

NCWSS • News

North Central Weed Science Society

Vol 35, Number 1, Spring 2018

www.ncwss.org

- ▶ President's Message 1
- ▶ Past President 4
- ▶ Distinguished Achievement and Outstanding Graduate Student Awards 6
- ▶ Student Paper and Poster Awards. 15
- ▶ New Officers 20
- ▶ New Executive Secretary 20
- ▶ Women in Weed Science..... 21
- ▶ Summer Weed Contest..... 22
- ▶ Washington Report..... 23
- ▶ Other news and publications 27



Christy Sprague President's Message

I am looking forward to serving as your 2018 North Central Weed Science Society President. It is my honor and pleasure to work with all the dedicated volunteers and members that make the NCWSS such a successful organization. As professionals interested in weed science from universities, the crop protection industry, crop consultants, state and federal agencies, private

researchers, and extension educators our mission has been to provide research, education, and training to persons responsible for weeds and their management in land use systems. I look forward to working with each of you in 2018 to complete this mission.

Reflections on our 72nd NCWSS Annual Meeting in 2017

As members of the NCWSS one of the key hallmarks of our society is the annual meeting. As President-elect this past year my main responsibility was to serve as the Program chair for this meeting. This experience was both challenging and rewarding. One of the greatest rewards was working with our members that volunteered and served to make the 2017 NCWSS annual meeting such a huge success. I would like to this time to reflect back and thank several people that contributed to making this meeting successful. First, I would like to thank the Local Arrangements Committee, led by Greg Elmore. The time commitment, attention to detail, and the team effort that Greg and his committee put forth into preparing the venue and making the meeting run smooth was highly commendable. Next, I would like to thank Tara Steinke, our Executive Secretary, and her staff from IMI Group for managing the meeting details including registration, arrangements with the hotel, and answering questions from the membership. This was Tara's first meeting as our Executive Secretary and she did an amazing job.

Graduate and undergraduate student education and professional development are key objectives of our society. There were several excellent events sponsored and available to our graduate and



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

Continued on Next Page

President message — continued



undergraduate students at the 2017 Annual Meeting. Special thanks goes to Thomas Butts,

Chair of the Graduate Student Committee, and Mayank Malik with Monsanto for organizing a pre-conference tour of Monsanto's Technology Research Center tour in Chesterfield, MO. Monsanto generously sponsored this tour and the previous night's hotel stay for the students that attended. Thomas also organized a fantastic Student Symposium titled, "Taking the Next Step: Preparing for your Future Career Goals" that brought together a diverse group of speakers that provided different perspectives on career paths and how to prepare for future career goals. The ever popular Monday evening Student Mixer and Quiz Bowl was once again sponsored by BASF Corporation. The society really appreciates BASF's annual sponsorship of this event where we are able to get reacquainted and catch up with friends and colleagues and test our knowledge on Weed Science trivia. The society would also like to thank Dow AgroSciences for their sponsorship and program at the Graduate Student luncheon and business meeting. The undergraduate student poster and graduate student paper and poster contests really highlights the outstanding and amazing research that our students and colleagues are conducting around the North Central Region. Each year the presentations from these exemplary students reaches an all new plateau and the competition is fierce. Congratulations to the award winners that are listed later in the newsletter. A total of 53 graduate student papers, 44 graduate student posters, and 23 undergraduate posters were

evaluated during the meeting. A special thanks goes to all the hard work by our Resident Education committee, and to Mark Bernards, Neha Rana, and Mayank Malik for overseeing the student contests. Also, a big thank you to all the volunteer judges! Your contributions make it possible to offer this amazing opportunity to our students. Please consider volunteering to be a judge for the 2018 NCWSS meeting!

The General Session on Tuesday morning was a great start to our 72nd NCWSS annual meeting. We were welcomed to St. Louis by Erin Hilligoss-Volkman and retired U.S. Army Colonel Paul Rosewitz experts from the National Park Service. They presented information on the scientific training and flora and fauna discovered on the Lewis and Clark Expedition with their presentation, "Lewis and Clark Expedition: Soldiers as Scientists". We also had the opportunity to learn about the key findings from the 2017 Regional Herbicide Resistance Listening Session project, "Managing Herbicide Resistance: Listening to the Perspective of Practitioners" from Dr. Jill Schroeder. Jill provided us with an overview of what our constituents as farmers, ag retailers, and several other weed management decision makers feel are the barriers to managing and delaying the development of herbicide-resistant weeds. Dr. Lee Van Wychen, Director of Science Policy, updated members on key issues and activities associated with his role in Washington D.C. We also heard from NCWSS President Greg Dahl as he reflected on his Presidential term. Greg highlighted the key activities and outcomes from the past year. We also took a moment of silence to remember colleagues that had passed away since our last meeting. Once the general session was over, we all quickly headed out to

Continued on Next Page

**The NCWSS Newsletter is Edited by Vince Davis
with content provided by the members of the Society
Photos provided by Joe Omelan**

President message — continued



begin learning from colleagues. In addition to excellent papers presented by our membership, two symposia surrounding hot topics in weed science

were organized by the Application Technologies and Extension sections. Special thanks goes to Ryan Edwards and Christopher Proctor for organizing the “Weed Management through Equipment and Application Technologies” and “An Open Dialogue on Dicamba Technology” symposia. Other key activities for our membership included the 4th annual “Women in Weed Science” Networking Breakfast. We were excited to have one of our members Cheryl Dunne with Syngenta Crop Protection share her experiences in being interviewed as one of the “Women of Acuron” on an episode on the RFD-TV show FarmHer. Thank you to Past-President Anita Dille and Cara McCauley for organizing this event. At the Awards Luncheon, we were entertained by our MC Dawn Refsell. We recognized and congratulated our Distinguished Achievement Award winners and new Fellows. We also recognized our outgoing Past-President Anita Dille and WSSA representative Reid Smeda and welcomed our new Vice President Stott Howard and WSSA representative Greg Elmore. Thank you Anita for your leadership and service. I would also like to thank Joe Omielan for the terrific photos that he takes of our Award winners and Society. This year we made a few changes to the NCWSS program. First, we recognized our student poster and paper winners at the Wednesday night social. We also held the ever popular “What’s New in Industry” session as the only session on Thursday morning. I would like to thank to Joe Wuerrfel, Chair of the Industry Committee, for his leadership in organizing this session. Joe also planned the Industry Breakfast that was held on Thursday morning. Those in attendance heard a great presentation by Dr.

Kevin Folta, Professor and Chairman of the Horticultural Sciences Department at the University of Florida who shared his experiences in “Communicating Agricultural Innovation to a Concerned Public”. In addition to the NCWSS Industry members that attended the breakfast, several other NCWSS members and students also attended Dr. Folta’s presentation. Thank you to Syngenta for sponsoring both the undergraduate and graduate students tickets to attend this breakfast. I would also like to take this time to acknowledge the Sustaining Members of our society, who through their generous support help defray the costs of many of our activities during the annual meeting and throughout the year. Once again, I hope that each of you found something stimulating and useful at the 72nd NCWSS annual meeting.

