

Seven Steps to a Water-Efficient, Sustainable Landscape

Whether updating an existing landscape or starting a new landscape from scratch, using the seven principles of Xeriscape will produce a water-wise environment. For best results, apply all seven principles.

1) PLAN THE XERISCAPE DESIGN

The most important step in creating a successful Xeriscape is to produce an overall plan so the landscape can be phased in as time and money allow. Begin planning with a drawing of the site, including buildings, driveways, walks and existing vegetation. Identify sunny and shady areas, slopes and views. Evaluate the needs of the people who will be using the landscape as well, and use all this information to create a functional and satisfying landscape design.

2) EVALUATE AND IMPROVE THE SOIL

Good soil is the basis for all successful Xeriscape Gardens. It absorbs and retains water, promotes good drainage, and allows oxygen to reach plant roots. It also provides nutrients necessary for plant growth. Soil in South Texas is lacking in organic matter, and will benefit from placing at least 1-2 inches of organic matter (such as compost, aged manure, humus or sphagnum peat moss), on top of the soil and tilling it in. (This is roughly equal to 3 to 5 cubic yards of organic material per 1000 square feet of planting area.)

3) CREATE PRACTICAL TURF AREAS OF MANAGABLE SIZES, SHAPES AND APPROPRIATE GRASSES

Many turf grasses consume far more water than plants adapted to our climate. Limiting turf grass to areas where it serves a purpose, or replacing an unused portion of turf grass with an attractive Xeriscape planting can substantially reduce water consumption as well as maintenance time and expense. Groundcovers, shrubs, perennials and ornamental grasses often require less water than turf grass and make excellent turf alternatives, especially in low-use, narrow or oddly-shaped areas or on slopes, which are difficult to water efficiently. Rock or organic mulches can be used around driveways or as paths instead of turf grass.

4) SELECT PLANTS ADAPTED TO OUR CLIMATE AND SOILS, AND GROUP THEM ACCORDING TO WATER NEEDS.

Selecting plants adapted to our climate and soils, grouping them by water needs and placing them in locations favorable to their growth results in a healthier, easier-to-maintain landscape that uses less water and fewer pesticides and fertilizers than a traditional landscape. Choose plants of different heights, colors, shapes and textures to create beauty in the landscape. For an attractive landscape all year round, include plants with seasonal interest, such as flowers, fall color, berries, unusual bark or seed heads, and dramatic winter form.

5) WATER EFFICIENTLY

Grouping plants with similar water needs makes irrigation more efficient. Choose the irrigation method (hose-end sprinkler, automatic system or drip system) that will water the plants in each area most effectively. Minimal wind conditions reduce evaporation and allow greater penetration of irrigation water. Always water turf grasses separately from other landscape areas. Water deeply and infrequently to develop deep roots. Reprogram automatic systems once a month to meet seasonal needs and weather conditions. Due to time restrictions implemented during drought conditions, residents are allowed to irrigate between 6pm and 10am. Remember that even the most drought-tolerant plants need water during their first two years to establish an extensive root system that will make them tough. Also, keep in mind that established Xeriscape gardens need supplemental water during extended dry periods in both summer and winter.

6) USE MULCHES TO REDUCE EVAPORATION

Three to four inches of organic mulch (such as wood chips) placed directly on the soil in planting beds helps conserve moisture, buffers daily temperature fluctuations and discourages weeds. Avoid black plastic in planting areas as it prevents air and water from reaching the plant roots. Organic mulches decompose, improving soil texture over time. In general, inorganic mulches (such as rock) should only be used in unplanted areas as they can increase temperature above and below ground. However, some ground cover plants prefer a shallow (-1") pea gravel mulch during their establishment period, and many Xeriscape...sun and heat-loving plants also grow well in a gravel mulch.

7) MAINTAIN ACCORDING TO GOOD HORTICULTURAL PRACTICES

Proper fertilization, weeding, watering and attention to your irrigation system encourages a beautiful Xeriscape that resists disease and insect pests, and enables it to survive periods of drought. Initially, the maintenance needs of a Xeriscape garden are similar to those of a traditional landscape. However, an established Xeriscape, produced by application of all seven principles, requires less maintenance over time.

