

Volume 40, Issue 1

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Important Dates:

January 23-26

swss

January 30-February 3

WSSA and NEWSS Joint

March 16

WSSNC

Details for all meetings on page 4

Weed Science Society of North Carolina



Letter from the President

Mrs. Kim Tutor, BASF

Hello fellow WSSNC members and attendees! I hope this finds you in good health and spirit as we enter the final month of 2022. Serving as the president during 2022 has been a privilege, but I would be remiss if I didn't acknowledge the dedication and hard work of the Board of Directors. These individuals are incredibly committed to the society, as well as the industry as a whole.

The Board has taken a slightly different approach to planning this year's annual meeting entitled, "WSSNC: Impacting Generations of Weed Management Professionals." We aim to highlight various founders and members across multiple disciplines and have asked them to highlight some of the history of the society, as well

as how weed science has impacted their individual careers. The meeting will also include several graduate student presentations and a poster contest.

That said, please mark your calendars for the 41st Annual Meeting of the Weed Science Society of North Carolina. It will be held at the J.C. Raulston Arboretum (4415 Beryl Rd, Raleigh, NC 27606) on Thursday, March 16th, 2023 from 9am to 3pm. The event will conclude with the annual business meeting.

Similar to last year, there will be an option to attend in-person or virtually. Please visit www.wssnc.org to register. The WSSNC is one of the few local, remaining societies sole-ly focused on weed science, which is a testament to your membership. Thank you for your continued

support and please spread the word about the society to your colleagues and industry partners. I look forward to seeing everyone (either in-person or virtually) in March!



Save the Date 41st Annual Meeting March 16, 2023

WSSNC: Impacting Generations of Weed Management Professionals

Please consider becoming a sustaining corporate member in the Weed Science Society of North Carolina. Your sustaining membership helps us provide student awards, pays for annual meeting expenses, provides us the funding to keep our society active, and gives your company the recognition of supporting the discipline of weed science in North Carolina.

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Join us for the 41st Annual Meeting of the Weed Science Society of North Carolina!

Looking Forward: 2023 Annual Meeting

A WSSNC Reunion Special!

Things will be a little different at WSSNC this year. Instead of our traditional program of speakers, we have decided to take an opportunity to look back on our years as a society. We have invited some familiar faces from years past to join us this year and speak about where the society and weed science has taken them in their career. We will still have our student presentations and poster program, so of course there will still be something new to talk about. We hope you will join us to look back on some outstanding weed science careers and support our students as they begin their own journey in our field. Look for a final program to be sent out in the new year!

Students and Advisors

It's time to start working on those posters and endowment ideas. An email will be shared with current students and advisors with a poster submission form. We are asking for posters a little earlier this year. Please submit your poster by February 16, 2023! Be sure to share these applications with new students who may not be on our mailing list!

Our Endowment has Grown!

Students, be sure to take advantage of our endowment award opportunity! Details and an updated endowment application will be shared in early 2023!

Membership Dues

Our registration fee will remain at forty dollars and a regular membership option for those unable to attend will be available at twenty dollars per year. Information about registration and maintaining your membership will be available online soon. Please consider becoming a sponsor or donating to the endowment fund.

Thanks to our 2022 Sponsors!











Please consider becoming a sponsor in 2023!

Judges Needed!

Please consider volunteering to help judge our poster session as well as outstanding student and endowment awards. If you are interested in being a judge, please contact Zachary Taylor at zrtaylor@ncsu.edu

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Weed Science Society of NC Grows Student Endowment

Written by Jennifer Howard, Communication Specialist, NC State Crop and Soil Sciences



NC State weed science researchers present at a cotton field day

Weeds pose the single biggest risk to global crop production, yet their study is infinitely complex. Weed management is highly regional and system-specific encompassing a variety of cropland, horticulture, turfgrass, aquatic system, and environmental concerns. To perpetuate research progress, the Weed Science Society of North Carolina (WSSNC) recently doubled its student fund- Alumna Sarah Meadows works at the Office of Pesticide Proing to develop the next generation of weed scientists.

In 1982, the WSSNC coalesced from a group of researchers and industry advocates to advance the field of weed science and its students. The group is a public-private partnership working to understand evolving weed pressures and pursue effective management. North Carolina is one of only two remaining state-level weed societies in the nation.

Charlie Cahoon is a Crop and Soil Sciences associate professor of weed science and the WSSNC's current vice president.

"North Carolina has a rich history in weed science, both at the university and in industry," Cahoon said. "NC State's weed science faculty is among the best in the nation and the large agrochemical companies in the Research Triangle Park anchor a significant presence and provide actively engaged industry colleagues.'



