

NCWSS • News

North Central Weed Science Society

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

Vince Davis at
Vince.davis@basf.com



John Hinz President's Message

I hope your summer is going well and all your field work is progressing nicely. I know certain portions of our region have really struggled to get crops established and treated. Hopefully, your field trials are all planted and treatments have been applied in a timely manner.

Our next big event is the Weeds Contest. The Weeds Contest will be hosted by Ohio State University on July 21. This will be a

national contest with teams coming from all 4 regional societies. With this size of contest, there will be a need for a large number of volunteers. I encourage everyone to sign up to help with the contest. You can find more information and the volunteer forms at the following link: <http://www.swss.ws/contest-hosted-university/>. The Weeds Contest was the best learning experience I had as a graduate student. It is also a very rewarding experience to volunteer at the contest and meet the next generation of weed scientists. I encourage everyone volunteer at the Weeds Contest.

The annual meeting will take place in Indianapolis from December 7 to 10. This year will be a joint meeting with the Midwest Invasive Plant Network. This will give the North Central Weed Science Society members a chance to sit in on some of the invasive talks if they wish. I know Anita Dille and the local arrangements committee have been hard at work getting the meeting organized. I encourage everyone to submit a paper for the meeting. Instructions on how to do this are in this newsletter.

It is also time to start thinking about nominating your colleagues for the Fellow, Outstanding Service and Outstanding Graduate Student awards. I am sure you know someone who is deserving of being recognized for their service to the society. Please take a few moments to nominate them for an award. The process is fairly simple and doesn't take a lot of time. It will bring so much joy to the recipient and the nominator when the person receives the award.

I hope to see you all in Columbus at the Weeds Contest and in Indianapolis for the annual meeting.



Message from the 2015 Program Chair

Anita Dille

This is the Call for Papers and Posters for the 2015 Annual Meeting of the North Central Weed Science Society. This is the only notice you will receive so mark your calendar and submit the

titles of your presentations **by Friday, September 4th**. Submissions received after September 4th may be placed in alternate sections, switched to the poster session or rejected depending on the availability of space in the sections. The web-based title and abstract submission process that has been used by NCWSS the past few years will be used again in 2015. The Title/Abstract Submission website will be available around July 31, 2015 through the NCWSS website (www.ncwss.org) or by going directly to the submission website hosted through WSSA (wssaabstracts.com).

The NCWSS annual meeting program begins Monday December 7, 2015 and concludes Thursday December 10, 2015. The general session will feature the Presidential Address by John Hinz plus the keynote speaker is David Vail, Assistant Professor, K-State Libraries with a history lesson on **“How the North Central Weed Control Conference Shaped Agricultural Aviation in the Grasslands.”** Half-day symposia are being developed on teaching topics and on molecular tools for weed scientists and we’ll continue with the popular “What’s New in Industry” section. We will also have joint sessions with the Midwest Invasive Plant Network on Wednesday and Thursday. The volunteer paper and poster sections are listed below and directions are included for submission of papers and posters into these sections.

There will be recording of paper and poster presentations again in 2015 for future viewing by NCWSS members via the NCWSS website. *This recording and posting will be **strictly voluntary** on the part of the paper and poster authors, and authors must “opt-in” to have their presentations and posters recorded.* See the following article for more details on this feature.

The 2015 program will feature the traditional graduate student paper and poster contests and an undergraduate poster contest. Guidelines for these contests are found later in this article and at our website under Society / About NCWSS – Link to NCWSS Operating Procedures. We eagerly anticipate the top-quality presentations given by the students.

All oral presentation authors should upload their presentation to the Submission website 1 week / seven (7) days before the meeting. This allows the section chairs to ensure that your presentation will work on their computer, have all talks preloaded before the conference, and by using the Submission website, this helps to prevent clogging up e-mail accounts with large file attachments. If this is not possible, you must contact your section chair 1 week prior to the meeting to make other arrangements.

Please consider giving one or more presentations at our annual meeting. We are interested in what you are working on. In addition to research, thought provoking or critical assessments of our discipline are also welcome. Also, please pass along any suggestions on ways to make the meeting even more valuable to you and others. I look forward to an interesting and exciting conference in December.

