



Minutes of Dec 13, 2021 NCWSS Board of Directors Meeting

Date: Dec 13, 2021

Place: Pearl Room, Amway Grand Plaza, Grand Rapids, MI

Zoom: <https://unl.zoom.us/j/95287505306?pwd=YU9LVUI3YVY4MlowSTVCUWFwK2hGZz09>

Meeting ID: 952 8750 5306

Passcode: 143921

Time: 1.00 to 5.00 pm eastern time

ROLL CALL Dec 13, 2021 NCWSS Board of Directors Meeting

A quorum of 19 members.

Officers	Names	Dec 13
President	Harlene Hatterman-Valenti	X
President Elect	David Simpson	X
Vice President	Reid Smeda	X
Secretary-Treasurer	Amit Jhala	X
Editor-NCWSS Proceedings	Joe Wuerffel	X
Editor-Communication/Newsletter	Joe Ikley	X
WSSA Representative	Brett Miller	X
CAST Representative	John Hinze	X
Past President	Stott Howard	X
Executive Secretary	Kelley Mazur	X
Director of Science Policy	Lee Van Wychen	X

Directors at Large	Names	Dec 13
Strategic Planning	Sarah Lancaster	X
Extension Committee Chair	Nick Arneson	X
Industry Committee Chair	Lowell Sandell	X
Resident Education Committee Chair	Devin Hammer	X
Graduate Student Committee Chair	Edinaldo Borgato	X
Central Region	Dan Smith	X
Western Region	Trevor Israel	X
Eastern Region	Erin Haramoto	X

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- Meeting called to order at 1 pm.

President – Harlene Hatterman-Valenti

Discussion:

- The Program and Local Arrangements Committees led by David Simpson and Christy Sprague, respectively did an excellent job of configuring the traditional face-to-face meeting with all the COVID safety strategies.
- NCWSS received \$5,000 from Belchim (Dennis Long) to support student travel awards.
- Voting for NCWSS officer election is 10 to 15% of the total members (about 800). How best we can increase this number? One of the suggestions was to add voting link with the NCWSS annual meeting registration page.

Action:

- The topic will be discussed in next BOD meeting about to add voting link with the NCWSS annual meeting registration page and other possible ways to increase voting for NCWSS officer election.

President-Elect/ Program Chair – David Simpson

Discussion:

- In August, the NCWSS board of directors decided to proceed with plans for an in-person meeting in Grand Rapids, MI.
- COVID has impacted the participation numbers and the number of papers and posters at this year's meetings. With early indications that attendance would be down particularly with industry participation, Mark Loux was able to negotiate a reduction in minimum number of rooms to reduce potential for penalties.

Action:

- Zoom recordings of the sections and a single pdf file containing the posters will be posted on the NCWSS members page for access only by members until March 1, 2022. Presentations and posters that authors granted permission for posting will be available for viewing.
- Organization of Women in Weed Science Network Breakfast should be formalized to clarify who arranges for speaker.
- NCWSS annual meeting program book: List affiliation of only first author and no need to include affiliation of all the coauthors in program book. No change in the NCWSS annual meeting proceedings. Motion passed with all in favor.
- The board should consider the addition of the Program chair in the selection of the Local Arrangement Chair which is currently done by Site Selection Committee Chair.

Proceedings Editor – Joe Wuerffel

Discussion:

- Several papers/posters submitted abstracts that were later withdrawn due to COVID travel related issues. This begs the question of what to do with the abstracts. Motion: Leave all abstracts in the 'Unofficial proceedings but remove any abstracts from the 'Official' Proceedings if they were not presented during the meeting. Motion was approved with all in favor.

Action:

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- Replace 'Unofficial proceedings' with 'Draft proceedings' and 'Official proceedings' with 'Final proceedings'

Past President- Stott Howard

Discussion:

- Recommend the inclusion of detail on the Outstanding Graduate Student 'Subcommittee' in the Manual of Operating Procedures. Presently there is no mention in the MOP about such a subcommittee, but there is a subcommittee listed in the annual meeting program as 'Distinguished Achievement Awards, Graduate Student subcommittee.'
- Recommend the inclusion of the Student Travel Grant committee/process in the Manual of Operating Procedures. Presently all we have is a 'one-pager' with instructions that resides on the NCWSS webpage.
- Committee Chair should inform those who didn't get the award and similar to WSSA, poster of the award winners can be kept during the NCWSS meeting.

Action:

- Amit to follow up and add in MOP.

Strategic Planning Committee Chair- Sarah Lancaster

Discussion:

- NCWSS member survey will be presented during 2021 NCWSS meeting.

Executive Secretary – Kelley Mazur

Discussion:

- The NCWSS net worth is at \$468,273.43 as of Dec 2021.
- A new database and website have been identified. David will be hosting a demo of the software and answer any questions, which Kelley will coordinate.

Action:

- To arrange a discussion meeting with financial advisor Stan Cooper to explore options for NCWSS budget investment.
- It's that time of year and I will be providing the Executive Committee with an evaluation form to completed within a month of delivery. The evaluation will be kept on file with NCWSS.

Resident Education Committee Chair - Devin Hammer

Discussion:

- Provided brief update on final number of papers and posters sections for each contest: 32 paper; 38 posters; 6 drops
- Changing the language referencing the "NCWSS Master Herbicide List" to refer to the WSSA-Herbicide Site of Action (SOA) Classification List. Motion was approved with all in favor.

Action:

- Amit to update this change in NCWSS MOP

Secretary/Treasurer: Amit Jhala

Discussion:

- Took minutes of all the NCWSS BOD meetings held in 2021 and provided to board members. They are available on NCWSS website.

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- NCWSS budget update (see attached: NCWSS Balance Sheet Comparison; NCWSS Profit Loss Statement; and Balance Sheet)
- Total registration for annual meeting is 265 as of Dec 10.

Action:

- Prepare minutes of the BoD meetings held in Dec 2021 and send them to members.
- Arrange a BoD meeting sometime in Jan 2022.
- Update NCWSS MOP.

CAST Representative – John Hinze

Discussion:

- We have monthly Zoom calls. I was able to attend 10 of the 12 meetings. I attended the annual meeting in Columbus, OH. 2022 will be the fiftieth anniversary of CAST. The annual meeting will be held in Ames, IA.

Extension Committee Chair – Nick Arneson

Discussion:

- There were a few instances where the same content was presented for the paper and video contest. Generally, this is not allowable for paper and poster contests, but based on a few abstracts it seems like the same information may be presented. No proposal, just raising awareness for the BoD to discuss.

Action:

- Debalin Sarangi is the new Chair of Extension Committee. He will come up with the proposal in next BoD meeting to discuss on this topic.

WSSA Representative – Brett Miller

Discussion:

- Attended all WSSA Board of Director meetings – provided updates regarding NCWSS activities such as the Summer Student Weed Contest and upcoming annual meeting plans as needed.
- 2022 WSSA annual meeting will be held jointly with the CWSS. It is currently planned to be in person in Vancouver at the Sheraton Wall Center - Feb 21-24, 2022.

Graduate Student Committee Chair- Ednaldo Borgato

Discussion:

- Host students for one-week visit/internship experience in 2022 (similar to WSSA-Travel Award Enrichment program).

Action:

- This topic was discussed with some interest shown by industry and academia. This will be discussed again in next BoD meeting.

Future Site Selection Committee Chair: Mark Loux

Discussion:

- Future Site Selection Committee looked at initial proposals from hotels in Indianapolis, Lexington, and Kansas City for the 2024 NCWSS annual meeting, with goal of having it in the week of 12/8/2024. Search was refined to Kansas City based on enthusiasm/availability of the potential local arrangements committee, and the ability to get bids from competing hotels. Committee chair visited



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hotels in Kansas City, and then refined bids from two – Westin Crown Center and Marriott Downtown. The committee recommends that we contract with the Westin for 2024 meeting.

- Motion was proposed to contract with the Westin for 2024 NCWSS annual meeting in the week of Dec 8 in Kansas City. Motion was approved with all in favor.

Refer to Officers Reports for detail information.

Meeting adjourned at 5 pm.

Next NCWSS BOD meeting is scheduled on Dec 16, 2021 at 10.15 am in-person in Emerald Room at Amway Grand Plaza and via Zoom. Amit will send a Zoom link.

NCWSS Committee and Officer Reports

President – Harlene Hatterman-Valenti

Date of Preparation: 12/11/2021

Officer/Committee Activities during the Year:

Most activities involved plans for the in-person weed contest and annual meeting to ensure the health and safety of our membership because of the COVID variants:

- The student weed contest was held at North Dakota State University. A big thank you to all (academia and industry) that helped make this a successful contest. Social distancing and other COVID safety practices were utilized whenever possible. I did not hear of any positive cases from the contest but did have one contestant that could not attend because of testing positive just before the contest.
- Aaron came to the board with a generous contribution of \$5000 that was given by Belchim to the NCWSS to help fund travel for qualified graduate students to attend the annual meeting. As a result, all 13 student applicants received support with the remaining \$1,500 to be spent in 2022.
- The COVID variants did bring some financial risk to the NCWSS.
 - Hotel negotiations: Mark Loux and Tina Nebuloni negotiated a reduced room count requirement with the Grand Rapids Amway Grand Plaza for our 2021 hotel contract. We met the new room requirement.
- The Program and Local Arrangements Committees led by David Simpson and Christy Sprague, respectively did an excellent job of configuring the traditional face-to-face meeting with all the COVID safety strategies.
- Thank you to the Board of Directors and especially Stott Howard for the advice on how to navigate the challenges associated with COVID!

Held one election during the year:

- General election for the role of Vice-President, which was filled by Dawn Refsell.
 - Unfortunately, society membership participation in election was not impressive. This was the second year of a low turnout. I think we need to discuss possible causes and how to increase voting numbers.
 - Thanks to Karen Renner and the nominations committee for presenting excellent candidates to the society for the Vice President position.

WSSA activities:

- Science Policy Committee meetings including virtual meetings (twice) with state representatives and other weed society presidents. Lee Van Wychen organized Zoom calls with approximately 20 House

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and Senate offices to discuss topics of concern to the society. These were very enlightening and productive conversations.

Motions/ Action Items:

- Passed proposal for Capturing Oral Presentations & Posters from 2021 NCWSS Annual Meeting
- Approve minutes from virtual Summer Board of Directors meeting

Motions/ Action Items:

President Elect/Program Chair – David Simpson

Date of Preparation: 12/09/2021

Officer/Committee Activities during the Year:

NCWSS 76th Annual Meeting is back “Live from Grand Rapids, Michigan”. Planning for the 76th annual meeting in 2021 has been a roller coaster ride which has only been possible by the teamwork and contribution of the entire Program Committee. The year began with COVID travel restrictions, virtual or social distancing campus life and industry employing virtual work environments. By spring, optimism was abound with the roll out of COVID vaccinations. Following the return of the summer weed contest and the return to “normal” campus life in the fall, confidence grew that an in-person meeting would be possible. In August, the NCWSS board of directors decided to proceed with plans for an in-person meeting in Grand Rapids. The Program Committee was called upon to ensure all aspects of planning for a meeting during the continued COVID pandemic were addressed as well as contingency plans in place for a virtual session. I am grateful to the entire Program Committee for their contributions to the planning the meeting. The Local Arrangement Committee led by Christy Sprague have been exceptional to work with ensuring all the hotel logistics and meal arrangements have been handled.

