

## Garden Tips from the Cheyenne Botanic Gardens version 01/07/08

Support the Gardens with your membership and donations 710 S. Lions Park Dr.

Cheyenne WY 82001

www.botanic.org

## **Mulches for Your Garden**

Sue Whetten, Horticulturist

Mulches are protective layers of material spread across exposed soil to:

- 1. Keep the soil moist
- 2. Smother weeds
- 3. Reduce erosion

- **4.** Keep the soil temperature even around plant roots
- 5. Make your garden more attractive.



- Before mulching, kill any weeds growing in the soil. You can mulch as soon as weeds and seeds are removed.
- ❖ Wait to mulch vegetable and flower gardens until the soil warms up in the spring.
- Using weed barrier under chips, bark or rocks can deter weed growth. Eventually, debris will accumulate above the weed barrier. This will provide a growing medium for new weed seeds.
- ❖ Black plastic is not the same as weed barrier. The heat from long term use of plastic will kill beneficial microorganisms that live in the soil. Black or clear plastic is best used in the spring to speed up the growth of vegetables.
- ❖ A three foot circle of mulch around the base of trees protects them from lawn mowers and string trimmers and gives your yard a finished look. Use edging to keep the mulch out of the lawn.

- Keep mulch 6 inches away from tree trunks. Decomposing mulch can expose trees to damaging insects.
- ❖ Compost is decomposed plant material that should be thoroughly mixed into the top six to 12 inches of soil. While it can be spread on bare soil in the winter as a mulch, it needs to be thoroughly mixed into the soil before any plants are added. Winter wind may blow a lot of the expensive compost away.
- ❖ Shredded leaves tend to blow away rather than stay on the soil. It is better to add them to a compost pile and use them to amend the soil in the spring.
- ❖ For small projects, bags of mulch are available in garden centers. These can be carried or rolled around in a wheelbarrow. For large projects, loads of mulch can be either picked up or delivered. A pickup truck holds about two cubic yards of mulch.
- ❖ To calculate the quantity of mulch for a project :
  - Multiply the **length** in feet times the **width** in feet to get the **area** in square feet
    - For the area of a circle, multiply 3.14 (pi) times  $\frac{1}{2}$  the length across the center (radius) times  $\frac{1}{2}$  the length across the center (radius)  $[\pi r^2]$
  - ➤ Calculate the **cubic feet** of mulch by multiplying the **area** times the thickness of the mulch (0.17feet = 2 inches, 0.25 feet = 3 inches)
  - > Divide by 27 to get **cubic yards**.
  - For example, an area 10' by 20' becomes 10'x 20'=200 square feet.

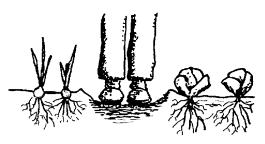
10'x 20'=200 square feet. 200 x 0.25= 50 cubic feet

50 / 27 = about 2 cubic yards

• Choose the best material for the area that needs to be mulched.

Material	Depth	Uses	Comments
Bark, wood chips or shredded bark	to Apply 3 inches	Spread around trees, shrubs, and in any garden path. Excellent winter protection for plants.	Keep mulch 6" from the trunks. It will need to be replaced as it decomposes or blows away.
Plastic chips	3 inches	Spread under trees and shrubs with weed barrier laid down first.	Less likely to blow away, but will stay on or in the soil forever. Difficult to remove.
Rocks and pebbles	2 inches	Spread under trees and shrubs with weed barrier laid down first.	Excellent weed control until debris builds up above weed barrier. Rocks heat up in the sun making the garden hot. Back breaking to remove.
Grass clippings	no more than 2" at a time	Spread between vegetable rows for weed control and among perennial and annual flowers.	Do not use clipping from herbicide sprayed lawns. Clippings break down quickly and need to be replaced. Do not cover new seedlings.
Newspaper or cardboard	1/4 inch	Place between vegetable rows for weed control. Holds moisture in soil.	Hold edges down with soil, rocks or grass clippings. Replace as it decomposes.
Pine needles	3 inches	Spread under trees, shrubs, flowers and in paths between vegetables. It provides excellent winter protection for plants.	Excellent winter protection for plants. It needs to be replaced when it decomposes or blows away. Needles tend to bind up rototillers.
Straw	3 inches	Spread under trees, shrubs, and in paths between vegetables. Best when it is not compacted.	It needs to be replaced as it decomposes or blows away. It provides excellent winter protection for plants. Adds nitrogen to the soil.
Old carpets	single layer	Lay between vegetable rows for weed control. Pin down the edges.	Effective, but not attractive. It needs to be removed when it decomposes.
Black or clear plastic	Single layer	Lay around vegetables to heat up spring soil .Pin down the edges	Tomatoes especially enjoy the early warmth. It will break down in sunlight.
Weed barrier	Single layer	Used with rock or wood mulch to discourage weeds.	It keeps rocks from sinking into the soil. Debris above the barrier will eventually let weeds grow.
Biodegradable weed barrier	Single layer	Best used under wood mulches or grass clippings.	It will eventually break down but it allows the decomposing mulch to add nutrients to the soil.
Lava rock	2 inches	Spread under trees and shrubs.	Same as rock, but lighter when moving around.
Pre-made tree rings	Single layer	Encircle the trunks of trees.	It protects trees from the lawnmower and from string trimmer damage.
Sawdust from non-treated wood	2 inches	It smothers weeds, especially in flower and vegetable beds.	Add nitrogen to the soil before using sawdust. It needs to be replaced as it decomposes.

❖ Good mulching practices use up to one-third LESS water. So your watering practices might need to be changed as over-watering promotes the spread of disease, stress the plants, and may cause a slug infestation.



Page 2