

## **Composting**

## By Steve Wood, Master Gardener, Master Composter

Whether you're a weekend gardener or an avid "Master Gardener" composting should be an integral part of your home garden and lawn care program. It prevents plant wastes from going to landfill and transforms these wastes into a free soil amendment. Compost adds nutrients, enzymes, and beneficial soil microorganisms while also improving soil texture, permeability, water retention, nutrient retention and aeration.

Composting is the decomposition of your recycled vegetable, fruit, yard, and garden scraps to become a rich, dark soil amendment, brimming with nutrients. If you only use one organic fertilizer to balance and enrich your soil, it should be compost - and really, it should be enough!

## How to make compost

1st layer - corn stalks, large twigs (for air flow)

2nd layer - 3 to 6 inches of dried organic matter or leaves (carbon)

3rd layer - 3 to 6 inches of vegetable scraps, grass clippings, or garden plant materials (nitrogen)

4th layer - 1 inch of soil or old compost to add microbes

## **Keys to Composting**

**Moisture** Proper moisture is important to keep microorganisms active. Avoid over-watering the pile, as this excludes oxygen.

**Aeration** The microorganisms need oxygen to break down the organic debris. Regular turning of the compost pile ensures aeration, speeding the composting.

**Microorganisms** Bacteria found in soil and compost are the primary microorganisms that break down organic matter. Compost starter products increase these microorganisms, speeding the composting process.

**Volume** A 3' x 3' pile is necessary to create enough volume for the pile to heat and hold an adequate temperature. Piles larger than 5' x 5' cannot be aerated properly.

**Surface Area** Smaller particle size increases the surface area for microorganisms to work on. Chopping or shredding reduces particle size.

**Carbon/Nitrogen Ratio** It is important to have a balanced carbon/nitrogen ration. Materials high in carbon, such as straw, must be balanced with additional nitrogen. Green plant materials have a higher nitrogen content, while dried plant debris is mainly carbon.

**Never add** Animal protein scraps/ dairy products, Animal or human manure, coloured newspaper, books, or magazines, plastic materials, grass clippings that may contain residual weed killers, coal and charcoal ashes, or diseased plants.