Anita Dille , Program Chair
dieleman@ksu.edu, 785-532-7240

**The NCWSS Newsletter is Edited by Vince Davis
Put together by Glenn Nice
And filled by The Members of the Society**

Recording and Posting of Papers and Posters to the NCWSS Website

Anita Dille, 2015 Program Chair and Angela Kazmierczak, Presentation Recording Special Committee

The NCWSS Presentation Recording Special Committee has worked hard to develop a procedure to allow the recording and posting of papers and posters to the NCWSS website. The voluntary recording of individual papers and papers was initiated in 2012 and will be an option again for the 2015 annual meeting. This will allow those who couldn't make it to the meeting to see papers and posters of interest, and also allow the chance to see a paper in cases of conflict where two papers of interest were presented at the same time.

The recording and posting of paper and poster presentations is strictly voluntary, and members must "opt-in" to have them recorded and posted to the NCWSS website. No one will be required to have their presentations recorded or posted. Presentations will be available to NCWSS members only (password protected) through the NCWSS website for a period of one year following the annual meeting, and are intended for personal learning by NCWSS members only. Posters will be submitted as PDF files for posting, and papers will have the Powerpoint and, optionally, voice recorded, plus a PDF version of the Powerpoint posted. There will be no videotaping of the presenter, just the slides. They can indicate their preference when submitting their title, and have the opportunity to change their minds at any time, including during their session, immediately after the presentation is made, or at any time during the one-year period of posting.

When the author enters the on-line submission website, he or she can choose the following options:

Posters: Each poster presenter will choose whether or not to upload a PDF file of their poster (default is no). Uploading to the website will occur just prior to or after the meeting date.

Papers: Each paper presenter will choose one of the following:

- Presentation will NOT be recorded or posted (default)
- PPT and voice recorded (plus PDF of PPT can be posted also)
- PDF version of PPT only (no voice)

Section chairs will be instructed as to which presentations are to be recorded, and only those to which the presenter consents will be recorded. Paper presenters who chose options 2 or 3 above may change their mind and choose not to be recorded at any time, including at the time of presentation by letting the section moderator know not to record it. Also, a presenter can choose not to have his or her recorded presentation posted to the website after the presentation or have it removed from the website at any time during the one year period of website posting. Posters that are posted to the website may also be removed by author instruction at any time.

Poster presenters choosing to allow their poster to be posted and paper presenters who choose options 2 or 3 above will be required to check a box indicating that he or she accepts the following conditions:

"It is the intent of the NCWSS that recorded presentations are provided solely for personal viewing by NCWSS members. If anyone wants to use the information for other purposes, they must request permission from the author. Presenters are responsible to make co-authors aware that the presentation will be recorded or posted on the NCWSS website. The presentations will be available for viewing for one year. Authors may request that their presentation be removed from the website at any time. The NCWSS agrees to not change any data or edit the presentation in any way that would change the interpretation of the data or presentation. The NCWSS agrees to not sell or market the presentation for monetary purposes or distribute it in any form."

If they do not agree to these terms the presentation or poster will not be recorded and posted to the website.

Any questions regarding this process can be sent to Angela Kazmierczak (218-789-7197) angela.kazmierczak@bayer.com

Process for On-line Submission of Papers and Posters

Please follow these directions below, closely heed the dead-lines, and please contact Anita Dille (dieleman@ksu.edu or 785-532-7240) if there are any questions.

SIGN-IN to Title / Abstract submission site (open Friday, July 31, 2015):

- ◆ Go to the home page of the NCWSS website (www.ncwss.org) and connect to the site through the link found there **OR** go directly to the submission website hosted through WSSA (wssaabstracts.com).
- ◆ You will need your login and password for your account or create your own new account if you have not done so previously.

