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

Spade and Auger

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Inside this issue:

All articles written by Jim Turenne, except where noted.

Message from the President

Mark Stolt, President.

Several recent ethics complaints got me thinking about the role of our society; so I decided to consult our constitution to see what our founding fathers had in mind when we started over 30 years ago. Article II of the SSSSNE Constitution states: the purpose of the Society shall be: (1) the advancement of soil science as it relates to soil classification, mapping and interpretation and (2) the promotion of the professional interests of soil scientists in the states of Connecticut, Rhode Island, and Massachusetts. The advancement of soil science and the promotion of professional interests; what does that mean? Well, I am guessing our founders had a broad agenda in mind when they developed these guidelines. What is clear is that the purpose of our society is not to be a governing organization. The board of directors and the officers you have elected are not the law. Our role is not to review complaints and hand out verdicts to soil scientists not acting in a professional manner and thus failing to promote and advance soil science.

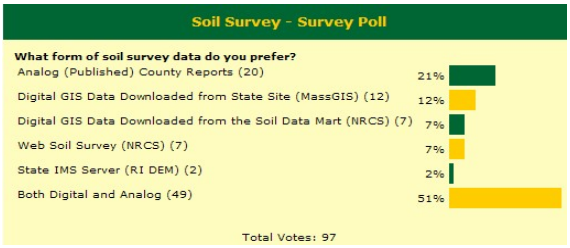
Another role our Society is not allowed to play (this time because of our tax status) is to lobby for state or federal laws and regulations that favor the soil science profession. This doesn't mean that our individual members should not speak for their profession; as well they should, as the SSSSNE constitution states members should promote the professional interests of soil scientists. We saw a good example of this last year where a number of our members, speaking for themselves and recognized as professional members of SSSSNE, went before Massachusetts Title V hearings to express support for the inclusion of soil scientists in Massachusetts soil evaluations. Maybe now is the time for our voices to be heard at the national level. At this time members of Congress are assembling the 2007 Farm Bill (this is not just about agriculture) and other national legislation that directly impacts soil scientists. Funds that come directly to agencies such as the NRCS for soils related projects that advance soil science (such as mapping and research), and the distribution of those funds, are being decided right now by our representatives in Washington. Each of us benefits when federal funds are allocated to support soils related activities or legislation is passed where soil scientist are needed to make environmental assessments (i.e. wetlands). Maybe now is the time to let your representatives know that you want them to endorse bills that support environmental and soils related activities and you want them to stand firm with a commitment to see that an equal share of those funds come to southern New England. Follow the guidelines in the Constitution-- promote the professional interests of soil scientists in southern New England and strive for the advancement of soil science.

Help Wanted: Please help the Spade and Auger—send articles for the Fall 2006 edition to soils@cox.net

Soil Survey… survey—Results are In

Users prefer both analog and digital soil data

An unscientific poll has been on the SSSSNE website for 3 months asking users what format they prefer for obtaining soil survey information. Six choices were available—analog data (published soil surveys), digital data downloaded from state sites (MassGIS, RIGIS, UCONN Magic), digital data downloaded from the USDA Soil Data Mart, the newly launched USDA Web Soil Survey, State internet mapping service sites, or both formats analog and digital.



Of the 97 votes tallied, an overwhelming 51% voted that they prefer both published reports and digital products. The second highest vote was 21% for the published surveys followed by 12% using data from State sites (MassGIS, RIGIS, and Magic). The poll was initiated to solicit feedback from users of soil survey data as to what product they use and prefer. With the release of the USDA web soil survey and Soil Data Mart download (see Fall 05 Spade and Auger), the USDA-NRCS is not planning on publishing soil surveys. The poll on the web also allows persons voting to add comments, answers and replies to these comments will be posted in May, the poll will be online for a few more weeks so if you have voted please do so soon.

In researching the number of downloads of digital soil data I obtained some statistics from each of the state GIS portals and received the following information: For RI, the "risoils_e00.zip" file was downloaded 257 times from the RIGIS data distribution system in 2005. For Massachusetts, in January 2006, there were 306 Total Requests and 295 visits to http://www.mass.gov/mgis/ftpsoi.htm (the page where users can access soils downloads). MassGIS also had 401 downloads in October 2005 (following the release of Worcester South), 324 downloads in November, and 332 in December. A high number is also expected in March with the release of Middlesex County. Soil downloads from the Connecticut MAGIC site was not available.

