Northern Michigan FruitNet 2014 Northwest Michigan Horticultural Research Center

Weekly Update

February 18, 2014

CALENDAR OF EVENTS

2/22-26	IFTA Conference
	Kelowna, British Columbia
	<u>mp://www.mantec.org/</u>
2/26-28	Michigan Grape & Wine Conference
	Grand Traverse Resort, Acme, MI
	nttp://www.michiganwines.com/conference
2/27-3/1	IFTA Post Conference Tours
2/27-3/1	25 th Moses Organic Farming Conference
	LaCrosse, WI
	www.mosesorganic.org
3/1-3/8	ANR Week (Formerly Farmers' Week)
	MSU
	www.anrweek.canr.msu.edu
3/1	2014 Growing Michigan Agriculture Conference
	Kellogg Center, MSU
	http://bit.ly/GrowingMichigan.
3/1	Family Forest Ownership Succession in MI Workshop
	GT Conservation District
3/11	Michigan Spring Peach Update Meeting
	SW Michigan Research & Extension Center
	msue.anr.msu.edu/events/michigan_spring_peach_meeting
3/12	Irrigation Workshop
	NWMHRC
	agbioresearch.msu.edu/events/irrigation_workshop
3/17	The Michigan Small Cooperative Conference 2014
	NWMHRC
	events.anr.msu.edu/event.cfm?folder=MSCC0314

3/18	Labor Meeting NWMHRC agbioresearch.msu.edu/events/nwmhrc_labor_meeting
3/20-21	Advances In Berry Production Workshop
	Guelph, Ontario
4/11	MDARD Specialty Crop Grant Deadline
4/12	Healthy Forests – Caring for our Trees GT Conservation District

MICE AND VOLE POPULATIONS ARE BUILDING IN MANY ORCHARDS

Some feeding damage by mice and voles is starting to be seen in fruit orchards.

Posted on **February 14, 2014, MSUE News,** by <u>Bob Tritten</u>, Michigan State University Extension



apple orchards in East Michigan where there is evidence of very high populations of mice or voles. With the extended snow cover in most orchards this winter, mice populations have quickly built to high numbers. Mice have been actively foraging for food supplies. Once populations build to high numbers they quickly run out of stored food supplies and begin to seek other food sources. While the bark of apples is not their first choice of food, they will feed on it when no other choices are available. In a few orchards I am starting to see where they are feeding on trunks of apple trees.

Young high density apple blocks have been particularly hard-hit as the trees are more numerous and the bark generally younger, tenderer and easier for feeding to occur. In extreme winters, mice have also been known to feed on peach trees.

The snow cover creates a sheltered environment for mice and voles allowing them to stay fairly active during winter months and move undetected by predators. As growers are out in orchards, they need to pay attention to tiny tracks in the snow. Follow the tracks a little bit further and you

will likely see that the tracks disappear into a small hole in the snow. The small hole is an entrance to ground-level where mice make their cozy winter homes and feed. As growers move about the orchard and disrupt the upper layers of snow that typically form a crust, they should be looking for the mice tunnels at ground-level.



There are three species of mice or voles that are common in the Great Lakes states. These species include pine voles, meadow voles and prairie voles. The feeding habits and identifying characteristics of each of these species vary, however the net effect of high populations is the same, potential feeding damage to tree trunks.

The most effective way, and recommended by <u>Michigan State University Extension</u>, of determining mice populations at this time of year is to place apple slices close to tree trunks or at the site of the active run. Depending on the size of the orchard, place an apple slice about every four to five trees in two or three locations in an apple or peach block. Growers should pay particularly close attention to placing apples close to trees growing near fence rows and woodlots where mice populations are generally higher. Apples should be checked after 24 hours for teeth marks or gnawing of the fruit. Generally, the percentage of apples with teeth marks will give an approximate percent of trees that could be damaged if mice populations are not controlled.

Control options during the midwinter are limited to the use of chemical baits. There are two types of baits: those that are acute (Zinc phosphide) and anticoagulants (Chlorophacinone and Diphacinone). Generally, the acute baits have shown to be more effective at this time of year.

Baits that are more weather-resistant will provide better control. A second application may be needed about three to four weeks after the first if populations continue to build. Be cautious not too apply the second application too quickly as a first application may not have had time to reduce the population. With our deep snow cover in many orchards, it may be necessary to do this bait by walking the orchard with a bucket. Be sure to read the bait label for bait placement and other restrictions.

