



Oconto & Marinette County

Agriculture Newsletter

**From the Desk of Oconto County Agriculture Agent
Sarah Mills-Lloyd**

The weather continues to be the major headline in agriculture news. As the fields wake from their winter slumber, uncertainties abound regarding the health of the crops that endured the extreme winter weather.

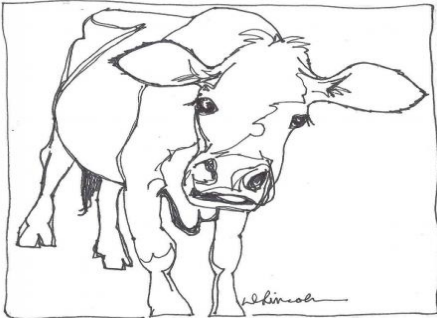
If you are considering alternative forage options or would like to compare economic opportunities for crops this season, please consider joining Scott Reuss, Marinette County Agriculture Agent, on April 4th at the Lena Town Hall for a discussion on your best crop strategies. If you are unable to meet Scott during this scheduled time, feel free to call or email him with your crop questions.

Please note email addresses for both Extension Agriculture Agents have changed. If your communication preference is email, please refer to the left-hand column on this page for our current email addresses. These have changed due to our affiliation with UW-Madison; however, our phone numbers have not changed.

An updated list of meetings and trainings can be found on page two in this edition of the newsletter. The current calendar of events even includes a few late spring and summer events for pre-planning purposes.

As always, please do not hesitate to call my office (920) 834-6845 if you have questions.

Sarah Mills-Lloyd
Agriculture Agent—Specializing in Dairy and Livestock
UW-Madison Division of Extension Oconto County



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If you will need accommodation or assistance as you attend any UW-Madison Division of Extension sponsored event, please contact the host county office at least two days prior to the event. All requests will be confidential.

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CALENDAR OF LOCAL & REGIONAL EVENTS

April 2	Oconto	Manure & Water Quality in Oconto County
April 4	Lena	Coffee, Fertilizer Dollars and Information
April 4	Lakewood	Manure & Water Quality in Oconto County
April 4-June 20	Mountain	Master Gardener Training: Thursday evenings 6:00-9:00 pm
April 6	Lena	Manure & Water Quality in Oconto County
April 8	Oconto Falls	Manure & Water Quality in Oconto County
April 9	Florence	Beef Quality Assurance Training
April 11	Coleman	Youth for the Quality Care of Animals In-Person Training
April 17	Suring	Manure & Water Quality in Oconto County
April 23	Gillett	Manure & Water Quality in Oconto County
April 27	Gillett	Oconto County Youth Fair Sheep Weigh-In & Swine Tag Distribution
April 27	Escanaba, MI	2019 Bay de Noc Gardening Conference
May 3	Kimberly	Farm Management Update for Agriculture Professionals
May 4	Gillett	Youth for the Quality Care of Animals In-Person Training
May 11	Beaver Town Hall	Marinette County Youth Sheep/Goat Weigh-In & Probable Last Day for Swine Information
June 9	Lena	Oconto County Breakfast on the Farm
June 30	Peshtigo	Marinette County Breakfast on the Farm
July 18	Peshtigo	Grazing Farm Tour & Meeting
July 23-25	Johnson Creek	Wisconsin Farm Technology Days 2019
July 26 & 27		Marinette and Oconto Counties Clean Sweep

HAY PRICE REPORT as of March 11, 2019

Currently hay demand and price reports can be found at: <https://fyi.extension.wisc.edu/forage/h-m-r/>

Hay Grade	Bale type	Price (\$/ton)		
		Average	Minimum	Maximum
Prime (> 151 RFV/RFQ)	Small Square	\$260.00	\$215.00	\$480.00
	Large Square	\$230.00	\$175.00	\$340.00
	Large Round	\$182.00	\$135.00	\$260.00
Grade 1 (125 to 150 RFV/RFQ)	Small Square	\$182.00	\$160.00	\$224.00
	Large Square	\$194.00	\$120.00	\$260.00
	Large Round	\$166.00	\$110.00	\$235.00
Grade 2 (103 to 124 RFV/RFQ)	Small Square	No Reported Sales		
	Large Square	\$164.00	\$100.00	\$235.00
	Large Round	\$153.00	\$75.00	\$200.00
Grade 3 (87 to 102 RFV/RFQ)	Small Square	No Reported Sales		
	Large Square	\$167.00	\$105.00	\$220.00
	Large Round	\$141.00	\$110.00	\$185.00

EVENTS, DEADLINES AND NOTES

Beef Quality Assurance (BOA) Training

Beef Quality Assurance is a national program that raises consumer confidence by offering training in proper management techniques with a producer commitment to quality within every segment of the beef industry.

Effective January 1, 2019, several large packers and processors will only purchase from Beef Quality Assurance (BQA) or National Farmers Assuring Responsible Management (FARM) certified farms. Buyers and stockyards will be confirming compliance at the point of sale.

Most dairy farms are already BQA certified with their completion of the National FARM program with their dairy processor. BQA equivalency documents for dairy farms include:

- Completed FARM Animal Care Version 3.0 or newer
- FARM Program supplied letter from cooperative or processor indicating completion of Version 3.0 or newer
- Signed Livestock Marketing Association affidavit

What does this mean for dairy and beef farmers who sell cattle? You will need to complete certification training in either BQA or FARM, and submit paperwork declaring your date of certification and certification number or equivalency documents.

