

# Spade and Auger

Volume 32, Number 2

2008 Board of

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November 2008

### **Message from the President**

#### Mark Stolt, President.

We are wrapping up the 34th year of the Society of Soil Scientists of Southern New England. It has been another busy year in SSSSNE. Thanks to all those members that assisted with the national soil judging contest in Rhode Island and the regional soil survey work planning conference (see story inside the S&A). Plans for 2009 are already taking shape including a field tour to Martha's Vineyard and an on-site wastewater/soils conference (see inside for more information). Many members have suggested a trip to the National Natural History Museum in Washington D.C. to view the Smithsonian's exhibit on soils. Right



now our plans are to make that trip in January. If you are interested, please see the accompanying story regarding registration and so forth. Our society made a significant monetary contribution to make the soils exhibit a reality and we should support the exhibit by encouraging folks to visit. I had the opportunity to visit the exhibit with my family in August. Although my two-year old (pictured here next to the monolith exhibit) kept me on the run, I enjoyed the exhibit very much. The monolith collection featuring every "states soil" is truly worth the price of admission. My family was very impressed that I had helped collect a soil that was being exhibited in the Smithsonian Institute. Everett Stuart and I collect the Narragansett soil from Exeter, RI and Everett constructed the monolith. Who collected and made the monoliths for the Connecticut and Massachusetts monoliths? Please let us know so we can post a story in the next S&A. I look forward to seeing you at the annual meeting and next year's events.

Mark Stolt and son Carter at the Smithsonian Soils Exhibit.

For a color version of this edition visit:

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# Northeast Soil Judging—URI takes 2nd place! - by Mark Stolt

The Northeast Region Soil Judging Competition was hosted this fall by Delaware Valley College in Doylestown, PA. Seven schools from the region participated in the competition including the University of Maine, University of Maryland, Ohio State University, Delaware Valley College, Wilmington College, Penn State University, and the University of Rhode Island. Soil parent materials were dominated by residuum formed in diabase, shale, and Triassic aged sandstone and siltstone. Colluvium and loess covered many of the residual soil materials. Outwash and alluvial deposits along the Delaware River were also shown during the practice sessions. Most soils were either Ultisols or Alfisols. Many soils contained fragipans. Congratulations to the University of Rhode Island (2nd place) for qualifying for the national competition to be held this spring in southwestern Missouri. Three of the top 11 individu-

als at the contest were from the University of Rhode Island including Jesse Dyer (3rd place individual), Mat Lautenberger (9thth place individual), and Marissa Theve (11th place individual). Thanks to the society for supporting the University of Rhode Island Soil Judging Team again this year.

#### **URI Soil Judging Team:**

Back row left to right: Mike Foster, Mark Stolt (Coach), Jennylyn Redner, Mat Lautenberger, Nicc Johnson, Rob Swanson, Mike Narcisi, Bill Burgess, Matt Ricker (asst. Coach)

Front row left to right: Colin Millar, Chrissy Pruett (asst. Coach), Marissa Theve, Jessie Dyer, Ben Vinhateiro



## **Welcome New Society Members**

#### Please welcome our new Society members:

#### **Basic Members:**

Michele White from Mansfield, MA., Danielle Christopher from Newbury, MA., David Duranleau from Warwick, RI, Bonnie Potocki from Manchester, CT

#### **Professional Member:**

Matt Richardson from Exeter, RI, and Robert Stuart from Avon, CT.

Not included are new Associate members. This brings our total membership to 225 through 2008. The Board handled a large number of applications for new membership, membership upgrades, and general inquiries in 2008. Many of the applications were incomplete and required extra work for the board to contact the applicant. Members looking to join or upgrade to Professional status should read the requirements on the http://nesoil.com/ssssne/membership.htm page. Official transcripts and letters of recommendation need to be sent with the application. Also, please also send in the correct amount for dues and application fees to avoid extra work for our treasurer who has to send money back.

