

Wisconsin Crop Manager

Volume 18 Number 18 --- University of Wisconsin Crop Manager --- July 14, 2011

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workshop. A brochure containing an agenda and registration information is included with this issue of *Crop Manager* and can also be found at:

<http://www.soils.wisc.edu/extension/cal/tnmp2011.pdf>

The TNMP workshops are a joint effort of the University of Wisconsin-Extension, UW-Madison Department of Soil Science, Nutrient & Pest Management Program, Discovery Farms Program, Wisconsin Department of Agriculture, Trade and Consumer Protection, Wisconsin Department of Natural Resources, and USDA-Natural Resources Conservation Service.

For more information about the workshop, contact Scott Sturgul at 608-262-7486, ssturgul@wisc.edu. To register for the workshop, use the on-line registration website identified in the brochure or contact Carol Duffy at 608-262-0485, cjduffy@wisc.edu.

Wisconsin Crop Diagnostic Training Center - 2011 Diagnostic Troubleshooting Workshops

Dan Heider, UW-Integrated Pest Management Program

There is still time to register for the most interactive workshop of the summer. Whether you regularly troubleshoot crop and pest management problems, or if the detective in you simply can't resist solving a mystery, this is the workshop for you. Because the date is filling fast, I encourage you to use our online registration which is found at <https://www.patstore.wisc.edu/ipm/register.asp>

Diagnostic Troubleshooting Workshop

Registration Fee:	\$75
CCA CEU's:	4.0 (categories to be determined)
Location:	Arlington Ag Research Station Tuesday July 19, 2011

Topics covered:

This workshop gives you the opportunity to fine tune your crop diagnostic skills in a fun, interactive setting! Small groups rotate through field problems with UW Specialists role playing as farmers. Through digging up plants, asking questions and consulting references participants will diagnose the problem and make a recommendation for correction. Each participant will experience 8 separate diagnostic scenarios.

For additional information, contact Dan Heider at (608) 262-6491 or via email at djheider@wisc.edu.

Training for Nutrient Management Planners Workshops

Scott Sturgul, Nutrient & Pest Management (NPM) Program

Two workshops designed for current and potential nutrient management plan writers in Wisconsin will be offered in September 2011. The intent of these two-day workshops is to provide in-depth training on the preparation of quality nutrient management plans. The program is designed for production agronomists and county-based conservation staff involved in nutrient management programs. Others are welcome to attend as well. Participants will work in small groups to prepare a functional plan for a real Wisconsin farm. The workshops will be held on September 15 and 16, 2011 at the Stoney Creek Inn in Wausau and on September 27 and 28, 2011 at the Crowne Plaza Hotel in Madison.

The *Training for Nutrient Management Planners* (TNMP) workshops will feature extensive training on the use of the SNAP-Plus nutrient management planning software. Participants are strongly encouraged to bring laptop computers to these workshops.

Enrollment in each workshop is limited to 80 participants. Advance registration for the workshops is required and the registration fee is \$200 per person (\$250 for late registration). The registration deadlines are September 6, 2011 for the Wausau workshop and September 16, 2011 for the Madison

Even with High Corn Prices, Production Efficiency is Key to Profitability

Joe Lauer, Corn Agronomist

[2011 PEPS Entry Form](#)

For many years, the question most asked by corn farmers has been, “How do I save a buck?” During the last three years the question has changed to, “How do I grow another bushel?” Growers are thinking creatively about ways to increase yields through new, innovative production techniques. The PEPS program provides an outstanding way to compare the economics and efficiency of your cropping system to others. It is an opportunity to gain valuable knowledge, technical insight and demonstrate your farming skills for conserving resources and improving water quality. The 2010 most efficient farmers in the PEPS program are shown in Table 1.

In the 2010, the average yield in the cash corn and dairy/livestock corn divisions was 218 and 216 bushels per acre with production costs of \$439 and \$408 per acre. The average cost per bushel was \$2.05 and \$1.88. Using PEPS production costs for an acre and the WI USDA average of 162 bushels per acre, the average cost per bushel was \$2.71. It cost \$724 per acre to grow corn silage with an average cost per ton of dry matter of \$77 (\$27 at 65% moisture).