Bait stations are also another effective method of controlling mice. Generally, growers use PVC pipes to help cover the bait and make it attractive over a longer period of time. Bait stations can be made from 2- to 3-inch PVC pipes constructed in an L-shape or an upside-down T-shape. The horizontal pipe should be at least 12 inches long.

Photo credits: Mark Longstroth, MSU Extension (first, top photo) and Jason Ahrns, <u>Flickr.com</u> (second, bottom photo)

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

CREATE A COVERSHEET FOR CLEAR COMMUNICATION OF CROP PEST SCOUTING DATA

<u>Creating a good pest scouting coversheet can force you to think about how you will go about</u> <u>scouting this summer.</u>

Posted on February 12, 2014, MSUE News, by Ben Werling, Michigan State University Extension

One of the fundamental principles of integrated pest management is that chemical controls should only be applied when pests exceed economic thresholds. To do this accurately, it is important to have good scouting data so you can apply pesticides where and when they are needed. In order for this data to be useful, it needs to be collected consistently and communicated in a way that facilitates decision making. One way some scouts do this is by creating a cover, or summary, sheet they attach along with raw counts of pest data.

Below are some tips for creating a good summary sheet, along with an example you can adapt for your operation.

	Basic Scoutin	g Information	
Client: Al Lium Farms	Location: Al's Back 40	Crop: Onions	
Date: July 1, 2014	Scout: Courtney Counter	Crop stage: 5 leaf	
	Crop and Pes	t Information	<i>10</i>
Pest, disease, disorder	How field was scouted	Summary #	Threshold (if applicable)
Onion thrips	Measurements: # thrips and leaves Sample unit: plants #Sample units: 50 #Samples/location: 5 #Locations: 10	0.5 thrips/leaf	1 thrips/leaf
	Measurement: Sample unit: plants #Sample units: #Samples/location: #Locations:		
	Measurement: Sample unit: plants #Sample units: #Samples/location: #Locations:		
	Measurement: Sample unit: plants #Sample units: #Samples/location: #Locations:		

Click on the picture above for an example of a pest scouting coversheet with example data. <u>Download a blank, editable version</u>.

Create a space for basic information

Include information common to all good scouting sheets. Make a space to record the client's name if you are a professional scout, the geographic location where data were collected, the date data are taken and the person collecting it. For the geographic location, use consistent names that you or your clients recognize. Some growers, for example, name fields after the landowner they purchased it from. You could also create your own naming systems for your own fields.

Identify what is to be measured

Depending on the pest, you may measure different things. Specify what needs to be quantified right on the sheet to make it clear to yourself and others what is being measured.

For example, for some pests you will count the pest itself. Often you will count numbers of a specific pest life stage, such as egg masses or adults. For others you may look for incriminating evidence that the insect is present, such as defoliation of leaves.

Finally, you will need to find out whether you need to make a quantitative count or simply record the presence or absence of a pest or its damage. Quantitative counts would involve recording how many pests there are or what percentage of a leaf was defoliated. For presence or absence data, you simply record a "yes" if the pest or damage is present and "no" if it is not.

Identify the sample unit

A sample unit is the item you collect data from. This could be a single leaf, a set of leaves on a plant, an entire plant, a specified length of row or an insect trap. Identify what the sample unit is right on the scouting sheet.

How many sample units will you count per field?

Make it clear on the scouting sheet how many leaves, plants, traps or sections of row were visited at the location.

Distribution of samples throughout field

Will you collect data all at one location or multiple locations? For example, if you are counting pests on 50 plants, will you count 50 plants consecutively in a single row, or instead count 10 plants at five locations throughout a field? Make space on the scouting sheet to record the number of locations sampled and how many samples were taken per location. Consider typing this information and information described in the sections above into the coversheet to remind yourself, your employees and your clients about procedures.

To show where samples were taken, also consider leaving a blank space to draw a map of each field you scout, what locations you counted pests at or where traps are. You can label each location with a number that you also record on your raw data sheet so growers can see where pest problems were worst. For traps that stay in one place, come up with a consistent label to identify them so growers can examine trends over time.

Summary number

Create a spot for a summary number indicating overall pest pressure. This could be percent plants infested, numbers of a pest per plant, numbers of a moth pest captured per night in a trap or average percent defoliation of leaves by a pest. Ideally, put this information adjacent to the threshold for the particular pest for easy comparison.

