



Niagara - October 2011:

The final month of the 2011 growing season brought above-normal temperatures and rainfall, following the similar trend seen throughout September. The growing degree day accumulation during the month of October was slightly above normal, although there was essentially no accumulation during the last half of October (Fig 1). Accumulated growing degree days for the entire 2011 growing season totaled 1441 for Vineland and 1583 for Virgil, well above the normals of 1320 and 1375, respectively. This is not surprising as day-time temperatures averaged above normal for the fifth month in a row, with average daily maximums approximately 1 °C above normal in October. Daily minimums were also above normal in Niagara East, but slightly below normal in Niagara West (Fig 2-5). Most stations fell below -2°C on one or more nights between October 27th and 30th.

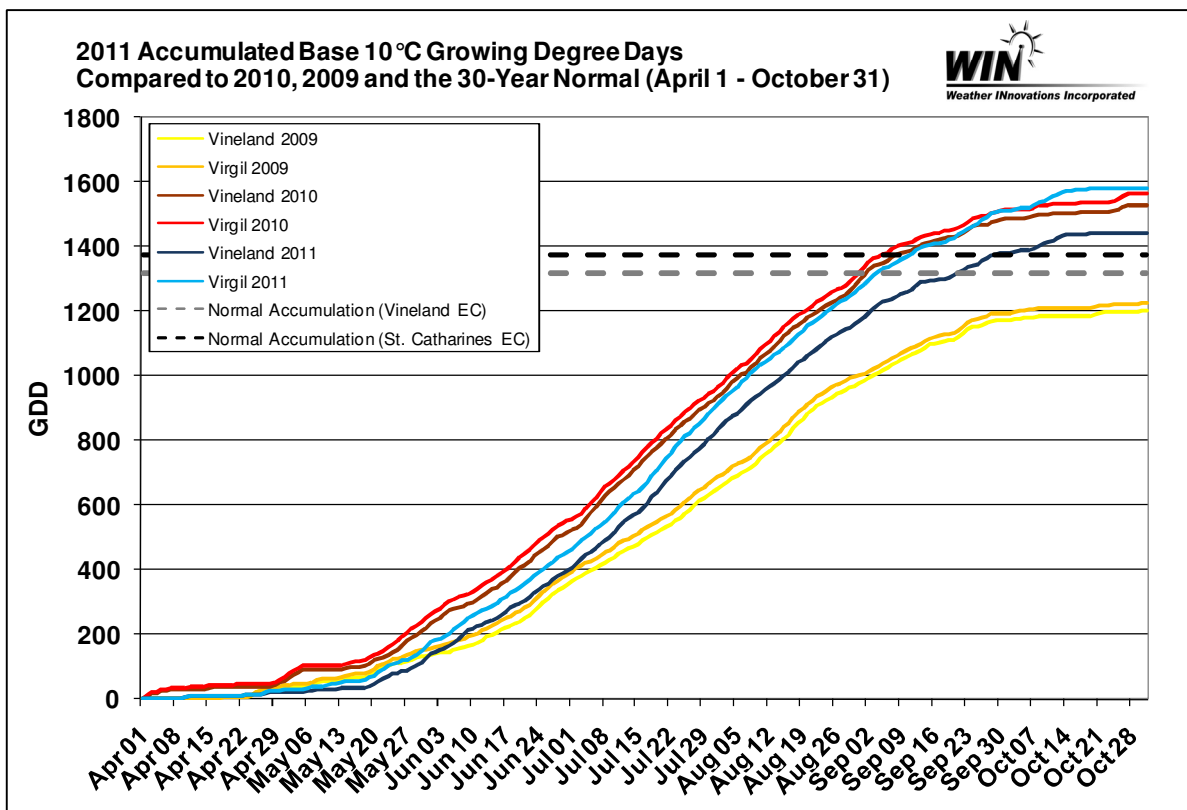


Figure 1: Growing Degree Days

The Niagara region received approximately 100 mm of rainfall this month. Rainfall totals across the stations ranged from 80.2 mm at Vineland Cherry Ave to 117.8 mm at West Lincoln. Overall, monthly rainfall averaged 147% of normal for Niagara West and 144% of normal for Niagara East (Fig 6 and 7). The above-normal rainfall resulted from an above-normal number of rain events: an average of 5 days above normal in both Niagara West and Niagara East (Fig 8 and 9). The wet harvest period included a 7-day stretch of continuous rainfall occurring between September 28 and October 4. A few days of temperatures rising above 25°C following these rains added to the harvest challenges.