Table 1. PEPS Most Efficient corn farmers in the 2010 Cash Corn, Dairy/Livestock Corn and Silage Corn Divisions.

Division	District	County	Participant	Cost/Bu Cost/T	Cost/A	Yield	Hybrid	Verifier
Corn, Cash Crop	1	Marathon	Steve Kloos	\$1.89	\$443	235	Pioneer 37Y12	Philip Ely
	2	Jackson	Stetzer Farms	\$1.66	\$468	282	DeKalb DKC52-59	Trisha Wagner
Corn, Dairy Livestock	1	Polk	Dale Wester	\$1.56	\$362	232	DeKalb DKC42-72	Kieth Zygowicz
	2	Buffalo	Diversified Farms	\$2.01	\$432	215	Pioneer P0461XR	Carl Duley
	3	Grant	David Gehrke	\$1.76	\$363	206	Kussmaul GL807GT	Steve Mueller
Corn, Silage	1	Marathon	Steve Kloos	\$71.05	\$588	8.3	Pioneer 35F38	Philip Ely

The “**Green Fields – Blue Waters**” award is given to a farmer to recognize and promote stewardship and sustainable corn production practices.

For previous PEPS reports and 2011 Entry forms see the website: <http://corn.agronomy.wisc.edu/PEPS>.

Fields entered in the PEPS program may also qualify for other contests such as the National Corn Yield Contest.

If you have any questions, please call Amy Cottom at (608) 262-7702 or e-mail at: agcottom@wisc.edu.

Have a safe and profitable growing season!

Vegetable Crop Update 13 Now Available

Dr. Amanda J. Gevens, Assistant Professor, Extension Plant Pathologist in Potatoes & Vegetables University of Wisconsin Department of Plant Pathology

Please find attached newsletter #13.

<http://ipcm.wisc.edu/LinkClick.aspx?fileticket=rPJUUbKuQeU%3d&tabid=115&mid=675>

Included in this issue:

Crop updates in potatoes and fresh market veg Colorado Potato Beetle, European Corn Borer, Onion Thrips, Soybean Aphids, and Potato Leaf Hopper updates Late blight (Blitecast) updates – 1st positive late blight detect on tomato from Waukesha County. Early blight updates and P-Days Black leg in potato Cucurbit downy mildew update Potato growth concern.

Yield Response of Flattened (Lodged) Corn

Joe Lauer, Corn Agronomist

Last night, July 11, a storm rolled through southern Wisconsin and northern Illinois causing corn to flatten (lodge) in the field. Lodged corn can be seen in a 30-50 mile east-west swath from Grant County to well into Walworth County. It is unclear yet, as to whether entire stalks lodged or whether stalk breakage (greensnap) has occurred. Most likely it is stalk lodging. All hybrids (conventional and transgenic seem to be affected equally). Most plants did not have brace roots yet. We will review yield data for both situations.

Wind lodging

Corn root lodging often occurs during the mid-growing season, when soils are saturated by heavy rainfall and the rainfall is accompanied or followed by high wind speeds. Often, entire corn stands are blown down. Initially, producers are concerned about how much recovery they can expect and potential losses from mechanical harvesting root-lodged corn. After a few days, the plants usually grow upward so that the upper stalk is vertical, but curvature occurs in the lower stalk area. Grain yield losses in conjunction with lodging can be attributed to (i) inhibited uptake and translocation of nutrients, primarily when lower-stalk breakage occurred; and (ii) reduced light interception, despite lack of any apparent stem injury. Wind lodging of corn is most likely to occur when plants are in mid-vegetative stages, and have not yet developed adequate brace roots.

