

Horticulture Fact Sheet



Coping with Watering Restrictions in the Landscape

Gary L. Wade, Extension Horticulturist

Residents in many counties throughout Georgia are currently facing restrictions or bans on outdoor water use. When watering restrictions are imposed, there are a number of things homeowners can do to help plants make the best use of water in the landscape.

First, make certain plants have a generous supply of mulch over their roots. Three to five inches of mulch will help hold moisture in the soil and will prevent evaporation from the soil surface. Fine-textured mulches, such as pine straw, mini-nuggets and shredded hardwood mulch do a better job of conserving moisture than coarse-textured mulch. Apply mulch to as large an area as possible under the plant, remembering that the roots of established woody ornamentals extend two to three times the canopy spread.

Another practice to conserve moisture in the soil is to use a leaf rake to gently pull back existing mulch (being careful not to disturb the surface roots of plants). Then, place two to three sheets of newspaper on the soil surface, moisten it, and rake the mulch back over the newspaper. Newspaper will serve as an added barrier to moisture loss. However, avoid placing the newspaper more than two to three sheets thick because a thick layer of newspaper will actually inhibit the penetration of rainfall, irrigation water and fertilizer to the roots. Moisten the newspaper soon after placing it on the soil. Otherwise it may draw moisture from the soil.

Avoid cultural practices that encourage new water-demanding growth. Fertilization is not wise during extended dry periods because fertilizers are chemically salts and can actually dehydrate the roots of plants. Routine pruning also stimulates new growth and should be avoided during dry periods. However, some selective pruning may be necessary when a plant wilts and begins showing leaf-scorch and death of branches. In this case, pruning helps the plant reduce its foliar demand on the roots for water.

When you can water, directional watering with the hand-held hose to apply water only to those plants that show signs of wilt will help conserve water. Priority should be given to newly planted trees and shrubs (those installed within the past four months). Water these plants every 7 to 10 days during the absence of rainfall.

Annual and perennial plants generally have a higher demand for water than woody ornamentals. However, wait for them to wilt before watering. Some perennials, like sedum, gaura, daylilies and ornamental grasses are extremely drought tolerant and can survive long periods without rainfall or irrigation (see attached list of drought-tolerant plants). Plants will tell you when they need water when the leaves wilt, droop or turn a grey-green color.

If a total ban on outdoor watering is imposed and you can not water anything, the best advice is to cut back

annual and perennial flowers that wilt in an effort to reduce their moisture loss and make certain they are well mulched. This will reduce the demand for water by the top on the root and will help keep the root system alive. A light pruning of shrubs that become severely wilted will also help them conserve moisture and survive the dry period.

Avoid shallow watering. The worst thing you can do for plants is to water them frequently and shallowly. Shallow frequent watering encourages a shallow root system and reduces the drought tolerance of plants.

When you can water, water between 9 pm and 9 am. Less water is lost to evaporation when watering in the evening or at night. Watering during this time will not encourage diseases since the foliage is usually wet anyway from the night-time dew.

Direct water to the roots - not the top. When you water, direct water to the roots and avoid wetting the foliage of ornamental plants if possible. Wetting the foliage not only encourages diseases but also results in evaporative loss of water.

Drip or trickle irrigation or a soaker hose are efficient ways of watering. Drip irrigation uses 50% less water than conventional sprinkler irrigation and applies water slowly and directly to the root system.

A timer installed on outdoor faucets to control the period of irrigation will prevent the unnecessary use of water.

Use drought tolerant plants. Many of our Southern ornamental plants have an inherent tolerance to drought and can survive long periods of limited rainfall. Table 1 is a listing of ornamental plants known to have above average tolerance to drought.

Table 1. Ornamental Plants Known to Have Above-Average Drought Tolerance.	
Trees	
Common Name	Botanical Name
Bald cypress	<i>Taxodium distichum</i>
Bur oak	<i>Quercus macrocarpa</i>
Cabbage palm	<i>Sabal palmetto</i>
Chaste tree	<i>Vitex angus-castus</i>
Cherry laurel	<i>Prunus caroliniana</i>
Chestnut oak	<i>Quercus prunus</i>
Chinese pistache	<i>Pistacia chinensis</i>
Crape myrtle	<i>Lagerstroemeia indica</i>
Deodarcedar	<i>Cedrus deodara</i>
Ginkgo	<i>Ginkgo biloba</i>

