

### Soil basics

Soil is made up of many simple components including air, water, decaying plants, organic matter from living or dead organisms and minerals like sand, silt or clay. When soils are healthy, air and water can move freely through the soil profile creating an environment that supports plant growth.

### Why is soil health so important?

- Increased production. Healthy soils with higher organic matter and live organisms create a soil structure that is most conducive to plant growth. Increased structure, aeration, moisture retention and excess water drainage all contribute to plant growth.
- Increased profits. Healthy soils typically require fewer equipment passes, resulting in less time and fuel costs, and reduced compaction. No-till, minimum till or strip till are often good choices to help maintain good soil health.
- Natural resource protection. A healthy soil has significantly more moisture-holding capacity. This means less soil and fertilizer is lost during heavy rain, and more moisture is available to your crops during drought.



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### Where do I start?

- Keep it covered. Keep a live plant growing year around to feed the soil by adding cover crops after your cash crop comes off.
- Do not disturb. No till, strip tillage or mulching are good choices.

### Did you know? From USDA NRCS

- Each one percent of organic matter in the top 6" of soil can hold approximately 27,000 gallons of water, or 18-20 times its weight in water.
- Organic matter builds as tillage declines.
- Cover crops and reduced tillage lead to increased organic matter.

**Check with your county NRCS office and Soil and Water Conservation District for financial assistance programs.**

### Additional Resources

*NRCS Soil Health Fact Sheets*

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/health/?cid=stelprdb1049236>

*Ray Archuleta's Soil Health Page*

<http://vimeo.com/channels/raythesoilguy>

*Partnership for Ag Resource Management*

[Cover Crop Fact Sheet](#)

[Strip Till Fact Sheet](#)