By attending an in-person training for BQA, you can become certified in BQA. A BQA training is being offered locally by University of Wisconsin-Madison Division of Extension Agriculture Agent, Sarah Mills-Lloyd.

April 9: Registration 10:00 am, Training 10:30 am
Florence Natural Resource Center
5628 Forestry Drive, Florence, WI 54121

Youth for the Quality Care of Animals

Wisconsin has replaced the MAQA (Meat Animal Quality Assurance) program with the Youth for the Quality Care of Animals (YQCA) national program. This interactive program provides youth options for annual quality assurance certification.

(Continued on Page 3)

Youth for the Quality Care of Animals (continued)

Exhibitors of the following species in Oconto County must complete Youth for the Quality Care of Animals (YQCA) national program: **beef, dairy, dairy goat(s), meat goat(s), poultry, rabbit, sheep and swine and poultry** in order to be eligible to sell in the 2019 Oconto County Youth Fair Sale of Champions. Any Marinette County exhibitor in the youth livestock auction eligible classes must complete YQCA (beef, meat goat, rabbit, poultry, sheep, and swine). In addition, youth will learn about other species of animals; not just the species they show. Each year, youth will complete one new module in each of the following categories: Animal Welfare (basic needs, proper animal handling, biosecurity, etc.), Food Safety (medications, medicated feeds, withdrawal times, avoiding residue, etc.), and Character Education (ethics, goal setting, career exploration, etc.).

The YQCA program was peer-reviewed for content and age appropriateness. It is supported by Wisconsin 4-H and FFA leaders. Youth for the Quality Care of Animals training content and modules will demonstrate a progression of topic knowledge in designated age categories (age as of January 1):

- Junior (8-11 years old) · Intermediate (12-14 years old)
- Senior (15-18 years old) · Young Adult (19-21 years old)

The YQCA training is an effort to provide flexibility to accommodate busy seasonal schedules, while providing relevant age-specific food animal quality assurance training. There are three options to become YQCA certified:

- In-person instructor led training—available for juniors (8-11 year olds *only*)
- Online modules
- Online test-out (*NEW for 2019!*)

The online test-out option is *only* available for youth 12, 15, and 19 years old. Online fees associated with the test-out option will only be collected if the test is passed.

Youth completing the online modules will pay \$12/person/year, and face-to-face trainings offered for juniors (youth age 8-11) only will pay \$3/person/year. The fee for the test-out option is pro-rated depending on the age of the youth.

To complete the YQCA online training or register for face-to-face training, log into <http://yqca.org>. Follow the step-by-step instructions to create a user identity and password. All payments for either the online or in-person training will be made using the YQCA website.

Two in-person trainings will be offered for juniors (8-11 year olds). The dates and locations of the trainings are listed below. Space will be limited, and registration will be taken only through the YQCA website (<http://yqca.org>).

2019 YQCA In-Person Trainings for

Juniors (8-11 year olds) ONLY:

Thursday, April 11—Pound Town Hall, Coleman 6:00 – 7:30 pm

Saturday, May 4—Gillett Community Center, 204 E Main Street, Gillett 10:30 am – Noon

If you complete your YQCA training online, it is recommended to print the completion certificate at the end of the online session. Access to the in-person YQCA completion certificate will be available approximately one week following the completing of the instructor led training. The certificate and ten-digit certificate number can only be accessed through your account at <http://yqca.org>.

Effective January 1, 2019, several large packers and processors will only purchase from Beef Quality Assurance (BQA) farms. Buyers and stockyards will be confirming compliance at the point of sale. Youth for the Quality Care of Animals is equivalent to certification in Beef Quality Assurance (BQA). No additional certification or training by youth will need to be completed, if they have successfully completed their annual YQCA certification.

If you have any questions about the YQCA training, please contact Sarah at (920) 834-6845. You may also visit the UW-Extension Wisconsin Youth Livestock Program website (<https://fyi.uwex.edu/youthlivestock/yqca/>) for additional YQCA information. ★

Coffee, Fertilizer Dollars and Information

As all of us face another tight cropping season, join Scott at the **Lena Town Hall on Thursday, April 4 from 9:30 am to Noon** for an informal discussion meant to help you feel confident about your nutrient management for 2019. It will be an opportunity to dive in-depth into your fields' nutrient needs and how you can most economically meet those needs. This would be an appropriate time to figure out where to best spend your fertilizer budget. Most farms will be best served spending those dollars on nitrogen for corn crops, but we can't ignore pH management or phosphorus and potassium on lower testing fields.

Bring your soil test results, your nutrient management plan, manure test results, cropping plan, and whatever else you think may help us as we go through the possibilities. We'll talk about the most pertinent things on the minds of those who are there to start the day and then analyze the dollars and sense of key crops and individual situations. Get there when you can and stay as long as you can (Scott can be there until about 1:30) or until you have all the details worked through that are on your mind.

