

U.P. Ag Connections Newsletter

June 2017 | *Agricultural News from MSU Extension and AgBioResearch* | Volume 21 Issue 6

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Fun on the Farm

Is Agritourism right for your farm?

Agritourism ventures are very popular with locals and tourists alike. Tourists are looking for unique local experiences where they can see and do an activity. Michigan Agritourism defines agritourism as the places where agriculture and tourism connect. "Anytime a farming operation opens its doors to the public and invites visitors to enjoy their products and services – that's agritourism."

Among the most common agritourism activities are pick-your-own operations, farm stands, farm stores, classes, tours, tastings, corn mazes, events, farm stays, hay rides, sleigh rides and pumpkin patches. There are many reasons a farm might look to agritourism as an option including additional income, diversification, education, and preservation. The photos are appealing – weddings in beautiful barns, families wandering through gardens, kids enjoying petting farms and other activities, but what does it take to have such a venture on your farm?

University of Vermont has some on-line checklists that are useful in thinking through this decision. Some of the considerations in deciding if agritourism is a good fit for your farm:

- Visual appearance of your farm. People understand that it is a working farm but do you have the capacity to provide visually appealing areas with relatively low hazards?
- Knowledgeable staff. Do you have enough staff to manage the activities you are interested in hosting? Does any staff that will interact with the public understand your mission and values and can they articulate that? Customer service is key to a successful venture and the people who work on your farm are who is going to deliver that exceptional service.
- Parking. Do you have adequate space for parking? Think about if you have a relatively flat area that can be set up for parking. It does not need to be a paved area but needs to be clearly marked and hopefully relatively dry. You may want to also check if there are local ordinances for parking that you would need to be in compliance with.
- Providing restrooms. Do you have existing facilities with restrooms or can you rent portable facilities? Don't forget the handwashing stations if you are renting portable restrooms.
- Permits and zoning. If you are operating as a farm and the primary income is from farming many of these activities will be covered under allowable uses. There are instances where other ordinances or zoning may come into effect. Many farm buildings that are built for agricultural use are not inspected. If you begin to use one of these buildings for public events it is now considered a commercial use and appropriate guidelines would need to be followed.
- Insurance. While this is a working farm and people understand that, you will want to confirm with your insurance that the types of activities you are hosting are covered under your insurance.
- Food Safety. If inviting visitors onto your farm, considerations should be given to food safety practices that can reduce the opportunity for contamination of produce. Pay attention to traffic patterns if visitors are allowed in animal areas and produce areas. Consider having a separate garden area where kids can participate in hands on garden activities rather than conducting those activities in your primary garden that you harvest from for sale. Make sure there are adequate handwashing stations and signage.

While thinking through the considerations can be daunting to some, there are many great reasons to think about agritourism as an opportunity for your farm. These ventures can operate year round or seasonally depending on what makes sense for your farm and the experience you want to provide. There is a strong interest among travelers to seek out unique experiences combined with an increased desire for the public to understand where there food comes from and how it is grown. Are you ready to help people have fun on the farm?

Michelle Walk, MSU Extension

Michigan State University AgBioResearch

MICHIGAN STATE UNIVERSITY | Extension

Perennial fruit crops featured at the North Farm Short Course

By Abbey Palmer, the North Farm Education Coordinator

Perennial Fruit Crops Short Course helps farmers and gardeners learn how to establish berry crops like raspberries and strawberries

The primary goal of The North Farm, a collaborative operation supported by Michigan State University Extension and Michigan State University AgBioResearch located in Chatham, Michigan, is to support the growth of new farmers producing nutrient-rich food for Upper Peninsula markets.

The North Farm is hosting a series of MSU Extension short courses starting in May on topics designed for market gardeners, small farms, and skill-seekers interested in diversified vegetable production. These short courses are an in-depth exploration of farming fundamentals and best practices for diversified vegetable growers. All workshops will be held on-site starting at 1 pm EST and will include a combination of experiential and classroom-based learning.

