



## Compost & Mulch

Two of the most important Xeriscape principles are to enrich the soil with organic material and to cover the soil with mulch.

### What is Compost?

Compost is decomposed organic material. It is the end product of the break down over time of materials like leaves, stems, fruits, vegetables, weeds and even wood. The final product is homogenous, clean material that looks like coarse, crumbly soil. The decomposition process can be fast or slow. Fast decomposition occurs when you add equal parts of brown material (as a carbon sources) and green materials (as a nitrogen sources), and moisture and air. If you piled and mixed dry oak leaves from the lawn with an equal part of fresh grass clippings and it rained every week (or you wet the pile), the pile would decompose so fast that you could feel the heat (160 to 180degrees F.). You would have compost in six or seven weeks.

### Using Compost in Raised Beds and On Grass

The best raised beds are made up of 1/3 compost. Compost spread 2 to 4 inches deep and tilled into the soil in increases drainage and water-holding capability of the soil for a lawn or garden. Spread it ½ to 1 inch deep before or after lawn aeration and you can increase its health remarkably. St. Augustine grass on a 6-inch bed of soil that is ½ organic material is relatively water efficient. Zoysia or Bermuda grass on such a bed will be very efficient.

### Can Compost and Mulch Be Interchanged?

Compost also makes good mulch. Mulch is layer of material on top of the soil that insulates the soil from the air and sun. The soil stays cooler, water does not evaporate as quickly and weeds do not grow as readily. Cool soil means that roots function better and lower evaporation rate means that less water is needed.

Compost works as mulch, but since it so valuable as soil enrichment, we generally save it for that use and utilize other materials for mulch. Mulch applied to a soil and replenished each year gradually decompose just lie the compost pile. It replicates nature where the bottom of the organic layer in woods or prairie is compost and the top is newly laid raw material.

Since compost can be used as mulch. What about using mulch for enrichment? In some cases this works fine. Leaves or grass clippings incorporated into the soil improves soil texture and plant performance. With coarser materials like sawdust or shredded brush, however, they create a temporary nitrogen source while the materials down. The texture can improve but the soil becomes nitrogen deficient. To counter-act the problem, extra nitrogen fertilizer must be added. The best strategy is to use coarser materials such as mulch above ground and relatively fine materials like compost in the soil.

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*This GVST Gardening Guide is excerpted from an article written by **Dr. Calvin Finch**, horticulturist and Director of Conservation for San Antonio Water System. The article first appeared in Primetime Newspapers in November 2003. For more information on water-saving gardening, visit the Conservation section of the SAWS website at [www.saws.org](http://www.saws.org). Also see this Texas A&M University website: <http://aggie-horticulture.tamu.edu>.*