

# Southern Weed Science Society

## *Note From the President:*

First and foremost, thank you to everyone who was a part of the 2022 Southern Weed Science Society Annual meeting. The months leading up to the 2022 annual meeting were filled with anxiety and trepidation with the looming threat of COVID. However, the meeting went very smooth and all seemed to enjoy Austin. It was good to see old friends and renew acquaintances, and I am sure everyone is already looking forward to gathering in Baton Rouge in 2023. With regard to the 2022 annual meeting, a total of 265 presentations were submitted including 119 posters — 43 of which were in the student presentation contest as well as 63 student contest oral presentations and 83 member oral presentations. The number of student presentations given at our annual meeting each year continues to be one of primary success stories of the Southern Weed Science Society. Thank you does not seem adequate for the work undertaken by public and private sector scientists to educate the next generation of weed scientists. Highlights from Austin included the presen-



tation from Ms. Julie Borlaug who discussed her family's legacy of contribution to global agriculture as well as the student mixer/social event held at Top Golf. Participation in the Top Golf event was phenomenal and provided an additional avenue for our members to interact and further develop relationships.

Gratitude and respect is also expressed to Dr. Cletus Youmans. Clete served as president-elect and program-chair for the first ever virtual SWSS annual meeting and president for the subsequent return to a face-to-face annual meeting. Clete undertook all challenges and implemented a very successful virtual meeting program in 2021 and led our return to normal operations in 2022. He served, without fail, during some of the most uncertain times that the Southern Weed Science Society has faced. Clete – thank you very much for a job well done. Additional kudos to Luke Etheredge, Ben McKnight, and Gary Schwarzlose – these men were instrumental to the success of the 2022 annual meeting through service on local arrangements. Kelley Mazur and Eric Gustafson continue to be tremendous resources for our society.

I would also like to express my appreciation to members of the Southern Weed Science Society as it is an honor and a privilege to serve as your president this year. Upon viewing a list of past-presidents of the Southern Weed Science Society, it is readily apparent that these folks are some of the most well respected and influential people in the history of our discipline. It is quite humbling to serve as your president with the legacy established by these people. I can only hope that myself and the board of directors can continue the standard of excellence set by our predecessors.

<u>2022 SWSS Weed Contest</u> – The 2022 summer weed contest will be held on August 2<sup>nd</sup> at the Memphis AgriCenter. Thank you to Bruce Kirksey for hosting this event once again this year. Rest assured that the 2022 summer weed contest will be a challenging, yet enjoyable event. The weed contest serves as yet another opportunity for our students to interact with public and private sector scientists from across the southern

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United States. The SWSS is truly indebted to Bruce and his team for the continual support of the Southern Weed Science Society and associated activities. As a point of reference, Bruce and his team have hosted the summer weed contest three times in the past seven years. Gratitude is also expressed to Drew Ellis for serving as chair of the summer weed contest for the past few years.

<u>Summer Board Meeting</u> – The SWSS summer board meeting will be held in Baton Rouge, LA on July 25<sup>th</sup> and 26<sup>th</sup> at the Renaissance Baton Rouge Hotel. The board meeting will begin on Monday, July 25<sup>th</sup> at 1 pm and adjourn at 12 noon on Tuesday, July 26<sup>th</sup>. Eric Castner is serving as president-elect and program chair for the 2023 annual meeting.

<u>2023 SWSS Annual Meeting</u> – The 2023 SWSS annual meeting will he held from January 23<sup>rd</sup> – 26<sup>th</sup> at the Renaissance Hotel in Baton Rouge, LA. Connor Webster and his team will serve on local arrangements for the 2023 annual meeting.

In closing, I would like to reiterate what a privilege it is to serve as president of our Southern Weed Science Society. I am hopeful that we have returned to normal operations and will have the chance to interact over the course of the coming months. As always, if myself or any member of the board of directors can assist in any way, please do not hesitate to contact us at any time.

Thank you and be safe this summer as laboratory and field experiments are being conducted.

## 2022 Graduate Student Paper & Poster Contest

The Graduate Student Contest at the 2022 annual meeting was a big success! An incredible amount of talent was showcased with 95 total students participating. Presentation and poster quality were excellent, and information shared will advance the field of weed science. High quality papers and posters are a testament to the commitment students and their advisors have to our discipline.

Events such as this are not possible without volunteers. A BIG thank you goes to all judges that volunteered their time to make the contest a success.

New this year was the use of a Google Spreadsheet for each section to allow judges to record scores online. The spreadsheet "auto averaged" scores across judges, speeding up the counting process for the committee. Additionally, it eliminated any potential confusion if final scores did not necessarily match with judges final rankings.

Overall response to the online ranking recording was positive. Matthew Wiggins (<u>matthew.wiggins@fmc.com</u>) will be the committee chair in 2023.



