

Northern Michigan FruitNet 2014

Northwest Michigan Horticultural Research Center

Weekly Update

April 8, 2014

CALENDAR OF EVENTS

4/10	IPM Fruit Tree Kick-off NWMHRC
4/10	Tractor Safety Class #1 Leelanau Co. Government Center's Community Room
4/11	MDARD Specialty Crop Grant Deadline
4/12	Healthy Forests – Caring for our Trees GT Conservation District
4/17	Vineyard Weed Identification and Management Meeting NWMHRC
4/17	Tractor Safety Class #2 NWMHRC
4/21	MDA Pesticide Applicator Testing NWMHRC
4/22	Responding to an S.O.S. from the Commercial Bee Industry – Webinar
4/24	Tractor Safety Class #3 NWMHRC
5/1	Tractor Safety Class #4 NWMHRC
5/3	Tractor Safety Test NWMHRC

TREE FRUIT INTEGRATED PEST MANAGEMENT KICKOFF

Emily Pochubay, Fruit IPM Educator

Please join Michigan State University Extension at the Northwest Michigan Horticultural Research Center on **Thursday, April 10** from 6-9 PM for the annual Tree Fruit IPM Kickoff! This year's meeting will cover pesticide label and pest management changes for cherries and apples in the 2014 season. Michigan State University's Tree Fruit Integrator, Dr. Julianna Wilson, will outline current Oblique Banded Leafroller pesticide efficacy and management recommendations. Dr. Nikki Rothwell will present Spotted Wing Drosophila and European Brown Rot pesticide efficacy trials and management recommendations. This event is **free** and no registration is required. *Three* CCA credits and *three* Pesticide Recertification Credits have been approved for this meeting. For more information, please call 231-946-1510.

BRIDGE GRAFTING GIRDLED FRUIT TREE TRUNKS

Bridge grafting is an option to help save trees with extensive bark damage inflicted by rabbits during the winter.

Posted on **March 26, 2014** by [Ron Perry](#), Michigan State University Extension and MSU Department of Horticulture



Rabbit damage on fruit trees near St. Johns, Mich. Photo by Brian Levene, Agronomic Sciences, Agro-Culture Liquid Fertilizer.

Several fruit tree growers have reported rabbit damage on young trees below the highest snow line as a result of this winter's deep snow cover. With a long cold winter like we have experienced, the damage can be severe as rabbits fed themselves on tasty bark of fruit trees. The most common target this past winter has been young apple trees. In many cases, the

damage is being experienced above tree guards, most being set at 18 inches above the soil line. Snow lines commonly accumulated at 24-30 inches which made trunks and branches vulnerable to the bunnies.

In St. Johns Mich., Brian Levene of Agronomic Sciences, Agro-Culture Liquid Fertilizer reported rabbit damage on 3,000 trees where bark was stripped away at 100 percent over a length of 6-8 inches. He has considered bridge grafting but due to the fact that the block needs to be uniform for experimental trials, they plan instead to regenerate and select a shoot after heading low at 18 inches.

For fruit growers who do not require the research trial uniformity, bridge grafting is an option. The process involves grafting scion sticks 1/4-1/2 inch in diameter into live tissue of bark cambium above and below the injured area, thus bridging the damage. Grafting can't be done until the bark begins to slip in Michigan about late April. However, scion sticks should be selected now, while dormant. Store scion sticks in poly bags with moist towels or shavings until ready for use. Cut smooth and straight scion sticks into 12-14 inch lengths.

Historically, bridge grafting was done where few trees were planted per acre and thus saving one tree could be important to the integrity of the orchard block. Trees were expected to live beyond 40 years before replanting. Today, we have many orchards established at 600-1,200 trees per acre at investments of \$10,000-18,000 per acre. The pressure for return on investment is great. Therefore, the value of saving trees may be paramount to avoid the expense of replanting with \$9-10 trees and a trellis system that is already newly established. Growers can head the trunk at a point just above the injured area and train a new regenerated adventitious shoot to become the new leader however the canopy needs to be redeveloped again after a few years of training and investment. Given this situation, growers may want to consider bridge grafting to avoid regenerating the canopy. I would recommend pruning some of the canopy back to reduce initial stress during bud break.

Bridge grafting can be professionally accomplished or, with practice, accomplished by a crew relatively new to the art. In his book "[The Grafter's Handbook](#)" R.J. Garner recommends using one piece of scion-stick for every 1 inch of trunk diameter. Therefore, a 1 inch diameter trunk will need one stick. If you have not done this before, consider at least two sticks to insure a take. In our climate, confine bridge grafting to species tolerant of wood canker diseases such as apple, pear, European plum and sour cherry. Cutting into bark and vascular tissue in sweet cherry, peaches and apricots invites infection from Bacterial Canker.

The materials needed include a sharp grafting knife, small hammer, 1 x 18 inch wire nails, wax or grafting compound and practice. Some experienced grafters don't recommend bridge grafting where injury extends beyond 50 percent of the bark. However, Garner indicates that it still can be accomplished where 100 percent damage is experienced. Either way, it is possible to perform the graft in late April and then reevaluate 6-8 weeks later to determine success. If not, adventitious water sprouts will arise from the live tissue below the damaged area and can still be selected and trained as the new leader in the tree.

