



Western Society of Weed Science Newsletter

205 W. Boutz, Bldg. 4, Ste. 5, Las Cruces, NM 88005

(575) 649-7157

wsws@marathonag.com

Summer 2015

IN THIS ISSUE:

- President's Report
- 2016 Program Chair Report
- Student Liaison Report
- Call for Research Progress Reports
- Asian-Pacific Weed Science Society Conference
- Global Herbicide Resistance Challenge Notification
- 2016 Weed Short Course Announcement
- 2016 ISAA Symposium
- Elena Sanchez Student Scholarship
- Note from the Business Office
- 2016 Canadian Herbicide Resistance Summit
- Washington Report
- Call for Fellows & Honorary Members
- Call for Distinguished Achievement Awards
- Research Progress Report Submission Guidelines
- Publication Order Form
- Sidebar highlights
 - Contact Us
 - Officers & Executive Committees
 - Publications
 - Calendar of Events



Report from the President by Joe Yenish

The WSWS Board of Directors held our summer meeting on July 30th and 31st at the Hyatt Regency in downtown Albuquerque, New Mexico, the site of our annual meeting in March. The hotel is located near several excellent restaurants in the downtown vicinity providing a delicious and eclectic variety of cuisines. The upper floors of the hotel provide a splendid view of the Sandia Mountains to the east of the city. The Duke City is home to over 500,000 people and has many enchanting points of interest. Similarly, the area surrounding Albuquerque offers many sights and activities. We strongly encourage attendees of the WSWS annual meeting as well as their friends and families to come early and stay late to truly enjoy the "Land of Enchantment."

The staff of the Hyatt Regency were incredibly friendly and helpful during the recent board meeting. Based on the food served during our meeting, we should greatly enjoy our meals during the March meeting. Most importantly, the meeting rooms and other facilities will allow freedom of movement between presentations, poster sessions, symposia, and other events during our sessions.

The board meeting itself was very concise with thorough discussion of a number of topics. Upcoming changes in key personnel were recognized or discussed. Brian Jenks has graciously accepted the appointment of WSWS representative to CAST, replacing Phil Westra following the November meeting of CAST. Thanks to Phil Westra for his excellent representation of WSWS interests to CAST. Additionally, Tim Miller has agreed to assume the duties of Operating Guide and Constitutional Representative, a five-year appointment beginning immediately following the March Meeting. Dr. Miller replaces Cory Ransom who has done an excellent job in the role since 2011. Finally, in what represents a major change in personnel, we discussed at length the difficult task of replacing our Business Manager and Executive Secretary, Phil Banks. Phil has indicated a desire to step back and resign from these activities following the 2017 annual meeting of the WSWS in Coeur d'Alene, ID. We want to thank Phil for his consistently outstanding leadership of the WSWS these past ten years and look forward to a continued relationship in other capacities. Additionally, Dr. Banks has notified the Southern Weed Science Society, the North Central Weed Science Society, and the North American Invasive Species Management Association of his intention to resign from his respective positions with those organizations. Following some initial discussions I had with the presidents of the organizations mentioned along with the president of the Weed Science Society of America, each of the boards have agreed that the WSSA will lead a joint search for replacements with representation from each of the societies. Moreover, it is expected that each of the organizations will have their own search committees. The WSWS search committee will be comprised of Joe Yenish, President, Drew Lyon, Past President, and Kirk Howatt, President Elect, with Joe serving as the representative to the WSSA committee. It is expected that the individual organizations will maintain separate contracts with their Business Manager or Executive Secretary. None of the organizations are bound to any commitment to hire the same individual as the others, nor will any individual or organization be bound to accept the contract of each and all of the organizations. Please provide any insight you have to the WSWS committee and we will keep you posted of developments as we can.

The program for the upcoming meeting was also discussed at length. The program appears to be well ahead of where we were at this time last year with plans coming together on several symposia or special sessions. Please pay close attention in the coming months as the program continues to come together.

One item of note in the poster session is that we will be renting display boards from a local source. We will not be using the boards and easels as we have in previous years. The rented boards can accommodate two posters on each side of the board with maximum dimensions of 42" by 42". If you intend to present a poster, please note these dimensions and be ready to see them repeated often.

Finally, I want to thank the WSWS Board of Directors for taking the time to attend the summer board meeting. I see solid potential to follow a fairly strong meeting in Portland, Oregon with an even stronger session at the Hyatt Regency in Albuquerque, New Mexico. Excellent meeting locations combined with strong programs have always been critical to the sustainability of organizations such as ours. Take care and we'll see you in March!

Invitation to the 69th Annual Meeting of the WSWS - Kirk Howatt, Program Chair

The 2016 WSWS Annual Meeting will be held March 7-10 in Albuquerque, NM, at the Hyatt Regency. This looks to be an excellent venue for our activities and we are anticipating comfortable settings for our discussions and relaxation. All members are encouraged to participate as well as solicit new members to this meeting and the society. Regular registration will be \$250 with the student registration set at \$100. Meeting registration will begin October 1, 2015, with information found on the society web page, <http://www.wsweedscience.org/>.

The Albuquerque area has some unique land features and is home to several important native plants, which you might see if you decide to hike the area trails. Dr. Mary O'Connell of New Mexico State University will participate in the General Session with a discussion about some of these local plants and their uses. Also, returning this year is Kaci Buhl, Project Coordinator for the National Pesticide Information Center. Her discussion last year about the Center, public perception, and pesticide-related topics was lively and ran out of time. At the 2016 Annual Meeting, we will be fortunate to have Kaci return to lead a session on "Communicating Science to the Public."

Call for Papers and Posters

All attendees are invited and encouraged to participate in the WSWS Annual Meeting by presenting at least one paper or poster, multiple submissions are welcome. Strong participation leads to a well-balanced meeting with good representation in all projects. Papers and posters can be submitted for inclusion in one of five projects: Agronomic Crops, Horticultural Crops, Weeds of Range and Natural Areas, Basic Biology and Ecology, and Teaching and Technology Transfer.

Oral paper presentations are scheduled every 15 minutes in concurrent sessions. Maintaining timely schedule in all concurrent sessions is important for those who need to move between sessions. Therefore, presentations of 12 to 13 minutes are suggested so there is time for a few questions before introducing the next author.

Different poster display boards will be used this year. The maximum poster size allowed will be 42 inches by 42 inches. Poster presentation affords the author more personal interaction with the audience and often leads to more in-depth discussions with individuals. Poster authors will be available during poster sessions on Tuesday or Wednesday morning to expand on their research.

Title and abstract submission will open October 1, 2015. Deadline for title submission will be December 1, 2015, but abstracts may be entered/uploaded/revise until February 1, 2016. The WSWS title and abstract submission will be conducted through WSSA Abstracts as in recent years once you have registered for the meeting, <http://wssaabstracts.com/>. Information also will be available on the WSWS web site. Graduate and undergraduate students are strongly encouraged to enter the student paper and/or poster contests. This is accomplished with one pull-down selection on the title submission screen.

We hope to have high attendance and good participation for this meeting. We expect interesting research discussions, opportunities for planning collaboration and society activities, and a good time getting acquainted with colleagues. There also may be time

Contact Us

Newsletter Editor

Carl Libbey

Washington State University
Mt. Vernon, WA 98273
(360) 848-6139

libbey@wsu.edu

WSWS Officers and Executive Committees

President

Joe Yenish

Dow AgroSciences
101 Calendula Circle
Billings, MT 59105
jpyenish@dow.com

Awards, Site Selection

President-Elect

Kirk Howatt

North Dakota State University
NSDU Dept 7670
PO BOX 6050
 Fargo, ND 58108-6050

Kirk.howatt@ndsu.edu

Program, Poster, Publications, Student Paper Judging, Local Arrangements

Immediate Past President

Drew Lyon

Washington State University
PO BOX 646420
Pullman, WA 99164-6420

Drew.lyon@wsu.edu

Fellows & Honorary Members, Sustaining Members, Nominations

Secretary

Curtis Rainbolt

BASF Corporation
4763 N Pacific Ave
Fresno, CA 93705

curtis.rainbolt@basf.com

Necrology

WSSA Representative

Marty Schraer

Syngenta Crop Protection
152 E Cassidy Drive
Meridian, ID 83646

marty.schraer@syngenta.com

Legislative

CAST Representative

Phil Westra

Colorado State University
112 Weed Lab
Fort Collins, CO 80523
cows19@comcast.net

Member-At-Large

Public Sector

Scott Nissen

Colorado State University
115 Weed Research Lab
Fort Collins, CO 80523-1179
scott.nissen@colostate.edu

Finance

Member-At-Large

Private Sector

Michael Hubbard

Kootenai Valley Research
4181 District Five Rd
Bonners Ferry, ID 83805
hubbard.kvfr@gmail.com

Herbicide Resistant Plants

Research Section Chair

Jane Mangold

Montana State University
PO Box 173120
Bozeman, MT 59717

Jane.mangold@montana.edu

Research Section Chair-Elect

Prashant Jha

Montana State University
Southern Agricultural Research
Center

Huntley, MT 59037
pjha@montana.edu

Education Section Chair

Sandra McDonald

Mountain West Pest
2960 Southmoor Drive
Fort Collins, CO 80525

Sandra@MountainWestPest.com

Education

Public Relations

Education Section Chair-Elect

Brian Jenks

North Dakota State University
5400 Hwy 83 S.

