

Fact Sheet



What on Earth Is Soil?



United States
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Natural Resources
Conservation
Service

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- Soil makes up the outermost layer of our planet.
- Topsoil is the most productive soil layer.
- It has varying amounts of organic matter (living and dead organisms), minerals, and nutrients.
- Five tons of topsoil spread over an acre is as thick as a dime.
- Natural processes can take 500 years to form one inch of topsoil.
- Soil scientists have identified over 70,000 kinds of soil in the United States.
- Soil is formed from rocks and decaying plants and animals.
- An average soil sample is 45% minerals, 25% water, 25% air, and 5% organic matter.
- Different sized mineral particles, such as sand, silt, and clay, give soil texture.
- Lichens help break rocks apart to form soil.
- Fungi and bacteria help break down organic matter in the soil.
- Plant roots break up rocks which become part of new soil.
- Roots loosen the soil and allow oxygen to penetrate. This benefits animals living in the soil.
- Roots hold soil together and help prevent erosion.
- Five to ten tons of animal life can live in an acre of soil.
- Earthworms digest organic matter, recycle nutrients, and make the surface soil richer.
- One earthworm can digest 36 tons of soil in one year.
- Mice take seeds and other plant materials into underground burrows, where this material eventually decays and becomes part of the soil.
- Mice, moles, and shrews dig burrows which help aerate the soil.

Conservation Across America

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