MO12 Soil Survey: News and Views

NRCS MLRA Soil Survey Region 12 Fall 2010

MO Message

by Dave Hvizdak, MO12 Team Leader

Welcome to the second edition of ***MO12 Soil Survey News and Views***. We're a little late getting this edition out from our original intent, but hopefully future editions will be timelier. I would like to thank everyone who submitted articles this time around—we had a lot of good articles to work with. There is a wealth of interesting soil survey activities taking place in MO12 and these articles show a tremendous amount of pride each of you take in your work. Since I've been here, I've been impressed with the quality and professionalism MO12 soil scientists have shown.

Last month, the MO12 Board of Directors (BOD) met in Amherst to provide oversight to the MO12 soil survey program as a whole. Most state soil scientists attended and each state was represented in some capacity. It's been awhile since the board met face-to-face and eight of the ten state conservationists were able to attend. We are very fortunate to have a cadre of state conservationists in the northeast who place enough importance on the soil survey work we are doing to physically meet on our behalf.

A topic of discussion at the BOD meeting included the Rapid Carbon Assessment (RaCA). Maggie Payne and Rob Tunstead gave an excellent presentation to the board illustrating the realities of collecting field data for this project. The board has thrown their full support to completing this project by the end of September 2011. Unfortunately, Rob will be leaving us in late November to take on the MSSO leader position in the 13-7 office in New Jersey. We will miss his coordination on RaCA, but we wish him the best of luck in his new position. The good news is, all of you have pitched in admirably this fall to give the project a tremendous boost and we should be in pretty good shape going into winter. I appreciate the fact that this has been a difficult decision on your part to re-direct work from your soil survey projects, but your efforts will help ensure this nationally mandated project gets done on time.

Another topic of discussion at the BOD meeting involved the Ecological Site Inventory (ESI) program, which is now underway nationally. You will be hearing a lot more of ESI in the future and in some capacity it will become an integral part of your MLRA projects. My advice is to learn as much as you can about this inventory and the resultant Ecological Site Descriptions (ESD) that will be developed and integrated in our soil map units.

We recently selected an Ecological Site Inventory Specialist who will have quality assurance responsibilities on ESD development throughout MO12, MO13, and MO18. His name is David Clausnitzer and he is currently the Pacific Islands Area Forest Ecologist in Hawaii. David has a tremendous amount of experience developing ESDs in association soil surveys and folks who have worked with him and who have experience with his work have nothing but high praise. His start date is January 16, 2011 and he will be stationed at the MO12 office in Amherst. Being a native of New Jersey, David is fully aware of what he's getting into regarding the northeastern climate. Eventually there will be 3-4 Ecological Site Inventory Specialists (ESD developers) located in selected MO12 soil survey offices.

Enjoy this edition of MO12 Soil Survey News and Views and please start thinking of articles for the next edition.

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GPR Survey Conducted to Locate Unmarked Graves and Wolf Stones

by Debbie Surabian, Soil Scientist, Connecticut

This wolf stone, located in the Wightman Cemetery, is extremely rare in that it has legible inscription. John Burrow was buried here in 1716.

At the request of the Connecticut Office of the State Archaeologist, a ground-penetrating radar (GPR) survey was conducted on the Wightman Cemetery in an attempt to locate unmarked graves and wolf stones in Groton, CT.

History of the Wightman Cemetery

In the early 18th century, eastern Connecticut was relatively undeveloped; most of the land was still heavily forested and inhabited by the remnants of the Narragansett and Pequot tribes. During this time, the Puritan order was still the rule of law in Connecticut. However, in 1705, a group of religious dissenters (six men and six women) in Groton organized the first Baptist church in Connecticut and called on Valentine Wightman to serve as their pastor. The original congregation petitioned the General Court of the colony to allow them to assemble in peace, but their petition was simply ignored. The church and Valentine received considerable harassment from Connecticut authorities. The First Baptist Church of Groton was not built until 1718. Before that time, Valentine's congregation met at private homes.

