Southern Weed Science Society

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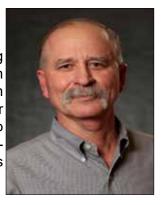




President's Message

Gary Schwarzlose

It is hard to believe that it is already August. I hope this finds you doing well and your work well underway. I know that many of us have been struggling with more herbicide and weed resistance issues this year than ever before and that while our challenges are many, the reason for our existence is becoming more evident every day. With that in mind, I also hope that you spent some time away from the field, cellphone, and computer. Each of us needs that time to help us clear our minds and refocus on what we do.



The 2018 Program is starting to come together. Think of it as a jigsaw puzzle and Bob Scott, President Elect and Program Chair, is the Puzzle Master. There are lots of pieces that have to be put together but once they are connected you have a finished product that you are proud of and can proudly show off.

The SWSS Board of Directors met at the Hyatt Regency Atlanta in June and found the facilities at this hotel to be excellent. Local Arrangements Chair Henry McLean and his Local Arrangements Committee are already working hard to make the meeting a success. Anyone that has ever had the opportunity to chair or work on this committee or one like it know that there are many "behind the scenes" activities that take place to make sure the meeting runs smoothly.

We are currently working on the Paper / Poster Submission website to add a few changes / upgrades that we think will help us as we prepare for the meeting. Please pay attention when entering your information. Check for typos and make sure the information you are entering is correct. It is a challenge to proof all the information as we are creating the program. If you enter it wrong there is a possibility that it might not get corrected.

A Call for Symposia has been sent to our membership. Please reply to Bob Scott if you have ideas for symposia and/or special events. In addition, the Call for Paper and Poster Title Submissions is included in this newsletter.

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2018 Annual Meeting January 21-24, 2018

Hyatt Regency, Atlanta, GA Look for more details at:

www.swss.ws

We will continue the tradition of having a SWSS Golf Tournament as part of the 2018 SWSS Meeting. The Golf Tournament during the last several years has generated substantial earnings for the SWSS Endowment Fund. Hunter Perry is once again in charge of this event and I am sure he will find another excellent course. We look forward to having another great outing in January. Please be on the lookout for the golf registration on our webpage. Sign up and join us!

This is a repeat from the May newsletter but I wanted to remind you that there will soon be a "Call for Awards" nominations. There are many deserving individuals who are never recognized because they are not nominated for an award. Don't be timid. I want you to begin considering who you might nominate and be prepared to submit. The process is simple and pain-free and is greatly appreciated by those who are nominated.

In closing I want to remind you that this society cannot function or improve without the input from our membership. If you have ideas that you feel can help the SWSS annual meeting or our organization please contact me, Business Manager Tara Steinke, one of the SWSS Board members, or a committee chair. We want to hear from you.

Have a great rest of your summer and fall and I look forward to seeing you in Atlanta.

Stay safe and take care.

CALL FOR PAPER AND POSTER TITLES FOR THE 2018 SWSS MEETING

You are invited to submit titles for papers and posters to be presented at the 2018 annual meeting of the Southern Weed Science Society. The meeting will be held at the Hyatt Regency Hotel in Atlanta, GA. January 21 - 24, 2018.

Submission of title and author information opens Monday September 4, 2017.

Titles submitted after Friday October 6, 2017 will not be accepted.

We will again be using the same website to handle title submission, abstract collection, and PowerPoint files as the WSSA. This process was extremely successful for the 2017 title submission process and we will continue this method. If at any time you have issues, please email me and I will assist you in the process (bscott@uaex.edu).

Papers and posters may be submitted to one of the following sections:

Section I	Weed Management in Agronomic Crops
Section II	Weed Management in Turf
Section III	Weed Management in Pastures and Rangeland
Section IV	Weed Management in Horticultural Crops
Section V	Weed / Vegetation Management in Forestry
Section VI	Vegetation Management in Utilities, Railroads & Highway Rights-of-way;
	Industrial Sites
Section VII	Physiological and Biological Aspects of Weed Control
Section VIII	Educational Aspects of Weed Control
Section IX	Regulatory Aspects of Weed Control
Section X	Invasive Plant Species

Section XI New Technologies

Section XII Soil and Environmental Aspects of Weed Science

Section XIII Weed Biology and Ecology Section XIV Weed Management in Aquatics

Section XV Weed Management in Organic Production Systems

Section XVI Posters

Paper sessions will consist of 15-minute presentations which includes time for questions.

Workshop/Symposia presentations are by invitation and may be longer than 15 minutes allotted for volunteer papers. Periods for discussion will be interspersed in the sessions.

Submission of Titles

The title submission process for the 2018 meeting is the same as last year. We will be using the WSSA submission system, which is accessible from the SWSS website (http://www.swss.ws) by clicking the "Submit Title/Abstract" link on the homepage. Alternatively you can go directly to the submission website (http://www.wssaabstracts.com). See the instructions below for using the system.

The Program will be printed exactly as submitted, other than format and font changes for uniformity; therefore, proofread your submission very carefully. Primary contact authors will receive an email indicating their title was received and a later email confirming the section/day/time when and where the paper will be presented. Please be certain to fill out the submission form completely and accurately. Titles are due no later than Friday October 6, 2017.

Authors are encouraged to submit their best research and other results for presentation at the SWSS meeting. Each author is assured of one senior-author presentation, but multiple senior-author submissions will be accepted only as space and time is available. If you have several papers or posters you wish to present, please indicate which is highest priority by adding a note in the comments section on the title submission form, or by emailing Bob Scott at bscott@uaex.edu.

Graduate students: When submitting a title, select "yes" when asked if you are a student. For the contest question, select "no" if you are not planning to enter in the oral paper or poster contest. If you are planning to enter the contest, you must select "SWSS MS oral", "SWSS PhD oral", "SWSS MS poster", or "SWSS PhD poster" to designate the appropriate contest.

Participation in Symposia/Workshops will be by invitation and titles will be submitted separately from the other sections.

Rules for the Student Contest are presented in Manual of Operating Procedures (MOP) on the SWSS website.

Title and Abstract System

On the WSSA Abstracts.com homepage, follow these steps:

- 1. Login
 - a. If you've previously used the WSSA abstract system, then enter you login name

and password. The login name is your email address. If you've forgotten your password, click the 'Reset pass word' link on the right sidebar.

- b. If this is your first time using the system, then you'll need to create an account. On the right side click "Setup New Account". Fill in your contact information and click "Submit". You'll receive an email with a link to set your password.
- 2. After logging in, on the right sidebar click "Join a Conference". A dropdown box will appear in the middle of the screen. In the dropdown list, select 2018 Southern Weed Science Society. You only have to perform this step one time.
- 3. Click the "Enter" button next to 'Southern Weed Science Society'.
- 4. On the next page, click 'My Titles and Abstracts'. Click the 'Add New Title/Abstract' button, and then enter your title, section, authors and keywords.

Abstracts

Abstracts will be due no later than Sunday January 21, 2018. Instructions for abstract submission will be provided in the December newsletter and will be sent to the lead author.

Paper Presentations

All presentations must be submitted via the website will be due no later than Monday January 16, 2017. This is to avoid last minute changes and on-site loading that could potentially disrupt the program. To ensure quality presentations and a smooth transition from presentation to presentation all presenters will be required to follow directions provided on the website.

The SWSS has adopted LCD projection for PowerPoint presentations as the standard and will be used exclusively during the annual meeting. LCD projectors and Windows PC laptop computers will be supplied and/or coordinated by section chairs and moderators.

Presenters will NOT be allowed to use their own computers in the sessions. If possible, computers will be located on the podium in each session. If this is not possible, an infrared remote providing forward and backward control of the PowerPoint presentation will be provided in each session. Screens, microphones, carts, and extension cords will continue to be supplied by AV services and paid for by the Society. In order to make this process go as smoothly as possible, please follow the guidelines below.