Threshold

For whatever pest you are scouting, you can list the economic threshold recommended by <u>Michigan State University Extension</u> for the crop pest of interest. You can type this information into the coversheets before taking them to the field.

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

2014 CIDER CONFERENCE HIGHLIGHTS NEW AND GROWING INDUSTRY

<u>Cider producers from all over the country attended a sell-out conference on cider production,</u> <u>marketing, sales and research.</u>

Posted on February 11, 2014 by Nikki Rothwell, Michigan State University Extension

The <u>fourth annual Cider Conference</u> was held in Chicago last week, Feb. 8, 2014. This year's event moved to a larger facility to accommodate the growing number of attendees. The growth of this conference mirrors the growth in the cider industry. In 2012, hard cider sales in the United States jumped over 60 percent, and sales in 2013 are expected to be close to a 100 percent growth. Those types of numbers are staggering yet exciting for a newly revitalized industry.

Hard cider was the drink of choice for most Americans in the 18th and 19th centuries, but the drink fell out of favor during Prohibition. In addition, new waves of German immigrants came to the United States and brought with them a culture of beer drinking, which is cheaper and easier to produce than cider. However, cider is back and it is now the fastest growing segment of the alcoholic beverage market. According to Robert Vale of <u>Angry Orchards</u>, a division of <u>Boston</u> <u>Beer Company</u> that makes <u>Sam Adams</u>, cider sales in 2012 were \$601.5 million, outpacing all of the Sam Adams' beer varieties in the last year. In fact, Boston Beer Co. is spending \$1 million per month on advertising its Angry Orchards brand.

Vale represented the bigger scale of hard cider producers at <u>CiderCon</u>, but many new, smaller cider companies are sprouting up across the nation. Washington is the largest producer of apples in the United States and currently boasts the largest number of cider operations in the country. However, the number of Michigan cider makers is also on the increase.

Mike Beck, owner of <u>Uncle John's Cider Mill</u> in Saint Johns, Mich., represents the Midwest on the newly formed <u>United States Association of Cider Makers</u>. He stated, "Michigan is certainly recognized across the country when it comes to producing high quality cider. We currently have over 30 brands of cider on the market, and I don't see this trend slowing any time soon. We are excited to be growing good fruit here in Michigan and turning those apples into great cider. At this time next year, I don't see why we wouldn't have twice the number of cider brands in the state."

The first <u>CiderCon</u> was held in the Pacific Northwest. It was organized to give the commercial cider industry an outlet to meet, share ideas, collaborate and affect positive changes in cidermaking, cider fruit production, the cider market and cider regulations. The conference was designed to help new cider producers discuss and exchange ideas on practices, innovations and trends to provide the foundation for a strong and diverse cider industry in the United States. The educational component of the conference has grown over the past four years. This year, there were four tracts from which participants could choose: cider making, business, marketing/sales and academic/orchards.

<u>Michigan State University Extension</u> participated in the academic tract where ongoing research efforts on hard cider varieties planted at the <u>Northwest Michigan Horticultural Research Center</u>

were discussed. The future research needs of cider producers were also addressed. In collaboration with <u>Washington State University</u>, <u>Virginia Tech</u> and <u>University of Vermont</u>, MSU will submit a <u>USDA Specialty Crop Research Initiative</u> (SCRI) pre-proposal outlining new projects that will support this new and growing industry.

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

NORTHWEST MICHIGAN IRRIGATION WORKSHOP

Join MSU Extension on March 12 to learn more about irrigation and water management. This day-long program will emphasize the design, use and maintenance of irrigation systems.

Spend the morning learning about water rights; the responsibilities and requirements of large volume water users; the important relationship between soil and water; Irrigation GAAMPs, and the basics of drip irrigation. Presentations will highlight how and why to schedule irrigation, in addition to the various tools available to growers to help them make irrigation decisions.

After lunch, hear the best management strategies for irrigating applies and cherries, managing fertilizer injections with various irrigation applications and a strategies approach to fertigating apples and cherries. Close out the day gaining knowledge directly from a panel of growers with irrigation and fertigation experiences and have time to visit with irrigation manufacturers and distributors.

