

Northern Michigan FruitNet 2016

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – August 2, 2016

CALENDAR OF EVENTS

8/3	MSU CA Clinic 2016 <i>Boulder Creek Golf Club, Belmont, MI</i>
8/23	Peach and Plum Variety Showcase SW Michigan Research & Extension Ctr, 4:00 pm - 7:00 pm
8/25	NWMHRC Open House

What's New?

- **SWD Trap Update – August 2, 2016**
- **Michigan spotted wing Drosophila report for July 29, 2016**
- **Michigan brown marmorated stink bug report for July 29, 2016**
- **Peach and Plum Variety Showcase**

Northwest Michigan Fruit Regional Report – August 2, 2016

Spotted wing drosophila numbers rose drastically in the last week; in apples, codling moth management is underway and a few apple maggots have emerged.

Emily Pochubay and Nikki Rothwell

Pest Report

Trap catches of SWD have risen drastically in the last week at the NWMHRC (Table 1) and we have consistent catches throughout the northwest region. This rise in SWD numbers is in relation to the end of harvest and fewer insecticides that have been applied to fruit that are remaining in the orchard. In addition to leftover fruit in orchards, SWD have and will continue to reproduce in the many ripe alternate hosts in the landscape. We will likely continue to see increasingly high SWD populations in the coming weeks. Anecdotally, evidence from NWMHRC research indicates that the higher the SWD population in an area, the more pressure there is on a management program and the greater the risk of infested fruit. Some growers have finished or are nearing the end of harvest, but this has been a long tart cherry harvest for most. More northerly growers have blocks that are yet to be harvested and the coming week(s) will be challenging for these growers. We continue to encourage growers to destroy fruit that are remaining in the orchard due to diversion, damage, infestation, etc. to help minimize the build-up of localized SWD populations.

Cherry fruit fly numbers continue to be low and catches were inconsistent this season. Two weeks ago, an average of two CFF were found at the NWMHRC. Last week, no CFF were found at the NWMHRC, and we found a total of five CFF this week. We have conducted extensive sampling of fruit for research trials at the NWMHRC, and while SWD larvae are common, no CFF larvae have been found in our samples.

Obliquebanded leafroller (OBLR) moth activity was higher this week in cherries (10.3 moth per trap) and apples (~six moths per trap) at the NWMHRC. Larvae have not been found readily or easily in cherry; however, where they are present, larvae should be larger and more evident this week.

Borer flight is ongoing with a slight decrease in the numbers of American plum borer (~nine moths per trap) and lesser peachtree borer (~eight moths per trap) this week. Greater peachtree borer are the highest that they have been this season with an average of 18 moths per trap.

Table 1. SWD Trap Catches at NWMHRC

Date	Average SWD per Trap	Total SWD
7/12/16	1.3	4
7/19/16	4.3	13
7/26/16	10.3	31
8/02/16	60.3	181

Apple maggot (AM) flight is ongoing and trap numbers are low and consistent with last week. There was an average of 4.5 flies per trap, a total of nine per two traps found at the NWMHRC. These flies undergo a 7-10 day pre-oviposition feeding period after emergence. In areas where the pest was detected last week, egg laying will likely begin this week. AM emergence is also influenced by rain/soil moisture and there will likely be

a higher flush of AM following a good wetting event. Currently, there is only a slight chance for a small amount of rain on Wednesday morning.

Codling moth numbers remain consistent with last week with an average of 2.5 moths per trap, a total of five moths in two traps. The NWMHRC set biofix two weekends ago on July 23 and we have accumulated 249 GDD base 50 degrees F; CM eggs are hatching at this time.

Wine Grapes

Duke Elsner, *MSU Extension*

Shoot growth has been vigorous during the recent hot weather, resulting in a need for hedging in some vineyards. Thus far we have seen very little collapse of shoots related to the hail injury of 2015 (one year ago today!). The window for powdery mildew infections on berries is closing soon. Japanese beetle numbers have remained low, as have potato leafhopper populations. Small, early instar hornworm caterpillars are now appearing in vineyards. Young vines in their 1st through 3rd growing seasons are more at risk for significant foliage loss to these caterpillars, so be sure to scout young vineyards for these pests.

