Southern Regional Soil Survey Conference Committee Charges for 2010

Standards and Taxonomy Committee Charges

Co-chairs: Charles Love (Charles.love@al.usda.gov)
Joey Shaw (shawjo1@auburn.edu)

1. Review the existing proposal for new taxonomic classifications and provide recommendations to NSSC for adoption in Soil Taxonomy.
2. Identify needed changes to the NSSH, Field Guide for Describing and Sampling Soils, and Soil Survey Manual to accommodate subaqueous soil survey activities.

Subaqueous Soils Committee Charges

Co-chairs: Jerry Daigle (jerry.daigle@la.usda.gov)
Rex Ellis (rexellis@ufl.edu)

1. Contact Jim Turenne in Warwick, RI and document progress from the Subaqueous Soils workshop.
2. Review and provide information on progress on methodologies for sample handling protocols and characterization methods for critical data elements.
3. Document progress of subaqueous soils research in soil survey and applications to interpretations.

Research Priorities Committee Charges

Co-chairs: Pam Thomas (pam.thomas@sc.usda.gov)
Wayne Hudnall (wayne.hudnall@ttu.edu)

1. Identify and evaluate research needed in the Southern Region to accomplish soil surveys
    a. Class criteria for gypsum content in soil interpretations
        i. at what gypsum content does piping occur within the soil,
        ii. at what gypsum content does cavern formation occur in soils,
    b. The “new soil survey” needs sampling requirements for dynamic soil properties. Identify existing data sets in the Southern Region that can be used to determine the spatial variability of near surface dynamic soil properties.
    c. Identify and/or suggest methods to predict highly variable soil properties such as infiltration from less costly measures
2. Identify known elements of ground water Spodosols formation and develop model to predict their occurrence in landscapes
3. Evaluate and identify ways to integrate soil spectroscopy tool into soil survey activities

New Technologies Committee Charges

Co-chairs: Edgar Mersiovsky (edgar.mersiovsky@ar.usda.gov)
David Weindorf (dweindorf.agcenter.lsu.edu)

Develop and document procedures, processes, and standards that will be used to integrate GIS, remote sensing, landscape modeling, and other similar technologies into the mainstream of the soil mapping and landscape inventory program.

1. Identify new inventory techniques that have emerged recently. Identify the strengths and weaknesses of these new techniques
2. Identify potential new technologies to support field activities in the processing of existing digital spatial data
3. Identify new technologies and methodologies that can support and/or enhance digital soil survey activities

Soil Interpretations Committee Charges

Co-chairs: Greg Scott (greg.scott@ok.usda.edu)
Kris Brye (kbrye@uark.edu)

This committee will explore and discuss how soil survey should address interpretations for regional updates of the soil survey and database representation.

1. Review and document current progress on dynamic soil properties and Ecological Site Inventory and its future effects on soil survey interpretations in the Southern NCSS regions.
2. Continue to establish a formal mechanism (charter) within the NCSS to:
    a. Identify, document, prioritize, and address the critical interpretation and technical development issues within the NCSS.
    b. Identify opportunities for partnering on investigation, validation, documentation and delivery of newly developed interpretations within NCSS.
    c. Identify opportunities for funding validation of interpretations in the soil survey.
    d. Identify coordination and communication protocols with ongoing Standing Committees of NCSS - Research Needs, New Technology, and Standards/Taxonomy.
3. Support, direct and summarize activities associated with Task Forces on Gypsum Interpretations, and the Soil Change and Subaqueous Soils Working Groups
4. Discuss development of 'Second Generation Interpretations':
    a. Explore and discuss how to take the first steps to initiate 'Second Generation Soil Survey Interpretations'.
    b. Soil interpretation derived from pedons and lab data nearest to the area of interest.
    c. Interpretations that take into account temporal data (precipitation, temperature, etc)
    d. Real-time Interpretations (Doppler radar, soil moisture probes)