

Be joyful,
though you have considered
all the facts.

Wendell Berry

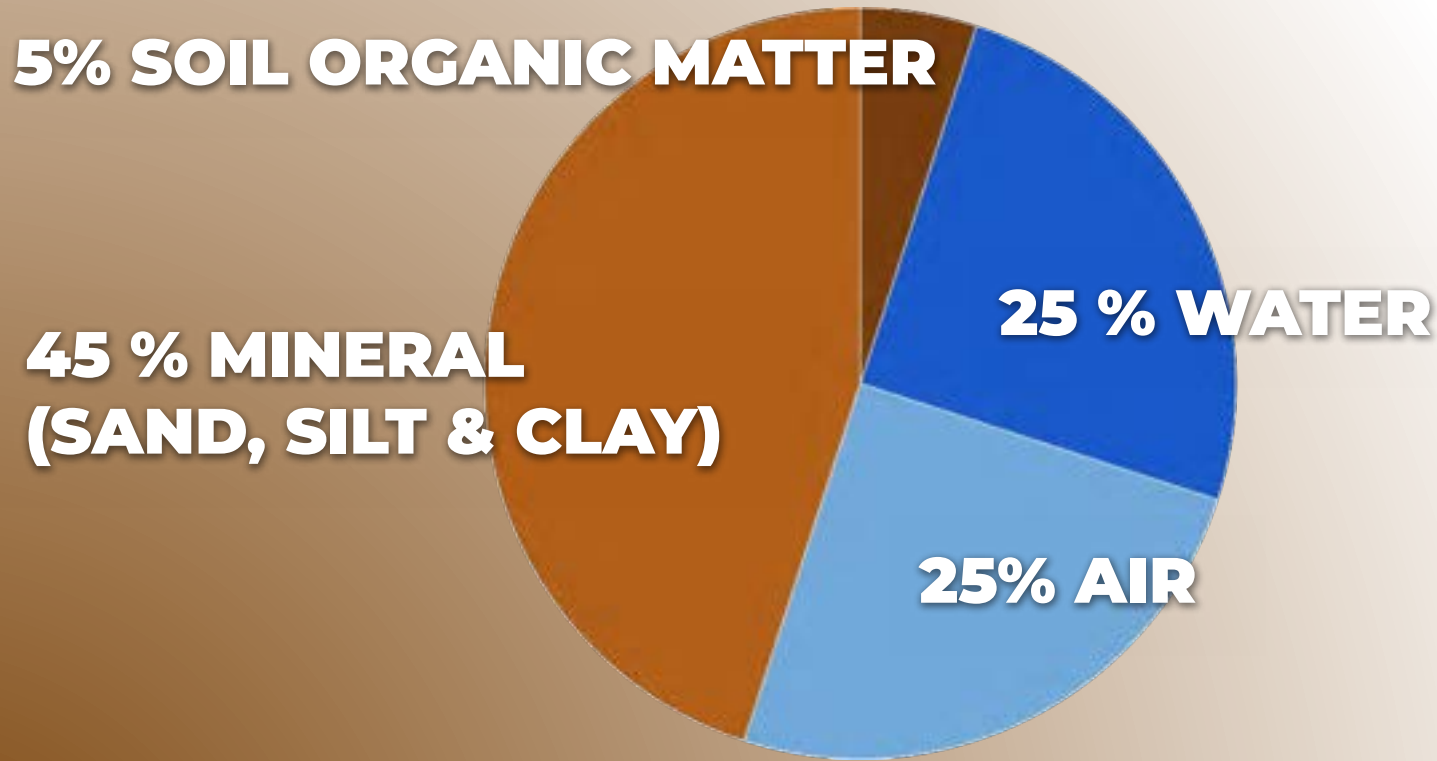


It is unequivocal
that human influence has warmed the
atmosphere, ocean and land.

IPCC Report, August 2021



WHAT IS SOIL?