The Wightman Cemetery, located behind the church, was started in 1710. The cemetery, still maintained to this day, is .98 acres in size and is enclosed by a finished stone wall and iron gate entrance. Aside from being the resting place of Revolutionary War and Civil War veterans, the burial ground holds the grave of its namesake, Rev. Valentine Wightman. It is believed to be the only cemetery in Groton to have a "wolf stone". A wolf stone is a large flat slab placed over the body in between the head and foot stones intended to prevent animals from disturbing the burials (According to Absolute Astronomy, gray wolves were such a problem in the Groton area that the local settlers offered to give 20 shillings for each wolf that was killed).

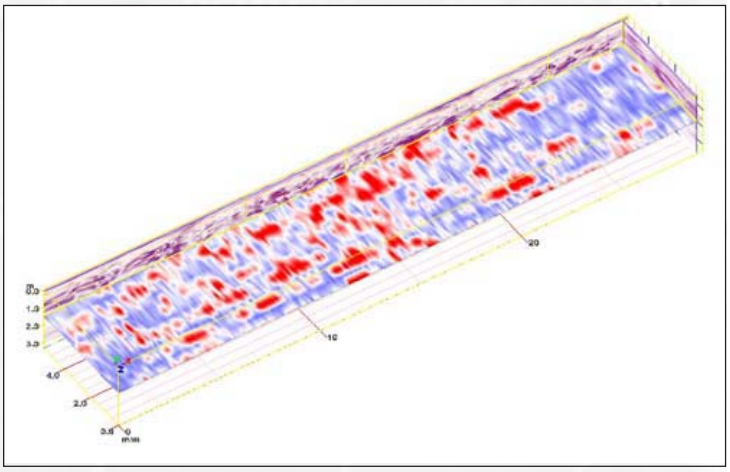
Survey Procedures

The Wightman Cemetery is located on the west side of Cold Spring Road in Groton, Connecticut, in an area surrounded by soil map unit 75C Hollis-Chatfield-Rock Outcrop complex, 3 to 15 percent slopes. The shallow, somewhat excessively drained Hollis and moderately deep, well drained Chatfield soils formed in glacial till. Glacial till is material that has been transported and deposited directly by ice. Till typically has unsorted sediments varying in texture, mineralogy, and degree of consolidation. Hollis soils formed in a thin mantle of loamy till derived mainly from gneiss, schist, and granite and are classified as loamy, mixed, active, mesic Lithic Dystrudepts. The depth to bedrock ranges from 25 to 50 centimeters. Chatfield soils formed in a coarse-loamy till and are classified as coarse-loamy, mixed, superactive, mesic Typic Dystrudepts. Depth to bedrock ranges from 50 to 100 centimeters. Hollis and Chatfield soils are considered well suited to GPR applications. Prior to field work, the site was reviewed and the most desirable study area was selected. To expedite field work, two equal length and parallel lines were set out at the site. These two parallel lines defined a rectangular grid area. Pink flags identified equal intervals along each of the two lines. Pulling the 400 MHz antenna along a reference line that was stretched between similarly numbered pink flags on the two parallel survey lines completed a GPR traverse. At the conclusion of each traverse, the reference line was moved sequentially to the next pink flags on the two parallel survey lines. Walking, in a back and forth manner, along the reference line between similarly numbered pink flags on the two parallel survey lines completed the GPR survey.

The Wightman cemetery (red dot) is located in shallow and moderately deep soils formed in glacial till.

