

What is Composting? Composting is the *managed process of speeding up the way nature recycles by creating ideal conditions for rapid decomposition of organic materials*. These ideal conditions include: (1) presence of nature's decomposers (bacteria, fungi, worms), (2) the proper ratio of Green (nitrogen-rich) and Brown (carbon-rich) ingredients, (3) particle size of ingredients, (3) aeration, (4) moisture, (5) pile size and temperature, and (6) pile turning. A properly mixed 3'x3'x3' pile will undergo temperature swings from low to high heat between periodic turning until it stabilizes and becomes humus (compost).

What is A 2-bin Composting System? This 2-bin system is a simple backyard bin composting with vermicomposting. It involves one bin dedicated to hold the incoming fresh *Greens* (nitrogen-rich organic waste), a second bin for the *waste coverings* used to bury exposed surfaces of fresh waste, and a pound of red wiggler (*E. fetida*) earthworms spread in both bins. *Waste coverings* consist of a moist mixture of garden soil, shredded and partially composted *Browns*, and earthworms, all top layered by some porous eco-blanket, carpet, or heavy sack. Waste coverings are used to prevent disease-carrying flies/insects from laying eggs on fresh pile, maintain pile moisture, and protect decomposers from extreme outside heat and cold.

What to put in Bin #1- *the Greens*

- Chopped fruits & veggies, coffee/tea grounds, eggshells, cooked grains, mulched green grass - all shredded to 1" size.

What *Not* to put in Bin #1-

- Meats, bones or fish, cooked oily food, oils and dairy, any recyclables*, whole newspaper, bulky compostables*.

What to put in Bin #2 – *the Browns*

- A supply of *Waste Coverings* – a moist mix of garden soil and partially composted carbon-rich materials of shredded dead leaves, hay, newspaper, wood chips, sawdust, coir, and/or farm and garden litter, with a porous eco-blanket/carpet/heavy sack as top layer.
- Earthworms (*E. fetida*) in both bins.

How To Use The 2-Bin Composting System

- Start deep (1 foot) into the ground for both bins and line with .25 hardware screen. Place ample waste coverings in Bin #2.
- Place and moisten shredded (1" size) Greens inside Bin #1. Split a pound *E. fetida* earthworms to Bin #1 (3/4) and #2 (1/4).
- Cover all exposed Green surfaces with a layer (3" in winter) of *waste coverings mix* from Bin #2.
- Top both bins with heavy porous sack/carpet or eco-blanket. Avoid turning pile until bin is full or after 7 days.
- When bin #1 is full, harvest contents by sifting out the finished compost for the garden, the earthworms for next composting cycle, and place the remaining large partially composted material to the second bin.

* **Bulky Compostables** - such as garden prunings, fall leaves, brush piles, Halloween pumpkins, bales of hay – bring to CEC site.

* **Recyclables** - such as magazines, colored prints, all containers, biodegradable plastic, foam - place in the city's *Recycle Carts*.