Year	Poster Contest Participants				Oral Paper Contest Participants			Total
	Under- grad	MS	PhD	Total	MS	PhD	Total	Participants
2022	3	30	13	46	25	24	49	95
2021	0	22	24	46	28	34	62	108
2020	0	13	9	22	29	26	55	77
2019	0	15	15	30	26	17	43	73

## Student contest award winners included:

Posters		
Undergraduate	1 <sup>st</sup> - Jacob Forehand	North Carolina State University
M.S. Group #1	1 <sup>st</sup> - Annu Kumari	Auburn University
	1 <sup>st</sup> - Stephen Ippolito	North Carolina State University
M.S. Group #2	1 <sup>st</sup> – Bodie Cotter	University of Arkansas
	2 <sup>nd</sup> – Andrew Blythe	North Carolina State University
M.S. Group #3	1 <sup>st</sup> – Dhiriaj Srivastava	Virginia Tech University
	2 <sup>nd</sup> – Noah Reed	University of Arkansas
	2 <sup>nd</sup> – Vipin Kumar	Virginia Tech University
PhD Group #1	1 <sup>st</sup> – Estafania G. Polli	North Carolina State University
	1 <sup>st</sup> – Mason Castner	University of Arkansas
PhD Group #2	1 <sup>st</sup> – Taylor Randell	University of Georgia
	2 <sup>nd</sup> – Eli Russell	Virginia Tech University
	2 <sup>nd</sup> – Hannah Wright	University of Georgia
Paper		
M.S. Group #1	1 <sup>st</sup> – Thomas Eubank	Mississippi State University
	2 <sup>nd</sup> – Nicole Glenn	Mississippi State University
M.S. Group #2	1 <sup>st</sup> – Benjamin Blackburn	Mississippi State University
	2 <sup>nd</sup> - Ty Smith	University of Arkansas
M.S. Group #3	1 <sup>st</sup> - Taylor Darnell	University of Florida
	2 <sup>nd</sup> – Conrad Oberweger	University of Florida
PhD Group #1	1 <sup>st</sup> – Delaney Foster	University of Tennessee
	2 <sup>nd</sup> – Eric Jones	North Carolina State University
PhD Group #2	1 <sup>st</sup> – Varsha Singh	Mississippi State University
	2 <sup>nd</sup> – Cynthia Sias	Virginia Tech University
PhD Group #3	1 <sup>st</sup> – Erick Begitschke	University of Georgia
	1 <sup>st</sup> – Amy Wilbur	Mississippi State University
	1 <sup>st</sup> – Zachery Howard	Texas A&M University
PhD Group #4	1 <sup>st</sup> – Pamela Carvalho-Moore	University of Arkansas





## 2022 SWSS Award Winners

#### 2022 Outstanding Young Weed Scientist (Academia) - Michael Flessner, Virginia Tech



Dr. Michael L Flessner is an associate professor and extension weed science specialist in the School of Plant and Environmental Sciences at Virginia Tech. He received his BS from the University of Tennessee. He obtained both his masters and doctoral degrees from Auburn University where he also served as research associated.

Michael has research and extension responsibilities for weed management in corn, soybean, small grains, and other crops as well as pastures and forages across Virginia. His research efforts focus on herbicides and herbicide resistance as well as cover crops and harvest weed seed control. To date, Michael is an author of 49 peer-reviewed publications in scientific journals, over 180 abstracts presented at professional meetings, and 20 extension publications. He has been awarded over \$2.9 million in competitive funds to his program. Michael has advised or co-advised 8 graduate students and currently chairs or serves on 9 student committees. Michael's students have won numerous scholarships and awards, notably enjoying success in the Society's annual weed contest.

Michael has been a member of SWSS since 2008 and served the Society in various rolls including committee service on the Weed Resistance and Technology Stewardship, Endowment Foundation, Local Arrangements, and Resolutions and Necrology committees as well as oral/poster contest judge and section chair. Michael has served on the executive committee of the Northeastern Weed Science Society (NEWSS) as Editor, in addition to other service. Michael was awarded NEWSS's Outstanding Researcher Award in 2019 and Outstanding Educator in 2022. He is also involved in WSSA, currently serving on the Weed Loss and Extension committees. Michael resides in Blacksburg, Virginia with his wife Chelsea Flessner and their two childern, Davidson and Everett.

## 2022 Outstanding Young Weed Scientist (Industry) - Sandeep Rana, Bayer



Dr. Sandeep Rana grew up in a family of agricultural researchers and administrators on the campus of CCS Haryana Agricultural University (HAU), a public-funded agricultural university located in Hisar, Haryana, India. He was destined to become an engineer but some forward-looking conversations with his Plant Pathologist father motivated him to pursue a career in agricultural sciences instead. He still considers that to be the best career decision he has made so far. Sandeep completed his B.Sc. (Honors) in Agriculture and started with an M.S. degree in Horticultural Biotechnology at CCS HAU before coming to the USA to start his journey as a weed scientist.