2018 Activities

As we transition into 2018 there are several committees that continue to be extremely active. First, the Resident Education Committee has been working with Drs. Brian Olson and Greg Krueger in planning the 2018 NCWSS Collegiate Weed Science Contest. The summer contest will be held at the Monsanto Water Utilization Learning Center in Gothenburg, NE on July 26, 2018. Stayed tuned for more information about the 2018 Summer Contest.

In addition, at the last NCWSS Board Meeting it was decided that the Board appoint a Communications Working Group. This group has been hard at work and you will see several new forms of communication over the next year. Thank you to Dawn Refsell, Renee Adler, and the rest of the communications team for working to broaden our means of communication.

The NCWSS is an organization that functions based on volunteers. These volunteers serve on committees and are program section chairs for the Society. I want to thank all of you for your dedicated service to the NCWSS, and please let me know if I can facilitate any of your committee activities throughout the

President message — continued



coming year. There are several opportunities to volunteer and serve. I will be sending out a survey with questions addressing the membership's thoughts on some of the program changes that

happened in 2017. There will also be an area on the survey for you to volunteer for a committee. The Chair of that committee will be in contact with you. The committee membership and chair assignments will be posted on the NCWSS.org website. If there are any corrections or changes in contact information needed, please let me know (Christy Sprague, sprague1@msu.edu).

Science Policy Committee

As your President, I serve on the WSSA Science Policy Committee and receive requests to co-sign letters on behalf of NCWSS. These letters range from providing comments on impending legislation to indicating our support (or not) of increased funding for the sciences to minimizing burdens on professionals due to increasing regulations. For example, at this point, I have

co-signed a letter urging Senate leaders to promptly pass legislation (HR 1029) to reauthorize the Pesticide Registration Improvement Act (PRIA). I will continue to be in contact with the Executive Board and may be in contact with the membership to fully understand the NCWSS role in various policy decisions.

Finally, I want to thank Greg Dahl for his contributions and excellent leadership to the NCWSS as 2017 President. I wish each of you a productive 2018 and look forward to hearing great things about your work at the next NCWSS Annual Meeting in Milwaukee, WI on December 3-6, 2018. I know that your President-elect and Program Chair, Aaron Hager is busy checking with the hotel and working with the Local Arrangements Committee to prepare a great meeting.

Sincerely,
Christy L. Sprague, NCWSS President
sprague1@msu.edu 517-353-0224

Past President — Greg Dahl



Thank you for the opportunity to serve as your North Central Weed Science Society President in 2017. I really enjoyed representing you and working with many of you on projects, programs, and issues. I am very

impressed with the wisdom, care, capability and desire of our members to build a better society. The NCWSS serves as an important professional scientific organization, sharing our expertise in all aspects of weed management,

across many production systems, for the North Central region. The culture of our NCWSS is one of friendliness, inclusiveness, family-like values, respect and fun.

I am thankful to Christy Sprague, our new NCWSS President, for her leadership in developing the 2017 NCWSS program. Christy and the program committee put together a great program. Christy provided a Guidebook App for the 2017 meeting. I really liked using the app and saw many others also using it. Christy lined up great speakers for the General Session, the NCWSS Awards Luncheon and the several symposia. Christy and the program committee made several changes to the program. The poster sessions and paper contests modified to



Past President message — contin-

allow more flexibility for presenters and judges. The poster and paper awards were presented at the NCWSS Social on Wednesday evening. This meant that the “What’s New in Industry” session had to be moved to Thursday morning. I was pleased by the good attendance at the session.

My sincere thanks to Greg Elmore and our Local Arrangements Committee in St. Louis, and to our Executive Secretary, Tara Steinke for organizing such a great meeting. There was much planning, details and decisions that were well attended to. Thanks to the Site Selection committee for selecting this site. Thanks to the Hyatt Regency St. Louis at the Arch for their service and hospitality. I am grateful.

Thanks to Monsanto for hosting a pre-meeting event for students. I heard good comments about this even. Thanks to Dow AgroScience for sponsoring the graduate student luncheon.

Thanks to Joe Wuerffel for organizing the What’s New in Industry symposium and the Industry Breakfast. There were other great symposia at the meeting including: “Weed Management through Equipment and Application Technologies” moderated by Ryan Edwards, “Taking the Next Step: Preparing for Your Future Career” moderated by Thomas Butts, and “An Open Dialog on Dicamba Technology” moderated by Christopher Proctor. Thanks to the moderators and speakers for great information.

Special thanks to Dawn Refsell for leading the Strategic Planning Committee, for help with development of App technology, communication strategies and for serving as the Master of Ceremonies for the NCWSS Awards Luncheon and NCWSS Social.

Thanks to all the volunteers that serve on committees, volunteered to judge student videos, posters, and papers, to chair and moderate sections, and to help with the 2017 and 2018 summer weed contests. Volunteers are critical for having a successful NCWSS organization.

Congratulations to all the 2017 NCWSS Distinguished Achievement Award winners, new Fellows, student travel grant winners, and student video, poster, and oral presentation award winners. My priority in 2018 will be to solicit nominations for these awards. Start thinking of deserving individuals that should be recognized by their peers in the NCWSS. The nomination process is not difficult, and information is included on our web site. More information will be included in the summer newsletter. Nominations will be due in September 2018.

I am deeply grateful to the NCWSS Board of Directors for their many contributions. The NCWSS is in great shape because of their efforts and those that served before them. I would like to express my great thanks to Anita Dille for her leadership and mentoring. I also thank the many other past-presidents for their advice, suggestions and support. I am pleased that the leadership of the board is now in the capable hands of Christy Sprague, she will do great.

I am excited that NCWSS is now on several types of social media. I am following the NCWSS on Twitter and LinkedIn. I look forward to your posts. Thank you to all of you that are building a better NCWSS. For those of you that are looking for a way to help, please let us know of your willingness to help, there are opportunities.

Sincerely,
Greg Dahl, Past-President

72nd Annual Meeting in St. Louis, MO.





Distinguished Awards 72nd Awards Luncheon



PROGRAM

Master of Ceremonies.....	Dawn Refsell
Graduate Student Paper Awards	Neha Rana
Graduate Student Poster Awards	Mark Bernards
Undergraduate Student Poster Awards	Mayank Malik
Undergraduate Scholarship.....	John Hinz
Student Travel Awards.....	Anita Dille
Distinguished Achievement Awards.....	Anita Dille
Outstanding Graduate Student Award.....	Greg Dahl
Video Awards.....	Chris Proctor
Fellows.....	Rich Zollinger
Presentation of New Officers	Greg Dahl

Continued on Next Page



Undergraduate Scholarship Award

Congratulations again to Nicole Sudbeck. Nicole is an Undergraduate Student from Kansas State University, and she was recognized with a scholarship at the annual meeting for a 1st place finish in the 2017 NCWSS student weed contest held last July. Anita Dille accepted the award from John Hinz at the December meeting, but pictured above was Nicole accepting her 1st place plaque at the 2017 contest from then-President, Greg Dahl.

