



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

Fort Bend County Fair, Rosenberg, Texas

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

Purpose

In September 2025, staff from the Fort Bend County Office of the Texas A&M AgriLife Extension Service and Cooperative Extension Program contacted the Rosenberg MLRA SSO staff asking them to set up a soil health booth at the Fort Bend County Fair (fig. 1). The purpose of the booth was to spread awareness and understanding of soil health and conservation practices to the students, teachers, and others attending the fair. On September 29 and 30, 2025, Rosenberg MLRA SSO Soil Scientists Scott Cardenas and Stacey Kloesel staffed a soil health booth that included immersive, hands-on activities to raise awareness about soil health and conservation practices.

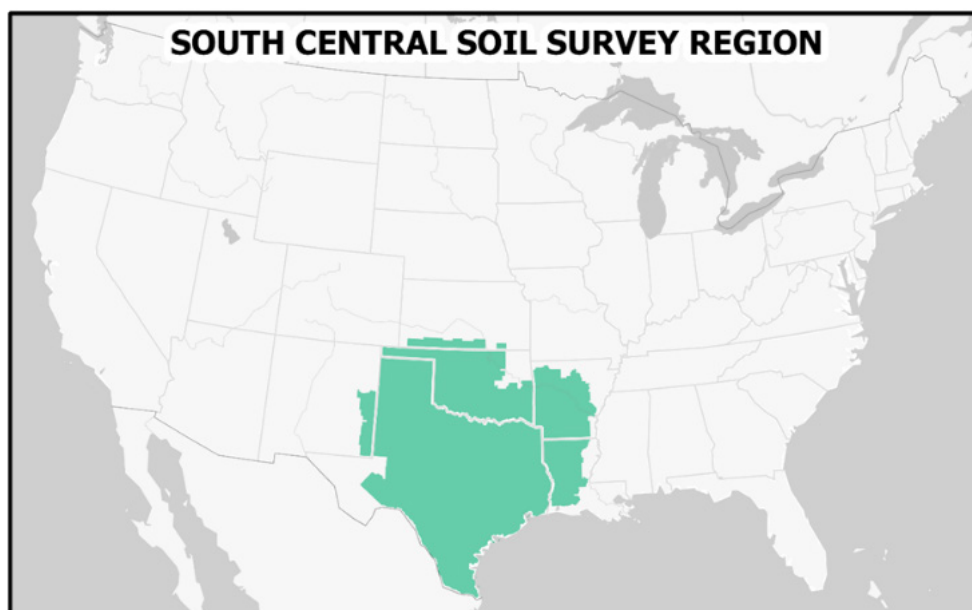


Figure 1.—The Rosenberg MLRA SSO is in the South Central Soil Survey Region of the United States.

Background

Fort Bend County has a very dense population, as it encompasses the western part of the greater Houston area. Thousands of students from dozens of schools across the 83 Fort Bend Independent School District campuses attended the fair. Students participating in their schools' agricultural programs attended the fair to learn more about different agricultural practices. They toured the livestock area of the fair and visited the agriculture displays, including the soil health booth (fig. 2).



Figure 2.—Soil Scientists Scott Cardenas and Stacey Kloesel stand behind their booth at the Fort Bend County Fair.

Key Outcomes

By providing support to the Fort Bend County Office, Cardenas and Kloesel raised awareness and understanding of soil health and conservation practices. They taught students and others visiting the soil health booth about the positive effects soil health has on soil functions by highlighting the foundational role soil plays in conservation practices. Students and others learned about the soil health principles, effects of soil health, and



different soil properties. Cardenas and Kloesel used probes, shovels, and augers to demonstrate what soil scientists do in the field. The students used soil color books and water to determine the color and texture of sample soils. A jar of sand and a jar of clay with holes at the bottom showed how water travels at different speeds through the ground depending on the soil type. One model in the booth showed how soil with healthy structure and living roots from non-tilled fields held together compared to soils from heavily tilled fields. Cardenas and Kloesel amazed students and others using a model to show how soil health principles and conservation practices held the healthy soil together, absorbed water, reduced runoff, and mitigated erosion.