University of California
Sonoma County Master Gardeners

Xeriscape

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Xeriscape is a term that was coined and trademarked by a water department task force in Denver in 1978, and refers to water-wise, climate-appropriate gardening. It derives from the Greek term xeros, which means dry, and landscape. Xeriscaping is not necessarily a parched, barren look, nor a no-maintenance (e.g., all rock) approach. Xeriscapes can have color, blooms, lushness and even a certain amount of turf. They are not incompatible with Mediterranean-style gardening or habitat gardening. A properly designed and implemented xeriscape can significantly reduce (but not eliminate) maintenance, and it has been estimated that it can reduce water use by up to 60 percent.

According to the Denver 'founders' there are several basic principles of xeriscaping:

- Climate-appropriate plant selection
- Superior garden design Efficient, non-wasteful irrigation Extensive mulching
- Minimal turf areas Conservation of water in soil Proper maintenance

Climate-appropriate plant selection means those whose water needs are closely suited to local water availability. Here in Sonoma, where we have a dry summer wet-winter Mediterranean climate, those plant varieties that are appropriate are those that survive on little summer water—see the list at the end of this article. Natives are always a choice that is in line with xeriscape principles.

Efficient, non-wasteful irrigation generally means drip, with the exception of effective sprinklers for densely planted areas of ground cover or bunch grasses. The term hydro-zoning refers to the practice of grouping plants by their water needs, so that just the right amounts of water can be given, which avoids both over and under-watering of particular plants. Each zone uses a separate valve, whether the method be drip, soaker or sprinkler, ensuring that each zone may be programmed independently.

Mulching helps moderate soil temperature, reduce evaporative water loss, and keep down weeds at the same time. Chipped or shredded barks are the most common mulches, but gravel and stones may be used as well. Soil amendment with compost both provides nitrogen for plant growth, and improves soil structure for water conservation.

Regular maintenance is not eliminated in xeriscaping. Pruning and fertilizing are still required, as is weeding, although mulch and drip irrigation will reduce weed germination considerably. Irrigation systems must be periodically tested, and seasonally adjusted. Pest management is still required, and both organic pest management, and IPM, or integrated pest management, are practices that are very consistent with the ideology of xeriscape.

Replacement of traditional lawn with ground covers or lower-water bunching grasses is a key element in xeriscaping. Ground covers such as creeping or wooly thyme, and grasses such as the dwarf versions of blue fescue, fountaingrass, and deer grass can serve much the same visual and use purposes as turfgrass, and require much less care and water than a lawn.

A list of xeriscapic plants appropriate for Nevada County includes:

Plants for Shade

Tall

Carpenteria californica, California Bush Anemone
Ceanothus integerrimus, Deerbrush*
Garrya fremontii, Mountain Silktassel*
Holodiscus discolor, Cream Bush*
Lithocarpus densiflora, Tanbark Oak*
Prunus ilicifolia, Hollyleaf Cherry
Rhamnus tomentella, Hoary Coffeeberry*
Ribes aureum, Golden Currant*

Medium

Amelanchier pallida, Serviceberry
Arctostaphylos 'Howard McMinn', Manzanita
Arctostaphylos 'Sentinel', Manzanita
Lilium humboldtii, Humboldt Lily*
Mahonia aquifolium, Oregon Grape*
Rhus trilobata, Squaw Bush*
Ribes nevadensis, Sierra Currant*
Ribes viburnifolium, Catalina Currant
Rosa californica, California Rose*
Styrax officinalis, Snowdrop Bush*
Symphoricarpus albus, Snowberry*

Low

Achillea spp., Yarrow
Ceanothus hearstiorum, Hearst Ceanothus
Chlorogalum spp., Soaproot
Clematis lasiantha, Chaparral Clematis*
Iris 'Pacific Coast' hybrids, Wild Iris hybrids
Mahonia aquifolium repens, Creeping Oregon Grape*
Rhamnus ilicifolia, Hollyleaf Redberry*
Salvia sonomensis, Creeping Sage*
Stachys ajugoides rigida, Rigid Hedge Nettle*

North America, 50% of residential water use is applied to landscape and lawns. Xeriscaping can reduce this by 50 75%. The zoning of landscape plantings by water use is one of the most useful concepts of xeriscape design.

For example, areas near your home can be zoned for higher water use plants. Vines, potted plants, a small lawn, perennials, ground covers, and shrubbery will help cool the home through shading and evapo-transpiration. Farther out from the house can be zones for drought tolerant trees, shrubs and ground covers blending with the natural vegetation found on your property.

Golden Currant,
Ribes aureum

Soil improvement: The ideal soil in a water-conserving landscape does two things: it drains quickly and stores water at the same time. This is achieved by increasing the amount of organic material in your soil and keeping it well aerated . Compost is the best organic additive.

Use appropriate plants: For best results, select plants that are native to our region. Native plants are adapted to variations in rainfall and summer drought conditions. Group plants according to their water and sun needs. Using native plants in your landscape also increases habitat and forage for beneficial insects, birds, and wildlife.

Limit lawn areas: Turf is the most water-thirsty landscape component. Design lawn areas for practical purposes, such as play areas. Consider replacing lawn areas with low ground covers, shrubs, native grasses, boulders, pathways, or mulched areas.

The use of lawn mowers contributes to air pollution. Herbicides, pesticides, and chemical fertilizers are expensive and pollute water, especially in run off from irrigation.

Mulch: Cover the surface of all bare soil with a mulch of wood chips, bark, leaves, coarse compost, pine needles, or gravel. A mulch several inches thick helps retain soil moisture and moderates temperature. Mulching prevents erosion and compaction and discourages competing weeds.

Irrigation: Soaker hoses and drip irrigation systems offer the easiest and most efficient watering for xeriscapes. Native plants need some irrigation for 1 3 years until they become established. Water deeply but infrequently to encourage the growth of a healthy root system.

Maintenance: Low-maintenance is one of the benefits of xeriscaping. Native plants do not need to be fertilized and seldom need any pruning. Over fertilization and heavy pruning of any plants will promote excessive growth and increase water needs. California generates 6 million tons of yard waste annually. Less than 10% is diverted from landfills. Xeriscaping will save you the time and expense of hauling yard waste and lawn trimmings.

* native to Nevada and Placer County region