All presentations MUST be in PowerPoint (Version 2007 or higher) for MS Windows (PC compatible). PowerPoint 2010 will be the software used. Macintosh (MAC) /Apple formats will NOT be supported. Your presentation must be saved as a PowerPoint show file (.PPSX). The section chairs have requested that ALL presentations be prepared and uploaded on the abstract submission site so that preloading prior to the meeting can be accomplished (see Submission of Presentations). Please coordinate with your section chair if you want to preview your presentation at the meeting to ensure that the formats/fonts are all as you intended them to be. Due to the limited time and equipment, last minute editing is highly discouraged. Submission of files at the time of the presentation or at any other time during the session will NOT be allowed. Please limit the size of presentations. Review the instructions provided on the website for size limitations. Use the "Compress" function from the "Picture Toolbar" in PowerPoint to reduce size of a file with pictures.

No audio clips or sounds will be allowed. Video clips are discouraged unless absolutely nec-

essary. PowerPoint animation is discouraged. Please contact the section chair or co-chair one week PRIOR to sending your presentation if you need to use a video clip. Limit fonts used in the presentation to basic fonts, as not all machines may have the same choice of fonts. Examples of standard fonts are Times, Arial, Courier, Tahoma, or similar equivalents. Section chairs and computer operators are not responsible for changes in fonts, bullets, and other formatting at the time of presentation. Use up-to-date virus protection software to avoid infecting the computers provided by the section chairs.

Further instructions will be provided in the December newsletter.

Poster Presentations

All contest posters are to be displayed before the first full day of the meeting to provide the judges appropriate time to assess all posters in a timely manner.

Posters should be no larger 48 x 48 inches. Display boards will be provided for poster display. Content of Paper - Text, graphs, and tables must be easily read from a distance of 6 feet. Titles and headings should be larger and readable from a greater distance.

Poster contestants will not be required to accompany their poster during the judging period (usually during the first full day of meeting) but if a designated time period has been given for the student's poster he or she can accompany their poster. Note that posters will only be judged on the content of the poster.

Because of cost and logistics, it will not be possible to provide electrical connections, video equipment, or other special equipment for any posters. If you have questions about the poster session contact section chair Tom Barber (tbarber@uaex.edu).

Student Information

During past meeting's submission process, some students failed to completely fill out the submission form that caused them to not be entered into the desired contest. This caused numerous program changes after printing and some confusion at the meeting.

Please be certain to fill out the submission form completely and accurately. Rules for the Student Contest are presented in Manual of Operating Procedures (MOP) on the SWSS website. Students are eligible to participate in both the Student Paper Contest and the Student Poster Contest multiple times during a M.S. program and a Ph.D. program. However, a student cannot participate in both contests concurrently. A student can only win 1st place in the paper and poster contest once per degree program. All students presenting a paper or poster are eligible for any available student benefits whether or not they enter the contest. Specific questions pertaining to the Student Contest should be directed to Chair of the Student Contest: Darrin Dodds (dmd76@msstate.edu).

If you have any questions about submitting a title for the 2018 meeting, please contact: Bob Scott, 2018 Program Chair, (501) 837-0273 or bscott@uaex.edu.

Nominations for SWSS Awards

Peter Dotray

Please see the listings below describing our award nomination procedures for 2017. For some awards, a short summary document such as a resume or CV may be attached. Please see the description below for details.

The deadline for nominations is October 6, 2017. Please send your nominations to the Awards Subcommittee Chair listed below:

Fellow Award - Bob Nichols <u>BNichols@cottoninc.com</u>
Outstanding Young Weed Scientist Award* - Bob Hayes <u>rhayes1@utk.edu</u>
Outstanding Educator Award - Tim Grey <u>tgrey@uga.edu</u>
Outstanding Graduate Student Award** - Wayne Keeling <u>wkeeling@ag.tamu.edu</u>
Excellence in Regulatory Stewardship Award - David Shaw <u>dshaw@research.msstate.edu</u>

*denotes 2 awards, one for industry and one for academia

** denotes 2 awards, one for MS student and one for PhD student

Please nominate your SWSS colleagues for these important awards. Please contact me if you have any questions. I can be reached at 806-778-3351 or at peter.dotray@ttu.edu.

The SWSS **Fellow Award** is the highest honor the Society presents. The purpose of this award is to recognize those members who have made significant contributions to the Southern Weed Science Society and advances in the discipline of weed science in the SWSS region.

To be eligible for the SWSS Fellow Award, the potential recipient must:

- Have been an active member of the SWSS for >20 years.
- Be at least 50 years of age at the time of the annual meeting.
- Have made significant contributions of service to the SWSS (including but not limited to: serving on committees or being an officer, hosting SWSS contests, judging at the paper/poster contest, etc.)
- Contributed substantially to the success of his/her company, university, and/or government agency and to advance the discipline of Weed Science in the SWSS region.
- Whereas the Fellow Award has been renamed to envelope both the Distinguished Service and the Weed Scientist of the Year Awards, previous recipients of these awards are not eligible for the SWSS Fellow Award.

The nomination must be by letter and 2 supporting letters are required (All sent in a single pdf file to the appropriate person listed on the SWSS website, at www.swss.ws). The nominating letter should explain in general and specific terms the outstanding contributions of the nominee. The nominating letter should contain a listing of the various contributions to the SWSS, but is limited to 2 pages in total length. The 2 supporting letters are also limited to 2 pages in length for each letter. A summary document describing the nominee (such as a CV) may be added but is limited to a total of 3 pages in length. The contributions must be in regards to SWSS and weed science in the SWSS region. Awards Committee members are not eligible during their time of service on the awards committee.

Award is limited to a maximum of 0.4% of total SWSS membership each year (rounding up from the calculated percentage). The Award recipient(s) receive a plaque at the annual meeting, and each subsequent year all winners will be recognized by a Fellows ribbon to wear at the annual meeting.

The SWSS **Outstanding Educator Award** (OEA) is presented annually to a weed scientist in recognition of outstanding contributions to the Society and Weed Science through education. The Award is to be given in recognition of a broad range of activities including formal classroom teaching; outreach and public service or extension including workshops, seminars, short courses, or other means of communication; mentoring undergraduate and graduate students; publication of scholarly work in journals, books, or reviews.

To be eligible for the OEA award, the potential recipient must:

- Must be a voting member of SWSS in the year of nomination.
- Must be an active member of SWSS during the last five (5) years.

The nomination must be by letter and 2 supporting letters are required. (All sent in a single pdf file to the appropriate person listed on the SWSS website, at www.swss.ws). The nominating letter should explain in general and specific terms the outstanding educational contributions of the nominee. The nominating letter should contain a listing of the various educational contributions, but is limited to 2 pages in total length. The 2 supporting letters are also limited to 2 pages in length for each letter. A summary document describing the nominee (such as a CV) may be added but is limited to a total of 3 pages in length. Possible information includes classes taught, number of graduate students advised, etc.

Award is limited to one award per year. The Award recipient receives a plaque at the annual meeting and a \$1,000 cash award presented at the annual meeting.

The SWSS **Outstanding Young Weed Scientist Award** (OYWSA) is presented annually to a young weed scientist one from academia (teaching, research, extension) to be sponsored by BASF and one from Industry to be sponsored by the SWSS in recognition of outstanding service to weed science.

To be eligible for the OYWSA, the potential recipient must:

- Must have been a voting member of the Society for at least three of the last five (5) years and
 must be a voting member of the Society in the year that the person is nominated for the award.
- Must be 40 years of age or younger on January 31 of the year she or he receives the award.
- Must have completed at least five (5) years' work in weed science other than that related to academic studies. Previous recipients of this award will be ineligible for re-nomination.

The nomination must be by letter and 2 supporting letters are required. (All sent in a single pdf file to the appropriate person listed on the SWSS website, at www.swss.ws). The nominating letter should explain in general and specific terms the outstanding contributions of the nominee. The nominating letter should contain a listing of the various contributions to the SWSS and to the discipline of weed science, but is limited to 2 pages in total length. The 2 supporting letters are also limited to 2 pages in length for each letter. A summary document describing the nominee (such as a CV) may be added but is limited to a total of 3 pages in length. The contributions must be in regards to SWSS and weed science in the SWSS region. Awards Committee members are not eligible during their time of service on the awards committee.

