

Northeast Regional Soil Survey Conference

More than 65 soil scientists from NRCS, universities, USGS, CSREES, the private sector, 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, North Carolina, 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 Hydrogeology 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.

The new technology demonstration showcased tools which may help soil scientists in the field. Tools to measure dynamic soil properties and a spectrometer 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. Additionally, some new computer software was demonstrated.

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. Participants observed the variability of Connecticut's outwash soils as well as differences in the soils originating from human disturbances ranging from about 5,000 years BP to as recent as two years ago.



Photo: Soil trench showing example of the anthropogenic pit features common in the Preston Plains area (photo courtesy of Steve DeGloria)

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 was 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.



Photo: Turf production (photo courtesy of Steve DeGloria)



Photo: Bridgehampton soil profile (photo courtesy of Barbara Alexander)

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.

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