



Tuesday, July 27, 2021

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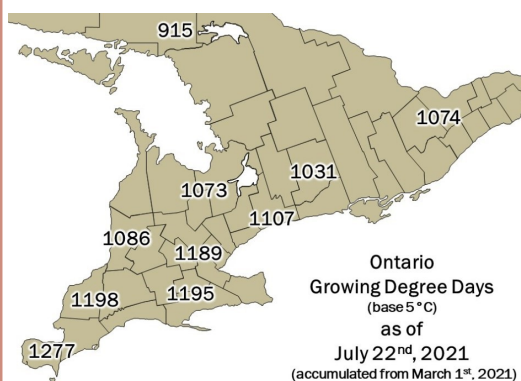
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VCR – Vegetable Crop Report – July 22nd, 2021

The VCR (vegetable crop report) is a weekly update which includes crop updates, weather and growing degree summaries for various vegetable growing regions across Ontario.



Temperature – Daytime temperatures are expected to range from low to high twenties for most regions over the next week.

Nighttime temperatures are forecasted to range from low teens to low twenties based on region. Carrot rust fly is at threshold in Essex, Chatham-Kent, and Norfolk counties. Onion maggot is at threshold in all regions except Sudbury. Cabbage maggot is at threshold in Wellington,

Peterborough, and Kemptville. Seedcorn maggot is at threshold in Peterborough and Sudbury. European Corn Borer is at threshold in Norfolk with Huron, Simcoe and Durham regions expected to go through their thresholds within the next week. Degree Day data for each region is shown below.

Rainfall – Most regions have forecasted precipitation over the weekend with a break on Monday then more rain forecasted for the rest of the week. All regions except for Huron and Kemptville are on pace or have passed their respective 10 year averages for the month of July. Simcoe has been seen quite a lot of rain over the past month with about 175mm of rain. Precipitation data for each region is shown below.

Crop Updates

Brassica Crops – As fields begin to dry out and irrigation is required, irrigate in the morning and avoid prolonged periods of leaf wetness that will favour pathogen development. Nutrient imbalances resulting in tip burn, leaf edema, and leaf scorch continue to develop. These abiotic disorders often vary by cultivar in their severity. Slugs are affecting the lower leaves in some fields and swede midge as well as the level of thrips are building in some areas.

Celery – Bacterial rot and black heart has started to develop, and both are likely due to the large amount of precipitation over the past three weeks. Celery leaf curl has been identified. As fields dry out (if it stops raining), avoid prolonged periods of leaf wetness and allow the canopy to dry out between irrigation events. Continue to dig up stunted plants weekly to examine the roots for nematodes, the hearts for carrot weevil damage or blackheart.

“In This Issue”

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Garlic – Harvest is underway across most of the province. Many plants that are still green, (70% green or higher) are still growing and should be left until more leaves have turned yellow. These fields that are still very green may be given a chance to dry out before harvest and reduce the amount of moisture to be removed from the crop during curing. If the majority of the field has 60% of the leaves senesced, it is time to start harvest. Always avoid leaving harvested bulbs in direct sunlight after they have been pulled. Take the time to cull/remove bulbs with rots or defects before they go into storage. If you are seeing rot around the basal plate, consider getting the bulb tested to rule out bulb and stem nematode. Be vigilant about reducing mechanical injury during harvest. The excess moisture will make it easy for pathogens to colonize wounds and lower quality and storability. Controlling humidity is the most important variable to control when curing. Forced air at less than 50% relative humidity is key for removing moisture from the crop quickly before it is stored. Curing over a long period of time (eg. 10-14 days), will allow storage pathogens and bulb mites to acclimatize and cause problems in storage. Curing over 48-72 hours is less favourable for pests and should allow the crop to be stored longer. The higher the quality of crop that goes into storage, the longer it will last.

Onions – The second wave of onion maggots are active and causing damage in some onion growing regions. Stemphylium is starting to progress but many fields are still green to the tip. The high humidity has made it a high risk for downy mildew to develop in many areas across the province. Past research at the Muck Station has shown that Orondis Ultra (groups 40/49), Zampro (groups 45/40) and Ridomil Gold MZ (groups 4/M3) are the most effective for controlling this disease and are most effective when they are applied as a protective application before infection can occur. The active mancozeb in Ridomil Gold MZ may help also manage Stemphylium as well as downy mildew. Conditions have also been favourable for Botrytis development (**Figure 1**). Dig up stunted plants and look for onion smut (**Figure 2**), pink root or nematode or maggot damage.



