

## **S011.06 Soil and Water Management & Conservation**

Division S-06 Annual Report for 2004

Committee Code No. S011.06 Div. S-06

Date of Report Preparation: January 7, 2005

Name of Society Activity: Division S-06

### **General Report**

**Officers:** Current officers for Division S-06 (2003-2004) are:

Past Chair: Gary (Pete) Peterson, Colorado State University, Fort Collins, CO

Chair: Jorge Delgado, USDA-ARS, Fort Collins, CO

Chair-elect: Diane Stott, USDA-ARS, West Lafayette, IN

Incoming Chair-elect: Tom Kaspar, USDA-ARS, Ames, IA

Division Board Representative: Doug Karlen, USDA-ARS, Ames/Ankeny, IA

SSSA/S-06 - SWCS Liaison, Warren Busscher, USDA-ARS Florence, SC

**New Business:** Jorge Delgado called the meeting to order. He reported that S-06 had 219 papers presented, which was the third highest number of papers received by any ACS Division and the highest in S-06 during the past 17 years.

### **2004 Division S-06 Program Highlights.**

Division S-06 received 219 presentations, the third most papers of any ACS division at the 2004 annual meetings (the most since 1988). We had one lectureship, two symposiums, 11 oral sessions, 14 poster sessions, and one workshop. The workshop was a success with forty-five people attending the S-06 sponsored workshop on Sunday. Several members could not register because the workshop was sold out. The Howard M. Taylor Lectureship was attended by approximately 180 people in a packed room. Additionally, we co-sponsored the Sustainable and Organic Agriculture Round Table supported by CSSA, ASA, SSSA, Divisions S-06 and C-03.

### **SUNDAY, OCTOBER 31, 2004**

- Comprehensive Nutrient Management Plans Workshop. *The four-hour workshop covered established and emerging risk assessment tools utilized during the development of a comprehensive nutrient management plan (CNMP). Four CEU's were offered.* 1:00 pm – 5:00 pm
- Undergraduate Speech Contest: Preliminary Speech Contest 3:30-5:30 pm; Finals 7:00-8:00 pm

### **MONDAY, NOVEMBER 1, 2004**

- Symposium-Precision Conservation in North America: I – *Fran Pierce presiding* 7:55 am - 12:05 pm
- Land Use Policy- *Tedd Huffman presiding* 12:55 pm – 3:30 pm
- Howard M. Taylor Memorial Lectureship: The Roots of the Second Green Revolution  
Dr. Jonathan Lynch, Professor of Plant Nutrition, Pennsylvania State University. *Dr.*

*Lynch's research focuses on the physiological basis of crop adaptation to infertile soils emphasizing phosphorus. Tom Kaspar presiding. 2:25 pm – 3:30 pm*

- Division S-06 Business Meeting: 3:30-5:00 pm, *Jorge Delgado presiding*

## **TUESDAY, NOVEMBER 2, 2004**

- Technologies and BMPs for Conservation of Water Quality: I – *Christoph M. Gross presiding 7:55 am – 10:30 am*
- Assessment and Management of Salinity: I – *Neil Hansen presiding 1:25 pm – 2:45 pm*
- Soil Plant and Water Relationships – *Dinku Endale presiding 7:55 am - 12:05 pm*
- Symposium---Assessment of the Effectiveness of Conservation Practices in North America: I. *Jorge A. Delgado presiding 1:25 pm - 4:00 pm*
- Assessment and Management of Soil Erosion for Conservation Across the Landscape: I – *Mahdi Al-Kaisi presiding 9:55 am – 11:30 am*

## **WEDNESDAY, NOVEMBER 2, 2004**

- Carbon Sequestration Across Landscapes: A Contribution to Global Sustainability: I – *Curtis Dell presiding 7:55 am – 9:45 am*
- Environmental Assessment of Organic Phosphorus Inputs: I – *David Sotomayor presiding 7:55 am – 9:00 am*
- Soil Physical Properties and Management Techniques for Increasing Conservation: I *Dewayne Mays presiding 9:55 am - 11:15 am*
- Evaluation of Tillage Impacts on Yield and Soil and Water Conservation: I – *Warren J. Busscher presiding 1:25 am - 2:45 pm*

