



Western Society of Weed Science Newsletter

12110 N Pecos Street, Ste. 220, Westminster, CO 80234
(303) 327-8016
info@wsweedsience.org

SUMMER 2021

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President's Report - by Sandra McDonald

Thank you for the opportunity to serve as your 2021/2022 WSWs President. It has been, and continues to be, an exciting and rewarding experience for me both personally and professionally. I am proud to be a part of this organization and extremely humbled to serve as President. WSWs is an amazing organization, we are our members and I admire all of you (us). I am continually awed by the support from the members and willingness of the members to serve the organization.

COVID continues to present challenges, but the Board of Directors (BoD) and Committees are working diligently, and we continue to progress in a virtual world. The WSWs Board of Directors split our annual summer meeting into a virtual meeting in July and are planning a hybrid "fall" meeting in October. We will meet at the Hyatt Regency Newport Beach, our venue for the 2022 meeting.

Our meeting in 2022 will be the 75th meeting of the WSWs. Plan to celebrate with us. Joel Felix and the 2022 Planning Committee are already working to have a great program. We are planning for an in-person meeting. Joel is building the General Session around the theme "Weed Science – Past, Present, and Future." I think this is a fantastic way to celebrate our first 75 years and look forward to our next 75. For better or worse, I am afraid we will still be fighting weeds in 75 years!

As WSWs members you can help us shape the 2022 meeting. If you have ideas for a symposium or are interested in organizing a symposium in Newport Beach in March 2022, please contact Carl Coburn (carl.coburn@bayer.com), WSWs Education and Regulatory Chair. If you have suggestions for a Project Section Discussion topic please contact Judit Barroso (judit.barroso@oregonstate.edu), WSWs Research Section Chair and she can coordinate with the Project Section Chairs.

Our WSWs members are outstanding and worthy of recognition. Sadly, many go unrecognized by the WSWs because no one submits Awards nomination packets. Please think about which of your colleagues are most deserving and begin working on an awards nomination. Please submit it to Rich Zollinger (richardz@amvac.com). If you know of individuals who should be recognized as a Fellow or an Honorary Member, please submit those packets to Drew Lyon (drew.lyon@wsu.edu).

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WSWS Annual Meeting March 7-10, 2022 Newport Beach, California

President's Report – CONTINUED FROM PAGE 1

The WSWS Committees have been very active. An Ad Hoc History Committee has been formed to update the last 25 years of the WSWS history. If you have anything you would like to share, please contact Vanelle Peterson (vanellep@yahoo.com). The WSWS history will be highlighted in Newport Beach.

The Public Relations Committee has been working closely with our new Social Media Administrator, Amy Giannotti (wsweedsci@gmail.com). Please follow us:

@wsweedsci - Instagram, Twitter

@Western Society of Weed Science - Facebook

It is time to update our WSWS Website. I have asked Lynn Ingegneri (lynn.ingegneri@aims.edu) to act as the point person, coordinating with the BoD and Committees. In conjunction with the update of the website, I am also hoping to update our membership information, please check yours at <http://www.wsweedscience.org/membership-information/member-login/>. If you do not get it updated, I will be harassing some of you – I know you have changed jobs or are no longer students, although this is not reflected in your information.

The 2021 Proceedings are almost complete. Carl Libbey is waiting on me. The BoD decided to dedicate the 2021 Proceeding to the “Resiliency of Our WSWS Membership.” Thanks to all of you for your resiliency, service to the society, and inspiring me and the BoD.

Student Paper and Poster Contest Announcement

If you are a student planning to attend the 2022 WSWS Annual Meeting in Newport Beach, please consider participation in the Student Paper and/or Poster Contest! It is a great way to share your research and gain valuable feedback on your presentation skills and content. The top scoring students in each division will be recognized with a plaque and cash award. Further details regarding contest eligibility, rules, and procedures will be included in the fall newsletter. Stay tuned!

-Josh Adkins, Chair

Contact Us

Newsletter Editor

Carl Libbey

wswsnewslettereditor@gmail.com

WSWS Officers and Executive Committees

President

Sandra McDonald

Mountain West Pest

sandra@mountainwestPEST.com

Awards, Site Selection

President-Elect

Joel Felix

Oregon State University

joel.felix@oregonstate.edu

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

Immediate Past President

Corey Ransom

Utah State University

corey.ransom@usu.edu

Fellows & Honorary Members,
Sustaining Members,
Nominations

Secretary

John Madsen

USDA ARS

jmadsen@ucdavis.edu

Necrology

Treasurer

Phil Banks

Marathon Agricultural &
Environmental Consulting Inc.

