

## Sheet mulching; The Whats, Whys, and Hows

WHAT is sheet mulching and what are its benefits?

Sheet mulching is a method of preparing a garden bed for planting that eradicates weeds without tilling or using herbicides, which are both harmful to soil ecology. It's also called composting in place because it builds soil by breaking down different layers of organic debris. Sheet mulching, as a method of preparing a garden bed, gives you the benefits of mulch, (conserving water, moderating soil temperatures, suppressing weeds, and adding organic matter to the soil), without having to dig or till.

How do I sheet mulch?

The basic recipe for sheet mulching is...

Step one: lay down the weed barrier. This can be a layer of cardboard, a thick layer of newspaper, or even non-synthetic cloth or wool carpeting.

Step two: put down about a foot of organic mulch. \*see below for a more detailed recipe

Q: What time of year is the best time to sheet mulch?

A: It's best to sheet mulch in the fall. That gives your sheet-mulched bed time to decompose/rot over the winter so that it's ready by spring.

Q: Can you plant in a sheet mulched bed before it totally decomposes?

A: Yes, if planting seeds, dig a trench, about 3 inches deep, fill it with compost or soil and seed that. If planting transplants, remove a pocket of mulch about three times the size of the plant's root mass, fill the pocket with compost or soil, and plant the transplant. If planting a deep-rooted plant, make slashes in the root barrier below where the plant is planted and the roots will find their way to the openings.

Q: What organic materials are best to use as mulch?

A: Whatever organic materials you can gather. Just like with composting, the more diverse the array of materials you can gather, and the closer you can get to achieving the 30:1 ratio of carbon-based materials to nitrogen-based materials, the more soil life you'll attract, and the faster the mulch will decompose and turn into rich humusy soil.

Q: What about weed seeds?

A: Cover all materials that may contain weed seeds (i.e. hay, or weeds that have gone to seed, food waste) with a couple inches of weed-free mulch. Although the process of sheet mulching doesn't generate enough heat to burn weed seeds, when found a couple of inches below the surface, they won't get a chance to surface and seed since sheet mulched beds don't ever need to be tilled.

Carbon-based organic matter

Straw

Wood Chips

Sawdust

Bark

Tree Prunings

Cardboard

Newspaper

\*A soil test will bring to light any other amendments that should be added.

Nitrogen-based organic matter

Food Waste (minus fats and meats)

Grass Clippings

Hay

Dried Leaves

Manure

Coffee Grounds

Alfalfa Meal

Brewing Grains

Compost

Worm Castings

Sheet mulching recipe (Taken from pg. 74 of Toby Hemenway's Gaia's Garden):

Top Layer: 2 inches of straw, leaves, or other seedless mulch  
1 to 2 inches of compost  
8-12 inches of hay, stable bedding, or other bulk organic matter  
Thin layer (1/4 to 1 inch) of manure or other nitrogen-rich material  
Newspaper (1/4 to 1/2 inch) or cardboard  
Thin layer of manure  
Soil Amendments (lime, rock dust, greensand, etc.)  
Slashed vegetation  
Soil surface

First Layer: Roots, cracks, moistened soil

\*Make sure each layer has ample moisture