

# Southern Weed Science Society

# *Note From the President:*

It never ceases to amaze me how quickly time passes; however, as I write this, students are nearly finished with fall classes and finals will soon begin. It seems like last week we were in the middle of summer and the heat would not let up, yet Christmas will be here soon. I hope each of you enjoys the holiday season with your friends and family, after which, thoughts will turn toward the spring meeting season. Our Southern Weed Science Society Annual Meeting will be held January  $23^{rd}$  – January  $26^{th}$ , 2023 at the Renaissance Hotel in Baton Rouge, LA.



Dr. Eric Castner is serving as President-Elect and Program Chair for the 2023 annual meeting and has been working diligently over the past few months on our annual meeting program. Eric is preparing an outstanding opening session for our members and has done a tremendous job of arranging the program. If you see him in Baton Rouge, please take a few moments and thank him for all his efforts. He is deeply committed to our society and has gone above and beyond to help our annual meeting be successful. As in Austin, we will once again have a Sunday evening event at Top Golf aimed at providing graduate students an opportunity to interact with University and industry colleagues in a relaxed, non-traditional setting. This event was very successful in Austin and we anticipate an even better event in Baton Rouge. We will once again have a graduate student quiz bowl, graduate student luncheon, society awards luncheon, and student awards mixer on Wednesday evening. Our 2023 annual meeting will have topics and events that will be of interest to all our members and I would encourage you to attend. Registrations (which include membership) that occur prior to January 2<sup>nd</sup>, 2023 will be \$400 for regular members and \$250 for students. On January 2<sup>nd</sup>, registration fees will increase by \$50 per person. If you cannot attend but wish to remain an active member of the Southern Weed Science Society, membership is available on the registration page/member application page for \$75.

Recently, I was given the opportunity to visit some of our Congressional leadership with Dr. Stanley Culpepper, WSSA President; Dr. David Simpson, NCWSS President; Ms. Taylor Randell-Singleton, WSSA Science Policy Intern; Mr. Navdeep Godara, WSSA Science Policy Intern; and Dr. Lee Van Wychen, WSSA Executive Director of Science Policy. We spent nearly three days visiting with leaders from around our country as well as personnel from the American Soybean Association, CropLife America, and the U.S. Fish and Wildlife Service. Dr. Van Wychen did an outstanding job of setting up and executing these visits and continuing his efforts to keep weed science related issues in front of our leaders. It was very eye opening to see some of the inner workings of our Congressional leadership. Kudos and thank you to Lee for all his efforts on our behalf.

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# **2023 SWSS Annual Meeting**

January 23-26, 2023

Renaissance Hotel Baton Rouge, LA

More details here: <a href="http://www.swss.ws/">http://www.swss.ws/</a>
<a href="mailto:annual-meeting/">annual-meeting/</a>

Officer elections were also held this fall and Dr. Cletus Youmans amassed an impressive slate of candidates for our open officer positions. The results are in and the following have been elected to serve our society: Dr. Eric Palmer – Vice-President; Dr. Hunter Perry – Secretary/Treasurer; Dr. Te-Ming "Paul" Tseng – Editor; Dr. Adam Hixson – Member at Large (Industry); Dr. Charlie Cahoon – Member at Large (Academia); Dr. Pete Dotray – WSSA Representative; and Dr. Spencer Samuelson – Endowment Foundation Board. Please join me in thanking each of these individuals for their willingness to serve our society. Also, thank you to Clete for his efforts as Past-President as well as for his many years of service to our society.

I am about to complete my 20<sup>th</sup> year as a member of the Southern Weed Science Society and I continue to be impressed at the evolution of our science and the quality of students emerging from our member institutions. It is one of the great honors of my career to serve as President of the Southern Weed Science Society. Thank you to everyone for your support and willingness to lend a hand whenever necessary. Please be safe and be sure to spend time this holiday season with those you hold dear. I look forward to seeing everyone in Baton Rouge.

# 2023 Annual Meeting Program Update "Stepping Up to the Challenge"

### **Tentative Meeting Agenda**

SWSS Board of Directors Meeting – Jan. 22nd 3:30 pm – 5:30 PM Graduate student mixer and social at Top Golf – January 22nd 6:00 pm – 9:00 pm Committee Meetings – January 23rd 8 am – 12:00 pm Committee Reports due February 3rd Oral Presentations – January 23rd – 25th Posters viewable January 23rd – 25th

Reminder: All abstracts are due January 13th, 2023, and can be submitted here: <a href="http://weedscimeetingabstracts.com">http://weedscimeetingabstracts.com</a>.