Carter and Hudelson (1988) simulated root lodging due to wind in a field experiment by saturating the soil with irrigation water and manually pushing corn plants over at the base, perpendicular to row direction. Treatments applied were a control and simulated wind lodging at V10, V13 to V14, and V17 to R1 stages in 1985 and V11 to V12, V15, and VT stages in 1986. Three hybrids were included. The upper region of plants straightened to vertical within two days following lodging, and lodging did not affect subsequent timing of plant development. The angle between the below-ear stalk and soil surface at harvest decreased from 73 to 85° with lodging at early (V10-V12) stages to 22 to 36° at late (V17-R1) stages due to more pronounced lower stalk curvature. This resulted in ear height reductions from 52 to 57 in. for controls to less than 30 in. when lodging occurred after V17. These results indicate that mechanical harvest of corn wind lodged during V10 to R1 stages will likely be possible, but slow harvest speeds may be necessary to minimize losses. Compared to hand-harvested grain yields of control plots, grain yield decreased (Table 1).

ISU Growth Stage	Grain yield decrease
	%
V10 - V12	2 - 6
V13 - V15	5 - 15
V17 - R1	13-31
derived from Carter and Hudelson, 1988	

Stalk breakage

Rapidly growing corn is more susceptible to stalk breakage from wind as well as other physical phenomenon such as cultivation, hilling, or fertilizer application where stalks are bent by a low tool bar. Mid-season stalk breakage is a type of stem lodging also referred to as "greensnap" or "brittle snap." This typically occurs a few nodes above the soil surface, at or below the primary ear node and usually occurs when stalks are moist and turgid. In general, treatments that cause plants to grow more rapidly enhanced susceptibility to stalk breakage (Wilhelm et al., 1999). Row direction, as well as planting dates and other cultural practices, have varying impacts on a crop's ability to withstand the wind. Corn plant displacement by wind (regardless of wind direction) was greater perpendicular to the row direction than parallel to the row direction (Flesch and Grant, 1992).

Elmore and Ferguson (1999) measured mid-season corn stalk breakage on over 100 hybrids in south central Nebraska resulted from 100 mph winds on 8 July 1993 and 80 mph winds on 1 July 1994. Corn growth stages at the time of damage ranged from V10 to V14. In 1993 stalk breakage ranged from 7 to 88%, and grain yield was reduced 1.5 bu/acre for every 1% increase in stalk breakage. Breakage in 1994 ranged from 1 to 37% at one site and from 5 to 51% at the other site. Grain yield was reduced by 1.5 and 1.8 bu/acre for every 1% increase in stalk breakage. Remaining plants did not compensate for grain loss from broken plants at any site.

Percentage yield loss is directly related to percentage stalk breakage.

