



Spade and Auger

Volume 33, Number 1

Internet: <http://ssssne.org>

September, 2009

2009 Board of Directors

- President
Mark Stolt (08-10)
- Vice President
Donald Parizek (06-08)
- Secretary
Jim Turenne (06-08)
- Treasurer
Rob Tunstead (07-08)
- Board Member
Margaret Washburn (08-10)
- Alternate
Jim McManus
- Web Master \ Editor of *Spade and Auger*
Jim Turenne

Inside this issue:

<i>President's Message</i>	1
<i>Soil Judging / members</i>	2
<i>Winter /Spring Work-shopssshops</i>	2
<i>NRCS Updates</i>	3
<i>Wetland Workshop</i>	4
<i>New Hats / Shirts</i>	5
<i>Soils on the Web</i>	5
<i>2009 NCSS Conference</i>	5
<i>NEHSTC Tour</i>	6
<i>Roadside Geology</i>	6
<i>Martha's Vineyard Reg</i>	7

Message from the President

I hope everyone had a wonderful summer. August has been quite nice with typical summer conditions. Can't say the same for June and July where it seemed like it rained every day. We had the wettest July on record in Rhode Island. The weather station at URI recorded over 4" more rain than the previous July total precipitation record. Global change seems to have come to



southern New England. At least we had a beautiful June day for the Red Soil workshop. Hope you had a chance to participate. If not, we have another workshop planned for October that should be awesome. Peter Fletcher has agreed to lead a tour of Martha's Vineyard soils and geology. Don't miss the boat on this one!!!

Our annual meeting is scheduled for November 11th at the Colonial Resturant, Webster, MA. Please plan on attending. You should receive a registration form for the annual meeting in a few weeks. The Board of Directors is busy putting together our new registry. Look for that in the mail before the end of the year. I am looking forward to another beautiful fall in southern New England. Hope to see you in a soil pit on Martha's Vineyard or at the annual meeting.

Save the Date—Annual Meeting, November 11, 2009

All articles by Jim Turenne, unless noted

National Soil Judging—Springfield MO - by Mark Stolt

The University of Rhode Island represented southern New England at the 49th annual National Collegiate Soil Judging competition. The contest was centered in Springfield, Missouri and hosted by Missouri State University. Most of the soils were Udults and UdalFs formed in residuum, colluvium, and alluvium. Chert was abundant in nearly all the soils leading students to describe the soils quite simply as “red dirt and chert”. Fragipans and horizons containing fragic soil properties were also quite common. Twenty-four universities participated in the competition from across the US. In the group judging competition our team (URI) placed third. Matt Lautenberger was the 7th high individual (out of 92 participants), and overall the University of Rhode Island placed 7th. The practice and competition was an excellent learning experience for our students. Thanks to the SSSSNE for helping to support our travel to the contest to represent southern New England.

Winter Wetland Workshop & Spring Aquaculture and Subaqueous Soil Tour

In February a joint wetland workshop titled “Wetlands—The Status of Wetlands De-lineation and Assessment in New England” was held with the Southern New England Soil and Water Conservation Society (SWCS) in Hadley MA. The session featured talks about wetland issues in the region. Information about the Regional Supplement was provided by Paul Minken and updates on the New England Technical Committee on Hydric Soils was provided by society president Dr. Mark Stolt. Other talks included information about the Fish and Wildlife Service National Wetlands Inventory, GIS tools and the RI Soil Survey Program. Approximately 70 people attended the session.

In June another joint field tour with SWSC was held in beautiful Matunuck, Rhode Island. This tour featured aquaculture farming in Potters Pond. Participants climbed aboard a boat and learned about Oyster, clam and scallop farming techniques and RI NRCS programs for aquaculture. Following the boat tour a talk on the Coastal Zone Soil Survey of Rhode Island was given by Mark Stolt and Maggie Payne (RI NRCS). Lunch included an old fashion clam bake at the Matunuck Oyster Bar (<http://www.rhodyoysters.com/>).

