

Director of Science Policy Report
Lee Van Wychen
WSSA Summer Board, July 23-25, 2010
Portland, OR

Finances

The Science Policy Committee (SPC) has a \$5000 travel fund that can be used towards science policy activities in Washington DC, or sending people to attend events that advance the objectives of the Science Policy Committee. To date, we have used \$1779.30 for travel expenses related to NISAW 2010 speakers and guests and for Mike Barrett's airfare to DC for the USDA NIFA Stakeholders Workshop. David Mortensen drove to DC in April to attend the USDA Plant and Pest Biology Stakeholders workshop, but did not ask for any reimbursement. Other anticipated expenses include the New Mexico EPA riparian/irrigation canal tour on Aug. 2-5, 2010 and possibly the NACD Herbicide Resistance meeting in Little Rock, AR on Aug. 9-12 and the NAWMA annual meeting in Pueblo, CO at the end of September. Travel to the regional weed science meetings, APMS, and other speaking requests are reimbursed to me through the host society or organization.

Office & Equipment- The hard drive on my desktop computer (5 yrs old) fried in May, but I was able to save almost all of my files. ☺ I purchased a new desktop computer for \$550.

Major weed science policy initiatives during 2010:

1. Address Weed Science funding issues with the newly established USDA National Institute for Food and Agriculture (NIFA).
2. Submit Federal Register comments on Spray Drift Pesticide Registration Notice and bring in outside expertise to educate federal staff on the advances in herbicide application technologies
3. Continue to provide input to EPA on National Pollutant Discharge Elimination System (NPDES) permits and submit Federal Register comments on their draft NPDES Pesticide General Permit (PGP) due on July 19.
4. Work with APHIS/EPA and WSSA members on the two herbicide resistance white papers
5. Work with all herbicide resistant stakeholders to help develop a uniform herbicide resistance management strategy and move towards a resolution that can be approved by all the National and Regional Weed Science Societies
6. Work with federal invasive weed stakeholders, in particular the National Invasive Species Council to develop an agenda for National Invasive Species Awareness Week (NISAW)
7. Work with invasive weed related non-government organizations (NGO's) like the Healthy Habitats Coalition and APMS to coordinate a legislative fly-in to Washington DC during NISAW.
8. Maintain input and interaction with the Public Awareness Committee
9. Continue to provide weed science based information and resources to Federal agencies, Congress, and NGO's.

USDA-NIFA I met with numerous USDA staff and stakeholders about the Agricultural and Food Research Initiative (AFRI) grant program and coordinated the comments submitted jointly by the National and Regional Weed Science Societies. WSSA appealed to USDA to make three changes: **1)** Add a Foundational program within AFRI to address weedy plant biology, ecology and management, similar to those focused on phytopathology and entomology; **2)** Reconfigure larger AFRI research programs to encompass the full breadth of the agricultural sciences. Currently, program objectives are written so narrowly as to exclude not only weed science, but many other important areas of study; and **3)** Restore funding for integrated activities under the Section 406 Legislative Authority. Section 406 supports integrated weed management research through initiatives like the Regional IPM Centers, Risk Avoidance and Mitigation Program, Crops at Risk and Organic Transitions Program. Funding for these programs was zeroed out in the President's FY 2011 budget. I'd like to give special thanks to Dave

Mortensen and Adam Davis on the WSSA Research and Competitive Grants Committee as well as Mike Barrett for substantial comments and editing. In addition, both Mortensen and Barrett traveled to Washington DC to represent the WSSA in separate USDA-NIFA stakeholder workshops. The NIFA response to the joint letter indicates that money will be directed to weed resistance issues and that more money will go to foundational programs rather than the 5 “pipeline” initiatives. The letter from Beachy also indicated that NIFA will not support separate funding lines for the Section 406 programs (which has been USDA position for 8 years), thus I will continue to lobby House and Senate appropriators to restore that funding through the appropriations process (which they have done for the past 8 years). The National Coalition for Food and Agricultural Research (NC-FAR) and I will meet with Dr. Beachy at the end of July to discuss their changes to the 2011 AFRI RFA’s, which are currently scheduled to be announced in December.

