## Northern Michigan FruitNet 2016 Northwest Michigan Horticultural Research Center

### Weekly Update

FruitNet Report - August 19, 2016

#### **CALENDAR OF EVENTS**

8/27 Fundraiser for Nate Wilson

Gallagher Farm, 5:00 p.m. - 9:00 p.m.

9/14 Michigan Managed Pollinator Protection Plan listening

sessions

NWMHRC, 10AM - Noon

## What's New?

- Cherry Industry Administrative Board Weekly Raw Product
- Degree Growing Days 8/22/16
- ABC's Good Morning America features Michigan cherry and hop production
- Michigan Managed Pollinator Protection Plan listening sessions

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## GROWING DEGREE DAY ACCUMULATIONS AS OF August 22, 2016 AT THE NWMHRC

Year	2016	2015	2014	2013	2012	2011	26 Yr. Avg.

GDD42	2980	2788	2557	2735	3327	2829	2793.1
GDD50	2002	1825	1637	1819	2240	1892	1822.3

#### Grapes

Duke Elsner, MSU Extension

Some of the earlier red hybrid varities are showing a lot of color now, especially Frontenac. The first signs of coloring of Pinot Noir have been seen at some sites. Topping and side-hedging of vineyards is underway across the region.

All of the commercial vineyards I visited this week are very clean, with minimal levels of powdery mildew. There is the typically sporadic incidence of grape berry moth, but the levels of injury are low in most vineyards. Some of the hornworm caterpillars are now getting close to maturity.

## **Cherry Industry Administrative Board Weekly Raw Product**

### Report Week 8 - 2016

#### CORRECTED

#### Weekly Raw Product Report for Week 8 ending August 20, 2016 (Millions of pounds)

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	Processed YTD 2016								
DIST.	Wk 8	YTD	Divert	Total	Est.	2015 Total			
NW MI	1.6	134.7	11.8	146.5	165.0	87.8			
WC MI	0.0	66.1	1.8	67.9	68.0	36.3			
SW MI	0.0	21.7	0.4	22.0	20.0	32.5			
NY	0.0	7.5	0.2	7.7	7.0	10.2			
OR	0.0	4.6	0.0	4.6	3.0	1.9			
PA	0.0	0.7	0.0	0.7	0.3	6.9			
UT	0.0	43.1	6.5	49.6	50.0	40.3			
WA	0.0	22.7	5.2	27.9	27.0	24.9			
WI	0.0	<u>13.1</u>	0.4	<u>13.4</u>	<u>11.0</u>	<u>8.7</u>			
Total	1.6	314.1	26.2	340.3	351.3	249.5			

#### Congratulations Harvest is Complete!

The production figures will change the restriction percent. We must await receipt of handlers Form 2 Reports due on September 1, 2016 to confirm the production figures.

The CIAB meets at the Double JJ Resort, Rothbury, MI on 09/08/16 at 8:00 AM to review the OSF.

# ABC's Good Morning America features Michigan cherry and hop production

The latest episode of ABC's Food Forecast with Ginger Zee showcases why northwest Michigan is ideal for cherry and hop production and how recent variable weather has impacted growers.

Posted by **Emily Pochubay**, Michigan State University Extension. MSUE News



Nikki Rothwell of the Northwest Michigan Horticulture Research Center talks to ABC chief meteorologist Ginger Zee about Michigan's cherry production.

Earlier this month, ABC's Good Morning America chief meteorologist, Ginger Zee, paid a visit to the Northwest Michigan Horticultural Research Center to film "Food Forecast: Cherries and beer hops are growing like crazy in Michigan." Food Forecast is a unique, six-part online series launched in late July 2016 and aims to cover how climate influences food industries across the United States. In particular, the show investigates the weather-related vulnerabilities and how industries overcome these hurdles.

The previous four episodes of this new series covered weather impacts on Maine's lobster industry, Vermont's maple syrup production and Napa Valley wine grapes. These industries have observed a shrinking ratio of "good" to "bad" years recently, a theme that is increasingly common amongst the nation's agricultural industries including fruit producers in northwest Michigan.

A Michigan native from Rockford, Zee wanted to showcase Michigan agriculture in this new series. Food Forecast contacted Michigan State University climatologist <a href="Jeff">Jeff</a>
<a href="Andresen">Andresen</a> with their interest, and Andresen steered Zee to our neck of the woods to investigate why this area is ideal for cherry and hop production and how recent variable weather has impacted fruit growers.

