

**Office of the Chief
Weekly Report**

**Soil Survey and Resource Assessment
Soil Survey Division**

November 9, 2011

Deadline Reminders

- None

Upcoming Meetings/Conferences

- None

Soil Survey Division Update

Pennsylvania Geophysical Evaluations - During the period of 2 to 4 November, personnel from the NSSC's Soil Survey Research and Laboratory Staff and the MLRA 139 (Lake Erie Glaciated Plateau) Soil Staff completed hydrogeological investigations using electromagnetic induction (EMI) at two monitoring well sites located in Mercer and Crawford Counties, Pennsylvania. Each well is equipped with an Odyssey soil moisture probe that measures soil moisture content at regular intervals. This state-wide NRCS project is designed to collect data on seasonal soil moisture content, duration of saturation, and depth to water table in several Pennsylvania soils. Electromagnetic induction data will be used to infer soil moisture contents, fluctuations, and movement across different landscape components. The data collected in this project will be used to improve the soil moisture status data for soil map unit components in NASIS.

Ground-penetrating radar (GPR) was also used in MLRA 139 to characterize fragipans and their distribution in areas of Venango and Ravenna soils (both classified as fine-loamy, mixed, active, mesic Aeric Fragiaqualfs). As part of the Soil Survey Recorrelation effort in this MLRA, these GPR data will be used to improve the accuracy, consistency and usefulness of soil survey information across political boundaries where data discrepancies have been identified.

Soils Meeting in Morocco - Maxine Levin attended the Sixth SUITMA (Soils of Urban, Industrial, Traffic, Mining and Military Areas) International Conference, Marrakech, Morocco, October 3-7, 2011. She presented an invited paper on an "Overview of the Green Infrastructure and Urban Soils Projects in the USA" and was the Chair of the last day of convening sessions. The presentation highlighted NRCS approaches to soil survey urban and suburban mapping and application of non urban soil survey interpretations. The presentation also shared database strategies showing that NRCS is leading in database management for the soil resource as well as educational outreach. The Workshop and Excursion allowed soil scientists from all over the world (but predominately Europe, China and Africa) to convene and share viewpoints of issues concerning soil science in urban, industry, transportation, military and mining applications as part of the Urban Soils Working Group, SUITMA, of the International Union of Soil Sciences(IUSS). Below is a picture of participants in the field.



NSSC Painting on Display at the Temple University School of Art - Jan Lang's soil painting "Keel Boat and Bird" (below) is on temporary loan to the Tyler School of Art, part of Temple University in Philadelphia, PA. The painting, requested by the School's Director, is part of an exhibition designed to demonstrate the many uses of soil in creating art. Lang, a lab technician at the National Soil Survey Center (NSSC), uses pigments derived from soils across the U.S. for her paintings and created this painting along with others on display at the NSSC as part of the Lewis and Clark Bicentennial Celebration.

