Basic Cation Saturation Ratio or Sufficiency Level of Available Nutrients
Richard Halopka, CCA
Clark County UW-Extension Crops & Soils Agent

Everyone loves controversy. When attending a soil meeting you can visually see the sides staking their claim. Here are just a few of the comments:

- University is against ratios because they don’t understand research or the natural system of soils.
- University just wants to support chemical fertilizer companies.
- University doesn’t understand how to balance a soil.
- University approved soil testing labs don’t do a good job.

These are a few comments thrown my way at many meetings, because I’m the university in the minds delivering the comments.

OK, let’s review what theory is and what is proven research without taking sides. I’m impressed when reviewing the literature how difficult and how important the original observations of scientist have been. Justus von Liebig’s observation in 1840 was contrary to the theory of humus, which was main stream at the time. Liebig observed that plants required oxygen (O), carbon (C) and hydrogen (H), which is available from the atmosphere and water, in addition, plants required essential nutrients. Primary nutrients were nitrogen (N), phosphorus (P), and potassium (K). Liebig popularized Carl Sprengel’s “Theorem of Minimum” or as known today “Law of the Minimum”. Basically it states that plants require seventeen essential nutrients at required levels to complete a plants life cycle. Over applying Ca or saturating the soil with Ca doesn’t respond to higher yields if another nutrient is below the required amount.

Liebig’s final student Oskar Loew in 1892 suggested an optimum calcium (Ca) / magnesium (Mg) ratio. Loew observed that an excessive application of lime (a calcium source) was toxic to plants. Research conducted during this period observed that plant yield is reduced when Ca is deficient rather than when Mg was excessive. In 1901 Loew and D. W. May (his student) proposed a ratio of 5:4 Ca/Mg.

Fast forward to the 1940’s two scientist, Firman Bear in New Jersey, and William Albrecht in Missouri, were developing theories. The “Ideal Soil” theory originates from Bear’s observations of plant growth response in greenhouse replicated pots. Bear originally thought 85% Ca on exchange sites is required for proper plant growth. After research was conducted Bear stated an “Ideal Soil” should have the following ratios of 65% Ca, 10% Mg, and 5% K.

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This newsletter is mailed to approximately 1,400 farmers and agriculture businesses in Central Wisconsin at a cost of .70 per newsletter. County budgets are tight and each department has been asked to reduce expenses. If you would like to view the Extension Views newsletter on-line versus receiving a paper copy please contact the UW-Extension Office at 715-743-5121 / lori.hendrickson@co.clark.wi.us. You can view the newsletter on our webpage at: [http://clark.uwex.edu/agriculture/agriculture-newsletter/](http://clark.uwex.edu/agriculture/agriculture-newsletter/) Thank you for considering this option!
Remember this was a theory as research data had not confirmed the theory. Understand theory is the original question, and then data collected during research will prove or disprove the theory. It is interesting that as early as 1951 Bear’s student S. J. Toth, concluded that “provided that Ca was the dominant cation, no specific ratio produced a best yield”. It is interesting that many of the researchers and students of Bear and Albrecht report research data doesn’t support a set Ca/Mg ratio. D. J. Eckart and J. Mclean 1981; stated that “emphasis should be placed on providing sufficient, but not excessive levels of each basic cation.” This was the foundation for a different mindset to supply crop required nutrients. The original theory was a good starting point, moving forward though research is defining the role of a sufficient level of nutrients for economical crop production. Sufficient Level of Available Nutrients (SLAN) is a research proven method of applying plant nutrients to soil to attain the required nutrients for crop development, provided there are adequate growing conditions during the season. State certified soil testing labs provide a Wisconsin farmer with accurate soil test information and a crop recommendation based on SLAN. You may review these recommendations by reading A2809, Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin. A2809 has been updated in response to research to fulfill the crop requirement for all essential nutrients. The reason a state certified soil testing lab is recommended:

1. There is a protocol for all samples as they come into the lab.
2. The lab procedure is reviewed for accuracy by a third party.
3. All soil tests will provide crop recommendations for up to four crops that farmers identify on their soil submission form.
4. Soil type is recorded for the field.