In 2010, Sandeep moved to University of Arkansas to pursue his M.S. in Weed Science under the guidance of Dr. Jason K. Norsworthy. After completing the M.S. in 2013, Sandeep went ahead to earn his Ph.D. in Turfgrass Weed Science (2016) from Virginia Tech under the direction of Dr. Shawn D. Askew. He also spent a short but fruitful time at

North Carolina State University working with Dr. Wesley J. Everman as a Postdoctoral Research Scholar (2017). In fall 2017, Sandeep started his professional career as an Agronomic Research Manager in Galena, MD, with Monsanto Company. With the long-term goal of contributing to cutting-edge research and production technology that address critical needs of productivity and sustainability of global agriculture, Sandeep currently serves as the North America Agronomic Research Lead for Bayer Crop Science. In this role, Sandeep provides strategic, technical, and people leadership to a team of scientists that aid in field testing, protocol development, and trial execution of new plant health and herbicide-tolerant native and biotechnology traits, crop protection products, and system improvement concepts. He works with cross-functional and multi-disciplinary teams and acts as a liaison between applied agriculture and next-generation biotechnology and precision agriculture tools.

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To date, Sandeep has authored and co-authored 8 peer-reviewed journal articles, a book chapter, 75 abstracts, 18 extension and outreach publications, and presented over 50 extension/outreach and scientific presentations. He thoroughly enjoys reviewing scientific articles and has reviewed nearly 80 papers across 6 journals and currently serves as an Associate Editor for 4 scientific journals - Agronomy Journal, Crop Science, Open Agriculture Journal, and Weed Technology.

Sandeep holds SWSS and its members close to his heart and considers SWSS as his home society. He has not missed a meeting since his first SWSS/WSSA joint meeting in Puerto Rico in 2011. As a graduate student, Sandeep participated in all SWSS activities, with Weed Contests being his favorite, and served as the Secretary, Vice-President, and President of the SWSS GSO. He currently serves as the Chair of the SWSS Outstanding Graduate Student Award Committee and Trustee for the SWSS Endowment Board. He also regularly helps with judging student talks/posters along with chairing and moderating annual meeting sessions. Sandeep continues to learn a great deal from this society and its extremely talented members. He is always ready to give back to the society in whatever capacity he can to help make SWSS members' experiences, especially students, at least as enriching as the one he continues to have. Because of the current COVID-19 pandemic, Sandeep is happily stuck in Middletown, DE, with his beautiful wife, Trisha Sanwal Rana, and a handsome 2-year-old son, Aveer Singh Rana. Sandeep and his family will relocate to Chesterfield, MO for his current role if the world ever comes out of this COVID mess.

#### 2022 Outstanding Educator Award - Ramon Leon, North Carolina State University



Dr. Ramon Leon is an associate professor of Weed Biology and Ecology in the Department of Crop and Soil Sciences, North Carolina State University, USA. Previously, he was an associate professor of Weed Science at the University of Florida, USA, professor of Weed Science at EARTH University in Costa Rica, and assistant professor at California Polytechnic State University, San Luis Obispo, USA. Dr. Leon obtained a Ph.D. (2005) and M.S. in Crop Production and Physiology (2003) with emphases on Weed Science and Seed Science, and a Ph.D. in Genetics (2005) from Iowa State University, and a B.S. in Agronomy (2000) from the University of Costa Rica. His research has focused on understanding changes in weed dynamics in response to management and environmental factors. He has published over 116 peer-reviewed scientific articles, 2 book chapters, and 210 abstracts. He is Editor of the Journal of Aquatic Plant Management, and Associate Editor for Weed Sci-

ence, Weed Research, Agronomy Journal, Peanut Science, and previously for the journals Weed Technology and Agronomy. He has mentored seven Ph.D. and eight master's students, four postdocs, and tens of undergraduate students conducting senior projects in different aspects of weed science.

#### Outstanding Graduate Student Award (MS) - Delaney Foster, Texas Tech



Delaney Foster grew up in Perry, Georgia, where her parents raised beef show cattle and horses. Delaney received her B.S. degree in Agriculture at Abraham Baldwin Agricultural College in Tifton, GA in 2018. As an undergraduate student, she worked for Dr. Stanley Culpepper at the University of Georgia Tifton campus and interned with Dr. Henry McLean, field scientist with Syngenta Crop Protection. As an undergraduate, Delaney placed first at the Southern Weed Science Society Weed Contest in the summer of 2018. These experiences opened the door for Delaney to discover a career path in weed science. Delaney obtained her M.S. degree in Plant and Soil Sciences with a concentration in crop protection from Texas Tech University in Lubbock, Texas. She studied under the direction of Dr. Peter Dotray who holds a joint appointment with Texas Tech University and Texas A&M AgriLife Research and Extension Service. Her thesis was titled "Crop Response, Weed Management Systems, and Tank Mix Partners with Isoxaflutole in HPPD Tolerant Cot-

ton".

Delaney has proven successful in many oral and poster competitions at both regional and national society and commodity meetings, placing first at the Texas Tech 3MT Competition, the Texas Plant Protection Association poster contest, the Beltwide Cotton Conference oral paper contest (MS & PhD), and the SWSS oral paper contest (MS). She was a member of the first-place sprayer calibration team of the SWSS at the North American Weed Science Contest in 2019 while at Texas Tech. At the SWSS weeds contest in 2021, she was a member of the winning sprayer calibration team again while a part of the University of Tennessee weed team and tied for first place in the individual sprayer calibration contest.

