

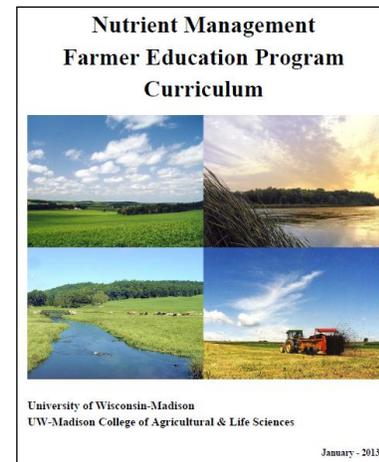
Wisconsin Crop Manager

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What's New

Nutrient Management Publications Updated.....	4
Nutrient Management Farmer Education Curriculum Revised.....	4
All 2012 Crop Manager Articles compiled in one PDF.....	5
Crops	
Vegetable Crop Update.....	5
Winners of the 2012 Wisconsin Soybean Contest are Announced.....	5
New State All-Time Corn Yield Record Set in 2012.....	5
Fertility and Soils	
Wondering how much nitrate might be left in the soil from the 2012 crop?.....	5
Managing Nutrients on Wisconsin Soils Webinar Workshop - 2013.....	6

Nutrient Management Farmer Education Curriculum Revised



An updated *Nutrient Management Farmer Education Curriculum* was released in late January 2013. This popular collection of nutrient management education and evaluation tools is produced jointly by the UW Discovery Farms Program, the Nutrient and Pest Management (NPM) Program, the UW-Extension Environmental Resources Center, and the UW-Extension Nutrient Management Team.

Changes to the 2013 version of the curriculum include:

- 1) Updates to be consistent with the recently revised UW-Extension publication *Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin* (A2809),
- 2) Updates from state and federal agencies regarding the status of their respective nutrient management programs.
- 3) Revisions to the evaluation tools.

The *Nutrient Management Farmer Education Curriculum* is contained on a CD that includes core and optional presentations, speaker notes, associated publications and worksheets, a suggested program evaluation procedure, and a user's manual.

If you have not yet received a 2013 version of the curriculum or would like additional copies, please contact Scott Sturgul by e-mail at ssturgul@wisc.edu or by phone at 608-262-7486.

Nutrient Management Publications Updated

The UW Nutrient and Pest Management (NPM) Program has updated many of its nutrient management publications to be consistent with the recently revised UW-Extension publication *Nutrient application guidelines for field, vegetable, and fruit crops in Wisconsin* (A2809). Updated publications include:

- 1) Nutrient Management Fast Facts
- 2) Know How Much You Haul
- 3) Credit What You Spread – Available Manure Nutrient Content (card)
- 4) Credit Legume Nitrogen and Reap the Profits (card)
- 5) UW Nitrogen Guidelines for Corn (card)

Copies of these and other NPM Program publications are available free of charge. To place an order, contact NPM at npm@hort.wisc.edu or 608-265-2660. Most NPM publications are also available for viewing and download at <http://ipcm.wisc.edu/>.

All 2012 Crop Manager Articles compiled in one PDF

The complete 2012 Wisconsin Crop Manager Volume 19 is now available on our website as a single PDF. The first four pages are a Table of Contents listing every article and the page number it can be found on.

To view or download all the articles from the 2012 Wisconsin Crop Manager in one PDF file, complete with a table of contents, click on the link below.

[WCM Volume 19](#)

Vegetable Crop Update 1/29/13

The 1st issue of the Vegetable Crop Update is now available. This issue contains follow up information from past education meetings as well as details on upcoming education meeting. Click [here](#) to view this update.

Winners of the 2012 Wisconsin Soybean Contest are Announced

Shawn Conley, WI State Soybean and Wheat Extension Specialist

The 1st place winner in Division 4, Bahr Farms of Belmont grew Trelay 24RR19 and harvested 82.6 bu/a. In second place, Nick Viney of Badgerland Grain Farms, Edgerton, grew FS HiSoy HS 24A01 and harvested 81.4 bu/a. In Division 3, RnK DeVoe Farms on Monroe won 1st place with Pioneer 93Y43 at 75.2 bu/a and in 2nd place, Josh Trautman of Badgerland Grain Farms, Edgerton, harvested 74.2 bu/a with FS HiSoy HS 24A01. Also in Division 3, the Wisconsin Bean Team of UW Graduate students Adam Gaspar, David Marburger, and Scott Rowntree grew Pioneer 92Y51 and harvested 79.0 bu/a. The WI Bean Team is ineligible for official prizes as they are grad students of Dr. Conley; however their efforts are still unofficially recognized. In Division 2, Jerry Koser of Almena achieved 73.7 bu/a from Pioneer 91M10 for first place. In 2nd place, Fly-By Acres of Sheboygan Falls harvested 69.6 bu/a from NK Brand 21-N6 Brand soybeans. In Division 1 at 61.2 bu/a is Kloos Acres from Stratford. They planted Pioneer 91Y30. 2nd place winner in Division 1 was Paul Graf Farms from Sturgeon Bay. They harvested 47.2 bu/a from Asgrow AG1031.