GPR Results

The three-dimensional (3D) image of the grid completed at the Wightman cemetery reveals greater amplitude patterns and abrupt differences in dielectric properties (seen in red), which may be associated with slight differences in soil moisture and/or soil density. Due to the fact that burial plots are backfilled immediately with excavated materials, it is speculated that soils within a burial shaft would be more mixed than the surrounding soils. This lack of uniformity between the natural soils and disturbed burial shafts is expected to produce differences in soil moisture and/or soil density and a contrast in dielectric properties. The greater and more abrupt the difference in dielectric properties, the greater the amount of energy that is reflected back to an antenna, and the more intense will be the amplitude of the reflected signals on the radar record. These areas of higher amplitude features (red areas) can be identified sporadically within the entire grid; however, no patterns that coincide with a cemetery plot layout can be identified. Layouts of cemetery plots usually have burials laid in an east/west orientation with paths running north/south that provide access to the individual plots. The interpretation of the data records having no pattern-recognition of anomalies as a cemetery plot and no visual monuments in the survey area suggests that there are no burials in this survey area.



A three-dimensional cube of the grid at 1.5 meters below the soil surface at the Wightman Cemetery. Areas of higher amplitude features (red areas) can be identified sporadically within the entire grid; however, no patterns that coincide with a cemetery plot layout can be identified.

A random "wild cat" GPR survey was also conducted across this cemetery in an attempt to locate unmarked graves and additional wolf stones. Interpretation of the radar records suggest no evidence of unmarked burials in areas designated as having no known gravesites or markers. Caution should still be used when digging in these unknown areas. Radar records do indicate the presence of additional wolf stones in the cemetery. These wolf stones may be easily located using a push probe to carefully identify the boundaries of the stone. ■

Maine Soil Survey Turns 100

by David Turcotte, Soil Scientist, Maine

Having been a soil scientist (working for NRCS out of Dover-Foxcroft) and member of MAPSS (Maine Association of Professional Soil Scientists) for nearly 14 years, I have been fortunate to have worked, collaborated, or at least mingled with many respected pedologists in Maine. In addition, I have had reasons to review various aspects of some of the older soil surveys in the state, such as York, Kennebec, Penobscot, and both Northeastern and Southeastern Aroostook soil surveys. Hence last fall, when I came across "The Early Soil Survey in Maine: 1910-1955," I suspected that I would find the paper of interest. Later, after reading it, I came to realize (by chance) that the soil survey turned 100 in June. Even more by chance, the year soil survey here turns 100 is the year the initial soil survey will be completed.

"The Early Soil Survey in Maine" was written by Norman Kalloch (former SCS/NRCS state soil scientist and MAPSS president) in 1999, the year Maine hosted the Northeast Soil Survey Work Planning Conference. A biography of John Arno's 1936-1976 career in the National Cooperative Soil Survey was attached to "The Early Soil Survey in Maine" write-up. This article consists of my thoughts on some of what I felt was intriguing and informative about Kalloch and Arno's papers (these papers can be accessed at http://www.me.nrcs.usda.gov/technical/SoilSurveyProgram.html). I also touch briefly on Robert Rourke's publications out of the Maine Agricultural and Forest Experiment Station, and the 2010 National Cooperative Soil Survey planner ("Benchmarks in History").

The early soil surveys had but one purpose, and that was to determine the suitability of soils for growing agricultural crops. If they appear crude compared to modern soil surveys, then consider the limitations they had compared to all of the

On April 16, 1999, Governor Angus S. King, Jr., signed Legislative Document 592 into law, making Chesuncook Maine's Official State Soil.

technological advantages (better access, better base and supporting maps, GPS, GIS, etc.) we have today. The first soil survey in Maine was the Soil Survey of the Caribou Area, issued in July 1910. Not surprisingly, it was a soil survey of Maine's expanding potato region. The final paragraph of the report gives some sound advice on how farmers can improve their land with sound rotations and use of organic matter (sound familiar?).

The second soil survey in the state was of the Orono area. This report was issued in October 1910, just three months after the Caribou Area report. Presumably, the premise for this survey was its proximity to the land grant university. The survey only had two series: Bangor and Orono! The former covered all till, while the later covered all forms of sediments (marine/lacustrine, outwash, alluvium)! The other three map units were peat, muck, and rough stony land. I find it interesting that they separated peat from muck, since one can distinguish sapric swamps and marshes in that area from hemic-fibric bogs (i.e. Orono and Caribou Bogs) and perhaps fens. Rough stony land—might that have been meltout till and/or areas with ample rock outcrops?