Delaney has had the pleasure to serve as the secretary of the SWSS graduate student organization and the vice president and current president of the WSSA graduate student organization. Delaney continues her education at the University of Tennessee where she is a PhD student with Dr. Larry Steckel studying auxin-resistant Palmer amaranth in west Tennessee. She hopes to find a career in the industry upon completion of graduate school.

### Outstanding Graduate Student Award (PhD) - Maria Zaccaro-Gruener, University of Arkansas



Maria was born and raised in Ribeirao Preto, Sao Paulo, Brazil. She was introduced to the importance of crop production by her parents, Ronaldo and Aracy Zaccaro, who run a plant nursery specializing in tropical plants and native fruit trees. They inspired her to pursue a B.S. degree in agronomy from the Sao Paulo State University, which was completed in 2011. Earlier that same year, she completed an internship at the Natural Products Unit (USDA) under the supervision of Dr. Franck Dayan, where she conducted bioassays to study the impact of herbicides on photosynthesis.

Maria completed an M.S. degree in Plant and Soil Sciences with a concentration in Weed Science at the Mississippi State University under the advisement of Dr.

John Byrd in 2016. Her thesis work centered on evaluating herbicide options and the use of cover crops to facilitate the management of cogongrass. In the fall of 2017, she began her Ph.D. degree in Crop, Soil, and Environmental Sciences under the direction of Dr. Jason Norsworthy at the University of Arkansas. Her dissertation work focuses on 1) evaluating dicamba translocation and metabolism in soybean, 2) understanding the factors affecting volatilization of dicamba, and 3) ascertaining the contribution of dicamba volatilization to the injury that has been observed on soybean in Arkansas and other locations.

To this date, Maria has authored and co-authored 5 peer-reviewed papers, 13 extension or technical reports, and 57 abstracts from scientific presentations. Maria successfully presented her research and won awards at the Arkansas Crop Protection Association, Gamma Sigma Delta, SWSS, and WSSA. Additionally, she competed at the 2021 SWSS Weed Contest, earning tenth place overall individual. She has been actively involved in the SWSS, serving as the Endowment Committee Student Representative (2018-2020) and as the current Student Program Committee Chair for the SWSS Graduate Student Organization. She plans to stay involved in the SWSS after graduation, as she recognizes the Society's impact on the growth of students and young scientists.

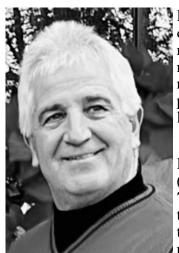
#### Fellow Award - Peter Dotray, Texas Tech



Peter Dotray is the Rockwell Chair of Weed Science and Extension Weed Specialist with Texas Tech University, Texas A&M AgriLife Research, and Texas A&M AgriLife Extension Service - Lubbock. He received his B.S. degree from the University of Minnesota, his M.S. degree from Washington State University, and his Ph.D. from the University of Minnesota. He started his current three-way appointment in Lubbock in 1993. Peter teaches Principles of Weed Science to undergraduate and graduate students and Mode and Mechanism of Herbicide to graduate students. These courses are taught on-campus and online to students off-campus. He conducts weed control research in several crops including cotton, peanut, grain sorghum, corn, and sesame. He has secured over \$5 million dollars in external research support. Peter also serves as an Extension Weed Specialist in District 2, a 20-county area home to 3.5 million acres of cotton on the Texas Southern High Plains. Peter has served as the major advisor or co-advisor of 43 graduate students, has served on 39

graduate committees, and has five graduate students in progress. He has authored or co-authored 95 journal articles, eight book chapters, 537 abstracts and proceedings, 213 technical publications and popular articles, and has given 100 presentations at professional meetings and 869 seminars and presentations at grower meetings. For the Southern Weed Science Society, Peter served as Proceedings Editor, CAST Representative, Board Member At-large, Vice President, President Elect, President, and Past President, and numerous other committees. He received the SWSS Outstanding Young Weed Scientist Award and SWSS Outstanding Educator Award. He is a Fellow of the American Peanut Research and Education Society.

#### Fellow Award - Eric Prostko, University of Georgia



Dr. Eric P. Prostko is a Professor and Extension Weed Specialist in the University of Georgia's (UGA) Department of Crop & Soil Sciences. He has been a faculty member at the University of Georgia since 1999. With a 100% extension appointment, Eric is responsible for the statewide weed science programs in field corn, peanut, soybean, sunflower, grain sorghum, canola, sesame, pearl millet, and winter pea. The farm gate value of these commodities in Georgia exceeds \$1.5 billion dollars.

Eric has earned degrees from Delaware Valley College (BS), Rutgers University (MS), and Texas A&M University (PhD). Dr. Prostko is the author or co-author of 73 refereed journal articles, 222 scientific abstracts, and 1097 extension publications (circulars, bulletins, popular press articles, PowerPoint slides, blogs, newsletters, etc.). He has delivered 1263 educational presentations at local county crop production meetings, extension agent trainings, and other industry sponsored

events. He has conducted more than **1100** field trials. Eric has been the major advisor for 3 PhD students and 2 MS students and has served on numerous other UGA graduate student committees.