COVID has impacted the participation numbers and the number of papers and posters at this year’s meetings. With early indications that attendance would be down particularly with industry participation, Mark Loux was able to negotiate a reduction in minimum number of rooms to reduce potential for penalties. The number of attendees is down from previous years. As of December 8th, 262 members have registered for the meeting with 102 industry and 160 university/government scientists. Normal attendance would range from 320-350 registrants. Despite all the challenges, the society was able to meet the minimum number of rooms and avoid penalties.

Additional thanks to Reid Smeda, Kelley Mazur, Joe Wuerffel and Erin Burn for their efforts in evaluating alternative options for the NCWSS members who would not be able to attend due to COVID travel restrictions. For those members who cannot attend, Zoom recordings of the sections and a single pdf file containing the posters will be posted on the NCWSS members page for access only by members until March 1, 2022. Only presentations and posters that authors granted permission for posting will be available for viewing.

2021 Program Highlights

The 2021 program has 113 oral presentations and 87 poster presentations with 38 student oral presentation contestants, 39 graduate student poster contestants, 11 graduate student video contestants, and 4

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undergraduate student poster contestants. There have been some withdrawals of presentations due to COVID or other reasons of five presentations and 2 video contestants.

General Session

This year's General Session will start at 8:00 a.m. on Tuesday morning to allow the opportunity to communicate any COVID restrictions or updates to the society at the beginning of the meetings. The General Session will feature a keynote presentation from Chuck Lippstreu, President of Michigan Agri-Business Association, who will provide a perspective of the challenges and opportunities facing Michigan agriculture. Sarah Lancaster, chair of the NCWSS Strategic Planning Committee, will share the results of the 2021 survey of the NCWSS members. Lee Van Wychen, NCWSS Executive Director of Science Policy, will provide an update on policy issues and activities from 2021. NCWSS President Harlene Hatterman-Valenti will give her Presidential Address to the NCWSS members.

Symposia

Three symposia scheduled for Wednesday afternoon.

1. The symposium "Implications for Weed Management Due to Climate Change" will feature diverse perspectives from experts within and outside the NCWSS to consider how the weed biology, competitiveness and control will be impacted by changing climates and the potential economic impacts. Special thanks to Marty Williams and Christopher Landau for coordinating this symposium.
2. The second symposium is on Graduate Student Career Development and Interviewing. This will be an interactive symposium to provide perspectives on landing that first job. The presenters bring diverse experiences and will provide insights on career opportunities, how to prepare resumes for industry, academia, and government job applications, and how to prepare for job interview process. This symposium will occur after all student presentations are completed and all students are encouraged to attend.
3. The final symposium will be the ever popular "What's New in Industry" that provides a fast pace concised highlights for label changes and new products or technologies. This symposium will be held on Thursday, December 16th from 8:30 – 10:15 a.m. Lowell Sandell is organizing the symposium and will communicate with each company concerning presentations.

Student Activities

Once again, there are numerous opportunities for students to engage in the NWCSS during the meeting. Please take advantage of the opportunities to develop your networks, gain knowledge and build presentations skills.

- Monday evening, December 13th, starting at 6:30 p.m. BASF will sponsor a Student Mixer.
- Tuesday Lunch, December 14th from 12:00 to 1:15 pm. Corteva Agriscience will sponsor the Graduate Student Luncheon and Business Meeting. All graduate students and undergraduate students are invited.
- Tuesday, December 14th will be the undergraduate and graduate poster sessions with a morning session from 10:00 - 11:50 a.m. and evening session from 5:30 - 6:30 p.m. Students must be present at both sessions.
- Graduate student paper contest will occur during the Tuesday afternoon and Wednesday morning paper sessions.
- NCWSS Awards Luncheon to recognize the new NCWSS Fellows and Distinguished Achievement Award winners on Wednesday, December 15th.
- Contest winners will be announced at the Society Social on Wednesday at 5:30 p.m. in the Ambassador Ballroom. This event is sponsored by our sustaining members and is open to all.



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- Industry Breakfast on Thursday morning at 7:00 a.m. in the Ambassador Ballroom. A special thanks to Syngenta for sponsoring graduate students to attend the breakfast.

With 2019 being the last in-person meeting, the society as a whole was a bit out of cadence in regard to pulling the program together for an in-person meeting. I would encourage the board to consider taking steps to address.

- Having a great Local Arrangement Chair (LAC) is critical to the success of the meeting. I am so grateful to have Christy Sprague to be the LAC. The board should consider the addition of the Program chair in the selection of the LAC which is currently done by Site Select Committee Chair.
- Knowledge, and experience with the software tools used for program development is key to success for the Program Chair. The tools are good but understanding the small things that need to be done could save unnecessary re-work. Considering whether a paid assistant program chair position should be created to support.
- Late submissions and errors in submissions of titles and/or abstracts continue to be an issue. For graduate students, should the system capture email of major professor and copy on confirmation email. For paper and poster contestants, should points be deducted for late titles, abstracts and presentation files.
- Establish an excel sheet containing all actions required by all committees, board members and executive secretary with initiation date and completion dates for the year to enable easier tracking of tasks.
- Society should consider formalizing the process for confirming and identifying the contacts for the companies sponsoring graduate student participation in events such as BASF for student mixer, Corteva for luncheon, Syngenta for industry breakfast.
- Organization of Women in Weed Science Network breakfast should be formalized to clarify who arranges for speaker. While Anita Dille should be commended on her leadership of this event, the board should consider providing additional support for this event. Further, the board should consider whether there is an opportunity to develop the network beyond the breakfast.

Motions/ Action Items:

Vice President – Reid Smeda

Date of Preparation:

Officer/Committee Activities during the Year:

Motions/ Action Items:

Resident Education Committee Chair – Devin Hammer

Date of Preparation: 12/09/21

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Officer/Committee Activities during the Year:

1. Brief update ahead of Poster and Paper Student Contests
 - a. Final number of papers and posters, sections for each contest: 32 paper; 38 posters; 6 drops
 - b. Final number of volunteers
2. Address rule changes for late submissions
3. Language for previously suggested changes to MOP for Summer Weed Contest rules/scoring (highlighted is copy/pasted from April meeting minutes)
 - a. Changing the phrase “mechanism of action” to “site of action” to be consistent with the WSSA definition and classification
 - b. Changing the language referencing the “NCWSS Master Herbicide List” to refer to the WSSA- Herbicide Site of Action (SOA) Classification List.

“The contest organizer will select 30 herbicide active ingredients (a.i.) from the WSSA- Herbicide Site of Action (SOA) Classification List found at the following URL: <https://wssa.net/wssa/weed/herbicides/>.”

- c. The MOP also states that the most current Herbicide Handbook should be used to determine classifications “unless specific exceptions are announced prior to the contest.” I think this language is sufficient as written, but we may need to clearly state and reference the WSSA Classification List in the rules packet ultimately sent out to universities.

Proceedings Editor – Joe Wuerffel

Date of Preparation: 12/09/2021

Officer/Committee Activities during the Year:

- A few unique and new situations arose this year that I have not encountered before that need BoD to be brought to the attention of the BoD:
 - 1) Several papers/posters submitted abstracts that were later withdrawn due to COVID travel related issues. This begs the question of what to do with the abstracts. **Proposal: Leave all abstracts in the ‘Unofficial proceedings but remove any abstracts from the ‘Official’ Proceedings if they were not presented during the meeting.**
 - 2) There were a few instances where the same content was presented for the paper and video contest. Generally, this is not allowable for paper and poster contests, but based on a few abstracts it seems like the same information may be presented. **No proposal, just raising awareness for the BoD to discuss.**

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- Abstracts were uploaded into CrowdCompass by Kelley and IMI group by 12/3. Many thanks for their support!
 - 'Unofficial Proceedings' were uploaded to the website and made available to the membership by 12/6.
 - After the meeting I would like to understand how often the 'Unofficial' proceedings are accessed on our website in the week prior to or during the meeting.
 - Aiming to post the 'Official Proceedings' by end of December
-

Communication Editor – Joe Ikley

Date of Preparation:

Officer/Committee Activities during the Year:

Motions/ Action Items: No

Past President – Stott Howard

Date of Preparation: 12/09/2021

Officer/Committee Activities during the Year:

- Contributed to the societies Newsletter as appropriate.
- Participated in scheduled Board of Director meetings during the year.
- Proposed to the Board of Directors that the Distinguished Achievement, Outstanding Graduate Student and Fellow Awards be recognized at the beginning of the NCWSS meeting (move awards luncheon to Tuesday) and that recipients would be acknowledged via poster in the poster session or commons area. Motion was approved by the Board of Directors.
- Participated in the Collegiate Student Weed Contest in Fargo North Dakota.
- Solicited nominations for our Society's Distinguished Achievement (DAA) and Outstanding Graduate Student (OGS) Awards and led the committee through the review of candidates and selection of recipients. Additional DAA committee members were recruited to reach the nine-member requirement. There were five nominations for Distinguished Achievement Award, and all will receive the award for which they were nominated (there are no carry-over nominations for consideration in 2022). There were two nominations for Outstanding Graduate Student Award.
- Using the NCWSS Manual of Operating Procedures to guide the Distinguished Achievement Award Committee process resulted in an oversight opposite the Distinguished Achievement Award, Graduate Student Subcommittee. The subcommittee was not engaged in the solicitation

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or selection process. It is recommended that this subcommittee and associated activities be either included in the MOP or dissolved.

- There was some confusion on my part about the organization and handling of the Student Travel Grants (process not mentioned or outlined in the MOP). Specifically, who is the committee chairperson for this activity and what is deadline for submission to the committee. Aaron Hager stepped forward and got the process on track.
- Aaron Hager was contacted by Dennis Long (Belchim) who made a generous donation of 5,000 USD to the NCWSS to support Student Travel Grants. With the additional funds, Aaron's committee agreed to fund all of thirteen of the submitted grant requests. This left 1,500 USD to be applied to next year's Student Travel Grant Fund. Aaron and his committee are recommending that the additional travel grant monies be used to promote NCWSS participation by non-traditional students and would like for the Resident Education Committee to lead the outreach effort.