SUBMIT TITLE (deadline Friday, September 4, 2015):

- ◆ Follow the site's instructions for submission. Select your top two choices (1st and 2nd preference) for topic section (e.g., Horticulture and Ornamentals, Invasive Weeds, etc.).
- ◆ Enter the title and authors' names in the spaces provided. **Capitalize only the major words in the title as indicated in the instructions.** Do not include any quote marks or punctuation in the title.
- ◆ Be sure to use the pull-down menus at the right to indicate member status and to indicate if an author is the presenter or not.
- ◆ Indicate if this paper or poster will be in the graduate or undergraduate student contest. It is critical that we know which papers and posters will be competing in the student contests, so please be sure to indicate this with your title submission.
- ◆ Please indicate if you choose to allow your paper or poster to be recorded for posting to the NCWSS website for future viewing by NCWSS members. Please be sure to get approval from your co-authors. Note: to have your paper or presentation recorded, you must "opt-in" by indicating your choice. The default is that the presentation NOT be recorded. You can change your mind later by contacting me (dieleman@ksu.edu, 785-532-7240). See further details in the separate article in this newsletter.

- ◆ All titles need to be submitted by **September 4, 2015** so please fill in the title, authors and affiliations (type in as it would appear in the final abstract). Try to make sure you have everything as you want it before submitting. Click on the "Submit" button when you have entered all the information.

SUBMIT ABSTRACT (deadline Friday, November 13, 2015):

- ◆ Sign in to your account as you did previously for the title submission. Click on the link to submit an abstract.
- ◆ Scroll down to the abstract part of the window and click anywhere in the area designated to hold the abstract.
- ◆ Cut and paste your abstract into the box provided. Develop abstract in a word processing program. There is no need to include the title and authors in the "cut and paste" portion since the correct information has already been entered in the boxes at the top of the page. We recommend that you make all changes prior to pasting into the submission form. NOTE: If you have changed authors (added or deleted) or made a title change, please send an email to both your section chair and me (dieleman@ksu.edu) to alert us about the change.

ACTION SUMMARY:

- ◆ Titles will be due on **Friday, September 4. By this date**, please enter the site and type in your title, authors' information, section preference, indicate if you are in the student contest, and submit.
- ◆ Abstracts will be due **Friday, November 13. By this date**, please enter the author information as indicated, cut and paste abstract, select keywords, and submit.

Preparing to Submit Titles

Please follow these instructions when preparing your title(s):

Online Submission - Continued

1. Decide whether the presentation is a poster, paper or invited symposia paper.
2. Select your first and second choices for the section in which you want to make your presentation. Any questions pertaining to the appropriateness of your presentation in these sections can be answered by contacting the Program Chair or the respective Section Chair.
3. Connect to the NCWSS website (www.ncwss.org) and use the link to connect to the Title/Abstract Submission website or go directly to the submission website (wssaabstracts.com). Follow the directions previously listed in this article.
4. Important Note: Type the title, authors, affiliation (institution, agency or company) and location exactly the way they are to be printed in the program. **Capitalize major words in the title.** Include the full first name and middle initial of the authors rather

than just initials. Place a checkmark in the box next to the author's name to designate who will present the paper or poster. Do not include departments or division, zip codes or the name of the state if it is a part of the institution's name. Use the common names of weeds, herbicides and crops. **Please follow the capitalization, punctuation and formatting as shown in these examples, especially the listing of affiliations.**

Single institution or company

Weed Control Feasibility in Large-scale Organic Snap Bean and Sweet Corn Production. Jed B. Colquhoun*, Heidi J. Kraiss, and Richard A. Rittmeyer, University of Wisconsin, Madison.

Multiple institutions or companies

Potential of Saflufenacil for Preharvest Desiccation of Sunflower. Kirk A. Howatt*, Brian M. Jenks, Phillip W. Stahlman, and Michael J. Moechnig, North Dakota State University, Fargo and Minot; Kansas State University, Hays; South Dakota State University, Brookings.

Paper and Poster Section Chairs

Agronomic Crops I (Corn, Sorghum, Cereals)

Brett Miller (612-656-8464)

brett.miller@syngetna.com

Agronomic Crops II (Soybeans, Dry Beans/Sugar Beets)

Joe Ikley (765-494-0891) jikley@purdue.edu

Equipment and Application Methods

Dave Hillger (317-504-6130) dehillger@dow.com

Extension

Kelly Nelson (660-739-4410)

nelsonke@missouri.edu

Herbicide Physiology

Mithila Jugulam (785-532-2755)

Mithila@k-state.edu

Invasive Weeds

Mark Renz (608-263-7437) mrenz@wisc.edu

Invasive Weeds Symposium (MIPN) and separate subsections

Chris Evans (618.435.8138 x131)

