

Water Wise Plants For West Texas



Presented by
South Plains Underground
Water Conservation District



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What is a Water Wise Landscape? According to the Texas A&M AgriLife website, it is a "landscape designed and maintained according to basic good horticultural principals that allow for a beautiful healthy landscape with minimal supplemental irrigation and no adverse runoff from the landscape property."

This book was created with the West Texas gardener in mind. Many West Texans have trouble knowing what types of plants are well suited for their area. The South Plains Underground Water Conservation District created this book in order to help guide those with a green thumb to the plants that are good for the hot dry, and unpredictable climate of West Texas.

Over 60 colorful photographs make this book a solid reference to 50 essential plants, trees, shrubs, ornamental grasses, turf, and cactus for the West Texas landscape.

For more information visit the South Plains UWCD office or website at www.spuwcd.org



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Please Note: size of plants are represented as width x height



SHRUBS Watering Tips

All newly planted shrubs should receive a good watering 2 or 3 times per week for the first month. After the first month they should be watered deeply once a week. Most trees and shrubs require 1" of water per week during the growing season.

Planting

Shrubs can be planted almost any time of the year as long as the ground is not frozen. Late summer or early fall is the optimum time to plant shrubs. This gives the shrub a chance to establish new roots before winter arrives and the ground freezes.

Maintenance

Some species of evergreen shrubs may need protection against winter sun and wind. A thorough watering in the fall before the ground freezes is recommended. Spray solutions are available to help prevent drying of foliage during the winter.

Fertilization is usually not needed for newly planted shrubs. Depending on soil and growing conditions, fertilizer may be beneficial at a later time.



Lilac

Syringa Vulgaris

Size ------ 20'x 15'
Habit ------ Deciduous
Exposure ----- Full Sun
Flower Color ----- Lavender



Dwarf Burning Bush

Euonymus alatus 'compactus'
Size ----- 5'-6'
Habit ----- Deciduous
Exposure ----- Sun to Part Shade





Dwarf Yaupon Holly

Llex vomitoria 'Nana'

Size 8'x 5'
Habit Evergreen
Exposure..... Sun to Part Sun

Flower Color ····· White



Butterfly Bush

Buddleia davidii

Size ------ 10'x 10'
Habit ----- Deciduous
Exposure ----- Sun
Flower Color ----- Lilac





White Sage

Ceratoides lanata

Size	3'x 4'
Habit ·····	Deciduous
Exposure	Full Sun
Flower Color ······	White



Rockspray Cotoneaster

Cotoneaster horizontalis

Size ----- 3'x 6'

Habit ····· Evergreen

Exposure -----Sun to Part Shade

Flower Color ····· Pink







'Moonlight'Hardy Broom

Cystisus scoparius

Size -----3'x 6'
Habit ------Evergreen
Exposure -----Full Sun
Flower Color ------Yellow





Vitex

Vitex agnus-castus

Size------ 10'x 10'
Habit ----- Deciduous
Exposure----- Full Sun
Flower Color----- Purple





Nandina-Gulf Stream

Nandina domestica

Size 3'x 63

Habit Evergreen

Exposure Sun to Part Shade

Leaf Color Gold/orange/red



Red Tip Photinia

Photinia x fraseri

Size ----- 5'x 10'
Habit ----- Evergreen
Exposure ---- Sun to Part Shade
Flower Color ---- White (red berries)





Texas Sage

Leucophyllum frutescens

Size·····	······ 5′x 8′
Habit ·····	····· Deciduous
Exposure ······	·····Sun to Part Shade
Flower Color ······	·····Purple & White





Indian Hawthorn

Rhaphiolepis indica



TREES

Site Location for Planting Your Trees

You must first determine the mature height and spread of the tree you wish to plant to make sure that the tree you choose will fit its designated location. Unless you plan to regularly control the tree's height and spread, the distance of a tree from the house should be somewhat greater than the mature spread and height of the tree.

Watering Tips

Always check the soil moisture before watering. Avoid overwatering, as this can kill the plant. A rule of thumb for irrigating plants is to apply one inch of water per week to the root zone. Apply about three inches of mulch on the surface of the root-ball. This reduces the evaporation rate in the root ball and therefore reduces the frequency of irrigation.

