Dear Great Lakes Grazier,

As we roll along in 2016 many folks are worried the ag economy is not heading in a good direction. Milk prices have drastically fallen (unless you produce organic milk), beef prices are lower, and the strength of the U.S. dollar is causing all ag exports to be lower than the previous years. But still there are things to be optimistic about.

Feeder calf prices in 2015 were down from the record setting $2.50/lb. prices of 2014. Some grumbled last fall “I only averaged a $1.90”. But still the $1.90 - $2.05 range for fall calves was the second highest price ever recorded in U.S. history according to Dr. Harlan Hughes, North Dakota State University Beef Specialist emeritus as he recently said “there is nothing wrong with earning the second-highest net returns on record on your farm”. Granted the costs of operation are up as MSU Extension Beef Team estimates reveal that annual beef cow costs over the last few years have been $900-$1,100 per cow when all costs are included (up 30% over the last three years). But at $2/lb for calves and $0.90/lb for cull cows most beef operations were profitable in 2015. And more good news is that many input costs will be lower in 2016. Fuel prices are down 50 – 60% in the last three months, fertilizer prices are down 40% from last year and the price of corn to feed cattle is down 12% from last year and 31% from three years ago. Even hay prices are lower and especially the price of lower quality beef cow hay as its supply grew so big that the price has fallen by 30% from a year ago. So even if beef prices stabilize at this current price level, a lower cost of production should keep beef cow/calf farms profitable in 2016.

Also the price of farmland in the U.S. corn belt, including Michigan, may also be heading lower according to Federal Reserve Bank of Chicago. In their latest report [https://www.chicagofed.org/publications/agletter/index Michigan “good” farmland declined 2% in the last year. So the cost of land, either to purchase or rent, may be lower in 2016 as well.

MSU Extension has many upcoming educational programs to help your farm improve in 2016. Read more about those opportunities in this newsletter.

Jerry Lindquist

MSU Extension Grazing Educator
**Staff Change at the Osceola MSU Extension Office**

In the past this newsletter was sent to you by our office secretary Tonia Hartline and maybe you had the opportunity to talk to her pleasant voice on the phone. After almost ten years of serving our office Tonia has taken a promotion in the Osceola County system and now is the Deputy (Assistant) Treasurer for the County. We thank Tonia for her great service and wish her well!

We are happy to announce we have a new secretary in place. Her name is Carrolin Ruppert and we feel confident you will find her a joy to with work with as well. Carrolin brings a great background of working with and understanding rural families from her previous work and especially her volunteer efforts of serving as a 4-H Leader for almost 20 years. Watch for future newsletters that I produce being emailed from Carrolin’s email address. If you filter out emails from un-known sources, do not block emails from Carrolin in the future. Her email address is: ruppert@anr.msu.edu

Jerry Lindquist

**No Pesticide Certification Exam to Be Offered In Cadillac Area in 2016**

Because of staff vacancies in the Michigan Department of Agriculture and Rural Development system (MDARD) Pesticide Certification Exams are not being offered locally in the Cadillac, MI. area this winter. The exams still can be taken at MDARD Regional offices in Grand Rapids or Traverse City by scheduling at [www.michigan.gov/pestexam](http://www.michigan.gov/pestexam) The exam is $50 for private applicators (farmers) and $75 for commercial applicators. Study books are still available at MSU Extension Offices. Anyone wishing to purchase restricted use pesticides must passed the restricted use pesticide exam every three years, or pass it once and then receive educational credits to advance their knowledge over the course of the next three years. We hope the offering of a local exam will return in future years but for this winter, if you have been notified by MDARD that your certification must be renewed, plan to take it at one of the Regional MDARD Offices or in Lansing.
Beef Cow-Calf Producer Update

Date: February 17, 2016  
Time: 6:30-9 p.m.  
Location: Ionia Co. MSU Extension Office, 50 E. Sprague Road, Ionia, MI. 49338  
Contact: Kevin Gould, 616-527-5357

Meeting Agenda

Beef-Cow-Calf Enterprise Budgets - Comparing your costs of production to regional averages can make you more profitable.  
*Kevin Gould, MSU Extension Beef Educator*

New Trends in Cover Crops Grazing - Grazing cover crops can improve soils and profitability.  
*Jerry Lindquist, MSU Extension Grazing Educator*

How are you Selecting Your Most Value-A-Bull Inputs?  
*Dr. Dan Buskirk, MSU Animal Science Department*

Beef Check-Off Opportunity for Michigan  
*George Quackenbush, Michigan Cattlemen’s Association*

Cost: $20 per farm.

