NCWSS • News

North Central Weed Science Society

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North Central Weed Science Society

If you are a member of the NCWSS and have material you would like to submit to the Newsletter, please send it to:

Harlene Hatterman-Valenti at H.Hatterman,Valenti@ndsu.edu

Columbus Welcomes the NCWSS December 9-12

The city of Columbus and your local arrangements committee are looking forward to hosting the 2013 NCWSS annual meeting. The Hyatt Regency Columbus is an outstanding facility, and the Hyatt staff are going out of their way to ensure a successful meeting. JD green, Program Chair, is working to make sure the program has something for everyone. In case you need a break from an intense meeting schedule, Columbus has a number of attractions and activities you might consider for entertainment. These include attending an OSU basketball game at the Value City Arena, a Blue Jackets ice hockey game at the Nationwide Arena, a visit to the Franklin Park Conservatory, or an evening visit to the Columbus Zoo to view the splendor of millions of holiday lights. COSI Columbus, the city's center of science and industry, is just a short walk away, as are the many fine restaurants and nightspots of the Short North, and the Arena and Brewery Districts. To guarantee your room at the Hyatt, please make your reservation before November 8. If you have questions, comments, or suggestions about the meeting please contact the Local Arrangements Committee Chair, Mark Loux, loux.1@osu.edu. We look forward to seeing you in December.

Traveling to Columbus

Transportation:

Columbus is serviced by Port Columbus International Airport. Transportation from the airport is accessible from the lower level outside the baggage claim area. In addition to the Hyatt shuttle, local limousine and taxi service is available. The Hyatt Regency Columbus is less than 10 miles from the airport, so both modes of transportation are reasonable. If you are driving to Columbus, the Hyatt Regency Columbus, at the corner or Nationwide Boulevard and High Street, is easily accessible from Interstates 70 and 71. The Hyatt is next to the Columbus Convention Center, for which local signs provide directions. Underground parking is available directly east of the Hyatt on Nationwide Boulevard, but parking of vans and trucks is restricted. An outside parking lot is available about one block east of the hotel on the same street.

Driving Directions:

Hyatt Regency Columbus 350 North High Street, Columbus, OH 43215 614-463-1234

COLUMBUS WELCOMES

NORTH CENTRAL WEED SCIENCE SOCIETY DECEMBER 9-12, 2013

COLUMBUS experiencecolumbus.com

DOWNTOWN DISTRICTS

Columbus' top entertainment areas surround downtown, each packed with entertainment, restaurants, and shops. Convention attendees are right in the middle of the "Five on High" — the five-mile span of High Street connecting downtown's districts. That means you don't have to go far to have a good time. Next to the Greater Columbus Convention Center, the Arena District is home to the Blue Jackets National Hockey League team, concerts, restaurants and nightclubs. In the neighboring







Short North Arts District, you'll find restaurants, hip bars, galleries and boutiques. South of downtown are the Brewery District and German Village, a quaint historic district. Venture to the north on High Street to visit the The Ohio State University district.

WORLD-CLASS ARTS & CULTURE

Take in one of Columbus' performing arts events. Among your choices are BalletMet, Broadway Across America-Columbus, the Columbus Jazz Orchestra. The Columbus Symphony and the Contemporary Theatre American Company. See world-class visual art at the Columbus Museum of Art. the Wexner Center for the Arts, The King Arts Complex and Franklin Park Conservatory and Botanical Gardens, the only botanical garden in the world with a permanent collection of glass artwork by Dale Chihuly.



Central Ohio is packed with fun attractions. See polar bears swim underwater at the Columbus Zoo and Aquarium, voted the #1 zoo of America by USA Travel Guide. Get hands-on at COSI, the #1 science center in the country for families according to Parents magazine. Explore our downtown parks, Columbus Commons and the Scioto Mile along the downtown riverfront.

RESPECTED SPORTS SCENE

Scarborough Sports Marketing ranked Columbus the #1 Sports Town in the United States. The city earns the distinction with several professional teams, including the National Hockey League's

Columbus Blue Jackets, Major League Soccer's Columbus Crew and the Columbus Clippers, the Triple-A affiliate of the Cleveland Indians. There's also the Ohio State







Buckeyes and the Jack Nicklaus Museum, a tribute to both the Columbus native and golf.

