

Soil Science Division

Soil Survey Region 3



Soil Survey Office at Laurens, South Carolina

South Carolina Envirothon

The Envirothon is North America's largest high school environmental competition. This hands-on, outdoor competition is geared to teach 9th to 12th grade students about the environment and natural resources. The overall goal of the Envirothon is to promote environmental education so that succeeding generations will be more environmentally literate and possess the skills and knowledge to make informed decisions regarding the environment and natural resources.

The Envirothon is a tremendous opportunity for high school students to learn more about the issues surrounding natural resources and the environment, and it promotes critical thinking skills and teamwork among students. For the contest, teams of five students are tested on their knowledge of aquatics, forestry, soils, wildlife, and current environmental issues and required to give an oral presentation.

The local soil survey office staff provided training for the coach's workshop and acted as the "station managers" for the soils station on the day of the contest. The coach's workshop was a 1-day training event where the coaches of the high school teams attended short training sessions on the subject areas covered by the contest. This year's Envirothon was hosted by Clemson University at their Sandhill Research and Education Center, which is located in Richland County, South Carolina.

The training workshop covered the basics for describing soils, how to read topographic maps, and how to find information from the soil survey of Richland County. Coaches that participated in the workshop were trained to identify different soil horizons in a provided soil profile, on how to color soil horizons, and on how to texture soil horizons. Using soil samples provided by the soil survey staff, the coaches were shown how to texture soils by hand, including using soil ribbons and wetting a small sample to estimate the amount of sand.

Coaches were instructed in how to identify features within the topographic maps. They were shown how contour lines are used to portray the shape and elevation of the land. Using this information, the coaches took a mock exam that tested their ability to find the elevation of points and determine rainfall drainage paths. Soil survey staff showed the coaches how to navigate and derive information from a hard copy of a soil survey book as well as from Web Soil Survey and how to explain the interaction between soil type and plant communities as well as suitability for various land use practices. The training was a success. The coaches gained valuable soil-related knowledge to take back and teach their students before the competition.

Soil survey staff prepared a soil pit and a soils exam for the day of the contest. The contest consisted of 18 teams of students from around the State. Soils staff worked throughout the competition, proctoring the soils exam, monitoring the time, and managing the soil pit to keep the pit face clean.





The entire group of South Carolina students that competed at the 2018 SC Envirothon.



Left image.—Students in the soils pit during the competition. Right image.—Students completing the soils exam during the competition.