Southern Weed Science Society

Vol. 41 No. 1
May 2018

*News from the* **SWSS**

## President's Message

*Bob Scott*

The Atlanta meeting was a great success and I want to thank all those that worked so hard to make it so. We had 376 people registered, pulled off two great symposia and a turf workshop. Local arrangements chair Henry McClain and his team did a great job with the rooms, Tara Stienke and the IMI group did a good job on their first turn with solo business manager duties, and I would like to thank all the section chairs as well as Joyce Lancaster and Gary Schwarzlose for assisting me with the program. In addition, Darin Dodds with help from Charlie Cahoon handled a huge student contest that included 81 contestants and required 53 judges and they did a great job! I cannot say how important it is to be active and help out with our annual meeting from program chair all the way to simply being a contest judge, moderator or serving on a committee, your participation is what makes this Society great and what makes it run!

I have to admit I crashed pretty hard after the 2018 meeting. President-Elect is a busy job when meeting time gets here. I must say that I am truly honored to serve as your president for 2018. I first attended an SWSS in 1993 I have seen a lot of things change and some that have not. The Society is the glue that holds the weed science profession together in my opinion, we are family. Like any family we may disagree from time to time, but those ties are hard to break, attending southern gives us roots, it connects us, and my wish for the society is that this continues. Anyway I am proud to follow in the footsteps of many great presidents that have come before me, including our most recent past president, Gary Schwarzlose, he was a big help to me last year and has set a great example for me to follow.

I am excited about presiding over the 2019 meeting because it will be in my native state of Oklahoma. Go Pokes! Downtown Oklahoma City has improved over the years and I think it will be a good site. More on that later. As I am writing this letter I am also hassling half the society about getting committee assignments updated, hopefully this list will be updated and sent to our new Business manager Kelley Mazur (be sure and read her bio in this newsletter) very soon. Tara Steinke had to step down from IMI for personal reasons and Kelley has done a great job filling her shoes, we are looking forward to working with her more this coming year.

Finally, I want to wish everyone a safe and productive year, most of you are in the field by now so good luck with your efforts this season, hopefully we will have lots of new and exciting stuff to talk about at next year's meeting. As for me, the powers that be had a momentary lapse of reason and they allowed a weed scientist to become Station Director at the Rice Research and Extension Center near Stuttgart Arkansas, so please wish me luck as I move over to the dark side - administration…..Senseman and Shaw said just stare at the blinking light and everything will be fine! Anyway looking forward to this year hope you are too!

### What's Inside

## 2017 Award Winners

### 2018 Outstanding Educator Award
**Stanley Culpepper**

Stanley Culpepper is a Professor in the Crop and Soil Science Department at The University of Georgia. A native of North Carolina, he grew up on a bicentennial family farm producing corn, cotton, peanut, soybean, and wheat. He received his BS in Agronomy from N. C. State University. His MS and PhD were also obtained at N. C. State in weed science under the direction of Dr. Alan York. Stanley began his professional career at The University of Georgia as a cotton, vegetable, and small grain weed scientist in 1999, and continues with those responsibilities today. Stanley's ultimate goal is to develop and share sound science with family farms improving their sustainability.

Because of Stanley's efforts, he has been an invited speaker at 277 functions across 25 states and several countries. In Georgia, he has presented timely information to growers at 583 county meetings and 118 field days while also training extension agents during 116 in-service or regional meetings. He has authored or co-authored 97 refereed journal articles, 4 book chapters, 363 abstracts for presentations at professional meetings, 213 extension publications and 171 newsletters/blogs. Additionally, Stanley has authored 16 successful Section 18 packages and critical use nomination packages as well as co-authoring 33 Section 24(c) state herbicide labels bringing new weed management tools to Georgia growers. Stanley has been honored to win numerous awards including the EPA's Montreal Protocol International Award for assisting in the preservation of the ozone layer and the Southern Region Excellence in Extension Award provided by the Extension Committee on Organization and Policy and the USDA National Institute of Food and Agriculture. Stanley was also honored with an invitation to serve as a member of the Agricultural Science Committee of the U.S. Environmental Protection Agency's Science Advisory Board.

### 2018 Outstanding Young Weed Scientist-Academia
**Ramon Leon**

Dr. Ramon Leon was born in San Jose, Costa Rica. He grew up in the capital, but because of his summers visits to his grandfather's farm in the northern part of the country, he became interested in agriculture. He attended the University of Costa Rica where he majored in Crop Production. In 1997, he was hired as a Research Technician in the Weed Science Program of the same institution, mainly conducting research on red rice management in paddy rice fields and integrated weed management in sugarcane. After obtaining his B.S. (2000), Dr. Leon went to Iowa State University to work on his master's (2003) and Ph.D. (2005) on Crop Production and Physiology with emphasis in Weed Science under the mentoring of Dr. Micheal D.K. Owen. There, he also obtained a Ph.D. (2005) in Genetics under the guidance of Dr. Diane Bassham. After completing his graduate studies, Dr. Leon was appointed Assistant Professor-Weed Science at the Horticulture and Crop Science Department, California Polytechnic State University in San Luis Obispo. In 2007, he had the opportunity to return to Costa Rica, where he became a Weed Science Professor at EARTH University, an international agricultural college training students from over 30 countries in agriculture, natural resource management, and sustainable development. While at EARTH University, Dr. Leon worked on multiple agronomic and horticultural crops and was involved in teaching, development and research projects throughout Latin America, Africa, and Europe. In 2012, Dr. Leon and his family decided to return to USA, so he could devote more time to conduct research on weed biology and management. He moved to the West Florida Research and Education Center, Jay, FL of the University of Florida as an Assistant Professor-Weed Science Extension Specialist working on weed management in row crops and turfgrass. In 2017, he was promoted to Associate Professor and given tenure. Because of his passion to study weed behavior in agricultural systems, he recently accepted a faculty position at

the Department of Crop and Soil Sciences, North Carolina State University as an Assistant Professor of Weed Biology and Ecology, where he is studying weed population dynamics and weed adaptations to cropping systems. Dr. Leon has authored and coauthored 59 peer-reviewed scientific articles, 3 book chapters, over 100 abstracts, 37 refereed extension publications and over 27 articles in newsletters and popular press. He has mentored 6 M.Sc. and 3 Ph.D. students. He currently lives in Raleigh, NC with his wife Rocio and sons Ignacio and Tomas. During his limited free time, he enjoys reading and hiking.

## 2018 Outstanding Graduate Student Award (MS)

**Zachary Lancaster**

Zachary grew up on a rice and soybean farm in northeast Arkansas, where his father and grandfather instilled in him a love for agriculture. He graduated Cum Laude from Arkansas State University in 2013 with a B.S. in agronomy. Zachary completed his M.S. in Weed Science from the University of Arkansas in 2017 and is currently working on his Ph.D. under the advisement of Dr. Jason Norsworthy. His thesis research evaluated quizalofop-resistant rice for Arkansas rice production systems. During his time at the University of Arkansas, Zachary has placed 1st individual at the 2015 WSSA Weed Olympics competition, and 9th and 2nd overall individual at the 2016 and 2017 SWSS Weed Contest, respectively. Zachary has also been successful in presenting his research by winning speaking contests at the 2015 SWSS Annual Meeting, the 2015 Arkansas Crop Protection Conference, and the 2016 Beltwide Cotton Conference. Zachary has been recognized for his academic and extracurricular achievements with awards such as the 2016 Department of Crop, Soil, and Environmental Sciences Outstanding M.S. Student Award, the Ron and Alice Talbert Distinguished Weed Science Scholarship, and the University of Arkansas Doctorial Academy Fellowship. Zachary's Ph.D. research will evaluate thiencarbazone-methyl for use in Midsouth soybean production.

## 2018 Outstanding Graduate Student Award (PhD)

**Sandeep Rana**

Sandeep Rana currently serves as an Agronomic Research Manager with Monsanto Company in Galena, MD. In this role, he leads and manages field research programs aimed at testing and advancing Monsanto's novel chemistries and biotechnology traits to support the Global Breeding team.

Sandeep is a native of India, where he grew up on a campus of an agricultural university - CCS Haryana Agricultural University (CCS HAU) located at Hisar in the Indian State of Haryana (Northwestern India). Born in a family of agricultural researchers and administrators, service to the field of agriculture runs deep in his family. Sandeep developed a strong passion for agricultural sciences from a very young age that motivated him to pursue higher studies in this field.

Sandeep received his B.S. degree in Agriculture (Honors) and M.S. degree in Horticulture/Biotechnology (partial completion) from CCS HAU. He then moved to the USA to pursue his M.S. degree in Weed Science under the direction of Dr. Jason Norsworthy at University of Arkansas. His thesis research focused on evaluating soybean response to drift and carryover of imazosulfuron from rice. Sandeep then moved to Virginia Tech, where he pursued a Ph.D. degree in Turfgrass Weed Science under the guidance of Dr. Shawn Askew. His Ph.D. research focused on evaluating golf green's canopy anomaly influence on putt kinematics and designing long-term control programs for weedy Poa species in golf turf. Prior to joining Monsanto, Sandeep also spent a small but fruitful period at North Carolina State University working as Postdoctoral Research Scholar with Dr. Wesley Everman.

To date, Sandeep's efforts have contributed to 7 peer-reviewed papers with several more in preparation, 59 abstracts from scientific presentations, and over 30 extension and outreach publications and talks. He has reviewed scientific papers for journals of Weed Technology, Weed Science, Crop Science, Crop, Forage, and Turfgrass Management, Applied Turfgrass Science, and International Turfgrass Society Research Journal. Sandeep has been actively involved in the SWSS, NEWSS, NCWSS, and

WSSA. During his Ph.D., he served as the President of the SWSS GSO and Secretary of the WSSA GSO. Sandeep has also led several other student organizations at departmental and university levels. He actively volunteers to judge student papers/posters and organize weed contests, and presently serves as section chair/co-chair and/or committee member across all the aforementioned weed science societies. For his contributions, Sandeep has won several prestigious awards, including SWSS Endowment Fellowship, WSSA Travel Grant, USGA Green Section Internship, NC State University Graduate School Industry Immersion Program, etc. Sandeep also has won 6 paper or poster presentation awards at scientific meetings. He competed in 3 SWSS and 2 NEWSS weed contests, where both he and his team always scored top 3 positions, including 1st place individual and team at the 2011 SWSS contest and 1st place team at 2014 and 2015 NEWSS weed contests.