Figure 1. Botrytis leaf blight, July 2020



Figure 2. Onion smut, July 2020 – J. Mosiondz

Pest Degree Day Forecasting

*NOTE: Data as of July 22nd, 2021

County	Carrot Rust Fly	Onion Maggot	Carrot Weevil	Aster Leafhopper	Tarnished Plant Bug	Cabbage Maggot	Seedcorn Maggot	European Corn Borer
THRESHOLD	329-395, 1399-1711	210-700, 1025-1515	138-156, 455+	128+	40+	314-398, 847-960, 1446-1604	200-350, 600-750, 1000-1150	See legend below
Essex*	1545	1423	1073	875	626	1184	1423	787
Chatham-Kent*	1430	1310	981	791	515	1084	1310	704
Norfolk**	1421	1303	975	785	512	1080	1303	697
Huron***	1308	1195	888	708	444	983	1195	626
Wellington**	1273	1157	849	668	413	945	1157	586
Simcoe County***	1307	1189	872	691	437	971	1189	609
Durham***	1337	1222	896	722	462	997	1222	641
Peterborough	1213	1095	777	602	361	875	1095	522
Kemptville***	1295	1181	857	671	416	961	1181	589
Sudbury***	1111	1009	737	586	353	821	1009	514

*- Bivoltine region for ECB. First Peak Catch: 300-350 DD, Second Peak Catch 1050-1100 DD

**-. Overlap region for ECB. First Peak Catch : 300-350 DD Second Peak Catch 650-700 DD, Third Peak Catch 1050-1100 DD

***-Univoltine region for ECB. Peak Catch 650-700 DD

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Use these thresholds as a guide, always confirm insect activity with actual field scouting and trap counts.

Select a region below for the latest weather, crop and pest degree day information:

Essex County(<https://onvegetables.com/2021/07/22/vcr2021-10/#essex>)

Chatham-Kent County(<https://onvegetables.com/2021/07/22/vcr2021-10/#chatham-kent>)

Norfolk County(<https://onvegetables.com/2021/07/22/vcr2021-10/#norfolk>)

Huron County(<https://onvegetables.com/2021/07/22/vcr2021-10/#Huron>)

Wellington County(<https://onvegetables.com/2021/07/22/vcr2021-10/#wellington>)

Simcoe County(<https://onvegetables.com/2021/07/22/vcr2021-10/#simcoe>)

Durham County(<https://onvegetables.com/2021/07/22/vcr2021-10/#durham>)

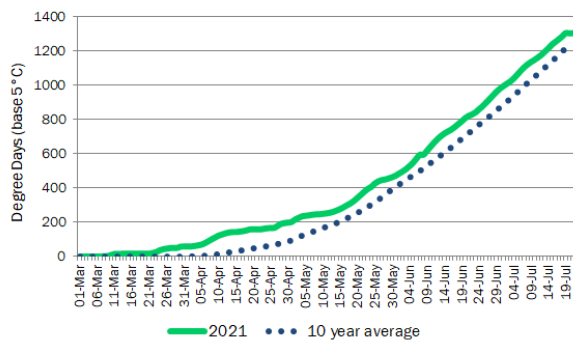
Peterborough(<https://onvegetables.com/2021/07/22/vcr2021-10/#peterborough>)

Kemptville(<https://onvegetables.com/2021/07/22/vcr2021-10/#kemptville>)

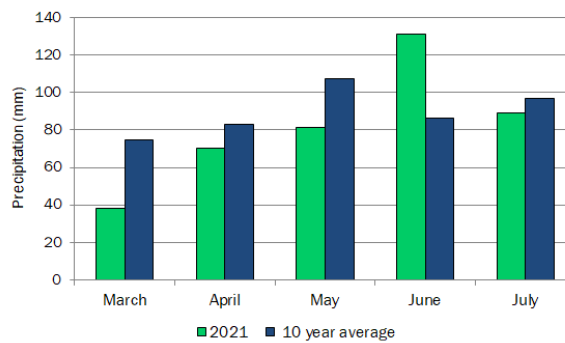
Sudbury(<https://onvegetables.com/2021/07/22/vcr2021-10/#sudbury>)

