

The Updated Cornell Soil Health Assessment, and the Soil Renaissance

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It seems that everywhere a person turns they are hearing about the health of the soil and the need for cover crops to be fit into the crop rotation cycle to increase soil resiliency. We are indeed a part of a Soil Renaissance where the Noble Foundation and the Farm Foundation are supporting an integrated systems approach to soil health with defined goals of measurement, education, research and economics.

The Cornell Soil Health Assessment (CSHA) has been publicly available since 2007 to assess functional behavior of the soil beyond simply supplying nutrients to the crop. This COMPREHENSIVE assessment includes additional indicator tests of essential soil biological processes (available or “active” carbon levels, soil respiration rate, soil protein content) which are performed on soil samples in the laboratory. Physical soil factors such as soil structural stability, water storage capacity and soil hardness are also examined.

The Soil Health test Report was expanded in 2014 to a 10-page document which clearly explains the testing strategy for each of the soil analyses. The lab test value obtained for each sample is related to the soil function it represents and the value is then scored against similar soils. Subsequently the lab values are linked to soil management practices which can positively affect soil function restraints.

The CSHA Report contains sufficient information that it becomes useful for adopting a strategy to best make use of the information. A six-step guide to Soil Health Management Planning can be used by growers or TSP's (technical service providers, such as professional crop consultants, University Extension personnel, farm advisors) to develop a soil management plan which addresses soil limitations AND fits the grower needs. Continuing education and wide exposure to new technologies enhance the process of developing a successful management plan.