Eric has been a member of the SWSS since 1994. Since that time, he has made oral or poster presentations at every meeting. As a graduate student in the SWSS, Eric was a former 1<sup>st</sup> and 2<sup>nd</sup> place winner of graduate student oral/poster contests, a member of the 1996 Texas A&M Weed Science Team who won 1<sup>st</sup> place in the SWSS Weed Contest, and was the 1<sup>st</sup> place individual in that contest. As a faculty member in the SWSS, Eric has received the Outstanding Young Weed Scientist Award (2005) and the Outstanding Educator Award (2011). He has had an exemplary service record in the SWSS including the following: regular judge of graduate student oral/poster contests; co-host of SWSS Weed Contest (2009); co-host of Endowment Enrichment Scholarship (2016); Endowment Foundation Trustee; and as chairman/member of numerous committees (Outstanding Young Weed Scientist, Fellow, Outstanding Educator, and Excellence in Regulatory Stewardship).

Dr. Prostko is also a member of the American Society of Agronomy (ASA), Weed Science Society of America (WSSA), American Peanut Research and Education Society (APRES), and the Georgia Association of County Agricultural Agents (GACAA). He has received numerous awards from these organizations including the Michael J. Bader Award of Excellence for Junior Scientist - Extension (UGA 2004), Dow AgroSciences Award for Excellence in Education (APRES 2005), Senior Specialist Award (GACAA 2010), D.W. Brooks Award for Excellence in Extension (UGA 2010), Outstanding Extension Award (WSSA 2011), Award of Excellence for Senior Scientist - Extension (UGA 2011), the Walter B. Hill Award for Distinguished Service in Public Service and Outreach (UGA 2012), the Walter B. Hill Fellow Award for Distinguished Achievement in Public Service and Outreach (UGA 2015), and APRES Fellow Award (2016).

## **Updates Corner**

#### **Weeds Contest Information**

The Southern Weed Science Society and the Agricenter International will host the 2022 Weed Contest in Memphis, TN on **August 2nd**. Bruce Kirksey of the Agricenter has volunteered to host once again. Coaches must notify Bruce Kirksey (<u>bkirksey@agricenter.org</u>) with their intent to compete and provide number of teams for graduate and under graduate levels no later than **May 1st**. All names of the graduate and under graduate team members plus alternated must be provided by **July 1**<sup>st</sup> to Bruce.

Coaches are highly encouraged to review the rules provided for the 2022 contest. The rules for the 2022 contest can be found here: http://www.swss.ws/wp-content/uploads/SWSS-Weed-Contest-Rules-2022.pdf.

In the near future more information will be shared on hotel recommendations and schedule of events will be provided. Details will be posted on the SWSS website here: <a href="http://www.swss.ws/collegiate-weeds-contest/">http://www.swss.ws/collegiate-weeds-contest/</a>.

We are looking forward to hosting this great event and seeing everyone in late summer.

If you happen to know of a contact at your respective University who would be coaching this year then please email their contact info to Bruce Kirksey and I so we can make changes to our list of contacts.

Regards, Drew Ellis, Contest Committee Chair Bruce Kirksey, 2022 Host

## Are You on a SWSS Committee?

The Southern Weed Science Society is successful due to the many volunteers that help the organization run. Serving the organization is an excellent way to ensure its continued success and interact with fellow members.

To find the current SWSS Committee List for 2022 and for more information about each committee and its role within the organization, please click here: <a href="http://www.swss.ws/society-information/committees/">http://www.swss.ws/society-information/committees/</a>.

If you're interested in volunteering for a committee, please contact the chair of the committee or send an email to tbutts@uada.edu.





## Washington Report

#### Congress Finalizes FY 2022 Appropriations

Nearly 6 months overdue, the House and Senate passed a much-awaited FY 2022 omnibus spending package on March 9 and March 10, respectively. President Biden signed the Consolidated Appropriations Act of 2022 (H.R. 2471) into law on March 15. The \$1.5 trillion legislative package combines all twelve FY 2022 appropriations bills and includes \$13.6 billion in military and humanitarian aid for Ukraine.

For FY 2022, USDA-ARS funding increased \$141 million to \$1.63 billion while USDA-NIFA funding increased \$67 million to \$1.64 billion. The Agriculture and Food Research Initiative (AFRI) competitive grants program increased by \$10 million for the fourth year in a row to \$445 million in FY 2022. Noteworthy highlights include a \$5 million increase in **Smith Lever** funding for Extension and a \$2.5 million increase for the **IR-4 Minor Crop Pest Management** program, its first increase in over a decade. Every dollar invested in the IR-4 Project generates \$524 in economic activity for the US.

There is also language in the FY 2022 omnibus that supports the creation of a regionally focused **Herbicide Resistance Initiative** for the Pacific Northwest to identify and overcome herbicide resistance associated with the crop production pathway, reducing production losses and reducing or eliminating pressure on trade limits due to contamination. It directs \$2 million to support research to address weed management strongly affecting the long -term economic sustainability of food systems in collaboration with ARS, research institutions, and stakeholder support.

Finally, under USDA APHIS appropriations, there is congressionally directed language for the second year in a row that instructs APHIS PPQ to provide \$3 million for cogongrass control and eradication in Mississippi, Alabama, Georgia and South Carolina.