Graduate Student Travel Awards

The NCWSS sponsors travel for up to six (6) graduate students to attend the annual meeting for the first time early in their career as a weed scientist. The travel award included \$500 plus complementary registration for the meeting.



Alyssa Hultgren



Alexandre Tonon Rosa



Balaji Aravindham



Chandrima Shyam

INDUSTRY Awards in this category are given to representatives of industry who meet the basic guidelines in the above education, research, or service categories. For these individuals, it is important to include the contributions this individual has made to weed science within the industry. Examples might be: patents, development of unique formulations, development of research techniques, discovery of unique uses for a product, or service to NCWSS or to agriculture in general.



Industry Scott Cully

Scott Cully was raised on a corn and soybean farm near the Central Illinois town of Jacksonville where he worked alongside his father and uncle who taught him how to grow corn, soybeans and wheat and how to be a steward of the land. Cully received a B.S in Crop Science from Western Illinois University in 1991 where he was advised and mentored by Dr. Gordon Roskamp. In 1990, Cully completed a 6 month internship with Dr. Larry Hageman at the DuPont Research Station in Rochelle, IL. He owes his experiences with Dr. Roskamp and Dr. Hageman to his career choice in Ag Chemical Research and Development. In 1992 Cully joined Ciba Geigy as a Technical Specialist at the Midwest Research Station near Dewey, IL. He worked in a split role between R&D and Marketing until 1994 when he married his wife, Sonja Mason, and became a full-time Experimentalist at the then Ciba research Station. In 1995, Cully began a M.S. Degree program in Weed Science at the University of Illinois while working full time for Ciba and soon to be Novartis.

In 2001, Cully completed his Masters of Weed Science and was promoted to a Research and Development Scientist with the newly formed Syngenta Crop Protection. Cully moved with his wife and one-year old daughter, Katie, to his territory in Southern Illinois and Kentucky – a new territory that was

previously covered in part by the Scientists from Illinois, Indiana, Tennessee, and Ohio. From 2001 to present, Cully has worked in this territory as a R&D Scientist and as a member of the Syngenta Weed Control Bio Team where he has had a significant role as Field Project Coordinator for several projects throughout the years working on several key development projects including several Stage 1 Herbicide projects through the years. The most significant project was summarizing much of the field efficacy and crop tolerance data for the development of the active ingredient Bicyclopyrone and specifically Acuron™ Herbicide. In 2014 Cully had the honor of being the first to publicly announce the Acuron trade name at the Commodity Classic in San Antonio, TX. Another noteworthy part of Cully's career has been the opportunity to hire and train several Summer Research Assistants many of whom have gone on to enter and earn M.S. and Ph.D. degrees in Weed Science programs at several prominent universities like Southern Illinois University, University of Illinois, University of Missouri, and the University of Kentucky. Cully is a member of the NCWSS, Rend Lake College Agriculture Advisory Committee, USA Swimming Official, and avid Oliver Farm Machinery collector and enthusiast. Cully enjoys spending time with his family, mentoring young people with interests in agriculture and science and is a very fortunate to have chosen the career path that involves working with great people and products in agriculture.



Industry Helen Flanigan

Helen Flanigan was raised on a crop and dairy farm in south-eastern Indiana. While growing up, her family nurtured her interest in agriculture, gardening and plant science as they farmed, milked cows and raised crops including processing tomatoes.

At Purdue University Helen worked as an undergraduate for Dr. Fred Warren, screening herbicides for various agricultural companies. It was this work experience and the encouragement of Dr. Warren that led Helen to consider a career in weed science. Helen enrolled at Michigan State University as a graduate assistant under Dr. Alan Putnam and received a Master's degree in Horticulture Weed Science.

Upon graduation Helen joined DuPont as a field development representative in the Crop Protection Division. She was involved in the first field evaluations of chlorimuron-ethyl (Classic), thifensulfuron (Harmony), nicosulfuron (Accent) and many other sulfonylureas. Over her 30+ years with DuPont, Helen has held other roles within the company. She was a product technical specialist which provided information to retailers and growers via the DuPont information line and most recently as the product development manager for corn and soybean herbicides. She also served as a mentor for newly hired field development representatives.

Helen has been a member of the North Central Weed Science Society since 1981. She has presented or co-authored over twenty papers and posters at the annual meeting. Helen has served on various committees including Resident Education, Industry and Local Arrangements. She has been the Indiana Industry Representative on the Board of Directors, section chair, a judge for papers and posters and a judge for the NCWSS Summer Weed Contest. She has enjoyed interacting with the graduate students and helping them be aware of the many opportunities in agriculture. Helen and her husband, Jim, enjoy traveling and spending time with their four children and six grandchildren.

Lowell Sandell grew up on a corn, soybean and hog farm near Burnside, Iowa. Mr. Sandell attended Iowa State University, graduating with a Bachelor of Science in Agronomy (1997) and a Masters in Crop Production and Physiology (Weed Science) (2000).

With Valent, Lowell's current role is in product development and technical support in the western corn belt. Prior to Valent, he worked at the University of Nebraska-Lincoln for seven years. At Nebraska he was involved with the annual production of The Guide for Weed Management in Nebraska, herbicide resistance management field days, and confirmation and management of herbicide resistant weeds in Nebraska. Lowell has been active in the NCWSS for many years. He has served on the NCWSS Board of Directors in a number of different roles, and currently is the CAST representative. He has also been continually involved with NCWSS student competitions, serving as a judge for poster and paper competitions and as coach and volunteer at the summer contest.



Industry Lowell Sandell



Education Stevan Knezevic

EDUCATION This award recognizes outstanding educational achievements in weed science. Individuals making outstanding contributions in areas such as resident, extension, industrial, and regulatory education are eligible. Principal criteria include innovative or unique approaches that result in learning, ability to clearly communicate ideas, motivation of the intended audience, and recognition of accomplishments by peers and the intended audience.

Stevan Knezevic grew up on Belgrade, Serbia (Former Yugoslavian republic). He received a B.Sc. degree in Plant Protection from University of Belgrade in 1987. In 1989 he moved to Canada where he received M.Sc. (Weed Science) in 1993 from University of Guelph. Then he moved to USA in 1994 to pursue doctoral studies at Kansas State University where he received PhD (Weed Science) in 1997. Upon graduation he conducted a one year of Post-Doctoral studies at University of Guelph. Stevan joined the University of Nebraska-Lincoln in 1999 as an Assistant Professor. He was promoted to Associate Professor in 2004 and became a full Professor in 2010. He teaches an internet based class on “Integrated Weed Management” to undergraduate and graduate students.