Sandeep's long-term goal is to leverage his research and leadership skills to contribute to cutting-edge research that addresses critical needs of productivity and sustainability of global agriculture. Sandeep plans to continue to extend his services to the SWSS and help the society in successfully achieving its true north objectives.

Sandeep is happily married to his college sweetheart, Trisha Sanwal, for over 5 years. In his free time, Sandeep loves to spend time with his family and friends and doing almost anything that brings him outdoors and closer to mountains and water bodies.

## 2018 Excellence in Regulatory Stewardship Award

**Neil Rhodes**

Neil Rhodes, a Tennessee native, is Professor and Extension Weed Management Specialist at the University of Tennessee in Knoxville. He received the B.S. and M.S. degrees in Plant and Soil Science from the University of Tennessee in 1977 and 1979, respectively. He then began pursuit of a PhD in Crop Science (major in Weed Science and minor in Entomology) under the direction of Dr. Harold Coble, graduating in 1982. He worked full time as an Extension Specialist in aquatic and non-cropland weed management while pursuing the Ph.D.

Following graduation, Dr. Rhodes worked for two years as a Field Development Representative for Rohm and Haas in Mississippi. In 1985 he returned to his native Tennessee to join the faculty of The University of Tennessee in Weed Science research and teaching. Beginning in 1990, Neil became Professor and Extension Weed Management Specialist with UT Extension. He has been responsible for the statewide educational program for weed management in all agronomic and horticultural crops, forages and aquatics. He led active applied research and demonstration programs across the state that focused on weed management in no-till cropping systems. In 2001 Neil assumed additional responsibilities at the University of Tennessee when he was selected as Head of the Plant Sciences Department and he served in that role through 2008 when he requested to return to the faculty ranks. He maintains active Extension and applied research programs in weed management in forages, tobacco, aquatics and increasingly in recent years, herbicide stewardship.

He is a Past-President of both the Tennessee Agricultural Chemical Association and the Tennessee Agricultural Production Association. He has been an active member of the Southern Weed Science Society and the Weed Science Society of America, serving on numerous committees in both societies over the years. In the Southern Weed Science Society he has chaired the Graduate Program Committee, the Endowment Committee, the Outstanding Graduate Student Award Committee, numerous paper sections and two symposia. Dr. Rhodes has received several awards, including being named the 2004 Outstanding Extension Weed Scientist by the Weed Science Society of America, and the 2008 Distinguished Service Award from the Tennessee Turfgrass Association. Also in 2008, Neil and his wife Becky were named as co-winners of the Outstanding Alumnus Award from the College of Agriculture and Life Sciences at North Carolina State University. Neil and Becky (also a Weed Scientist) reside in Maryville where they enjoy woodworking, fishing, swimming, and singing in church choir.

## 2018 Excellence in Regulatory Stewardship Award
**Trevor Israel**

Trevor grew up in North Carolina and worked in the family nursery and garden center business. He received his BS in Environmental Science from NC State University. While working as an aquatic weed technician, he met Dr. Rob Richardson and pursued an MS degree in Weed Science also from NC State University. Trevor then worked as an Extension Assistant at the University of Tennessee and completed his PhD in Weed Science under the direction of Dr. Neil Rhodes. During his membership in the SWSS, he has served as a Section Chair and Graduate Student Organization President and has placed in Student Paper, Poster, and Summer Weed Contests. He has authored/co-authored articles in Weed Science and Weed Technology and numerous Extension publications. Currently, Trevor is a Field Market Development Specialist with Valent USA and handles product development and technical service responsibilities in MN, ND, and SD. He is active in the NCWSS, serving on the Strategic Planning Committee and as a student paper judge. Trevor and his wife Rhiannon reside in Sioux Falls, SD.

## 2018 Fellow Award
**Scott Senseman**

Scott Senseman graduated from Wilmington College of Ohio in 1986 with a B.S. in Agricultural Business. He attended the University of Arkansas where he completed his M.S. in Agronomy-Weed Science in 1990 and his Ph.D. in Agronomy-Pesticide Residue in 1994. He served on that faculty in the Department of Soil and Crop Sciences at Texas A&M University for more than 18 years starting in October 1994. He is currently Professor and Head of the Department of Plant Sciences at the University of Tennessee where he has been employed since July, 2013. Dr. Senseman's research program has concentrated on several aspects of herbicide chemistry including the effectiveness of grass buffer strips on removal of herbicides from runoff water, herbicide dissipation and carryover, herbicide absorption and translocation, herbicide effects on soil microbial activity, extraction method development for soil and water, and weed management in rice. He has authored or coauthored 106 peer-reviewed journal articles, 229 abstracts of poster and oral presentations, 8 technical reports, two magazine articles, and one encyclopedia entry. In 2007, he finished his service as the editor for the Weed Science Society of America's Ninth Edition of the Herbicide Handbook. In 2014, he served as President for the Southern Weed Science Society. In 2016, he was elected to serve on the Board of Directors of the Weed Science Society of America serving as Vice President, President-Elect (2017), and President (2018). Dr. Senseman helped develop and teach the beginning course in agronomy (SCSC 101 Introduction to Agronomy), two undergraduate courses related to the evolution, role, and fate of agricultural chemicals in row crop production (SCSC 435 Ecology of Agrochemicals and SCSC 446 Weed Management and Ecology), a graduate and distance course related to herbicide mode of action and environmental fate (SCSC 650 Mode of Action and Environmental Fate of Herbicides) as well as an analytical course related to instrumentation used in environmental aspects of agronomy (SCSC 618 Methods of Plant, Soil, and Water Analysis in Environmental Systems). He also co-developed and co-taught PLSC 456/556 Turfgrass Weed Science at the University of Tennessee. Dr. Senseman has served as major advisor or co-advisor for 22 graduate students and has served on 66 other graduate student committees and four international undergraduate internships during his tenure at Texas A&M and the University of Tennessee.

***If you would like to see a specific topic covered in a symposia please contact James Holloway, 2019 Program Chair.***
***james.holloway@syngenta.com***

## 2018 Fellow Award

**Jerry Wells**

Jerry Wells was raised in south-east Texas, east of Houston. He received a B.S. in agronomy in 1979 from Texas A&M University where he developed an interest in weed science from Dr. Morris Merkle. After graduation, he worked for 6 months as a field development intern for Eli Lilly and Company at their regional office in Dallas, Texas. He then continued his education receiving a M.S. in Crop Science in 1982 working in Dr. Phil Banks' weed science program and in 1985 a Ph.D. in Agriculture from Texas Tech University working under Dr. John Abernathy and Dr. Jack Gipson. Jerry accepted a position with Sandoz Crop Protection (then operating as Zoecon Corp. in the U.S.) as a field development representative in Lincoln, Nebraska with responsibilities in ND, SD, NE, KS, MN, IA and MO. In 1986 he moved to Louisiana to take responsibility for product development activities in the state for Sandoz. In 1997 he relocated to Greensboro, NC to work as a technical brand manager for Novartis Crop Protection and later in various regulatory roles at Syngenta Crop Protection until his retirement in 2017. Jerry benefited greatly from the SWSS as a student and during his career in industry, participating in student contest presentations and the annual weed competitions. He served as student contest judge, on various committees, as president of the society and as section chair or symposia coordinator for regulatory sessions at SWSS and WSSA. He and his wife Janet have two children, Natalie and Sam and currently live in Oak Ridge, NC.

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## 2018 SWSS Endowment Enrichment Scholarship Winners

Zachary Lancaster – University of Arkansas. Host: Bayer Crop Science – Dr. Gary Schwarzlose et al.
Cole Smith – North Carolina State University. Host: Dr. Frank Carey – Valent
Wykle Greene – Auburn University. Host: Dr. Cheryl Dunne – Syngenta Crop Protection.

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## Congratulations to the 2018 Quiz Bowl Winners from Virginia Tech

# Directory of Officers, Executive Board Members, Committees and Committee Members
# January 31, 2018 - January 31, 2019

*Note:* Duties of each Committee are detailed in the Manual of Operating Procedures, which is posted on the SWSS web site at http://www.swss.ws

## 100. SOUTHERN WEED SCIENCE SOCIETY OFFICERS AND EXECUTIVE BOARD

### 100a. OFFICERS

| | | |
|---|---|---|
| President | Bob Scott | 2019 |
| President Elect | James Holloway | 2020 |
| Vice-President | Eric Webster | 2021 |
| Secretary-Treasurer | Jim Brosnan | 2020 |
| Editor | Muthu Bagavathiannan | 2020 |
| Immediate Past President | Gary Schwarzlose | 2019 |

### 100b. ADDITIONAL EXECUTIVE BOARD MEMBERS

| | | |
|---|---|---|
| Member-at-Large - Academia | Jason Bond | 2020 |
| Member-at-Large - Industry | Greg Stapleton | 2020 |
| Member-at-Large - Academia | Todd Baughman | 2021 |
| Member-at-Large- Industry | Eric Castner | 2021 |
| Representative to WSSA | John Byrd | 2020 |

### 100c. EX-OFFICIO BOARD MEMBERS

| | | |
|---|---|---|
| Constitution and Operating Procedures | Carroll Johnson | 2019 |
| SWSS Business Manager | Kelley Mazur | |
| Student Representative | Zachary Lancaster | 2019 |
| Web Master | David Kruger | |
| Newsletter Editor | Susan Scott | |

## 101. SWSS ENDOWMENT FOUNDATION

### 101a. BOARD OF TRUSTEES - ELECTED

| | | |
|---|---|---|
| President | Darrin Dodds | 2019 |
| Secretary | Donnie Miller | 2020 |
| | Hunter Perry | 2021 |
| | Gary Schwarzlose | 2022 |
| | Mike Lovelace | 2023 |
| Graduate Student Rep | Maria Zaccaro | 2019 |

### 101b. BOARD OF TRUSTEES - EX-OFFICIO

| | |
|---|---|
| Brent Sellers | Past President of Endowment Foundation Board of Trustees |
| Kelley Mazur | SWSS Business Manager |

102. AWARDS COMMITTEE PARENT (STANDING) - The Parent Awards Committee shall consist of the immediate Past President as Chairperson and each Chair of the Award Subcommittees.

| | | | | | |
|---|---|---|---|---|---|
| Gary Schwarzlose* | 2019 | Joyce Tredaway | 2019 | Ken Smith | 2019 |
| Charlie Cahoon | 2019 | Jay Ferrell | 2019 | David Shaw | 2019 |

The Awards Subcommittees shall consist of six members including the Chair, serving staggered three-year terms with two rotating off each year.