Scott will have coffee, milk, and cookies. You bring the questions about crop and fertilizer plans and we'll get them worked through together. If you can't get to this informal event, call Scott at 715-732-7510 to schedule a time to get together and go over your concerns, or email to sreuss@marinettecounty.com. ★



**Marinette & Oconto County UW-Extension
and your community libraries present:
Manure & Water Quality in Oconto County**

Join in on the discussion at the most convenient site and timing for your schedule. All attendees will receive information packets pertaining to the topic and be able to bring a sample of their own well water for nitrate analysis, provided at no charge.

<u>Site:</u>	<u>Date</u>	<u>Time</u>
Farnsworth Public Library (Oconto) 715 Main Street 920-834-7730	Tuesday, April 2nd	5 p.m.
Lakes Country Public Library (Lakewood) 15238 Hwy. 32 715-276-9020	Thursday, April 4	3 p.m.
Lena Public Library 200 East Main Street 920-829-5335	Saturday, April 6	10 a.m.
Oconto Falls Community Library 251 North Main Street 920-846-2673	Monday, April 8	1 p.m.
Suring Area Public Library Held @ the Fire Station, adjacent to library	Wednesday, April 17	4 p.m.
Gillett Public Library 200 East Main Street 920-855-6224	Tuesday, April 23	6 p.m.

There is no charge to attend. All site discussions facilitated by Crops/Soils Agent, Scott Reuss. He will be conducting the nitrate testing the half-hour prior to the start of each program. For site questions, contact the host library. For topic questions, contact Reuss at 715-732-7510 or e-mail to sreuss@marinettecounty.com



Farm Management Update for Ag Professionals
 Friday, May 3, 2019
 Liberty Hall, Kimberly

Farm Management Update for Ag Professionals Registration Form

- 9:30 am Registration, milk, coffee, juice, and rolls
- 10:00 am "Dairy Market Update / Outlook"
 Bob Cropp, Extension Dairy Market Specialist, UW-Madison Professor Emeritus
- 10:45 am "WI Dairy Processor Perspective & Outlook"
 Ted Galloway, V-P Galloway Company, Neenah WI & Current Member of the WI Dairy Industry Task
- 11:30 am "WI Dairy Enterprise Budget - New Extension Spreadsheet Tool"
 Kevin Bernhardt, Extension Farm Management Specialist, UW-Platteville & WI Center for Dairy Profitability
- 12:15 pm Lunch
- 1:00 pm "Crop Update"
 Area Extension Agents
- 1:30 pm "Tax Management Update - What We Learned About the New Tax Law"
 Mike Harer, Manager, Fox Valley Farm Management Association
- 2:15 pm "Farm Stress & Exit Planning" Panel Discussion
 Cari Sabel, Collins State Bank
 Frank Friar, Farm Finance Consultant, WDATCP Farm Center
 JoAnn Maedke, Maedke Tax and Farm Accounting LLC
 Troy Schneider, Twohig, Rietbrock, Schneider, & Halbach, S.C
- 3:00 pm Adjourn

Name(s): _____

E-Mail(s): _____

Business: _____

Address: _____

City: _____

Zip: _____

Phone: _____

Registration Fee: \$40 per person

Make check payable to: Waupaca County

Mail this registration form and check to:
 Waupaca County UW-Extension
 811 Harding Street
 Waupaca, WI 54981
 715-258-6231

Registration Deadline: April 26, 2019

UW Extension
 University of Wisconsin-Extension

An EEO/AA employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title VI, Title IX, and the Americans with Disabilities Act (ADA) requirements. Requests for reasonable accommodations for disabilities or limitations should be made prior to the date of the program or activity for which it is needed. Please do so as early as possible prior to the program or activity so that proper arrangements can be made. Requests are kept confidential.

Marinette & Oconto Counties

CLEAN SWEEP



HOUSEHOLD & AGRICULTURAL HAZARDOUS WASTE COLLECTION

This program is for the collection of waste generated within the boundaries of Marinette and Oconto Counties. Many home and yard products contain hazardous materials. Improper disposal of these products can cause fires, injuries to people and animals and groundwater contamination. This guide will help you identify hazardous products in your home. Keep your home safe and the environment clean by properly disposing of hazardous products.



USE THE FOLLOWING CODES AND CHART FOR EXAMPLES OF DISPOSAL
(Items may be modified at any time to meet the needs of the program)

Key: ■ Place in trash ▲ Take to a hazardous waste collection site

● Pour down the drain (if connected to a municipal sanitary sewer) after reading product safety label

