

**Office of the Chief
Weekly Report**

**Soil Science and Resource Assessment
Soil Science Division**

May 8, 2013

Deadline Reminders

none

Upcoming Meetings/Conferences

The National Cooperative Soil Survey National Conference received meeting approval for 21 NRCS participants. It will be held June 16-20, 2013, in Annapolis, MD, and hosted by the University of Maryland. This year's conference theme is, "Soil Survey – Planning for Soil Health in the Critical Zone." Go to http://soils.usda.gov/partnerships/ncss/conferences/2013_national/index.html for more information.

Soil Science Division Update

Meeting with US Fish and Wildlife Service in Amherst, Massachusetts

Luis Hernandez, Soil Survey Regional Director, Glaciated Soil Survey Regional Office (Soil Survey Region 12) cosponsored a meeting with Tom LaPointe, Forest Ecologist with the US Fish and Wildlife Service (USFWS) Northern Forest Land Management Research and Demonstration Program (LMRD). The purpose of the meeting was to gather people with interest in Site Suitability for Plant Communities (SSPC) and the opportunity for agencies and NGOs to learn about existing NRCS ESDs and discuss opportunities to partner in the effort to develop a dataset that informs local, landscape, and regional planning and implementation.

SSPC is the highest priority information need (science need) for USFWS northern forest Refuges and the Northern Forest LMRD and ranked second highest for the USFWS NA LCC Technical Committee Terrestrial and Freshwater Wetlands Subgroup. Although the concept of their site suitability is similar to ESDs, the discussion helped determine the utility of ESDs for USFWS and partner interests.

Soil Science Division Assistance to Pakistan

Thomas Reinsch participated in a Foreign Agricultural Service project to increase efficiency of soil fertility through extension in Pakistan. The team met with potential partners from the Department of Agriculture, University, and private sector in the Sindh Province to learn of current efforts to support efficient utilization of soil nutrients; understand the limitations to increase adoption of best management practices, and explore solutions to these limitations. The team also met with potential project implementers to share findings the potential partners in Punjab and Sindh Province as well as to outline the objectives, plan for activities to accomplish those objectives, and identify the outputs and outcomes. Potential project implementers were invited to submit project proposals for evaluation. The project will likely involve subject experts from NRCS and ARS.

Ecological Site Technical Review and Soil Quality Assistance in Missouri

On April 30 through May 2, two NSSC Soil Quality and Ecosystems staff members and the Regional Ecological Site (ES) Specialist provided input and technical progress review of Ecological Site Description (ESD) projects and work in Missouri and Arkansas. ESD partners involved included staff

from Missouri NRCS, Arkansas NRCS, Missouri Department of Conservation (MDC), and Missouri Department of Natural Resources (DNR). A review of project plan milestones, ES legends, ES keys and ESD correlation to soil components for MLRA 116A, 116B and 116C was completed. Ecological site forest sampling protocols and procedures were reviewed in the field. MDC staff summarized the importance of ESD inventory work and the importance and uses of ESDs especially for restoration efforts by their land managers.

In addition, NSSC staff provided an overview on the use and application of simple soil health assessments and interpretations with Missouri area and field office staff in St. Joseph and Springfield, MO, during the week.

University of Missouri at the National Soil Survey Center

Dr. Randy Miles brought 6 students from the University of Missouri last week to meet with the staff and leadership of the National Soil Survey Center. The meetings included a discussion with all of the National Leaders and a tour of the Kellogg Laboratory.

One student made a great summary relative to the tour as he stated "I was impressed with the facility but what really stood out was the quality of the professionals and their enthusiasm for their work". This is the type of outreach the NSSC both promotes and excels at.

Cooperative Research with Penn State University

On April 30 to May 2, Jim Doolittle with the NSSC's Soil Survey Research and Laboratory Staff, and graduate students under the direction of Dr. Henry Lin, Department of Ecosystem Science and Management at Pennsylvania State University, completed hydropedological investigations using ground-penetrating radar (GPR) within the Shale Hills Critical Zone Observatory (CZO). The Shale Hills CZO is a small, forested catchment in central Pennsylvania that has been the focus of National Science Foundation-supported research since the 1970s, and presently serves as a test site for evaluation of hydropedological responses. The focus of the present geophysical research is to better understand the effects of soil structures on water flux through the soil at different spatial and temporal scales.

Personnel Highlights

Linda Kruger, Staff Assistant in the Soil Survey Research and Laboratory branch of the NSSC, will be assigned, starting PP10, to the USDA Human Resources Enterprise System Management (HRESM) to assist with the One USDA project. This will be a 180 day assignment.