## **THURSDAY, NOVEMBER 2, 2004**

- Improving Water Conservation: Budgets and Hydrology – *Ali Fares presiding 7:55 am - 8:45 am*
- Identification of Land Use, Soils, Ecological Processes, and Use of Remote Sensing for Conservation – *Mark A. Leibig presiding 9:25 am - 10:30 am*

## **SSSA President Tom Sims then spoke for a few minutes at the S-06 Business Meetings:**

- New strategic plan for SSSA and the board needs feedback
- The board is proposing a restructuring of the board of directors
- Doug Karlen has already given the board some feedback for S-06
- SSSA wants to strengthen our relationships with professional soil scientists
- SSSA needs to raise \$3 million for the Smithsonian soils exhibit
- SSSA is growing and our current budget is good

Jorge thanked Past-Chair Gary Peterson for his help and advice. Jorge also thanked all the members who presided over the oral sessions and those who helped organize oral and poster symposiums and special oral sessions. He also thanked the chairs of the committees for their great job and thanked all members who contributed to a successful SSSA-S-06 meeting. Thanks were also extended to Brenton Sharratt, who after several years of Chairing the S-06/SWCS Undergraduate Student Speech Contest, and Jim Bauder who, after several years of being Technical Editor, will move on to other activities. S-06 thanks them for their great contributions.

Jorge also had a special thank you to Harold VanEs for his contributions to S-06 and the donation of all plaques for the awards.

**Awards:** The Division S-06 has a very active awards program for recognition of its members. Following are the reports from our awards committees.

**S-06/SWCS Undergraduate Student Speech Contest:** The 8<sup>th</sup> S-06/SWCS Speech Contest was held in conjunction with the 2004 ASA National Student Speech Contest on Sunday, October 31, 2004 in Seattle, Washington. The winner of the S-06/SWCS contest was chosen by six Division S-06 members who served as judges of the ASA National Student Speech Contest and also identified the contestants whose speeches addressed issues, policies, or research related to soil and water management and conservation. In accordance with an agreement between Division A-1a and S-06, the winner was selected from the final rankings of the A-1a contest.

The winner of the ASA National Student Speech Contest was Andrew Wamsley, an undergraduate at the University of Florida, with his speech "Will Rising Atmospheric CO<sub>2</sub> Concentrations Have a Positive Impact on Major US Agricultural Crops?". Division S-06 judges also selected Andrew as the winner of the S-06/SWCS contest since his speech covered issues related to soil and water conservation. Andrew was awarded the S-06/SWCS framed certificate, \$200.00 from Division S-06 and a one-year membership from SWCS at the Student Breakfast-Awards-Business meeting held on November 2, 2004. Brenton Sharratt chaired this activity and thanked the Soil and Water Conservation Society and his Executive Director, Craig Cox, for their support of this award. Neil Hansen will chair the student speech contest starting in 2005.

**Outstanding Graduate Student Award:** The winner of the 2004 "Outstanding Graduate Student" award was Adriane Elliott. Adriane completed her B.A. in sociology and anthropology in 1997 at Texas Christian University. In 2000, she enrolled in the Soil and Crop Sciences Department to pursue a M.S. under Jessica Davis at Colorado State University. Adriane's research focused on the impact of organic phosphorus sources on phosphorus runoff. Her results showed significantly less phosphorus runoff from field plots amended with compost and vermicompost compared to raw manure. Adriane began working as a Research Associate for Dr. Davis in October of 2004 at CSU. Adriane was awarded a plaque and a check for \$350.00 for her graduate work. Ken Potter chairs this activity.

**Young Scholar Award:** This award recognizes outstanding young scientists who within seven years of completion of their Ph.D. have made an impact and a significant contribution in Soil & Water Management and Conservation. Dr. Mark Liebig from USDA-ARS, Mandan, ND was selected for the Young Scholar Award. Mark works with a multidisciplinary team of scientists to develop soil, crop, and animal management practices for the northern Great Plains to overcome limitations to productivity while maintaining or enhancing environmental quality. As a team member, he is responsible for determining the effects of diverse cropping and integrated agricultural systems on soil quality and greenhouse gas fluxes. Mark was awarded a plaque for his significant contribution in Soil & Water Management. Gary Peterson chaired this committee.

