



Handling the Drought: For the Connecticut Green Industry Professional

"When conditions mean there's not enough water for both plants and people, municipalities must reduce usage. Before that happens, the nursery industry should build a working relationship with water departments. The industry must educate the community about drought resistant plants and water conservation practices. A real change is occurring in our weather—it's important we work together to use water wisely."—from ANLA



The way we make our living depends heavily on WATER. As we face drought conditions, keep four public relations principles in mind: Be: visible—informed—consistent—constructive.

On April 3rd the State of Connecticut issued a statewide drought advisory. The advisory requests state residents to undertake voluntary water conservation measures. This is the first time the state has issued a drought advisory.

The severity of the drought is not consistent throughout the state. Some regions, such as southeastern Connecticut, have received more rain than others in the state. However, statewide reservoir levels, streamflows and groundwater levels are all experiencing well below normal conditions due to the extensive precipitation deficits that have plagued the state. In fact, since July 2001 the state has received approximately 19 inches of precipitation. Normal statewide average for this same period is 35 inches.

In addition, there is no snow pack in the state this year to melt and help restore reservoir levels. In March, Connecticut Department of Environmental Protection announced that it had exempted water utilities from performing their annual spring freshet releases due to low water levels. Spring freshets are instantaneous releases of water into streams to flush debris and sediment from the streambeds in order to maintain optimal stream channel conditions.

In Connecticut, the counties most affected by the drought are: Fairfield, New Haven, Middlesex and New London.

Drought Conservation Definitions

A **drought watch** is used to alert government agencies, public water suppliers, water users and the public regarding the onset of conditions indicating the potential for future drought related problems. A drought watch calls for a voluntary 5 percent reduction of non-essential water use.

A **drought warning** is used to prepare for a coordinated response to imminent drought conditions and potential water supply shortages, relieve stressed resources, and, if possible, forestall the need to impose mandatory water use restrictions. A drought warning calls for a voluntary 10 to 15 percent reduction in water consumption.

A **drought emergency** is the most severe stage of the three drought declarations and imposes mandatory water restrictions on non-essential water use and can only be declared by the Governor.

Drought declarations are based on several factors including:

1. Precipitation
2. Reservoir storage levels
3. Streamflow levels
4. Groundwater elevations
5. Soil moisture

Plants Are A Valuable Community Resource

- Landscaping adds an average of 14.8 percent to a home's value.
- Homes with attractive landscaping sell quicker—by as much as five to six weeks.
- Plants control runoff and erosion. They allow soil to absorb water, returning it to aquifers. Decreased runoff

means less urban flooding. The very plants and trees damaged or destroyed by watering bans moderate the effects of harsh climatic conditions.

- As home improvements go, landscaping is an excellent investment. Recovery value at selling time can be 100 to 200 percent.

- Trees moderate urban "heat islands" created by extensive paved areas. Lawns cool homes, trap dust, absorb noise, and provide outdoor living areas for children and adults. Trees absorb as much as 85 percent of the sun's direct heat, and reduce power demand by as much as 59 percent. Temperatures around grassy areas are about 25 degrees cooler than around dead grass or concrete "heat islands."

- Landscaping enhances property values, which add to the community's tax base.
- Plants provide food and habitat for wildlife, which contributes to biodiversity and a healthier environment.
- Proper placement of shade trees and evergreen windbreaks reduces cooling and heating costs.

What The Green Industry Professional Can Do In A Drought

- Educate your customers on how they can responsibly garden and care for their landscape during the drought.
- Call your local government, inquire about their plans, ask that horticulture be represented on any drought action committees, and volunteer to serve. Offer to educate them about the impact that their drought actions may have on your business and the green industry generally.

- Notify CFA/CGGA/CNLA if local governments seem to be imposing unnecessary additional rules that impact your business. We want to monitor this and get involved if necessary.

- Contact your local news media and let them know you are available as a source when they want information on the drought and its impact on gardening and landscaping.

- Policy makers who see plants only as high-volume water users often overlook these factors. In reality, landscaping accounts for a small amount of water consumption—single digit percentages in most communities. So, even aggressive restrictions yield little benefit in water savings.

- Education and voluntary conservation are superior alternatives to reactionary restrictions. Quick fixes—cutting off water to landscapes—are not the answer.

- Remind everyone that the water used in landscapes returns to the aquifer.

Water-Saving Measures

- Never pour water down the drain when there may be another use for it -such as watering a plant or garden.

- Sweep driveways, sidewalks and steps rather than hosing off.