Saskatoons

Duke Elsner, *MSU Extension*

There are only a few post-harvest concerns in saskatoons. Entomosporium leaf spot is the most significant fungal disease threat; if we get into some periods of rainy weather this disease can be a concern. For the most part, foliar-feeding insects can be tolerated for the rest of the growing season. Plan ahead now for fall dormant applications against woolly aphids. The old test planting of saskatoons at the research center in Leelanau County was recently removed, giving us a chance to examine entire root systems for woolly aphids and their injuries. Infestations were found on several of the plants, but there was not a strong relationship between woolly aphids and plant vigor in this planting.



Figure 1: Woolly aphids on Saskatoon root



Figure 2: distorted stem growth from woolly aphids



Figure 3: Root nodules from woolly aphid feeding

SWD Trap Update – July 28, 2016

**May and June, and July catches have been removed from table.*

8/1	Benzie	Tarts, raspberry, honeysuckle, mulberry, grape	238
8/1	M-72 Corridor	Tarts	10
8/2	NWMHRC	Tarts	181

 = New catches

Total catches per region:

Centerville Twshp. - 412
S. of Suttons Bay - 129
Old Mission - 178
M-72 W corridor - 41
Elk Lake Rd. – 176
N. of Suttons Bay – 79
Eastport - 1
Northport-Omena – 549
Benzie – 1,062
Yuba – 8
Bingham – 3
East Leland – 11
E. of Suttons Bay – 1
Manistee – 191
S. of Elk Rapids – 120
NWMHRC – 229
Bingham – 3
***Abandoned block in Centerville – 425
Stoney Point – 49
Williamsburg – 5
Leland – 2
N. of Elk Rapids – 1
S. part of Grand Traverse Co. – 15
N. Antrim Co. – 70

Navigating Diversion, Crop Insurance, and NAP Decisions for Damaged Tart Cherries

Use these guidelines to assess which scenario is the most economical for your farm business; growers are recommended to contact crop insurance agent or Farm Service Agency (FSA) for further assistance.

N. Rothwell and E. Pochubay, NWMHRC
J. Bardenhagen and J. Nugent, MSUE Emeriti

With the large crop and recent hailstorm, growers will need to make decisions regarding the marketability of the crop. This year is somewhat different from years past as there is now tart cherry crop insurance, which was an addition to the most recent farm bill. Last year, growers in SW Michigan had similar considerations with crop insurance when they were hit with hail and high winds. Additionally, diversion credits may be worth more than in past years; at this time, we have heard diversion credits may be worth \$0.10-0.17 per pound. We worked through the following scenarios taking the following

into consideration: diversion, CAT (Basic NAP), Buy-up NAP, and tart cherry crop insurance.

The first step in this decision-making process is to determine if the crop is marketable; some growers may have taken this step already. Crop marketability depends on whether the whole orchard is damaged and is a total loss or if there is only partial damage to a block with some salvageable fruit. Growers should contact their processors to assist with this decision, and in many cases, the processor will determine if the crop is harvestable. However, if the damage is bad enough, the adjustor may be able to determine if the crop is salvageable. For any policy (NAP, crop insurance, etc.), the block needs to have a 'salvage value of zero', and an adjustor or processor needs to reject the fruit with some documentation that the fruit cannot be salvaged. If a processor has determined the block is not salvageable, then the grower must contact the adjustor. The fruit must be *on the tree* for an appraisal. Adjustors want to make sure the grower did everything he or she could to produce the crop. Growers may need to provide adjustors with a letter from the processor stating that the crop is not marketable.

If the whole orchard is a total loss, and if the grower has tart cherry crop insurance, there are a few options to consider. The Risk Management Agency (RMA) decided that growers with crop insurance will receive 80% of the National Agricultural Statistics Service (NASS) price for the 2016 season, and they will not consider any revenue from diversion credits. The RMA felt that there was no consistent price for diversion credits, so they will not count these credits against crop insurance. Growers will simply receive 80% of the NASS price.

Tart cherry crop insurance is a revenue policy, and the guarantee is based on the coverage a grower chooses (50-75%). The grower should have received a piece of paper that states the guarantee that was set in November 2015. If a grower has both the basic NAP and crop insurance, he or she cannot collect from both crop insurance and NAP. If you have already taken money from NAP, the grower will have to pay it back if he or she is receiving money from crop insurance.

