

Soil and Plant Science Division

Technical Soil Services

South Central Soil Survey Region

Kerrville Service Center Staff Provide Educational Talks at Kerr County Ag Day

Kerrville, Texas, Major Land Resource Area (MLRA) Soil Survey Office (SSO)

Purpose

The purpose of the technical soil service was to help fourth-grade students from Kerr County understand the value of soil and water and the role they play in their daily lives (fig. 1).

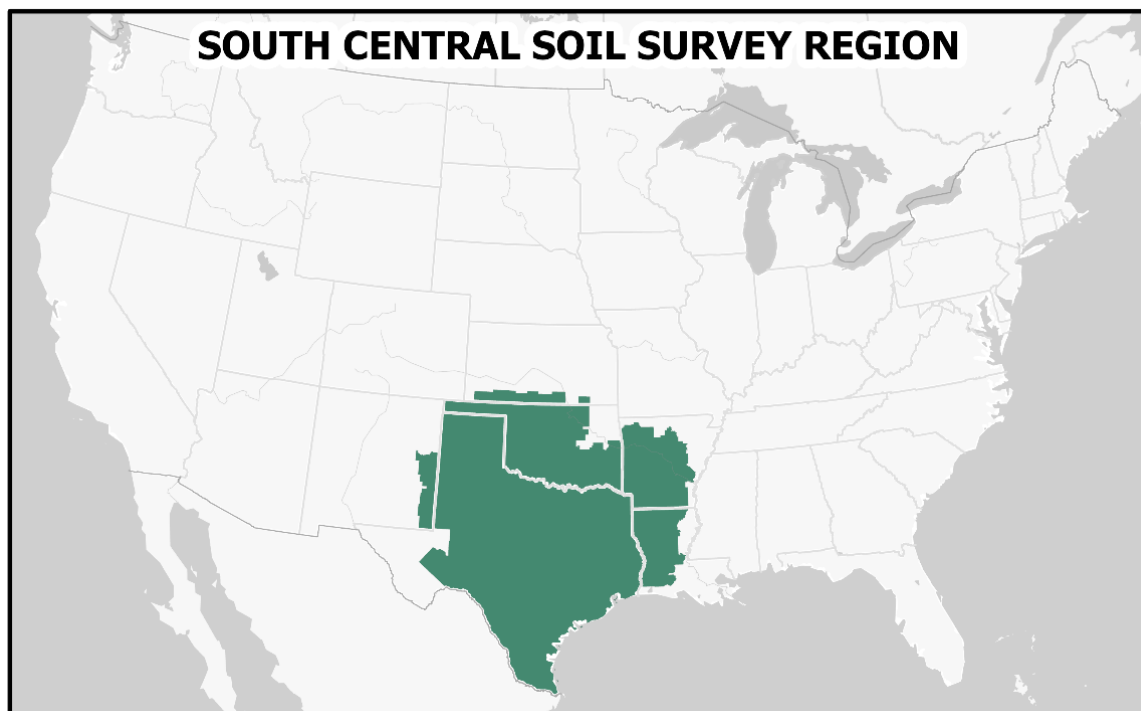


Figure 1.—Kerr County is located in the South Central Soil Survey Region.

Background

Soil and Plant Science Division (SPSD) and Kerr County Soil and Water Conservation District staff from the Kerrville Service Center teamed up on May 13, 2025, to give educational talks to fourth-grade students from across Kerr County. Students came from six public elementary schools in Kerrville, Ingram, and Center Point along with two private schools located in the county. A total of 512 students, along with their teachers, rotated through 10 stations. They learned different aspects about agriculture and natural resources from Jarred Goedeke and Travis Waiser, soil scientists with the SPSPD, and Missie Dreiss with the Kerr County Soil and Water Conservation District.

To highlight the importance of protecting our soil, the team used an apple to demonstrate the amount of topsoil on Earth that can be used to grow and produce the food we eat. They used a rainfall simulator to guide students through the impact rainfall has on runoff and ground water recharge for different types of ground cover (fig. 2). Students were able to observe four different groundcovers: little bluestem, bare ground, an impervious surface, and turf grass. Waiser gave a presentation on soils (fig. 3). He used soil profiles to talk about soil layers and demonstrated the size difference between sand, silt, and clay by comparing them to a beach ball, a baseball, and paper hole punches, respectively.



Figure 2.—Jarred Goedeke using a rainfall simulator to discuss runoff, erosion, and groundwater.



Figure 3.— Travis Waiser discussing the importance of soil in our daily lives.

Key Outcomes

The students learned about the components that make up soil and how soil influences many core aspects of their daily lives. They were also left with a better understanding of why deep-rooted vegetation can improve groundwater recharge and reduce surface runoff.