Motions/Action Items:

- Recommend the inclusion of detail on the Outstanding Graduate Student 'Subcommittee' in the Manual of Operating Procedures. Presently there is no mention in the MOP about such a subcommittee, but there is a subcommittee listed in the annual meeting program as 'Distinguished Achievement Awards, Graduate Student subcommittee. Another option would be to dissolve the 'subcommittee'.
- Recommend the inclusion of the Student Travel Grant committee/process in the Manual of Operating Procedures. Presently all we have is a 'one-pager' with instructions that resides on the NCWSS webpage.

Executive Secretary – Kelley Mazur

Date of Preparation: 12/11/2021

Annual Meeting:

The Program and Local Arrangements Committees have made great efforts to return to in-person meetings with threats of new COVID-19 variants constantly being introduced. A big thank you goes to David Simpson, Christy Sprague and LAC, Harlene Hatterman-Valenti, Reid Smeda, and Joe Wuerffel for their dedication and hard work in the creation of this unprecedented event. Below is a summary of past meeting preregistration and statistics:

Registration:

Fellows: 20

Regular Members: 182

Students: 85

Total: 287 total

	<i>Grand Rapids</i>	<i>Virtual</i>	<i>Columbus</i>	<i>Milwaukee</i>	<i>St. Louis</i>	<i>Des Moines</i>	<i>Indianapolis</i>	<i>Minneapolis</i>
	<i>2021</i>	<i>2020</i>	<i>2019</i>	<i>2018</i>	<i>2017</i>	<i>2016</i>	<i>2015</i>	<i>2014</i>
Members	202	199/253	249	257	347	284	273	270
Students	85	68/92	106	89	115	107	88	90
Total	287	267	355	346	462	391	361	360
Final	287	345	355	360	486	426	402	401

2019* 43 registered for the Invasive Plants Symposium

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Pick-up Rates from past 3 years:

Days out	2018	2019	2020	2021
>60 days	58	0	0	26
>45 days	52	76	55	37
44-30 days	68	72	41	152
29-15 days	114	129	83	28
14-3 days	46	37	88	20
Onsite	37	41	78	-
Total	375	355	345	263

Website:

A new database and website has been identified. David will be hosting a demo of the software and answer any questions, which I will coordinate.

The attached financials show NCWSS net worth at \$468,273.43. The comparison from this year to last year can be found in the attached Balance Sheet. The accounts and 5 CDs are listed below with their maturity dates:

10000 AHB - Checking - 739	54,221.27
10010 AHB - MM - 705	64,590.97
10020 AHB - CD3 - 1.2 - 8/24 - 5yr	48,792.84
10030 AHB - CD4 - .902 - 8/22 - 4yr	48,477.53
10040 AHB - CD5 - 1.3 - 7/22 - 5Yr	43,280.88
10050 AHB - CD6 - 1.45 - 9/26 - 5YR	43,517.17
10060 AHB - CD7 - 1.45 - 9/22 - 5YR	43,409.74
10070 RBC Account	121,983.03

RBC Report by Stan Cooper:

The “mini-cycle” from the pre-pandemic market peak of February 19, 2020, to the subsequent record high at August 16, 2021 provided opportunities for our risk-managed investment discipline. ***During this period Strategic Growth Fund (HSGFX) gained 23.25%***, compared with a total return of 35.59% for the S&P 500 Index. ***The deepest interim loss experienced by Strategic Growth Fund during this period was -7.98%, compared with an interim loss of -33.79% for the S&P 500.***

For the calendar year of 2020 the fund was up 14.53%.

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Over the previous 12 months the fund has gained 9.30% thru August 30th.

The S&P 500 lost 33.79% from February 19, 2020 to March 23, 2020, and during this period HSGFX gained 17.33%. It seems most appropriate to characterize the February-March 2020 decline as a “panic” or “crisis” rather than a “bear market.” Still, the intervening volatility did create enough dispersion across individual securities to pursue our value-conscious stock-selection discipline, and enough “compression” in short-term market action to justify maintaining a rather neutral market outlook for much of the period since March 2020. Recently, as market conditions have become more hostile, we have moved to a hard-negative outlook from a rather neutral outlook.

Below are some points on why we believe a risk-managed investment discipline is appropriate particularly now:

- ***We observe breathtaking extremes, beyond even 1929 and 2000 levels***, in the valuation measures that we find best-correlated with actual subsequent total returns in the Standard & Poor’s 500 Index in market cycles across history.
- The backward-looking returns of passive investment strategies are always the most glorious when market overvaluation is the most extreme. Yet that is also precisely the moment when likely future returns are the most dismal.
- Market internals have deteriorated. When investors are inclined to speculate, they tend to be indiscriminate about it. For that reason, we find that the best gauge of investor psychology toward speculation or risk-aversion is the uniformity or divergence of market internals across thousands of individual stocks, industries, sectors, and security-types, including debt securities of varying creditworthiness. ***Our primary gauge of market internals has been unfavorable in recent months, but we have refrained from adopting a hard-negative outlook until recently, as divergences have become more obvious in the equity components.***

Action/Discussion Items:

IMI Evaluation

It’s that time of year and I will be providing the Executive Committee with an evaluation form to completed within a month of delivery. The evaluation will be kept on file with NCWSS.

Secretary-Treasurer – Amit Jhala

Date of Preparation: 12/08/2021

Officer/Committee Activities during the Year:

- Took minutes of all the NCWSS BOD meetings and provided to board members. They are available on NCWSS website.
- NCWSS budget update (see attached: NCWSS Balance Sheet Comparison; NCWSS Profit Loss Statement; and Balance Sheet)
- Total registration for annual meeting is 265 as of Dec 10.
- Registration fee for 2021 NCWSS meeting: Regular member: \$375; Student: \$125; Honorary members/Fellows: \$225. The registration fee will remain same in 2022 annual meeting.

Motions/ Action Items: No

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WSSA Representative— Brett Miller

Date of Preparation: 12/08/2021

Officer/Committee Activities during the Year:

- Attended all WSSA Science Policy meetings
- Attended all WSSA Board of Director meetings – provided updates regarding NCWSS activities such as the Summer Student Weed Contest and upcoming annual meeting plans as needed
- 2022 WSSA annual meeting will be held jointly with the CWSS. It is currently planned to be in person in Vancouver at the Sheraton Wall Center - Feb 21-24, 2022
- The WSSA BOD conducted a survey regarding membership preferences for annual meeting format and a majority of members supported an in-person meeting
- The WSSA annual meeting will include 4 symposia and student competitions as well as the traditional poster sessions and concurrent breakout sessions for scientific oral papers
 - The WSSA BOD continues to watch international travel requirements as they evolve.
 - Future upcoming WSSA meetings include:
 - 2023 WSSA annual meeting jointly with NEWSS in Arlington, VA – Jan 30 to Feb 2
 - 2024 WSSA annual meeting jointly with SWSS in San Antonio, TX
 - WSSA will be looking at 2025 venue following 2022 annual meeting in Vancouver

CAST Representative – John Hinze

Date of Preparation: 12/08/2021

Officer/Committee Activities during the Year:

CAST

- We have monthly Zoom calls. I was able to attend 10 of the 12 meetings. I attended the annual meeting in Columbus, OH. 2022 will be the fiftieth anniversary of CAST. The annual meeting will be held in Ames, IA. I am on the local planning committee for this meeting. The following publications have come out that have come from CAST in 2021 or will be coming out in 2022.
- The Impact of CAST—50 Years of Influence in Agriculture
- GMO Free—The Impact on Consumers, Retailers, Farmers, and the Environment
- Environmental, Social, and Economic Impacts of Implementing Sustainable Intensification in Agriculture at Scale
- RNA Interference Technology in Agriculture: Methods, Applications, and Governance
- Review of Mycotoxin Impacts: Balancing Economic Costs with Animal and Human Health Adverse Effects Worldwide
- Goals, Strengths, and Limitations Governing the Use of Life Cycle Assessment (LCA) in Food and Agriculture
- The Impact of Biogenic Methane from Ruminants on Climate Change
- Harmful Algal Blooms: Causes, Effects, and Mitigation
- Applications, Benefits and Barriers of Gene Edited Crops
- Animal Agriculture and Zoonoses—A One Health Perspective
- Recruiting and Educating Graduate Students to Become Researchers and Leaders in Global Agriculture
- Irrigation and Precision Crop Management Technologies

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NCWSS Fellows Committee

- The Fellows Committee received 3 nominations for Fellow in 2021. Aaron Hager and Eric Spandl were selected as Fellows. They will be announced as Fellows at the Awards Luncheon.

Motions/ Action Items: No

Director of Science Policy – Lee VanWychen

Date of Preparation: 12/13/2021

SCIENCE POLICY COMMITTEE NOTES

JAN 13, 2021, 4:00 P.M. E.S.T.

AGENDA

- **Update on New HRAC and WSSA MOA/SOA Groups: Chandra Aradhya, US-HRAC Chair**
 - Summary of the MOA changes (why/ what/ how): https://hracglobal.com/files/CLI_SUPPORT_HRAC_MOA_UPDATE_ENG.pdf
 - In depth technical description of the MOA changes (those who wants to know detail on chemistry): https://hracglobal.com/files/GHRAC_MOA_UPDATE_2020.pdf
 - Updated herbicides MOA poster: <https://hracglobal.com/tools/hrac-mode-of-action-classification-2020-map>
 - MOA Classification Look-Up App or webtool: <https://hracglobal.com/tools/classification-lookup>
 - WSSA's MOA code changes/addition of new active ingredients were highlighted (in red) in the attached Excel sheet that Chandra sent for tracking old vs. new code changes.
 - The same Excel sheet is on the WSSA website: <https://wssa.net/wp-content/uploads/WSSA-Herbicide-SOA-20201203.xlsx>. However, the changes are not highlighted in red.
 - Most changes will not impact U.S. as they adopted a numerical MOA classification that was aligned with WSSA. There was only the addition of four new or reclassified MOAs.
 - US-HRAC will work with EPA to implement label changes via notification and is also planning a webinar for EPA staff on the updates.
- **Recap of Weed Science/Aquatic Plant Management “Virtual” Congressional Visits.**
 - Held 22 visits with staffers in GA, IA, IN, LA, MN, MT, NC, PA, UT & VA. Top issues:
 - Opposition to H.R. 7940 and S. 4406, the “anti-FIFRA” legislation introduced by Rep. Neguse-D-CO and Sen. Udall-D-NM. We also joined 300+ societies in a letter to every member of Congress and also issued a separate press release.
 - Support for USDA IR-4 funding at President’s request of \$17 million for FY 2021.
 - Glyphosate is safe. IARC decision is flawed.
 - Support for funding for the U.S. Army Corp of Engineers Aquatic Plant Control (APC) research program at the Senate level of \$7 million for FY 2021.
 - Support the Senate’s version (S. 3591) of the 2020 Water Resources Development Act (WRDA), which includes \$25 million for a Harmful Algal Bloom demonstration program and funding for various invasive species pilot programs that the House version (HR 7575) does



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not contain.