marathonag@zianet.com

Finance

WSSA Representative

Alan Helm

Gowan Inc

AHelm@gowanco.com

Legislative

CAST Representative

Gregory Dahl
Winfield United
gkdahl@landolakes.com

Member-At-Large - Public Sector

Steve Fennimore
University of California, Davis
safennimore@ucdavis.edu

Member-At-Large - Private Sector

John Coyle
Ark Valley Weed Management
and Consulting LLC
avweeds@gmail.com
Herbicide Resistant Plants

Research Section Chair

Judit Barroso
Oregon State University
judit.barroso@oregonstate.edu

Research Section Chair- Elect

Harlene Hatterman-Valenti
North Dakota State University
h.hatterman.valenti@ndsu.edu

Education & Regulatory Section Chair

Carl Coburn
Bayer Crop Science
carl.coburn@bayer.com
Public Relations

Education & Regulatory Section Chair-Elect

Jane Mangold
Montana State University
jane.mangold@montana.edu

Call for Papers and Posters

Joel Felix President-Elect/Program Chair

Unless there are unforeseen setbacks in the pandemic health situation, the 2022 Western Society of Weed Science (WSWS) Annual Meeting will be held in-person, March 7-10, 2022 at the Hyatt Regency Newport Beach, 1107 Jamboree Road, Newport Beach, CA 92660.

Room reservation information can be found here: [Hotel Reservations](#). The hotel is adjacent to the Upper Newport Bay Nature Reserve. Nestled among 26 acres featuring hundreds of palms and a succulent courtyard that is a nod to the California desert. The hotel has three unique pools, an executive golf course and luxury shopping. Details regarding meeting registration rates and travel options will be forthcoming.

The Program Committee will work with the Board of Directors and the members at large to develop a program fit for the 75th WSWS Annual Meeting --a Diamond Jubilee celebration! It is our hope to develop a program that will ***look back at the past accomplishments, celebrate the present undertakings, and anticipate the future of weed management.*** We welcome your inputs to accomplish this goal. The Program Committee wants to create a program that will be engaging, unique and valuable to all attendees of the 75th WSWS annual meeting.

Meeting registration will open Monday, December 20, 2021 and remain open through the meeting dates, with information found on the society web page: [WSWS Website](#). **Here are important deadline dates for the meeting; title submission Monday, 12/20/2021, abstract upload Monday, 2/14/2022, and slides upload Monday, 2/21/2022.** Please follow the guidelines when entering oral paper and poster titles! In particular, please use proper capitalization and use of periods, as outlined on the title and abstract submission site: [WSSA Abstracts](#). Standardizing author and organizational names will help make a smoother program. Your cooperation on this is appreciated!

The meeting will commence with the WSWS members welcome reception on Monday, March 7 and conclude around noon on Thursday, March 10, 2022. The Education & Regulatory Section Chair, Carl Coburn, who is a member of the Program team is soliciting proposals for symposia with a current deadline for submission on August 31, 2021 (see the full article [Symposia](#)). Similarly, the Research Section Chair, Judit Barroso, has been in touch with section chairs to develop discussion topics.

All attendees are invited and encouraged to participate by presenting at least one paper or poster, and multiple submissions are welcome. WSWS will continue to have oral papers and posters divided into five projects: Agronomic Crops, Basic Biology and Ecology, Horticultural Crops, Teaching and Technology Transfer, and Weeds of Range and Natural Areas. **Poster size should not exceed 45-inches by 45-inches.**

Oral paper presentations will be scheduled every 15 minutes in concurrent sessions. Thus, maintaining a timely schedule in all concurrent sessions is important in order to allow smooth transition for those who need to move between sessions. Therefore, presentations of 12 to 13 minutes are recommended to allow time for questions and transition to the next presenter.

Please plan on bringing your students to the meeting and encourage them to take the opportunity to participate in student oral presentation and/or poster contests and a facilitated "Student Night Out" to visit with members from the academic and industry settings.

Newport Beach promises to be an excellent venue and a wonderful meeting to hear about the latest research, recommendations, and findings among a wide range of weed science topics. We hope to see all of you in beautiful Newport Beach, California.

Student Liaison Report — Jodie Crose

Hello WSWS students,

I hope all of you are having a great field season so far and are staying cool! This summer has flown by and we already had our summer WSWS Board of Directors meeting earlier this month. While we are still teetering between the virtual and in-person world, it is always nice catch up with those involved in the society. Many important discussions took place for the 2022 annual meeting and I believe all are hopeful that an in-person meeting will occur in California next year. Fingers crossed! Don't forget to keep an eye out for the WSWS Elena Sanchez Outstanding Student Scholarship Award and the Rita Beard Endowment Award applications!

