Northern Michigan FruitNet 2016
Northwest Michigan Horticultural Research Center

Weekly Update


CALENDAR OF EVENTS

11/9  SWD Summit
      NWMHRC, Please RSVP

01/17 - 01/18/17  2017 Orchard and Vineyard Show
                   Grand Traverse Resort

What’s New?

- Fall tasks for apple orchards
- SWD Summit - SAVE THE DATE!
- BLOSI PLATFORM – NEWEST ADDITION TO THE NWMHRC
- Memorial Service for Dr. Charles Kesner

SWD Summit - SAVE THE DATE!

Michigan State University and Cherry Marketing Institute are hosting a third annual spotted wing Drosophila (SWD) Summit on November 9, 2016 at the Northwest Michigan Horticultural Research Center. This day-long meeting will bring together growers, researchers, consultants, processors, and other industry leaders to discuss the challenges of SWD during the 2016 and past field seasons. This pest has profoundly impacted the way we manage insects in cherries in Michigan. This meeting will be an in-
depth discussion to continue to develop an industry approach to sustainably manage SWD in Michigan cherries.

More information and the agenda will follow in the coming weeks. For now, we hope that you will save November 9th for the 2016 SWD Summit. We really want your input, so we hope you will be able to attend this important meeting.

Thank you!
NWMHRC and CMI

Please contact Jenn at 231-946-1510 or goodr100@msu.edu to RSVP for this event.

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**BLOSI PLATFORM – NEAREST ADDITION TO THE NWMHRC**

The Northwest Michigan Horticultural Research Center (NWMHRC) recently received their newest piece of equipment thanks to funds provided by the Michigan Tree Fruit Commission.

The NWMHRC staff had the opportunity to test three orchard platforms last spring. Orchard platforms have the potential to increase efficiency in orchard tasks, such as pruning, harvesting, and hanging mating disruption. The NWMHRC staff saw the value in the motorized and automated features of all the platforms, but they chose an Italian model made by the company N.Blosi Di Natalino Blosi (S.N.C.).

The Blosi Platform has been used for harvest and pruning of apples and cherries that are produced in high-density orchard systems. They are made to move both horizontally, like a vehicle, as well as vertically to reach the tops of taller trees. They are engineered with technology that is able to lift the platform up in the air, as well rotate the platform to lean into the tree canopy. The flexibility of this machine will allow station staff to work in small and large trees and will accommodate work in orchards planted on side hills.

Because the Blosi Platform was manufactured in Italy, the NWMHRC staff had to wait a few months for the platform to be constructed and delivered. NWMHRC coordinator, Dr. Nikki Rothwell, said “We are so excited to finally have the platform; there were at least 50 times that I wished we had it this season for various research projects at the station.” Rothwell explained that this platform would make it easier for plant growth regulator projects, as they need to collect data throughout the canopy of larger sweet cherry trees. “We can also collect fruit for various studies from the tops and bottoms of the tree--before the platform, we have been using ladders to access the upper most parts of the tree. This platform has the potential to drastically increase our efficiency here at the station.”
Mark Miezio, a Leelanau County grower that serves on the board of the Michigan Tree Fruit Commission, was on hand when the platform was delivered. “Many growers are starting to embrace some of the new technology that is available for orchards--having a platform at the research station where growers can actually see the impacts of this technology will likely increase the rate of adoption. The Tree Fruit Commission was pleased to help make this platform happen at the NW Station, and we look forward to the further research that will be conducted as a result of this new technology.”

The NWMHRC and Michigan State University would like to thank the Michigan Tree Fruit Commission for making this purchase possible.

From left to right: Karen Powers (NWMHRC), Mark Miezio (MTFC), Bill Klein (NWMHRC), Nikki Rothwell (NWMHRC), and Bruce Gelder (Louis Gelder and Sons)

**Memorial Service for Dr. Charles Kesner**

On **October 5, 2016** there will be a memorial service held for Dr. Charles Kesner in celebration of his life. The ceremony will be held at **10:30AM in the Acme Cemetery (located on US 31 North just before the entrance to the Grand Traverse Resort)**. There
will be a luncheon to follow, at the Feast of Victory Lutheran Church, located at 4400 Mt Hope Rd, Acme, MI 49610.

Dr. Kesner served as the District Horticulturist in northern Michigan for Michigan State University Extension upon completion of graduate school and was instrumental in the establishment of the grower funded Northwest Michigan Horticultural Research Station in 1979. He served as the Director of the Research Station until his retirement in 1991 after receiving the Michigan State University Distinguished Faculty Award in 1987 and the Northwestern Michigan College’s first Outstanding Alumni Award in 1988. His research in trickle irrigation, winter sun damage to fruit trees, and weed control was of interest to agricultural scientists from around the world. International connections through science would take him and Naida to France, Hungary, Australia, and New Zealand as well as multiple states across the country.

