

Sheet Mulching!

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Mulch can be any material placed on top of the soil. Sheet mulch refers to layers of various materials placed on the ground.

Why sheet mulch? You can use sheet mulch to create new garden beds without tilling, eliminate weeds without using herbicides, improve soil and add nutrients, retain moisture, regulate soil temperature, reduce erosion, and help improve the look of your landscape.

Common products you can use for sheet mulching and where to find them:

Cardboard: pick up curbside on garbage day, ask for at stores & autobody shops

Newspaper: salvage expired newspapers from cafes, shops, and free “weeklies” boxes

Yard debris: offer to rake and mow your neighbors’ lawns for leaves & grass clippings

Compost: make at home, or buy bagged or in bulk

Tree/shrub trimmings: contact arborists & landscapers; they will often deliver for free

Shredded bark: buy in bags at garden centers or in bulk from “fuel” suppliers

Straw/hay: buy at feed stores

Manure: buy bagged, pick it up from a farm or ranch, or raise livestock at home

Agricultural by-products (seed hulls, nut shells, corn cobs/stalks): in some cases buy bagged (i.e. cocoa & hazelnut shells), otherwise contact farmers (buckwheat hulls, hops, etc.)

Coffee grounds: ask at cafes and restaurants

Burlap: buy it in bulk at garden centers, or scavenge old potato & coffee sacks

Rocks & stone: collect wherever you find them, or buy from suppliers

Oyster/sea shells: buy oyster shell from feed stores or garden centers, collect seashells

Cover Crops (aka green manure or living groundcovers): buy seed or plants, take cuttings from friends’ gardens

Inorganic materials such as plastic and landscape/weed-block fabric: buy from garden centers

Note: Try to make sure that any yard debris, tree trimmings, or vegetation you use have not been treated with pesticides. Many chemicals will retain in your sheet mulch and may have detrimental effects on plants or on beneficial insects.

Methods of sheet mulching

To understand the best ways to use mulch and to determine the best materials to use, decide what you want the mulch to accomplish. If, for instance, you want to start a new garden bed where a patch of lawn is, you will need multiple layers of various materials that will decompose. If you simply want a uniform look to your landscape, you will probably just need a suppression layer like cardboard or fabric and shredded bark to go on top of it.

Here’s the basic method for a multi-layer sheet mulch, adapted from *Gaia’s Garden* by Toby Hemenway:

This method uses a balance of “green” (high in nitrogen: manure, compost, fresh yard debris, green clippings) and “brown” (high in carbon: paper products, dry leaves, straw, woody or bark products) layers that break down to create a healthy planting area.

The best time to sheet mulch to create new beds or for soil amendment is in the fall, so that the mulch can decompose by spring planting time.

1. Cut vegetation back to the ground, but leave the plant material in place, excepting large woody material. Use a hoe or digging fork to lightly aerate the soil. Water the whole area thoroughly.

2. Add soil amendments, based on your soil’s needs (lime, rock phosphate, greensand, organic meals, etc.). Getting a soil test helps determine what your nutrient and pH needs might be. You can also use an all-purpose organic fertilizer (I like EB Stone brand’s “Sure Start”).

3. Add a 1" thick layer of high-nitrogen material such as manure or grass/green plant clippings. You can also add some blood meal or cottonseed meal.

4. Start your suppression layer: lay down at least ¼" layers of newspaper and/or cardboard, overlapping ends at least 6" on all sides. Water thoroughly, until the layers are moist.

5. Add more high-nitrogen material on top of the suppression layer (manure, compost, green clippings). You can also add more organic amendments (kelp, cottonseed, blood meal, bone meal, or a balanced dry organic fertilizer blend).

6. Next, pile on a very thick (6-12") layer of mulch material such as straw, hay, leaves, or agricultural byproducts. Sprinkle in compost, manure, bloodmeal, cottonseed meal, or organic all-purpose fertilizer to improve the carbon-to-nitrogen ratio (which will aid decomposition). You can add top this off with a single layer of cardboard or newspaper if desired (if you are not going to plant right away). Water this layer well.

7. Add an inch or more of compost or composted manure for the next layer.

8. Finish off with a layer of seed-free organic material such as shredded straw, wood shavings, compost (I like Black Forest brand for its "mulchy" look), or anything that looks nice.

If you want to plant directly into the mulch right away, top it with a layer of soil or finished compost and some organic fertilizer. Otherwise, in a few months the sheet mulch will break down into a wonderful, rich planting medium!

Potential problems with sheet mulching are usually easy to deal with. Here are a few things you might run into (and how to resolve them):

- Slugs (use diatomaceous earth, copper barriers, eggshells, iron phosphate, beer traps)
- Damping off (move mulch away from close contact with seedlings)
- Weed seeds (in hay, compost, or yard debris—use suppression layers over these)
- Nitrogen deficiency in soil (if there's too much carbon in the mulch—counteract by feeding with nitrogen-rich amendments)
- Soil doesn't warm up very quickly (simply remove mulch)
- Mulch may hold too much moisture (adjust materials, make sure mulch isn't compacted)
- Mulch may not break down very quickly or breaks down too quickly (adjust materials)
- Molds or fungus may occur (not a bad thing! Fungus aids in decomposition and can help plants establish a good root system!)

Resources

Mulch It! A Practical Guide to Using Mulch in the Garden and Landscape by Stu Campbell

Gaia's Garden: A Guide to Home-Scale Permaculture by Toby Hemenway

Lasagna Gardening: A New Layering System for Bountiful Gardens by Patricia Lanza

The Ruth Stout No-Work Garden Book: Secrets of the Famous Year-Round Mulch Method by Ruth Stout

Where to find...

Bulk Compost, Soil, and Bark products:

Dean Innovations: 6400 SE 101st www.fineroutdoorliving.com

Mt. Scott Fuel: 6904 SE Foster www.mtscottfuel.com

Nature's Needs: 9570 NW 30th Avenue (North Plains) www.naturesneeds.com

Straw: Naomi's Organic Farm Supply 2615 SE Schiller www.naomisorganic.blogspot.com
Wichita Feed & Hardware 6089 SE Johnson Creek Blvd