009 20:00	-14.3	-14.8
12/17/2009 21:00	-14.5	-14.9
12/17/2009 22:00	-13.9	-14.8
12/17/2009 23:00	-13.5	-14.8
12/18/2009 0:00	-14.3	-14.0
12/18/2009 1:00	-14.9	-14.5
12/18/2009 2:00	-14.0	-14.1
12/18/2009 3:00	-12.4	-13.0



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Legend:

	Ice Wine Temperatures
	Below Ice Wine Temperatures



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Date/ Time	Cherry Valley	Hillier
12/18/2009 4:00	-12.3	-12.9
12/18/2009 5:00	-12.3	-13.2
12/18/2009 6:00	-12.3	-13.3
12/18/2009 7:00	-12.4	-13.5
12/18/2009 8:00	-12.0	-13.7
12/18/2009 9:00	-10.9	-13.0
12/18/2009 10:00	-8.6	-10.6
12/18/2009 11:00	-6.7	-8.8
12/18/2009 12:00	-6.0	-7.1
12/18/2009 13:00	-5.8	-5.2
12/18/2009 14:00	-5.4	-4.6
<b>Possible Icewine Opportunity: Dec 18-19</b>		
12/18/2009 15:00	-5.8	-5.0
12/18/2009 16:00	-6.9	-6.4
12/18/2009 17:00	-8.0	-7.8
12/18/2009 18:00	-8.6	-8.3
12/18/2009 19:00	-9.4	-8.9
12/18/2009 20:00	-10.0	-9.7
12/18/2009 21:00	-10.1	-10.5
12/18/2009 22:00	-10.3	-10.7
12/18/2009 23:00	-10.3	-11.1
12/19/2009 0:00	-10.3	-11.4
12/19/2009 1:00	-10.6	-11.7
12/19/2009 2:00	-10.7	-12.0
12/19/2009 3:00	-10.9	-12.1
12/19/2009 4:00	-11.3	-12.5
12/19/2009 5:00	-11.4	-12.6
12/19/2009 6:00	-11.5	-12.4
12/19/2009 7:00	-11.5	-12.5
12/19/2009 8:00	-11.5	-12.5
12/19/2009 9:00	-10.9	-11.5
12/19/2009 10:00	-9.1	-10.0
12/19/2009 11:00	-7.6	-9.1
12/19/2009 12:00	-6.7	-8.1



Legend:

	Ice Wine Temperatures
	Below Ice Wine Temperatures



Date/ Time	Cherry Valley	Hillier
<b>Possible Icewine Opportunity: Dec 19-20</b>		
12/19/2009 19:00	-7.1	-6.8
12/19/2009 20:00	-7.6	-7.2
12/19/2009 21:00	-7.9	-7.6
12/19/2009 22:00	-8	-7.9
12/19/2009 23:00	-8.3	-8.1
12/20/2009 0:00	-8.5	-8.2
12/20/2009 1:00	-8.7	-8.1
12/20/2009 2:00	-8.7	-8.4
12/20/2009 3:00	-8.5	-8.3
12/20/2009 4:00	-8.6	-7.9
12/20/2009 5:00	-8.3	-7.4
12/20/2009 6:00	-7.8	-7
12/20/2009 7:00	-7.4	-6.9
12/20/2009 8:00	-7.4	-7
<b>Possible Icewine Opportunity: Dec 21</b>		
12/21/2009 3:00	-5	-4.8
12/21/2009 4:00	-6.2	-5.3
12/21/2009 5:00	-6.5	-5.6
12/21/2009 6:00	-6.4	-8.5
12/21/2009 7:00	-7.7	-11.2
12/21/2009 8:00	-8.9	-12.2
12/21/2009 9:00	-7.8	-8.6
12/21/2009 10:00	-6.1	-6
12/21/2009 11:00	-4.9	-4.9
12/21/2009 12:00	-4	-4.2



Legend:

[Light Blue Box]	Ice Wine Temperatures
[Dark Blue Box]	Below Ice Wine Temperatures



Date/ Time	Cherry Valley	Hillier
<b>Possible Icewine Opportunity: Dec 21-23</b>		
12/21/2009 15:00	-3.2	-3.2
12/21/2009 16:00	-3.8	-3.6
12/21/2009 17:00	-5.2	-5.5
12/21/2009 18:00	-6.1	-8.4
12/21/2009 19:00	-7.2	-10.9
12/21/2009 20:00	-7.1	-8.2
12/21/2009 21:00	-7.4	-8.6
12/21/2009 22:00	-8	-8.9
12/21/2009 23:00	-8.5	-9.7
12/22/2009 0:00	-9.9	-9.8
12/22/2009 1:00	-10.7	-10.5
12/22/2009 2:00	-11.1	-11.1
12/22/2009 3:00	-11.1	-12.4
12/22/2009 4:00	-11.9	-12.7
12/22/2009 5:00	-13	-13.4
12/22/2009 6:00	-13.7	-14
12/22/2009 7:00	-14.3	-14.4
12/22/2009 8:00	-14.9	-15
12/22/2009 9:00	-14.6	-14.3
12/22/2009 10:00	-13.3	-13.1
12/22/2009 11:00	-12	-11.8
12/22/2009 12:00	-10.5	-10.3
12/22/2009 13:00	-9.3	-8.5
12/22/2009 14:00	-8.5	-7.8
12/22/2009 15:00	-8.1	-7.6
12/22/2009 16:00	-8.5	-7.9
12/22/2009 17:00	-9.3	-9.4
12/22/2009 18:00	-10	-10.5
12/22/2009 19:00	-10.4	-10.9
12/22/2009 20:00	-10.8	-10.9
12/22/2009 21:00	-11.3	-11.3
12/22/2009 22:00	-11.6	-11.8
12/22/2009 23:00	-12.2	-12.3
12/23/2009 0:00	-12.5	-12.4

