

# **U.P. Ag Connections Newsletter**

Agricultural News from MSU Extension and AgBioResearch

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Extension

### Growing U.P. Agriculture Association (GUPAA) Annual Meeting and Sandhill Crane Crop Damage Program Coming April 18th

The return of migrating birds to Michigan signals that spring is here, a welcome sight for most of us. Their calls seem to breathe life back into the thawing landscape and spread a sense of hope for the season to come. However, there is a subset of the population that may not fully share this sentiment; corn growers who experience crop damage caused by Sandhill cranes (Grus canadensis).

Sandhill cranes are leggy, but graceful; tall birds with a long slender neck, spindly legs and very broad wings. They are primarily gray in color with some rusty brown tones on the body and a striking red crown. The Eastern Population (EP) of Sandhill cranes migrates from Florida and Georgia to breeding territory that stretches across Michigan, Wisconsin, Minnesota, and Ontario. The birds arrive in southern Michigan beginning in early March each year, reaching northern locations in our state a few weeks later.

Sandhill cranes are a conservation success story. Thought to be extirpated from Michigan by the late 1800's, the population has increased dramatically since the 1970s when efforts to protect habitat and the cranes themselves were initiated. It is estimated that the EP of Sandhill cranes includes over 94,000 birds today, with over 23,000 cranes spending their summers in Michigan. The USFWS management plan for Sandhill cranes includes a population goal of just 30,000 birds for the entire EP. Could the old saying about *too much of a good thing* possibly apply to these beautiful birds?

As the population of Sandhill cranes continues to expand throughout the Great Lakes region, conflicts between agriculture and cranes are on the rise as well. Agricultural damage from Sandhill cranes most often takes the form of birds feeding on sprouting corn or wheat seed. When feeding in a corn field, they use their beak to pull out entire seedlings and then consume the seed that is still attached to the young plant. Cranes will feed on corn seeds throughout the seedling stage, until the endosperm that was present in the seed is completely metabolized by the plant. Damage can be quite extensive, as cranes usually pluck sections of row throughout the field, creating large gaps in stands. This reduces yield potential directly, and also causes problems for the plants that remain by opening up space for weeds.

There are few methods available for reducing Sandhill crane damage in Michigan corn fields. Deploying scare tactics like noise makers or predator effigies may work to some extent. Lethal removal can help to reinforce scare tactics. However, due to federal protection of Sandhill cranes, depredation permits from the U.S. Fish and Wildlife Service must be obtained before employing lethal controls. Around 1,000 cranes are killed annually under depredation permits in Michigan. Scare tactics and lethal control are time consuming, as they require persistently monitoring a field. These methods may also move cranes to neighboring fields, and thus spread rather than reduce damage.

Some have called for a crane hunting season in Michigan, but experts suggest that fall hunting would do little to directly address crop damage, which occurs primarily in the spring. States that have implemented crane hunting offer only a few hundred permits with individual bag limits in the single digits. This is because Sandhill cranes are somewhat vulnerable to population decline, having to reach 4-7 years of age to reproduce and only producing one offspring per breeding pair each year. Striking a balance with this species through hunting would be difficult, not to mention they are beloved by many.

Another method of controlling crane damage that is gaining popularity is the use of Avipel (anthraquinone), a non-lethal repellent seed treatment. Sandhill cranes that ingest Avipel treated seeds experience immediate, but harmless, digestive repellency and will learn to avoid eating treated seeds. Research has proven this to be an effective method for reducing crane damage. Cranes may still be present in treated fields, but they will instead feed on insects like grubs and caterpillars.

Prior to this year, Avipel has been used in Michigan under a Section 24(c) exemption. This year however, Avipel received approval from the EPA for a new federal label, expanding registration to all 50 states for use in field corn and sweet corn. Avipel comes in both dry and liquid formulations, is compatible with existing seed treatments, and can be purchased from most agricultural input suppliers. Typically, the farmer's cost of applying Avipel is \$6-10 per acre.

