

Northern Michigan FruitNet 2018

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – August 10, 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*

8/24

**"Forty Years Advancing Fruit
Production: Applied Physiology,
PGRs, Rootstocks, and Orchard
Systems" – Symposium**

More info below

What's new?

- **NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE – Education agenda included**

- **Forestry Field Day**
 - **Forest Mushrooms of Northern Michigan**
-

New articles

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE – Education agenda included

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.

**Northwest Michigan Horticultural Research Center's Annual Open House
Educational Session
August 23, 2018**

- | | |
|-------------|---|
| 1:00 | Welcome to the 2018 NWMHRC Open House |
| 1:05 – 1:10 | <i>Blosi platform demonstration in high-density apples</i>
NWMHRC Staff |
| 1:10 – 1:25 | <i>Results from 2018 streptomycin resistance screening for fire blight</i>
Suzanne Slack, Department of Plant, Soil, and Microbial Sciences,
MSU |
| 1:30 – 1:45 | <i>Spotted wing drosophila research update</i>
Dr. Nikki Rothwell, MSU Extension and AgBioResearch
Emily Pochubay, MSU Extension |
| 1:50 – 2:05 | <i>Using drones as a bird scare tactic</i>
Dr. Catherine Lindell, Department of Integrative Biology |
| 2:10 – 2:25 | <i>A review of SDHI fungicide resistance screening for cherry leaf spot</i>
Cory Outwater, Department of Plant, Soil, and Microbial Sciences,
MSU |
| 2:30 – 5:30 | Vendor Equipment Demonstrations |

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!

Forestry Field Day

Saturday, September 8, 2018

9:00 am to 12:00 pm

Palmer Woods Forest Reserve

3 miles south of M-22 on Wheeler Road Leelanau County

721 Acres – Leelanau Conservancy's Largest Natural Area!

This majestic forest reserve offers miles of hiking, cross-country skiing or snowshoeing through rolling hills and traditional northern hardwood forest. The trail system here is a work in progress, with mountain biking trails currently being constructed. The Forest Reserve's contiguous hardwood forest stretches over 2 miles north to south and has been managed for high quality timber for over 45 years. Consulting Foresters Richard Cooper and Paul Gerhart have helped guide management of this property for decades - years of experience which we can all learn from.

Join area forest landowners to learn about:

- How multiple use management works on the ground
- Sustainable forest management practices
- Forest insect and disease control treatments
- Impact of deer browse in the forest and management strategies
- Planting to increase diversity within a woodlot

Presenters include:

Richard Cooper and Paul Gerhart, Foresters, Cooper-Gerhart Consulting Forestry and Gerhart's Tree Service

Liana Nicole May, Ecologist, Borealis Consulting

Leelanau Conservancy Docents; Ann McInnis, Beth Chiles, and Peter Wolcott

Kama Ross, Forestry Assistance Program District Forester

Cost is \$5.00/person

Register by contacting Kama Ross by September 6, 2018 at 231 -256-9783 or kama.ross@macd.org

Forest Mushrooms of Northern Michigan

Tuesday, September 11, 2018, 6:30-8:30 pm Community Room of the Leelanau County Building 8527 E. Government Center Drive, Suttons Bay

Presentation by Linda Scribner from Manistee, Certified Wild Mushroom Expert, licensed to commercially harvest and sell wild mushrooms in Michigan. Linda brings 150 fresh & dried fungi specimens, sharing mushroom biology and the key features to look for when identifying different species. Linda's presentation includes the identification of the 20 species of mushrooms that the State of Michigan has deemed safe to eat in its Food Safety Program. Whether you are interested in mushrooms for the table, or want to identify something you saw in the woods, please join us to learn more about the fascinating, but often misunderstood, world of fungi!

Sponsored by the Forestry Assistance Program of Leelanau, Benzie and Grand Traverse Conservation Districts. Cost is \$10/person. Register by contacting Karen Long klong@leelanaucd.org or 231-256-9783

Articles featured in past FruitNet Reports

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 days 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.

Station	Full bloom date 2018			Predicted harvest date 2018			
	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.

