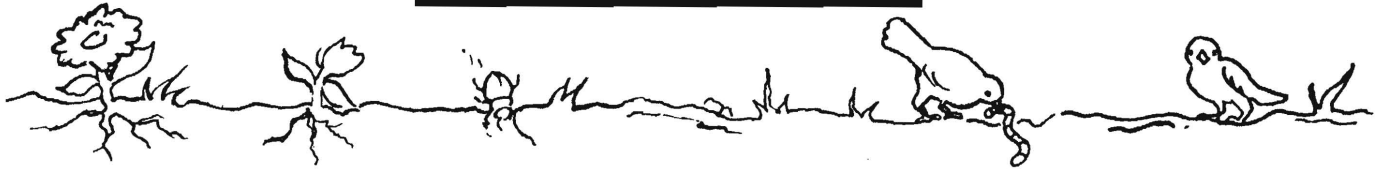


SECTION 1



What Is Soil?

Overview

Soil is the solid material on Earth's surface that results from the interaction of weather and biological activities with the underlying geologic formation. Soil is produced from broken down rocks, organic matter (decayed animal and plant life), water, and air. Soil generally loosens from its parent material at a rate of one centimeter every 250 to 2,500 years.

Nearly 21,000 soil types are found in the United States. All soil types are made of varying amounts of three main components—silt, sand, and clay—and can therefore be classified as silty, sandy, or clayey soils. Many different colors can be present in soil, and depend on the minerals found in the parent material and on the chemical and biological reactions within the soil.



Each soil type is suited for a different use. Some soils, for example, can support the massive weight of buildings, shopping centers, airports, and highways. Some are best for crops or ranging land, some for wildlife habitat and forests. Soil scientists determine the capabilities of different soils based on texture, structure, depth, slope, organic matter, and chemical composition.

Soil is normally found in layers. Soil layers are distinguished by different colors, textures, and structures. Soil layers also have different amounts of plant and animal material (called “organic matter”) and gravel.