After Dr. Kesner retired, he spent many years working with Northwestern Michigan College and spent 10 years working for Cherry Marketing Institute.

Charles and Naida raised their two sons on a farm in Suttons Bay, Michigan near the Research Station, spent a few years on property in the Upper Peninsula, and then built a home on Canyon Ferry Lake near Helena, Montana, in 2001 to spend time with their grandchildren in Bozeman. Health concerns prompted Charles and Naida to move to Bozeman in 2014.

Throughout his life, Dr. Kesner enjoyed spending his free time woodworking, farming, and instilling an appreciation of conversation in his family through hunting, fishing, and camping. He was also very active in his church in each community he lived in. Please join us on October 5th, to remember a great community member and leader.

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**Fall tasks for apple orchards**

*Have a to-do list ready for downtime between harvesting apple varieties.*

Posted by [Amy Irish-Brown](mailto:amy.irishbrown@msu.edu), Michigan State University Extension, MSUE News

While everyone feels very busy this time of year in apple orchards and the crop potential is huge, there might occasionally be a few open days between harvesting varieties as you wait for fruit maturity. If you have a need to guarantee hours per work week for employees, it would be prudent for apple producers to plan ahead to have a few to-do tasks ready to fill the time void. [Michigan State University Extension](https://www.msu.edu) offers the following suggestions to consider.

**Catch up on tree training**
Perhaps there are a few blocks you weren’t able to limb train in the summer that you can come back to, such as:

- Tying limbs down to trellis wires.
- Tying trees to posts, conduit or wires.

Get a jump on pruning

There are some do’s and don’ts you need to pay attention to if pruning in the fall. Of course, pruning prior to full winter hardiness comes with some big warning signs, but there are some limited pruning tasks to consider in September and October after harvest is complete.

- Consider pruning only in processing blocks that have been harvested.
- In low density blocks only, removing large limbs can be done. You will need to think through brush placement or removal if there are trees in nearby rows with fruit yet to be harvested.
- Pruning root suckers.
- Pruning vegetative suckers on limbs.
- Avoid early pruning to known cold-sensitive cultivars such as Fuji and McIntosh.
- Avoid early pruning in any high density, high value dwarf blocks.

Repairs, etc.

If you are growing any high density apple systems, you know there is always something that needs to be fixed:

- Repair trellis – anchors that have pulled up, loose or broken wires than need fixing, etc.
- Inspect and repair deer fencing.
- Bin repair.
- Trunk painting to prevent southwest injury.
- Put on tree guards for rodent management.
- Set up baiting stations for future post-harvest rodent management.

Work on irrigation systems

If the early harvest shortened your time to get over your irrigation systems, keep workers busy with:

- Irrigation line repairs – send workers through to identify problems row by row and follow up with necessary repairs.
- Winterizing irrigation lines or systems (with all the rain recently, you won’t need irrigation any more in 2016).

Fall weed control on solid variety blocks
There are some fall herbicides that have rather lengthy pre-harvest intervals, so you might only be able to treat in your solid variety blocks at this time.

**Clean out ditches and fence rows for air drainage**

The Farmer’s Almanac is predicting a treacherously cold winter once again, but it’s always a good idea to keep open air flow in orchards to help with winter cold and spring frosts.

**A note of using H2A workers**

With the higher utilization of H2A workers in Michigan apple orchards, and the need to guarantee their hours per work week, having a few tasks on a “to-do” list is a good plan, but some special considerations are needed:

- Before you assign jobs, go back to your H2A contract and make sure you listed that task on the contract. You cannot ask H2A workers to do tasks outside of what the contract states.
- If you are working with a farm labor contractor, make sure they understand what you need workers for on any given day so they aren’t in violation of their contracts.
- Make a list of possible tasks to be included in a future H2A contract – when you fill out the paperwork in February, these minor jobs don’t always come to mind, so take some notes now.

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**Apple storage advice for 2016 - a warm year at harvest**

Growers should pay extra attention to temperature of fruit going into controlled atmosphere storage.

Posted by Randy Beaudry, Michigan State University Extension, Department of Horticulture, MSUE News

Carbon dioxide injury to some apple cultivars grown in Michigan. Cultivars are, from
left to right, Jonathan, McIntosh, Honeycrisp and Empire.

Fruit are ripening ahead of normal harvest dates this year in all regions following this warm summer. My recommendation is to push through harvest to the extent possible, as weather is likely to deteriorate soon. One important consideration is the temperature of the fruit going into controlled atmosphere (CA) storage. Gala and other fruit harvested in the early days of fall are now going in warm, so extra attention needs to be paid to temperature monitoring.

In terms of temperature prior to CA storage, we usually like to see the temperatures of the warmest fruit at about 45 to 50 degrees Fahrenheit, but lower temperatures are better to be sure. Temperature control is your number one friend when it comes to preserving apple fruit quality.

