



Mulch Madness

By Dawn Pettinelli, UConn Home & Garden Education Center

Of the many tools gardeners have at their disposal, mulches are among the most indispensable. Often, they are also the most misused. Mulches offer both plants and gardeners a variety of benefits. Two big pluses on the side of gardeners are weed control and water conservation.

Weed seeds attempting to germinate in the soil of mulched beds either are unable to because of lack of light or their expansion after germinating is limited by the mulch covering. Those germinating on the top layer of mulch often dry out before the roots can reach the moister soil. It is true that weeds like ground ivy, quackgrass, and sheep sorrel, with their vining stems or stolons, can infiltrate a mulched area if growing next to it but, caught in time, they are easily pulled up.

A layer of mulch over garden beds reduces water lost to evaporation so beds need to be watered less frequently saving a gardener time and reducing water bills. More soil moisture means plant roots are less limited when seeking water, along with the plant nutrients dissolved in this soil water, so plants are healthier and more vigorous.

Mulch has other beneficial effects aside from weed control and moisture conservation. It insulates the soil from summer and winter temperature extremes, allows for increased penetration of rainfall, decreases erosion, reduces disease incidence, keeps weed whackers and mowers away from trees, and looks (in most cases) attractive.

Generally, I like to encourage the use of organic mulches in most situations. These break down over time and as they decompose, organic matter is added to the soil. Soils with adequate amounts of organic matter are better able to hold more water and nutrients, and typically exhibit enhanced soil structure.

Bark and wood mulches are widely available both in bags and in bulk. Hemlock, cedar and pine bark mulches are long lasting and pleasantly scented due to the volatile oils naturally present in the bark. Wood mulches vary in their composition ranging from ground up wood waste to hardwood tree trimmings. Often, they are dyed for a consistent color. Generally, the wood mulches do not last as long

as the bark mulches. Wood mulches may also be more readily colonized by undesirable fungal species such as artillery fungus and slime molds if applied too heavily.

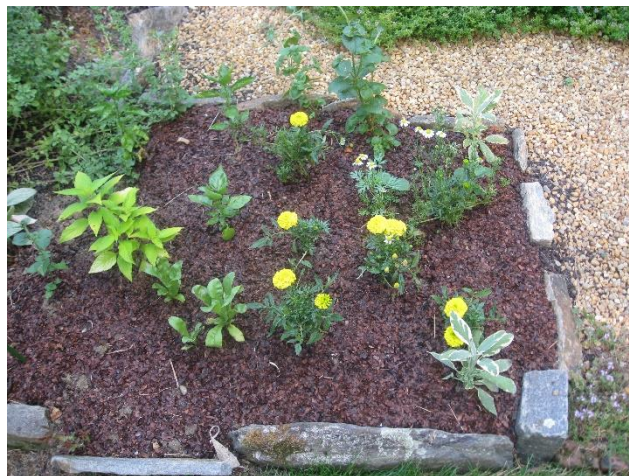
When mulching trees and shrubs, a 2 to 3-inch layer of mulch can be applied. This will be thick enough to keep down weeds and preserve soil moisture but still allow natural rainfall or irrigation water to seep into the soil. The soil also exchanges gases with the atmosphere and this process is essential for healthy roots. Heavier mulch layers inhibit this exchange.

I am always aghast at the unhealthy ‘volcano’ mulches around trees. Water and air will have a difficult, if not impossible, time reaching the soil and the mulch piled around the tree trunk creates a great environment for decay organisms as well as bark nibbling voles. Mulches should not be touching trunks, branches or crowns of plants.



Mulch volcanoes are detrimental to trunks as well as tree roots.

Flower beds and groundcovers usually require only an inch or so of mulch as the gardener often wants to encourage certain plants to spread. Because these plants are smaller in stature than trees and shrubs, often a smaller sized mulch looks more attractive. Finer shredded bark mulches, mini pine bark nugget chips, cocoa hull mulches (avoid if pets might consume it) or shredded leaves often set off these plants nicely. Keep extra on hand as needed to add after plant additions, divisions and design modifications.



Cocoa hull mulches look attractive with smaller plants.

Permanent mulches make sense in vegetable or herb garden pathways but not on the main beds. A heavy layer of pea stone follows a foot path through my herb garden while the paths in the raised vegetable garden are filled with wood shavings underlain with cardboard or newspaper.

My favorite mulches for the vegetable beds are Mainely Mulch, which is a mixture of chopped straw and hay, and untreated grass clippings. Both have one drawback. For the Mainely Mulch, it's the cost – about \$17 for 2.2 cubic feet. For untreated grass clippings, it's the weed seeds. I do stockpile shredded leaves in the fall for use in the vegetable garden and have also used shredded office paper around my onion plants.

While mulches are a great gardener's tool, they are not appreciated by certain pest-patrolling, ground-dwelling insects, so they would appreciate if you leave some spots of sandier soil bare. Also, keep your mulches on the thin side (1 inch or so) if you want self-seeding vegetable companion plants, like dill, calendulas and bachelor buttons, to reseed themselves.

For questions about mulches or on any home or garden topic, contact the UConn Home & Garden Education Center, toll-free in CT, at (877) 486-6271, visit us at www.ladybug.uconn.edu or call your local Cooperative Extension Center