The program for the 76th meeting of the Southern Weed Science Society is ready to go with the theme of "Stepping up to the Challenge". The challenges that face agriculture have never been greater and the focus of the 2023 SWSS meeting is to better prepare our members to be the educated voice for weed science and for agriculture. One highlight of the meeting will be the general session symposium addressing "The Impact of the Endangered Species Act" on agriculture. The symposium will feature speakers from US EPA, American Farm Bureau, Industry Partners, Louisiana Department of Agriculture as well as university experts. The SWSS Board of Directors is excited about the 2023 annual meeting in Baton Rouge and hope to see you there. Spread the word and let's make this meeting one of our best!

Thank you to everyone for submitting an oral presentation or poster title for the 2023 SWSS Annual Meeting. We have nearly 100 poster presentations and approximately 130 oral presentations. Of those presentations, 35 posters and 59 oral presentations are in the student contest. The Endowment Foundation will be sponsoring the graduate student social and mixer at Top Golf in Baton Rouge. The graduate student event was a tremendous success at the 2022 meeting and all graduate and undergraduate students are encouraged to attend this year's event. Look for more details from Connor Webster. The SWSS Executive Board meeting will be held on Sunday afternoon and Thursday morning at the Renaissance Hotel.

The program for the 2023 SWSS Annual Meeting will kick off with the general session at 1 pm in the Salons II, III and IV. Dr. Steve Linscombe, Professor Emeritus - Louisiana State University and Director of The Rice Foundation & Leadership Class Program will deliver the keynote address followed by a symposium on 'The Impact of the Endangered Species Act" featuring perspectives from government, industry, university and grower representatives. SWSS President Dr. Darrin Dodds will address the membership and the general session will also include presentations from the 2022 Endownment Enrichment Scholarship winners.

### **ORAL PRESENTATION CONTEST**

The graduate student oral presentation contest will be the focus of our meeting program on the morning of Tuesday, January 24th. Four concurrent sessions will be feature presentations from 59 graduate student members of our society. The student contest will kick off at 7:30 am on January 24th and will conclude at noon. All presentations should be uploaded to the website prior to the meeting. No changes will be allowed at the podium prior to presentations.

#### POSTER CONTEST AND NON-CONTEST POSTER

Posters will be on displayed in Salon I from Monday, January 23rd through Wednesday, January 25th. Students are not required to be at their poster for judging. All posters should be removed on the morning of Wednesday, January 25th.

### **STUDENT CONTEST (General)**

Students are to use the SWSS website to submit abstracts in .pdf format as well as oral presentations prior to the meeting. If you have additional questions about the contest rules, please contact Matthew Wiggins, Student Contest Chair (matthew.wiggins@fmc.com)

If you have questions about the program, please see the SWSS website or contact Eric Castner, Program Chair (eric.castner@fmc.com or 817-597-1852)

# Call for Judges for Annual Meeting

The SWSS Annual Meeting in Baton Rouge, LA is quickly approaching, and it is time to start lining up volunteer judges for the student contests. Once again, we are anticipating excellent participation out of our student members so we will need a large number of volunteer judges to make the contest a success.

If you are willing to judge a paper or poster section, please email both Matthew Wiggins (matthew.wiggins@fmc.com) and Pratap Devkota (pdevkota@ufl.edu) with your preferred section (paper or poster). As always, we will try to organize judges into the subject areas they feel most comfortable, but we cannot promise everyone will be placed in their top section choice.

The SWSS Annual Meeting is an excellent chance for graduate students to prepare and present technical information to their colleagues and peers. Volunteering your time and support helps insure we are providing students every opportunity to excel in Weed Science.

Again, if you are willing to judge a paper or poster section, please email both Matthew Wiggins (<u>matthew.wiggins@fmc.com</u>) and Pratap Devkota (<u>pdevkota@ufl.edu</u>) with your preferred section (paper or poster). More information will follow closer to the actual meeting date.

Thank you for your past, present and future service to the contest!

