



U.P. Ag Connections Newsletter

January 2017

Agricultural News from MSU Extension and AgBioResearch

Volume 21 Issue 1

In this issue:

Page 2
Midwest Cover Crop Council
Conference
Corn hybrid trials

Page 3
Forestry tidbits
Pesticide applicator review
sessions and exams
Producer Safety Alliance
Grower Training

Page 4
Soil Ca:Mg ratios

Page 5
Market report
Malting barley trials

Page 6
Beginning Farmer Webinar
Series

Page 7
U.P. Crop Nutrient
Management Programs

Page 8
Calendar of events

Follow the farm on Facebook:

[www.facebook.com/
MSU.UPREC/](http://www.facebook.com/MSU.UPREC/)

Well, the agriculture commodity price roller coaster of the past several years has made for squeamish stomachs of the most seasoned amusement ride regulars. The g-force of these price drops would even challenge the equilibrium of our great fighter pilots. Only a couple years ago beef and dairy farmers couldn't count the money fast enough. In all seriousness, one of the greatest challenges farmers faced in 2014 was finding ways to reduce the tax liability. I guess that's a pretty good indicator that times are good.

Lots of machinery was purchased for direct expense. I've been to several farm financial stress management programs in recent months. It's a common theme finding a huge intermediate liability due to machinery purchase debt from a couple of years ago. In these scenarios we are challenged with finding financial strategies to stabilize the business and ease the challenges with facing the banker. Sure, we tried it all, selling some of the machinery and custom hire the harvest – lots of used equipment for sale now, most of the two-year-old combines are worth less than the debt they owe on it. Stretching out loan payments to ease cash flow challenges. Riding out the low prices waiting for the bump in commodity revenue and calculating how long they can last. Improved marketing for better price protection. Quite honestly, it kind of works on paper but reality is much different.

So what happened? How did we go from so good to so bad so fast? Over two years, milk prices dropped to about half of what they were, dairy calf prices about 20% of what they were, cull cow prices nearly half, feeder calf prices dropped 25% in one year and followed with another 25% drop. Grain prices, hay prices all shattered. I don't have all those answers. Bottom line we operate in a free enterprise system that runs on supply and demand and one product is influenced by another. Exports, dollar strength, milk supply, beef cow inventory, competing meat inventory, the list is long.

Ag prices have fluctuated greatly over the past two years, but they have been fluctuating over the past two decades. I remember when fed cattle prices broke \$80 back in the mid 80's and the euphoria behind it. We've seen sky rocket in the prices of fuel, corn, soybeans, hay, beef, milk, etc. over the past decades and we have seen them all plummet. I've asked the question to those that should know, what can a farm do to deal with the great price uncertainty?

The common theme answer is pretty standard. Marketing strategy and price protection. Sound financial management ensuring that ratios are in check. Debt to asset ratio, liquidity, solvency, cash flow. Use the good times to make certain the financial measures and in check. We all know the good times aren't going to last long when they come. It's the way our market works. As soon as somebody starts making money, everybody else jumps in.

I make those points to promote my Novice Farm Financial Management Workshop coming up in the western UP. These programs are so important but usually not well attended. I decided to give it a try close to home. If successful I would like to conduct in other areas of the UP. Much of this isn't easy but so important to business management. Do you complete year-end balance sheets? Do you analyze farm profitability annually? Have you checked the balance sheet to ensure that you are in sound financial position? I'm not talking about looking at the Schedule-F to see if we made enough to owe taxes. I'm talking about evaluating this year's expenses vs this year's income and evaluating the net worth change in this year's balance sheet as compared to last year's. If you're interested in going through that process, please consider signing up for that workshop. If you're not interested in the workshop, I hope you're looking at all this yourself.

Michigan State University

AgBioResearch

MICHIGAN STATE
UNIVERSITY

Extension

Frank Wardynski—MSU Extension Ruminant Educator

**Midwest Cover Crop Council Conference
hosted in Grand Rapids, Michigan—
March 15, 2017**

Making Cover Crops Work – Experiences from the Field at the Crowne Plaza Grand Rapids – Airport, 5700 28th Street SE, Grand Rapids, MI 49546.

