



Western Society of Weed Science Newsletter

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Spring 2017

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President's Report by Monte Anderson

I think we pulled it off, the first joint meeting that the WSWS has had with another organization. Of course, it helped that the meeting hotel and location was familiar and ideal for these two organizations to get together. It was helpful that the two program chairs live somewhat close in proximity to work together, and to have a really local, local arrangements person. Adding to that, we had the most experienced business manager still on board guiding us through all of the different aspects of the meeting plus his effective handling of the finances. We had well over 300 registered attendees for this unique meeting and the consensus from both WAPMS and WSWS was that we should do this again in the future.

At the welcoming reception past president Joe Yenish recognized a number of retirees, including Vanelle Peterson, Dow AgroSciences; Bob Blackshaw and Neil Harker, Ag Canada; Larry Lass, University of Idaho; Ralph Whitesides, Utah State University; Carl Libbey, Washington State University; Joe DiTomaso, University of California-Davis; Dean Christie, Bayer CropScience; and Phil Stahlman, Kansas State University. The number of retirees continues to grow and the contributions and experience of these individuals will be greatly missed.

Topics, speakers, and presentations in the General Session were diverse and held a captive audience. Presidents Kirk Howatt and Scott Nissen of the two organizations provided their comments on the joint meeting. Kirk used various beauty shots of weeds to highlight people involved with the meeting, including a special guest, Janice McFarland, current WSSA president, whose goal is to attend each of the regional societies meetings. He also noted the efforts of the Herbicide Resistance Listening Sessions being held in three locations of the WSWS. Scott reminded us of our history with aquatic weeds and that these organizations have much in common and should continue to meet jointly when possible. Science policy director Lee Van Wychen's return to Coeur d'Alene after being a graduate student paper winner in 2001 was gratifying. Then we went to geology school and witnessed time lapse flooding from ancient lake Missoula while watching geologist Nick Zentner pace the width of the room. Nick did a fantastic job of keeping our attention with beautiful photography, videos, and humor. Alan Schreiber gave us the lowdown on cannabis growth, issues, and crop value. He got us going by voting on where we stand on this crop, and noted that the vast majority of people in the U.S. live in a state where at least one form of cannabis is legalized. It's also worth 520 times the value of blueberries!

Posters were presented, papers given, and symposia were conducted on everything concerning weed management. Including the five presentations from the General Session, this joint meeting ended up with a total of 170 presentations which does not count the four sessions with discussion topics. Graduate student attendance was less than last year's peak and accounted for 36 presentations. Thanks go to Joel Felix for organizing the grad student contests, soliciting the judges, and most of all, for the students, as their participation and quality presentations are a vital part of our conference.

Next year we meet in Garden Grove, CA near Los Angeles at the Hyatt Regency Orange County. We have plans to meet downtown Denver, CO in 2019 at the Grand Hyatt. Our site selection plans for 2020 normally take us to the PNW area again; however, the WSSA has proposed meeting in Hawaii, possibly jointly. At the business meeting our membership indicated strong interest in going to Hawaii, which is otherwise difficult for us to consider alone from a financial standpoint. As the WSSA checks out venues and

possibly proposes a joint meeting, we'll keep in mind what types of things we'd want to insure, such as having discussion groups, and other pros and cons for us to consider meeting jointly in 2020.

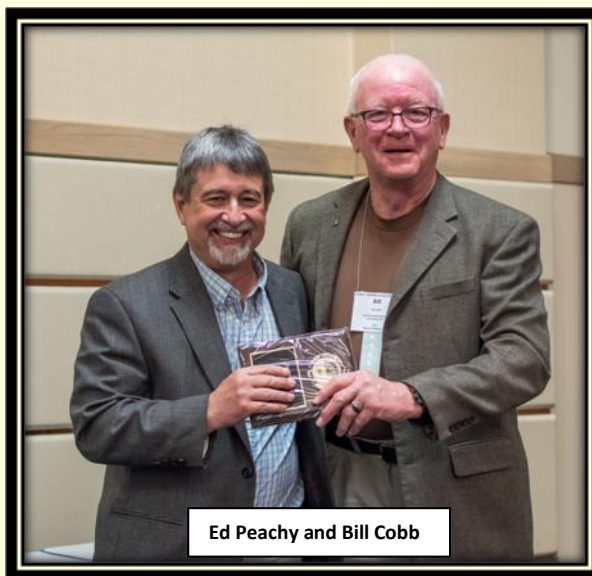
I'd like to thank you all for your program support for the 2017 meeting and look forward to serving as your president. It will be an interesting year working with a new business manager and the changes occurring in industry. Board officers and committee chairs/members, please pass along your information and files to those following you to insure continuity. Thanks for being involved in the WSWs and way to go Zags on a great season!

WSWS 2017 Fellow Awards – by Kassim Al-Khatib, chair

The WSWs Fellows and Honorary Member Committee is pleased to announce the Fellow Awards for 2017 were presented to Dr. Ralph Whitesides at Utah State University and Dr. Edward (Ed) Peachy at Oregon State University.



Kirk Howatt and Ralph Whitesides



Ed Peachy and Bill Cobb

The 2017 committee members were Bill Cobb, Jill Schroeder, and Kassim Al-Khatib (chair). Bill Cobb will assume the role of committee chair for 2018. Please submit nominations for Fellow and Honorary member Awards for 2018 to Dr. Cobb by December 1, 2017 (see future newsletter announcements).

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Student Liaison Report - by Caio Brunharo

We had an incredible joint meeting between WSWs and WAPMS this year. Even though the resort was surrounded by marvelous landscapes, I have to confess that I had a hard time getting out of the conference venue with so much good research being presented. This year we had 19 papers and 17 posters presented by students from both organizations, and thanks to you, high-quality science was once again consistent throughout the five research sections. I hope you guys had as much fun as I did!