Chris.Evans@illinois.gov

Horticulture and Ornamentals

Harlene Hatterman-Valenti (701-231-8536)

h.hatterman.valenti@ndsu.edu

Rangeland, Pasture, and Industrial Vegetation Management

Joe Omielan (859-217-0744) joe.omielan@uky.edu

Weed Biology, Ecology and Management

Neha Rana (638-288-2609)

neha.rana@monsanto.com

Poster Session

Helen Flanigan (317-862-0578)

helen.a.flanigan@usa.dupont.com

Program Chair

Anita Dille (785-532-7240) dieleman@k-state.edu

Paper Presentations and Presentation Format

All papers will be presented with PowerPoint files through an LCD projector. Electronic presentations will be limited to PowerPoint programs and need to be uploaded to the Submission website 1 week / 7 days prior to the meeting. Presentations are approximately 12 minutes long followed by one to two minutes for questions or comments to fit a 15 minute schedule. Contact the Program Chair if more time is needed. Abstracts of the paper and

poster presentations will be published on the NCWSS website (www.ncwss.org). Abstracts should be submitted electronically via the Title/Abstract Submission website prior to the meeting (by **November 13**). A Call for Abstracts and Instructions for Submitting the Abstracts will be sent to the corresponding authors by the Proceedings Editor after titles are submitted.

Poster Presentations

Posters will be set up on Monday and available for viewing on Tuesday and Wednesday. All posters should be removed by 5:00 p.m. on Wednesday. One poster mounting board, approximately 48 by 48 inches, supported on an easel will be provided by the NCWSS. Posters will be arranged according to

subject, so please indicate your section preference in the Title/Abstract Submission system linked to the NCWSS website. Additional details will be mailed to each poster session participant following title submission.

Call for Sustaining Member and Sustaining Member Displays

Contact the chair of the Industry Committee, Stott Howard (stott.howard@syngenta.com) for information on how to become a Sustaining Member of the NCWSS. Sustaining member displays can be set up Monday afternoon and should be removed by 4:00 p.m. Wednesday.



At the 2014 meeting in Minneapolis, the NCWSS Board of Directors authorized the updating of our website and that process has been finished. The website can be accessed at the same link as before: [http://](http://ncwss.org/)

ncwss.org/ Everyone will have the same login as before but you will need to create a new password to gain access to your contact information, register for the meeting, pay for membership, search the membership database, or view the presentations from the last meeting. To reset your password, click on the Members Only tab at the top of the page and choose "forgot password". Then just follow the instructions.

www.ncwss.org



Midwest Invasive Plant Network to Host Invasive Plant Symposium in Conjunction NCWSS Annual Meeting

The Midwest Invasive Plant Network (MIPN) will be hosting an Invasive Plant Symposium in December in conjunction with the North Central Weed Science Society's Annual Meeting in Indianapolis, IN. MIPN is working with the Indiana Invasive Species Council's Invasive Plant Advisory Committee to organize this symposium. The focus will be on the ecology and management of invasive plants of natural landscapes. The two-day meeting, (Wed-Thr) Dec 9-10, will feature a lineup of excellent plenary speakers on Wednesday morning and concurrent sessions on a wide variety of invasive-species related topics for the remainder of the symposium.

Participants can register for the entire symposium or just one day. NCWSS conference participants will be able to attend the MIPN Symposium at no additional cost. Details are still being worked out but keep an eye on www.MIPN.org for further details on the conference.

This will be the fifth time MIPN and NCWSS have partnered together on an invasive species conference. Previous symposia were held in 2013 in Columbus, 2011 in Milwaukee, 2008 in Indianapolis, and in 2006 in Milwaukee.

Call for Distinguished Achievement Award Nominations and NCWSS Outstanding Graduate Student Award

JD Green, Past President

The NCWSS has dedicated and successful members and students who make significant contributions to our Society and discipline. To recognize the contributions of outstanding members please take a few minutes to nominate them for a Distinguished Achievement Award. If you are unsure if a person has received an award in the past just check the NCWSS website (www.ncwss.org) for a listing of past recipients under the tab "About NCWSS". Nominations are a simple process.