Register at [http://events.anr.msu.edu/event.cfm?folder=BeefProducerUpdate](http://events.anr.msu.edu/event.cfm?folder=BeefProducerUpdate)

Registration at the door will be $25.
Malting barley in Michigan. Malting barley and hop production will be two of the topic areas covered at the Highland Ag Conference. Photo by Erin Lizotte, MSU Extension

**Michigan State University Extension**, in partnership with the **Missaukee, Osceola** and **Wexford County Conservation Districts**, is pleased to announce the first Highland Ag and Natural Resources Conference on March 19, 2016, from 9:15 a.m.-3 p.m. at the **Career Technical Center** in Cadillac, Michigan. The conference is a great opportunity for existing, new or next generation farmers to learn what’s next for Michigan agriculture. A variety of one-hour, concurrent educational sessions will be offered, with topics on soil health, novel crops, getting started with livestock, timber sales, invasive plants and much more. There is a special section of the conference focused just on youth and the career opportunities for young people in agriculture and natural resources. Ag-related vendors and agencies will also be on hand. See complete agenda on the next page.

The pre conference registration fee will be $20 for adults and a special fee of just $10 for students. The fee includes lunch, refreshments and handout materials. You may register on-line at [http://events.anr.msu.edu/event.cfm?folder=Highandconf16](http://events.anr.msu.edu/event.cfm?folder=Highandconf16) or mail in the registration form below. For information on sponsorship or vendor opportunities, please contact Tasha Lapinski at tasha.lapinski@macd.org or 231-832-2950. For general questions on the conference contact Jerry Lindquist at lindquis@anr.msu.edu or 231-832-6139.
## Agenda

**8:30-9:15 Main Hall**  
REGISTRATION, REFRESHMENTS and TRADE SHOW

**9:15-9:30 Main Hall**  
WELCOME

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| 9:30-10:25 |       | Post-secondary Educational Opportunities in Ag & Natural Resources  
Brian Matchett, Michigan State University | Introduction to Soil Health  
Justin Morris, Natural Resources Conservation Service | Growing Malting Barley and Hops  
Paul Gross and Erin Lizotte, Michigan State University Extension | Hay and Pasture Production Basics  
Jerry Lindquist, Michigan State University Extension | Invasive Species Threats to Farmland  
Vicki Sawicki, Soil Conservation District |
| 10:30-11:25 | Leadership and Career Opportunities through FFA  
Mark Johnson, Wex-Miss Career Tech Center and FFA Students | Tillage and Soil Health  
Jim Marshall, Natural Resources Conservation Service | Marketing Options for Farms  
Kendra Wills, Michigan State University Extension | Consumer Misconceptions about the Health Aspects of Beef and Milk Products  
Cindy Hulings, MI Beef Industry Comm, and Kathy Lee, Michigan State University Extension | Improving Your Property for Pollinators  
Ben Phillips, Michigan State University Extension |

**11:30-1:00**  
LUNCH, TRADE SHOW and TOUR

| Time   | Agriculture and Natural Resources Careers  
Betty Jo Kro nicki, Michigan State University | Choosing the Right Cover Crop  
Dean Baas, Michigan State University Extension | Vegetables for Northern Michigan  
Ben Phillips, Michigan State University Extension | Dairy Manure Handling & Utilization Trends  
Ryan Winnebrenner, Sikkema’s Equipment & Dairy Farmer | Professional Forestry Assistance  
Steve Kalisz, Cons. Forester; Ben James, Pac. Corp. of America; Rick Lucas, Conserv. District Wildlife Cooperatives - Anna Mitterling, MI United Conservation Clubs |
|        |       |            |       |           |                   |
| 1:00-1:55 |       |            |       |           |                   |
| 2:00-2:55 | The Basics of Being Your Own Boss  
Sara Keinath and Betty Jo Kro nicki, Michigan State University Extension | Cover Crop Seeding and Establishment – What We Have Learned  
Farm Producer Panel facilitated | High Yield Wheat Production  
Dennis Pennington, Michigan State University Extension | What It Takes to Start Raising Livestock  
Cora Watts, Falmouth Cooperative |                   |
The Highland Ag and Natural Resources Conference

