



10-Minute University™

*Oregon Master Gardener™ Association – Clackamas County Chapter
In Cooperation with Oregon State University Extension Service*



Sheet Mulching

What is it?

- Sheet mulching, lasagna gardening, and sheet composting are different names for the same process.
- Traditional composting is done by making a large pile and letting it “cook” over time.
- Sheet mulching is making compost in the place where you wish to make new garden beds.

Potential applications

- It is an excellent way to convert grassy areas to garden beds, to improve soil and soil structure, and to recycle organic materials.
- It is an easy way to fill framed, raised beds so that they are ready for planting next season.

Basic formula

- Traditional compost piles need 2 parts brown to 1 part green materials. Sheet mulching uses equal portions of each in alternate layers.
- Browns are carbon sources such as dry leaves, straw, paper, cardboard, sawdust, animal bedding mixed with manure, corn stalks, pine needles, wood chips, etc.
- Greens are nitrogen sources such as vegetable scraps, coffee grounds, grass clippings, fresh manure (cow, horse, or poultry), alfalfa pellets, cottonseed meal, soybean meal, and blood meal.

How does it work?

- The basic technique involves placing alternate layers of brown materials and green materials directly onto the soil.
- As with all compost, sheet composting needs carbon, nitrogen, oxygen, and water in proper proportions to break down the organic materials into a good growing medium.
- Sheet composting is a slow process. There is little or no heat reaction from the microorganisms to speed the process along. A sheet compost bed may take six months or longer to decompose sufficiently to allow for planting.
- The height of a bed may vary depending on when the bed will be planted. Generally speaking, the greater the volume of material, the longer it will take for decomposition.

When should I begin?

- Sheet composting is best started 5-6 months before you want to use the planting area.
- Fall is an excellent time to sheet compost as the material breaks down slowly over the winter and is ready for planting in the spring. But a bed may be started any time materials are available.

Step-by-step instructions

1. Remove persistent weeds such as blackberry, bindweed, and thistle. Sheet composting will not smother these weeds.
2. Begin by mowing or scalping grass or other vegetation down to the lowest possible level.
3. Add agricultural lime per soil test recommendations or 5 pounds per 100 square feet.
4. Add nitrogen rich fertilizer such as blood meal or feather meal at 1 pound per 100 square feet or plant-based fertilizer such as alfalfa meal at 5 pounds per 100 square feet.