Educating Students at Land Judging Contests in Kansas

Purpose

NRCS soil scientists provided instruction on describing and interpreting soils to high school students by serving as land judging officials at local academic land judging contests.

Background Information

Gene Campbell, soil scientist from the Clinton Soil Survey Office, and Don Gastineau, area resource soil scientist for the southeast part of Kansas, assisted with land judging contests held at two separate locations. Gastineau was the official judge at Fort Scott, Kansas, and Campbell was the official judge at Mound City, Kansas, where 12 schools totaling over 100 students participated. Four soil pits were dug at the contest site for students to judge the land and to evaluate it for homesites.

Figure 1. Kansas high school students evaluating land and a homesite at a pit near Mound City, Kansas.

During the land judging, students described soil texture of the surface and subsoil horizons, soil depth, slope of the site, erosion, permeability, and surface runoff. Students also had to identify what factors caused a change in Land Capability Class for the site, develop recommendations for land treatments for vegetation, and describe what mechanical treatments were needed. They also had to determine if lime and nutrients were needed at the site.

At the homesite evaluations, students evaluated land and determined shrink-swell potential of the heaviest layer, water table depth, and potential for flooding. They also had to determine the degree of limitation for each of the soil factors affecting foundations for buildings, lawn and landscaping, septic systems, and sewage lagoons.

Key Outcomes

The outreach and education provided to students at land judging contests nurture young minds, enabling an increased knowledge of soils, conservation, and proper management of natural resources.

Future Goals

Serving as land judging officials and educating students about soil science builds a stronger awareness of potential career paths in conservation.