

SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Northeast Soil Survey Region



Marietta, Ohio Major Land Resource Area (MLRA) Soil Survey Office (SSO)

SPSD Staff Conduct Educational Field Days in Ohio and West Virginia

Purpose

The SPSPD soil scientists at the Marietta MLRA SSO in Ohio have a history of responding to numerous requests every year to enlighten grade school students on the world of soil science and conservation. The staff believe this work is an important strategy to help build natural science and soil science-literate young adults and citizens.

Background

In May 2023, Dan Benyei, MLRA SSO leader, conducted three soil education events for students in Ohio and West Virginia. On May 5, Benyei shared his soil knowledge by examining a small hand-dug pit and auger borings with fourth and sixth grade students at the Wirt County, West Virginia “Wetland Day” event. On May 9 and 10, third grade students from Noble and Guernsey Counties, Ohio attending “Ag School Days” were given a lesson on basic soil characteristics through investigation of a shallow machine-excavated soil pit (figure 1).

Prior to the events, Benyei researched state Department of Education science standards for the appropriate grade levels to meet students at the intended knowledge level, then attempted to “raise the bar” on that learning through introduction of other soil-related topics. Finally on May 24, Benyei and Alex Quigley, newly onboarded MLRA SSO pathways soil science intern, assisted the Athens High School Envirothon team prepare for the soils portion of the Ohio state competition that will be held in early June.

Key Outcomes

Benyei engaged with over 200 students and adults at the grade school field days. Not only were the students able to observe the real-life aspects of what they have learned in

the classroom through these outdoor education events, their adult chaperones were also exposed to soil science along with the soil survey and conservation work of the Natural Resources Conservation Service (NRCS).

For the high school Envirothon participants, the science teacher joked that the brief time Benyei and Quigley spent with the team gave them 500 percent more soil science knowledge than they previously had. Following the Envirothon training event, the teacher reached out to thank Benyei and Quigley and asked that the Marietta SSO staff set aside time in the fall to do more in-depth soil training events, in hope that future teams will remain well-prepared for the competition.



Figure 1. The soils station at “Ag School Days”, where the only props are a hole in the ground and an NRCS SPSP soil scientist; as opposed to the other stations with fishing rods, lambs, and cattle.