



# U.P. Ag Connections Newsletter

August 2016

Agricultural News from MSU Extension and AgBioResearch

Volume 20 Issue 8

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## Farewell to a good cow man...

I gave my final farewell to a dear old friend of mine today. Most everyone knew Dallas Brusso as a good cow man that knew good cattle and how to manage grass. He was opinionated, outspoken and very direct. He was caring, good hearted and willing to help a neighbor at a moment's notice. No extension person ever spoke at a meeting that was attended by Dallas that they weren't challenged. His challenges weren't necessarily to be obstinate, (but many times they were) but to question a traditional thinking. Many people believe Dallas was stubborn and resistant to change. The fact is he was stubborn, he refused to allow horned or freshly dehorned/castrated cattle to sell through the Western UP Livestock Cooperative annual feeder calf sale. Dallas may have been slow to change but he didn't resist it. Dallas was the first one I know of to switch to fall calving. For years he pushed back against vaccinating calves only to be the person to make the motion that all calves be vaccinated selling through Paulding.

At Dallas' memorial service, as expected many farmers attended. Of course in the ag community that was expected. But others outside of our agriculture fraternity were a bit surprised commenting that it looked like a farmer's convention. It makes me proud to be part of it. My condolences to his wife Vi, his life partner and partner on the farm.

I recently took my daughter to Des Moines, Iowa for the National Jr Simmental Show, reminding me that fair season is just around the corner. As always I'm excited for the county fairs and of course the UP State Fair. I'd like to remind everyone to remember why we do this. It's for the kids. Their learning of their projects, learning of responsibility and building character. We teach them how to compete. How to win and how to lose. Not everyone can afford the most expensive animals but it doesn't cost anything for every youth to care for their animals with great pride.

I also want to remind everyone that fairs are usually hot. We need to take care to ensure that the animals are kept as comfortable as possible. Don't forget that the world is watching us. There are activists that don't believe we should own animals, nor should we exhibit them. Don't give them fuel by taking any less than excellent care of your animals.

And finally, try to win. But more importantly be a good sport. If you win, do it with humility. If you lose, do it gracefully and congratulate the winner. And find everyone that made this experience possible and say thankyou.

Frank Wardynski  
Livestock Educator, MSU Extension

Michigan State University

AgBioResearch

## MSU Grazing School Coming in September

MSU's popular Grazing School will be offered at three locations across Michigan in September.

Michigan State University Extension will again offer its very popular Grazing School for livestock, small ruminant and dairy producers at three locations simultaneously across Michigan on September 22 & 23, 2016. The two-day school will be offered at the MSU Kellogg Biological Station's W.K. Kellogg Farm near Hickory Corners, the MSU Ag BioResearch Center near Lake City, and at the Bay Mills Community College Waishkey Bay Farm near Brimley, MI. The school is offered to help all farmers improve their grazing management knowledge and skill set. The course will be taught by MSU Specialists and Extension Educators with expertise in animal grazing. They will utilize high-speed video conferencing technology that allows the various speakers to reach all the farming participants across the State with instruction. Participants only need to attend the closest location each day to participate in the full school.

The goal of the school is to blend classroom instruction with hands-on education at each of the host site farms to provide in-depth, cutting edge animal and forage research to the participants.

Major topics will include:

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

Registration is \$125.00 per person; a second participant from the same farm will be allowed to register for \$90.00 (see scholarship opportunity posted in this newsletter). The registration deadline is September 18, 2016. Late registrants will be charged a fee of \$160.00 per person. The registration fee includes a workshop handbook, a Forage Field Guide, lunch each day, and dinner on day one including refreshments. Please register at <http://events.anr.msu.edu/grazingschool16/>. For further information contact Frank Wardynski, MSU Extension Beef and Dairy Educator and the Bay Mills Host at 906-281-0918. MSU Extension programs are open to all people. Accommodation requests for people with disabilities should be communicated to the site host a minimum of seven days before the event.

Submitted by Jerry Lindquist, MSU Extension Grazing Educator, [lindquis@msu.edu](mailto:lindquis@msu.edu); 231-832-6139



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## Scholarships offered for grazing school students!

