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NEWSPAPER ARTICLES

Lasagna Gardening Aka No-till Gardening (August 23, 2025)

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On the surface, not tilling the soil is counterintuitive to many traditional gardeners – until the science behind it is understood. Tilling (rototilling, deep spading, or plowing) is used to break up and loosen soil, turn up weeds, and incorporate soil amendments. However, tilling destroys the fungal networks, soil organisms, humus, and insect life that live in and naturally improve soil health. Pick up a handful of soil from the forest floor, which is not tilled, and it will be dark, loose, and have a pleasant earthy aroma. Continually tilling soil destroys beneficial microorganisms (including mycorrhizae, arthropods, and earthworms), disturbs natural porosity resulting in compaction, and contributes to soil erosion and water evaporation.

In no-till or "lasagna" gardening, the soil is left undisturbed under layers of protective mulch. This improves soil quality by keeping fungal hyphae and microorganisms in the soil intact; reduces soil compaction; protects from soil erosion (topsoil washed or blown away); reduces evaporation of water; and, therefore, can improve plant health. No-till also saves your back from fighting the rototiller or deep spading. Plantings are done in shallow holes or ditches with minimum disturbance to the soil biome.



The no-till method can be used to create a new garden or convert existing gardens and can be applied to both food crops and ornamental plantings.

Create or convert a bed.

You can make a lasagna garden at any time, but fall is the optimal time to start, as most gardeners have more of the materials needed via fall clean-up, and the bed(s) can sit over the winter and decompose. For an existing garden or ornamentals, adding annual layers of mulch (such as disease-free leaves) or compost will break down and feed the soil--this, in turn, provides a healthy growing medium for the plants.

Pick an area and lay out the design.

To prevent soil compaction, the width of the bed(s) should allow you to reach across the bed without stepping into the planting area. For multiple beds, create pathways between them and cover with wood chips, gravel, or stepping stones to alleviate weeds. If your chosen area is bare or contains young, seed-free weeds, you can start layering. If your area is inhabited by root/rhizome spreading grass such as Bermuda or Johnson grass, your best action is to dig it out first – don't till with a rototiller as this only spreads the rhizomes, which will re-grow.

Start Layering

Now you can start layering with several layers of cardboard and/or thick newspaper (not shredded), being sure to overlap the edges. Over this, add a layer of leaves (brown material), as this will help break down the cardboard/newspaper quickly. Browns include leaves, pine needles, peat, and shredded newspaper. Then add a layer of greens or compost (vegetable scraps, disease and seed-free garden clippings or weeds, grass clippings (**not** Bermuda), coffee grounds or purchased compost). The brown layer should be twice the depth of the green layer, but doesn't need to be exact. Over this, you can add a layer of chicken fertilizer or composted manure.

If creating the bed in the spring or summer, it is advisable to add a soil-like layer of peat or topsoil (which allows for earlier planting). You can create multiple layers of this composition to your desired height. Finish off the bed with the topsoil. Sprinkle each layer with water as you build the bed. Top the bed with a thick layer of mulch, straw, dead plant material, or wood chips. If using wood chips, wait until next year to plant, as these can be acidic and harm young plants.

Let your "lasagna" decompose.

Your layered garden will shrink in height as it decomposes. Just add more brown, green, and compost layers annually. You should see an abundance of earthworms develop in your beds, which enhances soil health. Remove any weeds that develop on a regular basis and incorporate them into the green layer (unless they have seed heads). You can also plant cover crops in the winter (such as clovers, beans, peas, or alfalfa), then chop or mow them off before seeds develop and allow them to decompose on the bed(s). These cover crops help break up the soil with deep roots. It is best not to leave the soil bare or unprotected over the winter. If not planting a cover crop, apply a thick layer of mulch.

By creating the "lasagna" garden in the fall, you can let it sit and "cook" until spring. Then it is ready to plant. Using a garden fork loosens the soil without inverting the natural soil layers. A hand trowel can be used to make small holes for transplants. Just don't till your lasagna beds.

It takes some time to develop these healthy beds, but your plants will love it, and you should see food and flower production increase.

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