St. Paul or Bust!

Across the boulevard from the still magical Mississippi River, and in the heart of a downtown with a distinct difference, sits the beautiful Radisson Hotel Saint Paul. Twenty two floors up, the ‘Twin Cities’ only revolving restaurant, Carousel, provides guests a breathtaking view of a city rich in history.

The grandeur of St. Paul’s Cathedral, the spectacle of the Work Trade Center, and the gift of the Ordway Music Center are all within blocks of the hotel. The renowned Science Museum of Minnesota and Omnitheater is within walking distance, and so too shopping for any taste. The Minneapolis St. Paul airport and the Mall of America are only 20 minutes away.

The 1998 NCWSS annual meeting will be held at the Radisson Hotel (612-292-1900), 11 East Collage Boulevard, in St. Paul Minnesota, from December 7 to 10, 1998. The hotel, which recently added a beautiful atrium overlooking the Mississippi, is located in the heart of downtown St. Paul.

The Local Arrangements Committee is dedicated to do whatever possible to ensure that you will have an enjoyable and memorable stay in St. Paul. There are many attractions in the Minneapolis St. Paul area, so you may want to extend your stay. If you have any question, comments, or suggestions please feel free to contact one of your 1998 Local Arrangements Co-Chairs: Duane Rathman at 507-835-2580, or Zachary Fore at 612-451-4626.
President's Message

The following is a summary of the participation of the NCWSS and other Weed Science Societies in the CAST Conversations on Change Program.

Alabama’s Tuskegee University was the scene of visionary agricultural work by George Washington Carver and Booker T. Washington. It was also the location for the third workshop of the Council for Agricultural Science and Technology (CAST) Conversations on Change program. NCWSS has been represented at all three workshops and was represented at Tuskegee by Doug Buhler. Other representatives of Weed Science societies were Jill Schroeder (WSWS), Joe Neal (NEWSS), Randy Ratliff (SWSS), Horace Skipper (WSSA), and Laura Whatley (WSSA).

A total of 70 agricultural scientists representing CAST member societies met in February to study the rapidly evolving global production, processing and marketing systems for agriculture and to consider opportunities for greater service by scientists and professional societies. The participants were not only trying to better understand their world, but to transform it and create a more desirable future.

Conversations on Change is sponsored by CAST, which received a one-year, $275,000 grant from the W.K. Kellogg Foundation for support of the program, which is now in its third year. The Farm Foundation also has provided support. Many of CAST's 36 member societies and several universities- The Ohio State University, University of Illinois, Oregon State University, and Tuskegee University- are cooperating in the project.

The Conversations on Change workshops are sponsored by CAST, which received a one-year, $275,000 grant from the W.K. Kellogg Foundation for support of the program, which is now in its third year. The Farm Foundation also has provided support. Many of CAST’s 36 member societies and several universities—The Ohio State University, University of Illinois, Oregon State University, and Tuskegee University— are cooperating in the project.

The Conversations on Change scientists come from industry, private practice, government, and universities. They see themselves as agents and champions of change in their professional and scientific societies. Through the program they are seeking increased personal and organizational learning and growth; enhanced services, participation and leadership for their societies; new networks and collaboration between the societies and other organizations; and better communication of, and about, science and agriculture. There are five working groups, including 1) establishing networks, 2) recognizing skills and accomplishments, 3) reaching out in communication, 4) exploring learning opportunities, and 5) capturing synergy.

The Tuskegee workshop, Conversations on Change: Creating the Dialogue, focused on both agriculture-related issues and learning to use dialogue in addressing them. Diversity, dialogue, and learning in a world of constant and capricious change were themes.

Executive officers of 15 CAST member societies participated in the Tuskegee workshop. As opportunities for change are identified by the Conversations on Change working groups, they are carried to the societies for further development and possible implementation. As an example, 15 of the societies are exploring opportunities for collaboration in electronic publishing.

Overall the workshop stressed how to truly dialogue with one another to create new knowledge that was not there before the interactions. Developing a shared meaning among the groups is critical to creating a meaningful dialogue.

Thank you to all of you who work to make the NCWSS a meaningful scientific organization. Your involvement and dedication is greatly appreciated.

Doug Buhler

Attention University Professors!

The theme of this year’s Annual Meeting in St. Paul, MN is “Focus on the Future.” A large part of the future of Weed Science lies with the graduate students that are studying at the learned institutions within our Society boundaries.

Please consider bringing your graduate students to this meeting so that they can take advantage of the papers, posters, and symposia that are such an important part of this meeting. One of the symposia is being planned specifically with graduate students in mind. It is entitled “Professional Opportunities in Weed Science” and will focus on the job market for new weed scientists and what it takes to land a job after that degree is conferred.

Thanks for your consideration and I look forward to seeing you in St. Paul!

Phil Orwick
1998 Program Chair

From your NCWSS Newsletter Editor

The deadlines for submitting items for the next two NCWSS Newsletters are September 1 and February 1. Preferred methods of news item submission are via E-mail (mjhorak@ksu.edu), or in WordPerfect format. Otherwise, send by FAX or mail to:

Michael J. Horak
Department of Agronomy
Kansas State University
3701 Throckmorton Hall
Manhattan, KS 66506-5501

Phone: (785) 532-7240
Fax: (785) 532-6094

NCWSS Business Office Address and Phone:

NCWSS
1508 West University Avenue
Champaign, IL 61821-3133
Phone: (217) 352-4212
Fax: (217) 352-4241
International Symposium on Managing Resistant Weeds to Take Place at the NCWSS Meeting

An International Weed Resistance Symposium will be held at the North Central Weed Science Society Meeting in St. Paul, MN. The three-part symposium to be held on Thursday, December 10th and will focus on “Managing Resistant Weed Populations.”

**Topic 1:** How much does it cost to manage a resistant weed population?

Invited speakers include: James Orson, Director of the Morley Research Centre, Wymondham, UK; Dr. Hugh Beckie, Agriculture & Agri-Food Canada, Saskatoon, Saskatchewan, Canada; and Dr. Dallas Peterson, Kansas State University.

