



Grow Living Soil

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OWL (Oxygen, Water and Life) makes Living Soil.

Living Soil is alive. A teaspoon of good garden soil contains billions of invisible bacteria, several yards of equally invisible fungal hyphae, several thousand protozoa and a few dozen beneficial nematodes. Microbes bind soil together and, when OWL is balanced, these billions of microbes can transform brick-like dirt into a healthy, living soil sponge.

Oxygen is needed by healthy plant roots and soil organisms. Healthy soil has lots of tiny, little pockets of air.

When soils are eroded, graded, or disturbed, their structure becomes compacted. Compaction is caused when the tiny air and water bubbles are squeezed out of the soil and the microbes are killed. Microbes can be killed by fertilizer and pesticide use or even heavy traffic (foot or vehicular).

Water is needed by both plants and microbes. But too much water in the soil will displace the oxygen, saturating the soil and creating an anaerobic condition. Pathogenic microbes prefer anaerobic soil, and if this condition persists, diseases may develop, thus endangering the health of your garden.

Water is constantly moving through the soil. Any water in the soil needs to be replenished as the plants use it, as it evaporates from the soil surface, and as gravity pulls it down past the root zone.

Life in the soil includes all of the bacteria, protozoa, nematodes, and fungi, the food they eat, the excretions they make, and the root systems they sustain. Adding good quality compost into the soil is the fastest method of incorporating living microbes.

Plants attract microbes to their roots by feeding them carbon. Bacteria and fungi hold the soil together with microscopic glues and binders. The microbes consume organic matter and are then consumed themselves by larger creatures (worms, ants, slugs, centipedes, insect larvae, etc.) In turn, these creatures are consumed by creatures further up the food chain. Carbon and other nutrients are cycled through these many life forms, creating healthy, living, well-structured soil, no matter what the soil type.



Use a Soil Probe

A soil probe allows you to determine a lot of information about your soil. It will come in handy when you are trying to figure out whether water is reaching the plant roots or even going too deep beyond the roots' reach.

Press the probe into the ground, twist and pull out to take a sample. Take multiple samples from around your garden. How deep are your plants' roots?

Use this kind of probe on a regular basis if you are maintaining lawn area. It is a quick tool for determining whether or not your irrigation schedule is providing enough water.

Purchase a soil probe online or at your local irrigation warehouse.