

John Jachetta, Ph.D.

Period of Presidency: February 2010-February 2011

I embraced my opportunity through the Presidential arc (e.g. President Elect through Past President) with a huge advantage: back in early 2006, Jill Schroeder, Mike Barrett and I accepted a challenge to develop a 5-year vision for the Society complete with a set of actionable goals (*appended*), this was a perfect exercise to undertake in preparation for my turn in the Presidential leadership rotation. While this vision emphasized several critical areas of growth, the most important area was a very deliberate emphasis on increasing the WSSA's societal impact and influence on topics of importance to Weed Scientists. By giving a voice to our discipline in national affairs, I felt that we could once again become an organization that young scientist aspired to join. For years WSSA has had a decreasing membership and waning interest among academics, practitioners and industry; while we were fiscally healthy, we seemed to be vanishing as an institution and perhaps even headed for a future as a section in the Crop Science Society of America. However, with several thousand members remaining in WSSA and its affiliated societies, I knew that we had an extraordinary potential for impact through the societally critical nature of our extension, academic and industry roles that had never been truly realized. In fact (in my humble opinion), our true potential for societal impact had been ignored as we focused solely on the inward-looking implementation of our national meetings and publications. By focusing on extending WSSA's external impact and influence, I hoped to increase our relevance to all agricultural interests and thereby empower WSSA as the voice of the discipline by applying our collective efforts to our aspirations and concerns in shaping public policy and contributing to the international dialogue on plant management. As a result of these and many other efforts by our members since, WSSA is now a clearly visible and recognized force in the public and national discussion.

The areas that I felt we could have the greatest impact included the following six goals:

1. Develop and support a permanent partnership with EPA on issues critical to agriculture.
2. Become the go-to source of expertise on herbicide-resistant plant management strategies and implement mechanism-of-action product labeling.
3. Claim our voice on EPA's developing spray drift regulation and mitigation.
4. Insure that the National Pollutant Discharge Elimination System (NPDES) permits for aquatic and riparian weed management were implemented in as reasonable a fashion as possible and based on real information.
5. Reverse the National Institute of Food and Agriculture's (NIFA's) 2010 defunding of Weed Science Research
6. Implement Spanish abstracts in *Weed Technology* (and if successful there, throughout all our journals) as a means of increasing our "Impact Factors" through wider circulation and citation.

- Partnership with EPA on issues critical to agriculture:

In partnership with Don Stubbs, Head of EPA's Registration Division Herbicide Section, we led a WSSA/EPA initiative to create the EPA Subject Matter Expert position in 2007 with Steve Dewey of Utah State University Extension as our first representative on staff at the Agency. Through the years, we have remained deeply committed to engaging EPA and increasing their access to our science on a number of national issues through our second EPA Subject Matter Expert, Jill Schroeder of New Mexico State University, and most recently with Michael Barrett of Kentucky State University. EPA has often lacked the practical experience needed to understand proposed label mitigation language to address potential environmental concerns around the use of herbicides (and other pesticides) and the ready access to an academic scientist has been both welcome and important in gaining that understanding within the context of herbicide label reviews. The Subject Matter Expert position has also had great impact on all the larger issues we were invested in, including herbicide-resistant plants and NPDES permitting for herbicides, and spray drift mitigation. This highly successful program has been recognized as uniquely useful by several other science-based plant protection Societies. To expand WSSA's impact, I personally recruit and assisted several of those organizations in 2010 and was able to bring both the Entomological Society of America: Plant-Insect Ecosystems Section and the American Phytopathological Society into the Agency to set up a similar Subject Matter Expert positions for their organizations. As we collectively represent most of the researchers involved in the applied pest management sciences, this has led to a number of useful synergies and has provided us with an even greater base to coordinate our actions and impact on a number of issues of concern to pest management researchers and practitioners, especially spray drift and its mitigation, resistance management and NPDES permits. It was obvious to us at the time, and remains so today, that the more we work together with other scientific societies, the greater potential we have for accomplishments.