**Topic 2:** How much do cultural practices delay resistance or species shift?

Invited speakers include Dr. John D. Nalawaja, North Dakota State University; Dr. Doug Derksen, Weed-Crop Ecologist, Agriculture and Agri-Food Canada; Dr. Michael J. Christoffers, Geneticist, North Dakota State University; and Dr. Chris Boerboom, University of Wisconsin.

**Topic 3:** Labeling herbicides with their site of action.

Invited speakers include Dr. Carol Mallory Smith, Past Chair of the WSSA Herbicide Resistance Committee, Oregon State University; James Orson, Morley Research Centre, Dr. Hugh Beckie, Agriculture & Agri-Food Canada; and Tom Carrato, from Monsanto.

The format for the symposium will have each speaker give a 10-minute formal presentation followed by a 30-minute discussion period. This symposium is jointly sponsored by the NCWSS and the North American Herbicide Resistance Working Group.

New Distinguished Achievement Award for Technical Support

This award recognizes outstanding and sustained technical support contributions in weed science in the North Central region. Nominees will be restricted to individuals that work under the supervision of university, federal, or industry scientists. These individuals typically have titles such as researcher, technician, support scientist, or specialist. Nominees or their supervisors must have been members of NCWSS for the past 5 years and the nominee must have been involved in weed science research, extension, or resident education for at least 5 years. See “Call for Nominations” section for instructions to nominate someone.

New Technical Support Award

Help Needed: Graduate Paper and Poster Contest Judges

If you would be willing to be a judge for the Graduate Student Paper or Poster Contest at the 1998 December Meeting please contact:

**Paper Contest:**
Randy Loyd  
American Cyanamid Company  
1492 Rock Creek Road  
Williamsburg, KS 66095-8122  
913-242-6188

**Poster Contest:**
Reid Smeda  
Department of Agronomy  
University of Missouri  
202 Waters Hall  
Columbia, MO 65211  
573-822-2001
Call for Nominations

Distinguished Achievement Awards

Distinguished Achievement, Research Award
Distinguished Achievement, Education Award
Distinguished Achievement, Service Award
Distinguished Achievement, Young Scientist Award
Distinguished Achievement, Industry Award
Distinguished Achievement, Technician Award

These awards are available for presentation by the North Central Weed Science Society (NCWSS) to recognize persons who have made outstanding contributions to Weed Science in the North Central Region. Up to five awards can be given among these categories per year - awards will be given according to merit. We strongly encourage nominations from Industry.

Eligibility of Nominees

Nominees must be NCWSS members for at least 5 years at the time of nomination. A member may be eligible in more than one category, but can receive only one award within a three-year period. Candidates for the young scientist award must not have attained 40 years of age prior to September 7 of the year the award is given. Members of the NCWSS Executive Board and Distinguished Achievement Awards Committee (DAAC) are ineligible to be nominated. In the situation where it is desired to nominate a DAAC member, the member may resign from the committee to be eligible for nomination.

Eligibility of Nominators

Nominations will be received from active members of NCWSS. Members of the DAAC are ineligible to make nominations but are exhorted to actively encourage other Society members to submit nominations.

To assure that a nominee can be adequately evaluated for an award, the nomination document must be accurately prepared in the proper format. Nomination forms and instructions are available from the committee chairperson, Bill Miller, Dow AgroSciences, 624 N.E. Persimmon Ln., Lee’s Summit, MO 64064. Phone 816-373-0012, Fax 816-373-0051 E-Mail wmiller@dowagro.com. When requesting, please include your address, phone number and FAX number if available. Instructions also can be found in NCWSS Proceedings.

Submission Deadline: All materials must be received by the Chairperson by September 7, 1998.

Fellows

Selection as a Fellow is the highest honor the society bestows on its members and is limited to 0.5 percent of the membership annually. The Fellow Committee is responsible for identifying those individuals most deserving of this recognition. To assist with this task, members of the society are encouraged to submit nominations for NCWSS Fellows or to suggest possible nominees for this award to the Chairman of the Fellow Committee, Ken Carlson. The deadline for submitting nominations and supporting letters for this year is September 25, 1998. Directions for submission of nominations can be found in Proceedings of the NCWSS. Eight copies of the nomination should be submitted to: Ken Carlson, American Cyanamid, 8040 Cooper Ave., Lincoln, NE 68506. Phone 402-489-9131.

WSSA Undergraduate Research Award

The Weed Science Society of America has developed an Undergraduate Student Research Grant designed to encourage and involve exceptional undergraduates in agricultural research. Interested faculty members are encouraged to identify potential award candidates and discuss the possibility of sponsoring a research project. Awards may be used as a stipend, for research budget expenses (travel, supplies, etc.), to defray fees, to defray living expenses for summer research, or any combination of these items.

Award: Up to $1,000 for support of undergraduate research to be conducted over a minimum of one quarter/semester during 1999. This award may be used to defray the cost of research supplies or as a stipend. Support of a faculty sponsor is required. Awards will be made to the student, to be administered by the faculty sponsor’s department.

Applicants: The applicant is an undergraduate student with a strong interest in Weed Science. Students majoring in all related disciplines may apply.

To Apply: Applicants should prepare a two- to three-page research proposal including name, phone number, title, objective, experimental approach, discussion, budget and references. The discussion section of the proposal should describe the expected results and their possible significance to Weed Science. The student should provide a cover letter in which general academic and career goals are discussed. A copy of the students academic transcripts should also be provided.

Faculty Sponsor: Any faculty member who is actively engaged in Weed Science research is qualified to be a sponsor. The faculty sponsor should review the research proposal with special attention to the budget, the distribution of funds should be approved by both the student and sponsor. In addition, the sponsor should provide a letter of reference including a statement of his/her willingness to supervise the proposed research and to provide needed space, equipment and supplies above those requested in the proposal. The sponsor is encouraged to assist the student in presenting his/her results at a regional Weed Science Meeting.