Award is limited to two awards each year, one award to an industry member and one to an academic member. The Award recipient(s) receive a plaque at the annual meeting and a \$1,000 cash award.

The SWSS **Outstanding Graduate Student Award** (OGSA) (one each for students at the MS level and the PhD level) - These awards are sponsored by the SWSS Endowment Foundation and consist of a \$400 cash award and a plaque for MS level and \$400 cash award and plaque for PhD level. The awards are given annually to a graduate student (one at the MS level and one at the PhD level) who has demonstrated outstanding performance in graduate studies and related weed science activities. Winners at the MS level are not eligible for this award at the PhD level. Students must have received the degree for which they are nominated since the previous SWSS Annual Meeting.

To be eligible for the OGSA, the potential recipient must:

- Must be enrolled as a graduate student in the degree program for which she/he is nominated within the calendar year prior to the SWSS annual meeting in January.
- Have actively participated in SWSS sponsored activities such as the annual meeting, weed contest, student paper contest, or committee work.
- Must have been a member of SWSS during their time as a student at an SWSS member institution.

The nomination packet should include a nomination letter, 2 supporting letters, 1-3 page CV, and an unofficial copy of the students transcripts are required. (All sent in a single pdf file to the appropriate person listed on the SWSS website, at www.swss.ws). The nominating letter should explain in general and specific terms the outstanding contributions of the nominee. The nominating letter should contain a listing of the various contributions to the SWSS, but is limited to 2 pages in total length. The 2 supporting letters are also limited to 1 page in length for each letter. One of the letters (nomination or supporting) must be from the student's advisor at the time of the nomination.

A summary document describing the nominee (such as a CV) should be limited to a total of 3 pages in length. Transcripts of the student, including a listing of courses taken and grades earned should be included with the packet. Unofficial copies are acceptable, but the advisor agrees that the transcript represents the actual course of study of that student. Students of Awards Committee members are not eligible during their time of service on the awards committee. Award is limited to two awards each year, one for MS student and one for PhD student. The Award recipient(s) receive a plaque at the annual meeting and a cash award.

The **Excellence in Regulatory Stewardship Award** (ERSA) is for specific collaborations in the emerging applications of science and technology that require regulatory and stewardship protocols. This award recognizes scientists that demonstrate great interaction and collaboration between public and private institutions, establish multiyear outreach and support of the new technologies, and provide nonbiased feed- back while extending research findings to the scientific and farming communities through publications and extension activities.

Eligible nominees include industry personnel, primary research/extension project leaders, and primary graduate students actively involved in conducting the research.

The nomination must be by letter and 2 supporting letters are required. (All sent in a single pdf file to the appropriate person listed on the SWSS website, at www.swss.ws). The nominating letter should explain in general and specific terms the regulatory stewardship contributions of the nominee. The nominating letter should contain a listing of the various regulatory stewardship activities performed and how they relate to the discipline of weed science, but is limited to 2 pages in total length. The 2 supporting letters are also limited to 2 pages in length for each letter. A summary document describing the nominee (such as a CV) may be added but is limited to a total of 3 pages in length.

The selected program will be awarded a plaque and monetary awards are to be allocated as follows: Principal Investigator, \$2000, and remainder of the graduate team (\$250 each), to a maximum total award of \$3,000 unless extenuating circumstances. The graduate students should be the primary researchers and does not include technicians. Team members should be named during the nomination process. If a project has two lead PI's they should be awarded and the primary funds divided evenly. Graduate students providing minimal assistance should not be nominated.

The Excellence in Regulatory Stewardship Award (ERSA) is sponsored by Monsanto and awarded yearly for five years starting in 2017.

Graduate Student Organization Report and Weed Contest Results John Brewer

I hope everyone had a great summer and is looking forward to an enriching fall semester. The 2017 SWSS Weed Contest held at the Syngenta Research Farm in Vero Beach, FL from August 1-2 was a great success. I would like to take this opportunity to thank Syngenta, the weed contest committee, and all the volunteers who helped organize a great event. This year we had a participation of over 60 students from 9 universities. I hope all participants this year had a great learning and networking experience. I would like to take this opportunity to congratulate all team and individual winners. The top 3 undergraduate students included: 3rd place - Hao Sheng from Texas A&M, 2nd place - Will Singer from UT Martin, 1st place - Caitlin Lakey from Texas A&M. Texas A&M also had the first-place undergraduate team. The top 3 graduate students included: 3rd place - Seth Abugho from Texas A&M, 2nd place - Zachary Lancaster from the University of Arkansas, and 1st place - John Brewer from Virginia Tech. The top 3 graduate teams included: 3rd place - Texas A&M, 2nd place - University of Arkansas, and 1st place - Virginia Tech. The 2018 SWSS contest will be hosted by BASF at the Memphis Agricenter in Memphis, TN. The Memphis Agricenter has hosted some great contests in the past and I am positive that next year's contest will be equally good. I encourage all the students to participate and make the 2018 contest a great success. (Pictures following article.)

The next item for the SWSS will be our annual meeting in January. The meeting will be held at the Hyatt Regency in Atlanta, GA from January 22-24, 2018 (Monday – Wednesday). This year we will be hosting an extra event for students following the golf tournament on Sunday evening. The educational event on Sunday evening will consist of a speaker and possibly some light snacks and will occur at the hotel. The speaker has not yet been determined but could possibly be addressing how to effectively interact with different generations of people (e.g., Baby boomers to millennials). I highly encourage all students to come and support the SWSS student membership by participating in both the golf tournament and the following education event. Since the golf tournament helps raise money for the SWSS Student Endowment Fund, it will be a great opportunity to give back to the society which serves us so well in our professional lives.

The SWSS Endowment Fellowship winners for this year are Shawn Beam (Virginia Tech), Matt Bertucci (NC State), and John Brewer (Virginia Tech). The endowment fellowship is a great opportunity for all students to further explore their areas of interest and possibly meet your prospective employer, so please remember to fill out an application next year and take advantage of this opportunity. Like always, we will have a graduate student luncheon on Wednesday, January 24, which will include a financial planning speaker (Mrs. Melinda Sung with Morgan Stanley Wealth

Management). I will soon be sending out a student survey seeking your suggestions to help decide on the exact topic that Mrs. Sung should address in January.

I highly encourage all students to come and take advantage of these numerous opportunities that the SWSS has to offer. These opportunities will help you all a great deal to grow both professionally and personally. That being said, I hope to see you all in August for the weed contest and in January for the annual meeting. I wish you all good luck for your research and degree programs.

If you have any questions or concerns, please feel free to contact me anytime via email (jbrew10@vt.edu) or phone (931-309-1682).

First Place Team Virginia Tech in no particular order John Brewer Shawn Beam Cam Shelton Kara Pittman Shawn Askew - Coach





Second Place Team University of Arkansas in no particular order Zach Lancaster Hunter Bowman Matt Moore Michael Fogleman Christopher Rouse - Coach Nilda Burgos - Coach

Third Place Team
Texas A & M University
in no particular order
Seth Abugho
Spencer Samelson
Blake Young
Prabhu Govindasamy
Kathy Carson- Coach
Muthu BagavathiannaCoach
Vijay Singh- Coach





First Place Undergraduate Team Texas A & M University

People and Places

2017 ACS Fellows

Steven O. Duke was named one of the 2017 American Chemical Society Fellows that were announced in the June 19, 2017 issue of Chemical & Engineering News. Dr. Duke, Research Leader, at the Natural Products Utilization Research Unit with the U.S. Department of Agriculture, Agricultural Research Service, University, Miss.

The ACS noted that Dr. Duke's contribution to his science/profession included recognition for pioneering and sustained research on the effects and modes of action of pesticides on target and non-target organisms, and for research that has promoted natural compound-based pesticides. His contribution to the ACS community includes recognition for sustained service to the Division of Agrochemicals by promotion of international interactions, strategic planning, communication of research, programming, as well as serving in many leadership roles and offices.



