



NCWSS Board Meeting Agenda
Beck Ag Center/ Purdue Diagnostic Center
4540 U.S. 52 West
West Lafayette, IN 47906

July 27, 2016 at 7:00 pm

Conference call information: 1-989-633-1166 Access #: 714 522 136

1. Call to Order (President): Anita Dille
2. Roll Call (Secretary-Treasurer): David Simpson
3. President Report: Anita Dille
4. President-Elect Report: Greg Dahl
5. Vice President Report: Christy Sprague
6. Past President Report: John Hinz
7. Secretary-Treasurer Report: David Simpson
8. Proceedings Editor Report: Greg Kruger
9. Communications Editor Report: Vince Davis
10. WSSA Representative: Reid Smeda
11. CAST Representative: Lowell Sandell
12. Executive Secretary Report: Phil Banks
13. Director of Science Policy: Lee VanWychen
13. Strategic Planning Committee
& Regional Directors: Dawn Refsell
14. Extension: Amit Jhala
15. Industry: Paul Marquardt
16. Resident Education
NCWSS Weed Contest: Mark Bernards
17. Graduate Student: Doug Spaunhorst
18. Old Business:
15. New Business:
16. Adjourn

ROLL CALL July 27, 2015 Summer Board Meeting

Roll call [12 Quorum] Roll call at 7:03. Eleven present at roll call.

Officers	Names	July 27
President	Anita Dille	Yes
President Elect	Greg Dahl	Yes
Vice President	Christy Sprague	Yes
Secretary-Treasurer	David Simpson	Yes
Editor-NCWSS Proceedings	Greg Kruger	Yes
Editor-Newsletter	Vince Davis	Yes 7:25 pm
WSSA Representative	Reid Smeda	Yes
CAST Representative	Lowell Sandell	Yes
Past President	John Hinz	Yes
Executive Secretary	Phil Banks	Yes
Director of Science Policy	Lee VanWychen	No

Directors at Large	Names	July 27
Strategic Planning	Dawn Refsell	Yes
Extension	Amit Jhala	Yes 7:25 pm
Industry	Paul Marquardt	No
Resident Education	Mark Bernards	Yes
Graduate Student	Doug Spaunhorst	Yes
Central Region	Tim Trower	No
Western Region	Brady Kappier	No
Eastern Region	Eric Ott	No

Minutes:

Meeting called to order at 7:13 pm.

Quorum of 12 was not present. Meeting initiated as Executive board meeting. Anita Dille reviewed agenda and began her report.

Board members Vince Davis and Amit Jhala arrived at 7:25 pm thus providing a quorum required for the board meeting.

Bryan Young provide report on the NCWSS weed contest. Total of 97 students at contest which similar to 2014 in IA. 39 undergraduates and 58 graduate students. 14 graduate teams. 9 undergraduate teams. Expenses include approximately 8,000 for meals plus rental for building. Estimate \$10,000 budget. DTC fixed cost for rental of facility still to be added to cost. A single bill be come from Purdue for cost of weed contest will be submitted to Phil.

Board members provided verbal reports of activities since December 18, 2015 and written versions of the reports provided below. Board members made several motions during submission of their reports. Summary of Motions are provided below.

Discussions on the Technology Event on Thursday morning of the annual meeting in Des Moines. The board

recommended that a walk in registration fee of \$50 for the half day attendance fee for Thursday's Technology Workshop at 2016 NCWSS meeting be established. Program chair will provide update on Technology Event and work with Phil Banks to arrange for walk up registration.

Strategic planning has developed process for granting CCA credit for attending NCWSS meeting. Strategic Planning Committee will finalize the process for receiving CCA credit. Suggesting made for the Strategic Planning Committee to consider the need for a director of scientific policy.

Upon completion of board member reports, no new business was brought forward at this time.

Greg Dahl moved to adjourn. John Hinz second. Motion passed.

Meeting adjourned at 9:40 pm

Summary of Motions:

John Hinz made motion proceed with negotiations of NCWSS Executive Secretary final contract with Interactive Management Incorporation, Inc, Gary Cooper". Terms still to be negotiated. Greg Kruger second motion. Discussion: Transition targeted to begin at the 2016 NCWSS and transition should be 1-2 months. Anticipate negotiating the timing of the start of the contract. Clarification of length of contract is a 4 year contract (Dec 1, 2016 to Dec 1, 2020) with an out clause of 120 days. Motion passed with a unanimous vote of yes.

Dawn Refsell moved to have the NCWSS host the Women in Weed Science Networking Breakfast at the 2016 through 2019 annual NCWSS meeting and to sponsor the meal. Second by Greg Kruger. Motion approved with unanimous vote. Finance committee to include funding in future budgets through 2019 at which time the board will review the program and determine need to continued funding.

John Hinz move to support the Upper Midwest Invasive Species Conference (UMISC), Oct 17-19, 2016 and be a non-profit exhibitor for \$400. NCWSS will be provided one table for display during conference plus one-full conference registration fee (\$235 value), logo placement in program and on the website. Contact person is Mark Renz, Univ. of Wisconsin. Greg Dahl second motion. Vote was unanimous vote. Anita Dille to contact Mark Renz.

Greg Dahl moved that NCWSS approve the development of a phone APP for the NCWSS 2016 annual meeting with costs not to exceed \$4,000. John Hinz second motion. Vote was unanimous vote.

David Simpson moved to accept the meeting minutes. Second by Greg Kruger. Minutes from 2015 meeting was unanimously approved.

John Hinz moved for to keep registration fees the same as 2015 which is \$240 for regular members, \$170 for Fellows and \$120 for student members. Lowell Sandell second. Unanimously approved.

NCWSS Committee and Officer Reports

President

Anita Dille

Date of Preparation July 25, 2016

Officer/committee Activities during the Year:

It has been my pleasure to serve as NCWSS President since our annual meeting in December 2015 in Indianapolis. Committee assignments and chair persons for 2016 were updated and posted to the website in early April. Two main areas of effort: 1) searching for new NCWSS Executive Secretary and 2) serving on WSSA Science Policy committee and representing the NCWSS to comment and endorse letters on policy issues.

Executive Secretary Search:

- A Request for Proposals to provide Executive Secretary services for the NCWSS along with services for the WSSA and other regional and affiliated societies also looking for business manager or executive secretary was reviewed by all groups, and was sent out with proposals due January 4, 2016. Proposals could be submitted for part(s) of the RFP, or for all services across WSSA and regional and affiliated societies.
- At the WSSA meeting in February 2016, representatives from each weed science society met to review all applications and narrow the list to those for further consideration. It was strongly agreed among all representatives to find a company that would provide services for all organizations, in order to enhance synergies and efficiencies among the groups.
- The list was narrowed to four organizations, and a conference call was set up on Monday March 14, 2016 to have up to 1 hr conversation with each company. Based on these conversations, questions, and some additional information, it was narrowed down to two organizations.
- On Thursday, June 2, 2016, we had a face-to-face meeting in Kansas City, MO with Gary Leeper, President of Interactive Management Inc., from Westminster, CO and with Charles Hall and members of his group from Association Services Group (ASG), from LaGrange GA.
- As a result of the June 2, 2016 meeting, the general consensus from each society was to choose Gary Leeper, IMI.

In general, Interactive Management Inc., is a small company based in a suburb of Denver (Westminster) CO. The President is Gary Leeper, and he has a staff of about 7 individuals. It is an AMCI-accredited Association Management Company, demonstrating compliance with the highest industry standards. It is a family-owned company and in operation since 1973. Examples of current clients: Rocky Mountain Agribusiness Association (RMAA) for 26 years, Rocky Mountain Golf Course Superintendents Association for 14 years, In the proposal, the proposed Association Management annual fee is \$26,004, paid in monthly installments of \$2,167. Additional costs would be related to travel expenses to attend NCWSS meetings / conferences, copies, printing, postage, phone and other authorized expenses incurred on behalf of NCWSS interests.

