

SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

South Central Region



Lubbock, Texas, and Woodard, Oklahoma, Major Land Resource Area Soil Survey Offices

Perryton, Texas, 4H and Future Farmers of America Land Judging Contest

Purpose

During the third week of March 2023, Natural Resources Conservation Service (NRCS) staff assisted with the setup of the contest sites for the 2023 4H and FFA Land Judging Contest hosted by the Ochiltree Soil Water Conservation Service (SWCD) in Perryton, Texas.

Kelly Attebury (Resource Soil Scientist) from Texas NRCS in Lubbock, and Todd Carr (Soil Scientist) from the Lubbock Major Land Resource Area (MLRA) Soil Survey Office along with Brandon Vaverka (Soil Scientist) and Yanuel Charriez (Soil Scientist) from the Woodward MLRA Soil Survey Office in Oklahoma assisted by pre-screening sites, marking the control areas in the soil pits, filling the buckets with soil from the surface and subsurface, and completing the official contest score cards (see figure 1 and 2).

Background Information

Middle and high school contestants determine surface and subsoil soil texture, soil depth, slope, and degree of soil erosion. From this information, they determine permeability, runoff, and land capability class. They also rate suitability and limitations for use. The students must also determine the necessity of plant nutrient and soil amendment applications. Soils featured at the contest sites were in the Calcic Argiustolls and Aridic Calcic Argiustolls great groups.

Key Outcomes

Students gained experience in evaluating soil properties and determining interpretations for land use (see figure 3). Development of these skills fosters sound management of natural resources in future generations. Many NRCS Soil Scientists received their first exposure to a career in the field through 4H and FFA contests, and these events are important outreach and educational opportunities.



Figure 1. Todd Carr and Brandon Vaverka collect a soil sample from the surface horizon while Kelly Attebury completes the official contest score card.



Figure 2. Brandon Vaverka and Todd Carr preparing surface soil samples, while members of the Ochiltree County, Texas SWCD measure the slope for each site.



Figure 3. Students enjoying a nice, windy day at the contest.