

# Soil Health

## Messages and Demonstrations That Work

### Three Steps to a Successful Event

Promote “Soil Health” instead of cover crops because cover crops are only one tool in improving soil health.



#### 1. Make sure that participants understand how soil functions.

Start each session with a demonstration (slake test and infiltration demo, or slake test and rainfall simulator). Demonstrations may differ between indoor and outdoor events.

**INSIDE:** Slake and infiltration demonstrations work best, although rainfall simulators can be used inside if the room has ample space and an available water source.

##### Additional demo options:

- Large soil cores
- Single clod aggregate demo
- Light and dark-colored clods to demonstrate organic matter
- Tub with no-till and tilled soil to compare biological life
- “Qualitative” bulk density test

**OUTSIDE:** Use slake and rainfall simulator or slake and infiltration.

##### Additional demo options:

- Soil pit
- Compaction layer with penetrometer
- Respiration demo
- Root variation (vertically and horizontally).

#### 2. Give a basic soil health talk covering the four principals of soil health.

- Do not disturb the soil (no-till)
- Keep a living root in the soil at all times
- Use a diverse mixture of plants
- Keep the soil covered



Rainfall simulator

#### 3. Have a presenter talk about cover crops.

- Point out resource concerns that cover crops can help address:
  - Ground cover and more plant diversity reduces weeds
  - More roots and different root structure reduces compaction
  - Improved drainage in wet areas
  - Maximize fertilizer inputs by preventing nutrient loss over winter and fixing more nitrogen
  - Preventing soil erosion
  - Providing livestock feed
- Discuss other details of establishing cover crops
  - proper planting (drilling, broadcast or aerial)
  - proper timing for planting and terminating
  - types of forages
  - soil types on fields
  - cropping history

Participants should come away with a better understanding of soil health and how cover crops are one practice to improve it.

### Natural Resources Conservation Service

Contact your local NRCS office to learn more about the technical and financial assistance available.

[www.nrcs.usda.gov](http://www.nrcs.usda.gov)