Attendees at the Brimley Grazing School September 22-23 may qualify \$50 scholarship. The first 6 registrants will be refunded \$50 of the Grazing School cost after attending. Register now to take advantage of this opportunity!

## Menominee County Young Farmers Dinner on the Farm

Are you looking for something fun to do and want to learn about agriculture in Menominee county? If you said yes to either of these questions you will definitely want to come check out The Menominee County Young Farmers dinner on the farm taking place August 8<sup>th</sup>, 2016 at Tuinstra's Farm in Daggett, MI. The dinner will start at 6:30pm; Hotdogs, chips, cookies, and lemonade will be served. Please feel free to bring a lawn chair to relax and enjoy a night at the farm.

The main goal for the dinner is for the young farmers to become more involved with their community and become better public speakers. Some events that will be taking place at dinner on the farm will include a farm tour and hay wagon rides to explore the fields of crops that are grown on the farm. This is a free event and open to everyone, and we hope to see you there! For more information about dinner on the farm please visit:

[facebook.com/menomineecountyyoungfarmers](https://www.facebook.com/menomineecountyyoungfarmers) or contact the Menominee County Young farmers at 906-753-2209 .

### Save the Date! Soil Quality Field Days

Additional details will be in the September newsletter

- Sept 13—Alger Co. @ Bahman Potato Farm, Rumely
- Sept 14—Delta Co. @ MSU Forest Biomass Innov. Ctr.
- September 27—Pelkie
- September 28—Ontonogon

## Beef Cattle Meeting—Deworming and Holistic Management

Michigan State University Extension will be conducting a beef cattle meeting on July 27, 7-9:00 pm EDT at the Feedmill Café, 35009 Tapiola Rd in Tapiola. Jason Rowntree and Frank Wardynski will be present to discuss deworming beef cattle as well as many other management practices using a holistic management decision making process. Jason is in charge of the beef cattle at the U.P. Research and Extension Center in Chatham and leads the grass fed research at both research stations in Chatham and at Lake City. The Chatham research is part of a systems project that looks at the livestock/cropping systems interaction. Frank is leading a producer cooperator project on deworming cattle that utilizes fecal egg counts to determine need for treatment and identifies resistance issues. The agenda for this meeting is highly flexible. Jason and Frank would like to discuss any topics producers are willing to bring to the meeting regarding cattle production, grazing, forage production and soil health.



# TOGETHER AT THE FARM

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- Additional details available May 1<sup>st</sup> -

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## Selecting a liming material, Part 2

By Jim Isleib, Field Crops Educator, MSU Extension

A comparison of available liming materials from different sources in the Upper Peninsula shows the importance of knowing the details about lime and making adjustments in application rates.

Liming effectiveness varies with proper soil testing, proper lime application rate, even application and proper incorporation. As part of an effort to determine why western Upper Peninsula farmers were not achieving their desired results with lime applications, Michigan State University Extension educator Jim Isleib sampled lime from three U.P. agricultural lime sources and had them analyzed. The following results were obtained:

Source	% passing					
	% NV	% MgCO <sup>3</sup>	% Mst.	8 mesh	60 mesh	100 mesh
A	98.4	39.4	1.4	99.7	50.6	49.7
B	95.4	2.8	13.4	95.6	90.6	75.8
C	103.8	44.9	0	72.7	28.1	27.8

The 'Source A' lime analysis reveals a low moisture lime (good), good neutralizing value, high magnesium content (good if needed, otherwise neutral) and a relatively coarse grind, with only 50.6% passing the 60-mesh screen.

The 'Source B' lime analysis reveals a higher moisture lime, good neutralizing value, low magnesium and a relatively fine grind (good).

The 'Source C' lime is very dry (good), has excellent neutralizing value, high magnesium, and a very coarse grind (not so good).