The northwest Michigan irrigation workshop is pleased to host Dr. Denise Neilsen, a researcher from Summerland, British Columbia. Dr. Neilsen is a world-renowned expert on precision management of water and nutrients for woody perennial crops. She and her team have researched the climatic effects on the demand for irrigation water in the plant as well as the climate limitations to crop suitability and quality. She has helped growers optimize management practices to decrease environmental risk and improve nutrient use efficiency within various tree fruit production systems. Dr. Neilsen has also developed and utilized Beneficial Management Practices (BMPs) that improve/optimize water quality and quantity.

This workshop will be held at the Northwest Michigan Horticulture Research Center in Traverse City. The program will start at 8:30 a.m. The program will conclude at 5:00 p.m. and will include lunch. Registration is \$30 per person payable at the door. The northwest Michigan irrigation workshop is co-sponsored by Michigan State University Extension, AgBioResearch, and the Northwest Michigan Think Tank.

To learn more about this irrigation workshop or to register, please contact Jackie Baase at <u>baase@msu.edu</u> or 231-946-1510.

Northwest Michigan Irrigation Workshop Northwest Michigan Horticultural Research Center March 12, 2014

- 8:30-9:15 Large volume water user-rights, responsibilities and requirements Lyndon Kelley, Irrigation Educator, MSU/Purdue Extension
- 9:15-10:00 Soil and water relationship important to irrigation and BMPs Steve Miller, Irrigation Specialist, MSU Extension
- 10:00-10:20 **Updates on irrigation GAAMPs** Dan Busby, MAEAP Verification, MI Dept. of Agriculture Jessica Rasch and Garrett Coggon, MAEAP Technicians, Grand Traverse Conservation District
- 10:20-11:05Understanding the basics of drip irrigation and water application
Dr. Ron Goldy, Michigan State University Extension
- 11:05-11:15 BREAK
- 11:15-11:35What is an 'acre inch' of irrigation on tree fruit systems? Hints on scheduling to
achieve adequate water supply to your trees
Beau Shacklette, Irrigation Technician, Trickle-Eeze/White Water Irrigation
- 11:35-12:15Introduction into irrigating and fertigating high-density applesPhil Schwallier, District Horticulturist, MSU Extension
- 12:15-1:00 LUNCH
- 1:00-1:45Best management strategies for irrigating apples and cherriesDr. Denise Nielson, Pacific Agri-food Research Center, British Columbia
- 1:45-2:15Managing fertilizer injections with irrigation applicationsTom Anderson, Trickle-Eeze Co.
- 2:15-3:15 Strategies approach to fertigating apples and cherries Dr. Denise Nielson, Pacific Agri-food Research Center, British Columbia

3:15-3:30 BREAK

3:30-4:15 **Panel of growers with irrigation and fertigation experiences** TBD

PLEASE TAKE A MOMENT TO FILL OUT A POLLINATION SURVEY

As many of you know, MSU is the lead institution in a large, multi-state pollination project. To help gain a better understanding of pollination management practices in Michigan, we hope that you will take some time to fill out the survey on "Integrated Crop Pollination."

Please note that the survey will target growers of apple, cherries, blueberries, raspberries and pumpkins, squash and cucurbits - if you do not grow one of these crops, you can hit delete now. If you do grow one of these crops, I hope that you would take a little time to answer the survey--I think it will only take 10 or 15 minutes, but your information is important to our pollination project.

Please click on the following link to start the survey and complete by February 28th:

https://www.surveymonkey.com/s/MI_growers

We value your participation! Thank you for your help and support of our project.

THE MICHIGAN SMALL COOPERATIVE CONFERENCE - 2014

Date: March 17, 2014 Time: 8:30 a.m. Location: Traverse City - Northwest Michigan Horticultural Research Center Contact: Tom Kalchik: 517-432-8751 or kalchikt@msu.edu

The Michigan Small Cooperative Conference is for directors and members of small and recently organized cooperatives and people who are contemplating starting a cooperative or other group organzation. We will provide information about basic cooperative operation including types of cooperatives; the role of directors, managers, and members, and basics for starting and sustaining a cooperative. We will allow plenty of time for networking and input from the participants into issues and opportunities for cooperatives in Michigan.

The Conference will be at three separate locations. **Please register for one session in the location that is most convenient for you.**

- March 17 at the Northwest Michigan Horticultural Research Center (<u>click here</u> for map and directions)
- March 18 at Cabela's in Dundee, Michigan (<u>click here</u> for map and directions)
- March 19 at the Southwest Michigan Research and Extension Center (<u>click here</u> for map and directions)

Registration at each site will be at 8:30 AM. The Conference will convene at 9:00 AM with lunch at noon as part of the program. Morning and afternoon breaks will also be included. Below is the tentative agenda (click on the registration page link).