Essex County

Essex Growing Degree Days

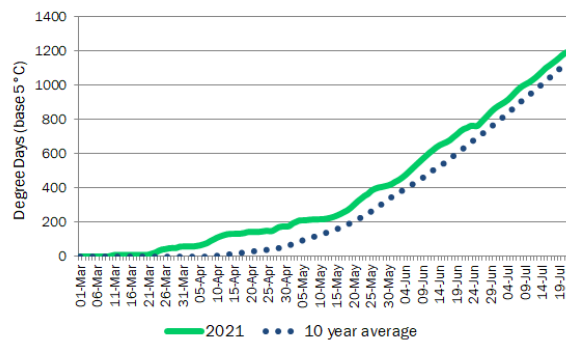


Essex Total Precipitation per Month

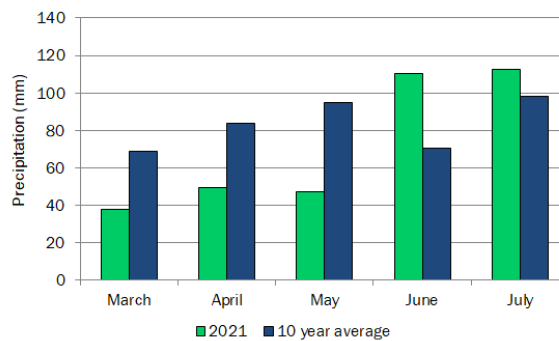


Chatham-Kent County

Chatham-Kent Growing Degree Days

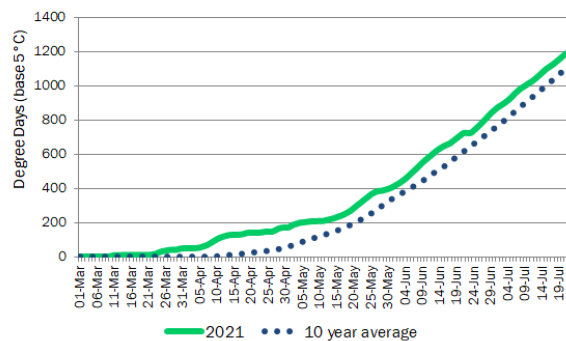


Chatham-Kent Total Precipitation per Month

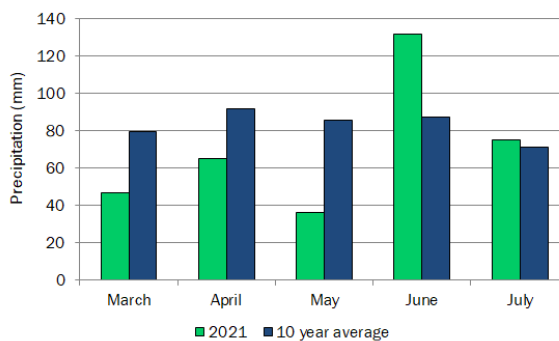


Norfolk County

Norfolk Growing Degree Days

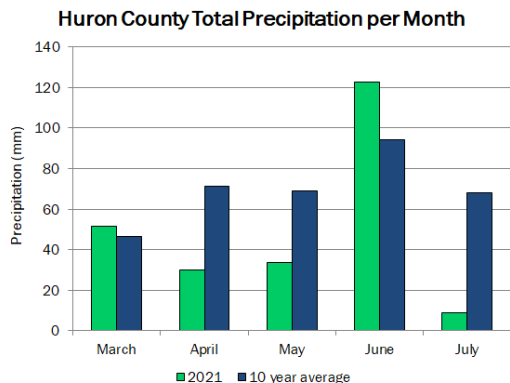
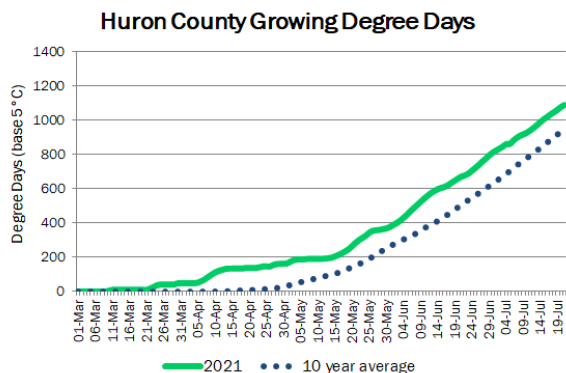


