

Northern Michigan FruitNet 2018

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – July 27, 2018

CALENDAR OF EVENTS

8/23

NWMHRC Open House

*More details below! Please RSVP
for dinner to Jenn at 231-946-
1510 or goodr100@msu.edu*

What's new?

SWD Update – NWMHRC Trap Counts for 31 July, 2018

New articles

SWD Update – NWMHRC Trap Counts for 31 July, 2018

Compared to last week's trap numbers, we found a decline in SWD in traps at the NWMHRC this week. Last week, SWD numbers increased dramatically at the research

station from 10 flies to 936. Cooler and wet weather was predicted and we hypothesized that trap numbers would increase again. However, that was not the case, and as of today, we found a total of 497 flies at the station (Table 1). We will continue to monitor traps on growers' farms in the region in the later part of this week.

We also sampled fruit from SWD research trials today. Last week, we found few larvae in fruit collected from blocks at the station. Our samples today indicated that SWD oviposition picked up at the station within the last week – we found significantly more larvae in fruit sampled this week than we have in previous weeks. In blocks that were not treated with insecticides this season, we found a total of 97 SWD larvae in today's samples. Whereas, in blocks that were treated with insecticides, we found a total of 16 larvae.

With some farms finishing harvest, we could see higher on-farm trap numbers as these growers' lighten up on SWD spray programs. However, growers that have yet to finish have been challenged with balancing PHIs, reapplication intervals, harvest timeframes and quotas recently. We remind growers that there is a 24C label available for the use of Mustang Maxx on tart cherries; this label provides a three-day PHI and does not allow a reapplication of the material less than 7 days apart. Please refer to the 24C Mustang Maxx label (attached to this FruitNet email) for corresponding requirements for this special use.

Table 1. Total SWD Trap Count for NWMHRC, 2018.

| Location | wk of 5/15 | wk of 6/4 | wk of 6/11 | wk of 6/18 | wk of 6/26 | wk of 7/2 | wk of 7/9 | wk of 7/16 | wk of 7/23 | wk of 7/30 |
|------------|---------------|--------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|
| NW Station | NA | trap set | 1 | 2 | 3 | 180 | 110 | 10 | 936 | 497 |

Articles featured in past FruitNet Reports

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE

The Northwest Michigan Horticultural Research Center's (NWMHRC) annual open house is scheduled for Thursday, August 23, 2018. This year's event will include educational sessions, equipment demonstrations, a social hour, and dinner.

We have moved to an every-year equipment show, so vendors and equipment will be on hand all day at this year's open house. We have also added annual equipment demonstrations - we have invited equipment companies to bring in new orchard and vineyard equipment and technologies for demonstration purposes. We hope to be able to showcase new advancements in orchard and vineyard assist technologies at the 2018

NWMHRC Open House.

Free educational wagon tours of the NWMHRC will feature MSU specialists and will take place from 1:00 – 2:15 PM. The tour will include wine grape and tree fruit specialists that will speak on a variety of topics. We will discuss fire blight resistance screening results and demonstrate an orchard platform in high-density apples. We will also showcase some work we have conducted using drones as bird deterrents in sweet cherry orchards. We will also present data on the effectiveness of spotted wing drosophila management strategies that were employed in 2018. Cherry leaf spot efficacy will also be discussed. We will demonstrate some weeding strategies in wine grapes, and wine grape specialists will be on hand to review the season and prepare for harvest.

After the educational sessions, growers are encouraged to meet with equipment vendors and participate in the demonstrations from 2:30 – 5:30PM. We will host as many equipment vendors to hold demonstrations as we can in this time frame. We hope that growers and others will be sure to attend this part of the 2018 open house. Demonstrations will be followed with a social hour from 5:30 – 6:15PM and dinner at 6:15PM.

In past years, the Leelanau Horticultural Society has held their annual meeting, but this year they plan to just host the social hour and dinner. We encourage growers from all over the northwest region to join us for this fun and relaxed event.