The NCWSS can present up to five awards each year from the following categories:

- Research**
- Young Scientist**
- Industry**
- Service**
- Education**
- Professional Staff**

Nomination guidelines for all categories are similar and can be found on pages 23-24 of the NCWSS Manual of Operating Procedures located on our website: <http://ncwss.org/wp-content/uploads/2015/03/Operating-Guide-Mar-2014.pdf> under "Operating Procedures". Nominators should initiate the process early to procure letters of support prior to the application deadline. **Submissions of nomination materials are due September 30, 2015.**

Exceptional students can also be nominated for the NCWSS Outstanding Graduate Student Award. The qualifications and eligibility requirements pertinent to this award are found on pages 25-26 of the NCWSS Manual of Operating Procedures. The awards committee will review the applicants to identify the graduate student who has been most actively involved in the society and provided the greatest contribution to the field of weed science through research, extension or teaching and other activities. **The deadline for graduate student nominations is**

also due September 30, 2015.

To submit a nominee Email an electronic version (PDF preferred) of complete nomination packages for all awards to: jdgreen@uky.edu Feel free to either email or call me at 859-257-4898 with any questions.



Washington Report

Lee Van Wychen

June 23, 2015



Foundation for Food and Agriculture Research Names First Executive Director

The Foundation for Food and Agriculture Research (FFAR) named Dr. Sally Rockey as its first executive director. Dr. Rockey is currently the deputy director of extramural research at the National Institutes of Health and will bring her 19 years of experience at USDA to the Foundation starting in September, 2015.

FFAR was established in the 2014 Farm Bill. Congress provided \$200 million for the Foundation that must be matched by non-federal funds as the Foundation identifies and approves research projects. The Foundation operates as a non-profit entity seeking to address problems of national and international significance. For more background on FFAR, as well Dr. Rockey's bio, please visit: <http://www.far.foundation/first-executive-director.html>



FFAR's Chairman of the Board and Former Secretary of Agriculture Dan Glickman (left) helped select Dr. Sally Rockey (right) as FFAR's first executive director.

Illinois Farm Data Indicates Mixing MOA's More Effective Than Rotating Them

Reprinted with permission from Stephanie Henry, University of Illinois.

A recently published study by weed scientists at the University of Illinois and USDA-ARS, looking at glyphosate-resistant waterhemp, is providing valuable evidence that points to management practices as the driving force behind herbicide resistance, and that herbicide mixing, as opposed to herbicide rotation, is the most effective tool in managing resistance.

Pat Tranel said this is not the first time researchers have presented evidence that herbicide rotation is not the best resistance management strategy. "This paper is valuable because these conclusions were obtained doing our experiment in a more 'real-life' fashion," Tranel said. "This study confirmed previous conclusions that farmers should use herbicide mixing rather than rotation."

During the study, they evaluated glyphosate-resistance incidences, as well as landscape, soil, weed, and farm-management data from 105 central Illinois grain farms, including almost 500 site-years of herbicide application records. Having this data, collected between 2004 and 2010, helped the researchers identify relationships between past herbicide use and current glyphosate-resistance occurrences.

Tranel said when glyphosate-resistant waterhemp was first reported in Illinois in 2006, researchers working at the site saw some fields that were infested with waterhemp, but adjacent fields that were free of the weed.

"We asked, 'what is different between these two fields? Is it what the farmers are doing?' We asked a retail applicator to let us review all the management practices data from 100 fields—50 that have resistant waterhemp and 50 that don't," Tranel said.

“We took the results of what farmers have already done, and asked what is different in the fields that have resistance versus the ones that don’t,” he added.

After collecting the management data, sampling waterhemp from the fields, and screening seeds from the field for resistance back in their greenhouses, the researchers analyzed that data for management factors most associated with resistance. Overall the researchers examined 66 variables related to environment, soil, landscape, weed community, and weed management.

“We looked at every factor we could think of in terms of management and landscape,” Tranel said. “We found that it was management factors that are the most important. It doesn’t matter whether you’re next to a water course that might bring in new seed, what the waterhemp density of your field is, etc. It’s what you did in your field that matters.

“That’s what’s encouraging,” he added. “It’s not inevitable that if your field is next to a water course, for example, you will have resistance.”

