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For more information about programs in  
this newsletter, call the UW-Extension  
office: 715-284-4257 or visit :

<http://jackson.uwex.edu/>

facebook/Jackson-County-  
UW-Extension-Agriculture

Weather-related cancellations will be  
announced on WWIS Radio 99.7



## Jackson County

### Winter 2017 Agriculture Newsletter

#### Seasons Greetings,

Mailed Wednesday November 30, 2016

With a much appreciated, relatively early conclusion of harvest this season, many of you will have a chance to evaluate your 2016 production year, and perhaps take in various educational events this winter. UW-Extension is here to provide educational opportunities, resources and information generated by the University of Wisconsin for the people of the state, where they live and work. However, this has never been a one-way street. Extension exists to listen and learn from all of you, in an effort to address farmers' concerns, questions and challenges with non-biased information that is relevant to agriculture today. Research on such topics as the costs of raising dairy replacement animals, feed trials, or maximum return to Nitrogen for corn, are conducted across the state, representing farms of varying sizes, production and soil types. Although this type of research can be time consuming, it aims to provide solid, dependable information for which you can base decisions upon. Thank you to those farms who willingly participate in on-farm research not only to improve your own business performance, but that of the entire industry of our state. ~Trisha

#### Employee management: 3 actions to improve retention & motivation...

One of the most common questions or concerns farmers have with regard to employees has to do with motivation.... What can I do to get my employees motivated about their job, to care more about their job?

Many employers think people leave/stay at a job for reasons of pay. However surveys indicate over 80% of employees leave or remain at a job for reasons other than pay.

Research tells us that we, as humans, are motivated not simply by material possession, but also by the inherent *enjoyment* and *meaning* that our actions bring us. Many of the daily tasks we ask employees to do are not inherently fun or satisfying; often they involve a lot of repetitive actions.

However, when we create an environment that fosters *autonomy, relatedness and competence*, employees are more likely to feel motivated to work. *So, how can farmers create such an environment to motivate employees?*

**1. Chalk the field.** Employee *autonomy* or 'self rule' begins with "chalking the field". This requires fully defining the job's specific goals and expectations. Autonomy allows the employee to feel trusted in their ability to do the job, and allows a level of flexibility and power to make decisions. Avoid problems with an employee who abuses autonomy by making sure he/she

bears the consequences and responsibility for their actions-which match the agreed upon goals and expectations. Example, the goal is <3% calf death loss and Joe thinks he knows how to achieve this -great, if the goal is met; if not, you discuss actions to meet the goal, Joe has the option to commit to the expectations, or move on to other employment.

**2. Share your vision with your team.** Joe will be motivated to commit if he perceives you to be a capable leader. Leaders convey vision and values of the business so that employees understand how their job *relates* to the overall success and importance of the business; and therefore feel their work is meaningful. Successful employers convey a strong vision, and live it everyday. What is your vision for your business? What motivates you to farm? Share your passion with your team.

**3. Foster an environment of competence.** Convey the importance of the job by encouraging participation in educational events, trainings, and association meetings. Employees feel motivated about work when it is perceived to be challenging -something that requires competence/skill. By growing their job skills and increasing knowledge-base, employees can feel inherent benefits of the job as well, increasing job satisfaction; fostering motivation. -Trisha



Registration: 9:30 am  
Meeting: 10 am-3 pm

Registration Fee:  
\$35 per person in advance  
(includes meal & materials)  
\$10 additional "Walk-in"

For more information:  
**Mark Hagedorn**  
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715.839.4712

# Raising Quality Calves

**Monday, December 5, 2016**  
UW-Extension Eau Claire County  
227 1st Street W, Altoona, WI

Farms looking at group feeding calves with automated feeders to reduce the labor of feeding individual calves will learn of design factors for automated calf barns to meet the management needs, and key factors associated with the successful use of automated feeders.

