

# **Northeast NY - 2023 - Apple Season Highlights**

**Persons Reporting:** Michael Basedow, Cornell ENYCHP

## **General Weather Conditions**

Warm winter had many of us concerned about early green tip.

Big temp (40 degree) swing Feb 3-4, wiped out much of NENY's stone fruit.

90 degree temps in April pushed things from silver tip to 1/2 inch green in the course of a few days. Panicked, but got cool again.

Frost May 18-19, took out some fruit in portions of NENY, caused frost damage in many other blocks. Some blocks saw very little damage, while others saw upwards of 80% loss close to Albany. Made thinning very difficult. Many growers decided not to thin. This left many blocks somewhat overcropped in many spots.

Dry in May, then started raining in June and did not stop.

## **Horticulture Overview**

In general, fruit is softer, and lower in brix this year compared to average due to all the rain. Storability may be questionable because of it. Luckily we had good weather during prime harvest so timely harvest occurred in much of the region.

## **Disease Overview**

Had a few fire blight events, but nothing too crazy. Sprayed and got through it in most blocks.

Large scab events came late to the Champlain Valley. Some leaf and fruit scab this year, particularly in susceptible varieties like Macs, Cortlands, etc. Powdery mildew pressure is high in Champlain valley blocks still, we were trying to clean that up for much of the season as well.

## **Arthropod Pests**

Insect wise, WAA is probably still our biggest issue that we are trying to get under control. We also struggle with ALCM, which seems to be high pressure here. Otherwise TPB continues to be a big issue where pink sprays are not utilized, followed by PC, OBLR, the other leps, etc.

BMSB were caught late into the season this year, though only a few growers are actively managing for them.

# Western NY - 2023 - Tree Fruit Season Highlights

**Persons Reporting:** Anna Wallis, NYS IPM; Vaughn Gingrich, Lake Ontario Ag Consulting; Janet van Zoeren, Cornell LOF

## General Weather Conditions

- **Winter Cold Events:** Feb 2-4, lows -2 to -4 (F) in Geneva, colder in other locations (e.g. -7.5 in Dundee), most stone fruit buds in Geneva killed; up along Lake Ontario temperatures were moderated and not much winter cold damage was seen.
- **Spring temperature trends:** Fairly cool (DDs behind average) until Mid-Apr. A hot spell (temps in the 80s) Apr 13-15 caused sudden jumping ahead in phenology.
- **Freeze event:** Overnight lows from May 17-19, lows 34.5 and 31.5 in Geneva, much colder in other locations (26 and 27F reported in some places, particularly bad in Finger Lakes) most apples at bloom/petal fall through 10mm, stone fruit at shuck split. In certain locations, we saw significant crop loss and/or fruit finish issues. See table below.
- **General** May 27-June 2 in 80's with lows in 50-60's.
- **Heat in July?** Not excessive, a few days in the 90's
- **Extreme but Unpredictable Rain Events:** Cool and rainy spring and late autumn with a warm and dry middle of the season. Overall, weather was never consistently hot or cold, or wet or dry, for very long at a time.
- **Other Weather:** Significant hail and windstorms caused damage to trees, fruit, and trellis structures in specific locations throughout the state.

## **McIntosh Phenology at Geneva Cornell AgriTech Research North, with DD43 and Date**

	<u>TC</u>	<u>P</u>	<u>B</u>	<u>PF</u>
<b>Avg</b>	228	289	378	479
	Apr27	May3	May10	May18
<b>2023</b>	268	318	422	526
	Apr20	Apr24	May10	May16

## **Frost Data from WNY region**

<b>Critical Temperatures Apples</b>		
Stage	10% kill	90% kill
Bloom/post	28	25
Key:	Blue	<32
	Light Orange	<28
	Dark Orange	<25
<b>Low overnight temperatures 5/17-18 recorded at NEWA stations in WNY</b>		
Station	Region	Temp (F)
<b>Scaffolds stations</b>		
Geneva	WNY, Inland	31
Highland (HVRL)	ENY, HV	31
Clifton Park	ENY, Capital Region	32

<b>Peru (Forrence)</b>	<b>ENY, CV</b>	<b>32</b>
<b>Medina - Inland</b>	<b>WNY, Inland</b>	<b>30</b>
<b>Appleton North - Lake</b>	<b>WNY, Lake</b>	<b>31</b>
<b>Fairville (The Apple Shed) - Inland</b>	<b>WNY, Inland</b>	<b>27</b>
<b>Williamson (DeMarree) - Lake</b>	<b>WNY, Lake</b>	<b>34</b>
<b>West of Rochester</b>		
LERGP	WNY	37
Fredonia	WNY	34
Ceres	WNY	23
Ransomville	WNY	33
Appleton (Russell Farms)	WNY	32
Corwin	WNY	33
Lyndonville	WNY	31
Knowlesville	WNY	29
Waterport (Orchard Dale)	WNY	33
Albion	WNY	31
Elba	WNY	28
Bergen	WNY	27
<b>East of Rochester</b>		
Williamson (Mason)	WNY	29
Sodus (Cherry Lawn)	WNY	31
Sodus	WNY	30
Butler (Tree Crisp)	WNY	30
<b>Fingerlakes Region</b>		
Conesus Lake North	FLX	32
Conesus Lake South	FLX	29
Arkport	FLX	26
Farmington	FLX	26
South Bristol	FLX	30
<b>Geneva Bejo</b>	<b>FLX</b>	<b>29</b>
<b>Geneva McArthy</b>	<b>FLX</b>	<b>30</b>
<b>Geneva Gates</b>	<b>FLX</b>	<b>32</b>
<b>Geneva (3 Bros)</b>	<b>FLX</b>	<b>33</b>
Dresden	FLX	31
Branchport	FLX	28
Hammondsport	FLX	29
Watkins Glen	FLX	30
Romulus	FLX	31
<b>Interlaken</b>	<b>FLX</b>	<b>30</b>
<b>Aurora</b>	<b>FLX</b>	<b>30</b>
<b>Lansing (CUAES Orchard)</b>	<b>FLX</b>	<b>31</b>
<b>Ithaca (CUAES)</b>	<b>FLX</b>	<b>26</b>
<b>Ithaca (Airport)</b>	<b>FLX</b>	<b>26</b>
<b>Freeville</b>	<b>FLX</b>	<b>27</b>
<b>Far WNY</b>		
Baldwinsville	WNY	28
Baldwinsville (Abbott)	WNY	29
Skaneateles	WNY	32
Syracuse	WNY	30
Syracuse Airport	WNY	31
Lafayette	WNY	30