I would like to congratulate those students who received student contest awards and also those who were recipients of the Elena Sanchez Memorial WSWs Outstanding Student Scholarship. Speaking of which, this year we received a limited number of applications for the travel award, even though each award consists of \$1000 that can be spent on research costs, as a stipend, or for travel to the WSWs annual meeting. I would like to encourage everyone to apply for this great opportunity, not only because of the financial assistance, but also because it will look good on your CV's. Major Professors: help us spread the word among your students by encouraging them to apply for the Elena Sanchez Memorial WSWs Outstanding Student Scholarship!

Once again the student silent auction was a success. A big thanks to all of you who gave monetary donations, donated items, and to the bidding participants. We had help from folks in industry, academia, scientific societies, and commodity boards. You all made it possible to raise \$4303.50 and fully fund next year's Student Scholarship Program! We really appreciate your help and look forward to working with you again next year.

Breanne Tidemann has now completed her two-year term and is stepping down from the Student Liaison Chair position. Many thanks to Breanne who was the protagonist in organizing the Student Silent Auction, Student Night Out program, and the Elena Sanchez Memorial WSWs Outstanding Student Scholarship this year. Stepping in to the Student Liaison Chair-Elect role is Clint Beiermann, a PhD student at University of Nebraska-Lincoln. Congratulations Clint! Thanks to the students who nominated themselves for this position and please consider nominating yourself or someone else in the future. It is a great opportunity to get involved in the society and network with people who have similar interests as yours.

If you have any concerns or suggestions, please contact Clint or myself and we will forward your word to the Board of Directors. Our role is to facilitate communication between the Board of Directors and the student members of the WSWs, so anything that you have in mind and think can be helpful to increase student presence in the society will be very much appreciated. We generally e-mail opportunities through the webmaster, but we also post them on our facebook page (Western Society of Weed Science Student Section) and twitter (@WSWSstudents), so make sure you like/follow these.

Caio Brunharo, Student Section Chair
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Clint Beiermann, Student Section Chair (elect)
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Elena Sanchez Memorial Scholarship – Roger Gast

The awards committee received three applications for the Elena Sanchez Memorial WSWs Scholarship. All three applicants were outstanding and were supported by impressive research papers presented at the Coeur d'Alene meeting. The recipients of the Elena Sanchez Memorial Scholarship were Neeta Soni (CSU), Mariano Galla (UC-Davis), and Caio Brunharo (UC-Davis). A big thanks to their graduate advisors for bringing along such great talent for the future of weed science.



2017 Presidential Award of Merit

Phil Stahlman received the WSWS Presidential Award of Merit from Kirk Howatt at the 2017 annual meeting in Coeur d'Alene, Idaho.



Awards Committee Report—Roger Gast, Alan Helm, and Gustavo Sbatella



We received nominations for only one award this year, Outstanding Weed Scientist, Early Career. Still the nominations were impressive to say the least.

The Outstanding Weed Scientist – Early Career award was granted to Dr. Erik Lehnoff, Assistant Professor at New Mexico State University.

The awards committee encourages all society members to consider nominating worthy candidates for all distinguished achievement award categories later this year.

A Note from the Business Office – Tara Steinke

Spring is here and we at Interactive Management Inc. (IMI) are busy transitioning the management of WSWS from Phil Banks to our helm. Phil is still going to be involved in WSWS on the Finance Committee and as the Secretary for the Rita Beard Endowment Committee, and we are looking forward to his continued involvement in the Society in a new role.

If you did not attend the great meeting in Coeur d'Alene, ID, you should renew your WSWS membership for 2017. You can do this by logging into your account at the website (www.wsweedscience.org) and clicking on the Current Member Renewal under the Membership tab. You can also renew by sending a check for \$30.00 along with your name and current contact information (form is included in this newsletter). If you have changed your address, job, phone number, or e-mail address, please take the time to update your information (through your account on the website). Let us know if you have any questions or need additional information.

To get ahold of us please call (303) 327-8016 or email info@wsweedscience.org. IMI is excited to continue the tradition of excellent service that Phil Banks has provided to the organization for the last ten years.

I will leave you with this: Get involved, and encourage others to get involved in WSWS! "As a business model and a core value, membership is perhaps the defining quality of nonprofit trade associations and professional societies. And it's more than just a bundle of benefits. To join an association is to become a member of a community, a place to belong, where like-minded people share knowledge and work together toward goals they couldn't achieve alone. The ASAE study *The Decision to Join* found that the human desire for belonging remains strong, and members join associations equally motivated to improve themselves and their industries or communities."

(<https://www.asaecenter.org/resources/topics/membership>)

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WSWS ONLINE EDUCATION
<http://passel.unl.edu/pages/index2col.php?category=weedscience#>

WSSA Journals Website Online
www.WSSAJournals.org

CALENDAR OF EVENTS

2nd Global Herbicide Resistance Challenge
May 14-18, 2017
Denver, Colorado
www.ghrc2017.org

57th Aquatic Plant Management Society Annual Meeting
July 16-19, 2017
Daytona Beach, Florida
www.apms.org

26th Asian Pacific Weed Science Society Conference 'Weed Science for People, Agriculture, and Nature'
September 19-22, 2017
Kyoto, Japan
www.c-linkage.co.jp/apwss2017/

Weed Science Society of America Annual Meeting
Jan 29 – Feb 1, 2018
Arlington, Virginia
www.wssa.net

Western Society of Weed Science Annual Meeting
March 12-15, 2018
Garden Grove, California
www.wsweedscience.org

Call for Symposia for the 71th Annual Meeting

Members of the WSWS are invited to submit proposals for symposia at the 71st Annual Meeting to be held at the Hyatt Regency Orange County, CA from March 12-15, 2018. The WSWS program committee will receive proposals and evaluate proposed symposia based on justification and objectives, the target audience, thorough agenda development, and detailed budget. Symposium proposals are due **June 15**. Symposia will be confirmed at the summer board meeting.