Maintenance

All trees require pruning. This is especially important when trees are young and promotes a proper scaffold branch structure. Most homeowners can prune a tree when it is young. Before buying a tree, find out if it is prone to limb breakage that is inherent to the species or from wind and ice damage.



Desert Willow

Chilopis linearis



Shademaster Honeylocust

Gleditisia triacanthos

Size······ 70'x 70'
Habit ····· Deciduous
Exposure ····· Sun
Flower Color···· No Flower





Live Oak

Quercus virginiana

Size----- 50'x 50' Habit----- Evergreen Exposure ----- Sun

Flower Color No Flower



Chitalpa

Chitalpa tashkentensis

Size ----- 30'x 30' Habit ----- Deciduous

Exposure Sun

Flower Color ····· Pink/White







Shumard Oak

Quercus shumardii

Size ·····	······60'x 60'
Habit ······	·····Deciduous
Exposure ·····	·····Sun
Flower Color ·······	······No Flower





Cottonless Cottonwood

Populus deltoids

Size	·········· 70'- 80'
Habit ······	····· Deciduous
Exposure ······	····· Sun
Flower Color ·······	········· No Flower







Austrian Pine

Pinus nigra

Size·····	·····60'x 30'
Habit ······	·····Evergreen
Exposure ······	
Flower Color	··No Flower





Alberta Blue Spruce

Picea glauca
Size ------ 60'x 30'
Habit -------Evergreen
Exposure ------Sun to Part Shade
Flower Color ------No Flower



Southern Magnolia

Magnolia grandiflora

Size ------80'x 80'
Habit -----Evergreen
Exposure ------ Sun to Part Shade
Flower Color ------White







Red Bud

Cercis Canadensis

Size------ 25'x 20'
Habit ------ Deciduous
Exposure------Sun to part shade
Flower Color------Purplish-pink







Grass (Ornamental)

Site Location for Planting your Grass

Plant spacing for ornamental grasses is very important to prevent your garden from becoming an overgrown jungle. Space your new plantings to allow enough room for growth. Like most perennials, grasses may not reach their full size potential until their third year in the ground. Ideally, the plant spacing equals the plant height.

Watering Tips

Plants should be well watered the first season after planting so they can develop a good root system. Established plants do not need regular watering, but may need supplemental watering during drought periods. The amount of water will depend on the grass species, the site, and on the quality, size and growth rate desired.

Maintenance

Established grasses are the ultimate low maintenance plants. Give these grasses an annual cut in early spring. Cut them back to within 6 to 10 inches of the ground. Use hedge shears and wear gloves - some species have very sharp edges.



Maiden Grass

Miscanthus sinensis 'Gracillmus'

Size -----7'x 5'

Habit ·····Deciduous Exposure ······Sun to part shade

Flower Color ······Silver



Pampas Grass

Cortaderia selloana

Size----- 8'x 4'

Habit ····· Evergreen

Exposure ····· Sun

Flower Color White





Sea Oats

Uniola panucilata

Size ······ 6'x 2'
Habit ······ Evergreen
Exposure ····· Sun

Flower Color Cream White



Fountain Grass

Pennisetum setaceum
Size ------ 3'x 2'
Habit ----- Deciduous
Exposure ---- Sun to Part Shade
Flower Color ---- Variety of Purples





Hameln Grass

Pennisetum alopecuroides

Size-----2'x 3'

Habit ·····Deciduous

Exposure ·····Sun

Flower Color ·······Wheat



Karl Foerster Grass

Calamagrostis x acutiflora

Size----- 3'x 4'

Habit ····· Deciduous

Exposure Sun

Flower Color ······ Wheat





Grass (Turf) Mowing Turf Grass

Mowing turf at the appropriate height is important for turf health and appearance. Turf cut too short usually has a shallow root system, lacks density, and often requires pesticide application to stave off weed and pest infestation that commonly occur in stressed lawns.

Watering Tips

The amount of water you apply during each irrigation cycle and the frequency of your irrigations can also have a significant impact on turf grass diseases. Overwatering is as much of a problem, if not more so, than under watering.