How To Apply: The completed proposal, academic transcripts, cover letter and faculty letter of support should be forwarded to: Dr. John Jachetta, DowAgroSciences, Bld. 308: 2E/05, 9330 Zionsville Road, Indianapolis, IN 46268-1054; Phone 317-337-4672, FAX 317-337-4649, E-Mail jjjachetta@dowelanco.com. Proposals should be received no later than November 15, 1998. Funding decisions will be made by January 25, 1999 and presented at the 1999 WSSA Annual Meeting Awards Banquet.
Call for Papers for the 53rd Annual Meeting of the North Central Weed Science Society
Radisson Hotel St. Paul
December 8-10, 1998

NCWSS Members and Other Interested Parties:
This issue of the NCWSS Newsletter serves as the CALL FOR PAPERS for the 1998 meeting of the North Central Weed Science Society. You will not be receiving additional notices, so mark your calendar and submit your presentation by September 1, 1998. Submissions received after September 1 may be placed in alternative sections, switched to the poster session, or rejected, depending on the availability of space in the paper sections.

To make paper submission more convenient and efficient, we are continuing the E-mail submission process. The details of the process are covered later in this Call for Papers. Please strongly consider using this method for paper submission and carefully follow the instructions. This method of submission greatly simplified the paper submission and program development process in 1997. Your cooperation in using this system is appreciated.

Due to the continued growth and success of the Poster Session, posters will be grouped by section and displayed through Wednesday afternoon. To designate the desired section, specify the section preference with your title submission as you would for an oral paper presentation.

The 1998 program will again feature the Graduate Student Paper and Poster contests. Students are eligible to compete in both contests. As usual, we are looking forward to top-quality, innovative presentations by the students. Guidelines for the contests are found later in this Call for Papers.

The program will begin Tuesday morning December 8, 1998 and will conclude at noon Thursday, December 10, 1998. The theme for this year will be “Focus on the Future.” Please keep this theme in mind as you develop your presentation for the meeting. Symposia will again be an important feature of the meeting. Topics for this year’s symposia include Weed Resistance Management, Forensic Weed Science: Diagnosing Symptoms, and Professional Opportunities in Weed Science.

Thank you for your participation and support of the North Central Weed Science Society. If you have any suggestions to improve the program, please let me know.

Phil Orwick,
President-Elect and Program Chair
Phone: 317-848-2818

Preparation of Title Submission

Please read and follow all instructions when preparing and sending title submission information.

Indicate whether the presentation is a poster or paper, and then select the section in which you want to make your presentation from the list of sections. Identify your first and alternative choices. Any questions pertaining to the appropriateness, etc., of your presentation in these sections can be answered by contacting the Program Chair or the respective Chair of that section.

Type the title, authors, affiliation (institution, agency, or company) and location (city and state) exactly the way they are to be printed in the program. Include the full first name and middle initial of the authors, rather than just initials. Do not include departments or division, zip codes, or the name of the state if it is a part of the institution’s name. Designate with an asterisk (*) the author who will present the paper. Give the common names of weeds, herbicides, and crops. Study the examples below:

Control of Velvetleaf in Soybean with Clomazone. Jeffrey L. Gunsolus* and Beverly R. Durgan, Univ. of Minnesota, St. Paul.

Tolerance of Corn to Flumetsulam plus Clopyralid. Joe L. Pafford* and Scott C. Ditmarsen, DowELanco, Indianapolis, IN.

Postemergence Herbicides for Broadleaf Weed Control in Corn. Loyd M. Wax*, J. Boyd Carey, and Marshal D. McGlamery, USDA-ARS, Univ. of Illinois, Urbana; American Cyanamid Co., Champaign, IL; and Univ. of Illinois, Urbana.

Do not use trade names in the title of a paper. If the herbicide does not have a common name that is accepted by WSSA (See WSSA homepage at http://piked2.agri.uiuc.edu/wssa/), it should be identified by giving the code number. If the trade name of a chemical appears in the title, the author must supply a suitable justification statement for using the trade name. In scientific reporting, trade names are required very infrequently. All other chemicals, such as surfactants, protectants, other pesticides, etc., should be identified by common name or code number.
Procedures for Submitting Titles

Submission of title information via E-mail is strongly encouraged. If you do not have access to E-mail, titles may be submitted via surface mail using the title submission form.

E-mail Submission Instructions

A. Enter the information contained on the title submission form (use the form as a guide) into an E-mail message. Please type directly into the E-mail message, Do Not convert from word processing or other software.

Include the following in the E-mail message:
1. Whether the preferred format is oral paper or poster
2. Section preference (First and second choices from the list below)
3. Indicate if it is to be entered in the Graduate Student Paper or Poster Contest
4. Title, authors, and affiliation in the format specified in Preparation of Title Submissions section
5. Mailing address of the corresponding author

B. Address and send message to:
1. Program Chair: orwickp@pt.cyanamid.com
2. Proceedings Editors: ross@btny.purdue.edu
3. Graduate Student contest coordinator (if entered in one of the graduate student contests): cthompso@oznet.ksu.edu

* Address to the appropriate individuals as a single message to aid submission tracking by the program chair.

1. Program Chair will acknowledge receipt. If you do not receive a receipt by Sept. 4, please contact the Program Chair by phone or E-mail to determine the problem.

C. Example of E-mail submission message:
1. Paper
2. 1st choice: Weed biology and Ecology. 2nd choice: Corn and sorghum
3. Graduate Student paper contest
4. Spontaneous Disappearance of Weed Seeds. Jane J. Student* and Major S. Professor, Univ. of Earth, Someplace, IN.
5. Jane J. Student, Univ. of Earth, 999 W. Jupiter Place, Someplace, IN 00000, (555) 555-1212.

Address and send. It's that simple!!!

Submission by mail

Submit a copy of the Title Submission Form to:

Phil Orwick
American Cyanamid Co.
301 East Carmel Drive, Suite C-300
Carmel, IN 46032

The Program Chair will use this copy to prepare the program, assigning your presentation to appropriate sessions and time slots. You also need to send a second copy of the Title Submission Form to:

Carole A. Lembi/Merrill A. Ross
NCWSS Proceedings Co-editors
Department of Botany and Plant Pathology
Purdue University,
West Lafayette, IN 47907-1155

They will then send you instructions for preparing abstracts or manuscripts of your presentation for publication in the NCWSS Proceedings. Do not send your abstract, manuscript, or computer disk to the Editors; present it to the Session Moderator when you present your paper or poster.

If you are participating in the Graduate Student poster or paper contest, you need to send a third copy of the Title Submission Form to the Resident Education Chair:

Curtis R. Thompson
Southwest Area Extension Center
2510 John St.
Garden City, KS 67846

In summary, send copies of the Title Submission Forms to both the Program Chair and the Proceeding Editors. Also, send a third copy to the Resident Education Chair if this presentation is entered in either Graduate Student contest.