Also, learn how nutrition plays an important role in the calf's ability to respond to everyday stressors and what your role is in the implementation of the new Veterinary Feed Directive.

- ◇ **Key Factors Associated with the Successful Use of Automated Calf Feeders**  
Marcia Endres, PhD, Extension Specialist, University of Minnesota
- ◇ **Designing or Remodeling Group Feeding Barns for Excellent Calf Health**  
David Kammel, PhD, Extension Dairy Engineer Specialist, UW– Madison
- ◇ **The Alphabet Soup of the Veterinary Feed Directive**  
Sarah Mills-Lloyd, DVM, Agriculture Agent, UW Oconto Co
- ◇ **Nutritional Impacts on Calf Health: Myths & Truths**  
Tom Earleywine, PhD, Director, Land O' Lakes Milk Products



## 2016–2017 WISCONSIN FARM SUCCESSION AND ESTATE PLANNING *UW-Extension state-wide webinar series*

Succession and estate planning are good risk management practices for all businesses, especially the family farm. Developing a working plan will make the actual transition smoother and make communicating the transfer details with family and business members easier.

The UW-Extension state-wide webinar meetings series includes a range of leading experts providing live presentations on a number of topics pertaining to farm succession and estate planning.

*The following topics remain in the meeting series:*

- January 26 - **Estate planning** – Bridget Finke, Attorney, Bakke Norman Law Offices
- February 23 – **Long Term Care: Planning for My Future Needs** – Steve Shapiro, Medigap Insurance Specialist, State of Wisconsin Board on Aging and Long Term Care and the WI Office of the Commissioner of Insurance
- March 23 – **Medicaid Eligibility and Recovery** – Anthony Schmoldt, Attorney, Schmoldt Law Office

All programs are held from 1-3 p.m. Participants have the opportunity to ask specific questions and listen to others participating in sixteen UW-Extension locations across the state. Participants are welcome to attend any of the sessions being offered. There is no charge to attend the program.

Contact the Jackson County UW-Extension office for registration and more information on the farm succession meeting series: 227 S. 11<sup>th</sup> Street, Black River Falls (715) 284-4257.

The farm succession webinar series continues into the fall of 2016 and early spring of 2017.

Details and links to recorded sessions also available at <http://jackson.uwex.edu/>

## 2017 Private Pesticide Applicator Training

Jackson County UW-Extension will host a General Farming Private Pesticide Applicator Training and open book examination. The sessions will be held at the Jackson County UW Extension office. The training begins at 10 a.m. until noon, with the exam to follow. The training fee of \$30.00 includes materials, certification with DATCP, and refreshments.

The State of Wisconsin and Environmental Protection Agency require that all users of restricted-use pesticides be trained, certified, and re-certified. Although principally designed for certification of applicators using pesticides classified as restricted use, this program is intended for all pesticide applicators whether or not you use restricted-use pesticides. Most private applicators (farmer, greenhouse grower, nursery operator, etc.) are certified in the General Farming Base Category, as it applies to production of any agricultural commodity.

Attending the session is not mandatory for certification or re-certification. A private applicator may choose to self-study the materials and make arrangements with any UW-Extension office to take the open book exam. Self-study applicators must receive at least 70% to pass the exam. Those taking the training course are only required to receive at least 50% to pass the exam.

Wisconsin requires that any person taking the certification exam must provide identification and their Social Security number. Exam questions may not be read for another person. If you need assistance in reading the exam, or reading English, notify the Extension office prior to the date you plan to register for the certification.