GARAGE AND WORKSHOP	▲ Wood filler	▲ Fungicide	▲
Acetone	▲ Wood preservative	▲ Furniture polish	▲
Artist's paint and media	▲	● Insect spray	▲
Antifreeze	KITCHEN AND BATHROOM	▲ Light ballasts	▲
Auto body repair products	▲ Alcohol-based lotions	▲ Metal polish, solvent-based	▲
Batteries - automobile/motorcycle	(Perfume, aftershave)	▲ Mothballs	▲
Battery acid	▲ Bleach	● Pesticides	▲
Brake fluid	▲ Cleaners, ammonia-based	● Pool chemicals	▲
Car wax, solvent-based	▲ Cleaners, solvent-based	▲ Rat poison	▲
Contact cement	▲ Cosmetics	■ Shoe polish	▲
Driveway sealer	▲ Disinfectants	▲ Spot remover	▲
Fiberglass epoxy	▲ Drain cleaner	● Stump remover	▲
Fluorescent/incandescent light bulbs	▲ Floor care products	▲ Thermostats & mercury switches	▲
Gasoline/oil mixtures	▲ Hair remover	▲ Weed killer	▲
Gasoline and other fuels	▲ Medicine - (See Back for Other Medicine)		
Glue, solvent-based	▲ Nail polish (Disposal Locations)	FARM & AG BUSINESS	
Glue, water-based	▲ Nail polish remover	▲ Pesticides	
Joint compound	▲ Oven cleaner	● Examples include DDT, Chlordane,	
Kerosene	▲ Permanent wave solution	■ Lead, Arsenate, Lindane, 2,4,5-T, Silvex	▲
Lighter fluid	▲ Skin cream	▲ Pesticide cylinders	▲
Non-automotive oils	▲ Thermometers	● Veterinary supplies	▲
Paint, latex (see back)	▲ Toilet bowl cleaner	● Lead-based and other metal-based paints	▲
Paint, oil-based	▲ Tub and tile cleaner	● Other toxic metal paints	
Paint thinner	▲ Window cleaner	(Fungicidal paints)	▲
Paint stripper		▲ Wood preservatives (Penta)	▲
Parts cleaner	HOME AND GARDEN	■ Batteries (household and dry cell)	▲
Photographic chemicals	▲ Aerosol cans, empty	▲ Freon 11, 12 (refrigerant)	▲
Rust remover	▲ Aerosol cans, full	■ Compressed gas cylinders	
Shellac	▲ Batteries, alkaline	(Propane, butane)	▲
Stain	▲ Batteries, button	▲ Picric acid	▲
Transmission fluid	▲ Batteries, rechargeable	▲ Pesticide rinsates	▲
Turpentine	▲ Dry cleaning solvent	■ Unknown chemicals	▲
Varnish	▲ Fertilizer (without pesticides)		
Windshield washer solution	● Fertilizer (with pesticides)		

MATERIALS THAT WILL NOT BE ACCEPTED

Asbestos, ammunition-explosives, infectious or medical wastes, radioactive wastes, oil, latex paints, TV'S & other electronics, light bulbs. For latex paint & medication disposal options, see the other side of this flyer. Automotive oil should be hauled to a recycling facility that collects oil. TV'S, other electronics & light bulbs can be recycled at most local drop off sites.

FOR FURTHER INFORMATION, CONTACT:

- Marinette County Land Information Department
1926 Hall Ave., Marinette, WI 54143, 715.732.7780
- Marinette County UW Extension Office
1926 Hall Ave., Marinette, WI 54143, 715.732.7514
- OR, visit the county website: <http://www.marinettecounty.com>



- Oconto County Land & Water Resource Department
301 Washington St., Oconto, WI 54153, 920.834.6827
- Oconto County UW Extension Office
301 Washington St., Oconto, WI 54153, 920.834.6845
- OR, visit the county website: <http://www.co.oconto.wi.us>

BUYING SMART

- Think twice before you buy! Switch to safe substitutions.
 - Read the label. Make sure the product will do what you want before purchasing. Follow label directions for safe usage, storage and disposal.
 - Purchase only the amount you need and use up what you buy.
 - Avoid aerosols. Choose pump sprays or other alternatives.
-

PROPER DISPOSAL

- Stores that sell car batteries must accept them back for recycling.
 - Give leftovers to someone who will use them up for their intended purpose. Reuse products such as paint thinner and paint.
 - Never pour oil, antifreeze or other hazardous materials on the ground, into storm sewers or down the drain.
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★★ DISPOSAL OF LATEX PAINT ★★

STEP 1: Find an outside work area away from children, pets, and rain. Locked screen porches and balconies work well. Because some old latex paint contains mercury, it's important to dry out paint outdoors in a safe place.

STEP 2: Dry it out. Remove the lid and let the paint dry in the can. Stir the paint occasionally to speed drying. Or, brush paint in layers on newspaper or cardboard. For larger amounts of latex: Pour one-inch layers of paint into a cardboard box lined with plastic. Allow the paint to dry one layer at a time – thin layers will speed up the drying process. Or, mix paint with cat litter, sawdust, or sand in a cardboard box lined with plastic and let dry.

STEP 3: Throw the dried paint, cans and other materials in the trash. Leave the lids off paint cans so trash collectors will see that the paint is dry and accept them.

★★ DISPOSAL OF MEDICINES ★★

For proper disposal of prescription and non-prescription medicines drop boxes are located at the following locations:

- | | |
|--|--|
| • Oconto County Law Enforcement Center
220 Arbutus Avenue, Oconto, WI | • Oconto Falls Police Department
500 N Chestnut Avenue, Oconto Falls, WI |
| • Suring Police Department
604 E. Main Street, Suring, WI | • Nicolet Pharmacy
15481 Commercial Road, Lakewood, WI |
| • Gillett Police Department
150 N McKenzie Street, Gillett, WI | • Marinette County Office of Sheriff
2161 University Drive, Marinette, WI |
| • City of Marinette Police Department
1905 Hall Avenue, Marinette, WI | |
-

THE JULY 26TH & 27TH 2019 TEMPORARY HOUSEHOLD & AGRICULTURAL HAZARDOUS WASTE COLLECTION SITES FOR EACH COUNTY ARE YET TO BE DETERMINED AND WILL BE PROVIDED IN FUTURE BROCHURES.