During his career, Stevan has published 116 peer-reviewed manuscripts, 10 book chapters, 1 training field manual, and was an author/co-author of 126 oral and 146 poster presentations at scientific conferences in USA and internationally. Stevan also authored and co-authored 19 extension publications, including an annual Guide for Weed, Diseases and Insect Management in Nebraska, of which he is a senior editor. Stevan has supervised 3 postdoctoral fellows, 28 graduate and 14 undergraduate students. He also hosted 31 international visiting scientists in his lab. He has served as a co-chair and chair of Weed Biology section of NCWSS. Stevan has received total of 22 awards for his research, publications, or presentation style. Just to name a few: Distinguish research award from NCWSS, “Outstanding Young Scientist in Crop Protection” from American Society of Agronomy; “The MOST READ and MOST CITED manuscript in 10 years” in Weed Technology Journal; “Top Cited article in 2009” for Weed Technology journal; “Internet Tool for Weed Control” (Web Version of Nebraska Weed Guide) from American Society of Agronomy; “Innovation Award for Designing Flame Weeding Machine” (shared with Dr. Gogos) from International Propane Association and Research Council; “Excellence in Team Programming” from UNL-IANR; and “Best Extension Publication” (Guide for Weed Management in Nebraska) from American Society of Agronomy.

PROFESSIONAL STAFF This award recognizes outstanding and sustained contributions in support of weed science activities in the North Central region. Nominees will be restricted to individuals that work under the direction of university, federal, or industry scientists. These individuals may have titles such as researcher, research associate, technician, support scientist, or specialist. The nominee must have been involved in weed science research, extension, or resident education for at least five years at the time of nomination.



**Profession Staff
Julie Young**

Julie Young was raised on a grain farm near Portland, Michigan and received a M.S. in Weed Science from Michigan State University in 1995 under Dr. Karen Renner. Upon graduation, Julie joined Valent U.S.A as a field market development specialist in Illinois and Wisconsin where she had the opportunity to engage in research, product development, and sales experiences. In 1999, Julie returned to the university system as a researcher at Southern Illinois University where she conducted field and greenhouse experiments and interacted with graduate students for 15 years. Julie relocated to Purdue University as a research associate in 2014 where she continues to conduct field and greenhouse research along with coordinating herbicide resistance screening and learning new techniques in mass spectrometry and hyperspectral imaging. While at Michigan State Julie met her husband, Bryan, and they now have three children with varied weed science experience. Julie considers successfully working with her husband for nearly 20 years as one of her major accomplishments.



**Outstanding
Graduate
Student
Joe Ikley**

Outstanding Graduate Student Award The NCWSS Outstanding Graduate Student Award recognizes one outstanding graduate student who is a NCWSS student member. This award will be given to a graduate student who is actively involved in the Society, as well as contributor to the field of weed science through extension, research, and teaching.

Joe Ikley grew up in Maryland where he attended college at the University of Maryland, College Park. During his sophomore year, he began working as a technician with Dr. Ron Ritter in the Weed Science program. After completing his B.S. degree in Agriculture Sciences and Technology in 2010, he stayed on with Dr. Ritter to pursue a Master's degree researching the efficacy of saflufenacil on glyphosate-resistant horseweed and its effect on soybean cultivars while also continuing to work in his technician role. He graduated with his M.S. in 2012 and moved to Purdue to pursue a Ph.D. under Dr. Bill Johnson.

Joe spent 4 years as a research technician under Dr. Johnson. In the technician role, he managed over 200 research trials across 6 locations in Indiana. Since January 2017, he has served as a Weed Program Specialist and helped Dr. Johnson with his extension duties to the stakeholders in Indiana. As Weed Program Specialist, he has presented weed science updates at nearly 40 meetings and trainings to over 3,000 clientele. He has also authored or co-authored 18 newsletter articles that reach over 3,200 subscribers weekly.

Joe's Ph.D. research has focused on the role alternative weed hosts play in the epidemiology of Goss's wilt of corn. His research has addressed the host range of the bacterial causal agent; the ability of the bacterium to overwinter on alternative host debris, inside seed, and on living winter annual hosts; the bacterium's ability to survive and remain pathogenic in alternative hosts treated with herbicides; and the effect of herbicides on disease severity in corn.

Joe has authored or co-authored 16 paper and poster presentations for 6 regional NCWSS and NCAPS meetings, placing 1st in the NCWSS Graduate Poster Competition in 2014, and 1st in the Graduate Paper Competition in 2016. He has also been involved with the NCWSS weed contest as a participant and host, and served as co-chair and chair for the Agronomic Crops II section at the 2014-2015 NCWSS meetings.

Outstanding Graduate Student Award Cont.



Outstanding Graduate Student Parminder Chahal

Parminder Chahal was born and raised in a small village in the state of Punjab, India. Being a farm boy, I used to help my family with our wheat, rice, and sugarcane planting and harvesting. We were always dealing with reduced grass weed control in rice and sugarcane due to the minimal number of effective PRE fb POST herbicide options available on the market, and most of the time we were forced to weed by hand in the extremely hot weather of June and July (100° to 115° F). Weed control in Punjab in rice and sugarcane relies mostly on the use of POST herbicides and farmers don't have much knowledge about PRE residual fb POST herbicide applications partially due to a lack of weed science extension activities, which is why I became interested in developing weed control practices and extension activities for effective weed control in crops. After finishing high school, I was admitted to the B.S. in Agriculture program at the prestigious Punjab Agricultural University in Ludhiana, India in 2008 and successfully finished my undergrad education in 2012. I joined the master's degree program in weed science under the guidance of Dr. Amit Jhala at the University of Nebraska-Lincoln in 2013 and was offered an assistantship for the duration of the degree. My M.S. research

reported herbicide programs for control of glyphosate-resistant volunteer corn in glufosinate-resistant soybean and the effect of late-season volunteer corn emergence on soybean yield, and immediately after finishing my master's degree in 2014 I joined the Ph.D. program in the same lab with Dr. Jhala. My Ph.D. research projects include exploring the mechanism of atrazine resistance in PS II- and HPPD-inhibitor-resistant Palmer amaranth from Nebraska, determining the physiological basis of synergism with tank-mixed applications of atrazine and mesotrione on the control of PS II- and HPPD-inhibitor-resistant Palmer amaranth, and developing herbicide programs for the control of resistant Palmer amaranth in conventional, Liberty-Link, and Roundup Ready corn. Throughout my career I have taken many opportunities to demonstrate my research and interact with growers, extension educators, research scientists, and industry representatives during Weed Science Extension Field Days and conferences, which has helped me to both fine-tune my communication skills and improve my scientific knowledge. I have also published seven manuscripts in peer-reviewed journals, three book chapters, and several extension articles during my graduate career, and look forward to continuing my work in educating growers and forming more collaborative relationships in the future.

