

Xeriscaping (pronounced *zer-i-skaping*) is a word that gets mentioned quite often during days of drought and water shortages. When listening to, or engaging in conversations regarding this topic, it becomes obvious that this word – *xeriscaping* – or the concept of it can be a source of confusion in some instances. Hopefully the following paragraphs will explain what xeriscaping truly means and hopefully eliminate some of the confusion.

Xeriscaping is a word originally coined by the Denver Water Department in the 1980's to describe landscaping with water conservation as a major objective. The word is derived from the Greek "xeros" meaning dry, and landscaping – thus, xeriscaping. *Xeriscaping is not a specific "look" or a particular group of plants; it is actually a combination of seven gardening principles that maximizes water efficiency while creating an attractive landscape at the same time.* Here are the steps required to create a true xeriscape:

Steps of Xeriscaping:

1. Planning and Design
2. Soil Preparation
3. Efficient Irrigation
4. Mulch
5. Right Plant, Right Place - Plant Zones
6. Practical Turf Area
7. Proper Maintenance

Step #1: Planning and Design

Planning is essential in creating a sustainable, attractive xeriscape. Take into consideration site characteristics that affect water use (i.e. slopes, exposures, micro-climates) and then design the area with these things in mind. Put it on paper. A scale drawing or diagram can go a long way in helping you to visualize what your xeriscape might look like. Group plants according to water use and take into account mature plant size.

Step #2: Soil Preparation

"Take care of the roots and the tops will grow themselves"...this is a phrase that has been used to describe soil's importance in plant growth. A healthy soil will result in healthier root systems which, in turn, create a more drought tolerant landscape. Amending entire garden beds (not just planting holes) with organic matter such as compost can help loosen heavy, clay soils allowing moisture and nutrients to infiltrate more readily to the roots vs. running off. On the other hand, adding organic matter to sandy soils will help increase the soil's water holding capacity vs. water loss due to leaching below the root zone.

Step #3: Efficient Irrigation

Water deeply and infrequently to encourage deep, more drought tolerant roots. Only water when absolutely necessary! Turfgrass should be watered to a depth of at least 6-8" while flowers and vegetable gardens should be watered to a depth of at least 8-12". Trees and shrubs need to be watered to a depth of 12-18" as

that is where the bulk of their roots are located. Watering much deeper than these depths is a waste of water. Check watering depth by using a probe of some sort (i.e. long screwdriver, piece of rebar, strong wire, etc.). When the probe hits resistance you have likely hit dry soil and this is the depth to which the moisture has reached.

Drip or sub-surface irrigation is the most efficient method as it places the water exactly where you need it. If watering with sprinkler systems or by hand, irrigate early in the morning to take advantage of lower wind speeds (hopefully), less evaporation, and higher humidity levels. Watering at this time of day also allows plant leaves to dry off quickly, lessening the threat of potential disease problems.

Step #4: Mulch

The need for supplemental irrigation is reduced when organic mulches are properly applied around plants. Examples of organic mulches include wood chips, cedar mulch, straw, leaves, cottonseed hulls, etc. These types of mulches decrease soil temperatures in the heat of summer while limiting evaporation from the soil surface. Organic mulch also discourages weed growth and breaks down over time helping to improve the condition of the soil (See Step #2). Generally, a 2-4" layer of organic mulch is ideal in most situations.

Inorganic mulches such as gravel are generally not recommended for use around plants as they can create a hotter, harsher environment for plant roots. Organic mulches are preferred for use around plants in most situations.

Step #5: Right Plant, Right Place – Plant zones

An extremely important step of xeriscaping is to plant the right plant in the right place. Plants vary in the amount of moisture they require so it is critical to know what those requirements are. Additionally, different areas of the yard may receive different amounts of moisture, sunlight, and wind. Take this into consideration when choosing plants for the xeriscape. Group or zone plants with similar water requirements together. For example, group a crabapple tree with shrub roses in a planting bed vs. planting the trees and shrubs sporadically throughout a turfgrass area. Since trees and shrubs need to be watered differently than turf, planting them in separate zones will allow for more efficient watering and healthier plants.

Select low water use or drought tolerant plants if possible. Remember all plants require additional moisture to get established. Drought tolerant does not mean "plant it and forget it".

Step #6: Practical Turf Areas

Cool-season turfgrass such as Fescue or Kentucky Bluegrass typically require the most water and maintenance in the landscape. Limit cool-season turf areas. Consider using mulches, groundcovers, ornamental or native grasses, shrub beds, decks or patios instead. Avoid odd shaped or narrow strips of turfgrass as these can be difficult to irrigate and may result in wasted water.

If you have full sun, consider planting warm-season turfgrasses such as Buffalo and Bermudagrass. These warm-season grasses are well suited to many areas of the state, and, once established, will require very little supplemental irrigation (if any) in comparison to the cool-season grasses.

Keep areas designated to turfgrass practical for your use. Do you really need that vast expanse of green grass in the front yard?

Step #7: Proper Maintenance

While xeric landscapes can be low maintenance, they will still require some degree of care throughout the year. At appropriate times, proper pruning, mowing, weeding, fertilizing, watering, and insect/disease control are important to maintain the health of your xeriscape.

Overall, these seven steps create a true xeriscape. As you can see, it is not just about rocks! Reducing outdoor water use does not have to mean replacing lawns and trees with plastic and gravel, or turning flower gardens into cactus gardens. ***Xeriscaping is not Zero-scaping!*** Water conserving landscapes, which may be a better way to refer to them, can look just as beautiful - if not more so - than water wasting ones.

For more information on water conserving landscapes or if you have questions regarding water conservation in general please contact the Ellis County Extension Office at (785) 628-9430 or check out our website: www.ellis.ksu.edu. You can also find us on Facebook under K-State Research and Extension – Ellis County.

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