

Farm Data Tools

Making Your Farm Smarter

Farming is complicated enough, so let's make things a little simpler. Our apps and tech platform are designed with you and your farm in mind. Perennia's highly-trained specialists are always looking for ways to help you work smarter on the farm – because when you're thriving, Nova Scotia is thriving.

April 6, 2023
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Tree Fruit Specialist

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WWW.PERENNIA.CA | [@NSPERENNIA](https://twitter.com/NSPERENNIA)

Quick Snapshot

Key Features of the Farm Weather Map

- Provincial farm weather stations in map view
- Compare real-time weather parameters, including temperature, wind speed, and precipitation
- Calculate site-specific GDD accumulation



This tutorial will include...

1. Registration and setup of a Farm Data Tools online account
2. Using the Farm Weather Map
3. Calculating growing degree days



REGISTRATION AND SETUP OF A FARM DATA TOOLS ACCOUNT



Registration

Create your Perennia account

- www.app.farmdatatools.ca
- Choose “**Don’t have an account**”
- Follow sign up instructions (1) and save your password somewhere safe
- An email is sent to you with an account verification code (2)
- Enter the verification code (3)
- You are now ready to login with your new username and password

1

Sign up

[Already have an account?](#)

Full Name*

Email Address*

Province/State

Business Sector




Major Products


Password

Confirm Password

By Signing up, you agree to our [Terms of Service](#) and [Privacy Policy](#)

2

[EXTERNAL] Please verify your Perennia Online Acc...   

 No-reply... Today at 10:58 AM

To: weather stations alert email

Thank you for signing up for your Perennia Online account! Your verification code is: 627300.

3

Verify Account

[Didn't get a code?](#)

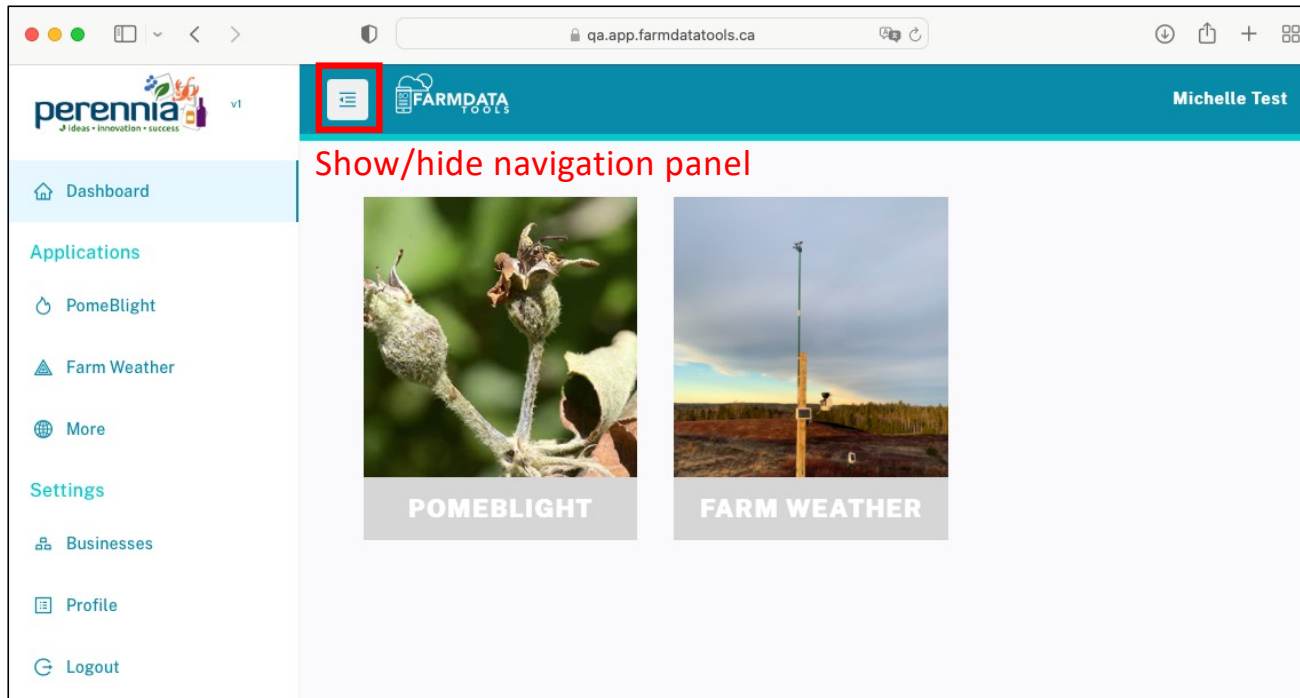
Email Address

Verify Code



Welcome!

