



# U.P. Ag Connections Newsletter

September 2015

Agricultural News from MSU Extension and AgBioResearch

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## Changes for the newsletter

The U.P. Ag Connections Newsletter has been published and distributed throughout the U.P. for nearly twenty years. Not only does it allow us at MSU to get timely, relevant and research-based information out to producers, it lets us notify you of upcoming events and opportunities, and provides a platform to advertise, buy and sell products. As with everything, we need to constantly evolve to make sure we are meeting needs of our stakeholders, and our top priority with this newsletter is to ensure those that want and need what this newsletter provides is receiving it. To make that happen, however, we're going to have to make some changes.

Advertisement in this publication has declined over the years and printing and mailing costs are considerable. As you can imagine, it has become a financial strain to maintain its distribution—evidenced by no July or August issue this summer. We believe the newsletter is something worth keeping though and we hope you do too. Please consider the following items if you would like to keep the U.P. Ag Connections Newsletter alive!

- The #1 way to cut costs is to have **readers convert to an online option**. This would mean no longer receiving the newsletter in the mail, but instead being sent the file or a web link to download the issue from the web.
- This newsletter reaches over 1,000 readers via mailings and through the internet—**consider advertising your business or product today!**
- **Newsletter inserts** are another great option to reach a diverse agricultural audience throughout the U.P. All relevant content will be considered. This function is a great way to provide notice on upcoming events, registration forms for conferences, or greater advertisement abilities.

**To convert to an online subscription or to explore any of these advertisement options, contact Michelle at [colema98@msu.edu](mailto:colema98@msu.edu) or (906) 439-5114.**

We appreciate your patience through this transition and hope through your support to get this Newsletter back on a reliable schedule!

Ashley McFarland  
906-439-5176  
[ashleymc@anr.msu.edu](mailto:ashleymc@anr.msu.edu)

## MSU Extension to host Dairy Margin Protection Program Meetings

By Stan Moore, MSU Extension Educator

*The sign-up deadline for the 2016 year of the Dairy Margin Protection Program is fast approaching, scheduled to end September 30, 2015.*

The sign-up period for the 2016 year of the Dairy Margin Protection Program (DMPP) is on, and many dairy producers are examining how they can best protect themselves from the current low milk prices. With a full year under the new DMPP program, producers have a better understanding of implications for their farm business, and how this tool might fit into an overall risk management strategy.

Michigan State University Extension is hosting seven live and three webinar host sites to help Michigan farmers learn more about the Dairy Margin Protection Program and what it means for their dairy farm businesses.

Christopher Wolf, MSU dairy economist, along with Extension educators are teaching these two-hour workshops. Topics covered during the session will include; Dairy Milk Market and Profit Outlook, Dairy Margin Protection Decisions, and Dairy Financial Risk Implications.

There is no cost to attend the program, but preregistrations are encouraged to help us plan for adequate space and refreshments.

A special webinar broadcast will be offered on Sept. 25 in East Lansing, Stephenson, Sault Ste. Marie and Caro. We ask that you join us at these site locations to connect to the webinar, as there will be local USDA Farm Service Agency representatives in attendance to answer specific questions about DMPP rules.

### **U.P. Dates, Times and Locations are:**

Sept. 25, 2015, 1-3 p.m. - Webinar Host Site

MSU Extension Office – Menominee, S. 904 Highway 41, Stephenson, MI 49887

Sept. 25, 2015, 1-3 p.m. - Webinar Host Site

USDA - FSA Office, 2847 Ashmun St., Sault Ste. Marie, MI 49783

Farmers interested in attending one of the live or webinar host sites can register for the program by going to the following link: <http://events.anr.msu.edu/dmpp/> or calling Katelyn Thompson at 906-753-2209.

## Accommodations

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Accommodations for persons with disabilities may be requested by contacting the event contact two weeks prior to the start of the event. Requests received after this date will be honored whenever possible.

## Contact Information

For more information about registration or the general program contact Adam Kantrovich at 616-994-4580 or [akantrov@anr.msu.edu](mailto:akantrov@anr.msu.edu).

## Forage Field Day in Houghton County

You are invited to an informal, outdoor forage educational event on Saturday, September 12, 10 am-12 noon sponsored by Michigan State University Extension.

