

Xeriscaping in the Texas Hill Country

Since the severe drought last year, there has been some real progress in understanding and appreciating xeriscape or water wise landscaping. And yet some people think with the spring rains the drought is over or lessening and that we can go back to assuming that we have as much water as we want. But it is more likely that we will have continued droughts, and it will be painful to be unprepared. This is our wake-up call. Even with the moister weather in recent months, people's values are changing. They are more interested in sustainable landscapes, and they want more economical landscapes and gardens that need less water, time, energy and money. And of course that means using plants and methods that are adapted to Central Texas conditions.

We live in a region that normally receives about 36" of moisture a year. To have a drought, we only need to miss a few spring rains. If rainfall is below average, or if we have high winds, or if temperatures are higher, as with Global Warming, we will need to use more water. And it is obvious that as our human population rises, water is becoming scarcer and more valuable. The point is that pressure is coming from many directions to conserve water, and that means it is time to learn to design and to make gardens and landscapes that use less water. It is time for xeriscape to become a mainstream method of landscaping in all areas of Texas.

Since "xeriscape" can mean differing irrigation rates, I am going to use this word to mean a landscape that requires half the irrigation of a conventional landscape. But cutting the water use in half is a good goal. Another way of expressing this is to say that a xeriscape should be watered no more than once a week, deeply, or maybe twice a week in July and August, after the plants have been established for 6-12 months.

Xeriscape does limit water use, but does not dictate any style. A xeriscape garden can be formal, naturalistic or highly personalized. It can be mostly ground covers, mostly shrubs, mostly evergreen shrubs or mostly grasses. It can be mulched with wood chips, rock chips or ground covers.

It is common for people to think of xeriscape as a limitation, but there are opportunities with xeriscape that you don't get with conventional landscaping. For example, people say "there are plants you can't grow dry, so you must have a smaller plant palette to work with." Certainly there are plants you can't grow in a xeriscape, but there are hundreds of good xeriscape plants that won't survive in areas with 30" or more annual rainfall. And these plants can't survive in conventional Texas gardens that are watered every day or every other day. Many of our Texas natives won't survive long with even moderate irrigation and poor drainage. Texas Sage, salvia greggii and rosemary will rot or look terrible if watered too much. Overwatering in Central Texas leads to fungal problems, as we can all attest. Low water has many advantages.

Most professionals doing maintenance or landscaping probably know that more plants die from over watering than from under watering. But it is common for people to think that if a little water is good, a lot of water is better. However plants need oxygen just as animals do, and when the soil is saturated with water, the oxygen is driven out. Without oxygen, the plants can't metabolize properly and the roots can't grow. Increasing water as need to get a new plant established is realistic, but once a plant has suffered from overwatering, it is very difficult to reverse, and the plant usually dies quickly.

Opportunities with xeriscape:

1. You can grow many Texas natives and adapted plants and other dry-loving plants much more successfully.
2. You can create a genuine Hill Country landscape that reflects and praises the natural beauty of the nature around us.
3. A xeriscape is more environmentally responsible and more sustainable since it uses so much less of our precious water. It also usually requires little or no fertilization and pesticides. Why? Because xeric plants often come from areas that are naturally lean with little soil fertility, and if they are given little fertilizer and little water, their tissues are tough and less succulent and therefore less attractive to fungi and insects.
4. An obvious opportunity and selling point is the fact that people's water bills will be lower. This factor will become more and more significant as the price of water will continue to rise. In addition, more and more

communities will be adopting water budgets, and a low-water landscape makes it easier to stay within your budget.

5. A xeriscape will survive a drought and water restrictions far better than a conventional landscape.
6. A xeriscape can require less maintenance. In conventional landscapes with ample water and fertilizer, more work is required to cut back plants after flowering, and there are usually more and bigger weeds because many weeds, especially grasses, thrive on ample water. And with less water, there are fewer fungus problems and fewer problems with sucking insects like aphids, which means less maintenance. Even deer are less attracted to dryer plants. (Note that excessive drought stress can increase maintenance problems.)
7. One of the best opportunities of xeriscape is the winter garden. Unlike English perennial borders and cottage gardens which turn brown and dead-looking in winter, the well-designed xeriscape can be attractive and colorful in winter. The color is not from flowers but from ornamental grasses, and from evergreen foliage that is many shades of green, gray and silver. A good xeriscape can be very enjoyable to walk through on a warm Texas winter day. So when you design your xeriscape, don't miss this opportunity.

Water Saving Tips

Some of these tips can improve the outcome of a xeriscape garden and can even be called "Water Equivalencies". Even plants that grow where it's hot and dry often look better or flower better with some extra moisture, and these tricks will give them extra moisture without increasing irrigation.