WHY XERISCAPE IS ESSENTIAL FOR OUR COMMUNITY

South Texas region is known as the Wild Horse Desert. Long ago residents knew that our region experiences prolonged periods of droughts with less than 15 inches of annual rainfall.

In the summer, more than half of Coastal Bend's precious water is applied to lawns, trees and shrubs, creating landscapes that are not environmentally suited to our climate or our natural resources, and not able to withstand periods of drought. Water conservation in the landscape is becoming more important as population growth increases the demand for water resources. Coastal Bend residents can conserve millions of gallons of water by altering their traditional approach to outdoor water use. It is urgent that we tame the way we water our lawns to make the most of the water we use. Be water wise.

WATER EFFICIENT LANDSCAPE RECOMMENDATIONS

- 1) Install 60 percent or less high water-use turf. May we suggest Floratam, a hardy turf variety. The remaining 40 percent can be covered with mulch, rock and drought-tolerant plants, trees and shrubs.
- 2) Improve any soil that will be planted by adding organic matter and till it into the soil as deeply as possible.
- 3) Do not install high-water use turf on steep slopes or narrow areas that are difficult to irrigate.
- 4) Install automatic irrigation systems that have a rain sensor, electronic clock/controller with the ability to change the watering program.
- 5) Use drip irrigation on trees and shrubs when appropriate.
- 6) Apply organic mulch to all planting beds to reduce evaporation of moisture from the soil.
- 7) Regularly observe the operation of your sprinkler system and make any necessary repairs.
- 8) Use a time or positive shutoff nozzle if a hose is used to water the landscape.
- 9) Do not waste water by allowing it to pool, run off, or spray onto pavement.

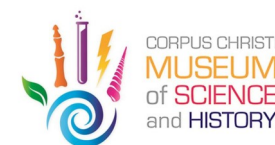
TEXAS A&M
AGRI LIFE
EXTENSION

Visit the Xeriscape Learning Center and Design Garden

1900 N. Chaparral Blvd., Corpus Christi, Texas

Open Year Around

Start by creating a plan of your Xeriscape design.



Sponsored by the City of Corpus Christi, Water, Storm Water, Environmental Services, Parks and Recreation, Museum of Science of History, Texas AgriLife Extension Service

XERISCAPE

a beautiful way to conserve water



It takes 7 simple Xeriscape principles to begin your Xeriscape landscape.

Xeriscape techniques are adaptable to any landscape style in that they can be plain, fancy, conventional, formal or natural as the homeowner desires. It is difficult to differentiate a Xeriscape garden from a traditional landscape without looking at the water bills!



XERISCAPE
Corpus Christi

1900 N. Chaparral Blvd.
Corpus Christi, TX 78401

Xeriscape Gardening

Avoiding Myths, Misconceptions & Pitfalls

Most Coastal Bend gardeners share the same simple goal—A landscape full of lush, colorful plants. But getting there is another matter. Picking the right plants can be confusing especially if you’re trying to go through catalogues, books or the internet. Even the most knowledgeable gardeners are overwhelmed.

Xeriscape Corpus Christi, a non-profit organization, is helping you select great landscape plants. Reputable nurseries are labeling “proven performing” plants with a purple label stating “I’m a Water-Wise Plant”. Over 150 trees, shrubs and perennials have been identified as outstanding selections by local landscape professionals. These plants are both disease resistant, as well as water-efficient.

Xeriscape Myths and Misconceptions

Xeriscape is a philosophy that’s popular among many local gardeners, but myths and misconceptions about the practice still exist, such as that Xeriscape gardens do not require water or that Xeriscape requires the sole use of cacti and rock. Some gardeners have visions of ripping out their entire yards and replacing everything with scraggly, native plants void of color. Nothing could further from the truth. Let the myths and misconceptions come to an end and let Xeriscape landscaping reflect our unique surroundings.

You can have a lush, colorful garden and still save water, that is if you control the amount of water you apply after the plants are established. Water-Wise plants are outstanding because they don’t just survive—they thrive—in our summer heat. And the scorching sun is one of the biggest challenges we face here on the coast. A lot of plants look good in our cooler spring and fall months, but landscape plants need to do well all year round, especially in summer.

Avoid the Pitfall of a Poor Landscape Strategy

A common mistake homeowners make is to plant only what they seen in their neighborhood or to purchase a plant at a garden center on impulse. These strategies will leave you with a landscape that’s either too predictable or a patchwork of plants at different degrees of failure. Visit our website for more water saving tips and look for the purple label at your local nursery.



