



SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Northeast Soil Survey Region

Morgantown, West Virginia, Major Land Resource Area (MLRA) Soil Survey Office (SSO)

Morgantown MLRA Soil Survey Office Helps NRCS West Virginia State Office with Envirothon and Soil Climate Project

Purpose

On April 18, 2024, the Morgantown MLRA SSO (MSSO) staff traveled to Ripley, West Virginia, to assist the NRCS West Virginia State Office with an Envirothon contest and help collect descriptions and samples for their soil climate project. For the Envirothon, MSSO staff members Jim Leonard, MLRA soil survey leader, and Megan Thomas, soil scientist, described and prepped the pits (fig. 1) for the contest and served as pit monitors during the contest. Around 200 kids traveled from all over West Virginia to compete in four disciplines: soils, wildlife, aquatics, and forestry.

During the same trip, MSSO staff met the NRCS West Virginia team at Frozen Camp Wildlife Management Area to assist in digging, describing, sampling, and installing soil temperature and soil moisture sensors for the NRCS West Virginia climate monitoring project (fig. 2).

Background

The NRCS West Virginia soil climate monitoring project aims to better understand the dynamics and variability of the soil climate in relation to hydrologic functions. NRCS staff select sites to target fragipans in footslope positions since these landforms are hydrologically active, economically important, and occur consistently across the State. Staff purposefully install soil moisture and temperature sensors to collect climate and hydrologic data for taxonomic characterization above and within the restrictive diagnostic feature.

Key Outcomes

Participating in Envirothon competitions and other Envirothon-like events allows NRCS staff to speak with young people, get them interested in soils, and expose them to career opportunities in our field of work. Outreach and recruitment at these types of events act as a primary means for getting youth interested in soils, ecological sciences, and the work NRCS does on a day-to-day basis with the hope of leading some of them down the NRCS career path.

Working with NRCS West Virginia on their soil climate monitoring project has been a great opportunity to see numerous fragic soils of West Virginia and to fill data gaps, develop future projects, validate series concepts, and provide soil climate information to the public through Web Soil Survey.



Figures 1 and 2.—Picture of the Envirothon contest pit (left). Field sampling with the NRCS West Virginia soils staff (right).