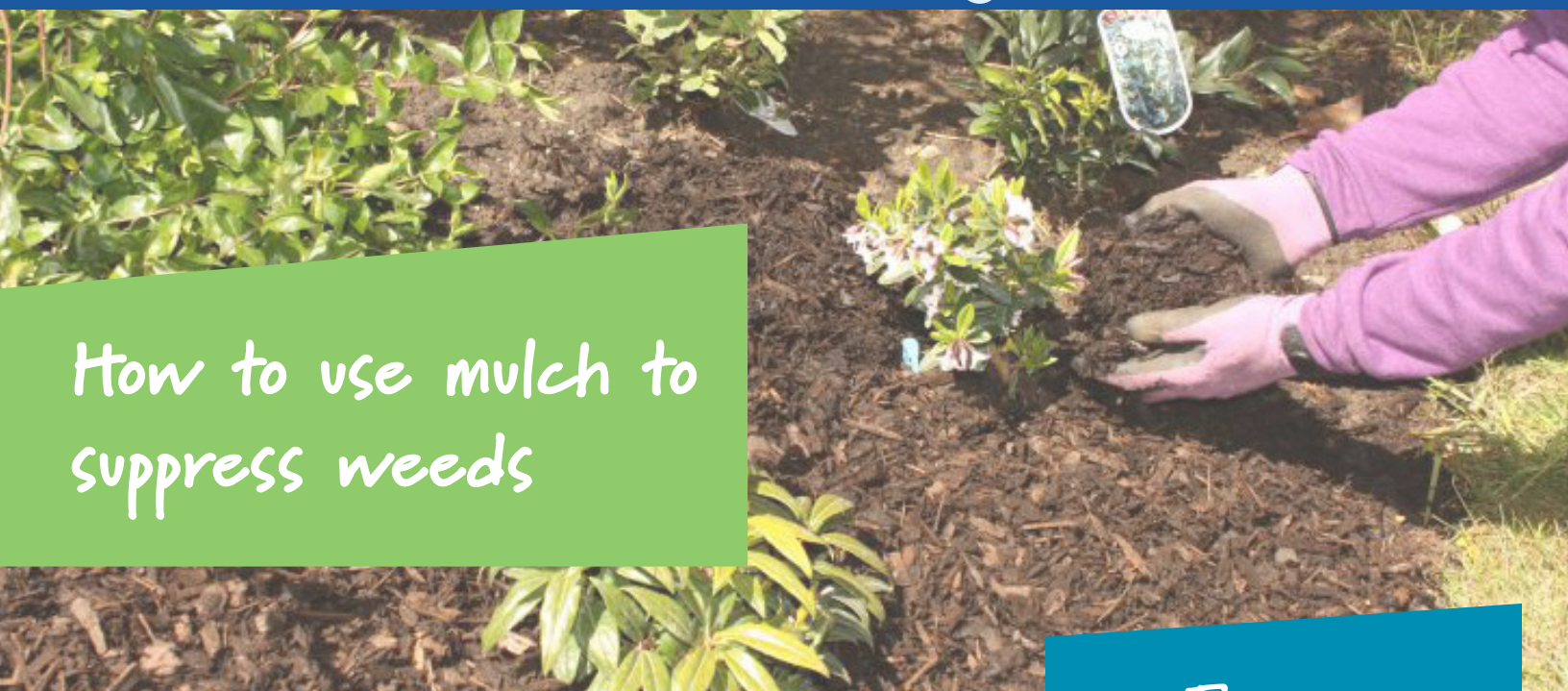




How to use mulch to suppress weeds

What is mulch?

Mulch is a material used to cover soil. It may be organic (wood chips, bark, leaves, etc.) or inorganic (stone, fabric, plastic.) This information will focus on the use of organic mulches used in landscaping and gardening.

Simple Steps

- 1 Remove weeds
- 2 Cover bare soil
 - Apply correct thickness
 - Keep mulch at least one inch away from plant stems
- 3 Re-apply when bare soil peeks through

How mulch works

Weeds can be suppressed by mulch that blocks light and that can physically interfere with seed germination.

One size does not fit all. Using the right kind of mulch for the landscape type, and applying it correctly, offers the best success and helps avoid common pitfalls of incorrect applications.

Weed suppression is most effective when mulch is applied after weeding. Covering perennial and grassy weeds will not suppress them; they will grow up through the mulch layer. Tiny seedlings may be smothered by mulch.

The many benefits of mulch!

Applied correctly, mulch can:

- Suppress weed growth
- Make weeds easier to pull
- Improve water penetration and retention
- Protect soil from compaction and erosion
- Act as a slow-release fertilizer
- Support beneficial insects, worms and fungi which aid root growth

Best types of mulch for suppressing weeds

Coarse texture is best, with particles ranging in size from about 2/3" to three inches in size. Shredded leaves, wood chips, bark nuggets, coir fiber (coconut fiber) nuggets, and straw are good examples.

Wood chip mulch (3-4" thick)



Christina Pfeiffer

Bark nugget mulch



Christina Pfeiffer

Shredded leaf mulch



Peggy Campbell

Straw mulch (1-2" thick)



Peggy Campbell

Coir fiber mulch, cubed



Christina Pfeiffer

How much mulch do you need?