Host farmer Nate and Jean McParlan have reclaimed an old potato field that had grown in with brush and established high quality forage cover crops to be used to graze sheep during the fall and early winter months. They have also had forested property clear cut and are using sheep to graze the brush regrowth along with frost seeded forages. The group will meet at 10:00am at the McParlan Farm on St. Johns Creek Rd in Hancock. U.P. MSU Extension educators and the host farmer will be leading discussion.

Directions: North of Hancock on US Hwy 4, Turn Left to head west on Pontiac Rd, After two miles continue straight after the stop sign, another two miles turn right onto Waasa Rd at the T, in a half mile turn left onto St Johns Creek Rd.

Refreshments will follow. There is no charge for this event, but registration is required. Please register or request details 10 by contacting the Ontonagon County MSU Extension office at 906-884-4386 or [msue.ontonagon@county.msu.edu](mailto:msue.ontonagon@county.msu.edu).

## **Grazing School for Beginners offered at three locations in Michigan by MSU**

*The Michigan State University Grazing School for Beginners will be offered at three locations across Michigan Sept. 24-25.*

By Jerry Lindquist, Michigan State University Extension

Michigan State University Extension will offer a beginning grazing school for farmers and landowners grazing dairy, equine and livestock animals at three locations in Michigan simultaneously using high-speed video conferencing in September.

The two-day school will be offered at the MSU Kellogg Biological Station Dairy Learning Center in Hickory Corners, Mich., the MSU Lake City AgBioResearch Center in Lake City, Mich., and the MSU Upper Peninsula Research and Extension Center in the Central Upper Peninsula of Michigan near Chatham. Each location will have Michigan State University grazing specialists and Extension educators onsite who will be presenters and will be conducting in-field demonstrations. Participants only need to attend the closest location to participate in the full school and gain the expertise of the numerous speakers from across the state.

The school will be held on Sept. 24 and 25. The goal of the school is to blend classroom instruction with in-field education and the latest animal and forage research to give participants an in-depth introduction to grazing management.

Early registration is \$125 per person; a second participant from the same farm may also attend for \$80. The early registration deadline is Sept. 18, 2015. The registrations received after that date will be \$150 per person and walk-ins the day of the event will be charged \$175 per person. Fee includes workshop notebooks, resource materials, all meals and refreshments.

Questions may be directed to either Misty Klotz, KBS Pasture Dairy Outreach Coordinator at [klotzmis@msu.edu](mailto:klotzmis@msu.edu) or 269- 671-2263; Jerry Lindquist, MSU Extension Grazing Educator at [lindquis@msu.edu](mailto:lindquis@msu.edu) or 231-832-6139, or Frank Wardynski, MSU Extension Beef & Dairy Educator at [wardynsk@anr.msu.edu](mailto:wardynsk@anr.msu.edu) or 906-884-4386.

### ***Major topics will include:***

- 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



## Upper Peninsula team awarded funding to explore feasibility of meat processing in region

A collaborative team in the U.P. has been awarded a grant through the Michigan Department of Agriculture and Rural Development to address the lack of USDA meat processing in the Upper Peninsula and determine the number and scale of facilities that could be supported. The U.P. Food Exchange has identified many restaurants and institutions that have expressed an interest in purchasing more local meat and farmers that have expressed an interest in supplying this market if they had

better access to processing. There is only one USDA meat processing facility in the U.P. and none that process poultry. Limited access to USDA processing makes it difficult for U.P. farmers to supply institutional purchasers in the U.P. and beyond with meat. This issue has been identified by the U.P. Food Exchange, several regional Farm Bureau chapters, and Marquette County's Local Food Supply Plan as an issue that needs further investigation. The feasibility study will focus on the entire U.P. with special interest in KI Sawyer Air Force Base as a suitable location for such a facility and look at other opportunities or locations for a facility as well.

## Raising dairy steers for beef requires responsible management

*Dairy Steers have the genetic potential to produce well-marbled, lean beef. Producers should ensure a high quality product with responsible management practices.*

By Frank Wardynski, Michigan State University Extension

Beef from dairy steers contributes a significant portion to the high quality grade beef available on the market. Dairy steers have genetic capabilities to produce high quality beef that is well-marbled with minimal backfat. Dairy steers may be bought and sold several times from birth to the final feeding stages. Each producer has the opportunity to positively or negatively impact quality such as creating injection site blemishes, slaughtering with volatile drug residue and a long list of other defects. Consequently, each owner must accept the responsibility of raising dairy steers with an emphasis placed on producing high quality beef without defects.

