

PLANTS & WATER – Getting the Most Out of Both!

by Michael Murr



Summer has come and gone, and the months of watering frantically to keep from ending up with brown lawns and dead plants are behind us for another year. This gives us a little time to consider this important question: How much watering do we need to do? We are beginning to understand that water won't be as plentiful as it has been in the past, so using it efficiently to sustain this most precious resource is the practical approach we need to take.

If you're interested in more than lip service to water conservation, there are some practical things you can do that will help maximize the use of both your water and your money...and it will still allow the watering you need to do to keep plants alive and thriving.



You may have heard some of these "tips" before – many involve plain old practical horse sense. (I am often surprised at the "senseless horses" around when I see water being wasted.) More

people are learning about **Xeriscaping**, which means, "quality landscaping that conserves water and protects the environment." The process and theory of Xeriscaping, however, may not really be understood.

As far as I know, all living things need some water and/or nutrients, so there is no such thing as "waterless or no-maintenance" plants. It is true that Xeriscape plants require a minimum amount of water over and above the natural rainfall of any region. So, by simply using water efficiently for your outside requirements, you are already Xeriscaping. But there is more to it than that.



Planning...

If you have the opportunity to plan a new landscape -- or renovate an old one -- take the time to plan for water usage and conservation. Sketch a plan of your home and existing features, visit with a nursery, and read the labels on plants to learn about their water requirements.

Divide your landscape into **three water use zones**: low, moderate and high. Place plants in areas that receive the same watering patterns and have the same water requirements, or put them in appropriate "low" or "high" spots

in the yard.



Study the **shade patterns**. A shaded landscape can be as much as 20% cooler than full sun areas and require much less water than those in full or partial sun. Before you cut those pesky pine trees down, remember they are providing shade to cool the house and the landscape. What you may not realize is that the pines also provide the acid for the soil on which many plants – and especially those azaleas we love – thrive.

Pay close attention to **moisture in the soil** to determine when to water. It also pays to do your homework on the water needs of the plants that you have selected for your yard. And don't forget about the soil itself. Our area has a lot of clay, which doesn't absorb water well. Incorporate some organic material into the soil before you plant and mulch. And don't forget to build up your beds. This means raising them higher than the level of your yard. This helps insure much-needed drainage for the plants, and retains the water you do use.

Also remember rocks don't use water but the more rocks you use, the more heat is retained in the area causing it to radiate around your plants and increase evaporation. If you are planting trees, take a look at the orienta-

tion, and think about where their shade will hit during the summer -- not only for cooling the house, but shading a window, or an area of the yard that will get a lot of sun.

Lawn Irrigation...

Irrigation is probably the biggest waste of outside water use, because most people just mismanage its use. It doesn't matter if you have the most high-tech irrigation system in the neighborhood, or if you still just drag water hoses around; **watering the landscape is the number one water-waster.**



Think about that the next time you see the driveway getting watered, or a sprinkler's over-spray filling the street gutters and trickling down the sewer drain. Also, don't water in the heat of the day or when it is windy. At those times, the water's potential efficiency is reduced to just about half, because the other half is evaporating. Watering frequency should be based on soil moisture, evaporation, and precipitation...not what you *think* you should set the timer for.

With an irrigation system...

1. Best time - Water early in the morning, before people start getting up to take showers, and getting ready for work. Fungus usually takes several hours of wetness

on leaves to take hold, so you don't need to worry about that.



2. Change your watering habits as the seasons change. You don't need as much in the winter and fall as you do the spring and summer. Make the adjustments to your system and habits accordingly.

3. Make sure you have water sensors and make sure they are clean, and working properly. This can be such an easy first step in saving a lot of water. It's irritating to see an irrigation system operating when it's raining outside...and talk about waste!

4. Have an annual check up for your system. Call in a professional or do it yourself, but do it! Get those leaks and bad heads fixed up and operating efficiently.

5. Try to use sprinkler heads that produce drops rather than mists. This helps to reduce evaporation.

6. Another key factor in efficient irrigation is one that is most often forgotten: your landscape may have changed since your system was installed. Increased size of plant material may now block or distort the spray pattern. You may have to modify either the plants or the irrigation system.

Hand watering with hoses...

1. Get a timer. These \$10 items are so handy and help you remember that sprinkler running outside when you get busy with something else.

2. Use soaker hoses where you can, and drip systems in pots.

3. Make sure valves are not leaking outside. Sometimes, just a slight tightening or adjustment can stop the drip.

4. Adjust your sprinkler before you turn it on. The street, driveway and sidewalks don't need water -- no one ever grew a garden in concrete!