Saturday, March 19, 2016

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**Payment**—I would like to register for the Highland Agriculture and Natural Resource Conference. Please make checks payable to MSU Mail to: MSU Extension, 301 W. Upton Street, Reed City, MI 49677

- [ ] Adult ($20.00)
- [ ] High School or College Student ($10.00)
Mr. Forage Is Coming to the Great Lakes Forage and Grazing Conference

This year’s 2016 Great Lakes Forage and Grazing Conference is loaded with cutting edge research and information from progressive farmers, forage researchers and educators across the Mid-West and best of all it is open to everyone right at the Michigan State University Campus.

The 2016 Great Lakes Forage and Grazing Conference will take place on Thursday, March 10 at the Michigan State University Kellogg Center on the MSU Campus. The educational day long event is jam-packed with information on producing hay, silage and pasture for dairy, livestock, equine and other farms in the Great Lakes region. Over fourteen speakers will provide the latest research and progressive farming practices on everything that is forage related.

This year’s keynote speaker for the conference will be Dr. Dan Undersander, the University of Wisconsin Forage Specialist. Dr. Undersander is one of the leading forage researchers in the United States. For over 35 years his research on alfalfa and grass forage production has been highly valued by the dairy, livestock, and cash crop hay farms. He will speak in two sessions during the conference on the future of forage genetics and on forage machinery management and innovations.

The conference will feature many other speakers including MSU Forage Specialist Dr. Kim Cassida’s new research on alfalfa/grass establishment, Roundup Ready alfalfa, and the use of cover crops for haylage.

New testing results on the availability of sulfur in alfalfa across Michigan will be offered by MSU Extension Educator Phil Kaatz. For the grazing community MSU grass-fed beef research updates will be provided by Dr. Jason Rowntree of the MSU Animal Science Department and by a group of Michigan grass-fed beef producers. Dr. Richard Ehrhardt, MSU Small Ruminant Specialist will offer his findings on optimizing forages for sheep and goats. In addition the topics of baleage production and alfalfa fertilization will also be addressed. A tradeshow of businesses with products and equipment for the forage industry will also be available during the day of the conference.

To learn more about the conference and to register go to the hyperlink at http://events.anr.msu.edu/GLFGC2016/ Those without Internet access may contact the Lapeer County MSU Extension Office at 810-667-0341 or MSU Extension Grazing Educator Jerry Lindquist at lindquis@anr.msu.edu or 231-832-6139.

Anyone needing special accommodations to attend the conference should notify the sponsors at least five days before the event. MSU Extension programs are open to all people.
2016 Michigan Bull Breeding Soundness Exam Clinics

The MSU Beef Extension Team will once again be organizing regional Bull Breeding Soundness Exam Clinics. Last year, the program tested over 300 bulls for 110 different operations. By identifying these potential male fertility problems, producers were able to reduce the risk of a less than optimum breeding season. The MSUE Beef Team encourages you to have BSE conducted on your breeding bulls every year. Contact your veterinarian or take advantage of the following Breeding Soundness Exam Clinics organized by MSUE. Cost is $60 per bull when done at one of the MSUE clinics. To schedule an appointment at one of these BSE clinics, please call the appropriate contact person as soon as possible. All Clinics start at 9:00 AM. In addition, the MSU College of Veterinary Medicine regularly schedules in house appointments for BSE's. To schedule an appointment contact the MSU CVM Large Animal Clinic at 517-353-9710.