Numbers of published soil surveys requested by mail is difficult to track since each state has its own policy on tracking. As for Connecticut and Massachusetts, each county report gets mailed out by the individual field office responsible for the survey. In Rhode Island, 47 soil surveys were mailed out in 2005 and over 100 copies were distributed at workshops and conferences. Estimates from Massachusetts and Connecticut also run approximately 200 published surveys mailed out each year.

From a National perspective there have been approximately 300,000 downloads from the USDA Soil Data Mart since inception. That is conservatively 9.5 Terabytes of information delivered from the SDM. In addition, there are 1,500 users per day on the Web Soil Survey. In one year's time, that is about 547,000 users. That is more information than what the USDA-NRCS have published in the last 8 YEARS! **Bottom Line**: Soil data is in HIGH DEMAND no matter what the format!

Remember to Update Your Registry

visit: http://nesoil.com/ssssne/update.htm

Welcome New Society Members

Please welcome our new members:
Basic Members: Megan Raymon, Steven Duman, Abigail Childs, and John Ellis.
Associate Member: Bonnie Potocki.

Membership information: http://nesoil.com/ssssne/membership.htm

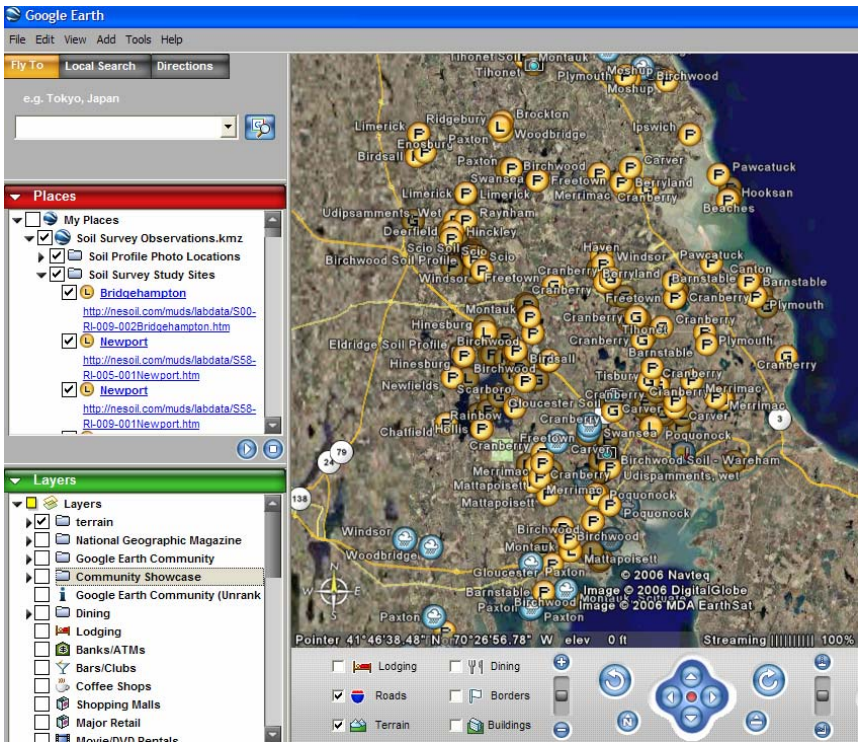
SSSSNE 2006 Activities

The Board of Directors is currently planning activities for this year. On May 25th we will host a red soil tour at the 4H center in Bloomfield Connecticut. Soils developed in the iron-rich Mesozoic Age bedrock in the Connecticut River valley and in other geologic formations throughout New England are considered "difficult to analyze" soils for making hydric soil and soil evaluations for septic systems. A series of monitoring wells have been installed at the site and during the tour we will open the soil pits and observe the morphology and discuss the data. Talks will be given by Byron and Janet Stone (USGS) and Dr. Harvey Luce (UCONN). Registration forms for the tour have been sent out, the registration form is posted on the SSSSNE Web.

