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Sustainable Landscape Management Horticultural Consulting for Residential and Commercial Properties



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Minimum size for compost pile while still being managable.



Day 6, thermometer reading 140°. The compost is in the thermophilic range.



Compost should smell earthy and like a forest floor. If it doesn't, something went wrong in the process.

Video/web supportheatherjoymorris@yahoo.com; graphics-normanovy@comcast.net; photos Linda Novy Dear Friends and Colleagues,

While some of you have been skiing, hiking, or staying inside to avoid the cold, I've been tending a winter batch of compost! It began In December as I settled into the annual ritual of pruning: grapes, roses, raspberries, Baccharis, and selected perennials. Of course, there's been oak leaf collection off pathways and the roof, too. This generated about 6 yards organic material that I didn't want to remove from my property, which is Bay Friendly Certified (I am, too!) Two key principles of the Bay Friendly program include reducing garden trimmings to landfill and nurturing the soil. I could achieve both by harnessing microbial power to convert the trimmings into a food for my garden. It was time to MAKE COMPOST! (A video clip showing each step of the thermal composting process: *The Start, Turning Hot, The Cure,* and *Lessons Learned*, is at lindanovy.com. Go to Home page, Resources, Newsletters. Several videos are listed, with *Compost 101* on the top!)

With the assistance of Juan Amador, Integrated Landscape Services, and his employees, Manual and Francisco Tsunux, we chipped six yards of garden clippings, mixed them with the oak leaves and created an active, thermal compost pile, this is *The Start*. What makes the compost heat up? The pile heats up as the microorganisms reproduce and fuel their metabolisms by eating the organic matter (and each other). To fuel their exponential growth, the organisms, primarily fungi, bacteria, protozoa, and nematodes, require sufficient oxygen and water and the right "foods" in the form of greens, browns, and high Nitrogen materials. The compost maker needs to monitor the temperature, moisture, and oxygen of the pile. The management and turning phase of the process is detailed in *Turning Hot*.

This batch is not yet finished compost. It has a nice brown color, smells earthy, but it needs more time to improve in quality. I inoculated the pile with two different inoculums to re-colonize the soil organisms that may have been killed or gone into a dormant state during the thermal process. The maturation or curing phase encourages a diverse and healthy population of organisms to become re-established. Grazing, chewing, and shredding of the remaining organic materials and predation of organisms continues to cycle nutrients in the pile. Bacteria, fungi, protozoa, nematodes, springtails, centipedes, worms and other organisms are at work in the compost. Bacterial bio-slime begins to stick particles together, which, along with the action of fungal strands and worms, begins the aggregation process. In this phase humification of organic matter continues. See *The Cure*, for more details.

Each batch of compost is different because our starting materials, weather, and pile management varies. I keep notes when making compost so I can retrace my steps and evaluate what may need adjustment. In this case, the pile reached temperatures that were at the high end of the range (160°) telling me I need to back off on my high Nitrogen inputs. Turning the pile more frequently to mix it up was called for as evidenced by the minor hot spots of ash. *(Next time, I tell myself)*. See **Lessons Learned**.

Why compost for the garden and landscape? Oh, let me count the ways: compost inoculates the soil with a wide diversity of beneficial soil organisms supporting a healthy food web, and can be fungal- or bacterial-dominated, depending on the starting materials. Compost helps to suppress disease, decompose toxins, cycle plant residues into plant nutrients, relieve compaction, build soil structure, and reduce the need for other inputs like organic and inorganic fertilizers. Good compost can also buffer extremes in pH or past pesticide use. What's not to like?

COMPOSTING CLASS MARCH 2, FAIRFAX HARDWARE & LUMBER To learn more about how you can begin backyard composting, what to look for when purchasing compost, and its role in an Integrated Soil Management Program, I hope you'll join me at Fairfax Lumber & Hardware, 109 Broadway, Fairfax, 415-453-4410 on Saturday, March 2, 10:00 AM, where I will be presenting more details. Feel free to call or email me for more discussion.

Get your garden on - spring is just around the corner!

With best regards,