

No-Turn Cold Composting

Recycling organic debris for composting and improving soil doesn't have to be a chore! If "hot" composting is not for you try one of these easy "cold" composting methods. Each has advantages and disadvantages but the end result is the same; improved garden soil and less organic waste in landfill.

➤ **Sheet mulch composting**

Sometimes called "lasagna gardening," it involves making alternate layers of green (nitrogen) material and brown (carbon) material. It is a "cold" composting method as little or no heat reaction occurs during the decomposition of the material. It is an excellent way to create a new planting bed or to prepare an existing garden bed for planting. When done over existing lawns, it kills the grass and uses the available nitrogen and organic matter of the sod for the new planting bed. It is a great way to encourage the growth of micro- and macro-organisms in the soil.

How to prepare a sheet mulched bed

- 1) Layer black and white newspaper 3-4 sheets thick over the area to be mulched. Be sure to overlap the edges of the paper so no light reaches the grass. Sheets of cardboard may be used as well. Wet the paper or cardboard with water.
- 2) Make the first layer with a green source such as manure, coffee grounds, vegetable food scraps, or fresh grass clippings or a combination of two or more green materials.
- 3) Add a layer of brown material of about the same thickness on top of the green, such as leaves, straw, shredded paper, dryer lint, etc. Sawdust may be used but has a much higher percentage of carbon so use thinner layers.
- 4) Add another layer of green on top of the brown.
- 5) Cover with a layer of brown. This is to keep the nitrogen from escaping and to reduce pests such as flies.
- 6) Continue to build the bed until a height of about 12 inches is reached. This may occur all at once or over time, as material is available. Always end with a brown layer. One final option is to cover the finished pile with moistened burlap bags. This helps to keep the bed neat and is reported to increase microbial activity in the soil during the decomposition of the material.

If done in the fall, the new garden bed will be ready for planting in the spring. Once decomposition is complete, you may dig down through the layers to plant. You may choose to turn the new bed over but it isn't necessary. You may plant young seedlings in the freshly created bed by making a hole twice the size of the root mass of your plant start, fill the hole with compost and set in your seedling. Do not allow the stem of the plant to come into contact with the fresh, decaying organic material. To plant seeds in a new sheet mulch bed, screen a 2-3 inch layer of good compost over the top of the bed and plant your seeds in this. Water normally. You may continue to add to a planted sheet mulched bed always leaving 2"-3" of space around the stems of existing plants.

Sheet mulch composting is a great way to make new garden beds with minimal work, create borders or add to existing borders.

➤ **In-Situ (in place) composting**

In-situ composting simply involves burying organic material directly into garden soil. Bury the material at least 12" deep to discourage dogs, cats or other small animals from digging it up. Rotate the site of composting to avoid over-concentration of material in one spot. An option is to cover the site with black plastic as the material decays. Slugs and snails will be attracted to the decaying material and will cling to the underside of the plastic. Lift the plastic and destroy or remove them. This very effectively reduces the populations prior to planting in the soil.

➤ **Trench composting**

Trench composting makes use of the walk space in between garden beds. Dig a trench 12-18" deep by 12"-18" wide (or your path width) and pile the soil on top of a garden bed next to the trench. In the fall, pack the trench solidly with leaves, straw or chopped garden debris up to the surface level of the garden bed. In the spring, turn the decomposed trench material onto the top of the garden beds and use the trench as a pathway during the growing season. Repeat the process each year. You may plant directly into the composted material. To avoid walking in mud in the spring a layer of bark mulch or more straw may be laid in the trench.



For more information about these and other methods of composting contact the OSU Extension Service – Lane County Compost Specialists at 541-682-4243 or email at compost.specialist@oregonstate.edu or the City of Eugene Solid Waste and Recycling Program at 541-682-5542.