In late October, a soil/geology tour of Martha's Vineyard (Dukes County), Massachusetts is planned. This will be a great opportunity to see backhoe pits and outcrops of the unique soils occurring on the terminal moraine. Mollisols, argillic horizons, coastal plain sediments, and paleosols have been mapped on the offshore island. This tour will be a two day event and a good time for all. If you missed the Block Island tour make sure you don't miss this one!

Google Earth—Soil Observation Locations

In the fall 2005 edition of the Spade and Auger I wrote about the free program called "Google Earth" (download the program at: www.earth.google.com) and a file (KML File format) I created that shows the geographic locations of the soil profile photos posted on the SSSSNE web site (http://nesoil.com/images/images.htm) on Google Earth. As of March 1 the file was downloaded by 230 people who use Google Earth. In February 2006, with thanks of the big blizzard (being stuck indoors with nothing to do), I created another KML file that includes both the soil photo locations and also shows the location of soil observation areas such as pedon descriptions, laboratory analysis, ground-penetrating radar study sites, water table monitoring sites, and soil temperature study sites that have been collected as part of the Plymouth County, Massachusetts Soil Survey Update.



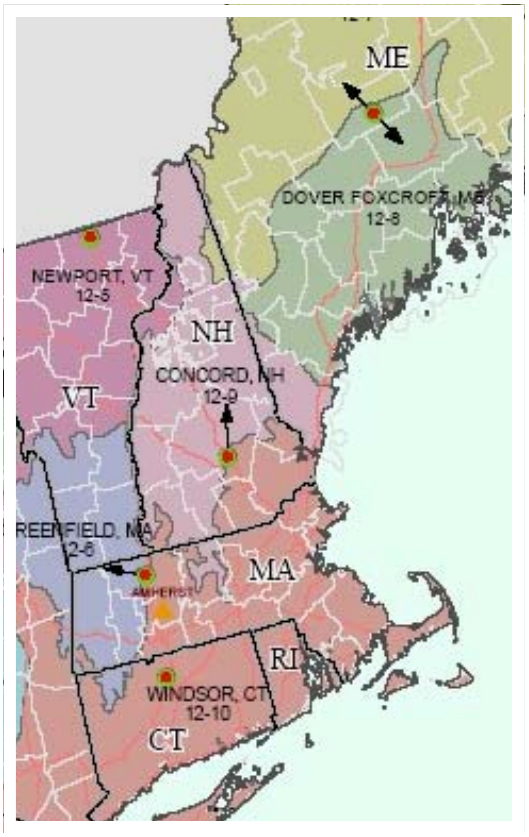
Since the beginning of the soil survey update in Plymouth County an attempt was made to geo-reference all of the data collected for the survey and make the data available to the users by posting it on the Nesoil.com web site. People not involved with soil survey may not know how much work and data collection goes into the published reports to substantiate the interpretive tables and soil suitability ratings. This Google Earth file shows the location of 204 soil observation points collected to date, this is only a portion of the data collected. The points are coded with a "P" for a pedon description, "L" for a laboratory analysis, "G" for GPR study, a rain drop symbol for a water table site, and a thermometer symbol for a soil temperature study. Each point is hyperlinked to the data via the Internet.

Plans are to keep adding points and data for other areas in the New England area as they become available. I am working on adding the lab and pedon descriptions for RI. and keep tracking data to make it available to the public. If you would like to check out the Google Earth file point your browser to:

http://bbs.keyhole.com/ubb/showthreaded.php/Cat/0/Number/310904/an/0/page/24#310904 (or follow the link from http://nesoil.com)

Soil Survey restructures

The USDA-NRCS is currently working on a plan to restructure the soil survey to adopt the "MLRA Concept" which was proposed during the late 1990's. The MLRA (Major Land Resource Area) concept removes the traditional structure of soil survey where each individual state managed their soil scientists and soil survey areas (County Reports). The draft plan will locate about 5 MLRA offices in the New England Region (see map on right). Most of southern New England will be serviced from the MLRA 144A office proposed in Windsor, CT. The Frigid soils of western CT and MA will be serviced from the Greenfield Massachusetts MLRA office or NH/VT. Another scenario is that there will be one or two offices covering all of New England. The MLRA office will be responsible for soil survey maintenance activities of the entire MLRA, database (MASIS) and GIS work, and assuring a perfect join of soil surveys to produce a "seamless Soil Survey". Each MLRA office will consist of a 2-3 person staff of soil scientist, GIS specialist, and other support personnel. All soil survey data and mapping will be made available on the soil data mart download and report site and the web soil survey. Published surveys will no longer be printed. The restructuring plan is to be implemented during 2007 and 2008. Currently within southern New England there are two active soil surveys underway in Massachusetts (Plymouth and Franklin County), the Rhode Island soil survey is undergoing maintenance and a plan to update the spatial and tabular data is being prepared. Connecticut is working on finishing the state-wide maps and data. Southern New England has four field soil scientists, 2 State Soil Scientists, 4 Assistant State Soil Scientists, and 5 soil data quality specialists in the MO-12 office located in Amherst. There are 450 field soil scientists employed by the NRCS.



