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Texas Agricultural Extension Service
The Texas A&M University System



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*W*ater is an easy resource to take for granted. Most of us don't think much about where our water comes from, or whether there will always be enough of it. However, in most parts of Texas, the demand for this limited, precious resource is growing.

*I*n urban areas of Texas, between 40 and 60 percent of the water supply is used for landscape and garden watering. Much of this water is used to maintain traditional landscapes that need lots of water. Often it is applied inefficiently.

*X*eriscape is an innovative, comprehensive approach to landscaping for water conservation. Traditional landscapes may incorporate one or two principles of water conservation, but the total Xeriscape concept is seldom employed to effectively reduce water usage.

*X*eriscape landscaping incorporates seven basic concepts which can help preserve our most precious natural resource -- water.

Seven steps to a Xeriscape landscape:

Planning and Design

A water-efficient landscape begins with a well-planned landscape design. Sketch your yard showing locations of existing structures, trees, shrubs and grass areas. Then consider the landscape budget, appearance, function, maintenance and water requirements. Local landscape architects, designers, nurserymen and county Extension agents can provide you with assistance. Implementing your landscape design can be done gradually over several years.

Soil Analysis & Improvement

Soil analysis will determine whether soil improvement is needed for better water absorption and improved water-holding capacity.

Appropriate Plant Selection

Select trees, shrubs and groundcovers based on their adaptability to your region's soil and climate. Native plants have lower water demands, fewer pest problems and lower fertilizer needs than many non-adapted,

exotic plants imported from other areas. Native Texas plants are becoming more available in retail nurseries and garden centers. Combining these native plants with well-adapted exotic plants is one key to a beautiful, interesting landscape that conserves water.

Practical Turf Areas

When considering a landscape's water requirement, keep in mind that turfgrasses require more frequent watering and maintenance than most other landscape plants. When designing or evaluating turfgrass areas in the landscape, consider the ease or difficulty in watering the proposed area. Areas that are long and narrow or small and odd-shaped are difficult to water efficiently with any irrigation equipment. Try to incorporate more blocky, square areas. Carefully select grass according to its intended use, planting location and maintenance requirements. St. Augustinegrass and Bermudagrass are used most often for lawns in Texas. Grasses available for use in Texas lawns vary significantly in water requirements. Planting the lowest water use turfgrass adapted to the region is an effective way to reduce landscape irrigation requirements.

Efficient Irrigation

In addition to wasting water, excess irrigation can leach nutrients deep into the soil away from plant roots and increase the chances of polluting groundwater. Observe the grass to know when to water the lawn. Wilting and discoloration are signs of water stress. When this occurs, apply 1 inch of water to the lawn as rapidly as possible without runoff. Also irrigate lawn areas separately from other plantings. Adjust the sprinkler so it doesn't water driveways and sidewalks. Be sure the system sprays large drops of water instead of a fine mist which evaporates more easily.

Using Mulches

Use mulch wherever possible. A good mulch conserves water by reducing moisture evaporation from the soil. Mulch also reduces weed populations, prevents soil compaction and keeps soil temperatures more moderate. Mulches can be organic materials such as pine bark, compost and wood chips, or inorganic materials such as gravel or permeable plastic.



Appropriate Maintenance

An added benefit of Xeriscape landscapes is less maintenance. A well-designed landscape can decrease maintenance by as much as 50 percent through reduced mowing, once-a-year mulching, elimination of weak, unadapted plants and more efficient watering techniques.

Mowing at the proper height conserves water. Mow St. Augustinegrass and buffalograss at 3 inches. Mow Bermudagrass at 1 inch and centipedegrass and zoysiagrass at 2 inches. Keeping grass at these relatively tall heights allows it to develop deeper roots. And taller grass grows more slowly, requiring less water and mowing.

Fertilize the lawn once in spring and again in fall to produce a beautiful turf without excess growth which demands more frequent watering. Use a slow-release form of nitrogen in spring and a quick-release form in fall. Apply only 1 pound of actual nitrogen fertilizer per 1,000 square feet of lawn at one time. By using this fertilizer schedule, no other fertilizer is needed for most shrubs and trees in the lawn area.

Other cultural practices that add to the efficient use of water by plants are periodic checks of the irrigation system, properly-timed insect and disease control and elimination of water-demanding weeds.

By following these guidelines you can proudly create your own water-saving Xeriscape landscape. And you'll join thousands of other homeowners across the country who have found that Xeriscape landscaping not only creates beauty and saves money, but is a way to help conserve our precious water resources for the future.

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