The Marinette and Oconto Counties Clean Sweep Program will accept hazardous waste from small businesses, churches, schools, emergency services, and municipalities that fill out a VSQG (Very Small Quantity Generator) form. VSQG participants will be responsible for paying all disposal costs. VSQGs may be eligible for 50% grant funding for disposal of agricultural chemicals. A no obligation disposal price quote will be provided prior to bringing material to the collection facility. Please contact one of the departments listed on the front of this flyer for more information.

PRE-REGISTRATION FORMS FOR FARMERS, AGRICULTURAL BUSINESSES AND BUSINESSES THAT ARE VERY SMALL QUANTITY GENERATORS (VSQG) WILL BE MADE AVAILABLE PRIOR TO THE EVENT. PRE-REGISTERING IS CRITICAL TO ASSESS SAFETY OF TRANSPORTING MATERIALS TO THE EVENT AND ANY COST INVOLVED FOR DISPOSAL, IF APPLICABLE.



Special thanks to the WI Dept. of Agriculture, Trade and Consumer Protection, Marinette & Oconto Counties and the Marinette – Oconto (MAR-OCO) Landfill for supporting & funding this program.



Dairy Situation and Outlook

March 19, 2019

By Bob Cropp, Professor Emeritus

University of Wisconsin Cooperative Extension

University of Wisconsin-Madison

Good news for improved milk prices is milk production continues to slow. For the last quarter of 2018 milk production was just 0.5% above a year earlier. January's production was up 0.9%, and February was up just 0.2%. The number of milk cows started to decline last June, and while there was no change from January to February cow numbers had declined 63,000 head and were now 77,000 head or 0.8% lower than a year ago. The increase in milk per cow continues below trend being up 1.0% in 2018 and 1.1% in February.

Of the 23 reporting states, 13 had fewer cows in February than a year ago, six had lower milk per cow and 8 had lower total milk production. States with big losses in cow numbers were Pennsylvania 25,000, New Mexico 12,000, Virginia and Ohio both 9,000, Arizona, California and Florida 8,000, and Minnesota, Illinois, Indiana and Wisconsin down 5,000. States with major increases in cow numbers were Texas 20,000, Colorado 12,000, South Dakota 5,000 and New York 2,000.

States with significant declines in February milk production from a year ago were Virginia 11.7%, Illinois 7.3%, Florida 6.2%, Pennsylvania 6.0%, New Mexico and Ohio 3.9% and Arizona 3.4%. States with significant increases in milk production were Colorado 8.3%, Texas 7.7%, Oregon 7.3%, South Dakota 6.4%, and Idaho 2.1%. Other increases were California 0.1%, New York 2.8%, Iowa 0.5%, Minnesota 1.6%, Michigan 1.0% and Wisconsin 1.5%.

Domestic demand continues on the soft side. Fluid beverage milk sales declined another 2.0% last year with modest growth in butter and cheese sales. This type of pattern is expected to continue in 2019. Dairy exports were a record high in 2018 being equivalent to 15.8% of milk production on a total milk solids basis compared to 14.5% in 2017. Compared to 2017 exports of cheese were 2% higher, butterfat 61% higher, nonfat dry milk/skim milk powder 18% higher and no change in total whey products. But, exports were robust for the first half of the year and dampened the second half of the year after China, Mexico and Canada imposed retaliatory tariffs on U.S. dairy products. On a milk-fat milk equivalent basis exports in the first half of 2018 grew by 18.9% over that of 2017, but declined to 8.0% for the second half of the year. On a skim-solids milk equivalent basis, exports in the first half of the year grew by 19.8% over 2017, but in the third quarter the growth declined to 12.8%, and in the fourth quarter exports were below 2017 by 12.2%. By December of 2018 exports on a total milk solids basis had declined to 12.8% of milk production. Looking into 2019 there are some positive factors for exports. Milk production is expected to show only a modest increase in the EU, lower production in Australia and a possible drought in New Zealand could dampen their milk production. World dairy product prices are increasing. But, as long as retaliatory tariffs exist exports will be hindered. USDA forecasts 2019 exports on a milk-fat basis to be down 3.8% and on a skim-solids basis up just 1.0%.

Cheese stocks remain at rather higher levels holding down cheese prices. January 31st cheese stocks grew a little from December with American cheese stocks 8.6% higher than a year ago and total cheese stocks 6.4% higher. Butter stocks normally increase as we move towards summer as cream supplies are more available than when ice cream production picks up for summer sales. January 31st butter stocks were 6.9% lower than a year ago. January 31st stocks of dry whey were 12% lower than a year ago and nonfat dry milk stocks 7.6% lower.