The third oldest survey in Maine was that of the Aroostook County Area. The area was essentially the cultivated areas of the county, excluding the St. John River Valley west of Van Buren. Some of the described soil series names in that publication are still in use today: Caribou, Washburn, Easton, and Linneus. This survey was significant in that it was the first survey in the state to describe both soil morphology and genesis.

The Soil Survey of Cumberland County was the next survey published. As the name implies, it was the first county-wide survey conducted in the state. Ten soil series embracing 21 map units were used. Subsequent to the Cumberland County survey were the county-wide soil surveys of York and Waldo (that have since been updated). The first generation county surveys still in use for Maine are for Penobscot (Northern Part), Androscoggin and Sagadahoc, Kennebec, and Somerset (Southern Part).

Aerial photos were not used until 1937, when parts of Central Aroostook County were mapped for the third time. Munsell color standards weren't used until 1955 and prior to that, color chip samples from the paint section of the Sears Roebuck were the only set of standards used! The plane table was used as the base map prior to the advent of aerial photos, since topographic maps at the time were pretty sketchy. The plane table wasn't always stable and was physically taxing to cart around. Some of the very early surveys (and through the 1990s in western unorganized towns) were mapped at one inch to the mile, which you can imagine required plenty of lumping with our notoriously variable glaciated soils. The concept of (the Caribou) catena was introduced in 1943. By then, more familiar series had been introduced, such as Monarda, Burnham, Plaisted, Perham, Daigle, and Thorndike.

As with "The Early Soil Survey in Maine", John R. Arno's career biography is fascinating reading. Most of John's 40-year career in soil survey was spent in Maine, and twice John got to meet and interact with Charles Kellogg. His discussion on how they used the plane table is quite enlightening, and at 5' 5" he said he could barely see over the top of it! John's master's thesis was "The Silica Sequioxides Ratio of some York County Soils". That research was significant, for it was thought to determine the degree of podzolization of a soil. His biography notes the use of the Abney level for slope, early use of the stereoscope, and when soil scientists often had a background in geology to begin to understand the soils according to local surficial and bedrock geology. Towards the end of his career, John worked with Kenneth LaFlamme, one of only three honorary members of MAPSS (the others being Norman Kalloch and John Ferwerda (who is also a retired SCS state soil scientist and former MAPSS president)).

More recently (from the 1960s through the 1990s), Robert V. Rourke (et al.) described and sampled an impressive number of pedons for several series still used around the state. He actually described and sampled five pedons for each series he set out to qualify and quantify. My understanding is that he was very conscientious about his science (in terms of how the pedons were described, sampled and analyzed), and that for several years his served on an international committee of Soil Taxonomy

for Spodosols. With each technical bulletin he published came interesting conclusions about soil taxonomy and genesis for the series in question, such as that neither argillic horizons nor fragipans were characteristic of Perham and Daigle soils (Tech. Bul. 75, 1975). All of Rourke's publications (i.e. technical bulletins)—as well as "Soils of Maine" by Ferwerda et al.—are available at: http://www.umaine.edu/mafes/publications/soils_water.htm. We, in Maine NRCS soil survey, have used his data to help establish the classification and range of characteristics of many of our soil series, using the laboratory data to supplement data from the National Soil Survey Laboratory (ssldata.nrcs.usda.gov).