# Incoming SWSS Board Members

# **Endowment Foundation Board**



Spencer Samuelson

## **Vice President**



Eric Palmer

# Secretary/Treasurer



**Hunter Perry** 

## **Representative to WSSA**



Peter Dotray

# Member at Large (Academia)



Charlie Cahoon

# Member at Large (Industry)



Adam Hixson

# **Editor (Proceedings)**



Paul Tseng

# Update Corner

University of Arkansas and Auburn University collaborate and publish first report describing the resistance mechanism in glufosinate-resistant Palmer amaranth accession

Palmer amaranth (*Amaranthus palmeri* S. Wats.) is a particular problematic and aggressive weed commonly infesting soybean and cotton fields across the US. The presence of glufosinate-resistant Palmer amaranth was first reported in Arkansas in 2020 by University of Arkansas team led by Dr. Jason Norsworthy, Dr. Tom Barber, and Dr. Tommy Butts (DOI: <a href="https://doi.org/10.1017/wet.2022.21">https://doi.org/10.1017/wet.2022.21</a>). Palmer amaranth is the first and only broadleaf weed resistant to glufosinate. The presence of this novel resistance brought an additional apprehension level to farmers and researchers across the US since this weed has evolved resistance to several different sites of action, and glufosinate is a commonly used option to control Palmer amaranth in soybean and cotton crops carrying the gene endowing glufosinate resistance.

In addition to resistance confirmation, the University of Arkansas research team in a partnership with Auburn University team led by Dr. Scott McElroy successfully demonstrated that the amplification of the chloroplastic glutamine synthetase (*GS2*) enzyme is the resistance mechanism in a highly resistant Palmer amaranth accession from Arkansas. The glufosinate-resistant accession had > 80 gene copies and 15 to 31 times greater *GS2* expression than susceptible plants. Herbicide resistance by gene amplification and over-expression has been previously reported in Palmer amaranth resistant to glyphosate and large crabgrass [*Digitaria sanguinalis* (L.) Scop.] resistant to acetyl-CoA carboxylase inhibitors. This is the first report worldwide explaining the resistance mechanism in glufosinate-resistant Palmer amaranth. This paper was published in the journal *Weed Science* in early June (DOI: <a href="https://doi.org/10.1017/wsc.2022.31">https://doi.org/10.1017/wsc.2022.31</a>). A later publication with a Palmer amaranth population from Missouri showed the same resistance mechanism.

Glufosinate screenings of Palmer amaranth field accessions from across the United States have been conducted yearly for the past four years by Dr. Norsworthy's team with the University of Arkansas System Division of Agriculture as part of a multi-state United Soybean Board funded project. These screenings aim to identify potentially glufosinate-resistant accessions as well as those with resistance to dicamba and provide farmers rapid identification of problematic areas, consequently minimizing the dissemination of a resistant accession to neighboring fields.

Other team members involved in the resistance mechanism project include Ph.D. student Pamela Carvalho-Moore, Dr. Fidel Gonzalez-Torralva, and Dr. Jeong-In Hwang from the University of Arkansas, and Dr. Jinesh Patel from Auburn University.

For any questions or comments regarding this discovery, please contact Dr. Jason Norsworthy (jnorswor@uark.edu) and Ms. Pamela Carvalho-Moore (pcarvalh@uark.edu).

# SWSS Graduate Student Organization Update



Sarah Kezar SWSS GSO President

It's great to know the SWSS annual meeting is right around the corner! Aside from sharing our research and catching up, there are some exciting graduate student events to take note of.

Following the successful Endowment Top Golf event in 2022, there will be another chance to show off your swing in Baton Rouge on Sunday night at 6:00 PM! This will be an excellent time for students to kick off the meeting by networking with industry professionals and students across different universities, so I would certainly encourage all students to attend. The Graduate Student Organization business luncheon on Tuesday (January 24th) from 12:30 to 2:00 PM in Salon II will feature a speaker to cover personal finances and financial literacy and lunch will be provided. Following the speaker event, we will conduct the business meeting which will include nominating and voting for our next slate of officers!

On behalf of the GSO, I would like to encourage all students to attend the business luncheon to vote, become involved in leadership if you are inclined to do so, or nominate others. I look forward to shaking hands with new and familiar faces at the SWSS annual meeting and hope to see you there! Until then, stay well and happy holidays.

