

Northern Michigan FruitNet 2017

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – August 4, 2017

CALENDAR OF EVENTS

- | | |
|-------------|--|
| 8/4 | First Friday Meeting
NWMHRC, 3-5PM |
| 8/24 | NWMHRC Open House, Equipment Demo and
Leelanau Hort Society Annual Meeting and Dinner |

What's New?

- **SWD Numbers are on the Rise**
- **Establishing Wildflower Habitat to Support Pollinators of Michigan Fruit Crops**
- **NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE**

NEW ARTICLES

SWD Numbers are on the Rise

Since we sent out the last FruitNet report earlier this week, we have observed higher numbers of spotted wing drosophila (SWD) across the region. Adult trap catches are on the rise (Table 1), and infestation levels are increasing in our research blocks here at the NWMRHC. Although the adult numbers are rising, which obviously indicates an increase in SWD populations, we have also had increased reports of infestations in the past two days. In addition to the reports of infestations from growers and the higher trap counts, we have seen higher numbers of SWD larvae in our sentinel fruit traps. Again, sentinel

fruit are unsprayed cherries placed into commercial blocks; SWD females can locate these unsprayed fruit quite readily and lay eggs—we are counting many more larvae in these sentinel fruit compared to last week. The increases in larval numbers in these sentinel fruit is another indication that pressure from SWD is rising.

With all of these factors showing increased pressure from SWD on fruit remaining in the orchard, growers need to protect fruit from infestation. Additionally, we had considerable rainfall throughout the region last evening (3 August), and rainfall amounts ranged from 0.5”-3”. These rains likely washed off any insecticide residues, and growers will need to reapply a material (rated excellent) if harvest will continue into the weekend and next week. We understand that growers have gone above and beyond to control SWD this season, but if harvest stretches out, fruit will need to be protected from the rising numbers of SWD. Growers should also communicate with processors about delivering fruit; we have heard reports of variable schedules for delivering fruit through the weekend.

Table 1: NW MI SWD Trap Counts

Location and # of traps out	wk of 5/15	wk of 5/22	wk of 5/29	wk of 6/5	wk of 6/12	wk of 6/19	wk of 6/26	wk of 7/3	wk of 7/10	wk of 7/17	wk of 7/24
North Manistee - 7	trap set	0	0	0	2	Not checked due to REIs	1	6	14	25	
Benzie - 44	trap set	3	2	4	23	50	23	48	103	269	
Yuba - 22	trap set	0	0	0	1	16	7	13	23	73	
Central Lake - 7	trap set	0	0	1	0	1	0	0	0	47	
Old Mission - 26	trap set	1	0	0	0	7	1	0 - Not all traps checked due to REIs	15	93	
Bingham - 75	trap set	0	0	0	3	38	92	68	73	777	
Cedar - 8	trap set	0	0	0	1	12	0	3	4	20	

								Not checked due to REIs		
East Leland - 7	trap set	0	0	0	0	0	0		1	1
Northport - 7	trap set	0	0	1	0	2	3	2	13	55

Establishing Wildflower Habitat to Support Pollinators of Michigan Fruit Crops

The ICP guide to "Establishing Wildflower Habitat to Support Pollinators of Michigan Fruit Crops" is now available for download from MSU Extension (bulletin number E-3360) at [this link](#), or from the [Project ICP Tools for Growers page](#).

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE

The Northwest Michigan Horticultural Research Center's (NWMHRC) annual open house is scheduled for Thursday, August 24, 2017. This year's event will include wine tasting, an equipment demonstration, dinner, and the Leelanau Horticulture Society's annual meeting.

This year's program will include an equipment show plus we are re-introducing equipment demonstrations. We have invited equipment companies to bring in new orchard equipment and technologies for demonstration purposes. We hope to be able to showcase new advancements in orchard assist technologies for the 2017 NWMHRC Open House.