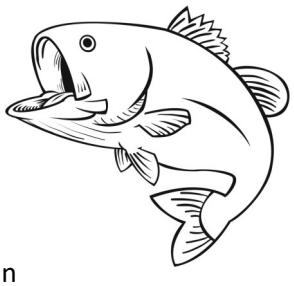
Perennial Fruit Crops will be held on Sunday, June 4th. From familiar raspberries to "novel" types like goji berries, perennial fruits are gaining popularity with market gardeners and farmers alike. Find out about variety selection, establishment, and cultural practices – including growing in high tunnels – for growing berries in a northern climate with MSU educators on perennial fruit crops. Michigan State University's Dr. Eric Hansen will share his research with raspberries and high tunnels and will address spotted wing drosophila. A farm walk to examine the novel berry trial plots (including goji, aronia, haskap, and saskatoons) and newly established strawberry planting will allow participants to see practices in action. Participants will have the option to take strawberry or raspberry plants home to establish for themselves based on what they learn in this short course.

These courses are in their third year. The instructor roster includes MSU Extension educators from around the state, as well as experts who live and farm in the U.P. Short courses qualify for education hours through the MSU Extension Master Gardener program. Residents of Menominee County can qualify for a full scholarship to the program through the E.W. and Dorothy Granskog Memorial Fund; apply at http://mmcommunityfoundation.org/index.php/e-w-and-dorothy-granskog-memorial-fund

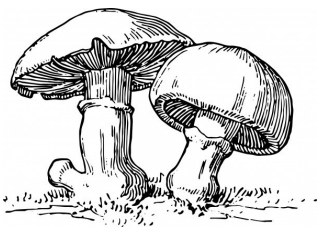
Registration is required for these events and can be accessed at http://www.msunorthfarm.org/short-courses.html Questions? Contact Abbey Palmer at palmerab@msu.edu or 906-439-5058.

Eating Through the Eastern U.P.

Have you ever wondered how to cook wild mushrooms or fillet a fish? Did you know there are highly nutritious foods growing all over the UP that you can collect and prepare for your family? Are you and your family interested in spending more time together exploring the outdoors? If you answered yes, then this class is for you!



On Saturdays from 10 am - 12
July 15-Pickford
August 19-Newberry
September 16-Rudyard
October 21-Sault
November 18-Brimley
Seasonal topic and food at each location



To register or for more information please contact the Mackinac County MSUE Office at: 906-643-7307 or 906-235-2985 or email: jarviem1@anr.msu.edu.

Why does boron show up on my soil test report?

Based on your soil type and intended crop, the nutrients recommended by the MSU soil test report may include boron.

By Jim Isleib, Extension Educator

Even though you didn't request a special soil test for boron when you sent your samples into the MSU lab, you may have received a recommendation to add one or two pounds for boron per acre for your selected crop. Like nitrogen, the boron recommendation is not based on chemical analysis of your regular soil sample. Instead, it is based on many years of accumulated research results regarding crop response to boron. Special tests for soil content of nitrogen and boron are available through the MSU soil testing lab and other reputable labs.

There are two main reasons why boron is routinely recommended: 1.) Coarse textured soil low in OM, and 2.) crops sensitive to boron deficiency.

1.) Plant-available boron exists in soil mostly as a neutral boric acid molecule. The source for this boron is mostly from decomposing organic matter in the soil. Many, if not most, Michigan agricultural soils contain adequate boron for good plant development. Coarse-textured soils, especially those low in organic material, are the most common places where boron deficiency occurs. Coarse textured soils are more prone to drought, and when soils are very dry, decomposition of organic material slows, sometimes causing boron deficiency. Boron is not bound to clay or organic matter particles and leaches through the soil profile readily, similar to nitrogen. In coarse-textured soils, this leaching is likely when wet conditions prevail.

2.) Some crops are much more sensitive to boron deficiency than others. Perennial legume forage crops, including alfalfa, clovers and birdsfoot trefoil are sensitive to low soil boron. Boron addition is often recommended for these crops. Brassicas, including certain vegetables (cauliflower, cabbage, broccoli, turnip, rutabaga, kale and others), canola and forage brassicas like rape and forage turnip are among the crops known to be sensitive to low soil boron levels. Sugar beets, apples, red beets, celery and sunflowers are also sensitive to boron deficiency. On soils with low cation exchange capacity, your soil test report may include a boron recommendation for these crops.