The program committee together with the WSWS Board of Directors may approve full or half-day symposia for the annual meeting. Proposals for meetings beyond 2018 are also encouraged; the 2019 meeting will be in Denver, CO. Topics that are relevant for the local audience are encouraged so that WSWS can reach out to end users with knowledge and technology.

Past symposium topics have included Risk Communication, Macro-photography, Effects of Climate Change on Weed Biology, Ecology and Management, Lab Diagnostics for Injury Determination, Tree & Vine Weed Control, Ecology and Management of Downy Brome, *Ventenata dubia*, Invasive Toadflax, Ecological Effects of Invasive Plants, Kochia, Invasive Grasses, Jointed Goatgrass, Biological Control of Invasive Plants, Adjuvant Technology, Arundo/Phragmites, Application Technology, Knotweed, Crop Protection Chemistry vs. Genetically Modified Crops, Dose Response Functions, and Salt Cedar.

Abstracts of symposium presentations will be included in the proceedings; therefore, symposium organizers are responsible for ensuring all electronic title and abstract submissions. We look forward to your proposals. If you have any questions, please contact Dirk Baker (dbaker@campbellsci.com) or Andrew Kniss (akniss@uwyo.edu).

Retirees Honored – Joe Yenish

The list of retirees honored at the Member Reception on Monday, March 13 and at the Coeur d'Alene Resort included:

<u>Member</u>	<u>Organization</u>
Vanelle Peterson	Dow AgroSciences
Bob Blackshaw	Ag Canada
Neil Harker	Ag Canada
Larry Lass	University of Idaho
Ralph Whitesides	Utah State University
Carl Libbey	Washington State University
Joe DiTomaso	University of California-Davis
Dean Christy	Bayer CropScience

Congratulations and best wishes to all in their future endeavors.

The WSWS would like to thank **Curtis Hildebrandt-M.S.** student from Colorado State University who graciously volunteered his time and talents to furnish the photographs included in this newsletter.

2017 Student Paper and Poster Awards by Joel Felix

The 2017 WSWS Student Paper Contest included 17 poster presentations and 19 oral presentations. Students who participated in the contest are to be commended for their excellent presentations. As is customary, the students with poster and oral presentations were each divided into different groups. According to the rules of the student paper contest, the number of winning places in different sections varied from one to two, depending on the number of students in each group.

The undergraduate poster presentation winner was Grace K. Ogden, Oklahoma State University. Her winning poster was titled *Pyroxasulfone Weed Management Systems in Oklahoma Winter Wheat*.



Graduate student poster presentations in the Aquatics, Weeds of Horticultural Crops, and Basic Biology and Ecology projects had two winners. First place was Mirella Ortiz from Colorado State University. Her winning poster was titled *Absorption Rates of 2,4-D Butoxyethyl Ester and 2,4-D Amine by Eurasian Watermilfoil*. Second place winner in the same group was Albert Adjesiwor, University of Wyoming. His poster was titled *Kin Recognition in Beta vulgaris*.

The other group of graduate student posters was represented in the Agronomic Crops project. First place winner was Tara Burke from Washington State University and her poster was titled *Russian Thistle (*Salsola tragus*L.) and Lambsquarter (*Chenopodium album* L.) Control in Sweet Corn*. Second place winner was Clint W. Beiermann, University of Nebraska. His poster was titled *Integrating Crop Rotation and Herbicide Programs to Control Kochia Prior to Sugarbeet in Western Nebraska*.

Student Poster Contest Winners

Weeds of Range and Natural Areas, Aquatics, Weeds of Horticultural Crops & Basic Biology and Ecology



1st – Mirella Ortiz, Colorado State University, Fort Collins
2nd – Albert Adjesiwor, University of Wyoming, Laramie

Weeds of Agronomic Crops



1st – Tara Burke, Washington State University, Pullman
2nd – Clint Beiermann, University of Nebraska, Lincoln



Students in the oral presentations were divided into five groups each representing one section, Aquatics, Basic Biology and Ecology, Weed of Agronomic Crops, Weeds of Horticultural Crops, and Weeds of Range and Natural Areas. In the Aquatics section, the first place oral presentation winner was Erika J. Haug, North Carolina State University. Her winning presentation was titled *Procellacor: concentration exposure time trials*. The second group of oral presentations was in the Basic Biology and Ecology section. First place winner was Carl W. Coburn, University of Wyoming, and his paper was titled *Influence of Soil Type and Growing Environment on the Selectivity Index in Herbicide Resistance Studies*. Second place winner was Neeta Soni, Colorado State University, and her presentation was titled *Integrated Weed Management of Winter Annual Grasses in Wheat using Harvest Weed Seed Control*.

The first place winner in the Weeds of Agronomic Crops oral presentation section was Charlemagne A. Lim of Montana State University. His presentation was titled *Survival, Growth, and Reproductive Fitness of Dicamba-Resistant Kochia in the Presence of Dicamba*. Second place winner was Curtis M. Hildebrandt, Colorado State University, and his presentation was titled *Viability Assessment of Mutagenesis-derived ACCase Resistant Wheat Lines as a New System for Control of Winter Annual Grasses*.

The first place oral presentation winner in the Weed of Horticultural Crops section was Caio Augusto Brunharo, UC Davis, and his presentation was titled *Evidences for Vacuolar Sequestration as Mechanism of Resistance to Paraquat in a Population of Italian Ryegrass from California*. First place winner in the Weeds of Range and Natural Areas oral presentation section was Tara Burke, Washington State University, and her presentation was titled *Vernalization Effects on the Translocation of Aminopyralid and Clopyralid in Rush Skeletonweed (Chondrilla junceaL.)*.