Each of the last four years have brought climate-related difficulties to agricultural producers in our region. Summer-like temperatures across the state in March 2012 triggered early bloom followed by several freezes that devastated many fruit crops that season. Two brutally cold winters in 2013-2014 and 2014-2015 resulted in extensive fruit tree and vine mortality.

Northern Michigan fruit consumers should not worry yet – according to statistics, Andresen believes that these winters were once-in-a-lifetime. In 2015, we had bloom-time freezes (albeit not as severe as those in 2012) followed by the catastrophic Aug. 2, 2015, storm with hail and straight-line winds that reached speeds up to 100 mph; this hail storm put a sizeable dent in apple and grape yields across the region. This season, a severe storm with quarter-inch to baseball-sized hail passed through at the onset of cherry harvest during the National Cherry Festival on July 8, 2016.

The fifth episode of <u>Food Forecast: Cherries and beer hops are growing like crazy in Michigan</u> features Andresen along with <u>Nikki Rothwell</u> of the Northwest Michigan Horticulture Research Center, and <u>MSU Extension</u> emeritus Jim Nugent. These three experts shared with Zee how Michigan's unique climate, moderated by the Great Lakes, allows producers to grow cold-sensitive fruit crops near the 45th parallel.

While weather patterns have been challenging for cherry growers in recent years, statewide cherry acreage has remained consistent. However, as discussed in the Food Forecast episode, some growers have diversified their business models or shifted toward the production of other crops such as hops for economic sustainability.

Check out northwest Michigan cherries and hops featured in this new online series at Food Forecast: Cherries and beer hops are growing like crazy in Michigan.

### **SWD** and Wine Grapes

N.L. Rothwell, K.L. Powers, and E.A. Pochubay

We have had many recent calls about the concern of spotted wing *Drosophila* (SWD) and its potential to infest wine grapes. Based on past work, SWD does not seem to prefer to reproduce in wine grapes. We hypothesize that the wine grape skin is tougher than some of the other softer fruits, and we have not seen infestations of wine grapes in the field. However, this season we are catching high numbers of adult SWD in vineyards (Figure 1).

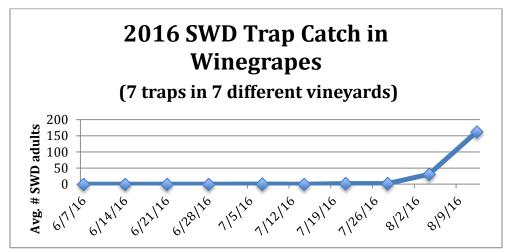


Figure 1. Average number of SWD adult catch in 7 NW MI vineyards in 2016.

In 2013 and 2014, we conducted laboratory bioassays to determine if SWD would reproduce in different varieties of winegrapes commonly grown in Michigan. We tested five varieties of winegrapes: Chardonnay, Pinot Noir, Riesling, Gewürztraminer, and Siegerrebe. Five uniformly ripe grapes were placed in a one-quart food container; fruit was suspended over a sponge, and SWD diet was added to the assay arena. Five male and five female lab-reared SWD were placed into each container for each of the winegrape varieties. Each variety treatment was replicated five times. Assay arenas were held in a growth chamber at 25°C and 14:10 light:dark for 14 days. Fruit was placed in a brown sugar solution. Larvae that emerged from the fruit were placed on diet and reared out to the adult stage to ensure they were SWD. The number of eggs, larvae and pupae was recorded.

Our laboratory data suggest that SWD do not prefer to reproduce in winegrapes. In 2013, we did detect minor numbers of SWD in Pinot Noir, Riesling, Gewürztraminer, and Chardonnay (Figure 2). However, numbers were low, and Pinot Noir had the highest number of larvae with a total of 11. In the variety Riesling, we only found one egg. We

repeated this experiment in 2014, and in 35 assay arenas with the same winegrape varieties, we found no SWD larvae or pupae in any treatment.