For more information on Sandhill crane ecology and damage management, attend the Growing U.P. Agriculture Association's annual meeting and educational program on April 18<sup>th</sup> 11 am - 3:00 pm at Bay College in Escanaba, MI. Participants will hear presentations from GUPAA, the International Crane Foundation, USDA Wildlife Services and Arkion Life Sciences, the maker of Avipel repellent. Corn growers in attendance will also be invited to participate in an Avipel demonstration project organized by Arkion LS and MSU Extension, receiving a free sample of Avipel and application advice. For more information, or to register, call the Upper Peninsula Research and Extension Center at (906) 439-5114.

James DeDecker **MSU UPREC Director** 

### Millet Cover Crops in a Potato Rotation

### M. Jean, A. Bahrman, C. Kapp and M. Quintanilla

In an effort to improve soil health in potato production systems, Michigan State University Extension (MSUE) and the Upper Peninsula Research and Extension Center (UPREC) have been investigating cover cropping. Previous research has shown including Pearl millet in a potato rotation may help control root lesion nematode (Sritharan, R. et al, 2006), a common pest in potatoes. Millet also produces a tremendous amount of biomass, contributing carbon to soil organic matter.

In 2018, MSU Extension, UPREC and a cooperating farm evaluated millet biomass accumulation across varieties and mowing regimes. Three pure millet varieties and two mixtures were planted on June 9, 2018 at Cousineau Potato Farm in Hardwood, MI. Three mowing regimes, Early + Late (7/6/18 + 8/31/18), Mid + Late (8/9/18 + 8/31/18) and Late (8/31/18) were replicated three times across a field previously in potatoes. The Early + Late and Mid + Late plots were mowed twice, but regrowth was negligible after the Mid mowing time. The Late mow time also terminated the cover crop. Nematode soil samples were taken at Late mowing with a soil probe, in a zig-zag sampling pattern with three samples taken per variety.



**Figure 1.** Biomass accumulation of millet by variety and time of mowing. \*indicates best performing variety at a 5% level of significance

Averaged across all mow times, German and Japanese millet were the highest biomass producers (Figure 1). Evaluating yield by mow time across all varieties, the highest biomass accumulation was achieved by letting the cover crop grow all season (2.35 DM tons.acre; Figure 1).

### PURPOSE:

Compare millet cover crop varieties and mow times as a tool for nematode suppression and soil health improvement in Michigan potato production systems.

### TRIAL LOCATION:

Cousineau Potato Farm Hardwood, MI

Soil type: Emmet fine sandy loam

### EXPERIMENTAL DESIGN:

Randomized complete block design with four replications

### TRIAL ESTABLISHMENT:

- 3 millet varieties, 2 mixtures
- Planted June 9 at 30 pounds per acre, equal representation in mixtures by using seeds/lb.

### **RESULTS:**

- Large varietal differences
- Consider residue management and seed cost

## Did you know?

The Upper Peninsula Research and Extension Center facility houses a small grain quality lab that can test grain for various parameters. The lab focuses specifically on malting barley for malt production, but can test moisture and protein on other grains as well. If you have a grain analysis need, contact the lab and see if it can help!

<u>msubarleylab@anr.msu.edu</u> <u>http://msue.anr.msu.edu/topic/</u> <u>malting\_barley/lab</u>









Figure 2 summarizes the interaction of variety by the mowing regime used. The Japanese millet variety that grew all season yielded the greatest amount of biomass (3.47 DM tons/acre; Figure 2). Very little regrowth occurred with the Mid + Late mow treatment, so only Mid mowing biomass was measured (Figure 2). At the late-mowing, lodging was observed in the Japanese Millet plots. Residue management must be considered when planting millet as a cover crop. If less biomass is desired, then Pearl millet and mowing are recommended. Note that growing degree day accumulation was slightly above normal, and precipitation was below normal for this site in 2018.

Root Lesion (RL) and Northern Root Knot (NRK) nematodes are detrimental to potato growth and development. No particular millet variety was found to have significantly lower RL or NRK nematode populations (Figure 3). Beneficial nematodes including Tylenchs, Aphelenchus, Bacterial Feeders and Oligochaetes were also evaluated by millet variety. Japanese and German millet varieties had a greater amount of beneficial nematodes then Pearl Millet (Figure 3). The mixtures were not included in the nematode soil testing.

Continuing to evaluate the impact cover crops have on soil health and Michigan cropping systems is a priority. This study will be continued in 2019, including yield and quality of potatoes planted into millet residue. We will also plant new millet plots and add a fallow control plot for evaluation in 2020.

