Natural Mulches

Hay/Straw

Straw from wheat, timothy, oats, rye, or barley is widely available and comparatively inexpensive. It is used as a winter mulch around tree or shrub roots and as a summer mulch in vegetable gardens and strawberry plantings.

Used like straw, hay contains more weed seeds that can become a problem in gardens. Hay adds nitrogen to the soil while straw decreases nitrogen content.

Bark mulches

Bark mulches have excellent resistance to compaction and blowing in the wind, they are attractive, and are readily availability. It should be applied 2-3 inches thick and topped off every 2-3 years.

Wood chips

These make an attractive mulch and are often available from municipalities or utility companies involved in pruning or clearing trees. A 2-3 inch layer of wood chips provides good weed control. Small wood chips decompose more rapidly using nitrogen from the soil, but this can be replaced by using nitrogen fertilizer.

Sawdust

Sawdust is often recommended as a mulch for blueberries, rhododendrons, and other acid-loving evergreens. Fresh sawdust tends to crust over and can rob soil of nitrogen as it decomposes. Compensate by adding extra nitrogen. It should be applied no thicker than 1 1/2 inches.

Leaves

A 2-3 inch layer of leaves provides good weed control. It is best to coarsely shred the leaves using a shredder or a lawn mower.

Leaves are usually easy to get, attractive as a mulch, and they will improve the soil once they decompose. After the leaves decompose, dig them into the soil and add a new layer of mulch on top.

Grass Clippings

Grass clippings can be left right on the lawn where they will decompose rapidly, adding nutrients back into the soil. They can also be raked up and used as mulch.

A 2-inch layer of grass clippings provides weed control if clippings do not contain weed seeds. Use dry grass, not fresh clippings, to prevent the formation of a solid mat.

Be careful not to use clippings from lawns that have been treated with herbicides.

Pine needles

A 1 1/2-2 inch layer of pine needles makes an excellent mulch for acid-loving trees and shrubs. Pine needles normally are not available commercially in this area but can be raked up from around pine plantings. They decompose slowly, are resistant to compaction, and are easy to work with.

Pine Bark

A 2-3 inch layer of pine bark is good for weed control and makes an attractive mulch. It can be purchased in various particle sizes, from shredded to large-sized particles, called nuggets. Large pine bark nuggets float in water and may not stay in place during a heavy rain.

For more information on this and other gardening topics call
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Lake Friendly Gardening Series

Lake Friendly Gardening

That's Mulch Better!

As popular as they are in contemporary landscapes, mulches are not a new concept.

For as long as trees have grown in forests, leaves and needles have fallen to the ground, matted together, and formed a natural protective layer over the soil.

This series made possible with funding from the Lake Champlain Basin Program

Lake Champlain Basin Program

The Benefits

When applied correctly, mulch has the following beneficial effects on plants and soil.

Mulches . . .

- prevent loss of water from the soil by evaporation.
- reduce the growth of weeds, when the mulch material itself is weed-free and applied deeply enough to prevent weed germination or to smother existing weeds.
- keep soil cooler in the summer and warmer in the winter, thus maintaining a more even soil temperature.
- prevent soil splashing, which not only stops erosion but also keeps soil-borne diseases from splashing up onto the plants.
- prevent crusting of the soil surface, thus improving the absorption and movement of water into the soil and helps prevent soil compaction.
- natural mulches can improve the soil structure. As the mulch decays, the material becomes topsoil. Decaying mulch also adds nutrients to the soil.

The growth rate and health of plants increases when there is no competition for water and nutrients from the soil.

- Mulch entire beds of shrubs, trees, annuals, herbaceous perennials and ground covers.
- Wood chips, bark chunks, shredded bark and pine needles are appropriate mulches for shrub beds or around trees.
- Link several shrubs together into one bed covered with mulch rather than mulching and mowing around individual shrubs.

Mulch Basics

When is the Best Time to Apply Mulch?

First determine whether a situation calls for a summer or a winter mulch.

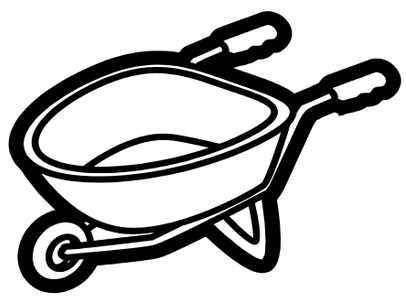
Winter mulches are used primarily as insulation for plants. They are laid down in late fall after the ground freezes to reduce heaving caused by freezing and thawing. Straw, shredded leaves, and pine needles are all effective winter mulches.

Summer or growing mulches are normally applied after the soil warms in the spring. The primary roles of summer mulches are to maintain a uniform soil temperature, reduce weed growth, and retain soil moisture.

How Much Mulch Do I Need?

Mulch is usually sold by the cubic yard, and that can leave gardeners scratching their head when trying to figure how much to buy. Here is an easy way to determine volume needed:

1. Find the area (square feet) of your garden by multiplying its length (in feet) by its width (in feet). Round off as necessary.
2. Next, multiply the area (found in step 1) by the depth of the mulch (in inches).



3. Then divide the number you get in step 2 by 324. This is the number of cubic yards of mulch you will need to cover your garden.

How Should the Mulch Be Applied?

Mulching is a very important practice for establishing new plantings, because it helps to conserve moisture in the root zone until the roots have grown out into the surrounding soil.

• Spread a layer of mulching material over the entire plant bed. Even more effective is to put down a 6-sheet layer of newspaper over existing soil and then cover with a 4-inch layer of mulch.

• Keep mulch 2-3 inches away from the stems of woody plants. This will prevent decay caused by wet mulch as well as rodent damage during the winter. Keep mulch 6-12 inches away from the walls of buildings.

• Don't mound mulch up against the trunks of trees and shrubs because it can damage the plant. Add 2-4 inches of mulch and then brush away mulch at the center of the circle so that it makes a slight depression in the center.

• Newly planted trees prefer a circle of mulch 3-4 feet in diameter. Maintain this for at least three years.

• For established trees in lawns, create a circle of mulch about 2 feet in diameter for each inch of trunk diameter. Increase the size of the mulched area as the tree grows. Try to apply the mulch at least 6-12 inches beyond the dripline of the tree. Because the root system can extend two to three times the crown spread of the tree, mulch as large an area as possible.

• Mulching too thinly encourages weed growth. Applying mulch too thickly and too close to the plant stems could cause plants to suffocate.

• Make periodic inspections to see that mulch stays in place. Some gardeners keep extra mulch on hand so that it can be added when and where it is needed.