- **2020 Water Resources Development Act (WRDA)**

- The Senate version of WRDA was included in the massive consolidated appropriations package that Congress passed and was signed into law on Dec. 27. Major win for invasive species policies.
- Authorizes a \$25 million Harmful Algal Bloom (HAB) demonstration program to be carried out by the Army Corp of Engineers (ACOE) with focus areas in the Great Lakes, the tidal and inland waters of NJ, the coastal and tidal waters of LA, the waterways of the counties that comprise the Sacramento-San Joaquin Delta, CA, the Allegheny Reservoir Watershed in NY, and Lake Okeechobee, FL.
- Authorizes \$10 million to EPA to provide technical assistance to support efforts for invasive species management in impaired waters
- Requires the ACOE Engineer Research and Development Center to add “prevention” to its research, in addition to “management and eradication,” of aquatic invasive species. In addition, it specifies that the Secretary (of the Army) must work with the Corps District offices representing regions that could be impacted in the future by aquatic invasive species, in addition to those that are already impacted.
- Directs ACOE to conduct a terrestrial noxious weed control pilot program in consultation with FICMNEW to identify and develop new and improved strategies for terrestrial noxious weed control on federal land under the jurisdiction of the Secretary (of the Army)
- Authorizes \$50 million per year through 2024 for ACOE to enter into partnerships with states and other federal agencies to carry out actions to prevent the introduction of, control, or eradicate invasive species that adversely affect water quantity or water quality in the Platte River Basin, the Upper Colorado River Basin, the Upper Snake River Basin, and the Upper Missouri River Basin. Priority is given to projects targeting Russian olive or salt cedar trees.
- Authorizes the South Florida Ecosystem Restoration Task Force to develop a priority list of invasive species that impact the structure and function of the South Florida ecosystem and that have a strong potential to reduce key indicators used to measure Everglades restoration progress. The Task Force will use the priority list to guide technical assistance and scientific research, and to develop innovative technologies and approaches to identify, target, and eliminate particularly impactful invasive plants and animals in the South Florida ecosystem. The Task Force must also use the priority list to develop innovative strategies and tools to prevent future introduction of non-native species.
- Authorizes \$25 million for a pilot program that requires that the Secretary of the Interior, through FWS, to develop and carry out effective measures to prevent, control, or eradicate aquatic invasive species in alpine lakes that are not located within the National Park System.

- **FY 2021 Final Appropriations- Signed Into Law on Dec. 27, 2020.**

Program/Agency	FY19 Final	FY20 Final	FY21 President	FY21 House	FY21 Senate	FY21 Final
	-----Millions -----					
USDA - ARS	\$1,303	\$1,414	\$1,368	\$1,454	\$1,486	\$1,492

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USDA - NIFA	\$1,471	\$1,527		\$1,591	\$1,575	\$1,539	\$1,570
AFRI	\$415	\$425		\$600	\$435	\$435	\$435
Hatch Act (Experiment stations, etc)	\$259	\$259		\$243	\$259	\$259	\$259
Smith Lever (Extension)	\$315	\$315		\$299	\$315	\$315	\$315
IR-4	\$12	\$12		\$17	\$15	\$12	\$12
Crop Protection and Pest Management	\$20	\$20		\$20	\$20	\$20	\$20
<p>Note- The final FY 2021 appropriations language provides \$3 million to USDA-APHIS to partner with State departments of agriculture and forestry commissions in states considered to be the epicenter of cogongrass infestations to assist with its control and treatment.</p>							
Army Corp- Aquatic Plant Control research	\$6	\$6		\$0	\$2	\$7	\$7
Army Corp- Watercraft Inspection Stations	\$6	\$18		\$0	\$18	\$13	\$18
EPA - Great Lakes Restoration Initiative	\$300	\$320		\$320	\$335	\$320	\$330
NOAA – Sea Grant	\$68	\$74		\$0	\$71	\$76	\$75

- **USDA-ARS:** The Crop Protection and Quarantine program (NP 304) has hired a new National Program Leader (NPL) for weed science: Dr. Steve Young. He is a **weed scientist** who was most recently at Utah State University and prior to that served as the Director of the Northeastern IPM Center at Cornell.
- **EPA proposed interim decision for paraquat.** [WSSA comments submitted Jan. 11, 2021.](#)
 - Given the value of paraquat as a unique weed management tool and the updated human health mitigation measures, WSSA is opposed to the following two application restrictions proposed by EPA: 1) prohibition of all aerial applications of paraquat except for cotton desiccation; and 2) prohibition of all paraquat applications using mechanically pressurized handguns and backpack sprayers.
 - Those application restrictions would eliminate many unique weed management options and put undue pressure on other broad-spectrum burndown treatments.
- **EPA Draft Biological Evaluations (BEs) for Triazines.** [Comments due Feb. 19, 2021](#)
 - This is the second group of pesticides, and the **first herbicides**, where the agency used its March 2020 [Revised Method for National Level Listed Species Biological Evaluations](#) of

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- Conventional Pesticides to assess potential impacts that these herbicides may have on threatened and endangered species and their critical habitats.
- The biological evaluations make effects determinations for 1,795 listed species and 792 designated critical habitats when these pesticides are used according to product labels. This includes no effect (NE), not likely to adversely affect (NLAA), and likely to adversely affect (LAA) determinations.
 - EPA estimated that atrazine is likely to adversely affect 54 percent of all species and 40 percent of critical habitats.
- **EPA Draft Biological Evaluations (BEs) for Glyphosate. [Comments due Mar. 12, 2021](#)**
 - Same situation as the triazine BEs above. Lots of unknowns with the models and assumptions. EPA estimated that glyphosate is likely to adversely affect 93% of endangered species and 96% of critical habitat.
 - One suggestion is to focus on the benefit of herbicides in controlling invasive weeds to help reestablish endangered species habitat. A good example is the work by Rod Lym in controlling leafy spurge that helped reestablish critical habitat for the endangered western prairie fringed orchid.
 - However, most of our comments probably need to focus on the assumptions and models EPA used to estimate these BEs to help refine the conclusions about risk.
 - **EPA Liaison: Greg Kruger**
 - Greg has changed jobs and started work with the Xarvio group within BASF to work on advancing spray application technology.
 - Feb. 1 is the application deadline for next EPA Liaison. So far, there is one official applicant and 2-3 others are expected to apply. The EPA Liaison Advisory Committee is meeting Jan. 19 to determine current status and how to interview.
 - Hopefully a decision will be made around the time of the annual meeting.
 - **NIFA Fellow: Jim Kells**
 - Kansas City office space for NIFA ready to move in
 - New NIFA director – Carrie Castille from LSU has a PhD in renewable resources. This is a 6-yr appointment that does not require Senate confirmation.
 - Weed Genomics Conference – September 22-24, 2021 – Kansas City – Received \$25k conference grant from USDA-NIFA
 - Jim has already organized and conducted two WSSA webinars on federal funding and grantsmanship that had great participation. The third and final webinar: Federal Career Opportunities for Weed Scientists is scheduled for Thursday, Jan. 28 at 3 pm E.S.T.
 - **Herbicide Resistance Education Committee: Jill Schroeder**
 - The next committee meeting is Tuesday, Feb. 2 at 3 pm E.S.T.
 - **National Invasive Species Awareness Week (NISAW)**
 - NISAW Part I - Information and Advocacy - A policy-focused webinar series is being scheduled for February 22-26, 2021.
 - Any input on invasive weed policies and funding is welcome
 - NISAW Part II - Outreach and Education – is May 15-22, 2021 and will focus on local invasive species prevention, removal, and educational events. The North American Invasive Species Forum is also being held virtually during NISAW Part II.

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OTHER BUSINESS

- **Leadership changes in Congress and Federal Agencies**
 - The new chair of the House Ag Committee is Rep. David Scott-D-GA. The new ranking member is Rep. Glen “GT” Thompson-R-PA.
 - The new chair of the Senate Ag Committee will be Sen. Debbie Stabenow-D-MI. The new ranking member will be Sen. John Boozman-R-AR.
 - The new ranking member of the House Natural Resources Committee is Rep. Bruce Westerman-R-AR. The chair will remain as Rep. Raul Grijalva-D-AZ.
 - The “new” Secretary of Ag nominee is Tom Vilsack who served eight years as the Secretary of Ag in the Obama administration.
 - The Secretary of Interior nominee is Rep. Deb Haaland-D-NM.
 - The EPA Administrator nominee is Michael Regan, Secretary of the NC Department of Environmental Quality.

FEB 10, 2021, 4:00 – 6:00 P.M. E.S.T.

AGENDA

- **Introductions. Committee members rotating off ---- > on.**
 - APMS President: Mark Heilman -----> Ryan Wersal
 - NCWSS President : Stott Howard -----> Harlene Hatterman-Valenti
 - NCWSS Rep : Greg Elmore -----> Brett Miller
 - NEWSS President : Art Gover -----> Caren Schmidt
 - SWSS President : Eric Webster -----> Clete Youmans
 - WSSS President : Corey Ransom -----> Sandra McDonald
 - WSSA President rotation: Larry Steckel -----> Carroll Moseley
 - Member-at-large: Bob Nichols -----> Ray McAllister
- **USDA-ARS National Program Leader for Invasive Pests of Crops (weed science) – Steve Young**
 - Email: stephen.young@usda.gov; Before joining USDA-ARS, Steve was at Utah State University and prior to that served as the Director of the Northeastern IPM Center at Cornell. He has a B.S. in Horticulture from Washington State, an M.S. in Weed Science from the University of Idaho with Don Morishita and Ph.D. in Soil Science from the University of California- Davis with Vic Claassen and Joe DiTomaso.
- **USDA Technical Advisory Group (TAG) for Biological Control Agents of Weeds: Paul Tseng**
 - One insect biocontrol petition submitted since July 2020 – Introduction and release of seed feeding weevil on houndstongue (*Cynoglossum officinale*). Some concerns about possible effects on similar horticultural/ornamental crops.
 - Discussion about how to get biocontrol research directed at the most common and troublesome weeds. Lee will send Paul 2020 weed survey results.
- **USDA Office of Pest Management Policy: Cameron Douglass**
 - Concerns about EPA composting restrictions for pyridine auxin herbicides – task force to look into this?
 - Models assume blanket treatment at maximum rate over an area – doesn’t take spot treatments into account.
 - Herbicide resistance issues from regulatory standpoint – compile info from all agencies
 - EPA’s proposed interim decision for paraquat– lots of push back from stakeholder groups on proposed application prohibitions for aerial and backpack/handgun sprayers – final decisions have to make more sense