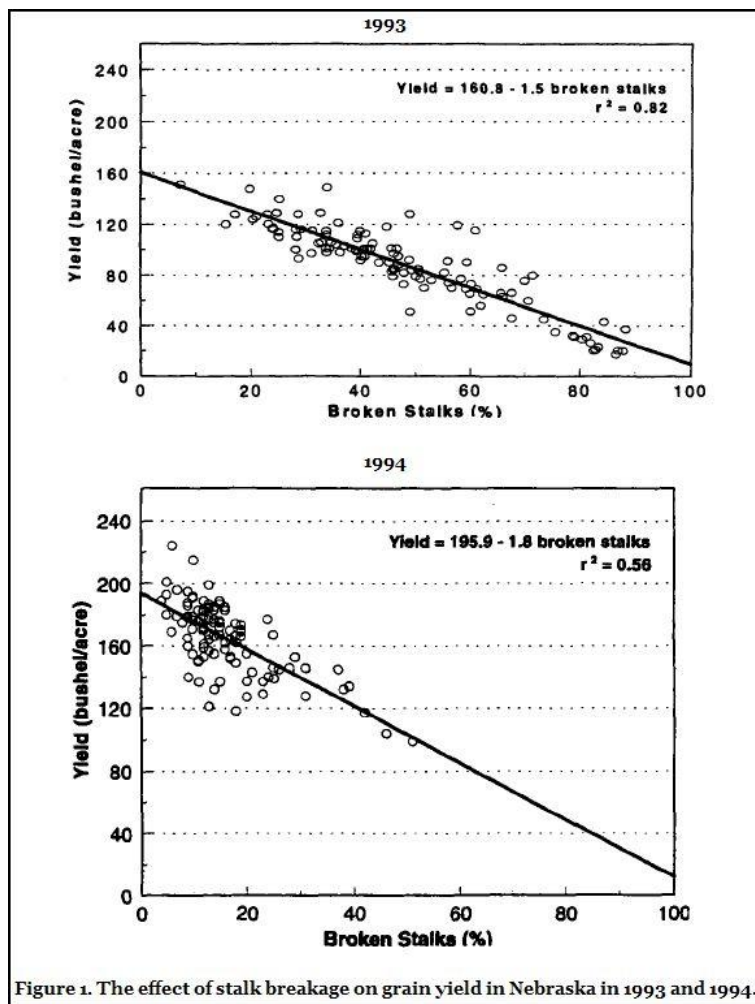


Figure 1. The effect of stalk breakage on grain yield in Nebraska in 1993 and 1994.

Using Foliar Fungicides

I was unable to find any data related to the need for foliar fungicides on lodged corn. The closest data was corn response to hail damage. Hail damage likely causes more problems than wind lodging due to bruising of leaves and stems. Fungicide application cannot recover yield potential lost due to damage. Fungicides protect yield potential by reducing disease. There are some diseases of corn that are favored by wounding, e.g., Goss's wilt, common smut and stalk rot, but fungicides are not effective against the pathogens. The foliar diseases managed by fungicides (e.g., gray leaf spot, northern corn leaf blight, eye spot, and common rust on corn, and brown spot and frog eye on soybeans) are caused by pathogens that do not require wounds for infection.

A simulated hail-fungicide trial was conducted at Urbana in 2007, with corn plants being damaged with a string trimmer just before tasseling to simulate hail damage (Bradley and Ames, 2010). Some plots were left undamaged as well. The fungicides Headline, Quadris, and Quilt were applied to the plots and compared to an untreated check. When the data were statistically analyzed, fungicides did not significantly improve yield compared to the untreated check in the "hail-damaged" plots or the nondamaged plots (Table 2). The simulated hail

Table 2. Effect of simulated hail damage and foliar fungicides applied at tassel emergence on gray leaf spot severity and yield of a susceptible corn hybrid near Champaign, Illinois, in 2007. (Bradley and Ames, 2008. *Foliar Fungicides in Corn Production: A Look at Local and Regional Data*. Proceedings of the 2008 Illinois Crop Protection Technology Conference.)

Simulated Hail ¹	Fungicide	Rate/Acre	GLS Severity ²	Yield (bu/ac)
No	Untreated		57	174
	Headline®	6 fl oz	33	179
	Quadris®	6 fl oz	42	170
	Quilt®	14 fl oz	40	155
Yes	Untreated		62	141
	Headline®	6 fl oz	48	144
	Quadris®	6 fl oz	47	142
	Quilt®	14 fl oz	35	140
	LSD ³		12	11

¹ Hail was simulated by damaging corn plants with a weed-eater type string mower.

² Gray leaf spot severity (0-100% scale).

³ Fisher's protected least significant difference (P = 0.05).

damage alone did decrease yield by approximately 30 bu/A compared to the nondamaged plots, however.

Fungicides should be used as a "tool" (along with other IPM practices) – to control diseases that are present and/or almost certain to be a problem. Consider the following factors before spraying:

- hybrid susceptibility,
- disease pressure at VT,
- weather conditions at VT and during grain fill,
- previous crop,
- the amount of crop residue present in the field,
- fungicide and application cost ,
- grain price, and
- read directions and restrictions on product label.

In general, a fungicide application is not recommended on resistant hybrids. On susceptible hybrids, a fungicide application may be warranted if disease is present on the third leaf below the ear leaf or higher on 50 percent of the plants at tasseling. With intermediate hybrids, a fungicide need only be applied if conditions are favorable for disease development. Spray if disease is present on the third leaf below the ear leaf or higher on 50 percent of the plants at tasseling, and the weather is warm and humid, and the field has a history of Gray Leaf Spot and/or Anthracnose, and >35 percent corn residue is present.

What do we do now?

Be patient. Let the corn crop recover. Make notes about hybrid differences for lodging resistance, crop development and whether brace roots had formed. Watch lodged fields closely, especially later near harvest. Plan on harvest taking slightly longer and expect 5-15% lower grain yields.