Growers should keep their potential yield in mind with this large crop. If a grower shakes $\frac{3}{4}$ of his acreage, the yields off the harvested portion of the farm may be larger than a grower's historical yields that could result in disqualification of the grower's crop insurance guarantee. Hence, growers will need to determine the total guarantee for crop insurance using the following formula:

Avg price (ARH) x acres x coverage level = total \$ guarantee

If a grower has higher yields in 2016, and he harvests only a portion of his total acres, the yield off the harvested acres multiplied by the NASS price (NASS is used in crop insurance rather than the FSA price that uses an Olympic average) = revenue that may exceed the guarantee. In this case, diversion might be an option on the acres that will

not be harvested. Growers should talk with their crop insurance agent to help him or her run the numbers.

If the orchard is determined to be a loss by an adjuster and the grower has Basic NAP, the loss has to be above 50% of the grower's average yield (APH) in order to kick in the policy. Growers should use the following formula to calculate their expected revenue:

Avg. Yield (APH) x acres x 50% coverage x \$0.32 (FSA price) x 55% x 80% (for non-harvest) = expected revenue

Growers should pay particular attention to their yields this year as yields are higher in most orchards compared with past years. For Basic NAP, average yield is calculated as an average of the past 10 years of production (i.e. 2006 -2015). Growers should look at 2016 production in the orchard and compare it to past production as this year's yields may influence the decision to use the Basic NAP or diversion certificates. If there is partial damage to the orchard, and 50% of the normal production is lost, the yields will likely be high enough to offset Basic NAP because it is a production policy. A CIAB representative can help determine the tart cherry yield in an orchard.

If the tart cherry block has some salvageable production, and the grower has the Buy-up NAP, he or she can buy up from 50% coverage all the way up to 65% coverage. For example, if a grower has 65% coverage on Buy-up NAP, he or she has to have marketable yield of 65% of the grower's APH (10-year average yield) for the policy to kick in. With this policy, growers should use the following formula:

Avg. Yield (APH) x acres x % coverage x \$0.32 (FSA price) x 80% (for non-harvest)

There are two differences between Basic NAP and Buy-up NAP. First, a grower can choose to purchase more coverage in Buy-up NAP than the mandatory 50% coverage in Basic NAP. But, perhaps the greater advantage to Buy-up NAP is that growers will be paid on 100% of the FSA price rather than 55% of that price in Basic NAP.

NAP is a policy based on marketable yield, and crop insurance is based on revenue. In the case of NAP, if diversion certificates are acquired and sold, then the crop is considered marketable and is not eligible for NAP. Whereas crop insurance allows the sales of diversion certificates as a means to capture some revenue, but this revenue will be considered when calculating the qualifying indemnification.

In summary, growers can use these steps to determine how to proceed with damaged orchards:

1. Determine if the crop is marketable or if part of the block is salvageable.
2. Estimate yield of salvageable fruit.
3. Use the aforementioned formulas to calculate the estimated revenue based on the different policies.
- 4. Lastly, growers are recommended to contact FSA and/or crop insurance agent to help calculate the expected values from the different options.**

Again, growers need to consider their production for 2016 to determine which compensation scenario will be the most beneficial for their business.

Michigan spotted wing *Drosophila* report for July 29, 2016

Trap catches remain high, especially near untreated plantings – high risk of infestation continues to be expected – susceptible crops must be protected.