How can you correct boron deficiency? With a lot of care. When deficient for a selected crop, application of the proper amount of boron can be a good economical decision. Boron can be blended with dry granular fertilizers, often with potash. Boron can also be mixed with liquid fertilizers, or applied to the soil alone and incorporated. However, over-application of boron, or the wrong placement of boron can lead to crop damage. Problems with boron toxicity can occur when crops sensitive to boron toxicity are planted with boron fertilizers present, or sprayed with liquids containing boron. Pre-plant broadcast application of boron fertilizer is generally safer for toxicity-sensitive crops than placement in a fertilizer band.

A common problem situation arises when a smaller-scale producer receives a soil test report including a boron recommendation. "How do I do this?" is the usual question. In some cases where the crop is not of high economic importance, such as a wildlife planting or home vegetable garden, a person may choose to ignore the boron recommended on their soil test, but not necessarily. The following 'bullet list' provides some ideas for boron application for the market gardener or small scale grower:

Boron application:

- Boron may be blended into dry fertilizers such as 0-0-60 or 0-14-42.
- Boron fertilizers include borax (11% boron) and borate granular (14% boron). Solubor (20% boron liquid) is foliar applied and must be applied at recommended rate for specific crops.
- Application of 9 lbs Borax per acre will supply 1 lb boron per acre
- For gardeners, about 4 teaspoons borax per 1000 square feet is equivalent to 1 lb boron per acre
- Dry boron fertilizers should be broadcast along with other fertilizers and worked into soil.
- Boron fertilizer should not be applied if grasses, including hay, pasture, turf, small grains or corn are sown immediately following application.
- Manure generally contains .03-.08 lbs boron per ton, more if composted

For more details on boron for crop production, check out Secondary Nutrients for Vegetables and Field Crops, MSU Extension publication E-486, Boron for Minnesota Soils AG-FO-0723-C and the MSU Extension webpage (type 'boron' into the search box for relevant articles).

Growing and Marketing Christmas Trees

June 21, 2017 at 6:30pm CST Room B21 Solin Center, Gogebic Community College

Join us to learn how to start a Christmas tree farm from the ground up. Christmas trees can be a profitable crop. Success at growing and marketing Christmas trees begins before you plant your first tree. This program will discuss all the aspects of growing Christmas trees including site and species selection, cultural practices, costs of production, and marketing options.

Presented by Dr. Bert Cregg, Horticulture and Forestry, Michigan State University and Jill O'Donnell, Senior Extension Educator, MSU Extension. For more information, please contact District Forester Winona Genther at 906-667-110 ext. 632.

MSU Upper Peninsula Research and Extension Center

Field Day

Saturday, July 29th

Registration starting at 9:30 am, with the **field day starting at 10 am**!

Morning topics include **indicators for soil health in the field and how you can close the nutrient loop with on-farm composting**!

Lunch is FREE

Attendees can choose to attend sessions at either the North or the South Farm in the afternoon.

Afternoon sessions at the North Farm: organic small grains, perennial fruit crops, equipment and tools for the small scale vegetable grower, and seed saving garden

Afternoon sessions at the South Farm: UPREC grass-finished beef study, Lake City grazing study, and crop research update (including forages, pea and oat trial, and heritage malting barley)

Field day concludes at 3 pm with optional farm tours!

We hope to see you there!

Grazing School 2017

Grazing School provides a hands-on experiences for those interested in starting or improving grazing management. Grazing School attendees can expect to learn a variety of tools and subsequently choose to integrate the methods that are most suitable for their particular grazing system. Additionally, attendees will have the opportunity to work with Michigan State University (MSU) experts to collectively graze a group of MSU livestock during the course of the Grazing School.

Grazing school will be held on Sept. 21 and 22, 2017 and will begin at 8 a.m. on Thursday and concluding at 4 p.m. on Friday

The two-day school will be offered at the MSU W.K. Kellogg Biological Station Farm and Dairy Meeting Room in Hickory Corners, Michigan

The goal of the school is to blend classroom instruction with in-field education and the latest animal/forage research to give participants an in-depth introduction to grazing management.

