

Tenth Biennial Soil Ecology Conference

Argonne National Laboratory, Illinois, May 2005

The Soil Ecology Society successfully hosted its tenth biennial international conference (conference website: http://www.atmos.anl.gov/SES/index.htm) on May 22-25, 2005, at Argonne National Lab, near Chicago, Illinois, USA. The theme of this year's meeting was "Linkages in Soil Ecology." Attendance at this year's meeting reached a recent high with 238 registrants representing 30



different nationalities. Following SES tradition, students were encouraged to attend the meeting, and they comprised 45% of the registrants. Over 160 presentations were given, including about 60 contributed talks in two concurrent sessions, and over 100 posters. The quality of presentations was outstanding throughout, with student presentations matching those of established scientists. Attendees enjoyed a kick-off evening presentation by David Coleman entitled "From Peds to Paradoxes: Linkages between soil biota and their influences on ecological

processes", true to the theme of the conference. There were five keynote presentations, delivered by Zoe Cardon, Miquel Gonzalez-Meler, Mark Rivers,

Karl Ritz, and Chris Schadt, spanning a wide range of topics around ecological linkages with soil ecology. The conference also featured an afternoon workshop entitled "A Learning Café to Discuss Soil Biotic Indicators", which was co-sponsored by NCERA-59 and SES. Field trips included excursions to visit the restored prairie at nearby Fermi National Accelerator Laboratory (Fermilab), the Underground Adventure exhibit at the Field Museum in Chicago, and a tour of Argonne's Advanced Photon Source.



(Photo: Prairie field trip)

Following SES traditions, social functions arranged by the local organizing committee were a great success. In particular, everyone enjoyed the kickoff mixer with pizza, beer, and some jazz provided by students from Neuqua Valley High School, recipients of the 2005 National GRAMMY Signature School Award.

New officers were elected at the business meeting with two-year terms. Current plans are to host the next biennial meeting in Moab, Utah, sometime in spring 2007.

Julie Jastrow, her local support team (especially Kelly Moran), and other members of the organizing committee have done a great job hosting this exciting conference!



(Photo: SES 2005 group shot)

New SES Officers Elected

The SES members present at the meeting elected Sherri Morris from Bradley University our next President-Elect and Mitch Pavao-Zuckerman from the University of Arizona the next Secretary/Newsletter Editor. Sherri and Mitch will take office in January 2006 when current President-Elect Jayne Belnap becomes President. Ralph Boerner will continue to serve as Business Manager, beginning the third year of his current four-year term.

Professional Achievement Award Winner at the 2005 Biannual Conference of the Soil Ecology Society

Eldor Alvin Paul

Senior Scientist, Natural Resource Ecology Laboratory, Colorado State University; Fort Collins, Colorado

(Text by: Dr. Sherri Morris)

It is with great pleasure that the Soil Ecology Society presented Eldor Alvin Paul with the Professional Achievement Award during the 2005 Biennial Conference. The award is presented to a soil ecologist who has made advances in research, has excelled in teaching and graduate education, and has been a

national and international leader in promoting soil ecology through representation in committees, organizations, and outreach beyond the circle of scientists. Eldor has excelled in all of these areas.

Eldor began his research career with a Ph.D. in Soil Microbiology from University of Minnesota in 1958. He then taught at University of Saskatchewan from 1959 to 1980 when he became the chair of the Plant and Soil Biology Department at the University of California at Berkeley. After ten years in California he became the chair of the Department of Crop and Soil Sciences at Michigan State University. In 2000 Eldor retired from Michigan State University, taking a position as a senior scientist at the Natural Resource Ecology Laboratory.

Eldor has a national and international reputation as a well-known, often cited soil scientist. His 1989 publication with F.E. Clark "Soil Biology and Biochemistry" has been widely read by those in microbiology, agronomy, ecosystem science, and soil science and has been translated into three other languages. A third edition of this much used textbook will be released shortly. Eldor has an extensive publication record that includes more than 250 publications in research journals and edited books. He was an editor of the book Soil Organic Matter in Agroecosystems, an associate Editor on the Handbook of Soil Science, and several times an editor on the Books in Soils and the Environment series Soil Biochemistry. He has also been an associate editor for the research journal Applied Soil Ecology.

