

Composting Cycle

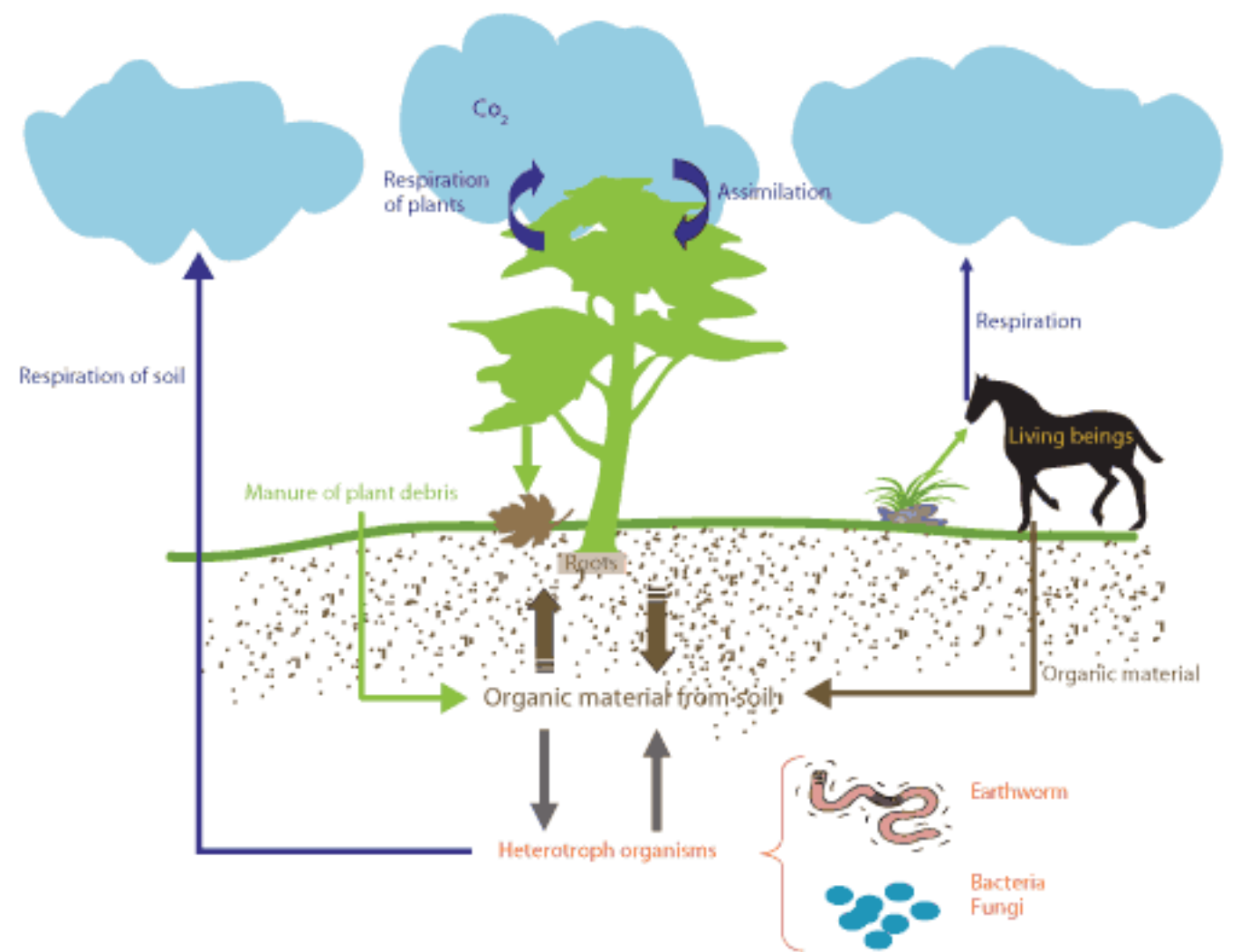
WHAT IS COMPOSTING?

Composting is the nature's own way of recycling. It's the controlled decomposition of organic material (leaves, twigs, grass, vegetable food waste...). Composting, first, helps to keep the high volume of organic material out of landfills (it will help to reduce pollution) and turns it into a useful product. And, second, making compost from garden and household waste is one of the best things you can do. It's easy and costs very little time or effort. Your garden will be fertilized by a natural way, and your plants will grow healthier and look happier for it.

MECHANISMS OF DEGRADATION

There are two different kind of actors during the degradation of the organic waste. The first ones are the detritivores such as bugs, beetles, mites and the second are earthworms! Earthworms eat just about anything and in the process, break up the materials to expose many more surfaces to the smaller microorganisms which are the second kind of degradation actors. Those microorganisms are the decomposers: the bacteria, the molds and the fungi.

By adding organic materials to the soil, you improve the structure of the soil (better aeration and moisture retention) and feed the beneficial organisms in the ground.