WSSA Science Policy Committee:

I represent the NCWSS on this WSSA committee. Lee Van Wychen, Director of Science Policy shares and requests information from this committee, as well as comments and feedback from me as a representative of the NCWSS. There have been a number of significant policies that affect the weed management activities we support for our industry and farmers.

I have commented, endorsed and signed off on the following as NCWSS President:

- May 30, 2016 – comments on the following docket id: EPA-HQ-OPP-2012-0919, “Proposed registration decision for the new active ingredient halauxifen-methyl”. Key issue was concerns over the proposed tank mix prohibition for any halauxifen-methyl uses. If synergism is a real thing, then there is a concern on drift of tank mixtures to non-target plants and causing more harm.

- May 31, 2016 – comments on the following docket id: EPA-HQ-OPP-2016-0187, “Dicamba: New use on herbicide-tolerant cotton and soybean”. Key issues were concerns over proposed registration of dicamba that affected other weed management practices beyond just dicamba specific issues.
- May 31, 2016 – comments on the following docket id: EPA-HQ-OPP-2016-0187-0012, page 7-16, “Addendum – Resistance Management Plan” as part of the “Dicamba: new use on herbicide-tolerant cotton and soybean”. It was requested to have this addendum be a separate Pesticide Registration (PR) notice rather than be included with the main docket for dicamba. We provided several comments and feedback on the EPA 11-element resistance management plan.
- June 6, 2016 – signed letter sent to US House of Representatives and US Senate in support of including H.R. 897, the Zika Vector Control Act, in any final conference agreement for H.R. 2577. This was to eliminate the redundant permit needed for an already registered pesticide application, that is an NPDES fix.
- February 19, 2016, letter to the Ag Appropriations Committee to fully fund USDA AFRI at \$700 million.

Other letters that have come through the SPC,

- May 9, 2016 on the “Proposed Interim Mitigation Decisions: paraquat dichloride”. Several mitigation measures were proposed by EPA to minimize human impacts, and WSSA responded to these points with either support or concerns raised.

Other discussion items:

Request from Mark Renz, Univ. of Wisconsin-Madison to be a sponsor for the Upper Midwest Invasive Species Conference, to be held October 17-19, 2016 in La Crosse, WI.

David Shaw, Mississippi State University, and Chair, WSSA Herbicide Resistance Education Committee, contacted all regional weed science societies for help and partnership in conducting local workshops focused on managing herbicide resistance. Plans are for workshops to be held during the fall of 2016, gathering information prior to next Herbicide Resistance Summit to be held in fall of 2017.

NCWSS Committee and Officer Reports

President Elect – Greg Dahl

Date of Preparation: July 25, 2016

Officer/committee Activities during the Year:

I have been working on planning for the North Central Weed Science annual meeting in Des Moines, IA in December 2016.

I met with Mike Owen, Local Arrangements Committee Chair, John Hinz, Past President and the hotel staff for the Marriott Des Moines, Downtown hotel on February 22, 2016. We had a great visit, went through an outline of meeting needs and timings, and I have great confidence that the Local Arrangements committee and the hotel will provide a great meeting experience for us.

Program planning:

Placed the “Call for Papers and Posters” in the NCWSS Summer 2016 newsletter. The web site to submit papers and posters will open the end of July 2016. Titles are due on Friday, September 9, 2016. Abstracts are due on Friday, November 11, 2016. I much appreciated the help of the President, Executive Secretary and Greg Kruger.

Visited with President Dille, Vice President Sprague, Past President Hinz, Executive Secretary Banks, Local Arrangements Committee Chair Owen, Strategic Planning Committee Chair Refsell, and Graduate Student Committee Chair Doug Spaunhorst and others about meeting needs and symposia, keynote speakers and arrangements.

The General Session will feature President Dille. I am looking for a keynote address and will have one soon.

There will be a Technology event on Thursday morning. Travis Legleiter will lead this event. I am quite excited to have this as an offering to our members. I encourage our members to attend this on Thursday.

There will not be a Graduate Student Symposium this year. Dupont will have a tour event on Monday and Dow will have a Graduate Student luncheon on Tuesday.

I am looking to have at least one more symposium for the meeting and am entertaining several other topics.

President Dille would like to continue the “Women in Weed Science networking breakfast on Wednesday morning. I support this event.

I have done some exploring of an APP for the North Central Weed Science meeting. I am willing to work to put the program into an APP.

There will be a “What’s new in Industry Session” Wednesday afternoon and an Industry Breakfast on Thursday morning.

Other activities.

I was involved in several of the responses to EPA regarding dicamba registration issues and other registration issues. I recommended that NCWSS support WSSA positions on those issues.

Motions/Action Items:

Request approval and finances to have an APP for the NCWSS 2016 annual meeting. This is a new feature. The printed program will be available.

Request financial support from the NCWSS to sponsor breakfast for the Women in Weed Science networking breakfast.

Vice President

Christy Sprague

Date of Preparation: July 24, 2016

Officer/committee Activities during the Year:

The primary activity that I have been involved with has been interacting with the WSSA Public Awareness Committee. This committee has a conference call every other week and discusses and reviews relevant Weed Science issues and research that are issued through press releases to the membership and general public. Some of the news releases and/or issued since January have included:

- **WSSA Survey Ranks Palmer Amaranth as the Most Troublesome Weed in the U.S., Galium as the Most Troublesome in Canada**
- **Scientists Say Herbicide Resistance Predates Genetically Engineered Crops by 40 Years**
- **WSSA Calculates Billions in Potential Economic Losses from Uncontrolled Weeds**
- **Weed Scientists Recommend Proactive Steps to Promote Pollinator Habitats**
- **Facts About Weeds: The Bullies of the Plant World** (factsheet)

Press releases can be accessed through the WSSA website.

I have also reviewed, commented, and supported letters that have been submitted to the EPA on behalf of the NCWSS.

Past President

John Hinz

Date of Preparation: July 27, 2016

Officer/committee Activities during the Year: I sat in on the phone interviews to hire a new executive secretary. I was unable to attend the face to face interviews.

I wrote 2 newsletter articles for 2016.

Motions/Action Items: none.

Secretary/Treasurer

David Simpson

Date of Preparation: July 19, 2015

Officer/committee Activities during the Year:

Minutes for the December 9th 2015 meeting presented.

Minutes from December 9, 2015

1. Call to order (President): Anita Dille
2. Roll call (Secretary-Treasurer) David Simpson
3. President: Anita Dille
4. Past President: John Hinz
5. Resolutions Aaron Hager
6. Local Arrangements: Ryan Lee
7. Finance, Steering and Policy David Simpson
8. Resident Education Mark Bernards
9. Extension Amit Jhala
10. Strategic Planning Dawn Refsell
11. Old business:
12. New business:
13. Adjourn

ROLL CALL December 9, 2015 Annual Board Meeting

Roll call [12 Quorum] Roll call at 7:02 pm. 15 present at roll call.

Officers	Names	Dec 9
President	Anita Dille	yes
President Elect	Greg Dahl	yes
Vice President	Christy Sprague	yes
Secretary-Treasurer	David Simpson	yes
Editor-NCWSS Proceedings	Greg Kruger	yes
Editor-Newsletter	Vince Davis	yes
WSSA Representative	Reid Smeda	yes
CAST Representative	Lowell Sandell	Arrived at 7:08
Past President	John Hinz	yes
Executive Secretary	Phil Banks	yes
Director of Science Policy	Lee VanWychen	yes

Directors at Large	Names	Dec 9
Strategic Planning	Dawn Refsell	Arrived 7:0
Extension	Amit Jhala	yes
Industry	Paul Marquardt	no
Resident Education	Mark Bernards	yes
Graduate Student	Douglas Spanhorst	yes
Central Region	Tim Trower	yes
Western Region	Brady Kappler	yes
Eastern Region	Eric Ott	no

Minutes:

Meeting called to order at 7:02 pm.