Lawns...

Now focus on what's in your landscape. You may need to have your soil tested for nutrient content and add organic matter if needed. Good soil absorbs and retains water better.

Minimize turf areas -- how about installing a brick walkway or patio you have been wanting to help reduce your outside water use. Remove thatch and aerate the turf if it is hard, so water won't run off so quickly, and this will absorb it to the root zone, too. There are many schools of thought, but *the most sensible key to watering lawns is to apply the water infrequently, yet thoroughly.* This creates a deep, well-rooted lawn that efficiently uses water stored in the soil.



Flower Beds...

Use plants native to Texas in your landscape -- they require less care and water than ornamental varieties. (Check out the Plant List on the Native Plant Society of Texas website, www.npsot.org,

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for a complete listing of our native plants, and consider using them as much as possible in your landscaping projects.)

Use mulch and place plants to ensure easy maintenance and efficient use of water. It is important to space plants far enough apart so that they can achieve their mature size without being crowded. Crowding not only increases your costs, but also results in long-term maintenance problems, and can also increase unnecessary water use for the same desired affect.



Maintenance...

Use mulch around shrubs and garden plants to reduce evaporation from the soil surface

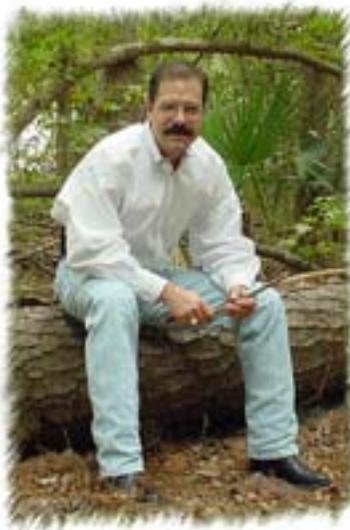
and cut down on weed growth. Remember, mulch holds water. Raise your lawn mower cutting height -- longer grass blades help shade each other, cut down on evaporation, and inhibit weed growth.

Conservation for the long term...

Houston's climate is what makes our plant materials -- including trees -- in this area so lush, and that is what makes living in this area so desirable. Water is a limited resource in many places, but with good stewardship, we have enough quality water in the Gulf Coast region to last a long time if we use it smartly. A time is coming, however, where we will have to curb our water use and pay more for this finite resource.

Landscape plants have an environmental impact and ecological value, including the production of the oxygen we breathe, the removal of many air-borne pollutants, as well as psychological and aesthetic benefits.

Just remember... **Plants do not save water; people do.** ■



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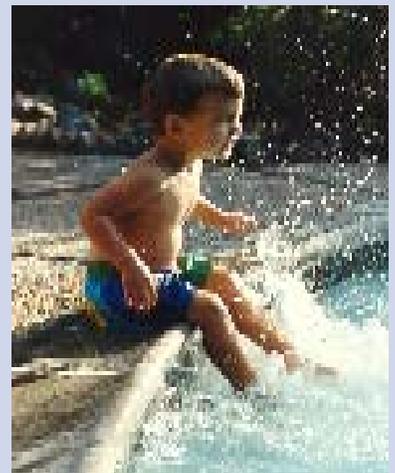
Michael has held operations management positions at two world-wide companies, before starting his business two years ago where he was influential in the implementation of the natural landscape design

and maintenance of those corporation's facilities.

Murr Incorporated provides consulting services for the planning and design of natural green space, implementation and preservation of indigenous materials that save water and promote conservation management. ♦

Additional water-saving tips:

- ♦ Sweep or blow driveways, sidewalks and steps rather than hosing them off.
- ♦ Wash the car with water from a bucket, and hose off with a cut off sprayer rather than letting the water run.
- ♦ Avoid purchasing recreational water toys that require a constant stream of water.
- ♦ If you have a swimming pool, consider installing a new water-saving pool filter.
- ♦ Lower pool water level to reduce amount of water splashed out.



- ♦ Use a pool cover to reduce evaporation when pool is not being used
- ♦ Eliminate the weeds when and where you can. Why would you want to water those?
- ♦ Supplement your automatic watering by spot and hand watering those smaller areas that aren't "thirsty."
- ♦ Don't install or use ornamental water features unless they recycle the water and do not operate during dry periods.
- ♦ Follow your subdivision's watering ordinances, and respect the days when you are asked to refrain from watering.