

What Is A Drought Tolerant Landscape?



Photo by David W. Marshall, UF-IFAS Leon County Extension: 'Sonset' lantana is a drought-tolerant flowering perennial, good for sunny spots in the landscape. It doesn't form berries, so it isn't invasive like some forms of lantana.

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In North Florida and South Georgia we receive an average of one inch of rain each week. Our natural rainfall would be sufficient to support growing most plants that grow in our region if only the rains came on a regular basis. Unfortunately we often face long periods of little or no rainfall which can cause drought stress to many plants.

Drought stress symptoms include changes in leaf color, wilting and leaf drop, and stunting or death of the plant. Many locations in our region have sandy soils that have a low water holding capacity. These sites require more frequent watering to prevent drought stress. Environmental conditions also play a role in plant water loss. Plants lose more moisture when exposed to full sun or reflected light, higher temperatures, low humidity and wind. In order to prevent plants from suffering from receiving too little moisture each of the factors should be considered.

Landscapes can be designed and constructed to help conserve water and prevent drought stress injury to plants. The installation of efficient irrigation systems and their proper use helps to establish and maintain landscape plantings that will require less water. All landscape plantings require frequent watering when initially planted. This is because the root systems of these plants consist of only those roots which were in the container at planting time. It takes about a year for most plants to grow a strong enough root system to go for longer periods without water. So you may have to start with waterings every other day and eventually taper off to more infrequent waterings as the roots grow and the plants become better established.

For established plants, infrequent deep watering when the plants begin to show stress helps to encourage deep rooting. This will enable them to endure drought better. Mulching plants helps to conserve ground moisture which can prove to be beneficial. Some plants that can tolerate shade will need less water when shielded from full sun. Creating windbreaks can also help slow water loss from plants.

Incorporating drought tolerant plants into a landscape where they are appropriate can greatly reduce or even totally eliminate the need for irrigation once the plants are established. Drought tolerant plants have special adaptations that help them conserve water. Some species have a thick waxy coating on their leaves while others have leaf hairs that reduce water loss. Other adaptations that help plants endure dry periods include having smaller leaves, dropping leaves during droughts, having extensive surface root systems or developing long tap roots.

Many of our native plants are drought tolerant and deserve being considered when planning a landscape. Plants from arid regions that are also tolerant of our rainfall and high humidity are worthy of consideration. However even the most drought plants often will require some watering after they are planted until they can become established.

There are some excellent sources of information on drought tolerant plants for our region available online. Do a search for 'Drought-Tolerant Plants for North and Central Florida', written by Gary Knox, on the <http://ifas.ufl.edu> website of University of Florida IFAS Extension. This publication gives an extensive list of trees, palms, shrubs, groundcovers and vines that withstand drought. The UF-IFAS website about Florida Friendly Landscaping has an extensive list of publications at <http://fyn.ifas.ufl.edu/ifaspubs.htm> which homeowners and landscape designers will also find to be useful in selecting the best plant materials to withstand drought. The Floridata website, <http://Floridata.com>, has a list of drought tolerant plants for the entire state with links to an information page on each of them. So there's lots of help out there.

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