Student Paper Contest Winners

Aquatic Weeds	Weeds of Range and Natural Areas	Weeds of Horticulture Crops
		
<p>1st – Erika Haug, North Carolina State University, Raleigh</p>	<p>1st -Tara Burke, Washington State University, Pullman</p>	<p>1st – Caio Brunharo, University of California,Davis</p>

Basic Biology and Ecology of Weeds	Weeds of Agronomic Crops
	
<p>2nd – Neeta Soni, Colorado State University, Fort Collins 1st - Carl Colburn, University of Wyoming, Laramie</p>	<p>1st – Charlemagne Lim, Montana State University, Bozeman 2nd - Curtis Hildebrandt, Colorado State University, Fort Collins</p>

Appreciation is expressed to all of the judges who contributed their time and energy in compiling scores of each of the presenters in the oral and poster presentations.

2017-2018 WSWS Officers and Executive Committee



Seated: Caio Brunharo, Brian Jenks, Andrew Kniss, Monte Anderson, Tara Steinke, Kirk Howatt, Chad Cummings, Tim Miller
Standing: Clint Beiermann, Dirk Baker, Brian Schutte, Brad Hanson, Marty Schraer, Charlie Hicks, Gustavo Sbattella

WSWS Rita Beard Endowment Foundation

The family of long time WSWS member Rita Beard, who passed away last October, has donated a substantial amount of money to support the creation of an endowed fund. The proceeds from the Foundation will be used to support the travel to a professional meeting for students and/or young professionals working in invasive species management in natural areas in which Rita worked for her entire career. In the late 1970s, she served as a Range Conservationist and Invasive Plant Specialist with the U.S. Forest Service in western Montana and made history by preparing the first Environmental Impact Statement on invasive plants in the United States, pioneering the use of herbicides to control invasive plants in wilderness areas. In 2005, she joined the National Park Service (NPS) as the National Invasive Plant Management Program Coordinator. At NPS she supervised 18 Exotic Plant Management Teams (EPMTs) and guided the development of policies related to invasive plant management and prevention.

At the Coeur d'Alene meeting of WSWS last month, a committee appointed by WSWS President Kirk Howatt met and created the Articles of Incorporation for the WSWS Rita Beard Endowment Foundation. Selected as Trustees for the Foundation were Mark Daluge, President; Celestine Duncan, Vice President; Phil Banks, Secretary; and Kirk Howatt and Todd Neel as Board Members. The Board of Trustees will oversee the operating procedures for the Foundation and pursue fund raising. A link was established on the WSWS website where those wishing to donate to the fund may do so either with a credit card or by check (<http://www.wsweedscience.org/rita-beard-endowment-foundation/>).

Please consider donating to the Foundation.

Derek Sebastian Joins Vegetation Management Stewardship Team in Graduate Scholar Position



Environmental Science, a business unit within the **Crop Science division of Bayer**, announced that Derek Sebastian, a recent Ph.D. graduate in Bioagricultural Sciences and Pest Management from Colorado State University, has joined the Vegetation Management (VM) Stewardship Team.

He holds a Master's degree in Bioagricultural Sciences and Pest Management, and a Bachelor's degree in Biology and Secondary Education. While pursuing his Ph.D. at Colorado State University, Sebastian worked in the Weed Research Laboratory. He is an active member of the Western Society of Weed Science, Weed Science Society of America, International Weed Science Society, Colorado Weed Management Association, Nevada Weed Management Association, DeAngelo Brothers Inc. Branch Training, and the Colorado Weed Network. Sebastian is published in *Rangeland Ecology & Management*, *Pest Management Science* and *Invasive Plant Sciences and Management*, among other industry journals.

Sebastian already works in partnership with VM Stewardship and Development Manager Dr. David Spak and Western Stewardship Manager Dr. Harry Quicke to assess efficacy of Bayer solutions on invasive winter annual grass control in western states. He was instrumental in positioning Esplanade 200 SC as a tool for the restoration of open spaces, as well as reducing wildfire risk through suppression of Downy Brome. In his new role, Sebastian will be responsible for conducting and coordinating research and demonstration trials, presenting results to customers, and working with government agencies to drive adoption of targeted vegetation management strategies.

Sebastian also joins vegetation management experts Jason Belcher (Eastern Regional Stewardship Manager) and Case Medlin (Great Plains Stewardship Manager) on the VM Stewardship Team. The team exists to translate company, market, and university research into real-world solutions for controlling unwanted, invasive and noxious weeds, resulting in enhanced safety, productivity, appearance and value of land, forests and infrastructure.

For more information on Bayer vegetation management solutions and the VM Stewardship Team, visit BayerVM.com.

Invasive Alien Species –Including Plants-on the Rise Worldwide

The International Union for the Conservation of Nature summarizes a recent journal article *No saturation in the accumulation of alien species worldwide* Hanno Seebens, Tim M. Blackburn, et al.: Invasive alien species are on the rise worldwide and their numbers show no sign of slowing down despite global efforts to address the challenge, according to a study published in Nature Communications by an international team of researchers, including members of the IUCN Species Survival Commission (SSC) Invasive Species Specialist Group. The study found that during the last 200 years, the number of new invasive species introductions has continuously increased worldwide, with more than a third of all first introductions recorded between 1970 and 2014. It also found that more new invasions are expected among all groups of species in the near future, with the exception of mammals and fishes.

Excerpt: "Drawing on new data including the IUCN Global Invasive Species Database and the Global Register of Introduced and Invasive Species, the authors analyzed more than 45,000 first records of almost 17,000 established alien species. The results indicate a distinct increase in first records of invasive vascular plants in the 19th century, probably as a result of the intensification of horticulture. The rates of new introductions of other organisms such as algae, mollusks or insects increased steeply after 1950, most likely as a consequence of the growth of global trade."