If you have submitted your title by E-mail, do not submit the paper submission form by mail.
Call for Papers

Sections and Chairs

Alternate Communications Systems ........................................ Alan Haack
Cereals and Oilseeds ........................................................... Carlyle Holen
Corn and Sorghum .................................................................. Rex Wichert
Equipment and Application Methods ..................................... Robert Wolf
Extension ............................................................................. William Johnson
Forage and Range ............................................................... Ken Carlson
Herbicide Physiology .............................................................. Joseph Masabni
Industrial, Forestry, Turf, and Aquatic ................................. Louanne Brooks
Regulatory and Crop Consultants ......................................... Steve Wagner
Soil and Environmental Aspects .............................................. Angela Harrison
Soybeans and Annual Legumes .............................................. Troy Bauer
Sugarbeets, Horticulture, and Ornamentals ........................ J. Rene Scoresby
Weed Ecology and Biology .................................................... Jack Dekker

Oral Presentations

A 15 minute paper (including time for questions) is suggested. Time
slots of other than 15 minutes may be allowed by the Program Chair
for special situations. Carousel projection equipment for 2" × 2" slides will be
standard equipment. If other equipment is needed, please discuss your needs with the Section Chair.
The speaker must provide any unusual equipment to be used in the
presentation.

You are asked to submit a paper or abstract for inclusion in the
NCWSS Proceedings. The paper or abstract should be presented as
hard copy and on a computer disk to the session moderator at the
time the paper is presented. The Proceedings Editor will send
instructions for submitting papers and abstracts to the Proceedings
when your title is submitted.

Poster Session

The poster session begins at 8:00 a.m. on Tuesday, December 8. One
poster mounting board, approximately 48 inches x 48 inches,
supported on an easel will be provided by the NCWSS. The authors will
be with their posters from 8:00 to 9:45 a.m. and from 3:30 to 5:00 p.m.
on Tuesday, December 8. Posters will be positioned in the same area
with the Sustaining Member displays and will remain in place all day
Tuesday and Wednesday. Posters should not be removed before 4:00
p.m. Wednesday, but should be removed before noon on Thursday.
Posters will be arranged according to subject, so please indicate your
section preference on the Title Submission Form. Additional details will
be mailed to each poster author in early October. You are asked to
submit a paper or abstract for inclusion in the NCWSS Proceedings.
The paper or abstract should be presented as hard copy and on a
computer disk to the Poster Session Chairperson on Tuesday morning.
The Proceedings Editor will send instructions for submitting disk and
papers or abstract for the Proceedings when your title is submitted. The
poster room will be open on Monday evening and you are strongly
urged to set up your poster at that time. The chair of the poster session
is J. Rene Scoresby, phone 614-397-2247.

Alternate Communications Systems

The Alternate Communications Systems session is open to all
subject areas and will allow a presentation to be made with a computer
or a VHS video cassette tape or when a
computer or a VHS video tape is a
portion of an oral presentation. The
room will not be set up with any
other projection equipment.

The Alternate Communications Systems session will follow the format
of the oral presentation and should
be presented at the same technical
level as a presentation that might be
in any other session. A 15 minute
presentation is suggested, including
the actual running time of the tape
should not exceed 10 to 12 minutes.
If more time is needed, please make
arrangements with the Program Chair. We intend to keep the video
presentations on the same time schedule as other presentations.
An abstract or paper should be presented to the session moderator
as hard copy and on a computer disk at the time of the presentation for
publication in the NCWSS Proceedings. All guidelines for a paper
presentation should be followed in preparation of this abstract. We
encourage you to present your video tapes that have already been
developed for use in teaching, extension and industry that may be
edited to fit the time frame of the meetings. In your introduction, please
indicate if the unedited version of the tape or the tape presentation
would be available for use by members of the NCWSS.

New for 1998: Please bring 20 to
25 copies of your abstract to the
meeting. These will be made
available at the meeting for those
interested in your research.
Graduate Student Paper Contest

Awards will be presented to graduate students giving outstanding papers at the 1998 meeting of the North Central Weed Science Society. Awards will be presented to the first and second place winners at the banquet. Any graduate student who is registered in attendance at the NCWSS meeting and has conducted the research being reported while a student in the North Central Region is eligible to compete in the contest, except those having won first place in a previous contest.

Graduate students may enter the paper contest by submitting the Title and indicating entry into the contest. The Title must be submitted to the Program Chair, Phil Orwick; Co-editors, NCWSS Proceedings, Carole A. Lembi/Merrill A. Ross; and Resident Education Chairperson, Curtis Thompson. An abstract or full paper should be presented as hard copy and on computer disk to the Section Moderator at the time of presentation for publication in the Proceedings. This paper or abstract must conform to the rules enabling camera-ready publication. The criteria for evaluation of presentations can be found on page 231 of the Proceedings of the 1996 North Central Weed Science Society.

Participating graduate students will receive a free banquet ticket from the NCWSS. Awards will consist of certificates of achievement and a minimum monetary award of $100 for first place and $50 for second place to the winners in each division (if divisions are necessary). The Contest Chairperson in charge of the graduate student paper contest is Randy Lloyd.

Graduate Student Poster Contest

The graduate student poster contest will be parallel in concept to the graduate student paper contest. Graduate students may enter the paper contest by submitting the Title and indicating entry into the contest. The Title must be submitted to the Program Chair, Phil Orwick; Co-editors, NCWSS Proceedings, Carole A. Lembi/Merrill A. Ross; and Resident Education Chairperson, Curtis Thompson. An abstract or full paper should be presented as hard copy and on computer disk to the Section Moderator at the time of presentation for publication in the Proceedings. This paper or abstract must conform to the rules enabling camera-ready publication. The criteria for evaluation of presentations can be found on page 231 of the Proceedings of the 1996 North Central Weed Science Society.

The purposes of the contest are to encourage participation in the poster session, promote development of quality poster displays, provide an outlet for students whose research can most effectively be presented in a poster session, and provide a special opportunity for participation by graduate students ineligible for the paper contest.