102a. SWSS Fellow Award Subcommittee

| | | | | | |
|---|---|---|---|---|---|
| Ken Smith* | 2019 | Barry Brecke | 2020 | Scott Senseman | 2021 |
| Doug Worsham | 2019 | Renee Keese | 2020 | Brad Minton | 2021 |

102b. Outstanding Educator Award Subcommittee

| | | | | | |
|---|---|---|---|---|---|
| Charlie Cahoon* | 2019 | Jason Norsworthy | 2020 | Nilda Burgos | 2021 |
| Jim Brosnan | 2019 | Tom Mueller | 2020 | Peter Dotray | 2021 |

102c. Outstanding Young Weed Scientist Award Subcommittee

| | | | | | |
|---|---|---|---|---|---|
| Jay Ferrell* | 2019 | Drew Ellis | 2020 | Ramon Leon | 2021 |
| Todd Baughman | 2019 | Daniel Stephenson | 2020 | Hunter Perry | 2021 |

102d. Outstanding Graduate Student Award Subcommittee

| | | | | | |
|---|---|---|---|---|---|
| Joyce Tredaway* | 2019 | Jay McCurdy | 2020 | Sandeep Rana | 2021 |
| Matt Goddard | 2019 | Stanley Culpepper | 2020 | Muthu Bagavathiannan | 2021 |

102e. Excellence in Regulatory Stewardship Award Subcommittee

| | | | | | |
|---|---|---|---|---|---|
| David Shaw * | 2019 | J. D. Green | 2020 | David Jordan | 2021 |
| Matt Goddard | 2019 | Larry Walton | 2020 | | |

103. COMPUTER APPLICATION COMMITTEE (STANDING)

| | | | | | |
|---|---|---|---|---|---|
| Shawn Askew * | 2019 | Jim Brosnan | 2020 | Shandrea Stallworth | 2020 |
| Dan Reynolds * | 2019 | Matt Goddard | 2020 | Kelley Mazur | |

104. CONSTITUTION AND OPERATING PROCEDURES COMMITTEE (STANDING)

| | |
|---|---|
| W. Carroll Johnson * | 2019 |

105. FINANCE COMMITTEE (STANDING) - Shall consist of the Vice President as Chair and President-Elect, Secretary-Treasurer, Chair of Sustaining Membership Committee, and others as the President so chooses, with the Editor serving as ex-officio member.

| | |
|---|---|
| Eric Webster * | 2020 |
| James Holloway | 2019 |
| Jacob Reed | 2019 |
| Larry Steckel | 2019 |
| Jim Brosnan | 2020 |
| Muthu Bagavathiannan | 2020 |
| Phil Banks | 2020 |
| John Schultz | 2021 |
| Tom Barber | 2021 |
| Kelley Mazur – SWSS Business Manager | |

106. GRADUATE STUDENT ORGANIZATION

| | | |
|---|---|---|
| President | Zachary Lancaster | Arkansas |
| Vice President | Jordan Craft | Virginia Tech |
| Secretary | Harrison Ferebee | Virginia Tech |
| Weed Resistance & Technology Committee | Blake Young | Texas A&M |
| Endowment Committee | Maria Zaccaro | Arkansas |
| Social Chair/Student Program Committee | Seth Abugho | Texas A&M |

107. WEED RESISTANCE AND TECHNOLOGY STEWARDSHIP (STANDING)

| | | | | |
|---|---|---|---|---|
| Alabama | J. Tredaway | | North Carolina | D. Spak |
| Arkansas | N. French<br>J. Norsworthy | | Oklahoma | T. Baughman |
| Florida | B. Brecke | | Puerto Rico | W. Robles |
| Georgia | E. Prostko<br>C. Johnson | | South Carolina | M. Cutulle |
| Kentucky | J. Green | | Tennessee | J. Holloway<br>L. Steckel<br>A. Mills |
| Louisiana | D. Stephenson | | Texas | P. Dotray |
| Mississippi | H. Perry **<br>F. Carey *<br>J. Bond | | Virginia | S. Askew |
| Missouri | M. Horak | | Grad. Student Representative | B. Young |

108. HISTORICAL COMMITTEE (STANDING)

| | |
|---|---|
| John Byrd * | 2021 |
| Andy Kendig | 2019 |

109. LEGISLATIVE AND REGULATORY COMMITTEE (STANDING)

| | | |
|---|---|---|
| Angela Post * | Chair | 2020 |
| Lee Van Wychen | (ad hoc) WSSA Science Policy Director | 2019 |
| Donn Shilling | (ad hoc) Chair of the WSSA Science Policy Committee | 2019 |
| Greg Kruger | (ad hoc), EPA liaison | 2019 |
| Jason Bond | Member-at-Large - Academia | 2020 |
| Greg Stapleton | Member-at-Large - Industry | 2020 |
| Todd Baughman | Member-at-Large – Academia | 2021 |
| Eric Castner | Member-at-Large - Industry | 2021 |
| Gary Schwarzlose | Past President | 2019 |

110. LOCAL ARRANGEMENTS COMMITTEE - (STANDING)

| | | |
|---|---|---|
| Todd Baughman * | 2019 | Oklahoma City, OK (SW) |
| Darin Dodds | 2020 | Biloxi, MS (MS) |
| Jim Brosnan | 2021 | (SE) |

111. LONG-RANGE PLANNING COMMITTEE (STANDING) –
Shall consist of the Past-Past President (chair), Past-President, President, and President-Elect.

| | |
|---|---|
| Peter Dotray | 2019 |
| Gary Schwarzlose | 2020 |
| Bob Scott | 2021 |
| James Holloway | 2022 |

112. MEETING SITE SELECTION COMMITTEE (STANDING) - Shall consist of six members and the SWSS Business Manager. The members will be appointed by the President on a rotating basis with one member appointed each year and members shall serve six-year terms. The Chairmanship will rotate to the senior committee member from the geographical area where the meeting will be held.

| | | | | | |
|---|---|---|---|---|---|
| Eric Webster (SW) | 2019 | Angela Post (SE) | 2021 | Andrew Price (MS) | 2023 |
| James Holloway (MS) | 2020 | Luke Etheredge (SW) | 2022 | Jim Brosnan (SE) | 2024 |
| Kelley Mazur – SWSS Business Manager | | | | | |

113. NOMINATING COMMITTEE (STANDING) - Shall be composed of the Past President as Chair.

| | |
|---|---|
| Gary Schwarzlose * | 2019 |

114. PROGRAM COMMITTEE - 2019 MEETING (STANDING)

| | |
|---|---|
| James Holloway * | 2019 |
| Eric Webster | 2020 |

115. PROGRAM COMMITTEE - 2020 MEETING (STANDING)

| | |
|---|---|
| Eric Webster * | 2020 |
| Elected VP (in-coming) | 2021 |

116. RESEARCH COMMITTEE (STANDING)

| | | | | |
|---|---|---|---|---|
| Eric Webster * | 2019 | | | |
| Alabama | J. Tredaway | | North Carolina | W. Everman |
| Arkansas | N. Burgos | | Oklahoma | T. Baughman |
| Florida | P. Dittmar | | Puerto Rico | W. Robles |
| Georgia | E. Prostko | | South Carolina | M. Marshall |
| Kentucky | | | Tennessee | L. Steckel |
| Louisiana | D. Miller | | Texas | P. Dotray |
| Mississippi | J. Byrd | | Virginia | S. Askew |
| Missouri | K. Bradley | | | |

117. RESOLUTIONS AND NECROLOGY COMMITTEE (STANDING)

| | | | | | |
|---|---|---|---|---|---|
| David Black * | 2021 | Ryan Edwards | 2020 | Michael Flessner | 2019 |

118. SOUTHERN WEED CONTEST COMMITTEE (STANDING) - Open to all SWSS members

| | | | | |
|---|---|---|---|---|
| Mississippi | D. Dodds ** | | Missouri | J. Heiser |
| Alabama | J. Tredaway | | North Carolina | W. Everman |
| Arkansas | N. Burgos | | Oklahoma | T. Baughman |
| Florida | G. MacDonald | | South Carolina | M. Cuttlle |
| Georgia | W. Vencill | | Tennessee | T. Mueller<br>D. Ellis * |
| Kentucky | | | Texas | P. Dotray |
| Louisiana | E. Webster | | Virginia | S. Askew |
| Mississippi | D. Reynolds | | Puerto Rico | W. Robles |
| Ad Hoc – Current | Bruce Kirksey | | Ad Hoc - Previous | Cheryl Dunne |

119. STUDENT PROGRAM COMMITTEE (STANDING)

| | | |
|---|---|---|
| Charlie Cahoon * | 2019 | |
| Seth Abugho | 2019 | Graduate Student Organization Rep. – Ex-officio member |
| Kelly Backscheider | 2020 | |
| Peter Eure | 2021 | |

120. SUSTAINING MEMBERSHIP COMMITTEE (STANDING)

| | | | | | |
|---|---|---|---|---|---|
| Jacob Reed * | 2019 | Kelly Backscheider | 2020 | Bob Scott | 2021 |
| Peter Eure | 2019 | Tom Barber | 2020 | Peter Dotray | 2021 |

121. CONTINUING EDUCATION UNITS COMMITTEE (SPECIAL)

| | | | | |
|---|---|---|---|---|
| AL - Steve Li | 2019 | | NC - Bobby Walls | 2019 |
| AR - Tom Barber | 2019 | | NC - Katie Jennings | 2019 |
| FL - Calvin Odero | 2019 | | OK - Todd Baughman | 2019 |
| GA - Scott Tubbs | 2019 | | SC - Alan Estes * | 2019 |
| KY - Mike Harrell | 2019 | | TN - Drew Ellis | 2019 |
| LA - Jeff Ellis | 2019 | | TX - Jacob Reed | 2019 |
| MS -Te-Ming Paul Tseng | 2019 | | VA – Shawn Askew | 2019 |

## Sustaining Members of the SWSS

ADAMA
Agricenter International
AMVAC Chemical Corp.
BASF Corporation
Bayer CropScience
Bayer Seeds Group
Bellspray, Inc.
Diligence Technologies
Dow AgroSciences
DuPont Crop Protection
Farm Press Publications
FMC
Greenleaf Technologies
Gylling Data Management Inc.
Helena Chemical Co.
K-I Chemical U.S.A. Inc.
Monsanto Company
Practical Weed Consultants, LLC
Syngenta Crop Protection
The Scotts Company
United Phosphorus, Inc.
Valent USA Corp.
Weed Systems Equipment
Winfield United
TeeJet Technologies - Spraying Systems Co.