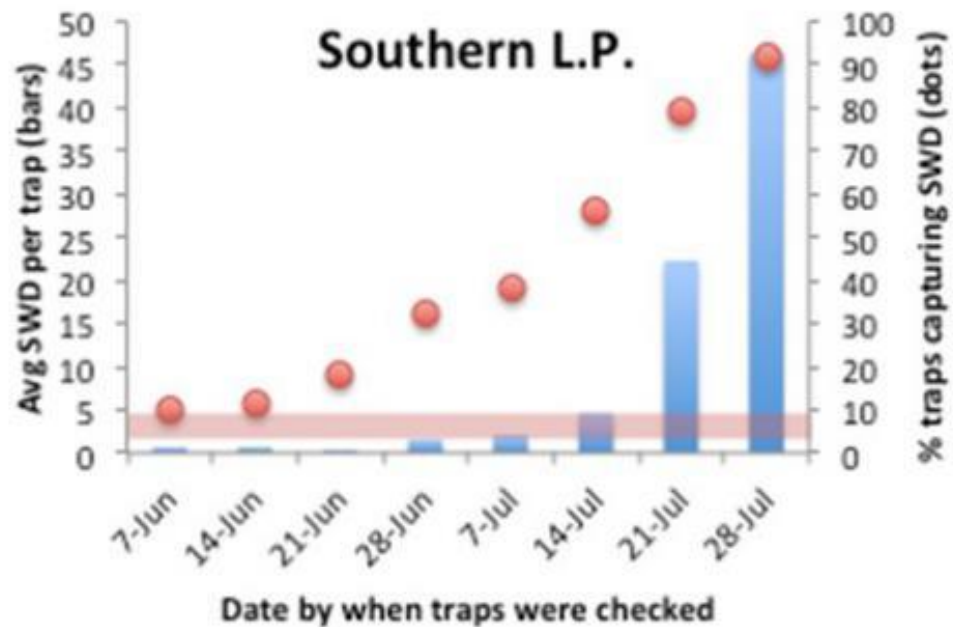
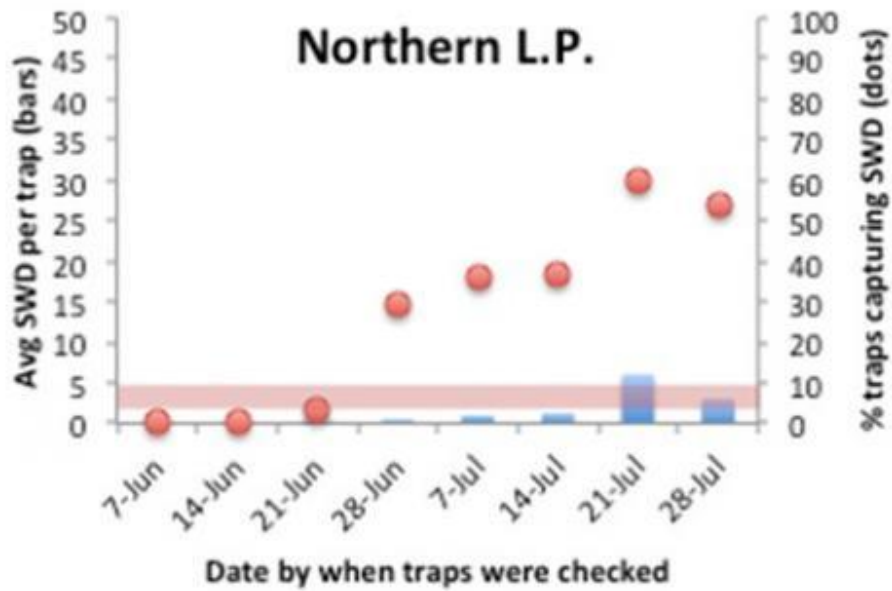
Posted on **July 29, 2016** by **Julianna Wilson**, Rufus Isaacs and Larry Gut, Michigan State University Extension, Department of Entomology