The posters will be evaluated on content, development, appearance, analysis of results, and presentation. See page 234 of the 1996 NCWSS Proceedings for a complete description of these evaluation points. Other aspects of the poster contest will follow the precedent of the graduate student paper contest, including a free banquet ticket and $100 and $50 for first and second place, respectively.

The Contest Chairperson in charge of the graduate student poster contest is Reid Smeda.

New for 1998: Please bring 20 to 25 copies of your abstract to the meeting. These will be made available at the meeting for those interested in your research.
Call for Papers

Call for Sustaining Member Displays - Guide for Preparing Displays

1. Products and services displayed. Examples of products and services that Sustaining Members may display to present information that advances weed science and technology include herbicides, computers, data collectors, application equipment, application services, contract research services, laboratories, publications, crop varieties, weed seed supplies, research plot equipment, toxic waste disposal services, packaging, transportation, media equipment, teaching aids, and communication technology.

2. Space available. Each exhibit must be contained within a space 10 feet wide by 8 feet deep unless special permission is received from Vince Ulsted.

3. Tables available. Rectangular tables with dimensions of 6 x 2.5 feet will be available. Exhibitors may use them for displays that fit the prescribed available space.

4. Electrical current. Standard electrical receptacles for 120-volt current will be available. Please bring a 50-foot extension cord to assure accessibility.

5. Sounds and lights. Displays with sounds or lights that would distract from other displays will not be permitted. Silent slide projectors and video equipment are permitted.

6. Time for set-up. The display room will be open for setting up exhibits Monday evening, December 7. The displays must be removed before noon on December 10, 1998.

7. Staffing displays. It is recommended that exhibitors have personnel at their exhibits during the normal hours of the meeting, but displays may be either manned or self-explanatory. It is especially important that the exhibits be staffed during the poster session from 8:00 to 9:45 a.m. and from 3:30 to 5:00 p.m. on Tuesday. The commercial exhibits and posters will be near each other, and many people will visit both during the scheduled poster session.

8. Number of displays. Each sustaining member is entitled to only one display. Non-Sustaining members may not share space with Sustaining Members.

9. Sales activities and business transactions will not be permitted in the display area. Likewise, promotional activities that detract from the professional integrity of the NCWSS will not be permitted.

10. Shipping of Displays. Please make your own arrangements for shipping your display to and from the hotel.

11. Becoming a Sustaining Member of the NCWSS. For information on how to become a Sustaining Member of the NCWSS, contact Vince Ulsted, Chair of the Industry Committee, phone 701-588-4542.

12. Contact person. The coordinator of the Sustaining Membership Exhibits at the St. Paul meeting is Vince Ulsted, BASF Corp., 4120 15th Street South, Fargo, ND 58104.

New for 1998: Please bring 20 to 25 copies of your abstract to the meeting. These will be made available at the meeting for those interested in your research.
CAST Directors Meet in Washington, D.C.

Jerry Doll and Tom Peters, outgoing and newly elected CAST Representative, respectively

The spring meeting of the Council for Agricultural Technology and Science met in Washington, D.C. on March 20 to 22, 1998. Board members were invited to attend the Agriculture in America reception, part of the Agriculture Week celebrations in the nation’s capital, on March 19. We also were encouraged to meet with legislators on key issues at this important time of budget deliberations.

Dr. Harold Coble is in Washington for 1 year to head the USDA IPM Program which has the clear objective of achieving the agency’s goal of 75 percent IPM adoption by the year 2000. Estimates are that producers are currently at a 58 percent adoption rate. Funds requested in the president’s budget for both IPM research and extension would be adequate to make reaching the goal feasible. The administration’s budget request in this area is the same as it has been for the past 3 years. However, the level of requested funding has been cut dramatically during the budget deliberation process. Our message to legislators was clear and direct: work to ensure that the requested budget levels are maintained.

We met first with Legislative Aid Mr. Will Painter in Rep. David Obey’s office (D-Wis.) the ranking member of the House Appropriations Committee, and then with Legislative Aid Mark Rokala in Sen. Herbert Kohl’s office (D-Wis.) who is on the Senate Appropriations Committee. Both legislative aids seemed genuinely interested in and understood the importance of the request. They described the gyrations and uncertainties inherent in the federal budget process and could only promise to do what they could to maintain the requested funding levels.

The CAST board meeting opened on Friday afternoon with officer and staff reports to about 50 board members and a few guests. CAST has a new group that represents them in Washington, Meyers and Associates and Dr. Stuckey, Executive Vice-president of CAST, has a new Executive Assistant, Kathy Buhman. This leaves only one vacancy on the staff, that of the development director. An outside agency has found three candidates and interviews will take place in Ames on March 30 and 31. This unfilled vacancy plus income from the Food Conference in Nov. to celebrate the 25th anniversary of CAST greatly improved the bottom line and CAST now has a reasonable reserve of funds. Efforts will continue to build reserves to an even more comfortable level.

At the awards banquet, Dr. Pinstrup-Anderson received the Charles A. Black Award. The award is given annually to someone who has made significant scientific contributions in agriculture. Dr. Pinstrup-Anderson is the director of IFPRI (International Food Policy Research Institute based in Washington, D.C.) and has contributed greatly to the development of food policy issues in the developing world.

The Plant Protection Working group invited Dr. Al Jennings to visit with us. He recently moved from the EPA to head the newly created USDA Office of Pest Management (OPM). The purpose is to coordinate and integrate pest management activities within the USDA and with other agencies. The OPM will develop a data base of pesticide uses and pest management practices, and strengthen the links between the agency and the land grant institutions. The Food Quality Protection Act drives most of the pesticide related issues now. In particular, the debate on the continued use of organophosphate insecticides is on center stage.

The Work Group is preparing an issue paper on Prescription Pesticides (coordinated by Harold Coble), a series of questions and answers on FQPA, recommended that the Pest Management CAST Report be redone (first edition is dated 1983), and recommended that an issue paper on nonnative deleterious organisms be developed. Other reports being prepared by CAST of interest to weed scientists are on hypoxia and biodiversity.

Dr. Richard Smiley of the American Phytopathological Soc. (Oregon State Univ.) chaired the first session of the Plant Protection Working group and Mr. Larry Larson of the Entomological Soc. of America (Dow Agrosciences) moved from vice-chair to chair at the second session. Dr. Tom Peters of the NCWSS (Monsanto) was elected vice-chair of the group.