Eric Jones presents at the 2021 WSSNC meeting

Supporting NC Weed Science Students

Student involvement has been a core tenet of the WSSNC since its inception, including a student representative position on the limited to graduate students.

society's governing board. Eric Jones served in the student role in

'The student representative role is very important so the board can better cater meetings for our students and, in return, learn how students benefit from the society.

Each year the society gives money for students to travel and gain new experiences and learn new techniques not possible at NC State. I had the pleasure of helping to update the student endowment award criteria broadening it from just travel expenses to now prioritizing enrichment experiences.

I am not aware of another state-level weed science society that does this much to ensure that students are successful."

NC State Weed Science Endowment

The society also invests in student experiential and professional development opportunities.

To this end, the WSSNC created the NC State Weed Science Endowment to fund student experiences.

grams within the Environmental Protection Agency.

"I benefited from the immense support the WSSNC provided students," Meadows said. "By connecting with pesticide users and scientists from universities, chemical companies, and government agencies, I realized my desire to make an immediate contribution to improving the quality and safety of agricultural products."



Graduate Student Jose de Sanctis presents at a cotton field day

The newly doubled endowment contribution will expand the number and breadth of student support.

"This additional funding will also allow us to fund opportunities beyond conference travel and prioritize external enrichment opportunities like visiting peer institutions or developing new skills through professional development," said society treasurer Steve Hoyle.

Scholarship applications are accepted each year but the award amounts aren't fixed and the scholarship parameters are quite broad. Hoyle notes that scholarship amounts are weighed with the expected student experience and that awards aren't necessarily Cont...

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Society Meetings

At the WSSNC annual mid-March meeting, the society offers students presentation opportunities, a judged poster contest, and awards for both outstanding Ph.D. and master's students. It's a valuable first step for weed science students to network and gain presentation confidence close to home.

But organizers also encourage students to stretch their wings.

"Different areas have different weed species, resistance issues, and cropping systems," Cahoon said. "Getting exposure to another part of the country – or world – is invaluable to students. It's important for them to get outside of their comfort zone."

As a graduate student, Cahoon himself received funding to attend the National Weed Science Meeting. He credits the opportunity to see a new part of the country and present in front of a new audience as a career enhancer.



NC State delegation at 2022 Southern Weed Science Society annual meeting

Regional Weed Contests

Another practical opportunity for students to hone their weed science skills is at collegiate weed contest competitions. Teams of four (usually graduate) students face off in a series of written and hands-on events to test their knowledge of weed identification, diagnostics, and equipment calibration.

"Of all of the competition categories, the farmer problem event is probably the best for preparing students. They are solving a real-world (albeit simulated) problem — interacting and serving farmers, or other stakeholders, like we do in Extension every day," Cahoon said. "These competition simulations are great preparation for field situations."

The WSSNC frequently funds NC State's team to compete across the country.

Enrichment Scholarships

The society's endowment increase is intended to increase the quality and accessibility of external experiential learning. Cahoon cites students investigating other weed science online courses, techniques and tools as examples of potential awards but also short stints at a different university or private company.

"The benefit of these enrichment events is monumental for our students," Cahoon said. "The more people in the industry that they can be exposed to, the broader their skillset and employability"



Associate Professor Charlie Cahoon is the WSSNC Vice President and competition team co-advisor.

NC State's Legacy in Weed Science

North Carolina's agriculture diversity gave rise to NC State's weed science strength. The university boasts one of the nation's largest and most diverse weed science faculty totaling thirteen between the Departments of Crop and Soil Sciences and Horticulture and representing all major field and specialty crops.

The Wolfpack's weed science alumni are equally strong as faculty with graduates working across the country and world working in a variety of federal and state agencies, private industry, and entrepreneurial capacities.

"Innovation in weed science is essential to support our agricultural future," said Jeff Mullahey, head of the Department of Crop and Soil Sciences. "Interdisciplinary studies and training from expert faculty in multiple departments prepare our weed science graduates for successful careers nationally and globally."

The WSSNC's annual meetings are held at the JC Raulston Arboretum. Society membership is open to anyone interested in weed science. The next meeting is Thursday, March 16, 2023.

The WSSNC endowment is always open for contribution by any donor who wants to support NC State students researching and advancing this evolving field.



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Letter from the Student Representative



Jose de Sanctis 2020-2021 Student Representative Dear WSSNC members,

It has been an honor and a joy to serve as the student representative for the Weed Science Society of North Carolina the end of most pandemic-related nuisances and the return of in-person activities and meetings. The past couple of their actions. years have certainly been challenging, marked by grief, economic recession, It was definitely inspiring to see the pasand, above all things, adaptability. This sion, work ethic, and devotion of the distinguished society has certainly been current board members to this Society, an example of adaptability and endurance, and despite all aggravations, was able to host its first hybrid meeting with remarkable attendance both in-person and online.

