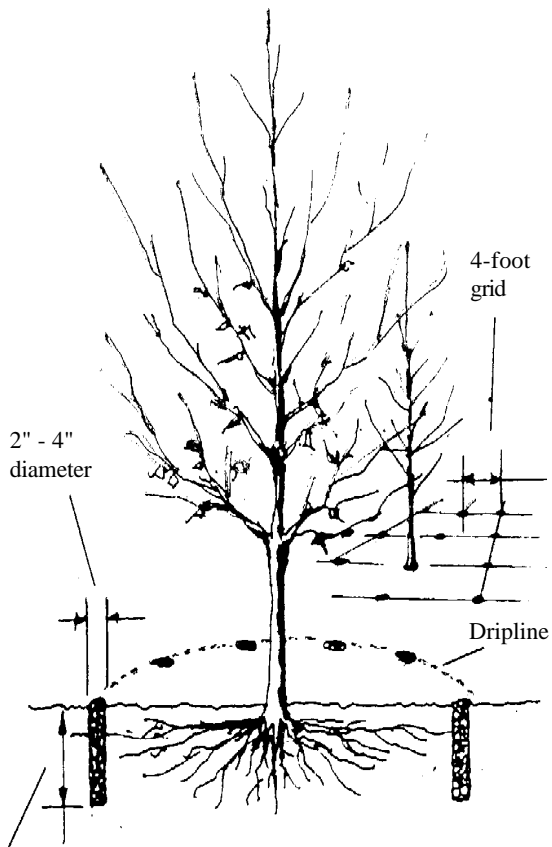


First, use a soil auger or post hole digger to make two- to four-inch diameter holes in the soil around the mature tree. The holes can be drilled around the trees' dripline, or they can be made in a four-foot grid pattern around each tree. Stay back from the trunk to avoid damaging large roots. Make each hole eighteen to twenty-four inches deep. Fill each hole with mulch or an equal mixture of compost and sand.



18" - 24" deep holes filled with mulch

Research shows that allowing turf grass to grow over a trees' root zone will harm the trees' growth. First, grass competes with the tree for limited quantities of water, air and plant nutrients in the soil. Second, many types of grass release chemicals that are harmful to other plants, including trees. Finally, grass growing near trees invites damage from lawn mowers and trimmers, or from herbicides and pesticides intended for the lawn.


Placing a ring of mulch around trees removes the competition from grass and weeds, and improves the health of a tree. For example, a recent study of newly-planted trees showed that an eight-foot diameter circle of mulch can quadruple root development.

The easiest and most effective way to improve the soil environment for trees is through the use of mulch. It is not high-tech, or an overnight remedy, but it imitates nature, and all scientific literature has supported its effectiveness in improving root development and plant vigor.

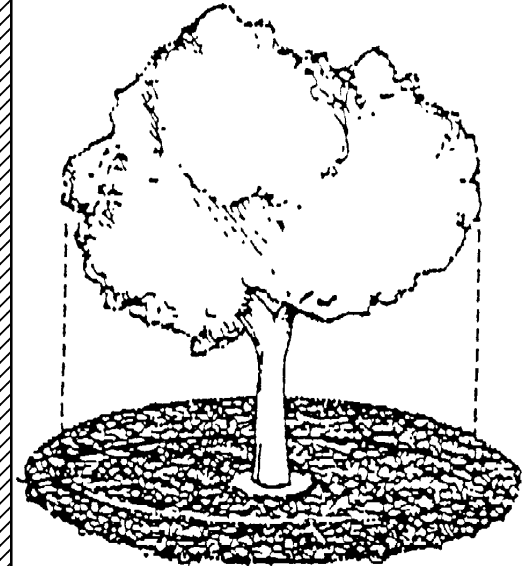
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Countywide Solid Waste Programs
(509) 886-0899



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TREE MULCHING

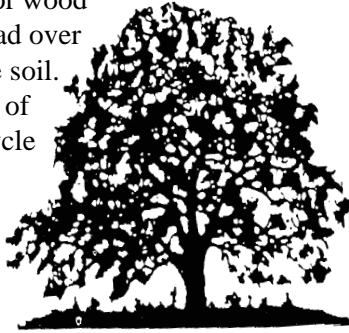


within
**DOUGLAS
COUNTY**

*How mulching can make your
trees grow bigger and
healthier*

Mulch is any material such as grass clippings, leaves, compost or wood chips that is spread over the surface of the soil.