Finally, the 2010 Soils Planner is all about benchmarks in the history of the National Cooperative Soil Survey. This sharp and informative planner goes all the way back to the origins of National Cooperative Soil Survey in the 1890s, and includes the origin of soil conservation efforts in the U.S. The planner may be attained at LANDCARE (http://landcare.sc.egov.usda.gov/ or 1-888-526-3227), or perhaps via your state's public affairs specialist. LANDCARE is a terrific resource for all sorts of USDA publications, planners and posters, including a CD that includes selected historical publications on soil survey and soil classification in the U.S.A. (available directly at http://landcare.sc.egov.usda.gov/product.aspx?id=786). ■

NRCSers attend USDA Wetlands Training in Maryland

by Karen Dudley, Resource Soil Scientist, New Hampshire

NRCSers from Maine, Vermont and New Hampshire attended a "new" (National Food Security Act Manual) Wetlands training in Maryland last spring. Attendees included: Tony Jenkins and Jim Johnson from ME; Kip Potter from VT; and Joe Homer and Karen Dudley from NH.

There are two primary federal "programs" requiring the identification of wetlands. They are Section 404 of the Clean Water Act and the Wetland Conservation provisions of the Food Security Act of 1985 (FSA), each having their own program-specific definitions. FSA wetland determination decisions are based on the unique definitions (wetland definition, hydric soil definition, and hydrophytic vegetation definition provided by Congress) and are provided by NRCS to the USDA program participant and USDA.

Key points from the training:

- The east side of Maryland consists of flat, subtle land forms that are mainly outwash and marine sediments.
- There are abundant farms in this area.
- NRCS will use the same methods as described in the U.S. Army Corps of Engineers manual but a different set of definitions for Food Security Act wetland delineations are required.
- The Wetland Determination Data form is found on the last pages of the "Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region " (Oct 2009) (http://www.usace.army.mil/CECW/Documents/cecwo/reg/trel09-19.pdf).
- The role of NRCS is to assist the USDA participant with the identification of areas that are subject to the Wetland Conservation provisions.
- For more information about USDA and Conservation Compliance, visit (http://www.nrcs.usda.gov/programs/compliance/). ■

(L to R) Maine State Soil Scientist, Tony Jenkins and New Hampshire Assistant State Soil Scientist, Joe Homer participated in the training.

Maggie Payne and Rob Tunstead measure bulk density using the modified compliant cavity ring method for the Rapid Carbon Assessment.

Rapid Carbon Assessment

by Maggie Payne, Soil Scientist, Rhode Island

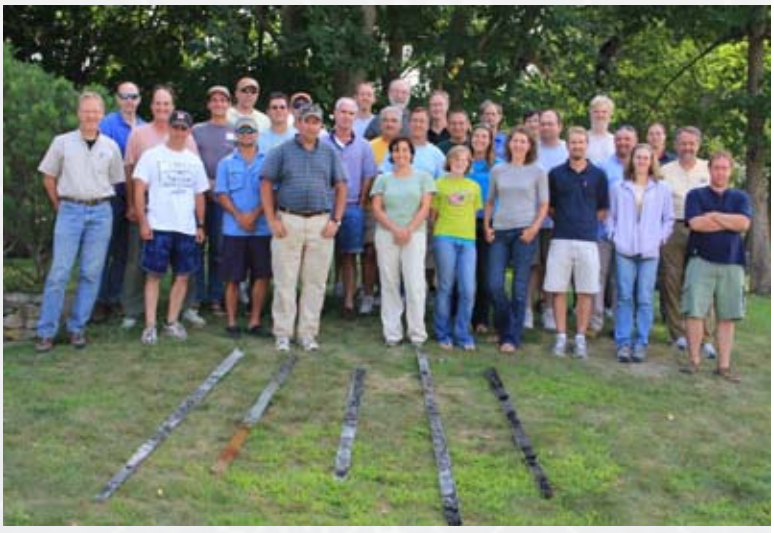
The Rapid Carbon Assessment (RaCA) project has begun. Maggie Payne and Rob Tunstead, the Rapid Carbon Leaders for MO12, received over 600 sample points from the National Soil Survey Center in July. The points have been pared down to 376 points that will be sampled throughout MO12 in the next year. These sites were selected to meet certain land use and soil type criteria and will be used to evaluate differences in soil carbon associated with differing soil properties, agricultural management systems, and land uses as well as to create a scientifically-based inventory of the soil carbon stocks in the United States. All sites have been remotely assessed to verify land use and soil type thanks to the help of mapping office and state personnel throughout the region.