Nature Communications 8, Article number: 14435 (2017), doi:10.1038/ncomms14435

Read more: https://www.iucn.org/news/secretariat/201702/invasive-alien-species-rise-worldwide?dm_i=2GI3,10WJC,40EN56,300SL,1

WASHINGTON REPORT

April 6, 2017
Lee Van Wychen

What Are Your Most Common and Troublesome Weeds in Grass Crops?

The National and Regional Weed Science Societies are seeking your expertise in identifying the most common and troublesome weeds in the following grass cropping systems: 1) corn 2) rice, 3) sorghum, 4) spring grains, 5) winter grains, 6) pastures/rangeland, and 7) turf.

Please take a few minutes to complete the survey at: <https://www.surveymonkey.com/r/2017weeds>

New CAST Issue Paper- Crop Protection Contributions toward Agricultural Productivity

The Council for Agricultural Science and Technology (CAST) released a new Issue Paper on April 5 that examines the current plant protection revolution that is driven by the biological realities of pesticide resistance, various market forces, and real or perceived side effects of pesticides. The paper has six authors, including weed scientists Dr. Hugh Beckie from Agriculture and Agri-Food Canada and Dr. Jill Schroeder from the U.S. Department of Agriculture. The authors cover a lot of ground in the 20 page report including:

- Plant Protection Trends—Current and Future
- New Biological Insect, Disease, and Weed Management Tools
- The Role of Emerging Crop Protection Technology Solutions in Integrated Pest Management
- How to Preserve Crop Protection Chemistries and Traits—Efficacy, Durability, and Usefulness into the Future

The Issue Paper accurately captures both the similarities and differences in the pest management challenges faced by weed scientists, plant pathologists, entomologists, and nematologists. The authors discuss new technologies such as drones, smart sprayers, and specially designed cultivators--and they examine current biotech advancements such as CRISPR-Cas9 and other techniques that may fit well into integrated pest management systems. They emphasize the need for research, communication, and collaboration as scientists "develop integrated strategies for managing pests while preserving ecosystem services and farm productivity."

This CAST Issue Paper (IP58) and its companion Ag quickCAST are available online at the CAST website: <https://www.cast-science.org/publications/>

Pruitt Confirmed as EPA Administrator

On February 17, 2017, the Senate confirmed Scott Pruitt as the 14th Administrator of the U.S. EPA by a vote of 52-46. The 49 year old Pruitt was born and raised in Kentucky where he graduated from Georgetown College in 1990. After that, he moved to Oklahoma where he earned his law degree at the University of Tulsa specializing in constitutional law. Most recently, Pruitt served as the Attorney General for Oklahoma. More on Administrator Pruitt at: <https://www.epa.gov/aboutepa/epas-administrator>

Zinke Confirmed as Secretary of Interior

Ryan Zinke was confirmed as the 52nd Secretary of the Interior by the Senate on March 1, 2017 by a vote of 68-31. The native Montanan served 23 years as a U.S. Navy Seal officer, retiring in 2008. He has a B.S. in Geology from the University of Oregon, a Masters in Business Finance from National University, and a Masters in Global Leadership from the University of San Diego.

During his confirmation hearings, Zinke said he would take a "multi-use approach" to federal land management on the more than 500 million acres of public land managed by the Department of Interior. He also vowed to clear the estimated \$12 billion backlog in maintenance and repair at national parks. More on Secretary Zinke at: <https://www.doi.gov/pressreleases/ryan-zinke-sworn-52nd-secretary-interior>

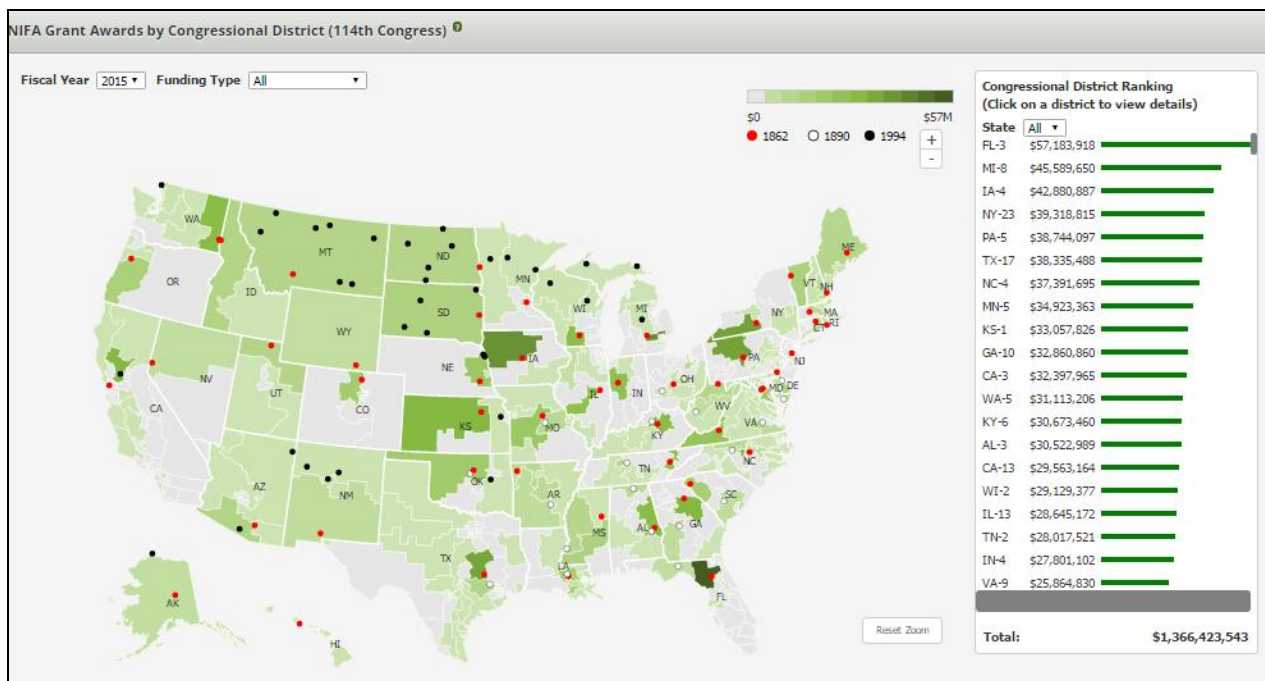
Perdue Approved by Senate Agriculture Committee