IMI INTERACTIVE MANAGEMENT, INC.
Professional Association Management

Last month, we announced that Tara Steinke was leaving IMI/SWSS to spend more time with her family. Tara's last day at IMI was April 13, 2018. While we will greatly miss Tara and all that she has contributed to the Southern Weed Science Society, we welcome our new Business Manager, Kelley Mazur.

Kelley attended the University of Nevada, Las Vegas for general studies before starting her career at Wynn Las Vegas Resorts in Event Planning, Marketing and Hospitality. It was at the Wynn that she gained her 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. Her proficiencies grew to managing finances, multiple databases and coordinating with a board full of passionate individuals to drive forward the mission of the organization.

She has recently moved to Northglenn, Colorado, where she was born. She loves hiking and enjoying the natural beauty of her home state. Kelley is anxious to utilize her skill set and assist SWSS in realizing their goals and organizational achievements. You can reach Kelley Mazur at 303-327-8016 or email kelley@imigroup.org.

**Thank you to all the participants and attendees at the SWSS 2018 Turf Symposia**

## In Memorium

It is with sadness and regret that we announce the passing of Dr. Timothy R. Murphy, Professor Emeritus and Extension Agronomist- Weed Science with the University of Georgia at the Griffin Campus. Dr. Murphy died on 13 April 2018 at the age of 66.

Dr. Murphy was born in Knoxville, Tennessee on 12 August 1951. He was preceded in death by his parents, Richard Dennis Murphy and Frances Juanita Blazier Murphy. He received his B. S. from Berea College in 1975, his M. S. and PhD in 1979 and 1985, respectively, from Clemson University. Dr. Murphy was hired by the University of Georgia in 1985 and retired in 2007.

Dr. Murphy served as a technical specialist for weed science programs in turfgrasses, roadsides, non-cropland, and forages in Georgia. Dr. Murphy was the first extension specialist to be housed at the Griffin Campus and quickly established a stellar reputation of service to county agents, golf course managers, homeowners, ranchers, and various agencies responsible for roadside maintenance. An area of personal interest and excellence was weed identification. Dr. Murphy was among the best in plant identification and universally considered to be the in-house expert. This interest led to him co-authoring several superb weed identification reference books that were the classic example of successful multi-institutional collaborations among several land-grant universities.

Dr. Murphy was instrumental in the implementation of in-service training sessions for Georgia County agents. These training sessions were conducted throughout the state on a recurring basis and featured quality weed science instruction in many different settings; agronomic crops, horticultural crops, aquatics, turfgrass, non-cropland, and (of course) weed identification where his weed ID quizzes were legendary. Dr. Murphy was part of the team of Georgia weed scientists who hosted the 1993 Southern Weed Science Society Weed Contest.

The highest award for a University of Georgia faculty member in the College of Agricultural and Environmental Sciences is the D. W. Brooks Award for Excellence in Extension, which Dr. Murphy received in 1995. Dr. Murphy's stature and impact as a weed scientist were recognized by the Weed Science Society of America (WSSA) in 1999 by him receiving the Outstanding Extension Award. Dr. Murphy was elected to serve on the Southern Weed Science Society (SWSS) Board of Directors as WSSA representative in 2002. His long-term service to the SWSS and the weed science discipline were recognized by the SWSS in 2009 by him receiving the Distinguished Service Award, which is now considered to be the Fellow Award. As recently as November 2017, Dr. Murphy received the Lifetime Achievement Award from the Georgia Crop Production Alliance. Dr. Murphy clearly made a difference in the weed science discipline and many aspects of agriculture benefited from his service.

Dr. Murphy was always approachable, even when the demands of his career consumed every single minute of the work day. His service, availability, sense of humor, and humility continued long after he retired from the University of Georgia. For many years, he worked as a volunteer in maintenance of the physical plant at First Baptist Church of Griffin. Additionally, he volunteered as carpenter in the construction of houses built by Habitat for Humanity in the Griffin area.

While Dr. Murphy was an accomplished agricultural professional, he was first and foremost a family man. He is survived by his wife, Marguerite J. Murphy; daughter, Molly Murphy; sisters, Alice Murphy Garrison, Helen Murphy Payton, Jeanie Murphy Hogg; brothers, Michael Murphy, Jim Murphy; and nieces and nephews.

A memorial service for Dr. Murphy was held Wednesday, 18 April 2018 at 1:00 pm at First Baptist Church, 106 W. Taylor Street, Griffin. Following the services, the family will receive friends in the church parlor. In lieu of flowers, please consider making a contribution to First Baptist Church, Building Fund, P. O. Box 908, Griffin, Georgia 30224 or to the Griffin Habitat for Humanity at http://www.griffinhabitat.com in memory of Dr. Murphy.

## Meetings of the National and Regional Weed Science Societies

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
Mar. 11 - 14, 2019 Western Society of Weed Science (WSWS), Denver, CO www.wsweedscience.org


For more information Contact Dr. Tom Mueller (tmueller@utk.edu) or click this link to attend: https://attendee.gotowebinar.com/register/6928950257794959 37

## People and Places

Wykle Greene completed his MS degree at Auburn University under the direction of Dr. Joyce Tredaway in May 2018. He will be pursuing his Ph.D. at Virginia Tech under the direction of Dr. Micheal Flessner.

Jason Norsworthy was named the Outstanding Researcher Award at the Weed Science Society of America meetings and was also named a Fellow in the Society.

To see more photos from Awards banquet and the winners of the Poster and Oral Presentation Contests go to https://photos.app.goo.gl/lyJXFehH19cNKseg2

The 2018 SWSS Summer Weed Contest will be held August 8th at the Memphis AgriCenter. Attached are the rules for the 2018 contest. Please pay particular attention to deadline dates for entering teams as well as supplying names of participants. If you have any questions do not hesitate to contact me at any time.

Thank you and we look forward to seeing you in Memphis in August.

## Position Vacancy Announcements

Assistant/Associate Proferror Weed Science Iowa State University. Click Link for Details:
https://www.iastatejobs.com/postings/32503

Assistant/Associate Professor – Precision Agriculture
University of Arkansas Division of Agriculture Cooperative Extension Service, Jonesboro, AR
Click link for deatils: https://jobs.uaex.edu/postings/6634

## Weed Contest: From the USA to Brazil

*Nilda Burgos*

The Weed Contest is a long standing tradition of annual competition of Weed Science students from various universities in the Southern Weed Science Society, USA since the early 1980s. It has since been practiced also by other regional Weed Science Societies of the US (i.e. North Central and the Northeast) and a National Weed Olympics has been held twice since 2011. This exciting and highly challenging educational activity has now taken root in Brazil, thanks to the initiative and leadership of Dr. Carlos Schaedler, a former graduate student from the Federal University of Pelotas (UFPEL), Rio Grande do Sul. Dr. Schaedler did his one-year sandwich Ph.D. program at the University of Arkansas, Fayetteville, USA in 2010-2011 under the mentorship of Dr. Nilda Roma Burgos. During his stay at the University of Arkansas, Carlos participated in the Weed Contest and placed in the top 10. The value of this activity inspired him to start the same in Brazil. Thus, the Brazilian Weed Contest was born in 2015. This has been made possible by the collaboration among at least eight universities from various states across the country, the Brazilian Weed Science Society, and the private agricultural industry led by Dow AgroSciences.

The third National Brazilian Weed Contest was held on November 20, 2017 at the Dow AgroSciences research station in Mogi Mirim, Sao Paolo State. Dr. Burgos, President of the International Weed Science Society, was invited to witness the event. The contest is comprised of five categories: 1) weed identification, 2) herbicide identification by symptomology on crops and weeds, 3) herbicide sprayer team calibration, 4) solving mathematical problems pertaining to pesticide application, 5) diagnosing and solving farmer problems, and 6) mystery event. For the last event, the contest organizers conducted a quiz bowl. Dr. Burgos is one of the coaches of University of Arkansas Weed Team since 1999, first with Dr. Dick Oliver (now Professor Emeritus) and later with Dr. Jason Norsworthy.

***Photos from the Brazillian Weed Contest. Clockwise from upper left: Symptomology plots, overview Reviewing crop and weed response to herbicides. Mystery event – Quiz Bowl. Reviewing farmer problem scenarios.***

**SWSS WEED CONTEST**
**Memphis AgriCenter – Memphis, TN**
**Primary contact: Bruce Kirksey – bkirksey@agricenter.org**
**August 8, 2018**

**RULES, REGULATIONS, AND GUIDELINES**

**Purpose:**

The purpose of the Southern Weed Contest is to provide an educational experience from which undergraduate and graduate students in Southern Universities can broaden their applied skills in Weed Science. The contest provides an opportunity for Weed Science students be exposed to weed scientists from other universities and industry, apply what they have learned using a contest to measure their capabilities, as well as to socialize. It is hopeful that the contest will increase the visibility of Weed Science and intensify the interest level of those participating in the discipline of Weed Science.

**Eligibility:**

Any undergraduate or graduate student currently enrolled and pursuing a B.S., M.S., or Ph.D. degree is eligible to participate. Each graduate team will consist of three or four members, composed of (a) graduate, (b) undergraduate, or (c) a combination of graduate and undergraduate students. If undergraduates are part of a graduate team, those students are subject to the same guidelines as the graduate students. If a university does not have sufficient students for a team, up to two students may enter as individuals. Universities are allowed to enter multiple teams. All students will compete using the same contest material. A team may also bring three alternates.
Alternate scores will only count toward individual awards. Team scores will be determined from averaging the individual scores from each team member; unless a three-person team is entered. Then the three highest individuals will be averaged. A maximum of two coaches per team can attend the contest. Students will be allowed to participate in the contest five times as a team member or alternate; however, the student can only participate as a team member three times. Undergraduate participation will not count against the five-time rule. **All teams must enter the contest by May 1, 2018. Names of team members and alternates must be provided by July 1, 2018 to Darrin Dodds: dmd76@pss.msstate.edu**

**Awards:**

**TEAM**-The highest average team score from all events will determine the overall contest winner. A traveling **"Broken Hoe"** trophy will be presented to the overall

winner and will rotate yearly. The first place team will receive a check for $500 and each member and coach will receive an engraved plaque. The second and third place teams will receive checks of $300 and $200, respectively. Each will also receive an engraved plaque as described above.