Norfolk Total Precipitation per Month

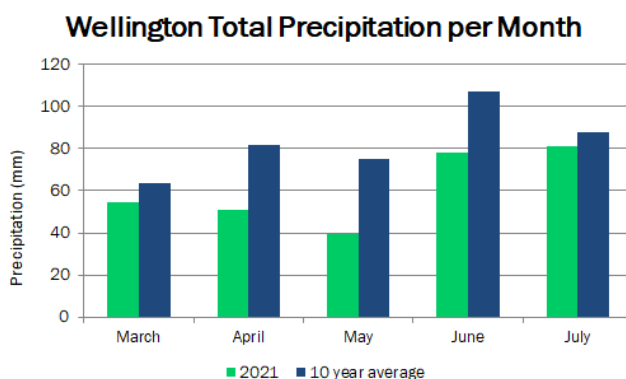
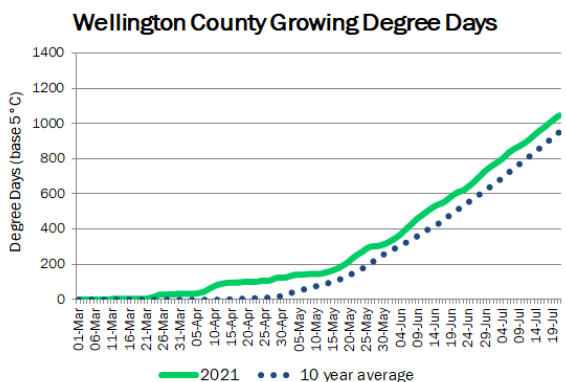


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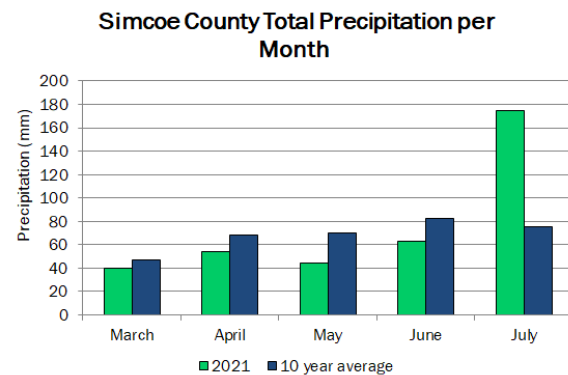
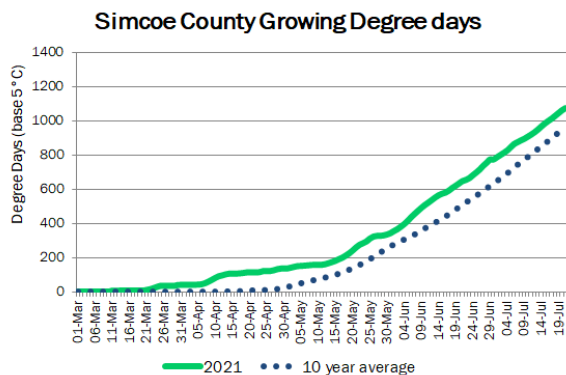
Huron County



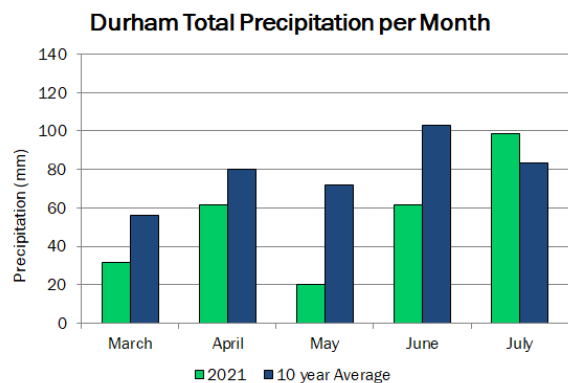
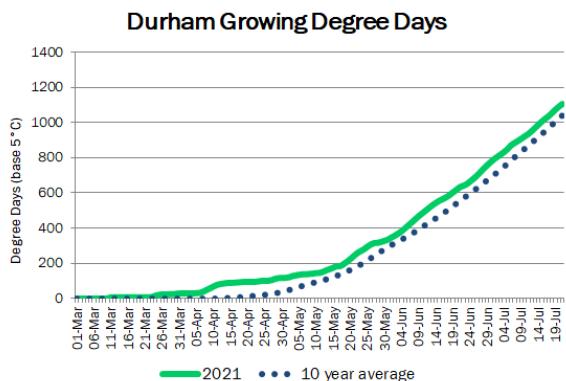
Wellington County