- Herbicide-resistant plant management:

In close communication with EPA through our Subject Matter Experts, we have made remarkable progress in coordinating our resistance management education efforts with the Agency and in assisting them in developing their resistance management strategy. To bring us forward, I established the S-71 Herbicide Resistant Weed Education Committee to develop a comprehensive herbicide resistance education strategy and they made great strides under the capable leadership of David Shaw, Mississippi State University; this committee invested considerable time and skill in achieving its goals through the development of both web-based training modules as well as in-depth use pattern-specific slide sets for use by any educator or Extension agent in nearly every aspect of the discipline from aquatics and turf through the major agricultural crops. A critical element of this committee's activities was the development of a study, funded by USDA-APHIS, entitled "Herbicide-Resistant Weeds Management Report." This report identified a number of key methods used to manage the spread and development of resistance in weeds, assesses their effectiveness, the degree of method adoption, the reasons for adoption or non-acceptance, and what can be done to increase the use of integrated resistance management programs; this information was presented to EPA at several levels with great impact. Further, the National Research Council (NRC) invited WSSA to hold the symposium at the National Academy of Science in Washington, DC in 2011 and much effort was invested to

make this a very successful event and set the stage for additional activities of this type. One of our primary goals was to have WSSA be seen as the go-to organization for science-based information on herbicide resistant weeds and we have been very successful in this effort.

- Spray drift regulation and mitigation

EPA had long been developing an updated Pesticide Regulation (PR) Notice on spray drift and published its draft regulation in late-2009 (PR-Notice 2009-X) and since this had great implications on virtually all herbicide applications we very much needed to be involved. There was (and is) substantial expertise in herbicide application technology within the Society, though this was new information at EPA. We invested significant time in educating EPA through several WSSA symposia and DC presentations to educate the Agency on the many advancements in application technology in order to insure that any new rule on spray drift is grounded on science-based risk assessments and fully considered the benefits of pest control while minimizing off-target deposition. In support of this effort, we also submitted combined comments with the Entomological Society of America: Plant-Insect Ecosystems Section and the American Phytopathological Society. Comments with this kind of support do get attention.

- National Pollutant Discharge Elimination System (NPDES) permits for aquatic and riparian weed management.

In the service of our public mission, WSSA has been deeply involved with the developing National Pollutant Discharge Elimination System (NPDES) permitting program for pesticide use in the riparian corridor. Congress enacted the Clean Water Act (CWA) more than 30 years ago, adding and later updating the NPDES permitting program several times since then. In the decades that EPA has administered the CWA, the Agency has never issued an NPDES permit for the application of a pesticide to target a pest that is present near or in water. Instead, EPA has been regulating these types of applications through the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Overall, this new decision marked a partial pre-emption of FIFRA by the CWA, layering numerous new requirements on applicators of legally-registered products that have wide value in society in combatting aquatic invasive plants. This new rule also exposes applicators to extensive legal jeopardy through citizen lawsuits in addition to Agency actions. Without careful design and execution, the implementation of a pesticide NPDES General Permit could have significant unintended consequences. To help EPA understand the impact of this program, we worked with Kurt Getsinger (US Army Corps of Engineers, Aquatic Plant Management Society), Lee VanWychen and Jill Schroeder to educate the EPA Registration Division and the Office of Water and help them appreciate the need for routine weed management in the riparian corridor; part of this effort was through well-attended educational field trips to understand the goals of aquatic plant management in Florida where the discipline is highly developed and a second tour to more deeply understand the issues inherent in our more arid climates, such as Southern and Middle Rio Grande and its salt cedar management issues. WSSA also put our concerns in writing as comments on the proposed NPDES Pesticide General Permit to document our expert insight. Later we would learn that the education we provided the Office of Water was critical in the visioning and implementation of this program and that the

Office of Water was highly appreciative of our efforts; the principle author would later comment that he had only really seen agriculture at 65-mph!

