



## **“Fruit Facts” – Wednesday, March 13<sup>h</sup>, 2024**

**Mario Miranda Sazo and Janet van Zoeren**

### **Don't Forget to Sign Up for the 2024 Fruit Facts!**

We began to send out Fruit Facts issues last week! For now, we will continue to send to everyone who was subscribed to receive Fruit Facts last year, but do make sure to sign up for this additional subscription when you enroll in our program via your county office.

## **Phenology Updates**

### **Phenology Update for Tuesday, March 13**

By Craig Kahlke, Terence Robinson, Mario Miranda Sazo, Janet van Zoeren, and Liz Tee.

Over the past week, bud development saw a small amount of movement. All early cultivars (Idared, NY-2, Ginger Gold, Zestar) are at the **silver tip** stages in inland sites across our region by now (see below tree bud phenology pics taken in Niagara, Orleans and Wayne orchards yesterday). In a few cases, we even saw early green tissue in less than 3-5% of the total amount of tree buds. The most advanced Idared trees in very early sites were at **60-70% or more silver tip** and NY-2 buds were about **50-60% or more silver tip** yesterday (March 12). Several other cultivars that are not supposed to be early cultivars (i.e. Honeycrisp, Gala) also showed silver tips but to a lesser extent at around 10-20% in early sites. There were also early stages of green tissue showing up in a few cases for both cultivars. The slight warmup of Tuesday 3/11 had highs in the upper 50's for most. The forecast for today (3/13) is partly cloudy with highs in the low 60's with lows 30's and 40's the next several nights. There will be more clouds Thursday and Friday with cooler highs (50's Thursday, 40's Friday). Saturday through at least the end of next week look to have highs only in the 30's and 40's with 20's and 30's at night with snow predicted for several days. Therefore, any bud development that has advanced slightly through the middle of this week should hold for the following 7-10 days if the forecast is accurate.

The season is reminiscent of 2012 when we had green tip (GT) March 18-19 in most sites in WNY although in that season the real warmup didn't arrive until March 11-16, with highs at inland sites hitting near 80F. There were sustained highs in the 60's for several days, with lows at night only in the 50's or 60's.

**Green Tip Model** – see last week's email blast/Fruit Facts from 3/7 for full explanation of the model. In summary, in a year like this with great temperature swings in late winter, the model is not very accurate. In Table 1 below, it is showing that some sites have already reached GT (last week/this week), especially for early varieties, when they have not. However, the accumulation of heat units is far ahead of past seasons. Half the WNY sites we used for the model are significantly ahead of Geneva, and even the Hudson Valley, which is typically at least one week ahead of us in phenology.

An older GDD model that uses growing degree days since Jan. 1 (GDD base 4C, BE) shows we have accumulated 80-98 GDD since Jan. 1. This indicates we are running well ahead of last year. This model predicts we should be at silver tip near 82, and we should be at 121 for green tip. The GDD model indicates we're at silver tip (ST) for  $\frac{3}{4}$  WNY sites, and will be at GT at one site by 3/22.

**Table 1. Heat Unit Accumulation for the Green Tip Model (through March 11)**

<b>NEWA Site</b>	<b>Units above 2023</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>Date Predicted to reach GT in early varieties</b>	<b>Date Predicted to reach GT in most varieties</b>
Appleton N	971	1793	822	478	3/13	3/16
Medina	1643	2118	475	446	3/8	3/12
Will.-Mason	1409	1893	484	433	3/14	3/25
Will.-DeMarree	NA	2293	NA	NA	3/5	3/8
Geneva AGT. N	1150	1954	804	480	3/12	3/13
Highland (HVL)	NA	1408	NA	NA	NA	NA
Peru (Forrence)	NA	557	NA	NA	NA	NA