- Wash company vehicles with water from a bucket, or consider using a commercial car wash that recycles water.

- When using a hose, control the flow with an automatic shut-off nozzle.

- Repair all leaks. A leaky toilet can waste 200 gallons per day. To detect leaks in the toilet, add food coloring to the tank water. If the colored water appears in the bowl, the toilet is leaking.

- Install ultra-low flow toilets, or place a plastic container filled with water or gravel in the tank of your conventional toilet. Be sure it does not interfere with operation of the toilet's flush mechanism.

- Install low-flow aerators and nozzles in irrigation equipment

- If you don't have it already, consider installing a drip irrigation system, which gives water more slowly to the place it's needed most: the plant's root systems.

- Detect and repair all leaks in irrigation systems.

- Use properly treated wastewater for irrigation where available.

- Water the lawn or garden during the coolest part of the day (early morning is best). Do not water on windy days.

- Water trees and shrubs, which have deep root systems, longer and less frequently than shallow-rooted plants which require smaller amounts of water more often. Check with the local extension service for advice on the amount and frequency of watering needed in your area.

- Set sprinklers to water the lawn or garden only - not the street or sidewalk.

- Use soaker hoses and trickle irrigation systems.

- Install moisture sensors on sprinkler systems.

- Remove any dead or weakened plant tissues to avoid secondary problems.

Useful Drought Action Links:

- Connecticut state government: www.drought.state.ct.us
- National Drought Mitigation Center: www.drought.unl.edu/ndmc
- Federal government: www.drought.noaa.gov

DROUGHT-TOLERANT PLANTS

Annuals (sun):

Ageratum
Alyssum
Amaranth
Angelonia
Annual Baby's Breath
Celosia
Cosmos
Creeping Zinnia (Sanvitalia)
Dianthus
Dusty Miller
Flowering Tobacco (Nicotiana)
Gazania
Geranium
Gloriosa Daisy
Lantana
Marigold
Melampodium
Mexican Sunflower
Nasturtium
Petunia
Phlox
Portulaca
Salvia
Strawflower
Sunflowers
Verbena
Vinca
Zinnia

Annuals (part shade):

Ageratum
Alyssum
Begonias
Annual Baby's Breath
Dianthus
Dusty Miller
Flowering Tobacco (Nicotiana)
Melampodium
Nasturtium
Phlox
Blue Salvia
Spider Flower (Cleome)
Verbena

Perennials (part shade):

Corydalis
Creeping Phlox
Daylilies
Dianthus
Epimedium (Barrenwort)
Ferns: Dryopteris, Osmunda,
Pellaea, & Pteridium
Heuchera
Hosta
Lamium
Liriope
Pulmonaria
Purple Coneflower
Santolina
Verbena

Trees & Shrubs (sun):

Abelia
Atlas Cedar
Barberry
Bearberry
Bayberry
Beautybush
Blue Mist Shrub (Caryopteris)
Burning Bush
Butterfly Bush
Colorado Blue Spruce
Cotoneaster
Crabapple
Crape Myrtle
Ginkgo
Green Ash
Goldenrain Tree
Honeylocust
Japanese Pagoda Tree (Sophora)
Juniper
Mock Orange
Mugo Pine
Nine-Bark
Potentilla
Privet
Pryacantha
Red and Pin Oaks
Rugosa and Shrub Roses
Russian Olive
Scotch Broom
St. John's Wort
Smokebush
Spirea
Tree lilac
Viburnum
Quince
Washington Hawthorn
Witch Hazel
Yew
Zelkova

Trees & Shrubs (part shade):

Abelia
Barberry
Bearberry
Bayberry
Kerria
Mock Orange
Privet
Stewartia
Viburnum
Witch Hazel
Yew

Perennials (sun):

Agastache
Amsonia
Artemisia
Asclepias
Aster
Perennial Baby's Breath
Baptisia
Black-Eyed Susans (Rudbeckia)
Boltonia
Campanula
Catnip
Coreopsis
Creeping Phlox
Daylilies
Dianthus
Echinops
Euphorbia
Fountain Grass
Festuca
Gaillardia
Gaura
Goldenrod
Helenium
Hen and Chicks
Hibiscus
Hollyhocks
Lamb's Ears
Lavender
Liatris
Liriope
Miscanthus
Oregano
Penstemon
Physostegia
Prickly Pear Cactus
Purple Coneflower
Rock Cress
Russian Sage
Salvia
Santolina
Sea Holly
Sedum
Siberian Iris
Snow-In-Summer (Cerastium)
Thyme
Verbena
Veronica
Yarrow
Yucca