

Northern Michigan FruitNet 2016

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – June 24, 2016

CALENDAR OF EVENTS

6/24	CIAB Grower Meeting SW MI Research and Extension Center, 4:30 – 6:30 PM
6/27	CIAB Grower Meeting Oceana Intermediate School District, 8:30 – 10:00 PM
6/28	CIAB Grower Meetings Peninsula Township Hall, 9:00 – 11:00 AM Milton Township Hall, 1:00 – 3:00 PM NWMHRC, 7:00 – 9:00 PM
5/3 – 6/28	Leelanau County IPM Updates, 12PM – 2PM Jim and Jan Bardenhagen's Farm (details below)
5/3 – 6/28	Grand Traverse County IPM Updates, 3PM – 5PM Wunsch Farms (details below)
5/4 – 6/29	Antrim County IPM Updates, 10AM – 12PM Jack White Farms (details below)
5/4 – 6/29	Benzie County IPM Updates, 2PM – 4PM Blaine Christian Church (details below)
7/1	Natural enemies, new insecticide options, perimeter spray programs-- Rufus Isaacs, MSU Hawthorne Vineyards on Old Mission Peninsula, 3-5PM
7/13	Income Taxes for Foreign Agricultural Workers (H-2A) NWMHRC, 8AM – 4:30PM
8/25	NWMHRC Open House

What's New?

- **SWD Trap Update – June 24, 2016**
 - **New resource for apple growers – OMAFRA**
 - **Young grape clusters are susceptible to attack from fungal diseases**
 - **Rebound of obliquebanded leafroller in tree fruits**
 - **Attend the 2016 spotted wing Drosophila berry grower training on June 30**
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SWD Trap Update – June 24, 2016

Catch Date	Location	Crop	No. of SWD
5/31	Centerville Twshp.	Tart Cherry	1
6/16	S. of Suttons Bay	Tart Cherry	1
6/17	Old Mission	Woodlot	2
6/20	M-72 W corridor	Tart Cherry	2
6/21	Old Mission	Sweet and Tarts	3
6/21	Elk Lake Rd.	Wild Raspberry	1
6/22	N. of Suttons Bay	Tart Cherry	1
6/22	Eastport	Wild Cherry/Raspberry	1
6/24	Northport-Omena	Tart Cherry	3

Total catches per region:

Centerville Twshp. - 2

S. of Suttons Bay - 1

Old Mission - 5

M-72 W corridor - 1

Elk Lake Rd. – 1
N. of Suttons Bay – 1
Eastport - 1
Northport-Omena - 3

CIAB Meeting, Grand Rapids, June 23, 2016

The Cherry Industry Administrative Board (CIAB) met today at the Amway in Grand Rapids. This meeting was held to determine the supply formula for the 2016 tart cherry crop. To begin, the Board had to determine the estimated crop size numbers to be used in the formula. The table below are the two different estimates: one from the USDA and the other from the CIAB members and the growers and processors present in the room. The CIAB determined to use the CIAB members' estimate rather than the USDA estimate; those numbers will be plugged into the optimum supply formula.

		USDA	MFFPA Guesstimate	Members	CIAB Board June 23, 2016	
NW		140.7	165	150	165	
WC		70	68	70	68	
SW		13	20	18	20	MI Total
MI TOTAL	223.7	222.7				253
NY		8	7	10	7	
OR		3	3	4.5	3	
PA		0.3	0.3	0.5	0.3	
UT		43	50	50	50	
WA		24.4	27	27	27	
WI		11	11	13	11	
TOTAL		312.4	351.3	343	351.3	
Unrestricted					3.3	
Restricted					348	

OSF - Estimates of Preliminary Restriction Percentages
Estimate for Crop Year 2016/17

Estimated In-orchard Diversions

SUPPLY, Estimated production			
	Crop Size		
	Restricted Districts	348	
	Unrestricted	3.3	
			351.3
	"Free" Carry-in		81.3
	Orchard Diversions		432.6
DEMAND			
	SALES		
	"Free," 3-year average	250	
	Market Growth Factor	25	
	OTHER FACTORS		
	Carry-out	57	
	Adjustments		
	Carry-out		
	Imports		
	Other	22	
	TOTAL DEMAND		303
SURPLUS			101

RESTRICTION % and POUNDS	
"Free" Percentage	71%
"Free" production (Million ##)	247
Restricted %	29%
Ristrcted tonnage	101

