

Reading the Soil Moisture Meter

Field Guide

Task

To take daily measurements from the soil moisture sensors

What You Need

- Properly installed soil moisture sensors
- Pen or pencil
- Soil moisture meter
- Daily Soil Moisture Sensor Data Sheet*

Note: Test the soil moisture meter to ensure it is functioning properly according to the manufacturer's instructions. Do this before each use. Each meter has its own operating procedures. The instructions below are for the Delmhorst and Watermark meters.

In the Field

1. Complete the top of your *Daily Soil Moisture Sensor Data Sheet*.
2. Locate the sensor in the 10 cm deep hole.
3. Uncover the sensor's wire leads.
4. Connect the soil moisture meter to the wire leads of the sensor.
5. Push the READ button. Wait for the meter to reach a constant value.
6. Record the date, time, saturation conditions, and soil moisture meter reading on the *Daily Soil Moisture Sensor Data Sheet* in the appropriate depth column. If the Delmhorst meter reads a negative value (and the soil is dry), record a zero.
7. Disconnect the meter and store the wire leads.
8. Replace the cover over the PVC pipe and wire leads.
9. Repeat steps 3-8 for each of the remaining sensors (30 cm, 60 cm, and 90 cm).
10. Convert each meter reading to soil water content using your calibration curve.