

Garden Smart, Save Water

By Susan Camp

Last Saturday, my husband and I returned from a weeklong trip to Sedona, Arizona. We have traveled to several western states and enjoyed the varied landscape, but we were not prepared for northern Arizona. Photographs can't capture the stark beauty of the high desert. Towering mesas, volcanic spatter cones, canyons and mountains, especially the red rocks around Sedona, are breathtakingly beautiful.

Jim and I visited the Grand Canyon, Horseshoe Bend on the Colorado River, and Antelope Canyon on the Navajo Reservation. Along the way, I observed the flora of the region and learned a little about the pride Arizonans have in their native state and the care they take of the environment.

The landscape of northern Arizona changes around every bend, from the towering saguaro cacti around Phoenix to twisted low-growing junipers in Sedona to dozens of varieties of knee-high bushes along the roadsides, many of which have gray or silvery-colored leaves. The soil changes, too, from sandy to volcanic basalt, but it is all alkaline, very different from our acidic soil.

We learned that much of the high desert land was over-grazed by cattle during the late 19th and early 20th centuries, resulting in the replacement of native grasses by undesirable scrub vegetation and invasive species.

A large portion of northern Arizona is located within the Coconino and Kaibab National Forests. We noticed signs in many areas requesting hikers to stay on the trails to protect fragile native vegetation that has been planted to replace non-native species. The lack of water is a major problem in the area, and xeriscaping is used to redevelop and protect the fragile environment. Xeriscaping is simply landscaping in a dry area.

On the Middle Peninsula, we have little fear of a drought of the magnitude seen in the southwest and southern California, but we do experience periods of little or no rain, as we did this summer. A garden bed planted in full sun without easy access to a water source can result in dried-up vegetation by July or August. We can adapt xeriscaping techniques in order to use water more judiciously. Virginia Cooperative Extension (VCE) publication "Creating a Water-Wise Landscape" offers suggestions for gardening without wasting water.

If you choose to use xeriscaping techniques, start with a detailed plan of your property and how you will use various areas. Observe areas of sun and shade and study drainage patterns. If you plant turfgrass, you will need a water source, so you may prefer to install a deck or patio, although too much solid surface can lead to runoff and erosion.

In order to reduce the need for frequent watering, soil must drain water quickly, while simultaneously storing it. It may sound impossible, but you can achieve this goal by adding two

to three inches of organic material in the form of compost to both sandy and clayey soils every year. Soil should be tested every three to four years. Contact the Gloucester Extension Office at (804) 693-2602 for a test kit and instructions.

Select plants that will thrive in our region. Native plants are ideal. Succulents like ice plant and sedum and plants with silver-gray, fuzzy leaves, such as *Artemisia* spp. and sages (*Salvia* spp.), are drought -resistant. Lavender, yarrow, columbine, coreopsis, echinacea, and rudbeckia are other good choices. Use organic mulch to retain moisture. Groundcovers need less water than turfgrass, but some are invasive and require extra effort to keep them from escaping their bounds. Keep turfgrass to a small area that is easy to mow.

Use drip irrigation or a soaker hose to water your plants efficiently. Water from sprinkler systems evaporates quickly and hand-watering results in runoff and waste. Water deeply and less frequently, about one inch per week. This allows water to reach the roots and absorb more efficiently.

Xeriscaping techniques make good sense, even if drought is not a major problem in our region. Water-wise gardening saves time, effort, and money, and we can all appreciate that!

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