No-dig garden beds

Also referred to as "sheet composting," "sheet mulching," or "lasagna gardening," no-dig gardens require a layering system of compost materials to smother grass and suppress weeds. This makes an in-place garden bed once the materials have decomposed.

Benefits

Grass and weeds are buried under thick layers, making sheet composting a great tool for non-chemical weed control. As long as you don't turn or till the surface, weed seeds are too deep to germinate. Improving the soil structure, as explained below, also helps to limit the advantage of weeds that often thrive in compacted, nutrient poor soils.

Since the bed preparation is essentially thick mulching, it improves moisture retention and nutrient content of the soil, all through adding organic material. This is a big bonus for Florida's sandy soils [or any other kind of soil!] Building and maintaining no-dig beds is one method of no-till gardening. No-till systems are a part of conservation tillage, an important method for preserving soil integrity through minimizing erosion and increasing and maintaining soil organic matter.

The uncomplicated and easy method of sheet composting means that it's appropriate for everyone (including those who may be physically limited or unable to dig traditional garden beds) and a good way to convert grassy areas to gardens. This leaves the sod in place where it gets converted into soil organic matter. You can also use this method to enlarge perennials borders. The process can be done at anytime and at any scale, even piecemeal as materials are available.

Building a Bed

Plan your bed. Sheet composting is best done a few months before you want to plant so that the materials have time to decompose. Beds can be contained in a raised bed if desired (be sure to use untreated lumber).

Mow or chop down grass and weeds in the place where you want your finished bed (or within your raised bed structure). Leave the trimmings in place.

Cover the ground and trimmings with four to six layers of newsprint or cardboard (a light-blocking carbon source). Wet thoroughly.

Add compost, worm castings, or manure two to three inches thick.

Cover with a layer of carbon material such as leaves, sawdust, or straw.

Top with another nitrogen layer of grass clippings, green weeds (no seeds), kitchen scraps, manure, or a combination of any of these.

Continue this layering until you've reached the desired bed thickness (18" – 36").

Cover with a mulch layer or a top-dressing of bark, newspaper, or leaves.

Water well.

Sheet composting is considered a "cold" process. It will take time to break down, the amount varying with the type and quantity of organic materials. If you want to plant before the bed is decomposed, you can add a 2" — 3" inch layer of finished compost or garden soil to the top of the bed and plant directly.

Since this method will not produce any or very much heat, it means that any weed seeds in the composting layers (above the cardboard) will not cook and will sprout in your bed. Make sure your materials are weed seed free in order to enjoy the weed control benefits of this method.

Maintaining your beds is as simple as adding new layers (a nitrogen layer, such as grass clippings, followed by a carbon like leaves) to keep the bed's height.

Adapted and excerpted from

Composting Methods: Sheeting composting, published by: Florida's Online Composting Center, University of Florida Extension

Sheet Mulch: Reduce weeds naturally, published by: Washington State University Extension, Gray Harbor County.

Sheet Mulch-Lasagna Composting (LC 731), published by: Oregon State University Extension Lane County Extension (04/2009).