A FOODIE'S PARADISE

foods.

Columbus has one of the most innovative food scenes in the country. From vegan to BBQ, you'll find hundreds of restaurants offering most every kind of cuisine. Don't miss the North Market, located across from the Greater Columbus Convention Center. It offers the finest in fresh and prepared

Traveling to Columbus - Continued

From I-71 North Bound:

Take I-71 to I-70 East and exit on Fourth St. Follow Fourth St to Nationwide Blvd. Turn Left at Nationwide Blvd. Hyatt Regency Columbus is on the Right.

From I-71 South Bound:

Exit on Spring St (the exit is to the Left). From Spring St turn Right onto Fourth St (get into the far Left lane). Turn Left on Nationwide Blvd. Hyatt Regency Columbus is located on the Right.

From I-70 East or West Bound: Exit on Fourth St. Follow Fourth Street to Nationwide Blvd. Turn Left on Nationwide Blvd. Hyatt Regency Columbus is located on the right.

Columbus Ohio Web Pages

<u>Experience Columbus Ohio</u> <u>Google Maps—Columbus Ohio</u> <u>Hyatt Regency—Columbus</u>

President's Message - Dave Johnson

It is hard to believe that it is the time of year when we are getting our summer research wrapped up, summarized, and moving to planning for next year. A new school year has started, the days are getting shorter, and planning for the 68th annual meeting of the North Central Weed Science Society is in full swing. The meeting this year will be December 9-12 at the Hyatt Regency in Columbus, Ohio. President-Elect and Program Chair JD Green and Local Arrangements Chair Mark Loux and their teams are working hard to bring you an excellent conference. This year we will be meeting jointly with the Midwest Invasive Plants Network (MIPN), one of the groups we met jointly with in Milwaukee in 2011. Details on the program, hotel, travel, etc. can be found in other sections of this newsletter. I thank JD, Mark, and their teams for all of the work they are doing to put on an interesting, productive, and enjoyable conference.

For the 2012 meeting we instituted the voluntary recording and posting of presentations and posters on the NCWSS website for viewing by NCWSS members. Several members have taken advantage of this service and have viewed presentations and posters after the meeting. Please note that all 2012 presentations and posters will be removed from the website at the time of the 2013 meeting, so check them out soon or you will lose the chance.

The NCWSS Board of Directors met at the Hyatt in Columbus in June to conduct Society business and tour the facilities for the upcoming conference. We agreed to continue the voluntary recording and posting of presentations, and are implementing a

subcommittee to manage this process. We are considering a few new opportunities for students in the coming years, details of which will be announced as they are developed, so stay tuned! Another action was to provide financial support for the Herbicide Resistance Summit II, a National Academy of Science event in Washington, DC in association with WSSA and the regional societies. The money provided will support the development of this event during a planning workshop in September. NCWSS Past-President Bryan Young will be representing NCWSS at this planning session.

One of the highlights of the summer is the annual Student Weeds Contest, which was held this year at Monsanto's Learning Center in Monmouth, IL. Troy Coziahr and Mayank Malik did a great job organizing and pulling off the event, made more complicated by also having the Northeast Weed Science Society students present. The weather was unusually cool which made it that much more pleasant. Many thanks to Monsanto and the Monmouth staff, the students, coaches, judges, volunteers, and all who worked to make this event a success. There were many first-time contestants this year, which bodes well for the future of weed science and indicates lots of interest in weed science as a rewarding career opportunity.

I hope 2013 has been a productive and safe year for you. I encourage you to attend the annual meeting in December, and recruit a new member to come and see what it is all about. Have a great fall and be safe!

2013 Annual Meeting Information - J.D. Green

The 68th annual meeting of the NCWSS is approaching soon! The meeting will be held December 9-12, 2013 at the Hyatt Regency in Columbus, Ohio. This year we are hosting a joint meeting with the Midwest Invasive Plant Network (MIPN). Mark Loux and his local arrangements team are working with the hotel staff to get things ready. The paper and poster titles are in and we are working to organize them into what should be another interesting and valuable program for our members.

