

Soil Science Division

Soil Survey Region 11 — East Central Glaciated Region



Training on Compact Constant Head Permeameters

Purpose

NRCS soil scientists provide training to partner staff members of the Illinois State Geological Survey (ISGS) as well as to students and faculty from the University of Illinois on the use of compact constant head permeameters, also known as Amoozemeters, to measure saturated hydraulic conductivity.

Background Information

Bob Tegeler and Rick Francen, soil scientists in the Springfield MLRA Office, provided Amoozometer training to NRCS partners. Amoozemeters require careful operation to gather consistent measurements on how quickly water moves through soil. The devices will be used by the ISGS, in collaboration with NRCS, for a funded research project related to rainwater infiltration and flooding hazards in southern Cook County, Illinois. This project aims to create a hydrogeologic soils database, including information related to soil hydraulic conductivity.

Key Outcomes

The data collected, along with information on surface topography and depth to water table, will be used in models to help determine the best locations for, and the cost effectiveness of, green infrastructure implementation for communities in southern Cook County.

Conclusions

Training partners to collect measurements related to how water moves through soil allows OneUSDA to focus conservation practices, such as green infrastructure projects, in locations that have the greatest need and result in the most effective conservation for producers.



Soil scientists Rick Francen (far left) and Bob Tegeler (second from right) instruct NRCS partners on proper use of Amoozemeters.