

Watering

Among the most common mistakes made by gardeners is incorrect watering. Many plant problems are directly or indirectly a result of poor watering practices. In Western Washington, the usual problem is under-watering. Many people assume that, since we have a rainy climate, watering is not needed and that a light sprinkling will do in dry times. Both of these attitudes are dead wrong.

Vegetable gardens, lawns and most flower beds need about an inch of water a week during the growing season. This 4 inches a month must be applied through irrigation, if rainfall is deficient. Usually, established trees, shrubs and groundcovers can get by with far less.

Most plant growth, flowering and fruit production takes place from May to September. Although we get lots of rain during the winter, these months are usually quite dry in our region. The total average rainfall over those 5 months in the Seattle area is only 5½ inches, far short of the 20 plus inches required. Our averages are about: May—1.64 inches; June—1.55 inches; July-- .75 inch; August—1.01 inches; and September-- .58 inch.

During the dry periods common to Puget Sound area summers, plants need regular irrigation and it must be done thoroughly – a light sprinkling does not help. Plants absorb water through their roots; enough water must be applied to soak the soil to several inches deep, where the roots are.

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The only way to figure out when and how much to water is by observing the soil. Stick your hand into the soil (or use a shovel, if the soil is too hard) to see or to feel where the moisture level is. Based on this test, you can determine whether to water and how much to apply.

Never allow the soil to be wet on the surface and dry an inch or two down. Check the soil just after watering and several hours after watering (or the next day) to see how fast the water seeps to what depth in the soil. Take this seepage into account for future watering.

Seeds and seedlings need moisture closer to the surface than mature plants, so they need more frequent watering. Once plants are established, less frequent, deep watering with dry periods between helps encourage deep roots. Deeply rooted plants are more drought-tolerant and require less care than shallow-rooted ones.

In the vegetable garden some crops are naturally more deep-rooted than others. Leafy crops like lettuce, spinach and mustards are shallow rooted. Soil should never dry out below a depth of 2-3 inches. The same is true for onions and their relatives: leeks, garlic and shallots. Root crops, such as beets, carrots, potatoes, radishes, should be kept evenly moist (no wet-dry cycles) or they develop tough zones.

Some watering tips:

1. Don't wait for the plant to wilt: After a few wilts, the plant will be stunted and production will be poor.
2. To save water from evaporation, irrigate during the cool parts of the day. Try not to water during windy times.
3. To avoid diseases, water in the morning or early enough in the evening, so the foliage can dry before nightfall. Always water roses, tomatoes and potatoes at the base, never with overhead sprinklers.
4. Avoid over-watering which leaches nutrients from the root zone.
5. Remove weeds that steal needed water from your flowers and vegetables.
6. Soaker hoses and drip tape are probably the best ways to water. If you hand water, do it slowly and patiently, so that you apply enough water to wet the entire root zone.

MULCH

Gardeners often lay material on the soil to hold in water and to discourage weeds. Organic materials such as straw, leaves, old grass clippings, compost, sawdust (cedar is fine) and wood chips are commonly used. Since organic mulch keeps the sun from warming the soil, it is best not to put it on vegetable beds until late June in the Puget Sound area. In the rest of the garden you can apply or renew mulches whenever it is convenient.

A real benefit of organic mulches is that most can be spaded under in the fall or early the next spring, which improves your flower or vegetable garden soil.

Tips for using mulch:

- Don't use grass clippings from lawns recently treated with an herbicide or "weed and feed" fertilizer.

- Wood chips, bark chunks, wood shaving and sawdust are best used on paths and around woody plants. These take several years to decompose and should not be mixed into flower and vegetable beds.
- Mixing in large amounts of sawdust or straw may "tie up" the nitrogen in your soil, so your plants get yellow or stunted. Add nitrogen fertilizer when you dig in the mulch to prevent this.
- Loose organic mulch may provide nice, moist hiding places for slugs, so be prepared to bait for them.
- Some organic mulches, especially hay, may contain lots of weed seeds and make more work than they save. Check hay or straw for seed heads before buying or using.
- We've probably all picked dirty strawberries and gritty spinach after a heavy rain. Clean fruits and vegetables are nice fringe benefits of mulching.

Landscape fabric and black plastic are used sometimes as mulch. Landscape fabric under bark or gravel works well to hold down weeds, but so does cardboard or several layers of newspaper. For heat-loving crops in the vegetable garden, black plastic (don't use clear) gives total weed control and allows the soil to warm more quickly in the spring. Poke holes in the plastic, so you can get water through it when you irrigate. The top of a bed under plastic mulch should be slightly concave to direct water to the plants. Plastic over a convex-topped raised bed will shed water wastefully into the paths.