Minot, ND 58701
brian.jenks@ndsu.edu

for personal entertainment and recreation. Brian Schutte is chair of the local arrangements for the 2016 Annual Meeting in Albuquerque. After discussion at the summer board meeting, Brian prepared an introduction to the area to start enticing you to plan a trip. Not that you need any other reason than the WSWS Annual Meeting.

Local Environment and Area Attractions

Brian Schutte, Local Arrangements

Albuquerque and the surrounding areas provide a variety of entertainment options that will make your stay even more enjoyable. As you plan your trip, be sure to make time for some of Albuquerque's attractions.

Weather: The average high/low in Albuquerque during March is 61/33 F. Typically, there are 21 sunny-to-partly sunny days in March.

Outdoor recreation: Fifteen minutes by car from the Hyatt Regency is the Rio Grande Nature Center State Park

(<http://www.emnrd.state.nm.us/SPD/riograndenaturecenterstatepark.html>), which offers opportunities for hiking and bird watching. Picturesque hikes and scenic drives are available at Cibola National Forest (<http://www.fs.usda.gov/cibola>), which includes 10,600-ft rocky peaks of the Sandia Mountains. To reach the Sandia Mountain peaks, consider the Sandia Peak Aerial Tramway (<http://www.sandiapeak.com>), which is approximately 25 minutes by car from the Hyatt Regency.

Additional recreation opportunities can be found outside of Albuquerque. A 1.5 hr drive north is Ski Santa Fe (<http://skisantafe.com>), which is located in the Sangre de Cristo mountain range and features a 12,075-ft summit. A 1.5 hr drive south is the Bosque del Apache National Wildlife Refuge

(http://www.fws.gov/refuge/Bosque_del_Apache/about.html), which is an important habitat for many bird species (<http://www.friendsofthebosque.org/seasonalbirding.html>).

Dining: There are several restaurants within walking distance of the Hyatt Regency. To name a few: The Artichoke Café, Ibiza Rooftop Restaurant and MAS Tapas Restaurant. Additional dining options can be found at Old Town, which is 1.9 mile west of the Hyatt Regency on Central Avenue. Taxi fare to Old Town is \$8-12. Restaurants at Old Town include: Church Street Café, Seasons Rotisserie & Grill and St. Clair Winery & Bistro. You might also consider dining in the Nob Hill neighborhood, which is 2.4 mile east of the Hyatt Regency on Central Avenue, near the central campus of the University of New Mexico. Taxi fare to Nob Hill is \$12-16. Restaurants in Nob Hill include several brewpubs, Zacatecas and Zinc Wine Bar & Bistro.

Culture and Heritage: The city of Albuquerque was founded in 1706; however, the Rio Grande Valley was populated long before settlement in 1706. Learn more about previous civilizations at Petroglyph National Monument (<http://www.nps.gov/petr/index.htm>), which is located on Albuquerque's western edge. Just west of downtown is Old Town (please see Dining above), which is the city's historic district and offers dining, museums and galleries. Near Old Town is the Indian Pueblo Cultural Center, which provides information on the art, history and culture of New Mexico's 19 pueblos (<http://indianpueblo.org/19pueblos/index.html>).

Film tours: Albuquerque has been the filming location for many movies and television shows, with "Breaking Bad" perhaps one of the more famous. Take in the sights of "Breaking Bad", or explore other Albuquerque landmarks on a trolley tour (<http://www.abqtrolley.com>).

Attractions and Museums: Albuquerque Museum of Art and History, Explora Science Center & Children's Museum, National Museum of Nuclear Science & History, New Mexico Museum of Natural History & Science. With the exception of the National Museum of Nuclear Science & History, these museums are within walking distance of Old Town.

Santa Fe: New Mexico's capital city is an hour's drive from Albuquerque. Santa Fe can also be reached by rail using the New Mexico Rail Runner Express (<http://riometro.org/>). Santa Fe has numerous museums, galleries, shops, cafes and historic sites within walking distance from the Santa Fe Plaza. Looking for a hike in the vicinity of Santa Fe? Checkout Bandelier National Monument, which features canyons, mesas and cliff dwellings from the Ancestral Pueblo people (<http://www.nps.gov/band/index.htm>).

Call for Symposia

Please remember to consider symposium ideas for future meetings. A list of past symposia can be reviewed from the annual meeting page online, <http://www.wsweedscience.org/annual-meeting/>. This page also has the application form for your idea. Symposia may sometimes fit better at a particular meeting location because of a local issue, regional activity, or proximity for the organizer. Please keep in mind these meeting locations after the 2016 meeting in Albuquerque, NM. The meeting in 2017 will be held in Coeur d'Alene, ID. The meeting in 2018 will be held in Garden Grove, CA. Symposia provide valuable focus on targeted topics and, at times, have bolstered meeting attendance. Thank you for your consideration and ideas.

Student Liaison Report - by Carl Coburn

The student liaisons attended the summer board meeting in Albuquerque at the end of July. It was nice to connect face to face with the board members to discuss upcoming topics for the March 2016 meeting. The hotel is a nice venue with ample space for our academic endeavors! With the upcoming meeting in mind, it is time for students to start preparing applications for the **WSWS Elena Sanchez Outstanding Student Scholarship Program**. Three students will receive \$1000 each to attend the upcoming meeting in Albuquerque. Although the research season is in full swing, please consider applying for this scholarship. Keep in mind, this award is for graduate AND/OR undergraduate students, so advisors, please discuss this opportunity with your student(s). The application can be found at http://www.wsweedscience.org/wp-content/uploads/2013/11/2016-WSWS_Student_Scholarship_Operating_Guide.pdf and the deadline for submission is **October 1, 2015**.

Student feedback on the survey sent out at the conclusion of the meeting in Portland was prolific, and this response was exciting to see. Thank You! Your comments and suggestions are valuable for improving future meetings and events and helping you to get the most you can out of these meetings. We are addressing concerns related to accessing student poster and paper competition guidelines, so check the student page on the WSWS website for more information prior to title and abstract submission. Also, we plan on providing judge feedback to students regarding presentations and posters at the conclusion of the upcoming meeting, so be sure to stick around for the entire meeting!

Congratulations to the students who represented the western region in the Weed Olympics in South Charleston, Ohio. You all did a fantastic job and we are proud to have you representing our region. We want to encourage more schools from our society to attend these events in the future. For students seeking more involvement in the society, we need help soliciting donations for the student silent auction. You may also want to consider running for student liaison chair elect position at the upcoming meeting, and prior involvement with the society may improve your standing among other students. Follow us on Twitter (@WSWSstudents) or like us on Facebook for updates, announcements, and general weed science media. Feel free to make a post on the student page with suggestions, questions, or information other students may find useful.

If you have any questions, you can contact Carl Coburn (ccoburn2@uwyo.edu) or Breanne Tidemann (blaturnu@ualberta.ca).

Research Progress Reports - by Traci Rauch

Please consider submitting preliminary results from ongoing laboratory, physiological, and other research in the WSWS Research Progress Report. It is a good opportunity for staff and graduate students to initiate the process for journal submission and improve their technical writing skills. Also, consider publishing results that will not be submitted for journal publication.

For instructions, see the Call for Research Progress Reports attached to the newsletter and also located on the website <http://www.wsweedscience.org>. Reports must be postmarked by **January 5, 2016**.