Feature presentations will cover approaches to:

- Introduction to managed grazing
- Pasture management and decision making
- Livestock nutrition and requirements on pasture
- Forage yield determination and pasture allocation
- Grass and legume species identification
- Pasture soil fertility and management
- Grazing systems, layout and design
- Water systems and requirements
- Building and using fence for grazing
- Pasture establishment and improvement

Grazing School is taught by a dedicated team of professionals with many combined decades of expertise in crop, soil, and animal sciences. Team members hail from all over the state to give a varied perspective on the variety of local conditions found across Michigan. Many have farms of their own from which to draw inspiration and examples.

- Dean Baas, Cover Crops Educator, MSUE
- Kim Cassida, Ph.D., MSU Forage Specialist
- Richard Ehrhardt Ph.D., MSU Small Ruminant Specialist
- Kevin Gould, Beef Educator, MSU Extension
- Phil Kaatz, Forage Educator, MSUE
- Howard Straub III, Pasture Dairy Manager, W.K. Kellogg Biological Station
- Santiago Utsumi Ph.D., Assistant Professor of Animal Science
- Brook Willke, Ph.D., Kellogg Farm Manager, W.K. Kellogg Biological Station

Registration information:

Registration is $125 for one participant ($95 registration price for students and veterans); $220 for two participants from the same farm, and $315 for three participants from the same farm. The registration deadline is Sept. 18, 2017. After the deadline, fees are as follows: $150 for one participant, $270 for two participants from the same farm, and $390 for three participants from the same farm. The workshop fee includes notebooks, resource materials, and all meals.

Registration link: **https://events.anr.msu.edu/GrazingSchool/**

Reminder, Use FEC to Determine Deworming Needs

By Frank Wardynski

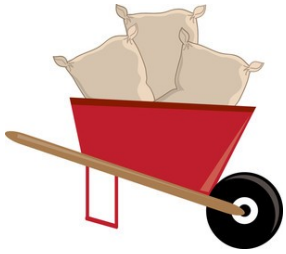
Management practices regarding the use of anthelmintics have become a routine practice that is repeated annually on many farms. Producers frequently utilize the same dewormer administered at the same time of the year without any assessment if treatment is required. It is well documented that ruminant animals with low parasite infestation will not grow faster or more efficiently with a dewormer treatment. Producers can utilize FEC to determine the need for treatment.

Many producers have utilized FEC to determine the need for treatment and have identified classes of animals that have not required treatment. This practice saves money to producers, minimizes the chance of developing resistance within the parasite population and reduces the environmental impact associated with anthelmintic use.

Producers can send in fecal samples to determine parasite infestation and the need for treatment with FREE LAB TEST. The only cost to the producer is the cost of shipping samples. Contact Frank Wardynski for more details. 906-884-4386 or wardynsk@anr.msu.edu

Classifieds

2500 small square bales, excellent quality, early June cutting. 200 round bales about 350lb, good quality, Bruce Crossing 906-827-3827



Control Flies and Minimize Resistance to Insecticides

Nuisance Flies can reduce performance and lower profitability. Producers should implement fly control programs that protect livestock and reduce the chances of insecticide resistance.

By Frank Wardynski

While flies are seldom cause mortality problems in beef cattle, they frequently cause stress and discomfort to cattle through the summer months. Fly control is an important economic management decision that needs to be made with concern of potential insecticide resistance problems. Fly populations across the country have developed various levels of resistance to insecticides.

Producers should manage the use of pesticides to minimize resistance before available pesticides become totally ineffective. Fly tags are frequently an effective method of using insecticides to provide season long protection. To minimize resistance producers should apply tags when they are needed. Applying tags will reduce their effectiveness later in the season. Tags should be applied as flies become a problem and removed after flies have subsided or the usefulness of the tags has been exhausted.

