

New Hampshire Association of Conservation Districts Position Paper  
November, 2022

**NHACD prioritizes soil conservation to ensure healthy soils.**

Soil conservation sustains healthy soils by limiting loss of the top most layer of the soil. Vegetation depletion, erosion, or reduced fertility caused by over usage, acidification, salinization, and other chemical soil contamination denigrate the complex combination of minerals, organic matter, microorganisms, gasses and water that constitute healthy soil. Soil conservation focuses on maintaining healthy soil through a combination of practices and techniques.

### **The Importance of Soil**

Soil provides the foundation for survival. Complete ecosystems depend on soil for food, water, and shelter. Soil is home to fungi, algae, unicellular, and multicellular organisms invisible to the naked eye, such as bacteria and protozoa. As they move through the soil, microorganisms help improve drainage and soil structure, making soil more fertile and productive. Soil is essential for farm food production and livestock nutrition. Soil also helps to create a cleaner climate because soil naturally absorbs carbon from the atmosphere in a process known as sequestration. Healthier soil absorbs more carbon, reducing the effects of greenhouse gases. Healthy soil contributes to a sustainable future.

### **The Needs of Healthy Soil**

Healthy soil requires:

- stability vs erosion and degradation
- fertility vs overuse and vegetation removal
- cleanliness vs pollution and chemical contamination
- moisture vs desertification vs excessive flooding
- conservation vs degradation

### **The importance of Soil Conservation**

Soil conservation contributes to sustainability and offers the following benefits:

- Improves soil quality and productivity. Increased fertility improves crop yields, reduces the need for chemical fertilizers, and saves money.
- Optimizes water infiltration. Better filtration increases water storage, preventing soil from drying out. As surface water travels through the ground to replenish aquifers, streams and rivers, soil filters out toxins and impurities, making it drinkable.
- Provides food and shelter. Soil-producing vegetation provides nourishment to all types of animals and offers protection from the elements.

Soil conservation also helps to minimize the following:

- Loss of fertile and arable land, impacting crops and livestock production, as well as the economy
- Pollution and sedimentation flowing in streams and rivers, affecting fish and other species
- Erosion and environmental degradation and desertification of land, potentially increasing flooding and negatively impacting forest ecosystems

### Actions

New Hampshire county conservation districts support and practice a diversity of scientifically established techniques to conserve soil:

- No-till farming
- Terrace farming
- Contour farming
- Crop rotation
- Windbreaks
- Wetlands restoration
- Buffer strips
- Forest cover reestablishment
- Earthworms
- Cover crops

Through soil conservation, NHACD helps minimize the impact of outdated practices and climate instability.

Soil conservation can support the healthy soils that support the long term needs of society.

### Sources

[Kamdar, Komal](#), *The Heart of Soil*, <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/wi/newsroom/features/?cid=nrcseprd1648423> . September, 2020

Soil Society of America, Soil Health, <https://www.soils.org/about-soils/basics/> . 2021

*The Importance of Soil*, <https://www.falmouthme.org> .