With that, I would like to remind you all to respond to the survey you received from me regarding suggestions for the meeting. I've received some great feedback so far and I look forward to compiling it and discussing it with the board in October. If you missed it, the link to the survey is: [WSWS Student Survey](#). Additionally, the WSWS student organization has a new social media platform on Instagram. At your convenience, please search for **wsws_students** and follow the page. I created this page in hopes of a fun way to share our research with one another through stories and photos of the work we are each involved in! So please send photos and information about your work to be featured on the **wsws_students** Instagram page!

Lastly, if any of you have any suggestions for the society, please don't hesitate to reach out to myself or our liaison elect Grace Flusche Ogden. It is our job to take your suggestions or concerns to the board and we are happy to do so! With that, I would like to suggest to any of you who have enjoyed attending the WSWS annual meetings and are interested in networking and becoming more involved with the society – there are many great ways to do so. The society has several committee's that are looking for input and involvement from students. You can find more information about committee's here: [WSWS Committees](#). If one peaks your interest, please contact me and I will be happy to put you in contact with someone on the committee. Committee involvement is not stressful and primarily takes place at the annual meeting where each committee usually holds a short meeting discussing the goals or tasks that are relevant. The student liaison position is another great way to become more involved in the society and it looks great on a resume! If you are interested, please reach out and I'll be happy to share with you more about what the position looks like. Have a great rest of your summer and I look forward to seeing/sharing more about all of the cool research each of you are involved in through our social media platforms!

Thank you all,

Jodie Crose, Student Chair
jcrose@uwyo.edu

Grace Flusche Ogden, Student Chair (elect)
gflusche@ostatemail.cokstate.edu

Business Manager

Eric Gustafson
IMI
12110 Pecos St, Suite 220
Westminster, CO 80234
info@wsweedsociety.org

Constitution & Operating Procedures Representative

D. Chad Cummings
Bonham, TX 75418
chad.cummings@corteva.com

Webmaster & Web Editor

David Krueger
Apex WebStudio LLC
david@apexwebstudio.com

Student Liaison

Jodie Crose
University of Wyoming
jcrose@uwyo.edu

Student Liaison Chair-elect

Grace Ogden
Oklahoma State University
gflusche@okstate.edu

Executive Director of Science Policy

Lee Van Wychen
National and Regional Weed Science Societies
5720 Glenmullen Place
Alexandria, VA 22303
(202) 746-4686
Lee.VanWychen@WSSA.net

Publications

**WSWS ONLINE
EDUCATION**

**WSSA Journals Website
Online**

CALENDAR OF EVENTS

**8th International Weed
Science Congress**
Dec. 5 – Dec. 10, 2021
Bangkok, Thailand
www.iwsc2020.com

**North Central Weed Science
Society Annual Meeting**
Dec. 13 – Dec. 16, 2021
Grand Rapids, Michigan
www.ncwss.org

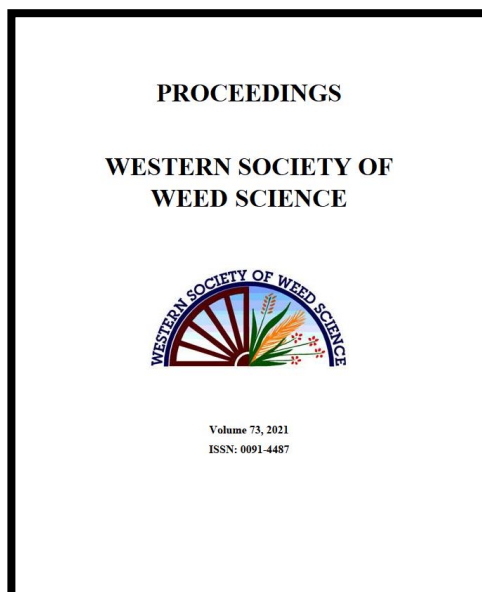
**Northeastern Weed Science
Society Annual Meeting**
Jan. 3 – 6, 2022
Gettysburg, Pennsylvania
www.newss.org

**Southern Weed Science
Society Annual Meeting**
Jan. 23 - 27, 2022
Austin, Texas
www.swss.ws

**Weed Science Society of
America
and
Canadian Weed Science
Society**
Joint Annual Meeting
Feb. 21-24, 2022
Vancouver, British Columbia
www.wssa.net
www.weedscience.ca

**Western Society of Weed
Science Annual Meeting**
Mar. 7 - 10, 2022
Newport Beach, California
www.wsweedscience.org

2021 Proceedings



The Proceedings from the 2021 74th annual Meeting of the Western Society of Weed Science held jointly with the Western Aquatic Plant Management Society have been posted to the WSWs website. You can view or download the Proceedings by following this link:

[WSWS 2021 Proceedings](#)

Publications Available from the WSWs

The following books or DVDs can be purchased from the WSWs:

Aquatic and Riparian Weeds of the West
Weeds of California and Other Western States
Interactive Encyclopedia of North American Weeds DVD
Weed Bingo

All publications can be ordered online at [WSWS Bookstore](#). Contact the Business Manager (Eric Gustafson) at (303) 327-8016 for bulk order prices.