The Budget and Finance committee recommended that CAST extend the agreement to work with Meyers and Associates until the end of the year (this would replace the earlier arrangement with AESOP). In particular, they should strive to develop emergency response teams that would be ready to address key issues and respond to the media as they develop in Washington, to arrange teams of agricultural scientists to visit the editorial staff of the major newspapers to try and give them first hand exposure to the important issues in agriculture, and to coordinate “educational lunches” every month or two for the legislative aids in the
congressional offices. Larry Meyers spoke to the Board and explained that his 18-year old business is respected on both sides of the isle and represents 18 Land Grants and additional organizations on the Washington scene.

The Membership committee recommended more focus directed towards individual memberships. The Executive committee has focused much of its energies at attracting society members. However, this focus will change once the development director position is filled. Improved communication with individual members including an expanded internet site and perhaps electronic newsletters should enable individual members to find value in CAST. The Membership committee also recommended that more emphasis be placed on attracting technology based organizations such as Golf Course Superintendents Association of America and the National Alliance of Independent Crop Consultants. Technology is the application of science. Yet our representation has been primarily science-based organizations.

The Conversations on Change program met in Tuskegee University in Feb. Nearly 60 representatives of professional societies participated, including executive directors from 15 societies. An incentives grant program was announced. Awards of up to $5,000 will be given to foster more intersociety programs, sponsor satellite events, engage resource people, and other projects that would help lead professional scientific societies into the next millennium.

The CAST home page continues to grow and flourish. It has a new address: www.cast-science.org. All in all it has been a very good year for CAST and the prospects are bright for the future.

World Weed Book Wins Publishers’ Award

For the first time, a Weed Science book has been awarded one of the highest honors in American publishing. World Weeds: Natural Histories and Distribution (Holm et al, 1997; John Wiley and Sons, Inc., pub.) has received the 1997 Award of Excellence in Professional and Scholarly Publishing in the Biological Sciences. The award is presented by the Association of American Publishers, whose 200 members represent all of the major commercial publishers and University presses. The book was written by University of Wisconsin, Madison Professors LeRoy Holm and Jerry Doll, College of Agriculture and Life Sciences; Eric Holm, former Wisconsin student in Geography; Professor Juan Pancho, taxonomist and illustrator, Museum of Natural History, University of the Philippines; and James Herberger, former University of Wisconsin student in Horticulture.

Weeds cause one of the largest single food losses in all of agriculture. Expenditures for weed management, worldwide exceed those for all other plant pests combined, and it is likely that the time and effort spent for hand-weeding still exceeds that of any other human task. Ninety percent of the world’s principal food crop, rice, is grown in Asia where most of it is still weeded by hand.

World Weeds is the culmination of four decades of research to identify and describe the worst weed species in agriculture and industry. As these studies began, there was speculation that there were as many as 5,000 weed species that were important in man’s activities. With this volume and its companion books The World’s Worst Weeds (Holm et al 1977) and A Geographical Atlas of World Weeds (Holm et al 1979) it may be said that the number is about 200 species — and we now know their names, their world distribution, and all or most of their biology.

World Weeds, the last of the trilogy, describes the natural history and distribution of 125 weed species found in crops in almost 200 countries of the world (for an extensive review of the book see Weed Technology 11:633-34 (1997)). The authors have gathered all or most of the known biology for each species, including habitat, seed behavior, morphology, ecology and physiology. Full-page illustrations of each species are supplemented by detailed botanical descriptions and maps of their world distribution. The massive bibliography contains more than 3,000 references distilled from more than 30,000 reviewed documents. But the authors have emphasized that “they often felt as dwarfs as they worked among 500 people from many countries who possessed a great knowledge of the behavior of the weeds about them. Often their education was limited, their books were few, but they were keen observers and they reasoned adroitly and skillfully about all of the biology that unfolded before them. They were our teachers!”
The Role of Science in the Legislative Process

Stephanie Mercier and Laura Whatley

Background:

This article is a summary of presentations at the recent CAST “Conversations on Change” workshop in Tuskegee, Alabama. Weed scientists representing each regional U.S. weed society plus WSSA participate in the ongoing program dealing with change in scientific societies. Other societies were represented at the workshop too; co-author Stephanie Mercier is a member of the American Agricultural Economics Association.

For more information on “Conversations on Change,” contact Doug Buhler, Bill Miller, or members of the other participating weed societies: Joe Neal, Randy Ratliff, Jill Schroeder, Horace Skipper, Laura Whatley, Paul Zorner.

The Role of Science in the Legislative Process

Introduction

The legislative process is both complex and open to ensure that proposed laws are fully considered and interested citizens and groups have an opportunity to express their views. Interpretation and enforcement of laws are part of the regulatory process, and are often as important as legislation.

Legislatures and regulatory agencies pay close attention to political considerations, particularly those that relate to the voters’ opinions and therefore to the legislator’s re-election prospects. To the extent possible, legislators also make an effort to make decisions based on factual information, but they do not always know where to find it. Scientists have a particular obligation to participate in this process, because they possess a pool of objective knowledge that can be applied to many issues under discussion.

A Case Study of the Political Process: The Agricultural Research Title

To great fanfare, the 104th Congress passed the Federal Agricultural Improvement and Reform Act of 1996, legislation which considerably altered the orientation of agricultural programs, reducing the reliance of American farmers on federal program payments and increasing their exposure to market forces. However, all the energy devoted to reforming such programs meant that some provisions typically included in that legislation were left uncompleted, including those related to Federal agricultural research and extension programs, the body of which is typically called the Research Title. The responsibility for that separate legislation lies with the current Congress, which to date has been unable to complete it due to conflicts of competing interests.

The Research Title contains provisions which authorize those institutions and activities which make up the Federal Agricultural Research system, including the Agricultural Research Service (ARS) and the Cooperative State Research, Education and Extension Service (CSREES), and disbursement of formula funds for university research under the Hatch Act and university extension under the Smith-Lever Act. One of the intentions of Congress in undertaking this legislation was to improve the accountability of researchers to the ‘stakeholders’ of the agricultural sector, a topic no doubt of interest to agricultural scientists. Scientists should recognize that they have both the ability and incentive to inform the legislative process, in this instance and many others, if they can but learn how to accomplish it.