Free educational wagon tours of the NWMHRC will feature MSU specialists and will take place from 3:00 - 4:45PM. The tour will include wine grape and tree fruit specialists that will speak on a variety of topics: Dr. Todd Einhorn will present on his work using ethephon for fruit removal on young trees and Apogee use in Montmorency tart cherry as well as research on increase fruit size in sweet cherries. Dr. George Sundin will be on hand to discuss 2017 cherry leaf spot efficacy results. Dr. Amy Iezzoni will update attendees on MSU rootstocks, and Dr. George Bird will present his latest results on cover

crops in orchard systems. NWMHRC staff will provide information on spotted wing drosophila (SWD) based on trials conducted this past season at the station.

Growers are encouraged to meet with equipment vendors and participate in the demonstrations during the social hour from 4:45 – 6:00PM. Dinner and the Leelanau Horticultural Society's annual meeting will follow at 6:00PM.

As in past years, the social hour and dinner have been sponsored by the Leelanau Horticultural Society and Parallel 45 with the educational portion sponsored by AgBioResearch, MSU Extension, and the NW Michigan Horticultural Research Foundation. To reserve or purchase a dinner ticket, please call (231) 946-1510 or email Jenn at goodr100@msu.edu by August 21, 2017. The dinner will be catered by *Ethnic Garden Catering* and will feature locally produced food; cost for dinner tickets is \$10 per person.

For more information, contact the NW Michigan Horticultural Research Center at 231-946-1510. We hope to see many of you at this fun and educational event!

ARTICLES FEATURED IN PAST FRUITNET REPORTS

CIAB Newsletter – Reminder for Growers

Please view the attached document [Grower Diversions Reference Chart](#)

CROP ESTIMATES AND MARKET CONDITIONS- On June 22, 2017 the CIAB met to discuss crop size and market conditions for the 2016/17 crop year. Sales, inventories and compliance activities were also discussed by the board along with carryout needs. Information from the meeting is presented below:

Crop Estimates (million lbs):

District	USDA-NASS	CIAB
NW Michigan		130
WC Michigan		26
SW Michigan		28
Subtotal, MI	164.5	184
Washington	25.3	26
New York	9	8
Wisconsin	10.4	9
Utah	29	25
Oregon		2
Pennsylvania		5
TOTAL	238.2	259

USDA-NASS reported their estimate based on surveys in late May and early June. Surveys were not conducted in Oregon and Pennsylvania. The board voted unanimously to adopt the CIAB estimate for the preliminary calculation of the optimum supply formula (OSF) for June. Unregulated districts for the preliminary restriction are Oregon and Pennsylvania.

OSF CALCULATION AND RESTRICTION- Free and restricted inventories are used, along with the crop estimate and sales, in the calculation of the OSF. The inventory breakdown is included below:

Inventory Type	Million lbs
Free	110.5
Restricted	65.9
Total	176.4

Inventory by type (as of May 31, 2017):

Product Type	Million lbs	Percent of Total
Frozen, General use	93.2	53%
Frozen, Dryer stock	42.6	24%
Waterpack	2.1	1.2%
Piefill	9.3	5.3%
Puree	0.6	0.3%
Juice	24.1	13.7%
Dried	2.4	1.4%
Other	1.7	1.0%
Total Carry-in	176.4	100%

Demand- 3 Year Average Sales- Sales for the marketing year ended May 31, 2017 are 260.8 million lbs. For calculation of the OSF, three year average sales are used to determine demand, plus a market growth factor (10% of 3 yr avg or 37.6 mm lbs). Average sales for the calculation are (in million lbs):

	Gross sales	Exports	USDA-Bonus Sales	Free Sales
2014	235	12	21.9	201.1
2015	257	12	46.8	198.2
2016	260	15	41.3	203.7
3 yr Avg.	250.6	13	36.7	201

OSF and Preliminary Restriction Percentage-The following table lays out the preliminary OSF calculation as approved by the CIAB on June 22, 2017. The adjusted surplus amount is divided by the amount of regulated tonnage available to calculate the restricted percentage amount ($63.4/240 = 26\%$). The regulated tonnage number is smaller than the total crop estimate since Oregon and Pennsylvania are not included and also because the CIAB included an estimate for in-orchard diversion of 12 million lbs.