Other soil labs may do a great job of testing soil, but the results will be comparing apples to oranges rather than apples to apples and you will generally hire a consultant to provide fertilizer recommendations. Is Basic Cation Ratio Saturation (BCRS) the best method for making recommendations for plant nutrients? Reviewing literature generally BCRS recommendations will apply more fertilizer per acre compared to SLAN recommendations. The flaws of BCRS are that researchers focused on the Ca rather than consider other chemical changes in the soil. Overall, yield is decreased only when an essential nutrient was supplied below the crop requirement.

University people understand the history of soil science and support the theories of soil science when they are supported by research. The university doesn’t ignore research and can explain if a theory was or wasn’t proven by research. Many people working with BCRS will use the term balance or balanced soil. Remember, Bear coined “Ideal Soil” not balanced. Balance is an ambiguous term that can open doors for many interpretations. Soils are alive, dynamic, resilient, and never in balance. Soils are alive so how can they be in balance? Living organisms are in a state of flux. The controversy I’m sure will continue myself. I’m very appreciative of the fathers of soil science. I believe it is important to understand the history rather than blindly go forward without some knowledge of the foundation of soil testing and making crop nutrient recommendations.

Does the university ignore the fathers of soil science? No, I embrace them for all of their tremendous work and observations that were made to develop the systems we have in place so agriculture can feed the world.

References:
This program is funded in part by a grant received from North Central Region-SARE.

To Register:
Limited to the first 80 paid registrants
Make checks payable to: UW-Extension, (credit cards not accepted)
Cost is $50 per person includes materials, a light breakfast, lunch, breaks, and a tour of Pearl Street Brewery (includes a pint glass and samples)

For more information contact:
Carl Duley
Buffalo County UW-Extension Ag Agent
407 South 2nd Street
Alma, WI 54610
608-685-6256
carl.duley@ces.uwex.edu

Jerry Clark
Chippewa County UW-Extension Ag Agent
711 N Bridge Street Rm 13
Chippewa Falls, WI
715-726-7955
jerome.clark@ces.uwex.edu

On the WEB at:
http://buffalo.uwex.edu/agriculture/barley-and-hops/

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the program coordinator or office giving program.
An EEO/AA employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including 7th IC and ADA.
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.

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**Saturday, March 12, 2016**
Limited to the first 80 paid registrants

9:00 am    Registration

9:30 am    Program begins

3:00 pm    Tour of Pearl Street Brewery—included with registration

Continue networking opportunities!

The 7th Annual Conference will be focused hop production and quality. All growers and brewers are welcome. We will not spend time on beginning grower topics, but beginning hop producer packets will be available while supplies last.

We reserve the right to ask any participant attending the program for age verification.

There are many lodging choices in the La Crosse Area. Call are also readily available and very low cost. Please be responsible.

Look to the following:
http://lacrossevisitor.com/
https://www.cityoflacrosse.org

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**Speakers and Topics**
(program order to be determined)

Topics may change slightly

- Jaki Brophy; Communications Director, Hop Growers of America, Washington State
  “National and International Look at Hop Markets: Where do Small Growers fit?”

- Dr. Amanda Gevens, UW-Extension, Plant Pathology
  “Wisconsin Hop Disease Update”

- Michelle Marks; UW-Madison, Plant Pathologist

- Joshua Havill; UMN, Department of Plant Pathology
  “Into the Wild: In Hop Pursuit” (MN wild hop breeding program)

- Dr. Joel Colquhoun, UW-Madison Department of Horticulture
  “How do Hop Herbicides Work?”

- Ruth Genger; UW-Madison, Plant Pathology Lab
  “The Wisconsin Clean Hop Rhizome Program Update”

- Joe Katchever; Owner and Brewmaster, Pearl Street Brewery
  “Our History and Our Beer”

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**March 12, 2016**
Pearl Street Brewery
1401 Saint Andrew Street
La Crosse, WI
(see map on their Facebook page)

**March 12, 2016**
Pearl Street Brewery
1401 Saint Andrew Street
La Crosse, WI
(see map on their Facebook page)

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Name(s): __________________________
______________________________
Address: __________________________
______________________________
City: __________________________
State: ___________ Zip: _______
Phone: __________________________
Email: __________________________

Check this box if you need a beginners packet of information ☐

Number attending: ___________ X $50 = ___________

Registration includes materials, a light breakfast, lunch, breaks, and brewery tour.