# Washington Report

November 21, 2022 Lee Van Wychen

### **2022 Science Policy Fellow: Navdeep Godara**

The Science Policy Fellowship is a unique opportunity for graduate students to assist me in my role as Executive Director of Science Policy for WSSA while gaining experience dealing with a broad array of weed science policy issues. Our second Science Policy Fellow for 2022 is Navdeep Godara at Virginia Tech.



Navdeep is a first-year Ph.D. student at Virginia Tech, pursuing his doctorate degree with Dr. Shawn Askew. Navdeep's dissertation project is focused on evaluating the effects of herbicides and other crop protection chemicals on pollinator foraging behavior, ultraviolet floral reflection, and floral nectar production in common weeds of managed turfgrass systems. In this project, he strives to develop best management practices for mitigating risk of pollinator exposure to harmful pesticides as an alternative to pesticide bans. Prior to his Ph.D., he completed his M.S. degree in Crop, Soil, and Environmental Science from the University of Arkansas under the direction of Dr. Jason Norsworthy. He received a B.S. in Agriculture from CCS Haryana Agricultural University, India. Navdeep's family is comprised predominately of farmers and dis-

tributors of crop production products. He witnessed firsthand how technology and knowledge can make the difference between success and failure in agriculture systems of Northwestern India. Navdeep wants to hone his research and communication skills in a manner that will allow him to significantly contribute to the field of Weed Science for ensuring food security on a global scale. The Science Policy Fellowship exposes him to the complex nature of science policies as he seeks his doctorate. Navdeep will be able to leverage this knowledge to improve his impact on agricultural systems throughout his career. Navdeep is thankful to the WSSA and Science Policy Committee for selecting him for this opportunity.

#### **WSSA Comments on Atrazine Interim Registration Decision**

The WSSA submitted <u>comments</u> on October 7, 2022 addressing EPA's proposed revisions for its interim registration review of atrazine. Among the various mitigation measures, the Agency's proposal calls for prohibiting applications in saturated fields, limiting annual application rates and requiring growers in watersheds with atrazine levels above 3.4 ppb to choose from a "picklist" of practices to mitigate runoff. It is estimated that the proposed changes would impact over 65 million acres of corn, sorghum and sugarcane.

The WSSA remains committed to cooperating with EPA to address the concern of off-field atrazine movement, and identifying practical but effective practices that are sustainable, economical, and achievable for the many growers who utilize atrazine around the country.

The WSSA would also like EPA to schedule a FIFRA Science Advisory Panel (SAP) to seek external peer review of atrazine's risks to aquatic plant communities, including the 3.4 ppb level of concern (LOC) since past ecological and scientific reviews have concluded higher LOC's for atrazine.

A huge thank you goes out to WSSA President Stanley Culpepper and Science Policy Fellow Taylor Randell for pulling together the comments and the literature review, as well as edits and reviews by Bill Chism, Anita Dille and Bill Curran. Thanks also goes to the WSSA Extension Committee members for their input.

#### **FY 2023 Appropriations Update**

The House and Senate passed a continuing resolution (CR) at the end of September to fund the federal government at FY 2022 levels through December 16. The federal fiscal year begins on October 1<sup>st</sup> of each year. Funding the federal government for FY 2023 will be one of the major tasks facing the outgoing 117<sup>th</sup> Congress.

The House has passed all 12 of their FY 2023 appropriations bills out of committee and six of 12 have passed the House floor in a minibus bill on July 20. However, the Senate has not passed any their 12 appropriations bills out of committee.

The table below includes the House and Senate appropriations for FY 2023, as well as the final appropriations for FY 2021 and FY 2022 for various Federal programs important to weed and invasive plant research and management. If there is a difference between the House and the Senate in FY 2023, the higher amount is highlighted.