**Outstanding SSAJ Division S-06 Paper award:** A web ballot was set up in the S-06 website where the members voted to select the best paper. The Division S-06 members selected

“Using rare-earth oxide tracers for studying soil erosion dynamics” by X.C. Zhang, M.A. Nearing, V.O. Polyakov and J.M. Friedrich the best 2003 SSSAJ paper. X.C. Zhang received a recognition plaque and copy of the SSSAJ CD ROM. All other coauthors received a certificate. The winner of the honorable mention was “Tillage Effects on Nitrate Leaching Measured by Pan and Wick Lysimeters” by Y. Zhu, R.H. Fox and J.D. Toth. The honorable mention authors received a certificate. Jorge Delgado chaired this activity.

**Soil Science Society of America Journal:** Jim Bauder, technical editor for S-06 gave the SSSAJ report. For the fiscal year ending June 30, 2004, S-06 received 71 manuscripts with 24 accepted. SSSAJ received 396 manuscripts with 193 accepted. Forty-four percent of the manuscripts were submitted by international authors. Jim mentioned that SSSAJ was going to continuous publication. Jim also mentioned that SSSAJ would like to include more review papers in the future. He asked the following questions:

- Should the journal continue to list division numbers? 40 yea 2 nay
- Should the journal add special topics manuscripts/issues? 35 yea 0 nay
- Should the journal double list division numbers for some manuscripts? 35 yea 0 nay

Division S-06 Technical Editor: James W. Bauder (Montana State University) Technical Editor second term expired after 6 years. Seth Dabney (USDA-ARS) will replace Jim Bauder as Technical Editor, January 1, 2005. The S-06 Associate Editors retiring from the board: Tom Sauer, 6 years; Michelle Wander, 3 years; Lynn Moody, 2 years. Continuing S-06 Associate Editors are Jeff Strock, Terry Howell, Manoj K. Shukla, Floyd Adamsen, Thanh Dao, Brian Weinhold, Clark Gantzer, Tom Kaspar, and Kris Brye. New S-06 Associate Editors, beginning January 1, 2005 are X-C John Zhang, R. Louis Baumhardt, Tom Schumacher.

**SSSA-SWCS Liaison Committee:** The activities of the liaison representative with the SWCS were expanded to a full society SSSA and SWCS liaison ad-hoc committee. Current committee members are Warren Busscher, Jorge Delgado, Mike Lindstrom, and Jeff Volk. Mr. Volk represents the SWCS Board of Directors. Jorge Delgado, Warren Busscher, Mike Burkhart, and Jerry Lemunyon led the efforts to develop the 5<sup>th</sup> annual SWCS & SSSA joint symposium that was presented at the annual SWCS meeting held in St. Paul, MN and at the SSSA, Seattle, WA. The 5<sup>th</sup> annual joint symposium held in St. Paul, MN was entitled "Assessment of the effectiveness of conservation practices, including watershed case studies". The 5<sup>th</sup> annual joint symposium held in Seattle, WA was also supported by the Canadian Soil Science Society and the Mexican Soil Science Society. The symposium was entitled “Assessment of the effectiveness of conservation practices in North America” with invited presenters from US, Canada and Mexico. The symposium oral session had four 30 minute presentations, followed by a poster session with 24 posters presenting specific watershed case studies.

Jorge Delgado, Warren Busscher, Jerry Lemunyon, and Christoph Gross led the efforts to develop a joint SWCS and SSSA-S-06 workshop that provided opportunities for members of either society to obtain CEU's in soil and water conservation. This workshop was presented at the SWCS at St. Paul, MN and at the SSSA in Seattle, WA. The SSSA S-06 “Comprehensive Nutrient Management Plans Workshop” was sold-out and received favorable comments in a survey conducted after the symposium. Eighty-nine percent of the attendees ranked the workshop as good or very good and 11% as average. Seventy-eight percent ranked the hand-outs

as good or very good and 22% as average. The workshop met the expectations of 92% of the attendees. Ninety-seven percent would recommend the workshop to others for future meetings.

