

Gardening Basics

All About Mulch

Using mulch in landscape beds, around trees, and in vegetable gardens helps retain moisture, deter weeds, and moderate soil temperature. Mulch can be added at any time of the year. The first decision is whether to use organic or inorganic mulch

Inorganic Mulch

Inorganic mulch, such as gravel, lava rocks, or recycled tumbled glass, offers the advantage of being relatively permanent, and it suppresses weeds. However, it does less to retain moisture than organic mulch, which is an advantage if the landscape is a xeriscape or filled with cacti and succulents. It also collects plant debris which is difficult to remove and catches weed seeds so requires maintenance.

In terms of using recycled tire rubber for mulch, Purdue University Extension Horticulture research found that “There are many questions remaining regarding the long-term safety of using recycled shredded or crumb rubber as mulch and playground surfaces. There’s little doubt that chemicals, including heavy metals, are released into the surrounding soil as the rubber decomposes. There are also issues with the rubber getting hot enough to burn tender plants.”

Which type of inorganic mulch you choose is primarily a matter of aesthetics.

Organic Mulch

Organic mulch comes from materials that were once alive, and it decomposes over time. The mulch decomposition improves soil texture and provides nutrients to the plants. However, when the decaying mulch is integrated into the native soil, the decomposition process extracts nitrogen that needs to be replaced. Organic mulch needs to be reapplied or topped off every year. The types of organic mulch frequently used in North Central Texas landscapes include:



- Bark from pine, cedar, or redwood trees is the most common and readily available from nurseries and big box stores.
- Partially decomposed compost provides an excellent mulch but be aware that it may contain weed seeds.
- Leaves are readily available either from your fall leaf raking or from neighbors who set out bags of leaves for trash collection. Leaves work best if shredded before adding them as mulch.
- Pine Needles are a good mulch for acid-loving plants. They are slow to decompose but may pack if added in too deep a layer.
- Chipper debris includes a mixture of shredded bark, wood chips, and leaves from tree-trimming operations. Some tree trimming services will provide chipper debris to homeowners for landscape mulch at little or no cost. Some city governments also offer mulch at a low cost.
- Grass clippings that are applied in thin layers that are allowed to dry between additions.
- Cotton burr mulch with a top layer of bark to keep in place

Factors in selecting organic mulch for most homeowners are cost, level of effort to apply/maintain, and appearance.

How much to add?

Three to four inches is recommended, but not touching plant stems and tree trunks to avoid pest and fungal problems. To find out how much raw material you need for your landscape consult the calculator included on this UC Marin Master Gardeners website: https://marinmg.ucanr.edu/BASICS/MULCH/Applying_Mulch/

Resources

“Applying Mulch: Where, When & How”, UC Marin Master Gardeners, University of California Agriculture and Natural Resources, (accessed 25 March 2026), https://marinmg.ucanr.edu/BASICS/MULCH/Applying_Mulch/

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Masabni, Joseph, “Easy Gardening: Mulching”, Texas A&M AgriLife Extension Service, (accessed 25 March 2026), <https://aggie-horticulture.tamu.edu/wp-content/uploads/sites/10/2013/09/EHT-073.pdf>

“Mulching with Wood/Bark Chips, Grass Clippings, and Rock”, CMG Garden Notes #245, Colorado Master Gardener™ Program, Colorado State University Extension, (accessed 25 March 2026) <https://cesantaclara.ucanr.edu/files/238922.pdf>

Taylor, Eric L. and C. Darwin Foster, “Pine Straw as a Ground Cover Mulch”, AgriLife Extension, Texas A&M System, (accessed 25 March 2026), http://oaktrust.library.tamu.edu/bitstream/handle/1969.1/87208/pdf_1877.pdf?sequence=1

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