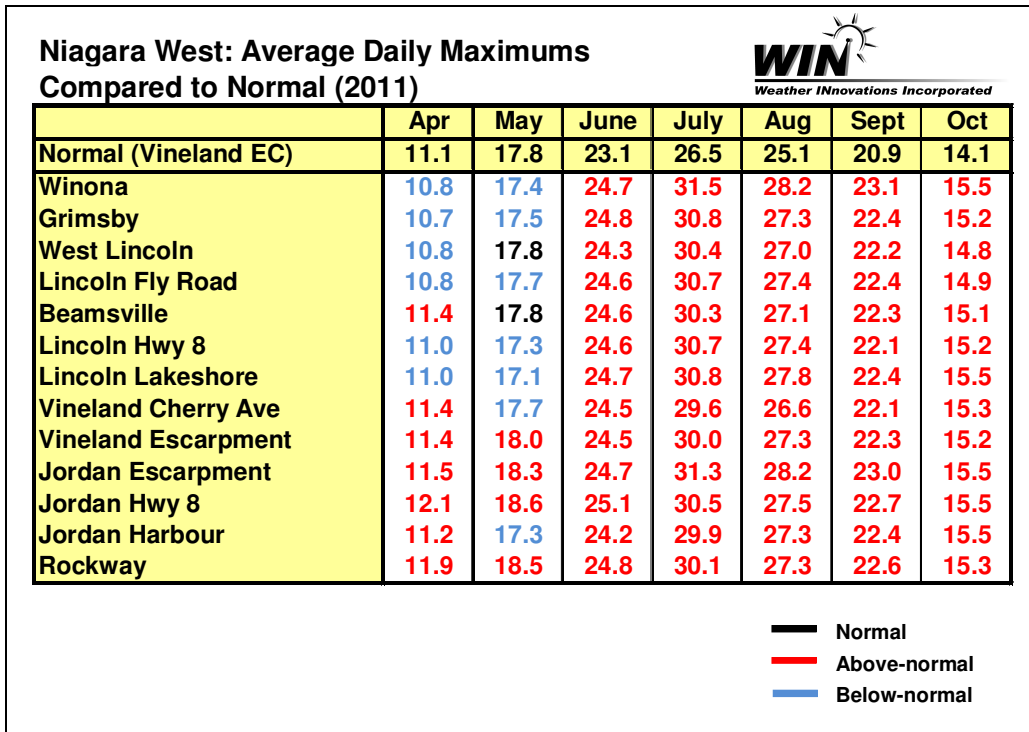


Figure 2: Niagara West – Maximum Temperatures

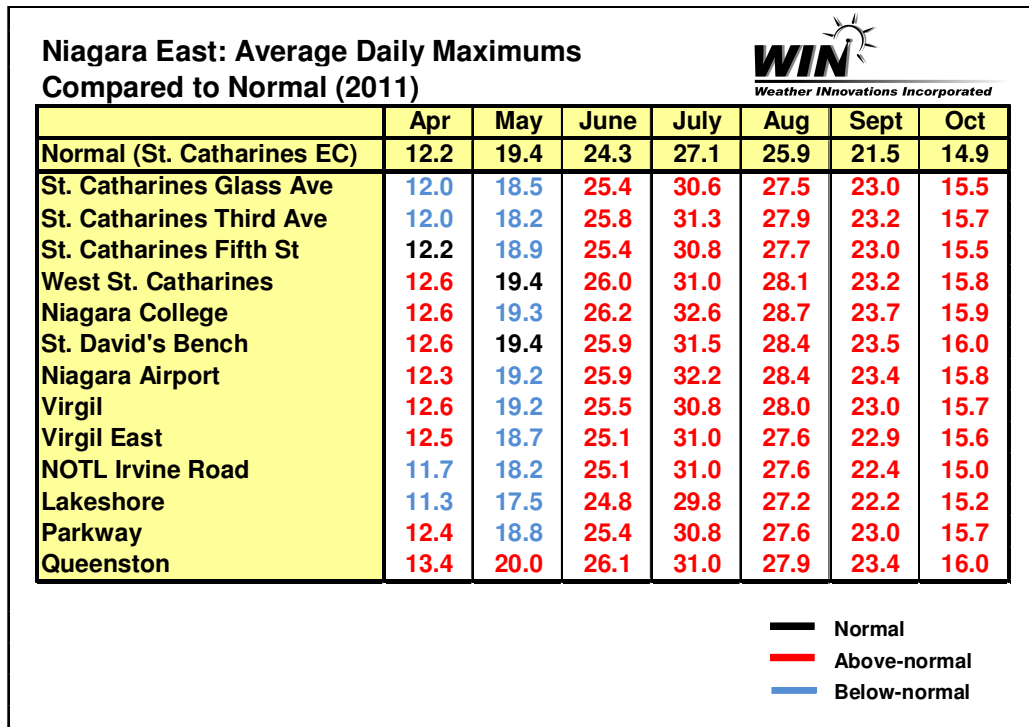


Figure 3: Niagara East - Maximum Temperatures



Niagara West: Average Daily Minimums Compared to Normal (2011)		 Weather INnovations Incorporated						
	Apr	May	June	July	Aug	Sept	Oct	
Normal (Vineland EC)	2.3	7.5	13.1	16.9	16.3	12.5	6.4	
Winona	2.0	8.0	13.6	17.9	16.2	12.8	6.2	
Grimsby	1.4	8.0	12.6	16.3	14.2	11.2	4.5	
West Lincoln	1.8	8.3	13.4	17.3	14.8	11.9	4.9	
Lincoln Fly Road	2.1	8.3	13.6	17.7	15.6	12.6	5.7	
Beamsville	2.5	8.8	14.4	18.6	17.0	13.5	7.0	
Lincoln Hwy 8	2.1	8.3	14.0	18.6	16.6	12.9	6.5	
Lincoln Lakeshore	2.3	8.2	14.0	17.8	16.2	12.9	5.9	
Vineland Cherry Ave	1.9	8.1	13.6	17.6	16.0	12.2	5.6	
Vineland Escarpment	2.2	8.6	14.1	18.3	16.6	13.1	6.3	
Jordan Escarpment	2.1	8.8	13.7	17.4	15.6	12.6	5.6	
Jordan Hwy 8	2.4	8.8	14.2	18.3	16.7	13.1	6.6	
Jordan Harbour	2.0	8.1	13.8	17.7	15.6	12.2	5.7	
Rockway	2.0	8.5	13.7	17.7	16.1	12.6	5.8	