The 'effective calcium carbonate' number is a very useful calculation to determine how much of a specific lime should be applied per acre using soil test report recommendations based on a standard ag lime neutralizing value of

90. By assuming a soil test report recommendation of three tons of lime per acre and running this calculation on the three samples, three different lime application rates are generated:

### Source A

<8 mesh = 0.3% X 0 = 0%

8-60 mesh = 49.1% X .5 = 24.5%

>60 mesh = 50.6% X 1 = 50.6%

75.1% is the "fineness factor"

75.1% X 98.4 (neutralizing value from analysis) = 74

"effective calcium carbonate"

"correction factor" = 90 / 74 = 1.2

so.....3 tons lime per acre X 1.2 = **3.6 tons lime per acre**  
(moisture in lime is minimal)

### Source B

<8 mesh = 4.4% X 0 = 0%

8-60 mesh = 5.0% X .5 = 2.5%

>60 mesh = 90.6% X 1 = 90.6%

93.1% is the "fineness factor"

93.1% X 95.4 (neutralizing value from analysis) = 89

"effective calcium carbonate"

"correction factor" = 90 / 89 = 1.0 but this lime contains 13.4% moisture by weight

so.....3 tons lime per acre X 1.0 / .866 = **3.5 tons lime per acre**

### Source C

<8 mesh = 27.3% X 0 = 0%

8-60 mesh = 44.6% X .5 = 22.3%

>60 mesh = 28.1% X 1 = 28.1%

50.4% is the "fineness factor"

50.4 X 103.8 (neutralizing value from analysis) = 52

"effective calcium carbonate"

"correction factor" = 90 / 52 = 1.7

so.....3 tons lime per acre X 1.7 = **5.1 tons lime per acre**

Does this mean that Source C is the worst choice? Not necessarily. The decision between these three lime sources should include price (lime material and delivery), availability, application equipment needed and timing considerations.

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## ***DNR, Michigan Tree Farm System host program to help fund transportation for forest field trips***

Contact: Mike Smalligan, 517-284-5884

### **Wheels to Woods**

Wheels to Woods, hosted by the Michigan Tree Farm System in partnership with the DNR Forest Resources Division, works to do just that. School field trips are a great way to get students outside to learn about the forest, but many schools in Michigan do not have adequate funding for transportation. Through Wheels to Woods, foresters are providing up to \$1,000 per school to help teachers with transportation costs for educational field trips to any forest.

In the first half of 2016, Wheels to Woods funded 75 field trips that brought 6,145 students, 250 teachers, and 991 parents outside into the forest. Students have studied Great Lakes coastal forests, wetlands, forest management, invasive plants, endangered species, maple syrup, birds, predators and even explored the forest by canoe. Students have gone to nature centers, county parks, state parks, family forests, national forests and forests owned by their school. Most of the first 75 trips have been urban schools in the southern Lower Peninsula, although all schools in Michigan are eligible.

Wheels to Woods is supported by generous donations from the United States Forest Service, DNR Forest Stewardship Program, Michigan Tree Farm System, American Forest Foundation, Michigan Forest Products Council, Michigan Association of Timbermen, Great Lakes Timber Professionals Association, Michigan Forest Foundation, Michigan Project Learning Tree, Michigan Society of American Foresters and other foresters and forest-product companies. Wheels to Woods has obligated 85 percent of its available funds and needs to raise more funds to offer grants to schools in the fall. The first 75 trips have cost only \$4.50 per student.

### **What Can You Do?**

There are a variety of things you can do to help get students outside and into a forest.

1. Volunteer with a local scout, church or other youth group to go hiking or camping in the woods this summer.
2. If you own forest land, offer to host an educational field trip this fall for a nearby school.

“Like” the Michigan Tree Farm System Facebook page to see students outside exploring the forest.

Share the news about Wheels to Woods funding with teachers at local schools. The one page application form is available at [www.TreeFarmSystem.org/School-Forests](http://www.TreeFarmSystem.org/School-Forests).

Donate to the Michigan Tree Farm System to help offer Wheels to Woods again this fall. Donations are tax deductible,

and all funds are used for the schools. Send a check payable to the “Michigan Tree Farm Committee,” with “Wheels to Woods” on the memo line, to 110 West Michigan Avenue, Suite 100, Lansing, MI 48933.

### **Forest Facts.**

Did you know that Michigan’s Project Learning Tree has trained more than 3,000 teachers and informal educators in outdoor education curriculum? Project Learning Tree is sponsored by the American Forest Foundation, the same national organization hosting the American Tree Farm System.