	Final	Final	House	Senate
	FY 2021	FY 2022	FY 2023	FY 2023
	\$ millions			
USDA-ARS	\$1,492	\$1,633	\$1,736	\$1,756
-Herbicide resistance initiative	n/a	\$2	\$2.5	\$1
USDA-NIFA	<b>\$1,57</b> 0	\$1,637	\$1,768	\$1,691
-AFRI Competitive Grants	\$435	\$445	\$500	\$455
-Hatch Act (Exp. stations)	\$259	\$260	\$265	\$265
-Smith Lever (Extension)	\$315	\$320	\$330	\$325
-IR-4 Program	\$11.9	\$14.5	\$15	\$14.5
-Crop Protection and Pest Management	\$20	\$20	\$20	\$22
-SARE: Sustainable Ag Research & Educ.	\$40	\$45	\$50	\$50
USDA-APHIS: Cogongrass management	\$3	\$3	\$3	\$3
Army Corps- Aquatic Plant Control Research	\$7	\$8	\$11	\$14
EPA - Great Lakes Restoration Initiative	\$330	\$348	\$368	\$358
NOAA - National Sea Grant College Program	\$75	\$76	\$82	\$90
DOI - BLM: Rangeland Management	\$106	\$109	\$113	\$110
<b>DOI -</b> FWS: National Wildlife Refuge System: Wildlife and Habitat Management	\$240	\$250	\$282	\$261
<b>DOI -</b> NPS: Resource Stewardship	\$362	\$382	\$553	\$531

We continue to advocate for these programs through various means including coalitions and congressional visits and are pleased to see potential increases in the IR-4 Program and the Crop Protection and Pest Management (CPPM) program.

There is appropriations report language in both the House and Senate for a regionally focused **Herbicide Resistance Initiative** for the Pacific Northwest. In FY 2022, \$2 million was allocated to "support research to address weed management strongly affecting the long-term economic sustainability of food systems in collaboration with USDA-ARS, research institutions, and stakeholder support". For FY 2023, we support the \$2.5

million recommended by the House appropriations committee.

There is also appropriations report language in both the House and Senate stating their concern over the rapid spread of **cogongrass** and its impact on forest productivity, wildlife habitat, and private landowners. Both the House and Senate provide \$3 million in FY 2023 "for APHIS to partner with State departments of agriculture and forestry commissions in States considered to be the epicenter of infestations to assist with the control and treatment of cogongrass".

There is also two pieces of appropriations support language in the House directing APHIS for *Arundo donax* (giant reed, Carrizo cane) management, but no similar provisions in the Senate. Specifically, the House appropriations committee provides \$5 million "for APHIS to continue to coordinate with ARS, CBP, Department of the Interior, the International Boundary and Water Commission, the Texas State Soil and Water Conservation Board, and other stakeholders on control efforts."

On the aquatics side, the Aquatic Plant Management Society continues to advocate for the **aquatic plant control research program** in the Army Corps of Engineers. We are pleased to see increases recommended for that program in both the House and Senate. In particular, we strongly support the Senate provision that recommends \$6 million in additional funding "for hydrilla control, research, and demonstration work in the Connecticut River basin".

# 2023 Farm Bill Update

While there is a long way to go, work is progressing on development of the 2023 Farm Bill with hearings and listening sessions taking place in Washington, DC, and around the country. Recordings of some of the sessions are available on the House Agriculture Committee website. With the November election results giving each party a very small majority in the House and Senate in a divided Congress, passing a Farm Bill will require significant intra-party compromise.

We are working with the National Coalition for Food and Agricultural Research (NCFAR) and the Supporters of Agricultural Research Foundation (SoAR) on talking points for use in support of ag research in the Farm Bill. Collectively, we are recommending an **increase of \$5 billion** allocated to agricultural research in the 2023 Farm Bill, which is a doubling of current funding levels.

We have also worked with the North American Invasive Species Management Association (NAISMA) to advance four invasive species policies for the 2023 Farm Bill.

In addition to hearings and listening sessions, House Agriculture Committee Chairman David Scott and Ranking Member Glenn "GT" Thompson have offered the opportunity for members of the public to submit their feedback and ideas for the 2023 Farm Bill through an online form available <a href="here">here</a>.

### **EPA Withdraws Glyphosate Interim Decision**

At the end of September, the EPA announced withdrawal of the *Interim Registration Review Decision* for glyphosate because the Agency was not able to meet the Ninth Circuit Court of Appeals deadline of October 1 to complete an Endangered Species Act (ESA) review and conduct a new health-assessment analysis.

EPA's underlying scientific findings regarding glyphosate, including its finding that glyphosate is not likely to be carcinogenic to humans, remain the same. Herbicide products containing glyphosate can continue to remain on the market and be used according to the product label and are unaffected by this action.