The 2017 SWSS Weed Contest was pleased to welcome Wayne L. Currey, Ph.D, to the events this year. Dr. Currey created the plaque "The Traveling Broken Hoe". First awarded to Auburn in 1980, the plaque travels to the home of the first place team each year. He is pictured here with the 2017 winning team from Virginia Tech.

SWSS Constitution and Bylaws Update

W. Carroll Johnson, III

The Southern Weed Science Society (SWSS) is a dynamic organization whose operations adjust to the changing needs of our science and agriculture. The following updates to the SWSS Constitution and SWSS Bylaws have been discussed and approved by the Executive Board. The proposed updates to the SWSS Constitution and the SWSS Bylaws will require vote by the membership at the 2018 Business Meeting in Atlanta.

The present versions of the SWSS Constitution and SWSS Bylaws are part of the Manual of Operating Procedures. The current Manual of Operating Procedures can be accessed by using this link: https://www.swss.ws/wp-content/uploads/SWSS-MOP-August-2017-Complete.pdf

Revision of the Constitution. In accordance with Article VIII, Section 3 of the SWSS Constitution: The following updates in the Constitution are being proposed:

- 1. Article III, Sections 2, 5, and 6: Revise the wording to reflect that all active members voting for leadership positions (officers and elected board positions) use an electronic ballot accessed and submitted through the SWSS website.
- 2. Article VIII, Sections 2 and 3: Revise the wording to reflect that all active members may vote on changes to the Constitution by electronic ballot or in-person at the SWSS Business Meeting, depending on when the called vote is scheduled.

Revision to SWSS Bylaws. In accordance with Section VI – Amendments, Section 1 of the SWSS Bylaws: the following updates in the Bylaws are being proposed:

- 1. Section 5, Subsection a: This is a description of Editor duties. Presently, it is stated that proceedings are published 'in the form of compact discs'. This needs to be revised to 'be published on the SWSS website and downloaded as needed.'
- 2. Section 8, Subsection b: This is in regard to duties of the Business manager, specifically 'mailings'. Revise to include email and notices posted on the SWSS website.
- 3. Amendments, Sections 1 and 2: Update to allow use of electronic ballots and voting accessed through the SWSS website or by vote at a called Business Meeting.

Please refer to the meeting program for the time and location of the SWSS Business Meeting and exercise your right to vote.

Don't Forget...

The annual SWSS Endowment Golf Tournament will be held in conjunction with the Annual Meeting on Sunday, January 21, 2018.

2017 Slate of Officers

Member-At-Large Industry

Eric Castner, DuPont, Weatherford, Tx Luke Ethridge, Monsanto, Llano, Tx

Member-At-Large Academia

Todd Baughman, OSU Seth Byrd, Texas A&M

Endowment Foundation Board

Mike Lovelace, Dow, Lubbock, Tx Jacob Reed, BASF, Wolfforth, Tx

Vice-President

Greg MacDonald, UF Eric Webster, LSU

Candidate Biographies

Member-At-Large Industry



Eric Castner is the Southern Regional Development Manager for Du-Pont Crop Protection and resides in Weatherford, TX. Most of his 28 year career with DuPont Crop Protection has been spent within the US Field Development organization. His current responsibilities include oversight of the DuPont research and development effort in the Southern US as well as leading the Field Development team in this geography. In addition, Eric currently has field development responsibility for Texas and works closely with both Texas A&M University and Texas Tech University. Prior to moving to Texas in 2001, Eric worked as a Field Development Representative in Louisiana (1993-2001) and as a Sales Representative in Columbia, SC (1990-1993).

Eric received his B.S in Agronomy from Oklahoma State University in 1986 and his M.S. in Agronomy – Weed Science from Oklahoma State University in 1988. His first became member of the Southern Weed Science Society in 1986 and continues to be active in the society.

Eric was the President of the Texas Plant Protection Association (2015) which is comprised of approximately 300 members representing university research and extension, independent consultants, farmers as well as the manufacturers and retailers of agricultural products. Eric continues to be very active in the Texas Plant Protection Association. While in Louisiana he was the President of the Louisiana Plant Protection Association (1998).

Eric and his wife, Lori have two sons. Their oldest son, Matt is a Mechanical Engineer (OSU – 2014) and their youngest son, Mason is a recent graduate in Plant and Soil Science at Oklahoma State University and is beginning work on his MS degree in Weed Science at the University of Arkansas. Lori is beginning her 27th year as an elementary teacher and teaches in Weatherford.

Dr. Luke Etheredge grew up on a 3800 acre working cattle ranch in central Texas, where he attended Llano High School and graduated in 1996. Luke then went to Texas A&M University in College Station, TX, where he joined the Corps of Cadets. While in the Corps he was a member of The Fish Drill Team and The Ross Volunteers. Luke graduated from Texas A&M University with a Bachelor of Science degree in agronomy in 2000 and then again with a Master of Science degree in agronomy in 2003. Luke and his wife Tara then moved to Baton Rouge, LA where he attend Louisiana State University and then graduated with a Ph.D in agronomy and a minor in ag-



ricultural economics in 2007. Following graduation, Luke accepted a job with Helena Chemical Company as business manager for Sugar-Tech, a subsidiary company of Helena that specialized in growing and producing certified, disease-free sugarcane seed. In 2008, Luke changed jobs and moved back to Texas, where he became a Technical Development Representative for Monsanto in the Industrial, Turf, and Ornamental division. He has been with Monsanto for 10 years serving in some capacity in the Technology Development and Agronomy organization. Luke, his wife Tara, Luke Moss (8 years old), and Grace (5 years old) currently live back in Llano, TX, where he is now the Weed Management Technical Development Representative for Monsanto in the Crop Protection Division and territorial responsible for the Eastern half of TX and Southeastern OK, specializing in Weed

Resistance Management and evaluating the Roundup Ready® Xtend (Dicamba) Cropping System.

Member-At-Large Academia

Todd Baughman was raised in the southwestern Oklahoma town of Cache. He had the opportunity to be introduced to weed science as an undergraduate research assistant in the lab of Dr. Paul Santelmann. He received his M.S. in Agronomy/Weed Science at Oklahoma State University under the direction of Dr. Thomas Peeper and his Ph.D. in Weed Science at Mississippi State University with Dr. David Shaw.

Todd worked with Sandoz Agro, Inc. and with Texas A&M University prior to his current employment at Oklahoma State University. He currently serves in the role of Weed Scientist and Program Support Leader with the Oklahoma State University Institute for Agricultural Biosciences. Todd is responsible for research and education in weed management in summer row crops for the state of Oklahoma. Todd



has conducted research in overall management of over a dozen crops throughout his career. He has authored or co-authored over 40 journal articles, over 190 abstracts, and 190 educational and newsprint articles, along with being an invited speaker to over 1000 educational events throughout the southwest. In addition to his current duties Todd serves as an adjunct professor at Texas Tech University where he has served on numerous students graduate committee.

Todd has been an active member in the Southern Weed Science Society since 1990. As a student, he participated and placed in the SWSS Student Paper Contest, Poster Contest, and the SWSS Weed Contest. Todd served on the Student Program Committee for 9 years and was the chairperson of that committee three different times. He also has served as a judge for the annual student competition for over 20 years and chaired or served as a member of multiple committees. In addition to these roles, Todd served as the Secretary-Treasurer for SWSS and was awarded their Outstanding Young Weed Scientist Award in 2006. He currently serves on the Weed Resistance and Technology Stewardship, Local Arrangement, Research, Southern Weed Contest, Continuing Education Units, and the Outstanding Young Weed Scientist committees. He is also an active member of the Weed Science Society of America and currently serves as a member of the finance committee.

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Seth Byrd is an Assistant Professor and Extension Cotton Specialist for Texas A&M AgriLife Extension located in Lubbock, TX. He is a native of Thurmond, NC and earned his B.S. in Agronomy at North Carolina State University. After spending time as an independent agronomic consultant in the Midwest and northern Rockies, he returned to school earning a M.S. in Agronomy from the University of Florida and a Ph.D. in Crop and Soil Science from the University of Georgia.