Field sampling equipment was received in August and we have begun the field portion of this project in the MLRA 12-6 region. Teams of four soils and resource staff have visited and sampled eight sites. Field days include locating and verifying the site, digging and describing five soil pits in a cluster approximately 30 meters from one another, sampling each horizon for bulk density, and conducting a vegetation analysis.

The plan is for Maggie and/or Rob to spend at least a week with each area office to provide training for the staff in the region. Staff from the area would then visit all the sites that have been assigned in their region and mail or deliver samples back to Rhode Island. Bulk density samples will be dried and weighed and carbon analysis using a Visible and Near Infrared Spectrometer will be carried out on each sample by NRCS staff at the University of Rhode Island. All of the pedon and lab data will be uploaded to NASIS where it will become a part of the national assessment of soil carbon. ■

Rhode Island hosts the 2nd National Workshop on Subaqueous Soils

by Jim Turenne, State Soil Scientist, Rhode Island



Thirty-seven people attended the workshop on subaqueous soils.

In early August, 37 people, mostly soil scientists, from across the country attended the 2nd National Workshop on Subaqueous Soils. The workshop was organized by Mark Stolt, Maggie Payne, Marty Rabenhorst, Patrick Drohan, and Jim Turenne and consisted of a combination of field session and lectures. During the field session folks learned about mapping freshwater submerged soils, using sampling tools such as vibracores and peat corers, how to describe and sample the soils, how to collect bathymetric data, and delineate soil landscape units. The lectures featured various talks on subaqueous soils, coastal ecology, uses and interpretations, and mapping techniques. Perfect weather made the workshop very enjoyable and educational for the participants. The workshop followed up on the 1st National Workshop held in Delaware in 2003 and was identified as a need during the 2009 National Meeting in Las Cruces, New Mexico. The workshop was sponsored by the Society of Soil Scientists of Southern New England, University of Rhode Island, University of Maryland, and Penn State. For information and copies of the talks and photos, visit the subaqueous soil information site at: http://nesoil.com/sas. ■

The Coastal Zone Soil Survey of RI and CT

by Jim Turenne, State Soil Scientist, Rhode Island

The final uploading of the first complete coastal zone soil survey is undergoing final QA by the MO12 staff and should be posted on the SDM/WSS soon. The survey consists of subaqueous soil mapping for all of the major coastal lagoons along the south shore of Rhode Island along with Little Narragansett Bay in RI and CT. Also included is a re-map of the dunes, marshes, and beaches along the RI south shore. During the course of the mapping, ten new soil series were established and over 250 pedons described and sampled. The NASIS workload and progress and final reviews were provided by the MLRA 12-6 office (Donald Parizek and Debbie Surabian) and Steve Fischer from the MO12 office. Maggie Payne completed the digitization, established the series, and conducted data entry. Mark Stolt and Mike Bradley from the University of Rhode Island also provided input and assistance to the project. The need to get a pilot project for subaqueous soils online was determined during the National Soil Survey Planning Conference in Las Cruces, NM. ■

"Soils are rainbows under our feet"—Awesome things we learned about soils this year...

by the 2010 Connecticut Envirothon Students (compiled by Marjorie Faber, CT Assistant State Soil Scientist)

The soils staff working at this year's Connecticut Envirothon posed a question to the students on their soils exam. The staff asked "What was the most awesome thing you learned about soils this year?" Here are their answers...