Treasurer / Business Manager

Phil Banks

Marathon Ag Company
205 W. Boutz Road
Bldg 4, Ste 5
Las Cruces, NM 88005
wsws@marathonag.com

Constitution & Operating Procedures Representative

Corey Ransom

Utah State University
4820 Old Main Hill
Logan, UT 84322-4820
corey.ransom@usu.edu

Webmaster & Web Editor

David Krueger

Apex WebStudio LLC
PO Box 91235
Raleigh, NC 27675
david@apexwebstudio.com

Student Liaison

Carl Coburn

University of Wyoming
Dept. 3354 1000 University
Laramie, WY 82071
ccoburn2@uwyo.edu

Student Liaison Chair-elect

Breanne Tidemann

University of Alberta
6000 C and E Trail
Lacombe, AB T4L 1W1
Canada
blaturnu@ualberta.ca

Science Policy Director

Lee Van Wychen

The National and Regional
Weed Science Societies
5720 Glenmullen Place
Alexandria, VA 22303
(202) 746-4686

Lee.VanWychen@WSSA.net

Publications

WSWS ONLINE EDUCATION
<http://passel.unl.edu/pages/in dex2col.php?category=weedsci ence#>

WSSA Journals Website Online
www.WSSAJournals.org

CALENDAR OF EVENTS

25th Asian Pacific Weed Science Society Conference

October 13-16, 2015
Hyderabad, India
<http://isws.org.in/apwssorganisers.aspx>

Canadian Weed Science Society Annual Meeting

November 22-26, 2015
Edmonton, Alberta
<http://weedscience.ca>

Weed Science Society of America Annual Meeting Joint Meeting with the Southern Weed Science Society

February 8-11, 2016
San Juan, Puerto Rico
www.wssa.net

Canadian Herbicide Resistance Summit

March 2, 2016
Saskatoon, Saskatchewan
www.weedsummit.ca

Western Society of Weed Science Annual Meeting

March 7-10, 2016
Albuquerque, New Mexico
www.wsweedscience.org

Western Invasive Weed Short Course

April 18-21, 2016
Loveland, Colorado
www.mountainwestpest.com/ShortCourse.html

7th International Weed Congress

June 19-25, 2016
Prague, Czech Republic
<http://www.iwsc2016.org/>

11th International Symposium on Adjuvants for Agrochemicals

June 20-24, 2016
Monterey, California
www.isaa-online.org

Second Circular



Website: <http://isws.org.in/apwss2015.aspx>



Organized by:

Indian Society of Weed Science

In collaboration with:

**Indian Council of Agricultural Research
Directorate of Weed Research
PJT State Agricultural University**



The Indian Society of Weed Science has the honor of organizing the 25th Asian-Pacific Weed Science Society Conference, which is scheduled to be held at The Professor Jayashankar Telangana State Agricultural University, Hyderabad, India, October 13-16, 2015.

For more information: <http://isws.org.in/apwssorganisers.aspx>

Dr. A.R. Sharma
Organizing Secretary, 25th APWSS Conference

iswsjbp@gmail.com or sharma.ar@rediffmail.com

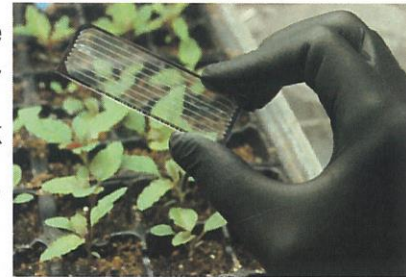
GLOBAL

HERBICIDE RESISTANCE CHALLENGE

Denver, Colorado, USA
May 14-18, 2017

Save the Date! Plan to Join Us in Denver!

The 2nd Global Herbicide Resistance Challenge "Challenge Accepted" will be held May 14-18, 2017 in Denver, Colorado, USA. The Challenge will kick off on Sunday, May 14, 2017, with exhibit set up, opening reception, and more!



The 2nd Global Challenge expects to attract weed scientists and professionals in research, education, government, and industry for four days of presentations and networking on key weed resistance management issues worldwide.

The 1st Global Herbicide Resistance Challenge was held February 18-22, 2013 in Perth, Australia. More than 300 scientists from 38 countries representing industry, government, universities, and non-governmental organizations attended the very successful 1st Global Challenge.



For more info visit: www.ghrc2017.org



SHORT COURSE

The 2016 Western Invasive Weed Short Course will be held April 18 - 21, 2016, at the Sylvan Dale Guest Ranch in Loveland, Colorado.

The continued partnership with Sylvan Dale Guest Ranch allows us to provide some unique training opportunities. One of the truly unique features of the Short Course is the ability to have a long-term restoration plot. Sylvan Dale has worked with us to establish a fenced site where we have been able to demonstrate weed management combined with native grass establishment. The plots were designed in a way that allows the course participants to see the progression of control and restoration over a three-year period. An opening night twilight weed walk is great way to see the ranch and start learning some weeds.

The WIWSC is an intensive study of current technologies and best management practices associated with noxious and invasive weeds in the western United States. Participants gain up-to-date knowledge specific to invasive weed management with interactive sessions that include:

- Classroom lecture
- Hands-on demonstration
- Field plots
- Facilitated discussion
- Live weed and herbicide symptomology specimens
- Small group projects
- Educational games
- Time for individual interaction with instructors

The 2016 WIWSC will be similar to the previous Courses, to see agendas please visit http://www.mountainwestpest.com/Current_Course.html. The Organizing Committee builds the final agenda based on a pre-course survey of the registered participants to assess specific areas of participant interest. The pre-course survey will not be sent to participants until they have completed the registration process.

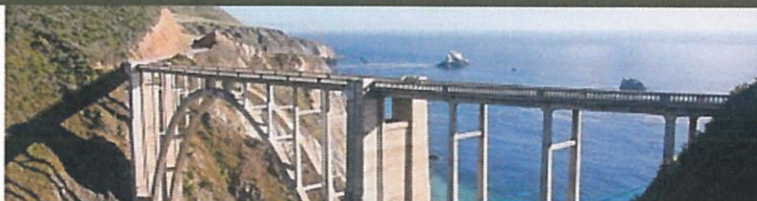
Our target participants are local, state, federal government, and other land managers throughout the western region desiring a better understanding of weed management. WIWSC is designed to benefit both those new to invasive plant management and experienced professionals seeking a comprehensive update in western invasive weeds and their management. The WIWSC instructors are from the Western Society of Weed Science.

Registration will open in the fall of 2015. Enrollment is limited and is accepted on a first-come, first-serve basis. Please contact Sandra McDonald, Course Coordinator, for additional information at 970-266-9573 or Sandra@MountainWestPEST.com.

Sandra McDonald
Pesticide Safety Educator
(970) 266-9573



ISAA
2016



11th International Symposium on Adjuvants for Agrochemicals, 20-24 June 2016,
Monterey, California, USA: Creating, Bridging and Sharing the Values of Adjuvant Technology

When you submit an abstract by 1 September 2015 or register with us beginning December 2015 at www.isaa2016.org, you will be able to enjoy these confirmed speakers and workshops:

- [Paul Hodges](#), Chairman, International eChem
- [Dr. Glenda Humiston](#), Vice President for the U. of California Division of Agriculture and Natural Resources, formerly California state director of USDA Rural Development
- *Workshop on adjuvant registrations in the Western US*, presented by [Jim Yowell](#), President, Spring Trading Company.
- *Workshop on app development for agriculture as uniquely performed in California*, presented by [Robert Tse](#), Community Planning and Development Specialist with USDA Rural Development.

Visit www.isaa2016.org and join these sponsors!