REQUEST FOR WSWs FELLOW AND HONORARY MEMBER NOMINATIONS

Dr. Drew Lyon, 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, 2021**

Send To:

Electronic submission preferred.

Drew Lyon

(509) 335-2961

drew.lyon@wsu.edu

10th Annual Western Invasive Weed Short Course



The 10th Annual Western Invasive Weed Short Course will be held September 27-30, 2021 at the Sylvan Dale Guest Ranch in Loveland, Colorado. This will be our first fall WIWSC and will provide some unique training opportunities.

Registration (\$825.00 by August 21, 2021; \$925.00 on September 1, 2021) includes educational program and daily refreshment breaks. Three lunches and three dinners are also included in the registration. Visit http://www.mountainwestpest.com/Past_Courses.php to learn more.

The continued partnership with the **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. A twilight weed walk on the first night is a 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.

The 2021 WIWSC will conclude sessions on:

- Restoration/revegetation
- Live weeds
- Herbicide symptomology specimens
- Habitat protection for pollinators & wildlife
- Other topics to be identified by the participants
- Time for individual interaction with instructors

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 is taught by outstanding trainers representing the **Western Society of Weed Science**.

Please contact Sandra McDonald, WIWSC Coordinator, for additional information at 970-266-9573 or Sandra@MountainWestPest.com.



2022 CALL FOR NOMINATIONS: DISTINGUISHED ACHIEVEMENT AWARDS

Everyone knows of some skilled and outstanding weed scientists in the western region who have contributed a great deal over the years and deserve our recognition and appreciation. One way to recognize such persons is to nominate them for a WSWS award. Please take the time and nominate an individual for one of awards listed below.

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 that 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 **December 11, 2021**.

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 **December 11, 2021**:

Rich Zollinger
Amvac Chemical Co.
4305 S Bighorn Lane
Spokane Valley WA 99206
509-209-0324
richardz@amvac.com

Integrating biological control into invasive plant management in Dinosaur National Monument

Dan Bean, Kristi Gladem and Sonya Daly-Colorado Department of Agriculture Palisade Insectary

Dinosaur National Monument (DNM) lies on the border between Colorado and Utah and is graced by over 100 miles of breathtaking and remote river canyons along the Green and Yampa rivers. The 210,844-acre park is mostly inaccessible to motorized vehicles, so tamarisk and Russian knapweed control and monitoring activities are conducted during the limited times when rafts can navigate the rivers. In 2006 DNM began incorporating weed biological control into its integrated weed management with the assistance of the Colorado Department of Agriculture Palisade Insectary (CDA).

Tamarisk Management

Tamarisk hindered recreational use of the rivers by forming thickets along riverbanks, outcompeting native vegetation and altering hydrology causing the disappearance of prized breeding sites for four endangered native fish, including the massive predatory Colorado Pikeminnow. Tamara Naumann, an ecologist with DNM, began working with volunteers from the public in the late 1990s to clear out tamarisk along the riparian corridors where it impeded recreational use. Volunteers put in long days in remote locations, on multi-day raft trips along the rivers pulling out tamarisk, sometimes relying on steel tripods and heavy-duty pulley systems, to yank the massive shrubs out by the roots (Figure 1). According to Naumann nearly 7,000 volunteers participated over the years [1] providing the public with an unforgettable experience and hands-on education in invasive species management. These mechanical tamarisk control efforts were highly successful, but localized.



Figure 1 1A. Peter Williams of the National Park Service's Dinosaur National Monument navigates the Green River carrying volunteers for the Weed Warrior program, 2006. B. Williams and Weed Warriors pull out a large tamarisk shrub from near a camping beach, Green River.

For the remainder of the tamarisk invaded riparian corridors Tamara brought in another component of IPM, biological control. The first releases of the northern tamarisk beetle,

Diorhabda carinulata (Coleoptera: Chrysomelidae) (Figure 2A), a host-specific biological control agent, were made In May of 2006 near the confluence of the Yampa and Green Rivers in Echo Park; additional tamarisk beetle releases were made through 2009. Since 2009 tamarisk beetles have spread throughout the river corridors on their own and may be found in all reaches of this remote canyon system. Beetles appear to be effective at tamarisk suppression at many locations in the intermountain west [2] but monitoring tamarisk and tamarisk beetles in the remote canyons of DNM is necessary to document and quantify tamarisk beetle impact.