— Normal
 — Above-normal
 — Below-normal

Figure 4: Niagara West - Minimum Temperatures

Niagara East: Average Daily Minimums Compared to Normal (2011)		 Weather INnovations Incorporated						
	Apr	May	June	July	Aug	Sept	Oct	
Normal (St. Catharines EC)	2.1	7.8	13.3	16.4	15.7	11.6	5.6	
St. Catharines Glass Ave	2.1	8.5	14.0	17.5	15.7	12.6	5.7	
St. Catharines Third Ave	2.1	8.0	13.9	17.5	15.9	12.6	5.7	
St. Catharines Fifth Ave	2.1	8.6	13.8	17.5	15.8	12.5	6.0	
West St. Catharines	2.4	8.8	13.6	17.0	15.6	12.6	5.9	
Niagara College	2.6	9.2	13.3	17.2	16.1	13.1	6.5	
St. David's Bench	2.3	9.1	13.8	17.8	16.3	13.0	6.1	
Niagara Airport	2.2	9.0	14.2	18.1	16.2	13.3	6.1	
Virgil	2.3	9.1	14.1	18.0	16.0	13.2	6.2	
Virgil East	2.1	8.5	13.6	17.2	15.4	12.6	5.5	
NOTL Irvine Road	2.2	8.6	14.1	18.3	16.6	13.3	6.3	
Lakeshore	2.2	8.4	14.0	17.9	16.1	13.2	6.2	
Parkway	2.0	8.5	13.6	17.3	15.9	13.0	5.9	
Queenston	2.4	9.0	13.9	17.8	15.9	13.2	6.4	

