



XERISCAPING: WATER CONSERVE LANDSCAPING

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INTRODUCTION

Xeriscaping is mainly about growing "xerophytes", which are slow growing plants that grow in low water environments. It is encouraged in areas where there is no readily accessible, abundant or reliable fresh water supply and is gaining acceptance in other areas as access to irrigation water becomes limited. The term "xeriscape" is coined by Nancy Leavitt of Denver, Colorado in 1981. Xeriscape landscaping or simply xeriscaping derived from Greek word "xeros" meaning dry combining with the word landscape which literally means "dry Landscape" Xeriscapping is a great way to create gardens less dependent on irrigation without sacrificing aesthetic-appeal. Xeriscaping is all about planning, sustaining, visual appealing of landscaping, gardening and implementing it in our urban life by using less water and also rain water harvesting.



IMPORTANCE OF XERISCAPING:

- ✓ Recreational uses with various looks and designs can be created by using topiaries and hedges. Xeriscape can be a powerful market tool for landscapers.
- ✓ Provides artistic interest by different Rock designs, hard scape elements and various tree forms like conical, vase, round, drooping etc.,
- ✓ Consumes less water as many species are drought tolerant and can do well with less irrigation facilities.
- ✓ Requires minimal supplemental inputs (fertilizer, pesticide).
- ✓ Saves money by reducing labour cost (Occasional pruning, low maintenance) less use of lawn mowers.
- ✓ Edible landscaping can also be implemented in xeriscaping by growing hardy herbal & edible species like lemon grass, Aloe, Oregano, fruits like pomegranate, sapota



SEVEN PRINCIPLES OF XERISCAPING:

- 1. Plan and design:** Create a diagram, drawn to scale, that shows the major elements of the landscape, including house, driveway, sidewalk, deck or patio, existing trees and other elements. Once a base plan of an existing site has been determined, the creation of a conceptual plan that shows the areas for turf, perennial beds, views, screens, slopes, etc. is undertaken. Once finished, the development of a planting plan that reinforces the areas in the appropriate scale is done.



- 2. Soil amendment:** Proper soil preparation is the key for successful water conservation, Physical & chemical characteristics of soil has to be analyse. Most xeric adapted plants do best in sandy, well drained soils, but there are some that thrive on clay soils (i.e. buffalo grass). Amending your soil with organic material, such as compost or manure, can help retain and release water
- 3. Appropriate plant and zone selection:** Different areas in a yard receive different amounts of light, wind and moisture. To decrease water waste, group together plants with similar light and water requirements and place them in an area that matches these requirements. Put moderate-water-use plants in low-lying drainage areas, near downspouts, or in the shade of other plants. Turf typically requires the most water and shrub/perennial beds will require approximately half the amount of water. Dry, sunny areas support low-water-use plants that grow well in the specific climate. Planting a variety of plants with different

heights, color and textures creates interest and beauty.

4. Efficient irrigation: Xeriscape can be irrigated efficiently with hand or using an automatic sprinkler system. Zone turf areas should separate from other plants and irrigate them efficiently using low-pressure, low-angle sprinklers. Use spray, drip line or bubbler emitters for watering trees, shrubs, flowers and groundcovers. Avoid oscillating sprinklers and other sprinklers if watering by hand, that throw water high in the air or release a fine mist. Water deeply and infrequently to develop deep roots. To reduce water lost to evaporation, never water during the day. With the use of automatic sprinkling systems, adjust the controller monthly to accommodate weather conditions. Also, install a rain sensor to shut off the device when it rains

5. Mulch: Mulch keeps plant roots cool, prevents soil from crusting, minimizes evaporation and reduces weed growth. Organic mulches, such as bark chips, pole peelings or wood grindings, should be applied 2 to 4 inches deep. Fiber mulches create a web that is more resistant to wind

and rain washout. Inorganic mulches, such as rocks and gravel, should be applied 2 to 3 inches deep.

6. Reducing turf: Reduce the amount of turf in landscape to reduce the water usage and thereby grow native or low water usage plants, mulches that beautify landscape while saving water. Avoid growing turf in sharp angles and long narrow strips that are difficult to mow and water. Planting turf such as buffalo grass, blue grass, Japanese grass, tall fescue and fine fescues to reduce water use in landscapes. Ground covers can be used as an alternative to turf.

7. Maintenance: Maintenance of a Xeriscape garden is similar to a traditional landscape, but it will decrease over time. Main objective of xeriscape maintenance is to decrease water use, and any new growth on plants. Regular checks of irrigation and proper mowing saves water. Maintenance in xeriscape includes weeding, less turfing, fertilize less and use slow release fertilizers, less pruning of trees and shrubs, cutting back most perennials. Avoid shearing of plants- Thinning is better than shearing.

Some of the Plants used in xeriscaping are as follows:

Perennials flowers	Annual flowers	Succulents	Cacti	Shrubs and Trees
Asters, Babys bearth, Coreopsis, Gaillardia, Iris, Lavender, Pansy, Sedum, Static, Sweet William, Tulips, Yucca etc.	Cosmos, Marigold, Rose, Static, Zinnia, Phlox, Mexican Sunflower, Vinca, Portulacca, etc.	Agave, Aloe, Bryophyllum, Cissus sp., Crassula, Euphorbia, Furcraea, Kalanchoe, Pedilanthus, Perlagonium, Sanseveria, Sedum, etc.	Opuntia, Cereus, Mammillaria, Golden barrel cactus, Old man cactus etc.	Adenium, cassia, acalerodendron, Juniper, Thuja, Acacia, Aralia, Bottel tree, Eucalyptus, Fig, Juniper, poplar,



DISADVANTAGES OF XERISCAPING

- ✓ High acquisition cost
- ✓ It may not match new aesthetics
- ✓ Sport area is reduced

CONCLUSION:

Xeriscape with lower maintenance and lesser water consumption provides people with healthy and beautiful environment.

ADVANTAGES OF XERISCAPING:

- ✓ Reduced consumption of water
- ✓ Reduces Waste and Pollution
- ✓ Less maintenance cost
- ✓ Reduce fertilizer use (phosphorus, nitrogen, potassium) that help grow harmful algae