Our ISAA 2016 Partner:

CLARIANT 

Other ISAA 2016 sponsors:



For further information on ISAA 2016, contact the organizers.
Solito Sumulong, ISAA 2016 Organizing Chair, Loveland Products, Crop Production Services, Loveland, CO, USA,
+1 970-685-3579, solito.sumulong@cpsagu.com
Andrew Malec, ISAA 2016 Scientific Chair, Advanced BioCatalytics, Irvine, CA, USA,
+1 949-394-0352, amalec@abioecat.com

Elena Sanchez Memorial WSWs Outstanding Student Scholarship

The Western Society of Weed Science is pleased to offer the Elena Sanchez Memorial WSWs Outstanding Student Scholarship to promote greater student participation at the WSWs annual meeting and encourage new weed science research and future weed science careers. Scholarships will be awarded to three outstanding undergraduate and/or graduate WSWs student members who will attend and present at the WSWs annual meeting. Follow this link to view the criteria for the scholarship and the application form: http://www.wsweedscience.org/wp-content/uploads/2013/11/2016-WSWS_Student_Scholarship_Operating_Guide1.pdf

Deadline for application submission is October 1, 2015

A Note from the Business Office by Phil Banks

We will be opening registration for the 2016 annual meeting in Albuquerque around October 1, 2015 and I will send out a note to everyone when that happens. The Hyatt Regency Albuquerque is a great venue with a lot of restaurants and things to see nearby.

Also, you can help support WSWS activities by purchasing some of our publications. Besides our best selling "Weeds of the West" book (we have sold over 180,000), we have a variety of other weed identification resources for sale. Bulk orders receive a discount. Call me for the rates. These resources can be used for teaching or self education. You can check out all of the publications by going to our website (www.wsweedsience.org) and clicking on the "Books" tab located at the top of the page. You can also order via mail using the form in this newsletter. When you are giving public presentations about weed identification please let your audience know about these resources.

If you need to contact the office, please give us a call at 575-649-7157 or e-mail at wsws@marathonag.com.

I have informed the Board of Directors that I will be stepping down as Business Manager effective at the end of the 2017 meeting in Coeur d'Alene, ID. They are forming a search committee and details of the RFP will come out later this year. I have enjoyed working as WSWS Business Manager for the past 10 years as well as being a member of WSWS for the past 25 years. I intend to be a member of WSWS for years to come but it is time to be involved in things other than weed science.

If you need to contact the office, please give us a call at (575) 649-7157 or e-mail at wsws@marathonag.com.

Phil Banks, WSWS Business Manager/Treasurer



2016 Canadian Herbicide Resistance Summit

The **Herbicide Resistance Summit** (March 2, 2016 in Saskatoon, Saskatchewan) was organized to facilitate a more unified understanding of herbicide resistance issues across Canada and around the world, and to increase awareness that everyone engaged with agriculture has a role in managing herbicide resistance.

Presenters will address many of the key issues faced by farmers and crop protection researchers in meeting the challenge of the growing threat of herbicide resistance. Our goal is to ensure participants walk away with a clear understanding of specific actions they can take to help minimize the devastating impact of herbicide resistance on agricultural productivity in Canada.

Participants in the day-long Summit will hear top experts speak on the following topics:

- A global overview of herbicide resistance
- State of weed resistance in Western Canada and future outlook
- Managing herbicide-resistant wild oat on the Prairies
- Distribution and control of glyphosate-resistant weeds in Ontario
- The role of pre-emergent herbicides, and tank-mixes and integrated weed management
- Impact of glyphosate-resistant Palmer amaranth and other glyphosate-resistant weeds in the southern and midwestern U.S.
- Harvest weed seed control in Australian cropping systems
- Implementing harvest weed seed control (HWSC) methods in Canada

<http://www.weedsummit.ca/>

WASHINGTON REPORT

July 30, 2015
Lee Van Wychen

Definition of a “Weed”

At their summer board meeting in July, the WSSA Board of Directors unanimously approved the following definition of a weed: ***A plant that causes economic losses or ecological damage, creates health problems for humans or animals, or is undesirable where it is growing.***

The plan is for the WSSA Public Awareness committee to do a press release on this and then incorporate it into a WSSA Fact Sheet that will include definitions for other specific types of weeds such as noxious weed, invasive weed, and “superweed”.

FY 2016 USDA Appropriations

The FY 2016 appropriations process could be pretty brutal. There’s a big fight between Congress and the President over adhering to the spending caps set forth in the Budget Control Act (i.e. sequestration). Those spending caps are back in full effect for FY 2016 after a two year hiatus due to the Murray-Ryan budget deal in 2013. Non-defense discretionary spending would take a big hit under Congress’s joint budget resolution which adheres to the spending caps. The President’s budget, which ignores sequestration, includes a 7% increase for both defense and non-defense discretionary spending, and is more favorable for research funding. Below are FY 2016 numbers from the President, House, and Senate for some USDA agencies.

USDA Agency	FY 2015 Enacted	FY 2016 President	FY 2016 House	FY 2016 Senate
	(in thousands of dollars)			
APHIS	871,315	855,803	870,945	876,465
ARS	1,132,625	1,191,540	1,122,454	1,136,075
ERS	85,373	86,023	78,058	85,373
NASS	172,408	180,346	161,206	168,108
NIFA	1,289,500	1,503,058	1,284,461	1,293,687
NRCS	846,428	831,231	832,928	855,209

There will likely be a filibuster for every Senate spending bill, unless an agreement is reached for spending cap offsets for defense and non-defense discretionary spending. It’s impossible to tell how this will all end up, but many in the federal government are already starting to prepare for a shutdown. However, the current consensus is that there will be a Continuing Resolution funding the government for at least the first few months of FY 2016.

Aquatic Plant Control Research Program Gets Support in Both the House and Senate.

While Senate support for the Army Corp’s of Engineer’s (ACOE) Aquatic Plant Control Research Program (APCRP) has been unwavering, for the first time in 4 years, the House included \$4 million in their mark-up of the Energy and Water Development Appropriations Bill for APCRP. Last year, Congress passed new authorizing language in the Water Resources Reform and Development Act of 2014 (WRRDA), which increased the authorization of funding for APCRP from \$15 million to \$20 million per year and expanded the scope of research directed to control not just aquatic plant growths, but all aquatic invasive species.

Foundation for Food and Agriculture Research Names First Executive Director

The Foundation for Food and Agriculture Research (FFAR) named Dr. Sally Rockey as its first executive director. Dr. Rockey is currently the deputy director of extramural research at the National Institutes of Health and will bring her 19 years of experience at USDA to the Foundation starting in September, 2015.

FFAR was established in the 2014 Farm Bill. Congress provided \$200 million for the Foundation that must be matched by non-federal funds as the Foundation identifies and approves research projects. The Foundation operates as a non-profit entity seeking to address problems of national and international significance. For more background on FFAR, as well Dr. Rockey’s bio, please visit: <http://www.far.foundation/first-executive-director.html>

Milkweed, Monarchs, and Pollinator Protection

The issues of milkweed, monarchs, and pollinator protection continues to be a hot topic in Washington D.C. In mid-May, the White House, through the Office of Science and Technology Policy issued the [Pollinator Research Action Plan](#). The

plan focuses on increasing honeybee and monarch butterfly numbers through the creation and maintenance of pollinator habitat. In conjunction with this effort, the EPA has also issued a [Proposal to Protect Bees from Acutely Toxic Pesticides](#). These regulations would prohibit the application of pesticides that are acutely toxic to bees during bloom in crops where honey bee pollination services are contracted. The [comment period](#) on these regulations will remain open until August 28.

On June 24, the EPA also published a document in the federal register titled “[Risk Management Approach to Identifying Options for Protecting the Monarch Butterfly](#)”. This document is the start of the process which will depend upon (i) input from a diverse group of stakeholders to identify and integrate information with respect to influences on the population dynamics of the monarch butterfly and the milkweed plant; and, (ii) cooperation and collaboration from these diverse stakeholders to identify activities that will balance weed management needs across varied landscapes with conservation of the milkweed plant.” The comment period ends August 24.

As a bit of good news regarding pollinator protection, the Senate Environment and Public Works committee marked up a 6 yr transportation bill (DRIVE Act, S. 1647) that included an amendment from Sen. Gillibrand (D-NY), which WSSA supported, that encourages pollinator habitat along transportation rights-of-ways. This is the first time a provision like this was included in the Senate to encourage pollinator habitat on transportation rights-of-ways. Some of the provisions in the amendment include: 1) conduct or encourage integrated vegetation management practices on roadsides and other transportation rights-of-way, including reduced mowing; 2) enhance the development of habitat and forage for Monarch butterflies, other native pollinators, and honey bees through plantings of native forbs and grasses, including noninvasive, native milkweed species that can serve as migratory way stations for butterflies and facilitate migrations of other pollinators; 3) encourage leveraging through partnerships and coordination with stakeholders in support of pollinators and plantings of native forbs and grasses, such as environmental groups, research institutions, other agencies, businesses, and community organizations; and 4) conduct or facilitate research and demonstration projects on the economic and environmental benefits and best practices for integrated vegetation management, reduced mowing, and plantings of native forbs and grasses for pollinator habitat, forage, and migratory way stations for Monarch butterflies and other migrating pollinators.