Demand - with adjustment		
	Avg.	Adj.
	239	22
	Total	
	252	

Total "Free" Supplies detailed by source	
Carry-in	81
Unrestricted production	3
Free Portion of restricted crop	247
Freed up using orchard diversions	0
Total:	331

Adjustments to OSF Components	
Crop Size	
Carryout (0 to 100)	57
Adjustments	
In-orchard diversions	
Carry out	0
Imports	0
Other	22

The 2016 Michigan Fruit Crop Guesstimate

The 2016 Michigan Fruit Crop Guesstimate was held today in Grand Rapids. This session was hosted by the Michigan Frozen Food Packers Association. Growers and consultants representing different areas of Michigan provided the following estimates. In the case of tart cherries, growers represented the different tart cherry growing states as well as the regions of Michigan:

Tart Cherries (million pounds)

Michigan

- Northwest: 165
- West Central: 68

Estimated Start Date

7/15 (Manistee) – 8/5 (Northport)
7/8 – 7/10

• Southwest:	20	6/29 – 6/30
Total:	253	
<i>New York</i>	7	7/11
<i>Pennsylvania</i>	0.3	
<i>Wisconsin</i>	11	7/31
<i>Utah</i>	50	7/11 – 7/15
<i>Washington</i>	27	6/27
<i>Oregon</i>	3	6/23
U.S. total:	351.3	

Sweet Cherries (million pounds)

Michigan:

- Fresh: 1,500,555
- Canned: 3,000,000
- Frozen: 16,500,000
- Brine: 33,000,000

Total 54,000,000

Apples (000 bushels)

Michigan (total numbers of bushels)

- Northwest: 3,636,600
- Eastern: 893,000
- West Central: 19,405,000
- Southwest: 2,360,000

Michigan total: 26,294,600

Blueberries (million pounds)

Michigan: 101

New resource for apple growers - OMAFRA

OMAFRA has released a new resource for apple orchard spraying.

Some of you have heard me speak about crop-adapted spraying, and after

four years of research we have developed an app for Apple and Android systems that prescribes a sprayer set up for most orchard applications. Drenches and plant growth modifiers aren't included.

The app is free and I took pains to ensure it works in both Metric and US Imperial so it will be of use to everyone.

I invite you to check out the article on Sprayers101 and read about what it does, and doesn't, do.

That article also links back to the article on Crop-Adapted Spraying, so you can get a little foundational refresher if you choose.

I hope to speak on the subject at our meeting this year, but I'm certainly happy to speak with anyone that has questions at any time.

If you'd rather respond to me directly rather than fill everyone's inboxes, please feel free.

Here's the link:

<http://sprayers101.com/orchardmax>

The link to the Apple store works right now, and the Google Play link should work before Monday.

Thanks for your interest and if you choose to share this information with your growers, I hope it helps them as much as it's helping Ontario's orchardists.

Jason Deveau
OMAFRA

Monitoring traps for catching spotted wing Drosophila

Using the right bait can help improve your spotted wing Drosophila trap's sensitivity.

Posted by [Rufus Isaacs](#), and Julianna Wilson, Michigan State University Extension, Department of Entomology; and Nikki Rothwell, MSU Extension, MSUE News



A trap for spotted wing Drosophila (SWD) that includes a plastic container with small holes for the flies to enter, a Scentry lure for SWD attraction and small volume of soapy water to trap the flies.

With the first catches of [spotted wing Drosophila](#) (SWD) detected in Michigan over the past few weeks, it is important to monitor for this pest to know when it is becoming active in berry fields and cherry orchards. Recent research at [Michigan State University](#) and elsewhere can guide how to best monitor for this pest, and there have been various developments on trap design and lures in recent years that should be incorporated into trapping programs. Additionally, trap checkers need to have good identification skills so that SWD can be separated from all the other small flies as well as detecting females that do not have the black spot on the wings. MSU has developed a guide with photographs, titled "[Spotted Wing Drosophila Identification Guide](#)."

Traps and lures can be made at home, or they can be purchased from commercial suppliers, such as [Great Lakes IPM](#) supplies traps and lures. MSU staff are using a simple monitoring trap that consists of a plastic, 32 ounce cup with 10 holes 0.1875-0.375 inch in size around the upper side of the cup, leaving a 3-4 inch section without holes to

facilitate pouring out the liquid. The holes can be melted into the plastic with a hot wire or soldering iron. The small holes allow access to vinegar flies, but keep out larger flies, moths, bees, etc.