This conference is an opportunity for farmers to learn about making cover crops work from researchers, educators and farmers from the Midwest and Ontario. In addition to joint sessions on termination and establishment there will be three concurrent sessions on cover crop use in field crops, vegetable crops and forage/grazing featuring presentation from researcher/educator and farmer teams. This conference rotates around the Midwest and Ontario and is back in Michigan for the first time since 2006.

The day before the conference the MCCC will hold its annual business meeting which is open to everyone. Registration and conference information is available at: <https://events.anr.msu.edu/MCCCannualmeeting/>. Contact Dean Baas at 269-967-9672 or baasdean@anr.msu.edu or Sarah Lovett Hanks at lovettsa@msu.edu for more information.



Ray's Feed Mill

Ration & Crop
Consultants
Feed • Seed • Fertilizer



(800) 832-1822 or (906) 466-2231
Bark River & Norway



*Working to build
a vibrant U.P. food
economy since 1971*

Open Daily, 8 to 9 • Everyone Welcome
906-225-0671 • 502 W Washington St
www.marquettefood.coop



Equity Cooperative Livestock Sales Association

*Collecting Cattle on Tuesdays at the
Larry Linsmeier Farm north of Menominee, MI*

(906) 863-8123

www.equitycoop.com



Marquette, MI
(800) 427-0980
(906) 225-1363

Buying top quality milk to produce the
U.P.'s finest dairy products.

Are you getting the most for your quality?



At the heart of growing America
100 years of Ag Experience

Loans, ag taxes, farm records, consulting

1801 N. Lincoln Road, Suite A, Escanaba, MI
(906) 786-4487 Fax: (906) 786-3450

**2016 MICHIGAN
CORN HYBRIDS
COMPARED**



**Michigan Corn Hybrid
Results Published
Online**

Corn performance trials are conducted annually to provide farmers, extension personnel, and private seed companies with agronomic information on corn hybrids submitted by private seed companies.

The 2016 Michigan Corn Hybrids Compared will be published as the Michigan State University Extension Bulletin E-431. It can be accessed on the web: <http://www.varietytrials.msu.edu/corn>.

Did you know?

A few forest tidbits from MSU Extension Forester, Bill Cook

1. The forest area in the USA increased by 14 million acres between 2007 and 2012, reflecting a decadal trend. 14 million acres is about 70% the size of Michigan's total forest area (20 million acres).
2. The same trend holds true with forest volume, between 2007 and 2012, which added the equivalent of 368,750,000 cords. Laid side by side (4 feet per cord), that would create a pile running 279,356 miles, or around the Earth over 11 times. We're not running out of wood.
3. Between 2005 and 2015, the forest carbon stocks annually increased by 1,690,000 metric tons (2204 pounds in a metric ton). That amount of carbon is equivalent to what is exhausted by 137 million cars.
4. The rates of forest growth and carbon sequestration are higher in Michigan than the national averages.

Save the Date

Produce Safety Alliance Grower Training

The PSA Grower Training Course is one way to satisfy the Food Safety Modernization Act (FSMA) Produce Safety Rule requirement outlined in §11.2..9(c) that requires, 'At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.'

Scheduled for April 6th, in Marquette

Registration and more details will be available in January



GREAT LAKES HYBRIDS
Generations Ahead

Corn, Alfalfa, Soybean

Agriculture Plastic for Harvest and Storage
Bale Wrap, Bunker Covers, Grain and Silage Bags

We also carry Hay preservative

For more info call John at 906-399-5510 or e-mail at
john.rappette@yahoo.com

**GINOP
SALES
Inc.**

Alanson, MI (800) 344-4667
Williamsburg, MI (800) 304-4667
Hillman, MI (877) 334-4667
www.ginopsales.com



SMC

Stephenson Marketing Cooperative

We want to be your first choice!
Agricultural Services & Supplies

Stephenson, MI

(800) 445-6167

Oconto, WI

(920) 834-4500

Powers, MI

(800) 962-3008

Aurora, WI

(800) 962-3007

**MAC-LUCE-SCHOOLCRAFT
FARM BUREAU®**

President: Scott Nance

Secretary: Mary Robertson

Review sessions and exams for state certified pesticide applicators

MSU Extension is offering pre-exam study sessions for those seeking state pesticide applicator certification.