EPA Responses to IARC Reports for Glyphosate and 2,4-D

Glyphosate: In 1991 EPA concluded that glyphosate should be classified as a Group E (evidence of non-carcinogenicity for humans) based on a lack of convincing carcinogenicity evidence and considering the criteria in EPA Guidelines for classifying a carcinogen. Since then, EPA has monitored emerging research on the carcinogenicity of glyphosate.

In 2014, EPA reviewed over 55 epidemiological studies conducted on the possible cancer and non-cancer effects of glyphosate. Our review concluded that this body of research does not provide evidence to show that glyphosate causes cancer, and it does not warrant any change in EPA’s cancer classification for glyphosate. This is the same conclusion reached in 2004 by the United Nations’ Food and Agriculture Organization and affirmed this year by Germany’s pesticide regulatory officials. In a few months, EPA will be releasing for public comment our preliminary human health risk assessment for glyphosate as part of our program to reevaluate all pesticides periodically. EPA is aware of the recent International Agency for Research on Cancer (IARC) report and will address it in detail in the preliminary risk assessment. Additional information regarding glyphosate and EPA’s ongoing registration review can be found at:

http://iaspub.epa.gov/apex/pesticides/f?p=CHEMICALSEARCH:31:0::NO:1,3,31,7,12,25:P3_XCHEMICAL_ID:2477

2,4-D: On June 23rd, IARC released a scientific assessment which retains the group’s previous classification of 2,4-D as a “2B carcinogen” (possibly carcinogenic to humans). This resulted from the June 3rd, 2015 United Nations World Health Organization’s International Agency for Research on Cancer (IARC) meeting to review the carcinogenic potential of 2,4-D.

EPA reviewed 2,4-D in 2014 as part of its decision to register Enlist Duo and found that the data do not support a cause and effect relationship between exposure to 2,4-D and non-Hodgkin’s lymphoma. This is the same conclusion reached by an earlier review of the issue by the FIFRA Scientific Advisory Panel.

2,4-D is currently undergoing registration review, EPA’s periodic review of pesticide registrations to ensure that each pesticide continues to satisfy the statutory safety standard for registration; that is, the pesticide can perform its intended function with reasonable certainty of no harm to people from residues in food and water and that it will not cause unreasonable adverse effects on the environment when used according to the product label. Through this program, EPA is ensuring that each pesticide’s registration is based on current scientific and other knowledge, including its effects on human health and the environment.

The scope of the registration review process is to evaluate previously conducted human health risk assessments using the most recent scientific information, agency policies, and risk assessment methodologies in order to identify data deficiencies and future actions/work needed for the pesticide. The risk assessments and toxicology for 2,4-D will be revisited during this process and will include IARC’s assessment after publication of Volume 113 of the IARC Monographs. EPA will determine whether any risk mitigation is needed to address unreasonable risks to humans.

Currently, we expect to release for public comment the draft human health risk assessment for 2,4-D in March 2016.

Illinois Farm Data Indicates Mixing MOA's More Effective Than Rotating Them

Reprinted with permission from Stephanie Henry, University of Illinois.

A recently published study by weed scientists at the University of Illinois and USDA-ARS, looking at glyphosate-resistant waterhemp, is providing valuable evidence that points to management practices as the driving force behind herbicide resistance, and that herbicide mixing, as opposed to herbicide rotation, is the most effective tool in managing resistance.

Pat Tranel said this is not the first time researchers have presented evidence that herbicide rotation is not the best resistance management strategy. "This paper is valuable because these conclusions were obtained doing our experiment in a more 'real-life' fashion," Tranel said. "This study confirmed previous conclusions that farmers should use herbicide mixing rather than rotation."

During the study, they evaluated glyphosate-resistance incidences, as well as landscape, soil, weed, and farm-management data from 105 central Illinois grain farms, including almost 500 site-years of herbicide application records. Having this data, collected between 2004 and 2010, helped the researchers identify relationships between past herbicide use and current glyphosate-resistance occurrences.

Tranel said when glyphosate-resistant waterhemp was first reported in Illinois in 2006, researchers working at the site saw some fields that were infested with waterhemp, but adjacent fields that were free of the weed.

"We asked, 'what is different between these two fields? Is it what the farmers are doing?' We asked a retail applicator to let us review all the management practices data from 100 fields—50 that have resistant waterhemp and 50 that don't," Tranel said.

"We took the results of what farmers have already done, and asked what is different in the fields that have resistance versus the ones that don't," he added.

After collecting the management data, sampling waterhemp from the fields, and screening seeds from the field for resistance back in their greenhouses, the researchers analyzed that data for management factors most associated with resistance. Overall the researchers examined 66 variables related to environment, soil, landscape, weed community, and weed management.

"We looked at every factor we could think of in terms of management and landscape," Tranel said. "We found that it was management factors that are the most important. It doesn't matter whether you're next to a water course that might bring in new seed, what the waterhemp density of your field is, etc. It's what you did in your field that matters.

"That's what's encouraging," he added. "It's not inevitable that if your field is next to a water course, for example, you will have resistance."

Aaron Hager, a co-author on the study, explained that the occurrence of glyphosate-resistant waterhemp was greatest in fields where glyphosate had been used in over 75 percent of the seasons included in the analysis, where fewer MOAs were used each year, and where herbicide rotation occurred annually. "Simply rotating herbicide MOAs actually increased the frequency of resistance," he said.

On the other hand, Tranel said that the farmers who were using multiple herbicides per application were least likely to have resistance. "When using an average of 2.5 MOAs per application, you are 83 times less likely to have resistance compared to if you used only 1.5 MOAs per application," he explained.

"That's pretty amazing that adding one additional mode of action in your tank reduces your chances of resistance by that much," Tranel added.

Hager pointed out that this strategy will work only if each component of the tank mixture is effective against the target species. "Effective, long-term weed management will require even more diverse management practices," he added.

Another piece of good news for farmers is that the researchers did not find an association of proximity between neighboring fields and resistance. "The good thing is not only does management matter, it's what you do in your own field that matters. Even if a neighbor's resistance moves, it's at a small frequency. If you're doing the right thing it will stay at a small frequency," Tranel said.

Although there may be some concerns with herbicide mixing, Tranel said it is still the best tool to manage resistance. One concern is the greater expense and environmental load of using multiple herbicides.

Another concern is using the correct mix of herbicides in the tank. Particularly as waterhemp becomes resistant to other herbicides, such as PPO inhibitors, mixing glyphosate and a PPO inhibitor, is not going to be a good management strategy if there is already resistance to a PPO inhibitor, Tranel explained.

“As we have new tools coming like 2,4-D and dicamba-tolerant soybeans, some people may think ‘I’ll throw in 2,4-D with glyphosate, because that’s using two modes of actions,’ but if you already have glyphosate resistance then you are not really using two effective modes of action,” he added.

“We don’t say that mixing is the end-all solution. What we saw from this study if success for farmers is measured by lack of resistance or lower frequency, then successful farmers use multiple herbicides per application.”

USDA Releases Federal Noxious Weed Disseminules ID Tool

The **Federal Noxious Weed Disseminules of the U.S.** (FNWD) was developed by the USDA APHIS Identification Technology Program (ITP) in collaboration with the California Department of Agriculture (CDFA). Most of the content in FNWD is a work of the U.S. Government and is in the public domain. The ID tool was developed to enable accurate identification of federal noxious weeds (FNW) disseminules and to assemble a set of high-quality images of the disseminules of all the FNW taxa. The ID tool and its identification keys were designed to be used by officials at U.S. ports responsible for identification of plant pests. It may also be a useful resource for seed professionals and anyone else with an interest in, or a need to know about, the U.S. federal noxious weeds and what their disseminules look like.

