

Soil Science Division

Soil Survey Region 3



Frederick, Maryland, Soil Survey Office

D.C. Intern Helps with Correlation of Soil Map Units

Purpose

The NRCS Frederick Soil Survey Office had a chance to show a management analyst what soil survey involves. At the request of National Headquarters, John Andreoni joined the Frederick staff in the field (fig. 1). Soil Scientists David Verdone and Benjamin Marshall were working on a project to investigate soils north of the Potomac River that were said to have developed in colluvial fan positions. Figure 2 shows the location of soils sampled (yellow dots) for previous maps. The locations were on the highest positions of the landscape. The current colluvial fan positions of these soils suggest that soil material has moved downward the mountainside and been deposited below.



Figure 1.—John Andreoni helps out augering.

It is important to rectify such small discrepancies in soil survey data so that the information best describes what is on the landscape, for agriculture purposes, conversation plans, cost share EQIP plans, erosion control, and other important soil issues.



Key Outcomes

David Verdone, Benjamin Marshall, and John Andreoni went to the field to determine what now exists on the high hills. They found a large amount of well rounded gravel and cobbles, which suggested that these landscapes were remnants of old high terraces that existed when the river was higher. Examining the soil profile, they found silt loam and silty clay loam textures and well developed horizons, which indicate an old soil, and numerous rounded quartz rock fragments. The soil is well drained and strongly red.

The new soil determinations will allow farmers and landowners to better understand their land. In addition, John Andreoni learned about soils and how to do a few survey tasks, like texture soil, use a soil color chart, test soil pH of the soil, and identify various soil-forming factors.

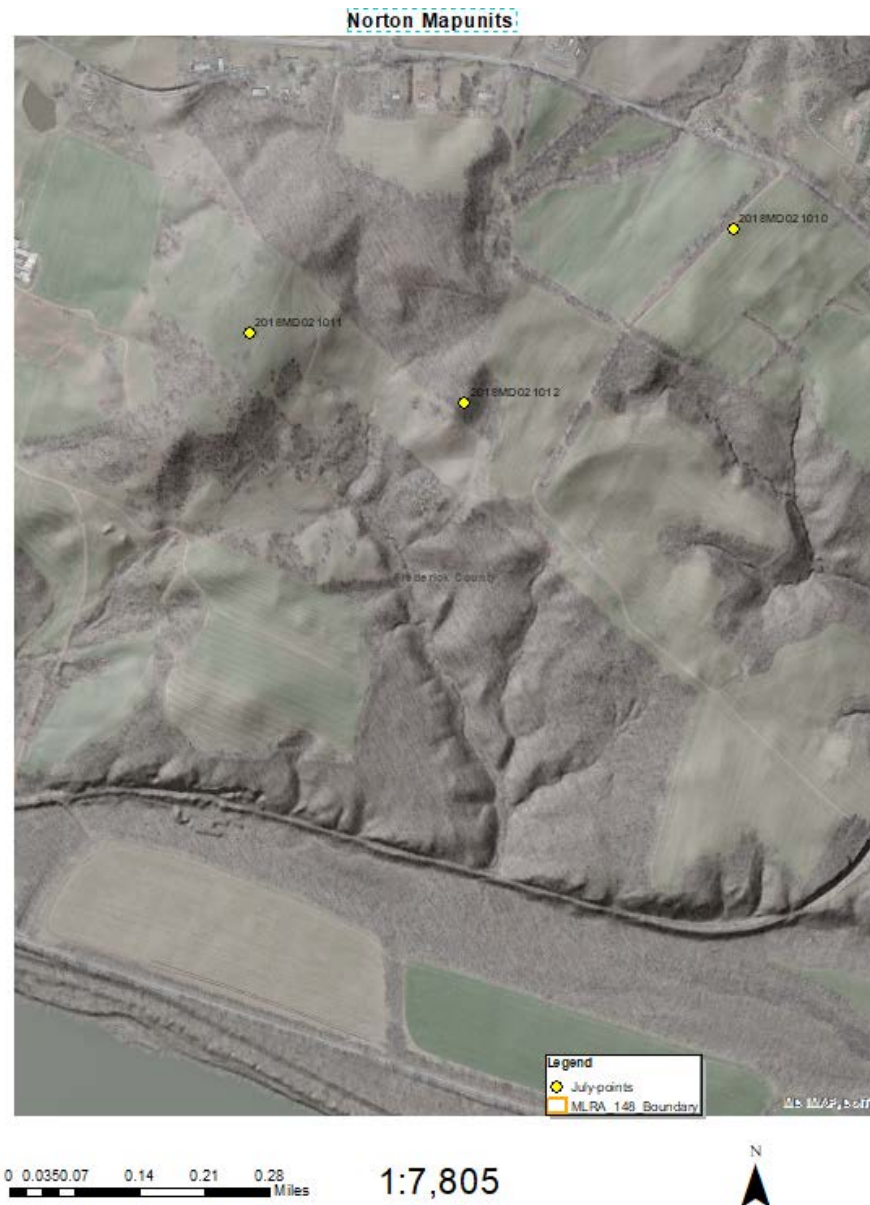


Figure 2.—Map of project area.