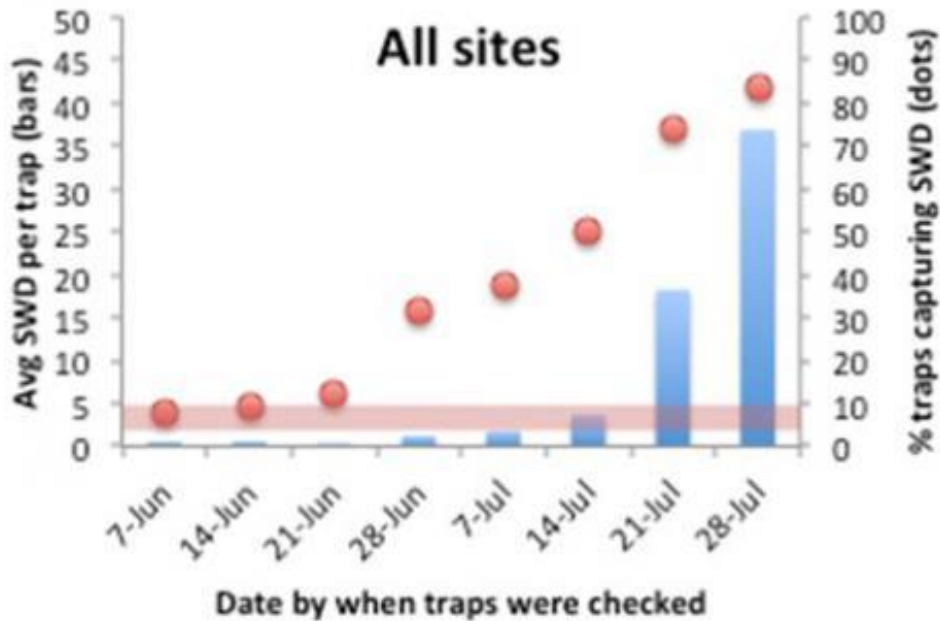
This is the Michigan State University Extension spotted wing *Drosophila* (SWD) Statewide Monitoring Network report. Trapping has concluded in plantings where harvest is already complete (June-bearing strawberries, southwest cherry orchards, etc.), but continues in most blueberry, raspberry and grape sites in the network and also in northwest cherry orchards. Out of the 111 traps collected during the week prior to July 28, 2,210 female and 1,886 male SWD were captured for a total of 4,096 SWD flies. We found SWD in 93 traps, or 84 percent of the traps being monitored.

Average SWD catch in the traps being monitored this week is now over 46 SWD flies per trap in the southern part of the Lower Peninsula, which is a doubling from the numbers trapped last week. In contrast, the numbers are much lower at 3 SWD flies per trap in the northwest counties. Ripening fruit throughout the state are at high risk for infestation if not protected. Check with local Extension staff or crop consultants, and refer to the “2016 Michigan Fruit Management Guide” for recommendations for your crop(s).

Table 1. The regions that are being monitored for SWD in 2016, how each region is defined (by the counties listed), the number of sites in each region that were monitored this week, the cumulative total of SWD flies caught in traps by region and the average number of SWD flies caught per trap.				
Region	Counties covered in the SWD monitoring network	No. sites this week	Cumulative SWD Total	Avg SWD flies per trap*
SE	Genesee, Ingham, Lenawee, Livingston, Macomb, Monroe, Oakland	17	1,410	66.4
SW	Allegan, Berrien, Kalamazoo, Ottawa, Van Buren	57	5,561	48.4
Ridge	Ionia, Kent, Muskegon	7	225	11.1
WC	Mecosta, Oceana	6	100	9.5
NW	Antrim, Benzie, Grand Traverse, Leelanau, Manistee	24	430	3

	Grand Total:	111	7,726	36.9
* Average is for the week ending July 28, 2016				





Bars represent the average number of SWD flies caught in monitoring network traps each week. Dots represent the percent traps that captured SWD that week. The shaded bar across each graph represents the proposed threshold for triggering management of the pest in susceptible crops. Northern Lower Peninsula (LP) encompasses all network traps in counties north of and including Clare in the Lower Peninsula (n = 24 traps this week). Southern LP encompasses all network traps in counties south of Clare in the Lower Peninsula (n = 87 traps this week).

Traps in the network are baited with commercially available lures and placed in susceptible crop fields or orchards, or in a location adjacent to susceptible crops, in areas where SWD infestation has been recorded in the past. Commercial plantings included strawberry, blueberry, raspberry, grape, tart and sweet cherry, peach and plum. Counties included in the 2016 trapping network are Allegan, Antrim, Benzie, Berrien, Genesee, Grand Traverse, Ingham, Ionia, Kalamazoo, Kent, Leelanau, Lenawee, Livingston, Macomb, Manistee, Mecosta, Monroe, Muskegon, Oakland, Oceana, Ottawa and Van Buren.

For the most current recommendations for monitoring this pest, please refer to "[Monitoring traps for catching spotted wing Drosophila](#)." You can find out more about how to identify and manage this pest in fruit crops by visiting [MSU's Spotted Wing Drosophila website](#).