President report: Anita Dille. Wrapping up the program through Thursday afternoon. Collecting information new chairs and ideas for symposium. Some program pages missing. The herbicide pages were of program were removed on purpose. Feedback to have more blank pages and to have the map in the program. Women's in Weed Science was a success and appreciate the support for the breakfast. Susanne Wasson from Dow AgroSciences was the presenter.

Past president: John Hinz. Two carry over for distinguish awards. Resident Education Committee has accepted responsibility for the Graduate Student Travel Awards.

Resolutions: Anita present the resolutions to recognize 1) the hotel, 2) local arrangements, 3) graduate and undergraduate student poster and paper contest judges, 4) Weed Science Contest hosts and 5) Glenn Nice support of the Newsletter. Phil requests to hold the resolution on the hotel until we determine the how the relocation. John moved to approve resolution 2, 3, 4 and 5. Greg Kruger second. Resolution 2 through 5 are approved.

David Simpson present budget to the board. Increases for the potential overlap of executive secretary roles with new hire and increase in Weed Contest funding from \$8,500 to \$20,000. Christy Sprague moved to accept budget. Mark Benard second. Motion passed.

Mark Bernards for the Resident Education committee will create a subcommittee to be chaired by the past chair of the Resident Education committee to select the winners of the Graduate Student travel award. Will bring forth a proposal to the board for MOP changes to address criteria for grading papers and poster. Will bring proposal for on whether the students can participate in the both poster and paper contest. Committee will provide a list of weeds for the Summer Weed Contest.

Weed contest will be held at Purdue University on July 27 and 28th, 2016.

Amit Jhala from Extension committee has discussed the student video contest and has developed criteria for the contest. Contest will be open to both undergraduate and graduate students. Proposed to have deadline of November 1, 2016 for submission. John moved that the society sponsors a first and second prizes for 2 categories at value of 200 and 100 dollars for two categories. Gregg Dahl second. Approved.

Dawn Refsell from Strategic Committee has discussed possible symposium items and presented to Greg Dahl. Using an app for the program was discussion. Consider opportunities to promote the meetings with our industry customers and consider CCA credits for attending. Challenge is the documenting the CCA credit.

Lee Van Wychen provided report to the board on Enlist Duo registration, Herbicide Resistance Education, Areawide IPM bill, Dallas Peterson, Donn Shilling Meetings on Capitol Hill, Foundation for Food and Agricultural Research, Glyphosate safety, Problems with the Press, Concerns/comments on EPA Worker Protection Standards final rule, WOTUS/NPDES, FY 2016 approps, NISAW, National Weed Survey. See detail report below.

New Business

Reid Smeda raised a question on whether there can be better synergy between the MPIN and NCWSS societies. Discussion but no action items brought forward.

John Hinz moved and Gregg Dahl second to adjourn the meeting.

Action Items:

Greg Dahl has responsibility to follow up the cost and logistics of the having an meeting app developed for the NCWSS.

North Central Weed Science Society: 2016 Budget (12/1/15-11/30/16)

		2016
INCOME		
Program Services		
	Membership Dues	\$14,000.00
	Sustaining Membership	\$30,500.00
	Investment Income	\$2,500.00
	Miscellaneous	0
	Total	\$47,000.00
PUBLICATIONS		
	Proceedings	200
	Weed DVD	200
	Weeds of Midwest & Canada	750
	Total	\$1,150
ANNUAL MEETING		
	Registration	86,000
	Total	\$86,000.00
	TOTAL INCOME	\$134,150.00
EXPENSES		
Program Services		
	Postage	50
	Insurance, Legal	1200
	Office Supplies	250
	Newsletter	750
	Organization Dues (CAST)	1500
	CAST publication	5000
	Web Administrator	4000
	Travel	5000
	Management Fee	25,000
	Stipend-Secretary/Treasurer	750
	WSSA Science Director	12,263
	Weed Contest	20,000
	Scholarships	6,000
	Miscellaneous	2,500
	Overlap for Executive Secretary	12,500
	Total	96,763.00
PUBLICATIONS		
	Weed ID DVD	50
	Stipend - Proceedings Editor	750
	Total	800
ANNUAL MEETING		
	Annual Meeting Expenses	\$48,000
	Total	\$48,000.00
	TOTAL EXPENSES	\$145,563.00
	Gain (Loss)	(\$11,413.00)

Proceedings Editor

Greg Kruger

Date of Preparation: July 27, 2016

Proceedings Editor Activities during the Year:

Proceedings from the 2015 meeting posted in January. Everything is set for this year. The abstracts will be due on Friday November 11th.

Motions: None at this time

Executive Secretary Report

Phil Banks

Date of Preparation: 7/21/16

Executive Secretary Report for Summer 2016 Board Meeting:

Final 2014 Annual Meeting Numbers: Final attendance for the Indianapolis meeting was: 281 regular members, 18 Fellows and 102 students (402 total). The MIPN registration was 126 (12 Students, 16 one day registrations, and 98 full registrations). Total income from the MIPN registration was \$18,000.00 and after expenses MIPN and NCWSS each received \$5,456.57. For the Industry Breakfast there were 76 paid. There were 43 attendees for the Women in Weed Science breakfast. Approximately 51 members that did not attend the annual meeting have renewed their membership as of July 21, 2016. Total current membership in NCWSS is 504 (56 Fellows; 345 regular members; 103 students).

Finances: The current net worth of the NCWSS and the investment status is attached as well as the net worth at the end of the fiscal year (November 30, 2015) and the cash flow from the past fiscal year. NCWSS has a current net worth of approximately \$435,521.66, which is approximately \$ 18,500.00 more than this time last year. In the summer of 2014 we bought 5 CDs shown in the attached spread sheet with the strategy to convert all to 5 yr CDs as each matured. This laddering of the CDs will maximize interest income over the next 5 years. There is a considerable amount of money in the money market account (\$83,030.82) that is earning 0.3% interest. The assets in the money market and checking accounts is approximately equal to our annual operating expenses.

Other than required payments to support the Director of Science Policy (\$ 7,779.06) due in October, Web Master (\$ 1,000 for one quarter) and the quarterly (1) management fee (total of \$6,250.00) we will not have any other significant expenditures through the fiscal year (November 30). Income from registration for the 2016 meeting will begin in September and Sustaining Member dues will begin in November.

Other Activities: I have worked with the Anita Dille and others in the search for a new Executive Secretary. The Board needs to select and approve the new Executive Secretary and I will work to make a smooth transition over the next several months.

Preparation for 2016 Meeting: The Board needs to set the registration rates for the Des Moines meeting. I recommend no change in fees from last year (\$240 for regular members, \$170 for Fellows and \$120 for student members). Registration for the 2016 will open on approximately August 1, 2016.

