



SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Northwest Soil Survey Region

Fort Morgan, Colorado, MLRA Soil Survey Office

Future Farmers of America 2025 Land Judging and Homesite Evaluation District Contest

Purpose

On March 26, several NRCS staff members participated in the 2025 Future Farmers of America (FFA) District Land Judging contest that was held at Northeastern Junior College in Sterling, Colorado. Fifty-six high school students attended this year's contest. The land judging contest is 1 of 14 career development events (CDEs) that test the FFA members' skills learned through agricultural education and help prepare the students for the state competition.

Background

Soil scientists from Soil and Plant Science Division (SPSD) were the leads for site selection and preparation of the two soil pits, which also included filling out the official answer key for the soil pits. SPSP staff also created and filled out the official scorecard for the classroom portion of the contest. Area 2 Resource Soil Scientist Mary Ellen Cannon from the NRCS Area Office in Fort Collins and Soil Scientist Kari Sever and Soil Survey Leader Andy Steinert, both from the Fort Morgan MLRA Soil Survey Office, proctored the contest. Soil Scientists Dylan Casey and Matt Wellick from the Fort Collins MLRA Soil Survey office helped with the soil pit preparations and official answer keys.

The annual contest includes a field session and a classroom session. The students gather soils information from two soil pits to answer questions relating to soil characterization and agricultural interpretations, in addition to performing a homesite evaluation (figs. 1 and 2).



Figure 1.—Students collecting and documenting soil property data at the soil characterization and agriculture soil pit.



Figure 2.—Left photo shows the agricultural and soil characterization soil pit, a fine-loamy, mixed, superactive, mesic Aridic Argiustolls. Right photo shows the homesite soil pit, a fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Aridic Argiustolls.



The classroom session requires students to use Web Soil Survey (WSS) to create a soil map and answer various test questions about soil properties and the suitabilities and limitations for use of the soils. The WSS test is based on one of the soil pits that the students gathered soils information from in the field. This gives the students an opportunity to see how the collected information in the field is then used in WSS to provide suitabilities and limitations for use of the soils (fig. 3).



Figure 3.—Students gathering data at the homesite soil pit to answer questions regarding the suitability of the site for building a home.

Key Outcomes

During the contest, students gained valuable knowledge on how to collect soils data in the field and then how that data is used to provide suitabilities and limitations for use reports in WSS. Soils education supports conservation planning because soils, and the knowledge of them, are the basis for all conservation planning activities. A conservation plan should not be made without first looking at the soils. Teaching our next generation to understand the land is the most important step in our overall goal of helping people help the land.

These students are our future NRCS employees and customers as well as future stewards of the land. The schools and FFA organizations are our partners in educating our youth and the next generation of farmers, ranchers, foresters, soil scientists, and conservationists. These students will go on to feed the United States and the world.