Despite a slower growth in milk production ample cheese stocks, modest growth in domestic demand and reduced growth in dairy exports has kept milk prices from showing much improvement. The Class III price was \$13.89 in January and \$13.96 in February. Earlier in the month barrel cheese was just \$1.365 per pound and 40 pound blocks were \$1.52 per pound. Prices have improved to \$1.51 for barrels and \$1.5825 for blocks. But, dry whey prices continue to weaken from \$0.36 per pound early in the month to now \$0.305. To get \$16 Class III prices cheese needs to get above \$1.70 per pound. It looks like March Class III will increase to about \$14.95. Dairy futures continues to show very slow price recovery with Class III reaching the low \$15's in April and not reaching the \$16's until August and only topping out in the low \$16's in October. But, I look for the Class III price to do better than this. After four years of low milk prices and starting 2019 with low milk prices the growth in milk production is likely to stay below 1% for a while. The number of licensed dairy herds in 2018 declined 2,731 or 6.8%. Herd numbers continue to decline. Cow numbers will likely continue to decline through at least the first half of the year. Slaughter cow numbers continue to run above a year ago and the number of dairy replacements expected to enter the dairy herd during the year are down 1% from a year ago. And with some forage quality issues until a new crop and lower returns over feed cost the increase in milk per cow is likely to be dampened. So I see the possibility of much stronger Class III prices for the last six months and reaching the mid to high \$16's by fourth quarter.

(Continued on Page 9)

Dairy Situation and Outlook

Continued

Butter prices have been staying around \$2.28 per pound and should hold around there and strengthen some by fourth quarter. Nonfat dry milk prices should hold close to \$0.95 per pound and higher for most of the year. The Class IV price was \$15.98 in January, \$15.86 in February and should be about \$15.80 in March. By May the Class IV price should reach \$16's and could be in the high \$16's by fourth quarter.

In 2018 the average all milk price was \$16.18 compared to \$17.65 in 2017 and the lowest average since \$12.85 back in 2009. So while milk prices will improve in 2019 over that of 2018 they will keep operating margins for dairy farmers rather tight until at least the last quarter of the year. ★



focus on energy®

Partnering with Wisconsin utilities

Focus Incentives for Farmers Who Lost Barn Roofs

Wisconsin farmers reeling from a disastrous winter are getting help from the state's energy efficiency program. There have been dozens of reports of barn roofs at least partially collapsing in the past month, especially in the northern half of Wisconsin, where some areas have seen snowfall totals close to 90 inches this winter. That includes record-setting February snowfall numbers in parts of northwestern Wisconsin.

FOCUS ON ENERGY® is offering a 25-percent bonus on top of its regular financial incentives to Wisconsin farmers whose barn roofs collapsed due to heavy snowfall. The money can help farmers replace some equipment damaged in roof collapses – things like lights, waterers and circulation fans – with energy-efficient options that will save them money on their energy bills for many years.

The special offering will be launched March 20. To be eligible, farmers must:

- Need reconstruction due to a natural disaster in 2019
- Be a customer of one of the 107 Wisconsin utilities who participate in Focus on Energy
- Apply for a bonus request by June 1, 2019
- Complete any projects and submit incentive paperwork by November 30, 2019

Contact your local Energy Advisor for questions and to learn how to get started by visiting focusonenergy.com/agribusiness or calling **888.947.7828**. ★

AE1573 (Revised)

Sump Pump

QUESTIONS

Thomas Scherer
Extension Agricultural Engineer

Water in the basement is always a concern when we receive a large amount of rain or snow. For many homeowners, the first line of defense is a sump with a pump in it.

The sump may be connected to tile that drains the area near the footings of the house under the entire basement or it may just drain the area where the sump is installed. Tiling can be installed on the outside or inside of the footings or both.

Many houses have tiling only installed around a portion of the house. Homeowners should try to determine what type of drainage system they have in the basement.

The water that drains into the sump must be removed, and this is accomplished with a sump pump. Sump pumps come in two basic models: the upright (commonly called a pedestal) and the submersible. Either will work well with proper maintenance.

The pedestal pump has the motor on top of the pedestal and the pump at the base, which sits on the bottom of the sump. The

motor is not meant to get wet. The pedestal pump is turned on and off by a ball float. One advantage of this type of pump is the on/off switch is visible so the action of the ball float can be seen easily.

Submersible pumps are designed to be submerged in water and sit on the bottom of the sump. The on/off switch is attached to the pump and can be a ball float connected to an internal pressure switch or a sealed, adjustable, floating switch.

Both are reliable, but the floating switch requires a larger diameter sump. If the sump diameter is less than 18 inches, the floating switch or its cord could become entangled with the piping or pinned between the pump and sump.

Either type of pump should have a check valve on the water outlet pipe so water doesn't flow back into the sump when the pump shuts off. Water flowing back and forth can cause the pump to turn on and off more frequently than necessary, which decreases the life of the pump.

Some frequently asked questions about sump pumps:

Q. How do you check or test a sump pump?

A. First, make sure the outlet pipe is not frozen shut or plugged and that it directs water away from the house. Unplug the sump pump. Remove the lid (if the sump has one) and use a flashlight to check if the sump is clean and that the pump intake is not plugged.

For pedestal pumps, the intake is on the top of the pedestal in the water. For submersible pumps, the intake screen is just below the motor. Normally, the intake is visible even in water but if not, use your fingers to make sure the intake is not plugged.

In some sumps, the tile inlet or inlets are near the bottom of the sump. In this case, temporarily plug the inlet or inlets. Next, make sure the pump is plugged in. Then slowly pour water into the sump. Try

to simulate the speed that water normally would flow into the sump.

Watch the on/off float switch's action and listen to the pump. Make the pump turn on and off at least twice. If the pump doesn't sound right, fix it as soon as possible.

