2016 WSSA NIFA Fellow report—submitted by Donn Shilling July 2016

I am beginning my second year as the WSSA NIFA Fellow. My host (Mike Fitzner) and I have worked to develop a plan that will hopefully culminate in an enhanced view of Weed Science within NIFA, greater participation by Weed Scientists in NIFA grant programs and as a result more sustained funding to our discipline. We are also hopeful that our success in meeting these objectives could result in NIFA hiring a Weed Scientists dedicated to all Weed Science related grant programs. I have and will continue to visit NIFA one week each month. Our overall plan follows:

- 1. Obtained security clearance.
- 2. 4 part plan:
 - a. Networking-Specific groups where relationships with NIFA could be helpful
 - i. AHIPS
 - ii. ARS
 - iii. Office of Pest Management Policy
 - iv. NSF/NIFA partnership
 - v. Pollinators
 - vi. Area-wide management
 - vii. EPA
 - viii. NRCS
 - ix. Interagency committee
 - x. US Forestry
 - xi. BLM Gina Romis
 - xii. Ficminew
 - xiii. National invasive species council
 - b. RFA process-how things work/Weed Science funding history
 - i. Enhancing participation
 - 1. WS/NIFA webpage
 - 2. WSSA workshop
 - 3. NIFA announcements
 - ii. Stakeholder input process
 - iii. Engage in process
 - iv. Portfolio process
 - 1. planning
 - v. Impact assessments
 - c. Enhancing NIFA Weed Science funding
 - i. On-going: Develop NIFA Weed Science webpage (see attachment): https://nifa.usda.gov/program/weed-science. I have been working with Andrew Clark to help establish a NIFA webpage to help enhance the weed science community understanding of NIFA grant opportunities. We have been working with WSSA Web contact-Muthukumar Bagavathiannan to optimize communication and awareness. For example we have tried to make the "links"
 - ii. On-going: Develop a WSSA Symposium ("Federal Funding for Weed Science Research") for the 2017 WSSA meeting (see attachment). Our proposal was submitted and we (Mike Fitzner, James Westwood and Donn Shilling) are in the process of planning the meeting (monthly conference calls, etc.).
 - d. Study USDA Weed Science funding history

- i. Topics
- ii. Impacts
- iii. Amounts
- iv. Number of applications and success rates

Goal

I/we hope this relationship will help enhance NIFA's perception of Weed Science resulting in future positions and more sustainable Weed Science funding. I believe that establishing relationships with USDA scientists combined with the aforementioned projects will have positive impacts.

Next projects:

- 1. Develop plan to created NIFA/NSF cooperative grant program to enhance opportunities to fund more fundamental Weed Science projects.
- 2. Assessing what is presently/has been funding programs (RFA's) for Weed Science including impacts and recommendations for future research/actions

Past projects:

- 1. Submitted Weed Science research priorities to NIFA (see attached).
- 2. Reviewed 5 grant programs for relevance to Weed Science (see attached).

Other activities:

- 1. Determine the process for gathering stakeholder input and other sources of information that will become the basis for the development of RFA's.
- 2. Develop a justification for a NIFA Weed Science NPL.
- 3. Work closely with NPLs and program specialists to enhance weed science participation and funding.
- 4. Serve as program manager or panel manager.
- 5. Assist in the compilation of data and the preparation of reports requested by USDA, the White House and Congress.
- 6. Represent NIFA at major stakeholder group meetings to strengthen partnership and collaboration with stakeholders.
- 7. Work with industry (Monsanto, Pioneer, CropLife, and Dow) to coordinate private-public research efforts, to guarantee that NIFA programs are forward-looking with regard to technological advancements, and identify areas where there are mutual interests for joint programming. This could involve the incorporation of recommendations from the USDA Advisory Committee on Biotechnology and 21st Century Agriculture (AC21) report on "Enhancing Coexistence" into the AFRI Weed and Invasive Plant and/or the Biotechnology Risk Assessment Grants (BRAG) Programs.
- 8. Review applications for capacity funding (Hatch, Smith-Lever, and McIntire Stennis) and help provide liaison to Hatch Multi-state Committees in the area of weedy and invasive plants and provide scholarly input to applicants/committees.
- 9. Assist with post-award management of some CAP projects that involve weeds and invasive species, and the 40 or so projects funded under the old "Biology of Weedy and Invasive Species" and the new "Controlling Weedy and Invasive Plants" Program. This would include reviewing progress reports for adherence to RFA requirements, organizing

- and conducting annual project director meetings, and working with project directors to identify significant outcomes for reporting to congress and stakeholders.
- 10. Work through the Invasive Species Working Group of the OSTP's CENR Ecological Systems Subcommittee, help coordinate the current and future Federal efforts in efforts to understand interactions between, climate change, invasive species, native pests and disease. Ultimately, the goal would be an on-going assessment process to identify those issues (such as human health, water borne diseases, wildlife disease, challenges to agriculture, natural resources, water availability, food safety, food security, etc.) that might be included in the U.S. Global Change Research Programs' National Climate Assessment.
- 11. Provide NIFA liaison to extension communities of practice that have a substantial weed or invasive species component including Climate, Forest and Woodlands, Invasive Species, and Rangelands.

Visitation schedule:

April 26-28: first visit: talked with Mike Fitzner and developed plan for Fellow program Also visited with several NPL's

May 27-30: Visited with Mike, Jill Schroeder-Office of Pest Management and Policy, Tom Bewick and Rob Hedberg

July 22-25: visited APHIS and OPMP staff

August 24-26: visited with NIFA, Invasive Species Council and Forest Service staff

October 7-9: visited with NIFA staff

Dec 2-5: obtained USDA security pass, visited several congressional offices and was a panel member for a congressional workshop on herbicide resistance.

March 28-31: Visited with Paul Tanger-AAAS Fellow working on NIFA/NSF cooperative projects. Issues discussed: Plant-Biotic Research initative; Milk weed/monarch butterfly issues; Area-wide IPM; NSF cooperation; NIFA Weed Science web page; Enhanced communication; WSSA/NIFA workshop

June 12-15: Pollinator issue-Mary Purcel; NIFA Weed Science webpage-Andrew Clark; Visited with Director of NIFA-Sonny; Visited with several NPL's and Mike Fitzner