The Senate Agriculture Committee approved Sonny Perdue's nomination as Secretary of Agriculture by a voice vote on March 30, 2017. He is expected to easily pass a final confirmation vote in the Senate, but unfortunately that vote will not occur until after a two week Easter recess when the Senate returns the week of April 24. Perdue, 70, was born and raised on a diversified row crop and dairy operation in central Georgia and earned a doctorate in veterinary medicine from the University of Georgia in 1971. Following a brief tenure as a practicing veterinarian, Perdue started two businesses from the ground up, concentrating in agribusiness and transportation. There have been 30 Secretaries of Agriculture since the job was created in 1889, and though some were raised on a farm, only two actually lived and worked in agriculture as adults. If confirmed, Sonny Perdue will be number three.

Map of USDA-NIFA Grant Awards by Congressional District Available

A new, interactive map from USDA's National Institute of Food and Agriculture (NIFA) shows both Competitive and Capacity Grant awards to the 1862, 1890, and 1994 land grant institutions. The Congressional District map is based on the 114th Congress (2015-16) and shows awards for each year from FY 2011 through FY 2015. Top of the list in FY 2015 was FL-3, home to the University of Florida, which received just over \$57 million.

See: <https://portal.nifa.usda.gov/web/maps/nifa-funding-by-congressional-district/>



NIFA Releases Study on the Value of Capacity Programs

On March 27, the USDA National Institute of Food and Agriculture (NIFA) released a new report that measured the effectiveness of NIFA's investments in capacity programs. The report entitled, "**National Evaluation of Capacity Programs**," was prepared by TEconomy Partners. The report found that capacity funding remains a relevant program that offers multiple benefits. Investments respond to the specific needs of local, regional, and state agricultural producers. Capacity funds offer an essential funding stream for research and extension programs of relevance to producers that are unlikely to receive national-scale attention. **Each dollar of capacity funding leverages \$1.85 in additional investments from state, local, and private sector sources.**

NIFA commissioned the study to determine whether funding based on 100-year-old legislation is still a suitable model to support 21st century university needs. The results of the study will be helpful in defending the federal investment in capacity programs such as Hatch and Smith Lever as budget constraints lead to discussions about potential cuts to the USDA budget.

House Ag Subcommittee Holds Hearing on Ag Research

On March 16, the House Agriculture Subcommittee on Biotechnology, Horticulture, and Research held a hearing titled “The Next Farm Bill: Agricultural Research.” For more details:

<http://agriculture.house.gov/calendar/eventsingle.aspx?EventID=3728>. The subcommittee heard testimony from:

- Dr. Jay Akridge – Glenn W. Sample Dean of Agriculture, Purdue University, West Lafayette, IN; on behalf of APLU.
- Mr. Richard Wilkins – Chairman, American Soybean Association, Greenwood, DE; on behalf of NC-FAR.
- Dr. James Carrington – President, Danforth Center, St. Louis, MO; on behalf of the Danforth Center.

Each of the witnesses talked about the importance of research to the future success of agriculture and the farm economy. Dr. Akridge, testifying on behalf of the land grant universities, spoke about the need to support competitive and capacity programs, as well as infrastructure. Mr. Wilkins, representing the National Coalition for Food and Agricultural Research (of which WSSA is a member), gave the perspective of stakeholders who use and benefit from agriculture research to support their businesses. Dr. Carrington focused his testimony on the Agriculture and Food Research Initiative (AFRI), its operations, and the need for increased support.

This was the first agriculture research-focused hearing conducted in preparation for the next Farm Bill. The House and Senate Agriculture Committees are expected to hold numerous additional hearings as they work to develop the next Farm Bill.

Trump Budget Blueprint Proposes Cuts to USDA

On March 16, President Trump released his budget blueprint for FY 2018. The blueprint provides proposed funding levels across the government, but in most cases does not get into many programmatic details. The Department of Defense would receive an increase of \$54 billion, while most other departments would face significant cuts.

Under the blueprint, the USDA would be cut by 21% from the current FY 2017 Continuing Resolution level. The blueprint does not provide many details on how these cuts would impact agricultural research. The Agriculture and Food Research Initiative (AFRI) would receive \$350 million under the blueprint, which represents the same level received in FY 2016 and the current FY 2017 Continuing Resolution. However, this is \$25 million less than the House and Senate Appropriations Committee versions of the FY 2017 agriculture appropriations bill. Funding levels for capacity programs such as Hatch and Smith Lever are not mentioned.

The blueprint states that in-house research funding within the Agricultural Research Service (ARS) would be focused on the highest priority agriculture and food issues such as increasing farming productivity, sustaining natural resources, including those within rural communities, and addressing food safety and nutrition priorities. Without providing specifics, it appears that the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS) would be cut significantly, although the 2017 Census of Agriculture would be supported.

It is important to note that this is one of the first steps in the development of the FY 2018 budget. Major cuts like those proposed in the Budget Blueprint would have to be approved by Congress through the annual appropriations process. A copy of the Budget Blueprint [can be found here](#).

New National Research Initiative Aims to Improve Cover Crops

The Foundation for Food and Agriculture Research (FFAR) and The Samuel Roberts Noble Foundation launched a national cover crop initiative on March 22, 2017.

The \$6.6 million research initiative, made possible by a \$2.2 million grant from FFAR, will promote soil health through the development and adoption of new cover crops across the U.S. The Noble Foundation has been a leader in developing forages and new cover crop varieties since the 1950s. The initiative will bring together collaborators from the seed industry, USDA-ARS, USDA-NRCS, three land grant universities, and an existing

Legume Cover Crop Breeding Team, comprising another six land grant universities, ARS sites and a producer network.