Goldenrain tree	<i>Koelreuteria paniculata</i>
Hollies	<i>Ilex</i> spp.
Honeylocust	<i>Gleditzia triacanthos</i>
Japanese zelkova	<i>Zelkova serrata</i>
Japanese pagoda tree	<i>Sophora japonica</i>
Lacebark elm	<i>Ulmus parvifolia</i>
Laurel oak	<i>Quercus laurifolia</i>
Live oak	<i>Quercus virginiana</i>
Loquat	<i>Eriobotrya japonica</i>
Magnolia	<i>Magnolia grandiflora</i>
Needle palm	<i>Rhapidophyllum hystrix</i>
Pin oak	<i>Quercus palustris</i>
Pindo palm	<i>Butea capitata</i>
Pond cypress	<i>Taxodium ascendens</i>
Redbud	<i>Cercis canadensis</i>
Shumard oak	<i>Quercus shumardii</i>
Smoke tree	<i>Cotinus coggygria</i>
Sweetgum	<i>Liquidambar styraciflura</i>
Sycamore	<i>Platanus occidentalis</i>
Tulip poplar	<i>Liriodendron tulipifera</i>
Washington hawthorne	<i>Crataegus phaenopyrum</i>
Water oak	<i>Quercus nigra</i>
White ash	<i>Fraxinus americana</i>
White oak	<i>Quercus alba</i>
Windmill palm	<i>Trachycarpus fortunei</i>

Table 1. Ornamental Plants Known to Have Above-Average Drought Tolerance. (cont.)

Shrubs	
Common Name	Botanical Name

Aucuba	<i>Aucuba japonica</i>
Barberry	<i>Berberis</i> sp.
Beauty bush	<i>Kolkwitzia amabilis</i>
Beautyberry	<i>Callicarpa americans</i>
Butterfly bush	<i>Buddlea davidli</i>
Chaste-tree	<i>Vitex agnus-castus</i>
Chinese photinia	<i>Photinia serrulata</i>
Chinese holly	<i>Ilex cornuta</i>
Cotoneaster	<i>Cotoneaster</i> spp.
Crepe myrtle	<i>Lagerstroemia indica</i>
Dwarf yaupon holly	<i>Ilex vomitoria</i> 'Nana'
Euonymus	<i>Euonymus</i> spp.
Firethorn (Pyracantha)	<i>Pyracantha coccinea</i>
Flowering quince	<i>Chaenomeles speciosa</i>
Forsythia	<i>Forsythia intermedia</i>
Fragrant sumac	<i>Rhus aromatics</i>
Glossy abelia	<i>Abelia grandiflora</i>
Japanese barberry	<i>Berberis thunbergii</i>
Jasmine	<i>Jasminum</i> spp.
Juniper	<i>Juniper</i> spp.
Oleander	<i>Norium oleanders</i>
Osage orange	<i>Maclura pomifera</i>
Pampas grass	<i>Cortaderia selloana</i>
Pittosporum	<i>Pittosporum tobira</i>
Quince	<i>Chaenomeles japonica</i>
Spirea	<i>Spirea</i> spp.
Strawberry bush	<i>Euonymus americans</i>
Viburnum	<i>Viburnum</i> spp.
Wax myrtle	<i>Myrica cerifera</i>
Yaupon holly	<i>Ilex vomitoria</i>

Table 1. Ornamental Plants Known to Have Above-Average Drought Tolerance. (cont.)	
Vines/Ground Covers	
Common Names	Botanical Names
Asiatic jasmine	<i>Jasminum asiaticu</i>
Bearberry cotoneaster	<i>Cotoneaster dammeri</i>
Carolina jasmine	<i>Gelsemium sempervirens</i>
Confederate jasmine	<i>Trachelospermum jasminoides</i>
Creeping juniper	<i>Juniperus horizontalis</i>
Daylily	<i>Hemerocallis</i> spp.
Honeysuckle	<i>Lonicera</i> spp.
Japanese clematis	<i>Clematis</i> spp.
Juniper	<i>Juniper</i> spp.
St. John's wort	<i>Hypericum calycinum</i>
Thrift	<i>Phlox subulata</i>
Trumpet vine	<i>Campsis radicans</i>
Trumpet honeysuckle	<i>Lonicera sempervirens</i>
Wintercreeper	<i>Euonymus fortunei</i>

Table 1. Ornamental Plants Known to Have Above-Average Drought Tolerance. (cont.)	
Annuals/Perennials	
Common Names	Botanical Names
Annual phlox	<i>Phlox drummondii</i>
Annual periwinkle	<i>Vinca rosea</i>
Baby's Breath	<i>Gypsophila</i> spp.
Black eyed susan (coneflower)	<i>Rudbeckia bicolor</i>
Calendula	<i>Calendula officinalis</i>

Cape marigold	<i>Calendula officinalis</i>
Coreopsis	<i>Coreopsis</i> spp.
Cornflower	<i>Centaurea cyanus</i>
Cosmos	<i>Cosmos bipinnatus</i>
Gaura	<i>Gaura lindheimeri</i>
Gazania	<i>Gazania linearis</i>
Globe amaranth	<i>Gomphrena globosa</i>
Moss rose	<i>Portulaca grandiflora</i>
Stonecrop	<i>Sedum</i> spp.
Strawflower	<i>Helichrysum bacteatum</i>
Verbena	<i>Verbena hybrida</i>

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