Planting

When you select a turf grass for your lawn, consider the method of establishing the grass. Some grasses can be seeded. Others must be planted by vegetative sprigs, plugs, or solid sod. When seeding, use top quality seed from a reliable nursery or seed company. Seed should be fresh and certified as to purity and germination percentage. Do not buy old seed left over from last planting season.

Buffalo

Buchloe dactyloides

Mowing Height	·····2" -3"
Traffic Tolerance	
Exposure ······	·····Full Sur
Inch/ Week H20	0 8-1 7



Bermudagrass

Cynodon dactylon

Mowing Height ······	·· 1.5″-2″
Traffic Tolerance	·· High
Exposure ······	·· Full Sun
Inch/Week H20 ······	1.5-2.5





Prairie

Bromus wildenowii Kunth

Mowing Height	····· 3"
Traffic Tolerance ·····	······High
Exposure ·····	·····Full Sun
Inch/Week H20 ······	0.5-1.0



Little Bluestem

Schiachyrium

Mowing Height ······	2"-3"
Traffic Tolerance	High
Exposure ······	Full Sun
Inch/Week H20 ·······	Low



Blue Grama

Bouteloua gracilis

Mowing Height 1.5"-3"
Traffic Tolerance High
Exposure.................. Full Sun
Inch/Week H20................ Very little



Sideoats Grama

Bouteloua curtipendula

Mowing Height 1.5"-3"
Traffic Tolerance High
Exposure Full Sun

Inch/Week H20 ····· Very little





Cactus

Planting

Most people who grow cactus plants in flower pots believe that clay pots work better than plastic pots. Size matters to the root system of any potted plant, and it is important that roots have room to grow. In most cases it is more important to leave some space for the roots to grow than it is to try and keep the pot size small.

Watering Tips

Potted cactus plants require more care in watering than planted cactus. Cactus should not be allowed to go completely dry, just moist. In the house, watering could be as little as once a month depending on the humidity of the house. But outside, watering may only be required every two or three days.

Maintenance

Encouraging cactus plants to bloom is usually a matter of sunlight, water and especially the age of any specific variety. Cactus plants reach flowering age according to their species. Some bloom in a few years, while others take decades before making their first flowers.



Yucca

Yucca spp.

Size ······7'x 4'
Habit ······Evergreen
Exposure ······Sun

Flower Color Variety of colors



Adams Needle Yucca

Yucca filamentosa
Size----- 3'x 2'

Habit ······ Evergreen

Exposure Sun

Flower Color ----- Pale Yellow





Ice Plant

Delosperma cooperi

Exposure ·····Sun

Flower ColorPinks & Purples



House Leek

Size 6"x 6"

Habit ····· Evergreen

Exposure ····· Sun

Flower Color White or Pink





Spiderweb Hens & Chicks

Flower Color ·····Pink

Sempervivum arachnoideum
Size------ 6" x 1'
Habit ------Evergreen
Exposure ------Sun







Flowers Fertilizer

Ideally, gardeners should run basic soil tests to determine fertilizer requirements. You can use a general purpose granular fertilizer or a slow release granular fertilizer with an analysis of 10-10-10 (the three number on the label). Read and follow the label directions on how much to use.

Watering Tips

Most flowers prefer soil that is evenly moist yet well drained. When you do water, apply it slowly and thoroughly. To be effective, the water must soak down to the deepest roots.

Planting

Planting annual and perennial flowers is an easy task. By doing it at the correct time your flowers will get off to a fast, healthy start that will reward you with bigger and better blooms down the road.

It is best to plant when it is not especially hot or sunny. An overcast day when rain is forecast is ideal-your watering will get done for you.