Motions:

Net Worth - As of 11/30/2015

	11/30/2015
Account	Balance

ASSETS

Cash and Bank Accounts

CD # 6	40,240.36
CD #3	44,253.59
CD #4	44,121.73
CD #5	40,160.16
CD #7	40,320.64
Checking	94,849.02
Merrill Lynch Money Market	0
Money Market	82,885.60
RBC Account	111,703.34
TOTAL Cash and Bank Accounts	498,534.44
TOTAL ASSETS	498,534.44

NCWSS Net Worth - As of 7/21/2016

Account

ASSETS

Cash and Bank Accounts

		2yr @ 0.6% Matures	
CD # 6	40,360.75	9/2016	Will renew for 5yr
CD #3	44,521.29	5yr @ 1.2% Matures 8/2019	
CD #4	44,321.91	4yr @ 0.9% Matures 8/2018	
CD #5	40,420.49	5yr @ 1.3% Matures 9/2020	
CD #7	40,481.48	3yr @ 0.8% Matures 9/2017	
Checking	29,873.11		
Money Market	83,030.82		0.30%
RBC Account	112,511.81		
TOTAL Cash and Bank Accounts	435,521.66		
TOTAL ASSETS	435,521.66		

OVERALL TOTAL	435,521.66
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North Central Weed Science Society Cash Flow
12/1/2014 through 11/30/2015

Category

INFLOWS

Annual Meeting Income	107,510.37	
Capital Gains	88.03	RBC
Div Income	3,422.66	RBC
Interest Inc	1,912.81	
Renewals	1,810.00	Membership
Royalty On Proceedings	240	
Security Value Change	-6,155.94	RBC
Sustaining Member Dues	20,000.00	
Weed Contest	-8,500.00	Student activity
Weeds Of Midwestern US & Canada	1,163.11	
TOTAL INFLOWS	121,491.04	

OUTFLOWS

Annual Meeting Expense	73,457.09	
Bank Charge	3	
CAST	2,500.00	Support for publication
CAST Dues	1,500.00	
Corporation Annual Fee	10	State of Illinois
Director Of Science Policy	7,779.06	To Weed Science Society of America
Insurance	1,204.52	
Management Fee	25,000.00	Marathon-Agric. Consulting
RBC Fee	1,426.66	
Stipend	2,250.00	Editors
Student Awards	3,700.00	
Supplies	109.56	
Tax Preparation	766.36	
Travel For WSSA Rep.	1,040.06	
Travel To Annual Meeting	857.47	
Travel To Summer Meeting	906.75	
Web Master	4,000.00	Annual fee for maintenance
Website Design	5,200.00	Website redesign
TOTAL OUTFLOWS	131,710.53	

OVERALL TOTAL **-10,219.49**

WSSA Representative Report

Reid Smeda

Date of Preparation: July 23,2016

Officer/committee Activities during the Year:

A. WSSA Executive Board for February 2016– February 2017

Board Membership	Name
Past-President	Dallas Peterson
President	Kevin Bradley
President-elect (Program chair)	Janis McFarland
Vice-President	Scott Senseman
Secretary	Hilary Sandler
Treasurer	Rick Boydston
Members-at-Large	Daniel Kunkel, Andrew Kniss
Chair, Constitution and MOP	Mark Bernards
Director of Publications	Sarah Ward
Executive Secretary	Joyce Lancaster
Director of Science Policy	Lee Van Wychen
www.wssa.net	

B. Results of WSSA meeting on February 11, 2016 in San Juan

1. Total registration in San Juan meeting was 723.
2. Meeting apparently lost money due to high cost of AV equipment

C. WSSA 2016 Summer Board Meeting

Attended July 12-13 in Tucson, AZ at the Hilton El Conquistador Resort

D. Outcomes from Summer 2016 BOD meeting

1. WSSA Annual Membership dues will remain at \$175 for North American members, be lowered to \$175 for non-North America members (result of journals only being available on-line; no shipping costs), and remain \$50 for students.
2. Several proposals received from prospective companies to serve WSSA as Executive Secretary. BOD unanimously approved a three year contract with Interactive Management Incorporated (IMI); cost will be a bit over \$100,000 annually.
3. Joyce Lancaster reported WSSA currently has 1,155 members; membership is increasing in the emeritus category, up to 218 in 2016 from 187 in 2011. For the period ending May 31, 2016, the General Fund stood at \$1,002,404.37 and the Endowment Fund at \$393,506.92.
4. The final journal issue by WSSA partnership with Allen Press will be IPSM 9(4) in December 2016. On-line only publication of WSSA journals by Cambridge University Press (CUP) will begin in January 2017 with Weed Science 65(1). Remaining issues of journals and books will be removed from storage with Allen Press, undesirable material disposed of, and remaining material sent to CUP for storage.
5. Iowa State University was approved to approach for establishment of a WSSA print archive. Sarah Ward is working with Mike Owen at ISU to determine feasibility.
6. BOD approved both an oral paper and poster contest as regular events for graduate students at WSSA annual meetings. Darrin Dobbs et al. drafted contest rules that were also approved.

7. Annual registration cost for WSSA meeting in 2016 will be increased to \$400 for Early Bird, \$500 for late registration, and \$600 for on-site registration.
8. Seven symposium proposals were received for the 2017 annual meeting. Board reviewed and ranked them. Janis McFarland will work with Joyce to accommodate up to five of the proposals.
9. WSSA Journals reported latest release of Impact Factors:
IPSM = 1.21; Weed Technol. = 1.487; Weed Sci. = 1.993

CAST Report

Lowell Sandell

Date of Preparation: July 26, 2016

Officer/committee Activities during the Year:

As a reminder, the objective of CAST is to communicate good science to the public and policy makers. If you have ideas for proposals, please communicate these ideas to the cast representative. There are three work groups within CAST; Plant Science, Animal Science, and Food Science. NCWSS rep's time is devoted to the Plant Science work group.

- Participated in the scheduled plant working group phone conferences.
 - o Jan. 28, 2016, Feb. 25, 2016, March 31, 2016

The following are CAST completed and scheduled activities in 2016:

- In a recent election at the Council for Agricultural Science and Technology (CAST), Dr. Nancy Reichert was chosen as the President-Elect for 2016-2017. She will officially assume her responsibilities at the conclusion of CAST's Fall Board Meeting in October. Dr. Reichert has represented SIVB on the CAST Board of Representatives since 2013, and as a member of the Food Science and Safety Work Group, she recently had an issue paper proposal approved that she is liaison and champion for. She is also an active member of the 2016-2020 Strategic Plan Committee.
- The Impact of Labeling publication that was released last October (Issue Paper 56) has been translated into Spanish and was released in June.
- The CAST Annual Fall Board Meeting will take place in St. Louis, Missouri, October 25–27.

Motions:

Director of Science Policy Report

Lee Van Wychen

Date of Preparation: July 26, 2016

Officer/committee Activities during the Year:

Discussion Items

1. Tank Mix Prohibitions / Herbicide Synergism Uncertainties
2. EPA Herbicide Resistant Management Plan / Labeling /MOA Classification
3. Draft Ecological Risk Assessments for Triazines
4. Glyphosate- IARC/NIH funding
5. Foundation for Food and Agriculture Research (FFAR) update
6. FY 2017 USDA Appropriations
7. WOTUS Update
8. NPDES Fix Bill Update
9. National Survey of Most Common and Troublesome Weeds
10. Milkweed and Monarchs
11. NISAW & ISAC Update
12. Paraquat Mitigation Comments Submitted
13. GMO Food Labeling Bill to Become Law

1. Tank Mix Prohibitions / Herbicide Synergism Uncertainties

The National and Regional Weed Science Societies (WSSA, APMS, NCWSS, NEWSS, SWSS, & WSWS) commented on the tank mix prohibitions proposed by EPA for two new herbicide registrations: 1) dicamba-tolerant cotton and soybean; and 2) halauxifen-methyl. The comment period for both those registrations closed at the end of May. EPA is considering whether they will continue to propose tank mix prohibitions on all new registrations and re-registrations going forward due to uncertainty about potential tank mix synergism effects on non-target organisms.