**INDIVIDUAL**-The highest combined score from all events, except team sprayer calibration, will determine the overall-winning individual. The top 10 individuals will be recognized and awarded a plaque. The winning individual will receive a check for $400. Individuals finishing second, third, fourth, and fifth will receive checks from $250, $100, $75, and $50, respectively. The high individual in Weed Identification, Crop Response to Herbicides, Sprayer Calibration Problem Set, and Crop/Weed Situation and Recommendations will be recognized and awarded a plaque. If at least four undergraduate students participate in the contest, the top three individual scores will be recognized with first, second, and third place plaques and checks for $200, $100, and $50, respectively.

**Events:**

**The contest will consist of four major events plus a mystery event. Inclement weather may delay the contest; however, it will continue as soon as conditions permit.**

While contestants are briefed on contest details during breakfast, coaches will be taken to the contest site to review all aspects of the contest. Coaches will review the six phases of the contest: weed identification, herbicide identification, sprayer and written calibration, field problem solving, and mystery event. The coaches will then be taken to a neutral site for breakfast. No contact, electronic or otherwise, with contestants will be allowed until all events have been completed. A committee meeting will also be conducted, if needed, either the day before the contest or on the day of the contest.

1. **Weed Identification** (100 points)

From the contest weed identification list of 100 weeds and weed seeds/tubers, the host will pick a total of 50 weeds and/or weed seeds to be identified. Plants will be grown in a field weed nursery or pots and may be in any stage of growth or development within reason. A complete weed identification list is provided with the correct spelling of each species (Table 1). Students will be responsible for the correct WSSA common and scientific name and spelling (Weed Science Composite List of Weeds - 2011). **Undergraduate students will only use the common names.** The fall preceding the contest the host should evaluate its weed seed supply and obtain additional seeds/tubers if needed so that an excellent representation of the weed species can be selected for identification. **It is important to utilize as many plant species as possible.** The plants will be grown in sufficient numbers so that adequate samples are available so that 30 to 70 contestants can have specimens for identification. The contestants will be allowed ample time to identify each specimen. The percentage of samples will range from 50 to 80% weeds and from 50 to 20% seeds. Uncontaminated weed seed and plant samples are essential for effective identification. **Pure samples are essential.** The contestant's score will be figured as follows: 2 points for each correctly identified species (1 point for common name and 1 point for scientific name with 0.5 points for Genus and 0.5 points for species) x 50
= 100 points. **If names are not spelled correctly or capitalized correctly, they are wrong.**

**Likewise, answers must be in the correct column.** Teams will not be supplied weed seed for study, but rather rely on their own training resources.
However, teams are encouraged to expand/improve their training resources through contacts with other weed scientists. This approach may better reflect individual and team preparation for the contest.

## 2. **Calibration** (100 points)

This event consists of two sections: an individual written test worth 50 points and a team sprayer calibration event worth 50 points.

The individual written test will cover problems and factual information about sprayer and seed treatment calibration of all types; the written portion will be scored as an individual and team event (50 points per person). The host should take particular care to insure all banded application and skip-row calibration problems are stated clearly. Individual team members and alternates will be given a maximum of 1 hour to complete the written exam. **The host will provide calculators and students will be allowed to use their own.** The three or four individual team member scores will be added and divided by the number of individuals on the team to give the number of points out of 50 for the team score.

In the team section, the host will provide a hands-on calibration activity that focuses on team, rather than individual performance. Students should have practical calibration knowledge for air blast sprayers, tractor sprayers, backpack sprayers, granular applicators, greenhouse spray chambers, etc. **Differences in time for the competition will count no more than 40% of the overall score. Accuracy of calibration is critical.**

To determine final team score for the calibration event, the number of points scored out of 50 obtained in the team event will be added to the average score of the three or four high team members from the individual calibration problems for a maximum possible of 100 points. Reference material for the individual problems will be Chapter 23 of Applied Weed Science by Ross and Lembi (2009); Circular 1192 - Equipment and Calibration; Low-Pressure Sprayers, and Circular 1240 - Equipment and Calibration: Granular Applicators, both by Bode and Pearson (University of Illinois); Roth, L.O. and H.L. Fields, eds. 1991. Introduction to Agricultural Engineering: A Problem Solving Approach, Second Edition, New York: Chapman and Hall; Aerial Application Handbook for Applicators by Dennis K. Kuhlman, Kansas State University; Research Methods in Weed Science, 3rd ed. SWSS 1986; Physiology of Herbicide Action. M.D. Devine, S. O. Duke, and C. Fedtke, 1993; Herbicide Handbook. WSSA 9th ed. 2007, and various unit conversions.

## 3. **Crop Response to Herbicides** (100 points)

This is an area of extreme difficulty for the students. **Thus, the host must have available a sprinkler irrigation system so that residual herbicides may be activated and weeds and crops maintained in an active growth stage for postemergence treatments.** A list of possible crops and herbicides with rate and method of application are provided in Table 2. The test must contain at least 6 crops and 6 weeds and will be planted and treated with a wide range of preemergence and postemergence herbicides from the list. Each herbicide plot will contain a 1X rate of the unknown herbicide. It is suggested that the test be planted 4 to 5 weeks prior to the

contest, with postemergence herbicides being applied 10 to 14 days prior to the contest. Each contestant will be required to identify the unknown herbicides by WSSA-approved chemical family and common name by observation of crop and weed responses. Both names will be given equal credit; in other words missing family or common name will be half right. Put the letter for the correct family listed above, and follow it with the correctly spelled common name. For the aryloxyphenoxy or cyclohexane family, the host may choose the specific product.
There should be from 10 to 15 plots. Herbicide plots may be duplicated and check plots can be utilized. It would be of great benefit to the students if they could be led back through the plots following the event. **Students will not be allowed to pull any portion of the plants in the plots. If plants are pulled, the student will lose the points for that plot.**

4. **Crop/weed Situation and Recommendations** (100 points)

Contestants will be required within 15 minutes to determine and evaluate a crop/weed situation and recommend the most effective legal remedy to the problem. **Each contestant will have two field problems to solve.** Recommendations must comply with the label of each herbicide recommended. Students should give consideration to such factors as stage of growth, crop tolerance, climatological factors, agricultural spraying procedures, weed control, economics, and impact upon the environment. The host will determine the best answer considering all alternatives for a situation, although several possible answers may be correct. The latest Federal (Section 3) or State (Section 24C) labels of the product constitutes legal control. The event will be conducted as a "role-play" situation and the potential problem will be in one of the crops on the problem-solving sheet. Also, the potential herbicide and weed problem will involve only the listed herbicides and weeds on the predetermined problem-solving sheet. The contestant will be asked to assume the role of a chemical company representative, state extension specialist, or independent crop consultant when dealing with the farmer and scored as follows:

5 points - proper approach to farmer
20 points - understanding and solving problem
12.5 points - recommendations for this year's crop
12.5 points - recommendations for next year's crop

Each team will be divided at random into two groups in order to handle one of two different problem situations. Following completion of the first problem, the groups will switch problems and repeat the procedure. **Each participant will evaluate the same two problems.** Alternates and other individuals will be equally divided between the two groups. The assigned judge and farmer will independently score each participant from a predetermined scoring sheet with assigned points for each statement, compare scores, and adjust if necessary. **Prior to the contest, judges and farmers will be tested to ensure that the scorers will give equivalent scores within each individual field problem**. Each field problem will be worth 50 points and to obtain the participants score, the two scores will be added for a maximum of 100 points.

5. **Mystery Event** (15 to 20 points)

This team or individual event will be an agronomic related problem and the contestants will not be advised of the area to study prior to the contest. The mystery event will count toward the

team score and individual scores.

**Scoring**

Overall team ranking of each respective school should be provided to the team coach the night of the banquet following the event. Individual score sheets including their respective ranking against all other competitors should be distributed back to the contestants or their coach at the end of the banquet. An answer key should also be distributed to the team coach.

Scores should be tabulated using a scoring format as listed in the examples below. Each phase of the contest will be scored equally (100 pts. each) except for the mystery event (15 or 20 pts) for a total of 415 or 420 points per team. Examples are:

A. All teams with four individuals.

| | | Events | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Field Problem | | | Calibration | | | | | |
| Super University | ID | Crop/Weed Response | 1 | 2 | Avg. | Team | Ind. | Myst. | Score | Ind. | Team Placing |
| John Doe | 86 | 60 | 25 | 19 | 44 | -- | 45 | 5 | 240 | 9 | |
| Bill Smith | 80 | 65 | 47 | 31 | 78 | -- | 35 | 5 | 263 | 5 | |
| Jane Doe | 95 | 75 | 35 | 25 | 60 | -- | 45 | 0 | 275 | 1 | |
| Roy James | 63 | 50 | 43 | 43 | 86 | -- | 45 | 3 | 247 | 7 | |
| Total | 324.0 | 250.0 | -- | -- | 268 | -- | 170 | 13 | | | |
| Team Avg. | 81.0 | 62.5 | -- | -- | 67 | 40 | 42.5 | 3.25 | | | |
| Team Total | 296.25 | | | | | | | | | | 3 |
| Alternates | | | | | | | | | | | |
| Pat Ray | 80 | 60 | 31 | 201 | 51 | -- | 45 | 5 | 241 | 8 | |
| Jim Jones | 65 | 45 | 27 | 18 | 45 | -- | 50 | 0 | 205 | 20 | |

B. Mixed three and four individual teams (if teams with three individuals attend).

| | | Events | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Field Problem | | | Calibration | | | | | |
| Super University | ID | Crop/Weed Response | 1 | 2 | Avg. | Team | Ind. | Myst. | Score | Ind. | Team Placing |
| John Doe | -- | -- | -- | -- | -- | -- | -- | -- | 240 | 9 | |
| Bill Smith | 80 | 65 | 47 | 31 | 78 | -- | 35 | 5 | 263 | 5 | |
| Jane Doe | 95 | 75 | 35 | 25 | 60 | -- | 45 | 0 | 275 | 1 | |
| Roy James | 63 | 50 | 43 | 43 | 86 | -- | 45 | 3 | 247 | 7 | |
| Total | 238.0 | 190.0 | -- | -- | 224 | -- | 125 | 8 | | | |
| Team Avg. | 79.33 | 63.33 | -- | -- | 74.6 | 40 | 41.67 | 2.67 | | | |
| Team Total | 301.67 | | | | | | | | | | 3 |
| Alternates | | | | | | | | | | | |
| Pat Ray | 80 | 60 | 31 | 20 | 51 | -- | 45 | 5 | 241 | 8 | |
| Jim Jones | 65 | 45 | 27 | 18 | 45 | -- | 50 | 0 | 205 | 20 | |

Alternates and low individuals of four member teams will not be scored as part of a team, but can win individual prizes.