All farmers producing food for consumers should have a commitment to quality of the final product they produce and understand the impact of their management on that final product. Utilizing the Beef Quality Assurance (BQA) program is an ideal mechanism to develop management techniques to ensure the production of high quality beef. Beef producers across the country have embraced BQA and implemented proper management techniques to improve profitability. The BQA program covers all aspects of management including animal health.

A valid Veterinarian-Client-Patient-Relationship (VCPR) should be a vital part of any animal health management regime. Several factors are critical in the implementation of a VCPR:

- Veterinarian assumes responsibility of clinical judgments of animal treatments and client agrees to follow veterinarians' instructions;
- Veterinarian has sufficient knowledge of that farm's animals;

- Veterinarian is available for follow-up evaluation;
- Veterinarian provides oversight of treatment, compliance, and outcome;
- Patient records are maintained.

Veterinarians should be used to develop preventive health care protocols rather than only for emergency situations. Preventive health care practices are critical. Sanitation and ventilation, along with dry bedding, including straw during cold weather, are important factors to ensuring that calves have a comfortable environment that ensures fresh air without drafts.

An appropriate vaccination program is also important and should be designed with the assistance of a veterinarian. Care should be taken to minimize stress during castration and dehorning and steer calves should be implanted with a growth promotion to increase weight gain and improve feed efficiency. Educators and specialists from Michigan State University Extension recommend the use of these management practices to improve production efficiency.

The Food and Drug Administration will be implementing the Veterinary Feed Directive (VFD) beginning October 1, 2015. Producers wanting to purchase feeds containing antibiotics deemed medically important in human medicine will need to be actively participating in a VCPR. Antibiotics will only be allowed in livestock feed through a VFD order from a veterinarian. Examples of feeds that will need a VFD order include medicated milk replacer, antibiotic water medications and supplemental feeds that contain antimicrobials such as medicated protein pellets.

Producing high quality food without quality defects should be an objective for all farmers. Concerns regarding antibiotic use in livestock production is a hot issue. For more information regarding responsible beef production practices contact Frank Wardynski, Ruminant Extension educator with Michigan State University at wardynsk@anr.msu.edu or 906-884-4386.

## Hay fertilizer and lime demonstration in Chippewa County

*A simple, on-farm demonstration provides a look at the potential for improving yields on hay fields usually managed with low-fertilizer or no-fertilizer inputs.*

By Jim Isleib, Michigan State University Extension

The purpose of this Michigan State University Extension on-farm demonstration, developed with input from local farmers, was to show the results of moderate lime application of 1 ton per acre, surface applied, and compare fertilizer rates including no fertilizer, fertilizer at “maintenance” or “nutrient removal” rate and fertilizer at “build-up” rate based on an MSU soil test on a typical Chippewa County hay field.

Six quarter acre strips were established in a typical timothy/birdsfoot trefoil hay field. This field has not received fertilizer or lime in a number of years. Phosphorus and potassium application for the nutrient removal rate at a yield goal of 2 tons per acre was calculated using information from “Nutrient Recommendations for Field Crops in Michigan,” MSU Extension publication E2904. The soil test showed the following: Phosphorus: 6 parts per million (ppm), Potassium: 105 ppm, pH: 5.9 ppm, and Lime index: 66.0 ppm.

For clover/grass hay, 13 pounds P<sub>2</sub>O<sub>5</sub> and 39 pounds K<sub>2</sub>O is recommended for nutrient removal per ton of hay removed at 18 percent moisture. The fertilizer applied for the ‘nutrient removal rate’ was 270 pounds per acre of 17-9-28. The fertilizer rate of 460 pounds per acre of 10-22-24 for the build-up treatment was calculated for a yield goal of 2 tons per acre using an MSU soil test report for the field. Fifty pounds of actual nitrogen per acre was included with both the nutrient removal and build-up fertilizer treatments based on an early visual evaluation of the legume stand, estimated at 15 percent at the time of soil sample collection. Lime and fertilizer were applied May 26 and 28. The July 24, 2015, MSU Extension Forage Field Day held in Rudyard, Michigan, included this demonstration as a tour stop.



Yield check on Rudyard hay field. (J. Isleib)

On Aug. 13, 2015, yield checks were taken from windrowed hay in each treatment strip. Two 5-foot sections of windrow were weighed from within each treatment and averaged. At each sampling site, the width of four windrows was measured to determine average windrow width. A hay sample for moisture content from each treatment was collected. All six moisture samples were dried by microwave and the moisture contents averaged to provide an estimate of 20.4 percent moisture for the entire demonstration. This simple yield check was not replicated, but provided a relative comparison of hay performance under the different treatments.