Checks made payable to UW-Extension
(credit cards not accepted)

Registration Deadline: Friday, March 4, 2016

List any dietary restrictions __________________________________________________________

Send payment to:
Buffalo County UW-Extension
407 South 2nd Street
Alma, WI 54610
608-685-6256
Exhibit Form

Friday
March 11, 2016
Grand Occasions
Ballroom
Osseo, WI
10:00am—3:00pm

Exhibit space - $100/organization
Exhibitor fee includes lunch, materials and registration fee for one booth staff, additional booth staff must pay registration fee

Advertising space - $100/organization
• Your organization’s ad w/logo displayed on our website
• One promotional piece in conference folder (advertiser supplied)
• Ad w/logo in slideshow

Organization Name: ___________________________ ___________________________
Contact Name: _______________________________ ___________________________
Address: _______________________________________________________________
City, State, & Zip: ____________________________ _____________________________
Phone #: __________________ Alt. Phone #: __________________
Email: _________________________________________________________________

☐ Yes, I’d like an exhibit space!  ☐ Yes, I’d like to advertise!

Register online at www.RiverCountryRCD.org

Checks payable to: River Country RC&D
Mail form & check to: River Country RC&D
PO Box 2187
Eau Claire, WI 54702-2187

Schedule includes:
Morning Speaker
Lunch
Afternoon speaker
Tradeshow

Hosted by

River Country Resource Conservation and Development (RC&D) Council, Inc. was granted 501(c)3 nonprofit status in 1987. Our primary function is to promote, facilitate and build connections for the wise use of natural, human and economic resources. We serve Barron, Buffalo, Chippewa, Clark, Dunn, Eau Claire, Jackson, Pepin, Pierce, Polk, St. Croix and Trempealeau counties of Wisconsin. Our federal tax ID number is 39-1569067.
Wisconsin Dairy and Beef Well-Being Conference
March 11, 2016

UW-Platteville & Pioneer Farm
1313 Markee Pioneer Student Center, Platteville, WI 53818

Agenda

9:00 AM Registration
9:30 AM Keynote—Building Your Ag Story Through Social Media
   Wanda Patsche, Minnesota Farm Living
10:00 AM Morning Break
10:30 AM Topic: Quality Assurance
   WI Beef Council, Inc.
11:20 AM Topic: Cow Comfort and Transition
   Dr. Katy Proudfoot, Animal Welfare & Behavior Extension Specialist, The Ohio State University
12:10 PM LUNCH
1:00 PM Livestock Stewardship: The Puzzle of the People
   Heidi Carroll, Extension Livestock Stewardship Associate, South Dakota State University
2:15 PM Breakout Sessions
   Dr. Ron Gill
   Extension Livestock Specialist, Texas A&M University
   Topic: Getting Cattle to Work for You
   (Pioneer Farm Handling Facility)
   Dr. Sandy Stuttgen & Dr. Sarah Mills-Lloyd
   University of Wisconsin-Extension
   Topic: Pain Management in Youngstock (campus)
   David Kammel
   Biological Systems Engineering
   UW-Extension
   Topic: Design & Management of Humane Animal Handling Facilities (campus)
3:00 PM Adjourn

Registration Form
Wisconsin Dairy and Beef Well-Being Conference

Name(s) _____________________________________________
Address _____________________________________________
City/State/Zip _______________________________________
Email address _______________________________________

Phone ___________________________ # attending ___________

Early Bird (Prior to February 19th) = $45 per person
After February 19th = $55 per person

Make check payable to: UW-Extension
Mail to: Dane County UW-Extension
        Attn: Well-Being Conference
        5201 Fen Oak Drive, Suite 138
        Madison, WI 53718

Continuing Education Credits Available!
Veterinarians & Humane Officers
4 credit hours—American Registry for Professional Animal Scientists (ARPAS)
1 Beef Quality Assurance

Contact Jennifer Blazek at 608-224-3717 or jennifer.blazek@ces.uwex.edu with questions.
Youth Track

This year there will be a track tailored to youth, the majority of the track held at the Pioneer Farm Technology Center. The youth track features more interaction and hands-on activities to engage young learners. The conference ends early at 2pm to allow students to arrive in time back to school for the end of the school day.

Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 AM</td>
<td>Registration (on campus)</td>
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<tr>
<td>9:30 AM</td>
<td>Keynote—Building Your Ag Story Through Social Media, Wanda Patzke, Minnesota Farm Living</td>
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<tr>
<td>10:20 AM</td>
<td>Travel to Pioneer Farm Technology Center</td>
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<tr>
<td>10:40 AM</td>
<td>Pain Management in Youngstock Dr. Sandy Stuttgen &amp; Dr. Sarah Lloyd-Mills, UW-Extension</td>
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<td>11:30 AM</td>
<td>Livestock Stewardship-Making Ethical Decisions when Caring for Animals, Heidi Carroll, Extension Livestock Stewardship Associate, South Dakota State University</td>
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<tr>
<td>12:20 PM</td>
<td>Lunch</td>
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<td>1:00 PM</td>
<td>Getting Cattle to Work for You Ron Gill, Texas A&amp;M University</td>
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<td>2:00 PM</td>
<td>Youth Depart for Home</td>
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Youth Registration Form

Wisconsin Dairy and Beef Well-Being Conference

Name of Advisor/Adult/Parent: ____________________________________________

FFA Chapter/Group Name: ________________________________________________

Phone Number: __________________ Number of Youth Attending: ____________

Email Address: __________________________________________________________

Early Bird (Prior to February 19th) = $45 per person

After February 19th = $55 per person

Make check payable to: UW-Extension

Mail to: Dane County UW-Extension

Att: Well-Being Conference

5201 Fen Oak Drive, Suite 138

Madison, WI 53718

For more information on the conference and to see complete biographies on all the speakers, please visit:
http://fyi.uwex.edu/animalhusbandryconference/

Contact Jennifer Blazek at 608-224-3717 or jennifer.blazek@ces.uwex.edu with questions.

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An EEO/AA employer; University of Wisconsin Extension provides equal opportunities in employment and programming, including Title IX and ADA. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the UW Extension Office at 608-224-3717. 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.
QuickBooks for Farm Financials Recordkeeping

Beginner’s Workshop

Develop a simple set of farm financial record and reports and learn basic accounting skills. Learn how QuickBooks is structured, how its files work, and how to navigate the software.

Space Limited. Register early

Register ONLINE.
http://marathon.uwex.edu/events/quickbooks-for-farm-financial-recordkeeping/

Event Location
Athens Fire Hall
301 State Highway 97
Athens WI

DATE: March 18th, 2016
TIME: 10:00a.m. – 3:00p.m.
COST: $20/person (includes lunch) Does not include software.

CONTACT: Heather Schlesser
PHONE: 715-261-1230
EMAIL: heather.schlesser@ces.uwex.edu

Wanted:
10 Clark County soybean growers with 4 soybean fields to contribute to a soybean yield gap survey. Please contact UW-Extension Clark County Crops & Soils Agent Richard Halopka, 715-743-5121 or richard.halopka@ces.uwex.edu

the will meet with you one on one to fill out survey. This project is sponsored by:
Soybean Marketing board
North Central Soybean Research
The University of Wisconsin-Madison

WANTED:
10 Clark County soybean growers with 4 soybean fields to contribute to a soybean yield gap survey. Please contact UW-Extension Clark County Crops & Soils Agent Richard Halopka, 715-743-5121 or richard.halopka@ces.uwex.edu
the will meet with you one on one to fill out survey. This project is sponsored by:
Soybean Marketing board
North Central Soybean Research
The University of Wisconsin-Madison

Data supplied to:
Dr. Shawn Conley; Soybean & Wheat Specialist @ UW-Madison.
Economic Outlook for Agriculture

This seminar will provide critical updates and information for your agricultural operation. Trends in the dairy market and industry and how they affect farm operations will also be discussed, as well as crop production, the cost of producing corn and beans and best practices to minimize investment.

Lunch will be provided to participants of this seminar.

AGENDA

9:30 a.m.  Registration

10:00 a.m. Dairy Economic Outlook  
Mark Stephenson, Center for Dairy Profitability  
In this session, Mark Stephenson will discuss the changing trends in the dairy market, while specifically highlighting Wisconsin’s future in the dairy industry.

11:30 a.m. Lunch

12:30 p.m. How to Lose Less on Grain Production this Year  
Paul Mitchell, Department of Agriculture and Applied Economics, UW Extension State Specialist  
In this session, Paul will discuss the current status of the grain markets and the associated costs of production. He will focus on how to maximize efficiency and decrease production costs.

EVENT DETAILS

Wednesday, March 9, 2016  
Registration: 9:30 a.m.  
Seminar: 10:00 a.m. - 2:00 p.m.