For aquatic plant management, the Army Corps of Engineers received \$8 million for its Aquatic Plant Control Research program, its second \$1 million increase in a row. Of the \$8 million, \$1 million is designated for activities for monitoring, surveys, and control of **flowering rush** and **hydrilla** and \$7 million is for nationwide research and development to address invasive aquatic plants. The appropriations language also encourages the Army Corps to support cost-shared aquatic plant management programs, and in particular, to evaluate and address prevention of new infestations of **hydrilla** in the Connecticut River Basin.

Overall funding for the Department of the Interior (DOI) increased \$776 million to \$14.1 billion in FY 2022, with \$1.4 billion (+8 percent) directed to the Bureau of Land Management (BLM); \$3.3 billion (+5 percent) to the National Park Service (NPS); \$1.65 billion (+4 percent) to the Fish and Wildlife Service (FWS), and \$1.4 billion (+6 percent) to the US Geological Survey (USGS), which includes at least \$2.75 million for research on harmful algal blooms.

Within specific DOI programs important for invasive species management, BLM's Rangeland Management account received a \$3 million increase to \$109 million after being held level in FY 2021. The FWS's Wildlife and Habitat Management account under its National Wildlife Refuge System received a \$10 million increase to \$250 million in FY 2022. The appropriation language directs \$15.9 million from this account to focus on high priority invasive species including nutria, **buffelgrass**, and **cheatgrass**. In addition, this account helps fund the FWS's invasive species strike teams. Finally, the National Park Service's (NPS) Resource Stewardship account received a \$20 million increase to \$382 million, which helps fund the NPS's invasive plant management teams.

The table below includes final appropriations for FY 2019 - FY 2022 for various Federal programs important to weed and invasive plant research and management in terrestrial and aquatic ecosystems.

	FY 2019	FY 2020	FY 2021	FY 2022
	\$ millions			
USDA-ARS	\$1,303	\$1,414	\$1,492	\$1,633
USDA-NIFA	\$1,471	\$1,527	<b>\$1,57</b> 0	\$1,637
-AFRI Competitive Grants	\$415	\$425	\$435	\$445
-Hatch Act (Exp. stations)	\$259	\$259	\$259	\$260
-Smith Lever (Extension)	\$315	\$315	\$315	\$320
-IR-4 Program	\$12	\$12	\$12	\$14.5
-Crop Protection and Pest Management	\$20	\$20	\$20	\$20
-SARE: Sustainable Ag Research & Educ.	\$37	\$37	\$40	\$45
-McIntire-Stennis Forestry Research	\$36	\$36	\$36	\$36
USDA-APHIS: Cogongrass eradication	n/a	n/a	\$3	\$3
Army Corps- Aquatic Plant Control research	\$6	\$6	\$7	\$8
EPA - Great Lakes Restoration Initiative	\$300	\$320	\$330	\$348
NOAA - National Sea Grant College Program	\$68	\$74	\$75	\$76
DOI - BLM: Rangeland Management	\$104	\$106	\$106	\$109
<b>DOI -</b> FWS: National Wildlife Refuge System: Wildlife and Habitat Management	\$234	\$239	\$240	\$250
<b>DOI</b> - NPS: Resource Stewardship	\$334	\$342	\$362	\$382
DOI - Wildland Fire: Fuels Management	\$189	\$194	\$220	\$227

#### EPA Announces Endangered Species Act Protection Policy for New Pesticides

On January 11, 2022, the EPA announced that, effective immediately, the Agency's review of applications for new pesticide active ingredients (AI) pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) will uniformly incorporate analysis under the Endangered Species Act (ESA) with the intention of prioritizing protection for listed species as much as possible. The new policy applies to AI applications already submitted for consideration as well as incoming applications. <u>EPA press release</u>.

Prior to this policy change, EPA has not uniformly required ESA analysis for all applications for new AIs, which often resulted in litigation against EPA. EPA expects the new policy to reduce litigation in general and improve the overall legal defensibility of new AI registrations.

EPA has explained that it intends to provide several mitigation options to allow the greatest flexibility for pesticide users while still ensuring protections for listed species. Mitigation efforts often include measures intended to avoid or minimize exposure routes between where pesticides are used and where the species live, restrict the geographic or temporal scope of pesticide applications, and reduce the number of pesticide applications allowed on a treated site.

To learn more about EPA's Endangered Species Act Protection Policy for New Pesticides, please see the <u>Q&A</u> <u>document</u>.

#### **EPA Updates Endangered Species Protection Bulletins**

The EPA has released an improved version of Bulletins Live! Two (BLT), an online application for Endangered Species Protection Bulletins. BLT describes geographically specific pesticide use limitations to protect threatened and endangered species and their designated critical habitat.

Pesticide applicators are required to reference the Bulletins Live! Two (BLT) website (<a href="https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins">https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins</a>) when directed by a product label. If the pesticide label directs you to this website, you are required to follow the pesticide use limitations(s) found in the Bulletin for your intended application area, pesticide active ingredient or product and application month.

#### EPA's Bulletins contain the following information:

A map of the user-defined intended application area.