Michigan brown marmorated stink bug report for July 29, 2016

Fruit and vegetable growers in the southern Lower Peninsula should be scouting for

brown marmorated stink bug this season.

Posted on **July 29, 2016** by [Julianna Wilson](#), Michigan State University, Department of Entomology



Figure 1. Brown marmorated stink bug adult. Photo by David R. Lance, USDA APHIS PPQ, Bugwood.org

This is the first weekly report of the [Michigan State University Extension brown marmorated stink bug](#) (BMSB) monitoring network. For the last 3-4 weeks we have been monitoring more than 80 sites for BMSB nymphs and adults using pyramid or Rescue style traps baited with Agbio lures. Traps are set up near apples, stone fruits (peaches, plums and sweet and tart cherries), blueberries, grapes, strawberries, a variety of vegetable crops and at several urban locations considered to be hotspots. So far we have captured a total of 30 BMSB, the majority of which came from some vineyards early in the season in southwest Michigan.

We have been encouraging growers in the southern part of the Lower Peninsula to scout for this pest this season – if they haven't in the past – based on where we know it to be well-established as a nuisance pest in homes (Figure 2). Traps are easy to deploy and check, but the area of influence for a single baited trap appears to be relatively small. Therefore, it is important to place them near the crop and to combine trapping with other sampling methods such as limb-jarring of fruit trees or sweep-netting in orchard edges close to woodlots and/or riparian areas. Visual inspection of orchard edges for the presence of fruit injury, or for the insects themselves, is recommended, especially in Berrien, Kent and Genesee counties where several commercial apple and

peach orchards reported suspected damage by BMSB last season and where nuisance reports have been high.

Damage to fruit from BMSB feeding can be confused with several disease or nutrient deficiencies, depending on the particular fruit that is affected, so it is important to involve your local MSU Extension fruit educator to help determine what caused the damage or to send samples to MSU Diagnostic Services.

For more information about management strategies in fruit should populations reach levels that would require control, please refer to the MSU Extension Bulletin E0154, "2016 Michigan Fruit Management Guide." To learn more about how to monitor for BMSB, distinguish it from other similar-looking stink bugs and what plants it favors, visit MSU's Brown Marmorated Stink Bug website.

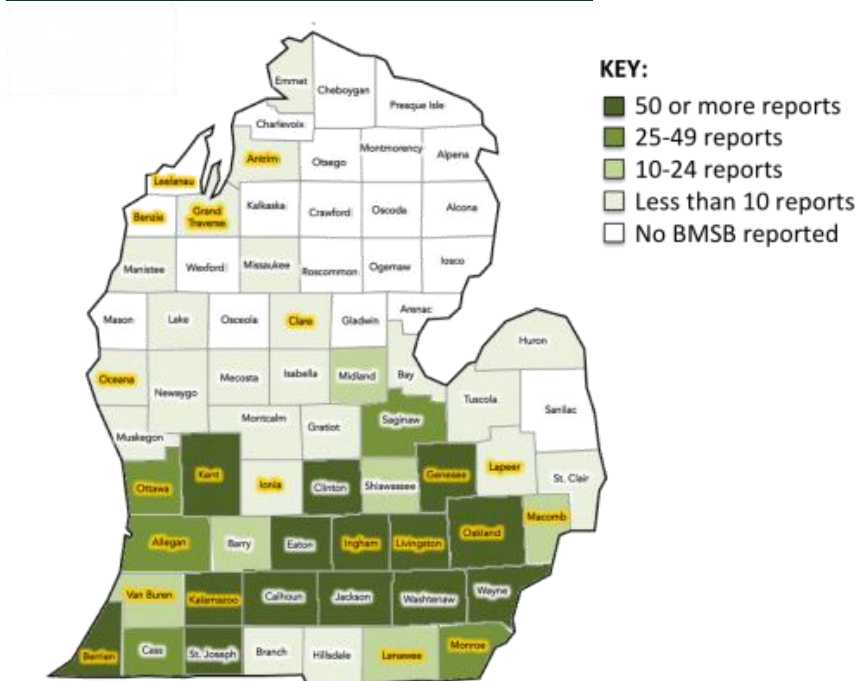


Figure 2. A map of Michigan's Lower Peninsula showing the extent to which brown marmorated stink bugs have become established as a nuisance pest (shaded from darkest to lightest, representing most to least nuisance reports) and the counties (highlighted in yellow) in which MSU Extension is monitoring for BMSB in 2016. Reports come from those submitted by citizens to the Midwest Invasive Species Information Network since June 2016. Counties being monitored in 2016 are Allegan, Antrim, Benzie, Berrien, Clare, Genesee, Grand Traverse, Ingham, Ionia, Kalamazoo, Kent, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Monroe, Oakland, Oceana, Ottawa and Van Buren.

