



Researcher Resources



ABOUT

NEWS & STORIES

AFFILIATED PROGRAMS

PROJECTS

Home

Background
& Projects

Calendar

Directions

InfoVideos

Links

Extension
Expert Search

Publications

Staff

Northern Michigan FruitNet 2002 Weekly Update

[James E. Nugent](#) [Gary E. Thornton](#) [William M. Klein](#)

NW Michigan Horticultural Research Station

Michigan State University

June 4, 2002

GROWING DEGREE DAY ACCUMULATIONS through June 3 at the NWMHRS:

	2002	2001	2000	1999	1998	1997
Base 42	500	720	774	829	932	437
Base 45	386	599	602	662	759	323
Base 50	253	364	371	434	513	180

WEATHER

For the first week since mid-April, temperatures were not below normal. Rainfall occurred at trace levels or more on 7 of the last 8 days of May. Evaporation exceeded rainfall by only 1.28 inches, for this growing season to date.

GROWTH STAGES

Apple: Red Delicious—mid petal fall
 Pear: Bartlett – fruit set
 Sweet Cherry: Napoleon – 11 mm fruit
 Tart Cherry: Montmorency – shuck split
 Plum: European type – shuck split
 Grapes: Chardonnay – 1"-3" shoots

COMMODITY REPORTS

Cherries: Both tart and sweet cherry crops look shorter than already anticipated, due to repeated freezes and poor pollination conditions this spring. **Bacterial canker** has been severe in some blocks of sweet cherries and plums, resulting in significant levels of spur death. **Cherry leaf spot** lesions are present on the oldest full sized leaves in many tart cherry blocks. This will not cause significant defoliation, but will provide abundant inoculum for secondary infection. Check tarts at this time for the presence of leaf spot. The first catches of **American plum borer** were reported this past week, averaging six per trap. **Plum curculio** were active this past week, but no stings have been reported so far. Any stone fruits that are out of the shuck are susceptible at this time to plum curculio. Orchards with crops should maintain a tight schedule, as plum curculio may be traveling further than in the past to seek out fruit for egg laying.

Apples: Last week we had back-to-back heavy infection periods for **apple scab** and cherry leaf spot throughout NW Michigan. Late in the week growers should have protected apples for **fireblight**, as the warm temperatures increased the numbers of bacteria. Forecasts predict that temperatures will be warm enough late this week for strep sprays to be considered again.

Codling moth trap catches are just beginning. They averaged one per trap at the NWMHRS. **Spotted tentiform leafminer** averaged 138 per trap. **European red mites** are active, and some are above threshold, but with rapidly expanding leaves those populations are likely to be diluted to below threshold levels. **June beetles** and **cutworms** have been reported and activity will increase with warmer temperatures later in the week.

[ACTUAL AND PREDICTED DEGREE-DAY
ACCUMULATIONS SINCE MARCH 1, 2002 \(*\)](#)

Please send any comments or suggestions regarding this site to:

Bill Klein, kleinw@pilot.msu.edu
 Last Revised: 6-04-02



Northern Michigan FruitNet 2002 Weekly Update

[James E. Nugent](#) [Gary E. Thornton](#) [William M. Klein](#)

NW Michigan Horticultural Research Station
Michigan State University

June 11, 2002

GROWING DEGREE DAY ACCUMULATIONS through *June 10* at the NWMHRS:

	2002	2001	2000	1999	1998	1997
Base 42	642	843	937	1034	1021	603
Base 45	508	672	744	846	827	468
Base 50	341	435	480	583	553	590

GROWTH STAGES

Apple: Red Delicious—fruit set

Pear: Bartlett –11mm fruit

Sweet Cherry: Napoleon – 12mm fruit

Tart Cherry: Montmorency – 11 mm fruit

Plum: European type – 6mm fruit

Grapes: Chardonnay – 4"-8" shoots

COMMODITY REPORTS

Apples: **Apple scab** is showing up on the leaves in some commercial apple blocks. Primary scab season is likely to go for 7 to 10 more days. **Fireblight** pressure is very high now, and rains will result in an infection period. **Codling moth** trap catches averaged 2.3 per trap by abandoned apples near the NWMHRS. Some commercial blocks are over the five per trap threshold for codling moth, and sprays will go on in 250 degree days base 50 – usually 14 to 20 days. **Spotted tentiform leafminers** were 48 per trap at the NWMHRS, as the first generation flight continues to taper off. No mines have been reported yet. **Rosy apple aphid** colonies are building. The first **white apple leaf hopper** was reported this week. **European red mites** are building and are above threshold in some blocks.