1. Shade equals water. During the drought, because of water restrictions, a lot of lawns were brown by August, but the areas under trees often were still green. This is a clue that shade equals water. So if you put plants that prefer more water on the east or north side of buildings or fences, they will be protected from all day and hot late afternoon sun. With this shade they will do better with the same amount of water. If you read that a plant needs full sun and you know it is not very drought tolerant, you can often plant it in part shade, because a half day of Texas sun is usually equal to full sun in the east or Midwest.
2. Soil preparation equals water. Organic matter such as compost or manure holds moisture for longer periods of time, and soil that is loosened and is not compacted permits rain to penetrate and get down to the roots. Compost also is food for mycorrhiza, the beneficial fungi that can extend the reach of plant roots up to 700 times to increase water absorption.
3. Wind protection equals water, because wind can be so desiccating. Sometimes plants die back in the winter not because of cold, but because wind has dried out the canes. A xeriscape garden with a wind break or fence on the west side will require less water.
4. Mulch equals water, as we know; it keeps the water in the ground from evaporating. And besides organic mulches, fine gravel like decomposed granite or pea gravel makes good mulch for many rock garden plants that would rot under bark and wood chips. Even ground covers can act as effective mulch.
5. Dead-heading equals water. This one is not so obvious, but when a plant goes to seed, it takes a tremendous amount of energy from the mother plant. If a plant is getting little water, it can decline or even die after going to seed. So if you dead head right after flowering and before seed-set, plants will recover much more quickly, and will often live longer.

A few more tricks for xeriscape

1. "Right Plant in the Right Place" is a trick that will improve the outcome of any type of garden. One way to make a garden sustainable is to put each plant in a spot where it is best adapted, so give them the soil and exposure like where they originated, even if that means hot, lean and dry. Plants that come from cooler conditions will melt in hot locations, so put them in some shade.
2. Most of you know this, but it is worth mentioning that it is very important to group your plants by water needs. Put the high water plants together and the low water plants together. If you don't do this, you will have to water all the plants enough to keep the most moisture-loving plants alive. This will waste water, and rot the true xeric

plants. If you have plants that require more water, put them in the shade on the east or north side of the house or under the shade of trees.

3. Another trick is, if you plant the edges with attractive low-water groundcovers, the entire landscape looks better, even if it has dried out in July. This will be even more true if the ground covers are evergreen and if they have their own drip system.
4. In a xeriscape you will be able to include tough plants that could be invasive in moderate watering. Plants such as ivies and honeysuckle can be well-behaved and maintained in a xeriscape. Of course this is a generalization, so use it with your own good sense.
5. The last trick is to change your attitude. Don't expect your landscape to look the magazine covers of a northern California, Washington State or Oregon garden that we see on the grocery store racks in August! This is Texas! It is very important to educate ourselves about what to expect with a xeriscape. We often have unrealistic expectations about a new garden, and sometimes we are expecting the Garden of Eden. The truth is, this is a Xeriscape - it may not have as many flowers, but it will have beautiful textures, foliage color, beautiful shapes, rhythm and pattern. It will support birds and butterflies; it will save water and pest management.

There are drawbacks to xeriscape which should be admitted, but there are ways to reduce their impacts. In a xeriscape there are certain plants you won't be able to grow, like ferns, water loving annuals and perennials, and many types of roses. How do you reduce the impact? Select a small, highly visible area in a protected location, like on the north or east side of the house or other structure, and group your high water plants there, and give them more water. This is still xeriscape and water wise. Or, plant other plants that are similar-looking but use less water. For example: instead of Hostas, use Penstemons; instead of ferns, use yarrows; instead of Hybrid Tea roses, use Antique and Earthkind Roses on their own roots.

Another disadvantage to xeriscape is that plants that are watered sparingly won't fill in as fast as plants that are given ample water. To reduce this impact, water amply (but not excessively) the first year to get a faster fill-in, then reduce watering the following year, or use mulches to cover bare areas. Also low-water annuals can be planted to fill in the gaps for a year or two.

Xeriscapes also generally bloom less than landscapes given ample water. So to reduce the drawback of fewer flowers, water more during the blooming season to get more flowers, then cut back after blooming, or plant self-sowing xeric annuals to get masses of color for 6-8 week periods. And you can plant large flowering shrubs and tough roses for big splashes of color. Also, fewer flowers will not be noticed in a garden that is designed for sculptural forms, textures, foliage color, and variety of bloom times, for wildlife or for peaceful and meditative qualities.

Another disadvantage is that xeriscapes can look burned out and scruffy in July and August. In nature in Texas, this is normal and not a problem as long as the plants can reproduce and/or come back strong the next year. But most homeowners and neighbors don't like scruffy gardens. So what is the answer? In early June, do a good maintenance of dead heading, weeding and cleanup, followed by the longest, deepest watering of the year. This will give the garden a pick-up, new growth will be supported, and blooming will be encouraged for the summer and fall bloomers.

In Texas we are looking for our own genuine landscape style. Traditionally, American gardens have been influenced by the English and Japanese styles, but both of these are more successful where there is ample moisture and temperatures are not too severe, like on the east and west coasts. Here in Central Texas, we have to discover a more appropriate style, using plants that are water-wise and drought tolerant.

Beyond these guidelines, be your own guide. You will be inspired as you expand your plant palette and discover just how beautiful Xeriscape is. No book or magazine article is as powerful as the examples of our own gardens in showing others that resourceful, ecological and water wise gardens can be beautiful and wonderful!