Mulches are part of the natural life cycle of trees as represented by the annual dropping of leaves and needles. The



important role that mulch plays in protecting and feeding trees is evident by the fact that most tree roots grow in the top three feet of soil, and most fine, nutrient-absorbing roots are found in the top six inches.

In addition to removing competition from grass and weeds, mulching trees with organic materials offers the following benefits:



Improves the movement of water and air around the tree roots.



Conserves moisture through greater water-holding capacity and decreased evaporation.



Protects tree roots from temperature extremes.



Provides important plant nutrients and feeds beneficial soil organisms.



Improves soil structure, reducing soil compaction and erosion.



Simplifies maintenance and protects trees from damage by lawn mowers and trimmers.

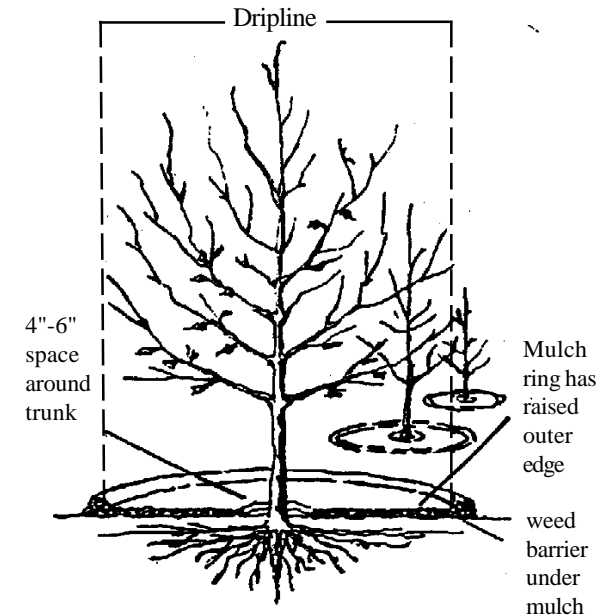
Composted mulch made from organic materials provides all these benefits, plus saves on your disposal costs.

Coarser grades of mulch, such as one-half to three-quarter inch, will also assure good air circulation, thus reducing the risk of mold and disease. Raw materials that degrade slowly, such as wood chips and prunings, serve well. Fine sawdust, freshly ground bark, grass clippings and leaves are less preferred, because they can decompose quickly and take nitrogen out of the soil. Gravel or rocks used as ground cover can cause heat damage during the summer months, and they don't hold water or improve the soil as do organic mulches.

1 - 2 - 3 Surface Mulching

Clear the weeds and grass from under the tree out to the dripline. The dripline extends out as far as the tips of the trees' branches. For newly-planted trees, make a circle at least four to eight feet in diameter. Sod can be removed in strips with a flat shovel and reused in some other section of your lawn, or it can be composted.

If additional protection from weed sprouting is desired, put down layers of cardboard over the soil surface before spreading the mulch. Plastic sheet barriers are not recommended, because they prevent water and air from reaching the tree roots.



Starting four to six inches away from the tree trunk to prevent crown rot or insect damage, spread a tree to six inch layer of mulch under the tree. Raise the depth of the mulch around the outer edge to prevent run-off. Due to decomposition, the mulch should be replenished, not replaced, every one to two years.

Vertical Mulching

Vertical mulching is a specialized form of mulching for mature trees, which channels water, oxygen and fertilizer through sod or compacted soil to the roots of a stressed tree. Many experts believe vertical mulching helps to reverse compaction caused by lawn equipment and vehicles. It is also an effective alternative where conventional mulching is not practical.