**2017 PAT certification course dates: reservations are required**

### Jackson County January 24 and February 21

Jackson County UW Extension, 227 S. 11<sup>th</sup> Street, Black River Falls  
(715) 284-4257 [trisha.wagner@ces.uwex.edu](mailto:trisha.wagner@ces.uwex.edu)

### Trempealeau County January 25, and February 15

Trempealeau County UW Extension/Court House 36245 Main St., Whitehall  
(715)-538-2311 Ext: 376 [steve.okonek@ces.uwex.edu](mailto:steve.okonek@ces.uwex.edu)

### Eau Claire County January 14, February 14, and March 16

Eau Claire County UW Extension office 227 1st St. West, Altoona  
(715) 839-4712 [mark.hagedorn@ces.uwex.edu](mailto:mark.hagedorn@ces.uwex.edu)

## Heart of the Farm Women in Agriculture

**Friday Dec. 9th 9a.m. - 3:15 p.m.**  
**Three Bears Resort, Warrens**

The Heart of the Farm—Women in Agriculture program addresses the needs of farm women by providing education on pertinent topics, connecting them with agricultural resources, and creating support networks.

*Program topics include:*

**What's up with Pollinators and What Can You Do to Help?** *Patrick (PJ) Liesch, UW-Madison, Dept. of Entomology.*

**Considerations for Written Ag Land Rental Contracts** *Bill Halfman, UWEX Ag Agent, Monroe County.*

**All About Crop Insurance** *Paul Mitchell, Extension Specialist Ag & Applied Economics.*

**Ask a Vet!** *Gina Zastoupil, DMV, Tomah Large Animal Veterinary Service.*

**Roots Chocolates** *Lisa Nelson, Wisconsin Dells, WI From IT Management to Chocolate.*

**Contact** If you have any questions, please contact Bill Halfman ([bill.halfman@ces.uwex.edu](mailto:bill.halfman@ces.uwex.edu), 608-269-8722) or Jenny Vanderlin ([jenny.vanderlin@wisc.edu](mailto:jenny.vanderlin@wisc.edu), 608-263-7795) <http://fyi.uwex.edu/heartofthefarm/>



## Mark Your Calendar

### 2017 Area UW Agronomy Updates

The UW Dept. of Agronomy will offer crop management meetings at eight WI locations. CCA credits have been requested. **Jan. 7th** : 7:30 a.m. Eau Claire -Mark Hagedorn (715) 839-4712; 12:00 p.m. Sparta -Bill Halfman (608) 269-8722

### Wisconsin Agribusiness Classic - Crop Management Conference

(formerly Ag Lime Conference) will be held **Jan. 10-12, 2017** at the Alliant Energy Center, Madison. Also **CCA Exam Review Training Webinars** are also being offered. <http://www.agclassic.org/>

### La Crosse Farm Show January 11-12th

The 39th Annual Midwest Farm Show will be held at the La Crosse Center, downtown La Crosse 9:00-3:30.

### 2017 WI Area Soybean Conferences January 20th

Eau Claire Holiday Inn South, Eau Claire.  
WI Soybean Association: 608-274-7522

### GrassWorks Grazing Conference February 2nd-4th

The 25th annual GrassWorks Grazing Conference will be held at the Chula Vista Resort in the WI Dells. Visit <http://grassworks.org> for registration info or call 715-965-8324, [info@grassworks.org](mailto:info@grassworks.org).

### Western WI Beef Producers Annual Meeting & Banquet

Information on the annual meeting of the Western WI Beef Producers (WWBP) can be found by contacting Bill Halfman Monroe County UWEX 608-269-8722.

### Corn/Soy Expo 2017 February 2nd - 4th

The 2017 Corn/Soy Expo, WI Pork Assoc. Expo and Taste of Elegance will be held at the Kalahari Resort in WI Dells, visit: <https://www.cornsoyexpo.org/>

### WI Cattlemen's Association February 17th - 18th

The 2017 WI Cattlemen's Assoc. Winter Conference will be held at the Wilderness Resort, WI Dells. For more information: [www.wisconsincattlemen.com](http://www.wisconsincattlemen.com)

**Mark Your Calendar...(cont.)****WI Maple Syrup Producers Assoc.****January 13th -14th**

Wisconsin Winter Maple Institute & Maple Trade Show is being held in Wausau at the Plaza Hotel, Wausau. For session details and equipment auction visit: [www.wismaple.org](http://www.wismaple.org)

