



Soil and Plant Science Division Technical Soil Services South Central Soil Survey Region

4-H District Soil Judging Contest

Kerrville, Texas, Soil Survey Office (SSO)

Purpose

The 4-H soil judging contest provides 4-H members the opportunity to learn about soils and introduce them to the basics of soils. Contest organizers asked Natural Resources Conservation Service staff from the Kerrville, Texas, SSO to dig and describe the soil pits for the contestants to evaluate (fig. 1). On Friday, April 11, the soil judging contest took place from 9:00 a.m. to 12:00 p.m. There were 27 students in attendance representing multiple counties, along with county agents, parents, and coaches, bringing the total attendance to 46 individuals.

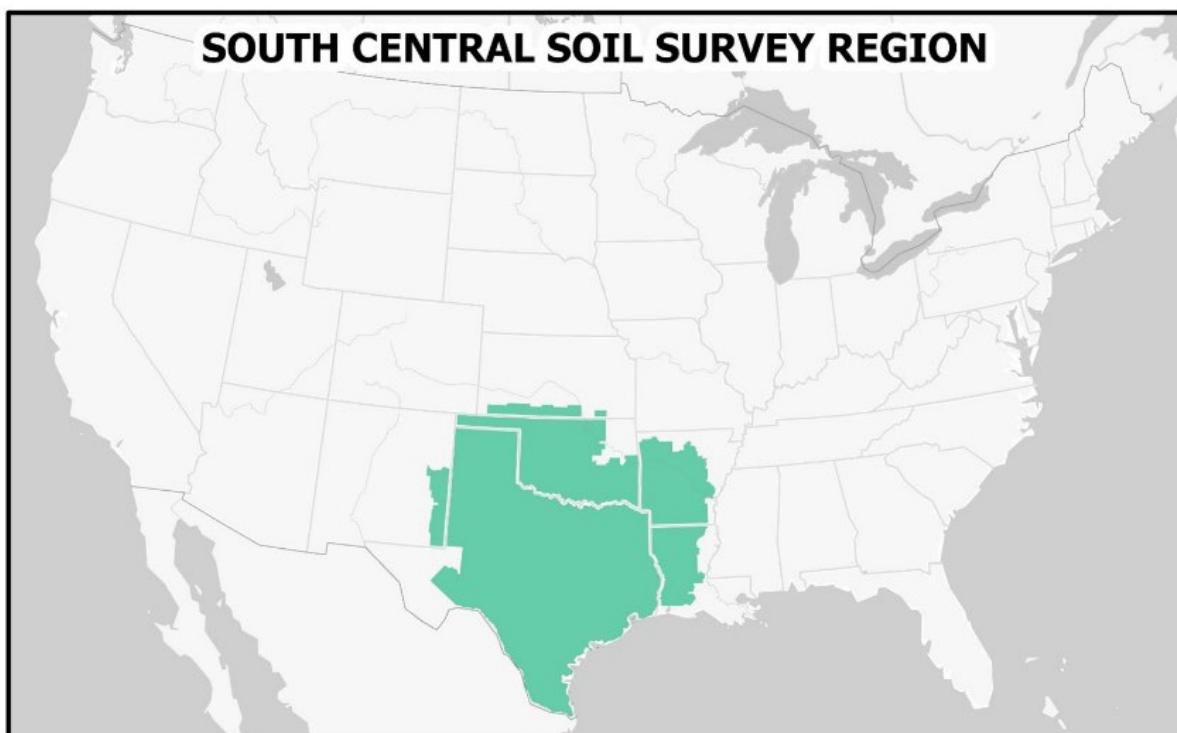


Figure 1.—The Kerrville, TX, SSO is within the South Central Soil Survey Region.

Background

Prior to the field visit, on March 6, 2025, Travis Waiser and Jarred Goedeke identified a location with differing soil features in Gillespie County, Texas. Once in the field, they determined pit locations and took soil samples for particle-size analysis.

During the week of April 7–11, Waiser and Goedeke began preparing for the District 10 4–H soil judging contest. Waiser analyzed soil characteristics both in and out of the soil pit to accurately populate soil judging answer keys. He evaluated soil texture, structure, consistency, depth, slope, and erosion at four soil pits to help decide infiltration rate, runoff potential, permeability, and site drainage for each pit (fig. 2). Once students completed the soil judging contest, Waiser walked students through each pit detailing how he and Goedeke made the official soil assessments (figs. 3 and 4).



Figure 2.—Contestants evaluated the four soil pits during the contest.



Figure 3.—Contestants texturing the subsoil.



Figure 4.—Contestants walking to a soil pit for a run through of the official results.



Key Outcomes

The 4-H soil judging contest is a great opportunity for students from third to twelfth grade to gain exposure to soils and to learn more about a potential degree opportunity in college and a career as a soil scientist. The Kerrville staff enjoyed teaching students and coaches more about soil. The students, parents, and coaches all gained knowledge and understanding of the different soils across the landscape and now see soil as an exciting career path.