Station	Days ahead of normal			Days ahead of last year		
	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

"Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems" – Symposium

24 August 2018, Hagerty Conference Center, Traverse City, Michigan

This day-long symposium and post-symposium dinner has been organized to **highlight current advances in fruit research** and recognize the statewide, regional, national, and international impacts of the 40+ year careers of Michigan State University professors of fruit science, **Jim Flore** and **Ron Perry**. Many of the anticipated speakers at the symposium studied with Drs. Flore and/or Perry at MSU and have become **leaders around the world in fruit research, teaching, extension, and industry.** **symposium Schedule (subject to change)**

8:15-8:20 Welcome and Introduction

8:20-8:50 **Jim Flore**, *Career Reflections* (30 min)

8:50-9:15 **Riccardo Gucci**, University of Pisa, Italy (25 min) *From Tree Physiology to Fruit Quality: the Role of Carbon and Water in Orchards*

9:15-9:35 **Marlene Ayala**, Pontificia Universidad Catolica, Chile (20 min) *Practical Applications of Source-Sink Relationships in Sweet Cherry*

9:35-9:55 **Paolo Sabbatini**, Michigan State University (20 min) *Changes in Within-Vine Carbon Partitioning Subjected to Early Basal Leaf Removal*

9:55-10:20 **Moreno Toselli**, University of Bologna, Italy (25 min) *Organic Fertilization Affects Carbon and Nutrient Balance in the Orchard Ecosystem*

10:20-10:45 Coffee break

10:45-11:05 **Lailiang Cheng**, Cornell University (20 min) *Photosynthesis and Flower Development in Relation to Sorbitol in Apple*

11:05-11:25 **Dario Stefanelli**, Agriculture Victoria, Australia (20 min) *Apple Biennial Bearing, the Importance and Effects of Crop Load*

11:25-11:50 **Roberto Zoppolo**, INIA, Uruguay (25 min) *Vineyard Water Management in a Temperate Humid Climate*

11:50-12:15 **Alan Lakso**, Cornell University (25 min) *Fruit Crop Physiology to Support Grower Practices*

12:15-1:30 Lunch

1:30-2:00 **Ron Perry** (30 min) *Career Reflections (30 min)*

2:00-2:25 **Tom Beckman**, USDA-ARS, Byron (25 min) *Rootstock Breeding to Improve Disease Resistance and Orchard Productivity*

2:25-2:45 **Greg Lang**, Michigan State University (20 min) *Integrating Rootstocks and Canopy Physiology into New Orchard Systems*

2:45-3:05 **Brent Black** - Utah State University (20 min) *Precision Tart Cherry Orchard Management: High Density System Development, Mapping and Variable Rate Applications*

3:05-3:30 **Terence Robinson**, Cornell University (25 min) *The Evolution/Revolution in Apple Planting Systems and Rootstocks*

3:30-3:50 Coffee break

3:50-4:10 **Win Cowgill**, Rutgers University (20 min) *Six Years of Research with Plant Growth Regulators for Feathering Apple Trees*

4:10-4:30 **Todd Einhorn**, Michigan State University (20 min) *Practical Orchard Strategies to Manage Flower Development and Fruit Set*

4:30-4:55 **Enrico Peterlunger**, University of Udine, Italy (25 min) *New Tools for Physiology Research and Breeding in Grapevine*

4:55-5:15 **Duane Greene**, University of Massachusetts (20 min) *A High Rate of ReTain*

Influences 'Honeycrisp' Apple Fruit Quality and Storage Potential

5:15-5:40 **Paul Domoto**, Iowa State University (25 min) *Reflections on Thirty-Eight Years of NC-140 Apple Rootstock Research*

5:40-5:45 Symposium wrap-up

6:00-7:00 Reception/social hour (*partial sponsorship by Michigan Grape & Wine Industry Council*)

7:00-10:00 Dinner and short appreciations (e.g., 2-4 min per speaker) (*partial sponsorship by Michigan Grape & Wine Industry Council*)

Registration and Travel Arrangements for the Flore/Perry Symposium

Please see the program and itinerary above (subject to slight modifications) for the one-day fruit science symposium, "**Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems**" to honor the retirements of **Professors Jim Flore and Ron Perry**. As you can see, this is going to be a very stimulating day of state-of-the-art international fruit research presentations, reflections on major advances in fruit production over the years, and ample opportunities to socialize with Jim, Ron, and the many academic and industry colleagues attending the program and/or dinner in beautiful Traverse City, Michigan. Many people are planning to spend extra days and/or bring family members to enjoy the Grand Traverse Bay area - there is much to see and do, from the Sleeping Bear Dunes National Lakeshore to sailing and fishing to dozens of opportunities for tasting of award-winning wines, ciders, and craft beers!