PPA Member: $18  
Non-Member: $22  
Class #66439  
Class #66440

LOCATION

NTC Center for Business and Industry Building  
1000 W. Campus Drive  
Wausau, WI 54401

GET STARTED TODAY

To register, call 715.675.3331 and press “1” or visit www.ntc.edu/ce/conferences

QUESTIONS? Contact Continuing Education at 715.803.1965 or email ce@ntc.edu
PESTICIDE APPLICATOR RE-CERTIFICATIONS

- WEDNESDAY, MARCH 2- Colby VFW, 104 S. Division St, Colby
- FRIDAY, MARCH 4- Thorp Fire Hall, 101 S Wilson Street, Thorp
- WEDNESDAY, MARCH 9- Neillsville Courthouse Auditorium, 517 Court Street, Neillsville

All classes will be held 9:00 a.m. – 2:30p.m.

The cost of the training session is $35.00.

If you have any questions regarding this training please do not hesitate to contact Clark County UW-Extension, 715-743-5121.

Lunch is not provided.

2016 PEAQ Stick in Clark County

Four locations in Clark County will be observed for alfalfa quality measurements in 2016. PEAQ stick measurements estimate the current relative feed value of the growing alfalfa so farmers can estimate when harvest should begin. The results will be reported to the state website located at: http://www.uwex.edu/ces/ag/scissorsclip/index.cfm or check our county at webpage http://clark.uwex.edu/peaq-stick-readings-2016/ or you may call 715-743-5124 and listen to the message for the current PEAQ stick results that week. Depending on weather conditions PEAQ stick reporting will probably begin about May 15, 2016 and will be update at least twice during the week. If you have questions about PEAQ stick measurements or alfalfa management please call Richard Halopka, Clark County UW-Extension, Crops & Soils Agent at 715-743-5121 or richard.halopka@ces.uwex.edu.

Managing Dairy Employees Effectively

A Bilingual Middle Manager Training on Employee Management

As the title says, learn to be a more effective employee manager. Register through Marathon County UW-Extension. Registration deadline is March 1.

Event Information

DATE: March 15th, 2016
PLACE: Country Aire Bar & Banquets
F1312 County Road P, Stratford WI 54484
TIME: 8:45a.m.-3:00p.m.
COST: $25/person
CONTACT: Heather Schlesser
PHONE: 715-261-1230
EMAIL: heather.schlesser@ces.uwex.edu

Precision Ag: When and Where Do I Start?

April 8th
Loyal City Hall
10a.m. – 3p.m.
Lunch Included

Please RSVP at UW-Extension so we have a head count for lunch. 715-743-5121

- Jim Leverich — When Should I consider investing in precision ag?
- Brian Luck — How can I use precision ag?
- Drew Mizgalski — How Heartland Coop implements precision ag
- Kori Ritchtor — Tractor Central
- Stewart-Peters — Marketing commodities
- Richard Halopka — Developing a Crop Budget
Heart of the Farm

Women in Agriculture Conference

Wednesday, March 22nd, 2016

Mead Wildlife Education and Visitor Center
8248 County Hwy S
Milladore, WI 54454

(Registration starts at 9:00)

Will 2016 be another “treading water” year for Wisconsin Dairy Farmers?

Mark Stephenson, Extension Dairy Policy Analyst and Director, Center for Dairy Profitability, Dept. of Agricultural and Applied Economics, UW-Madison. It is a new year and the dairy markets look like they are under siege. Mark Stephenson will discuss the mounting pressures on milk prices in the year ahead.

Social Media on the Farm.

Heather Schlesser, Dairy Agent, Marathon County, UWEX. How to use social media to promote your farm. Presentation will discuss the use of Facebook and Twitter to get the word out about your farm and the great agricultural practices you perform.

Becky Schlesser will discuss the world of beekeeping. Why keep bees? What does it cost? What are the benefits and rewards?

Value Added Agriculture, Making Corn Fun

Liz Henry, Assistant Director, RENK AgriBusiness Institute, Producer and Bourbon Babe. Liz will discuss how she and her family worked magic in their historic barn in Dane, WI by creating pure Wisconsin craft bourbon. Find out how J. Henry and Son’s Bourbon brought Liz back to the family farm.

Please contact us for special assistance regarding our programs. Requests are confidential.

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA.