Location: Gary Voogt Farm, 2831 Hayes St, Marne MI  Date: Friday, March 11th, 2016  Contact: Kevin Gould @ 616-527-5357 or Gary Voogt @ 616-677-3680

Location: Matt Miller Farm, 2685 E. Bellvue Rd, Charlotte MI  Date: Saturday, March 26th, 2016  Contact: Beadle Lake Veterinary Clinic @ 269-441-9233

Location: Breault Beef Farm, 868 Hoffman Road, Gladwin MI  Date: Friday, April 8th, 2016  Contact: Kable Thurlow @ 989-426-7741

Location: MSU Lake City Experiment Station, 5401 W. Jennings Road, Lake City MI  Date: Friday, April 15th, 2016  Contact: Kable Thurlow @ 989-426-7741 or Doug Carmichael @ 231-839-4608

Location: Wernette Cattle Company, 9144 50TH AVE, Remus MI  Date: Saturday, April 16th, 2016  Contact: Kevin Gould @ 616-527-5357 or Dr. Kevin Todd 231-832-3680

Location: Upper Peninsula of Michigan  Date: April 25-29, 2016  Contact: Frank Wardynski @ 906-884-4386

Location: Chuck Preston Farm, 4780 County Line Road, Prescott MI  Date: Saturday, April 30th  Contact: Phil Durst @ 989-387-5346 or Chuck Preston @ 989-873-4164
Michigan Grass Fed Beef Production Update

Information on grass fed beef production is now available right at MSU, in fact MSU has become known as one of the research leaders in the grass finished beef industry.

Posted on February 8, 2016 by Kable Thurlow, and Jerry Lindquist, Michigan State University Extension

Grass fed beef production in Michigan is a growing industry. For many years small producers have been selling and marketing grass fed beef but there were very few places for them to obtain research based information on the practice. Thanks to Jason Rowntree and his Michigan State University (MSU) team of Doug Carmichael, Jerry Lindquist, and Kable Thurlow information on grass fed beef production is now available right at MSU, in fact MSU has become known as one of the research leaders in the grass finished beef industry.

The MSU team has conducted much of their research with the University cattle herds at the Lake City and Chatham Research Farms. They have analyzed the many aspects of grass feeding and finishing beef without grains including: production systems, cattle nutrition, cattle genetics, grazing methods, carcass and meat qualities, economics, and consumer preferences to name just a few. The team has also worked on a sustainable farm grant (North Central SARE) with 17 farms in northwest Michigan to help these farms establish a system for grass fed beef production.

Through four years of training these farms have evolved to the point where seven are now producing grass-fed beef. These farms in conjunction with the MSU Farms have now produced over 250 head of finished cattle that were supplied to the grass-fed market. Carcass quality and yield measurements have been taken on the majority of the cattle produced. This data is still being compiled as the fall harvested cattle of 2015 are just being entered, but in general the average carcass grade of the cattle has been USDA High Select and the average carcass yield at 19 – 21 months of age has been 53 -54 percent. Price premiums of 25 percent above the general cattle market prices have been received for the hanging carcasses.

Informal and formal interviews with buyers and consumers of the product have been conducted. From the butchers, to the food wholesale buyers, to the chefs and the consumers the reviews have been good to excellent. For example, one butcher that received four heifers from one of our cooperative farms said, “Before I butchered these cattle I had a bad opinion of the quality of grass-fed beef. You guys at MSU have shown me there can be quality beef produced in a grass-fed way.” A chef in Traverse City wrote “..... the grass-fed beef coming from the MSU project is some of the best I have had in close to 30 years in the business ... the taste, texture and flavor of your work is something that I hope continues on for many years to come”. One major food wholesaler in Northwest Michigan has increased their annual purchases of grassfed beef carcasses from the MSU project from 40 carcasses per year to 70. They say this is because their retail demand for the product continues to grow.
To showcase the growth and significance of grass-fed beef production in the U.S., and to highlight the grass-fed beef research conducted by MSU, the grass-fed beef team orchestrated the 2015 Grass-fed Exchange Conference that was held in Mt. Pleasant over three days in September. Over 275 attendees from 23 states and Canada attended the event. Michigan attendees made up 57 of this total. A tour of the Lake City Farm showcased the MSU research on grass-fed cattle, pasture grazing management, and utilizing cover crops for grass finishing.