General Session

The general session will feature Phil Stahlman, Kansas State University, who has been serving this year as President for the Council of Agriculture and Science Technology and Michael Barrett, who is the new WSSA-EPA liaison in Washington DC. Dave Johnson will give the annual NCWSS Presidential Address followed by a necrology report by Kirk Howatt.

Awards Luncheon and Social

Our new NCWSS Fellows, Distinguished Achievement Awards winners, and student contest winners will be recognized at the Awards Luncheon on Wednesday, December 11. The Society Social, sponsored by our sustaining members, will be that evening.

Symposia

This year an "Invasive Plant" symposium in conjunction with MIPN is being organized by Mark Renz and other MIPN board members. The symposium will be held Wednesday afternoon and all day Thursday. The other symposium organized by Vince Davis should have some interest for all NCWSS members about "Technology Tools and Communication Trends for Weed Scientists" In addition, Chris Kamienski is coordinating the popular "What's New in Industry" session. Chris is also organizing the Industry breakfast meeting, scheduled for Thursday morning, December 12th.

Student Activities

In addition to the traditional student paper and poster contests, we are planning other activities geared towards students. A preconference tour of Scott's Miracle-Gro Company in Marysville, OH will be offered to member students and their professors

on Monday afternoon, December 9. In addition, we plan to have the Student Quiz Bowl during the BASF-sponsored Student Mixer on Monday evening, December 9. See separate articles in this newsletter on these student activities. Dow AgroSciences is again sponsoring the Student Luncheon and Business meeting on Tuesday, December 10. These activities, plus the "Technology Tools and Communication Trends for Weed Scientists" symposium, should be valuable to our students, who represent the future of the weed science profession.

Committee Meetings

Several committee meetings are scheduled and we welcome your input. These meetings are open to all members and your input is very important to help guide future meetings and our society's role in the scientific community, as educators, and as weed managers. If you have an interest in serving on a particular committee please let the society President know.

Presentation Recording

Offered again this year is the opportunity to record presentations and posters for viewing by members at a later date on the NCWSS web site. Presentation recording and posting is strictly voluntary and authors were able to choose whether or not they wanted their presentations recorded when they submitted their titles. Another option is to post a PDF version of slides or posters on the web site. Authors may change their minds and choose not to have their presentation recorded and posted or to remove it from the web site at any time by contacting the Program Chair. Presentations will be available for viewing by NCWSS members only for a period of one year after the meeting. The Strategic Planning Committee, lead by Brian Jenks, continues to lead this effort.

Titles, Abstracts, and Presentation Loading

Title submission through the web-based system seemed to work very well again this year. This system will also be used for submitting abstracts and oral slide presentations. See the NCWSS Summer 2013 Newsletter for complete instructions on submitting abstracts, which are **due by November 22**, and for preparing and submitting your slide presentations for the meeting. PowerPoint files for oral presentations should be submitted to section chairs by **December 2**.

2013 Annual Meeting - Continued

Early Registration and Hotel Reservations

Please plan to attend the 2013 NCWSS meeting in Columbus. You can also participate in all the sessions associated with the MIPN Symposium on Wednesday through Thursday afternoon. Early registration deadline for the meeting is November 8 (fee increases by \$50 after this date for all NCWSS registrations). Make your hotel reservations by November 8 to get the group rate.

Graduate Student Contest Judges Needed

We have had a great turnout for the graduate student paper and poster contests for our annual meeting. Therefore, judges will be needed to help with this important activity. Judging will take place on Tuesday, December 10th. If you wish to participate as a judge please contact:

Graduate Paper Contest Chair: Tate Castillo tate.castillo@bayer.com Graduate Poster Contest Chair: Doug Nord dwnord@gbta.net

Graduate Student Quiz Bowl BASF Student <u>Mixer</u> <u>December 9th, 2013</u>

The Quiz Bowl will be another featured activity at the NCWSS annual meeting! Gather teammates for a head-to-head competition during the BASF Student Mixer on Monday night. Teams will consist of 3-4 individuals who will answer questions on weed science topics. The teams will be randomly paired off in a bracket similar to the NCAA basketball tournament, with the winning team from a pairing advancing to the next round until a winner is decided. Great prizes for the winning team! Multiple teams from a university are welcome. Teams can sign up for the Quiz Bowl at the start of the Mixer (by 6:45 pm, Monday, December 9).