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- Major issues with EPA's draft biological evaluations (BEs) for triazines and glyphosate (see next agenda item). The application scenario assumptions aren't realistic (i.e. assumes glyphosate is applied at 8 lb/A max rate every year on CRP and grazing land. For residential lawns, assumes glyphosate applied max number of times at over 40 lbs/A per year).
- Hopeful for revisions in the model. Situation not dire..... yet.
- **EPA Biological Evaluations (BEs) for Triazines and Glyphosate.**
 - EPA released its draft biological evaluations (BEs) for the triazines and glyphosate. **Biological evaluations (BEs)** are the beginning of EPA's Endangered Species Act (ESA) consultation review process for pesticides where they determine if an endangered or threatened species or critical habitat could be affected by the use of that pesticide.
 - The ESA is not a "risk-benefits" statute like FIFRA. ESA is pure risk, worst theoretical impact possible.
 - The **triazines** are the **first herbicides** to go through EPA's [Revised Method for Species Biological Evaluations of Conventional Pesticides](#).
 - The BEs make effects determinations for 1,795 endangered or threatened species and 792 designated critical habitats.
 - EPA's draft BEs for the triazines predict that:
 - **atrazine** is likely to adversely affect 54% of all species and 40% of critical habitats;
 - propazine is likely to adversely affect 4% of all species and 2% of critical habitats; and
 - simazine is likely to adversely affect 53% of species and 40% of critical habitats.
 - EPA's model found that atrazine is likely to adversely affect nearly all endangered/threatened species and critical habitats in the continental U.S., including some that are already extinct.
 - [Comments on the draft BEs for the triazines are due Feb. 19, 2021.](#)
 - EPA's draft BE for glyphosate predicts that:
 - **glyphosate** is likely to adversely affect 93% of all species and 96% of critical habitats.
 - [Comments on the draft BEs for glyphosate are due Mar. 13, 2021.](#)
 - Need to collect as many anecdotes as possible from weed scientists about "real-life, actual use rates and patterns" for the triazines and glyphosate.
- **USDA NIFA Fellow: Jim Kells**
 - Organized 3 webinars for weed scientists and grad students that were well attended:
 - Oct 2020 – funding opportunities; Dec 16 – grantsmanship; Jan 28 – career opportunities in Fed Gov't
 - recordings made available on WSSA website.
 - NIFA funding for Weed Genomics Conference: Sep. 21-24, 2021 in Kansas City
 - New NIFA director, Dr. Carrie Castille from Louisiana. Lee, Jim and Vijay plan to meet with her soon.
 - Lots of transition for NIFA in the last 18 months with move to Kansas City.
 - New NIFA NPL – Katie Dentzman - Social Scientist who did a lot of work with Herbicide Resistance Education Committee on social aspects of herbicide resistance and its management

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- **USDA-NIFA National Program Leader for Weed Science- Vijay Nandula**
 - Email: vijay.nandula@usda.gov; Prior to joining USDA-NIFA in 2020, Vijay was with USDA-ARS since 2011 in Stoneville, MS where he worked on herbicide resistance issues. At USDA-NIFA he manages the Crop Protection and Pest Management (CPPM) program. Received his Ph.D. in Weed Science and Plant Physiology from Virginia Tech.

- **Increase NIFA Crop Protection and Pest Management (CPPM) funding to \$25M**
 - Funded at \$20M since FY 2017. Approx \$18.1M in funding available for three areas:
 - **\$4 Million- Applied Research and Development Program Area (ARDP)** – funds research projects for the development of new IPM tactics, technologies, practices, and strategies. About 20% of proposals funded. 3 weed science proposals funded this past year.
 - **\$10 Million for 50 States: Extension Implementation Program Area (EIP)** – i.e. the Extension IPM programs (Smith-Lever 3d). States must apply on a 3 yr rotation.
 - **\$4.1 Million for Regional Coordination Program Area (RCP)** – i.e. the Regional IPM Centers, which must apply on a 4 yr cycle.

- **Establish an Areawide IPM (AIPM) program and funding in USDA-NIFA (and increase in ARS)**
 - We strongly support the AIPM funding in USDA-ARS, which has supported several successful weed AIPM programs such as Team Leafy Spurge, Tame Melaleuca, and currently the CA Delta Region Areawide Aquatic Weed Project (DRAAWP).
 - Working with Entomology and others to establish an AIPM program and associated funding within USDA-NIFA. Rep. Tulsi Gabbard’s office (D-HI) was strong supporter, but she retired.

- **Increase IR-4 funding to \$20M in FY 2022**
 - Flat funding in NIFA budget at \$11.9M for over a decade. Will be subject to increased indirect cost charges from universities in FY 2022.
 - A top priority for the WSSA Specialty Crops committee (E10)
 - The IR-4 Commodity Liaison Committee (CLC) is seeking a champion in Congress to advocate for \$20M in FY 2022 in the USDA-NIFA budget.

- **EPA Liaison update: Bill Curran**
 - Greg has changed jobs and started work with the Xarvio group within BASF to work on advancing spray application technology.
 - Received 5 outstanding applications. WSSA-EPA Liaison Advisory Committee will interview all five candidates the week of Feb. 22 and hopes to make a decision by March.

- **Herbicide Resistance Education: Jill Schroeder**
 - Focusing on understanding the socio-economic impacts for managing resistance
 - Committee’s role is to engage stakeholders as broadly as possible from other professional societies and industries.
 - See recent reports for committee activity

- **2021 National Invasive Species Awareness Weeks (NISAWs), www.nisaw.org/nisaw-2021/**
 - NISAW Part I - Information and Advocacy – is February 22-26, 2021.
 - Lee: “Show Me the Money” on Feb. 26
 - NISAW Part II - Outreach and Education – is May 15-22, 2021
 - Local and state demonstration and awareness events.

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- NISC funding was restored to \$1.2M in FY 2021.
- Lee working with Scott Cameron, former DOI budget guru, on invasives funding in DOI
- Reestablish Invasive Species Advisory Committee (ISAC)

- **Department of the Interior** – increase funding for invasive weed research and management
 - Extremely underfunded. DOI spends approx. 35 cents per acre on invasive species. In FY 2020, spent \$143M on ALL invasive species programs for 400+ million acres of federal land.
 - USDA spent approx. \$9 per acre for Forest Service invasive species mang't and research.
 - Difficult to target invasive spending within DOI's USGS, NPS, BLM, FWS, BIA and BOR.

- **2020 Water Resources Development Act (WRDA)** – Over \$100 million “authorized” for new aquatic invasive species efforts. However, we need to go after the appropriations requests for the following programs included in 2020 WRDA:
 - Army Corp of Engineers (House & Senate Energy and Water Appropriations):
 - \$25M Harmful Algal Bloom (HAB) demonstration program;
 - \$50M to partner with states and other agencies for Russian olive and saltcedar control in certain western U.S. river basins
 - a pilot program for terrestrial noxious weeds control on Army Corp lands.
 - Dept. of the Interior- administered through Fish & Wildlife Service (House & Senate Interior, Environment and Related Agencies Appropriations):
 - \$25M for invasive species eradication in alpine lakes;
 - \$10M to remove invasive plants that contribute to drought in the western U.S.;

- **Definition of a Plant Pest**
 - Explore the possibility of expanding the definition of a “Plant Pest” under the Plant Protection Act (PPA) to include “noxious weeds”. Funding for noxious weeds at APHIS-PPQ is severely hampered because noxious weeds are not considered a “plant pest”. Only “parasitic plants” are considered a “plant pest” in the PPA ([7 U.S.C. 7702](#)).
 - Implement the change within 2023 Farm Bill.

- **APHIS-PPQ; \$3 million for cogongrass control in Alabama, Mississippi, Georgia and South Carolina.**
 - Main Contact is Anne LeBrun, National Policy Manager for Federal Noxious Weeds, APHIS.
 - Congress took \$3 million out of the Field Crop and Rangeland Ecosystems Pests in APHIS's Plant Health subaccount and designated it specifically for a cogongrass pilot program.
 - *There is hereby appropriated \$3,000,000, to remain available until expended, for a pilot program for APHIS to provide grants to State departments of agriculture and forestry commissions in states identified (AL, MS, GA, & SC) in the final environmental assessment published in the Federal Register on Sep. 23, 2020 (85 Fed. Reg. 59735), to combat and treat cogongrass through established cogongrass control programs.*

- **CAST update:** Jill Schroeder
 - Online webinars on new issue papers coming out.
 - Watch for series of essays around presidential initiatives on climate change and agriculture.
 - CAST representatives from various geographic regions on committee getting together re: issue papers.
 - CAST issue papers tend to be well received by congressional committee staffers.

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- **Weed Science Society Presidents Congressional Visits:** when and how.
 - Looking at 2-3 “virtual” Congressional visits + 1 trip to DC in fall? Play it by ear.
 - Week of April 5
 - Week of June 14
 - Target House & Senate Appropriations subcommittees for:
 - Agriculture & Interior, Environment & related agencies
 - Separate visits for APMS leaders on 2020 WRDA appropriations targeting House & Senate Appropriations subcommittees for Energy & Water

- **2020 Science Policy Fellows** – Camp Hand and Vasiliy Lakoba. Plans for 2021.
 - Short recap of “virtual” SPF experience
 - Application Deadline for 2021 Fellows- Friday, April 2
 - Discussion of stipend amount if travel to DC remains unfeasible.

- **USDA Plants Database/WSSA Composite List of Weeds.**
 - P22b committee met yesterday. Camp Hand and Carroll Moseley provided update on the committees progress and process to synchronize WSSA weed names with USDA Plants Database
 - Each team of 2 people on the committee is reviewing 410 weed species each
 - Will make final recommendations to WSSA Board
 - Standardization of names will continue, hyphenation, synonyms, etc. Working with USDA to get some synonyms, but there will be one WSSA accepted name.
 - USDA will be seeing input on geographic distributions of species.
 - WSSA to resist changing country of origin in common names (as introduced in MN).

- **National Weed Survey**
 - 2020 weed survey results available at: <https://wssa.net/wssa/weed/surveys/>
 - Request from federal research agencies on the most common and troublesome weeds regarding who is conducting research on these species and what type of research? Basically- identify research gaps and funding needs.
 - 2021 survey will be for weeds in aquatic and non-crop areas and will go out around Memorial Day and close after Labor Day.
 - WSSA Herbicide Resistance committee requested to add a question to the survey about herbicide lack of control issues with weeds to help identify potential resistant species.

- **Weed Bingo** – how to increase sales.
 - Add more information and photos about the game to WSSA website/bookstore once the website is revamped. Make it more “Amazon-like”.
 - 40% off Christmas sale still on!