We're opposed to the proposed tank mix prohibitions because the benefits of tank mixing outweigh any "uncertainty" about potential tank mix synergism effects on non-target organisms. EPA recognizes the benefits from tank mixes and states: "*The practice of tank mixing can result in **significant economic benefits to the grower** by allowing control of a wider variety of pests in a single application without incurring the expense of sequential applications. Additionally, by reducing the number of visits to the agricultural field, the grower is also **reducing fossil fuel use** and emissions from large agricultural equipment, **as well as the potential exposure to pesticides** that can result from multiple visits to the same area being treated. It is also widely accepted that the practice of **mixing products with different modes of action is essential to the management of weed resistance**. Because weed resistance is known to have a very costly impact to overall crop yields, which in turn negatively impacts growers' harvests and the price of commodities to the consumer, tools that aid in the prevention of resistance are considered to be a very important benefit to agriculture"*.

Yet, despite these recognized benefits, EPA has proposed a tank mix prohibitions for both dicamba and halauxifen-methyl. In addition, EPA's "uncertainty" about the effects of herbicide synergism on non-target organisms is a divergence from the [2013 National Academy of Sciences \(NAS\) report: "Assessing Risks to Endangered and Threatened Species from Pesticides"](#). The NAS report is the gold standard for how EPA and the Fish and Wildlife Service are supposed to make endangered species assessments. The NAS report recognizes that "*The toxicity of a chemical mixture probably will not be known, and it is not feasible to measure the toxicity of all pesticide formulations, tank mixtures, and environmental mixtures. Therefore, combined effects must be predicted on the basis*

of models that reflect known principles of the combined toxic action of chemicals”. The 2013 NAS report emphasizes that the complexity of assessing the risk posed by chemical mixture (i.e. tank mixing herbicides) “**should not paralyze the process**”.

The National and Regional Weed Science Societies comments are at: <http://wssa.net/wp-content/uploads/Weed-Science-Societies-comments-on-dicamba.pdf> and <http://wssa.net/wp-content/uploads/Weed-Science-Societies-comments-on-Halauxifen-methyl.pdf>

The tank mix prohibition situation does not appear to be going away anytime soon and is impacting all pest management disciplines. This started with a patent office claim on Enlist Duo from last fall. Registrants have filed 100’s of herbicide synergism patents with the Patent Office going back to the 1960’s to “control the business space”. The first one was approved by the Patent Office in 1969 (before EPA). We need to show EPA that the benefits of tank mixes with multiple herbicide MOA’s outweigh any potential synergistic effects from a tank mix on non-target organisms.

Bryan Young, Purdue, gave an excellent presentation to EPA staff on June 1 in a talk titled “Herbicide Interactions: A Weed Science Perspective” (please see attached powerpoint). It was standing room only with over 50 people in the room. Bryan is also developing a symposium for the WSSA meeting in Tucson, AZ in 2017 titled “Understanding and Reducing the Impact of Herbicide Off-Site Movement: Technologies and Tank Mix Interactions”.

Another possibility to address this is developing some WSSA white papers or possibly a CAST issue paper that would address the benefits of herbicide mixtures. These papers would address economics, herbicide resistance management, practical weed management, sustainability, and environmental benefits of tank mixing. Some parts might be a review while others (e.g. economics) may be some new analysis.

2. EPA Herbicide Resistant Management Plan / Labeling

On May 31, the National and Regional Weed Science Societies (WSSA, APMS, NCWSS, NEWSS, SWSS, & WSWS) submitted comments on EPA’s proposed herbicide resistance management plan, which was first proposed as part of the dicamba-tolerant cotton and soybean registrations. EPA’s proposal presents a significant change in how resistance is monitored, mitigated and communicated to weed management stakeholders.

While the National and Regional Weed Science Societies complimented EPA on these proactive resistance management measures, we provided many suggestions and recommendations on how to improve the plan. It will be important for EPA to communicate to the weed management community what their expectations are for the plan, how much it will cost to implement, and how will success (and failure) be measured. In addition, we consider the plan a first iteration that will need adaptation and evolution with our experience with it. The comments are at: <http://wssa.net/wp-content/uploads/Weed-Science-Societies-Comments-on-EPA-11-element-Resistance-Mgmt-Plan.pdf>

One of our concerns was that this was included as part of the proposed dicamba registration and not as a separate Pesticide Registration (PR) Notice by itself. However, just as the dicamba registration comment period was closing at the end of May, EPA did issue two separate PR Notices for the Resistance Management Plan on June 2nd. The first PR Notice (PR Notice 2016-X) is titled “[Draft Guidance for Pesticide Registrants on Pesticide Resistance Management Labeling](#)” and the second PR Notice (PR Notice 2016-XX) is titled “[Draft Guidance for Herbicide Resistance Management Labeling, Education, Training, and Stewardship.](#)”

Draft [PR Notice 2016-X](#), which revises and updates [PR Notice 2001-5](#) (the first labeling update in 15 years), applies to all conventional agricultural pesticides (*i.e.*, herbicides, fungicides, bactericides, insecticides and acaricides). The updates in PR Notice 2016-X focus on pesticides labels and are aimed at improving information about how pesticide users can minimize and manage pest resistance. Updates fall into the following three categories: (1) additional guidance to registrants

and a recommended format for resistance-management statements or information to place on labels; (2) references to external technical resources for guidance on resistance management; and (3) instructions on how to submit changes to existing labels in order to enhance resistance-management language.

Draft [PR Notice 2016-XX](#), which only applies to herbicides, communicates EPA's current thinking and approach to address herbicide-resistant weeds by providing guidance on labeling, education, training, and stewardship for herbicides undergoing registration review or registration (*i.e.*, new herbicide actives, new uses proposed for use on herbicide-resistant crops, or other case-specific registration actions).

The National and Regional Weed Science Societies will be submitting comments for both PR Notices. The first PR Notice has some discrepancies in the definitions used among the pest management disciplines that need to be corrected. There is also the subject of trying to get the entire weed science community to use the same herbicide MOA classification scheme, whether that be HRAC's or WSSA's. Preliminary discussion with relevant stakeholders indicated that this is something we should not rush into, but is a possibility over the long term.

For the second PR Notice, we will resubmit our comments for EPA's proposed herbicide resistance management plan, which was first proposed as part of the dicamba-tolerant cotton and soybean registrations. One thing we might do differently is submit separate comments for herbicide resistance management in aquatic systems. The main issue is that using full label rates is not often recommended in aquatic systems because of the nature of treating a volume of water and for maintaining flexibility in species selectivity and non-selectivity. In addition, NPDES regulation of aquatic pesticide applications mandates that the lowest possible discharge be conducted.

To view and provide comments on these draft Pesticide Registration Notices and any supporting material, please visit [EPA-HQ-OPP-2016-0242](#) for PRN 2016-X and [EPA-HQ-OPP-2016-0226](#) for PRN 2016-XX. The comment period for each closes on **August 2, 2016**, however WSSA and others have asked for a **60 day extension**. As of July 25, EPA has not verified if they will extend the comment period.

3. Draft Ecological Risk Assessments for Triazines

Below are links to the draft ecological risk assessments for atrazine, propazine and simazine and their supporting documents.

- Atrazine ([EPA-HQ-OPP-2013-0266](#))
 - [Preliminary Ecological Risk Assessment for Atrazine](#)
 - [Supporting Documents](#)
- Propazine ([EPA-HQ-OPP-2013-0250](#))
 - [Preliminary Ecological Risk Assessment for Propazine](#)
 - [Supporting Documents](#)
- Simazine ([EPA-HQ-OPP-2013-0251](#))
 - [Preliminary Ecological Risk Assessment for Simazine](#)
 - [Supporting Documents](#)

There are significant concerns with EPA's draft ecological risk assessment and the models they used, especially for atrazine. EPA used data and findings previously deemed "flawed" by EPA's 2012 Scientific Advisory Panel (SAP) on atrazine. EPA is recommending aquatic life level of concern (LOC) be set at 3.4 parts

per billion (ppb) on a 60-day average. The EPA's current LOC for atrazine is 10 ppb. However, scientific evidence points to a safe aquatic life LOC at 25 ppb or greater. The proposed level cuts average field application rates down to approximately 1/4 pound per acre – which effectively eliminates it.