### **Important Dates:**

July 11-15: DNR’s Academy of Natural Resources professional development for teachers

August 19-20: Michigan Forest Association Annual meeting in Livonia for landowners

September 1: deadline to apply for the Qualified Forest program for a property tax break

### **Questions?**

To learn more about Wheels to Woods, contact Mike Smalligan, DNR Forest Stewardship Coordinator, at [smalliganm@michigan.gov](mailto:smalliganm@michigan.gov) or 517-284-5884. To learn more about programs available to assist private forest landowners, or to find the DNR service forester in your area, go to [www.Michigan.gov/PrivateForestLand](http://www.Michigan.gov/PrivateForestLand). The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state’s natural and cultural resources for current and future generations. For more information, go to [www.michigan.gov/dnr](http://www.michigan.gov/dnr).

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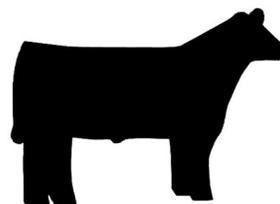
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## Master Gardener Program

### Helping People and Communities Grow

By Rebecca Krans, Michigan State University, Consumer Horticulture Extension Educator

Do you enjoy being outdoors and working in the soil? Would you like the opportunity to learn more about growing plants? Are you excited about the chance to share your time and talents with others and spend time with people who share your interests? If so, you might want to become part of the Michigan Master Gardener Program (MGP). This horticulture education and volunteer training program is offered by Michigan State University Extension (MSUE) and provides home gardening information to Michigan residents through a network of trained Master Gardener volunteers. All you need to get involved in the MGP is an interest in plants, a personal commitment to volunteering and an enthusiasm for sharing your knowledge with others.

During the last 35 years, more than 30,000 Michigan residents have taken part in the MGP, improving their communities through gardening, teaching thousands of children, adults and senior citizens the joy of gardening, learning how to garden using environmentally sustainable practices and making lifelong friends.

**Access to World Class Gardening Knowledge**—The MSU Extension Master Gardener Program connects gardeners across the state to Michigan State University’s faculty and resources. Participants have access to information generated at one of the nation’s top plant science teaching and research universities and the chance to use this knowledge to improve their communities and enrich their lives.



*Extension Master Gardener, Liz Slajus, teaches students at the Woodland Childcare Center in Kingsford about fresh greens for her volunteer project.*

Master Gardener volunteers start by completing a 13-session course that provides a solid knowledge base grounded in university-generated data. Training is offered through MSU Extension and covers the topics of Introduction & Volunteerism, Plant Science, Soil Science, Integrated Pest Management, Diagnostics for Master Gardeners, Annual and Perennial Flowers, Woody Plants, Lawns, Vegetable, Small Fruit, Tree Fruit, Indoor Plants, Household and Nuisance Pest, and Gardening Practices to Protect Water Quality.

**An Opportunity to Serve**—After completing the course, Master Gardener trainees must complete 40 hours of horticulture-related service within one year to earn their Master Gardener certification. That community service may include:

- working with students to design an elementary school garden
- creating a horticulture therapy program at a senior center
- helping a neighborhood association create an urban garden.
- Sharing environmentally-friendly gardening practices at community events
- Establishing vegetable gardens to meet local nutritional needs
- Beautifying community sites for special events or community activities that attract local residents and tourists

Community based MGP coordinators and facilitators assist trainees in exploring opportunities that meet their interests, schedules and comfort levels. Most of all, Master Gardener trainees get the chance to get outdoors and spend time with other gardening enthusiasts in challenging and rewarding activities.

**Connecting with Others**—Master Gardener volunteers love to have fun! Many gardeners establish lifelong friendships and connections when they join local programs that beautify their community and bring personal fulfillment and satisfaction. Many counties offer ongoing educational programs, garden tours, lectures and other social activities in which volunteers learn and share their knowledge while interacting with others.

**Next Steps**—The Master Gardener Program welcomes anyone interested in learning about gardening, community service and working with other volunteers. No prior knowledge or experience in gardening is required. Join this exciting program by participating in the fall 2016 training session in the Escanaba area. Registration must be completed online any time before August 11, 2016 at the following website: [http://msue.anr.msu.edu/events/master\\_gardener\\_program\\_escanaba](http://msue.anr.msu.edu/events/master_gardener_program_escanaba).