Other Business

- **Biden Administration, Jan. 20, 2020 - List of Agency Actions for Review**
 - **EPA:** “Pesticides; Agricultural Worker Protection Standard; Revision of the Application Exclusion Zone Requirements,” 85 Fed. Reg. 68760 (October 30, 2020).
 - **EPA:** “The Navigable Waters Protection Rule: Definition of ‘Waters of the United States,’” 85 Fed. Reg. 22250 (April 21, 2020).
 - **Interior-FWS:** “Endangered and Threatened Wildlife and Plants; 12-Month Finding for the Monarch Butterfly,” 85 Fed. Reg. 81813 (December 17, 2020).
 - **Interior- BLM:** U.S. Department of the Interior, National Greater Sage-Grouse Land Use Planning Page (NEPA No. DOI-BLM-WO-WO2100-2017-0003-RMP-EIS) (last updated Jan. 11, 2021).

MAR 31, 2021, 4:00 – 5:00 P.M. E.S.T.

AGENDA

- **EPA Liaison Search (Bill Curran)**
 - EPA and NIFA advisory committees established and solicited applications
 - Interviewed 5 applicants
 - Mark VanGessel (University of Delaware) is the new EPA Liaison
 - Mark has stepped into the new position and is reaching out to partners
 - Email/newsletter announcements of this to WSSA forthcoming
- **USDA NIFA Fellow: Jim Kells**
 - NIFA funding for Weed Genomics Conference: Sep. 22-24, 2021 in Kansas City
 - New NIFA director, Dr. Carrie Castille from Louisiana. Lee, Jim and Vijay plan to meet with her soon.
 - Lots of transition for NIFA in the last 18 months with move to Kansas City.
 - New NIFA NPL – Katie Dentzman - Social Scientist who did a lot of work with Herbicide Resistance Education Committee on social aspects of herbicide resistance and its management
 - Working on grant concept related to AI/robotic weeding
 - Planning mid-Oct 2021 webinar on NIFA funding opportunities for weed science
 - NIFA posted 8 March 2021 webinars for new investigators; WSSA will send link
- **Weed Science research priorities survey (Lee Van Wychen)**
 - Dan Brainerd (Michigan State) is WSSA Research Priorities Committee chair
 - Results of survey will be published in *Weed Science*
 - Will share survey questions at next SPC call; future SPF will work on this
 - Priorities from survey will be used to advocate at NIFA (Jim Kells)
- **Plans to schedule a strategic session on weed science role in a changing climate (Janis McFarland)**
 - First suggested topic: Biden EO on tackling climate crisis
 - WSSA needs to cultivate common message/goal and be the trusted source on weed science information
 - Janis will be calling a strategic meeting to discuss the EO in next 2 weeks
 - Climate change is also important to the herbicide resistance committee
 - Tri Societies and NASDA interested in partnering on common position/strategy
- **2021 National Invasive Species Awareness Weeks (NISAWs), www.nisaw.org/nisaw-2021/**
 - NISAW Part I - Information and Advocacy – was February 22-26, 2021.
 - Lee gave webinar titled “Show Me the Money” on Feb. 26
 - NISAW Part II - Outreach and Education – is May 15-22, 2021
 - Local and state demonstration and awareness events.
 - NISC funding was restored to \$1.2M in FY 2021.

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- Lee working with Scott Cameron, former DOI budget guru, to compose letter on all taxa invasive species funding requests.
 - Reestablish Invasive Species Advisory Committee (ISAC) and plus up NISC.
 - **CAST paper on economic costs of invasive species (Jill Schroeder)**
 - Entomology CAST rep (Phil M.) proposed invasive species issue paper idea
 - Discussion to continue in collaboration with NAISMA
 - Next steps: frame a proposal and assemble a task force
 - Paper will be about plants only and focus on societal and economic costs of invasion, comparing public and private lands impact
 - Anita will recruit someone from WSSA to be on this taskforce
 - Goals: Strengthen partnerships w/ CAST and NAISMA; solidify position as the trusted source on invasive plant issues.
 - CAST issues paper will not produce economic analysis, but will review and summarize knowns/unknowns.
 - **Paraquat/Glyphosate/Triazines/ESA update: Monty Dixon; Carroll Moseley**
 - Several comment periods and label updates in the past year
 - Globally, more press/legal attention
 - Paraquat is toward the end of its multi-year re-registration process
 - Closed transfer systems for quantities under 120gal. Some other changes in who can handle the product
 - Largest decision in final PID: no aerial application except for cotton desiccation
 - Applications are often made in wet conditions when ground application not possible, so this has been the focus of many comments submitted.
 - Ban on handheld applications; change to REI; change to mask/respirator requirements
 - Final decision should come out by end of September (end of fiscal year)
 - WSSA has posted its comments on all of these PIDs on its sci pol website
 - Much critical input from academic partners and growers on use rates
 - **Science Policy Fellows (SPF)**
 - Camp Hand and Vasiliy Lakoba have completed their SPF and already have jobs.
- Application Deadline for 2021 Fellows- Friday, April 2

MAY 12, 2021, 4:00 – 5:00 P.M. E.S.T.

AGENDA

1. Introduction of new Science Policy Fellows: Rebecca Champagne and Devon Carroll
 - a. Contact them at rebecca.champagne@maine.edu and dcarro17@vols.utk.edu
2. WSSA Research Priorities Committee update: Dan Brainard
 - a. Last survey was published in 2009 (Davis et al) - committee is developing a revised survey with 10 broad categories for respondents to rank, as well as subcategories to rank within each broad category.
 - b. Subcategories are currently being compiled with the goal of circulating to members by end of June; results will be analyzed this fall.
 - c. Jacob Barney- majority of people doing invasive spp research are not in WSSA- consider sending survey to other groups as well.

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3. WSSA Noxious and Invasive Weeds and Biocontrol Committee update: Jacob Barney
 - a. Noxious weeds - potentially propose to board hosting noxious weed information on WSSA web site
 - b. Biocontrol - interest in organizing a biocontrol symposium at annual meeting

4. CAST update: Jill Schroeder
 - a. Proposal for a CAST issue paper is in the works to identify the topic within the invasives issues that would be developed to discuss what we know, questions remaining, policy/funding recs. WSSA board approved officially partnering with CAST on this effort.
 - b. PPDC meeting tomorrow 5/13 to discuss status update of the pesticide resistance management workgroup tasked with providing recommendations to EPA.

5. EPA Liaison: Mark VanGessel
 - a. New MOA discussion last week - discussed new numbering system, implementation
 - b. Will be giving vegetable weed control seminar in July
 - c. Participated in EPA cover crop discussion
 - d. A separate, but related issue: In Feb. 2021, the WSSA Herbicide Resistance committee requested to add a question to the national weed survey about herbicide lack of control issues with weeds to help identify potential resistant species. After further discussions with the committee and EPA, it was decided not to address this issue via the national weed survey.

6. Recap of Weed Science Presidents Congressional visits: Anita/Harlene/Caren/Clete/Sandra
 - a. Conducted 11 virtual visits with staffers in five states.
 - b. The three main requests were fund the IR-4 Project at \$20M in FY 2022; CPPM at \$25M in FY 2022; [\\$11.5B investment in ag research infrastructure](#)

7. APMS Congressional Visits: Re: 2020 WRDA appropriations
 - a. The 2020 WRDA bill authorized over \$100 million in new invasive species management and HAB projects. While authorization is good, the agencies will not be able to carry out any of those new projects without appropriated dollars in FY 2022.
 - b. Lee will work on scheduling visits with leaders of House & Senate Appropriations subcommittees for Energy & Water, which is responsible for many of the new 2020 WRDA projects. House leaders are from OH & ID. Senate leaders are from CA & LA.

8. Hydrilla/dead eagles: [Mysterious Eagle Killer Identified](#)
 - a. Rob Richardson - cyanobacteria on leaves of hydrilla produce bromine neurotoxin that is bioaccumulating and passing up food chain to birds
 - b. Herbicides targeted as the cause, but nothing to back this up

9. APHIS spending on Federal Noxious Weeds
 - a. Only spending \$3.1 million out of \$360 million on weeds - major concern
 - b. Lee - use public awareness committee to address importance of noxious weeds and provide more education on them

10. FY 2022 Invasive Species Appropriations Requests
 - a. PDF attached to Lee's email (put link to Science Policy page)

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11. Recap of meeting with NIFA director, Dr. Carrie Castille; Farm of the Future comments
 - a. On April 14, Anita Dille, Bill Curran, Jim Kells and Vijay Nandula met with NIFA Director Castille to discuss weed science priorities, which included weed genomics, intelligent weed management and the CPPM program.
 - b. On May 6, Lee provided oral comments to USDA-NIFA “Farm of Future” proposal, which were based off comments submitted by Jim Kells.

OTHER BUSINESS

-[Invasive Species Wikipedia Edit-a-thon](#). The session will include an introduction and information about the Information Center and invasive species from Joyce Bolton, head of the National Invasive Species Information Center, and other guest speakers from USDA. Then, a one-hour training on Wikipedia editing and [provide information on updating invasive species articles on Wikipedia. During the event experienced editors and Invasive Species experts will be on hand to assist and answer questions. **May 20, 2021; 11am – 3pm ET.**

-[National Invasive Species Awareness Week](#) (NISAW II) Education and Outreach

- **Monday, May 17th**, 1:00 pm – 2:00 pm CT:
 - [The Climate Crisis and Invasive Species](#)
- **Tuesday, May 18th**:
 - 8:00 am-12:30 pm CT: [Biological Threat Surveillance Tools \(US Geological Survey Special Event\)](#)
 - 1:00 pm – 2:00 pm CT: [The Model Legislative Framework for State Aquatic Nuisance Species \(ANS\) Programs and Resource Toolkit for Local Governments](#)
- **Wednesday, May 19th**, 1:00 pm – 2:30 pm CT
 - [The Regulatory Process for Classical Weed Biological Control](#)
- **Thursday, May 20th**, 1:00 pm – 2:00 pm CT
 - [Aquatic Plant Management Priorities](#)
- **Friday, May 21st**, 1:00 pm – 2:00 pm CT
 - [A Comparison of State Noxious Weed Lists and The Western Weed Action Plan](#)

JUNE 23, 2021, 4:00 – 5:00 P.M. E.S.T.