Another reason temperature control is important in warm years is that the fruit coming in at high temperatures respire much faster than cool fruit, leading to a rapid build-up of CO2 (carbon dioxide) in the storage environment. In a room with a closed (not sealed) door, CO2 levels can reach 5 percent overnight! For CO2-sensitive varieties (e.g., Honeycrisp, Empire, Jonathan, McIntosh), this can be disastrous. For these varieties, Michigan State University Extension recommends putting a half- or a quarter-skid of lime in the room during loading, especially if the fruit are coming in warm. CO2 scrubbing may also be an option.

Cooling fruit is important, but even warm fruit are responsive to 1-MCP. For most varieties, there is no reason to delay the application of 1-MCP. Our work has shown that 1-MCP is similarly effective from 32 to 70 F, and keep in mind multiple applications are just fine. There is no harm to treating the same fruit twice if room loading is stretching out due to waiting on color (also a problem some warm years) or labor or weather issues.
“Ghosting” in Golden Delicious, a kind of russeting or staining of the cuticle attributed to applying 1-MCP. Cooling the fruit over a period of days prior to applying 1-MCP helps to prevent this relatively uncommon disorder.

With regard to treating fruit at higher temperatures, an exception might include Golden Delicious, which, during warm harvest seasons, seems to be susceptible to a surface discoloration when treated with 1-MCP while still warm. I’ve not seen this disorder on Michigan fruit, but I have on Ohio Goldens in 2012.

Grower Training Course - Produce Safety Alliance

This event is brought to you by Michigan State University Extension, MDARD, Michigan Farm Bureau and the Produce Safety Alliance

9 AM – 5:30 PM
November 2, 9 or 10, 2016
The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in § 112.22(c) that requires ‘At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.’

The course will provide a foundation of Good Agricultural Practices (GAPs) and FSMA Produce Safety Rule requirements, and details on how to develop a farm food safety plan.

After attending the entire course, participants will be eligible to receive a certificate from the Association of Food and Drug Officials (AFDO) that verifies they have completed the training course. To receive a AFDO certificate, a participant must be present for the entire training and submit the appropriate paperwork to their trainer at the end of the course.

Trainings are being offered in the following locations:

- **Wednesday November 2**  Hart Community Center, Hart MI
- **Wednesday November 9**  Krysiak’s house, Bay City MI
- **Thursday November 10**  Jordan Tatter Center, SWMREC, Benton Harbor

**Agenda**

8:30 am Registration  
9 am Welcome and Introduction  
9:15 am Introduction to Produce Safety  
10 am Worker Health, Hygiene, and Training  
11 am Break 
11:15 am Soil Amendments  
Noon Wildlife, Domesticated Animals, and Land Use  
12:45 pm Lunch  
1:30 pm Production Water  
2:15 pm Postharvest Water  
3:15 pm Break  
3:30 pm Postharvest Handling and Sanitation  
4:30 pm How to Develop a Farm Food Safety Plan  
5:15 pm Final Questions and Evaluations

For More Information or to Enroll Online visit:  
[http://events.anr.msu.edu/2016growerproducesafety/](http://events.anr.msu.edu/2016growerproducesafety/)
Leelanau Peninsula Economic Foundation Technology Committee
Seeks Community Input!

High-speed Internet and broadband capabilities can no longer be considered a “luxury.” Indeed, Internet is considered a utility and a critical necessity for schools, families, libraries, business owners, and emergency services personnel.

The Leelanau Peninsula Economic Foundation (LPEF) Technology Committee has partnered with Connect Michigan to survey Leelanau County residents and stakeholders to identify needs and priorities. The survey will be helpful to efforts designed to identify areas lacking broadband access and for developing mechanisms to promote expansion of services via attracting additional providers.

Connect Michigan has worked with providers to identify Internet needs throughout Michigan. In the image below, the areas shaded in red represent un-served, or inadequately served Leelanau residents. Areas shaded in yellow, according to Connect Michigan, have at least some level of broadband availability. As depicted, significant portions of Leelanau County are without adequate service.

The Technology Committee’s Chair, Commissioner Patricia Soutas-Little, says, “Broadband is vital for so many businesses and residents. Leelanau County has such a diverse landscape, knowing current accessibility and resident needs, will help us plan for the future.”
The Committee is striving to have survey result tabulated in early September. Survey results will be used to develop action plans and work with potential providers to address gaps and improved service goals. The Survey is open until September 3 and only takes ten minutes to complete. You can take the survey as a resident, business owner, or as a designated representative of another organization. The survey is available online at http://www.connectmycommunity.org/leelanau-peninsula/ or a paper copy can be obtained from any library or by calling the Leelanau Peninsula Chamber of Commerce at (231) 994-2202. For additional information about this effort, contact Patricia Soutas-Little at (231) 218-8496.

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WEB SITES OF INTEREST:

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://agbioresearch.msu.edu/nwmihort/faxnet.htm

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

Fruit CAT Alert Reports:
http://news.msue.msu.edu