Seth began his role with Texas A&M in December, 2015 and is located at the Texas A&M AgriLife Research and Extension Center in Lubbock. He leads the extension cotton agronomy program for the Texas High Plains, where approximately 4 million acres of cotton are planted annually. As an Extension Specialist, Seth focuses on education and outreach by speaking annually to producers at an

average of 35 meetings, authoring or co-authoring 20 extension or press articles, and conducting bi-monthly extension agent trainings over a wide range of cotton production topics. Additionally, he is involved in collaborative research with universities and federal agencies in projects at local, regional, and national levels. Seth has been involved with the Southern Weed Science Society since his time as a Ph.D. student, and has currently served for two years as the chair of the Weed Science Conference at the Beltwide Cotton Conferences. He has authored or co-authored 12 referred publications and 36 abstracts presented at professional meetings or conferences.

Endowment Foundation Board

Mike Lovelace received his B.S. Degree from Oklahoma State University in 1997. He was very active as he served as Agronomy Club President, participated in soils, crops, and weed judging teams, and worked as an undergraduate worker with Dr. Tom Peeper. As a senior, Mike also won the undergraduate NCWSS weed contest. Mike continued his education at the University of Arkansas and received his M.S. under Dr. Dick Oliver in 2000 and Dr. Ron Talbert in 2003 in weed science. While at Arkansas, he served as Crop, Soil, and Environmental Sciences Graduate Student Club President and became involved in the SWSS and WSSA. Mike was the second graduate student in SWSS history to win the SWSS weed, oral presentation, and poster contests.

In 2003, Mike joined the USDA AMS as an Agronomist and led a field and laboratory based variety verification program to support truth in labeling provisions of the Federal Seed Act. Mike devel-



oped various bioassays and protein based testing methods to accurately quantify herbicide and insecticide tolerance levels in seed lots. He served as a member of the International Seed Trade Association Variety Testing Committee and was Chairman of the Association of Official Seed Analysts Cultivar Purity Committee.

In 2011, Mike joined Dow AgroSciences as a global seed quality leader. Mike implemented ISO based quality management systems into the soybean and canola seed production businesses and revamped the seed customer complaint system to ensure timely resolution of customer complaints and ensure valid corrective actions were implemented.

In 2013, Mike was presented an opportunity to transition back into weed science field research with Dow AgroSciences so he moved his family to Texas. Mike currently serves as a Field Scientist for Dow AgroSciences covering Texas and Oklahoma. He is responsible for field research in various row crops and vegetables. In addition to his research responsibilities, Mike also provides sales support, coordinates field days, and trains sales and commercial team members on new technologies.

Jacob Reed is a Field Biologist with BASF Corporation in Lubbock, Texas. He is a native of Canadian, Texas. Jacob received his B.S. in Composite Science and Religion from Wayland Baptist University in 1998, his M.S. in Plant Breeding and Genetics from Kansas State University in 2001, and his Ph.D. in Plant and Soil Science from Texas Tech University in 2012. Jacob spent eight years at Texas AgriLife Research, entering as a Research Assistant in peanut physiology and working as an Assistant Research Scientist in Weed Science before starting with BASF in 2013. While at Texas AgriLife Research, Jacob was honored with Wayland's Distinguished Young Alumni Award and the Texas A&M Department of Soil and Crop Science Special Achievement Award for Graduate



Research Support. His publication record includes 7 refereed journal articles, 39 presentations and posters, and 49 extension publications. He is a member of the Weed Science Society of America, the Southern Weed Science Society, and Gamma Sigma Delta Honor Society of Agriculture. Jacob is currently responsible for managing field research trials in Texas, New Mexico, and Oklahoma, generating data on research compounds, facilitating commercial demonstrations, and working with university researchers to develop local use recommendations. His expertise is in weed science with a focus in applied management of weeds in corn, cotton, wheat, sorghum, and peanuts. Jacob is married to Georgia and they have two daughters and a son.

Vice-President



Greg MacDonald was raised in the Finger Lakes region of upstate New York where he spent his time working on dairy and row crop farms. He received an Associate of Applied Science in agricultural engineering from Alfred State University and a Bachelor's of Science from Cornell University in vegetable crop production in 1986. He received his Master of Science in Agronomy/Weed Science at the University of Florida in 1991 and PhD from the same institution in 1994. From 1994 to 1998 he was employed as a weed extension specialist for The University of Georgia, based in Tifton, GA. In December 1998 he returned to Gainesville as a faculty member in Agronomy at the University of Florida. He is a professor of Weed Science and teaches undergraduate and graduate weed science and crop production courses, including on-line, distance education courses. His research focus is weed physiology and the interactions of herbi-

cides with plants in terrestrial and aquatic ecosystems and research on perennial invasive grass management. In addition, he conducts international research and development through USAID in Haiti, Guyana and Ghana with a focus on peanut production, utilization and marketing. He

chairs(ed) 10 doctoral students, 9 masters and currently serves as the Agronomy undergraduate coordinator. He has authored 3 book chapters, 65 journal articles and over 300 reports, abstracts, popular press, and extension publications. His program has garnered over \$3 million in extramural support and he has given over 500 presentations at local to international venues. Greg and his wife Mickey have two boys, George and Joey. He enjoys spending time with his family, camping, traveling, home projects and is a volunteer Boy Scout leader.



Dr. Eric Webster graduated from Auburn University with a B.S. in Agronomy and Soils in 1987, and he continued his education at Auburn University and received a M.S. in Weed Science in 1990. In 1995, Dr. Webster completed a Ph.D. in Weed Science from Mississippi State University. After completing his Ph.D., he accepted an Extension Weed Science position with the University of Arkansas, and in 1997, he accepted a position with Louisiana State University at Baton Rouge, Louisiana. Dr. Webster is the only faculty member in the Louisiana State University AgCenter with a four-way appointment: research, extension, teaching, and administration. Dr. Webster's research and extension duties include statewide responsibilities in rice weed management. He teaches Plant/Herbicide Physiology and Weed Biology and Ecology. Dr. Webster has been fortunate to receive several individual awards. In 2014, he

received the Conservation Systems Rice Research Award at the Cotton and Rice Tillage Conference. In 2013, Dr. Webster was awarded the Rice Industry Award at the Rice Outlook Conference in St. Louis, Missouri. In 2010, he received the Rice Technical Working Group Distinguished Rice Research and Education Award. In 2005, Dr. Webster was awarded the Louisiana State University Rogers Research Excellence Award, and the Weed Science Society of America Outstanding Early Career Award. In 2014, Dr. Webster became the Chair of the Rice Technical Working Group. He has served the SWSS in several capacities: as a Board Member from Academia from 2001 through 2004, Site Selection Committee, Outstanding Educator Award Committee, Weed Contest Committee, Research Committee, Outstanding Graduate Student Committee, Placement Committee, served as a judge for graduate student oral presentations and posters, and hosted the Weed Contest in 1994 and 2004. He has author or co-authored 65 refereed journal articles and over 500 abstracts, research bulletins and popular press articles. Dr. Webster has advised or co-advised 20 graduate students and served on numerous graduate student committees. He has been awarded more than \$5,000,000 in grant funding.

Sustaining Member Committee

John Richburg

A big thank you to our Sustaining Members for your past and future support of the SWSS. Your support is critical to the success of our Society, our annual meeting and other activities we are involved with. We are nearing the time of year when we begin our efforts to contact Sustaining Members. If your company is not a Sustaining Member or you know of a company we should contact, please reach out to our Business manager Tara Steinke or myself. Your organization will be recognized as a Sustaining Member on our website (www.swss.ws), in the program for the annual meeting, in the Newsletter and at the registration desk during the annual meeting. If you have any questions, please feel free to contact Tara, or myself.

Position Vacancy Announcements

Professor and Director, Rice Research & Extension Center

UA Division of Agriculture Agricultural Experiment Station and Cooperative Extension Service Stuttgart, AR

Description: The University of Arkansas System Division of Agriculture seeks an energetic individual to provide creative and exemplary leadership for the Rice Research and Extension Center (RREC) located near Stuttgart, AR. The Director will provide leadership for the multidisciplinary team of eleven research and Extension faculty, approximately 50 classified and non-classified staff, and hourly support staff. The Director will serve the Division as a recognized authority and spokesperson in many aspects of rice production, rice processing and rice marketing. The successful candidate will proactively lead the faculty and staff in building and maintaining strong, multidisciplinary research and extension programs in applied and basic research focusing on the needs of the Arkansas rice industry.