The focus of the initiative will be to identify cover crop species with the greatest potential to improve soil health and evaluate such species over a broad geography within three groups: small grains (wheat, rye, oat and triticale), annual legumes (hairy vetch, winter peas and clovers), and brassicas (turnips, radishes, kale and mustards).

The project is not limited to traditional breeding and evaluation. Engaging both producers and industry, researchers will seek to identify and introduce key traits that can improve crop performance and soil enhancement. Additionally, scientists at the Noble Foundation will utilize advanced breeding techniques – which have traditionally been limited in application to high-value, row crops – to bring new and value-added characteristics to cover crops.

Field trials will be conducted at five strategic sites to assist with cover crop evaluations: Maryland for the northeast, North Carolina for the southeast, Oklahoma for the Southern Plains, Nebraska for the Northern Plains and Missouri for the Midwest.

Short-term goals of the research are to identify the best cover crop species and varieties currently available through evaluation and screening, promote them to farmers and ranchers, and increase effective options within the marketplace. Researchers will share results from this project with the public through national meetings and peer-reviewed publications. Certain outcomes, including molecular markers, will be made available through publication and publicly accessible databases.

Pesticide Registration Improvement Bill Passed by House

Legislation to reauthorize EPA's pesticide approval system passed the House by a voice vote under suspension of the rules on March 20 and now heads to the Senate. The legislation, H.R. 1029, is the fourth reauthorization of the Pesticide Registration Improvement Act (PRIA 4) that sets fees for pesticide registrants seeking to get products registered in return for regular approval schedules. Specifically, the bill extends the maintenance fee provision until 2023 and increases the total amount of maintenance fees to \$31 million, extends the prohibition on levying registration fees, and includes additional uses for any fees collected to defray costs associated with registration review. In addition, H.R. 1029 codifies timeframes for experimental use permits as well as clarifies applications of inert ingredients, Gold Seal letters, and any other actions that are not pesticide activities but are subject to registration service fees. Further, annual reporting requirements and set-asides for worker protection, partnership grants, and safety education are extended until 2023.

Since 1954, Congress has authorized the collection of different types of fees to partially defray various costs related to federal pesticide regulation activities. Collected fees are deposited as receipts in the “Reregistration and Expedited Processing Fund” in the U.S. Treasury. These fees are made available to the EPA as mandatory appropriations.

PRIA 1, which became law in 2003, provided the current framework for EPA to collect maintenance and registration services fees. PRIA 2 in 2008 reauthorized and amended the pesticide fee framework by adding new categories of applicants. PRIA 3 further amended the fee framework that is currently applied today. In addition to extending provisions, this legislation adjusts fee amounts, increases transparency, encourages Good Laboratory Practices, and adds flexibility to the use of collected fees.

The law has bipartisan support because registrants also put money aside for farmworker safety and environmental programs. Under PRIA 4, pesticide registrants are proposing to increase those fees and have the measure last seven years instead of five. The law expires on Sept. 30, 2017.

APHIS Seeks Comments on Revision of its Biotechnology Regulations. APHIS is proposing to revise its regulations regarding the importation, interstate movement, and environmental release of certain genetically engineered organisms in order to update the regulations in response to advances in genetic engineering and our accumulated experience in implementing the current regulations, as well as reduce the burden on regulated

entities. This is the first comprehensive revision of the regulations since they were established in 1987. To view the proposed rule and submit public **comments by June 19, 2017**, see [Docket No. APHIS-2015-0057](#).

In concert with the proposed revised regulations now being developed, APHIS is developing a process that includes an evidenced-based, standardized approach to assessing risk prior to making the decision whether to require controls (e.g. movement permits). This upfront risk analysis process will include either (in most cases): A [Weed Risk Assessment \(WRA\)](#) to characterize weed risk, if any, of genetically engineered (GE) plants, OR: A Plant Pest Risk Assessment (PPRA) for invertebrates, microorganisms, and GE plants (where appropriate), to characterize plant pest risk, if any.

Seed Industry Announces New Palmer Amaranth Seed Test

The following press release was issued by the American Seed Trade Association (ASTA), which represents over 700 companies involved in seed production, plant breeding and related industries in North America.

Weed seed can be spread in a variety of ways—including by air, animals, rain, soil and mechanical means. In a recent survey, the Weed Science Society of America (WSSA) identified Palmer amaranth (PA) as a very problematic weed in many parts of the country. To prevent PA from entering the professional seed supply, the native seed industry has been working closely with the scientific community on the development and validation of a rapid DNA test to identify PA.

“This new test will provide companies and their customers with an additional tool to ensure purity,” said ASTA President & CEO Andy LaVigne. “The American Seed Trade Association’s membership includes native seed producers with generations of experience who deliver professionally produced, quality seed to their customers. There’s a lot involved in producing the best seed for the best results.”

Developed by the California Department of Food and Agriculture and Eurofins BioDiagnostics, with support from the Minnesota Department of Agriculture Plant Protection Division Seed Program, the independently validated DNA sequencing method differentiates PA from other amaranth and weed species. While still available on a limited basis, the Minnesota Department of Agriculture Seed Unit recently announced it will accept the test for labeling purposes, as PA has been declared a prohibited noxious weed in the state. Although not designated as a noxious weed in any states other than Ohio and Minnesota, ASTA is taking steps to keep this troublesome weed out of seed sources. In addition to the DNA test, seed producers may also use a growout method from Illinois Crop Improvement Association to evaluate whether weed seeds are PA.