Student Video Contest

The NCWSS once again had a video contest. **Videos were submitted to one of two categories: 1) Research or 2) Extension.** Submissions in the research category provided a synopsis of the student's weed science research. Extension submissions represented applied research based information that is relevant to an agriculture or horticulture professional audience. Videos were limited to 5 minutes and were judged based on criteria similar to oral and poster presentations. Judging criteria included Purpose/Introduction, visual quality, audio quality, flow/transition, voice quality/grammar, physical mannerisms, use of visual aids, conclusion/summary, creativity, and educational quality.



Student Video Contest Winners



Eric Osland



Sara McCaley



Parminder Chahal



Ethan Barnes



**Fellow
John Hinz**

FELLOW AWARDS: Fellow is the highest honor that the Society can confer to an individual member. Only individuals who have made outstanding contributions to weed science (no more than 0.5% of the membership) receive the award each year. Fellows are considered life-time members of the NCWSS.

John Hinz was raised on a small livestock and grain farm near Fairmont, MN. He received a BS degree in agronomy from the University of WI, River Falls and his MS and PhD from Iowa State University in weed science. It was at Iowa State University that he met his wife, Angie. He was an assistant professor at West Virginia University for 1.5 years. He then took a job as a field development representative with Bayer in 1998. Dr. Hinz has been actively involved in the North Central Weed Science Society. He attended his first meeting in 1988. He was the North Central Weed Science Society President in 2015.

He has served on and chaired the Resident Education committee, the Industry Committee, the Herbicide Resistance Committee, the Placement Committee and the Distinguished Achievement Committee. He has also chaired the Herbicide Physiology section. He has also been a strong supporter of the North Central Weed Science Society's Collegiate Weed

Contest. He chaired the contest committee in 2017. He has volunteered as a judge or farmer for the farmer problem for 16 of the last 17 years. He served as a judge for the farmer problems at the first Weed Olympics and a farmer at the second Weed Olympics. He has also judged the paper and poster contest numerous times. Dr. Hinz also chaired the committee that wrote the rules for the North Central and North East Weed Science Society joint weed contest. He has served on the WSSA Photo Contest subcommittee. He has been a poster judge at the last 3 WSSA meetings. He served on the search committee to hire a new executive secretary for WSSA and the regional societies. In 2006 the North Central Weed Science Society recognized his efforts with the

Fellow John Hinz Cont.

Distinguished Achievement in Industry Award.

Dr. Hinz is also involved in his community. He served as president of the church council has served on and chaired several committees. He was President of the local Kiwanis Club and served on several committees. He currently is presenting Bayer's Making Science Make Sense to 2 local school districts. Making Science Make Sense is Bayer's STEM initiative. In his spare time, John enjoys playing golf and woodworking.



Fellow Patrick Tranel

Patrick Tranel holds the Ainsworth Professorship in Crop Sciences at the University of Illinois. Reared on a crop and livestock farm in northern Illinois, Pat received B.S., M.S., and Ph.D. degrees from Iowa State University, Washington State University, and Michigan State University, respectively. He has been a member of the University of Illinois faculty since 1997. Pat attended his first NCWSS meeting—coincidentally also here in St. Louis—in 1996. Since then, he has authored/coauthored 107 papers/posters at our annual meetings. Pat also has contributed to our society through serving on the Board of Directors, moderating sessions and a symposium, and serving as a coach and volunteer for the annual weeds contest. Pat is also active in WSSA, has been an Associate Editor of Weed Science since 2002, and is on the Editorial Board of three other journals.

Pat's research program focuses on evolution and mechanisms of herbicide resistance, and his lab was an early adopter of utilizing molecular and genomics approaches in weed science. He has authored/coauthored 88 research articles, 14 review arti-

cles, and 7 book chapters. His research contributions were facilitated by 26 graduate student advisees and postdocs, as well as by collaborations with numerous University of Illinois, NCWSS, and WSSA colleagues.

Pat actively engages his clientele regarding the practical implications of his research, much of which is translational. For example, his lab pioneered the use of molecular tests for herbicide resistance in waterhemp. Pat also has contributed significantly to formal training of future weed scientists and practitioners. Roughly 1000 undergraduate students have taken his introductory weed science course, which has sparked a career interest in weed science on multiple occasions.



Student Paper & Poster Presentation Awards

Graduate Student Paper Contest (Chair Neha Rana)

Herbicide Physiology



1st

Presence of an alternative mechanism of resistance to PPO-inhibiting herbicides in tall waterhemp populations from Indiana, Illinois, Iowa, Missouri, and Minnesota.

Nicholas Steppig. Purdue University



2nd

Quantifying resistance to isoxaflutole and mesotrione and their interaction with metribuzin POST in waterhemp population.

Sarah O'Brien. University of Illinois

Equipment and Application Methods



1st

Paraquat efficacy as influenced by spray droplet size for Palmer amaranth control.

Marshall Hay. Kansas State University

Agronomic and Specialty Crops



2nd

Response of sugarbeet to low-dose tank contamination with dicamba and 2,4-D.

Michael Probst. Michigan State University

Graduate Student Paper Contest (continued)

Weed Biology, Ecology, Management



1st

Effects of Failed cover crop termination and winter annual weed suppression in the Eastern Cornbelt.

Stephanie DeSimini. Purdue University



2nd

Density-dependent Johnsongrass seed production under different cropping systems.

Don Treptow. University of Nebraska

Weed Biology, Ecology, Management



1st

Weed exposure to sublethal rates of herbicides as a result of pesticide drift.

Bruno Canella Vieira. University of Nebraska



2nd

Modeling emergence pattern of common ragweed influenced by spring tillage in Nebraska.

Ethann Barnes. University of Nebraska

Agronomic Crops



1st

Dicamba and 2,4-D efficacy on Palmer amaranth and common waterhemp.

Nathaniel Thompson. Kansas State Univ.



2nd

Control of glyphosate-resistant waterhemp in Ontario with Roundup Ready 2 Xtend crop system.

Brittany Hedges. University of Guelph

Graduate Student Paper Contest (continued)

Agronomic Crops



Implementation of variable rate herbicide applications based on soil physical properties.

Garrison Gundy. Kansas State University



Biologically-effective dose of tolypyralate applied postemergence for annual weed control in corn.

Brendan Metzger. University of Guelph

Graduate Student Poster Contest (Chair Mark Bernards)

Agronomic Crops



Integration of residual herbicides and cover crops for weed control in a soybean production system.

Derek Whalen. University of Missouri



Combining herbicide programs and cereal rye cover crop for integrated weed management in soybeans.

Adam Striegel. University of Nebraska

Agronomic Crops



Utilizing geospatial technology to assess off-target dicamba injury and yield loss in Missouri soybean fields.

Brian Dintelmann. University of Missouri



Evaluation of "recovery" treatments for dicamba-injury and yield loss in Missouri soybean.