- Reversing the National Institute of Food and Agriculture's (NIFA's) defunding of Weed Science Research

When the USDA National Institute of Food and Agriculture (NIFA) and Food Research Initiative (AFRI) competitive grants program request for applications (RFAs) was released in 2010 with little or no opportunity for funding Weed Science research, extension or education, I had a moment of doubt and briefly despaired that a program of critical importance to the discipline may be lost on my watch. Instead, WSSA developed an advocacy program through our Public Awareness Committee that sent our message of disappointment loud and clear through personal meetings and candid discussions at NIFA as well as a series of focused press releases that were widely cited in trade articles, newspapers and even through interviews on radio talk shows. We know that NIFA heard us and when these resources were restored and more, we were told that this was a direct result of our impact and refusal to just lie down and let this roll over us. By the end, 18 NIFA programs had been terminated and only 3 were ultimately restored... this included WSSA among others. This effort highlighted the importance of WSSA's increasing impact and influence on the longevity and vitality of the Society.

- Spanish Abstracts:

Spanish abstracts were added to our Weed Technology Journal in February, 2010 through an initiative that I began and led as President Elect. This initiative was actualized by the Publication Board under the leadership of James Anderson, ARS USDA at North Dakota State University. This effort recognized the rapid advances in Latin American agriculture and was intended to create a more open Society with greater emphasis on making our science available to all whom would find utility. Since our journal Impact Factors are directly related to the population citing our research, it seemed obvious that our Impact Factors could be increased by accessing a whole new population of agricultural researchers in non-English speaking countries and by providing additional information and resources for the academic papers they would develop. Since Weed Technology brings forward original research in applied aspects of weed management and can have immediate applicability, it was chosen as the first of the three WSSA journals to publish Abstracts in Spanish. While we were a bit slow in bringing this new potential to our Latin American colleagues' attention, I remain confident that this will pay off as intended.

*** Declaration of the WSSA 2010:**

By 2010 WSSA will be a visible and recognized force in the public and in the national debate over concerns of ecosystems management and sustainable practices in plant management. WSSA

members routinely participate in and are called on to shape relevant public policy. WSSA will have influence in all of the Americas. By 2010 WSSA will have:

- Created a powerful and highly utilized web site for researchers, land managers (agricultural, forestry etc.) and educators at all levels to further Weed Science research, best practice adoption and education*
- Started a new journal on Invasive Species, or adapted an existing journal to also cover this area*
- Expanded journal abstracts to include a functional Spanish translation for highest impact in the Americas*
- Be and continued to be sought after by the popular press for expert opinion on invasive species and the impact weeds in the natural world*
- Established strong relationships with Federal Agencies and other policy creators, with members routinely sought to sit on panels for public policy and oversight*
- Collaborated with the Regional Societies to meet their needs and have maximum impact for Weed Science*
- Significantly increased its membership and annual meeting attendance (both total and proportion of membership) by focusing on diversity and youth*

Our community of committed scientists provides a unique strength to WSSA and allows us to offer critical services to researchers and educators including a high quality website and professional journals. We are distinguished in the quality of our dedicated paid staff and support their professional growth. We have direct links to the critical arms of government, legislators and policy makers in order to help influence the creation of laws, standards and policies. WSSA provides direct benefit to the Regional Societies and membership through its professional meetings, publications and its influence and impact on the laws and regulations we all live under. WSSA can best achieve this by: knowing our membership better (their needs and focus), developing stronger relationships with politicians and the general media, understanding how to reach primary and secondary educators and students, and developing research for meeting 21st century challenges and expanding our experience and expertise to the developing regions of the Americas. WSSA believes that Weed Science in general and Invasive Species in particular will continue to grow in importance to the public, nation and the Americas. WSSA has the ability to identify and help place the appropriate scientists with the agencies that review and set policy. WSSA believes that primary and secondary educators will be interested in and promote educational modules that help to teach Weed Science to children. This, in turn, will help lay the foundation for increased enrollment in Higher Education as well as improved public understanding of the impact of Weed Science on everyday life.