<u>Pre-Conference Student Tour of Scotts</u> Miracle-Gro Facilities – December 9th 2013

Scotts Miracle-Gro invites graduate students and interested professors attending the upcoming NCWSS annual meeting to participate in a tour of their facilities in Maryville, Ohio. Details on how to participate are included below. Robert Baker with

Scotts Miracle-Gro and Lacy Valentine, Chair of the Graduate Student Committee, is helping to coordinate this activity. On Monday, December 9, at 1:00 pm buses will pick up the participants at the hotel lobby to begin the tour. The tour will return to the Hyatt Regency around 5:30 pm in time for the Monday evening activities.

If you are interested in participating in this event, please e-mail Lacy Valentine (lacy.valentine@huskers.unl.edu) before October 31 with the following information:
First and last name:
Institution name:
E-mail contact:

Some students may need to arrive on Sunday in order to participate in this activity. Hotel rooms for Sunday night would be the responsibility of the graduate students and/or their respective institutions. Your response is needed by **October 31** so that final arrangements can be made for this tour.

Symposia: Technology Tools and Communication Trends for Weed Scientists

Vince Davis has organized an exciting symposium on communication trends that should be of interest to all NCWSS members and graduate students. Going digital, social media, YouTube, Google tools, interactive web-based weed management guides, smart phone Apps, hashtags, and branding your message will be some of the methods to be discussed by individuals who will share their experiences with these forms of communication. These media tools can be important for communicating among weed scientists to communicating our message to growers, crop consultants, and the general public.

Invasive Plant Symposium

Greeting NCWSS members, I am pleased to announce we will hold an invasive plant symposium in Columbus this December. This symposium will be similar to previous ones in that NCWSS has partnered with the Midwest Invasive Plant Network (MIPN) and Ohio Invasive Plant Council (OIPC) to deliver an innovative and relevant symposium. NCWSS conference attendees will have access to this symposium as part of the conference, and individuals interested in just this symposium have the opportunity to register (\$30 student, \$60 see conference page to register).

2013 Annual Meeting - Continued

This year the conference will be 1.5 days long starting Wednesday December 11th at 1:30 pm and continue for the entire day on Thursday December 12th. On Wednesday we will have a contributed papers section from NCWSS, OIPC and MIPN members. Thursday will feature a plenary session with keynote speakers Dr. Dan Simberloff (University of Tennessee-Knoxville), Dr. Diane Larson (USGS), and Dr. Don Cipollini (Wright State University). Following this session we will have breakout sessions on the following topics:

New tools and technology for invasive species reporting and outreach Invasive Plant Management

Featuring presentations on invasive Vines, Tree of Heaven, and Phragmites

Assessing Invasiveness of Invasive Plants Asian Bush Honeysuckle: Recent Advances in Research and Control

The final agenda will be posted in early October to MIPN (www.mipn.org), OIPC (http://www.oipc.info), and NCWSS websites so stay tuned for details. ♦







www.oipc.info

Call for Contributed Talks and Posters Symposium on Invasive Plants in the Midwest at the North Central Weed Science Society Conference

The Midwest Invasive Plant Network (MIPN) and the Ohio Invasive Plants Council (OIPC) are co-hosting a two-day symposium on invasive plants at the North Central Weed Science Society conference in Columbus, OH, Dec. 11-12. The symposium will focus on invasive plants in natural areas and will include a plenary session, as well as concurrent sessions on a broad array of topics, such as assessing invasiveness of non-native plant species, using online reporting tools for early detection, and management of some of the most problematic invasive plants, including an in-depth session on Asian bush honeysuckle impacts and management. The plenary session on December 12 will feature the following speakers.