Shea Ferrall. University of Missouri

Graduate Student Poster Contest (continued)

Herbicide Physiology and Weed Biology & Ecology



1st

Inheritance of mesotrione resistance in a waterhemp population from Nebraska.

Maxwell Oliveira. University of Nebraska



2nd

Tall waterhemp resistance to PPO-inhibiting herbicides: Does *s*-metolachlor reduce selection pressure, decrease overall survivorship, or both?

Brent Mansfield. Purdue University

Herbicide Physiology and Weed Biology & Ecology



1st

Artificial hybridization between *Amaranthus tuberculatus* and *Amaranthus albus*.

Brent Murphy. University of Illinois

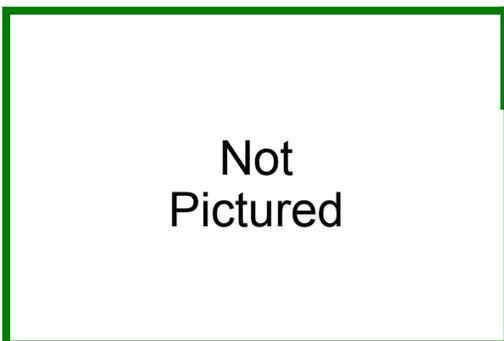


2nd

Using seed rain to assess feasibility of at-harvest seed destruction for three troublesome weed species in Missouri soybean.

Alyssa Hultgren. University of Missouri

Agronomic crops



1st

Evaluation of a new herbicide, switchblade, for broadleaf weed control.

Michael Fleetwood. University of Missouri



2nd

Strategies for control of Palmer amaranth that survived a POST contact herbicide.

Jesse Haarman. Purdue University

Undergraduate Student Poster Contest (Chair Mayank Malik)

Weed Biology, Ecology and Management



1st

Waterhemp seed production and seed viability as affected by sublethal dicamba dose.

Allyson Rumier. Western Illinois University



2nd

Breaking seed dormancy in Palmer amaranth.

Samuel Ramirez. Southern Illinois Univ.

Agronomic Crops



1st

Confirmation of common waterhemp biotype resistant to Protoporphyrinogen oxidase (PPO) inhibitors in Nebraska.

Trey Stephens. University of Nebraska

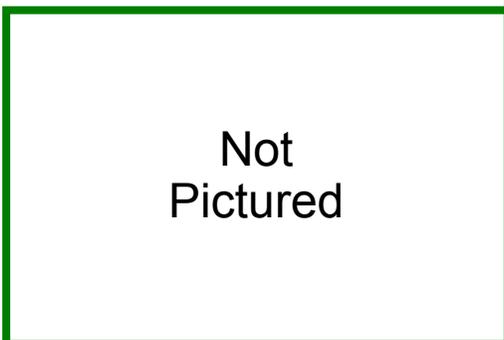


2nd

Weed control following single-pass PRE or POST corn herbicides as affected by planting date.

Luke Merritt. Western Illinois University

Equipment and Application Methods



1st

Visualization of the Penetration and Uptake of Multiple Adjuvant Systems Using Confocal Microscopy.

Savana M. Lipps. University of Wisconsin



2nd

Impact of droplet size on POST applications of HPPD-inhibiting herbicides.

Barbara Vukoja. University of Nebraska

2017 Officers

Greg Dahl, President
Christie Sprague, President Elect
Aaron Hager, Vice President
David Simpson, Secretary-Treasurer
Editor—Proceedings, Greg Kruger
Editor—Newsletter, Vince Davis
WSSA Representative, Reid Smeda
CAST Representative, Lowell Sandell
Past President, Anita Dille
Executive Secretary, Tara Steinke

2017 Program

Dawn Refsell, Master of Ceremonies
Neha Rana, Graduate Student Paper Awards
Mark Bernards, Graduate Student Poster Awards
Mayank Malik, Undergraduate Poster Awards
John Hinz, Undergraduate Scholarship Award
Anita Dille, Distinguished Achievement Awards
Anita Dille, Outstanding Graduate Student Award
Rich Zollinger, Fellows
Greg Dahl, Presentation of New Officers

2018 Incoming Officers



Stott Howard (Vice President) **Pictured on Left**
Greg Dahl (Past President)
Christie Sprague, (President)
Aaron Hager, (President-Elect)

Vince Davis (Newsletter Editor)
David Simpson (Secretary-Treasurer)
Greg Kruger (Proceedings Editor)
Reid Smeda (CAST Representative)
Greg Elmore (WSSA Representative)



New Executive Secretary

The North Central Weed Science Society would like to welcome Ms. Kelley Mazur as our new Executive Secretary. Kelley started as our new Executive Secretary on April 14 and is making an excellent transition into this role, after the departure of Ms. Tara Steinke who recently left IMI to spend more time with her family. Tara will be greatly missed. However, I have no doubt that Kelley will be a great asset to the NCWSS. Kelley's background includes attending the University of Nevada, Las Vegas for general studies before starting her career at Wynn Las Vegas Resorts in Event Planning, Marketing and Hospitality. At the Wynn she gained skills in managing events and marketing campaigns for two luxury resort properties. In October of 2013, Kelley shifted her career focus to non-profit where she would manage

the Children's Heart Foundation of Nevada. Kelley is proficient in managing finances, multiple databases and coordinating with a board full of passionate individuals to drive forward the mission of the organization. Kelley is anxious to utilize her skill set in assisting the NCWSS to reach our goals. **Please welcome Kelley Mazur to the NCWSS.**

Kelley's contact information is: Kelley Mazur at 303-327-8016 or email kelly@imigroup.org or by using info@ncwss.org

4th Annual “Women in Weed Science” Networking Breakfast Anita Dille

The NCWSS Women in Weed Science enjoyed our 4th annual networking breakfast on Wednesday morning, December 6, 2017. We had more than 60 female meeting attendees participated in round-table discussions over a wonderful breakfast. I want to thank Cara McCauley, PhD student from Purdue Univ. for organizing an ice-breaker activity so that we could get to know each other better and put names to faces. This networking event provided opportunities for the attendees to share a bit about their careers, their lives outside of work, and to ask questions from colleagues in different career paths. We enjoyed watching Cheryl Dunne (R&D Lead, Syngenta at Vero Beach, FL) show some of her episode on the program FarmHer hosted by Marji Guyler-Alaniz, President of FarmHer, Inc., our guest speaker from 2016. Thank you to the NCWSS Board for supporting this activity. We look forward to another great networking event in December 2018.
Anita Dille



Standing is Anita Dille, Past-President, sharing a bit about herself during the ice breaker at the Women in Weed Science networking breakfast on December 6, 2017.