Cherries: **Cherry leaf spot** infections are very easy to find in many orchards. The southern half of the district has some orchards with severe cases for this time of the year. Bravo sprays can be used through shuck split, but Nova or Elite should be tank mixed at a high rate if you are trying to burn out lesions. Growers with infections in their orchards should maintain a tight schedule for the next few weeks to protect new growth. **Plum curculio** are active in all stone fruits. Some plum and peach crops exist and are susceptible to plum curculio at this time. This year there is additional pressure on the light crops that remain, as the adults seek out egg laying sites. **Lesser peach tree borer** (LPTB) traps averaged 23 per trap, and **American plum borers** dropped off to five per trap at the NWMHRS.

Trunk sprays remain important even without a crop. Trunk sprays applied starting next week will coincide with the beginning

Thinning sprays remain important even without a crop. Thinning sprays applied starting next week will coincide with the beginning of egg hatch for LPTB. If growers are using lesser peach tree borer disruption, ties should be applied as soon as possible. **Green fruit worm** are ½" large, but they are only a potential economic problem in blocks that have harvestable fruit. Pressure seems light this year for green fruit worm.

Pears: **Pear psylla** are extremely low in numbers this year. The pear crop had looked good earlier, but it recently thinned out to the point of being very light at this time.

THINNING APPLES

By Jim Nugent

While I'm generally a proponent of thinning any time the weather is favorable after petal fall, this year I think it's prudent to do no thinning until the fruit reaches 8-12mm in fruit size. This will give you a better opportunity to assess the crop potential prior to thinning.

Secondly, due to the extent of frost damage and lack of fruit set, I suggest that you use only mild to moderate thinning strategies. I do not believe this is the year when aggressive thinning is needed.

GIBBERELIC ACID USE ON BEARING TART CHERRIES

By Jim Nugent

Because of the high probability of setting a large crop next year, it's important to continue the application of gibb on mature tart cherries. Both Dr. Bukovac and I feel that it is actually desirable to increase the rate of gibberellic acid by about 20%, but if you don't feel comfortable with this, at least use the same rate as in the past.

[ACTUAL AND PREDICTED DEGREE-DAY ACCUMULATIONS SINCE MARCH 1, 2002 \(*\)](#)

Please send any comments or suggestions regarding this site to:

Bill Klein, kleinw@pilot.msu.edu

Last Revised: 6-11-02



Northern Michigan FruitNet 2002

Weekly Update

[James E. Nugent](#) [Gary E. Thornton](#) [William M. Klein](#)

NW Michigan Horticultural Research Station
Michigan State University

June 18, 2002

GROWING DEGREE DAY ACCUMULATIONS through *June 17* at the NWMHRS:

	2002	2001	2000	1999	1998	1997
Base 42	761	1048	1089	1173	1185	753
Base 45	606	856	875	965	970	598
Base 50	405	585	576	671	661	387

GROWTH STAGES

Apple: Red Delicious—12mm fruit

Pear: Bartlett –12mm fruit

Sweet Cherry: Napoleon – 13mm fruit

Tart Cherry: Montmorency – 13 mm fruit

Plum: European type – 6 mm fruit

Grapes: Chardonnay – 10"-16" shoots

WEATHER

This past week was cool and wet, with rainfall occurring three or four days during the week. The wetting events in NW Michigan ranged from 53 to 127 hours, depending on location. Rainfall for the week at the NWMHRS totaled 1.81 inches.

COMMODITY REPORTS

Apples: **Apple scab** lesions are visible in unsprayed orchards. Last Friday and Saturday's heavy infection period marked the end of the primary season for apple scab. Growers who have scab present in blocks should maintain a protectant program to keep the scab off the fruit. **Fireblight** strikes are showing up from the rains that we had 15 days ago. Strikes should be cut out in young blocks, either by breaking them out or cutting them out and leaving a stub. **Codling moth** trap catches averaged three per trap at the NWMHRS. Some growers went over threshold early last week when the temperatures were warm. If growers are not trapping, they should plan on spraying for codling moth about June 26th to control newly hatched larvae. **Plum curculio** is active in apples. Pressure may be higher in apples this year, as adult plum curculio adults search for ovipositional sites. **Spotted tentiform leafminers** are between generations. **European red mites** are above threshold in many blocks, and some growers have already applied miticides.

Cherries: It's hard to find tart cherry trees with enough fruit to justify harvest. **Plum curculio** is a threat in all stone fruit crops...where crops exist. If crops are non-existent, insecticides need not be applied. However, if trunk sprays for **borers** have not been applied where needed, they should be applied as soon as possible. **Cherry leaf spot** infections are common. This past weekend the rains resulted in a high infection period. Yellow leaves will start to show up next week from cherry leaf spot and **sour cherry yellows**. Be careful not to confuse the two. Leaves with cherry leaf spot will often have white mycelia

spot and bear cherry cankers. Be careful not to confuse the two. Leaves with cherry leaf spot will often have white mycelia on the under side.