To help ensure that trapped flies do not escape and to facilitate checking traps, a small, yellow sticky trap can be placed inside hung on a paper clip, but this is **not** necessary. A drop of unscented dish soap in the liquid will ensure flies remain trapped. It is important to have many points for entry by the flies into the trap, and to have holes that are not too big, otherwise lots of other insects will be trapped. Some trap designs include red or black coloration and this will help increase captures, but the bait is the most important component of the trap for getting the flies to be attracted and enter the trap.

For baits, there are some different options. A homemade approach is to use a yeast-sugar mix that ferments and attracts the flies. This trap is made by combining 1 tablespoon of active dry yeast (we use Red Star brand, available online or in stores) with 4 tablespoons of sugar and 12 ounces of water. Although these traps are harder and messier to service, the yeast bait is less expensive.

If you prefer the convenience and cleanliness of a pre-made commercial lure, some of those are now available for SWD. This year, we are using the Scentry pouch lure that is pictured in the photo, and in our 2015 trials in Michigan this lure worked as well as the yeast-sugar mix bait. This Scentry lure is hung in the trap over 1-2 inches of water with unscented dish soap, and the liquid can be checked each week for SWD. The lure should be changed monthly to maintain maximum activity. To prevent the development of molds in the liquid and to help preserve the SWD flies for identification, add 32 grams of borax per gallon of water.

Traps for SWD should be hung in a shaded area in the fruit zone, using a wire attached to the top of the trap. Growers should be sure the trap is clear of vegetation with the holes exposed so that SWD can easily fly in. [MSU Extension](#) recommends a minimum of one baited trap for SWD every 5-10 acres, with an additional trap in a wooded field margin if present to see when SWD is becoming active. Traps should be checked for SWD flies once a week at a minimum; the yellow sticky trap and liquid inside of the trap should be observed for SWD, and the SWD captures should be recorded each week in a log book. With this method, you can track the number of male and female SWD as the season progresses.

Once fruit are ripening and SWD flies are present, fruit protection will be needed to minimize the risk of infestation. We typically get a sharp increase in captures in July, and when SWD populations reach high levels, it is a very important time for protection of later blueberry varieties, fall raspberry crops and cherries.

For more information about monitoring and management of SWD in Michigan fruit crops, please visit the [MSU Spotted Wing Drosophila website](#).

CIAB Grower Meetings

The CIAB meets June 23, 2016 at 8:00 AM, at the Amway Grand Plaza, in Grand Rapids, MI to discuss the Optimum Supply Formula and to set restriction percentages, if any. The CIAB will hold grower meetings to discuss the outcomes with growers and the prospects for this harvest.

The meetings will be at the following locations and times. Please attend the one that is more convenient for you.

Friday, June 24	4:30 – 6:30 PM	Southwest Michigan Research and Extension Center 1791 Hillandale, Benton Harbor, MI
Monday, June 27	8:30 – 10:00 PM	Oceana Intermediate School District 844 Griswold Street Hart, MI
Tuesday, June 28	9:00 – 11:00 AM	Peninsula Township Hall 13235 Center Rd. Traverse City, MI
Tuesday, June 28	1:00 – 3:00 PM	Milton Township Hall Kewadin, MI
Tuesday, June 28	7:00 – 9:00 PM	NWMHRC 6686 S. Center Highway Traverse City, MI

Income Taxes for Foreign Agricultural Workers (H-2A) – Meeting

Meeting Dates and Times:

Tuesday, July 12, 2016

**Ottawa County Fillmore Complex Main Conference Room 12220 Fillmore Street West
Olive, MI 49460**

Wednesday, July 13, 2016

**MSU Northwest Michigan Horticultural Research Center 6686 S. Center Highway
Traverse City, MI 49684**

Michigan's agricultural industry has been seeing a decline in recent years of the traditional labor resources that have been used in the past. The use of the H-2A Guest Worker Program has seen a significant increase in use recently with continued significant growth in coming years. With this increase there is a need for legal and tax professionals to have an understanding on how to prepare taxes for H-2A guest workers, common pit-falls and challenges.

This Continuing Education Program will provide a four hour presentation with three hours of hands-on workshop to help tax professionals understand how tax law impacts foreign agricultural workers and their employers and give them a better understanding of the challenges faced by tax professionals, employers and the workers themselves as they strive to comply with federal and state tax laws.