The Women in Weed Science at the annual meeting in St. Louis, MO on December 6, 2017



2018 Summer Weed Science Contest

The 2018 NCWSS Collegiate Weed Contest will be co-hosted by the Monsanto Company and the University of Nebraska at the Monsanto Water Utilization Learning Center near Gothenburg, NE on July 26th. For details, visit: <http://ncwss.org/weed-contest/>

A welcome reception will be held on the evening of July 25 at the University of Nebraska West Central Research and Extension Center, and there will be an optional tour of the wind tunnel testing program Dr. Kruger has for spray particle drift.

The contest will be on July 26th, 2018 with awards banquet to follow that evening back at the Quality Inn.

The facility the contest will be hosted is located on the western edge of the corn belt where irrigated corn and soybean production is prevalent so there will be a western theme to the competition. Co-leads are Dr. Brian Olson from the Monsanto Company and Dr. Greg Kruger from the University of Nebraska. The official rules are located here:

<https://ncwss.org/wp-content/uploads/NCWSS-2018-Collegiate-Weed-Contest-Rules-Final-weeds-list.pdf>

Action Items:

- **Register Teams and by June 11th, 2018**
 - Download Excel file from link below and return to Brian.Olson@monsanto.com
<https://ncwss.org/wp-content/uploads/2018-Summer-Contest-Registration.xlsx>
Mark Graduate and Undergraduate teams with (G) and (U), respectively
- **Book hotel rooms.** (Although, having an entire team show up to a contest with no rooms is a great learning, and unforgettable, experience in a rural location).

Teams are encouraged to stay at the Quality Inn located in North Platte, NE. **To reserve a room, please call the Quality Inn at (308-532-9090). Other hotel accommodations are available, but there is a room block at the Quality Inn at the rate of \$95/night.** When setting up the reservation, please reference the NCWSS Annual Weed Judging Contest.

- **Lastly, volunteer if possible!!!** These contests couldn't happen without the tremendous generosity of volunteers. Please email Dr. Olson to volunteer at brian.olson@monsanto.com.



Washington Report

Lee Van Wychen



Congress Avoids Sequestration with 2-Year Budget Agreement

Congress approved a two-year budget plan on February 9 that would increase authorizations for federal spending. The agreement passed in the Senate (71-28) and House (240-186) and was signed into law by President Trump. The bipartisan agreement raised the sequestration caps on defense and nondefense discretionary spending by nearly \$300 billion over two years, with nondefense discretionary spending - the biggest source of research funding - getting a \$63 billion boost in FY 2018 and an additional \$68 billion in FY 2019.

While Congress now has a budget blueprint, they still have to modify and pass an FY 2018 omnibus appropriations bill. Federal agencies will continue to operate on a Continuing Resolution (CR) under FY 2017 levels through March 23, 2018. If an appropriations package has not been passed by March 23, the government will once again face another shutdown.

Northey Confirmed to Lead USDA Farm Production and Conservation Programs

The Senate confirmed Bill Northey to serve as USDA Under Secretary for Farm Production and Conservation on voice vote on Feb. 27 after Sen. Ted Cruz (TX) lifted his nearly 6 month hold on Northey's nomination. Unfortunately Northey, who has served as Iowa's Secretary of Agriculture for the past 11 years, was used a political football by Sen. Cruz and the oil industry in a tiff over the Renewable Fuel Standard (RFS). Iowa is the country's leading ethanol producer. Following several high profile meetings between ethanol and oil proponents, there is still no agreement on changing the RFS, but at least Northey can begin his work on leading USDA's Farm



Bill Northey

Service Agency (FSA), Natural Resources Conservation Service (NRCS) and the Risk Management Agency (RMA). These three agencies will fall under the farm production and conservation mission area, a newly formed section under Agriculture Secretary Sonny Perdue's reorganization plan.

Northey is a corn and soybean farmer from Spirit Lake, IA. He is a 1981 graduate of Iowa State University with a degree in agricultural business and also received an M.B.A. from Southwest Minnesota State University in 2004. Northey served as president of the National Corn Growers Association from 1995-96 and was co-founder and president of Innovative Growers, LLC, a farmer-owned and managed group designed to capitalize on demand for the production of specialty grain products. Northey had served as Iowa's Secretary of Agriculture since 2006, having won races in 2006, 2010 and 2014. Some of you may remember Bill when he addressed NCWSS members at the 2016 meeting in Des Moines. He will have a key role in shaping the 2018 Farm Bill, which Congress will start to move forward on shortly.

EPA Draft Human Health and Ecological Risk Assessments for Glyphosate Now Available

As part of EPA's registration review of glyphosate, which was initiated in 2009, EPA released its draft human health and ecological risk assessment for glyphosate. This was posted for comment on Feb. 27 along with 12 other supporting documents. Comments are due April 30, 2018.

After reviewing comments received during the public comment period, EPA may issue a revised risk assessment and explain any changes to the draft risk assessment. All documents pertaining to the registration review of glyphosate can be found at <https://www.regulations.gov/docket?D=EPA-HQ-OPP-2009-0361>

EPA Being FOIA'd and Sued at Record Pace

From Jan. 20, 2017, to the end of last year, EPA received 11,431 FOIA requests, up about 17 percent compared with an equivalent period during Obama's last year in office, according to an analysis by the Project on Government Oversight. Likewise, outside groups have filed 55 lawsuits against Trump's EPA for public records thus far. As a comparison, George W. Bush's EPA faced only 57 FOIA lawsuits during his entire 8-year presidency.

PRIA Reauthorization Path Forward Unclear

The Pesticide Registration Improvement Act (PRIA) sets a fee schedule for registrants (~\$46 million in FY 2017) in exchange for specified time frames for regulatory decisions on low risk products and increased funds for pesticide education and training. PRIA 3 expired on Sept. 30, 2017, but has been temporarily extended in the Continuing Resolution funding the government through Mar. 23. Reauthorization was easily expected in 2017, similar to 2007 and 2013, but environmentalists have blocked its passage to protest other regulatory decisions unrelated to PRIA. If PRIA is not re-authorized, we could

see the elimination of approximately 200 positions from the EPA Office of Pesticide Programs, which is approx. 1/3 their workforce. More details about PRIA: <https://www.epa.gov/sites/production/files/2017-10/documents/session-6-pesticide-registration-improvement-act-update.pdf>

Federal Rule Delays 2015 WOTUS "Applicability Date" to 2020

The EPA and the Army Corps of Engineers (The Agencies) finalized a rule on January 31 that delays the "Applicability Date" of the 2015 Waters of the United States (WOTUS) rule in order to provide regulatory certainty and prevent any confusion from a recent Supreme Court decision. The 2015 WOTUS rule had an applicability date of August 28, 2015, but the implementation of the rule was stayed nationwide by the Sixth Circuit Court. However, on January 22, 2018, the U.S. Supreme Court ruled that the U.S. District Courts retain jurisdiction over challenges to the 2015 WOTUS Rule, a decision that resulted in lifting the Sixth Circuit stay of the 2015 WOTUS Rule across the United States, except in 13 states (Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, and Wyoming). For the other 37 states, the 2015 WOTUS Rule could have become effective immediately.