PRELIMINARY OSF CALCULATION-

Supply	
U.S. Crop	259
+ Carry In	110.5
=TOTAL SUPPLY	369.5
3 year sales avg	201
+ Target Carryout	45
+USDA Adjustment	36
=OPTIMUM SUPPLY	282
SURPLUS (TOTAL – OPTIMUM)	87
-Market Growth Factor	23.7
=Adjusted Surplus	63.4

Please note: Growers should contact their processor(s) directly about plans for compliance with the restriction percentage.

In-Orchard Diversion- In contrast to last year, the CIAB chose to include an estimate for in-orchard diversions for calculation of the OSF in June. Including this estimate in June increases the preliminary restriction percentage, but also helps to lessen the impact of changes in September when the CIAB sets the final restriction percentage.

SWD- A subcommittee of the CIAB worked this Spring to address concerns about in-orchard diversion practices and growers dealing with SWD (Spotted Wing Drosophila). The subcommittee recommended a proposal to amend in-orchard diversion practices and the proposal was adopted unanimously by the CIAB at its May 3 meeting in Grand Rapids, MI. Since we do not anticipate the proposal to be in place this season, the CIAB has moved ahead with retraining in-field compliance staff so that marketability for diversion is consistent with the FDA tolerance for canned and brined cherries. In practice, this means tart cherries will be rejected for in-orchard diversion only if they contain more than 5 tart cherries with worms, or 7 tart cherries with rot from a sample of 100. If

growers have any questions about this inspection process, please feel free to contact the CIAB office directly.

MARKET EXPANSION- In January the CIAB tasked the Executive Committee with developing a proposal to address competition from non-domestic tart cherries. The committee met several times by conference call and in person to develop a proposal that was both workable and acceptable to as many in the industry as possible. The committee invited guests for input from sectors most impacted by non-domestic competition. Ultimately, a proposal was presented to the full CIAB on May 3, 2017 and it passed unanimously. USDA has agreed to allow the CIAB to adopt the provisions of the proposal in practice while it works its way through the informal rule making process. The most significant changes from the proposal are:

1. Market expansion projects will be eligible to earn diversion credits for 5 years
2. Projects that target non-domestic competition can be approved through the existing NPNM process, or through an expedited process by providing a statement of intent to use domestic tart cherries in place of non-domestic
3. Projects that target non-domestic product can be supplied by more than one handler and multiple handlers can receive credit for that project

CALENDAR of Events July – October, 2017

Aug.	7, 14, 21, 28 - Form #1 Weekly Raw Product
Sept. 1	Form 2 Cherries Acquired from Producers
Sept. 14	CIAB meeting, Fairport, NY
Oct. 2	Form 4 Handler
	Reserve Plan and Final Pack Report
	Form 5A Inventory Reserve Summary
	Form 5B Inventory Location Report

Soil Health Field Day – Antrim County

Presented by the Antrim Conservation District

Friday, August 11, 2017 from 10 AM – 3PM

Shooks Farm, 5833 Shooks Rd. Central Lake, MI 49622

\$10 per person. Registration includes a local foods lunch. Registration begins at 9:15AM. MAEAP Phase one credit for attending.

Topics include:

- Up to date science and demos on soil health
- Soil health to weather the weather extremes
- Beyond the basics with Mycorrhizal Fungi
- Benefits of no-till, cover cropping and strip cropping

Only pre-registration guarantees lunch. For more information and to register, visit www.antrimcd.com or call 231-533-8363

Soil Health Field Day – Kalkaska

Presented by the Kalkaska Conservation District

Thursday, August 10, 2017 from 10AM – 2:30PM

Birgy Farms, 1723 Birgy Rd SW, Fife Lake, MI 49633 (Enter on Puffer Road, SW of house)

\$10 per person. Registration includes a local foods lunch with grass-fed beef. Registration begins at 9:15AM. MAEAP Phase one credit for attending.

Topics include:

Soil health to weather the weather extremes
Beyond the basics with Mycorrhizal Fungi
Grazing to improve soil health

Only pre-registration guarantees lunch. For more information and to register, visit www.Kalkaskaconservation.org or 231-258-3307

Predicted 2017 Apple Harvest Dates

Phillip Schwallier, District Horticulture Educator Amy Irish-Brown, District ICM
Educator MSU Extension

The predicted harvest dates for every MAWN weather station is now available on Enviroweather web site at Michigan State University. We have less confidence in this year's prediction for the middle of the state. Frost and a long cold bloom make it difficult to predict the exact full bloom dates. Apple set is from two year old and in some places from one-year-old wood that will produce a very mixed maturity at harvest. In general,

2017 Predicted Harvest Dates are roughly a few days ahead of normal except in the north, which might be normal. Predicted dates are a fairly normal except in the north ahead of last year. Bloom dates this spring were early in the south and normal in the north. May was a cold month and a long drawn out bloom period especially in the middle of the state. We do expect mixed maturity at harvest time due to the long bloom.