View this edition in
color at:
<http://nesoil.com/ssssne/newsletter.htm>

Welcome New Society Members

Please welcome our new Society members (Not included are new Associate members):

Basic Members:

Patrick McIntosh, Ashford CT, William Burgess, Naugatuck CT, Michael Narcisi, Greenville RI, Steven Holden, Wakefield RI, Sally Paul, Exeter RI, Ben Vinhateiro, Kingston, RI

Professional Member:

Michelle Manarolla, Middletown CT, Lisa Krall, Vernon Rockville CT.

This brings our total membership to 234 (including Associate members) through 2009 an increase of 9 members from 2008. We lost 23 members who did not renew their dues in 2009.

Information on SSSSNE Membership: <http://nesoil.com/ssssne/membership.htm>

NRCS Updates - by Jim Turenne

Rhode Island: Pooh Vongkhamdy has been selected as the new State Conservationist replacing Roylene Rides at the Door who left to become State Conservationist for Washington State. Pooh, who came from Oklahoma, began as the State Conservationist in May. He majored in soil science at Stevens Point Minnesota. His original career plans were to be a soil mapper with the NRCS but had to settle for a State Conservationist position because (as he claims) he could not reach the top of the soil auger.

Soil work in RI has been ongoing with the Coastal Zone Soil Survey, with plans to complete the coastal and subaqueous soil mapping for the south shore areas this year and post the data to the web soil survey in 2010. In January, work also began mapping fresh water submerged soils the 250 acre Bowdish Reservoir in Gloucester. Most of the pond consisted of deep (45 feet in areas), organic deposits (Frasiwassists).

Updates to the RI GIS digital soils data has been added to the RIGIS download site (<http://www.edc.uri.edu/rigis/>). Changes were made to the attribute table to provide several new interpretations (no changes have been made to the spatial mapping yet). Users of RIGIS soils data should download the new version, complete metadata explaining the attributes is included with this new set. A soil catena chart and soil parent material map is now available for RI by visiting the RI NRCS soils page: <http://www.ri.nrcs.usda.gov/technical/soils.html>. A copy of the soil parent material map is also available for Google Earth—see info on Page 6.

Massachusetts: Society member William Taylor has retired from the USDA-NRCS after 42 years of service. When Bill finished high school he wanted to find a career where he could help the people of the world produce the crops necessary to sustained mankind. He started by studying plant science at Florida A&M University. There, one of his professors steered him into soils.

Bill joined the agency, then known as the Soil Conservation Service, in 1967, as a student intern in Watertown, New York. He later became a full time employee, working in Lake George, New York, and Holden, Middleboro, and Amherst, Massachusetts. In Massachusetts, he served as Project Leader for Worcester County, Supervisory Soil Scientist for the Southeast Technical Area Office, and eventually as Assistant State Soil Scientist.

Bill is proud of the three soil surveys he authored. He also assisted in the completion of three others. "This data will be used by the public for the next twenty years," he says. Bill plans to stay in the Worcester area and work on his golf game. Society member Al Averill has been selected to replace Bill as the Assistant State Soil Scientist for MA.



Society Member William Taylor

Mapping Complete—The field soil mapping of the Plymouth County Soil Survey has been completed and the digital data is currently being reviewed by Rob Tunstead, Project Leader for the survey. The Plymouth Survey began in 1990 with a complete re-map of the county as deemed needed after initial review of the 1969 Survey. Society members Pete Fletcher (original Project Leader), Jim Turenne, Meredith Ashworth, Brian Parks, Tom Peragallo, Don Parizek, Debbie Surabian, and Rob Tunstead all worked on the mapping. Folks interested in the digital advance copy of the county should contact Rob Tunstead at 508-205-5151 x117..

Connecticut: The Windsor MLRA Soil Survey Office has been busy collecting soil information for the initial surveys in Plymouth and Franklin Counties in MA, and the New York City soil survey.

Maine: State Soil Scientist Wayne Hoar has retired after 34 years with the NRCS. Wayne has been replaced by Tony Jenkins as the State Soil Scientist.

Wetland Workshop—Applying the Regional Supplement

Despite the wet weather pattern during June it was a perfect day for the SSSSNE summer workshop held at the beautiful Wadsworth Mansion in Middletown, CT. We had a full turnout for the workshop which focused on using the new draft regional supplement for federal wetland delineations. The Wadsworth site was selected because it is one of the study sites being monitored for the TF2 National Indicator which is used for the red soils in the Mesozoic Basin. UMASS and the CT. NRCS have been monitoring the site for several years to test the TF2 Indicator.