The ID tool provides photographs, text, and keys that aid in determining whether or not an unknown disseminule (e.g., seed, fruit) found as a contaminant in imported botanicals and agricultural products is a FNW and is therefore actionable. The total list of 114 FNW taxa is broken down into smaller groupings, first by Disseminule type—Spores vs. Vegetative vs. Fruits & Seeds. This page describes the various types of disseminules represented within the tool. Taxa with spore and vegetative disseminules are described in fact sheets. The taxa with fruit and seed disseminules (further broken down into three groupings: Poaceae, Fabaceae, and Other Families) can be separated using one of the three associated keys. A Key to Keys assists the user in deciding which of these three keys is appropriate to use for taxon identification. Fact sheets for each FNW taxon pull together relevant descriptions, including distinguishing characteristics and photographs. See: <http://idtools.org/id/fnw/>

USDA-ERS Report on the Economics of Glyphosate Resistance Management

Data obtained by USDA’s Agricultural and Resources Management Survey (ARMS), conducted every year targeting about 5000 fields and 30,000 farms, along with data from the Benchmark study (Shaw et al., 2011) show that weed-management choices that account for the yield and cost effects of glyphosate resistance and maximize returns over time differ from those that ignore the effects of glyphosate resistance by: 1) using glyphosate during fewer years; 2) often combining glyphosate with one or more alternative herbicides; and 3) most importantly, not applying glyphosate during consecutive growing seasons. As a result, glyphosate resistance is managed more cost effectively and the cumulative impact of returns is higher after about 2 years of managing resistance instead of ignoring it.

The findings of the USDA Economic Research Service (ERS) study suggest that education about the negative consequences of glyphosate resistance and the economic benefits of managing resistance, as well as the common-pool-resource nature of weed susceptibility to glyphosate and the potential benefits of cooperation, could promote resistance-management practices, encourage neighboring farmers to collaborate in managing glyphosate resistance, and increase long-term returns to corn and soybean production.

The USDA-ERS report “The Economics of Glyphosate Resistance Management in Corn and Soybean Production” can be found at: <http://www.ers.usda.gov/media/1832877/err184.pdf>

WOTUS Rule Finalized. 27 States Sue.

On June 29, the Waters Of The U.S. (WOTUS) rule was officially published in the Federal Register, and subsequently, 27 states filed lawsuits in four separate federal courts seeking to block the administration’s expansion of which waters are covered under the jurisdiction of the Clean Water Act (CWA). The rule will take effect Aug. 25, but for judicial review purposes, the rule would be considered final on July 13.

Texas, Louisiana, and Mississippi filed a joint lawsuit in Houston asserting that the EPA’s final rule is “an unconstitutional and impermissible expansion of federal power over the states and their citizens and property owners.” While the EPA has the authority to regulate water quality, the suit says Congress has not granted the EPA the power to regulate water and land use.

Similarly, Ohio and Michigan filed a joint complaint in an Ohio federal court, while the following 13 states: Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, New Mexico, Nevada, North Dakota, South Dakota, and Wyoming are seeking to have the rule overturned in a North Dakota federal court. A fourth lawsuit was filed by

nine more states in a Georgia federal court that includes West Virginia, Alabama, Florida, Kansas, Kentucky, South Carolina, Utah, Georgia, and Wisconsin.

The EPA and Army Corps of Engineers first proposed the WOTUS rule in April 2014 and finalized it in May 2015. The rule will reportedly add some two million acres of streams and 20 million acres of wetlands under the jurisdiction of the CWA.

There is also legislation in both the House (H.R. 1732) and Senate (S. 1140) that would repeal the WOTUS rule and require the administration to develop an alternative rule in consultation with state and local governments. In May, the House voted 261-155 to pass its bill. The Senate version was passed by the Environment and Public Works Committee in June, but is awaiting a vote from the full Senate. The Administration said it would likely veto the House and Senate bills, so a two-thirds majority would be needed in both chambers. In addition to the stand alone bills that would repeal WOTUS, there are also "riders" in the appropriations bill in both the House and Senate that would prevent EPA and the Army Corp of Engineers from using any money to implement WOTUS. However, that is only a 1 year solution, and according to the lawyers, the states would still have the burden to implement the new WOTUS rule, even without the federal money.

U.S. is 22,500 College Graduates Short for Agricultural Jobs

A report from USDA's National Institute of Food and Agriculture (NIFA) and Purdue University, released in May, has found tremendous demand for recent college graduates with a degree in agricultural programs. An estimated 57,900 high-skilled job openings are available annually in the food, agriculture, renewable natural resources, and environment fields, the report found, but there are only about 35,400 new U.S. graduates with a bachelor's degree or higher in agriculture related fields, 22,500 short of the jobs available annually.

College graduates with a degree in "Plant science" can expect to see a very strong job market.

Read the report on agriculture jobs in the U.S. at: ["Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources, and the Environment, United States, 2015–2020."](#)

Voluntary GMO Labeling Bill Gets A Lot of Attention

The Safe and Accurate Food Labeling Act of 2015 (H.R. 1599) would require the FDA to regulate the distribution and labeling related to bioengineered foods. The bill was introduced in March and has had hearings in both the House Agriculture and the House Energy and Commerce Committees. In July, the House passed the bill by a vote of 275-150. H.R. 1599 defines the term "bioengineered organism" as an organism that meets the following three conditions: (a) the organism is a plant (or a seed, a fruit, or any other part thereof), (b) the organism contains genetic material that has been modified through in vitro recombinant DNA techniques; and (c) the modification could not otherwise be obtained using conventional breeding techniques.

H.R. 1599 would require food producers to notify FDA of any bioengineered foods intended to be sold interstate and would prevent the sale of any bioengineered foods not deemed safe by FDA. The bill would prevent FDA from requiring the labeling of bioengineered foods only on the grounds that the foods are bioengineered, however, the FDA could require that alterations of nutritional properties, allergens, or other characteristics of food be listed on food labeling.

The second title of H.R. 1588 directs FDA to define the term "natural" for its use on food and beverage products. The third part of the legislation directs FDA to establish federal standards for food producers who choose to voluntarily label their product for the absence or presence of bioengineered organisms. Finally, H.R. 1599 deals with the issue of preemption (the doctrine that federal law takes precedence over state law) by affirming FDA as the nation's authority for the use and labeling of bioengineered food ingredients and would prevent states from issuing their own food labeling requirements. Although there appears to be support for the measure in the Senate, its path is unclear in the Senate and beyond.

WSSA Survey of Most Common and Troublesome Weeds

The winner of the \$100 drawing for completing the survey of the most common and troublesome weeds was WSWS member, John Vickery, Member, Education & Outreach Committee, Colorado Native Plant Society. Congratulations John!

Lee Van Wychen, Ph.D.

Science Policy Director - National and Regional Weed Science Societies

Lee.VanWychen@wssa.net

cell: (202) 746-4686

www.wssa.net

REQUEST FOR WSWs FELLOW AND HONORARY MEMBER NOMINATIONS

BY

Dr. Jill Schroeder, Committee Chair

Now is your chance to nominate deserving colleagues as a WSWs Fellow or Honorary Member!

WSWS FELLOW

WSWS Guidelines for Nominating Fellows

Fellows of the society are members who have given meritorious service to the Western Society of Weed Science.

The nominator must contact the member to be nominated and request them to prepare a concise [2-3 page] resume.

- a. The nominee must be involved in the process. The most pertinent information about the nominee can only be obtained from the nominee.
- b. The nominee's resume should be based on the WSWs guidelines approved by the Board of Directors (see below).
- c. Information from the resume will be used by the nominator in writing the letter of nomination.
- d. The nominator also is responsible for soliciting two letters of support for the nominee. The letters should be sent to the nominator and included in the nomination package sent to the committee.
- e. The nomination package should include the nominee's vita, the nominator's letter of nomination, and two support letters.

SERVICE TO WSWs – Please address the following points in the resume:

1. **Officer:** President; Vice-President; Secretary, Research Section Chair; Education & Regulatory Section Chair; Editor; Other.
2. **Committees:** Standing; Special; Ad Hoc.
3. **Presentations and Publications:** WSWs – Papers, Proceedings, Research Progress
4. **Service to other Weed Science Societies:** Weed Science Society of America; State Organizations.
5. **Academic Weed Science Endeavors:** Teacher; Graduate Students; Refereed Publications; Extension Publications, Books; Popular Publications; Academic Weed Science Pursuits; Other.
6. **Industry Weed Science Endeavors:** Sales and Marketing; Research and Development; Regional Manager; Product Manager.
7. **Other Meritorious Weed Science Service**

WSWS HONORARY MEMBER

WSWS Guidelines for Nominating Honorary Members

Honorary members are selected from individuals whose activities have been largely from outside the Western Society of Weed Science, but who have significantly contributed to the field of weed science.

