Overview

Soil health has recently captured the attention of farmers and conservationists as modern farm management practices have led to increased soil compaction, erosion, greater pest problems, and reduced crop productivity. Soil health assessment allows farmers and planners to determine if their soil will continue to sustain profitable yields, while reducing long-term risks to environmental quality.

What is Soil Health?

The capacity of a soil to be used productively without adversely affecting its future productivity, the ecosystem or the environment.

Emphasizes the integration of biological with chemical and physical measures of soil quality that affect farmers' profits and the environment.

Soil health recognizes both inherent and dynamic soil quality.

Inherent soil quality (genetic)
Natural characteristics of the soil, such as its texture.
The result of soil-forming factors.
Can't be changed easily.

Dynamic soil quality (affected by management practices)
Compaction,
Biological functioning,
Root proliferation, etc.

Although both properties need to be recognized separately, inherent and dynamic soil quality components interact, as some soils are more susceptible to degradation resulting from poor management. As part of the assessment, soil measurements are gathered to monitor the condition of soil health properties both in space and time. Improvements or degradation resulting from different management practices, as well as long term changes in soil health under given management practices, can then be quantified with the assessment.

Cornell Soil Health Assessment

At the heart of soil health is the integration of soil physical, chemical and biological processes and functions. A healthy soil will be a balance of all three components. For years we have relied on inexpensive soil testing procedures to assess chemical properties, but methods for rapid assessment of the physical and biological status of the soil are not generally offered. The Cornell Soil Health Assessment can be used to evaluate and integrate these different processes and functions for the purpose of improving soil health.
Soil Health Assessments in New Hampshire

NRCS NH Office Locations

Concord Field Service Center
10 Ferry St., Suite 211
Concord, NH 03301

Conway Field Service Center
73 Main St., Conway, NH 03818

Dover State Office
273 Locust St., Suite 2D
Dover, NH 03820

Epping Field Service Center
Knightly Plaza
629 Calef Highway, Suite 203
Epping, NH 03042

Lancaster Field Service Center
4 Mayberry Lane
Lancaster, NH 03584

Milford Field Service Center
Chappell Professional Ctr., #468
Rte. 13 South, Milford, NH 03055

Orford Field Service Center
19 Archertown Rd., Suite 1
Orford, NH 03777

Walpole Field Service Center
11 Industrial Park Dr.
Walpole, NH 03608

Environmental Quality Incentives Program (EQIP)

EQIP helps promote farm and forest production by enhancing the environmental quality of soil, water, air, plants and animals.

The New Hampshire Natural Resources Conservation Service (NRCS) offers financial assistance to producers that are interested in going the extra step beyond traditional soil nutrient testing to get a Cornell Soil Health Assessment.

Cornell Soil Health Assessment strives to identify and overcome the following limitations and problems:

- Disease & pest pressure
- Low organic matter content
- Soil compaction
- Drought-prone soils
- Decreased infiltration
- Excessive runoff
- Erosion
- Reduced water holding capacity

The Cornell Soil Health Assessment will help you:

- Choose the right method to increase Organic Matter (manure, compost, green manure, crop residue)
- Choose the right Tillage Method (Deep Tillage, Reduced Tillage, Chisel plow, No-till, Zone Tillage)
- Choose the right Crop Rotation
- Manage soil limitations (aggregate stability, organic matter content, water holding capacity, pH, nutrients)
- Maximize reliance on natural, renewable and on-farm inputs.

NRCS Technical and Financial Assistance

New Hampshire NRCS staff will come to your farm with the equipment and expertise to provide a Soil Health Assessment for you.

For more information, visit
http: soilhealth.cals.cornell.edu index.htm,
http: www.nh.nrcs.usda.gov
Or call or stop by your area NRCS office.

Good management allows the soil to reach its full potential.