Q. Can you burn out the pump if the outdoor pipe is frozen shut or will it automatically shut off?

A. All newer sump pumps have thermal protection built in to protect the motor. If the motor becomes too hot, a thermal relay will trip and shut off power to the motor.

Unplug the pump and let the motor cool. The thermal relay should reset in 15 to 30 minutes. While you wait, make sure the pipe is clear of ice.

Q. What size pump should I have for my house?

A. There is no "correct" size. The horsepower requirement for a house is determined by the area of drainage connected to the sump, the depth to groundwater, the depth of the basement and many other factors. A 1/3 horsepower (hp) pump is satisfactory for most houses, but a 1/2 hp pump doesn't cost that much more.

Q. Are there any problems with replacing a 1/3 hp pump with a 1/2 hp pump?

A. When used in similar conditions, a 1/2 horsepower pump will pump more water and lift it higher than a 1/3 horsepower pump. Most new sump pumps will have a chart or graph in the instructions or on the box that shows the flow versus height of lift for both sizes.

The flow usually is given in gallons per minute (gpm) or gallons per hour (gph). Multiply the gpm by 60 to convert to gph. The height of lift is given in feet of vertical lift.

The 1/2 hp pump shouldn't cause any problems, but in situations where the water flow into the sump is relatively slow, you would have no advantage by using the larger pump. However, in situations where the water flow can become quite rapid, a 1/2 hp pump will keep up with the flow, whereas the 1/3 hp pump may not.

Q. Do sump pumps have filters which need to be cleaned or replaced?

A. Sump pumps do not have filters, but they do have screens or small openings where the water enters the pump. These sometimes can be plugged.

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Q. Can or should you pump into a sewer drain or basement floor drain?

A. No, you should not. If you have a septic system, under no circumstances should the sump be pumped into the basement floor drain.

During wet conditions, the drain field of the septic system usually is saturated and struggling to handle the normal flow of water from the house. Adding to it with a sump pump can damage the septic system.

Even if you are connected to a public sewer system, sump water should not be pumped into a floor drain except under special circumstances. Many communities have ordinances prohibiting the diversion of sump water into the sanitary sewer system during certain times of the year or during widespread flooding. Check with your municipal government to find out its rules.

Q. Where should the sump pump drain hose be run?

A. Preferably, sump water should be discharged at least 20 feet away from the house. All water from the sump pump should be directed away from the house in such a way that it drains away from the house. It should not be directed onto your neighbor's lot, into window wells or onto the septic system drain field.

Q. Can the average person replace a defective sump pump or does it require specialized tools or the expertise of a plumber?

A. Almost all sump pumps come with a list of required tools and directions for installing them. Replacing a sump pump should not be too difficult for the "average" person.

Q. How big should the sump hole be? What kind of hole liner should you use? How much gravel do you put under and around it?

A. Sump holes should be about 2 feet in diameter at the top. This allows space for the pump and associated piping and stores a sufficient amount of water between pump on/off events. Metal or plastic liners can be used but plastic is easier to work with and is sold commonly in home supply stores.

When the sump liner is installed, about 3 to 4 inches of coarse gravel should

be placed in the bottom of the hole. The gravel forms a solid base for the sump to sit on and support the weight of the pump.

Q. Should the sump pump be on an isolated electrical circuit?

A. A standard 15-amp, 110-volt three-prong grounded electrical outlet is sufficient to handle a sump pump. The electrical outlet for the sump pump should be an isolated line, with no other connections between the breaker and the outlet.

Although, a sump pump is always in or near water, a ground fault interrupter (GFI) in the circuit is not recommended. In some instances, lightning has triggered the GFI and shut off power to the pump during severe downpours, resulting in wet or flooded basements.

Q. I don't have a sump in my basement but am concerned about water leaking in. What can I do?

A. If water leaks in, you can push it to a floor drain, but if water backs up in the floor drain or drains very slowly, you need a pump.

Small pumps, sometimes referred to as "skimmer" pumps, are designed to sit on a flat surface and pump when water on the floor is $\frac{1}{4}$ to $\frac{1}{2}$ inch deep. On the discharge end, they often have a hose bibb connector so a garden hose can be used. A 50-foot garden hose run out through a basement window usually will carry the water far enough away from the house.

You can remove more water by taking the cover off the floor drain and placing the pump in the drain bowl. These pumps are usually small enough to fit in the bowl.

In emergencies when electric service is off, a small gasoline generator can power these pumps.

Q. What is the useful life of a sump pump?

A. This is a difficult question. Some pumps have been in use for years. The answer really depends on how often and for how long they have run.

Those built for the home market in the last 10 years have plastic or cast iron body construction with stainless steel shafts. These do not rust or corrode like earlier models, and the submersible motors are sealed.

Some manufacturers recommend replacing the switch and float every two years and the pump every five years. If you do not know the age of your pump but it tested OK, then buy a backup pump of the same size.

Prepare the backup pump with necessary fittings so it can be installed quickly. Usually, you do not have much time when you need the backup pump.

Q. Do I need a backup pump?

A. Many people like the security of a backup sump pump, especially if they are away from home for significant periods during the year. Backup sump pumps also provide peace of mind during flooding events. A backup sump pump should "kick in" when the main pump fails or loss of electrical power occurs.