1. Visit savingwater.org
2. Search "Mulch Calculator"
3. Enter thickness and area size
4. Select "Calculate" and **Voila!**

The right texture at the right depth

Coarse texture mulch maintained at three to four inches deep is optimal for most landscape beds. When it breaks down to less than two inches, germination of weed seeds is likely to increase. At this stage, add enough new coarse textured material on top to bring it back to a 4-inch depth.

Coarse woody mulch can be applied more deeply to suppress weeds on barren ground. This is an effective way to prepare new planting beds. Wood chip mulch can be placed 8-12-inches deep over bare ground or where the existing grass/weeds have been trimmed down to soil grade.

Mulch piles can be stockpiled onto future planting areas (but not within the drip-line of existing trees). At planting time, the excess mulch can be redistributed so that 4 inches of mulch remains.



Christina Pfeiffer

Woody coarse textured mulch (left) has good weed suppressive qualities. Fine textured compost (right) does not, and often supports seedling growth.



Materials to avoid

Avoid materials that encourage weed growth:

- Screened compost
- “Fertile-Mulch” products
- Composted manures

Highly composted, finely textured organic materials are not only less effective at weed suppression, they often provide a nutrient-rich seed bed for annual weeds and may boost growth of perennial weed species. Examples are screened compost “fertile-mulch” products made with highly composted manures, sawdust, and ground up bark or wood.

Compost and compost blends that have a fine soil-like texture are best for replenishing soil organic matter and nutrients. They can be used in a thin layer to help build soil, cover that thin layer with coarse textured mulch for weed suppression.

Avoid materials that shed water and prevent nutrients from reaching roots:

- Plastic
- Landscape fabric
- Fine or medium bark

How about cardboard or other weed barriers?

Plastic sheeting and fabric weed barriers aren’t always the quick fix they may seem to be. Some perennial weeds will poke through or go around the edges. And weed barriers won’t stop seeds from growing on top of them. In addition, plastic and fabric weed barriers can be a challenge to remove in the future when there are garden changes or soil improvement needs. When used long term, they prevent decomposing organic matter and beneficial soil organisms from reaching the soil beneath. New weeds will eventually find their way in, via seed or from underground.

Biodegradable weed barriers such as cardboard, newspaper, and paper-based commercial products placed beneath coarse organic mulch can be a good alternative on level ground. These barriers must be kept moist and fully covered in mulch to be effective.

Overall, fabric and biodegradable weed barriers are best used as temporary measures to subdue heavy weed growth, or as a no-till method to prepare a new garden over open ground. All types can impede air and moisture movement.

Be thoughtful about how and where sheet mulch is used. In many cases, just using the right texture and depth of mulch will be sufficient to suppress weed growth.

Use mulch to convert lawn into planting beds by sheet mulching

“Sheet mulching” is a way to convert lawn into planting beds. Instead of using herbicides or digging up sod, the process applies layers of organic material. As the material decomposes, it smothers the lawn below and turns it into healthy soil.

1. First, mow the lawn short.
2. Next, cover the area with overlapping layers of several sheets of newspaper.
3. Then, apply 2 -3 inches of compost (optional).
4. Finally, cover the area with 3-4 inches of wood chips.

Wait three to four months, or longer, before planting. For each planting hole, pull aside the wood chips before digging each plant in. Then, rake wood chips back around each plant, leaving mulch at least one inch away from stems.

Spread the mulch over the entire area, covering up all bare soil. Worms and microbes in the soil do the decomposing and rototilling for you!

Weeds are much easier to pull from the well conditioned soil beneath good mulch.

Where some soil exposure matters

Never bury the trunks of trees and shrubs in mulch. It is harmful to their health and invites basal rot. Mulch rings around trees should taper to soil level a few inches away from trunks and be thickest toward the outside perimeter.

Keep some pockets of exposed soil in appropriate locations as habitat opportunities for ground-nesting native bees and other beneficial insects.

When to mulch

After weeding: Cover exposed soil with mulch immediately.

Fall: Mulch to protect bare soil from rain impact and to suppress winter weeds.

Early Spring: Replenish mulch that has broken down to less than 2 or 3 inches (by mid-April) to suppress spring seed growth.



Where to Get Mulch

Some local companies offer you-haul and home delivery. Be sure to know what type of mulch you are ordering, avoid fine or medium bark as well as aged mulch.

Arborist wood chips are often available for free from tree services. Inquire from your local arborist or visit getchipdrop.com.

Straw bales are available at local farm supply stores.

Grass clippings from your yard can be used as long as they are free of weed-and-feed or other herbicides.

Do you live in the Lake Whatcom Watershed?

The City of Bellingham has specific guidelines for mulch use in this watershed since Lake Whatcom is the drinking water source for more than 100,000 people. Please use hog fuel mulch if you live within this watershed. This recommendation is based on rigorous testing of phosphorus and fecal coliform bacteria content in mulch products, as well as the advice of landscaping professionals. Find more recommendations by visiting cob.org/weeds.

cob.org/weeds