**Contest Committee:**

All coaches and individuals within academia, research, and industry, as well as potential contest hosts are invited to serve on the committee. On the morning of the contest, prior to contestants entering the events, individuals from the host location and all committee members will review each event and last minute corrections will be made and be the authority for all questions relating to the contest. If questions arise that cannot be resolved through interpretation of the standing rules or cannot be resolved through communication with the committee chairman or members of the committee, the contest host has the authority to make the final decision in the best interest of the contest.

**Expenses:**

Each university will provide its own transportation to and from the contest and cover all expenses incurred during travel. The host will provide meals the evening before and the day of the contest. The weed contest committee will provide the prize money and the plaques.

**Location:**

The Southern Weed Contest will be held at any facility within the Southern Weed Science Region with the capability of providing all the designated events.

**Dishonesty:**

All coaches are charged with ensuring that teams abide by rules of the contest, and that no team gains an unfair advantage. This includes, but is not limited to, cheating. Cheating is defined as a dishonest violation of rules as determined by the coaches attending the contest. A committee made up of all coaches attending the contest will deal with acts related to cheating. A team and/or individual that does not abide by the rules of the contest will be disqualified and will automatically receive last place at the contest. Teams are not allowed to visit contest site 30 days prior to contest without permission of host. **All contestants' cell phones, iPad's, or computers will be collected by team coaches and bagged by individual name when arriving at the contest site on the morning of the event.**

**Table 1. 2016 SWSS WEED CONTEST WEED LIST**

| **Common name** | **Genus** | **Species** |
|---|---|---|
| velvetleaf | *Abutilon* | *theophrasti* |
| hophornbeam copperleaf | *Acalypha* | *ostryifolia* |
| northern jointvetch | *Aeschynomene* | *virginica* |
| **alligatorweed** | ***Alternanthera*** | ***philoxeroides*** |
| Palmer amaranth | *Amaranthus* | *palmeri* |
| **redroot pigweed** | ***Amaranthus*** | ***retroflexus*** |
| **spiny amaranth** | ***Amaranthus*** | ***spinosus*** |
| **tall waterhemp** | ***Amaranthus*** | ***tuberculatus*** |
| common ragweed | *Ambrosia* | *artemisiifolia* |
| giant ragweed | *Ambrosia* | *trifida* |
| purple ammannia | *Ammannia* | *robusta* |
| broomsedge | *Andropogon* | *virginicus* |
| trumpetcreeper | *Campsis* | *radicans* |
| musk thistle | *Carduus* | *nutans* |
| smellmelon | *Cucumis* | *melo* |
| southern sandbur | *Cenchrus* | *echinatus* |
| ground spurge | *Chamaesyce* | *humistrata* |
| spotted spurge | *Chamaesyce* | *maculata* |
| common lambsquarters | *Chenopodium* | *album* |
| bull thistle | *Cirsium* | *vulgare* |
| Benghal dayflower | *Commelina* | *benghalensis* |
| spreading dayflower | *Commelina* | *diffusa* |
| field bindweed | *Convolvulus* | *arvensis* |
| horseweed | *Conyza* | *canadensis* |
| showy crotalaria | *Crotalaria* | *spectabilis* |
| woolly croton | *Croton* | *capitatus* |
| tropic croton | *Croton* | *glandulosus* var. *septentrionalis* |
| bermudagrass | *Cynodon* | *dactylon* |
| yellow nutsedge | *Cyperus* | *esculentus* |
| purple nutsedge | *Cyperus* | *rotundus* |
| rice flatsedge | *Cyperus* | *iria* |
| crowfootgrass | *Dactyloctenium* | *aegyptium* |
| jimsonweed | *Datura* | *stramonium* |

| | | |
|---|---|---|
| Florida beggarweed | *Desmodium* | *tortuosum* |
| **smooth crabgrass** | ***Digitaria*** | ***ischaemum*** |
| large crabgrass | *Digitaria* | *sanguinalis* |
| Virginia buttonweed | *Diodia* | *virginiana* |
| junglerice | *Echinochloa* | *colona* |
| barnyardgrass | *Echinochloa* | *crus-galli* |
| eclipta | *Eclipta* | *prostrata* |
| goosegrass | *Eleusine* | *indica* |
| southwestern cupgrass | *Eriochloa* | *acuminata* |
| wild poinsettia | *Euphorbia* | *heterophylla* |
| Carolina geranium | *Geranium* | *carolinianum* |
| ground ivy | *Glechoma* | *hederacea* |
| common sunflower | *Helianthus* | *annuus* |
| **ducksalad** | ***Heteranthera*** | ***limosa*** |
| **hydrilla** | ***Hydrilla*** | ***verticillata*** |
| cogongrass | *Imperata* | *cylindrica* |
| red morningglory | *Ipomoea* | *coccinea* |
| ivyleaf morningglory | *Ipomoea* | *hederacea* |
| pitted morningglory | *Ipomoea* | *lacunosa* |
| bigroot morningglory | *Ipomoea* | *pandurata* |
| tall morningglory | *Ipomoea* | *purpurea* |
| palmleaf morningglory | *Ipomoea* | *wrightii* |
| smallflower morningglory | *Jacquemontia* | *tamnifolia* |
| **green kyllinga** | ***Kyllinga*** | ***brevifolia*** |
| henbit | *Lamium* | *amplexicaule* |
| Amazon sprangletop | *Leptochloa* | *panicoides* |
| bearded sprangletop | *Leptochloa* | *fusca var. fascicularis* |
| tall fescue | *Lolium* | *arundinaceum* |
| Italian ryegrass | *Lolium* | *perenne* ssp. *multiflorum* |
| carpetweed | *Mollugo* | *verticillata* |
| cutleaf evening-primrose | *Oenothera* | *laciniata* |
| red rice | *Oryza* | *sativa* |
| yellow woodsorrel | *Oxalis* | *stricta* |
| fall panicum | *Panicum* | *dichotomiflorum* |
| torpedograss | *Panicum* | *repens* |

| | | |
|---|---|---|
| Dallisgrass | *Paspalum* | *dilatatum* |
| cutleaf groundcherry | *Physalis* | *angulata* |
| clammy groundcherry | *Physalis* | *heterophylla* |
| buckhorn plantain | *Plantago* | *lanceolata* |
| annual bluegrass | *Poa* | *annua* |
| prostrate knotweed | *Polygonum* | *aviculare* |
| Pennsylvania smartweed | *Polygonum* | *pensylvanica* |
| ladysthumb | *Polygonum* | *persicaria* |
| common purslane | *Portulaca* | *oleracea* |
| wild radish | *Raphanus* | *raphanistrum* |
| Florida pusley | *Richardia* | *scabra* |
| curly dock | *Rumex* | *crispus* |
| sicklepod | *Senna* | *obtusifolia* |
| coffee senna | *Senna* | *occidentalis* |
| hemp sesbania | *Sesbania* | *herbacea* |
| giant foxtail | *Setaria* | *faberi* |
| yellow foxtail | *Setaria* | *pumila* |
| green foxtail | *Setaria* | *viridis* |
| arrowleaf sida | *Sida* | *rhombifolia* |
| prickly sida | *Sida* | *spinosa* |
| horsenettle | *Solanum* | *carolinense* |
| silverleaf nightshade | *Solanum* | *elaeagnifolium* |
| eastern black nightshade | *Solanum* | *ptychanthum* |
| lawn burweed | *Soliva* | *sessilis* |
| johnsongrass | *Sorghum* | *halepense* |
| common chickweed | *Stellaria* | *media* |
| dandelion | *Taraxacum* | *officinale* |
| puncturevine | *Tribulus* | *terrestris* |
| broadleaf signalgrass | *Urochloa* | *platyphylla* |
| Texas millet | *Urochloa* | *texana* |
| common cocklebur | *Xanthium* | *strumarium* |

*** Bold -- plants only**

**Table 2. 2016 SOUTHERN WEED CONTEST CROP AND WEED RESPONSE TO HERBICIDES**

| Crops* | | Weeds | |
|---|---|---|---|
| 1. cotton | 6. southern pea | 1. broadleaf signalgrass | 7. Palmer amaranth |
| 2. field corn | 7. soybean | 2. ivyleaf morningglory | 8. pitted morningglory |
| 3. grain sorghum | 8. sunflower | 3. fall panicum | 9. prickly sida |
| 4. peanut | 9. squash/zucchini | 4. hemp sesbania | 10. seedling johnsongrass |
| 5. rice | 10. sweet potato | 5. large crabgrass | 11. velvetleaf |
| | | 6. barnyardgrass | 12. sicklepod |

*At least 6 crops and 6 weeds must be included

| Potential Herbicide Families and Herbicides | |
|---|---|
| **Amide**<br>1. propanil (4.0 lb ai/A POST) | **Isoxazoline**<br>12. pyroxasulfone (0.106 lb ai/A PRE) |
| **Sulfonanilide**<br>2. cloransulam-methyl (0.0394 lb ai/A PRE) | **Phenoxy**<br>13. 2,4-D (0.5 lb ae/A POST) |
| **Benzoic acid**<br>3. dicamba (0.25 lb ai/A POST) | **N-Phenylphthalimide**<br>14. flumioxazin (0.064 lb ai/A PRE) |
| **Bipyridylium**<br>4. paraquat (0.5 lb ai/A POST) + NIS | **Phosphinic acid**<br>15. glufosinate (0.54 lb ai/A POST) + NIS |
| **Chloroacetamide**<br>5. *S*-metolachlor (1.25 lb ai/A PRE) | **Pyrimidinedione**<br>16. saflufenacil (0.0223 lb ai/A POST) + MSO |
| **Cyclohexanedione**<br>6. sethoxydim (0.191 lb ai/A POST) + COC | **Quinoline carboxylic acid**<br>17. quinclorac (0.5 lb ai/A POST) + MSO |
| **Dinitroaniline**<br>7. pendimethalin (1.0 lb ai/A PRE) | **Substituted urea**<br>18. diuron (0.5 lb ai/A PRE)<br>19. fluometuron (1.0 lb ai/A PRE) |
| **Diphenylether**<br>8. fomesafen (0.25 lb ai/A POST) + COC | **Sulfonylurea**<br>20. chlorimuron (0.0156 lb ai/A PRE)<br>21. trifloxysulfuron (0.007 lb ai/A POST) + NIS |
| **Glycine**<br>9. glyphosate (0.77 lb ae/A POST) + NIS | **Triazine**<br>22. atrazine (1.5 lb ai/A POST) + COC<br>23. metribuzin (0.375 lb ai/A PRE) |
| **Imidazolinone**<br>10. imazethapyr (0.063 lb ai/A POST) + NIS | **Triazolinones**<br>24. carfentrazone (0.023 lb ai/A POST) + COC |
| **Isoxazolidinone**<br>11. clomazone (0.375 lb ai/A PRE) | **Triketone**<br>25. mesotrione (0.094 lb ai/A POST) + MSO |

**COC = crop oil concentrate at 1% (v/v); NIS = nonionic surfactant at 0.25% (v/v); MSO = methylated seed oil at 1% v/v. Some herbicide formulations may include an adjuvant system and do not require additional adjuvants. Label rates should be followed and adjusted based on soil type. The soil types will range from a silt loam to silty clay loam (0.7-1.1% O.M., CEC of 12-18, pH of 5.9-6.8).