Aaron Hager, a co-author on the study, explained that the occurrence of glyphosate-resistant waterhemp was greatest in fields where glyphosate had been used in over 75 percent of the seasons included in the analysis, where fewer MOAs were used each year, and where herbicide rotation occurred annually. “Simply rotating herbicide MOAs actually increased the frequency of resistance,” he said.

On the other hand, Tranel said that the farmers who were using multiple herbicides per application were least likely to have resistance. “When using an average of 2.5 MOAs per application, you are 83 times less likely to have resistance compared to if you used only 1.5 MOAs per application,” he explained.

“That’s pretty amazing that adding one additional mode of action in your tank reduces your chances of resistance by that much,” Tranel added.

Hager pointed out that this strategy will work only if each component of the tank mixture is effective against the target species. “Effective, long-term weed management will require even more diverse management practices,” he added.

Another piece of good news for farmers is that the researchers did not find an association of proximity between neighboring fields and resistance. “The good thing is not only does management matter, it’s what you do in your own field that matters. Even if a neighbor’s resistance moves, it’s at a small frequency. If you’re doing the right thing it will stay at a small frequency,” Tranel said.

Although there may be some concerns with herbicide mixing, Tranel said it is still the best tool to manage resistance. One concern is the greater expense and environmental load of using multiple herbicides.

Another concern is using the correct mix of herbicides in the tank. Particularly as waterhemp becomes resistant to other herbicides, such as PPO inhibitors, mixing glyphosate and a PPO inhibitor, is not going to be a good management strategy if there is already resistance to a PPO inhibitor, Tranel explained.

“As we have new tools coming like 2,4-D and dicamba-tolerant soybeans, some people may think ‘I’ll throw in 2,4-D with glyphosate, because that’s using two modes of actions,’ but if you already have glyphosate resistance then you are not really using two effective modes of action,” he added.

“We don’t say that mixing is the end-all solution. What we saw from this study if success for farmers is measured by lack of resistance or lower frequency, then successful farmers use multiple herbicides per application.”

USDA Releases Federal Noxious Weed Disseminules ID Tool

The Federal Noxious Weed Disseminules of the U.S. (FNWD) was developed by the USDA APHIS Identification Technology Program (ITP) in collaboration with the California Department of Agriculture (CDFA). Most of the content in FNWD is a work of the U.S. Government and is in the public domain. The ID tool was developed to enable accurate identification of federal noxious weeds (FNW) disseminules and to assemble a set of high-quality images of the disseminules of all the FNW taxa. The ID tool and its identification keys were designed to be used by officials at U.S. ports responsible for identification of plant pests. It may also be a useful resource for seed professionals and anyone else with an interest in, or a need to know about, the U.S. federal noxious

weeds and what their disseminules look like.

The ID tool provides photographs, text, and keys that aid in determining whether or not an unknown disseminule (e.g., seed, fruit) found as a contaminant in imported botanicals and agricultural products is a FNW and is therefore actionable. The total list of 114 FNW taxa is broken down into smaller groupings, first by Disseminule type—Spores vs. Vegetative vs. Fruits & Seeds. This page describes the various types of disseminules represented within the tool. Taxa with spore and vegetative disseminules are described in fact sheets. The taxa with fruit and seed disseminules (further broken down into three groupings: Poaceae, Fabaceae, and Other Families) can be separated using one of the three associated keys. A Key to Keys assists the user in deciding which of these three keys is appropriate to use for taxon identification. Fact sheets for each FNW taxon pull together relevant descriptions, including distinguishing characteristics and photographs. See: <http://idtools.org/id/fnw/>

USDA-ERS Report on the Economics of Glyphosate Resistance Management

Data obtained by USDA's Agricultural and Resources Management Survey (ARMS), conducted every year targeting about 5000 fields and 30,000 farms, along with data from the Benchmark study (Shaw et al., 2011) show that weed-management choices that account for the yield and cost effects of glyphosate resistance and maximize returns over time differ from those that ignore the effects of glyphosate resistance by: 1) using glyphosate during fewer years; 2) often combining glyphosate with one or more alternative herbicides; and 3) most importantly, not applying glyphosate during consecutive growing seasons. As a result, glyphosate resistance is managed more cost effectively and the cumulative impact of returns is higher after about 2 years of managing resistance instead of ignoring it.