The RRREC is located in the heart of the Grand Prairie region of Arkansas and comprised of approximately 850 acres of irrigated field research, ten modern laboratories, six greenhouses, and a modern office/conference center. A new, state-of-the-art Foundation Seed Plant is located at the RREC. The focus is rice production, but Division faculty also conduct soybean, corn, grain sorghum and wheat research and demonstrations at the RREC. Foundation Seed Rice, Soybeans and Wheat are produced, cleaned, conditioned, bagged and sold at the RREC. The support and operations budget at the RREC exceeds \$1.3 million.

The USDA's Dale Bumpers National Rice Research Center is co-located with the RREC. More information regarding the RREC is available at: https://aaes.uark.edu/research-locations/rice.aspx

Salary: Commensurate with qualifications and experience. This is a full-time twelve-month, non-tenure-track appointment.

Responsibilities: Provide leadership in planning, integrating, and implementing the research and Extension programs conducted at the RREC. Duties will include administrative and fiscal leadership for the RREC personnel, programs and physical resources; program planning, faculty development, and pursuit of extramural funding; coordination with other university programs, professional and governmental agencies, and industry groups. The successful candidate will be active in industry support groups including, but not limited to the Arkansas Rice Research & Promotion Board, Rice Technical Working Group, Rice Industry Alliance, Arkansas Farm Bureau, USA and Arkansas Rice Federation, and the Agricultural Council of Arkansas. The Director will help establish research and extension priorities related to rice production, processing, and marketing. The Director will also provide overall leadership for planning and execution of the Rice Expo, an annual research and Extension event featuring field tours of research, classroom presentations, speeches, exhibits and contests for approximately 1,100 stakeholders.

Minimum Qualifications: Candidates must have an earned Ph.D., or equivalent, in Agriculture or a closely related discipline, and a sufficient record of professional accomplishments that would qualify for the rank of Professor. Demonstrated ability to communicate effectively and persuasively with both scientific audiences and stakeholder audiences.

Preferred Qualifications: The candidate's record should demonstrate the administrative skills to lead a dynamic research and Extension program, including the ability to collaborate and communicate with diverse clientele. Demonstrated fiscal and personnel management, excellence in written and oral communication skills, ability to attract extramural funding, interest in providing multi-disciplinary leadership and coordination of diverse research interests is preferred. Prior experience in the Land Grant University System, including field research, laboratory research, and/ or Extension education is highly desirable.

Application: Applicants should submit a letter stating their interest in this position, and their qualifications including professional vitae and names of five individuals who may be contacted for letters of reference. In addition, the applicant is asked to provide a one-page statement on: (1) his/her professional goals, (2) the challenges facing the rice industry and (3) an approach to addressing these challenges including his/her philosophy of administrative leadership. Applications should be submitted to: http://jobs.uark.edu/postings/21605

Deadline: Screening of applicants will begin September 1, 2017 and will continue until a qualified candidate is identified.

The University of Arkansas System Division of Agriculture is an equal opportunity, affirmative action institution. All applicants are subject to public disclosure under the Arkansas Freedom of Information Act and persons hired must have proof of legal authority to work in the United States.

Assistant Professor (Weed Science Extension)

Below you will find the details for the position including any supplementary documentation and questions you should review before applying for the opening. To apply for the position go to: https://jobs.ncsu.edu/postings/88513

Vacancy Type Tenured/TT Faculty

Is Internal Transfer Only No

Working Title Assistant Professor (Weed Science Extension)

Salary Range

Anticipated Hiring Range Commensurate with Experience

Position Number 00000204

Work Schedule As research/extension and teaching schedule dictates

Full Time Equivalent (FTE) 1.00

Department 110901 - Crop and Soil Sciences

Department College of Agriculture and Life Sciences

Job City & State Choice of location (Raleigh, NC or Vernon James Research Center

in Plymouth, NC)

Primary Function of Organizational Unit
Crop & Soil Sciences is a Department with diverse disciplines that encompass research, extension and teaching related to soil science and theory and the genetic improvement, production and utilization of agronomic and turfgrass crops. Research in basic and applied science and the engagement and technology transfer to public and private sector practitioners.

Essential Job Duties The candidate will develop a nationally and internationally recognized, externally funded research program in weed science focused on weed management in agronomic crops, specifically corn and cotton. Expertise in conducting field research is expected. The successful candidate will be an integral, collaborative, and supportive member of the NCSU Weed Science Program as well as the Crop and Soil Sciences faculty. The focus of this position will be managing weeds in corn and cotton using innovative strategies including cultural practices and herbicides to improve sustainable weed management recommendations to stakeholders. The candidate will develop appropriate extension publications and other outreach tools, will be involved in Cooperative Extension field faculty training in weed management principles and problem solving, will publish research results in the peer-reviewed literature and other appropriate outlets, and will interact with commodity organizations and the agricultural community. Inclusiveness and diversity are critical to the success of the University. Therefore, the successful candidate will be expected to foster an environment that is welcoming of all groups.

Other Work/Responsibilities The candidate will also teach an undergraduate course on weed science, and is expected to advise grad students

Minimum Education/Experience PhD degree in Weed Science, Agronomy, Horticulture, Plant Biology, or related discipline is required.

Departmental Required Skills Expertise in conducting field research.

Preferred Experience, Skills, Training/Education

Experience with corn and cotton.

Experience with weed management.

Required License or Certification n/a

Special Instructions Please attach a CV, cover letter, and contact information for

three professional references.

Job Open Date 07/21/2017

Must Be Open Until Positions will be posted until 5:00 PM ET on this date. Positions remaining posted after this date are still accepting applications but may close at any time. 08/17/2017

Is this position partially or fully funded on ARRA stimulus monies? No Proposed Hire Date 01/01/2018

AA/EOE NC State University is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, gender identity, age, sexual orientation, genetic information, status as an individual with a disability, or status as a protected veteran.

Individuals with disabilities requiring disability-related accommodations in the application and interview process, please call 919-515-3148.

Final candidates are subject to criminal & sex offender background checks. Some vacancies also require credit or motor vehicle checks. If highest degree is from an institution outside of the U.S., final candidates are required to have their degree verified at www.wes.org. Degree must be obtained prior to start date.

NC State University participates in E-Verify. Federal law requires all employers to verify the identity and employment eligibility of all persons hired to work in the United States.

WASHINGTON REPORT

July 25, 2017 Lee Van Wychen

Ag Industry, Do We Have a Problem Yet?

University of Missouri Integrated Pest & Crop Management

Author: **Kevin Bradley** Published: **July 25, 2017**

It's funny how we can be living through a situation or watch something unfold in front of our very eyes and one person can view it one way and another can see it totally different. If you think about it, this happens all the time at sporting events. Not too long ago I was watching a Cardinals game with some Cubs fans and all of a sudden they all started yelling that our player was out when I could clearly see that he was in fact, safe. How can that be? We were all watching the same thing at the same time...

I've been trying to wrap my head around this whole issue of perspective lately. I think a person's perspective is an important thing to consider when it comes to the issues we are seeing with off-target movement of dicamba in this country, and especially when it comes to the reasons that are offered for off-target movement. Never has a difference in perspective been more apparent to me than what I have seen happen for the past year, and especially for the past two months, within the agricultural industry.

I get calls daily from those who say we have a major problem with off-target movement of dicamba and something has to be done about it. Most of these calls are from soybean farmers who have had their crops drifted onto. Some are from homeowners or vegetable producers. Others are from representatives with other competing companies that don't have a stake in any dicamba product or the Xtend technology. There's that perspective thing again. More recently, most of these calls are from independent agronomists, agricultural retailers, and custom applicators who have been making applications of these approved dicamba formulations and have now decided to stop spraying these products for the rest of the season because of the off-target movement that has occurred despite their best efforts to keep these products in place.