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

Mission
Farm Management and Production
Education for Women
Improving Farm Business
Decision-Making

Agenda
9:00 am Registration
9:15 am Introductions
9:45 am Kitchen Wellness
10:00 am Will 2016 be another “treading water” year for Wisconsin Dairy Farmers?
11:00 am Social Media on the Farm
11:30 am Beekeeping 101
12:00 pm Lunch (provided)
1:00 pm Value Added Agriculture, Making Corn Fun
1:30 pm Beet the System, Farm with Wisdom—Adding Market Gardening to Your Operation
2:45 pm Evaluations, Prizes
3:00 pm Adjourn, Optional Tour

Goal
The Heart of the Farm—Women in Agriculture

Beck the System, Farm With Wisdom—
Adding Market Gardening to Your Operation
Joel Kuenhold, Lonely Oak Farm, Milladore, WI. Join Joel for an informative discussion on how vegetables can add significant revenue to your farm operations with low initial overhead. Joel will explain how he transitioned his entire farm to a direct marketing model. He will cover planning for market gardening, season extension, starting a Community Supported Agriculture (CSA) program, and share his adventures in starting an on-farm restaurant. An emphasis on engaging your local food system will be carried through this presentation.

Joel will be offering a tour of his diversified farm immediately following his presentation.

Lonely Oak Farm
11496 County Road S
Milladore, WI 54454

Please contact us for special assistance regarding our programs. Requests are confidential.

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA.

Registration Form
Please make checks payable to:

UW-Extension

Name:
Address:
City/State:
Zip:
County:
Email:
Phone:
PO Box 8005
940 Market Street
Wisconsin Rapids, WI 54495

Registration Deadline: March 27, 2016

Send registration form and check to:
Wisconsin County Extension Office
609 E OFT, Wood County

If you have any questions, please contact:
Mott Lippert, 715-421-8440, matthew.lippert@ces.uwex.edu
OR
Jenny Vanderlin, jnvanderlin@wisc.edu, 608-253-7795

http://www.uwex.edu/ces/heartofthefarm/

Cancellations after the registration deadline will not be refunded.
Call 715-421-8440 to cancel your registration.

In case of inclement weather:
Call 715-421-8440 regarding the status of the conference.

Speakers

Kitchen Wellness.
Brittany Schreiber, Rural Life Initiative Outreach Health Coordinator, Nurse, Farmer, Mother. Brittany works for a small non-profit organization that takes preventative health screenings to the farms in Marathon County. She sits at the kitchen tables of farm workers and checks them for their blood pressure, cholesterol, and diabetes. She comes from a farming background and still farms with her husband Bart doing crops while trying to help farmers throughout Marathon County while being a mother to a two year old with another on the way.

If you have any questions, please contact:
Mott Lippert, 715-421-8440, matthew.lippert@ces.uwex.edu
OR
Jenny Vanderlin, jnvanderlin@wisc.edu, 608-253-7795

http://www.uwex.edu/ces/heartofthefarm/

Cancellations after the registration deadline will not be refunded.
Call 715-421-8440 to cancel your registration.

In case of inclement weather:
Call 715-421-8440 regarding the status of the conference.
Walking and Talking Crops: Cover Crops Field Day
April 15th cover crop field day at Dave Gallion’s N9934 Groverside Ave Spencer, WI 54479
12:30-3:00
Review aerial and drill seeded cover crops and cover crop plots.
Review of how 2016 crop will progress, Soil Health review, NRCS update, UWEX update and meet new Clark County Land Conservationists.

BLOOD DRIVE IN CLARK COUNTY

3/21/16 Greenwood High School
209 S Hendren
Greenwood WI
12:00pm-6:00pm

4/4/16 Colby High School
705 N Second Street
Colby, WI 54421
12:00pm-5:00pm

4/14/16 OEM Fabricators Incorporated
1701 Industrial Park Dr
Neillsville, WI 54456
11:30am-5:30pm

4/25/16 Neillsville American Legion
6 Boon Blvd
Neillsville, WI 54456
11:30am-5:30pm

4/26/16 Thorp Community
Thorp Fire and Ambulance
Thorp, WI 54771
9:30am-2:00pm

Farm Record Keeping workshop
Getting a handle on farm record keeping ...

Tuesday March 8th 1 - 3:30 p.m.
Jackson County UW Extension - 2275 11th Street Black River Falls
- Review of various record keeping systems, different formats, types, and where to find more information.
- Introduction to the use of the paper ledger format and a number of the computer record keeping programs available.
- Details regarding the pros and cons of each system, farm business friendly, program costs, and support.