Spray Drift- The regulation of spray drift remains problematic and the risk assessment tools that EPA employs are based on aging data and the application technology in current use has improved significantly. The WSSA, Entomological Society of America -Plant-Insect Ecosystems Section (ESA P-IE), and the American Phytopathological Society (APS) jointly submitted Federal Register comments on the EPA Spray Drift Pesticide Registration Notice in March. Our main recommendations included removing the word “could” from “could cause” (compared to “causes adverse observable effects”). “Could cause” is very subjective and could attract frivolous complaints, leading to difficult, confusing and uneven drift enforcement decisions. Obvious and off-label drift occurrences that might not have readily observable adverse effects are already enforceable as application violations (residues, species decline, etc). Another important recommendation was to only use down-wind buffers between target and sensitive sites instead of uniform buffers around all sides regardless of wind direction. USDA determined, with the previous EPA drift PR notice in 2000, that, if buffers were not made wind-directional, the economic loss would be on the order of \$1-2 billion dollars due to the large amount of irreplaceable acreage removed from production. Finally, I am working with Jill Schroeder and John Jachetta to bring in Bob Wolf this fall to give a presentation on the progress made in spray drift reduction technologies to EPA and Capitol Hill. Wolf’s spray drift seminar to EPA is scheduled for Sept. 14 at 11 am.

NPDES- I have submitted comments on behalf of the National and Regional Weed Science Societies on July 19. In my opinion, there is no way that all 44 states will be ready issue NPDES Pesticide General Permits (PGP’s) by April 9, 2011. The remaining states, U.S. and Indian territories have to use EPA’s NPDES PGP that is currently in the comment period and will apparently be finalized by December. The National and Regional Weed Science Societies key comments include:

- 1) EPA Should ask 6th Circuit Court for additional time (at least 2 more years)
- 2) Application rate objectives are best met by directing the applicator to follow the FIFRA prescriptive label, rather than requiring research-based judgments the applicator is unqualified to make in order to “minimize” application rates.
- 3) EPA is incorrect that reduced rates are effective for resistance prevention (note- EPA Office of Water staff assured me that this is not their objective, but that is not how the draft PGP currently reads!). Again, the PGP stresses “MINIMIZE” and makes it sound like you will be in violation of your permit if you DO NOT USE LESS than the labeled rate.
- 4) Increased jurisdictional clarity would help others determine if their pesticide use(s) warrant inclusion under this general NPDES permit. It’s plausible that an applicator could be sued for applying a herbicide in their field where that field has a ditch with water in it at the time of application. While Agricultural Stormwater runoff and Irrigation Return Flow are exempt from Clean Water Act permitting, the application of pesticides for control of terrestrial pests associated with crop production is not covered under EPA’s NPDES draft PGP. Farmers that apply pesticides in any of the four use patterns that discharge to U.S. waters may need permit coverage. Example: application of pesticides in or along the sides of irrigation canals or ditches to control vegetation.
- 5) Make Outstanding National Resources Water (Tier 3) eligible for PGP.

- 6) Pesticide R&D (such as that done at Land Grant colleges or Industry) should be automatically covered by this permit and not be required to submit an NOI and be subject to “citizen lawsuits”

Herbicide Resistance- I would like to especially thank John Jachetta, David Shaw, and Jill Schroeder for their outstanding work on this issue on behalf of the weed science societies. The WSSA created a special “Herbicide Resistance Education Committee” chaired by David Shaw to address emerging issues and develop a comprehensive education strategy. WSSA and its affiliated societies need to be the go-to organization for science-based information on herbicide resistant weeds. I cannot stress how important this for us as other groups and federal agencies look for answers. The committee is working with many stakeholders including industry and commodity groups to build on and develop new materials in a wide range of formats that will be used to educate growers about herbicide resistance management. David and Jill will in DC during the week of Sept. 13 and will provide updates on WSSA’s progress on these efforts to CropLife America and EPA.

Related to this are 2 herbicide resistance white papers that are being developed by WSSA with financial support from USDA-APHIS and EPA. The first paper, led by Bill Vencill in coordination with Carol Mallory-Smith, Bill Johnson, Nilda Burgos, Ted Webster, Bob Nichols, John Soteres, and Mike Owen deals with the development of herbicide-resistant weeds and weed shifts that are linked to the introduction of GE herbicide-tolerant corn, soybeans, wheat, rice, cotton, alfalfa and switchgrass. The paper is scheduled for review in *Weed Science* by the end of August. Final paperwork for obtaining the remaining grant funds (~\$16K) is due at the end of September.

The second white paper is being developed by the Herbicide Resistance Education committee led by Shaw and deals with the extent to which weed resistance management programs are being utilized in various cropping systems and an understanding of how successful they are at achieving their goals. Work on this paper is just getting started, but is expected to be completed by Sept. 2011. The writing team for this paper includes David Shaw, Mike Barrett, Kevin Bradley, Nilda Burgos, George Frisvold, Bob Nichols, Jason Norsworthy, Stephen Powles, Sarah Ward, and Bill Witt.