**2017 WI Fresh Fruit & Vegetable Conf.****January 22nd - 24th**

The WI Fresh Fruit & Vegetable Conference will be held at the Kalahari Resort in WI Dells., visit: [www.wisconsinfreshproduce.org/](http://www.wisconsinfreshproduce.org/)

**Midwest Forage Assoc., WI Custom Operators, Professional Nutrient Applicators Assoc. 2017 Symposium****January 23rd - 25th**

The Midwest Forage Assoc. Forage Production and Use Symposium will be held at the Chula Vista Resort, WI Dells. For more information: [www.midwestforage.org/](http://www.midwestforage.org/)

**Area Cattle Feeders Clinics**

Cattle feeders, keep an eye out for information regarding the annual 2017 cattle feeder clinics. More information available soon at WI Beef Info Center site: <http://fyi.uwex.edu/wbic/>

**Midwest Manure Summit****February 22nd - 23rd**

Featuring experts in manure handling and processing with multiple speakers, demonstration and farm tours, the 2017 Summit - Green Bay. [www.midwestmanure.com](http://www.midwestmanure.com)

**MOSES Organic Farming Conference****February 23rd - 25th**

The 28th Midwest Organic & Sustainable Education Service Conference will be held at the La Crosse Center. For registration information, visit [mosesorganic.org](http://mosesorganic.org) or 715-778-5775

**WI Dairy & Beef Well-Being Conference****March 3rd**

The WI Dairy & Beef Well-Being Conference will be held in Stratford. For speaker details and registration: <http://fyi.uwex.edu/animalhusbandryconference/>

**WI Ag Women's Summit****March 10th -11th**

The 2017 Wisconsin Ag Women's Summit is presented by Badgerland Financial, Wisconsin Farm Bureau and UW-Extension. Brochures and registration forms are available at the Extension office or print one from the website: <https://wiagwomenssummit.com/>

# Grain MARKETING

MELROSE - AMERICAN LEGION HALL 11 A.M. - 2 P.M.

Specialists in grain marketing from Extension, industry representatives, and USDA Farm Service Agency (FSA) discuss market outlook, crop insurance updates, and marketing and risk management strategies for 2017. Area farmers are welcome to attend any or all of the three-meeting series.

**Location: American Legion Hall****Thursday January 19th**

- Grain and Livestock market update - Brenda Boetel UWRF
- Crop insurance update - Krissy Johnson Badgerland Financial

**Tuesday February 7th**

- 2017 Market outlook for corn/soybean - Nate Frise Cargill
- Tight margin year: Shawn Conely, Damon Smith, (soybeans) Paul Mitchell (economics), Carrie Laboski (nutrient mgt.)

Lunch sponsored by participating organizations...

**Cargill****FSA****Badgerland FINANCIAL****Nutrient Management**

2017 soil fertility management: agronomics and economics

**Managing nutrients in 2017:**

- Accurately crediting on-farm sources of NPK
- Maximum return to Nitrogen recommendations
- Nutrient Management \$\$ for a low-budget year.

**Grants \$\$ for Soils sampling and Manure analysis\* and more:**

- General soil sampling
- In-season N testing: pre-plant and side dress
- Manure nutrient analysis
- N-stalk test

**Tuesday: February 28th**  
**1:00 - 3:00 p.m. Jackson Co. UW-Extension**

*Guest: UW-Discovery Farms*



**For more information contact the Jackson County UW-Extension office**  
Grants available on first come-first serve basis, recipients must attend meeting.  
Grants for individual farmers, or farmers working with consultants (private agronomist, co-op agronomist, etc.). Test/analysis at state-approved lab only.