- The nominator must contact the person to be nominated and request them to prepare a vita.
- The nominator will then prepare a letter summarizing the nominee's contribution to the area of weed science with emphasis on how the interests of the WSWs have been served by this non-member.
- Include the vita with the letter of nomination to provide all pertinent information to the Committee.

NOMINATIONS FOR FELLOW AND HONORARY MEMBER PACKAGES ARE DUE BY DECEMBER 1, 2015

TO:

Electronic submission preferred.

Dr. Jill Schroeder

(202)720-0066

Jill.schroeder@ars.usda.gov

2016 CALL FOR NOMINATIONS: DISTINGUISHED ACHIEVEMENT AWARDS

We all know several skilled and outstanding weed scientists in the western region who have contributed greatly over the years or a young scientist just beginning their career who is making an impact. As you think of these people please take some time and nominate them for one of the distinguished achievement awards as a way of showing our respect and appreciation for their hard work and dedication.

CRITERIA USED FOR EVALUATING NOMINATIONS: Awards are based on merit and impact on weed science and weed management practices. Applicants **MUST BE** a member of WSWS. Professional achievements and their impacts are the principal criteria for receiving these awards. There is no requirement that an award be given in any or every category. Past winners are not eligible again in the same category. An award may be given each year in both the private and public sectors for Outstanding Weed Scientist and Outstanding Weed Scientist – Early Career. Only one award may be given each year for Weed Manager and Professional Staff. Within the guidelines for each category, there is flexibility to fit the nominee.

I. OUTSTANDING WEED SCIENTIST

This award recognizes outstanding achievements in weed science from individuals in both the public and private sectors. Principle criteria for this award includes innovative or unique approaches that result in learning, ability to clearly communicate ideas, motivation of the intended audience, demonstrate excellence and creativity in research accomplishments, applying results to solve problems in weed science, the impact on weed management practices and principals of weed science, and recognition of accomplishments by peers and intended audiences.

II. OUTSTANDING WEED SCIENTIST – EARLY CAREER

This award is to be given to members in the private and public sectors with no more than 10 years of service after completion of their terminal degree. This award recognizes outstanding achievements in weed science early in the individual career with the same criteria as the outstanding weed scientist above.

III. WEED MANAGER

This award recognizes outstanding and sustained contributions in support of weed science activities. This award is intended for those paid by taxpayers and are working in the public sector, such as employees of state departments of agriculture, weed boards, public land managers, and vegetation management personnel. The nominee must have been involved in the WSWS and weed science for at least five years at the time of nomination.

IV. PROFESSIONAL STAFF

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

NOMINATION DEADLINE: Nominations must be received by **October 1, 2015**.

NOMINATOR’S RESPONSIBILITY: The nominator will submit a nomination document following the “Instructions for Nomination” guideline. The nominator is responsible for obtaining three letters of support and including them with the nomination package. Unsuccessful nominations will remain active for three years; however, an updated nomination packet of holdover candidates is encouraged.

The nomination package, including the supporting letters, should be sent, by email, to the chair of the Awards Committee by **October 1, 2015**:

Alan Helm
Midwest Development Representative
Gowan Company, LLC.
13450 Success Rd
Success, MO 65570
(970) 466-1466
ahelm@gowanco.com

CALL FOR 2016 RESEARCH PROGRESS REPORTS

The WSWs Research Progress Report is published to make significant new weed science research in the West available with the least possible delay. Early dissemination of weed research data is an important aid in formulating recommendations and in planning research. We encourage members of WSWs to submit pertinent new research data for publication in the Research Progress Report.

The Research Progress Report is produced on a very tight schedule. In order to expedite publication, all reports must be submitted in a "camera ready" condition. The report must be prepared according to the specific directions outlined below. Reports that do not strictly adhere to the requirements will be returned to the author. The report will be rejected if there is not time to make the necessary changes.

Each contributor must:

1. Follow instructions carefully and completely.
2. Obtain two additional reviews of each report and have each reviewer *print their name* at the bottom of the index outline. The two reviewers can be anyone other than the senior author of the report. The two reviews are a requirement for publication.
3. Send the report(s) via e-mail with an index outline for each report. An index outline form will be available on the website. Remember, the report will be printed as received.
4. Adhere strictly to the submission **deadline of January 5, 2016**. **Send an electronic copy** as a Microsoft Word file (doc or xdoc) or as an Acrobat file (pdf) attached via e-mail to trauch@uidaho.edu. **After submission, a reply will be sent upon receipt of a report. No reply means no report was received.**

Questions? Please contact: Traci Rauch
 208-885-9709
 trauch@uidaho.edu

GUIDELINES FOR RESEARCH PROGRESS REPORTS

WSWS will not retype or make typographical corrections on papers submitted for the WSWs Research Progress Report. It is the responsibility of the author to submit each report in a ready for publication condition following these guidelines:

FORMAT: Paper must be white 8.5 by 11 inch. Margins must be one inch on all sides. Please use **full justification** (this means both right and left margins are aligned). Type all text using **10 pt (Times New Roman)** font. All text should be single spaced. Either English or metric units are acceptable. However, do not mix English and metric units (Some exceptions may apply – e.g., CEC is expressed best in metric units as meq/100g). Do not type page numbers. Reports will be printed as received.

TITLE: Begin title at the left margin. Capitalize only the first letter of the first word. Underline the entire title. End the title with a period.

AUTHORS: Begin the authors name (first, middle initial, last) following the title of the paper. End list of authors with a period. Briefly list the author's affiliation and mailing address in parentheses - e.g. (Weed Research Laboratory, Colorado State University, Fort Collins, CO 80523)

BODY OF TEXT: The report should clearly present the objectives of the research, methods, and results. Double space or indent between paragraphs.

Abbreviations: Use abbreviations as shown in the Scientific Style and Format: The *CBE Manual for Authors, Editors, and Publishers* and as commonly used in *Weed Science* or *Weed Technology*. Abbreviations for weeds can be used in the tables. **Do not abbreviate the word inch.** Do not place a period after the abbreviation unless its omission could cause confusion. Abbreviations not shown in the *CBE Manual* (**including Bayer codes**) should be introduced in parentheses immediately after their first use in the text or footnoted if used in a table.

Numbers: Use Arabic numerals for numbers with two or more digits and for measurements of time, weight, and degrees, except when the number is the first word of a sentence. Spell out numbers less than 10 or when they are the first word of a sentence, except when they constitute a series in which one number has two or more digits. Write 10 by 20 rather than 10 x 20 and 1 to 5 rather than 1-5 except in tables where space is limited. Use decimals instead of fractions (0.5, not ½). Place zero at left of decimal (0.5, not .5).

Plant names: Weeds can be appropriately identified in the text by using the WSSA-accepted common names [*Weed Science*, 32 (Supplement 2): 1984 with *Weed Science* 36:850-851, 1988; Composite List of Weeds, available from WSSA; or WSSA.net].

Chemical names: Herbicides can be properly identified by the WSSA-accepted common name (appears in the back of *Weed Science* Vol. 54 issue No. 6). Other herbicides may be identified by giving the code number followed by the chemical name in parentheses. Do not use trade names in the title of the paper. If the trade name of a chemical (herbicide or adjuvant) appears in the paper, the author must supply a suitable justification statement for using the trade name; this statement is to be given on the index outline.

Herbicide rates: Express rates as active ingredient (ai) or acid equivalent (ae) (whichever applies), not as formulated material. When necessary, it is appropriate to mention a specific formulation, such as the specific ester or salt utilized in the research.

TABLES AND FIGURES: Use **10 pt (Times New Roman)** font. If space is limiting, font size may be reduced to as low as 8 pt. Single-space all tables. **Table width should be the size of the paper with margins one inch on all sides.** Tables may be landscape or portrait. Type the word “Table” with an uppercase “T” at the top of the table and follow it with a period. Do not use a table number unless the report has more than one table. Please note the following in the example table at the end of the guidelines: a) the unit designation for each column is below the line; b) only the first letter in each column heading and treatment is capitalized; c) a zero precedes each decimal (0.5, not .5); d) herbicide common names are written out when possible and necessary herbicide abbreviations are spelled out in a footnote; and e) use + to indicate herbicide tank mixtures and / to indicate herbicide premixtures. Use superscript numbers (^{1,2,3}, etc.) to indicate footnotes for tables. Begin the word “Figure”, **below the Figure**, with a capital “F” and follow it with a period. Do not number the figure unless the paper has more than one figure. Figures that will reproduce well are acceptable.