### JOB POSTING:

North Farm Production Assistant, under direct supervision of the Farm Manager, will be responsible for day-to-day vegetable production, harvest, and general farm maintenance activities. Work will be done in tandem with the Farm Manager, and may vary from week to week. Position will be a part-time, seasonal, hourly position, beginning May 1st. A full, 6-month commitment is preferred. This position offers 29 hours per week of work. Pay rate is \$10/hr, and on-site housing is available. Please provide a resume, three references, and a cover letter explaining how your education, skills and experience make you a strong candidate for this position. Applications must be submitted to Allison Stawara via e-mail (stawaraa@msu.edu) by April 1<sup>st</sup>, 2019.

#### Bay de Noc Gardening Conference Scheduled for April

April 15th is the registration deadline for the 21<sup>st</sup> Annual Bay de Noc Gardening Conference in Escanaba. The event will be held at Bay College on Saturday, April 27. This year the event features 20 different classes on a variety of yard and garden topics.

Participants will be able to choose to attend four classes at this day-long conference. "French Castles, Chateaus, and Gardens" will be presented by Rebecca Krans, MSU Extension Horticultural Educator. Belinda Collins, Advanced Master Gardener, will discuss growing and harvesting garlic. Poppy Hatinger will talk about "Cordage-A Twisted Adventure," covering the plants you can grow to produce cordage. Dr. Dave Gafner will be discussing, "Bulbs for Spring Beauty". He will also be teaching a class on dividing perennials. Other conference topics include attracting birds to your garden; perennial garden design; composting; bees and other pollinators; hydrangeas; food preservation; incorporating vegetables into the landscape; cut flowers; sedum; root crop vegetables; season extension and hoop houses; apples; and rock gardens. Ryan Leary of Tonella Farms will give a hands-on workshop on mushroom log inoculation, and Chef Robin Holmes of Pacinos will be back to demonstrate simple cooking techniques.

The cost of the program is \$40.00 per person, which includes morning refreshments, lunch, and up to four classes. Only pre-paid registrations postmarked by April 15<sup>th</sup> will be accepted. Brochures can be picked up in the Escanaba area at Tractor Supply, Mel's Lawn and Garden, Wickert Floral, Pam's Petals, Escanaba Downtown Development Authority, and the Bonifas Arts Center. In the Marquette area, brochures are available at Flower Works, Forsbergs...a New Leaf, and Northwoods Flora. To receive a printable pdf of the brochure by email, contact

<u>DeltaCountyMGA@gmail.com</u> or, on Facebook, private message your email address to the event Facebook page, Bay de Noc Gardening Conference.

### Northern Michigan Livestock

Gaylord, MI—I-75 (Exit 282), 2 miles west on M-32 to N Townline Road, go 2 miles North to Sale Yard

### 2019 Spring Feeder Cattle Sales

All Sales are on Fridays @ 12 pm April 12 April 26 May 10 Preconditioned cattle will be sold first on April 26th, proof required

- Pre-conditioning program strongly recommended
- All feeders must meet proper TB & ID requirements
- Request cattle be brought in the day before sale
- Bred cattle & breeding bulls may be sold at sales
- Steers in question will be sold as bulls

Sale Barn Telephone (989) 732-5732 Frank or Jan Leist—Telephone (231) 439-5679 See us on our website: www.northernmichiganlivestock.com

### How to Start a Food Business in Michigan

Selling to grocery stores can be a useful addition to your wholesale business. You can't push the same volume, but you make more profit on each unit sold. Michigan Farm News, January 2019, noted that wholesale prices are being squeezed while farm products are sold in grocery stores at artificially high prices. A self-branded or a value-added product, sold direct-to-grocer, can let you earn a larger portion of this retail -listed price. If you've thought about making this step, consider attending the UP Food Summit in Iron Mountain on May 17th. Hear directly from the experts on the regulatory, business, equipment and retail requirements of a commercial food business. Register for this FREE event at: <a href="http://events.anr.msu.edu/UPFoodSummit2019/">http://events.anr.msu.edu/UPFoodSummit2019/</a> or call 906-290-3210 with any questions.