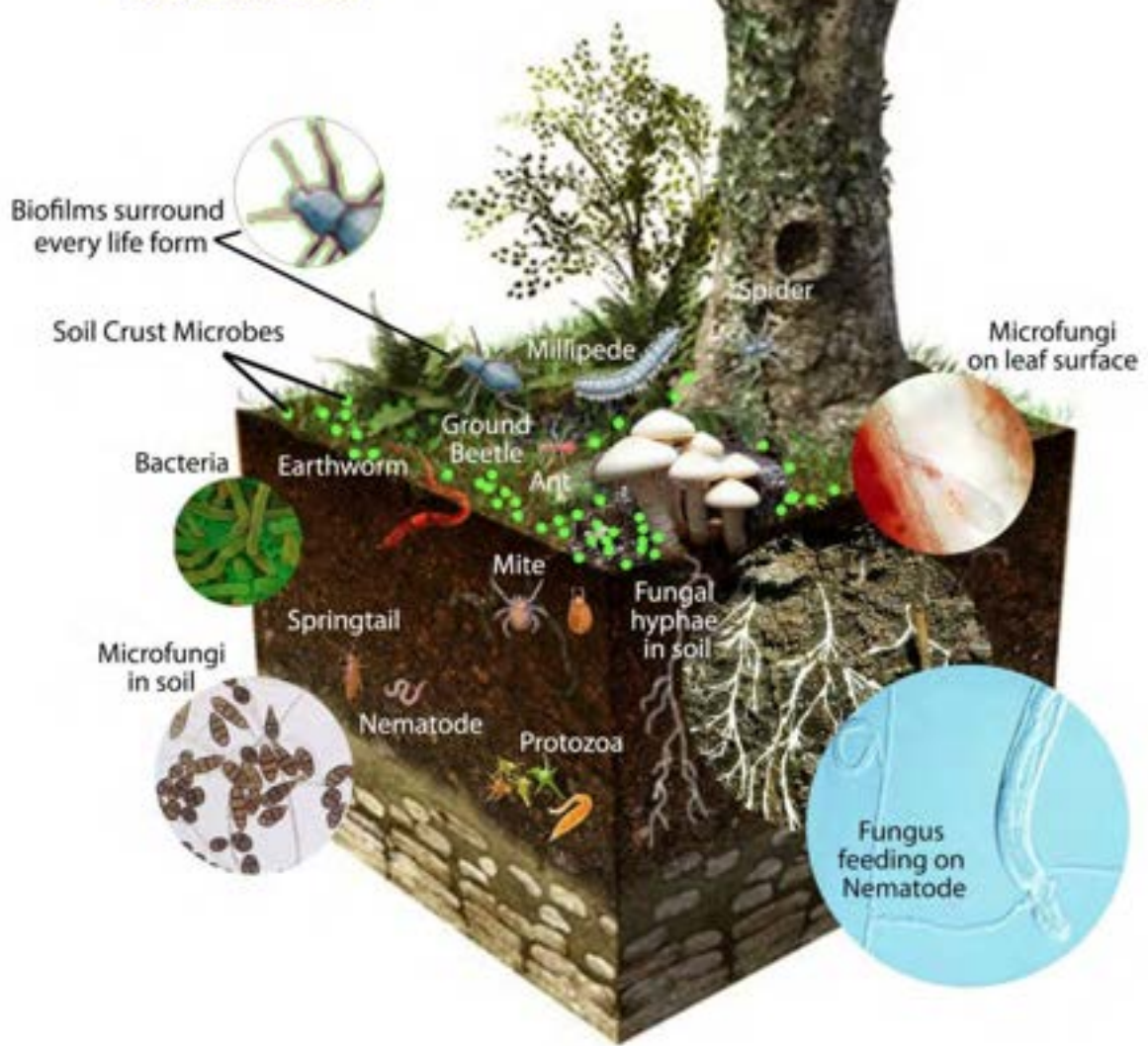
The water and air portions exist in the pore spaces between the soil aggregates.

Source: USDA/NRCS

WHAT IS HEALTHY SOIL?

*Soil health
is defined as the
continued capacity of
soil to function as a
vital living ecosystem
that sustains
plants, animals, and
humans.*

(USDA/NRCS)



**HEALTHY
SOIL IS**



**HEALTHY
SOIL IS
FULL OF
LIFE**



HEALTHY SOIL

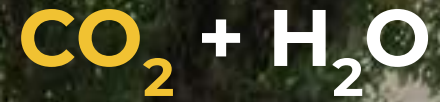


HEALTHY SOIL FIXES CARBON



Liquid Sugars

(Carbohydrates)



CO_2

A background image of a large green tree with a thick trunk and dense foliage. A series of white dots traces a path from the ground up the trunk and into the canopy. A white arrow curves from the right side of the image, pointing towards the tree's canopy. The chemical formula CO2 is written in white on the right side of the image.