Many manufacturers sell electric backup sump pumps. The most common configuration is a direct current (DC) pump supplied by batteries. The batteries are kept charged by a trickle charger connected to house electrical power.

The float on the backup sump pump is positioned above the turn-on position of the main pump float. Thus, if the main pump fails, the water will rise and turn on the backup pump.

Just like the main pump, backup pumps and their electrical systems need to be maintained and checked on a regular basis.

For More Information

- "Planning Ahead: Sump Pump Tips" video at www.youtube.com/watch?v=8P9b72wW8OQ
- "Electric Backup Sump Pumps (AE1771)" publication at www.ag.ndsu.edu/publications/home-farm/electric-backup-sump-pumps-for-houses
- "Electric Backup Sump Pumps for Houses" video at www.youtube.com/watch?v=PPQvJRFVtxo
- "Backup Sump Pump Battery Selection, Installation and Maintenance" video at www.youtube.com/watch?v=ZGJPUGuRyL8

For more details about preparing for a flood and information about cleanup after a flood, contact your county office of the NDSU Extension Service or visit the NDSU Extension Service Flood Information website at www.ag.ndsu.edu/flood.



For more information on this and other topics, see www.ag.ndsu.edu

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Corn Response to Banded Fertilizers at Planting

By Dr. Joe Lauer

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Banding fertilizer around the corn seed during planting is a common practice in the northern Corn Belt. Corn planting is frequently delayed in this region due to cold, wet soils, which result in slow root growth and limited uptake of nutrients during early developmental stages.

The last major evaluation of banded fertilizer in Wisconsin was conducted between 1995 and 1997 (Bundy and Andraski, 1999). Results indicated that full-season corn hybrids increased grain yield with banded fertilizer when planted late. Since then significant production changes have occurred including higher yields using transgenic crops, improved planting machinery and implements, and continued increases in soil nutrient levels. Growers question whether starter fertilizer is even necessary for modern corn hybrids and production practices, yet, often it is applied as “insurance.” Our objective was to evaluate the agronomic response of corn to banded fertilizer. Plots were established at 11 locations (Arlington, Janesville, Montfort, Fond du Lac, Galesville, Hancock, Marshfield, Chippewa Falls, Seymour, Valders, and Coleman). Fertilizer treatments included: 1) an untreated check, 2) seed-placed fertilizer (10-34-0-1(Zn)) applied in the seed furrow at 4.1 gal/A, and 3) starter fertilizer (9-11-30-6(S)-1(Zn)) applied at 200 lb/A as a band 2 in. to the side of the row and 2 in. below the seed. Split-plots were eight to sixteen corn hybrids ranging in RM by 5-d increments from 80 d- to 115 d-RM. An emphasis was placed upon longer-season hybrids at each location and selection of hybrids differing in emergence vigor. Corn was harvested and yields determined mechanically from the center two rows of each four-row plot.

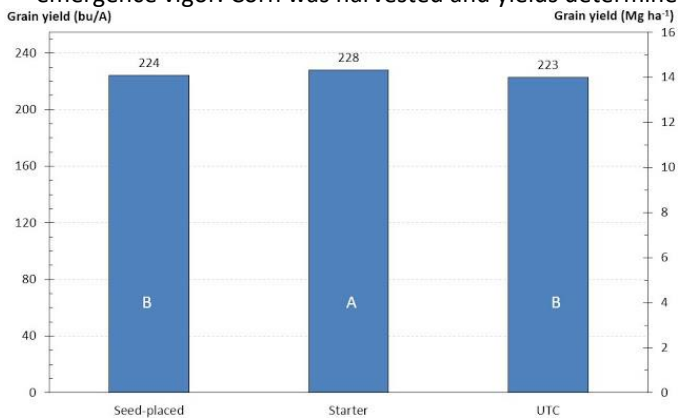


Figure 1. Corn grain yield response to banded fertilizer. Values are derived from 578 GxE means and averaged across 2017 and 2018. Research is funded by the Wisconsin Fertilizer Research Council.

During 2017 and 2018 across all locations, significant differences were found for fertilizer treatment (Figure 1). Overall, starter fertilizer produced greater grain yield than seed-placed fertilizer and the untreated check. On average starter fertilizer (228 bu/A) increased grain yield up to 2.4% more than seed-placed fertilizer (224 bu/A) and the untreated check (223 bu/A). During 2017 and 2018, 5 of 11 locations had a significant response to fertilizer treatment. Consistent response across locations were seen at Arlington, Fond du Lac and Marshfield. One more year of research will be conducted during 2019.

The response of corn grain yield to starter fertilizer has been studied extensively in the United States, but the specific combinations of environmental conditions and agronomic factors that result in consistent responses remain unclear. An overall goal of this project is to predict when and where banded fertilizer will provide an economic return for the farmer. For each replicate soils were sampled and tested for nutrients. At the V5-V6 stage of growth, plants from each hybrid were sampled and tissue tests determined plant nutrient concentrations.

Additional data can be found at: <https://ipcm.wisc.edu/blog/2019/03/corn-response-to-banded-fertilizers-at-planting/>

Further Reading: Bundy, L.G., and T.W. Andraski. 1999. Site-Specific Factors Affecting Corn Response to Starter Fertilizer. *Journal of Production Agriculture* 12:664-670. ★

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