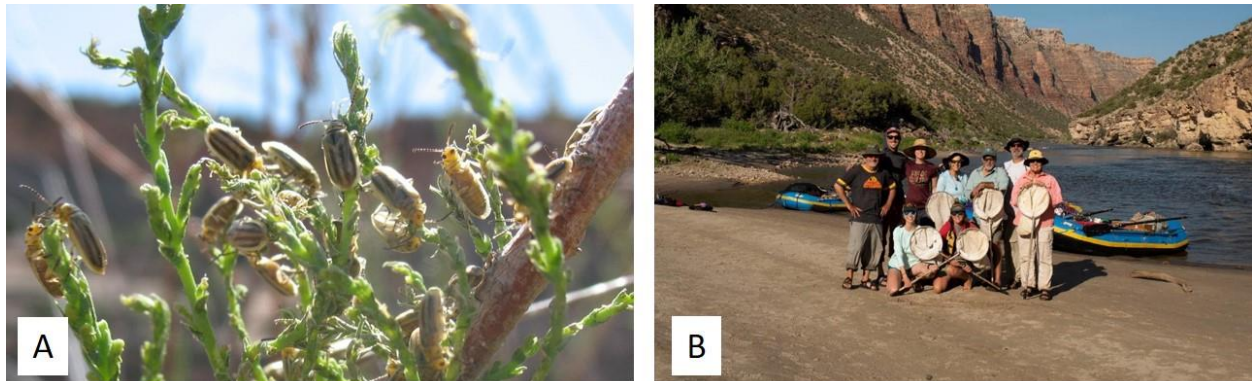


Figure 2: A) adult northern tamarisk beetles feed on tamarisk early in the season; B) Tamarisk monitoring volunteers and their rafts, 2021

National Park Service (NPS) technician Peter Williams set up a series of permanent monitoring locations spaced along both the Yampa and Green Rivers. Williams monitored from 2008-2017 and his annual monitoring reports reveal the dynamics of tamarisk beetle populations and impacts on the targeted tamarisk thickets [3, and earlier reports cited within]. After Williams' retirement in 2017, CDA, in cooperation with NPS, took the lead on DNM's tamarisk biocontrol monitoring program with the goal to quantify population dynamics of the northern tamarisk beetle and impacts of biocontrol on tamarisk at a regional scale, over a 20 year period. CDA and volunteers run the Yampa when snow melt-off makes the float possible and follow up with a float on the Green where steady flows throughout the summer keep the river navigable.

Russian Knapweed

The Russian knapweed (RK) biocontrol program was initiated in DNM this spring with the goal of reducing RK densities and increasing native grasses and forbs. CDA and NPS personnel released two gall-forming biocontrol agents, the midge *Jaapiella ivannikovi* (Diptera: Cecidomyiidae) and the gall wasp *Aulacidea acroptilonica* (Hymenoptera: Cynipidae) that suppressed RK in other riparian ecosystems [4]. The first gall wasps (Fig. 3A) were released at 18 different areas along the Yampa River (Fig. 3B) in early May and wasp galls were observed at some of the release sites in late May and early June, indicating that released wasps laid eggs and a new generation of wasps is impacting RK on site. On a subsequent trip CDA released midge galls and gall wasps in RK infested areas grazed by livestock and wildlife along the Yampa. Grazing stimulates the RK to promote new shoots, the stage preferred by midges for oviposition. The tiny flies have multiple generations a season, therefore midge suppression of new plant growth occurs throughout the season. The gall wasps, with one generation a season, were

released under cover of shrubs at grazed midge release sites to protect wasps from wildlife grazing.

In 2022 CDA and NPS plan to release more wasps in less disturbed areas and midges in heavily grazed areas. Three permanent monitoring transects through dense infestations of RK were established to complement DNM's overall biocontrol monitoring program. CDA plans to monitor all release locations and permanent transects every May/June for the next five years.