**Well water testing grant****Jackson County Public Health**

If you have a private well, you should be testing for bacteria and nitrates yearly. If you have never tested your well for arsenic, you should test for it at least one time. Jackson County has received a grant to test for Arsenic in well water. Jackson County Public Health has the well sampling bottles and lab slips if you would like to test your well for Arsenic. Jackson County has its own lab for checking Coliform Bacteria in well water and contracts with the Commercial Testing Lab in Colfax to do Nitrate testing. For more information contact Susie West Environmental Health specialist at Jackson County Dept. of Health, 420 Hwy 54 West, BRF. (715) 284-4301 ex. 408

*for Dairy employees ...*

### **Calf Management**

**Thursday February 16th**

**Alma Center VFW Post - Main Street Alma Center**

Measuring adenosine triphosphate (ATP) is a common method food processors, and health care industries are using to measure the effectiveness of their cleaning procedures. An ATP meter measures organic material present on surfaces which otherwise appear to be clean to the naked eye.

**Meetings:** 1-3 pm (lunch at 12:30)

**Registration Fee:** None, reservation appreciated for lunch count.

**For more information:**

Jackson County UW-Extension

*Offered in English and Spanish*

Dr. Don Sockett, DVM with the Wisconsin Veterinary Diagnostic Laboratory has been working to adapt ATP usage to on-farm calf sanitation audits. ATP measurements may have value for farms' calf management, by identifying areas where cleanliness can be improved. By utilizing this

technology farmers are able to assess how they are doing at sanitizing the equipment they use for calf management.

The focus of this meeting will be to learn how the ATP meter can be used to evaluate farms' current protocols for washing calf care equipment and the ability to thoroughly clean that equipment. Data will be presented from UW-Extension studies of dairy farms' level of organic material on equipment with the ATP meter before and after improvements were made to cleaning protocols. Following the program, participants will have the opportunity to use the ATP meter on their farms. Dairy owners/managers are welcome.

### **Walking Strong**

**Tuesday March 21st**

**Alma Center VFW Post - Main Street Alma Center**

*Recently, recommendations for footbath dimensions have changed after new research was conducted at the UW School of Veterinary Medicine.*

Digital dermatitis is one of the most common foot diseases of the dairy cow and can be found in even well managed dairy herds. When used properly and paired with a disinfectant, a footbath can prevent and control foot rot and digital dermatitis. This program will focus on the use of foot baths and the prevention of lameness in dairy cattle.

*Specific topics will include:*

- Understanding stages of DD
- New footbath recommendations
- Footbath location
- Retrofitting your current footbath
- Topical treatment and proper foot wraps for infected (Stage M2) digital dermatitis on individual cows.



### ***Youth Livestock Project Corn for Kids "Grain Bank"***

Got corn?! Corn for Kids Grain Bank was created to establish a supply of grain for youth participating in 4-H or FFA beef livestock projects. Corn donated to the grain bank will help off-set some of the costs of the project. The Jackson County Livestock education committee hopes this will help reduce barriers to participation in the livestock project, which can be challenging for participants due to expense. Many farmers recognize there are fewer youth growing up on farms today. Involving youth in the livestock project who may not grow up on a farm will help improve knowledge and understanding of livestock practices. The Corn for Kids Grain Bank can help. Perhaps such youth will not become farmers as adults, but they *will* become our future consumers.

You can donate to the Grain Bank at Allied, Federation or Countryside Cooperative. Other arrangements can be made for those who don't deliver to a co-op. You may contact the Extension office to be put in touch with a Livestock education committee member.

### ***Century, Sesquicentennial Farm Applications due March 1st***

In celebration of Wisconsin's agricultural heritage, long-time farm owners are encouraged to register for a 2017 Sesquicentennial or Century Farm and Home Award. To qualify for the award, continuous family ownership of a property for the past 150 or 100 years must be proven. Applications are now available from the Department of Agriculture or the Wisconsin State Fair office and are due by March 1, 2017. Honorees will receive complimentary State Fair admission tickets, an invitation to the awards breakfast, a commemorative photo, certificate, and outdoor display sign.