The image shows a cross-section of a tree and its root system in the soil. White dots representing carbon are shown moving from the atmosphere into the tree's leaves, down its trunk, and into its roots. From the roots, the dots spread out into the surrounding soil. In the top right corner, a curved arrow points from the atmosphere towards the tree, with the chemical formula CO_2 next to it, indicating the absorption of atmospheric carbon dioxide.

**Plants absorb
atmospheric carbon
Soil organisms store it**



THE BIG EXCHANGE

ATMOSPHERE

750 Billion tons of Carbon

BIOSPHERE

550 Billion tons of Carbon

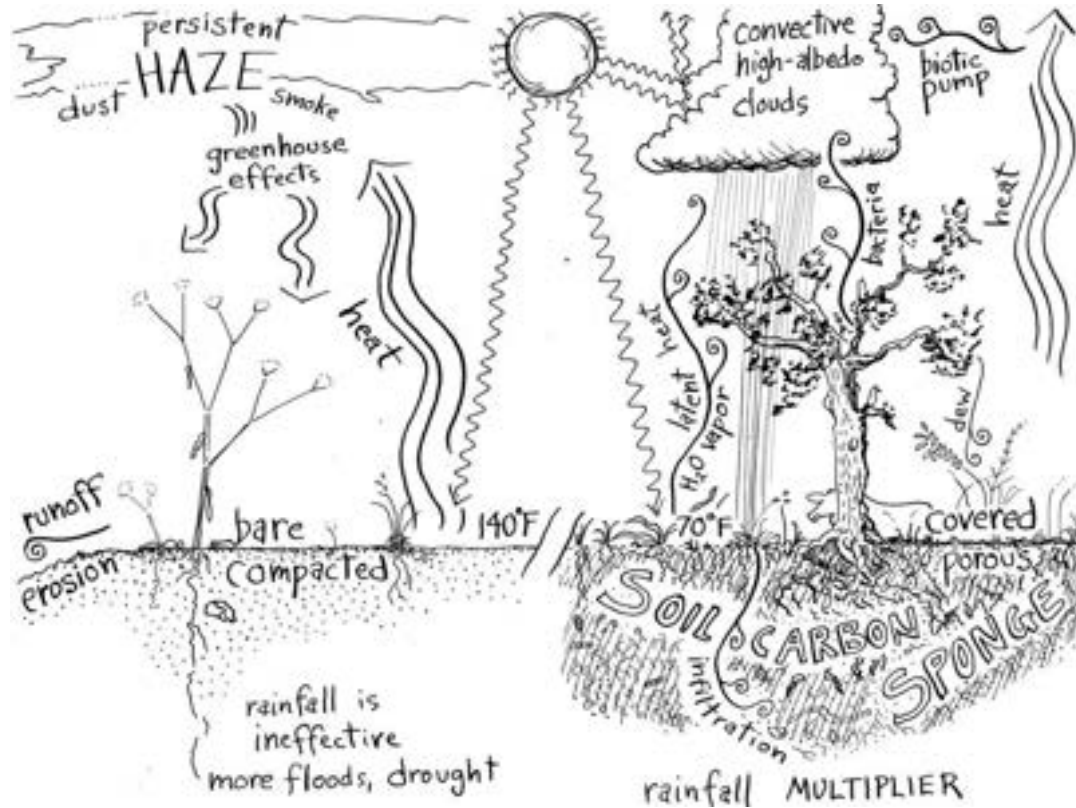
PEDOSPHERE

2300 Billion tons of Carbon



*We've removed 136 Billion tons of Carbon from the soil since the industrial revolution

The Water-Harvesting Soil-Carbon Sponge



The condition of the soil-carbon sponge controls the fate of rainfall and affects climate. Drawing by Peter Donovan, SoilCarbonCoalition.org

SOIL HEALTH PRINCIPLES

Maximize
biodiversity.

Keep soil
covered.