To further extend the list of accomplishments from this accredited Society it is worth mentioning the completion of the transfer of funds to the NCSU Student Endowment account. This is another

reminder of how much the members of this society value graduate students and work hard to create chances and opportunities for us. During the Board of Directors meetings, I heard multiple times during this past year. As this year from different members that this Society comes to an end, I can only celebrate was created to support Weed Science students from NCSU, and all members have certainly reflected that will into

> and I personally thank all of you for your hard work during this past year. Best regards,

Jose de Sanctis

Upcoming Events

January 23-26, 2023

76th Annual Meeting of the Southern Weed Science Society Baton Rouge, LA

Registration is open More details can be found online at:

http://www.swss.ws/annual-meeting/

January 30- February 3 2023

63rd Annual Meeting of the Weed Science Society of America, Joint With Northeastern Weed Science Society

Registration is open More details can be found online at:

https://wssa.net/current-annual-meeting/

March 16, 2023

41st Annual Meeting of the Weed Science Society of North Carolina

Registration and more details coming soon at:

https://wssnc.org/index.php

Content... We Need It!

I hope you enjoy this late fall edition newsletter of the Weed Science society of North Carolina. My hope is to maintain a bi-annual newsletter in the future, with a fall and spring edition. You can help make this possible by sending me content. Please send newsworthy items, important dates, or any ideas that you would like to see in the newsletter to, Zachary Taylor, newsletter editor, at zrtaylor@ncsu.edu

Send newsworthy items to

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Jose de Sanctis Wins Farmer Problem Weed Competition

Written by Jennifer Howard, Communication Specialist, NC State Crop and Soil Sciences



"Weed contests test your entire knowledge of what's a weed and how to control it," said Crop and Soil Sciences' Ph.D. student Jose de Sanctis. "Of the five competition categories, the farmer problem is the only one you can't study

Collegiate weed competitions get real with several hands-on and true-to-life simulations. Recently, Jose put his knowledge and field experience to the test at the Southern Weed Science Society's contest. He took home first place in one of the most difficult-to-prepare-for categories - the farmer problem.

Weed Contests Challenge Depth of Knowledge

Weed contests are student-team competitions held at regional and national weed science conferences. Teams of four compete in a series of five written and handson categories: a troubleshooting exam, weed identification, herbicide symptomology, backpack calibration and the wild card - farmer problem.

"It's so unpredictable," Jose said. "You have just 15 minutes to interact with a farmer and diagnose the problem they present. It challenges your interpersonal and problem-solving skills in addition to your weed and herbicide knowledge."

Volunteer 'farmers' present real-world situations to the student competitors who've been assigned a mock industry identity. Students visit with their farmer clients at small-block field plots reflecting the simulated problem and they attempt to troubleshoot the agronomic woes.

"You have some symptoms to work with and sometimes the farmers have a product label which can be helpful, Jose said. "But you've only got 15 minutes to figure it out. It really tests your logic funnels to figure out what problems are affecting a field.'

The interactions are very realistic and occasionally stressful.

Simulating Situations

Charlie Cahoon, a Crop and Soil Sciences associate professor of weed science, volunteered in the farmer problem competition in previous years.

The students were supposed to be company representatives. The idea was that I had used their herbicide and my tobacco was injured. I was bound and determined that they were going to pay me for my tobacco."

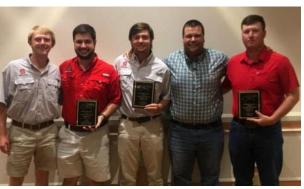
Farmer volunteers can manifest however they choose - sharing as much or as little information as they wish. Students have to navigate tricky interpersonal dynamics as the clock ticks and they search for clues and solutions.

De Sanctis Beats the Clock

At the 2022 Southern Weed Contest, Jose was dealt a tough hand.

"In my competition, I faced a very quiet farmer with a private consultant who frequently spoke over the farmer. They didn't give me much information and I didn't have a field plot to look at just drone pictures of corn showing areas with a strong stand and then some with just a 30%

Jose said he spent the bulk of his time trying in vain to pry out details. But at the 12-minute mark, a kernel of information came to light.



2022 Southern Weed Science Society Weed Team (Brock Dean, Jose de Sanctis, Hunter Lee, Coach Charlie Cahoon, Jacob Forehand)

"The consultant kept responding to all my questions that they had done everything right. But I finally learned that the farmer had used old seed in some areas. He was also worried about what he could replant following an atrazine spray.'

"In the remaining three minutes, I talked as fast as I could to cover germination rate testing, herbicide label review, and that his only option was to plant sorghum. I knew I had said the right things but wasn't sure how well I said them.'