To further disseminate the research results on this project to the people of Michigan as they are completed, the MSU Team will offer two educational sessions in Michigan this winter. The first session hosted by Michigan State University Extension will be at the Great Lake Forage & Grazing Conference on March 10 at the MSU Kellogg Center. For more information go to the event website. The second will be on March 17, at 7 p.m. at the Harrison Campus of Mid Michigan Community College, 1375 S. Clare Ave, Harrison, MI 48625, held in conjunction with the Mid Michigan Cattle Network meeting. For more information on the March 17 meeting, contact Kable Thurlow at (989)426-7741 or thurlowk@msu.edu.

This article was published by Michigan State University Extension. For more information, visit http://www.msue.msu.edu. To have a digest of information delivered straight to your email inbox, visit http://bit.ly/MSUENews. To contact an expert in your area, visit http://expert.msue.msu.edu, or call 888-MSUE4MI (888-678-3464).
2016 Winter Agricultural Programs of Interest

Optimizing Dairy Farm Profits  February 25, 10:00 A.M. – 3:00 P.M., Falmouth Community Center, Falmouth, MI. Contact Kathy Lee at 231-839-5850 for more details.

Soil & Seed Meeting  March 2, 2016  Morgan Composting will host a luncheon meeting in Sears, MI. to address crop seed genetics, liquid fertilizers and improving soils with cover crops. Jerry Lindquist, MSU Extension will address cover crops for soil improvement and grazing forage. Contact Morgans at 231-734-2451.

Milk and Grain Marketing Series  March 8, 10:00 A.M. – 12:00, Isabella Co. MSU Extension Meeting Room, Mt. Pleasant, MI. Contact Paul Gross at 989-772-0911 for details.

Great Lakes Forage & Grazing Conference  March 10, 9:30 A.M. – 4:00 P.M., Kellogg Center, East Lansing, MI. latest info on hay/haylage production and grazing practices, go to http://fis.msue.msu.edu/ for complete details. Carpooling is possible, contact Jerry Lindquist at 231-832-6139.

Great Lakes Beef Connection Bull Sale  March 12, 1:00 P.M.  Clare, MI. Over 70 beef bulls for sale. Go to http://www.jcsimmentals.com/ for details. Open house is March 5.

Mid Michigan Cattlemen’s Network Grass-fed Beef Update  March 17, 7:00 - 9:00 P.M., Mid Michigan Community College, Harrison, MI. Dr. Jason Rowntree will highlight over four years of research findings from MSU on Grass-fed beef production. For more information contact Kable Thurlow at 989-426-7741 thurlowk@msu.edu or Jerry Lindquist at 231-832-6139 lindquis@msu.edu.

Highland Ag & Natural Resources Conference  March 19, 9:15 A.M. – 4:00 P.M., Wexford Missaukee Career Technical Center, Cadillac, MI. $20/person tradeshow and 20 concurrent sessions on agriculture and natural resources topics. To learn more go to http://events.anr.msu.edu/Highandconf16/ or contact Jerry Lindquist at 231-832-6139.

MCA/MSU Bull Sale  March 19, 12:30 PM, Crystal, MI. Over 55 performance tested beef bulls for sale. Go to http://www.mibulls.com/ for complete info. On-line bidding from remote locations is available. Open house is March 5 to view bulls.


Pesticide Certification Exam  exams this winter are not being offered locally; they can be taken at MDARD Regional offices in Grand Rapids or Traverse City by scheduling at www.michigan.gov/pestexam, exam is $50 for private applicators and $75 for commercial applicators. Study books are still available at MSU Extension Offices.

Bull Breeding Soundness Examination Clinics  April 15, MSU Lake City Experiment Station, Contact Kable Thurlow at 989-426-7741 or Doug Carmichael at 231-839-4608 for details.

Bull Breeding Soundness Examination Clinics  April 16, Wernette Cattle Company, Remus, MI. Contact Kevin Gould at 616-527-5357 or Dr. Kevin Todd at 231-832-3680.

For a complete list of MSU Extension educational programs around the State go to http://web2.msue.msu.edu/events/.