- Daniel Simberloff, University of Tennessee- The future of invasion biology
- Diane Larson, U.S. Geological Survey- Using prairie restoration to curtail invasion
- Don Cipollini, Wright State University- Chemical ecology of invasive plants

If you would like to present a talk or poster at the conference, titles must be submitted to the North Central Weed Science Society (NCWSS) by September 9. **Please note this deadline is just for titles.** Abstracts are not due until Nov. 22. To submit a title for a poster or presentation, visit http://www.ncwss.org/meeting-page2.php. Instructions on using the online submission system are available at http://www.ncwss.org/news/2013/Summer2013.pdf. Though you will be submitting your title to NCWSS, all presentations on invasive plants in natural areas will be included in the MIPN/OIPC symposium. Be sure to select the "invasive plants" section when submitting your abstract.

For more information about the conference or to register, go to http://www.ncwss.org/meeting-page2.php. Registration is now open.



NAIPSC Update

September 22, 2013. The NAIPSC website (http://ipscourse.unl.edu) has been updated with new features and information, including two new programs and the 2013-2014 Webinar Series. If you want to learn about invasive plants from the comfort of your office or home, the first ever NAIPSC Web Course is in the works. It's a field course entirely online! And, if you want to take a college course on invasive plants also entirely online, check out "Invasive Plants: Impacts on Ecosystems".

If you're interested in becoming part of the growing NAIPSC Online Community, you can register and get access to the NAIPSC Webinar Series, online discussion, papers, and more.

Be sure to sign up for regular emails from the NAIPSC so you can keep up to date on all of the latest happenings. And, if you're a social media type, you can 'like' the NAIPSC on Facebook or follow the NAIPSC on twitter.

A lot is happening with the NAIPSC! Don't miss out!



Online Course

The newest University of Illinois PSEP course is *Herbicide Tolerant Crop Stewardship*. It was developed by Michelle Wiesbrook, Extension Specialist, PSEP - Horticultural Weed Science and Scott Bretthauer, Extension Specialist, Pesticide Safety Education.

This training includes information on preventing injury. By understanding the off-target movement of herbicides better and by knowing what factors contribute to it, applicators can more easily take preventative steps. Information is provided here on typical injury symptoms that result from exposure to PGR or auxin herbicides as their use is expected to greatly increase. Injury diagnosis assistance and resources for handling injured plants and communicating with neighbors are shared as well.

Although this training was developed with herbicide tolerant crop (HTC) growers in mind, it is also intended to be useful for a much broader audience. You may visit the PSEP Online Courses at http://web.extension.illinois.edu/psep/articulate/.

Necrology Information Request

We would like to honor in remembrance during the annual meeting members of the NCWSS who have passed away during the last year. Whether current members when passing or previous members of the society, please send name and obituary information to Kirk Howatt (kirk.howatt@ndsu.edu). Thank you for your time and consideration for these individuals.

2013 NCWSS/NEWSS Weed Contest Monsanto Learning Center Manmouth IL

Graduate Team



1st Place University of Wisconsin Team 1



2nd Place University of Illinois Team 1



3rd Place University of Nebraska Team 1

Undergraduate Team



1st Place Western Illinois University Team 1



2nd Place University of Nebraska Team 1



3rd Place University of Illinois Team 1

Field Calibration



Graduate Team University of Nebraska



Undergraduate Team Western Illinois University

Graduate Individual



1st Place Ryan DeWerff University of Wisconsin



2nd Place Laura Chatham University of Illinois



3rd Place Pratap Devkota Purdue University

Undergraduate Individual



1st Place Sarah LeJuene Western Illinois University



2nd Place Jasealen Moraes University of Nebraska



3rd Place Katie Peiels University of Wisconsin

Graduate Individual



Weed ID Ryan DeWerff University of Wisconsin



Herbicide ID Pratap Devkota Purdue University



Problem Solving Adam Gasper University of Wisconsin

Graduate Individual

Undergraduate Individual



Calibration Gary Gregg University of Kentucky



Weed ID, Problem Solving and Calibration Sarah LeJuene Western Illinois University

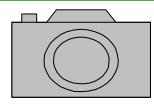


Photo unavailable

Herbicide ID Greg Rencheler Western Illinois University



2013 NCWSS/NEWSS Weed Contest Problem Solving and Recommendation Score Sheet

Name:	University:	:	
Team Name:			(or Individual)
Circle status:	Undergraduate	Graduate	
Scoring: the followi	ng outline is the format to follow w ****** 100 possible po		