Menominee County MSU Extension Office

904 South US Hwy 41, Stephenson, MI 49887

Wednesday, February 8, 2017, 9am-1pm central time

State exams offered at 1:15 pm central

State Office Building

305 Ludington St, 2nd Floor Conference Room

Escanaba, MI 49829

Tuesday, March 21, 2017, 9am-1pm eastern time

State exams offered at 1:15 pm eastern

For more information, contact Jim Isleib, MSU Extension, at 906-387-2530 or isleibj@anr.msu.edu.

Soil calcium-to-magnesium ratios should not concern most farmers

If soil calcium and magnesium levels are adequate and soil pH is acceptable, variations in the Ca:Mg ratio between 2 and 8 have been shown to have no influence on crop yield.

By Jim Isleib, Extension educator

The question of balance between soil magnesium and calcium levels seems to revive among farmers every few years. On soils where lime is recommended, and the lowest cost source is high-magnesium dolomitic lime, some farmers are especially sensitive to the relatively high soil magnesium level and low Ca:Mg ratio they observe on soil test lab reports for fields where lime has been applied repeatedly. However, the actual levels of plant-available magnesium and calcium are much more important to crop performance than the Ca:Mg ratio. Generally, calcium levels of less than 300 ppm and magnesium less than 35 ppm are considered low. Concern should begin only when the Ca:Mg ratio becomes very small, with magnesium base saturation nearly equal to, or greater than, calcium base saturation.

Questions about the ratio of bases in soils have been addressed with research in Wisconsin and other Great Lakes states. In E.E. Schulte and K.A. Kelling's University of Wisconsin Extension publication, [Soil calcium to magnesium ratios – Should you be concerned?](#), they varied the Ca:Mg ratio in two Wisconsin soils by adding gypsum (CaSO_4) and /or Epsom salts (MgSO_4). Phosphorus, potassium and sulfur were maintained at optimum levels. They found that if adequate levels of calcium and magnesium are present in the soil, variations in the Ca:Mg ratio between 2 and 8 had no effect on alfalfa yield, and varying the calcium saturation percentage from 32% to 68% and magnesium from 35% to 12% also did not influence yield.

Michigan State University studies also indicate that the overall quantity of Mg and K is more important than ratios between these nutrients, with the following recommendations:

- Adding Ca to alter the Ca:Mg ratio is not necessary unless Mg equals or exceeds Ca on meq basis
- Adding Ca may induce Mg deficiency in sandy soil

- The ratio may be useful in selecting between calcitic and dolomitic lime when lime is needed
- Mg needs to be greater than 3% of soil base saturation
- %Mg needs to be greater than %K

Michigan State University Extension has been called upon occasionally by Upper Peninsula farmers to interpret magnesium, calcium and potassium ratios on high magnesium soils. The most concern comes from the eastern and western U.P. farming areas, where soil pH is low and dolomitic lime was locally available and affordable for many years. The [MSU Soil and Plant Nutrient Laboratory](#) provided a listing of 874 Chippewa County soil test reports from July 2003 to August 2016. Of these soil tests, 1.1% had a Ca:Mg ratio smaller than 1.5, and none were lower than 1.16. The average Ca:Mg ratio for these Chippewa County soil tests was 3.14. Baraga County submitted 221 soil samples in the same period with 1.4% having less than 1.5 Ca:Mg ratio and none lower than 1.32. The average Ca:Mg ratio for these Baraga County samples was 4.78. None of these samples was deficient in calcium to meet crop needs. Several were deficient in magnesium and/or potassium. In the great majority of cases, the Ca:Mg ratio was not a good indicator of the need for one or the other of these nutrients.