Coreopsis

Coreopsis lanceolata

Size -----4'x 2'
Habit -------Deciduous
Exposure ------Sun to Part Shade
Flower Color ------Variety



Verbena

Verbena bonariensis

Size ·······3' x 2'
Habit ······ Deciduous
Exposure ······ Sun

Flower Color Violet-blue





Daylily

Delosperma cooperi

Size -----3'x 2'
Habit ------Deciduous
Exposure -----Sun to Part Shade

Flower Color ······Variety



Liriope

Liriope spictata





Blanket Flower

Gaillardid x. grandiflora

Size ----- 2'x 2'
Habit ----- Deciduous
Exposure ----- Sun

Flower Color ····· Orange with Yellow

Tips & Dark Eye



Salvia

Salvia divinorum

 Size----- 10"x 12"

 Habit----- Deciduous

 Exposure----- Sun

Flower Color Purple







Black Eyed Susan

Rudbeckia hirta



Lantana

Lantana camara

Size 2'x 2'
Habit Deciduous
Exposure Sun
Flower Color Variety





Purple Coneflower

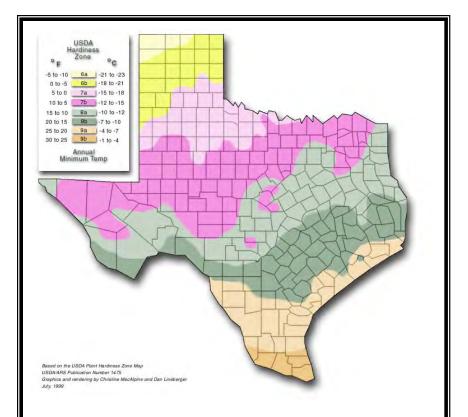
Echinaceae purpurea

Size ------ 3'x 3'
Habit ----- Deciduous
Exposure ---- Sun
Flower Color ----- Purple



Silver Mound Artmisia





A hardiness zone is a geographically-designed zone in which a specific category of plant life is capable of growing. When selecting plantings for your landscape project, it is very important to consider the proper climate zone needed for them to grow. Native grasses, flowers, shrubs, and trees matched with the appropriate hardiness zones require less maintenance and make better use of the resources available to them. For more information on the hardiness zones in your area, visit the USDA website at

http://www.usda.gov





Wildflowers

Studies show that wildflowers can increase species of insects and birds that act as all-natural pest control, reducing or eliminating the need for pesticides.

Pollinator Bees

Bee species are declining because of over use of pesticides. Bees play a key role in agriculture and in nature as pollinators. Some bee species like Mason Bees, make compartments of mud in hollow reeds or holes in wood. Consider placing pollinator houses in your yard or garden to encourage bee popu-



lation. Plant flowers that attract and feed bees such as bumblebees.

Monarch Butterfly

Monarch butterfly populations are declining because of overuse of pesticides, loss of habitat and loss of caterpillar food plants. Monarch butterfly caterpillars can only survive on milkweed plants. These plants have a milky sap that is toxic



to most animals. The caterpillar is able to use the sap in its skin and muscle making it taste bad. Planting native milkweeds will help these butterflies survive. Native milkweeds are available in a variety of colors.

<u>Hummingbirds</u>

Humming birds are attracted to tubular shaped flowers. They love shades of red and pink.



Rainwater harvesting was a common method of providing water for many of the first settlers in Texas. At that time, most rainwater was captured in cisterns. As its name implies, roof-based rainwater harvesting refers to the collection of rainwater runoff from roof surfaces. Captured rainwater is most often used for landscape irrigation, although, some systems are designed to treat the rainwater so that it can be used for drinking purposes inside the home.

The District's rainwater harvesting system was installed in 2014. This system consists of two 550-gallon storage tanks. The roof area of the barn is 608 ft². Approximately 365 gallons of rainwater can be captured from a 1" rainfall event. The average annual rainfall in our area is 17.5".

A notable feature of the District's system is the first-flush pipe. The first water to come off the roof fills this pipe. This is how dirt and other contaminants are cleared from the roof. When this pipe is full, the clean water goes into the storage tanks.

At the time the District installed the rainwater harvesting



system, the xeriscape garden was also created. The garden contains many of the plants which are shown in this book. Once established, the plants have been watered almost entirely with the stored rainwater. The garden's pollinator

house has become a sanctuary for bees and butterflies.

The District is committed to increasing awareness about rainwater harvesting. Remember, "Every Raindrop Counts".



South Plains UWCD

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