Key References

Bradley, C.A., and K.A. Ames. 2010. Effect of Foliar Fungicides on Corn with Simulated Hail Damage. Plant Disease 94:83-86. DOI: doi:10.1094/PDIS-94-1-0083.

Carter, P.R., and K.D. Hudelson. 1988. Influence of simulated wind lodging on corn growth and grain yield. J. Prod. Agric. 1:295-299.

Elmore, R.W., and R.B. Ferguson. 1999. Mid-season stalk breakage in corn: hybrid and environmental factors. J. Prod. Agric. 12:293-299.

Flesch, T.A., and R.H. Grant. 1992. Corn motion in the wind during senescence. I. motion characteristics. Agron J 84:742-747.

Plant Management Network Launches Focus on Corn Webcast Resource for Growers, Consultants

Joe Lauer, Corn Agronomist and Plant Management Network

The Plant Management Network (PMN), a nonprofit publisher of applied crop science information, announces the launch of Focus on Corn (<http://www.plantmanagementnetwork.org/foc>) a resource that features webcasts and other science-based information tools that will help corn growers and consultants protect and manage corn crops more effectively.

The central feature of Focus on Corn is its 24/7 on-demand educational webcasts. These are audio-visual presentations authored and presented by university professors and extension specialists recognized for their expertise and research on corn management practices.

"Topics are suggested by both a technical advisory board and grower surveys and selected for their current interest and need for timely information," said Greg Grahek, Director of Publications at the Plant Management Network. "We try to get the best expert in the field to talk about a technical subject in a format for the busy agricultural practitioner."

One new webcast will be published in Focus on Corn each month. Each of these new webcasts will be open access for a period of at least 60 days. As long as users visit the site monthly to see each new webcast during the open access period, all webcasts may be viewed free of charge, without a subscription. Current freely available webcasts include the following:

- Plant Parasitic Nematodes of Corn by Tamra Jackson, University of Nebraska, Lincoln.
- Residue Management, Nitrogen, and Tillage in Continuous Corn by Emerson Nafziger, University of Illinois.
- Weed Competition in Corn by Bill Johnson, Purdue University
- Southern Rust of Corn and Differentiating Between Southern and Common Rusts by Jerald 'Snook' Pataky, University of Illinois
- Corn Silage Management: Seeding Rate Studies by William J. Cox, Cornell University
- Corn Drying by Ken Hellevang, North Dakota State University

Plant Management Network, (<http://www.plantmanagementnetwork.org>), is cooperative not-for-profit resource for the applied agricultural and horticultural sciences. Together with its industry, university, and nonprofit partners, PMN provides fast electronic access to science-based crop management solutions for growers and their advisers. PMN focuses on publishing high-quality, applied, and science-based information. PMN is cooperatively managed by the American Society of Agronomy, American Phytopathological Society, and Crop Science Society of America.

Soybean for Soybean Aphid

Eileen Cullen, Extension Entomologist

Soybean aphids have been present on soybean at low levels (below the economic threshold of 250 aphids per plant) at various locations in the state for the last couple of weeks. Last week, WI DATCP Pest Bulletin reported that about one-third of the state's soybean fields still had no detectable population. Their examination of 29 fields (V3-R1) from June 30 - July 6 found aphids in 19 (66%) of fields sampled in Dane, Lafayette, Fond du Lac, Jefferson, La Crosse, Rock, Sheboygan, Vernon and Winnebago Counties.

Both my lab and David Hogg's lab at UW Madison Entomology Dept. have found low densities at Arlington and West Madison agricultural research stations, respectively, in our research trials.

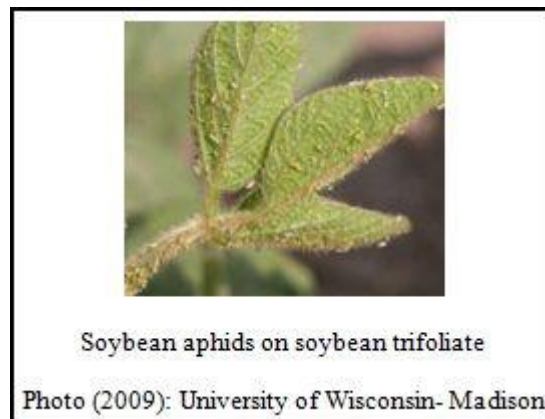
Tom Novak, CCA, Total Crop Management, in Jefferson County has been finding aphids in all soybean fields scouted this past week except late planted fields (last few days of May and early June) with Cruiser insecticide seed treatment.