Yield check results: Treatment 1: No fertilizer, no lime – 1.81 tons dry matter (DM) per acre; Treatment 2: No fertilizer, 1 ton lime – 1.33 tons DM per acre; Treatment 3: Crop removal fertilizer, no lime – 2.60 tons DM per acre; Treatment 4: Crop removal fertilizer plus 1 ton lime – 3.00 tons DM per acre; Treatment 5: Build-up fertilizer, no lime – 2.64 tons DM per acre; and Treatment 6: Build-up fertilizer plus 1 ton lime – 3.48 tons DM per acre

By grouping fertilizer and lime treatments and comparing the average hay yields, the apparent impacts can be brought into focus:

- No fertilizer: 1.57 tons DM per acre
- Crop removal fertilizer rate: 2.80 tons DM per acre
- Build up fertilizer rate: 3.06 tons DM per acre

Using a ballpark figure for fertilizer cost of \$525 per ton, a very simple economic estimate can be made based on a single fertilizer/lime application and same-year har-

Yield results of lime and fertilizer treatments		
Lime treatment	No fertilizer	Fertilizer added
No Lime	1.81 DM/acre	2.62 DM/acre
Lime Added	1.33 DM/acre	3.24 DM/acre

vest. Because the demonstration was not replicated and only one year of data is available, the economic estimate should be considered as a “snapshot” for this year and location only. It is anticipated the 2015 fertilizer/lime application will have additional yield impact in 2016, especially the build-up rate. Build up rates are expected to reach the critical level in three to four years, so they are not expected to break even in the first year.

**Crop removal fertilizer** (272 pounds per acre 16.6-9.4-28.5) = \$71.40 for fertilizer per acre + \$7.50 spreading cost = total application cost of \$78.90 per acre. This application resulted in an increased yield of 1.23 tons dry matter per acre above the unfertilized treatment. The hay value must equal \$64.15 (\$78.90/1.23) per ton of dry

Continued on page 6

matter to break even in the first year.

**Build-up fertilizer** (460 pounds per acre 10.0-22.3-23.7) = \$120.75 for fertilizer per acre + \$7.50 spreading cost = total application cost of \$128.25 per acre. This application resulted in an increased yield of 1.49 tons dry matter per acre above the unfertilized treatment. The hay value must equal \$86.07 ( $\$128.25/1.49$ ) per ton of dry matter to break even in the first year.

### Summary

- On average, adding fertilizer resulted in a yield increase of 1.36 tons of dry matter per acre compared to adding no fertilizer.
- The full effects of lime as a surface application of 1 ton dolomitic lime per acre may not be discernable eight weeks after application.
- A very basic economic estimate indicates that the nutrient removal fertilizer application was economical when hay value exceeds \$64.15 per ton of dry matter, and the build-up fertilizer application was economical when hay value exceeds \$86.07 per ton of dry matter based on a single application/same-year harvest calculation and not considering potential yield improvement on second-year harvest.
- It is reasonable to expect the build-up treatment will have a positive impact on hay yield in the following year.
- The economic estimate offered does not include the positive impact of harvesting more hay from fewer acres. Additional cost savings could include less land rental, less fuel and expense of harvesting extra acres.
- The demonstration provided a good focal point for the July 24, 2015, MSU Extension Forage Field Day with highly visible difference in color and stand density between treatments. The follow-up yield check reinforces this impression.

See the first article in this two-part series, "Three farms at forage field day give insight into annual forages and hay fertilization rates."

Contact me at [isleibj@anr.msu.edu](mailto:isleibj@anr.msu.edu) or 906-387-2530 for more information.

### Utilizing EPD's to select breeding bulls for grass finished beef

*Breed EPD's can be used to select bulls for the grass finished beef operation. As should be the case with any herd, multiple trait selection is critical.*

By Frank Wardynski, Michigan State University Extension

[wardynsk@anr.msu.edu](mailto:wardynsk@anr.msu.edu) or 906-884-4386.

Expected Progeny Differences (EPD's) are the best selection tool available to beef cow-calf producers for bull selection. The data is derived from performance information collected on the given individual, its ancestors, collateral relatives and progeny. Values given to animals in the form of EPD's predict the difference between individuals based on statistical analysis utilizing all information that is extremely expansive and inclusive.

