

Soil and Plant Science Division

2024 SSSA Summer Conference: Dynamic Soil Properties Workshop Agenda

Monday, June 10, 2024

Bus will depart promptly at 1:00 pm from outside the Caribe Hilton lobby. Please arrive 10-15 min early.

Time	Activity	Description
1:00-2:00 pm	Participants travel to Corozal Bag lunches will be provided and eaten on bus ride	Situate yourself in Puerto Rico: A landscape discussion Manuel Matos Rodríguez (NRCS Puerto Rico State Soil Scientist) will describe the physiography of the region, soils, and management considerations unique to Puerto Rico as we drive through varying landscapes.
2:00-2:15 pm	Presentation: Introduction to DSP (indoors)	Dynamic Soil Properties: Understanding our past, informing our future Francine Lheritier (NRCS National Resource Soil Scientist for Dynamic Soil Properties) will discuss the history of National Cooperative Soil Survey and DSP efforts, the demand for dynamic data, and the types of data being collected for DSP projects. Plot layouts and spatial distribution will also be discussed.
2:15-2:20 pm	Participants move to stations	Participants are split into 4 groups (Humid Mountains and Valleys, Semiarid Mountains and Valleys, Humid Coastal Plains, and Semiarid Coastal Plains) that will rotate through 4 stations.
2:20-3:05 pm	First field rotation (2 stations)	<p>Field 1: Continuously tilled [Mountains and Valleys group]</p> <p><u>Station 1.1: Soil and Water: Measuring Ksat and infiltration for DSP (20 min, outdoors) [Humid group]</u></p> <p>Shaunna Repking (NRCS Resource Soil Scientist for Dynamic Soil Properties) will discuss the importance of saturated hydraulic conductivity on soil functions and interpretations, then demonstrate the use of the Saturo unit for measuring Ksat. She will show examples of good and bad data and discuss efforts towards extracting infiltration curves with the units.</p> <p style="text-align: center;"><i>(5 minutes to switch stations, ask questions)</i></p> <p><u>Station 1.2: Connecting Inherent and Dynamic Soil Properties: Bulk Density and Aggregate Stability (20 min, outdoors) [Semiarid group]</u></p>



		<p>Kevin Godsey (NRCS Resource Soil Scientist for Dynamic Soil Properties) and Samuel Ríos Tirado (NRCS Mayagüez MLRA Soil Survey Office Leader) will discuss management and inherent soil property impacts on the dynamic soil properties bulk density and aggregate stability with an open soil pit.</p> <p>Field 2: Long-term no till [Coastal Plains group]</p> <p><u>Station 2.1: Immerse yourself in the Corozal: A Pedology Discussion (20 min, outdoors) [Humid group]</u></p> <p>Manuel Matos Rodríguez (NRCS Puerto Rico State Soil Scientist) will discuss the formation, properties, and unique management considerations of the Corozal soil, including lab data, in front of an open undisturbed soil pit.</p> <p><i>(5 minutes to switch stations, ask questions)</i></p> <p><u>Station 2.2: Making Meaning out of Data: Data Aggregation and Soil Survey Products (20 min, indoors) [Semiarid group]</u></p> <p>Francine Lheritier (NRCS National Resource Soil Scientist for Dynamic Soil Properties) will discuss how DSP data will be used to enhance soil survey products and the creation of a dynamic soil survey.</p>
3:05-3:10 pm	Switch fields	Participants will cross the road to attend sessions on the opposite field.
3:10-3:55 pm	Second field rotation (2 stations)	<p>Field 1: Continuously tilled [Coastal Plains group]</p> <p><u>Station 1.1: Soil and Water: Measuring Ksat and infiltration for DSP (20 min, outdoors) [Humid group]</u></p> <p><i>(5 minutes to switch stations, ask questions)</i></p> <p><u>Station 1.2: Connecting Inherent and Dynamic Soil Properties: Bulk Density and Aggregate Stability (20 min, outdoors) [Semiarid group]</u></p> <p>Field 2: Long-term no till [Mountains and Valleys group]</p> <p><u>Station 2.1: Immerse yourself in the Corozal: A Pedology Discussion (20 min, outdoors) [Humid group]</u></p> <p><i>(5 minutes to switch stations, ask questions)</i></p> <p><u>Station 2.2: Making Meaning out of Data: Data Aggregation and Soil Survey Products (20 min, indoors) [Semiarid group]</u></p>
3:55-5:00	Depart Corozal	Participants load onto bus and return to Caribe Hilton.