Together, the reports above have a few fields at 20-25 aphids/plant field average (with heavier plants in that average counts at 70 to 90 aphids on individual plants).

Soybean aphid scouting should start now, if you have not yet checked fields for this insect for the first time this season. Heat units are accumulating more quickly now with warmer summer weather, good soybean growth conditions, and all soybean should be on a regular soybean aphid scouting schedule no later than R1 (beginning bloom).

Start spot-checking vegetative soybean, then scout regularly from R1 (beginning bloom) through R5 (beginning seed) stages. Check 20-30 plants per field, from throughout the field, to obtain an average aphids/plant density for the field.

Soybean aphid can be found on growing points and young leaves of vegetative soybean plants. From late vegetative stages through bloom and pod development stages, soybean aphids can be found on all plant parts. Although most common on undersides of leaves, they also occur on stems, petioles and upper leaf surfaces.



Use an economic threshold of 250 aphids/plant to support insecticide treatment decision and timing. This economic threshold should be based on an average of aphids over 20-30 plants sampled throughout the field. Regular field visits (weekly intervals) are required to determine if aphid populations are increasing, and how field populations are responding to suppressive factors such as natural enemies (predators and parasitoids, entomopathogenic fungi), and/or weather and temperature conditions.

For more information on soybean aphid, scouting, economic threshold, biological control, and more, please visit the UW Soybean Plant Health page at: <http://www.plantpath.wisc.edu/soyhealth/aglycine.htm>

UW-Extension/Madison Plant Disease Diagnostic Clinic (PDDC) Updates

Brian Hudelson, Ann Joy, Amanda Zimmerman, Adam Greene, and Erin Schmid, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant samples from around the state. The following diseases/disorders have been identified at the PDDC from June 29, 2011 through July 5, 2011.

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
FIELD CROPS			
Corn	Anthracnose	<i>Colletotrichum graminicola</i>	Sauk
	Common Smut	<i>Ustilago maydis</i>	Brown
	Northern Corn Leaf Spot	<i>Bipolaris zeicola</i>	Sauk
	Seedling Blight	<i>Fusarium</i> sp., <i>Pythium</i> sp.	Columbia
	Yellow Leaf Blight	<i>Phyllosticta maydis</i>	Sauk
FORAGE CROPS			
Alfalfa	Lepto Leaf Spot	<i>Leptosphaerulina trifolii</i>	Shawano
FRUITS			
Cherry	Verticillium Wilt	<i>Verticillium</i> sp.	Door
Cranberry	Protoventuria Leaf Spot	<i>Protoventuria barriae</i>	Sauk
Grape	Eutypella Canker	<i>Eutypella</i> sp.	Vernon
	Growth Regulator Herbicide Damage	None	Dodge
Raspberry	Root Rot	<i>Climacocarpus</i> sp.	La Crosse
Strawberry	Growth Regulator Herbicide Damage	None	Wood
	Leaf Spot	<i>Ramularia</i> sp.	Wood
	Root/Crown Rot	<i>Pythium</i> sp., <i>Phytophthora</i> sp., <i>Fusarium</i> sp.,	Milwaukee, Wood
VEGETABLES			
Basil	Unidentified Viral Disease	Unidentified virus	Columbia
Potato	Corky Ring Spot	Tobacco rattle virus	Portage
Tomato	Bacterial Speck	<i>Pseudomonas syringae</i> pv. <i>tomato</i>	Jefferson
	Botrytis Blight	<i>Botrytis cinerea</i>	Vernon
	Septoria Leaf Spot	<i>Septoria lycopersici</i>	Jefferson

The following diseases/disorders have been identified at the PDDC from July 6, 2011 through July 12, 2011:

