

Two steps toward “sustainability” – remove your lawn and grow some of your own food!

Lawns are the number one irrigated crop in the U.S., covering over 40 million acres. They take enormous amounts of water, fertilizer, pesticide and gasoline to maintain, and do nothing to feed us or support a healthy ecosystem. Lawns – especially in the arid West – are not sustainable, so transforming your lawn reduces this “negative”, whereas planting a food garden is a “positive”. Growing at least some of our own food make us more self sufficient, reduces the “carbon footprint” of our diet, and can save money. Congratulations for deciding to transform your lawn!

There are several methods to do this. Which one you choose will depend on how large your lawn is, the time of year, how soon you want to plant, how much manual labor you can do, and how much money you want to spend.

(Please note that if you have a persistent perennial grass like Bermuda grass, you will need to remove the entire root mass completely. This can be done by patiently and carefully digging out every inch of root with a digging fork, or by excavating a couple of feet of soil and roots. Do not try to compost Bermuda grass; it probably will re grow.)

Sheet mulching

Since the goal is to grow food, which requires fertile soil, we recommend the method that makes the lawn break down in place, which improves the soil. This is called *sheet mulching*.

Sheet mulching is best done in the fall after a good rain; the soil should be ready to plant into by the following May. This method requires the least labor but takes time.



First, stake out the area to be converted, cut the grass as short as possible and make sure the soil is moist. If possible, loosen the soil by inserting a digging fork and rocking back and forth every few feet. If a source of lime such as oyster shell or other minerals are recommended, spread that layer now. Spread a layer of good quality compost or high nitrogen material such as manure over the area. Sprinkle with water if needed.

Next, lay down your light barrier, with at least 6” overlap between pieces so the sod doesn’t try to creep through. Large pieces of cardboard work well as it doesn’t blow away as easily and is readily available but several layers of newspaper (black print only) can serve too. Water the cardboard or newspaper, cover with a layer of compost, then mulch – such as straw, tree trimming chips, or fall leaves at least 6 inches thick. If there is not sufficient rain to keep moist, water the area occasionally. Depending on the crop, you may still need to add organic fertilizer before planting.

Dig holes in the mulch to set well-established seedlings in the ground. If starting this process in spring and you want to plant soon, make sure all layers are moist and use manure or sprinkle some organic nitrogen fertilizer on the grass and over the paper layer.

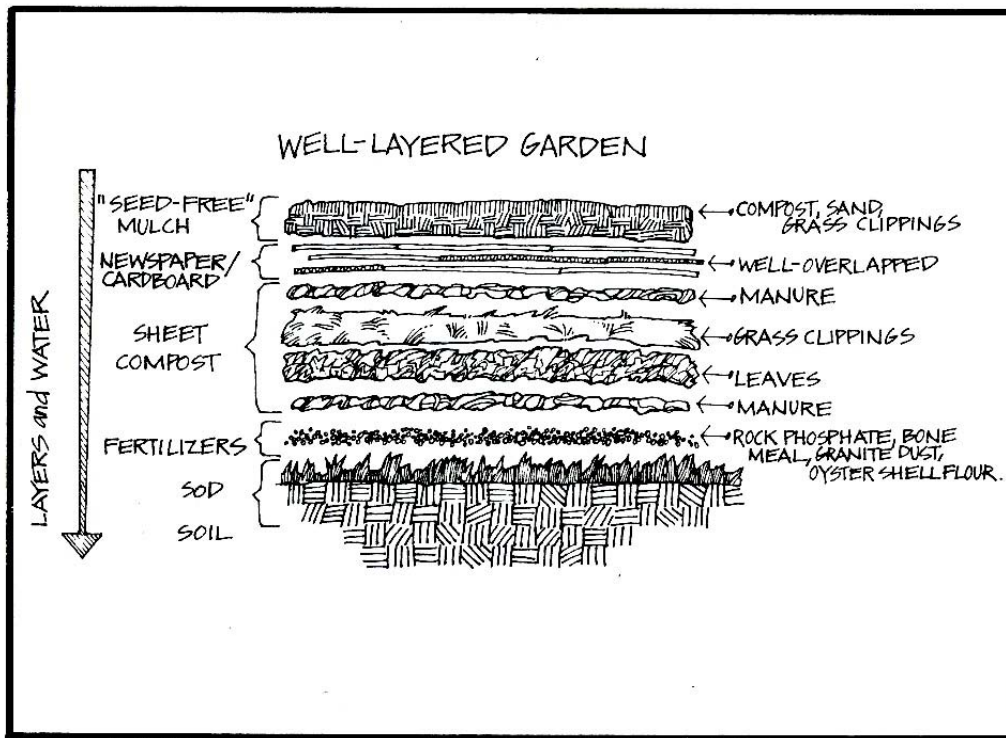
A variation on this method, sometimes referred to as *lasagna mulching*, uses more layers of organic materials, such as green weeds, kitchen vegetable waste, grass clippings, or manure, essentially building a low compost pile on the ground (Figure 1). This has the benefit of creating very rich topsoil once all materials break down.

Sheet mulching will keep the soil cool in late spring, so heat-loving crops may need to be planted a bit later.

can be sliced off using a spade. The remaining soil will need to be loosened and amended with compost and any needed minerals before planting.

The sod which has been removed can be stacked and covered with a sheet of black plastic; in 6 months or so the grass and roots will break down leaving you with valuable soil or potting mix. Sod is not allowed in the yard waste containers in Sonoma County.

Figure 1: Lasagna mulching



Drawing By: Robert Kourik

Sod cutting

The fastest way to remove a lawn is to physically remove the sod by cutting it into strips with a sod cutter, (which is available at tool rental shops), roll the strips up and remove. For small areas of lawn, the sod