The Legislative Process

Transforming ideas into laws follows the same general procedure at the state and federal level. However, the details can differ; the legislative branch at the Federal level and in 49 states are bicameral (composed of two houses). The fiftieth state, Nebraska, is unicameral, as are legislative bodies at most local levels (county, city, etc.).

A proposal for a new law is usually called a bill. Anyone can formulate a bill; many originate with the governor, mayor, or appointed executive branch officials reporting to them. However, only members of the legislative body can introduce a bill. These bills are generally referred to the committee and subcommittee that handle legislation in particular subject areas: an air quality bill to the Environmental Committee, a tax bill to the Finance or Ways and Means Committee, and so on. The Agriculture Committees of both the House and the Senate have oversight responsibility for the U.S. Department of Agriculture and all of the programs and activities the Department conducts.

In preparing to consider legislation, members typically begin by seeking out information that is relevant to the issue covered under the legislation. One important mechanism typically used is a public fact-finding hearing, in which witnesses testify briefly about their areas of expertise and members of Congress ask questions. The Senate Agriculture Committee held four hearings in 1997 in preparation for the Research title.

Since it was known years in advance that the research provisions would need to be reauthorized, there was enough time to conduct a thorough analysis of the issues. In 1993, the Board on Agriculture of the National Research Council undertook a study on the land-grant university system that was completed in 1995. The results of that study contributed very heavily to early discussions on the legislation. In addition, in advance of the hearings that he held, the Chairman of the Committee, Senator Richard Lugar of Indiana, also made public a series of questions about the
nature of the agricultural research system and what reforms might be needed. Responses to those questions, submitted by a variety of institutions, organizations, and individuals, formed a very important part of the information base for interested staff members.

For a bill that needs to command bipartisan support, such as the research title, the drafting discussion stage can be quite lengthy. Once the language is finalized, the committee meets to mark up (i.e., vote on) the Chairman’s version of the bill. The next step is to submit the bill for approval by the full body. In bicameral bodies, these steps must be followed by both houses, and then differences in the bill language must be resolved by a conference committee, consisting of members appointed by both the Senate and the House. After both houses approve identical language for final passage, the bill is sent to the chief executive for his approval or veto.

The legislative process is deliberately complex to assure full consideration of new laws and policies. Most bills never receive any action at all, and only a small number of those that are seriously considered ever make their way successfully through the legislative obstacle course to win enactment.

Legislative rules and protocol often differ significantly, not only from legislature to legislature, but also from house to house within the same legislature. Many state legislatures allow bills to be pre-filed, i.e. introduced before the legislative session, and set a deadline after which new introductions are not permitted. Others permit introductions at any time during the session (bills do not automatically carry over from one legislature to the next: they must always be reintroduced when a new legislature convenes). The length of legislative sessions differ greatly. Some states have year-round sessions, while others are as short as 45 days. Still others meet just every other year. There are also differences from state to state in the staff size assigned to individual legislators and committees. In addition, the rules by which laws are made vary from state to state.

Every legislative body has informal practices and customs that can be as important as the rules. For example, legislative hearings are common in some legislatures and rare in others. Many now use electronic systems for roll-call votes; others do not, and in still other states, voice votes rather than roll calls are the accepted practice. Key policy decisions are made by the leadership in some legislatures, by a policy committee in other bodies, and by majority party caucus in yet others.

With few exceptions, the legislative process is very open. Every citizen who has inputs and opinions to express has ample opportunity to participate at various stages of the process.

Almost all legislators are nominated through partisan political processes and chosen in partisan elections. The party that wins a majority of the seats in each legislative body also wins the right to pick the officers of that house, the committee chairperson, and often the majority of the committee staff. Although political parties are not as powerful in elections as they once were, they still are very potent forces in determining the organization of the vast majority of legislatures.

In some jurisdictions, there are other means of initiating or even passing legislation. In about half the states, voters have the power of final judgment on legislation through initiatives and referenda. Direct initiatives are proposed laws placed on the ballot through petitions containing a certain number of voters’ signatures. The legislature is not normally involved in the process. In the case of indirect initiatives, the legislature is given an opportunity to act on the proposal before it goes to the voters.

Most states have a form of referendum that requires the voters’ approval of certain measures such as constitutional amendments, bond issues and the like. These referenda take place as a matter of law with no petitions required. The term “popular referendum” refers to the opportunity given to voters in some states to petition a particular act of the legislature onto the ballot for approval or disapproval.

Contributors to the Legislative Process

If a bill’s sponsors are truly interested in passing effective legislation rather than scoring political points, then it is likely that the Executive Branch was involved early in the process, making sure their concerns are addressed so that legislation does not face a serious veto threat. While the Executive can suggest legislation at any point in time, only members can formally introduce bills for consideration, so they are often forced into a reactive mode. For the Agriculture Committees at the Federal level, the Administration is typically represented by officials of the U.S. Department of Agriculture. At least for the Agriculture Committees, the other official big players in informing the legislative process are the land-grant university system, usually represented in the person of Deans of the College of Agriculture for each school. However, most members’ input is limited to that provided by the Deans from the universities in their own state.

The unofficial contributors to agricultural legislation are more numerous, bringing many different viewpoints to bear on the process because they have direct or indirect stakes in the results. Commodity and trade organizations are always interested in whatever the Agriculture Committees do because their
members’ livelihoods depend in large part on their actions. With reduced federal commodity programs, many of these groups have identified research spending as important to maintaining the U.S. competitive position in agricultural trade. University associations and umbrella research groups also weigh in on most issues under Committee consideration, on a fairly effective basis.

Groups interested in rural development, the environment, and nutrition issues advocate very ably for their cause. Sometimes, that advocacy consists of blocking new spending for other programs, because under Congressional budget rules, more spending on one item typically means less spending on another.

In the past, scientific societies have not been very effective participants in the legislative process. One suspects that most societies are reluctant to become involved, because it might be seen as compromising the scientific integrity of their members. However, it is possible to be advocates for (and providers of) good science, without becoming co-opted by the political process, although it is a very delicate position to maintain. What Congressional staffers need most is accurate information that can be factored into the decision-making process without having to spend time deciding if the information providers might skew the analysis to bolster the probability of an outcome in their favor. Scientists are ideally positioned to fill such a role.

