



# Appropriate Landscaping to Conserve Water

Deborah C. Swanson, Extension Educator  
UMass Extension Landscape, Nursery, Urban Forestry Program  
Plymouth County Cooperative Extension

Certain landscapes create harmony, pleasure and serenity. Some are high maintenance while others are functional, efficient, and water saving. "Xeriscaping," a term created from the Greek root "Xeros" (for "dry") and "scape" (for "vista"), is a method of landscaping, which helps create, harmonious yet water efficient landscapes. The basic principles of Xeriscaping involve seven simple steps, which may assist gardeners in creating water-conserving landscapes. Both new and established landscapes can benefit from Xeriscaping, which focuses on:

- **Effective Design** - It is important to plant the right plant in the right place and to group plants with similar needs together. Examine and assess the planting areas as to: hardiness zone, slope (degree of steepness), exposure, (hot/sunny, cool/shady,) soil type, (heavy soil, sandy soil, etc), good drainage, poor drainage, etc., and plan and plant accordingly. Also consider the maintenance of the designed landscape as to whether it will require frequent mowing, fertilizers, pesticide application, pruning, etc. High frequency watering translates into high maintenance, potential high cost and overuse of a limited resource.
- **Soil Improvement** - In some planting areas, the addition of soil amendments such as compost, rotted leaves or manure, etc. may improve soil structure and increase the water holding capacity of the soil.
- **Reduced Areas of Turf** - Turf could be reduced to areas of importance. Use of drought tolerant grasses will aid in water conservation. Also, avoid narrow, isolated strips of turf. Not only is maintenance more costly but watering may be difficult, sometimes wasteful. Maintaining a lush, green lawn during a drought, usually means frequent watering. To conserve water during drought, allow turf to go dormant.
- **Expanded Uses of Mulches** - Organic mulches reduce water evaporation from the soil, suppress weeds that may compete with desirable plants for available moisture, and moderate soil temperature. Mulch should be placed over the root zones of plants and never mounded or placed against the stems or trunks. In some instances, mulched planting beds planted with drought tolerant plants, may be an ideal replacement for turf areas.
- **Efficient Irrigation** - In many cases, well - planned sprinkler systems can save water. For efficient water use, plan to irrigate turf areas separately from other plantings. Also landscape plantings should be grouped according to similar water needs. Turf areas are best watered with sprinklers. Trees, shrubs, garden flowers, and ground covers can be watered efficiently with low volume drip, spray, or bubbler emitters. Regular adjustment of irrigation systems will save water and money. Make sure the irrigation system is designed to fit the needs of the landscape, the water needs of the plants and zoned to reduce unnecessary applications of water. Automatic irrigation systems sometimes waste water and should be adjusted according to soil moisture.
- **Appropriate Maintenance** - Regular maintenance (weeding, pruning, etc.) preserves the intended beauty of a landscape and may save water. Proper planting and appropriate and timely maintenance will help ensure the health and longevity of plants.
- **Selection of Low-Water Demand Plants** - Evaluating the landscape and choosing plants that usually have lower water needs and also have fewer insect and disease problems can result in an attractive landscape that conserves water, reduces labor and pesticide usage, and produces an interesting and attractive landscape. When selecting drought tolerant plants for a landscape, it is important to remember that plants do need water to become established . The following is a partial list of plants, that once established, are drought tolerant.

## **TREES**

*Acer buergerianum* - Trident Maple  
*Abies concolor* - White Fir  
*Acer campestre* - Hedge Maple  
*Cedrus atlantica* - Atlas Cedar  
*Cornus kousa* - Kousa Dogwood  
*Cotinus obovatus* - American Smoke Tree  
*Gleditsia triacanthos* - Honey locust  
*Ilex opaca* - American Holly  
*Juniperus virginiana* - Eastern Redcedar  
*Magnolia acuminata* - Cucumbertree Magnolia  
*Malus* sp. - Crabapple (Choose disease resistant cultivars)  
*Picea* sp. - Spruce  
*Pinus* sp. - Pine  
*Quercus* sp. - Oak  
*Thuja occidentalis* - American Arborvitae  
*Ulmus parvifolia* - Lacebark Elm

## **SHRUBS:**

*Aesculus parviflora* - Bottlebrush Buckeye  
*Chaenomeles speciosa* - Japanese Quince  
*Clethra alnifolia* - Sweet Pepperbush  
*Cornus mas* - Cornelian cherry  
*Forsythia* sp. - Forsythia  
*Fothergilla major* - Large Fothergilla  
*Ilex x meserveae* - Meserve Holly  
*Ilex pedunculosa* - Longstalk Holly  
*Kolkwitzia amabilis* - Beauty Bush  
*Myrica pensylvanica* - Northern Bayberry  
*Philadelphus coronarius* - Mock orange  
*Physocarpus opulifolius* - Common Ninebark  
*Potentilla fruticosa* - Bush Cinquefoil  
*Prunus maritima* - Beach plum  
*Rhus* sp. - ornamental Sumacs  
*Rosa virginiana* - Virginia Rose  
*Spirea* sp.

## **PERENNIALS:**

*Achillea* sp - Yarrow  
*Aster divaricatus* - White Wood Aster  
*Artemisia* sp. - Wormwood  
*Baptisia australis* - False Indigo  
*Coreopsis verticillata* - Threadleaf Coreopsis  
*Dianthus* sp. Pinks; Carnations  
*Epimedium* sp. - Barrenwort  
*Eryngium* sp. - Sea Holly  
*Euphorbia* sp. - Spurge  
*Helleborus* sp. - Hellebore

*Hemerocallis* sp.- - Daylily  
*Hosta* sp. - Hosta  
*Lavandula* sp. - Lavender  
*Liatris* sp. - Gayfeather  
*Phlox* sp. - Phlox  
*Rudbeckia* sp. - Black eyed Susan  
*Sedum* sp. - Sedum  
*Sempervivum* sp. - Hens and Chicks  
*Yucca filamentosa* - Adam's Needle

#### **ORNAMENTAL GRASSES:**

*Andropogon gerardii* - Big Bluestem  
*Calamagrostis x acutiflora* - Feather Reed Grass  
*Carex* 'Evergold' - Sedge  
*Chasmanthium latifolium* - Northern Sea Oats  
*Eragrostis spectabilis* - Purple Love Grass  
*Panicum virgatum* - Switch Grass  
*Schizachyrium scoparium* - Little Bluestem

#### **ANNUALS**

*Amaranthus caudatus* - Tassel - flower  
*Arctotis stoechadifolia* - African daisy  
*Begonia semperflorens* - Wax Begonia  
*Calendula officinallis* - pot marigold  
*Centaurea cyanus* - Bachelor's Button  
*Cleome hasselerana* - Spider Flower  
*Eschscholzia californica* - California poppy  
*Gazania* - Gazania  
*Pelargonium hortorum* - Geranium  
*Petunia x hybrida* - Petunia  
*Phormium* - New Zealand Flax  
*Portulaca* - Moss Rose  
*Salvia* sp - Salvia  
*Senecio cineraria* - Dusty Miller  
*Verbena* sp. - Verbena

#### *Sources:*

*Xeriscape Fact Sheets, Colorado State University Cooperative Extension, Fort Collins, Colorado.*

*Office of Water Conservation, Denver water Department, Denver, Colorado.*

*N.Y. Agricultural Forum, January 28, 1988, "A List of Water Conserving Plants" - Jim Cross, Environmentalist, Cutchogue, New York.*

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