— Normal
 — Above-normal
 — Below-normal

Figure 5: Niagara East - Minimum Temperatures

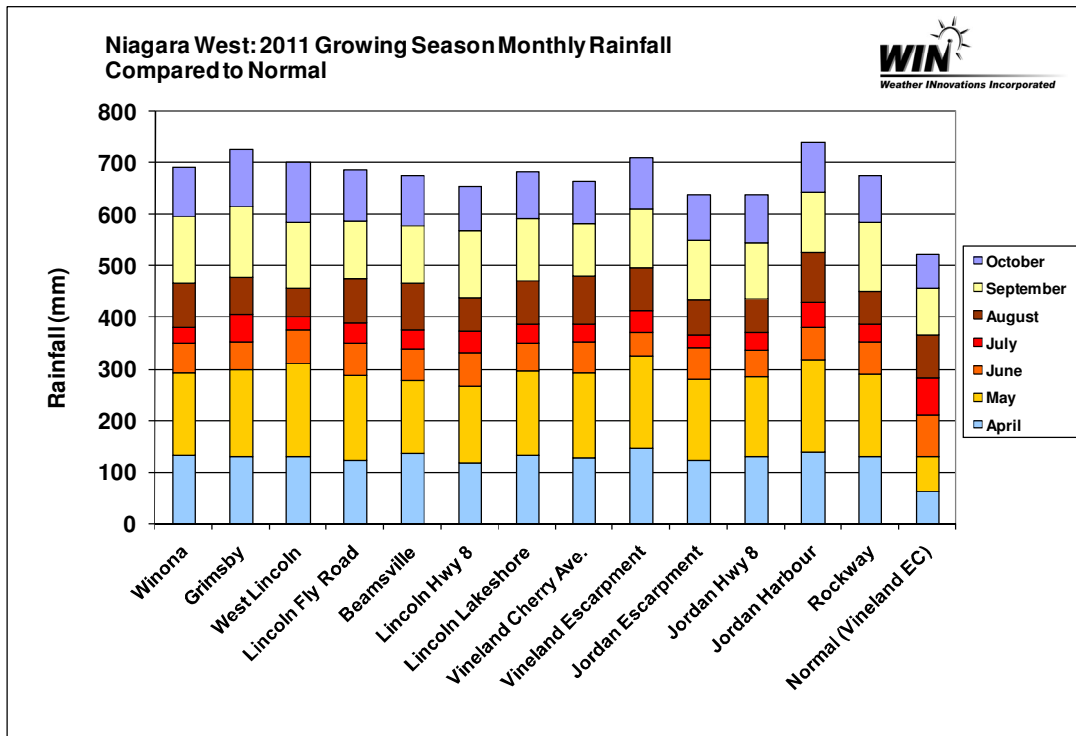