## Disease Overview

### Primary Apple Scab Infection Periods:

4/16, 4/24, 4/28, 5/1, 5/20, 6/12-6/16

\***McIntosh Green Tip Date:** 4/2 (mainly inland) through 4/12 (mainly lakeside)

**Estimated date of 100% Scab Ascospore Maturity (NEWA):** 6/9 through 6/16

Scab pressure was light early on but primary scab season lasted several weeks longer than "usual". Rains late season led to some locations with high secondary scab pressure.

### Fire Blight Blossom Blight Infection Periods:

Fire blight pressure was much lower this summer than we've seen the past few years. Almost the entire bloom period was very cool, which led to much lower risk of FB infection. Late blooming varieties saw some blossom blight, but nothing compared to previous years.

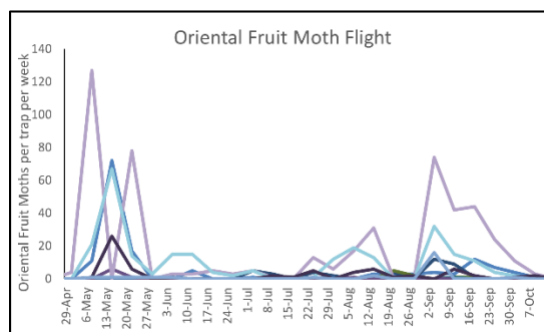
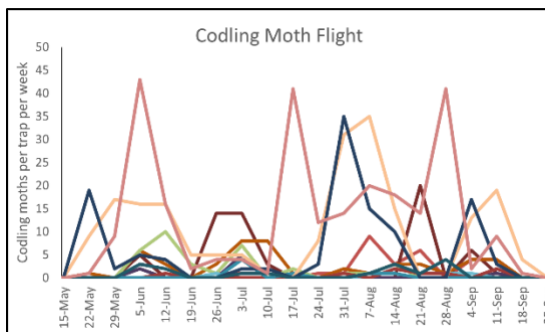
### Powdery mildew:

In early spring it seemed like it would be a high PM pressure year. However, temperatures turned cool and rainy, and PM never blew up like it seemed like it was going to early on. Several locations did struggle with PM.

**Summer rots** caused some issues in orchards, especially since it was hard to find a good spray window during the rainier parts of the summer. Some suspected **Marssonina leaf blotch and/or Glomerella leaf blotch** was seen throughout the region (far more than I have seen previously).

### Arthropod Pests along Lake Ontario

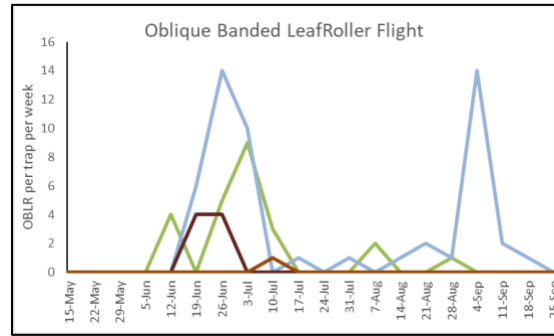
First catch of OFM occurred May 2 in Medina NY, with the first generation peak around mid-May. Several traps saw high outbreaks of OFM adults (>70 per week), and they continued to be trapped until early October (similar to last year). First catch of CM occurred on May 22, last catch was September 18, and the generations of CM did not seem to separate out very well this year. Similarly to most years, although OFM adults trap catch was much higher than CM adult trap catch, we see much higher numbers of CM larvae in the fruit at harvest than of OFM.



OBLR first trap catch was not until June 12<sup>th</sup> (2 weeks later than last year).

Apple maggot numbers were low.

Woolly apple aphid numbers were high again this year, and were set to be very bad until the summer rains knocked populations back in August.



Stink bug trapping and damage to fruits both seemed to be quite low this year. Although entirely speculation, I suspect the wet summer meant there was more alternative food sources in the forests and field cropping systems, which meant SBs were not forced into the orchards until late September. I do not think the actual WNY population of stink bugs is any lower this year than it has been other years.

In cherries and berry crops, spotted wing drosophila showed up late and at a lower abundance than previous years.

Black stem borer numbers were higher than in 2022, but much lower than in 2021. A handful of blocks saw declining trees with borer holes present.