REGISTERED MAINE ANJOU AND ANGUS

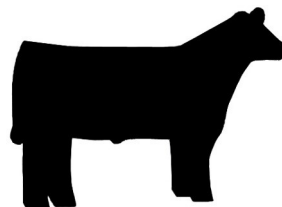
CLAY KNOLL FARMS

OPEN & BRED HEIFERS AND BREEDING AGE
BULLS AVAILABLE

BREEDING CATTLE TO IMPACT THE
PRESENT AND INFLUENCE THE FUTURE.

BREEDING STOCK—BULLS
SHOW PROSPECTS—STEERS

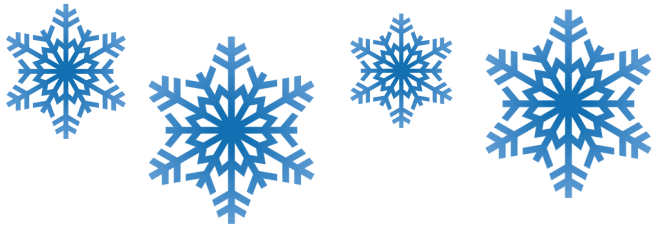
DUANE & LISA SIMPKINS
& SONS
DUANE CELL 989-329-6141
LISA CELL 989-578-0328



GARY & JAN SIMPKINS
HOME 989-426-8185
CELL 989-329-4668
GLADWIN, MI



Preliminary spring malting barley variety trial data is now available online featuring three plots throughout Michigan, including this trial that was hosted at the MSU W.K. Kellogg Biological Station in Hickory Corners.



Market Report

| | |
|-----------------|--------------------------|
| Choice Steers | \$85—\$100 per 100 lbs. |
| Holstein Steers | \$75—\$90 per 100 lbs. |
| Hogs | \$45—\$53 per 100 lbs. |
| Lambs | \$130—\$145 per 100 lbs. |
| Cull cows | \$35—\$50 per 100 lbs. |
| Calves | \$50—\$150 per 100 lbs. |
| Goats | \$150—\$190 per 100 lbs. |

Breeding and Feeder Animals

| | |
|-----------------------------|--------------------|
| Grade Holstein cows | \$1100—\$1800/head |
| Grade Holstein bred heifers | \$1600—\$2200/head |

Feed Prices across the U.P.

| | Avg. \$/cwt | Avg. \$/ton | Price Range |
|--------------------------------------|-------------|-------------|-------------|
| Corn | \$9.15 | \$183.00 | \$145-232 |
| Soymeal | \$21.67 | \$433.35 | \$379-525 |
| Oats | \$8.98 | \$179.50 | \$160-200 |
| Barley | \$8.88 | \$177.60 | \$140-220 |
| Average price/100 wt. for 1 ton lots | | | |

Preliminary data from the 2016 malting barley trials now available

Drought stress through much of the state impacted yields, but overall, disease pressure and pre-harvest sprout were down.

By Ashley McFarland, UPREC Coordinator

In 2016, a three-site variety trial was managed by staff from the [Michigan State University Upper Peninsula Research and Extension Center](#) (UPREC) and the [Michigan State University W.K. Kellogg Biological Station](#) (KBS). The trial was supported by a grant through the [Brewers Association](#) and [American Malting Barley Association](#). The primary goal of this research was to examine a set of malting barley varieties for yield and quality performance in various climatic regions of Michigan. MSU collaborated on this trial with eight other states and two locations in Canada through the Eastern Spring Barley Nursery program, spearheaded by the [Craft Maltsters Guild](#). The three trial locations were:

1. Upper Peninsula Research and Extension Center in Chatham, MI (Alger County)
2. The Julian Pilarski Farm in Posen (Presque Isle County)
3. W.K. Kellogg Biological Station (Kalamazoo County)

Residing in diverse regions, each area has a long history of small grain production and multiple craft malthouses due to start production with the intent to source locally grown barley. Each plot utilized a rectangular lattice experimental design, which allows for good statistical analysis of results. Twenty-eight varieties were tested in three replications.

Preliminary trial data can now be found at the [UPREC Malting Barley website](#). Agronomic and yield data are included in the report. Quality data will be published early 2017.