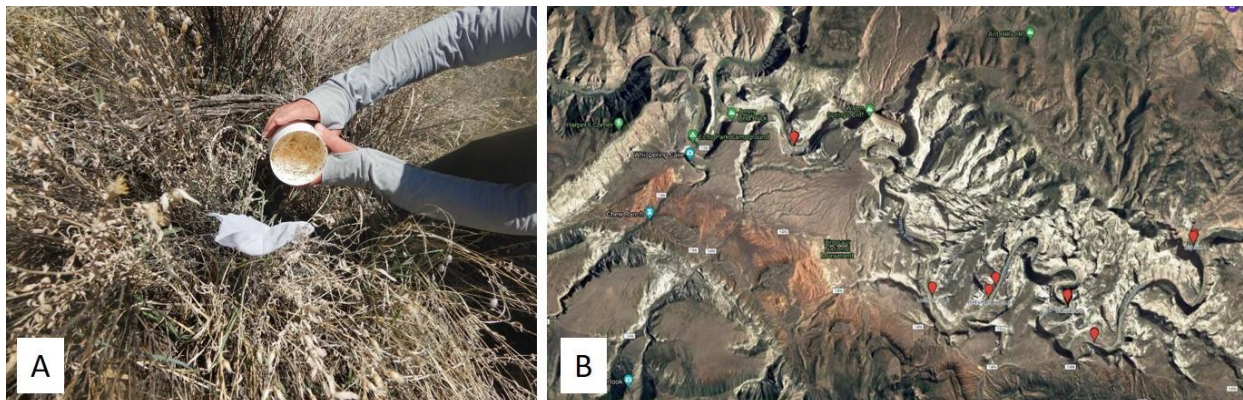


Figure 1A) A release of Russian knapweed gall wasps, *A. acroptilonica*, at a remote site on the Yampa, 5/08/2021; B) Russian knapweed gall wasp releases on the Yampa, May 2021. Release sites are shown in red.

Citations:

1. Cawley, D. 2017. Last ride for Dinosaur's original 'weed warrior', Deseret News, 7/16/17. <https://www.deseret.com/2017/7/16/20615994/last-ride-for-dinosaur-s-original-weed-warrior>
2. Bean, D.W. and T. L. Dudley (2018) A synoptic review of *Tamarix* biocontrol in North America: tracking success in the midst of controversy. *BioControl* 63: 361-376
3. Williams, P.A. 2016. Dinosaur National Monument northern tamarisk beetle (*Diorhabda carinulata*) 2016 monitoring results. Dinosaur National Monument. Dinosaur, Colorado.
4. Bean, D., S. Daly and C. Randall. 2020. Russian knapweed biocontrol shows promise in Colorado. pp 7-9, Western Society of Weed Science Newsletter, Fall 2020.

WASHINGTON REPORT

July 30, 2021

Lee Van Wychen

Seeking Your Expertise for the 2021 Weed Survey

The 2021 survey of the most common and troublesome weeds in aquatic and non-crop areas in the U.S. and Canada is here! <https://www.surveymonkey.com/r/2021WeedSurvey>

We invite you to participate in this year's weed survey to list the five most common and troublesome weeds in at least one of the following areas:

- 1) Aquatic: irrigation, flood control
- 2) Aquatic: lakes, reservoirs, rivers

- 3) Aquatic: ponds
- 4) Forestry
- 5) Natural Areas: parks, wildlife refuges
- 6) Ornamentals: field nursery crops, outdoor containers, Christmas trees
- 7) Right-Of-Ways: railways, roads, public utilities

Common weeds refer to those weeds you most frequently see, while troublesome weeds are those that are most difficult to control but may not be widespread. Your expertise is important and will be invaluable in highlighting weed species trends over time.

Survey: <https://www.surveymonkey.com/r/2021WeedSurvey>

Support for \$11.5 Billion in Ag Research Infrastructure

The Weed Science Societies joined over 350 other national, regional, and state organizations and companies in a letter to House and Senate Agriculture Committee leadership to request their support for \$11.5 billion in ag research infrastructure investments over five years. This investment in our 1862, 1890, and 1994 land grant and non-land grant schools of agriculture is necessary in order to ensure the U.S. remains a global leader in food and agricultural innovation. A recent Gordian/APLU study assessed the state of facilities at U.S. colleges and schools of agriculture this year and reported that 69% of these buildings are at the end of their useful life. [Click here](#) to read the letter and see the signatories.

Jacobs-Young Nominated to Serve as USDA Under Secretary for Research, Education, and Economics



On July 29, the Biden administration nominated Dr. Chavonda Jacobs-Young to serve as USDA Under Secretary for Research, Education, and Economics (REE). The REE mission area covers the work of the Agricultural Research Service (ARS), the Economic Research Service (ERS), the National Agricultural Statistics Service (NASS), the National Institute of Food and Agriculture (NIFA) and the Office of the Chief Scientist (OCS).