The 2018 NWMHRC Open House is co-sponsored by the Leelanau Horticultural Society and Michigan State University AgBioResearch, and Extension, with support from Parallel 45 and the NW Michigan Horticultural Research Foundation.

To reserve or purchase a dinner ticket, please call (231) 946-1510 or email Jenn at goodr100@msu.edu by August 20, 2018. The dinner will be catered by *Ethnic Garden Catering* and will feature locally produced food; cost for dinner tickets is \$15 per person.

For more information, contact the NW Michigan Horticultural Research Center at 231-946-1510. We hope to see many of you at this fun and educational event!

Predicted 2018 Apple Harvest Dates

Philip Schwallier, District Horticulture Educator
Amy Irish-Brown, District ICM Educator
Clarksville Research Center

The predicted harvest dates for every MAWN weather station is now available on Enviroweather web site at Michigan State University. This spring was colder than average which delayed the development of spring foliage. Then warmer weather arrived and bloom developed 7 behind normal in the south to 2 days behind normal in the north

part of the state. Record hot temperatures followed thus advancing harvest dates to predict near normal dates for 2018 for the state. In general, 2018 Predicted Harvest Dates are roughly normal in the south and a few days early in the north. Bloom dates this spring were late across the state.

As always, the weather seems to be unusual each year and 2018 was no different. It began with what appeared to be another very late spring. Most areas bloomed late except northern areas of the state. During April very cold weather moved in several times leaving low areas and sensitive varieties with minor frost damage. In general, apple blocks have a mix of cropload, some light areas but mostly moderate to heavy cropload. Blocks with light croploads will mature 3 or 4 days sooner than the predicted harvest dates. Heavy croploads will mature 7 days later than the predicted dates. If hot stressful weather occurs in August or September, apple maturity will be advanced. The 2018 predicted harvest dates are listed in Table 1. This year 2018, we are a few days behind last year. Table 2 lists this year's predictions compared to normal and last year.

The normal harvest dates for other varieties are listed in Table 3 for the Grand Rapids area. This year's 2018 predicted dates for other non-modeled varieties are a rough estimate based on the McIntosh, Jonathan and Red Delicious predicted dates. Other areas of the state should adjust non-predicted varieties based on their own history. ReTain application should be applied 30 DBH (days before harvest). Harvista can be applied 3 to 7 DBH. Use Table 3, 2018 Predicted Harvest Dates for Other Varieties, to time ReTain applications and adjust for varieties and locations.

Table 1. 2018 predicted peak harvest dates.

| Full bloom date 2018 | | | | Predicted harvest date 2018 | | | |
|----------------------|----------|--------|--------|-----------------------------|--------|--------|----------|
| Station | McIntosh | Jons | Reds | McIntosh | Jons | Reds | Observer |
| SWMREC | 11-May | 13-May | 14-May | 8-Sep | 24-Sep | 1-Oct | Shane |
| Deerfield | 8-May | 9-May | 10-May | 5-Sep | 22-Sep | 29-Sep | Tritten |
| Romeo | 13-May | 14-May | 15-May | 10-Sep | 25-Sep | 30-Sep | Tritten |
| Peach Ridge | 16-May | 17-May | 17-May | 14-Sep | 26-Sep | 2-Oct | Irish- |
| Hart | 21-May | 22-May | 23-May | 19-Sep | 30-Sep | 7-Oct | Irish- |
| NWMHRS | 22-May | 23-May | 23-May | 20-Sep | 2-Oct | 8-Oct | Rothwell |

Table 2. 2018 predicted peak harvest dates compared to normal and last year.

