



**SOIL ECOLOGY SOCIETY
SPRING 2008 NEWSLETTER**

SYNOPSIS OF OUR ELEVENTH BIENNIAL SOIL ECOLOGY CONFERENCE:

**“BREAKING THE MOLD: FOSTERING INTERACTIONS AMONG SCIENTISTS, LAND
MANAGERS, AND THE PUBLIC”
MOAB, UTAH, APRIL 29-MAY 2, 2007**



Breaking the mold:

Fostering interactions between scientists, land managers and the public

Our Moab meeting was a resounding success! Meeting coordinators Jayne Belnap, Megan Macomber, and other organizers planned a lively and compelling meeting, and the location couldn't have been better – surrounded by profound natural beauty and several national parks, we were within walking distance of groovy downtown Moab and the Moab brewery. The meeting drew over 200 participants, 40% of them students, and featured keynote talks by experienced scientists, a popular science writer, compelling research talks and posters, impressive student research contributions, an excellently-received teaching workshop, and

several field trips to stunning attractions in and around Moab. Over 140 presentations were given, with over 80 contributed talks and almost 65 posters.

Keynote talks by Frank McCormick, Ralph Boerner, Kate Cannon, Mark Miller, and Yvonne Baskin addressed science and management themes germane to our meeting locale in the American West. Kate and Mark described the advantages and disadvantages of management-oriented soils research, and Frank and Ralph discussed the tribulations and rewards of collaborations between academic researchers and land managers. Yvonne Baskin, author of *Under Ground: How Creatures of Mud and Dirt Shape our World*, described her experiences traveling the world with soil scientists in search of greater understanding of various soils, and reminded us how important it is to connect with the public about our work in soil ecology.

Two afternoons of the 2007 meeting were reserved for field trips to nearby National Parks and other attractions. Field trip hikes included excursions to Landscape and Delicate Arches in nearby Arches NP, travel to Grandview Point in the Island of the Sky district of Canyonlands NP, the LaSal Mountains and Castle Valley, and to view Native American petroglyphs and pictographs. The weather was perfect and the scenery and ecology were spectacular!



Delicate Arch eroded in Entrada sandstone, with the granitic LaSal Mountain Range in background (R. Thiet photo)

Student travel and research awards

Student involvement in SES continues to grow. This year 12 students were awarded Parkinson's Travel Grants to attend the meeting: Catalina Aristizabel, Bala Chaudary, Nathan Mellor, Jessica Mentzer-Gutknecht, Jessica Miesel, Adi Oren, Jeff Piotrowski, Jeff Powell, Corey Prescott, Nick Reynolds, Will Wieder, and Elizabeth Wolkovich. As always, experienced SES members evaluated student oral presentations and posters to establish our annual research awards. This year, 35 posters and 25 talks were judged by the committee. Posters and oral presentations were

exceedingly professional in creativity, presentation, and scientific content, and all the judges were very impressed with the work they observed. The high quality of student research made selecting winners very difficult, as student research is increasingly notable each meeting. Being tasked with selecting the best of the best, the judges' final selections for 2007 are below:

Student awards for oral presentations

Emily Hollister from Texas A&M was awarded first prize for best student oral presentation for "Microbial community structure in a mesquite savanna."



Emily Hollister climbing to the top of our field during one of our Moab field trips (Courtesy photo)

Jennifer Adams Krumins from Rutgers University won second prize for "Microbial community and soil nutrient response to a Gypsy Moth outbreak in the New Jersey Pine Barrens."



*Jennifer Adams Krumins
on one of our Moab field
trips (Courtesy photo)*

Anita Antoninka from Northern Arizona University was recognized with third prize for “Opening the black box: deciphering interactions of arbuscular mycorrhizal fungi and soil mesofauna under CO₂ and N enrichment.”



*Anita Antoninka at one of
her field sites, Cedar
Creek LTER (Courtesy
photo)*

Student awards for poster presentations

Alexandra (Alix) Contosta from the University of New Hampshire won best student poster for “Microbial community structure and nutrient cycling dynamics in soils exposed to chronic warming and nitrogen additions: preliminary results.”



Alix Contosta at the control panel that regulates her soil warming plots at the Harvard Forest (Courtesy photo)

Jeff Powell and **Corey Lawrence** tied for second place honors. Jeff Powell from the University of Guelph was recognized for his poster, “Crop litter decomposition in Roundup Ready[®] and conventional cropping systems,” and Corey Lawrence from the University of Colorado was honored for “Geochemical evidence for the importance of eolian dust to soil formation in the San Juan Mountains of southern Colorado.”



Jeff Powell with his research assistants at one of his field sites in Elora, Ontario (Courtesy photo)



Corey Lawrence at one of his field sites, near Molas Pass in the San Juan Mountains, Colorado (Courtesy photo)

A list of all student awardees is linked on our website. A silent auction raised more money for a greater number of student travel scholarships and presentation awards, and SES officers continue to develop new ways to support student work and travel to meetings.

Best Practices in Teaching Soil Ecology workshop

Rachel Thiet facilitated the first-ever “Best Practices in Teaching Soil Ecology” workshop, which drew 49 participants that included seasoned and new professors, research scientists, undergraduate and graduate students, and resource managers. Participants evaluated attitudes, values, and best practices in teaching soil ecology, and agreed to continue building our collaborations and resource sharing around teaching. For a full summary report of the workshop,

contact Rachel at [rachel_thiet\(at\)antiochne.edu](mailto:rachel_thiet@antiochne.edu), and check out the next teaching workshop at the our 2009 meeting! Rachel Thiet and Loren Byrne will co-facilitate a related teaching workshop on August 3, 2008, at the Ecological Society of America meeting in Milwaukee, titled “Toward learner-centered soil ecology education: integrating research and experiential activities into teaching soils.” Look for this workshop if you attend ESA this year!