1. The varying strengths of soils and how that affects human activity on the land
2. The awesome qualities of soil infiltration and how it affects agricultural technologies.
3. Soil contains critters.
4. Clay soil forms a "ribbon" when you press it between the fingers.
5. Soil compaction!
6. The soils are differently charged, so when you pour purple Kool-Aid into the soil, various soils will take either the blue or red in the Kool-Aid.
7. Loam is a combination of sand, silt and clay! O, A, B, C horizons. Hillslope is a generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.
8. That you could make a ribbon with clay.
9. Farmers used to taste soil to taste their pH levels. Acidic soils would taste sour or sweet, while basic soils would taste bitter.
10. That gray color soil indicates a lack of oxygen.
11. Redoximorphic features.
12. They taste good.
13. Soils rock. They are the rainbows under our feet . Texturing is fun.
14. The different horizons and how lovely they each can be.
15. Learning how much life there is in such a small area!!
16. Worms eat and digest soil! Woah! I ♥ soil.
17. That everything that goes into the soil eventually comes back up.
18. Humus and hummus are spelled differently for a reason.
19. Loam sounds like hair rubbing together when you rub it in between your fingers!
20. You can use it to dye your hair ☺. Learning about the different qualities and feels of the soils and their effect on plant life.
21. It's not called dirt! It was formed and compacted by glaciers.
22. Glacial till. Deposition. Erosion.
23. Soil is 25% air.
24. I learned that there are special chemicals in bogs that preserve bodies. These bodies are around 2,000 years old and their fingerprints are even identifiable.
25. The coolest thing yet about soils is that soil is not dirt! Anyways, did you know that Antarctica is a frozen desert? ■

The 2010 Northeast Regional Cooperative Soil Survey Conference

by Ed White, State Soil Scientist, Pennsylvania

Pennsylvania hosted the 2010 Northeast Regional Cooperative Soil Survey Conference at Elizabethtown College in Lancaster County, Pennsylvania. State Soil Scientist, Ed White, opened the conference describing the new era in soil survey: a new structure, new tools, advanced technology, new opportunities, and an exponentially increasing need to help society make informed decisions.

Monday morning sessions included reports from the Soil Survey Division, National Soil Survey Center, Technical Soil Services, National Park Service and activities of the National Society of Consulting Soil Scientists along with breakout sessions for committee meetings. During a Monday evening dinner with a "Pennsylvania Dutch" menu, Dr. Donald Kraybill, Senior Fellow of the Young Center for Anabaptist and Pietist Studies, spoke on Amish and Mennonite agriculture and culture throughout the northeast.

Tuesday's session was opened by Denise Coleman, State Conservationist in Pennsylvania, who discussed the value of the Soil Survey program to the agency, USDA and the public. The technical sessions included a wide variety of timely topics in soil survey: storm water issues, mill dams and legacy sediments, ARS nutrient and hydrologic studies, applications of LiDAR, and detailed climate analysis for Pennsylvania, just to name a few. Concurrent sessions included Ecological Site Descriptions, North American Soil Geochemical Landscapes Project, Soil Interpretations—Productivity and Risk, Pa One Stop-Online Conservation Planning Tool, Solifluction in the Ridge and Valley, and Soil Based Drought Vulnerability. A well attended poster session followed the presentations.

Restored Legacy Sediment Site

(L to R) John Chibirka, James Fisher, and Patrick Drohan present soil monoliths to Jan Waltz and Jeff Zick

Wednesday's technical tour brought all of the presentations into sharp focus. At the first stop, the Mid-Atlantic Hydric Soil Committee led a discussion of the TF-2 Red Parent Material Hydric Soil Indicator. Mill dams, legacy sediments and the sedimentary soils, and a restored mill dam floodplain site were observed at the second stop, with Dorothy Merritts and Bob Walters leading the discussions. At the third stop, Patrick Drohan led the group through multiple terrace soil sites of the Susquehanna River. After lunch, the group visited Warwick Township to learn about their innovative approaches to storm water management, farmland preservation, nutrient management, and wetland restoration and the positive effects these have had throughout the township and to Lititz Creek. Storm water BMP's from porous pavement, bioswales, and basins were observed in action during a period of heavy rainfall. A Hagerstown soil profile highlighted the stop.