Figure 6: Niagara West – Accumulated Rainfall

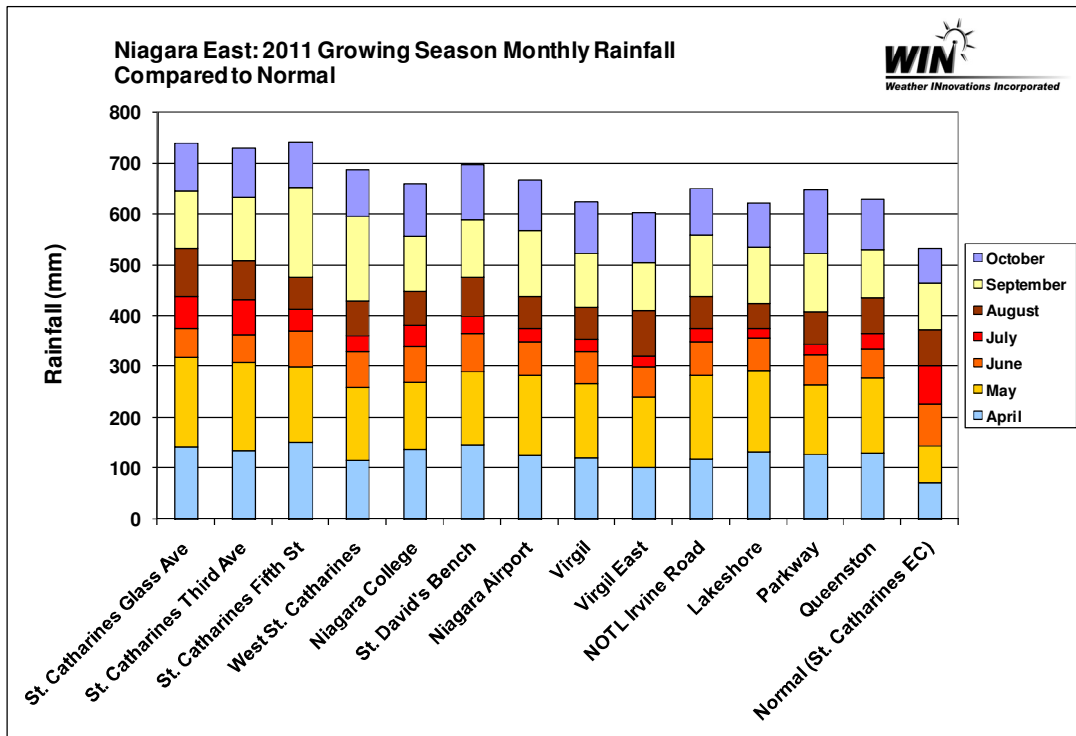


Figure 7: Niagara East – Accumulated Rainfall

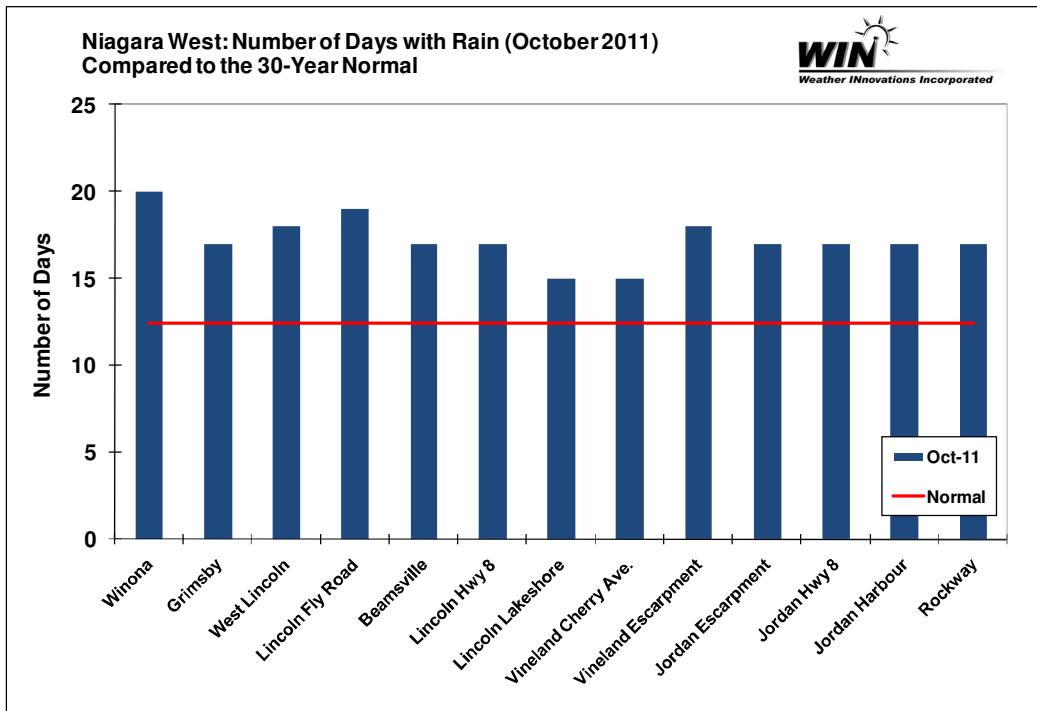