# NRCS Updates - by Jim Turenne

**Rhode Island:** With the help of summer interns all of the historic RI soil surveys (including 1904, 1939, 1942, 1943, and the published statewide 1981) are now online with the scanned soil maps. These historic documents have a lot of important information and it is interesting to read how the soil mapping progressed through the past 104 years. These documents are a must-read for users of soil survey data. They contain soil series such as Tiverton, Compton, and Galveston soils, descriptions of "mellow sandy loam" and "incoherent loamy sand" and historic descriptions of the survey area with detailed maps produced by the pioneers of soil science make these documents a must read for users of soil survey data. The MapCoast partnership has also had an active season conducting coastal and subaqueous mapping along the

south shore of RI. MapCoast has also been working with NOAA and Natureserve to include a component on subaqueous soils in the Coastal Marine Ecosystem Classification System (CMECS). In October 2008 a Benthic and Subaqueous soil tour and seminar was provided at the Restoring Americas Estuaries National Conference.

**Massachusetts:** Dave Hvizdak has been selected as the State Soil Scientist and MO-12 Leader for the Glaciated-Northeast. Dave hails from Wisconsin and replaces Society founding member Bruce Thompson. The Plymouth County Soil Survey has been accelerating the soil mapping with help from NRCS Soil Survey Office 12-6 (New England and Eastern NY, southern part). Soil scientists Don Parizek and Debbie Surabian assisted Rob Tunstead with field mapping and data entry. The Plymouth survey completed the mapping and will be working to digitize the survey and get the mapping on the Soil Data Mart and Web Soil Survey. Steven Fisher has been selected as the regional senior soil scientist for MO-12.

**Connecticut:** NRCS and Society members Don Parizek and Debbie Surabian were featured in a segment of the History Channel's Monster Quest. Don and Debbie were shown using an EMI unit and observing a soil core along with CT. State Archeologist Nick Bellentoni. To see the segment, visit the Nesoil video page: www.nesoil.com/video.htm. Kevin Connelly has been selected to be the Soil Survey Project Leader for the Windsor Soil Survey Office 12-6 which covers most of southern New England and Eastern NY.

### **Soils Featured in National Geographic**

If you did not see the September 2008 National Geographic point your browser to:

http://ngm.nationalgeographic.com/2008/09/soil/mann-text

The article has a feature on soil by Charles C Mann, a photo gallery by Jim Richardson, an interactive soil quiz, and a GeoPedia link about soils. A side bar article called "Dirt Poor" features Haiti's soil problems.







# SUITMA—September 21-23 2009

The 5th International SUITMA (Soils of Urban, Industrial, Traffic and Mining Areas; the Urban Soils Working Group of the International Union of Soil Sciences) Conference will be held Sept 21, 22, 23, (Mon-Tue-Wed) 2009 at the CUNY Graduate Student Center, 365 Fifth Avenue. New York, NY http://www.gc.cuny.edu/about\_gc/directions.htm.

A 5 boro NYC field trip will follow on Sept 24 & 25, and a Baltimore-DC trip is in the works as well. The NRCS, along with the Queens College School of Earth and Environmental Sciences, will be hosting.

The last SUITMA Conference in 2007 in Nanjing was highly successful from a networking and informationsharing perspective, and it was fascinating to see and hear about the effects of rapid urbanization on soils in China. There were 138 participants from 19 countries, with 48 oral presentations and 35 posters. There was overwhelming interest in holding the next meeting in the U.S.

The conference will offer the opportunity to share in the latest developments in the study of urban and disturbed soils from around the world. A local organizing committee is planning invited speakers on such topics as classification of urban soils, urban soil microbiology, Black C in urban soils, soil quality in urban areas, as well as some panel discussions, e.g., Urban soil survey - what can we offer our customers? Hopefully we will have good representation from the host country and show off all of the work that we have been doing in urban areas here in the U.S. A web site is being set up and more information will be available soon.