Minimize
disturbance.



Maintain
living roots.

**Know your
context.**

Integrate
animals.

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LIVING COVER



North Valley Organics, Albuquerque, NM

MULCHING



Leave the Leaves, Santa Fe, NM

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**Minimize
disturbance
and minimize
external inputs.**



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animals.

NO-TILL



Planting sticks, The Pueblo Farming Project

NO CHEMICALS



Praying mantis in grain fields at La Villita, Alcalde, NM

COMPOST



Compost for sale at Reunity Resources, Santa Fe, NM

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COMPOST



High desert no-stress composting in Los Ranchos, NM

COVER CROPS



Multi-species summer over crop, Casa Minka, Arroyo Seco, NM

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PERENNIALS



Tesuque Farm Orchard, Pueblo of Tesuque, NM

PLANNED GRAZING



Native forbs and grasses at Jack Chatfield's ranch in Mosquero, NM

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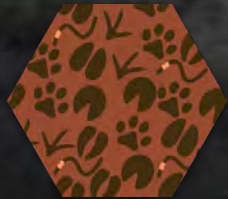


Maintain
living roots.

Know your
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**Integrate
animals.**

WILDLIFE



Pronghorn at Pueblo of Santa Ana, NM

UNGULATES



Bison in Northern New Mexico

UNGULATES



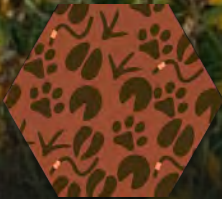
GrazeDays, Railyard Park Conservancy, Santa Fe, NM

POULTRY



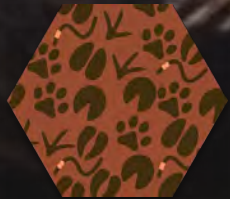


POLLINATORS



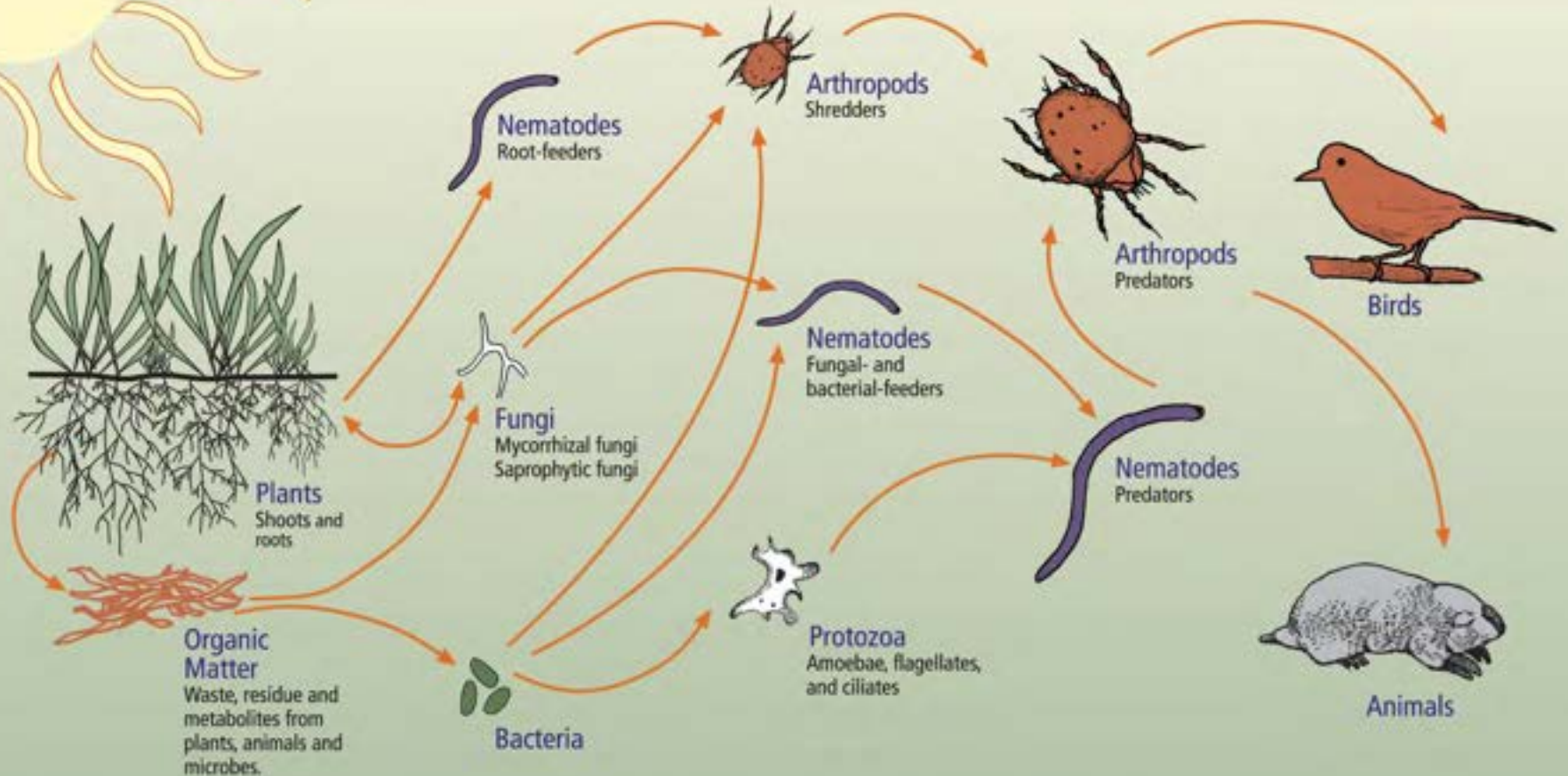
NMSU Sustainable Agriculture Science Center, Alcalde, NM