Your dashboard on the Farm Data Tools application and note the side navigation panel



Navigation panel



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USING THE FARM WEATHER MAP

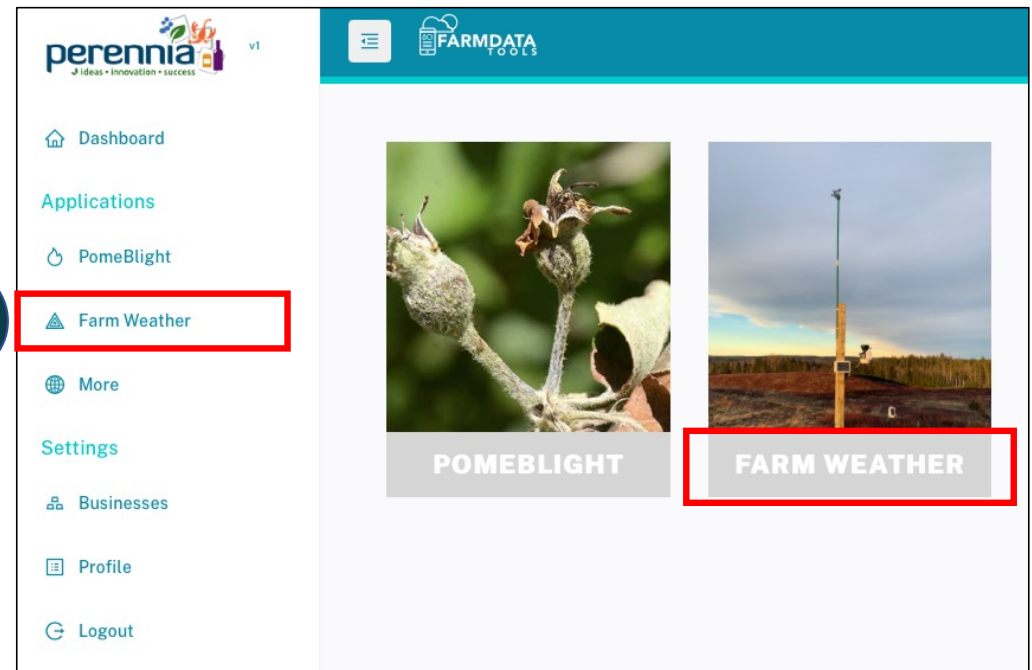


Accessing the Farm Weather Map

Find all of the weather stations

- Your account is created so for all future uses simply open the model from the dashboard or side panel
- Open **Farm Weather** now (1)