Grapes should be getting a very important fungicide spray 10-14 days before bloom. This spray is important to control **powdery mildew**, **black rot** and **phomopsis**. **Potato leaf hopper** and **rose chafer** could show up anytime now.

[ACTUAL AND PREDICTED DEGREE-DAY
ACCUMULATIONS SINCE MARCH 1, 2002 \(*\)](#)

Please send any comments or suggestions regarding this site to:

Bill Klein, kleinw@pilot.msu.edu

Last Revised: 6-18-02



Northern Michigan FruitNet 2002

Weekly Update

[James E. Nugent](#) [Gary E. Thornton](#) [William M. Klein](#)

NW Michigan Horticultural Research Station
Michigan State University

June 25, 2002

GROWING DEGREE DAY ACCUMULATIONS through June 24 at the NWMHRS:

	2002	2001	2000	1999	1998	1997
Base 42	958	1211	1260	1368	1405	947
Base 45	782	998	1025	1138	1169	771
Base 50	546	692	691	810	825	525

GROWTH STAGES

Apple: Red Delicious—21mm fruit

Sweet Cherry: Napoleon – 15mm fruit

Tart Cherry: Montmorency – 13 mm fruit

Plum: European type – 17 mm fruit

Grapes: Chardonnay – 10"-16" shoots

WEATHER

NW Michigan has continued to receive generally adequate rainfall, though rain on Monday, June 24, ranged from 1.11 inches in East Leland to 0.01 inches in Bear Lake. The rainfall has created some wetting periods that will foster the spread of diseases such as cherry leaf spot and apple scab.

COMMODITY REPORTS

By Jim Nugent and Gary Thornton

Apple: The primary infection period for **apple scab** ended with the rains that occurred on June 21st. Apple scab is very abundant on abandoned apples and crab apples this year. Orchards with scab present should be on a protection program to keep the fruit clean for the rest of the season. Apple growers who are not trapping should have an appropriate insecticide on now for the control of **codling moth**. The first major flight of adults occurred on or near June 10th and 250 degree days base 50 has passed, and the eggs are starting to hatch. Adult codling moth flight increased significantly this week to average 9.5/trap at the NWMHRS. **Plum curculio** remain very active in abandoned apples. Apple growers should watch this pest very closely this year as the adults will have to search for egg laying sites, as there is such a limited cherry crop. **Spotted tentiform leafminers** are between flights and averaged 4 per trap. Tissue feeding mines are visible in apples. **Green apple aphid** colonies are starting to build on the terminals of apples. **White apple leafhoppers** are increasing but are rarely a problem at this time of year in NW Michigan. Occasionally populations will be high at harvest time and become a nuisance to pickers.

Cherry: This past weekend's rains resulted in light to moderate infection periods for **cherry leaf spot** and apple scab. Cherry leaf spot is common in many orchards and very heavy in some. **Sour cherry yellows virus** symptoms became apparent

leaf spot is common in many orchards and very heavy in some. **Sour cherry yellows** and symptoms became apparent throughout the area in recent days. Growers shouldn't mistake these symptoms for cherry leaf spot. Active cherry leaf spot will have whitish mycelium on the underside of the leaf, whereas the sour cherry yellows won't. Leaf drop from the yellows can be heavy on some trees. **Eastern cherry fruit fly** has been caught down state, but we have not caught any at the NWMHRS yet. I would expect our first catch this week. **Plum curculio** is still a threat to all stone fruits. Growers interested in using mating disruption for the **greater peach tree borers** should get their pheromone disruption ties out now. Greater borer is the larva that typically attacks the lower portion of trunk and just below the ground line. Trap catch for **lesser peach tree borer** averaged 2.3 per trap, greater peach tree borer 6 per trap and **American plum borer** 2.6 per trap at the NWMHRS.

Potato leafhoppers are now present and can be a problem in young apples and plums, as well as strawberries and raspberries. **Rose chafer** adults are now present; damage can occur to any fruit, but is most prevalent in grapes, peaches, and non-bearing apples and cherries.

[KEY TO THE TRUNK](#)

[\(Dick Straub, Entomology, Highland\)](#)

from [Scaffolds Fruit Journal](#), No. 15, June 24, 2002

[LEAFHOPPER AND APHID CONTROL WITH REDUCED RATES OF PROVADO](#)

[\(Dick Straub & Peter Jentsch, Entomology, Highland\)](#)

from [Scaffolds Fruit Journal](#), no. 15, June 24, 2002

[ACTUAL AND PREDICTED DEGREE-DAY ACCUMULATIONS SINCE MARCH 1, 2002 \(*\)](#)

Please send any comments or suggestions regarding this site to:

Bill Klein, kleinw@pilot.msu.edu

Last Revised: 6-25-02