Dr. Jacobs-Young has served as Administrator of ARS since 2014. Previously, she was the ARS Associate Administrator for National Programs, where she led the Office of National Programs and the Office of International Research Programs. She is a native of Augusta, GA and holds an M.S. and Ph.D. in Wood and Paper Science and a B.S. in Pulp and Paper Science and Technology from North Carolina State University.

Legislation to Boost USDA Research Funding Reintroduced

Senators Dick Durbin (D-IL) and Jerry Moran (R-KS) reintroduced the **America Grows Act**, S. 1371, that would require a five percent annual funding increase each year for the next 10 years for research activities at USDA’s ARS, NIFA, NASS, and ERS. The U.S. share of total agriculture research investments among high-income countries as a group has declined from 35 percent in 1960 to less than 25 percent by 2013. By comparison, in the past 30 years, Chinese investments in agriculture research have risen eight-fold.

The six National and Regional Weed Science Societies [joined over 120 other organizations](#) in a letter to Senate Agriculture and Appropriations Committee members supporting the America Grows Act of 2021.

Producers Can Now Hay, Graze and Chop Cover Crops Anytime and Still Receive Full Prevented Planting Payment

Agricultural producers with crop insurance can hay, graze or chop cover crops for silage, haylage or baleage at any time and still receive 100% of the prevented planting payment. Previously, cover crops could only be hayed, grazed or chopped after November 1, otherwise the prevented planting payment was reduced by 65%.

USDA's Risk Management Agency (RMA) recognizes that cover crops are not planted as an agricultural commodity but rather with the primary purpose for conservation benefits. For the 2021 crop year and beyond, RMA will not consider a cover crop planted following a prevented planting claim to be a second crop. But RMA will continue to consider a cover crop harvested for grain or seed to be a second crop, and it remains subject to a reduction in the prevented planting indemnity in accordance with the policy.

[Learn more.](#)

Randy Moore is the New Forest Service Chief



On June 28, USDA Secretary Tom Vilsack announced that Randy Moore will serve as the 20th Chief of the USDA Forest Service. Prior to this appointment, Moore served as the Forest Service's Regional Forester for the California-based Pacific Southwest Region since 2007. He previously served as the Regional Forester for the Milwaukee-based Eastern Region and also worked with USDA's Natural Resources Conservation Service (NRCS) as a soil scientist in several states including North Dakota. Moore, who has a bachelor's degree in plant and soil science from Southern University in Baton Rouge, Louisiana, will be the first African American to lead the Forest Service.

EPA Announces Plan to Revise WOTUS Definition

The EPA and the Army Corps of Engineers have announced plans to revise the definition of "waters of the U.S." or WOTUS to determine which waterways and wetlands federal agencies can regulate under the Clean Water Act.

The agencies also intend to initiate a new rulemaking process to restore the pre-2015 definition of what constitutes WOTUS and have requested a federal judge to remand the Trump Administration's 2020 Navigable Waters Protection Rule. The 2020 rule, which replaced the Obama Administration's 2015 Clean Water Rule, moved WOTUS back towards Congress's original intent of "navigable waters" and removed ephemeral streams that flow only after heavy rainfall or snowmelt as well as wetlands without surface water connections to intermittent or perennial streams from the agency's definition of WOTUS.

Many agricultural groups are opposed to changing the current Navigable Waters Protection Rule because they feel it provided long-overdue certainty and clarity for landowners affected by the scope of WOTUS' jurisdiction. There is concern about government overreach and regulatory confusion in how federal agencies decide which waters of the United States they can regulate.

The Biden Administration eventually plans to draft its own definition of which waterways, wetlands and groundwater they can regulate by "*drawing from the lessons learned from the current and previous regulations, as well as input from a wide array of stakeholders, so we can better protect our nation's waters, foster economic growth, and support thriving communities.*" More information about the new rulemaking is forthcoming.

National Invasive Species Awareness Week (NISAW)- Part II

NISAW Part II was May 15-22, 2021 and focused on local invasive species prevention and removal events, plus included five educational webinars. The [North American Invasive Species Forum](#) was also held virtually during NISAW Part II and led by the Canadian Council on Invasive Species.

The webinars from NISAW part II are now available. Click a link to begin watching.

- May 17: [The Climate Crisis and Invasive Species](#)
- May 18: [Biological Threat Surveillance Tools \(US Geological Survey Special Event\)](#) and [The Model Legislative Framework for State Aquatic Nuisance Species \(ANS\) Programs and Resource Toolkit for Local Governments](#)

- May 19: **The Regulatory Process for Classical Weed Biological Control**
- May 20: **Aquatic Plant Management Priorities**
- May 21: **A Comparison of State Noxious Weed Lists and The Western Weed Action Plan**

NISAW 2022 is Feb. 28 – Mar. 4.