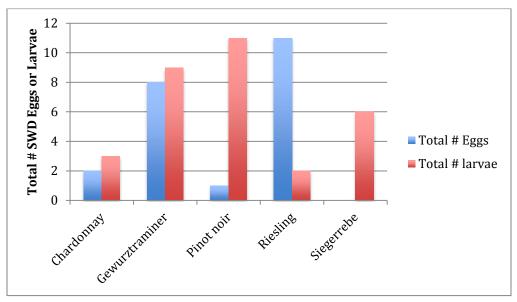


Figure 2. No. of SWD in five different winegrape samples.

Based on these data and data from other trials around the state, SWD will not as readily reproduce in winegrapes compared with other fruits, such as cherries or raspberries. However, if fruit are cracked, we hypothesize that SWD will lay eggs in damaged fruit. Additionally, we are currently investigating the potential of SWD to carry sour rot, which can be a potentially more serious problem than larvae in fruit. Research is underway in Ontario, and data are forthcoming.

## Michigan Managed Pollinator Protection Plan listening sessions

Beekeepers, growers and others interested in the health of honey bees are invited to listening sessions to discuss pesticide use and bees.

Posted by **Meghan Milbrath**, Sarah Scott and Rufus Isaacs, Michigan State University Extension, Department of Entomology, MSUE News



Honey bees on a frame removed from a hive during a health inspection. All photos: Sarah B. Scott, MSU.

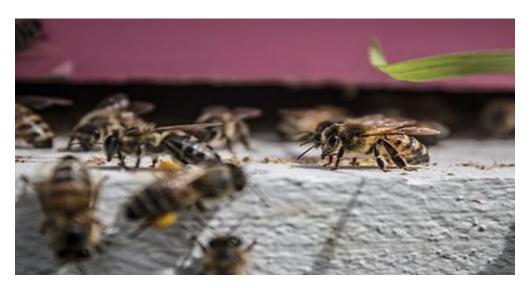
Michigan State University will host six listening sessions around the state for stakeholders concerned about the health of managed bees in Michigan. These listening sessions will be held from late August to early October and will each be two hours. A short presentation will be followed by time for input. We invite local beekeepers, growers and others with interest in the long-term health of honey bees and other managed bees to attend one of these sessions to provide input.

These meetings and the input we receive will be an important step towards developing a Managed Pollinator Protection Plan that is underway currently. An inaugural meeting was held in February 2016 to bring together commodity partners and stakeholders to start discussing and developing a plan for managed pollinator protection and stewardship. These six listening sessions are the next step in the process that will culminate in producing a plan to help minimize risk of pesticides to our state's managed bees and to ensure their long-term health.

The three main objectives of this process are to:

- 1. Build relationships between interested parties in Michigan, representing beekeeper groups, growers, government and research to share existing work and to open pathways for future collaboration.
- 2. Develop a managed pollinator protection plan that is consistent with the National EPA Pollinator Protection Plan that allows for adequate protection of

- managed and wild pollinator populations, while simultaneously maintaining the ability for agricultural producers to produce their crop.
- 3. Develop a method and strategy of communication with the public and a wider group of stakeholders.



Honey bees at the entrance of a hive. A bee in the foreground can be seen with pollen baskets she is bringing back to the hive from a foraging trip.

The goal of the Managed Pollinator Protection Plan is to provide guidance to improve and protect the health of managed pollinators. It is designed to be flexible and is non-regulatory. With a high level of input from stakeholders, and with an open dialogue that promotes amendments and adjustments, the Michigan Managed Pollinator Protection Plan will be improved as we get more information.

Pollinator-related issues differ across states, so it is crucial to tailor Michigan's Managed Pollinator Protection Plan to fit individual situations and encourage proper best management practices (BMPs) that apply best to our particular situation. Many other states have developed Managed Pollinator Protection Plans, and there is a list of these posted at the Pollinator Stewardship Network website. Guidelines for Managed Pollinator Protection Plans are found at the National Association of State Departments of Agriculture website.

Given the importance of beekeeping, crop production and wildlife habitat management in Michigan, we are inviting representatives from all of these sectors to the discussion. We expect this managed pollinator plan will highlight the many ways Michigan stakeholders can work together to ensure crop production and beekeeping remain strong in our state into the future. In order to tailor the plan to meet as many needs as possible, we are looking for input from stakeholders to move forward in developing a plan that will be productive, successful and beneficial.



Honey bee foraging on Asclepias, commonly known as milkweed.

