



Waterwise Gardening Techniques & Tips

Article by Londa Jacques

There is little chance that meteorologists can solve the mysteries of weather until they gain an understanding of the mutual attraction of rain and weekends.

~Arnot Sheppard

There are many adages written about the weather, but this one is most certainly true. You probably won't need to water your garden on the weekend around here—at least until July... Until then (especially this season, with our record 5+ inches of rainfall in June) gardens, lawns and weeds are lush and green, and likely getting enough water from Mother Nature. This is just a ruse to lull beginner gardeners into thinking they might just get the hang of this gardening thing after all! By mid-July it all changes. During the months of July to until September (October, if we're lucky), we experience a dry Mediterranean climate. Knowing how to adjust to this sudden drop in rainfall, is what separates the experienced organic gardener from the beginner.

Once the warm weather hits, beginners go in search of buggy culprits to explain the sudden turn of events. Formerly lush foliage may begin to look stunted; aphids and other insects are present in large numbers. This is when garden store clerks and Master Gardener clinics begin to be inundated with "what's eating my plant" questions. Some poor aphid or innocent ladybug larvae gets the blame, when the real culprit is actually the gardener and poor watering technique.

Good Technique Beats the Best Equipment

One need not have state-of-the-art equipment, such as complex drip irrigation systems, automatic sprinklers and timers to grow an excellent garden. In fact, such bells and whistles don't guarantee a healthy garden, especially when used improperly. True, when used correctly, these tools can be great time savers. However, gardeners in P-patch situations may not be able to install them, and many of us simply can't afford them or the extra time it takes to maintain them. Age-old hand watering methods work very nicely, as long as the gardener understands how to water effectively. Good hand watering technique can save significantly on the water bill, especially if you've captured rain water in water barrels to stretch your water budget.

Get Down and Dirty

Assess whether or not your garden actually needs water. Don't judge whether or not your garden needs water just by looking at the soil. Being a good gardener requires actual plant-to-human contact and interaction! You can check your garden to see if it has enough water by taking a handful of soil from around the base of the plant and squeezing it in your hand. Is the soil moist on top, but dry down below? Or is it just the opposite—dry on top from a windy day or two, but adequately moist down below? If the soil in your hands forms a ball, your soil is moist

and adequate. If the soil runs out of your hand, you need to water your garden.

Lay Off on the Light Sprinkling

When plants are young seedlings, keeping the top surface moist is a good thing. Seeds are still sprouting and roots are shallow. Once the plants grow beyond the seedling stage and get their first true leaves, their watering needs quickly change. A light sprinkling can often do more harm than no water at all: It stimulates the roots to come to the surface, where they are killed by exposure to the sun. Most of water stays on the leaves, seldom reaches the soil, and evaporates before it can do any good. A light sprinkling can, however, be used to initially to break the surface tension of dry soil. Once the surface has been moistened, the next round of water will soak in, rather than run off immediately. Try this technique on your hanging baskets, where water often runs right through and out the holes of a dry basket, without wetting the roots.

Does this Scenario Sound Familiar?

Rushed for time, you sprinkle lightly in the morning, thinking you'll water more heavily as soon as you get home from work. Then someone invites you out and you forget all about the heavy watering until it's after dark. Life happens... but that doesn't mean your garden has to suffer for it.

An Ounce of Prevention

A good layer of mulch around your plants will slow the evaporation process, so the surface soil is less likely to lose moisture, especially from drying winds. It might even hold in enough moisture so that you can water properly the next morning before you go to work. Mulch can be a variety of things, such as a top-dressing of inert compost, straw, rabbit manure, steer manure, deciduous leaf mulch, and grass clippings from untreated lawns. Mulch should be applied thinly and never next to the plant's stem. It also must remain on the surface. If dug into the soil, the process of breaking down competes for the nitrogen in the soil that the plants need to thrive.

Avoid Watering at Night

Especially here in the Pacific Northwest, where evenings are cooler, it's much better to water in the early morning hours. When you water in the heat of the day, much of the water evaporates quickly. As a result you'll waste more water (and time) getting to the roots of the plants. Watering at night can cause all sorts of garden grief. If you water at night when the day is cooling off, the water is more likely to remain on the leaves, increasing the danger of disease. Also, you've just created ideal feeding conditions for those slugs and snails that have been hibernating from the heat. If you find you must water at night (and nearly all of us have to do it more than once in a season) avoid getting water on foliage, and water only the roots at the base of each plant, not all the ground surface. The weeds and the snails can do without.

Learn To Be Consistent

When watering your vegetable garden, there is one rule you should follow: Always soak the soil thoroughly. So much depends on climate and the ability of different soil types to hold moisture that it's difficult to give specific directions for watering your garden. Generally, however, vegetable plants need about an inch of water a week.

If you must use an overhead oscillating sprinkler, always water in the morning. Set out small containers at various distances from the sprinkler and check the depth of the water in the

containers. Most likely, there will be a significant difference in some locations. Adjust your watering patterns accordingly.

Lack of Water

Plants suffering from true lack of water show obvious signs of wilting, stunting, and brown, shriveled leaves. These plants will not recover. If plants show signs of wilting early in the morning, water them well immediately. Sometimes, however, water is not what a wilting plant needs. When plants are growing fast, the leaves sometimes get ahead of the roots' ability to provide them with water. If the day is hot and the plants wilt in the afternoon, don't worry about them; they will regain their balance overnight. Afternoon wilting on hot days can often be seen on pumpkins and cucumbers.

Inconsistent Watering

Inconsistent watering is the root cause of most insect and plant disease infestations. Poor watering technique sets up ideal plant stress conditions for insects and disease to thrive, and results in stunted growth. Aphids and other insects attack stressed plants. Blossom end rot on tomatoes is caused by inconsistent watering. If you see signs of blossom end rot in your tomatoes, it's a good indicator that your entire plot is suffering from poor water technique.

A tip for next season: when purchasing vegetable starts, stay away from vegetable starts that are already blooming. Early bloom is usually the heroic effort of a dying plant, inconsistently watered, trying to set seed.

Lessons Learned

Whether you water by hand, by handheld hose, by overhead sprinkler or by drip irrigation, periodically check your technique by putting your hands in the soil deep enough to feel what the roots of your plants are feeling. Be sure to apply a good mulch to retain moisture and reduce evaporation. If you establish a consistent watering technique, you will have a successful, healthy, productive organic garden. Sure, you might encounter a few bugs, slugs and fungi along the way, but they won't prevail.

Now, here's hoping for a little sun and warm weather, so we can begin practicing our waterwise gardening techniques.

Londa Jacques ■