Some within the industry have been critical of using EDP's to select bulls for grass finishing production systems. The argument lies within the fact that the data is derived within a production system that utilizes high concentrate rations during the finishing phase. Additionally, opponents of using EPD's argue that larger framed, less biologically efficient cows are offered supplements to mask their inefficiencies. There is little evidence to support arguments that biological efficiency changes based on the makeup of the ration.

As with any beef cattle operation, bulls should be selected based on available resources. Producers with minimal labor available during calving season can emphasize calving ease in the selection criteria. Producers that retain ownership and sell finished cattle on a carcass grid basis can place increased importance on various carcass traits.

Growth and carcass traits are important considerations in selecting cattle for a grass finished beef system. Cattle must have adequate growth, but care needs to be taken to select for growth while paying attention to not the select for excessive frame size and mature cow weight. A general rule of thumb is that for cattle to grade choice they will weigh 110% of their dam's weight. Observation of many Angus and Red Angus bulls produced to target the grass finished beef market are near breed average for growth traits.

The final market is critical in determining carcass EPD trait selection. Some markets pay a premium based on the degree of marbling while others pay the same price regardless of quality grade. One carcass EPD value uniquely selected by producers of grass finished beef is 12th rib backfat. Producers of grass finished beef frequently select bulls that are greater than breed average for the amount of backfat. This is not because of premiums on cattle with greater levels of backfat but rather selection for animals with a propensity to deposit fat. Animals in the grass finished beef system consume a ration lower in caloric density, so excessive backfat is almost never a problem.

## Save the Date!

### Michigan Farm to School Regional Trainings

With summer fading away and the new school year right around the corner, it's time to gear up your farm to school programming! CRFS is hosting its annual round of farm to school trainings throughout the state this September and October. Whether you're brand new to farm to school or a seasoned expert, working in early childhood or K-12, this will be a great experience for those working in to increase your knowledge of farm to school activities, meet and collaborate with colleagues developing farm to school efforts throughout the region, and provide you with new skills for beginning or expanding your farm to school programs.

Thursday, October 1, 9:30 am – 3:30 pm  
MSU Upper Extension and Research Center  
E3774 University Dr.  
Chatham, MI 49816

Special Guests: Michelle Walk, MSU Extension Community Food Systems Educator; Jeannette Cushway, New FoodCorps Service Member; Erin Caudell, Michigan Farmers Market Association

#### Agenda:

- Overview of Farm to School and Farm to Early Childhood
- Purchasing and Procurement of Local Foods

- Building Successful Farm to School Teams
- Working with Local Farmers / Hoopouses for Health
- Seasonal Menu Planning
- Tracking Purchases and Measuring Progress

Registration is required

These trainings are free, however we ask you to register at [http://msucarrs.az1.qualtrics.com/SE/?SID=SV\\_diD7k1cRWPa4gkt](http://msucarrs.az1.qualtrics.com/SE/?SID=SV_diD7k1cRWPa4gkt). You are welcome to bring more than one person from your farm to school programs to these trainings. In fact, we encourage it! Farm to school teams are an essential part of successful programs, but we ask that each attendee register individually.

For more questions email Abby Harper, CRFS Farm to School Specialist, at [harperab@msu.edu](mailto:harperab@msu.edu)



### U.P. Ag Classifieds

*Personal ads will be removed monthly. We reserve the right to edit your ad. Free ads must be no more than 110 spaces. Please respect the space requirements. You can always purchase an ad if more space is required. Please call or email your ad no later than the 15th of each month. Call or email Michelle at (906) 439-5114 or [colema98@msu.edu](mailto:colema98@msu.edu).*

Hay for sale, 1st Cutting 4x6 round bales  
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### Market Report

Choice Steers	\$130-\$150 per 100 lbs.
Holstein Steers	\$115-\$136 per 100 lbs.
Hogs	\$65-\$72 per 100 lbs.
Lambs	\$150-\$160 per 100 lbs.
Cull cows	\$80-\$105 per 100 lbs.
Calves	\$250-\$500 per 100 lbs.
Goats	\$125-\$150 per 100 lbs.