Figure 8: Niagara West - Days with Rainfall

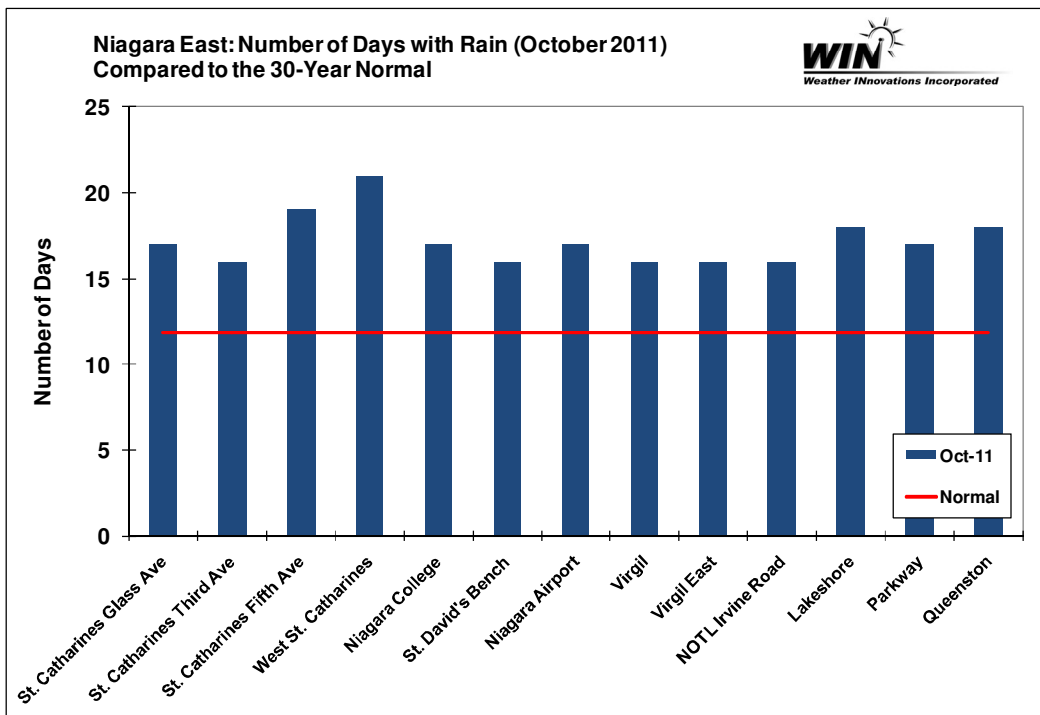


Figure 9: Niagara East - Days with Rainfall