EARTHWORMS

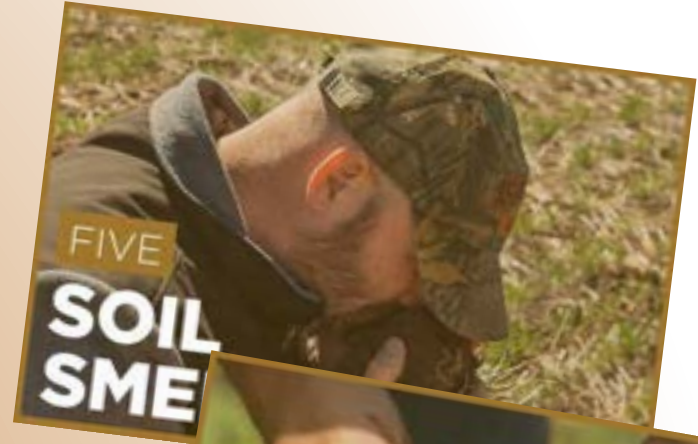


NM Organic Farming Conference, Albuquerque

The Soil Food Web



SOIL HEALTH ASSESSMENT



SOIL HEALTH ASSESSMENT



Events & webinars: SOIL STORIES



Coming up: Monday November 15, 5:30pm SOIL STORIES with David LeZaks and Mandy Ellerton
The Regenerative Agriculture and Human Health Nexus: Insights from Field to Body

Soil Health Champions Network



NM HEALTHY SOIL INITIATIVE

2018

- Working Group forms, writes bill language. Stakeholder survey and coalition building.
- HB 204 The Healthy Soil Act introduced in both houses.

2019

- Healthy Soil Act passes Senate unanimously, bipartisan support in the House. Signed into law.
- NM Dept. of Ag. and stakeholders develop successful Healthy Soil pilot grant program.

2020

- Recurring funding secured.
- NMDA disburses Healthy Soil Program education and project grants.

2021

- HB 89 The Healthy Soil Tax Refund Contribution Option passes with nearly unanimous support and is signed into law. NM residents can now voluntarily contribute all or part of their state tax income refund to the Healthy Soil Program.

Healthy Soil Program:

- Administered by the NM Dept. of Agriculture;
- Provides for voluntary incentives and education to advance soil stewardship;
- Eligible Entities include nations, tribes and pueblos, land grants and acequias.
- Equity clause prioritizes eligible entities serving young producers, veterans, small farms or ranches or for projects that benefit economically or socially disadvantaged communities”.
- Based on 5 soil health principles.





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**Join New Mexico's
healthy soil movement**

NMhealthysoil.org