

Soil Quality Literature

Soil quality information sheets are available for the following topics:

- ✦ Soil Quality Resource Concerns
- ✦ Rangeland Soil Quality Series
- ✦ Pastureland Soil Quality Series
- ✦ Urban Soil Quality Concerns

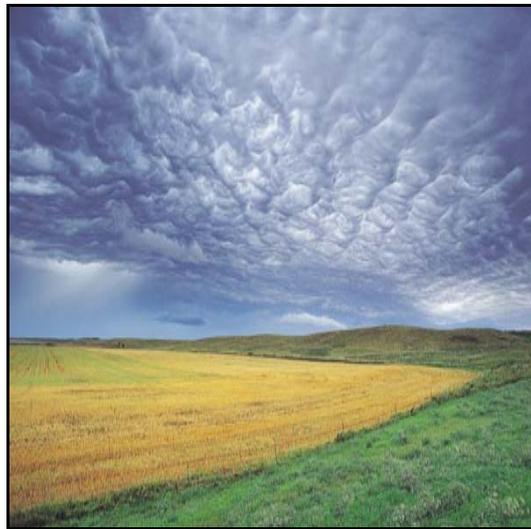
Soil quality booklets available include:

- ✦ Soil Biology Primer (2000)
- ✦ Soil Biology and Land Management (2004)



Information sheets and booklets can be found at the NRCS Soil Quality website:

<http://soils.usda.gov/sqi>



For more information contact:

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North Dakota Soil Quality



"A thin layer of earth, a few inches of rain, and a blanket of air make human life possible on our planet. These essential resources must be available to provide the good life for our children and for future generations."

John F. Kennedy



Soil Quality

Soil quality is...

The capacity of the soil to function as a vital system to sustain the productivity of animals and plants, maintain or improve the water and air quality, and health of the plants and animals within the limits of an ecosystem.

Doran and Zeiss, 2000

Soil quality is important because...

- ✦ *It is a basic foundation of sustainable agriculture.*
- ✦ *It is a reflection of an ecosystem's productivity and resilience to stress.*
- ✦ *It is an essential link in maintaining other resources such as water and air quality and animal and human health.*

Management strategies that enhance soil quality...

- ✦ *Minimizing soil disturbance.*
- ✦ *Increasing crop diversity.*
- ✦ *Rotational grazing.*



Measuring Soil Quality

Similar to human health, there is no single measure of soil health. It is a composite of many physical, chemical and biological properties and processes that interact constantly.

Tools to assess soil quality include:



Shovel



Soil Health Score Cards



Soil Quality Test Kit

Soil Quality Indicators for On-Farm Assessment

Biological

- ✦ Soil Respiration
- ✦ Earthworms and small insects



Chemical

- ✦ Soil pH
- ✦ Electrical Conductivity
- ✦ Soil Nitrate



Physical

- ✦ Compaction
- ✦ Infiltration Rate
- ✦ Aggregate Stability
- ✦ Bulk Density