The information included also applies to all taxpayers who use ITINs when filing tax returns and/or have spouses and/or dependents living outside the United States.

This program will use IRS Publications 519 and 51 and others as a guide throughout this training. Participants will gain an understanding of tax preparation for H-2A Guest Workers, the appropriate method to fill-out an ITIN documentation/application, how to appropriately calculate the time a guest worker has been "in country" over the past 3-years to determine the correct tax documentation needed to be filed in the present tax year. Participants will also receive an overview of the tax deductions, credits available and not available to H-2A Guest Workers.

This program will also discuss payroll and tax withholding issues and responsibilities of an Employer and H-2A Laborer that all tax and legal professionals should be aware of when working with their clients.

Registration fee is \$125.00 per person which includes lunch, refreshments, handouts and materials. **Register online** by July 8, 2016 at

<http://events.anr.msu.edu/H2ATaxPrepWorkshop/>. Online registration offers payment by credit card or check. Or to register by mail, mail completed registration form at right with check payment no later than July 5. Please indicate the location you would like to attend.

More information can be found in the attached PDF flyer.

Rebound of obliquebanded leafroller in tree fruits

Recent trapline data suggests possible rebound of obliquebanded leafrollers in apples and cherries.

Posted on by [John Wise](#), Michigan State University Extension, Department of Entomology, and Nikki Rothwell, MSU Extension, MSUE News

[Obliquebanded leafroller](#) populations have been relatively low in apples and cherries since the 2012 “crop loss” year, but recent trapline data suggests a possible rebound. We set a June 6, 2016, biofix for obliquebanded leafrollers at the [Trevor Nichols Research Center](#) in southwest Michigan, which was followed by two weeks of higher than normal adult flight. The first summer generation larvae are expected over the next week in southwest Michigan, and increasing thereafter. At the [Northwest Michigan Horticulture Research Center](#), high numbers of adults were caught over the last week, and biofix was set as June 17.

Obliquebanded leafrollers are a threat to apples as a direct pest; the larvae feed on leaves and fruit in summer (July) and fruit in fall (September). In cherries, obliquebanded leafrollers do not feed much on fruit, but they can cause damage to cherry leaves, which can result in defoliation. The greater concern of obliquebanded leafrollers in cherries is the threat as a contamination pest, as they can be found in cherry tanks if present in trees at harvest. Despite the fact the larvae are easily visible either in the tank or at the processor, [Michigan State University Extension](#) advises growers to take precautionary measures to prevent these insects from infesting harvestable fruit and contaminating cherry tanks. Growers with problem orchards risk having tank-loads rejected at the processor if obliquebanded leafroller larvae are present.

Organophosphate-resistance was documented in obliquebanded leafrollers in Michigan apples in the early 2000s, and more recently in cherries in 2014. Pyrethroid and carbamate resistance have also been documented. However, there are several new insecticide chemistries that are efficacious against obliquebanded leafrollers labeled for apples and cherries. However, optimizing the timing of insecticide applications should take into account the residual activity, recommended degree-day target and pre-harvest intervals (see table below).

Growers should use traps to set a biofix by using [MSU's Enviro-weather](#) system. After adult emergence, growers should begin monitoring for summer generation larvae. Growers should look at 10 fruit clusters and 10 terminals on five trees per orchard each week and should apply an insecticide if three larvae per tree are found.

For cherries, the insecticides we recommend for obliquebanded leafroller control at pre-harvest time are Delegate, Altacor, Belt, Exirel and Voliam flexi. For organic growers, we

recommend Entrust. All of these insecticides have shown to be excellent against obliquebanded leafrollers. Because of their slower activity, Bt's may not eliminate canopy infestation sufficiently to prevent contamination from a pre-harvest spray.

Compound, chemical class, residual activity, pre-harvest interval (PHI) and standard degree-day (DD) timing of insecticides used for obliquebanded leafroller (OLBR) control.						
Compound trade name	Chemical class	DD spray timing for OBLR	Residual activity	PHI (days) cherries	PHI (days) apples	Labeled for spotted wing Drosophila
Dipel* , Deliver* , Crymax	Bt's	Biofix + 450 DD	5-7 days	0**	0	No
Grandevo* , Venerate*	Biological	Biofix + 450 DD	5-7 days	0**	0	Yes No
Altacor,	Diamide	Biofix + 400-450 DD	10-14 days	10	14	No
Belt,				7	14	No
Exirel				3	3	Yes
Entrust*	Spinosyn	Biofix + 400-450 DD	7-10 days	7	7	Yes
Delegate	Spinosyn	Biofix + 400-450 DD	10-14 days	7	7	Yes
Proclaim	Avermectin	Biofix + 400-450 DD	7-10 days		14	No
Rimon	IGR	Biofix + 100-200 DD	10-14 days	7	7	Yes
Voliam flexi	Diamide + Neonicotinoid	Biofix + 400-450 DD	10-14 days	14	35	No

* Organic Materials Review Institute (OMRI) approved.