Professional seed suppliers have always taken great care in managing seed production to reduce the presence of diseases, pests and weeds. This includes field preparation and field inspections throughout the growing process; properly cleaning seed using state of the art equipment to maintain quality and performance; and testing to ensure high-quality performance standards are met. They must also comply with federal and state requirements for seed purity and germination, and these results must be on the seed tag. Industry Best Management Practices for Native Seed production can be found [here](#). Click [here](#) for more information on environmental and conservation seed, including a [list](#) of professional seed suppliers in each region.

Farmers who have identified PA in fields or conservation plantings are urged to contact their seed supplier, and local Natural Resource Conservation Service, Farm Service Agency or Extension professional.

WOTUS rule - Judicial, Legislative, and Executive Branch Actions.

On November 1, 2016, opening briefs to the 6th Circuit Court were filed by 31 states, plus various organizations and companies opposed to the expanded federal jurisdiction over streams and wetlands under the Waters of the United States (WOTUS) rule finalized in 2015. The challengers argue that the WOTUS rule undermines state authority and take particular issue with what they say is the federal government’s disregard for whether a body of water is considered “navigable,” which they say should be key in determining where it can regulate. A 6th Circuit Court hearing is unlikely to occur before April 2017.

On January 12, 2017, Senators Joni Ernst (R-IA) and Deb Fisher (R-NE) resurrected a resolution calling for the WOTUS rule to be scrapped. The nonbinding resolution would put the Senate on record as calling for the water rule to be withdrawn or vacated. The Senate fell just short of the 60 votes necessary to kill it last year, but with

multiple moderate Democrats facing tough reelections in 2018, that could change. The new resolution could offer a test vote to see where lawmakers stand on the water rule now.

On January 13, 2017, the Supreme Court agreed to hear a challenge by the National Association of Manufacturers (NAM) to a lower court ruling because of a provision in the Clean Water Act (CWA) that lays out when challenges are allowed to leapfrog lower courts. NAM's petition argues that challenges to the water rule should be first heard by district courts, rather than by appellate courts, as the 6th Circuit Court decided, because they are closer to concerns on the ground.

On February 28, 2017, President Trump ordered a revised WOTUS rule. His executive order directs the heads of the Army Corps of Engineers and EPA to “review and reconsider” the existing WOTUS rule, which likely means it will be resubmitted through the federal rule making process. The order instructs the two agency leaders to review a 2006 opinion written by late Supreme Court Justice Antonin Scalia in *Rapanos v. United States*. In that opinion, Scalia argued that federal jurisdiction extends only to water bodies with a permanent flow or non-navigable waterways that connect via surface water with areas with permanent flow — definitions with a more limited approach than the EPA established in its existing WOTUS rule that was finalized in 2015.

“NPDES Fix” Legislation Introduced in 115th Congress.

New “NPDES fix” legislation has been re-introduced in both the House and Senate in the 115th Congress. The Reducing Regulatory Burdens Act of 2017 (HR 953) was introduced on Feb. 7, 2017 by Rep. Bob Gibbs (R-OH) and currently has 31 cosponsors. The House Agriculture Committee has already passed HR 953 by a voice vote on Feb. 16th. The companion bill in the Senate is S. 340 and was also introduced on Feb. 7 by Sen. Mike Crapo (R-ID) and Sen. Claire McCaskill (D-MO). S. 340 is titled the “Sensible Environmental Protection Act of 2017” and has 15 cosponsors. The NPDES-fix legislation has been passed by the House of Representatives in each of the last three sessions of Congress in 2011, 2013, and 2016.

Senate EPW Passes Invasive Species Legislation.

The Senate Environment & Public Works (EPW) committee passed the Wildlife Innovation and Longevity Driver (WILD) Act by a voice vote on April 5, 2017. The WILD Act was introduced by Senate EPW Chairman John Barrasso (R-WY) and cosponsored by Ranking Member Tom Carper (D-DE), James Inhofe (R-OK), Cory Booker (D-NJ), John Boozman (R-AR), and Sheldon Whitehouse (D-RI). The WILD Act (S. 826) would reauthorize funding for the Partners for Fish and Wildlife Program in which the Interior seeks partnerships with private landowners in fighting invasive species, including conserving habitat for the greater sage grouse. The bill would also offer rewards for innovative technologies to stop invasive species.

The Rise of Predatory Publishing: How To Avoid Being Scammed!

This last news item is a little bit off the beaten path, but still very relevant to weed scientists. I want to specifically highlight an article in *Weed Science* written by WSSA’s Director of Publications, Dr. Sarah Ward from Colorado State University. The issue of predatory publishing is a rapidly growing concern among all disciplines of science and many seasoned scientists have already been duped.

Prospective authors must ultimately decide for themselves whether an unfamiliar on-line open access journal is legitimate and of sufficient quality to be trusted with a manuscript submission. A useful first step is to find out whether the publisher belongs to the Open Access Scholarly Publishers Association (<http://oaspa.org>), and whether the journal is listed in the Directory of Open Access Journals (<http://doaj.org>), which has taken stronger recent action to filter out predatory publications.

Here is the abstract from Sarah’s article (DOI: <https://doi.org/10.1614/WS-D-16-00080.1>):

The rise of on-line open access (OA) has profound implications for academic publishing, not least the shift from subscribers to authors as the primary transactional partners for peer-reviewed journals. Although OA offers many benefits, it also paves the way for predatory publishers, who exploit the author-as-customer model to obtain revenue from author fees while providing few of the editorial services associated with academic publishing. Predatory journals publish papers with little or no peer review, and often disguise their real geographical location while exaggerating their scope and editorial expertise. Such journals also attempt to

attract authors by promising unrealistically rapid editorial decisions while falsely claiming peer review, and fabricating impact factors and inclusion in academic indexes. The explosive increase in predatory OA journals is not only a risk to inexperienced authors, but also threatens to undermine the OA model and the legitimate communication of research.

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- ❖ To support legislation governing weed control programs and weed research and education programs.
- ❖ To support the Weed Science Society of America and foster state and regional organizations and agencies interested in weed control.



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