#### Breeding and Feeder Animals

Grade Holstein cows \$1700 - \$2000/head  
Grade Holstein bred heifers \$2000 - \$2500/head

#### Feed Prices across the U.P.

	Avg. \$/cwt	Avg. \$/ton	Price Range
Corn	\$9.92	\$198.40	\$180-210
Soymeal	\$22.53	\$450.60	\$430-490
Oats	\$12.67	\$253.40	\$160-320
Barley	\$10.33	\$206.60	\$150-280
Average price/100 wt. for 1 ton lots			

# Upper Peninsula Research and Extension Center

## UPREC awarded grant to develop a malting barley quality analysis laboratory

The U.P. Research and Extension Center has been engaged in malting barley research to support the craft beer industry for the past three years, and as acreage grows in the state, so does the demand for access to appropriate quality analysis infrastructure.

UPREC has been awarded a grant through the Michigan Department of Agriculture and Rural Development to develop a malting barley quality analysis laboratory at the station. This fee-for-service lab will test malting barley samples from research projects and samples submitted by farmers, maltsters and brewers from Michigan and throughout the U.S. Such a lab, testing according to the American Malting Barley Association standards, does not currently exist. A lab technician hired to process samples will receive training at North Dakota State University this fall so that they fully understand how to operate and maintain the equipment procured through the grant award. Staff at the UPREC hope to have the lab operational by early-2016.

Feel free to contact Ashley McFarland at (906) 439-5176 with any questions and stay tuned to this newsletter for notification on when the lab is open for business.



MSU Upper Peninsula Research and Extension Center

<http://agbioresearch.msu.edu/centers/uprc>



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## Clare County Livestock Auction, LLC

2015 Fall Feeder Cattle Sales

Clare, Michigan

David Clark, Owner/Auctioneer

Contact # 810-441-6191—Sale Barn # 989-386-9256

### October 1st, November 5th, and December 3rd

All sales on Thursday and start at 1:00 pm

All cattle weighed at sale time

Accepting cattle on Wednesday, all day!

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for more information!

“Sale every Monday at 3:00 pm”

## Extension Workshop Series

All workshops are held on-site at the North Farm and start at 2 pm EST. Contact Collin Thompson at (906)439-5059 or [thom1264@anr.msu.edu](mailto:thom1264@anr.msu.edu) with questions.

Registration can be accessed at:

[www.events.anr.msu.edu/NorthFarmWorkshops15/](http://www.events.anr.msu.edu/NorthFarmWorkshops15/)

### Cold Storage – September 26

Cold storage is essential for extended shelf life in vegetable crops. Come learn about different options for cold storage and the benefits of each. We will discuss root cellaring, refrigeration, and cold chain considerations during transport. (2 hours)

### Soil Health and Cover Crop Rotations – October 17

Soil health is the backbone of any farm and integrating cover cropping systems aids in the development of healthy soil systems. Join The North Farm staff for a discussion regarding planning cover crop schedules, analyzing soil health, and management strategies for organic systems. (2 hours)

### Scheduling and Production Planning – November 7

One of the most exciting and challenging parts of farming is production planning. This workshop will focus on planning your crop schedule to provide consistent supply to meet your market or family's demands. We will discuss variety selection, succession planting, crop rotations, and cover cropping. (3 hours)

[www.msunorthfarm.org](http://www.msunorthfarm.org)



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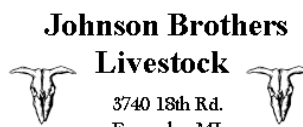
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#### **Calendar of Events**

September 12	Forage Field Day—Hancock County, McParlan Farm on St. Johns Creek Rd in Hancock (10 am– 12 noon)
September 16-18	Grassfed Exchange Conference, Comfort Inn and Suites, Mt. Pleasant, MI
September 24-25	Grazing School for Beginners, Upper Peninsula Research and Extension Center, Chatham
September 25	Dairy Margin Protection Program Meetings—Webinar Host Sites MSU Extension Menominee County Office, S. 904 Highway 41, Stephenson, MI 49887 <i>and</i> USDA - FSA office, 2847 Ashmun St., Sault Ste. Marie, MI 49783 (1-3 pm)
September 26	North Farm Extension Workshop Series—Cold Storage, hosted by the North Farm at the Upper Peninsula Research and Extension Center, Chatham (2-4 pm)
October 17	North Farm Extension Workshop Series—Soil Health and Cover Crop Rotations, hosted by the North Farm at the Upper Peninsula Research and Extension Center, Chatham (2-4 pm)
October 1	Michigan Farm to School Training at the Upper Peninsula Research and Extension Center, Chatham (9:30 am 3:30 pm)
October 23	Michigan Apple Crunch Day
October 24	National Food Day