| Days ahead of normal | | | | Days ahead of last year | | |
|----------------------|----------|------|------|-------------------------|------|------|
| Station | McIntosh | Jons | Reds | McIntosh | Jons | Reds |
| SWMREC | -1 | -3 | -3 | -11 | -9 | -9 |
| Deerfield | 3 | -1 | 3 | -7 | -4 | -4 |
| Romeo | 3 | 0 | 3 | -8 | 0 | 1 |
| Peach Ridge | 1 | 0 | 3 | -9 | 1 | 2 |
| Hart | -1 | 3 | 7 | -6 | 0 | -1 |
| NWMHRS | 2 | 4 | 9 | -1 | 6 | 6 |

Table 3. Normal and 2018 peak harvest dates for varieties for the Grand Rapids area

| Variety | Normal date | 2018 predicted date |
|------------------|-------------|---------------------|
| Paulared | 8/24 | 8/24 |
| Gingergold | 8/26 | 8/26 |
| Gala | 9/10 | 9/10 |
| McIntosh | 9/15 | 9/14 |
| Honeycrisp | 9/18 | 9/18 |
| Empire | 9/24 | 9/24 |
| Jonathan | 9/26 | 9/26 |
| Jonagold | 9/26 | 9/26 |
| Golden Delicious | 10/2 | 9/28 |
| Red Delicious | 10/5 | 10/2 |
| Idared | 10/10 | 10/9 |
| Rome | 10/15 | 10/14 |
| Fuji | 10/25 | 10/25 |
| Braeburn | 10/25 | 10/25 |
| Goldrush | 11/1 | 11/1 |

Project GREEN Drone Workshops

Background: Thanks to a grant from AgBioResearch at MSU, RS&GIS and Dr. Bruno Basso will be conducting a series of **free** Drone workshops over the next two years, for growers across the state. Through these workshops, growers will develop an understanding of drone- based data collection and analysis with specific application to their commodity groups. Each of the 2-day workshops will target a specific commodity group including: tree & bush fruits, viticulture, nursery stock, and row crops.

Registration: <https://goo.gl/forms/UQDAnHWxBpRtnopz2>

| Agricultural Specialization (Commodity Group) | Location | Date |
|---|--|-------------------------|
| Tree / Bush Fruit | Southwest MI Extension Center, Benton Harbor | August 9 -10, 2018 |
| Grapes | Northwest MI Horticulture Research Center, Traverse City | September 13 – 14, 2018 |

| | | |
|---------------|---|---------------------|
| Nursery Stock | Michigan State University, East Lansing | September 6-7, 2018 |
| Row Crops | TBD | TBD |

Overall Attendees will:

- Learn the essential elements required to safely conduct commercial flight and mapping operations in the National Airspace System including flight planning and preparation
- Take part in hands-on drone flights both manual and autonomous.
- Develop an understanding of analysis techniques and applications in precision ag
- Gain a brief overview of Remote Sensing and its management applications.
- Leave the course with a clear understanding of the Drone-to-GIS workflow, including planning and completing missions, processing data and analyzing said data in GIS

Space is limited, if you are interested in attending please register and answer the questions at: <https://goo.gl/forms/UQDAnHWxBpRtnopz2>

Interested parties must sign up by July 25, 2018, we will confirm your spot by August 1, 2018.

Please contact Erin Bunting (ebunting@msu.edu) or Bruno Basso (basso@msu.edu) for more information

MSU Extension programs and material are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status, or veteran status. Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities.

WEB SITES OF INTEREST:

Farmer to Farmer – Connecting farmers, cultivating community

<http://www.f2fmi.com>

Insect and disease predictive information is available at:

<http://enviroweather.msu.edu/homeMap.php>

This issue and past issues of the weekly FruitNet report are posted on our website:

http://www.canr.msu.edu/nwmihort/nwmihort_northern_michigan_fruit_net

60-Hour Forecast:

<http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous46ktvc>

Information on cherries:

<http://www.cherries.msu.edu/>

Information on apples:

<http://apples.msu.edu/>

Information on grapes:

<http://grapes.msu.edu>