Part A—How the Student Approaches the Grower	Points	Score
1. Firm handshake	5	
2. Confidence / eye contact	5	
3. Questioning / listening skills	5	
4. Communication	5	
5. Approach (Did the grower feel comfortable?)	5	
Possible points	25	

Part B—Assessment of Situation and Determination of Problem	Points	Score
1. Ask what the problem or concern is	5	
2. Quality of questions: logic and flow	5	
3. Address application, environment, & cultural practices	15	
4. Identified the problem	20	
Possible points	45	

Part C—Recommendation for Now	Points	Score
1. Accuracy of recommendation	10	
2. Approach (Did the grower feel comfortable?)	5	
Possible points	16	

Part D—Recommendation for Next Year and the Future	Points	Score
1. Recommendation for preventing the problem in the future, or what to do next year	10	
2. Approach (Did the grower feel comfortable?)	5	
Possible points	15	
TOTAL SCORE:		

Infield Problem

Grad Problem:

- Student = Company Rep
- Background/situation—Farmer spraying RR soybean fields with Roundup. All soybeans were planted at the same time. This is a new soybean variety. He finishes up a field in the evening with product still left in the tank. The next morning he sprays and adjacent field with the remaining product in the tank. Several days later he is noticing stress in the soybean he sprayed on the second day. He is assuming you provided him non-RR seed by mistake.
- Problem—a few days prior to spraying his soybeans, he had sprayed a pasture for thistles using Clarity. He thoroughly rinsed the (poly) tank & booms with water, but did not use a tank cleaner, and he may not have flushed his booms thoroughly. The Roundup sitting in the sprayer overnight 'pulled' some remaining dicamba residue out of the tank & lines, resulting in slight crop injury.
- Recommendation (this year) it is only slight injury, the beans will come out of it and yield should not be impacted.
- Recommendation (next year) if dicamba product is sprayed, the tank should be triple rinsed, and a tank cleaner or ammonia solution should be used. Booms should be flushed thoroughly.

Undergrad Problem:

- Student = Seed Agronomist
- First corn field the farmer planted in April, (perfect weather, good planting conditions, with a new, full-season hybrid. The field was sprayed with Harness Xtra as a PRE one day after planting. It is now early May and his stand is poor and erratic. He assumes the problem is due to a bad lot of see with poor germination, or damage from the herbicide.
- Problem Seed was planted too shallow contestant should demonstrate this to the farmer to show that it was not a seed quality or herbicide issue. Planter was not adjusted properly.
- Recommendation (this year) offer to do a stand count and determine if replanting is warranted. Replanting is warranted due to potential for future problems associated with shallow planting. Student must recommend best way to remove the existing stand and start fresh. Soybeans are not an option due to atrazine in the PRE.
- Recommendation (next year) Plant at proper depth/verify planter settings. Discuss optimal depth for corn planting and help diagnose planter issues that could have led to the problem this year. Make recommendations for improving the quality of planting next year.

New Publication

Rong Ma, Dean Riechers, Aaron Hager, Pat Tranel, Chance Riggins

... and other collaborators at the University of Illinois-Urbana and Syngenta recently published a paper in the September 2013 issue of *Plant Physiology* [163:363-377] describing two distinct metabolic detoxification mechanisms that confer resistance to mesotrione and atrazine in an Illinois waterhemp population. This work represents the first-ever published research to identify and describe a resistance mechanism to HPPD-inhibiting herbicides in a natural weed population. Rong Ma is currently working on her PhD in weed science and herbicide physiology with Dr. Dean Riechers in the Crop Sciences Department at UIUC.

Position Available



Cropping Systems, Assistant Professor

College of Food, Agricultural and Natural Resources Sciences (CFANS) Southwest Research & Outreach Center (SWROC), Lamberton MN University of Minnesota

The University of Minnesota seeks a faculty member to provide leadership for research and extension education programs in Cropping Systems Management that focus on using innovative approaches to enhance Minnesota cropping systems for improving productivity, profitability and delivery of ecosystem services. Issues pertaining to corn and soybean management are especially relevant in Minnesota. It is expected that research and extension programming will integrate new and innovative approaches to maintain resource stewardship, sustainability and multi-functionality of cropping systems.

