

Drought Tolerant Plants

Drought is defined as a deficiency of precipitation over an extended period of time, usually a season or more. Other climatic factors such as high temperature, high wind, and low relative humidity can increase drought severity. These conditions are very familiar to Arizona residents and rather than responding to drought, we should plan for it. One way to anticipate drought is to reduce the amount of water applied to landscaping. The term "xeriscape" refers to landscaping in ways that reduce (or eliminate) the need for supplemental irrigation. This water conserving strategy relies on plants that can tolerate extended drought periods once established.

Drought tolerant plants should be regularly irrigated for the first couple of years to help them become established. Some supplemental irrigation is necessary for successful plant establishment. New landscapes are often installed with drip irrigation systems. Irrigation water must be directed to not only the original rootball, but also the surrounding native soil to encourage a well-distributed root system. This will also help the plant to withstand high winds and utilize natural precipitation when it occurs. This is often where drip irrigation systems fall short because these system are usually designed to only deliver water to a small area of soil near the original root ball of the plant.

The key to successful xeriscaping does not end with simply planting and establishing drought tolerant plants. Following establishment, homeowners must also allow these plants to express their drought tolerance by actually reducing the amount of irrigation applied. Native grown plants often have fewer leaves, smaller flowers, and/or a slower rate of growth than that of a regularly irrigated plant of the same species. Get your landscape plants established then cut back the irrigation so that they can withstand drought conditions.

Resist the urge to fertilize drought tolerant ornamental plants. Fertilizing ornamentals will produce weaker wood, cause the plant to grow excessively fast which often leads to the need for pruning. A well fertilized plant can also produce succulent growth which is more attractive to animals and insects. Pruning causes wounds which require energy to heal and exposes plant tissue to infection by disease causing organisms. Drought tolerant plants should never be sheared to shape them – the lack of applied irrigation will cause the plant to develop a natural shape and limit growth.

Drought tolerant native plants also provide familiar habitat for native birds, reptiles, mammals and arthropods. Conversely, non-native drought tolerant plants are less familiar to the native fauna, and when used in the landscape, may offer some advantages in the way of increased pest resistance (native pests may not be able to utilize them for food). Whether native or non-native, drought tolerant plants will conserve water.

Additional Resources:

The following lists are not designed to be comprehensive and they may contain some plants that may not be readily available in the nursery trade (but are native to the area and should be conserved where possible). However, they list many plants, native and non-native that will use less water following establishment.

University of Arizona, Yavapai County Cooperative Extension:

Prescott Area Plant List

Cottonwood, Verde Valley and Sedona Area Plant List

Drought Tolerant Native Plants for the Verde Valley

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