The Century Farm Program began in 1948 in conjunction with the State's Centennial Celebration. There are currently over 8,800 Century Farms and Homes nestled throughout the Badger State. The Sesquicentennial Program originated in 1998 as part of the State's Sesquicentennial Celebration. Since that time, over 670 families have been honored for carrying on Wisconsin's rich family farming tradition. To request a copy of either application contact the Wisconsin State Fair Century Farm Program by calling 414-777-0580, or contact the Extension office.

## Guidelines for Soil Compaction Management During a Wet Harvest Season

### Fast Facts:

- Waiting for better soil moisture conditions is best, but not always possible.
- Reduce axles loads and maintain low equipment tire pressure.
- Managing equipment traffic pattern can contain/reduce damage.
- Don't assume subsoiling is needed.
- Surface tillage might be needed to address ruts.
- Cover crops may help.



**Background:** Crop yields are decreased in compacted soils. This reduction in yield is caused by a reduction in root growth, water infiltration and plant water availability. Therefore, it is important to reduce the risk of soil compaction. Wet soil conditions in the fall increase the risk for causing soil compaction during harvest operations. Below are some guidelines to help prevent, diagnose, and manage soil compaction during wet harvest conditions. Preventing soil compaction from happening is usually the best management approach when possible.

**Guidelines:** One of the main issues during wet harvest is the creation of ruts from equipment traveling in a field. Rutting creates an uneven soil surface which affects seed to soil contact during planting the following season's crop. Also, ruts are a sign of surface soil compaction and clay smearing which increase the likelihood of soil crust to form.

Don't assume that the presence of ruts indicates subsoil compaction. Soils are most susceptible to compaction at water contents near field capacity because the proportion of soil pores filled with air and water is just right for compaction (soil consolidation) to occur. It seems counterintuitive, but soils with most of the pores filled with water are less susceptible to subsoil compaction. Recall that liquids are not compressible, unlike air, thus can bear an equipment load whereas air would allow for a pore space to collapse. However, soils near saturation are very prone to rutting and smearing near the surface. Use of a soil penetrometer can help determine if you have subsoil compaction in your field. Contact the Extension office to borrow a penetrometer.

If there is a considerable amount of tire ruts, doing some light tillage to smooth the soil surface will help with planting operations. If ruts are present, surface tillage might be needed to improve the seedbed. Surface tillage can be done localized to those areas with ruts only if needed. Then plant a cover crop if possible, probably a grass such as cereal rye that has a fibrous root system that will help that soil surface.

If shallow compaction (less than 6" deep) is detected, plant a cover crop (again cereal rye would be a good option for this, maybe mixed with a legume but not necessary for this) and track compaction with a penetrometer in the fall and spring. Freeze/thaw conditions this winter can also help alleviate shallow compaction but may not always work.

If deep/subsoil compaction (deeper than 6") is detected, a sub-soiling or deep strip-tillage operation might be helpful. A cover crop would help here as well, but it will depend more on the growing season required for that cover crop and its root system's ability to penetrate the compacted layer. Freeze/thaw will not help for deep compaction (need the freeze/thaw cycles, similar to wetting/drying, to loosen the soil). There is a chance that a cover crop will help here, so it might pay off to monitor compaction this fall and again in the spring to determine if a deep tillage operation (e.g. sub-soiling or deep striptill) is needed.

It is recommended for long-term no-tillage fields with ruts or other soil damage in localized spots in the field, to just target those areas with tillage if needed and leave the rest of the long-term no-tillage field alone. Soils in long-term no-tillage fields have a greater ability to "bounce" back than of conventional tillage managed soils. In general, soils should be allowed to dry before any other operations are implemented, if weather cooperates.