**Potential Crops (6):**

Cotton Field
corn
Grain sorghum
Soybean Sunflower
Tomatoes

**Weeds:**

Any weed from the 2016 weed identification list.

**Herbicides:**

Any herbicide labeled in the crops listed above.

**Scoring:**

The 'farmer' and a judge will independently score each contestant from predetermined scoring sheet.

**Role:**

Each contestant will be assuming the role of a chemical company representative, independent crop consultant, or state extension specialist.

**WASHINGTON REPORT**
May 15, 2018
Lee Van Wychen

**China Says Weed Seeds in U.S. Soybean Exports a Problem**

In 2016, China put in place a new grain import law to keep invasive weeds and other plant pests from entering their country. Following a visit in September 2017, Chinese plant quarantine officials informed USDA that U.S. grain shipments, particularly soybeans, did not comply with the new law. They specifically cited increased detections of weed seeds. Approximately 1 of every 3 bushels of U.S. soybean are shipped to China, and were valued at more than $14 billion in 2016.

Quality specifications for No. 2 yellow soybeans, the variety most common in U.S. export contracts, allow for up to 2% foreign material. However, as of Jan. 1, 2018, China has requested the U.S. soybeans contain only 1% foreign material for expedited clearance. It is my understanding that Brazil and Argentina can still export soybeans to China with up to 2% foreign material. For U.S. soybean shipments that exceed 1% foreign material, China will determine whether to provide additional inspection, cleaning, treatment or other phytosanitary-protective measures for weed seeds of concern.

The longer-term systems approach (www.aphis.usda.gov/soybean-systems-approach) agreed to by USDA and China will focus on weed seed control across the U.S. grain supply chain, as well as appropriate protective measures that can be implemented at Chinese import destinations. The systems approach is a suite of recommended best practices intended to help reduce weed seeds in soybeans on farm, at U.S. grain elevators, and at the point of export. APHIS has also been conducting a baseline survey and foreign material analysis to monitor for weed seeds in bulk and container shipments of U.S. soybeans to China. China has agreed to allow **two years** to determine the effectiveness of weed seed control best management practices adopted for U.S. soybean exports, with a formal review scheduled for December 2019.

**Weed Scientists Working with Soybeans**- we need to help get the word out to the 515,000 soybean growers in the U.S., especially those dealing with herbicide resistant weeds. This is a 2-for-1 deal. Implementing herbicide resistance BMP's typically cost more money and time, but the potential reward of higher soybean yields (with less weed seeds) is now buoyed by the fact that the U.S. needs to meet the 1% foreign material standard to maintain its $14 billion export market to China. Pay it now, or pay more later. Concerns with managing dicamba off-target movement and Chinese tariffs on soybeans has garnered much of media attention for soybeans as of late, but rest assured, this weed seed phytosanitary issue is here to stay.

**Weed Seeds of Concern to China** - Nearly 80 percent of the weed seeds detected by China in U.S. soybean shipments came from ragweeds, cocklebur, Johnsongrass, and pigweeds.

Common ragweed (*Ambrosia artemisiifolia*)
Giant ragweed (*Ambrosia trifida*)
Johnsongrass (*Sorghum halepense*)
Common cocklebur (*Xanthium strumarium*)
Cocklebur (*Xanthium sp*.)
Palmer amaranth (*Amaranthus palmeri*)
Sorghum-almum (*Sorghum almum*)
Spiny cocklebur (*Xanthium spinosum*)
Waterhemp (*Amaranthus tuberculatus*)
Southern sandbur (*Cenchrus echinatus*)
Toothed spurge (*Euphorbia dentata*)
Marshelder (*Cyclachaena xanthiifolia*)
Field sandbur (*Cenchrus spinifex*)
Horsenettle (*Solanum carolinense*)
Dune sandbur (*Cenchrus tribuloides*)
Sterile oat (*Avena sterilis*)
Ripgut brome (*Bromus diandrus var. rigidus*)

Showy crotalaria (*Crotalaria spectabilis*)
Western ragweed (*Ambrosia psilostachya*)
Longspine sandbur (*Cenchrus longispinus*)
Turnipweed (*Rapistrum rugosum*)
Buffalobur (*Solanum rostratum*)
Ragweed (*Ambrosia* sp.)
Sandbur (*Cenchrus* sp.)
Turkeyberry (*Solanum torvum*)
Darnel ryegrass (*Lolium temulentum*)
*Puncturevine (*Tribulus pentandrus*)
*Three-cornered jack (*Rumex hypogaeus*)
Prickly lettuce (*Lactuca serriola*)
Dodder (*Cuscuta* sp.)
Barb goatgrass (*Aegilops taushcii* or *A. triuncialis*)
Silverleaf nightshade (*Solanum elaeagnifolium*)
Jointed goatgrass (*Aegilops cylindrica*)
*Chinese dodder (*Cuscuta chinensis*)
*Broadleaf false carrot (*Turgenia latifolia*)
Spurge (*Euphorbia sp.*)
* Indicates species NOT listed in WSSA's Composite List of Weeds

**WSSA Holds Research Workshop for Managing Dicamba Off-Target Movement**

The Weed Science Society of America (WSSA) sponsored a research workshop for managing dicamba off-target movement on April 16 -17, 2018 in Arlington, VA. WSSA invited a select group of weed scientists, agricultural chemical application specialists, representatives of state agrichemical organizations and regulatory agencies, dicamba registrants, and the EPA to discuss technical issues related to the off-target movement of dicamba that occurred in 2017 and to identify potential research objectives for 2018. Over 30 different areas of concern and research questions were raised and discussed during the workshop and prioritized by workshop participants. Some of the top ranked issues included: 1) creating uniform herbicide labels to help applicators find label information more easily; 2) research to better understand plant exposure response to dicamba aerosols versus dicamba vapor; 3) establishing residue tolerances for horticultural crops; and 4) defining what "neighboring distance" is. A report of the research workshop proceedings is being drafted and will be available soon.

**Congress Avoids Sequestration with 2-Year Budget Agreement**

On February 9, Congress approved a budget blueprint for FY 2018 and FY 2019 that 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.

**Congress Approves FY 2018 Omnibus Appropriations**

The federal government was operating under a Continuing Resolution for appropriations until March 23, when the FY 2018 Omnibus appropriations bill was passed by Congress and signed into law. Agricultural research programs, including the Agricultural Research Service (ARS) and the National Institute of Food and Agriculture (NIFA), received $3.03 billion, an increase of $138 million over FY 2017. Congress also rejected the Administration's proposal to close 17 ARS locations in FY 2018. The Agriculture and Food Research Initiative (AFRI) is funded at $400 million, $25 million over FY 2017 and the Sustainable Agricultural Research and Education (SARE) program is funded at $35 million, an increase of $8 million over FY 2017. The Hatch Act ($243M), Smith Lever b & c ($300M), IR-4 ($11.9M) and Crop Protection and Pest Management ($20M) programs are all level funded compared to FY 2017.

**Wildfire Funding Fix in FY 2018 Omnibus**

The FY 2018 spending bill included a wildfire funding fix that has been sought for decades. The ever growing cost of fighting wildfires has been depleting forest management funds such as invasive plant removal that can mitigate the frequency of wildfires and severity of future fire seasons. Beginning in FY2020, $2.25 billion of new budget authority is available to USDA and the Department of the Interior, which increases by $100 million each year through FY 2027. For

the duration of the 8-year fix, the fire suppression account will be funded at the FY 2015 President's Budget request - $1.011 billion. If funding in the cap is used, the Secretary of Agriculture must submit a report to Congress documenting aspects of fire season, such as decision-making and cost drivers, that led to the expenditures. The omnibus funding bill also includes other important forest management reforms, including a categorical exclusion for wildfire resilience projects, a fire hazard mapping initiative, and fuels management for protection of electric transmission lines.

**PRIA Authorization Extended to Sept. 30 in Omnibus**

The FY 2018 Omnibus spending bill temporarily extended the authorization for the Pesticide Registration Improvement Act (PRIA) to Sep. 30, 2018. 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 reauthorization was easily expected in 2017, but environmental groups have used it as a political football to protest other unrelated regulatory decisions by EPA. The registrant fees provided under PRIA support approximately 200 positions in the EPA Office of Pesticide Programs, which is just over one-third of their workforce.

**House Ag Committee Marks up Farm Bill**

On April 18, the House Ag Committee passed the Agriculture and Nutrition Act of 2018 (H.R.2) on a partisan 26-20 vote. The main sticking point for the partisan vote was the objection to a change in the SNAP program that would require work-capable adults to either find employment or receive free training for 20 hours per week. That aside, the bill has many positives for both regulatory reform and research affecting weed science. Key regulatory reforms included a legislative fix for the duplicative National Pollutant Discharge Elimination System (NPDES) permitting requirement, reauthorization of the Pesticide Registration Improvement Act (PRIA), and reforming FIFRA to address the process under which pesticides are reviewed for potential impacts to threatened and endangered species and critical habitat. On the agricultural research front, the bill re-established a research equipment grant program authorized at $5 million per year and removed the AFRI matching requirement for competitive grants within NIFA. The House Ag Committee bill did not re-authorize the Foundation for Food and Agriculture Research (FFAR) which was established in the 2014 Farm Bill. However, there is strong support for FFAR on the Senate side, which should be introducing their version of the Farm Bill soon.