**Food Business 101** - Is a food business right for you? Explore how to turn your concept into a successful business with information on business structures, financial planning and pricing for profit. We'll examine who your target customer is and how to send marketing messages using your product labeling and packaging.

- Presenter: Sally Miller NWTC Kitchen and Business Incubator
- Time: 9:00 9:50am.

**Food Safety** – Food safety from the retail side is a very important aspect of your business. Maintaining a clean and sanitary environment is not only an expectation of your customers, but is vital to selling a safe product to the public. This session will cover basic sanitation to keep in mind as you prepare your retail space.

- Presenter: Beth Waitrovich MSU Extension
- Time: 10:00 10:50am.

**Going Commercial** - There are many regulatory entities within the food sector with overlapping jurisdictions and differing licensing requirements. Hear directly from an MDARD Food Inspector to understand the production requirements for your food product. Specific topics will include labeling laws, production facility options and food establishment licensing. Plenty of time will be available for questions.

- Presenter: Angela Juhola Michigan Department of
- Agriculture and Rural Development Time: 11:00 11:50am.

**Retail Ready** - Consumers spend less time than you think considering buying your product. Learn how to compete in the crowded grocery store aisle through product differentiation, product placement and in-store marketing tactics. We'll also discuss how to start and maintain retailer relationships. The logistics of self distribution will be covered and when to consider working with a distribution company.

- Presenter: Parker Jones MSU Product Center
- Tim White, Pat's Foods, will also be available to answer questions
- Time: 12:00 12:50pm.

#### **Parker Jones**

Innovation Counselor Community, Food & Environment Institute, MSU

#### **Two Upcoming Trainings for Produce Growers**

This April, Upper Peninsula produce growers will have two opportunities to attend a full-day training on the Food Safety Modernization Act (FSMA) Produce Safety Rule. Attending one of these trainings will satisfy the FSMA educational requirement for produce growers outlined in section 112.22(c) in the Produce Safety Rule. Ideally, the farm supervisor and/or farm food safety manager would attend this training. These trainings also provide examples of Good Agricultural Practices and tips on writing your farm's detailed food safety plan. Participants who are present for the entire training will receive a certificate from the Association of Food and Drug Officials to verify they have completed the FSMA educational requirement.

UP produce growers can choose between two locations:

April 9<sup>th</sup> – Menominee County Extension Office, S904 US-41, Stephenson, MI 49887

April 11<sup>th</sup> – St. Ignace Public Library, 110 W. Spruce Street, St. Ignace, MI 49781

These trainings are free to attend, and lunch is provided. The course is expected to begin at 9am and end at 3:45pm. Pre-registration is required, please visit <u>https://events.anr.msu.edu/2019SpringPSA/</u> to enroll in either class. You do not need to attend both trainings. These classes are provided to Michigan produce growers by MSU Extension, Michigan Department of Agriculture and Rural Development, Michigan Farm Bureau, US Food and Drug Administration, and the Produce Safety Alliance. Each course is presented by certified PSA trainers.

To learn more about assessing produce safety risks on your farm and to earn a produce safety certificate from the state of Michigan, contact your local Produce Safety Technician.

Landen Tetil

Produce Safety Technician, Marquette County Conservation District



## 21st Annual Carney-Nadeau FFA Alumni Consignment Auction

Sunday, May 5th @ Noon

## Held at Machalk's Specialty River Road, Stephenson, MI

#### For more information and to list your items:

Donna Buechler (906)753-4146 or 424-0688 Glenn Hanson (906)753-4684 Tom Piche (906)295-1177 Dan Gaudes (906)753-2322 or 753-2308 Pat & Barry Wehner (906)753-4192 leave message

#### Advertising deadline April 17th!

Sell your used farm equipment, running vehicles, almost anything (except live animals and clothing) at auction. You set the minimum bid. 10% commission on gross sale (maximum commission per item is \$500).