The National and Regional Weed Science Societies will be commenting on the ecological risk assessments for the triazines. **Is APMS aware of any concerns expressed about the aquatic use of simazine?** The 60-day comment period closes on August 5, 2016. However, I believe a 60 day extension was just granted so the comment period will now end on **October 4, 2016**.

4. Glyphosate- IARC/NIH funding

Advocacy groups in Europe used the International Agency for Research on Cancer's (IARC) report on glyphosate to lobby member state governments to block the EU's reauthorization of glyphosate. As discussed previously, the IARC study conclusions are the result of a significantly flawed process. Of the 900+ things IARC has analyzed, IARC has determined that they all could cause cancer (except yoga pants), which is often at odds with the conclusion of U.S. regulators. EPA's Cancer Assessment Review Committee completely discredits IARC findings in their review of glyphosate (but EPA has been sitting on that report since Oct. 1, 2015- and is a whole other issue). **The problem is this- the National Institutes of Health (NIH) gave IARC \$859,000 in U.S. taxpayer dollars to conduct its flawed study.** Any study by IARC, regardless of its credibility, benefits from association with the U.S. NIH and its reputation as a premier research organization. Unfortunately, because the glyphosate study was funded through the NIH, the conclusions will be taken more seriously than they might have been. Rep. Bob Aderholt, chairman of the House Ag Appropriations Subcommittee is investigating this with NIH Director Francis Collins. In addition, the American Association for the Advancement of Science (AAAS) has recently pushed back against IARC, saying that IARC reports create mostly confusion because they only look at hazard, not risk, which is poorly understood by consumers.

5. FFAR Update

The Foundation for Food and Agriculture Research (FFAR) was established in the 2014 Farm Bill. Congress provided \$200 million for the Foundation that must be matched by non-federal funds as the Foundation identifies and approves research projects. The Foundation operates as a non-profit entity, completely separate from USDA and is governed by 15 Board members. The FFAR Board's initial research target areas were:

- More productive, sustainable agriculture
 - Improving plant efficiency
 - Optimizing agricultural water use
 - Transforming soil health
 - Enhancing sustainable farm animal resilience, productivity, and health
- Better health through food
 - Achieving a deeper understanding of nutrition and healthy food choices
 - Managing food production systems for enhanced human nutritional outcomes
 - Spurring food system innovation

Over the past year, FFAR has been hiring staff, including their executive director, Dr. Sally Rockey, and holding listening sessions. WSSA [submitted research priorities](#) to FFAR last fall. FFAR announced a "New Innovator in Food and Agriculture Research" and "Rapid Response Program" this spring, but have not made any formal requests for applications for the research target areas above. We expect FFAR to make some of those announcements this fall.

6. FY 2017 USDA Appropriations

The House and Senate Agriculture Appropriations Subcommittees released their proposed budgets for FY 2017. In both budgets, many of the USDA agencies that receive funding for weed research and management were proposed to receive modest increases compared to FY 2016. Agencies with proposed increases include: APHIS, ARS, NIFA, and NRCS. Within NIFA, the AFRI Competitive Grants program, both the House and Senate recommended an increase of \$25 million over the FY 2016 appropriation of \$350 million. However, most of the other NIFA line items relevant to weed science were held constant to the FY 2016 levels. This included Hatch Act, McIntire-Stennis, Smith Lever b & c, IR-4, SARE, and Crop Protection and Pest Management. Unfortunately, it appears any action or

approval of FY 2017 appropriation's bills will be pushed well into next year after the presidential inauguration. Thus, we can probably expect a continuing resolution for funding based on FY 2016 levels until March 2017.

	FY 2014	FY 2015	FY 2016	FY 2017 House	FY 2017 Senate
USDA AGENCY	----- \$ millions -----				
ARS	1,122.4	1,132.6	1,143.8	1,151.8	1,177.9
ERS	78.0	85.3	85.3	86.0	86.7
NASS	161.2	172.4	168.4	168.4	169.6
NIFA	1,277.1	1,289.5	1,326.4	1,341.1	1,363.7
APHIS	821.7	871.3	894.4	930.9	939.2
NRCS	812.9	846.4	850.8	855.2	864.4
NIFA Programs					
Research and Education Activities	772.5	786.8	819.6	832.8	851.4
-Hatch Act (Experiment Stations)	243.7	243.7	243.7	243.7	243.7
-Cooperative Forestry Research	33.9	33.9	33.9	33.9	33.9
-AFRI Grants Program	316.4	325.0	350.0	375.0	375.0
-Sustainable Ag Res. & Education	22.6	22.6	24.6	24.6	27.0
-IR-4 Program	11.9	11.9	11.9	11.9	11.9
Extension Activities	469.1	471.6	475.8	477.3	476.2
-Smith-Lever Act, Section (b) & (c)	300.0	300.0	300.0	300.0	300.0
Integrated Activities	35.3	30.9	30.9	30.9	36.0
-Crop Protection & Pest Mang't	17.1	17.2	17.2	17.2	20.0

There are also various instructions and recommendations included in both the House and Senate Ag Appropriations bill related to weed science. I have included them in my July 2016 WSSA newsletter. Here are three examples:

- **Herbicide Resistance**-The Committee reminds NRCS of the challenges many producers are facing due to the spread of herbicide-resistant weeds and encourages it to ensure agency staff, partners, and producers are aware of conservation practice standards, conservation activity plans to address herbicide-resistant weeds, and financial assistance available through conservation programs to assist producers in their efforts to control these weeds.
- **Sage Steppe Restoration Science**- The Committee includes an increase of \$1,000,000 for ARS to advance sagebrush habitat restoration science in the Northern Great Basin including cooperative research, testing and deploying precision restoration methods to restore habitat impacted by significant disturbance such as wildfire and invasive species.
- **Pollinator Health and Monarch Recovery**.- The Committee reiterates its concern for the need to address threats posed to pollinator health, and urges the Department to continue to support the Fish and Wildlife Service's Monarch Conservation Strategy. The Committee directs NRCS to leverage resources, relationships and partnerships, including with non-governmental organizations that are perceived positively by the private land and agriculture

communities and that possess experience working directly with agricultural producers and other conservation partners. The Committee recommends the Department continue to support monarch conservation on private lands in fiscal year 2017 and expects to see a multi-year recovery effort undertaken, focusing on the deployment of conservation practices.

7. WOTUS Rule Update.

In June 2015, the EPA and Army Corps of Engineers finalized their waters of the United States (WOTUS) rule, which expands which waters are covered under the jurisdiction of the Clean Water Act (CWA). The rule will reportedly add some two million acres of streams and 20 million acres of wetlands. Over 30 states subsequently filed lawsuits in multiple federal courts seeking to block the administration's WOTUS rule. In August 2015, the District of North Dakota stayed the rule nationwide. In October 2015, the Sixth Circuit Court (not district court) claimed they have jurisdiction over the rule. Since then, there have been numerous jurisdictional battles between opponents and proponents of the rule in both District and Circuit courts. When it's all said and done, the Supreme Court will likely be issuing a final verdict on whether the WOTUS rule is "arguably unconstitutionally vague" under the CWA.

In a separate Supreme Court case ruling regarding CWA determinations on May 30, the Supreme Court ruled unanimously against the government in a case deciding when landowners can challenge certain decisions about water permits in court. The case, *Army Corps of Engineers v. Hawkes Co. Inc.*, centers on a North Dakota peat mining company that wants to challenge a government determination that its mining plans would require costly Clean Water Act permits. Property rights advocates and industry contend that landowners should be able to contest those decisions in court and the Supreme Court unanimously agreed. Chief Justice John Roberts wrote the court's opinion, finding that a jurisdictional determination approved by the Corps is indeed a "final agency action" that is subject to judicial review. [Click here](#) to read the Supreme Court opinion.