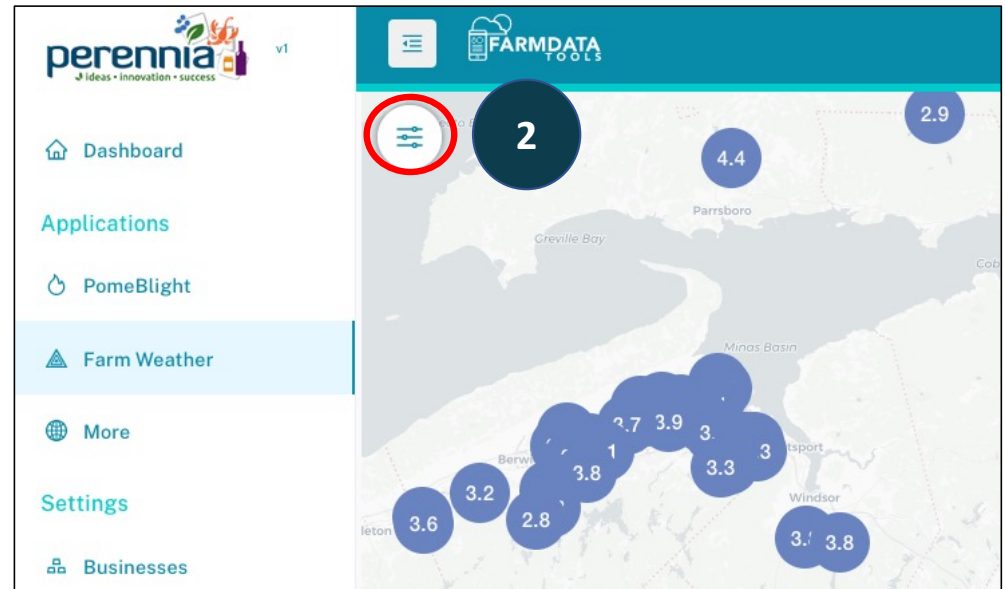
1



Access the weather menu

Open the menu to filter weather parameters

- Click on the weather menu (2)

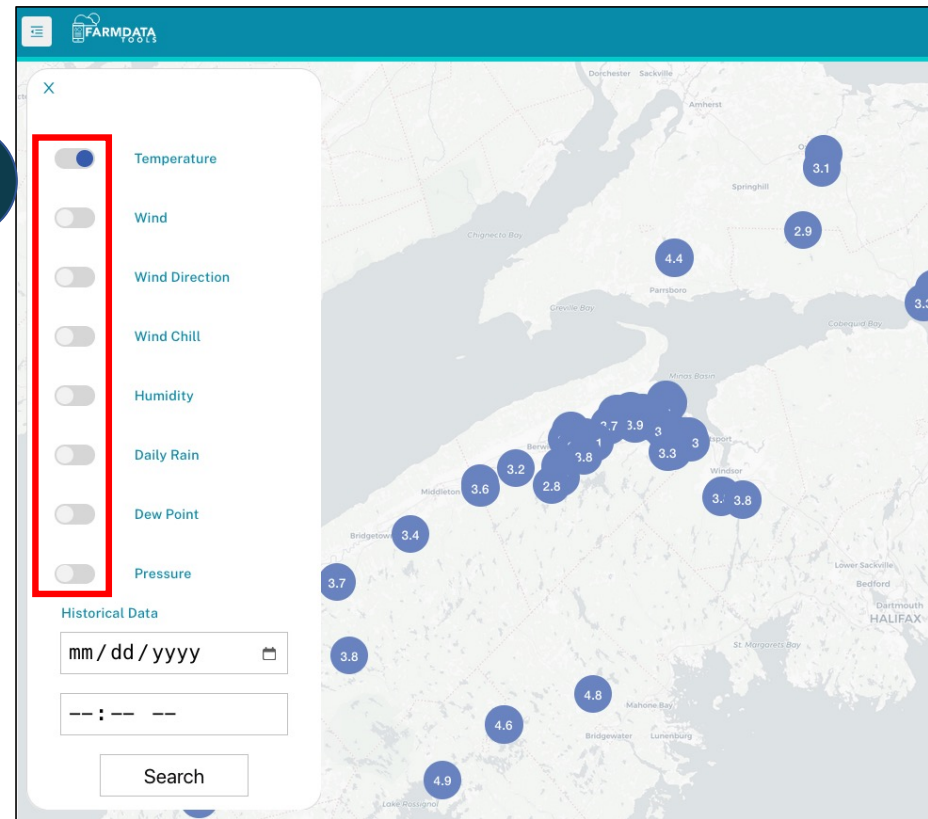


Change the parameter of interest

Temperature, wind or rain

- Choose one parameter from the menu (3)
- All weather station previews on the map are updated to reflect the selected parameter
- This feature is still under development

3



CALCULATING GROWING DEGREE DAYS



Refresher on Growing Degree Days (GDD)

Measure of heat accumulation based on daily air temperature

- Calculated in this tool using the basic method
 - Calculates the daily mean temperature by adding together the max and min temperatures and dividing by two.
 - The base temperature is subtracted from the mean temperature to give you the accumulated GDD.