**Fall, 2016 MSUE Master Gardener Program  
Classes held at: Bay de Noc Community College  
525 ITV Conference Room, Student Center  
2001 N. Lincoln Rd.  
Escanaba, MI 49829**

August 25th through December 1st

Thursdays from 5:30 – 9:30 p.m. EST

Cost: \$300.00 (includes the 1000-page training manual, speakers and facilities). Partial scholarships are available by applying online by July 30th. Completion of the 40 hours volunteer project is an expectation. For more information, contact: Rebecca Krans, MSU Extension Consumer Horticulture Educator Iron MSU Extension Office phone: 906-875-0606 email: [kransr@anr.msu.edu](mailto:kransr@anr.msu.edu)

## Market Report

Choice Steers	\$107—\$118 per 100 lbs.
Holstein Steers	\$100—\$110 per 100 lbs.
Hogs	\$70—\$73 per 100 lbs.
Lambs	\$160—\$180 per 100 lbs.
Cull cows	\$60—\$75 per 100 lbs.
Calves	\$100—\$210 per 100 lbs.
Goats	\$180—\$220 per 100 lbs.

### Breeding and Feeder Animals

Grade Holstein cows	\$1500—\$2000/head
Grade Holstein bred heifers	\$1600—\$2000/head

### Feed Prices across the U.P. - 5/16

	Avg. \$/cwt	Avg. \$/ton	Price Range
Corn	\$10.11	\$202.25	\$180-270
Soymeal	\$23.90	\$478.00	\$440-552
Oats	\$9.04	\$180.75	\$160-198
Barley	\$9.71	\$194.25	\$160-232
Average price/100 wt. for 1 ton lots			



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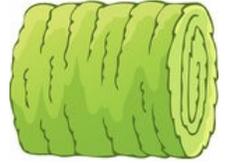
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*To stay in tuned with the latest in local food resources and events, check out **The Plowshare**, the formal newsletter for the U.P. Food Exchange*

<http://upfoodexchange.com/newsletter/>

# COVER CROP FIELD DAY

Menominee County  
Wednesday, August 3<sup>rd</sup> @ 11 AM CST

Follow the progress of the cover crop research on the Steve Brock Dairy Farm—3 miles east of Daggett on the 358 Road.

Call Michelle @ (906) 439-5114 with questions.

Michigan State University  
AgBioResearch

MICHIGAN STATE  
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See how the current corn crop is responding to various fall cover crop treatments

Speaker:  
Daniel Olson,  
Byron Seeds



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## MSU Agriculture Innovation Day: Focus on Soils

August 24, 2016

Saginaw Valley Research and Extension Center in Frankenmuth, Michigan

Hear from experts and see the results of cutting-edge techniques on crop growth and soil quality. Learn about soil testing and plant diagnostics, academic programs and other MSU resources.

### Participate in sessions focused on:

- **Nutrient management.** Enhance decision making about nitrogen usage and rates through technology.
- **Soil quality.** Improve soil quality, including the architecture of cover crops, extended rotations and interseeding.
- **Compaction.** See the effects of soil structure, controlled traffic and various tillage methods.
- **Tile technology.** Get an in-depth view of the movement of nutrients from the soil to tile lines.

*CCA credits in soil and water will be available.*

[msue.msu.edu/msuaginnovationday](http://msue.msu.edu/msuaginnovationday)



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### Fair Season Reminder!

By Katelyn Thompson, MSU Extension

County fair season is underway around the UP and the UP State Fair will soon be here. This is the time of year youth all over have been waiting for to exhibit all the work they have put into their livestock projects. As your county fair or the UP State Fair comes around there are some key things to keep in mind to insure the health and safety of your animal. While factors to keep in mind are not limited to the following here are three items to consider in the comfort and health of your livestock. First make sure that your livestock is kept hydrated and have access to clean water at home and at the fair especially with the hot temperatures that summer can bring. Secondly insure that your livestock have proper ventilation. Whether in their housing at your farm, traveling to the fair and once at the fair make sure that your livestock are in a fresh air environment. And thirdly, evaporated heat loss also known access to a wash rack. Sometimes when the combination of outdoor temperature and level of stress factors on your livestock you need to take further cooling measures and get your livestock to the wash rack and get them cooled down. Overall we need to make sure that we are keeping livestock cool and comfortable to limit stress.