The contest is sponsored by the WI Soybean Program and organized to encourage the development of new and innovative management practices and to show the importance of using sound cultural practices in WI soybean production.

New State All-Time Corn Yield Record Set in 2012

Joe Lauer

In spite of the 2012 drought, a new all-time state record corn yield was produced in Portage County. The previous all-time record was from Grant county. A total of five county records were set in Brown, Green Lake, Pepin, Portage, and Walworth counties. Yields jumped 13 to 65 bushels per acre over the previous record in these counties. The county with the greatest

yield increase, 65 bushels per acre over the previous record, was Walworth county.

The new record was set by Jeff Laskowski of Plover, WI, where he produced 327 bushels per acre using the corn hybrid Pioneer P0533AM1. Laskowski's irrigated entry was grown on 10 continuous acres.

For further reading see the [NCGA Corn Yield Contest](#) and the [Wisconsin PEPS program](#).



Highest recorded corn yields (bu/A) in Wisconsin counties (1983-2012). Data includes participants in the NCGA yield contest and Wisconsin PEPS program.

Wondering how much nitrate might be left in the soil from the 2012 crop?

Carrie A.M. Laboski, Extension Soil Fertility/Nutrient Management Specialist

Drought conditions throughout much of Wisconsin in 2012 resulted in yields that were less than growers had been planning for when they planted in the spring. Under drought conditions, there is the possibility that the drought stressed crop did not use all of the nitrogen that was applied. This unused (or residual or excess) N will remain in the soil profile until it is used by another crop or leached. Situations with the greatest potential for excess N to remain in the soil profile after the 2012 crop include fields with drought stressed corn, where manure was applied for the 2012 crop, or where forage legumes were grown in 2011. If fall, winter, and early spring rainfalls are normal or below normal, it is likely that unused N from 2012 will still be in the soil profile in spring 2013 and be available for the 2013 crop.

To adjust N applications to corn fields in 2013 where residual nitrate is likely, a preplant nitrate test (PPNT) can be taken prior to planting corn in the spring. Soil samples for PPNT are collected at the 0-1' and 1-2' depth. In the spring prior to planting, it is typical to see 50 lb N/a in the soil profile. Therefore, 50 lb N/a should be subtracted from the PPNT results to arrive at a N credit. This N credit should then be subtracted from the top end of the corn MRTN rate guidelines.

For more information on the PPNT and MRTN consult Chapter 5 in UWEX Publication [A2809 Nutrient application guidelines for field, vegetable, and fruit crops in Wisconsin](#).

In an effort to assess residual soil nitrate following the 2012 corn crop, a soil nitrate monitoring network was developed. Soil samples were collected from 0-1', 1-2', and in some cases, 2-3' deep in fields throughout the state after corn was harvested and after adequate rainfall occurred to allow sampling with depth. The amount of residual nitrate at each location along with some field information can be found at: <http://uwlab.soils.wisc.edu/soilnitratemonitoring>. The amount of nitrate remaining in the soil profile across the state is highly variable. Coarser textured soils typically had low amounts of residual N. Fields with higher N application rates and/or manure application tended to have higher residual N. The greatest amount of residual N was 325 lb N/a. If this amount of nitrate was found in PPNT samples, the N credit would be 275 lb N/a (325-50=275); more than enough to grow a crop of corn with no additional fertilizer or manure. These results suggest that growers should strongly consider taking soil samples for PPNT in the spring to adjust N applications to improve profitability. Soil samples will also be collected from the soil nitrate monitoring network fields in spring 2013 and results posted as soon as data are available.

Managing Nutrients on Wisconsin Soils Webinar Workshop - 2013

Presented by: UW-Madison Department of Soil Science and UW-Extension Nutrient & Pest Management Program

Managing Nutrients on Wisconsin Soils Workshop is being offered in a webinar format this year with a revised/updated curriculum. The 2013 workshop webinars will be March 18, 19, and 21 from 1 to 4 pm. Registered participants will receive a URL to login into the webinar series from their office or home computer.

Program Information

This is an intensive nine-hour webinar designed for agency and industry personnel who desire to have a more in depth knowledge of intermediate to advanced topics in soil fertility and soil management. The learning objectives are to provide individuals with a fundamental understanding of Wisconsin's revised nutrient application guidelines, advanced soil fertility management tools that may be used in adaptive nutrient management, and soil management practices to reduce nutrient loss.