The workshop was held entirely in the field with Paul Minken with the ACOE providing a brief overview of the regional supplement prior to heading to the wetland site. Groups were split into two sessions with one going over the plant and hydrology factors and the other looking at the soils and hydrology factors. Following lunch and an interesting talk about the mansion we headed back to the site to switch the groups and ended with a discussion of the data that society member Rebecca Elwood has been collecting. The data backed up the results of the wetland identification using the TF-2 soil indicator—showing that the soils met the technical standards for a hydric soil. The data will be sent to the NTCHS to hopefully make the indicator approved for use in the region.

Special thanks to Paul Minken and Mike Sheehan from the ACOE for taking time to help out with the supplement and cover the plants session. Also thanks to Jim Slipperly for providing access to the site and use of the mansion.

For more information on the regional supplement visit: http://www.usace.army.mil/CECW/Pages/reg_supp.aspx

TF2. Red Parent Material. *For testing in LRRs with red parent material.* In parent material with hue of 7.5YR or redder, a layer at least 10 cm (4 inches) thick with a matrix value and chroma of 4 or less and 2 percent or more redox depletions and/or redox concentrations occurring as soft masses and/or pore linings. The layer is entirely within 30 cm (12 inches) of the soil surface. The minimum thickness requirement is 5 cm (2 inches) if the layer is the mineral surface layer.



Looking for Volunteers for Soil Display

Do you have skills in graphic design or interest in helping to put together an educational soil science display? The SSSSNE Board of Directors is looking for a few volunteers to help design a permanent soil science display at the Auer Farm in Bloomfield, CT. The Auer Farm is a 4-H Education Center that offers a wide range of environmental science programs to thousands of school children and adults throughout the year including programs on soils. If you are interested please contact Donald Parizek

Phone (860) 688- 7725 ext. 117 or e-mail Donald.parizek@ct.usda.gov



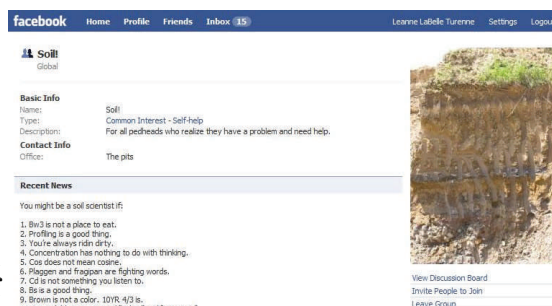
New Society Hats and Shirts Available

We have brand new society hats and shirts available for sale. The hats come in two colors; light green and drift wood. The shirts are light brown, short sleeve collard with the Society logo. Shirt sizes are medium, large, and extra large. For product information visit; <http://nesoil.com/ssssne/products.htm> to order the products click the bottom of the page for the order form. Also available are tote bags and state soil shirts.



Soils on the Web—social networks and video

As with just about everything else the web is becoming the place to go for soils information and networking. A search for “soil science” on YouTube lists about 850 videos results, some that provide good educational information on using soils surveys, understanding soil properties, and other interesting videos on soil. I try to keep a list of the best find on the <http://nesoil.com/video> page, if anyone has a favorite they find send to soils@cox.net. Wikipedia, the free encyclopedia that anyone can edit and add content to, has a lot of soil information at http://en.wikipedia.org/wiki/Soil_science.



The social networking site FaceBook has numerous soil groups, one of which has 425 members from around the world. Several university, soil societies, and soil and water conservation societies also have groups; perhaps someday SSSSNE will set up a group (anyone interested contact soils@cox.net).

2009 National Cooperative Soil Survey Conference—Las Cruces, New Mexico.

In May, the 2009 National Cooperative Soil Survey Conference was held in Las Cruces, New Mexico. The conference featured several tours (in 100 plus degree heat) including a full day trip to the White Sands Missile Range, a trip to the 78,000 hectare USDA Jornada Experimental Range, the setting for the Desert Soil-Geomorphology Project conducted from 1957-1972, and an agronomy tour of the pecan farming industry. The soil pits on the tour were exceptional, large trenches dug into the calcic horizons (Bk horizons) and discussions on the soil formation were very educational. The conference talks focused on some international efforts for soil mapping (GlobalSoilMap.net), updates on the NCSS program by Soil Survey Division leaders, and the sub-committee meetings for standards, new technology, subaqueous soils, and interpretations. Rhode Island's efforts to map subaqueous soils was highly featured and discussed during the conference.