Trial highlights:

- The Posen site realized the greatest drought stress, nearly 4.5 inches below the six-year average, but all locations were slightly ahead in growing degree days (GDD) at the time of grain maturity.
- Optimal moisture at harvest was yet again difficult to achieve in the U.P., whereas both locations downstate were successful in getting most varieties down below 12 percent.
- Test weight across all varieties were average at UPREC, above average at Posen and slightly below average at KBS.
- Average yields were 71 bu/ac (UPREC), 50 bu/ac (Posen) and 60 bu/acre (KBS).
- Top varieties summarized across all locations include AAC Synergy, LCS Odyssey, ND Genesis, 2ND28065 and KWS Fantex.

New webinar series for beginning farmers will begin in January

By Jim Isleib, MSU Extension Educator

The Beginning Farmer Webinar Series generated new farm businesses and employment opportunities. A new series will begin January 30, 2017.

New farm businesses provide jobs, income and increased economic and social stability, and increased food security to rural and other communities. Providing basic, practical information to people interested in or already engaging in new farm enterprises helps these small businesses develop sound production and marketing plans. The [Michigan State University Extension Beginning Farmer Webinar Series](#) helps to make this happen, reaching 664 people since 2012.

An evaluation of the series of 24 webinars offered during January-May 2016 showed that the series was perceived as valuable by respondents, with strong indication of knowledge increase. Respondents indicated the series will have impact on the land they manage and on several key farming decisions and activities. Respondents revealed that the series contributed to the creation of 10 new jobs.

A [new Beginning Farmer Webinar Series](#) is planned for January-May 2017. Presenters include MSU Extension educators and others. The following evening "Getting started with..." webinars will provide valuable start-up information on nine general and more specific farming topics, including:

- ◆ [Jan. 30](#), Small vegetable farm systems
- ◆ [Feb. 13](#), Hoophouse management
- ◆ [Feb. 27](#), Maple syrup
- ◆ [March 13](#), Fencing and watering systems for livestock
- ◆ [March 27](#), Blueberries
- ◆ [April 3](#), Crop nutrient management
- ◆ [April 10](#), Aquaculture (fish farming)
- ◆ [April 24](#), Planning and operating a mixed fruit orchard
- ◆ [May 8](#), Producing and selling eggs

A fee of \$10 per webinar is required, or you can register for the entire series at half price for \$45. Webinar recordings will be provided to all registered participants. Participate from the comfort and convenience of your own home or office.

Registration, a brochure containing details on each individual program and online or mailed payment options can be found at [Beginning Farmer Webinar Series 2017](#). You may register for all or some of the courses at any time, even if the session has already taken place. In that case, you will get a link to the recorded program.

Each program begins at 7 p.m. ET and will last up to two hours. A high-speed internet connection is required. You will receive webinar connection information after you register.

An archive of 58 Beginning Farmer Webinar Series programs from 2012-2016 on a wide variety of topics can be accessed free of charge at the [Beginning Farmer Webinar Series](#) webpage.

Contact the Alger County MSU Extension office at 906-387-2530 or isleibj@anr.msu.edu for more information.

Your source for Polled Genetics

Richlo Dairy Farms

Engadine, MI

Polled Holstein, Jersey & Norwegian Red Bulls available!

Employment Opportunities!

For all information on polled bulls in AI, call Jonathan (906) 477-6505

Johnson Brothers Livestock

3740 18th Rd. Escanaba, MI

Buying or Hauling Cattle

St. Louis—Mondays, Gaylord—Wednesdays

Call Gary Johnson

Office (906) 786-4878 Gary Cell (906) 235-0099

Steve Cell (906) 399-2858

United

Producers, Inc.

Farmer owned. Farmer values.

St. Louis Sale every Monday

Marion Dairy Sale 3rd Friday of each month
For dairy cattle, call Chad @ (517) 294-3484 or

Paul @ (614) 296-5038

Collection point in Escanaba

Call for more information (989) 681-2191

Save the Date!

Ag For Tomorrow Conference

March 7, 2017

Bay College Escanaba

This ad could be yours!

Paid advertising delivers this newsletter to your mailbox each month!