There is no registration fee thanks to strong support from our sponsors: CoBank, Michigan State University Product Center, Mid America Cooperative Council, and various support organizations.

Please register by March 10 to allow us to adequately plan for the Conference.

Visit The Michigan Small Cooperative Conference 2014 registration page for more information.

MARCH LABOR MEETING PLANNED

"Labor has become an increasingly pressing problem for growers across Michigan. Too often, we have left crops in the field or orchard due to a shortage of workers. This meeting will help address some of the current challenges growers are facing as well as solutions on how we can better retain quality workers on the farm. We will bring in experts from the following organizations to help answer important questions or concerns about labor issues: Michigan Farm Bureau, the Telamon Corporation, ICE, Michigan Dept. of Agriculture, Office of Migrant Affairs and Michigan State University Extension. The NW meeting will discuss the H2A program and how it can be used on the farm, and we will host a panel of growers that have had recent experiences with on-farm audits and their associated paperwork: 'how do we get it all done and still farm?'. The program will end with a talk on how good communication can improve worker retention on the farm.

The meeting will be held at the Northwest Michigan Horticultural Research Center on **March 18**, 2014 from 9:00 a.m.- 4:15 p.m. The cost of this meeting is \$25 payable at the door and includes lunch and breaks. If you are interested in attending this important meeting, please contact Jackie Baase at 231-946-1510 **before March 14th**. We hope to see many of you there!"

MSUE Labor Meeting

Northwest Michigan Horticultural Research Center March 18, 2014

- 9:00-9:45 **H2A—Is it Working? Can This Program Work for Multiple Farms?** *Craig Anderson, Michigan Farm Bureau*
- 9:45-10:00 Grower Perspective on How H2A has Worked on the Farm Mark Miezio, Cherry Bay Orchards
- 10:00-10:15 **Q and A about the H2A Program: With M. Miezio and C. Anderson**
- 10:15-10:45 **Michigan's Farmworker Families: Healthy Families, Cultivating Hope** Audra Fuentes, Office of Migrant Affairs, MI Dept. of Human Services
- 10:45-11:00 **BREAK**
- 11:00-11:20How Can Growers Better Support the Migrant Community?Carla Wojtal, Telamon Corporation
- 11:20-12:00 What is Happening on the National Front in Immigration Reform? Ryan Findlay, Michigan Farm Bureau
- 12:00-12:45 **LUNCH**
- 12:45-1:00Michigan Migrant Resource Council: What's New with this Organization?Kevin Benson, Workforce Development Agency, State of Michigan
- 1:00-1:45 **I-9 Update and IMAGE Presentation** Blair Babcock & Cory Howe, Agents, ICE, Homeland Security Investigations
- 1:45-2:30 I Need Migrant Housing, Where Do I Start? What are the BMP's for the Housing I Have? Ginger Bardenhagen, Michigan Dept. of Agriculture
- 2:30-3:45 Grower Panel on paperwork: How to get it all done when your farm has to follow all the 'audit-potential' regulations? TBD
- 3:45-4:15 Communicating to Retain Good Workers on the Farm

GETTNG STARTED WITH SOIL IMPROVEMENT: AN OVERVIEW FOR BEGINNERS - Part 2

<u>New farmers should have a clear understanding of fertilizers and soil amendments, both</u> <u>conventional and organic.</u>

Posted on January 31, 2014, MSUE News, by Jim Isleib, Michigan State University Extension

Beginning farmers may start out with low fertility soils where large additions of nutrients are necessary for acceptable crop performance. Even if the soils are great, a fertility program is essential to keep them that way. There are many options available to provide plant nutrients. The following summary is not meant to be exhaustive, but provides an overview.

Conventional fertilizers

"Conventional" fertilizers are concentrated, manufactured chemical products. They are highly soluble in soil water solutions and readily available for plant uptake. These fertilizers are widely available and can be blended to meet specific crop nutrient requirements.

