Fort Collins MLRA Soil Survey Office

NRCS Soil Science Division Partners with Colorado State University to Host FFA Land Judging Competition

Purpose

The land judging competition sponsored by the Colorado State Future Farmers of America (FFA) took place on April 30, 2018. This career development event was held at the campus of Colorado State University (CSU) and CSU's Agricultural Research, Development, and Education Center (ARDEC), an off-campus working research farm about 4 miles north of Fort Collins, Colorado. Each year, the Fort Collins Major Land Resource Area (MLRA) Soil Survey Office partners with Colorado State University to host the State FFA land judging competition. The soil survey office provides science-based technical soil services to support education in soils.

Background Information

The Colorado land judging event includes three exercises—soil characterization and agricultural interpretation, homesite evaluation, and soil survey—that promote an understanding of describing soils and using soils information. The soil survey exercise was administered in computer classrooms at the CSU Morgan Library. This exercise focused on navigating Web Soil Survey to derive answers to soils questions. This may be the only competition in the country that uses Web Soil Survey in a land judging competition. After completing the soil survey exercise, the contestants were bused to ARDEC. Two demonstration soil pits at this location were used for the soil characterization and agricultural interpretation and homesite evaluation exercises.

Organizers and judges of the competition were soil scientists Chris Fabian, John Norman, and Kari Sever, Fort Collins MLRA Soil Survey Office. They were assisted by soil scientists Andy Steinert and Mike Moore, Fort Morgan MLRA Soil Survey Office; soil scientist Clark Harshbarger, Greeley Field Office; CSU pedology instructor Dr. Susan Melzer; CSU PhD candidate Yamina Pressler; and CSU student interns Leah Carter and Nana Ueno.

Soil scientists Clark Harshbarger, Chris Fabian, Andy Steinert, Mike Moore, and Kari Sever (L-R) prepare the soil pit for the homesite evaluation exercise.

Key Outcomes

A total of 23 high schools and 75 individual participants represented Colorado chapters of FFA at the State land judging competition this year. Lone Star High School took 1st place in the team competition. Cedaredge, Weld Central, Rocky Ford, and Stratton High Schools took 2nd through 5th places, respectively. Colten Daigle of Lone Star High School took 1st place in the individual competition. Peter Sandels, Cedaredge High School; Andrea Kuntz, Lone Star High School; Idhaly Martinez,

Lone Star High School; and Terianne Saffer, Flagler High School, finished in 2nd through 5th places, respectively. Some of these top finishers may have an opportunity to compete in the national FFA land judging competition next year. Congratulations to these finalists and to all the other FFA participants in the competition.

Kari Sever, NRCS soil scientist (left), and first place team and coach, Saralynn Vetter, from Lone Star High School (Otis, Colorado).

State FFA land judging contestants complete in the soil characterization and agricultural interpretation exercise at the ARDEC facility.

Following the contest, soil scientist Chris Fabian summarizes soil properties and answers to contest questions at the homesite evaluation pit while contestants look on.

A land judging contestant feels for sand grains in the palm of his hand to accurately identify soil texture during the soil characterization exercise.

Future Goals/Conclusions

The land judging competition, an FFA career development event, teaches students how soil properties impact crop production and general agriculture management, how to make urban and rural land use decisions, and how to access soils data for conservation, engineering, and land use planning. With practice, the contestants can become skilled at making land use and management decisions based on land and soil properties, whether in the field or at a computer. Many students are from rural areas; therefore, the information they learn can be valuable for their own family farm or ranch or their community. Students are exposed to science-based careers that help the land, soil, people, and environment.