## Getting Ready for Market – Part 1

By Michelle Walk, Community Food Systems Educator, MSU Extension

Food safety considerations in preparing to sell at a farmers market.

May is here and that means it is farmers market season. This is the time of year many of the outdoor markets start for the season. According to the [Michigan Farmers Market Association \(MIFMA\)](#), the number of farmers markets in Michigan has increased from around 90 in 2001 to over 300 today, so you don't have to go far to find a market. Farmers markets have been a great way for small farms to find an outlet to sell their produce or for backyard gardeners to sell extra items or test the waters for increasing what they grow.

Each market has their own policies, requirements and application process to be able to sell at their market so be sure to check with the market manager before just showing up to sell. Many markets do not require any kind of formal food safety training, certification or education for their vendors and some may not even require you to have liability insurance. That doesn't mean that you still wouldn't be responsible if something happened as a result of someone eating your produce. Here are some basic food safety considerations if you are considering selling your produce at a farmers market:

- Testing your water source. There are different protocols depending on whether you are using municipal water, ground water or surface water for irrigation.
- Knowing what is in your soil amendments (compost) and recommended application protocols. Fully treated compost may be applied without restriction on the time interval between application and crop harvest but untreated should be incorporated into the soil not less than 120 days prior to harvest if the edible portion comes into contact with the soil or not less than 90 days prior to harvest if edible portion does not have direct contact with the soil. For many in northern climates this means a fall application. Check out this [fact sheet](#) for more information as you might be surprised how much of what you are considering "compost" actually should be treated like raw manure.
- Separating animals from crops. This includes your home pets in addition to any livestock you may have. Since even the best of fences don't keep everything out, it is good practice to make sure you are inspecting your produce for signs of animal contamination and destroy any items that may have been potentially contaminated.
- Maintaining clean equipment, including properly cleaning, sanitizing and storing harvest containers. Ensure you're only using equipment and containers for their intended purpose. You don't want to use a container that had trash or kids toys one week as your harvest container the next week.

- Keeping a healthy workforce. For many of the vendors selling at farmers markets, you are your only employee or you may have a family member or neighbor help out. You want to make sure you are properly washing your hands before harvesting and wearing clean clothes as to not bring contaminants into the garden. This also means not harvesting when you are sick. You should not handle food meant to be consumed by others for at least 48 hours after symptoms such as diarrhea and/or vomiting stop.

Selling at a farmers market is a great way to connect directly with consumers. One of the great things about the local farmers market is the trust people develop by knowing the people who grow their food. Are you doing everything you can to make sure you are providing a safe product to consumers?

For more information you can contact the [Michigan State University Extension Agrifood Safety Work Group](#) or [Community Food Systems Work Group](#).



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#### Calendar of Events

- |              |   |
|--------------|---|
| July 27      | Beef Cattle Meeting, Feedmill Café, 35009 Tapiola Rd in Tapiola (7-9 pm EST)                    |
| July 30      | Together at the Farm: U.P. Local Food Conference, Upper Peninsula Research and Extension Center |
| August 28    | Whole Farm Health Short Course, The North Farm @ UPREC (1-6 pm)                                 |
| September 13 | Soil Quality Field Day, Alger County @ Bahrman Potato Farm, Rumely                              |
| September 14 | Soil Quality Field Day, Delta County@ MSU Forest Biomass Innovation Center (rented farmland)    |
| Sept. 22-23  | MSU Grazing School, Bay Mills Community College Waishkey Bay Farm, Brimley, MI                  |
| September 27 | Soil Quality Field Day, Pelkie  |
| September 28 | Soil Quality Field Day, Ontonagon   |
| October 9    | Seed Saving, Short Course, The North Farm @ UPREC (1-6 pm)                                      |

#### North Farm Short Course focusing on Whole Farm Health

These short courses are an in-depth exploration of farming fundamentals and best practices for diversified vegetable growers. Each five-hour learning session has an emphasis on hands-on activities so participants can practice what they learn, and includes the cost of materials for a project.

All workshops will be held on-site starting at 1 pm EST and will include a combination of experiential and classroom-based learning. Short courses qualify for education hours through the [MSU Extension Master Gardener program](#).

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

**Whole Farm Health – Sunday, August 28**

**Seed Saving – Sunday, October 9**