Pros

- Convenience
- Generally higher concentration of nutrients
- Lower cost per unit of available nutrient
- "Quick release"
- Standardized nutrient content
- Precision of application
- Ability to "blend" precision mixtures of nutrients and micronutrients
- Multiple formulations (dry granular, liquid, foliar)

Cons

- No organic matter included
- High salt concentration
- Potentially imbalanced
- Potential damage to soil organisms
- Price fluctuates based on cost of energy
- Environmental hazard potential if misused
- Manufacturing these products requires high amounts of energy

Examples

- 46-0-0 urea (46% nitrogen)
- 0-45-0 triple superphosphate (45% P₂O₅)
- 0-0-60 muriate of potash (60% K₂O)

Organic fertilizers

These products originate from plant, animal or mined sources.

Pros

- Natural, not manufactured
- Contain multiple plant nutrients
- Often farm-produced (manures, cover crops)
- Add soil organic matter
- Encourage soil biological diversity
- Improve water-holding capacity
- Allow a more self-contained farm system
- Slow-release of nutrients

Cons

- Low nutrient concentration
- Require large volumes
- Inconsistent product availability
- Higher cost per unit of nutrient, especially if purchased
- Variable nutrient content

Examples

- Compost (2-3% nitrogen, 1-2% P₂O₅, 1-2% K₂O)
- Cow manure (2-3% nitrogen, 0.5-1% P₂O₅, 1-2% P₂O)
- Blood meal (12% nitrogen, 1-2% P₂O₅, 0-1% K₂O)

Other soil amendments

Municipal biosolids. "Biosolids" refers to treated sewage sludge that meets the <u>EPA</u> pollutant and pathogen requirements for land application and surface disposal. These products contain significant nutrients, but are state regulated because of the potential for contaminants. They can be an economical source of plant nutrients in the right situation.

Industrial by-products. These vary in availability depending on the presence of industries in Michigan. Examples include paper mill sludge, sugar beet lime/pulp and spent grains from breweries or ethanol plants.

Industrial wood ash. If available, wood ash (0% nitrogen, $1-2\% P_2O_5$, $3-7\% K_2O$) makes a good liming agent (typically half the lime value and fast-acting) and provides significant potassium, some phosphorus and micronutrients.

Conventional or organic?

If your ultimate goal is organic certification, then getting started with the certification process is desirable. You should be using only fertilizers and soil amendments acceptable under the <u>USDA</u> <u>National Organic Program</u>. Details can be found at the <u>Michigan State University Organic</u> <u>Farming Exchange</u> website. You may also want to review the <u>Michigan State University</u> <u>Extension</u> Bulletin E3067, "<u>Transitioning to Certified Organic in Michigan: Where to Start?</u>"

More details on fertilizers as well as fertilizer recommendations based on soil test reports can be provided by your local field crop, fruit and vegetable <u>MSU Extension educators</u>. Another good resource is the MSU Extension Bulletin E3144 "<u>Building Soils for Organic and Sustainable</u> <u>Farms: Where to Start?</u>"

The 2014 MSU Extension Beginning Farmer Webinar Series is an ongoing educational opportunity for people new to farming. Registration is currently open for the following webinars:

- Getting started with organic vegetable pest control
- Getting started with selling to schools and hospitals
- Getting started with selling at farmers markets
- Getting started with a CSA farm
- Getting started with hoophouses

Check the MSU Extension events calendar for additional webinars:

- Getting started with hops
- Getting started with organic field crops
- Getting started with expanded vegetable production
- Getting started with basic farm business records

Read <u>Part 1</u> of this series for information on how new farmers can benefit from careful assessment of their farm's soil and planning for crop rotations and use of cover crops.

For more information, contact Extension educator Jim Isleib at <u>isleibj@anr.msu.edu</u> or 906-387-2530.

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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

Save the Date! Michigan Small Cooperative Conference

MARCH 17 – TRAVERSE CITY, MI MARCH 18 – DUNDEE, MI MARCH 19 – BENTON HARBOR, MI

(Attend the Conference that is the area most convenient for you)

Who should attend:

- Directors and members of small and emerging cooperatives
- Anyone thinking about starting a cooperative
- Anyone contemplating working with friends, neighbors and others to start a business

What you will learn:

- How to manage with very limited resources
- How to find directors
- Avoiding director burnout
- Raising equity
- Budgeting
- Financial reporting
- Accounting programs
- Financing a small cooperative
- And much more

Registration and details: For more information, registration, maps and directions to the facilities, go to the Events page of MSU Extension at <u>www.msue.msu.edu</u> or to <u>http://events.anr.msu.edu/MSCC0314/</u> or contact Tom Kalchik at 517-256-7968 or <u>kalchikt@msu.edu</u>.

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