*Soil penetrometer for detection of soil compaction.*

The YouTube video **"Using a penetrometer to detect soil compaction"** can be accessed at: <http://jackson.uwex.edu/agriculture/crops-and-soils/>

## Economic Return on Nitrogen - *measure profitability, not just yield*

**Facts:** Many farmers recognize that at some point, we see a yield plateau, after which additional inputs result in a diminishing profit margin. To help determine the point at which profits maximize, the UW developed N application rate guidelines for corn that reflect the maximum economic “return to N” or MRTN. MRTN was developed in 2005 based upon on-farm research from across the state.

**Background:** In addition to yield, MRTN accounts for profitability, given the price of nitrogen and price of corn. The MRTN allows farmers to select an N rate that is specific for their economic situation, soil type, and cropping system, to maximize profit.

The MRTN and range of profitable N rates is calculated using data from N response experiments in Wisconsin.

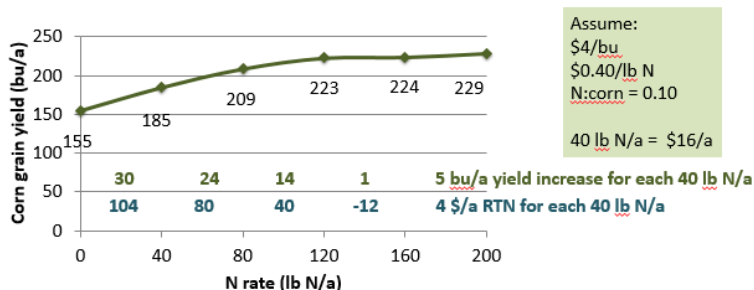
Since the MRTN debuted in 2005, corn N response data have been added to the database annually. These new sites comprise on-farm trials at UW Ag Research Stations along with many more replicated field trials conducted by County Extension Agents in cooperation with farmers, consultants, and ag businesses across Wisconsin. The current database comprises nearly 130 sites.

**Use the N:Corn Price Ratio Table to determine your MRTN:** The following table is used to find the

Maximum return to N (MRTN); the N rate that will be most profitable for a particular N:Corn ratio. Simply find your N price and Price of Corn to determine your N:Corn Price ratio. Example, N prices is .45/lb, and Corn price is \$3.50, your N:Corn price ratio is 0.13 (in the blue zone).

Next use the chart below to determine your MRTN. First determine your soil yield potential. If you don’t know, use UWEX publication A2809. Then pick the previous crop grown. Look to the right for the N:Corn price ratio (blue column). For example, if I am on a high yield potential soil, and my previous crop is corn, my MRTN rate is 130 lbs N/acre. The range associated with this (120-145) is the profitability range of N rates (within \$1/acre) of the recommended MRTN rate. There are foot notes to fine-tune your MRTN, full details available at the Extension office or: <http://ipcm.wisc.edu/download/pubsNM/>

### Crop response to N fertilizer



- The first increment of N applied has the greatest efficiency and potential for economic return
- N applied at rates in excess of crop need presents greater risk for loss to the environment

Carrie Laboski, PhD. Extension Specialist Soil Fertility/Nutrient Management

Color Key for ratio (see other side)	Price of Corn (\$/bu corn)												
	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50
0.05	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05
0.10	0.12	0.11	0.10	0.09	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.05
0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.08	0.07	0.07	0.07	0.06
0.20	0.16	0.15	0.13	0.12	0.11	0.11	0.10	0.09	0.09	0.08	0.08	0.08	0.07
0.45	0.18	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.10	0.10	0.09	0.09	0.08
0.50	0.20	0.18	0.17	0.15	0.14	0.13	0.13	0.12	0.11	0.11	0.10	0.10	0.09
0.55	0.22	0.20	0.18	0.17	0.16	0.15	0.13	0.13	0.12	0.12	0.11	0.11	0.10
0.60	0.24	0.22	0.20	0.18	0.17	0.16	0.14	0.14	0.13	0.13	0.12	0.11	0.11
0.65	0.26	0.24	0.22	0.20	0.19	0.17	0.16	0.15	0.14	0.14	0.13	0.12	0.12
0.70	0.28	0.25	0.23	0.22	0.20	0.19	0.18	0.16	0.16	0.15	0.14	0.13	0.13
0.75	0.30	0.27	0.25	0.23	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.14
0.80	0.32	0.29	0.27	0.25	0.23	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.15