Trees

Common Name

Anacua Tree
Desert Willow
European Olive
Honey Mesquite Tree
Japanese Yew Tree
Pecan Tree
Yaupon Holly

Ehretia anacua
Chilopssis linearis
Olea Europaea
Prosopis glandulosa
Podcarpus macrophyllus
Carya illinoensis
Illex vomitoria “Pride of Houston”

Palms/Cycads

Chinese Fan Palm
Lady Palm
Mediterranean Fan Palm
Mexican Fan Palm
Pygmy Palm
Texas Sabal Palm

Livistonia chinensis
Rhaps excelsa
Chamaerops humilis
Washingtonia robusta
Phoenix robellinii
Sabal texana

Shrubs

American Beauty
Barbados Cherry
Blue Plumbago
Cenizo or Texas Sage
Century Plant
Century Plant, variegated
Crape Myrtle
Dwarf Bottlebrush
Dwarf Burford Holly
Dwarf Chinese Holly
Dwarf Pomegranate
Dwarf Yaupon Holly
Esperanza
Flame Ancanthus
Hamelia
Indian Carnation
Indian Hawthorne
Jatropha
Juniper
Knockout Rose
Lantana
Macho Fern
Oleander
Pittosporum, Green
Pittosporum, Variegated
Pride of Barbados
Sandankwa Viburnum
Split-leaf Philodendron

Callicarpa Americana
Malpighia glabra
Plumbago auriculata
Leucophyllum frutescens
Agave Americana
Agave Americana
Lagerstroemia spp.
Callistemon citrinus “Little John”
Ilex cornuta “Burfordii Nana”
Ilex cornuta
Puncia granatum
Ilex vomitoria
Tecoma stans
Aniscanthus wrightii
Hamelia patens
Tabernaemontana divaricate
Raphiolepis indica
Jathropha integerrima “Compacta”
Ilex spp.
Rosa x Radtko
Lantana spp.
Nephrolepis biseneta
Nerium spp.
Pittosporum tobira
Pittosporum tobira
Caesalpinia pulcherrima
Viburnum suspensum
Philodendron selloum

Botanical Name

Shrubs

Turk’s Cap, Drummundi
Turk’s Cap, Giant
Western Arborvitae
Xanadu Philodendron
Yellow Plumbago

Malvaviscus arboreous
Thuja orientalis “Green Giant”
Philodendron “Xanadu”
Galphimia glauca

Perennials & Vines

Common Name

Sweet Potato Vine
African Iris
Aloe Vera
Begonia
Bird of Paradise
Blue Flax Lilly
Daylily
Firecracker Plant
Foxtail Fern
Mexican Bush Sage
Mexican Heather
Mexican Honeysuckle
Moraea Iris
Oyster Plant
Pentas
Prickly Pear Cactus, Thornless
Red Yucca
Shell Ginger
Shell Ginger, Variegated
Shrimp Plant
Spider Lily

Impoea batatas
Diets bicolor
Aloe Vera
Begonia semperflorens
Strelizia reginae
Dianella tasmanica
Aspidistra elatior
Russelia equisetiformis
Asparagus densiflorus “Myers”
Salvia Leucantha
Cuphea hyssopifolia
Justicia spicigera
Diets Iridioides
Tradescantia spathacea
Pentas Lanceolata
Opuntia species
Hesperaloe parviflora
Alpinia zerumbet
Alpinia zerumet variegata
Justicia brandegeana
Hymenocallis lirioides

Ground Covers

Airplane Plant
Asiatic Jasmine
Asparagus Fern
Japanese Garden Juniper
Liriope, Big Blue
Liriope, Giant
Purple Heart
Sedum
Wedelia

Chlorophytum comosum
Trachelospermum asiaticum
Asparagus densiflorus
Cyrtomium falcatum
Juniperus procumbens
Liriope muscari
Liriope gigantea
Setcreasea padilla
Sedum rupestre “Lemon Coral”
Wedelia trilobata

Grasses

Bermuda Grass

Cynodon dactylon “Celebration”

Ornamental Grasses

Fountain Grass

Pennisetum setaceum

Botanical Name

Malvaviscus arboreous