EPA has determined that withdrawal of the Interim Registration Review Decision for glyphosate is appropriate in consideration of the Ninth Circuit's June 17, 2022, decision. EPA is unable to finalize a new ecological portion in a registration review decision for glyphosate by the court-imposed Oct. 1, 2022 deadline because of the time needed to address the issues for which EPA sought remand of for the ecological portion and satisfy ESA requirements. EPA initiated formal ESA consultation with the U.S. Fish and Wildlife Service and the National

Marine Fisheries Service for glyphosate in November 2021, and consultation is ongoing. Moreover, before issuing any decision, EPA must first prepare a proposed decision, publish for a 60-day public comment period, and consider any comments received. EPA could not complete these processes by the court-imposed deadline.

A copy of the <u>Withdrawal of the Glyphosate Interim Registration Review Decision</u> is posted to the glyphosate registration review docket at <u>EPA-HQ-OPP-2009-0361</u>.

### **EPA Approves Stronger Plans for Certification of Pesticide Applicators**

The EPA has approved 13 state and federal agency certification plans that comply with the improved federal standards to enhance worker safety under the 2017 Certification of Pesticide Applicators (CPA) rule.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires authorities to have an EPA-approved plan to certify applicators of **restricted use pesticides (RUPs)**. To date, of the nation's **68 certification programs**, EPA has reviewed all proposed modified plans and has approved **eight plans from states and territories** and **five from federal agencies**, of which all are now starting to be implemented.

In 2017, EPA updated the <u>CPA</u> regulations, setting stronger standards for people who apply RUPs. Improvements include enhancing applicator competency standards to ensure RUPs are used safely, establishing a nationwide minimum age for certified applicators and persons working under their direct supervision, and protection for noncertified applicators by requiring training before they can use RUPs (under the direct supervision of a certified applicator), among others.

The following approved state and territory certification plans meet or exceed the standards mandated in the 2017 CPA rule:

Alaska

California

Nebraska

New York

Oregon

Puerto Rico

Vermont

U.S. Virgin Islands

In addition, the following federal agency certification plans meet or exceed the standards mandated in the 2017 CPA rule:

USDA, Animal and Plant Health Inspection Services, Plant Protection and Quarantine

**USDA** Forest Service

U.S. Department of Defense

U.S. Department of Energy; Bonneville Power Administration

U.S. Department of the Interior, Bureau of Land Management

State, territory and tribal authorities with existing plans can continue using those plans until **November 4**, **2023**, consistent with EPA's recently issued extension (87 FR 50953, August 19, 2022). EPA is working closely with authorities to address challenges in revising their plans and will continue to approve plans on a rolling basis. After November 4, 2023, only authorities with EPA-approved modified certification plans can continue to certify applicators of RUPs.

### **IR-4 Completes Horticultural Crop Safety Summaries for Four Herbicides**

IR-4 research examined whether over-the-top applications of dimethenamid-p, indaziflam, oxadiazon and smetolachlor caused injury to various environmental horticulture crops when applied for pre-emergent weed management. Close to 1,700 individual research trials are represented in the summaries, which span experiments from 1972 to 2022.

This research has resulted in numerous crops being added to these labels. Some of the commonly tested crops include rose, hydrangea, evergreens (such as junipers), young trees, and herbaceous perennials (like hosta). To view and download these summaries, please visit: <a href="https://www.ir4project.org/ehc/environmental-horticulture-research-summaries/">https://www.ir4project.org/ehc/environmental-horticulture-research-summaries/</a>

### **NISAW: February 20-26, 2023**

National Invasive Species Awareness Week (NISAW) will be digital again in 2023. If you have topics or issues of concern, or would like to help plan next year's NISAW, please let me know. Lee. Van Wychen @wssa.net

Lee Van Wychen, Ph.D.
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National and Regional Weed Science Societies
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### Meetings of the National and Regional Weed Science Societies

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

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

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

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

Feb. 27 – Mar 2, 2023 Western Society of Weed Science (WSWS), Boise, ID <u>www.wsweedscience.org</u>

Jul. 24 - 27, 2023 Aquatic Plant Management Society (APMS), Indianapolis, IN www.apms.org

# December Newsletter Funny



What kind of things does a farmer talk about when milking cows?

Udder nonsense!