I also get calls daily (and read articles and company "position" blogs, posts, tweets, etc.) from those who say we don't have a major problem at all, and that people like me are drawing more attention to an issue that isn't really a problem, and that this is just a normal part of the "learning curve" with any new technology. Most of these calls (or articles, blogs, posts, tweets, etc.) are from company representatives that either make one of the approved dicamba products, or sell the Xtend trait. Some of these calls are also from farmers and/or farmer seed dealers who say they have sprayed one of the approved products on their Xtend soybean and have had zero problems. More perspectives I guess.

I shouldn't be surprised by all this but I must confess it is baffling to me; here we have people within the agricultural industry that are all *presumably* watching the same thing unfold in front of their eyes at the same time, yet these people have a completely different perspective as to how significant this issue really is. So I thought maybe I would try to expand all of our perspectives (mine included) outside of just what is happening in Missouri or anywhere else. I thought I would try to put a 'U.S. perspective' on this issue.

The purpose of this article is NOT to debate whether the off-target dicamba problems are due to drift, sprayer error, volatility, contaminated glufosinate, calcium deficiency, temperature inversions, inadequate training by universities, generic dicamba, the coming solar eclipse, or any of the dozens of other explanations I've seen put forward. I've already spent plenty of my summer arguing about these reasons and based on current responses from industry, it looks as if I'll be spending most of the rest of the year doing more of the same. Regardless, several of my colleagues have written brilliantly on these topics so I've decided there is no need for me to try to re-invent the wheel and tell you something that I literally could not say any better than what has already been said. If you have not read these articles already, I would highly recommend that you do so. They are well worth the read (from my perspective): The Dicamba Dilemma in Illinois: Facts and Speculations, by Aaron Hager, Associate Professor, University of Illinois; I Can't Keep Dicamba in the Field by Larry Steckel, Extension Weed Specialist, University of Tennessee; and Thoughts on the Dicamba Dilemma by Bob Hartzler, Professor of Agronomy, lowa State Unviersity.

The purpose of this article is simply to broaden our view and provide a national perspective of the problem as it stands right now, in hopes that at least some in the industry can agree that this is a substantial problem that needs to be addressed. Oops, I kind of let my own perspective slip there a bit.

In order to do this, I requested information from many state Departments of Ag about the number of official dicamba-related investigations that are currently under way in 2017. This information is shown in Figure 1. If a state isn't colored in on this map, it simply means that either I did not get a response from that state, or that I never requested any info because they produce little to no cotton or soybean. However, as Dr. Hager pointed out in his recent article, to estimate the extent of the dicamba injury problem using the number of complaints filed with the state Departments of Ag as the sole metric would be to "grossly underestimate the current reality".

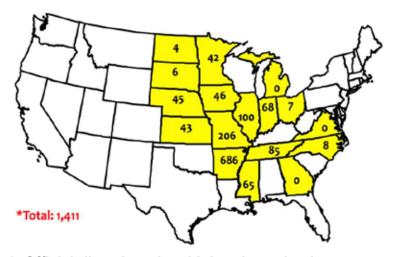


Figure 1. Official dicamba-related injury investigations as reported by state departments of agriculture (as of July 19, 2017).

Because I agree with Dr. Hager's statement, I also polled a number of university extension weed scientists from around the country and asked them to provide me with their best estimate as to the number of soybean acres injured by dicamba in their respective states. These estimates are shown in Figure 2. I'm sure many will have problems with these numbers, but I can assure you that none of these individuals took these estimates lightly. These estimates

weren't just generated out of thin air, they were generated by polling Extension agents around the state; by personal field visits of affected areas; through emails, calls and texts from injured parties; and through various consultations with trusted ag retailers, applicators, and farmers around each state. As with Figure 1, if a state isn't colored in on the map, it is either because there was no weed science contact in that state, or because that state produces little to no soybean.



Figure 2. Estimates of dicamba-injured soybean acreage as reported by state extension weed scientists (as of July 19, 2017).

I didn't know what kind of responses I would get when I set out to make these maps. After looking through the official responses and estimates I would say that this exercise has broadened my perspective but hasn't really changed it. For everyone who reads this article and sees these maps I leave you with the two questions:

First, does 1,411 official dicamba-related injury investigations and/or approximately 2.5 million acres of dicamba-injured soybean constitute a problem for U.S. agriculture? I guess it depends on your perspective but my answer is an emphatic yes. If you think so as well, let others know how you feel and let's stop the standard denial routine that I have heard so often this season. Instead, lets put our time and effort into figuring out where we go from here as an industry and what's going to be different about next season.

Second, I said previously that the purpose of this article is NOT to debate about the reasons for off target movement. And it isn't. And I'm not. But the reasons for off-target movement of dicamba are the number one thing we are going to have to discuss if you agree that there is a problem. So my last question is this; can you look at the scale and the magnitude of the problem on these maps and really believe that all of this can collectively be explained by some combination of physical drift, sprayer error, failure to follow guidelines, temperature inversions, generic dicamba usage, contaminated glufosinate products, and improper sprayer clean out, but that volatility is not also a factor? I know what my perspective is, what's yours?

FY 2018 Federal Budget

Work on the FY 2018 federal budget began in May when the President released his FY 2018 "skinny" budget, which proposed an overall cut of 21 percent to USDA. Most programs in USDA's Research, Education, and Economics mission area did not fare as badly in the President's budget request with NIFA facing an 8 percent cut, the Economic Research Service

(ERS) an 11 percent cut, and ARS a 15 percent cut compared to FY 2017. The National Agricultural Statistics Service (NASS) is proposed for a \$14 million increase to conduct the 2017 Census of Agriculture. The Administration did propose to maintain near level funding for the Hatch Act that provides capacity funds for the state ag experiment stations and for the Smith-Lever 3(b) & (c) capacity funds for ag extension activities.

The House and Senate have recently marked up their FY 2018 appropriations bills for agriculture and provided much more favorable numbers than the President's budget request. The Senate numbers are particularly favorable with increases in FY 2018 funding for NIFA, ARS, ERS, NASS, APHIS, and NRCS compared to FY 2017. The final endgame for the FY 2018 appropriations process is still a big question mark, but given the House and Senate numbers for USDA programs important to weed science, we should be ok.

Selected USDA Discretionary Appropriations Accounts

Program	2015 Final	2016 Final	2017 Final	2018 President	2018 House	2018 Senate
	Millions of Dollars					
NIFA	1289	1326	1362	1253	1341	1373
Hatch Act	244	244	244	243	244	244
Smith-Lever 3b & c	300	300	300	299	300	300
AFRI grants	325	350	375	349	375	375
IR-4	11.9	11.9	11.9	11.9	11.9	11.9
CPPM*	17.2	17.2	20	14	20	20
ARS**	1132	1143	1170	993	1133	1182
ERS	85	85	86	77	77	86
NASS	172	168	171	186	184	192
APHIS	871	894	946	810	906	953
NRCS	846	850	864	766	859	874

^{*} Crop Protection and Pest Management (CPPM): Addresses high priority pest issues using IPM.

ID'ing Palmer Amaranth Seed in Conservation Seed Mixes

A great example of the value of USDA capacity funds return on investment is the work done by Pat Tranel's lab at the University of Illinois that was supported by Hatch Act funds. They developed and validated a qPCR assay for distinguishing Palmer amaranth from 12 other Amaranthus species. The assay can consistently detect a single Palmer amaranth seed when present in a pool of 100 Amaranthus species' seeds. The key is to make sure every seed is ground up during the extraction process. The 100 seed test only costs \$50. The only option available prior to that was a California company that tests individual seeds using DNA sequencing that costs \$100 per seed. Tranel said the qPCR assay is available to other testing labs for free. The testing protocol is published in Pest Mang Sci: A quantitative assay for Amaranthus palmeri identification.

^{**} House and Senate Appropriators rejected the White House proposal to close 17 of ARS's 112 research facilities, estimated to be at least \$1 billion behind in deferred maintenance needs.