In yet another CWA court case, the Eastern District Court of California ruled that a wheat farmer and nursery operator violated the CWA because he plowed his field. I'm not going to go into the details here, but there is a nice little write-up in Farm Futures by Gary Baise at: <http://farmfutures.com/blogs-plowing-polluting-wheat-farmer-loses-clean-water-case-11059>

8. NPDES Fix Bill Update

On May 24, the House passed H.R. 897, the Zika Vector Control Act (formerly the Reducing Regulatory Burdens Act- a.k.a. the "NPDES Fix" bill) [by a vote of 258-156](#). This is the 3rd time in five years the House has passed this bill. This version of H.R. 897 contains the same language as the original legislation, but included a 2 year sunset provision that we opposed. The Zika Vector Control Act (H.R. 897) was rolled into H.R. 2577, which also includes the Military Construction and Veterans Affairs Appropriations Bill as well as the Zika Response Funding bills.

The National and Regional Weed Societies [joined over 100 other organizations in a letter](#) urging House and Senate Conferees to support the inclusion of H.R. 897 in the final conference agreement for H.R. 2577 and to remove the sunset provision. The good news is that part of the NPDES fix language made it into the House – Senate Conference Agreement that includes a \$1.1 billion Zika virus response package and the FY 2017 Military Construction-VA appropriations bill. The bad news is that there is only a waiver from NPDES permits for mosquito control, not aquatic weeds. Plus the waiver is only for 180 days, and then sunsets. The House did pass the conference agreement (H.R. 2577), but then it blew up in the Senate, plus Obama promised to veto it. In other words, it's back to the drawing board because even if Congress does pass a Zika Response bill after their August recess, the verbiage that is in there for an NPDES-fix is worthless (and useless).

9. National Survey of Most Common and Troublesome Weeds- Update

I have received a lot of positive feedback from the national survey of the most common and troublesome weeds. There were nearly 700 responses from 49 states, Puerto Rico, and eight Canadian provinces. The plan is to conduct this survey every year, but split it into a 3-year rotation. The 2016 survey covers the most common and troublesome weeds in broadleaf crops (i.e alfalfa, canola, pulse crops, etc...), fruit & nut crops, and vegetables and is still open at: <https://www.surveymonkey.com/r/2016weeds>. So far, 145 individuals have submitted just over 200 survey responses for weeds in broadleaf crops. In 2017, the survey will cover weeds in grass crops/pasture/turf. In the 3rd year of the rotation in 2018, the survey will cover weeds in aquatic/non-crop/natural areas.

One concern was how to reference the survey data. For the short term (next couple of years), please use the following suggested website citation:

Van Wychen L (2016) 2015 Survey of the Most Common and Troublesome Weeds in the United States and Canada. Weed Science Society of America National Weed Survey Dataset. Available: http://wssa.net/wp-content/uploads/2015-Weed-Survey_FINAL1.xlsx.

After we get two or three complete weed survey data sets for the 26 different crops, non-crops, aquatic, and natural areas, I would expect that WSSA will analyze and publish that data in one of the weed science journals.

10. Milkweed and Monarchs

On February 27, the World Wildlife Fund and the Mexican National Commission of Protected Natural Areas reported that the total forest area in central Mexico occupied by overwintering monarch colonies was 4.01 hectares, which was more than triple the 1.13 hectares in 2015 and six times greater than the low of 0.67 hectares reported in 2014. This year's reported population is estimated to be 200 million monarchs compared to the long-term average of 300 million. The National Strategy to Promote the Health of Honey Bees and Other Pollinators has set a short-term target of 225 million monarchs overwintering in Mexico (approximately six hectares of covered forest) by 2020 through national/international actions and public/private partnerships. Unfortunately, only 2 weeks after the monarch population numbers were announced in February, a March 11 snowstorm with subfreezing temps and 50 mph wind gusts hit Mexico's overwintering grounds, **killing somewhere between 3 – 50% of the overwintering population.**

The *Oikos Journal* published a Cornell study online on April 27 titled "[Linking the continental migratory cycle of the monarch butterfly to understand its population decline](#)". **Abstract:** Recent analyses have linked the monarch decline to reduced abundance of milkweed host plants in the USA caused by increased use of genetically modified herbicide-resistant crops. To identify the most sensitive stages in the monarch's annual multi-generational migration, and to test the milkweed limitation hypothesis, we analyzed 22 years of citizen science records from four monitoring programs across North America. We analyzed the relationships between butterfly population indices at successive stages of the annual migratory cycle to assess demographic connections and to address the roles of migrant population size versus temporal trends that reflect changes in habitat or resource quality. We find a sharp annual population decline in the first breeding generation in the southern USA, driven by the progressively smaller numbers of spring migrants from the overwintering grounds in Mexico. Monarch populations then build regionally during the summer generations. **Contrary to the milkweed limitation hypothesis, we did not find statistically significant temporal trends in stage-to-stage population relationships in the mid-western or northeastern USA. In contrast, there are statistically significant negative temporal trends at the overwintering grounds in Mexico,** suggesting that monarch success during the fall migration and re-establishment strongly contributes to the butterfly decline. **Lack of milkweed, the only host plant for monarch butterfly caterpillars, is unlikely to be driving the monarch's population decline.** Conservation efforts therefore require additional focus on the later phases in the monarch's annual

migratory cycle. We hypothesize that lack of nectar sources, habitat fragmentation, continued degradation at the overwintering sites, or other threats to successful fall migration are critical limiting factors for declining monarchs.

11. NISAW and Invasive Species Advisory Committee (ISAC) Update

Planning for National Invasive Species Awareness Week (NISAW) 2017 is underway. Scott Cameron, President of the Reducing Risk from Invasive Species Coalition (RRISC) replaced Phil Andreozzi from the National Invasive Species Council (NISC) as my fellow co-chair for NISAW. Last February, we organized most of the NISAW events so that they occurred online. See www.nisaw.org. Other main organizing committee members include Hilda Diaz-Soltero – USDA, Stephen Phillips - Pacific States Marine Fisheries Commission, Leigh Greenwood - Nature Conservancy, Hilary Smith - Department of the Interior, Jason Goldberg – FWS, Priya Nanjappa – AFWA, Chuck Barger-Bugwood, and Peg Brady- NOAA. We meet once a month and are currently working to identify DC seminar topics and recruit seminar speakers. We have also discussed what is the best venue on Capitol Hill for a NISAW fair and reception. **NISAW will be held Feb. 27 – Mar. 3, 2017.**

NISC solicited nominations for the 9th Invasive Species Advisory Committee (ISAC). Janis McFarland was reappointed for a 2nd two year term. Joe Ditomaso retired from ISAC. The Science Policy Committee nominated Jacob Barney and Rob Richardson, but unfortunately neither was selected at this time. For a complete list of new and reappointed members of ISAC, please go to: <https://www.doi.gov/invasivespecies/members-isac-9>

12. Paraquat Mitigation Comments Submitted

As part of the Registration Review process for paraquat that was initiated in 2011, EPA proposed the following five additional mitigation measures to minimize human health incidents:

- 1. Developing paraquat-specific applicator training material that emphasizes that the chemical must not be transferred to or stored in improper containers**
- 2. Changes to the pesticide label and warning materials to highlight the toxicity and risks associated with paraquat**
- 3. Use of a closed-system (similar to the lock-and-load system) for transferring paraquat out of all product containers**
- 4. Restricting the use to certified pesticide applicators only, thus prohibiting application by individuals working under the supervision of a certified applicator.**
- 5. Prohibiting applications from hand-held equipment**

WSSA commended EPA for taking steps outlined in mitigation measures #1 and #2. WSSA expressed concerns about the increased costs that would be associated with mitigation measures #3, #4, and #5, which would potentially eliminate the use of paraquat as an alternative MOA.