GDD for Specific Weather Stations

Click on a station for access

- On the map, click on a weather station (1)
- Current weather conditions and a GDD calculator appear (2)

The screenshot displays the FARMDATA TOOLS interface. A map of Nova Scotia is shown with several weather stations marked by blue circles containing numerical values. A popup window for the station 'Cambridge (NSW055)' is open, displaying current weather conditions and a Growing Degree Days Calculator. The calculator includes input fields for Base Temperature (Tbase), Start Date, and End Date, along with a 'Calculate' button and a 'GDD: 0' result. A large blue circle with the number '1' is overlaid on the map, indicating the location of the selected station. Another large blue circle with the number '2' is overlaid on the popup window, indicating the weather data and calculator.

Cambridge (NSW055)

Temperature: 4.1°C

Wind: 1.6 km/h

Humidity: 30%

Pressure: 1030.0 mb

Dew Point: -12.2°C

Daily Rain: 0 mm

Growing Degree Days Calculator

Base Temperature (Tbase)

Start Date

End Date

GDD: 0



Choose the timeframe for GDD calculations

Select a base temperature (3), start (4) and end date (5)

3

4

5

Growing Degree Days Calculator

Base Temperature (Tbase)

Start Date

End Date

GDD: 0

Growing Degree Days Calculator

< April 2023 >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

GDD: 0



With the chosen timeline, calculate GDD

Your answer is given after pressing calculate

- Press calculate (6)
- Your answer for the chosen weather station and timeframe is given

Growing Degree Days Calculator

Base Temperature (Tbase)

Start Date

End Date

6

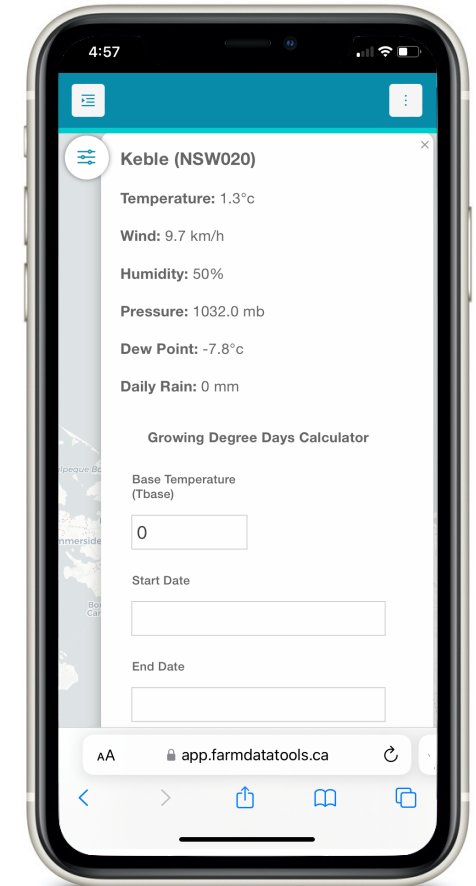
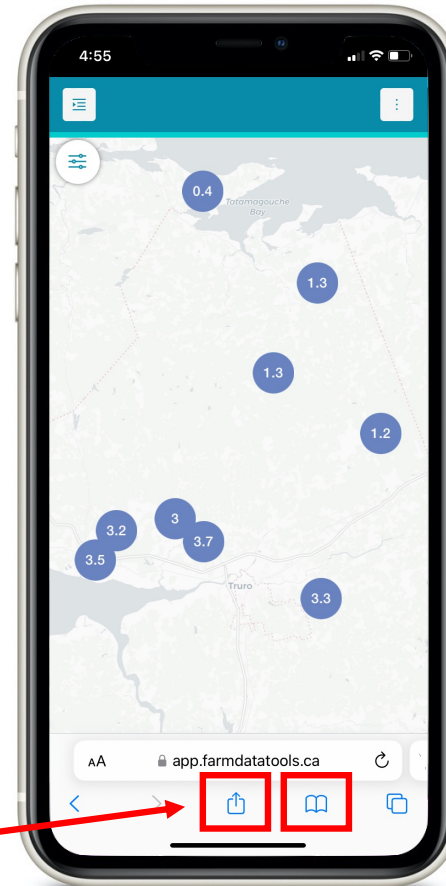
GDD: 15.4