Featured Speakers

John Peters, Carrie Laboski, Scott Sturgul, Ken Hubbard, Laura Good, Kevin McSweeney, Matt Ruark, Francisco Arriaga, Department of Soil Science, University of Wisconsin-Madison

Topics

Monday, March 18

- Understanding soil groups and soil yield potential
- The nitrogen cycle – the key to better N management

- Forms of fertilizer N
- N rate guidelines for profitable crop production,
- N credits from manure and legumes
- Soil nitrate testing
- Understanding N stabilizer/extenders
- Crop canopy sensing for in-season N management
- Evaluating N management during/after extreme weather (eg heavy rainfall, drought)

Tuesday, March 19

- Phosphorus and potassium recommendations & management
- Manure P & K credits
- P loss from tile lines: is it really an issue?
- Starter fertilizers as part of a nutrient management plan
- Secondary and Micronutrients – do you need them?
- Liming – the cornerstone to a good nutrient management program
- Uses and limitations of plant analysis including end of season stalk nitrate test

Thursday, March 21

- Soils and landforms of Wisconsin and their influence on nutrient loss
- Cover Crops
- Soil management practices and their impact on nutrient loss
- Soil management practices in RUSLE2 and the Phosphorus Index

Online Registration

Registration for the webinar is required for each participant and the fee is \$90 per person. Registration will close on March 18 at noon, but early registration is appreciated and will improve the participant's webinar experience.

Register at: <http://patstore.wisc.edu/npm/register.asp>.

Credit card is the only form of payment on this website.

A confirmation email will be sent to each participant. For questions on registration contact Carol Duffy (cjduffy@wisc.edu, 608-262-0485). For questions about program content contact Carrie Laboski (laboski@wisc.edu, 608-263-2795).

Course Materials

After registering, participants will be sent an email with directions for downloading supplemental materials and information needed to log into the webinars. All webinars will be recorded and available for participants to view until May 31. Basic principles of soil fertility will not be covered in these

webinars, but will be part of the supplemental materials. Participants may wish to purchase UWEX publications A2809 *Nutrient application guidelines for field, vegetable, and fruit crops in Wisconsin* and A3588 *Management of Wisconsin Soils* from the Learning Store at: <http://learningstore.uwex.edu>. Both publications can be downloaded for free as PDF files.

CCA CEUs

An application has been made for Certified Crop Advisor CEU's with 6 credits in nutrient management and 3 credits in soil and water management (9 credits total).

Scroll down to the end of this newsletter to view the flyer for this event.



Managing Nutrients on Wisconsin Soils Webinar Workshop–2013

March 18th, 19th and 21st
1-4 pm each day

Presented by: UW-Madison Department of Soil Science and
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Webinar Agenda

Date/Time	Topic	Speaker
Monday, March 18		
1:00-1:20	Understanding soil groups and soil yield potential	John Peters
1:20-1:40	The nitrogen cycle – the key to better N management	Carrie Laboski
1:40-1:50	Forms of fertilizer N	Carrie Laboski
1:50-2:00	Break	
2:00-2:30	N rate guidelines for profitable crop production	Carrie Laboski
2:30-2:40	N credits from manure and legumes	John Peters
2:40-2:50	Soil nitrate testing	Scott Sturgul
2:50-3:00	Break	
3:00-3:20	Understanding N stabilizers/extenders	Carrie Laboski
3:20-3:40	Crop canopy sensing for in season N management	Ken Hubbard
3:40-3:50	Evaluating N management during/after extreme weather (eg heavy rainfall, drought)	Carrie Laboski
3:50-4:00	Wrap-up	
Tuesday, March 19		
1:00-1:20	Phosphorus and potassium recommendations & management	Carrie Laboski
1:20-1:30	Manure P & K credits	John Peters
1:30-1:50	P loss from tile lines: is it really an issue?	Laura Good
1:50-2:00	Break	
2:00-2:10	Starter fertilizers as part of a nutrient management plan	Carrie Laboski
2:10-2:30	Secondary and micronutrients – do you need them?	John Peters
2:30-2:50	Liming – the cornerstone to a good nutrient management program	John Peters
2:50-3:00	Break	
3:00-3:50	Uses and limitations of plant analysis including end of season stalk nitrate test	Carrie Laboski
3:50-4:00	Wrap-up	
Thursday, March 21		
1:00-1:30	Soils and landforms of Wisconsin and their influence on nutrient loss	Kevin McSweeney
1:30-1:50	Cover Crops	Matt Ruark
1:50-2:00	Break	
2:00-2:50	Soil management practices and their impact on nutrient loss	Francisco Arriaga
2:50-3:00	Break	
3:00-3:50	Soil management practices in RUSLE2 and the Phosphorus Index	Laura Good, Francisco Arriaga
3:50-4:00	Wrap-up	

Revised Curriculum