SOIL SURVEY MISSION

The authorities define the mission of the Soil Survey Program. Taken together, the authorities direct the Secretary of Agriculture to:

1. make an inventory of the soil resources of the United States;
2. keep the soil survey relevant to ever-changing needs;
3. ***interpret the information and make it available in a useful form; and***
4. ***promote the soil survey and provide technical assistance in its use for a wide range of community planning and resource development issues related to non-farm and farm uses.***

Ethics Complaints

On a fairly regular basis the SSSSNE Board of Directors receives complaints from SSSSNE members or private citizens who have hired a member of our Society. The complaints vary from work not being completed to questionable soil interpretations, particularly in hydric soil delineations. Society members should review the Code of Ethics (http://nesoil.com/ssssne/ethics.htm) from time to time. As a member of our society each soil scientist agrees to abide by and adhere to the code. As far as disciplinary actions, such as removal from membership or hearings about the complaint, there is nothing in the ethics code or bylaws that enables the Board to act upon these complaints. The Board is interested in hearing from members as to whether the bylaws should be amended to address ethic complaints. Please contact Mark Stolt with any comments or email them to soils@cox.net.

Soil Survey Division National Leaders Visit Rhode Island

Micheal Golden, Director of the USDA Soil Survey Division, and Dr. William Puckett, Deputy Chief for Soil Survey & Resource Assessment, visited Rhode Island to participate in the Mapping Partnership for Coastal Soils and Sediment (MapCoast) annual conference on February 27. The MapCoast Partnership was formed 2 years ago when the RI USDA-NRCS approached URI's Coastal Institute to begin the framework to set up a center of excellence in subaqueous soil mapping. MapCoast is a group of 15 (and growing) partners that have been working together to develop a mapping protocol, build interpretations, develop a common classification system, and make the data and maps available to the coastal community. Micheal Golden provided an overview of NRCS's commitment to advancing soil science and soil survey in both terrestrial and subaqueous areas.

Director of the Soil Survey Division Micheal Golden and Dr. Mark Stolt.

The MapCoast conference also featured both of Rhode Island's Senators Jack Reed and Lincoln Chafee. Both Senators have been very supportive of MapCoast and were there to talk to the audience of over 100 people about their support. Senator Jack Reed was able to secure a $100,000 earmark for the RI NRCS soil program and Senator Lincoln Chafee secured $800,000 to NOAA to support MapCoast.

The conference featured a series of talks by State and Federal agencies that support MapCoast followed by and unveiling of the Ninigret Pond subaqueous data. The conference concluded with talks about the need and use of subaqueous soil data.

For more information about MapCoast visit: www.mapcoast.org

More information on Subaqueous Soils: http://nesoil.com/sas

Soil Judging 2006—by Mark Stolt

The University of Rhode Island recently represented southern New England at the 46th annual National Collegiate Soil Judging competition. The contest was centered in San Luis Obispo County and hosted by the California Polytechnic University. San Luis Obispo is about half way between Los Angeles and San Francisco, just a few miles from the coast. Most of the soils were Haploxererts, Argixerolls, and Haploxeralfs formed in residuum, colluvium, and alluvium. We observed excellent examples of slickensides and calcic and argillic horizons, sometimes all in the same soil!! Along the coast we saw Quartzipssamments with thin lamellae that had formed in ancient dunes and awesome examples of marine terraces. Twenty-one universities participated in the competition from across the US. The University of Rhode Island won the distinction of coming the farthest of any of the teams at the competition. 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.

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SSS of SNE

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

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Jim Turenne, editor.