The findings of the USDA Economic Research Service (ERS) study suggest that education about the negative consequences of glyphosate resistance and the economic benefits of managing resistance, as well as the common-pool-resource nature of weed susceptibility to glyphosate and the potential benefits of cooperation, could promote resistance-management practices, encourage neighboring farmers to collaborate in

managing glyphosate resistance, and increase long-term returns to corn and soybean production.

The USDA-ERS report "The Economics of Glyphosate Resistance Management in Corn and Soybean Production" can be found at: <http://www.ers.usda.gov/media/1832877/err184.pdf>

U.S. is 22,500 College Graduates Short for Agricultural Jobs

A report from USDA's National Institute of Food and Agriculture (NIFA) and Purdue University, released in May, has found tremendous demand for recent college graduates with a degree in agricultural programs. An estimated 57,900 high-skilled job openings are available annually in the food, agriculture, renewable natural resources, and environment fields, the report found, but there are only about 35,400 new U.S. graduates with a bachelor's degree or higher in agriculture related fields, 22,500 short of the jobs available annually.

College graduates with a degree in "Plant science" can expect to see a very strong job market.

Read the report on agriculture jobs in the U.S. at: ["Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources, and the Environment, United States, 2015–2020."](#)

GMO Labeling Bill Gets A Lot of Attention

The Safe and Accurate Food Labeling Act of 2015 (H.R. 1599) would require the FDA to regulate the distribution and labeling related to bioengineered foods. The bill was introduced in March and has had hearings in both the House Agriculture and the House Energy and Commerce Committees. H.R. 1599 defines the term "bioengineered organism" as an organism that meets the following three conditions: (a) the organism is a plant (or a seed, a fruit, or any other part thereof), (b) the organism contains genetic material that has been modified through in vitro recombinant DNA techniques; and (c) the modification could not otherwise be obtained using conventional breeding techniques.

H.R. 1599 would require food producers to notify FDA of any bioengineered foods intended to be sold interstate and would prevent the sale of any bioengineered foods not deemed safe by FDA. The bill would prevent FDA from requiring the labeling of bioengineered foods only on the grounds that the foods are bioengineered,

Washington Report - Continued

however, the FDA could require that alterations of nutritional properties, allergens, or other characteristics of food be listed on food labeling.

The second title of H.R. 1588 directs FDA to define the term “natural” for its use on food and beverage products. The third part of the legislation directs FDA to establish federal standards for food producers who choose to voluntarily label their product for the absence or presence of bioengineered organisms. Finally, H.R. 1599 deals with the issue of preemption (the doctrine that federal law takes precedence over state law) by affirming FDA as the nation’s authority for the use and labeling of bioengineered food ingredients and would prevent states from issuing their own food labeling

requirements. Although there appears strong support for the measure in the House, its path is unclear in the Senate and beyond.

WSSA Survey of Most Common and Troublesome Weeds

The winner of the \$100 drawing for completing the survey of the most common and troublesome weeds was WSSWS member, John Vickery , Member, Education & Outreach Committee, Colorado Native Plant Society. Congratulations John!

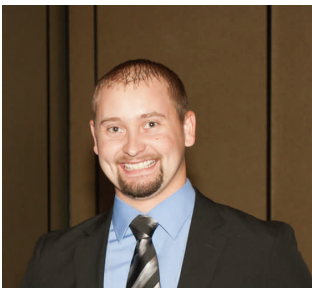
[Lee Van Wychen, Ph.D.](#)
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People and Places - NCWSS



Stacey Marion:

Stacey Marion received a M.S. degree in Agroecology from the University of Wisconsin-Madison in May 2015. Her thesis research focused on characterization of Wisconsin giant ragweed resistance to cloransulam-methyl. She was co-advised by Dave Stoltenberg and Vince Davis.



Thomas Butts:

Thomas Butts completed his M.S. in Weed Science from the University of Wisconsin-Madison under the direction of Dr. Vince Davis. He has currently relocated to North Platte, NE where he is pursuing a Ph.D. degree at the University of Nebraska under the direction of Dr. Greg Kruger.