Other provisions of note in the House Farm Bill include an amendment from Rep. Neal Dunn (R-FL) establishing a USDA Algae Research Program, language reauthorizing a noxious weed compliance clause in the Commodity Title whereby producers must effectively control noxious weeds in order to be eligible to receive payment under the Commodity title, and a categorical exclusion clause from National Environmental Policy Act (NEPA) requirements for invasive and noxious weed management on federal lands related to restoration and wildfire prevention activities.

**WSSA, ESA, APLU Highlight Benefits of Federal Funding for AIPM Programs**

On May 10, I participated in a luncheon briefing on Capitol Hill titled "*Protecting American Coffee, Wine, and Baseball Bats through Areawide Integrated Pest Management (AIPM)*". The event was sponsored and organized by the Entomological Society of America (ESA), WSSA and the Association of Public and Land-grant Universities (APLU). Damage from invasive pests cost the U.S. billions of dollars every year and pose a threat to our agricultural and commercial sectors as well as our national defense. The briefing discussed how AIPM can be deployed to save money and resources while managing pests across a range of ecosystems. The briefing was lead off by Rep. Ted Yoho (R-FL), a veterinarian and House Ag Committee member, who is

a co-sponsor of H.R. 5411, the AIPM Act of 2018. Another Congressional champion of H.R. 5411 is Tulsi Gabbard (D-HI) who would also have offered introductory remarks, but had to be in Hawaii for the Kilauea volcano response activities.

**Northey Confirmed to Lead USDA Farm Production and Conservation Programs**

Bill Northey was confirmed by the Senate on February 27 as USDA Under Secretary for Farm Production and Conservation where he will oversee the Farm Service Agency (FSA), Natural Resources Conservation Service (NRCS) and the Risk Management Agency (RMA). 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.

**Barbre Appointed as Administrator of USDA Risk Management Agency**

On April 19, USDA Secretary Perdue appointed as Martin Barbre as Administrator of USDA's Risk Management Agency (RMA), which oversees the nation's federal crop insurance programs. Barbre owns and operates Chestin Farms in Carmi, IL and grows 6,000 acres of corn, soybeans, wheat, grain sorghum, and alfalfa, as well as specialty crops such as seed soybeans and white corn. He is a past president of the National Corn Growers Association Corn Board and a member of the Illinois Corn Growers Association (ICGA), having served on the board of directors from 1995 to 2006. Barbre served as vice president of the ICGA in 2003 and president in 2004. He graduated from Southeastern Illinois College in 1974 with a degree in Ag Business.

**Fordyce Appointed as Administrator of USDA Farm Service Agency**

On May 11, USDA Secretary Perdue appointed Richard Fordyce to serve as Administrator of the Farm Service Agency (FSA), which supports ag production through a network of over 2,100 county and 50 state offices. Fordyce and his wife Renee operate a row crop and commercial cattle operation in Bethany, Missouri. He most recently served as State Executive Director for FSA in Missouri. Prior to that, Fordyce served as the director of the Missouri Department of Agriculture from 2013 to 2017. He also served 11 years on the United Soybean Board and 8 years as chairman of Missouri's Soil & Water Districts Commission.

**Shanower will be NIFA's Acting Director**

USDA's National Institute of Food and Agriculture (NIFA) was created by the 2008 Farm Bill to replace the Cooperative State Research, Education and Extension Service. As part of that legislation, the Director for NIFA is appointed by the President for a 6 year term, which is unique to the Agency. Dr. Sonny Ramaswamy was the first NIFA Director to serve the full 6-year term, which ended on May 4, 2018. In the interim, Dr. Thomas Shanower will be NIFA's Acting Director. An entomologist with USDA ARS, Shanower served as the Associate Area Director for the Pacific West Area. From 2007 to 2015, he served as the Center Director for ARS' Center for Grain and Animal Health Research in Manhattan, Kansas. More details at this link.

USDA NIFA Web-links:

- 2017 Annual Report -recently released
- NIFA's Data Gateway -includes funding by Congressional District
- Request for Application (RFA) Schedule -updated biweekly
- Agriculture and Food Research Initiative (AFRI) Funded Projects Webpage - now arranged by state, with the three most recent fiscal years awarded (2015-2017) listed.
- Peer Review Process for NIFA Competitive Grant Applications

**IR-4 Project Contributes $9.4 Billion to GDP**

Since 1963, the IR-4 Project has been the major resource for supplying pest management tools for specialty crop growers by developing research data to support new EPA tolerances and labeled product uses. Since its inception, IR-4 Project data has supported the approval of nearly 50,000 conventional reduced risk pesticides and biopesticides in fruits, vegetables, nuts, herbs, and ornamental crops. A recently updated study out of Michigan State University shows that the IR-4 Project supports over 95,000 U.S. jobs and contributes about $9.4 billion to annual gross domestic product (GDP). Considering that the IR-4's core budget is only around $15 million annually, this is an incredible return on taxpayer investment. On March 12, **Dr. Jerry Baron** (photo), Executive Director of the IR-4 Project, presented a seminar on Capitol Hill titled "Keeping the Good Food, Good" where he discussed the role of the IR-4 Project in preventing pest damage and food waste in specialty crops.

**Support IR-4 at $19 Million in FY 2019**

There is currently a push to get IR-4 funded at $19 million in FY 2019. Annual funding for IR-4 has been stagnating at around $11.9 million for nearly a decade. On April 26, Sen. Menendez (D-NJ) sent a "Dear Colleague" letter to Senate Ag Appropriations Committee Chair John Hoeven (R-ND) and Ranking Member Jeff Merkley (D-OR) requesting an appropriation of $19 million for the IR-4 Project for FY 2019. The letter was co-signed by 13 Senators and supported through the efforts of the IR-4 Commodity Liaison Committee, the Minor Crop Farmers Alliance, and endorsed by nearly 60 organizations including the six National and Regional Weed Science Societies.

**Andrew Wheeler Confirmed as No. 2 Official at EPA**

The Senate confirmed Andrew Wheeler as EPA Deputy Administrator on April 12 by a 53 – 45 vote. Wheeler is a native of Ohio and received a BA in English and in Biology from Case Western Reserve University, a JD from Washington University in St. Louis School of Law, and an MBA from George Mason University School of Management. His first job was with EPA between 1991-1995 working on toxic chemical and pollution prevention issues. He is a long time Senate staffer having worked for Sen. George Voinovich (R-OH), Sen. Jim Inhofe (R-OK), and the Senate Environment and Public Works Committee. Wheeler most recently served as Senior VP for Faegre Baker Daniels Consulting, a national advisory and advocacy firm dealing with energy and natural resources practice.

**2017 Hurricanes Hammer Monarchs But Conservation Efforts Continue**

On March 5, the overwintering area for monarch butterflies in Mexico was reported as 2.48 ha, which is down for the second year in a row from the 4.01 ha occupied in 2015-16. By all accounts, there were some excellent monarch numbers reported in the upper Midwest last

summer, but the occurrence of two tropical storms and three hurricanes during the monarch fall migration was attributed to the decline.

On-going monarch conservation efforts such as the Mid-America Monarch Conservation Strategy continues with plans to establish 1.3 billion new milkweed stems over the next 20 years in the upper Midwest monarch breeding areas. In Iowa alone, the Iowa Monarch Conservation Consortium seeks to establish approximately 480,000 to 830,000 acres of monarch habitat by 2038. The U.S. Fish and Wildlife Service is working to assess the effectiveness these monarch conservation efforts and has until June of 2019 to determine whether the monarch should be listed under the Endangered Species Act.

**Regulatory Barriers Hinder Ag Biotech by Small Businesses and Universities**

Despite foundational contributions requiring considerable public resource commitments for genetically engineered (GE) crop innovation and development, a **new CAST issue paper** documents how universities and small private entities have been almost entirely excluded from the ag biotech market. A main conclusion is that the current "process-based" U.S. biotech regulatory system is a scientifically unjustifiable barrier to agricultural innovation.

This CAST Issue Paper (IP59) and its companion Ag quickCAST are available online at the CAST website, along with many of CAST's other scientific publications. CAST Issue Papers, Commentaries, and Ag quickCASTs are FREE.

**Secretary Perdue Issues USDA Statement on Plant Breeding Innovation**

On March 28, Secretary of Agriculture Sonny Perdue issued a statement providing clarification on USDA's oversight of plants produced through innovative new breeding techniques which include techniques called genome editing.

Under its biotechnology regulations, USDA does not regulate or have any plans to regulate plants that could otherwise have been developed through traditional breeding techniques as long as they are not plant pests or developed using plant pests. This includes a set of new techniques that are increasingly being used by plant breeders to produce new plant varieties that are indistinguishable from those developed through traditional breeding methods. The newest of these methods, such as genome editing, expand traditional plant breeding tools because they can introduce new plant traits more quickly and precisely, potentially saving years or even decades in bringing needed new varieties to farmers.

**Federal Rule Delays 2015 WOTUS "Applicability Date" to Feb. 6, 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. The "Applicability Date" Rule was intended to avoid confusion with a recent Supreme Court ruling regarding federal court jurisdiction and give the Agencies additional time to carry out the President's two-step Executive Order on WOTUS issued last year. The Agencies proposed "step-two" rule to revise the definition of "waters of the United States" is expected out for comments later this year. A final WOTUS rule from the Agencies is now expected in September 2019.

**Updated State Noxious Weed Seed Listings for States**

The USDA Agricultural Marketing Service (AMS) enforces interstate commerce provisions of the Federal Seed Act (FSA) and provides seed testing service under the Agricultural Marketing Act. The FSA regulates the interstate shipment of agricultural and vegetable seeds. The FSA requires that seed shipped in interstate commerce be labeled with information that allows seed

buyers to make informed choices. Seed labeling information and advertisements pertaining to the seed must be truthful. The FSA helps promote uniformity among State laws and fair competition within the seed trade.

USDA AMS recently updated the list of prohibited and restricted noxious weed seeds for each state. The list can be accessed at: https://www.ams.usda.gov/sites/default/files/media/StateNoxiousWeedsSeedList.pdf

**2018 Survey of the Most Common and Troublesome Weeds**

If you have not done so yet, please take a few minutes to share your expertise on the five most common and troublesome weeds in the following areas in your state:

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.

Survey link: **https://www.surveymonkey.com/r/2018weedsurvey**