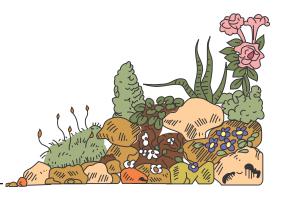


Water Conservation

Tips for Landscaping



In Arkansas, a surprising amount of water is used daily in home landscapes. Water authorities have reported that as much as 70 percent of water from municipal water systems can be attributed to residential use. Of all the water used in one household during the summer months, almost 50 percent is used to maintain landscape plantings.

In some areas of the state, water supplies may be limited or restricted and can be expensive to purchase. However, the homeowner does not have to sacrifice color and beauty in order to practice water conservation in the plantings and maintenance of landscapes. Peak usage of water comes during the hot summer months (May, June, July and August). During this period, it is very important to follow water efficiency plans set forth by the water authorities.

The Concept of Traditional and Xeriscape Landscaping

The traditional concept of landscape is characterized by large areas of turf with trees and shrubs placed throughout. This type of landscape contains the two greatest consumers of water in the landscape. Conventional landscaping can be costly for the homeowner to maintain.

A common water-efficient concept is known as xeriscape. This is a concept developed in Colorado in response to annual water shortages. This style of landscape design depends primarly on rainfall and relies little on supplemental water. Landscapes that follow water-conserving principles can remain beautiful, require less labor and are water efficient.

Water Conservation **Principles**

Planning and Design

Creating a water-efficient landscape begins with a practical plan for design. Analyze your area with locations of existing turf areas, trees and shrubs. Consider the budget, function, appearance and maintenance of the landscape plans. Be aware of different climate aspects of the area: amounts of sun, shade and slope. Local professional landscape architects and designers can help in proper decision-making and implementing the desires of the homeowner.

Soil Analysis and Preparation

Soil testing is an important part of every successful landscape. It determines which nutrients are needed to improve existing soil. Contact your local county Extension office for proper directions on how to collect a soil sample.

To conserve water and increase the health of plants, add organic matter to the existing soil. This will increase the soil's ability to store water for the plant to use. Mix organic matter in with the top 4 to 6 inches of soil. Organic matter also helps with drainage and to relieve compaction of hard soils. Remove all weeds and grasses in areas; they will compete with new plants for nutrients and water in the soil.

Use Practical Turf Areas

Turf is the largest user of water in the home landscape. It carries with it a high cost in money and time to maintain. Use turf only in areas where it serves a purpose, as in areas of entertainment and play. When deciding on a turf, select a variety suited for the climate of Central Arkansas. Bermudagrass and zoysiagrass are the two best types of warm-season turf that do well in the hot, dry climate of this region. These turfs are water-efficient grasses. Consider replacing nonessential turf areas or shady areas with other groundcovers, patios, hardscapes or mulches.

Efficient Irrigation

Always keep a well-maintained and efficient sprinkler system. Check your system regularly for broken heads, disrupted nozzles, leaks or faulty valves. Do not water driveways, sidewalks or streets. Water only when necessary, and adjust your irrigation system with changes in weather. Rain shutoff devices should be installed on all irrigation systems. These devices are a major contributor to water conservation.

When using a hose-type sprinkler, use a timer device to eliminate water running for excessive periods of time. Use efficient watering systems such as soaker or drip hoses that limit water output. Only operate irrigation systems in the early morning hours. This reduces evaporation of water and is best to maintain plant health. Apply water infrequently and deeply to plants to ensure that roots will grow deep and healthy.

Plant Selection

- Select drought-tolerant plants that are proven to grow well in the Central Arkansas climate.
- Consider using native plants that grow and are adapted to your climate zone. When



drought-tolerant plants are established, they use far less water than other plants.

 Group plants together according to water needs. This will help to properly utilize every bit of water that is distributed. Local nurseries and the county Extension office can supply needed knowledge of the plants that are practical for your landscape.

Use Mulch

Mulch any organic material that covers the soil around plants. Tree bark, compost or inorganic materials, such as lava rock, are options homeowners can use. Mulch helps the soil conserve

water by reducing evaporation. It also helps to eliminate erosion and prevent competition for nutrients from weeds. Mulch should be applied to the entire area at 1 to 3 inches in depth.

Appropriate Maintenance

Heavy pruning of plants leads to excessive growth and extra water needs. Lightly prune plants to shape and direct their growth. Homeowners can reduce weeds by hand pulling weeds in the early stages, preventing the spread of weed seeds. Properly timed applications of herbicides and insecticides can also contribute to water conservation. Apply nutrients only when plants need them, and use a slow-release formula of fertilizer.

Always follow watering guidelines or restrictions set forth by the water municipalities. These recommendations are put into place to ensure water is available for household use. Homeowners should help educate their family and neighbors on the importance of water conservation.

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