

Natural Resources Conservation Service

Soil and Plant Sciences Division

East Central Glaciated Soil Survey Region 11



Findlay Soil Survey Office

Nutrient Management – On-Site Investigation

Purpose

The soils at the proposed construction site of a dry stack manure storage facility required a detailed investigation due limited soil depth to bedrock.

Background Information

Neil Martin and Matthew Tucker, soil scientists at the soil survey office in Findlay, Ohio, conducted an on-site investigation at a farm in Wyandot County, Ohio. The proposed site had little more than 1-foot of soil over fractured limestone bedrock. Leveling the sloping site would have been costly, and the potential for groundwater contamination was high. By considering an alternative site on the opposite side of the barn lot, the soil scientists found soils with depths from 2 to 3.5 feet to bedrock.

Key Outcomes

The alternative site significantly reduced the construction cost of the storage facility, and with the additional soil depth to bedrock, provided additional safeguard from groundwater pollution. The soil investigation results provided the producer and NRCS engineering technician with a cost effective and environmentally beneficial alternative to their original plan.

Future Goals

Providing a detailed soils investigation at the proposed construction site of a dry stack manure storage facility enabled OneUSDA to better design waste storage facilities for producers, resulting in improved conservation of our natural resources.



Figure 1. Soil scientists Matthew Tucker (left) and Neil Martin (right) investigate depth to bedrock at a site in Wyandot County, Ohio.