Teaching workshop participants working in small groups. (R. Thiet photo)

Lifetime of Professional Achievement Award

Edie Allen was awarded the Professional Achievement Award in honor of her service to the society and accomplishments in the field of soil ecology. Edith served as president of SES from 2002-2003. Since the mid-70's, Edith has deepened our understanding of interactions between soil, mycorrhizae and plants in alpine, shrubland, desert, grassland, tropical, and coastal sand dune ecosystems. Edith has been a pioneer in demonstrating the value of applying soil ecological knowledge towards restoring ecosystems, as well as plant and soil responses to global changes such as increased nitrogen deposition and invasion by exotic species. The “Professional Achievement Award” is a minor token of the society’s appreciation for Edith’s contributions to science, student training, and service. (Contributed by Sara Baer.)



Edie Allen with her Professional Achievement Award and her students (L-R), Kristin Weathers, Heather Schneider, Leela Rao, Sara Jo Dickens, Robert Steers, and Anna Wrona (Courtesy photo)

Ralph Boerner stepped down from his long-term service to the Soil Ecology Society, after serving as President from 1998-1999 and Business Manager/Treasurer from 2000-2008. Ralph's research activity, collaborative spirit, and mentorship of students have been central to the growth of SES into the dynamic, multi-generational group we enjoy today. In addition to his extensive research contributions to our field, Ralph introduced more than 10 students to SES, many of whom are still active in the society. Thank you Ralph for everything you've done!



Ralph Boerner liked to accompany his students in the field. Here he is at one of his long-term research plots in Hocking State Forest, OH (Courtesy photo)

Officers for 2008-2009

New elected officers were announced at the final celebration banquet: Sherri Morris: President, Jayne Belnap: Immediate Past-President, John Klironomos: President-Elect, Rachel Thiet: Secretary/Newsletter Editor, Jeffrey Smith: Business Manager/Treasurer, Board Members At Large: Tony Trofymow, John Dighton.

Soil Ecology Society 2009 meeting in Burlington, VT

The next Soil Ecology Society meeting will be July 12-15, 2009, in Burlington, VT, and will be a joint meeting with the Society of Nematologists. Burlington is a big university town with an active and lively downtown. The city is easily accessible by air, has a comfortable climate moderated by its proximity to Lake Champlain, and is surrounded by many lovely natural areas that provide ample opportunities for scenic field trips.

Burlington is on the shores of Lake Champlain and provides opportunities for sailing, kayaking, and ferry rides. The city has 40 art galleries and venues, 13 coffee shops, 8 night clubs, 100+ restaurants and bistros, 1 of the oldest minor league baseball parks still in use in the country, a pedestrian-friendly downtown, sand beaches, two local microbreweries, Shelburne Farms, Vermont Teddy Bear factory, Champlain Chocolate Factory, Ben & Jerry's ice cream factory, bicycle and kayak rentals, and a 13-mile lakeside bike path. More visiting and touring information can be found at http://www.uvm.edu/about_uvm/visiting/ or <http://www.destination360.com/north-america/us/vermont/things-to-do.php>.

Burlington has a variety of music venues (Flynn Center, Higher Ground), and weekly summer festivals that include the Vermont Mozart Festival, Vermont Brewers Festival, Vermont City Marathon, and Discover Jazz. Some links include:

<http://www.flynncenter.org/>
<http://www.highergroundmusic.com/>
<http://www.discoverjazz.com/> - early June
<http://www.runvermont.org/> - late may
<http://www.vermontbrewers.com/festival.html> - mid July
<http://www.vbt.com/natgeo.aspx> - bicycling vacations
<http://www.vtmozart.org/> - mid July to early August

The Soil Ecology Society will meet in the 2007 Davis Student Union that recently received LEED Gold Certification (<https://www.uvm.edu/~uvmpr/theview/article.php?id=2616>), and dormitories that recently received LEED Silver Certification. There are many surrounding local hotels with a free bus shuttle along College Street, which links downtown with the university. Flights go directly into Burlington, or meeting participants can fly into Montreal (100 miles), Boston (220 miles), New York City (290 miles) or Albany (145 miles). (Contributed by Deb Neher.)



*View of New York's
Adirondack Mountains
and Lake Champlain,
Burlington.
(LinkVermont.com photo)*

Smithsonian Institution soil exhibit

Heading to Washington, D.C. anytime soon? Check out the Smithsonian Institution's new soil exhibit: "Dig It! The Secrets of Soil," which opens to the public at the National Museum of Natural History on July 19, 2008. The exhibit remains at the Smithsonian until January 2010, when it goes on the road with the Smithsonian Institution Traveling Exhibition Service (SITES) for a four-year national tour through 2014. Siobhan Starrs, the exhibit's Project Manager, describes the exhibit as "a broad look at the hidden world of soils – always under our feet but often ignored. Through interactive stations, videos, multimedia programs, and vibrant graphics, the exhibition will bring to life this exciting world teeming with living organisms. The All American Soils Gallery contains one of the most exciting features of the exhibit – real soils from the 54 states, territories, and the District of Columbia on loan to the Museum from the USDA Natural Resources Conservation Service." If you're interested in having the SI traveling exhibit come to your city, contact Jennifer Bine at SITES ([binej\(at\)si.edu](mailto:binej@si.edu)). More information about the exhibit is online at <http://forces.si.edu/soils/> and http://www.sites.si.edu/exhibitions/exhibits/dig_it_soils/main.htm.

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