**Table 2. GDD Accumulation, Base 43 BE (Jan 1 through March 11; ST Predicted at ~82 DD, GT Predicted at ~121DD)**

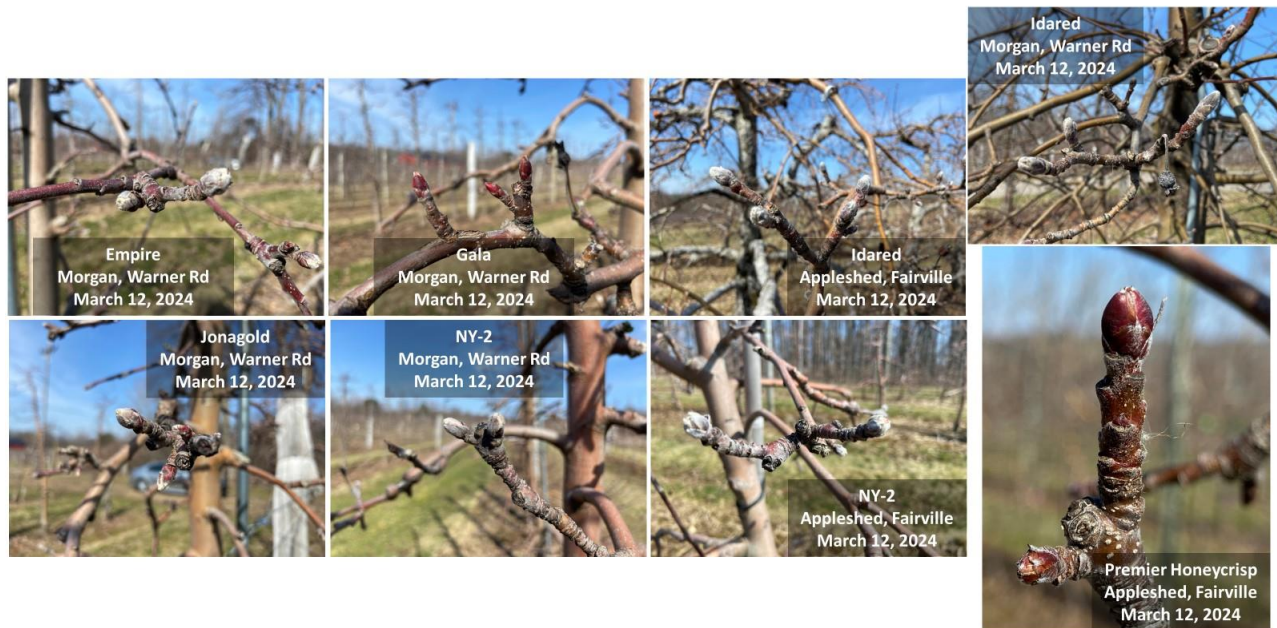
<b>NEWA Site</b>	<b>Units above 2023</b>	<b>2024</b>	<b>Forecast through 3/22</b>	<b>2023</b>	<b>2022</b>
Appleton N	59	82	92	23	23
Medina	77	98	123	21	31
Will.-Mason	57	80	96	23	29
Will.-DeMarree	68	96	105	28	31
Geneva AGT. N	55	88	117	33	33
Highland (HVL)	0	75	123	75	69
Peru (Forrence)	25	36	45	11	15

**Interpretations:** We cannot say for sure when we will have true GT in apples in WNY, but seeing some green tissue ahead of another day of above average temperatures could bring us there for a low percentage of buds in some early varieties. Sprayers should be calibrated and ready to go by now!

**Early apple bud phenology stages in Niagara and Orleans blocks visited yesterday (Tuesday, March 12).**



**Early apple bud phenology stages in Wayne blocks visited yesterday (Tuesday, March 12).**



## To Do Today

- **Are you enrolled for this year's Fruit Facts?**

We're providing a few complementary issues this spring, as a reminder to re-enroll if you would like to. You can re-enroll in with the Fruit Team and for your Fruit Facts subscription at:

<https://lof.cce.cornell.edu/enrollment.php>.

- **Is your sprayer clean and calibrated?** I hate it too, but spring is coming more quickly than any of us would like.

- If you need to send anyone for the "Special Permit" handlers course, to be able to apply certain restricted use pesticides, those courses will be offered in-person on April 9<sup>th</sup> (Wayne county) and April 10<sup>th</sup> (Orleans county).

- Check your **pesticide inventory** and make sure you will be able to source any products including herbicides that you will need this summer.

- Insects are moving. Pear psylla eggs and adults were spotted by Liz Tee on March 12<sup>th</sup> (see picture at right) and a black stem borer adult was seen on March 5<sup>th</sup>. What does that mean? If we get a long enough cold snap, it could knock numbers down. Or, if not, they get an early start and may have a longer season. It's too early to tell, but stay tuned, and be sure not to skimp on these early season control IPM strategies (proper pruning, copper and oil, early season scouting, etc).



Pear psylla adult, March 12 2024. Dormant oil will help control this guy. Photo by

- Today or tomorrow might be a good window for **dormant oil sprays**, which can be applied any time between **now until ½" green**. It is a bit of a gamble, since temperatures below freezing temperatures in the two days prior or two days after an oil application may damage tissues.

- A 2-3% oil application can be tank mixed with any copper formulation, and will help with **mites, San Jose scale and pear psylla**.
- If you don't get it on today, there may be time later next week depending how fast buds develop when temperatures warm up.

- A **silver-tip** application of a high (>15%) metallic copper equivalent (MCE) **copper** fungicide (e.g. Badge, Champ, Cuprofix, Kocide) will help clean up any **apple scab** and **fire blight** inoculum that overwintered in bud scales and will provide an early protection against fungal ascospore release for the following 7-10 days. You can make this application **through green tip** – this week or next will likely be your windows.

Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide. Copyright 2024. All rights reserved. No part of this material may be reproduced or redistributed by any means without permission. Cornell Cooperative Extension provides equal program and employment opportunities.

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