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
FIELD CROPS			
Soybean	Herbicide Damage	None	Vernon
	Root Rot	<i>Phytophthora</i> sp., <i>Pythium</i> sp., <i>Rhizoctonia</i> sp., <i>Fusarium</i> sp.	Clark
FRUITS			
Cherry	Fusarium Canker	<i>Fusarium solani</i>	Door
VEGETABLES			
Kale	Alternaria Leaf Spot	<i>Alternaria brassicicola</i>	Dane
Pea	Fusarium Wilt	<i>Fusarium oxysporum</i>	Dane
Potato	Sun Burn	None	Grant
Tomato	Late Blight	<i>Phytophthora infestans</i>	Waukesha

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.



Registration Form

Registration deadlines: September 6 - Wausau workshop
September 16 - Madison workshop

Fee: \$200 (received prior to registration deadline)
\$250 (received after registration deadline)

Attendance limited to 80 per site. Advance registration is required. Registrants will be accepted on a first-come, first-served basis.

Name: _____

Organization: _____

Address: _____

City/State/Zip: _____

Phone: _____

e-mail: _____

Workshop location:

_____ Wausau - September 15 & 16, 2011

_____ Madison - September 27 & 28, 2011

FAST & easy ON-LINE registration by credit card at:

<https://www.patstore.wisc.edu/npm/register.asp>

If paying by check:

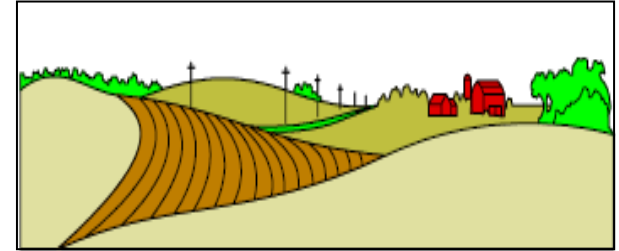
Make checks payable to: UW-Madison.
Mail or fax one registration form per registrant and send payment to:

Carol Duffy
Department of Soil Science
University of Wisconsin-Madison
1525 Observatory Drive
Madison, WI 53706
Phone: (608) 262-0485; FAX: (608) 265-2595



University of Wisconsin – Madison
Department of Soil Science
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Madison, WI 53706

Training for Nutrient Management Planners Workshops - 2011



Wausau, WI
Stoney Creek Inn
September 15 & 16, 2011

Madison, WI
Crowne Plaza
September 27 & 28, 2011

Presented by:

University of Wisconsin-Extension
UW-Madison - Department of Soil Science
Nutrient & Pest Management Program
Discovery Farms Program
Wis. Dept. of Ag, Trade & Consumer Protection
USDA-Natural Resources Conservation Service
Wis. Dept. of Natural Resources

Program Information

These workshops are designed for current and potential nutrient management plan writers in Wisconsin, particularly production agronomists and county-based conservation staff. The intent of these two-day instructional workshops is to provide in-depth training on the preparation of quality nutrient management plans. Participants will be working in small groups to prepare a functional plan for a real Wisconsin farm. All segments of the agenda will involve interactive group activities that build the components of a nutrient management plan.

The 2011 *Training for Nutrient Management Planners Workshops* are an updated continuation of programs offered over the past 11 years. The 2011 workshops will feature extensive training on the use of the SNAP-Plus nutrient management planning software. Participants are strongly encouraged to bring laptop computers to these workshops with the latest version of the SNAP-Plus software installed. SNAP-Plus can be downloaded for free at: <http://www.snapplus.net/downloadSetup.php>

Enrollment in each workshop is limited to 80 participants. A 50-50 audience split of agronomists and county-based conservation agency staff is desired. Advance registration for the workshops **is required**.

Continuing education units (CEUs) for this program will be awarded.

Registration

Fee: \$200 (prior to registration deadline)
\$250 (after registration deadline)
 (see registration form)

Fee includes refreshment breaks, lunches, and training materials. Early registration is encouraged. Registrants will receive a confirmation letter and receipt. For registration information, call Carol Duffy at (608) 262-0485 or e-mail at cjduffy@wisc.edu. For program information, call Scott Sturgul, (608) 262-7486 or e-mail at sturgul@wisc.edu.