The House Oversight subcommittee on Domestic Policy, chaired by Dennis Kucinich (D-OH) will hold a Congressional Hearing tentatively titled “Are Superweeds an Outgrowth of Ag-Biotech Policy”. This could be problematic if not handled right. Basically, Kucinich is very anti-pesticide and is going after both USDA and EPA on why there is not enough regulatory oversight for pesticides. USDA asked to be allowed to testify, but were denied by the committee. As I type this, my understanding is that Mike Owen, David Mortensen, and Bryan Young will be testifying at this hearing on Wednesday, July 28 at 2 pm in 2154 Rayburn House Office Building. Messaging for this is being developed ASAP and is “red light” priority.

NISAW is being planned for February 28 to March 4, 2011. I am working at this from two fronts. My goal is to have the National Invasive Species Council (NISC) coordinate invasive species education and awareness events and PR during that week. This is a departure from past NIWAWS in that 1) it is all-taxa, 2) NISC will put resources into coordinating this; and 3) individual invasive species coalitions will encourage their members to have legislative fly-ins that are independent of NISAW. Planning is underway for a Kid’s Day event at the U.S. Botanic Garden, an invasive species briefing on Capitol Hill, and a joint reception between federal agency staff and NGO’s such as the WSSA. While I am helping NISC move in this direction (and to hopefully lead the national invasive species education and awareness effort in the future), my main focus is on coordinating a legislative fly-in during NISAW for the Healthy Habitats Coalition (HHC) and possibly the Aquatic Plant Management Society. Current members of the HHC Steering Committee are John Jachetta (Dow), John Cantlon (DuPont), Eric Lane (WWCC), George Beck (Colorado St), Fred Raish (NAWMA), and me. HHC has been working at the state, regional and national level to obtain new funding and more effective federal participation in invasive species

management efforts. As a result of these efforts, the Western Governors Association (WGA) just passed a new Resolution on Combating Invasive Species in support of invasive species management that we intend to utilize as a lobbying platform. Our 3 main legislative goals are to 1) procure the funding Asks associated with the WGA invasive species resolution; 2) pass the Invasive Species Emergency Response Fund Act; and 3) insure that the 2012 Farm Bill adequately addresses invasive weed management. HHC members have visited DC in February and May where we have already met with over 20 different Representatives, Senators, NGO's and Federal Agencies. If you are interested in traveling to Washington DC during March 1-3, 2011 to lobby for invasive weed funding, please contact me.

Public Awareness- The WSSA Public Awareness committee continues to be very active and is an important committee in helping me disseminate key science policy messages. In particular, the press releases titled "WSSA Issues Strong Appeal to USDA for Restoration of Funding for Weed Science" and "New Application Technologies Keep Herbicides Where They Belong" were very effective at generating national attention to USDA and EPA. While this committee is still less than 5 years old, our consistent, timely press releases has given us a national platform and name recognition. Just in the past few months, I have fielded weed science information inquiries from media sources such as the Wall Street Journal, New York Times, Seed World Magazine, Iowa Farmer Today, Hobby Farm Home, and Western Farm Press. We are gaining national credibility!

Educating NGO's, Feds, and Congress- I coordinated a seminar on Capitol Hill on June 28 in conjunction with NC-FAR and CropLife America titled "Solving Africa's Weed Problem" presented by Leonard Gianessi. Over 90 congressional staffers attended this event at the House Agriculture Committee. The main purpose of the seminar was to spur USDA, NGO's, and international development agencies to help fund weed science work in Africa. The primary method of weed control by smallholder farmers in Africa is hand weeding with short handled tools. Herbicides have been tested for forty years in Africa and have been widely-adopted by large-scale commercial farmers but not by smallholders, who lack training and access. CropLife Foundation (CLF) and CNFA, Inc. have launched a pilot project in Kenya and Malawi and 4 WSSA scientists have been supported as volunteers to visit and aid in the weed research. We hope to continue to build support for this program, but face large opposition from anti-pesticide groups.

I've also coordinated meetings for Jill Schroeder, Harold Coble, Kurt Getsinger and I to meet with the new USDA Director of the Office of Pest Management Policy, Sheryl Kunickis and CropLife America's new Vice President for Research, Barb Glenn, to discuss a wide array of weed science policy issues.