Jim Turenne in front of a Fine-loamy, mixed, superactive, thermic, Ustic Haplargids



New England Hydric Soil Technical Committee Summer Tour

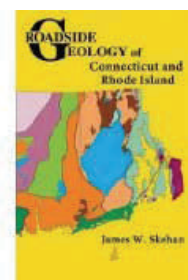
Down East Maine was the location for this years New England Hydric Soil Technical Committee hydric soil tour. The tour was set up by David Rocque with the Maine State Department of Agriculture and features several stops in the beautiful Reid State Park. The soils examined included a coastal soil on a back barrier (sandy indicator), a site with thick ortstein looking at spodic indicators, and a problem site where neither the Regional or National Indicators worked well. Over the past years the committee has been working very hard on determining which of the regional indicators in version 3 need to be modified to the National indicators for the new Regional Supplement Wetland Delineation Manual. Several indicators have been monitored and sent to the National Technical Committee for Hydric Soils for consideration.



Members of the NEHSTC in West Georgetown, Maine

Roadside Geology of Connecticut and RI

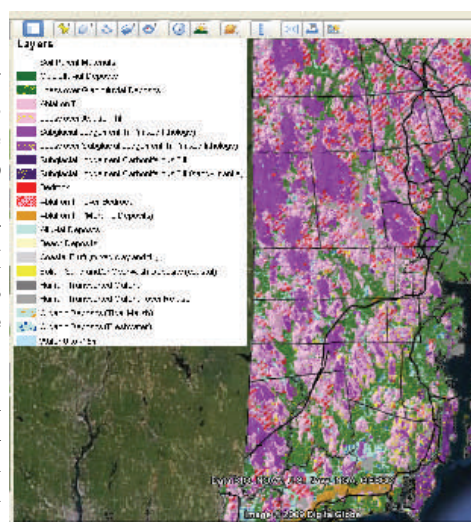
A must read for soil scientists working in the southern New England region are the roadside geology series from Mountain Press. Recently released is the series on RI and CT by Dr. James W. Skehan, Professor in the Department of Geology and Geophysics at Boston College (who also wrote the Massachusetts roadside book). This series features color photos and diagrams highlighting the complex geologic history of the region. As with the other roadside series the book features mainly the hard rock geologic story but also includes information on the glacial deposits. Copies of the book sell for \$26 and can be purchased from the CT DEP store (or other book stores): <http://www.ctdepstore.com/main.sc>



New Digital Data for RI

Several new digital datasets are now available for Rhode Island. Very high resolution, four inch pixel (each pixel in the image equals 4 inches on the ground) pseudo-orthophotography (not quite ortho but close enough) imagery is available on the RI Digital Atlas. Folks wishing to view the imagery can use the new RI Digital Atlas at: <http://www.edc.uri.edu/atlas/>. GIS users can connect to the imagery server and view using ArcMap or the free ArcGIS Explorer. The RI Digital Atlas also has several soil interpretive maps, impervious ground, elevation data, and numerous other resource maps. The site also allows the maps to be viewed using Google Earth.

Also available is state-wide Pictometry which provides high resolution oblique aerial imagery in all four directions. Pictometry is very useful for soil mapping and other remote sensing activities. Although the full pictometry dataset are only available for state and some federal use, a limited extent version is available using the "Birds Eye View" feature in Bing maps (<http://www.bing.com/maps/>) - this Bing Map feature also works for many parts of CT and MA.



RI Soil Parent Material in Google Earth, visit www.nesoil.com for link

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




SSS of SNE



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

**WWW: [http://nesoil.com/
ssssne](http://nesoil.com/ssssne)**

Email: soils@cox.net
Online Edition: <http://nesoil.com/ssssne/newsletter.htm>
Jim Turenne, editor.