Next year, National Invasive Species Awareness Week (NISAW) will be February 28 – March 4, 2022 and will return to a single weeklong event and “fly-in” to Washington DC. If you have topics or issues of concern, or would like to help plan next year’s NISAW, please let me know.

Eagle Killing Neurotoxin Linked to Hydrilla Identified

Bald eagles, as well as other wildlife, have been succumbing to vacuolar myelinopathy (VM) in the southern U.S. since the 1990s. In a March 2021 issue of *Science*, researchers finally identified the neurotoxin, aetokthonotoxin (AETX), which is produced by the cyanobacterium *Aetokthonos hydrillicola* that is the cause of VM deaths. The cyanobacterium, *A. hydrillicola*, grows very well on hydrilla covering 20-90% of its leaf surfaces. *A. hydrillicola* has also colonized hydrilla in more than half the watersheds in the southeastern US.

Reference: “Hunting the eagle killer: A cyanobacterial neurotoxin causes vacuolar myelinopathy” by Breinlinger et al., 26 March 2021, *Science* 371. DOI: [10.1126/science.aax9050](https://doi.org/10.1126/science.aax9050)

There was some controversy created by inaccurate media reports that linked the herbicide diquat dibromide as a possible cause. AETX biosynthesis relies on the availability of bromide. The authors recognize that a number of conditions may increase or even decrease bromide availability such as environmental conditions (e.g., lake turnover, agitation), natural sources (e.g., geologic), as well as anthropogenic sources (e.g., power plants, water treatment plants, gasoline additives, chemicals, plant management). Breinlinger et al. (2021) state that “the consequences of elevated bromide from geologic and anthropogenic sources (e.g., water treatment and power plants) on VM should be further investigated”.

It should be noted that there are VM-positive water bodies with AETX where diquat has never been used. Likewise, diquat controlling hydrilla is desired because hydrilla is the source of the problem. Furthermore, the water concentration of bromide after a diquat application is 25 to 125 times below the optimum water concentration of bromide required for AETX production.

The bigger travesty in all of this is that **hydrilla is a federally listed noxious weed**, and without question, the most widespread aquatic noxious weed on the federal list. APHIS Plant Protection and Quarantine (PPQ) has limited funding for managing and preventing the interstate spread of federal noxious weeds under the Plant Protection Act. While APHIS has active permits for two hydrilla biocontrol agents, *Hydrellia balciunasi* and *Hydrellia pakistanae*, unfortunately, APHIS confirmed that they **do not have a current program** for the control and management of hydrilla. WSSA has ongoing conversations with APHIS on this important issue.

Weed Science Societies Support NEPA and Lacey Act Fixes for Invasive Species

The national and regional weed science societies supported letters that would improve invasive species management on two separate issues.

The **first letter** requests that the Council on Environmental Quality (CEQ) approve the Department of the Interior’s request for a number of categorical exclusions under the National Environmental Policy Act (NEPA) for invasive species control. Without the ability to use categorical exclusions to promptly control invasive annual grasses after a fire on federal lands, those invasive grasses have spread rapidly while federal land managers have to go through the NEPA process, which has taken years in many cases, before those invasive grasses can be managed.

The **second letter** supports legislation, S. 626, in the Senate that would fix a flaw in the Lacey Act, which came about through a federal court case, where the court interpreted that the US Fish and Wildlife Service (FWS) could not regulate interstate commerce in injurious species, notwithstanding decades of generally accepted practice during which FWS had exercised that authority.

Lee Van Wychen, Ph.D.
Executive Director of Science Policy
National and Regional Weed Science Societies
Lee.VanWychen@wssa.net
(202) 746-4686

2021 Membership Renewal Form
To pay by credit card, please go to www.wsweedscience.org
and login to your account

IF YOU DID NOT ATTEND THE ANNUAL MEETING BUT WANT TO REMAIN A MEMBER, FILL IN THE INFORMATION BELOW AND SEND \$30.00 FOR DUES TO THE ADDRESS GIVEN.

Last name	First name	Affiliation	
<hr/>			
Mailing address	City	State	Zip code
<hr/>			
Phone # w/area code		e-mail address	

Classification: Student ___ University ___ Federal Agency ___ State Agency ___
Private Industry (manufacturing and sales) ___ Private Industry (consulting) ___
Unemployed ___ Retired ___ other (specify) _____

**Send to: WSWS/IMI,
12110 Pecos St., Ste 220,
Westminster, CO 80234**

Questions? info@wsweedscience.org or (303) 327-8016

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
12110 Pecos St., Ste. 220
Westminster, CO 80234