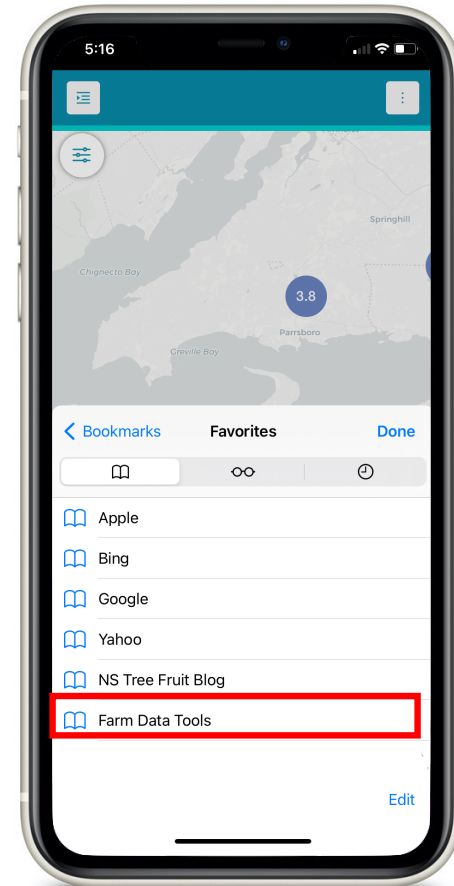
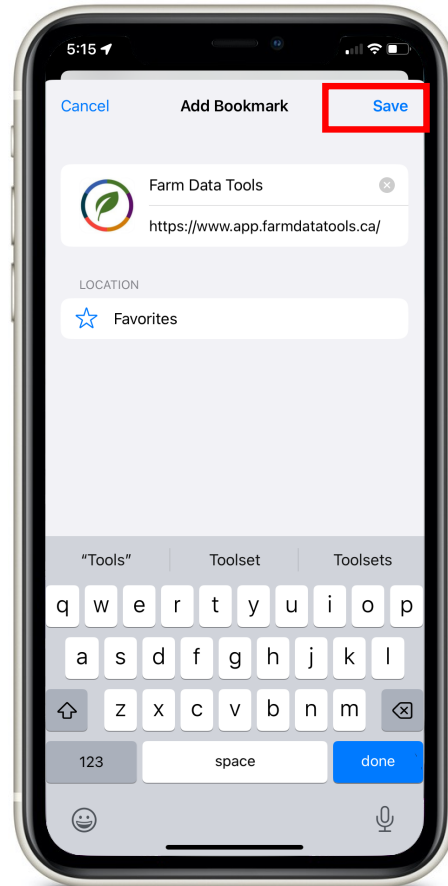
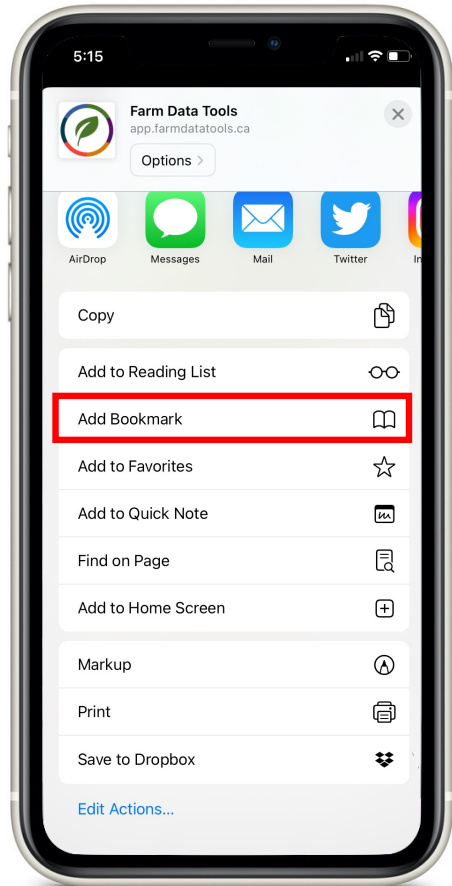
Try the Mobile Experience

Responsive website adjusts to screen size

- Tool is NOT downloaded to your phone so iPhone vs Android does not matter
- If your phone has the internet, then this website will work
- Log in on your smartphone at the website address:
www.app.farmdatatools.ca
- Bookmark website to revisit later



Saving a bookmark





www.farmdatatools.ca

Congratulations on being early adopters!
Communicate issues and feedback to Hugh Lyu at
hlyu@perennia.ca or 902-890-0472



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