Warren Busscher continues leading this joint SWCS and SSSA committee. The committee has been in active communication with the SSSA and SWCS Boards of Directors. The Liaison committee had also submitted recommendations to the Membership Committees of both SSSA and SWCS to potentially increase new members. The committee submitted a proposal for a new award to recognize members conducting research in soil and water management and conservation, and has recommended the exchange of newsletters between the societies membership. SWSC meetings are in Rochester, NY, July 30<sup>th</sup> to August 4<sup>th</sup>, 2005. S-06 will be sponsoring a joint symposium and other joint activities.

There was a nomination and second for Warren to continue as SWSC liaison. It was approved by acclamation (2005-2008).

**Howard M. Taylor Lecturship:** Dr. Jonathan Lynch, Professor of Plant Nutrition, Pennsylvania State University was selected to present the Howard M. Taylor Memorial Lectureship: “The Roots of the Second Green Revolution”. Dr. Lynch's research focuses on the physiological basis of crop adaptation to infertile soils emphasizing phosphorus. He was presented with a plaque and a \$4,000.00 honorarium at the end of the presentation. The committee members were Jorge Delgado (Co-chair 2005), Doug Karlen (Co-chair 2005), Bobbie McMichael (2005), Bingru Huang (2005), Ken Van Rees (2005), Tom Kaspar (2005) and Diane Stott (2006)

**Election of Chair:** At the S-06 Business meeting in Seattle, we started the process to identify Division S-06 candidates for 2007 division chair to succeed Tom Kaspar. Jorge asked for nominations for S-06 chair and Peter J.A. Kleinman (USDA-ARS) was placed into nomination and seconded. The membership agreed that additional nominations will be requested via the internet. Following the request of additional nominations via the S-06 website, Clark J. Gantzer (University of Missouri-Columbia) and Ted M. Zobeck (USDA-ARS) were added to the list of nominees. The SSSA Division S-06 has set the runoff ballot to determine two candidates for a general election to be the Chair-Elect of S-06 (2007).

**S-06 Board Rep report and solicitation for input to SSSA Board:** Doug Karlen was excused from the Meetings due to a death in the family. Jorge Delgado represented Doug and S-06 at both SSSA Board of Directors Meetings. Gary Peterson, Past S-06 Chair and member of the SSSA Board of Directors, presented the report to the S-06 members and asked a series of questions from the board regarding SSSA structure, new strategic plan for SSSA, etc. Following the discussion, several suggestions regarding the SSSA Vision and Mission Statements were made. These were taken to the SSSA Board meeting by Gary Peterson.

**Visit by the President of the Soil Water Conservation Society:** Jean Steiner, President of SWCS addressed the S-06 meeting. She emphasized the advantages of cooperation between societies and she has talked extensively with Tom Sims. She thanked Jorge and Warren for their liaison activities. She said that SWCS was interested in new ways to organize joint training sessions for professionals and facilitate learning requirements for certified soil scientists. She thought that there were lots of opportunities for cooperation and joint symposium. She mentioned that SWCS symposium ideas must be submitted by Nov 29, 2004.

**Unfinished Business:** Discussion of Best Paper Award postponed until next year's business meeting or via internet.

**Remarks:** I would like to thank the outstanding leadership of Division S-06 for their support and contribution to a very active and successful 2004 Division S-06 annual meeting. Special thanks go to all the members who actively participate in all the S-06 activities (committees, sub-committees, symposium, lectureships, oral sessions, poster sessions, award committees, liaison committees, and others S-06 activities) including the authors of oral and poster presentations. Special thanks also to Dave Kral, Keith Schlesinger, Ian Popkewitz, Sara Uttech and Ellen Bergfeld, headquarters staff for their help. Thanks are also extended to John L. Havlin, J. T. Sims, and Michael J. Singer, Presidents

Jorge then introduced Diane Stott. Diane thanked Jorge for his work. She asked that ideas for symposiums be forwarded to her. She then closed the meeting.

*Jorge A. Delgado, Division S-06 Chair*