** Not recommended for pre-harvest sprays to prevent OBLR contamination in cherry because of slow action.

Drs. Wise and Rothwell's work is funded in part by [MSU's AgBioResearch](#).

Young grape clusters are susceptible to attack from fungal diseases

Protect grape clusters from all major diseases at this time.

Posted by [Annemiek Schilder](#), Michigan State University, Department of Plant, Soil and Microbial Sciences, MSUE News

Young grape clusters are highly susceptible to all major diseases, including [downy mildew](#), [powdery mildew](#), [black rot](#), [Phomopsis](#) and [anthracnose](#). Luckily, weather conditions have been warm and mostly dry in recent weeks and activity of fungal pathogens has been suppressed. Dew also has been rare due to relatively warm nights. With a lack of prolonged leaf wetness, most diseases will be suppressed except for powdery mildew which thrives in the absence of rain and is promoted by high relative humidity and shading in the grape canopy. However, if there is a leaf wetting period for 6 hours or more in the next few weeks, infection periods for black rot, Phomopsis, anthracnose and downy mildew are expected. In our experience, a relatively dry spring and early summer will prolong the availability of inoculum for these diseases and they will sneak in infections when they can.

Black rot and Phomopsis lesions have been seen in the last three to five weeks and indicate that the pathogens are active. Grape anthracnose symptoms are also visible on shoots, leaves and cluster stems of susceptible varieties. Powdery mildew has not yet been reported, whereas downy mildew symptoms have been seen at low levels in unsprayed Chancellor vines and are picking up on wild grapevines. Botrytis is unlikely to be active during dry, warm conditions. [Michigan State University Extension](#) continues to advise careful scouting for disease symptoms on a weekly basis.

It is possible for fruit clusters to be infected by powdery mildew without seeing any foliar infections first, so protect the fruit of susceptible cultivars even if no powdery mildew has been seen on the leaves. In addition, downy mildew infections of flower clusters may occur before leaf infections as well, particularly in the cultivar Chancellor, whose clusters are highly susceptible to downy mildew. Growers are strongly advised to protect flower and fruit clusters from infection by all grape pathogens using effective fungicides. The risk of infection is especially high if we have multiple rain events and moderate temperatures, resulting in prolonged wetting of foliage and developing fruit.

In general, aim to protect the clusters from the major diseases from immediate pre-bloom until four to five weeks after bloom. As the berries develop, they become naturally resistant to most diseases and the need for fungicide protection diminishes. This happens quite rapidly for downy mildew (two to three weeks after bloom), whereas for powdery mildew it is about four weeks after bloom. Concord grapes become resistant to black rot at four to five weeks after bloom but some wine grape varieties may remain susceptible to black rot for up to eight weeks after bloom. Be aware that the cluster stem (rachis) and berry stems can remain susceptible longer than the berries in most cases. The only disease in which berries remain susceptible throughout their development is Phomopsis, but the risk of infection diminishes after bunch closure

because spore numbers drop off then. In the case of Botrytis, berries actually become more susceptible closer to harvest, especially in tight-clustered varieties.

Depending on the susceptibility of the grape cultivars that you are growing, broad-spectrum fungicides or fungicide combinations are most appropriate at this time of the growing season to get the broadest control. A good option would be a tank-mix of a sterol inhibitor (e.g., Rally, Tebuzol) plus a protectant (e.g., Manzate, Ziram). In addition, broad-spectrum fungicides such as Pristine, Abound and Sovran, or pre-mixes such as Revus Top and Quadris Top are useful at this time. The pre-mixes Luna Experience and Inspire Super are good options for wine grapes where efficacy against Botrytis is also desired, however, they do not work against downy mildew, so a downy mildew fungicide may need to be added (e.g., Phostrol, Presidio, Revus, Forum, etc.).

