



# HEALTHY SOILS ARE: *high in organic matter.*

*Newsletter article #4*

## **Increasing organic matter: A matter of good soil health management**

Considering the long list of benefits organic matter has on soil health and crop production, increasing organic matter may well be the most important management step a producer can take to improve a farm's profitability and sustainability. In general, there are three ways to do that:

- Increase the amount of plant and root production
- Apply carbon-rich materials to the soil; and
- Use practices that slow rather than speed decomposition.

Cover crops, green manure crops, and perennial forage crops add organic matter, as do compost and manure. Growing crops and roots add biomass above and below the soil surface. However, not all that biomass is converted to soil organic matter—much of it is released as carbon dioxide and water. It can take 20,000 pounds of organic inputs such as crop residue to increase the actual soil organic matter from 4 percent to 5 percent.

Compost in particular breaks down more slowly and improves soil structure more quickly than other organic materials. Manure breaks down quickly to add nutrients for crops, but takes longer to improve the soil than compost.

To learn more about soil health, and to meet some of the farmers who are “Unlocking the Secrets in the Soil,” visit [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

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