

WSSA STRATEGIC PLAN

MISSION STATEMENT: The Weed Science Society of America promotes research, education, and extension outreach activities related to weeds; provides science-based information to the public and policy makers; and fosters awareness of weeds and their impacts on managed and natural ecosystems.

Strategic Goal: To foster awareness of weed biology and the impacts of weeds on humans and managed and natural ecosystems in order to improve quality of life, public safety and agricultural productivity through weed management. This goal can be achieved through the promotion of research, professional education, extension outreach and public awareness of the role and value of weed science information.

| GOALS | OBJECTIVES AND ACTION ITEMS |
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| ADVANCE WEED SCIENCE RESEARCH | <ol style="list-style-type: none"> 1. Identify key weed science research areas with strategic importance to people and the environment (See current priority research areas attached). 2. Provide a forum for research and information exchange through publications and meetings including international weed science research and collaboration with other science societies. 3. Provide information and committee participation in key research and policy areas to improve funding opportunities for weed science research. 4. Provide information to WSSA members on grant writing and research funding opportunities. |
| SUPPORT WEED SCIENCE EDUCATION AND EXTENSION OUTREACH | <ol style="list-style-type: none"> 1. Provide a forum for information exchange through publications, meetings and workshops. 2. Establish a process to ensure that the WSSA WEB SITE is meeting society goals and is a primary source of information to members, potential members, regulators and the public. 3. Develop educational materials for the Web; Examples include an interactive tool for weed identification, maintaining lists of invasive weeds, resistant weed populations, etc. 4. Develop education/information materials for specific issues such as importance of weeds in natural ecosystems, impact of weeds on crop yields, new discoveries in weed science, weed issues in the rest of world, and the public safety and natural resource management aspects of weed management. 5. Develop a plan to disseminate weed science educational materials to regions of the country, Canada, Mexico and rest of world (WSSA could sponsor/fund graduate student projects to develop some of the outreach materials). 6. Identify and sponsor WSSA training courses and workshops to reach out to the public, other countries and non-traditional members (NAWMA, NRVMA, certified crop advisors, practitioners, public land managers, nature conservancy stewards etc). 7. Establish a multi-year student mentorship program including 1-3 week educational exchanges, internships and participation in weed science regional and national meetings. 8. Provide training for communicating weed science issues with the media, general public and practitioners and others impacted by weed science research. |

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| PRODUCE AND DISSEMINATE HIGH QUALITY WEED SCIENCE PUBLICATIONS AND INFORMATION | <ol style="list-style-type: none"> 1. Implement electronic access for journals/publications. 2. Evaluate the focus of Weed Technology and Weed Science to increase coordination between the two journals. 3. Identify and prioritize new publications to reach traditional and new audiences (new publications, books, training manuals, international/global information). 4. Develop a policy on honorariums to facilitate “commissioned publications.” 5. Develop and implement an effective marketing plan for WSSA publications and information. 6. Create a process to notify international weed science societies when WSSA papers/publications relevant to international weed issues are published. |
| RAISE PUBLIC AWARENESS OF WEEDS, THEIR IMPACTS AND MANAGEMENT | <ol style="list-style-type: none"> 1. Develop a vision of environmentally sound weed management systems/weed ecology systems for the future. 2. Hold conferences/workshops/symposia with governmental organizations, private and non-profit organizations that a) need weed management information (DOT, utilities, railways, landscapers); b) are involved in regulatory decisions (EPA, USDA, State regulators); and c) environmental advocacy groups that manage conservation lands, work on invasive weeds, influence public. 3. Distribute WSSA guidance/educational materials to extension programs, national and state agencies. 4. Define a plan for WSSA’s role in education in elementary through high school programs, 4-H, FFA, Soil and Water Conservation, international programs etc. 5. Work to include the professional title of weed scientist into regulation, legislation and job titles. 6. Publish regional press releases or newspaper columns on weed science. Ideas include “what you can do to manage weeds in an environmentally friendly manner” or the importance of weed management to public safety, or the importance of weeds in natural ecosystems, biotechnology and its impact on weed science, weed management’s role in food quality, low prices and erosion control and major accomplishments of weed scientists. |
| PROMOTE SOUND WEED SCIENCE POLICY | <ol style="list-style-type: none"> 1. Provide timely, science-based information to policy makers regarding public policy, legislation, and regulation related to weed science. 2. Be recognized as the leading authority or source of weed research information to USDA, EPA and other Federal/State agencies through appointments to panels/ participation in policy debates. 3. Identify members with specific expertise and encourage participation through stakeholder input into specific policy issues. 4. Participate with other organizations to increase awareness of weed issues within the legislation and administration. 5. Inform WSSA members about the federal policy process and federal policy activities relevant to weed science. 6. Develop WSSA position papers for distribution to policy makers and general public. Include in part a global perspective on issues that cross borders. 7. Inform members on how to efficiently provide information and opinions on weed science issues to legislators and policy makers. |

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| <p>PROVIDE SERVICE TO OUR MEMBERS, REGIONAL SOCIETIES AND AFFILIATE MEMBERS</p> | <ol style="list-style-type: none"> 1. Develop a mechanism for members to easily voice opinions/needs and for the board to review the comments and respond. 2. Define core values and core competencies to focus resources and to promote the identity of WSSA to external audiences. 3. Conduct facilitated workshop(s) to identify how WSSA could better serve the regional societies and affiliate members and integrate into strategic plan. 4. Establish a business plan that includes coordinated goals for membership, publications, meetings, education coordinator, public outreach and director of science policy. Include plan for fiscal growth/stability and future governing structure of WSSA. 5. Support leadership and communication training for members. 6. Identify and pursue external funding opportunities and partnerships to support the research, education, extension and policy goals of WSSA. 7. Develop an ethics statement/guidance document for WSSA. |

PRIORITY RESEARCH AREAS FOR WSSA

Weed biology and ecology of aquatic and terrestrial weeds. Competition and interference; seed physiology; dormancy; seed bank dynamics; molecular biology; physiology and biochemistry; genomics on seed dormancy and germination.

Biotechnology. Impact of transgenic crops; benefits of using transgenic crops; genomic sequences; potential for pollen transfer in crops or weeds; resistant weeds and its implications; use of molecular biology in resistant weeds; genomic sequences.

Invasive plant/weed species. Assess ecological implications; develop management strategies; role of invasive plant species in agriculture and natural resources management.

Integrated weed management. Research on IPM and herbicide resistant weed management strategies in crops; integrate tillage, scouting and application technology to improve weed management practices. Assess the impact of transgenic crops in IPM practices; develop economic base for management strategies in all major crops and natural resources management.

Discovery of new weed management strategies. Identify new modes of action of herbicides; biological control agents: identification of various bio-control agents; develop multi-species control strategies; use of natural products for weed control; Isolation, identification and characterization of allelopathic compounds; genetic identification and incorporation of specific traits related to weed management in crops.

Soil and environmental protection. Establish research data on movement and persistence of herbicides; improve computer modeling to predict herbicide movement in the environment; conduct research at the watershed level to improve designs of grass filter strips, buffer and riparian zones, tillage practices and weed management to improve water quality (reduce levels of pesticides, fertilizers and sediment in water).

Precision agriculture. Develop tools for precision agriculture; research feasibility of adoption of practices.

Risk Assessment Technology: Develop research information and data important for risk/benefit assessments and weed management regulatory decisions (benefits of sound weed management, herbicide use, phytotoxicity/ non-target injury, application improvements, environmental impacts etc).