



## BASICS

- “Composting” means the controlled decomposition (decay) of organic material such as yard trimmings, kitchen scraps, wood shavings, cardboard, and paper.
- “Compost” is the humus-rich material that results from composting.
- Compost contributes nutrients and beneficial life to the soil, improves soil structure, and helps prevent runoff that can pollute rivers and lakes.
- Compost helps the soil absorb and retain nutrients and moisture, and protects plants from diseases and pests. Better moisture retention means less watering, allowing you to conserve water and reduce runoff pollution.

## COMPOST BENEFITS

Compost makes good mulch. It can also be mixed into garden and potting soils.

**Nutrients.** Compost contains the full spectrum of essential plant nutrients. However, you should test the nutrient levels in your compost and soil to determine what supplements your landscape requires. Ask your county extension agent for more information.

- Compost contains micronutrients such as iron and manganese that are often absent in synthetic fertilizers.

# Composting

- Compost releases its nutrients slowly, over several months or years.
- Soil enriched with compost retains fertilizers better than lifeless soil does. Less fertilizer runs off to pollute waterways.
- Compost balances both acid and alkaline soils, bringing pH levels into the optimum range for nutrient availability.

**Soil Structure.** Compost helps bind clusters of soil particles (aggregates). Soil rich in aggregates is full of tiny air channels and pores that hold air, moisture, and nutrients like a sponge.

- Compost helps sandy soil retain water and nutrients that would normally wash right through the sand.
- Compost breaks up tightly bound particles in clay or silt soil, allowing roots to spread, water to drain, and air to penetrate.
- Compost alters the texture and structure of all soils, increasing their resistance to erosion.
- Compost particles attract and hold nutrients strongly enough to prevent them from washing out, but loosely enough so that plant roots can take them up as needed.
- Compost makes any soil easier to work and cultivate.

**Beneficial Soil Life.** Compost introduces and feeds diverse life in the soil, including bacteria, insects, worms, and more, which support vigorous plant growth.

- Compost bacteria break down mulch and plant debris into plant-available nutrients. Some soil bacteria also convert nitrogen from the air into a plant-available nutrient. Beneficial insects, worms, and other organisms are plentiful in compost-enriched soil; they burrow through the soil keeping it loose and well aerated.
- Compost suppresses diseases and harmful pests that overrun poor, lifeless soil.

**Water Quality.** Compost increases soil’s ability to retain water and decreases runoff. Runoff pollutes water by carrying soil, fertilizers, and pesticides to nearby streams.

- A 5 percent increase in organic material quadruples the soil’s ability to store water.
- Compost promotes healthy root growth, which decreases runoff.
- Compost can reduce or eliminate your use of synthetic fertilizers.
- Compost reduces the need for chemical pesticides because it contains beneficial microorganisms that protect your plants from diseases and pests.

Be sure to contain your compost pile so that it doesn’t wash off your yard during a rainstorm. An excess of nutrients in water can deplete the oxygen available to fish and other aquatic life.