Campus Composting

What is Compost?

Decomposed organic matter

"The path to the garden (or farm) of your dreams leads right through the middle of a compost pile"

- Vegetable Gardener's Bible

Benefits of Compost

- Provides nutrition and makes plants hardy
- Improves soil structure
- Increases water retention
- Moderates soil pH
- Promotes microorganisms

How we can engage in this alchemy of turning wastestreams into foodstreams?

This is where relationship/community-building is crucial.

For many institutions, donating raw materials to your operation can be cheaper and improves their "green image".

Where do I find organic waste?

Be creative: food distribution centers, breweries, coffee roasters and shops, cafeterias, compost cab, utility subcontractors, city governments all want a local and reliable place to dump their organic waste.

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Principles of a Compost Mix

* DISCLAIMER: We are describing how to make a hot compost pile in order to speed up the process and eliminate potential pathogens and seeds. This doesn't imply passive piles are bad. But you must consider your need. In our case, demand for soil is high.

1) Ratio: 30:1 Carbon/Nitrogen (Browns/Greens).You want to end up with a total ratio of 30: 1. Remember, even "green" material has a significant amount of carbon.
2) Structure
    a. Start with a base of twiggy, bulky, unshredded browns to promote air circulation (at least 6 inches)
    b. Alternate layers of greens, and browns (remember the ratio!)
    c. On top of each green layer, add a thin layer finished compost and/or garden soil
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d. On top of each brown layer, add water until moist but not drenched
e. Always finish pile with thick layer of browns to isolate greens from the outside *Prevents odors and unwanted scavengers
f. Cover pile (usually with tarp), to trap moisture and prevent overwatering or drying

*TIPS:

- Shred your browns to promote faster decomposition
- More vertical than horizontal, like a campfire
- To promote even more aeration, drive a rebar stake into the pile to make a deep hole, then place a perforated bamboo stick/plastic pole/chicken wire into it (or whatever you can think of)
- Use your pitchfork to loosen and puff up the pile as you build it

3) NO
    a. Diseased plant material (especially those with mildew and fungus infections)
    b. Animal scraps (oil, bones, meat, dairy)
    c. Too much citrus
    d. Too much pine needle
    e. Weeds? If consistently keeping pile hot, most weed seeds will die

4) Maintenance
    a. Water: damp, but not dripping
    b. Checking temperatures: ideal is 100 – 155 degrees Fahrenheit
    c. Turning the pile: promotes aeration and a thorough decomposition; recommended when temperature drops closer to 100 degrees
    d. Keep a journal; can take as little as 2 months or as much as 8 months.

5) Finished! You know it is done when it's crumbly, very dark brown, and fresh! There won't be a significant increase in temperature when you turn or otherwise aerate the pile. There may be a lot of left over woody material in your compost, and that can be sifted out and recomposed. If you're just adding to your soil, you can mix it in and let it finish the composting in the ground.

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Types of Piles

Windrows – used in larger commercial scale composting facilities, it is making large rows that can be easily turned and maintained by machinery.

Pallet Bins (3x3 at least) – urban farm or campus scale, very mobile and easy to assemble. The advantage of a pallet bin over no bin at all is that you can create more volume and build that campfire structure better.
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