For more information contact
Jackson County UW Extension (715) 284-4257

UW-Extension Staff
Richard Halopka
Crops and Soils Agent
richard.halopka@ces.uwex.edu

Melissa Kono
CNRED Agent
melissa.kono@ces.uwex.edu

Christine Hollar
4-H Youth Development Agent
christine.hollar@ces.uwex.edu

Nancy Vance
Family Living Agent
nancy.vance@ces.uwex.edu

Brianna Miller, WNEP
brianna.miller@ces.uwex.edu

Lori Hendrickson, Support Staff
lori.hendrickson@co.clark.wi.us

Kim Kolano, Support Staff
kim.kolano@co.clark.wi.us

715-743-5121
## Upcoming Meeting / Events

Make sure to listen to WCCN and WAXX for any cancellations

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2</td>
<td>Pesticide Applicator Training</td>
<td>Colby VFW</td>
<td>9:00am</td>
</tr>
<tr>
<td>March 3</td>
<td>Heifers: The Next Generation</td>
<td>Abbotsford City Hall</td>
<td>9:30am-3:00pm</td>
</tr>
<tr>
<td>March 4-5</td>
<td>Wisconsin Age Women’s Summit</td>
<td>Madison Marriott West, Middleton</td>
<td>WiAgWomensSummit.com</td>
</tr>
<tr>
<td>March 4</td>
<td>Pesticide Applicator Training</td>
<td>Thorp Fire Hall</td>
<td>9:00am</td>
</tr>
<tr>
<td>March 8</td>
<td>Nutrient Management Planning</td>
<td>Reseburg Town hall</td>
<td>9:15am</td>
</tr>
<tr>
<td>March 8</td>
<td>Farm Record Keeping Workshop</td>
<td>Black River Falls</td>
<td>1:00-3:00pm</td>
</tr>
<tr>
<td>March 9</td>
<td>Economic Outlook for Agriculture</td>
<td>Wausau Wi</td>
<td>9:30am-200pm</td>
</tr>
<tr>
<td>March 9</td>
<td>Pesticide Applicator Training</td>
<td>Neillsville Courthouse Auditorium</td>
<td>9:00am</td>
</tr>
<tr>
<td>March 10</td>
<td>Fruit Tree Pruning</td>
<td>Jackson UW-Extension</td>
<td>2:00pm-4:30pm</td>
</tr>
<tr>
<td>March 11</td>
<td>Wisconsin Dairy and Beef Well-Being Conference</td>
<td>Platteville</td>
<td>9:00am—3:00pm</td>
</tr>
<tr>
<td>March 11</td>
<td>West Central WI Grazing Conference</td>
<td>Osseo WI</td>
<td>10:00am-3:00pm</td>
</tr>
<tr>
<td>March 12</td>
<td>Hop Production for Wisconsin Craft Brew Industry</td>
<td>LaCrosse, WI</td>
<td>9:00am—3:00pm</td>
</tr>
<tr>
<td>March 15</td>
<td>Managing Dairy Employees</td>
<td>Country Aire Bar &amp; Banquet</td>
<td>8:45am-3:00pm</td>
</tr>
<tr>
<td>March 17</td>
<td>Integrated Pest Management</td>
<td>Jackson County UW-Extension</td>
<td>1:00pm — 3:00pm</td>
</tr>
<tr>
<td>March 17</td>
<td>Nutrient Management Planning</td>
<td>Green Grove Town Hall</td>
<td>9:15am</td>
</tr>
<tr>
<td>March 22</td>
<td>Heart of the Farm</td>
<td>Milladore, WI</td>
<td>9:00am—3:00pm</td>
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<tr>
<td>March 30</td>
<td>Nutrient Management Planning</td>
<td>Loyal Town hall</td>
<td>9:15am</td>
</tr>
<tr>
<td>April 8</td>
<td>Precision Ag: When and Where do I Start?</td>
<td>Loyal City Hall</td>
<td>10:00am-3:00pm</td>
</tr>
<tr>
<td>April 15</td>
<td>Walking and Talking Crops: Field Day</td>
<td>Dave Gallions; Spencer, WI</td>
<td>12:30-3:00</td>
</tr>
</tbody>
</table>

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