The user-selected active ingredient and/or pesticide product to be applied.

Pesticide use limitations(s).

The month for which the Bulletin is valid.

#### Important Notes about Bulletins

Bulletins may be accessed up to six months before pesticide application. Be sure that you follow the correct Bulletin for the month of your pesticide application.

When referenced on a pesticide label, Bulletins are enforceable use limitations under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

The pesticide use limitations found in Bulletins Live! Two are part of EPA's federal program to protect listed species. Your state may have pesticide use limitations beyond those found in your Bulletin. Bulletins are not intended to replace or override any restrictions that your state may impose. You need to be aware of and follow pesticide limitations according to both the state AND federal requirements.

For more information: <a href="https://www.epa.gov/endangered-species/endangered-species-protection-bulletins">https://www.epa.gov/endangered-species/endangered-species-protection-bulletins</a>

#### Vilsack Announces 10-Year Strategy to Confront Wildfire Crisis

In response to the nation's growing wildfire crisis, USDA Secretary Vilsack and Forest Service Chief Moore have launched a strategy to address the threat to millions of acres and communities across the nation. The strategy will first target areas defined as being at the highest risk based on community exposure, including the Pacific Northwest, the Sierra Nevada Range in California, the front range of Colorado, and the Southwest. The plan highlights the importance of collaboration with the Department of Interior, Tribes, states, local communities, and private landowners to effectively address the crisis. For more information, click <a href="https://example.com/here-target-acressing-new-target-a

#### Wilkes Confirmed as USDA Undersecretary for Natural Resources and Environment



Homer Wilkes was sworn in on Feb. 11, 2022 to serve as Undersecretary for Natural Resources and Environment at USDA. His nomination was confirmed by the Senate by a voice vote. Wilkes is expected to work closely between USDA NRCS and the Forest Service on land restoration projects, including the 10-year wildfire mitigation plan.

Wilkes is a native of Port Gibson, Mississippi. He earned a B.S. in business finance, an M.B.A. and Ph.D. in urban higher education from Jackson State University. From 1984 to 2007, Wilkes served as a supply officer in the United States Navy Reserve. During his career, Wilkes has served within the NRCS as acting CFO, acting associate agency chief, and as Mississippi's state

conservationist. Since 2013, Wilkes has worked as the director of the Gulf Coast Ecosystem Restoration Task Force.

#### Williams Confirmed as USFWS Director



On February 17, 2022, the U.S. Senate confirmed Martha Williams by voice vote to serve as the next Director of the U.S. Fish and Wildlife Service (USFWS), a position that has been vacant since January 2021. Williams has been leading the agency since January as Principal Deputy Director. Prior to that Williams served as Director of the Montana Department of Fish, Wildlife and Parks from 2017 to 2020. She previously served as an Assistant Professor of Law at the Blewett School of Law at the University of Montana and co-directed the university's Land Use and Natural Resources Clinic. Williams earned her bachelor's degree from the University of Virginia and her Juris Doctor degree from the University of Montana School of Law

#### Dr. Chavonda Jacobs-Young Senate Nomination Moves to a Vote

On January 12, the Senate Agriculture Committee advanced the nomination of Chavonda Jacobs-Young to be USDA's Undersecretary for Research, Education, and Economics. Dr. Jacobs-Young's nomination will now head to the Senate floor for a full-Senate vote. She is the Administrator of the USDA Agricultural Research Service (ARS) and currently serves as the Acting Under Secretary for Research, Education, and Economics and as Acting USDA Chief Scientist.

#### USDA-NIFA Director Named to Lead University of Tennessee Institute of Agriculture



The director of the USDA National Institute of Food and Agriculture (NIFA), Carrie Castille, has been selected to serve as the next senior vice chancellor/senior vice president for the University of Tennessee (UT) Institute of Agriculture. This role oversees and leads the Herbert College of Agriculture, the College of Veterinary Medicine, UT AgResearch, and UT Extension, while also serving as the university's chief advocate on issues of agricultural policy in support of the state.

Dr. Castille will conclude her service at USDA in April and assume this new role July 1, 2022, pending approval of the UT Board of Trustees Executive Committee. In the interim, USDA

and NIFA leaders are working closely together to plan for the agency's leadership transition and ensure operations continue seamlessly to best serve the mission and stakeholders.

#### Toombs Appointed Acting USDA-NIFA Director



Dionne Toombs has been appointed to serve as Acting Director of USDA NIFA following the departure of Carrie Castille. With over a decade of USDA service, Dr. Toombs has significantly contributed to USDA's agricultural research, education, and Extension services while serving in various leadership roles. Most recently, she was Director of the Office of the Chief Scientist (OCS). She served as the head of the Division of Nutrition at NIFA and as the National Program Leader (NPL) for the Agriculture Food and Research Initiative. Prior to serving as NPL, Dr. Toombs was a Program Specialist for Food Science and Nutrition at the former USDA Cooperative State Research Education and Extension Service, now NIFA.