Fruit growers who have trees with severe damage and are considering bridge grafting should consult publications that provide detailed guides through the process. Iowa State University's

article "[Rabbit Damage to Trees and Shrubs](#)" describes rabbit damage and shows bridge grafting illustrations. A step-by-step [YouTube video](#) describes the process but does not include painting the grafts with wax or grafting compound upon completion. Additional references include "[The Grafter's Handbook](#)" by R.J. Garner and "[Plant Propagation Principles and Practices](#)" by Hartmann, Kester, Davies and Geneve.

Additional articles on bridge grafting:

- [Bridge grafting as a life-saving procedure for trees](#)

This article was published by [Michigan State University Extension](#). For more information, visit <http://www.msue.msu.edu>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).

VINEYARD WEED IDENTIFICATION AND MANAGEMENT MEETING
Duke Elsner, Small Fruit Extension Educator, NW Michigan

Thursday, April 17, 1-4 p.m. in Traverse City and Benton Harbor

Weed control is one of the most critical issues in vineyard establishment, and weeds remain as an issue throughout the lifetime of the vineyard. In addition to competition for water and nutrients, weeds harbor insect pests, serve as hosts for viruses, and interfere with vineyard operations related to culture and harvest. Certain weeds, such as horsenettle, produce berries that can taint harvested grapes.

Although numerous herbicides are available for use in vineyards, they aren't equally effective on all weeds. Application timing is important to get optimum results. This workshop will help you identify problem weeds and understand their lifecycles— the key to choosing effective management strategies— whether they are cultural or chemical.

Plan now to attend the Vineyard Weed Identification and Management Meeting on Thursday afternoon, April 17, to get answers on how to manage troublesome weeds in your vineyard. Via a teleconference connection, Dr. Wayne Mitchem, a weed scientist at North Carolina State University will discuss herbicide selections and other management practices. Eric Hanson from the Department of Horticulture at Michigan State University will handle the weed identification topic. Dr. Hanson will speak in person at the Benton Harbor site and appear in Traverse City through a teleconference connection. Participants will be able to have interactive discussions with the speakers.

Growers have a choice of two locations for the workshop, either the Southwest Michigan Research & Extension Center in Benton Harbor, or the Northwest Michigan Horticultural Research Center near Traverse City. Contact Duke Elsner elsner@anr.msu.edu 1-231-922-4822 for additional information. See <http://events.anr.msu.edu/2014vineyardweedmanagement/> for registration information and the meeting agenda. The registration fee for the workshop is \$25 per person and includes handouts and refreshments. Three RUP credits have been requested for the workshop. Attendance is limited. **Please register by April 11.**

MDA PESTICIDE APPLICATOR TESTING AVAILABLE

For those that still need to get their pesticide applicator license renewed or need to apply for a pesticide applicator license, MDA has set up a test date on **Monday, April 21**, from **1:00-5:00 p.m.** at the NW Michigan Horticultural Research Center. For a Private Applicator license, the fee is \$50 and for Commercial \$75, payable to State of Michigan. To register or for additional information, go to MDA's website www.michigan.gov/pestexam.

RESPONDING TO AN S.O.S. FROM THE COMMERCIAL BEEKEEPING INDUSTRY

Date: April 22, 2014

Time: 1 p.m.

Location: Webinar

Contact: Rosa Soliz, soliz@msu.edu

Webinar URL: <http://connect.msu.edu/newtech>

Mala Spivak (University of Minnesota) - Given the chronic health problems facing honey bees and the increasing demand for pollination services from almond, blueberry, cranberry, apple, vine crops and many other growers, commercial beekeepers and breeders have requested assistance in maintaining healthy colonies. To this end, we began a novel "Bee Tech Transfer Team" program through the Bee Informed Partnership, a 5-year grant funded by USDA-NIFA. These teams consist of independent beekeepers that provide on-the-ground services to commercial beekeepers to assess and record colony health information; survey beekeepers about management; test for bee diseases and parasites and assist in breeding bees that are more resistant to diseases and parasites.

There is demand for this program nationwide and we are exploring ways to ensure that the Tech Team services are economically sustainable after the funding ends in 2016. As bees are directly or indirectly responsible for 35% of our diet through their pollination services, it is critical to increase effort to keep bees healthy and to provide hands-on assistance to the beleaguered beekeeping industry throughout the U.S. Marla Spivak is a MacArthur Fellow and McKnight Distinguished Professor in Entomology at the University of Minnesota. She has bred a line of honey bees, the Minnesota Hygienic line, to defend themselves against diseases and parasitic mites. Current studies include the benefits of propolis to honey bees, and the effects of agricultural landscapes and pesticides on honey bee and native bee health.

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WEBSITES 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 is available at the new cherry website:

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

Fruit CAT Alert Reports has moved to MSU News

<http://news.msue.msu.edu>