Master Gardener Newspaper Articles

Volunteer Program

Tulare/Kings Counties

Water Wisely

by Jana S. Mercado, UC Master Gardener Intern

I enjoy gardening, or maybe I should say that I enjoy the results. When I think of the ideal garden, I envision beautiful lush foliage and brightly colored blooms surrounding a soft, green carpet of healthy grass. But, I must admit, my garden has not yet achieved this state, most likely due to my lack of care, especially when it comes to watering. If plants had a system of communicating with one another, the plants that live in my yard would radio to the ones at the nursery and say, "Don't let her take you home! You 'll dehydrate!" Providing plants with adequate water is an essential task necessary for a healthy garden. Most often, plants receive too much water or not enough. Sounds obvious, but how much water do you apply? Here is an answer that is often frustrating: well, it depends. Let's look at the lawn first, since it is usually the least tolerant of poor watering practices.

First, how much water should be applied to the lawn? This depends on the type of grass, time of year and climate. Water your lawn when the soil begins to dry out but before the grass actually wilts. One sign of wilting may include the lawn changing color, displaying a blue/green or smoky tinge. A wilting lawn may also lose resiliency, so footprints remain rather than the grass blades bouncing back.

Second, it is important to water deeply and consistently. Make sure the water percolates down to the root zone and doesn't just runoff into the street, especially if there are mounds in your lawn. A frequent light sprinkling can actually be more harmful than forgetting to water on occasion. Light sprinkling encourages root development at the soil surface. Shallow roots require frequent watering to keep the surface wet, and this creates an ideal environment for weeds and diseases.

Here is a good test to determine the length of time you need to run your sprinklers in order to water deeply. Place clean, empty straight-sided cans, such as tuna cans, on your lawn at various intervals (the more cans the better to determine the uniformity of your sprinkler system). Run your sprinklers for 15 minutes. Turn off your sprinklers and measure the amount of water in each can. You may be surprised to discover just how variable your sprinkler system is. No wonder the lawn has dry and soggy spots! Try to adjust your sprinklers so each area gets the same amount. Use the following table to help determine the length of time you need to run your sprinklers if there is no rain. You may need to make adjustments for your microclimate. For example is your lawn shaded by trees or surrounded by concrete buildings?

Third, it is best to water your lawn in the early morning hours, between 2:00 a.m. and 8:00 a.m. This conserves water and prevents disease problems. Watering in midday is not harmful to the lawn, but almost half of the water evaporates before it gets to the roots, so more water is needed to actually benefit the lawn. Watering in the early evening on hot summer nights may cool off the yard

but it can make your lawn more susceptible to disease, especially if you have a cool season grass like tall fescue.

Warm season lawns like bermuda, St. Augustine, and zoysiagrass are less susceptible to diseases, but shallow frequent watering leads to an outbreak of weeds like crabgrass and oxalis. These lawns can really thrive in the heat and perform well with just a weekly irrigation. For cool season lawns, three waterings per week may be necessary during our hot summer months, but when cooler weather arrives in the fall, twice a week is sufficient. While I am highly skilled at under-watering my plants and lawn, over-watering can also lead to problems. Over-watering starves roots of oxygen, leads to disease and washes nutrients from the soil. So, determine how much water needs to be applied to your lawn for the time of year and test your irrigation system using the "can test." If you water deeply and consistently, you will soon have a healthy lawn of green grass that requires fewer fertilizer applications and less frequent weeding - and plants will want to live in your well-tended garden.

	Cool Season Grasses					**Warm Season Grasses**				
		Sprinkler output/15 min.					Sprinkler output/15 min.			
		¼”	½”	¾”	1”		¼”	½”	¾”	1”
	Inches Per Week	Minutes to water/week				Inches Per Week	Minutes to water/week			
Jan	.2	12	6	4	3	.1	6	3	2	1
Feb	.3	18	9	7	5	.3	18	9	7	5
Mar	.7	42	21	15	10	.5	30	15	11	8
Apr	1.0	60	30	23	15	.8	48	24	18	12
May	1.4	84	42	31	21	1.0	60	30	23	15
Jun	1.6	96	48	36	24	1.2	72	36	27	18
July	1.7	102	51	39	26	1.3	78	39	29	19
Aug	1.5	90	45	34	23	1.1	66	33	25	17
Sep	1.1	66	33	25	17	.9	54	27	21	14
Oct	.7	42	21	15	10	.5	30	15	11	8
Nov	.3	18	9	7	5	.3	18	9	7	5
Dec	.2	12	6	8	.	.1	6	3	2	1

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