The 2015 WOTUS rule will now have an applicability date of February 6, 2020. The Jan. 31 WOTUS Applicability Rule does not affect the Agencies' current two-step proposed rulemaking under the President's Executive Order issued last year that is intended to review and revise the definition of "waters of the United States." The Agencies have already proposed a first step (or "step-one") rule, which would rescind the definition of the term "waters of the United States" under the 2015 WOTUS Rule. The comment period for the proposed step-one rule closed in September 2017, and a final rule could be released at any time. A proposed second step (or "step-two") rule to revise the definition of "waters of the United States" has yet to be published.

NPDES Fix Legislation

There is a renewed effort on the Senate side to pass a NPDES fix bill, S. 340, which is the companion bill to H.R. 953 on the House side that was passed on May 24, 2017. The bills amend FIFRA and the Clean Water Act to prohibit the EPA from requiring duplicative permitting under the National Pollutant Discharge Elimination System (NPDES) for a pesticide application into navigable waters if the pesticide is already approved for aquatic use under FIFRA. The six national and regional weed science societies endorsed letters of support to both the [House on H.R. 953](#) and the [Senate on S. 340](#) and recently endorsed a letter urging the House Ag Committee to include the NPDES-fix language in the 2018 Farm Bill



National Invasive Species Awareness Week (NISAW): Feb 26 – Mar 2, 2018

By the time you read this, another NISAW will be completed, but I encourage you to visit www.nisaw.org to check out the activities that occurred during the week. The Capitol Hill lunch seminars included:

- “Invasive Species and Infrastructure” - led by Michael Vissichelli, Wildlife Biologist at U.S. Army Corps of Engineers.
- “Unmanned Aerial Vehicles” - led by Sinan Abood, Ph.D., of the USDA Forest Service.
- “Gene Drives 101: Perspectives on Potential Invasive Species Management” - led by Heath Packard, Director of Government and Public Relations for Island Conservation.
- “Early Detection and Rapid Response” - led by Stas Burgiel of the Department of Interior and will be followed by a panel discussion moderated by the Secretariat of the National Invasive Species Council.

The National Association of Invasive Plant Councils (NAIPC) also offered a number of webinars on invasive species management that were recorded for later viewing, including:

- SIIPA Model: Webmap on Early Detection and Rapid Response
- Legal Issues Surrounding Invasive Species Management
- Climate Change and Invasive Species
- The Indiana CISMA Project

Next year will be the 20th NISAW! If you are interested in getting involved with NISAW or would like to sponsor events during the week, please contact me at Lee.VanWychen@wssa.net or Rick Otis with the Reduce Risks from Invasive Species Coalition (RRISC) at rick.otis@rrisc.org.

IR-4 Project Contributes \$9.4 Billion to GDP

The IR-4 Project (a.k.a. the Minor Crop Pest Management Program) was established in 1963 by USDA to work in coordination with EPA to assist in the collection of residue and efficacy data in support of the registration or re-registration of minor use pesticides and the determination of tolerances for residues of minor use chemicals in or on raw agricultural commodities. While most of the minor uses investigated are small enough that it is not profitable for private business to establish the acceptability of a pesticide for individual specialty crops, collectively the specialty crops covered by the IR-4 project make up almost half of U.S. agricultural crop production and over \$40 billion in sales.

The Michigan State University Center for Economic Analysis (MSU/CEA) has recently updated [their estimates](#) of the economic significance of the IR-4 Project. Their findings show that the IR-4 Project supports over 95,000 U.S. jobs and contributes about \$9.4 billion to annual gross domestic product (GDP). This is an incredible return on taxpayer investment considering that the IR-4 Project's core budget in 2016 was only \$15.5 million.

Washington Report - Continued

2018 Weed Survey Now Available

The National and Regional Weed Science Societies survey of the most common and troublesome weeds in the U.S. and Canada is now available at:

<https://www.surveymonkey.com/r/2018weedsurvey>

The 2018 survey focuses on weeds in the following aquatic and non-cropland areas:

- 1) Aquatic: irrigation & flood control
- 2) Aquatic: lakes, rivers, reservoirs
- 3) Aquatic: ponds
- 4) Forestry
- 5) Natural Areas: parks, wildlife refuges
- 6) Ornamentals: field nursery crops, outdoor containers, Christmas trees
- 7) Right-of-Ways: railways, roads, public utilities.

Past weed survey data and results summaries are available at: <http://wssa.net/wssa/weed/surveys/>

Lee Van Wychen, Ph.D.
Science Policy Director
National and Regional Weed Science Societies
5720 Glenmullen PI, Alexandria, VA 22303
Lee.VanWychen@wssa.net
Phone: 202-746-4686

Meetings of the National and Regional Weed Science Societies

Mar. 12-15, 2018

Western Society of Weed Science (WSWS), Garden Grove, CA

www.wsweedscience.org

Jul. 15 - 18, 2018

Aquatic Plant Management Society (APMS), Buffalo, NY www.apms.org

Dec. 3 - 6, 2018

North Central Weed Science Society (NCWSS), Milwaukee, WI www.ncwss.org

Jan. 7 - 10, 2019

Northeastern Weed Science Society (NEWSS), Baltimore, MD www.newss.org

Feb. 3 - 7, 2019

Southern Weed Science Society (SWSS), Oklahoma City, OK www.swss.ws

Feb. 11 - 14, 2019

Weed Science Society of America (WSSA), New Orleans, LA www.wssa.net

Other News and Publications

Graduate Research Assistantship (Ph.D.): weed physiology, ecology, and biochemistry in integrated weed management, University of Illinois.

Our multidisciplinary research team (weed physiologist, weed ecologist, quantitative agronomist and biochemist) seeks a highly motivated individual interested in the scientific underpinnings of integrated weed management to serve as a graduate research assistant in the Crop Sciences Department at the University of Illinois in Urbana-Champaign. The overarching goal of our USDA-NIFA funded project is to investigate potential interactions among cereal rye cover crop residues, allelochemicals, and soil-applied herbicides to ultimately improve weed suppression while reducing selection for evolution of herbicide resistance. Duties will include the design and implementation of laboratory, greenhouse and field experiments to quantify these interactive effects on troublesome weeds of grain production in the upper Midwest. The PhD student will learn cutting-edge techniques for studying weed science at multiple levels of biological organization within the context of a collaborative team approach. Preferred qualifications include: B.S. or M.S. in a plant sciences discipline, experience in field and laboratory settings, basic statistical knowledge with a strong desire to learn more advanced techniques.

To learn more about the position and NIFA project, please contact Dr. Dean Riechers (riechers@illinois.edu) or Dr. Adam Davis (asdavis1@illinois.edu). The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit <http://go.illinois.edu/EEO>. To learn more about the University's commitment to diversity, please visit <http://www.inclusiveillinois.illinois.edu>.



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