When the time is up, farmers quietly score students on several criteria. The bulk of the score is based on how well the student presents themself and their line of reasoning, only 30% hinges on students' suggested solutions.

"Given the rushed timing, I didn't think I had a chance in this category. I was shocked to see my name on the winners' board," Jose said.

"I was an irate tobacco farmer," Cahoon mused. Also at the Southern contest, Jacob Forehand and Hunter Lee won second and third respectively in the undergraduate competition. Earlier in the year, NC State's graduate team placed second at the Northeast Weed Contest in Ontario.

Prepared For Variability

Because weed competition events are diverse, preparation is key. Cahoon says he and fellow team advisor Wes Everman take students to view weed plots at the Lake Wheeler Road Field Laboratory or other research stations to view and diagnose crops and weeds problems. They also lead periodic 'weed walks' as well as calibration practice during the summer after fieldwork is complete.

Jose credits this training for his comfort on his feet. "Since we work with a lot of herbicides in our research fields, we get to see a lot of examples of injury and weed response. Plus, our advisors are Extension Specialists. Often they present us with actual problems they face and the answers they give. It's excellent training.'

Originally from Brazil, Jose came to NC State to learn about other crops and systems after earning a master's in weed science at the University

of Nebraska. He is currently working under the direction of Cahoon and Everman on herbicide-resistant Italian ryegrass. He is also working with Dr. Travis Gannon's lab to understand the mechanisms of herbicide resistance in Italian ryegrass. In the field, the group is evaluating the combination of cover crops preemergence herbicides for control of the weed.

Jose enjoys the field of weed science for its never-ending problem-solving.

"I quickly learned that I didn't enjoy entomology, but I love identifying different plants and understanding the herbicide

options of weed science. It's a continuous farmer -problem scenario.'



2022 Northeastern Weed Science Society Weed Team (Colton Blankenship, Jose de Sanctis, Eric Jones, Coach Wes Everman)

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Weed Science Society of North Carolina



We're on the Web!

www.wssnc.org

The Weed Science Society of North Carolina was founded to advance the discipline of Weed Science and to improve the well-being of the citizens of the state through a better understanding of weeds and their management.

Make a note of our address!

All mail correspondence should be mailed to:

Weed Science Society of NC Campus Box 7620 Raleigh, NC 27695-7620

Support the WSSNC Endowment

The Weed Science Society of North Carolina Endowment provides support for Weed Science student activities in the College of Agriculture and Life Sciences at North Carolina State University and other universities in our state.

Our goal is to make more and larger awards as the endowment grows, but WE NEED YOUR HELP!

Contact today to find out how!

Membership in WSSNC

Membership is open to all individuals interested in weed science and/or weed management.

Active members include those who have paid annual dues.

Supporting members include any individual or firm concerned with the manufacture, distribution or application of weed management materials or devices who contribute financially to the society.

Student members include undergraduate and graduate students interested in weed science.

Join Today!

Interested in Serving on the Board?

We have open board positions. Contact any board member to nominate yourself or a colleague. Director terms are for 2 years, Vice-President and Student Representative are 1 year terms. Open positions include: Vice President (from industry), Director At-Large (from industry), and Student Representative

2022-2023 Board of Directors

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Mrs. Kim Tutor **BASF** Corporation 1517 Hoke Landing Ln Raleigh, NC 27603 E-mail: kimwtutor@gmail.com

Past President:

Dr. Bridget Lassiter Lake Wheeler Road Field Lab 4201 Inwood Road Raleigh, NC 27603 E-mail: blrobins@ncsu.edu

Vice President:

Dr. Charlie Cahoon NC State University Campus Box 7620 Raleigh, NC 27695 E-mail: cwcahoon@ncsu.edu

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Steve Hoyle NC State University Campus Box 7620 Raleigh NC 27695 E-mail: hoyle@ncsu.edu

At-Large:

Mr. Thomas "Tommy" Batts NC Cooperative Extension 1806 SW Goldsboro St Wilson, NC 27893 E-mail: tmbatts@ncsu.edu

Academia:

Dr. Cole Smith IR-4 Field Research Program 4201 Inwood Dr Raleigh, NC 27603

E-mail: scsmith7@ncsu.edu

Industry:

Mr. Ryan Aldridge BASF Corporation 26 Davis Drive RTP, NC 27709

E-mail: ryan.aldridge@basf.com

Student Representative:

Mr. Jose de Sanctis NC State University Campus Box 7620 Raleigh, NC 27695 E-mail: jhscarpa@ncsu.edu

Newsletter Editor/Website Coordinator

Zachary Taylor NC State University Campus Box 7620 Raleigh, NC 27695

E-mail: zrtaylor@ncsu.edu