MSU CA Clinic 2016

The 2016 MSU Controlled Atmosphere Storage Clinic will be held at the **Boulder Creek Golf Club in Belmont, Michigan** on August 3, 2016.

The **Controlled Atmosphere (CA) Clinic** is organized by the Department of Horticulture at Michigan State every other year to pass on new information relating to controlled atmosphere storage and warehousing of apple and other temperate fruit. The CA Clinic serves to facilitate communication between researchers, industry spokespersons, technical experts and packinghouse and storage operators. Attendees should expect to be brought up-to-date on the most recent scientific findings and related practical developments in the field of CA and refrigerated storage.

We are fortunate this year to feature **Drs. Jennifer DeEll (ONT)** and **Peter Toivonen (BC)**, two of the nation's leading experts on the storage of apples and other perishables. Presentations will deal broadly with the challenges of successful fruit storage and will highlight the storage of the Honeycrisp and other difficult to store apples. In the Great Lakes Region, we have begun to store Honeycrisp in CA storage - a practice that will likely become commonplace in the coming years. Importantly, an adequate storage strategy for Honeycrisp has been difficult to come by: sensitivities to low temperature and typical storage atmospheres have made this an extremely challenging fruit to store. In addition, there will be presentations by experts from MSU (Drs. Beaudry and Lu) and a number of technical updates from leaders of postharvest industries including Pace, Decco, Storage Control Systems, and AgroFresh.

Clinic Speaker Agenda, August 3, 2016 - Boulder Creek Golf Course/Meeting Rooms, Belmont, Michigan (updated July 22, 2016)

To register, visit: <http://events.anr.msu.edu/MSUCA2016/>; Doors open at **7:30 a.m.** and educational sessions begin at 8:30. Morning snack, lunch and breaks included. There is no charge for this event thanks to the generosity of our sponsors.

Time	Speaker	Affiliation	Presentation Title
8:30	Dr. Randolph Beaudry	MSU	Welcoming Remarks/Introductions
8:40	Amy Irish-Brown and Phil Schwallier	MSU	MSU apple assessment program - Year 1
8:55	Jennifer DeEll	OMAFRA, Ontario	Storing Honeycrisp - Harvista®, delayed CA, and more
9:25	Dr. Dana Faubion	AgroFresh, Lead R & D Manager, Yakima, WA	Introduction to AvantStore®
9:45	Chad Christopherson, Dr. Lynn Oakes, and Dr. Nazir Mir	Decco/Essentiv/Uniphos	TruPick® – postharvest freshness management: the newest concept in 1-MCP delivery technology

10:05 Morning Break - visit sponsor booths

10:20	Dr. Peter Toivonen	Agriculture and Agri-Food Canada, Summerland, BC	Re-evaluation of approaches to assess apple harvest maturity
10:40	Ted Nulliner	Pace International	FYSIUM® - The Future of 1-MCP
11:00	Dr. Randolph Beaudry and Jim Schaefer	MSU	Dynamic controlled atmosphere storage (DCA)
11:30	Jim Schaefer	Storage Control Systems	Stress-Free DCA

12:00 Lunch Break - visit sponsor booths

12:45	Dr. Randolph Beaudry	MSU	CA injury in Empire and Honeycrisp: Control by diphenylamine and preconditioning
1:00	Dr. Anand Pothula for Dr. Renfu Lu	USDA, MSU	Development of a self-propelled apple harvest and automatic in-field sorting machine.
1:20	Dr. Jennifer DeEll	OMAFRA, Ontario	Storage disorders in Empire, McIntosh, and Gala
1:50	Fernando Edagi	AgroFresh, R & D Manager Wenatchee, WA	Harvista® Technology: Beyond Harvest Management Tool
2:10	Dr. Peter Toivonen	Agriculture and Agri-Food Canada, Summerland, BC	What's new in apples from British Columbia? When to harvest and how they store

