

# Depth Profile Soil Moisture Protocol

## Field Guide

### Task

Collect soil moisture samples at depths of 0-5 cm, 10 cm, 30 cm, 60 cm and 90 cm.

### What You Need

- [Soil Moisture Data Sheet – Depth Profile](#)
- Five soil sample containers (sealable bags or cans) weighed and labeled with their mass and a container number
- Compass (to locate sampling point)
- Trowel
- Science Log
- Auger
- Pen or pencil
- Meter stick

### In the Field

1. Complete the top portion of the [Soil Moisture Data Sheet – Depth Profile](#).
2. Locate your sampling point on the star and cut and pull away any grass or groundcover. See *Star Pattern Soil Moisture Field Guide*.
3. With the trowel, dig a hole 10-15 cm in diameter down to 5 cm. Leave this soil loose in the hole.
4. Remove from the loose soil any rocks larger than a pea (about 5 mm), large roots, worms, and other animals.
5. Use your trowel to fill your soil container with at least 100 g of the loose soil.
6. Immediately seal the container to hold in the moisture.
7. Record the container number and mass on the *Data Sheet* next to Sample Depth 0-5 cm.
8. Use the auger or trowel to remove all of the soil from the hole down to a depth of 8 cm.
9. In a clean container, collect a soil sample that contains the soil between 8 and 12 cm deep. Remove rocks, large roots and animals. Seal the container.
10. Record the container number and mass on the *Data Sheet* next to Sample Depth 10 cm.
11. Continue to auger down to obtain samples centered at 30, 60, and 90 cm. Record the container numbers and mass values on the *Data Sheet*.
12. You should have 5 containers of soil taken from 1 hole. Return the remaining soil to the hole – last soil out, first in.
13. Dry samples according to the [Gravimetric Soil Moisture Protocol Lab Guide](#).