Insecticide classes should rotate from one year to the next. Pyrethroids and organophosphates are two classes available to be alternated. Alternating chemical classes isn't just for the ear tags. Insecticides used as ear tags, sprays, and powders should be rotated. Sprays and powders can be used to supplement or instead of ear tags. Also macrocyclic lactones in the pour on form can be used to supplement fly control with minimal resistance problems. Macrocyclic lactones are a class of anthelmintic commonly used to deworm livestock.

Market Report

Choice Steers	$120—$146 per 100 lbs.
Holstein Steers	$100—$117 per 100 lbs.
Hogs	$67—$72 per 100 lbs.
Lambs	$210—$228 per 100 lbs.
Cull cows	$60—$72 per 100 lbs.
Calves	$80—$185 per 100 lbs.
Goats	$125—$150 per 100 lbs.

Breeding and Feeder Animals

Grade Holstein cows $1000—$1500/head

Grade Holstein bred heifers $1500—$2500/head

Feed Prices across the U.P.

	Avg. $/cwt	Avg. $/ton	Price Range
Corn	$9.73	$194.50	$145-244
Soymeal	$22.14	$442.75	$360-556
Oats	$9.60	$192.05	$170-230
Barley	$9.65	$193.00	$140-242

Average price/100 wt. for 1 ton lots

Organic livestock feed potential investigated in the Upper Peninsula

Research supports organic or naturally grown livestock in the region

The Upper Peninsula of Michigan is experiencing an agricultural renaissance, which is being fueled by a new generation of farmers wanting to return to the land. Although many of these operations would be considered small in scale, they are often direct to market enterprises managed within an organic system. Furthermore, many operations contain stacked enterprises, integrating both crop and livestock production. As consumers continue to drive preferences within the marketplace, the demand for natural or organically produced meat has greatly increased, but no such grain market exists within the region to support this expanding industry. Organic grain production is virtually non-existent in the Upper Peninsula. Sourcing outside of the region is quite costly and growth limiting, especially for those wanting to market as certified organic.

The Michigan State University Upper Peninsula Research and Extension Center in Chatham, Michigan along with MSU Extension Field Crop Educator Monica Jean, were recently awarded a grant through the Organic Farming Research Foundation with the primary goal of developing a framework of research and knowledge of organic grain systems in the region, and to determine the market potential for farm adoption. This will be achieved through both variety and crop management research, identification of need and marketing opportunities, and finally, dissemination of findings through field days and outreach materials. Research will be hosted at an on-farm cooperator site, Guindon Farms (Cornell, MI) and at the MSU Upper Peninsula Research and Extension Center North Farm. The North Farm is a farm incubator focusing on sustainable farm development in the region.

The MSU team is one of five recipients of the OFRF grant award. "We were impressed with the large number of excellent proposals we had to draw from for this round of grants," said Brise Tencer, Executive Director at OFRF. "As with the grants we funded in 2016, all of these projects focus on priorities identified by organic farmers in our 2015 national survey of organic farmers." Since its founding in 1990, OFRF has awarded 337 grants to organic researchers and farmers, investing over $3M. All OFRF-funded research must involve farmers or ranchers in project design and implementation, take place on certified organic land, and include strong education and outreach components.

Work is already well underway for this project as the trials were established in April at both the MSU research station, and at the Guindon Farm. Oats, barley and corn will be examined, and expertise from organic crop farmer and retired MSU Educator, Dan Rossman, will be utilized to develop cost of production guides for these crops. The UPREC plot will be featured at the North Farm's July Short Course, *Organic Small Grains*. Event details and registration can be found here: http://msue.anr.msu.edu/events/.rm_on_farm_short_courses

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Calendar of Events

June 21 Growing & Marketing Christmas Trees (6:30 pm CST) Room B21 Solin Center, Gogebic C.C.
July 29 Upper Peninsula Research and Extension Center Field Day

The North Farm Short Course Series (each event running 1—6 pm)
June 4 Perennial Fruit Crops
July 9 Organic Small Grains
August 13 Insects on the Farm

Eating Through the Eastern U.P. Series
On Saturdays from 10 am - 12, Seasonal topic and food at each location
July 15-Pickford
August 19-Newberry
September 16-Rudyard
October 21-Sault
November 18-Brimley