The registration website is now available at:

https://events.anr.msu.edu/Hort_Dept_Fruit_Symposium/

Thanks to Michigan State University and industry sponsorships, we were able to keep the registration costs exceedingly low:

\$75 for the Symposium, lunch, wine reception, and dinner

\$35 for the Wine reception and dinner only

\$50 for the Symposium and lunch only

Please register as soon as possible, and note that **registration closes on August 17** (we need to provide a firm number for the meals one week in advance of the symposium).

Also, please note that Traverse City is a highly desirable destination in summer, and so this second-to-last weekend of the traditional tourism season means hotel rooms will be increasingly difficult (and increasingly expensive) to procure, as will air travel into Traverse City airport (alternatives are to fly into Detroit, Lansing, Flint, or Grand Rapids, and rent a car to drive to Traverse City).

The MSU Horticulture Department has been able to reserve a block of hotel rooms at the Country Inn and Suites for \$226/night, which are available **until July 23** or until they are gone. Other alternatives may be found at hotel clearinghouse sites such as www.Hotels.com, www.Expedia.com, www.Tripadvisor.com, or www.Airbnb.com.

Ms. Meghan Hill in the MSU Horticulture main office may be able to help with travel questions, and Ms. Greta McKinney from the Horticulture main office will be our on-site arrangements coordinator for the Symposium and meals, so if you have any registration problems or any dietary restrictions, please advise Greta.

If you have any questions about the Symposium program, please don't hesitate to contact any of us, as between us we'll endeavor to get you the answers you'll need to have a wonderful time! We are looking forward to seeing you in Traverse City!

Sincerely,

Todd Einhorn, einhornt@msu.edu

Greg Lang, langg@mu.edu

Symposium Convenors

Meghan Hill, hehrerme@msu.edu

Greta McKinney, mckin134@anr.msu.edu

Symposium Travel Coordinator and Arrangements Coordinator, respectively

2018 Agriculture Container Recycling Program

A FREE service for agricultural producers in NW Michigan

Where are the collection sites?

- Wilbur-Ellis Co
8075 US-31 Williamsburg, MI 49690
- Ellsworth Farmer's Exchange (Co-op)
11900 Byers Rd. Ellsworth, MI 49729
- CHS Inc
6766 E Traverse Hwy Traverse City, MI 49684
- Crop Production Services (CPS)
13343 Pleasanton Hwy, Bear Lake, MI 49614

When can I drop off my ag containers?

- August 20- August 28 You can drop off your materials during regular business hours at any collection site listed above during these dates. G. Phillips & Sons (the ACRC contractor) will pick up containers on Wednesday, August 29.
- NOTE: CPS in Bear Lake will accept containers anytime throughout the growing season. All other collection sites will ONLY accept containers between August 20- August 28.

One Additional Site: Drop off ONLY on August 29

- Cherry Bay Orchards
2801 N. Jacobson Rd. Suttons Bay, MI 49682
This will be a ONE-DAY collection. You may drop off your containers between **8:00 am and 3:00 pm on August 29.**

What do I do to prepare the containers for recycling?

- Triple rinse, remove caps, remove loose leaf labels (if possible), put in large/clear plastic bags OR string together 20-30 containers with twine – if the containers are not up to these standards, they will not be accepted.
- All non-refillable, high-density polyethylene (HDPE) plastic crop protection and specialty pesticide product containers in sizes up to and including 55 gallons are accepted.

***We will have 1 final recycling collection date in 2018 on October 30. Keep an eye out for future fliers about when you can drop off your containers for this collection date!

Questions? Contact Lauren Silver (lsilver@gtcd.org) or Lizzy Freed (lfreed@gtcd.org) at the Grand Traverse Conservation District. Ph: 231-941-0960

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>