Eldor has had a lifelong interest in soil biology and biochemistry. He has focused on the ecology of soil organisms, the role of nutrients in plant growth and C and N dynamics in ecosystem functioning. He has focused extensively on soil organic matter, specifically on components of SOM, types of transformations, rates of transformations and the organisms that are involved in these reactions. Early work involved pairing fractionation techniques with carbon dating to measure *in situ* the residence time of soil organic matter fractions. His work has been key to identifying tools by which soil organic matter can be distinguished as unique kinetic pools and interpreting data collected using multiple tools such as information gained through natural and radioisotopes. His most recent work has focused on changes in soil organic matter dynamics following land use change and under climate change scenarios.

Over the last forty years, Eldor has been recognized by many societies. He is a fellow of the American Association for the Advancement of Science, American Society of Agronomy, Soil Science Society of America, and the Canadian Soil

Science Society. He has been cited as among the Most Published Authors by Current Contents. He has been a reviewer for the U.S. Department of Energy Global Change Program, U.S. Department of Agriculture National Research Initiative and National Science Foundation Ecology Program.

At the award presentation during the SES banquet, several of Eldor's former colleagues and students lined up to comment on the important contributions that Eldor had made to science and their career. The overall sentiment was that the contribution that Eldor made to science and to the lives of those that he worked with always outweighed the stress he invariably introduced into one's life with his challenge to test one question while he dreamed up more. And certainly one must beware when Eldor uses the phrase "piece of cake". One comment that best summarizes Eldor's contributions to science and his students and colleagues came from Yvon Martel, one of Eldor's early graduate students. "He was a coach, a mentor and a champion for the cause of the ecosystem approach. Eldor believed in the ecosystems approach before everyone else. His comprehension of the convergence of science, organic matter and ecosystems has been the most valuable "lesson" I have received from Dr. Paul. It has been useful for a "lifetime"."

Eldor was preceded in this award by a prestigious line of soil ecologists, including D.A. Crossley, Jr. and David C. Coleman, both from the University of Georgia (1997 and 1999, respectively), Clive A. Edwards, The Ohio State University and Dennis Parkinson, The University of Calgary (both in 2001) and Diana Wall, also of the Natural Resource Ecology Laboratory, Colorado State University (2003).



(Photo: Dr. and Mrs. Paul at the Soil Ecology Society Meeting at Argonne National Laboratory, May 2005)

11th Biennial Meeting, Moab, Utah in 2007

Jayne Belnap, SES president-elect, is planning to hold the next meeting in Utah. Proximity to National Parks should be an added incentive to attend the meeting, and would provide attractive possibilities for excursions. Jayne will need help in organizing the meeting and has announced that she will rope people into it, so watch out! Stay tuned for more information about the meeting, which will be sometime in May 2007.

Minutes from the Business Meeting

SES members dealt with several important issues at the business meeting on the evening of May 24, 2005.

SES is very fortunate to have Ralph Boerner as its Business Manager. Ralph reported on the membership and financial data of the society. As of March 1, 2005, the society has 328 members who paid dues in the last 5 years. Of those, 275 are from the USA, and 22 from Canada, but there are also members from 13 other countries.

As was decided at the last meeting, all society money is now consolidated into one account, with the Parkinson Fund being tracked on paper. It is currently empty due to awards being made for student travel to the meeting, but it will be replenished by dues collected as a part of the meeting registration and by money collected from the t-shirt and raffle fundraisers. The operating fund had around \$8,000 as of end of 2004. Overall, the financial status seems to be fairly stable over the course of the last several years. There was a discussion about what the agenda for the money should be, including letting money grow to create an endowment.

Webmaster Mitch Wagner reported that the society web page needs more content, and there was a general feeling that the page is stale. Western Connecticut State University can continue to host the society page. Future content of the web page could include links to jobs and upcoming events, as well as archives of past newsletters, and members and institutions.

Criteria for the Professional Achievement Award were discussed, as those would be helpful for the board and committee to choose recipients.

A possible relationship with the NRC (National Research Council) Soil Section was discussed. A society representative would have to go to Washington, D.C. about 3-4 times a year. Jayne indicated that she would look into finding more information and perhaps someone to rotate on these assignments.