INDEX OUTLINE: To enhance the publishing procedure, an index outline for each paper must be prepared by the author and submitted to the editors. The outline will include: Title of paper, author(s), Project, list of crops, list of weeds, list of herbicides, keywords, and reviewers’ names. Choose the appropriate Project for your report. Projects are: 1. Range and Forest; 2. Horticultural Crops; 3. Agronomic Crops; 4. Teaching and Technology Transfer; 5. Wetlands and Wildlands; and 6. Basic Sciences. Authors must identify **weeds and crops by common and scientific binomial name and authority on the index outline.** Chemicals (herbicide and adjuvant) must be listed by common name **and trade name** or code number. Papers submitted without a **current** index outline will be returned. Attach the completed electronic index outline to the e-mail.

REJECTED REPORTS: Any report submitted that does not conform to the guidelines will not be published. Editors may, at their discretion, work with the author to correct the report if time permits.

INDEX OUTLINE FOR WSWR RESEARCH PROGRESS REPORTS
Complete one for each report.

1. TITLE:

2. AUTHOR'S NAMES:

3. CORRESPONDING AUTHOR:

Email
Phone number
Address

4. PROJECT (see choices under **INDEX OUTLINE**):

5. CROP(S) INVESTIGATED (List alphabetically by common name. **Include scientific binomial name plus authority**):

6. WEED(S) INVESTIGATED [List alphabetically by WSSA-approved common name. **Include scientific binomial name plus authority**. Many weeds can be found in COMPOSITE LIST OF WEEDS, Weed Science 32 (Supplement 2): Revised 1989 or at WSSA.net]:

7. HERBICIDES AND **ADJUVANTS** INVESTIGATED (List alphabetically by common name or code number AND include **trade name**):

8. KEYWORDS (examples biocontrol, direct-seed, herbicide resistant). Do not include words listed above in crop, weed, herbicide or adjuvant:

REVIEWS BY TWO PERSONS IN ADDITION TO SENIOR AUTHOR: I have reviewed the attached report and find the content to be appropriate and presented in the proper style for publications in the WSWR Research Progress Report.

Name _____

Name _____

Title _____

Title _____

Affiliation _____

Affiliation _____

EXAMPLE: RESEARCH PROGRESS REPORT

Weed control in imidazolinone-resistant winter wheat with imazamox. Traci A. Rauch and Donald C. Thill. (Plant Science Division, University of Idaho, Moscow, ID 83844-2339) A study was established in 'Fidel' imidazolinone-resistant winter wheat to examine weed control in 2001 and herbicide soil persistence in 2002 with imazamox. Wheat was seeded on October 3, 2000. Plots were 16 by 32 ft arranged in a randomized complete block design with four replications. All herbicide treatments were applied using a CO₂ pressurized backpack sprayer calibrated to deliver 10 gpa at 30 psi and 3 mph (Table 1). Wheat injury and weed control were evaluated visually on June 7, 2001. Wheat seed was harvested with a small plot combine on August 7, 2001. In spring 2002, each plot will be planted to spring barley and yellow mustard to evaluate soil persistence of imazamox.

Table 1. Application and soil data.

Location	Moscow, Idaho	
Application date	November 2, 2000	April 24, 2001
Wheat growth stage	1 leaf	3 to 5 tiller
Volunteer barley growth stage	2 leaf	2 to 3 tiller
Air temperature (F)	50	50
Relative humidity (%)	73	86
Wind (mph, direction)	2, E	4, E
Cloud cover (%)	30	10
Soil temperature at 2 in (F)	44	40
pH		4.7
OM (%)		2.8
Texture		loam

No treatment visibly injured wheat on June 7, 2001 (data not shown). All treatments controlled volunteer barley 98% or better (Table 2). Wheat grain yield (89 to 99 bu/A) was better with all treatments compared to the untreated check. Test weight (56 to 60 lb/bu) did not differ among treatments or from the untreated check.

Table 2. Weed control, wheat yield and test weight with imazamox near Moscow, Idaho in 2001.

Treatment ¹	Rate lb ai/A	Application timing	Volunteer barley control %	Wheat	
				Yield bu/A	Test weight lb/bu
Imazamox	0.04	fall	99	96	60
Imazamox	0.08	fall	98	95	60
Imazamox	0.04	spring	99	99	59
Imazamox	0.08	spring	99	99	56
Imazamox + MCPA amine	0.04 + 0.25 ²	spring	99	95	59
Imazamox + thifensulfuron/tribenuron	0.04 0.016	spring	98	97	59
Untreated check			--	89	59
LSD (0.05)			NS	5	NS
Density (plants/ft ²)			1		

¹All treatments were applied with 90% nonionic surfactant (R-11) at 0.25 % v/v and 32% urea ammonium nitrate (URAN) at 1qt/A.

²MCPA amine rate is expressed as lb ae/A.

(EXAMPLE)
INDEX OUTLINE FOR WSWs RESEARCH PROGRESS REPORTS
Complete one for each report.

1. TITLE: Weed control in imidazolinone-resistant winter wheat with imazamox

2. AUTHOR'S NAMES: Traci Rauch and Donn Thill

3. CORRESPONDING AUTHOR:

Email trauch@uidaho.edu
Phone number (208) 885-9709
Address University of Idaho
 PSES Dept.
 PO Box 442339
 Moscow, ID 28244-2339

4. PROJECT (see choices under **INDEX OUTLINE**): 3. Agronomic Crops

5. CROP(S) INVESTIGATED (List alphabetically by common name. **Include scientific binomial name plus authority**):

wheat, winter (*Triticum aestivum* L.)

6. WEED(S) INVESTIGATED [List alphabetically by WSSA-approved common name. **Include scientific binomial name plus authority**. Many weeds can be found in COMPOSITE LIST OF WEEDS, Weed Science 32 (Supplement 2): Revised 1989 or at WSSA.net]:

barley, volunteer (*Hordeum vulgare* L.)

7. HERBICIDES AND **ADJUVANTS** INVESTIGATED (List alphabetically by common name or code number AND include **trade name**):

imazamox (Beyond)	thifensulfuron (Harmony Extra XP)
MCPA (MCPA 4 Amine)	tribenuron (Harmony Extra XP)
non-ionic surfactant (R-11)	urea ammonium nitrate (URAN)

8. KEYWORDS (examples biocontrol, direct-seed, herbicide resistant). Do not include words listed above in crop, weed, herbicide or adjuvant:

persistence
plantback

REVIEWS BY TWO PERSONS IN ADDITION TO SENIOR AUTHOR: I have reviewed the attached report and find the content to be appropriate and presented in the proper style for publications in the WSWs Research Progress Report.

Name _____

Name _____

Title _____

Title _____

Affiliation _____

Affiliation _____

Publications Available From the Western Society of Weed Science

(All prices include shipping and handling; bulk orders may be discounted, see below)

_____ Weeds of the West.....	\$34.00
_____ Aquatic and Riparian Weeds of the West.....	\$45.00
_____ Weeds of California and Other Western States.....	\$85.00
_____ Weed Control in Natural Areas in the Western United States	\$40.00
_____ Interactive Encyclopedia of North American Weeds DVD.....	\$50.00
Total _____	

All publications can be ordered online at www.wsweedscience.org (click on online store)

To order by mail and pay by check, send this completed form with payment to:
WSWS Business Manager, 205 W. Boutz Rd, Bldg 4, Ste 5, Las Cruces, NM 88005.

Contact the Business Manager (Phil Banks) at (575) 649-7157 for bulk order prices.

Shipping Information:

Name: _____
Address: _____ City: _____
State: _____ Zip Code: _____ Telephone: _____
e-mail: _____

WSWS Objectives

- ❖ To foster and encourage education and research in weed science.
- ❖ To foster cooperation among state, federal and private agencies in matters of weed science.
- ❖ To aid and support commercial, private and public agencies in the solution of weed problems.
- ❖ 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.



Western Society of Weed Science
205 W. Boutz, Bldg. 4, Ste. 5
Las Cruces, NM 88005