

SOUTH HADLEY COMPOST AREA OPERATIONS

This article explains how we make compost here in South Hadley, and why we do things the way we do them here at the Department of Public Works.

As you may know, compost is created by mixing four elements: high nitrogen yard wastes such as grass or weeds, high carbon yard wastes such as fall leaves and woodchips, and oxygen and water to help the growth of the aerobic bacteria which work to decompose the material. So how is South Hadley's compost made?

It all starts with you, the resident. Every Wednesday and Saturday between the hours of 8 and 3, you bring us your yard waste. In the front of our compost pad, in the public space, we have three areas for you to drop off your materials. The left hand side as you enter is for leaves and grass, and the right hand side is for brush. There is also a separate area on the far right for butt logs (stumps are not allowed). In the spring and fall we also take in yard waste from the curbside collections, and then in January at the end of the curbside collection cycle we take in Christmas trees.

The reason we separate out materials this way has to do with how they are composted. Grass, leaves and weeds decompose rapidly on their own. Because grass especially breaks down so quickly, it can cause odor problems. We all know the sour smell of grass which has been lying in a pile for days. So we ask you to separate out the grass in order to combine it with woodchips or some other high carbon material so the composting process will begin immediately.

The larger brush materials, though, will have to be ground up before they can be composted. We only grind these materials twice a year, so obviously any grass deposited in the brush pile could sit for upwards of six months, and this we want to avoid. There is also no need to grind grass, so if we separate it out we don't need to pay for it to be ground.

Once the material has been ground it is ready to be composted. In order to compost efficiently, the materials need to be laid out in piles roughly 12 feet high and 18 feet wide.

Once the piles, or windrows as they're called, are formed, we then have to monitor the temperature. The reason to take the temperature of the windrow is to make sure the bacteria are still happily decomposing the material. If the temperature drops below 100 degrees, it means that the bacteria aren't getting enough moisture, or oxygen, or both. In that case, the windrows will be turned to incorporate more air and mix in any surface moisture to the middle of the piles. If the temperature goes above 140 degrees, it means that too much activity is happening, and if temperatures get too high it can kill off the aerobic bacteria and then the windrow will start anaerobic decomposition which could lead to odors. So if the temperature is above 140, again the windrows will be turned to release heat and make sure the decomposition stays aerobic. The rate at which materials turn into compost is greatly dependent upon the initial size of the material, with smaller materials composting more quickly, as well as outside temperatures, moisture and oxygen content. Our compost operation schedule is to turn the windrows once every two weeks. The information about what days the compost has been turned is in our new Compost Operations Calendar on the Solid Waste Division website.

So that's how compost gets made here at the South Hadley DPW. One quick word of caution – although almost all residents have been fabulous about separating out grass from brush, and only bringing yard waste to the compost site, occasionally contaminants are left as well. The only materials which are allowed are grass, leaves, weeds, brush and butt logs. That's it! Anything else is forbidden and considered illegal dumping.

The best part is the reward at the end of the composting cycle – free compost to South Hadley residents.