**Legend:**

	Ice Wine Temperatures
	Below Ice Wine Temperatures

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Date/ Time	Cherry Valley	Hillier
12/23/2009 1:00	-12.6	-12.4
12/23/2009 2:00	-12.7	-12.4
12/23/2009 3:00	-12.8	-12.4
12/23/2009 4:00	-12.8	-12.4
12/23/2009 5:00	-12.6	-12.5
12/23/2009 6:00	-12.7	-12.7
12/23/2009 7:00	-12.9	-13.0
12/23/2009 8:00	-13.0	-13.1
12/23/2009 9:00	-12.7	-12.1
12/23/2009 10:00	-11.4	-10.4
12/23/2009 11:00	-10.1	-9.3
12/23/2009 12:00	-9.3	-8.4
12/23/2009 13:00	-8.5	-7.6
12/23/2009 14:00	-7.9	-6.6
12/23/2009 15:00	-6.9	-5.8
12/23/2009 16:00	-6.4	-5.6
<b>Possible Icewine Opportunity: Dec 24</b>		
12/24/2009 1:00	-7.1	-7.1
12/24/2009 2:00	-7.4	-7.2
12/24/2009 3:00	-7.5	-7.1
12/24/2009 4:00	-7.8	-8.7
12/24/2009 5:00	-8.1	-10.5
12/24/2009 6:00	-8.4	-10.1
12/24/2009 7:00	-7.7	-8.3
12/24/2009 8:00	-7.5	-7.1
12/24/2009 9:00	-6.8	-6.2
12/24/2009 10:00	-5.4	-5.2

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**Legend:**

	Ice Wine Temperatures
	Below Ice Wine Temperatures

Date/ Time	Cherry Valley	Hillier
<b>Possible Icewine Opportunity: Dec 28-30</b>		
12/28/2009 23:00	-7.7	-8.3
12/29/2009 0:00	-9.7	-9.8
12/29/2009 1:00	-11.3	-12.1
12/29/2009 2:00	-13.5	-13.8
12/29/2009 3:00	-14.7	-14.9
12/29/2009 4:00	-15.9	-15.9
12/29/2009 5:00	-16.4	-16.5
12/29/2009 6:00	-17.1	-17.2
12/29/2009 7:00	-17.6	-17.6
12/29/2009 8:00	-17.9	-17.9
12/29/2009 9:00	-17.9	-17.7
12/29/2009 10:00	-17.1	-16.9
12/29/2009 11:00	-16.2	-16.1
12/29/2009 12:00	-15.6	-15.1
12/29/2009 13:00	-14.7	-13.8
12/29/2009 14:00	-13.8	-12.9
12/29/2009 15:00	-12.9	-12.1
12/29/2009 16:00	-12.6	-12.1
12/29/2009 17:00	-13	-13.3
12/29/2009 18:00	-13	-13.3
12/29/2009 19:00	-13	-13.8
12/29/2009 20:00	-13	-14.4
12/29/2009 21:00	-12.7	-14.4
12/29/2009 22:00	-12.8	-13.7
12/29/2009 23:00	-13.7	-15.3
12/30/2009 0:00	-14.4	-17
12/30/2009 1:00	-15.4	-16.1
12/30/2009 2:00	-15.2	-14.5
12/30/2009 3:00	-15.1	-14.9
12/30/2009 4:00	-15.3	-14
12/30/2009 5:00	-13.1	-13.1
12/30/2009 6:00	-13.1	-13.6
12/30/2009 7:00	-13.8	-13
12/30/2009 8:00	-11.1	-11.8
12/30/2009 9:00	-9.3	-10.3
12/30/2009 10:00	-7	-8.1
12/30/2009 11:00	-5	-5.2



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Legend:

	Ice Wine Temperatures
	Below Ice Wine Temperatures



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## SUMMARY

December 2009 temperatures were near-normal; average temperatures for the month were only slightly above the 30-year normal for Picton. There were 12 days when temperatures, at one or more stations, dipped into ice wine temperature ranges. The coldest December event took place on the 29<sup>th</sup> of December, reaching -18.1°C at the Hillier station. These conditions provided a reasonable number of suitable hours for grape harvesting for ice wine.