#### Organic Weed Management Remains #1 Priority of Organic Industry

In March, the Organic Farming Research Foundation (OFRF) and Organic Seed Alliance (OSA) released the National Organic Research Agenda (NORA) and State of Organic Seed (SOS). The two reports are published every five years to examine organic farming challenges across the U.S., identify research needs, and better understand the organic seed needs of producers. Those reports were based on survey data from over 1,100 certified organic and 71 transitioning organic farmers and ranchers across North America.

Certified organic survey participants identified the following production challenges:

#### Controlling weeds – 67% of respondents

Managing production costs – 59%

Maintaining adequate yields – 48%

Managing soil fertility and crop nutrition – 43%

Controlling insect pests – 41%

Finding appropriate organic crop varieties and seeds – 38%

Controlling disease pressure – 36%

Adapting to climate change – 36%

Controlling weeds clearly emerged as the most pressing production challenge, and the broader topic of "soil health" was second only to weeds in response to the open-ended survey question. Focus group participants discussed difficulties managing weeds without degrading soil health, which underscores the need for additional research in organic weed management strategies that require less cultivation. In addition, focus group discussions revealed that climate disruptions can accentuate other challenges in managing weeds, pests, soil, and water resources. These challenges appeared especially intense for Southern organic farmers, while producers in the moisture-limited Great Plains and Mountains found cover crops and other organic soil management practices more challenging than producers elsewhere. Survey details:

https://ofrf.org/wp-content/uploads/2022/03/OFRF National-Organic-Research-Agenda-NORA 2022.pdf

#### Culpepper, Neal, Peachey Receive IR-4 SOAR Award

On April 6, the IR-4 Project announced the winners of the 2022 SOAR Award. The SOAR Award honors external partners who exemplify the areas of **Service, Outreach, Altruism, and Research**, while supporting specialty crop growers and the mission of the IR-4 Project. This year's winners have made significant impacts to their individual

#### Dr. Stanley Culpepper - Professor and Extension Weed Scientist, University of Georgia

Dr. Stanley Culpepper with the University of Georgia was selected as a recipient of the SOAR Award for his commitment to the future of agriculture in the state of Georgia and throughout the country.

- Service: Dr. Culpepper goes beyond his research and extension duties to engage in policy actions on the state and national level that have led to the approval of needed pest management tools for specialty crop growers;
- Outreach: Dr. Culpepper has shown consistent dedication to educating the agricultural community about the work of the IR-4 <u>Project</u>;
- Altruism: Dr. Culpepper grew up on a farm and has a deep understanding of the challenges specialty crop growers and family farms face. He uses this unique perspective to fuel his passion for the future of agriculture; and
- Research: Dr. Culpepper's countless research trials and data reports, along
  with his willingness to conduct trials for IR-4, have generated necessary data for
  numerous label expansions.

## Dr. Joseph Neal – Professor of Weed Science and Extension Specialist, NC State University

Dr. Joseph Neal with NC State University was selected as a recipient of the SOAR Award for his commitment to solving pest management problems for ornamental and landscape growers.

- Service: Dr. Neal has been an active participant in IR-4's environmental horticulture and biopesticide programs for more than 25 years, working closely with various stakeholders and government entities to advance the needs of specialty crop growers.
- Outreach: Dr. Neal consistently educates commodity groups and clientele about the mission of the IR-4 Project;
- Altruism: Dr. Neal is committed to the welfare of others, both professionally and personally, through measures such as mentoring extension agents and specialists; and
- Research: Dr. Neal has worked on several research projects of regional and national importance that contributed data to most herbicides currently labeled for use on nursery and landscape plantings.



#### Dr. Edward Peachey - Associate Professor, Oregon State University

Dr. Ed Peachey with Oregon State University was selected as a recipient of the SOAR Award for his service to specialty crop growers in the state of Oregon and the Pacific Northwest.

- Service: Dr. Peachey actively voices the needs of Oregon farmers through his role as the state liaison for IR-4;
- Outreach: Dr. Peachey has built a reputation among growers as a reliable and knowledgeable source for identifying pest management problems and investigating solutions;
- Altruism: Dr. Peachey is dedicated to solving pest management problems and has taken on any tasks necessary to make a significant number of product registrations a reality; and
- Research: Dr. Peachey has an extensive research record, including undertaking approximately 80 weed science and entomology IR-4 studies that have directly contributed to new or expanded labels.

Lee Van Wychen, Ph.D.

Executive Director of Science Policy National and Regional Weed Science Societies Lee.VanWychen@wssa.net 202-746-4686

#### Meetings of the National and Regional Weed Science Societies

Jul. 18 - 21, 2022 Aquatic Plant Management Society (APMS), Greenville, SC www.apms.org

Dec. 5 - 8, 2022 North Central Weed Science Society (NCWSS), St. Louis, MO www.ncwss.org

Jan. 23 - 26, 2023 Southern Weed Science Society (SWSS), Baton Rouge, LA www.swss.ws

Jan. 30 - Feb. 2, 2023 Northeastern Weed Science Society (NEWSS), Arlington, VA www.newss.org

Jan. 30 - Feb. 2, 2023 Weed Science Society of America (WSSA), Arlington, VA www.wssa.net

Feb. 27 - Mar 2, 2023 Western Society of Weed Science (WSWS), Boise, ID www.wsweedscience.org