Contact Michelle @ 439-5114 to place an ad (\$30/month)



Equity Cooperative Livestock Sales Association

WAUKON, IOWA
Feeder Sales Schedule

• 2nd & 4th Wednesdays

(563) 568-4501

www.equitycoop.com

***U.P. Crop Nutrient Management program—
Registration still open!***

MSU Extension is offering a 2-session crop nutrient management educational program in 5 Upper Peninsula locations. All farmers and interested people are welcome to attend these free programs.

Presenters: Jim Isleib and Monica Jean, MSU Extension U.P. Crop Production Educators

Pre-registration is required at least one work day prior to the program you plan to attend. Register by phoning or emailing your name, address, phone number and email information to Jim Isleib at 906-387-2530 or isleibj@anr.msu.edu or to Monica Jean at 906-786-3032 or atkinmon@anr.msu.edu. On-line registration is also available through the MSU Extension website at <http://msue.anr.msu.edu/> under 'events'.

| County | Location | Session 1 Date | Session 2 Date |
|-----------|---|---------------------|---------------------|
| Menominee | Menominee MSUE Office S904 US Highway 41, Stephenson | Wed, Jan 4, 2017 | Wed, Jan 11, 2017 |
| Ontonagon | Mass City Community Center 1502 Mass Avenue, Mass City | Mon, Jan 16, 2017 | Mon, Jan 23, 2017 |
| Mackinac | Garfield Twp Hall N6760 M-117, Engadine | Wed, Feb 22, 2017 | Wed, March 1, 2017 |
| Chippewa | Rudyard Twp Hall 18725 S. Mackinac Trail, Rudyard | Wed, March 15, 2017 | Wed, March 22, 2017 |

**All meetings
6:30-8:00 pm
local time**

MCA/MSU Bull Evaluation Program

BULL SALE

MARCH 18, 2017 – 12:30 PM
INCLUDING ANGUS, CHAROLAIS, HEREFORD,
RED ANGUS, AND SIMMENTAL BULLS
FOR REPORTS, CATALOG AND PROGRAM INFO

www.MIBulls.com

325 Mount Hope Rd, Crystal, MI
Station Manager: (989) 506-2061
Contact MCA (517)347-8117 to request a
printed catalog.

BID AND VIEW LIVE ONLINE
WWW.DVAUCTION.COM

Open House

March 4, 2017
10 am—2 pm
Lunch provided

Skinners

Pickford, MI
(906) 647-5655 or
(877) 647-2500

Kubota, AGCO, Massey-Ferguson, New Idea, Hesston,
Gehl, Bush Hog, H&S, and Kverneland

Michigan State University
Upper Peninsula Research and Extension Center
P.O. Box 168, E3774 University Drive
Chatham, MI 49816

RETURN SERVICE REQUESTED

Serving the Upper Peninsula Agricultural Industry

Michigan State University Extension is an affirmative-action, equal-opportunity employer. Michigan State University programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status, or veteran status.

U.P. Ag Connections appreciates the support of this newsletter by our advertisers, however in no way does this imply endorsement of any specific products or services.

If you do not wish to receive this publication, please contact Michelle at colema98@msu.edu or (906) 439-5114

Calendar of Events

U.P. Crop Nutrient Management Programs—each meeting runs from 6:30-8 pm (local time)

- January 4 & January 11 Menominee MSUE Office, S904 US Highway 41, Stephenson
- January 16 & January 23 Mass City Community Center, 1502 Mass Avenue, Mass City
- February 22 & March 1 Garfield Twp Hall, Engadine, MI
- March 15 & March 22 Rudyard Twp Hall, 18725 S. Mackinac Trail, Rudyard

Pesticide Applicator Core Manual Review sessions/MDARD exam—each meeting runs 9 am—1 pm (local time)

- February 8 Menominee Co MSUE Office, Stephenson
- March 21 State Office Building, 305 Ludington St, Escanaba

- January 30—Beginning Farmer Webinar Series begins!
- February 14 & 28—2017 Cow-calf Seminar at Bay College (7:00-9:00 pm)
- March 7—Ag for Tomorrow Conference, Bay College
- March 15—Midwest Cover Crop Council Conference—
Crowne Plaza, Grand Rapids, Michigan