As always, the weather seems to be unusual each year and 2017 was no different. It began with what appeared to be another very early spring, however, cold May weather delayed bloom to a more normal timing from the middle state to the north. Most areas bloomed early. The cold May was also very dry and June followed with normal to hot temperatures, which give us early to normal predicted harvest dates. Frost damage is considerable and the state’s cropload is approximately 65% of normal. The tops of trees are heavy and the bottoms are light. Blocks with light croploads will mature 3 or 4 days sooner than the predicted harvest dates. Heavy croploads will mature 7 days later than the predicted dates.

The normal harvest dates for other varieties are listed in Table 3 for the Grand Rapids area. This year's 2017 predicted dates are a rough estimate based on the McIntosh, Jonathan and Red Delicious predicted dates. Other areas of the state should adjust non-predicted varieties based on their own history. ReTain application should be applied 30 DBH (days before harvest). Use Table 3, 2017 Predicted Harvest Dates for Other Varieties, to time ReTain applications and adjust for varieties and locations.

Table 1. 2017 predicted peak harvest dates.

Full bloom date 2017				Predicted harvest date 2017			
Station	McIntosh	Jons	Reds	McIntosh	Jons	Reds	Observer
SWMREC	23-Apr	24-Apr	25-Apr	28-Aug	15-Sep	22-Sep	Shane
Deerfield	25-Apr	26-Apr	27-Apr	29-Aug	18-Sep	25-Sep	Tritten
Romeo	28-Apr	1-May	1-May	2-Sep	25-Sep	1-Oct	Tritten
Peach Ridge	1-May	5-May	7-May	5-Sep	27-Sep	4-Oct	Irish-Brown
Hart	11-May	13-	14-	13-Sep	30-Sep	6-Oct	

		May	May				Irish-Brown
NWMHRS	19-May	20-May	21-May	19-Sep	8-Oct	14-Oct	Rothwell

Table 2. 2017 predicted peak harvest dates compared to normal and last year.

Days ahead of normal				Days ahead of last year		
Station	McIntosh	Jons	Reds	McIntosh	Jons	Reds
SWMREC	10	6	6	2	1	0
Deerfield	10	3	7	3	-1	0
Romeo	11	0	2	5	1	4
Peach Ridge	10	-1	1	2	2	1
Hart	5	3	8	0	2	2
NWMHRS	3	-2	3	1	-8	-7

Table 3. Normal and 2017 peak harvest dates for varieties for the Grand Rapids area

Variety	Normal date	2017 predicted date
Paulared	8/24	8/19
Gingergold	8/26	8/21
Gala	9/10	9/5

McIntosh	9/15	9/5
Honeycrisp	9/18	9/15
Empire	9/26	9/25
Jonathan	9/28	9/27
Jonagold	9/28	9/27
Golden Delicious	10/2	10/1
Red Delicious	10/5	10/4
Idared	10/10	10/9
Rome	10/15	10/14
Fuji	10/25	10/24
Braeburn	10/25	10/24
Goldrush	11/1	10/31

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WEB SITES OF INTEREST:

Farmer to Farmer - Connecting Farmers, Cultivating Community

<http://www.f2fmi.com>

Insect and disease predictive information is available at:

<http://enviroweather.msu.edu/homeMap.php>

This issue and past issues of the weekly FruitNet report are posted on our website:

http://www.canr.msu.edu/nwmihort/nwmihort_northern_michigan_fruit_net

60-Hour Forecast:

<http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous46ktvc>

Information on cherries:

<http://www.cherries.msu.edu/>

Information on apples:

<http://apples.msu.edu/>

Information on grapes:

<http://grapes.msu.edu>