Organizers are trying to estimate the number of hotel rooms needed. Please contact Richard Shaw (number below) if you are planning to attend. Suggestions, ideas for topics for speakers, or discussions, etc. are also welcome.

Richard K. Shaw, Ph.D., Soil Scientist, USDA-NRCS NYC Soil Survey, 1000 South Ave. Staten Island, NY 10314

Phone: 718-761-1657

# **CT Soil Survey Work Planning Conference**

The Connecticut NRCS Soil Staff cordially invites you to our Work Planning Conference, November 20, 2008, at the Tolland County Agricultural Center, 24 Hyde Avenue, Vernon, Connecticut.

Our last statewide work planning conference was held in 1999 to exchange ideas on improving our soil survey program and products. Your input was put to use and now that the statewide soil survey is completed and available, we want to showcase our official soil survey information, new interpretations, subaqueous soils, and overall changes to the soil survey program. We also want to hear your experiences in using the current soil survey, as well as receive your input on how we can address the current and future soil information needs of our partners and customers.

Each agency, cooperator, and soil survey user group is encouraged to attend or send a representative to this event. The conference will address issues from state, regional, and national perspectives and will be an opportune time to share and learn about the future direction of the soil survey program in Connecticut.

The conference will start at 9:30 AM and finish by 3:00 PM. Lunch will be available for a nominal fee. An agenda will be available and posted on our website at www.ct.nrcs.usda.gov. Please contact Shawn McVey at (860) 871-4044, or by email at shawn.mcvey@ct.usda.gov if you plan to attend or if you have any questions or comments.

Mark your calendar for November 20, 2008; we look forward to seeing you at the conference.

# Northeast National Cooperative Soil Survey Conference — by Margie Faber

More than 65 soil scientists from NRCS, universities, USGS, CSREES, the private sector, SSSSNE, and the Agriculture and Agri-Food Agency of Canada attended the Northeast Regional Cooperative Soil Survey Conference held at the University of Rhode Island Bay Campus in Narragansett, Rhode Island June 2nd to June 5th. The conference was sponsored by the NCSS partnership of Connecticut and Rhode Island. Participants were mostly from the Northeastern US, from Maine to West Virginia to Washington DC, but there were others who came from as far away as California, Nebraska, and Texas to attend. This regional conference provided a forum for partners of the National Cooperative Soil Survey to transfer technology, highlight research projects, and discuss common soil issues and concerns.

The conference featured speakers, breakout sessions, a new technology demonstration, and a field trip. National Soil Survey Reports were presented by the NRCS soils leadership. Many of the regional university cooperators presented a report on their research component of the joint Northeastern Hydropedology project. These research projects focused on soil carbon, subaqueous soils, and hydric soils. There were additional reports presented focusing on other local soil science research, the USDA National Research Initiative, and the upcoming 2009 International Urban Soil Conference which will be held in New York City (see page 4).

Continued on page 6

# **Board of Directors Plan Events for 2009**

Plans have begun for events to be held in 2009. In January a two day bus trip to Washington DC is tentatively scheduled (depends on member turnout) to visit the Secrets of Soil display at the Smithsonian (please fill out the registration if you plan to attend). A two day septic system workshop is being planned by UMASS. This will be the first large Society conference held in over 6 years. More information will be posted on the SSSSNE website. In the fall, a trip to SE Massachusetts or Martha's Vineyard is being planned. Members interested in helping plan any of these events are encouraged to contact the Board. If you have a suggestion on a workshop or event you would like the board to host please send to: soils@cox.net.

# Blast from the Past— Ed Sautter buttons

Some of the older Society members will recall founding member Ed Sautter selling these soil buttons and bumper stickers at every function. Thanks to Dawn Pettinelli, Education Educator, UCONN for sending.