AGENDA

1. PPDC Resistance Management Workgroup: Amy Asmus & Jill Schroeder.
 - a. Recap of what has happened since the May PPDC meeting. Discussion of the draft recommendations. They are still early in this process and will share the draft once it is farther along.
 - b. Goal is to develop recommendations to the EPA in addressing pesticide resistance with stakeholders. What is the role/authority of EPA to facilitate implementation?
 - i. Four charge questions >>>10 group recommendations
 - ii. Eliminate conflicts, create interagency workgroup, convene panels of experts on resistance issues, centralized network/watchlist of weeds, investment/improvement in education, resistance management oversight, cooperative industry agreements, encourage proactive resistance management programs, update/develop training materials, consider incentive programs, organize yearly meeting with stakeholders, explore private project with e-labeling, development of tools for resistance detection
2. Tolerance vs. resistance on herbicide labels. Updating the definitions: Ray McAllister
 - a. The North American Herbicide Resistance Action Committee (HRAC) and CropLife America’s (CLA) Registration Committee are proposing to update tolerance and resistance

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definitions to replace those published in *Weed Technology* 12:789 in 1998. Those definitions were adopted by EPA in PRN 2017-2 (pp 5-6). The purpose of this effort is to align with long-standing terminology used on herbicide product labels, generally understood by herbicide users throughout the United States, and consistent with other terminology use by EPA. Following publication of PRN 2017-2, some product managers in EPA's Office of Pesticide Programs have initiated efforts to have registrants reverse the terminology on herbicide product labels to match the definitions used in that Pesticide Registration Notice. We are concerned that this will cause confusion among herbicide users and increase the possibility of unintentional misuse. We believe it would be most prudent to revise the definitions to match wide-spread and long-standing common usage, and maintain the current language usage on herbicide labels. Since EPA has relied on the WSSA definitions, we are approaching you as a first step.

- b. Have three WSSA committees review proposal, then discussed at board level.
 - c. Will send to appropriate regional committees, this is free to be shared
 - d. Might be difficult to get practitioners to change language from tolerant to insensitive
 - i. This is primarily for labeling purposes. Goal is to standardize language
 - e. Some debate on use of "insensitive weeds"
3. EPA Liaison: Mark VanGessel
 - a. Will be giving a [seminar on weed control in processing vegetables](#) on July 21, 2021 at 11 a.m. E.S.T.
4. NIFA Fellow: Jim Kells
 - a. 2021 International Weed Genomics Consortium is Sep. 22-24, 2021 in Kansas City, MO. <https://www.weedgenomics.org/>
5. CAST update: Jill Schroeder
 - a. Proposal for a CAST issue paper is in the works to identify the topic within the invasives issues that would be developed to discuss what we know, questions remaining, policy/funding recs. WSSA board approved officially partnering with CAST on this effort.
6. USDA survey data included in the 2020 dicamba registration decision
 - a. We discussed the USDA NASS ARMS data referenced in the Oct. 2020 dicamba registration decision. Specifically the 2019 cotton data for dicamba.
 - b. Reference: <https://www.regulations.gov/document/EPA-HQ-OPP-2020-0492-0003>, Dicamba Use on Genetically Modified Dicamba-Tolerant (DT) Cotton and Soybean: Incidents and Impacts to Users and Non-Users from Proposed Registrations: Table 9, p. 36
 - c. Based on this data, you can calculate that 51% of dicamba-tolerant cotton acres were treated with dicamba products not labeled for over-the-top use in 2019.
 - d. However, after a discussion that Stanley and I had with NASS personnel, there is lot of extrapolation that happens with the survey data that results in inaccuracies. For example, in Georgia, there was more dicamba-tolerant cotton acres treated than actual cotton acres in the state.
 - e. Still, there was clearly off-label applications and we need to continue stress the need to use labeled products.
7. Update on diquat/hydrilla/eagles
 - a. 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

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surfaces. *A. hydrillicola* has also colonized hydrilla in more than half the watersheds in the southeastern US.

- b. 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
- c. 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*”.
- d. 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. No hydrilla = *A. hydrillicola* = no AETX.
- e. 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.
- f. 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. I am having ongoing conversations with APHIS on this issue.

OTHER BUSINESS

- WSSA rep to PPDC: Amy Asmus
 - **Plans to re-nominate Amy for a third 2-yr term to serve from Dec. 2021 to Dec. 2023. She does a great job on behalf of WSSA and brings a lot of unique experience to the PPDC. Three terms is the max limit. Deadline for re-noms is July 23, 2021.**
- Proposed WOTUS rollback
 - **On June 17, 2021, the EPA and the Army Corps of Engineers 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 agencies definition of WOTUS.**
- FY 2022 appropriations status
 - **President’s budget released May 27. Highlights include IR-4 funding at \$20 million and AFRI at \$700 million.**

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- The House Appropriations Committee has started this week to consider its versions of the 12 spending bills for FY 2022.
- Potential reintroduction of the Neguse “anti-FIFRA” bill
 - A version of last year’s bill likely to be re-introduced soon. Rep. Neguse-CO is leading the effort in the House while Sen. Corey Booker-NJ is leading the effort in the Senate.
- 2021 Common and Troublesome Weeds Survey:
<https://www.surveymonkey.com/r/2021WeedSurvey>

August 18, 2021. 4:00 P.M. E.D.T.

Thanks again for the discussion and input regarding whether to update WSSA’s 1998 definitions of herbicide resistance and tolerance. The end result was that we agreed to have President Dille appoint a special committee, made up of researchers who specialize in this topic and educators who have to explain it to users. The committee needs a clear directive on direction from both a WSSA standpoint and a federal policy standpoint.

ACTION ITEMS

- Ray McAllister will contact registrants to find examples of where EPA herbicide product managers have initiated efforts to have registrants reverse the terminology on herbicide labels due to WSSA’s 1998 definitions.
- EVERYONE: If you are interested in serving on the Special Committee to consider updating the definitions of herbicide resistance/tolerance, please email Anita Dille ASAP. dieleman@ksu.edu

OTHER BUSINESS

- Federal Infrastructure bill- \$450 million over 5 yrs for invasive plant removal programs through Dept. of Transportation and US Forest Service. Additional language included for a Bureau of Reclamation watershed competitive grant program for accomplishing protection against invasive species and restoration of native species.
- FY 2022 appropriations- House and Senate ag numbers show Increases for many programs, including ARS, IR-4, AFRI, SARE, Hatch Act and Smith Lever extension. The House and Senate Energy & Water approps also show a 33% & 66% increase, respectively, for the Army Corp of Engineers Aquatic Plant Control Research Program.

October 6, 2021. 4:00 P.M. E.D.T.

AGENDA

- Update on Ad-hoc Committee for Herbicide Resistance/Tolerance definitions - Dille
 - Finalizing committee
 - Working on defining a clear mission – what are our goals, our audience, etc.
 - Ray working on compiling examples from EPA
- Discussion of Weed Science Societies letter to Interior Sec. Haaland on use of indaziflam on BLM land. (**ATTACHED**)
 - Lee would like all Presidents to review and sign this letter
- EPA Liaison update- VanGessel
 - Dicamba discussions – asked to summarize what is going on in dicamba crops, have label modifications had an impact, state reports
 - Proposed changes for MOA and site of action – working on timeline for when these changes should be implemented to inform registrants and extension – going to be at least 18 months
- NIFA Fellow update- Kells
 - International Weed Genomics conference recently held – strategic planning exercise discussed future research needs in weed genomics – hope to use as roadmap for NIFA



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- Weed research priorities survey is almost ready to go out
- Some possible webinars for this winter/spring – funding opportunities with NIFA, including opportunities that have historically been underutilized
- Need WSSA volunteers to serve on NIFA panels – will work on recruiting during annual meeting in Vancouver
- CAST Rep update- Schroeder
- PPDC session end of October – recs from resistance working group will be discussed
- CAST Board meeting end of October in Columbus, OH
- Potential issue papers – invasives, rangeland management
- Fall Congressional Visits
- In-person won't happen this fall – be on the look out for virtual visit information
- Status of FY 2022 Appropriations, Infrastructure Bill, and Budget Reconciliation Bill for weed science funding (**See ATTACHED newsletter**)

OTHER BUSINESS

- 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.
- Carroll – please fill out the WSSA annual meeting survey that was emailed to everyone the other day

November 17, 2021. 4:00 P.M. E.D.T.

AGENDA

- USDA-ARS – Steve Young
 - Update – hiring weed scientists in ARS!
 - Two positions in hiring stage
 - Louisiana and Minnesota
 - Two more opening soon
 - Area-wide pest management project now has a website:
<https://www.ars.usda.gov/research/project/?accnNo=149756> ??
 - Meeting held on 11/16/2021
 - 6 current projects (2 on weeds)
 - Agronomic weeds (GROW) <https://growiwm.org/> Steve Mirsky
 - Invasives in aquatic systems
 - Proposed climate change funding in congress (\$50 million proposed) for ARS
 - Having projects ready to go if funding comes through
 - Symposium showcasing weed science across ARS at WSSA
 - Other ARS folks will likely attend meeting (ARS offices will tentatively re-open for “normal business” on Jan. 3.)
 - Steve needs data for the following
 - Crop losses associated with weeds: <https://wssa.net/wssa/weed/croploss-2/>
 - Areas (acres) covered by invasive plants
 - Impacts of HR weeds
 - Costs to control invasive plants and crop weeds
 - USDA-ERS can likely provide some of this information
 - Cameron Douglass has ERS contacts
- USDA-OPMP- Cameron Douglass

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- Regulatory update (Re-Registration/herbicide issues)
 - Pyridine herbicides
 - EPA final decisions on aminopyralid (OK) clopyralid
 - 18 month holding on treated plant material
 - cancelled supplemental labeling on hay for transport
 - Might form a work group on this
 - Dicamba – waiting for EPA decision to drop any day now
 - Enlist – re-reg on One and DUO
 - Atrazine – good conversations
 - Herbicide/biological evaluations
 - Atrazine, simazine, glyphosate
 - Biological control regulations
 - Better clarity on regulatory front for FIFRA exemptions
 - Help out US Forest Service
 - Indaziflam – discussions with FWS/NMFS and BLM regarding ESA
- Endangered Species Act (ESA) Workshop update- Stanley Culpepper
 - Planning for WSSA ESA Workshop (Webinar) on Jan. 13, 2022 from 1 – 4 pm E.S.T.
 - Build a large gathering of diverse individuals
 - Covering agency roles and descriptions of work
 - Role of WSSA
 - EPA finalized its biological evaluations on glyphosate, atrazine and simazine. All 3 are "likely to adversely affect (LAA)" certain ESA species and their "designated critical habitats." Affects all registered uses and approved product labels for those three herbicides. The LAA determination means EPA "reasonably expects" that "at least one individual animal or plant, among a variety of listed species, may be exposed to the herbicide at a sufficient level to have an effect, which will be adverse.
 - This is a process all pesticides must now go through, as required by the ESA.
 - Now EPA sends its evaluations to the U.S. Fish and Wildlife Services (FWS) and National Marine Fisheries Service (NMFS), i.e. "the Services", which will develop their own biological opinions based on EPA's findings. If they find that these herbicides put an endangered species or critical habitat in "jeopardy," they will work with EPA to propose "additional protections" that could come in the form of a new label and use restrictions. However, not all species or habitats identified in the evaluation as at risk will necessarily require major changes to the registrations.
 - PPDC Herbicide Resistance Workgroup Update – Asmus/Schroeder
 - Working groups now make formal recommendations (made @ last meeting)
 - Not just discussion based
 - Adopted and recommended by PPDC to move to proper places within EPA
 - "More formal marching order" to the EPA
 - **5 recommendations for herbicide resistance:** [Link to Full report](#)
1. EPA should explore changes in pesticide labels to make them more uniform across manufacturers. Labels need to contain clear and concise language so all needed information to implement resistance management is easily found and understood by end users such as crop consultants, pesticide decision makers, and commercial and private pesticide applicators.
 2. EPA should conduct a thorough review of EPA policies and regulations that impact

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resistance management and remove contradictions and situations that hinder effective resistance management to the maximum extent possible.

