

Organic matter is the most important part of the soil because it is “food” for the many organisms that keep the soil in good physical and chemical condition . Since the good soil bacteria and fungi use up these materials, they need to be replenished.

COMPOSTING:

There are various ways to prepare organic matter so that it can be composted and then used as mulch. Simple or elaborate bins can be constructed or the material can be windrowed on the ground if you have room.

All of the techniques for composting involve combining composts four main ingredients: Browns, greens, water and air. Browns are dry, woody materials such as fallen leaves, dead grasses, branch trimmings, and sawdust that are high in carbon. Greens are moist materials, high in nitrogen, from food waste, new grass clippings and fresh weeds.

To make compost, chop the materials to help them break down more quickly. Mix the Browns and Greens in equal amounts and maintain air and water balance by keeping the compost as moist as a wrungout sponge. Air is important so make sure you turn your pile once a week. Turning more often will increase the bacterial activity and hasten plant breakdown. Cover with a tarp to retain heat and moisture.

Materials to compost: leaves and trimmed branches.....chopped woody prunings pine needles, most sawdust, grass clippings, plant trimmings weeds without seeds, fruit and vegetable trimmings, coffee grounds & filters, tea bags, herbivore manures. Do not compost: grains, beans or breads, meat, bones or fish, diseased plants, sawdust from plywood or treated wood, dog, cat or bird feces, dairy products or grease.

Grass cycling: The practice of leaving grass clippings on the lawn quickly and easily returns nutrients to the soil. Follow these steps to start:

Mow often: Mow often enough that no more than a third of the grass blade is cut.

The shorter the clipping the faster it decomposes.

Mow dry: Mowing when the grass is dry prevents clippings from clumping.

Leave the clippings on the lawn: You do not need special equipment for grass cycling.

Simply remove the bag from your mower as you mow, or better yet, use a push reel mower. This leads to cleaner air, less noise and more exercise.

Reduce or eliminate your lawn: The tradition of landscaping with great swaths of grass originated in climatic regions, much different from our own, where the rainfall is frequent and occurs year round. With our hot, dry summers watering the lawn can be a costly and wasteful exercise.

In addition, most lawns are nitrogen greedy and so can deplete this essential soil nutrient. Also, much of the nitrogen can run off and in so doing pollute both land and water. Grass-cycling can help return nitrogen to the soil but a better solution is to replace the lawn with a mulch or a drought-tolerant groundcover. You may want to keep enough lawn for your kids or grandkids or for the occasional game of badminton or croquet.

MULCHING:

An easy, low-maintenance way to build soil over time is to mulch with organic materials. Any material laid on top of soil is mulch. Gravel can be used but plant materials are better for most purposes as they break down and enrich the soil. Mulch offers many benefits including retaining soil moisture, moderating soil temperature and suppressing weeds.

The best plant materials to use for mulch are those you can obtain locally. Organic wood chips from a local tree service or your neighbors’ leaves and grass clippings are good sources. These are called green waste mulches. Cut the leaves and plant pieces down to small sizes by hand or with a mower or weed cutter.

In most circumstances a two- four- inch layer of mulch will do the job. For weed control, coarse mulch from four to six inches deep would be best. A two-inch layer of a finer mulch, made from compost or shredded leaves, will help retain moisture.

The many benefits from recycling these high nutrient materials from your garden back into your soil include the following:

Conserve water. Mulch protects the soil from sun and wind, resulting in less surface evaporation and reducing the need for watering. Local California native plant species survive with only natural rainfall once established. Saving water saves money and conserves a vital resource.

Insulate soil. Mulch keeps the soil cooler in summer which reduces irrigation needs and helps raise the soil temperature in winter. This temperature moderation encourages better rooting and allows plants to survive in areas where they might otherwise be killed by winter temperatures.

Reduce erosion. A layer of mulch slows the flow of water over the soil surface. Water then has more time to penetrate the soil rather than running off and carrying the soil with it.

Improve soil structure. A protective layer of mulch reduces soil compaction caused by foot traffic and watering practices. This allows water to penetrate more easily. Mulch also leads to increases in biological activity of worms, fungi, and other organisms which work the soil into an optimum consistency. The result is a loose mix with plenty of air spaces for young plant roots and bacterial and fungal activity.

Improve soil chemistry. Organic mulch material decays over time and releases nutrients for plants. Phosphorus, potassium, some nitrogen and other essential nutrients slowly become available.

Protect trees from damage. There is less chance of mechanical damage from mowers, edgers, and weed whips when lawn is removed from around the base of trees and shrubs and mulch is used.

Eliminate green waste disposal. Savings result when materials are kept in your own yard and used there. There are no costs for hauling or dumping. You save money on gas as well and you get your mulch and compost free! You also save fees at the landfill and it will last longer.

Eliminate herbicides and pesticides. Mulch will discourage many weedy species from growing and so reduce the need for herbicides. Mulch can also be used in areas where lawn is unwanted or unneeded. This will then reduce the need for herbicides, pesticides, and fertilizers which would not be needed to support lawn growth.

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