WSSA's greatest concern is that prohibiting paraquat applications from hand-held equipment would essentially eliminate the weed science community's ability to do small plot research with paraquat. If the Agency decides to adopt this prohibition, WSSA strongly recommended there be an exemption for weed research work with paraquat. For this particular weed science research exemption, the WSSA would support that anyone who applies paraquat with handheld or backpack sprayer equipment must possess a certified pesticide applicators license.

WSSA comments are at: http://wssa.net/wp-content/uploads/WSSA-comments-on-paraquat-mitigation_FINAL.pdf

13. GMO Food Labeling Bill Expected to Become Law (yes- there is still hope for Congress)

On June 23, Sen. Pat Roberts (R-KS) and Sen. Debbie Stabenow (D-MI), chair and ranking member of the Senate Ag Committee, unveiled a bipartisan proposal to protect the use of agriculture biotechnology and to ensure consumers have access to the information they want. [Click here](#) to read the legislative text. Key provisions of the bipartisan proposal include:

- **Pre-emption:** immediately prohibits states or other entities from mandating labels of food or seed that is genetically engineered.
- **National Uniform Standard:** the U.S. Department of Agriculture establishes through rulemaking a uniform national disclosure standard for human food that is or may be bioengineered. This will occur over the next two years and is where the anti-GMO groups will now focus their attention (and lawsuits)
- **Disclosure:** requires mandatory disclosure with several options, including text on package, a symbol, or a link to a website (QR code or similar technology); small food manufacturers will be allowed to use websites or telephone numbers to satisfy disclosure requirements; very small manufacturers and restaurants are exempted.
- **Meat:** foods where meat, poultry, and egg products are the main ingredient are exempted. The legislation prohibits the Secretary of Agriculture from considering any food product derived from an animal to be bioengineered solely because the animal may have eaten bioengineered feed.

After a couple of procedural votes in the Senate, the Senate passed the compromise GMO labeling bill 63-30 on July 7. House Ag Committee Chairman, Michael Conaway (R-TX), was silent on the Senate bill for several days, but eventually issued the following statement: *"After spending the past week and a half studying the legislation and meeting with agricultural producers, along with a variety of other stakeholders, I have come to the conclusion that the Senate bill is riddled with ambiguity and affords the Secretary a concerning level of discretion. I have sought written assurances from USDA on the more problematic provisions, and I appreciate the efforts of the Department to provide some level of clarity. While I will never fully support federally mandating the disclosure of information that has absolutely nothing to do with nutrition, health, or safety, it is my expectation that this legislation will be considered on the House floor next week, and it is my intention to support this bill."*

Following that statement, the House did indeed pass the Senate version of the bill on July 14 by a vote of 306-117. The president is expected to sign the bill, but has not done so as of July 25. Vermont's GMO labeling law went into effect on July 1 and there are reports that retailers have pulled over 3000 grocery products from the shelves.

Motions:

Extension Report

Amit Jhala

Date of Preparation: July, 2016

Officer/committee Activities during the Year:

Chair of Extension Committee: Amit Jhala, University of Nebraska-Lincoln

Vice-chair of Extension Committee: Chris Proctor, University of Nebraska-Lincoln

Extension committee is pleased to announce a new "NCWSS Student Video Contest" starting this year. Following is the description of the contest.

The North Central Weed Science Society will sponsor a video contest to provide students the opportunity to showcase their research or to create educational videos. The objective of the videos is to provide students an opportunity to present a synopsis of their research or to teach a weed related concept in an Extension-type format with the audience being a farmer, dealer, consultant, researcher, or the public. Videos will be separated into two categories: 1) Research or 2) Education. Videos should be prepared in a professional manner and approved by student's faculty advisor. Videos will be limited to 5 minutes and will be judged based on criteria similar to oral and poster presentations. Judging criteria will include Purpose/Introduction, visual quality, audio quality, flow/transition, voice quality/grammar, physical mannerisms, use of visual aids, conclusion/summary, creativity, and educational quality. Videos should be submitted to the Chair of Extension Committee: Amit Jhala at Amit.Jhala@unl.edu by November 1, 2016. Videos will be judged by a committee and winners will be recognized at the NCWSS annual meeting in December. Awards will be similar to those given for oral and poster presentations. If approved by the authors, videos will be placed on the NCWSS website to enhance the educational role of the NCWSS. Update will be available on NCWSS website.

Attached is a grading sheet.

Motions:

North Central Weed Science Society Student Video Contest Grading Sheet (5 minutes maximum)

Student Name _____

University _____

Category (circle one):

Education

Research

Purpose/Introduction: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Visual Quality: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Audio Quality: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Flow/Transition: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Voice quality/Grammar, Physical mannerisms: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Physical mannerisms: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Use of Visual Aids: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Conclusion/Summary: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Creativity: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Educational Quality: (poor) 1 2 3 4 5 6 7 8 9 10 (Excellent)

Additional Comments:

Total Score:

Industry Report

Paul Marquardt
Date of Preparation: July

Officer/committee Activities during the Year:

Review of Sustaining Member Benefit Tier

- Presently there is no difference between the tiers other than the level of support a company provides and these sponsorship levels are not publicly acknowledged. Recommendations include:
 1. Acknowledging the tier each company supported in the program and meeting announcements.
 2. Review the tiers and consider whether a differentiation would be an attractive incentive for supporting the society at higher levels.
- ‘Acknowledgement of support in most publications’ needs to be changed to specify program, proceedings and newsletter.
- Process for ‘complimentary registration’ needs clarity as sustaining members may not be taking advantage of this benefit. It is suggested that the solicitation for sustaining membership include instructions for submitting the name of the individual to receive the complimentary registration.
- Consider offering industry committee membership to include to all sustaining members.
- Recommend updating sustaining membership matrix to Board of Directors during summer meeting.
- Other questions (some with answers, some open ended)
 1. Did the tiered matrix increase the amount received? **No in 2014. Yes in 2015.**
 2. Did anyone sponsor at amounts other than what is listed for each tier...say 750 or 1000? **No.**
 3. Should membership be based upon sales as it was years ago?
 4. What will we do as consolidations continue?

Ideas for symposia (or Breakfast Speakers in 2016)

- Nitrate pollution in Des Moines municipal water supply and associated legal activities.
- I’m still working on getting a speaker lined up to cover this topic, but this is still the plan as of today.

Ideas for increasing participation in the breakfast meeting.

- Change the name from ‘Industry Breakfast’ to ‘Breakfast (sponsored by industry)’ as perhaps it is perceived as being open only to private industry.
- Reduce the price or make free for graduate students to capture their participation.

Motions:

Resident Education Report

Mark Bernards

Date of Preparation: July 27, 2016

Officer/committee Activities during the Year:

Still seeking host for 2017 weed contest.

Looking to have a master list of 125 weeds from which a subset for 75 weeds would be selected by the host. MOP currently allows minor changes to rules but major changes require board approval. Changes would require MOP change. Proposing to bring forward new grading format at the 2016 NCWSS board meeting in December. Considering potential changes to grading of calibration section of the summer weed contest.

Motions:

Graduate Student Report

Doug Spaunhorst
Date of Preparation: July

Officer/committee Activities during the Year:

Coordinated a graduate student tour of DuPont Pioneer's facility in Des Moines, IA prior to the North Central Weed Science Society annual meeting on 12/12/16 with Dave Johnson.

Randy Smith and Pam Cannady agreed to sponsor and organize the 2016 North Central Weed Science Society graduate student luncheon. Eric Scherder will be speaking at the luncheon.

A symposium topic of interest: Glyphosate-resistance in weeds: Why are there so many mechanisms? (Speakers that have characterized different mechanisms).

Motions: None