Appointment: This is a nine-month tenure track appointment at the rank of Assistant Professor with duties divided between research (60%) and extension education (40%). The position is supported by CFANS, SWROC and U of M Extension. The position is located at the University of Minnesota SWROC near Lamberton, MN and is expected to be an active member of the CFANS department that best matches the candidate's expertise. The position will provide leadership and work within the Extension Crops Program team in the planning, development and implementation of education programs on innovations in cropping systems.

The successful candidate will work with SWROC and CFANS research scientists and educators as well as regional and local Extension educators, governmental agencies, the agricultural industry, and diverse clientele groups to develop high quality research and Extension education programs. The successful candidate will be expected to obtain extramural funding and publish in relevant peer-reviewed journals, recruit and involve graduate students in research, and develop and implement a nationally and internationally recognized research and extension education program..

Background: The University of Minnesota's SWROC is a nationally recognized research facility where conventional, organic and environmental agricultural research occurs. The SWROC is part of a Research and Outreach system that includes nine other research centers across Minnesota. The SWROC has a strong and significant commitment to cropping systems research and Extension. Currently the Center has 820 acres of land utilized for research and another 1900 acres may be made available for large scale studies. A modern laboratory, greenhouse and field equipment are available.

Qualifications - Required: Ph.D. or equivalent in agronomy, plant sciences or field related to cropping systems by date of appointment, strong written communication skills, demonstrated ability to propose and conduct independent and collaborative research and publish results in scientific journals, experience in field research techniques and statistical analysis of field data, experience in interpreting and reporting results to agricultural and non-agricultural clientele and the scientific community, experience in extension education in agronomy, plant sciences, or related fields.

Qualifications — Preferred/Desired: Familiarity with corn-soybean cropping systems of the Midwest, USA, strong oral communication skills, experience in successful educational programming in applied research, a history of successful grant applications and demonstrated ability to publish for both the scientific community and the producer clientele, experience working effectively in interdisciplinary research and Extension teams and with diverse clientele groups, demonstrated experience with precision management; remote sensing; crop rotations; integration of cover crop components or other crops into current cropping systems to enhance resource stewardship and cropping sustainability; or cultural practices in cropping systems to optimize yield with emphasis on multifunctional agriculture and the

Assistant Professor - Continued

Salary and benefits: The tenure-track position will be filled at the rank of Assistant Professor with a nine-month (Bterm), 100% time appointment. The tenure department within CFANS will be determined by the expertise of the chosen candidate. Salary will be competitive and commensurate with professional experience and qualifications. Benefits include a competitive faculty retirement program, and group life, medical and dental insurance plans, disability benefits, sick leave, and sabbatical opportunities. Two months of summer salary for the first three (3) years will be covered in addition to three (3) years' salary for a graduate student. A competitive start-up package with funding to support the position will be provided.

Application Process: Apply online via the University of Minnesota Employment System at https://employment.umn.edu. Click on "Search Postings" and enter Requisition #187445.

Applications complete the online application and include the following attachments:

- 1. A statement (3 pages maximum) including: a) how your research and education experiences fit this position, b) innovative approaches to research in cropping systems, c) Extension interests as related to this position, and d) examples of potential interdisciplinary collaboration as related to this position.
- 2. A detailed vitae including a list of publications, and grant proposals, and Extension or classroom education activities.
- 3. Copies of official academic transcripts.

Three letters of recommendation must be submitted directly to Dr. Jeff Strock by email at jstrock@umn.edu.

Review of applications will begin January 2014 and continue until the position is filled. The projected starting date is Spring, 2014 or as agreed upon mutually. Inquiries about the position should be addressed to one of the Search Committee Co-Chairs:

Dr. Craig Sheaffer (sheaf001@umn.edu) or 612-625-7224

Dr. Jeff Strock (jstrock@umn.edu) or 507-752-5064

The University of Minnesota is an equal opportunity educator and employer. As an institution committed to demonstrating excellence through diversity, the College of Food, Agricultural and Natural Resource Sciences is committed to hiring a diverse faculty and staff, and actively encourages candidates from historically underrepresented groups to apply.