For organic vineyards, a tank-mix of a protectant biocontrol agent (e.g., Double Nickel 55) plus a plant defense booster (Regalia- giant knotweed extract) is a good option. For grape cultivars that can tolerate these products, sulfur is a good powdery mildew fungicide, and copper will protect vines against downy mildew in addition to suppressing other fungal diseases. Oils and salts are best used as eradicans for existing powdery mildew lesions. Be careful using sulfur, oils, salts or phosphites during hot, dry conditions as these may cause leaf burning, especially on stressed vines. Also it may be advisable to avoid spraying grapevines during full bloom, as we have noticed yield reductions in juice grapes sprayed with fungicides at bloom.

Dr. Schilder's work is funded in part by [MSU's AgBioResearch](#).

Attend the 2016 spotted wing Drosophila berry grower training on June 30

Take the guesswork out of your spotted wing Drosophila (SWD) control program. Learn how to use a systems approach to control SWD.

Posted by [Carlos García-Salazar](#), Michigan State University Extension, MSUE News



Blueberry growers learning to use Enviro-weather for SWD management.

[Spotted wing Drosophila](#) (SWD) have been trapped for several weeks, and this pest is ready to attack Michigan berry fields. It is time to prepare your control strategy to stop SWD. Early detection and action is critical for successful SWD management. To help berry growers control this pest, [Michigan State University Extension](#) has developed an intensive [2016 Spotted Wing Drosophila Workshop](#) using information on SWD biology, insecticides, weather conditions and other tools. Integrating information and tools from different sources to create a robust system is called a systems approach and is a highly effect way to handle any problem.

This workshop will be on Friday, June 30, 2016, from 9 a.m. to 4 p.m. at the Ottawa County Fillmore Complex Boardroom, [12220 Fillmore Street, West Olive, MI 49460](#). There is a \$30 registration fee for this workshop, which includes materials and refreshments. [Pre-registration](#) is required. Four RUP credits will be available for certified pesticide applicators. For a complete description of the program and to register, go to: [2016 Spotted Wing Drosophila Workshop](#).

This workshop is designed for berry growers, field managers, pest consultants and anyone involved in insect pest management in berry crops. Its goal is to teach growers to manage SWD using a systems approach. Participants will learn SWD biology and behavior, recommended insecticides and their strengths and weaknesses, how weather conditions impact insecticide performance and how to use the [MSU Enviro-weather](#) website's weather information and tools to develop a successful integrated pest management (IPM) program to control SWD.

Even if you have attended SWD trainings in the past, this training will provide new information, helping you upgrade your IPM skills. You will be able to effectively manage SWD at your fields during the 2016 season.

For more information, contact Mary Frein at the [Ottawa County MSU Extension office](https://www.ottawacountymsuextension.org/) at 616-994-4540 or frein@anr.msu.edu.

2016 IPM Update Schedule

Emily Pochubay and Nikki Rothwell
Michigan State University Extension

Tree Fruit IPM Updates beginning the first week of May through mid-July (as needed) will highlight management of the seasons current potential pest challenges dictated by weather and pest biology. Attendees are encouraged to bring examples of pests and damage found on the farm to these workshops for identification and discussion. Workshops will be held weekly in Leelanau and Grand Traverse counties and bi-weekly in Antrim and Benzie counties in May. Beginning in mid-June, we will hold weekly meetings in all four locations. Tree fruit growers are welcome to attend meetings at any of the locations and times that are most convenient (see below). These workshops are free and do not require registration. For more information, please contact Emily Pochubay (pochubay@msu.edu), 231-946-1510.

Leelanau County

Location: Jim and Jan Bardenhagen, 7881 Pertner Road, Suttons Bay

Dates: May 3, 10, 17, 24, 31; June 7, 14, 21, 28

Time: 12PM – 2PM

Grand Traverse County

Location: Wunsch Farms, Phelps Road Packing Shed, Old Mission

Dates: May 3, 10, 17, 24, 31; June 7, 14, 21, 28

Time: 3PM – 5PM

Antrim County

Location: Jack White Farms, 10877 US-31, Williamsburg (south of Elk Rapids on the southeast side of US-31)

Dates: May 4, 18; June 1, 15, 22, 29

Time: 10AM – 12PM

Benzie County

Location: Blaine Christian Church, 7018 Putney Rd, Arcadia, MI 49613

Dates: May 4, 18; June 1, 15, 22, 29

Time: 2PM – 4PM

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:

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>