The final technical tour stop was at the Waltz Vineyard to learn of the complexity of viticulture, terrior (soil, climate and landscape) in the northeast. All phases of viticulture were discussed by owners Jan and Kim Waltz; farm manager, Jeff Zick; vineyard soil specialist, James Fisher; and Cooperative Extension Viticulture Specialist, Mark Chien. After a long, wet day in the field, Waltz Vineyard hosted a wine tasting and dinner. They were presented with two soil monoliths of their "Terrior".

On Thursday, the six conference committees presented their final reports and the Regional Soil Survey Offices (MO 12, 13 and 14) presented their reports. A need for an interpretations subcommittee was discussed.

Tony Jenkins, State Soil Scientist in Maine, volunteered to host the 2012 Northeast Regional Conference, likely to be in Orono, ME in July.

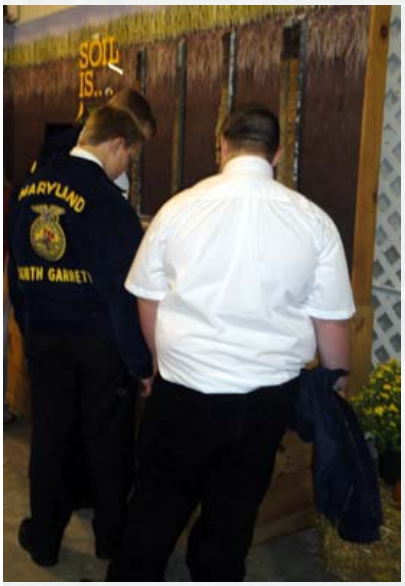
More than 85 people attended all or part of the conference. All of the presentations, committee and MO reports, and additional photos from the 2010 Northeast Regional Soil Survey Conference are available at the Northeast Regional Cooperative Soil Survey Conference web site. ■

RI Soil Scientist Receives Silver Spade Award

by Maggie Payne, Soil Scientist, Rhode Island

John Galbraith (L) presenting Silver Spade Award to Jim Turenne.

Rhode Island State Soil Scientist, Jim Turenne, received the Silver Spade award at the 2010 Northeast Regional Soil Survey Planning Conference. The award was presented to Jim by the 2008 award winner Dr. John Galbraith from Virginia Tech. Jim was selected for the award for his 23 years of service to the soil survey program and developing innovative approaches to advancing soil survey such as setting up the Nesoil.com web site, Google Earth products, and his involvement with the Society of Soil Scientists of Southern New England. The Silver Spade is presented to a member of the conference who has contributed outstanding regional and/or national service to soil survey. Past winners of the award include: Ed. Ciolkosz, Ed Sautter, Sid Pilgrim, William Wright, Del Fanning, Bob Rourke, John Sencindiver, Peter Veneman, Marty Rabenhorst, Steven Carpenter, Jim Baker, Ronnie Taylor, and John Galbraith. ■



Soils Featured at The Big E

by Kristie Wiley, MO12 Editor

Soil was center stage at the USDA exhibit at the 2010 Eastern States Exhibition (The Big E) in West Springfield, Massachusetts. From September 17th to October 2nd, the USDA booth featured soil monoliths, an interactive soils quiz, and a couple of hands-on activities that helped visitors understand soil texture.

The Big E, the largest fair in the northeast, attracted over 1.2 million visitors during the 17-day event.

FFA students from Maryland take the interactive soil quiz at The Big E. Who knows, maybe there is a future soil scientist in this photo! ■

Editor's Note:
Your ideas, suggestions, comments, and articles are welcome.

Articles may be sent via e-mail as either an MS Word attachment saved as text only, or pasted directly into your e-mail message.

Photographs should be e-mailed as a separate jpeg attachment. Please include a caption for each photo submitted.

Send items to:
kristina.wiley@ma.usda.gov.