3. EPA should expand collaboration and outreach efforts with other federal agencies and convene panels of relevant stakeholders to address specific priority issues and questions associated with resistance and resistance management.
4. EPA should explore how it can encourage proactive pesticide resistance management and prevention programs in cooperation with industries and universities through cooperative agreements, updated training materials, and grant programs.
5. EPA should explore the creation of incentive programs for assistance in overcoming the hurdles associated with resistance management, in particular incentives to researchers, users and suppliers for accurate early detection and timely adoption of regionally specific resistance management actions.
 - Next steps... working groups need to have a specific charge
 - Stakeholders should continue in an advisory capacity
 - Can answer EPA questions/follow-up
 - What would the charge be?
 - What are other areas we need a work group to look at?
 - Previous submission for a workgroup on labeling
 - Open to trying again?
 - Hesitation because this is submitted as a recommendation already
 - Springboard to entire label?
 - If resubmitted, will take a long time
- NAISMA and NISAW – Elizabeth Brown
 - Check [NAISMA website](#) to see letters written and issues supported
 - Creation of three new sub-committees recently
 - 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.
 - Week after WSSA in Vancouver, week before WSWS meeting in CA
 - Open invitation if anyone wants to join in planning
 - Can sign up for alerts on the website
 - Also updated toolkit
 - Lee is looking at key meetings with the heads of USDA, DOI, ACOE etc. to discuss “big picture” invasive species issues within their agency. If you have topics of concern, please let Lee know.
- CAST Rep- Jill Schroeder
 - CAST Annual meeting a few weeks ago
 - New publication talking about 50 years of CAST
 - Proposed an issue paper to Plant Work group on invasive weeds led by Jacob Barney
 - Jill will be presenting a poster on 50 years of CAST achievements at WSSA
- Weed Science provisions in Infrastructure Law – Lee
 - Signed into law on Monday
 - Need a committee on how to use these provisions?
 - These are authorizations, NOT appropriations yet

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- SEC. 11522. **Invasive Plant Elimination Program.** Federal-Aid Highways. **\$250 million total**, \$50 million per year for FY 2022 thru FY 2026. The Secretary (Department of Transportation, through the Federal Highway Administration) “shall carry out a program to provide grants to States to eliminate or control existing invasive plants or prevent introduction of or encroachment by new invasive plants along and in areas adjacent to transportation corridor rights-of-way”.
 - The term “invasive plant” means a nonnative plant, tree, grass, or weed species, including, at a minimum: cheatgrass, Ventenata dubia, medusahead, bulbous bluegrass, Japanese brome, rattail fescue, Japanese honeysuckle, phragmites, autumn olive, Bradford pear, wild parsnip, sericea lespedeza, spotted knapweed, garlic mustard, and **palmer amaranth**.

- SEC. 40804. **Ecosystem Restoration.** Through the US Forest Service, **\$200 million total** for the fiscal years 2022 through 2026) shall be made available for invasive species detection, prevention, and eradication, including conducting research and providing resources to facilitate detection of invasive species at points of entry and awarding grants for eradication of invasive species on non-Federal land and on Federal land.

- SEC. 40907. **Multi-Benefit Project To Improve Watershed Health.** Through the Bureau of Reclamation (BOR). Not later than 1 year after the date of enactment of this Act, the BOR Commissioner, in consultation with the heads of relevant agencies, shall establish a competitive grant program to award grants to eligible applicants for the design, implementation, and monitoring of conservation outcomes of habitat restoration projects that improve watershed health in a river basin that is adversely impacted by a Bureau of Reclamation water project by accomplishing 1 or more of the following:
 - (1) Ecosystem benefits.
 - (2) Restoration of native species.
 - (3) Mitigation against the impacts of climate change to fish and wildlife habitats.
 - (4) **Protection against invasive species.**
 - (5) Restoration of aspects of the natural ecosystem.
 - (6) Enhancement of commercial, recreational, subsistence, or Tribal ceremonial fishing.
 - (7) Enhancement of river-based recreation.

- BLM Letter on indaziflam and money for invasive weed management. Lee
 - Comments due COB TODAY. Thanks for all the excellent reviews.
 - WY & CO Governors received a response from Stone-Manning saying that BLM “is in the early stages” of the process to add indaziflam as an approved vegetation treatment on BLM land.
 - Revisit during National Invasive Species Week?
 - Especially if we secure a meeting with DOI Secretary Haaland

- APMS Congressional Visits report – Richardson/Lee
 - Richardson, Heilman, Thum and Van Wychen met with key staffers of the House and the Senate Energy and Water Appropriations Committees last week to discuss funding for the ACOE Aquatic Plant Control Program and the ACOE HAB Demonstration Program included in 2020 WRDA.
 - Meetings went very well



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OTHER BUSINESS

- **Weed Science Presidents-** Congressional Visits: Round 2 regarding FY 2022 Appropriations. Looking at either Dec. 1-3 or Dec. 8-10.
 - Lee will poll the presidents on availability
- FYI... <https://www.kcur.org/news/2021-11-15/corporate-money-keeps-university-ag-schools-relevant-and-makes-them-targets-of-donor-criticism>

Strategic Planning Committee Chair – Sarah Lancaster

Date of Preparation: 12/11/2021

Officer/committee Activities during the Year:

- We have assembled a brief summary of the survey to share at the meeting. One of the agenda items for the meeting on Tuesday is to develop some recommendations as a result of the survey.

Motions/Action Items: No

Extension Chair – Nick Arneson

Date of Preparation: 12/10/2021

Officer/Committee Activities during the Year:

- NCWSS 2021 meeting includes student video contest. An extension committee approved an updated rubric and published along with background information and rules on the contest on the meeting website. A call for submissions was included in the spring newsletter. Rules and an additional call for submissions will be included in the summer newsletter released in August. Example videos were shared and will continue to be promoted through Twitter until the submission deadline. Submission process will mirror that of paper and poster competition submissions including submitting titles and abstracts at appropriate deadlines.

Motions/ Action Items: No

Industry Chair – Lowell Sandell

Date of Preparation: 12/11/2021



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Officer/Committee Activities during the Year:

The Industry Committee had a successful year soliciting Sustaining Membership support for the meeting/Society. 26 companies provided support across three levels (6 Gold, 5 Silver, and 15 Bronze), contributing approximately \$38,000. With Kelley's help, we invested quite a bit of time continuing to update the Sustaining Membership contacts list.

2021 Sustaining Membership list:

Gold

- BASF, Bayer, Belchim, Corteva, Syngenta, Winfield United

Silver

- FMC, Gowan, Helena, Valent, Wilbur-Ellis

Bronze

- ABG Ag Services, ADAMA, AMVAC, Blue River Technology, BellSpray Inc, Clariant Chemical Corp, Greenleaf Technologies, Growmark, GDM Solutions, KayJay Ag Services, Lamberti, Midwest Research, PRS LLC, TeeJet Technologies, United Phosphorus Inc.

Motions/ Action Items: None

Graduate Student Chair– Ednaldo Borgato

Date of Preparation: 12/08/2021

Officer/Committee Activities during the Year:

- Graduate Student Workshop in 2021 NCWSS meeting: The invite to attend is for everybody, including professionals.
- Host students for one-week visit/internship experience in 2022 (similar to WSSA-Travel Award Enrichment program).

Motions/ Action Items: No

Future Site Selection Committee Chair: Mark Loux

Date of Preparation: 12/08/2021

Officer/committee Activities during the Year:

The committee looked at initial proposals from hotels in Indianapolis, Lexington, and Kansas City for the 2024 meeting, with goal of having it the week of 12/8/2024. Indianapolis did not have availability, but hotels in Lexington and Kansas City did. Search was refined to Kansas City based on enthusiasm/availability of the potential local arrangements committee, and the ability to get bids from competing hotels. Committee chair visited hotels in Kansas City, and then refined bids from two – Westin Crown Center and Marriott Downtown. Comparison of the two hotels follows with some comments. The committee recommends that we contract with the Westin for 2024 meeting.

2024 Meeting Westin Crown Center:



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Pros - Lower room rate, six complimentary suites, better rebate, lower F&B minimum, shops and lunch food places in adjoining indoor shopping area, on streetcar line

Cons - consolidated but a smaller meeting space

- Room rate - \$159
- 10,000 F&B minimum
- One comp Park King Corner Room, Two Park King Corner Rooms at the group rate, Five complimentary junior suites
- 1 per 50 comp room
- Comp Guest room internet for all Marriott BonVoy members, free to sign up and will receive free wifi at any Marriott property
- 80% attrition
- In lieu of the 5% rebate back to master, hotel will rebate back \$7 to the master account (4.4% essentially)
- Three comp self- parking passes during the duration of the event
- Hotel to provide 10 standard guest rooms for two nights at the group rate for pre planning meeting. Hotel will provide comp meeting space for 10 people, based on hotel availability
- 15% A/V Discount with in house AV
- comp room and breakfast in concierge room for scholarship winner
- parking rates - self 22, valet 28
- no plaque for scholarship winner

Marriott Downtown

Pros - better comp room rate, bigger AV discount, lots of meeting space but very spread out, on streetcar line

Cons – only one comp suite, have to walk outside and down the street for lunch food (aside from hotel restaurant), higher room rate, lower rebate

- room rate - \$169
- \$15k F & B minimum
- 3% guest room rebate
- 80% attrition
- 1 per 45 comp rooms
- comp guest room internet
- three comp self-parking passes
- ten standard guest rooms for two nights at the group rate for pre planning meeting with comp meeting space for 10 people
- Hotel to extend a gift certificate for the Scholarship winner for (2) comp nights with breakfast
- 20% AV discount on rental if Encore is preferred provider
- one Comp premier suite for 4 nights, one premier suite at group rate for three nights, two one-bedroom junior suites at group rate.
- four amenities for VIP's (selection of Chef's choice), and concierge lounge access for up to ten VIP's.
- parking rates – 20 self, 29 valet
- no plaque for scholarship winner

Budget needs: None

Suggestions for future: None

Current Committee members: Mark Loux, Eric Spandl, Greg Dahl, Stott Howard

Suggestions for future committee members: None