



## *What Is Soil Health?*

Soil, particularly healthy soil, is a living, breathing organism, rich with billions of healthy bacteria, fungi, and other microbes that all play unique roles to create delicate and exquisite self-sustaining ecosystems. It not only creates nutrient-dense, abundant crops, but plays a critical role in the health of our environment with its ability to sequester carbon and create cleaner air, and water. While healthy soil's role in food and the environment was (and still is) no secret to Indigenous communities, there has been a public rise in conversations about soil health over the last two decades due to its ability to be more sustainable and to help fight climate change.

Right now, a third of the world's soil is moderately or highly degraded thanks to deforestation, unsustainable conventional agriculture practices like tilling and chemical-dependent farming, overgrazing, urban expansion, as well as, industrial and chemical pollution. What this means is there is a significant threat to the world's food supplies and there have been and will be increases in carbon emissions. Currently, in areas with conventional agriculture, a lot of the nutrients needed to sustain our health are already drained from the produce. However, though systemically there is still a lot of work to do, more and more solutions-makers are stepping up to create sustainable change in terms of soil health, and there are steps you can take too.

First some facts and history.

- Just a single teaspoon of rich garden soil can hold up to one billion bacteria, several yards of fungal filaments, thousands of protozoa, and plenty of nematodes.
- Dirt is not the same thing as soil. Dirt is not alive like soil, and is comprised of sand, silt, and clay. It has none of the minerals, nutrients of living organisms found in soil.
- Soil quality is directly linked to food quality and quantity. Soils supply the essential nutrients, water, oxygen and root support that food-producing plants need to grow and thrive, that in turn helps provide nutritious food to help people stay healthy.
- Healthy soil captures and stores water, which reduces the risk for both flooding, and can serve as a boon during droughts. Healthy soil also filters water, and when needed purifies aquifers, which are integral for suitable drinking water.
- Healthy soil stores vast quantities of carbon and plays an integral part in the global carbon cycle. Scientists say more carbon resides in soil than in the atmosphere and all plant life combined; there are 2,500 billion tons of carbon in soil, compared with 800 billion tons in the atmosphere and 560 billion tons in plant and animal life.
- Cover crops are a necessary component to protecting healthy soils. Cover crops slow erosion, improve soil health, enhance water availability, smother weeds, as well as help control pests and diseases.
- Over the years, the world's soils have lost between 50-70% of their carbon due to unsustainable agriculture methods. This mismanagement of soil has contributed to climate change with much of that carbon released into the atmosphere as carbon dioxide.
- Topsoil is the top layer of soil that contains all the necessary nutrients for your plants. Nearly half of the world's topsoil has been lost in the last 150 years due to these same unsustainable agriculture methods.

***Soil Lovers say: Are You Farming To Create A Functioning Healthy Soil?***

Ref: <https://www.ecowatch.com/soil-health-guide.html>

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