2:35 Afternoon Break - visit sponsor booths

2:50	Debra Chester	MSU Occupational Health	CA Room Safety & Regulations
3:10	Ben Paskus for Dr. Randolph Beaudry	MSU	Revisiting hypobaric storage for perishable produce
3:30	Yuzhen Lu for Dr. Renfu Lu	USDA/MSU	A new imaging technique for enhanced detection of defects on apples
3:50	Dr. Randolph Beaudry		Sum up and thanks
4:00			Adjourn

Peach and Plum Variety Showcase

Date: August 23, 2016

Time: 4:00 p.m. - 7:00 p.m.

Location: SW Michigan Research & Extension Ctr, 1791 Hillandale Rd., Benton Harbor, MI 49022

Contact: MSU Extension Tree Fruit Specialist Bill Shane: (269) 208-1652 or shane@msu.edu

You are invited to see and taste the newest, traditional, and unusual peach and plum varieties and experimental selections.

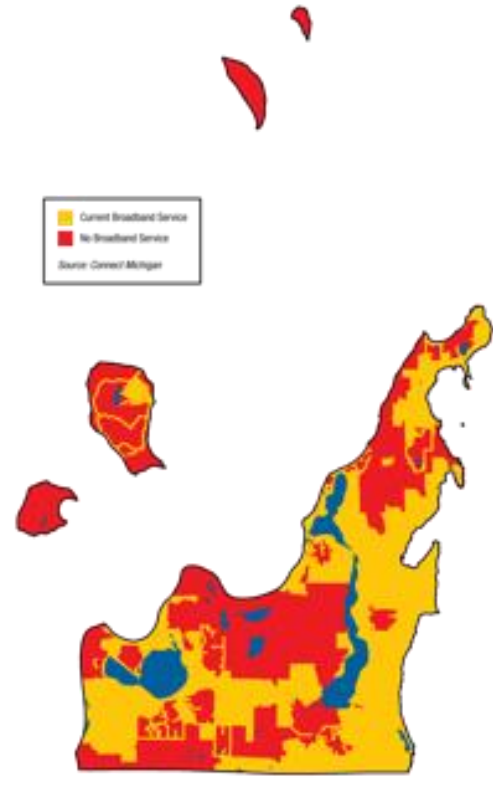
This extensive stone fruit display will be assembled from samples contributed by commercial growers, nurseries, and university breeding programs across Michigan and elsewhere. Fruit on display will include yellow and white fleshed peaches and nectarines, donut, aprium, and plumcot types. Attendees will see new varieties and experimental selections from the Stellar, Flamin' Fury, Rutgers University, University of Wisconsin, Cornell University, and Michigan State University breeding programs. Breeders, commercial nursery, growers, and university researchers will share their experiences and recommendations with these new varieties.

This showcase will take place in Berrien County at the SW Michigan Research & Extension Center, 1791 Hillandale Rd., Benton Harbor, MI 49022 from 4:00 PM to 7:00 PM. The schedule is: 4:00 PM Fruit variety displays open for viewing and tasting; 4:30 PM Fruit variety discussions; 6:00 PM Supper. There is no charge. Supper provided courtesy of International Plant Management and Summit Sales, Lawrence, MI.

You are welcome to bring samples of new, unusual, and experimental peaches and plums varieties to add to the display. The SW Research and Extension Center will be open for self-guided tours to see over 60 projects on fruit and vegetables including high tunnel production, grapes, hops, peach training systems, variety trials, and peach breeding.

Directions to SWMREC: Travel on I-94 to Exit 30, which is Napier Avenue. Turn east on Napier Avenue and go 2 1/2 miles to Hillandale Road. Turn south (right) and travel to the entrance of SWMREC (about one-quarter on the east (left) side of Hillandale Road).

This showcase is organized by the Michigan Peach Sponsors, Summit Sales, International Plant Management, and Michigan State University Extension.



**Figure 1. Leelanau County
broadband availability, 2/2016**

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 his 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>