**Opportunities for Informing the Process**

As is often the case, sooner is better than later. Comprehensive studies with clear policy implications available at the beginning of the legislative study process can have considerable impact on forming legislation, and fit well into the framework of academic research. Pieces designed to facilitate later participation in the process should be drawn from the larger body of work, and tailored to the rapid-fire needs of an individual with limited time to examine any single issue.

Except during slack legislative periods, staffers generally have little time to read technical material. To capture their interest, it is necessary to make it through whatever filtering mechanism the key staffers have adopted. This can be accomplished in one of three ways:

- Personal contact with person or organization generating material (in a briefing, for example)
- Personal recommendation of someone they trust
- Name recognition of affiliated organization

In the legislative arena, even award-winning work is unlikely to have an impact unless it is ‘marketed’ somehow to potentially interested parties.

**Beyond Legislation**

Passing a law is only the beginning of change; interpretation and enforcement of the new law remain. Battles over this regulatory process can go on for years. The law as written is general; legislators empower an agency to enforce it. Details are left to the agency, which develops the specifics through regulation. Even at this stage, informed intervention can alter how those regulations are shaped.

The process involves preparing a proposed regulation which is published for a period of public written comment. The agency may also hold public hearings. After the comment period, the agency decides what changes, if any, it wants to make in the proposal, and then promulgates (adopts and publishes) it as final regulation. In some situations, another body must approve or ratify the regulation before it can take effect: either a separate administrative agency or an arm of the legislature.

There are similarities between the legislative and regulatory processes, but there are also important differences. When a bill is introduced in a legislative body, at least 75% of the action still lies ahead. In contrast, when a proposed regulation or rule is issued for public comments, 75% of the action has already taken place.

**Conclusions**

It is clear that increased education is needed on both sides. Scientists are largely unfamiliar with the legislative process, and do not know how or when to make an effort to introduce the fruit of their research to help make policy. On the other hand, most legislative staffers are not trained in a scientific field, and do not know how to easily draw on available information. The goal for everyone should be to have more informed decision.
Position Announcement

Assistant Professor and Extension Specialist of Urban IPM
Department of Natural Resources and Environmental Sciences
College of Agricultural, Consumer and Environmental Sciences
University of Illinois at Urbana-Champaign

**Position:** Nine-month tenure-track assistant professor and extension specialist beginning August 21, 1998 or as soon thereafter as possible.

**Qualifications:** A Ph.D. in horticulture, entomology, plant pathology, weed science, or similar plant protection discipline.

**Expectations:** Responsibilities will be 70 percent extension and 30 percent research. Candidate will conduct a well-focused program in the area of urban IPM with emphasis on outreach and applied research.

**Salary:** Commensurate with education and experience.

**Closing Date:** July 1, 1998

**Application:** Send curriculum vita detailing education, professional experience and qualifications; a statement describing reasons for interest in the position; college transcripts; and names, addresses, telephone numbers, and E-mail addresses of three references to:

Ms. Joyce Canaday
Department of NRES
University of Illinois
W-503 Turner Hall
1102 S. Goodwin Ave.
Urbana, IL 61801
Phone: 217-333-2770
FAX: 217-244-7156
Email: jcanaday@uiuc.edu

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1999 Committee Participation Request Form
North Central Weed Science Society

I would like to volunteer to serve the NCWSS as a member of a committee starting in 1999. I am listing my order of preference to serve on the following committee(s) (subject to available space):

1. ________________________
2. ________________________
3. ________________________
4. _____ I have no preference; I’m willing to serve where needed.

Name _____________________________________
Address ____________________________________
Telephone __________________________________

Committee assignments will be made after the 1998 December meeting, so your name will be kept on file for these assignments. This form should be returned to Phil Orwick, American Cyanamid Co. 301 E. Carmel Dr. Suite C-300, Carmel, IN 46032. You can send this form with your Title Submission Form if you are giving a paper at the 1998 meeting, or you can send it separately.

Send to Phil Orwick before December 20, 1998.
**Title Submission Form**

1998 North Central Weed Science Society Meeting  
December 8-10, 1998  
Radisson Hotel St. Paul,  
St. Paul, Minnesota  

**Do not submit this form by mail if you have submitted by E-mail (the preferred method)**

Every title submitted must complete steps 1, 2, 4, and 5. If this presentation is entered into the Graduate Student Contest, also complete step 3.

1. Submit only one copy of this form by mail to: Phil Orwick, American Cyanamid Co., 301 East Carmel Drive, Suite C-300, Carmel, IN 46032 before September 1, 1998. See “Procedures for Submitting Titles.” Indicate whether presentation is a poster or paper, and indicate your section preference by name:

   Paper _____ Poster _____ (check one)

   Section preference (specify for both papers and posters):

   1st Choice __________________ 2nd Choice __________________

2. Also, send a copy of this form to: Carole A. Lembi/Merrill A. Ross, co-editors, NCWSS Proceedings, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907. Do not mail your abstract to the co-editors, but present it to the Session Moderator when you present your paper at the meeting. Instructions for preparation of camera-ready copy and computer disk will be mailed to you by the co-editors.

3. Graduate Student Paper or Poster Contestants Only

   a. ___ Paper Contest ___ Poster Contest

   b. Send a third copy of this form to: Curtis R. Thompson, Southwest Area Extension Center, 2510 John St., Garden City, KS 67846.

4. Please type title, authors, affiliation and location exactly as you wish information to appear in the NCWSS printed program; see “Preparation of Title Submissions” for specific directions and examples. Note: Include first name and middle initial of authors rather than just initials. Place an asterisk by name of the author that will deliver the paper if more than one author is listed.

5. Provide mailing address for author who will handle correspondence and inquiries from the Program Chair:

   Name _____________________ Phone ___________________

   Address ____________________________________________

   City ___________________, State or Province __________ ZIP or Postal Code __________

**Note:** A 35 mm slide projector is standard equipment and will be provided for speakers in all sections. Should you require equipment other than a 35 mm slide projector, please discuss your needs with your particular Section Chair. Speakers must provide any unusual equipment.