What is soil quality and soil health?
A healthy environment begins with soil quality. When soil is at its best it can absorb and hold moisture, supports plant and animal life, and helps purify the air by storing CO₂ in the soil (carbon sequestration) which helps the environment by giving cleaner air.

How to improve Soil Health.
Any activity to the soil affects the soil quality. Especially, in the management practice we choose on our land. Conservation Tillage Practices (No-till/Strip-till and Ridge-till) along with crop rotation, pest and nutrient management, and soil testing help produce better soil health.

In addition, leaving residue (organic matter) on the soil surface each year (at least 2 to 4 tons/acre/year) helps build up the organic layer. By building up the organic layer helps to supply crops with more nutrients and holds more moisture in the soil which helps to produce a better yield.

The Soil Quality Card
The advantages of using the soil quality card helps you evaluate the changes in soil quality as affected by management practices.

The regular use of the Soil Quality Card allows you to record long-term improvements from your management practices.

Recommendations
- Evaluate soil health every 2-3 years in the same locations evaluations were made in previous years (by the same person).
- Evaluate several places in each field.
- Soil Testing every 3-5 years.
- Evaluate soil structure after rainfall or irrigation events.
- Measure soil compaction in the Spring when plants about 10" tall.
- Evaluate Soil Erosion after harvest and during high-wind periods or after heavy rain.

Colorado Soil Quality Card
The soil quality card is a tool to assist the landowner in assessing the health of their soil before and after management practices.

Regular use will assist in understanding current soil quality conditions. For best results take several samples in the same field.

Evaluation scores do not represent absolute measures or values, but provides a guide in understanding soil health.

Observations
- Organic layer: dominated by organic material, consisting of undecomposed or partially decomposed plant materials, such as dead leaves
- Topsoil: largely mineral soil derived from parent material; organic matter leached from above gives this horizon a distinctive dark color
- Subsoil: accumulation of mineral particles, such as clay and silt leached from topsoil; distinguished based on color, structure, and kind of material accumulated from leaching
- Unconsolidated material derived from the original parent material from which the soil developed

For more information contact your local NRCS Field Office
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