### Classifieds

**HAY FOR SALE** 800 pound birdsfoot trefoil/grass mix round bales for sale. Net wrapped and stored inside. \$35/bale. Just north of Rock. Call (906)280-1946

**HERD REDUCTION:** Red Angus heifers and bulls. Top bloodlines. Gentle and easy to handle. (906) 238-4236.

FARM FOR SALE by owner: 278A / 200 tillable, 160A adjacent to farm buildings, some woods for harvest/ hunting. Includes 96' barn, 6 buildings, 2 wells. All structures have metal roofing. \$382,000. <u>Visit FB Link</u> -Brimley Sales for pics/details. Contact Melvin Schwiderson @ (906) 248-6633 or <u>northwind906@icloud.com</u>

**Beautiful property** in the Upper Michigan, 130 acres In Perkins for sale or pasture for rent for livestock for the 2019 season. Beautiful river running through it. Great for hunting, building or developing, or simple grazing livestock. Land is divided into 9 paddocks with high tensile electric fence and 5 stock watering ponds. Call (906) 359-4825.

FARM FOR SALE: Upper Peninsula Farm with over 1,100 acres, water access, maple syrup production, and much more! Shady Lane Farms http://shadyInfarms.wixsite.com/shadyInfarms Henry DeGroot (906) 238-4251 hjdegroot@alphacomm.net

WANTED TO BUY: Feed barley or yellow peas in large totes or semi loads. Also, 2019 hay bales off of field. Prefer 4x6 bales in Delta, Schoolcraft or Alger County. Call Dan Dalgord (906)644-2276.

**FOR SALE: John Deere B**. Clean, less than 50 hrs on rebuild. **Allis-Chalmers C**. New paint, runs good. **Hay Hauler**. Hauls up to 10—4x6 round bales, use spear on back, don't have to unhook. Call Terry (906)644-2777.

# Just a reminder it is about time...

# to schedule your bull testing!

Renee Coyer – Thompson Vet Clinic

(906) 341-2813

Note: Renee will be traveling to the western UP to conduct Breeding Soundness Exams on May 10, 2019. To schedule an appointment, contact Frank Wardynski (906)884-4386 or wardynsk@msu.edu.

#### Market Report

Choice Steers		\$110—\$122 per 100 lbs.	
Holstein Ste	ers	\$85—\$110 per 100 lbs.	
Hogs		\$60—\$68 per 100 lbs.	
Lambs		\$130—\$160 per 100 lbs.	
Cull cows		\$45—\$60 per 100 lbs.	
Calves		\$45—\$70 per 100 lbs.	
Goats		\$200—\$300 per 100 lbs.	
Breeding and Feeder Animals			
Grade Holstein cows \$850—\$1250/head			
Grade Holstein bred heifers \$1000—\$1275/head			
Feed Prices across the U.P.			
	Avg. \$/cwt	Avg. \$/ton	Price Range
Corn	\$9.96	\$199.25	\$155-262
Soymeal	\$19.28	\$385.50	\$360-450
Oats	\$12.00	\$240.00	\$200-300
Barley	\$9.78	\$195.50	\$160-240
Average price/100 wt. for 1 ton lots			



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## **Calendar of Events**

FSMA Produce Safety Rule Grower Training Program — April 9— Menominee Co Extension, Stephenson, 9 am-4 pm FSMA Produce Safety Rule Grower Training Program — April 11—St. Ignace Public Library, St. Ignace, 9 am-4 pm Northern MI Livestock Feeder Cattle Sale—April 12—Gaylord, noon Beef Quality Assurance Certification—April 15—Rudyard Twp Hall, Rudyard, 6-9 pm Beef Quality Assurance Certification—April 16—Bay College, Escanaba, 6-9 pm Beef Quality Assurance Certification—April 17—Twilley's, Bruce Crossing, 6-9 pm Growing UP Ag Association Annual Meeting—April 18—Bay College, Escanaba, 11 am-3:00 pm Swine Health Champions UP—April 23—Delta County MSUE Office, Escanaba, 6-9 pm Swine Health Champions UP—April 24—St. Ignace Public Library, St. Ignace, 6-9 pm Northern MI Livestock Feeder Cattle Sale—April 26—Gaylord, noon Carney-Nadeau FFA Alumni Consignment Auction—May 5—Machalk's Specialty, Stephenson, noon Northern MI Livestock Feeder Cattle Sale—May 10—Gaylord, noon UP Food Summit—May 17—Bay West Campus, Iron Mountain, 9 am-1 pm CT

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