The following members-at-large were elected (following the bylaws these need to be elected every 2 years): Yosef Steinberger, Tony Trofymow, Suzanne Visser.

There was a discussion about the possibility of meeting with the Society of Nematologists in 2009, as their committee expressed an interest in such a joint meeting. A straw vote of business meeting attendees was about evenly split concerning interest in this joint venture, with the cons pointing out that it would make the meeting larger and more difficult to manage for the SES President-Elect. It was decided to poll the general membership by email.

In general discussions, additional items were raised. For future meetings, there was a general agreement that there should be no more than 2 concurrent sessions, and that students remain included in all. For the journal *Applied Soil Ecology* there is a potential society-based discount in the works.

SES Student Awards

Student Presentation Awards



(Photo: Recipients of student presentation awards)

As in previous meetings, the quality of student presentations at the SES meeting continues to rival that of more senior researchers. Thanks also to the judging team for mastering the challenging task of picking winners among the excellent entries. Prizes were presented in both oral and poster categories.

Here are the winners of the **oral presentation category** (including titles):

1st place, Jennifer Follstad Shah, University of New Mexico, The effects on soil N cycling by invasive species in semi-arid riparian ecosystems.

2nd place, Alison Bennett, Indiana University, A test of tri-trophic interaction hypotheses involving mycorrhizae, plants, and herbivores.

3rd place, Ben Wolfe, University of Guelph, Spatial heterogeneity of arbuscular mycorrhizal fungal community structure in an old-field plant community.

3rd place, Janet Lensing, University of Kentucky, Impacts of altered rainfall on bottom-up and top-down control processes in the detrital food web of forest-floor leaf litter.

Honorable mention, James Campbell, Texas Tech University, Effects of soil chemistry on distributions of oligotrophic bacteria along an elevational gradient.

The following are the winners in the **poster presentation category** (including the presentation titles):

1st place, Megan Quirk, University of Northern Colorado, Impacts of altered UVB radiation on below ground food web communities in the Shortgrass Steppe.

2nd place, Cathy Stewart, NREL, Colorado State University, ¹³C stabilization in functional C pools after 2.5 years: Implications for C saturation theory.

3rd place, Colleen Iversen, University of Tennessee and Oak Ridge National Laboratory, Will nitrogen limitation preclude a sustained productivity response of a deciduous forest to elevated concentrations of atmospheric CO₂?

Honorable mention, Kelley Gravier, University of Chicago, Field Museum of Natural History, and Argonne National Laboratory, A preliminary analysis of arbuscular mycorrhizal fungal diversity in a Costa Rican rainforest.

Honorable mention, Erin Hladilek, University of Kentucky, Spinning the forest food web: using stable isotopes (δ^{I3} C and δ^{I5} N) to link ecosystem components.

Congratulations to these students for their excellent contributions.

Parkinson Student Travel Awards

The Dennis Parkinson Student Travel Awards were established at the biennial meeting at Callaway Gardens in Georgia (2001) to help encourage student participation in the meeting and honor lifelong contributions of Dennis Parkinson to soil ecology.

The following students were recipients of the 2005 SES Parkinson Travel Award; congratulations to all!

Anita Antoninka, Northern Arizona University

Danica Badtke, University of Wisconsin Oshkosh

Yolima Carrillo, University of Georgia

Brian Darby, University of Vermont

Cinzia Fissore, Michigan Technological University

Einav Mayzlish, Bar-Ilan University

Johanna Nesbitt, Dalhousie University

Breana Simmons, University of Georgia

Anna Tyler, University of Arizonia

Jessica Veenstra, University of California, Davis



(Photo: The recipients of the 2005 Parkinson travel award with D. Parkinson, on the left)

Some Upcoming Meetings:

18th World Congress of Soil Science July 9-15, 2006 - Philadelphia, Pennsylvania, USA

Details about this meeting can be found at the meeting website: http://www.colostate.edu/programs/IUSS/18wcss/

3rd European Symposium on NMR Spectroscopy in Soil, Geo and Environmental Sciences in Freising, Germany, 6-9 August 2006

For more information: http://www.wzw.tum.de/bk/nmr06/