Simcoe County



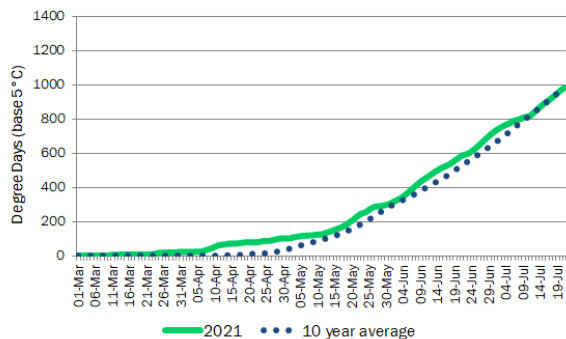
Durham County



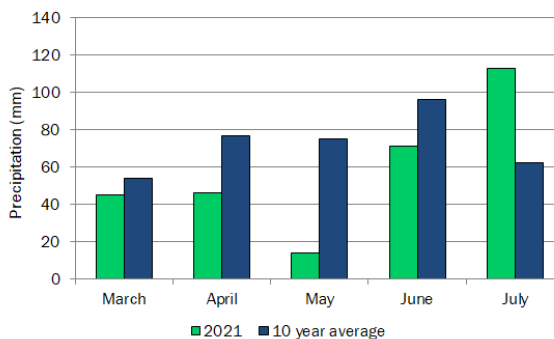
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Peterborough

Peterborough Growing Degree Days

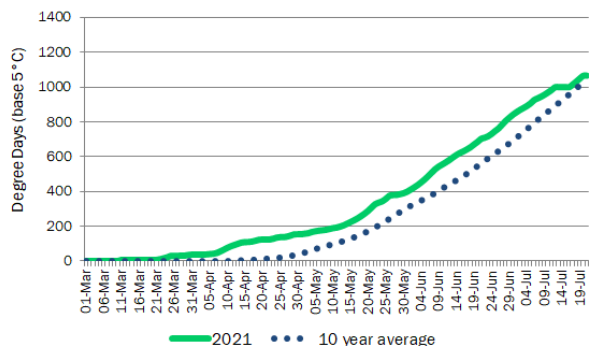


Peterborough Total Precipitation per Month

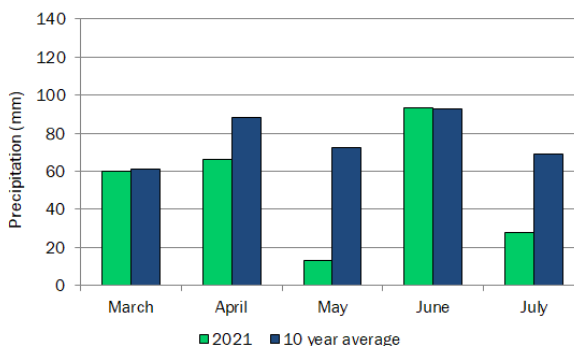


Kemptville

Kemptville Growing Degree Days

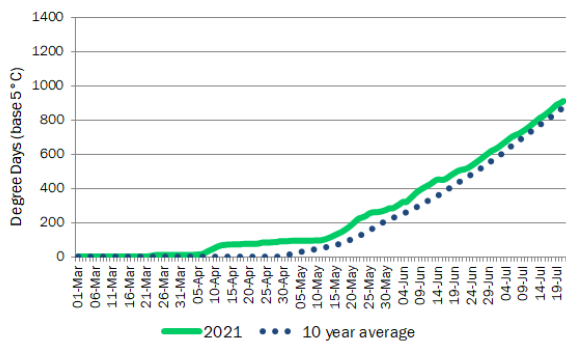


Kemptville Total Precipitation per Month



Sudbury

Sudbury Growing Degree Days



Sudbury Total Precipitation per Month