Learn more about the Michigan Managed Pollinator Protection Plan, what the state of Michigan is doing to protect pollinators, and give us your feedback on developing the Managed Pollinator Protection Plan by attending one of the <a href="Managed Pollinator">Managed Pollinator</a> Protection Plan listening sessions listed below.

#### **Scheduled listening sessions**

- Aug. 30, 10 a.m.-12 p.m., Michigan State University Pavilion, 4301 Farm Lane, East Lansing, MI 48823, Room C/D
- <u>Sept. 7</u>, 10 a.m. -12 p.m., Saginaw Valley Research and Extension Center, 3775 S. Reese Road Frankenmuth, MI 48734
- <u>Sept. 13</u>, 2-4 p.m., Upper Peninsula Research and Extension Center, E3774 University Dr. Chatham, MI 49816
- <u>Sept. 14</u>, 10 a.m. -12 p.m., Northwest Michigan Horticulture Research Center, 6686 S. Center Highway Traverse City, MI 49684
- Oct. 4, 10 a.m. -12 p.m., Trevor Nichols Research Center, 6237 124th Avenue Fennville, MI 49408
- Oct. 6, 10 a.m. -12 p.m., Central Michigan University, 1200 S. Franklin St., Mount Pleasant, MI 48859
- Oct. 12, 10 a.m. -12 p.m., Tollgate Research Center, 28115 Meadowbrook Road, Novi, MI 48377

To register for any of these meetings so we can gauge attendance, **please register at:**Managed Pollinator Protection Plan Meetings. If you have any questions or concerns prior to the meetings, please let us know by emailing mmp3@msu.edu.

Find more information about the plan on our <u>Managed Pollinator Protection Plan</u> website. You can find updates and current information on listening sessions and other

topics related to the Managed Pollinator Protection Plan on <u>MSU Extension</u>'s <u>Pollinators</u> <u>and Pollination</u> page.

#### **Fundraiser for Nate Wilson**



Dinner, Live Music, Silent and Live Auction (Coffee, Water and Pop provided or BYOB)

Saturday, August 27, 2016 5:00 p.m. – 9:00 p.m.

Gallagher Farm: 9300 Breithaupt Road, Traverse City, MI



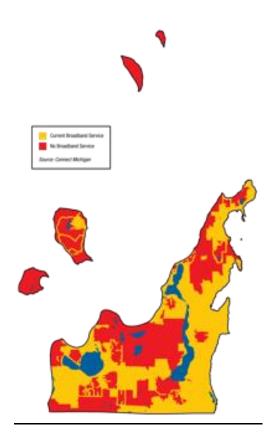
Nate has been diagnosed with a rare degenerative eye condition called Keratoconus, and currently there is no known cure. However, surgery is an option that can delay/stop the progression. Nate is only 25, and without surgery, the disease will continue progressing. This surgery is not covered by insurance, and is going to be performed by the closest provider which is located in Indianapolis. *With your help,* we can raise the needed funds for the surgery, follow up visits and related travel expenses.

An account has been opened at Chemical Bank. If you are unable to attend and would like to make a donation, please visit any Chemical Bank location and deposit to the account for Nathaniel A. Wilson.

Please come out and join us Saturday, August 27th, 2016.

If you are interested in being a sponsor for the fundraiser, please contact Cindy at 231-632-0251 or <a href="mailto:cnedd55@gmail.com">cnedd55@gmail.com</a>.

**GOLD Sponsor \$500** SILVER Sponsor \$250 BRONZE Sponsor \$100



## 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 <a href="http://www.connectmycommunity.org/leelanau-peninsula/">http://www.connectmycommunity.org/leelanau-peninsula/</a> 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: <a href="http://enviroweather.msu.edu/homeMap.php">http://enviroweather.msu.edu/homeMap.php</a>

This issue and past issues of the weekly FruitNet report are posted on our website: <a href="http://agbioresearch.msu.edu/nwmihort/faxnet.htm">http://agbioresearch.msu.edu/nwmihort/faxnet.htm</a>

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: <a href="http://apples.msu.edu/">http://apples.msu.edu/</a>

Information on grapes:

http://grapes.msu.edu

Fruit CAT Alert Reports: <a href="http://news.msue.msu.edu">http://news.msue.msu.edu</a>