LOCATION AND RECIPE

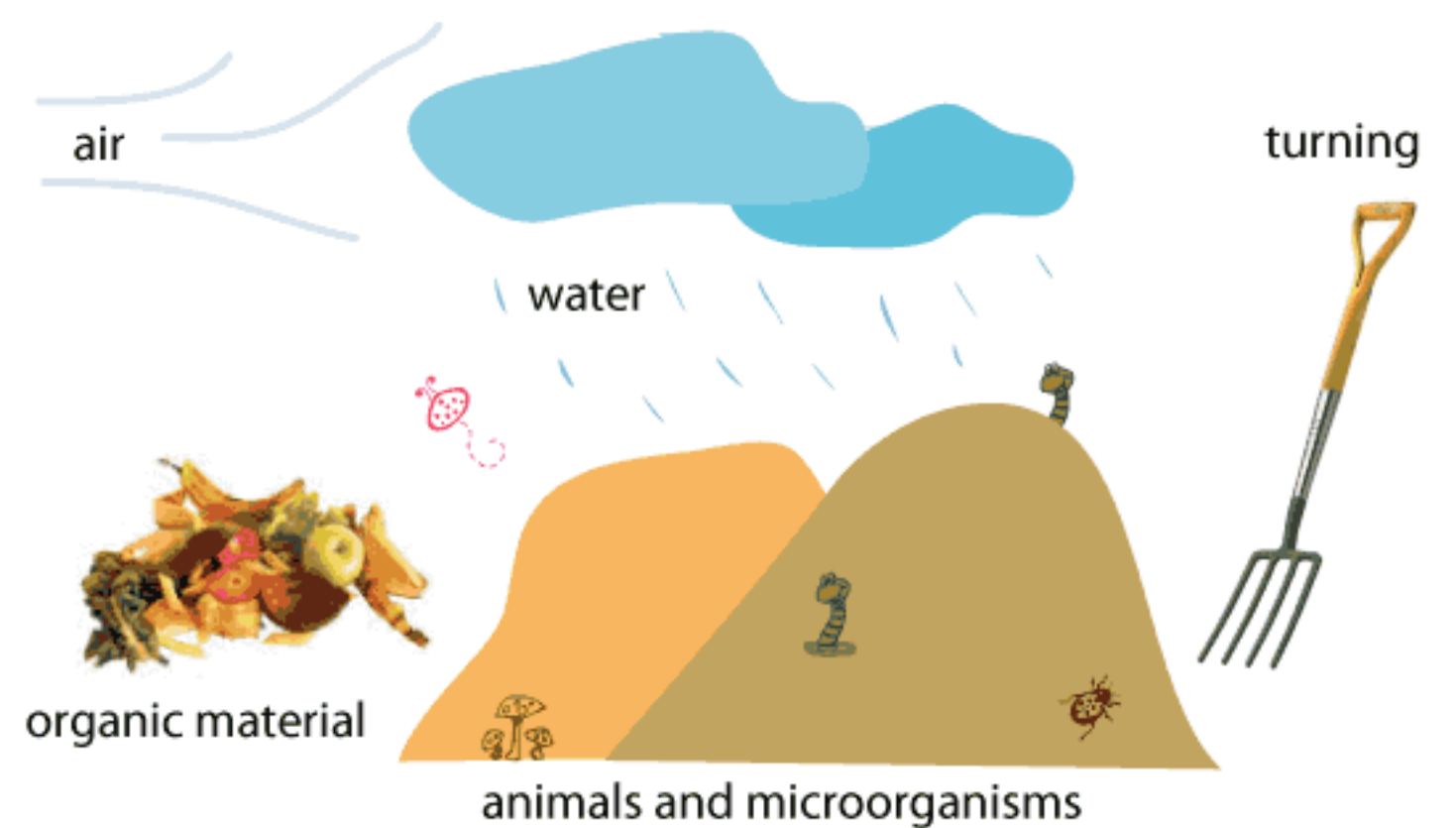
The compost pile should be placed directly on the ground to facilitate my entrance and other beneficial organisms from the soil. A shady spot will keep the bins from drying out so rapidly in the hot summer months. Locate near a water source, as water will be needed when building the pile, and also from time to time when turning the pile.

To have a good compost pile, you need those basic ingredients:

- * Organic matter -> household waste, kitchen waste and yard waste.
- * Microorganisms and animals -> already in the soil.
- * Water -> the goal is to try to achieve about 50% moisture content which is necessary for the development of the microorganisms.
- * Air -> good air circulation is the basic requirement for a successful aerobic compost pile.
- * Turning -> this process assures that oxygen is available to keep the pile aerobic.

Building layers:

- * First layer should be composed of some fairly absorbent materials to catch any excess liquid (crushed leaves and/or sawdust)
- * After the dry materials, add a layer of green materials (green grass clippings, kitchen waste, ...) avoid the big pieces of material which will be more difficult for the degradation.
- * The last layer should be composed of some leaves and dry grass to help inhibit any odours.



WHEN IS COMPOSTING READY?

The length of time required for decomposition is extremely variable from compost to compost.

It depends on many factors including : particles size, frequency of turning, moisture content, ambient air temperatures... After about 15-20 days, the temperature will come down; Gradually the material in the pile will turn dark brown, have a rich humus look and feel and smell "earthy", like a forest floor. Assuming that, it's still moist, and did not lose its temperature because it dried out, the compost will be ready to use.

All the contents of the pile will not be equally decomposed. There will always be a discernible leaf or stalk. Some materials contain lignins and other hard to break down substances, but this will not matter, as they will continue to be decomposed out in the garden.

WHY BOTHER?

Throwing things away is a waste of the resources and energy which have been used to make the product.

If we don't reduce, reuse and recycle our materials, they will have to be disposed of in one way or another.