\* to use an online calculator go to <http://www.soils.wisc.edu/extension/cropprod.php>

### University of Wisconsin Nitrogen Guidelines for Corn

		N:Corn Price Ratio (see table on other side)			
		0.05	0.10	0.15	0.20
Soil <sup>1</sup>	Previous Crop	lbs N/acre (total to apply) <sup>2</sup>			
loamy: high yield potential soils	Corn, Forage legumes, Legume vegetables, Green manures <sup>5</sup>	190 <sup>3</sup> 170-----210 <sup>4</sup>	165 155-----180	150 140---160	135 125---150
	Soybean, Small grains <sup>6</sup>	140 125---160	120 105---130	105 95---115	90 80---105
loamy: medium yield potential soils	Corn, Forage legumes, Legume vegetables, Green manures <sup>5</sup>	145 130---160	125 115---140	115 105---125	105 95---110
	Soybean, Small grains <sup>6</sup>	130 110---150	100 85---120	85 70---95	70 60---80
sands/loamy sands	Irrigated—All crops <sup>5</sup>	215 200---230	200 185---210	185 175---195	175 165---185
	Non-irrigated—All crops <sup>5</sup>	140 130---150	130 120---140	120 110---130	110 100---120

<sup>1</sup> To determine soil yield potential, consult UWEX publication A2809 or contact your county agent or agronomist.

<sup>2</sup> Includes N in starter.

<sup>3</sup> Maximum return to N (MRTN) rate.

<sup>4</sup> Profitability range within \$1/acre of MRTN rate.

<sup>5</sup> Subtract N credits for forage legumes, legume vegetables, animal manures, green manures.

<sup>6</sup> Subtract N credits for animal manures and second year forage legumes.

R-01-2015-2M



**UW**  
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**Wisconsin Farm Account and Record books**

Wisconsin Farm Account and Record books at the Jackson County UW Extension office available January 2017.

This paper ledger record keeping system includes a complete, adequate bookkeeping system designed to provide all of the figures needed to prepare farm tax returns and farm profit and loss statement for the year.

**MASTER GARDENER** Level 2 Master Gardener  
UNIVERSITY OF WISCONSIN-EXTENSION Training - Spring 2017

Inquire with the Extension office regarding the Level 2 MGVT training program, beginning in February.

**Market Grower education series**

**Jackson County UW-Extension**

**Jan- March 2017 tbd**

The Market Grower education series will focus on a number of topics for beginning market growers, specifically farmers market and road-side stand marketers of fruit and vegetable produce - open to all market vendors.

Topics will include display presentation, best practices for creating/retaining a customer base, pricing considerations, post-harvest handling recommendations, and more.

Production topics to include integrated pest management, soil fertility and using cover crops for weed control and soil amendment. Contact the Extension office for more information.

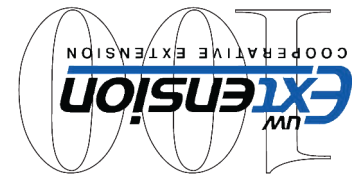


*This program is intended for fruit and vegetable growers, farmers, and interested members of the public. Market vendors of other products are also welcome to attend.*

University of Wisconsin-Extension, U.S. Department of Agriculture and Wisconsin counties cooperating.  
An EEO/AA employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements.

**Return Service Requested**

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«Roe Family»  
«W12839 Hwy 121»  
«Alma Center», «WI» «54615»



Jackson County University Extension Office  
USDA—Cooperative Extension Service  
227 S 11th Street  
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