#### Northeast Soil Survey Conference (continued from page 5)

The new technology demonstration showcased tools which may help soil scientists in the field. Tools to measure dynamic soil properties and a spectromenter to measure reflectance values of soil profiles or soil samples were shown. Also, several different ground penetrating radar and global positioning systems were demonstrated, including a system that assists with bathymetry and subaqueous soil mapping (RTK GPS). Additionally, some new computer software was demonstrated including the Soil Resource Inventory Toolbox for GIS and PedonPC.

The Silver Spade, an award presented to a member of the conference who has contributed outstanding regional and/or national service to soil survey, was presented to Dr. John Galbraith of Virginia Polytechnic University for his contributions to the National Cooperative Soil Survey. Bruce Thompson, recently retired MO-12 leader (Amherst) and Massachusetts State Soil Scientist, was recognized by NRCS headquarters and the Society of Soil Scientists of Southern New England for his 42 years of soil survey accomplishments.

The field tour visited sites highlighting soils and soil issues of Connecticut and Rhode Island. At the first stop, participants had the opportunity to examine quite a few long trenches dug on an archaeological site at the Mashantucket Pequot Tribal Property in Preston, CT. Archaeologists from the University of Connecticut, the Mashantucket Pequot Museum and Research Center, and The Office of State Archaeology discussed soils and archaeology.

The next stop was to Ninigret Pond, a coastal lagoon on the south coast of Rhode Island. Subaqueous soils were mapped in Ninigret Pond by University of Rhode Island and NRCS soil scientists. Core samples had been extracted in advance of the trip and were examined by participants. Subaqueous soil classification and interpretation issues were discussed. The beach and dune landscape were also discussed. The tour proceeded

north, over the Charlestown End Moraine, which was deposited as the glacier receded about 17,000 years ago. The Bridgehampton soil, silty loess underlain by fluvial deposits, was examined. The group then had the opportunity to walk to a commercial sod field and discuss the effect of turf production on soil. The final stop was to see carboniferous till soils on Jamestown Island, in the Narragansett Basin. The soils are very dark and are derived from the dark parent material.

The conference standing committees had time for members to discuss concerns and present reports and recommendations to the entire group. Committees included subaqueous soils, hydric soils, research needs, standards and procedures, new technology, and by-laws. The conference concluded with committee reports and updates from the three MO offices which cover the Northeastern Regional Soil Survey area. Pennsylvania will be hosting the next regional conference in 2010.

Connecticut and Rhode Island NRCS soil scientists, Dr. Mark Stolt of University of Rhode Island, and the Society of Soil Scientists of Southern New England were recognized for their efforts in hosting and organizing this conference.





Photo: Top right: trench dug in outwash soils at Preston Plains. Bottom: participants of the conference at the social clam bake/lobster boil, Narragansett Pier Beach.

# Registration for the Smithsonian Soil Exhibit Bus Trip to D.C. January 8 and 9 2009

Please fill out the form below and include your check to reserve your seat on the bus for the trip to the Smithsonian Soil Exhibit on January 8 and 9, 2009. Details on where to meet will be sent to registrants as time nears. The trip may be cancelled if turnout is low; checks will be refunded if the trip is cancelled. Please sent this in by December 5, 2008. Contact Mark Stolt (mstolt@uri.edu) if you have any questions. Family and non-society members invited.

Name: Ph	one:	
Address:	State: Zip:	
Email (method of contact):		
Number of People Attending: Price Per Person: \$150		
Send Registration and Check to PO Box by December 5th 2008: PO Box 258 Storrs, CT 06268		
	Entrance to Dig It! The Secrets of Soil: A Be- hind-the-Scenes Look at the Soils Exhibit, produced by the Soil Science Society of Amer- ica and the National Museum of Natural His- tory, which opened to the public in July, 2008 in Washington, D.C. Credit: Soil Science Society of America https://www.soils.org/smithsonian/index.html	

Society of Soil Scientists of Southern New England PO Box 258 Storrs, CT. 06268



Dedicated to advancing the soil science profession and encouraging broad use of soil resource information.