Davis and Panetta Launch House Ag Research Caucus

House Agriculture Committee members Jimmy Panetta (D-CA) and Rodney Davis (R-IL) have launched the Congressional Agriculture Research Caucus to promote research needs in advance of the 2018 farm bill. Davis and Panetta are both members of the House Ag Subcommittee on Biotechnology, Horticulture and Research, with Davis serving as Chair.

Rep. Panetta: "As a representative of the Salad Bowl of the World, I believe it is of the utmost importance to equip our growers, shippers, and farmworkers with the most effective tools possible. Strategic investments in research for plant breeding, crop protections, and mechanization will support the future success of the agriculture industry while also helping to address major concerns relating to resource conservation and labor shortages. I look forward to working with Congressman Davis and our colleagues on both sides of the aisle to further support our nation's agriculture industry."

Rep. Davis: "By investing in agricultural research today, we will ensure U.S. agriculture remains competitive globally and continues to lead the way in food and agriculture innovation. My district is home to several major universities that are at the forefront of agricultural research critical to our state and national economies. Additionally, the potential for public-private partnership between industry and academia allows us to expand our horizon and reach new goals. I look forward to joining my colleagues on both sides of the aisle to make agriculture research a priority."

Other Ag Research Caucus members include: Newhouse (R-WA), Schrader (D-OR), Yoho (R-FL), Grisham (D-NM), Rooney (R-FL), Loebsack (D-IA), Blum (R-IA), Pingree (D-ME), Hice (R-GA), Carbajal (D-CA), Kelly (R-MS), Nolan (D-MN), Marshall (R-KS), Maloney (D-NY), Thompson (R-PA), Takano (D-CA), Jayapal (D-WA), Shea-Porter (D-NH), and Garamendi (D-CA).

Farm Bill Hearings in Full Swing by House and Senate

There have been several hearings already on the Research Title of the Farm Bill where we have emphasized a balanced portfolio of the entire USDA research, extension, and education (REE) mission area. The House Ag Committee recently held two Farm Bill hearings on how to foster technological innovations for producers, which I believe is great opportunity for weed science (see next story). I've also been trying to get weed science interests represented at the field hearings. The House Ag Committee will be conducting "open mic" listening sessions on Farm Bill programs on: July 31, 2017 in San Angelo, Texas; on Aug. 3, 2017 in Morgan, Minnesota; and on Aug. 5, 2017 in Modesto, California. Anyone can step up to the mic for 2 minutes and talk about their concerns. I'm also working with some invasive species groups to get "noxious weeds" included as part of the many "plant pest" programs that are funded in the various Titles of the Farm Bill (i.e. conservation, trade, forestry, research).

Fennimore Presents 'Robotic Weed Wars' Seminar On Capitol Hill on May 22

On May 22, 2017, Dr. Steve Fennimore from UC-Davis presented a seminar on Capitol Hill titled "Robotic Weed Wars: A New Game, New Players and New Rules". The seminar was part of the National Coalition for Food and Agricultural Research (NC-FAR) Lunch-n-Learn seminar series. WSSA is a member of NC-FAR and a sponsor of the seminar series. NC-FAR is a consensus-based and customer-led coalition that serves as a forum and a unified voice in support of sustaining and increasing public investment at the national level in food and agricultural research, extension and education.

Abstract: U.S. vegetable growers are mainly dependent on hand weeding to achieve acceptable weed control since there are relatively few herbicides registered for use in these small acreage crops due to the nearly \$300 million cost of researching, developing, and testing a new herbicide that would meet today's regulatory requirements. Labor shortages have led to higher hand-weeding costs that run \$150 to \$300 per acre, thus vegetable growers have begun to adopt automated robotic weeders. Machine vision technology, together with data processors, have been developed to enable commercial machines to recognize crop row patterns and control automated devices that perform tasks such as removal of intra-row weeds, as well as to thin crops to desired stands. However, it is doubtful that private funding alone from small startup companies will be adequate to develop automated robotic weeders custom-designed for U.S. crops. Public funding is needed to help train students in the multidisciplinary fields of science. technology, and engineering needed to advance the development of automated robotic weeders. Research is needed on more challenging precision weed control technologies, such as lasers or sand abrasives to remove weeds. These public investments would be a win-win for everyone as it generates higher paying jobs in the crop protection industry, leads to the use of lower risk weed control tactics, and maintains a safe and affordable food supply.

National Academies Seek Input on Future of Food and Agriculture Research Science Breakthroughs 2030: A Strategy for Food and Agricultural Research is a new National Academies of Science study to identify ambitious scientific opportunities in food and agriculture research. They are asking for input from scientists to identify emerging opportunities. You can submit your ideas on IdeaBuzz and "vote" and comment on ideas that have already been submitted. They are also inviting people to participate in-person or online in a Town Hall meeting on August 8th in the National Academy of Sciences Auditorium in Washington DC. Learn more and register for the Town Hall here.

Weed Science Societies Comment on APHIS Revision of its Biotechnology Regulations. The National and Regional Weed Science Societies <u>submitted comments</u> on APHIS's proposed rule regarding the importation, interstate movement, and environmental release of certain genetically engineered (GE) organisms. While we complimented APHIS on the many positive aspects of the proposal (i.e. moving from a "regulate first, then analyze" approach to an "analyze first, then regulate only if necessary"), we encouraged APHIS to repropose a rule that minimizes regulatory uncertainty related to their weed risk assessment model. We expressed our willingness to partner with APHIS in identifying specific, risk-based criteria for assessing GE crops for potential 'weediness,' but stressed that federal noxious weed authority in the Plant Protection Act should not be used to regulate GE crops.

Pesticide Registration Improvement Bill Awaits Final Vote in Senate

H.R. 1029, the Pesticide Registration Improvement Act (PRIA), passed the House in March on a voice vote and was marked up and passed by unanimous consent by the Senate Ag Committee on June 29. Final passage in the Senate is expected this summer. The current version of PRIA expires on Sep. 30, 2017. It sets fees for pesticide registrants seeking to get products registered in return for regular approval schedules. The law has bipartisan support because a proportion of the registrant user fees support farmworker safety and environmental programs. Registrant user fees would increase from \$27.8 million/year to \$31 million/year for FY 2018 through 2020.

\$75 Million Available from APHIS for Pest Detection, Surveillance, and Identification

APHIS issued a call for "suggestions" (i.e. proposals) for its "Plant Pest and Disease Management and Disaster Prevention Program." The FY 2018 open period is **July 10, 2017**,

through August 18, 2017. In FY 2017, APHIS received 720 proposals and funded 480 of them, a 66% success rate. There were only a few related to weeds, but only because there were not that many applications (i.e. "suggestions") for weed and weed seed surveillance, identification, and threat mitigation.

WOTUS Rule Rescinded. Rewrite is Next Step.

The EPA and the Army Corps of Engineers released a pre-publication notice on June 27 to rescind the 2015 Waters of the United States (WOTUS) rule and replace it with a recodification of the regulatory text that governed the legal regime prior to the 2015 WOTUS Rule. Nothing in the proposed rule restricts the ability of States to protect waters within their boundaries by defining the scope of "navigable waters" regulated under State law more broadly than the federal law definition. There will be a 30-day comment period. Comments should be limited to the appropriateness of the rescission and not on the scope of the definition of WOTUS.

The EPA and Army Corp will issue a second notice and comment period on a new proposed rule that interprets "navigable waters" that is consistent with Justice Scalia's opinion in <u>Rapanos v. United States (2006)</u>. In that opinion, Scalia argued that federal jurisdiction of the Clean Water Act extends only to water bodies with a permanent flow or non-navigable waterways that connect via surface water with areas with permanent flow.

"NPDES Fix" Legislation

On May 24, the House passed the Reducing Regulatory Burdens Act (HR 953) by a vote of 256-165. The Senate has not acted on its companion measure (S 340). This is the fourth time this legislation has been up for a vote in the past 7 years, each time passing the House, but ending up stalled in the Senate. The National and Regional Weed Science Societies have supported the NPDES-fix legislation from the start and endorsed <u>a letter</u> to Congress urging passage of H.R. 953, along with more than 100 other organizations.