Lodging

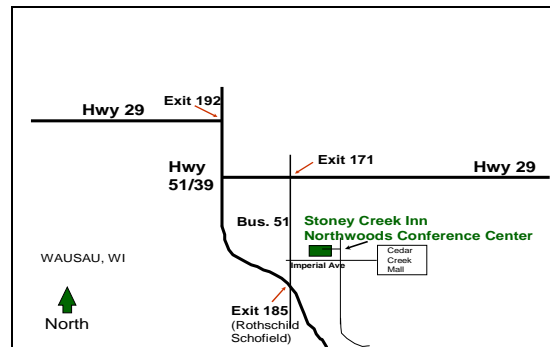
A block of rooms is being held until August 31 at the Stoney Creek Inn in Wausau and until August 27 at the Crowne Plaza Hotel in Madison. Participants should make their own room reservation directly with the hotel. Inform the hotel that you are attending the *Training for Nutrient Management Planners Workshop* in order to get a discounted rate.

Stoney Creek Inn

1100 Imperial Avenue
 Rothschild, WI 54455

1-715-355-6858 or 1-800-659-2220

\$70 single or double; lodging deadline: Aug. 31, 2011

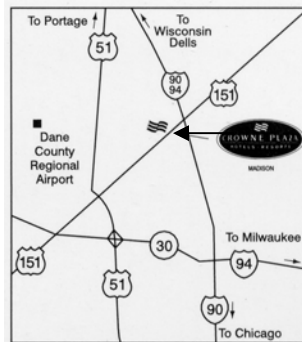


Crowne Plaza Hotel

4402 East Washington Ave.
 Madison, WI 53704

1-608-244-4703 or 1-800-404-7630

\$70 single/\$80 double; lodging deadline: Aug. 27, 2011



AGENDA

DAY 1

- 8:00 Registration and Continental Breakfast
 8:30 Introduction and Workshop Overview
 (Scott Sturgul, Paul Kivlin)
 8:50 USDA-NRCS 590 Nutrient Mgmt. Standard
 (Sue Porter, Pat Murphy)
 9:05 Importance of Farm Conservation Plans to Nutrient Mgmt. Planning
 (Paul Kivlin, Pat Murphy, Sue Porter)
- Info. needed from conservation plans
 - Using SNAP-Plus to update conservation plans
- 11:00 Soil Fertility Issues Related to Nutrient Mgmt. Planning (Carrie Laboski, John Peters, Matt Ruark, Chris Baxter, Paul Kivlin)
- Soil sampling
- 12:00 Lunch
 12:45 Soil Fertility Issues Related to Nutrient Mgmt. Planning (Continued)
- Wis. nutrient recommendations & guidelines
 - Understanding soil test reports
 - Understanding nutrient credits: legumes, manure, and biosolids
- 4:45 Adjourn

DAY 2

- 8:00 Continental Breakfast
 8:30 Manure Production Estimates & Nutrient Mgmt. Planning (Paul Kivlin)
 9:30 Nutrient Mgmt. Planning: Federal & State Program Requirements
 (Pat Murphy, Andrew Craig, Sue Porter)
 10:20 Additional Aspects of Nutrient Mgmt. Planning
 (Sue Porter, Laura Ward Good)
- Rotation-based nutrient mgmt. plans
 - The P Index and nutrient mgmt. planning
- 11:10 Mechanics of Creating a Nutrient Mgmt. Plan
 (Paul Kivlin, Sue Porter)
 11:30 Nutrient Mgmt. Plan Writing Exercise
 12:00 Working Lunch
 12:45 Continue Developing the Nutrient Mgmt. Plan
 1:45 Presentation & Review of Nutrient Mgmt. Plans
 (Participants & Panel)
 2:40 Additional Insight on Nutrient Mgmt. Planning
 (Panel)
- SNAP-Plus reports
 - Implementation tips
 - Continuing the plan into future years
 - Real-world issues with nutrient mgmt. plans
- 4:15 Adjourn