

## How to Sheet Mulching Your Garden

In the gardening world, your ally is the earthworm. Their daily work entails tilling, fertilizing, and keeping soil in good condition. Worms produce 1 ½ times their weight every day. And their castings contain most of the minerals and nutrients that soil needs to feed vegetables, flowers, trees, and herbs. For every 100 square feet of planting bed space, earthworms produce 40 pounds of super fertilizer! That's amazing!

Essentially, sheet mulching helps to create an environment in which earthworms thrive. Sheet mulching is an easy method for preparing organic beds for growing fruit, vegetables, flowers, and other plants. And once you've gathered the materials, it only takes a few minutes to construct the beds and plant them.

**Here's what you need to know about sheet mulching your planting beds: worms need food, moisture, and a moderate temperature to do their best work.**

### **Step One: Create Food and Moisture**

Cut any grass or weeds down to a two-inch height. Sprinkle dolomite-lime on the surface and water. Lay overlapping cardboard or six to 12 leaves of newspaper, watering as you go. Now add two inches of "worm food," that is decomposing leaves (not new leaves or waxy leaves, like oak), leaf mold (available at the city dump), wood ashes, aged manure, compost, and coffee grounds. You can purchase amendments, such as green sand (potash, like wood ashes) and rock phosphate (phosphorus) at your local organic gardening supply store. If desired, add an organic fertilizer and water again. (The addition of moisture starts the decomposition process.)

### **Step Two: Moderate Temperature**

Worms enjoy temperatures around 50 degrees – not too hot or too cold. To maintain the desired ground temperature, cover the area with six inches of fluffed-up pine needles or a seedless wheat straw. This natural "quilt" keeps the worms happy and productive during the heat of summer and the cold of winter. (Pull back the straw in January, and you'll see the evidence of their work.)

### **Step Three: Plant Your Newly Sheet-Mulched Bed**

Spread apart a small section of the straw/needles to form an empty cylinder. Punch a hole in the paper. Fill the hole with planting soil. Then plant your seedling or seeds and water. Repeat at appropriate intervals, depending on what you are planting.

### **Here's what's happening to your pile of ingredients...**

The cardboard/newspaper mixture smothers the grass and weeds, which becomes food for the worms. The worms work the soil, mix the ingredients, create air and water tunnels, and produce fertilizer. You rarely have to water the planting bed since it's already insulated with your sheet mulching. Weed seeds haven't been disturbed, and they are mulched anyway. Nitrogen in the soil remains level since the dirt hasn't been turned over.

**When to Sheet Mulch**

You may start sheet mulching and planting in either autumn or spring. However, if you wait for spring, the cardboard will be decomposed and the soil will be rich and ready for planting. And the worms will have even eaten most of the straw.

**Maintaining Your Sheet Mulching**

Each autumn, take the time to reward your worms. Lift the soil with a pitchfork, but be careful not to turn it over. Spread one inch of new leaf mold into your existing soil. (You can keep a pile of leaves slowly decomposing just for that purpose.). Then infuse the soil mixture with compost. Water the soil and cover again. (Always be sure to cover your soil.)

That's it! Follow these three easy steps and bonus easy-maintenance tips and you'll always have great soil for planting. And you'll spend less money and less time on soil maintenance and weeding year-round. Happy sheet mulching!

*Information provided by Charlie Headington of the Greensboro Permaculture Guild.*