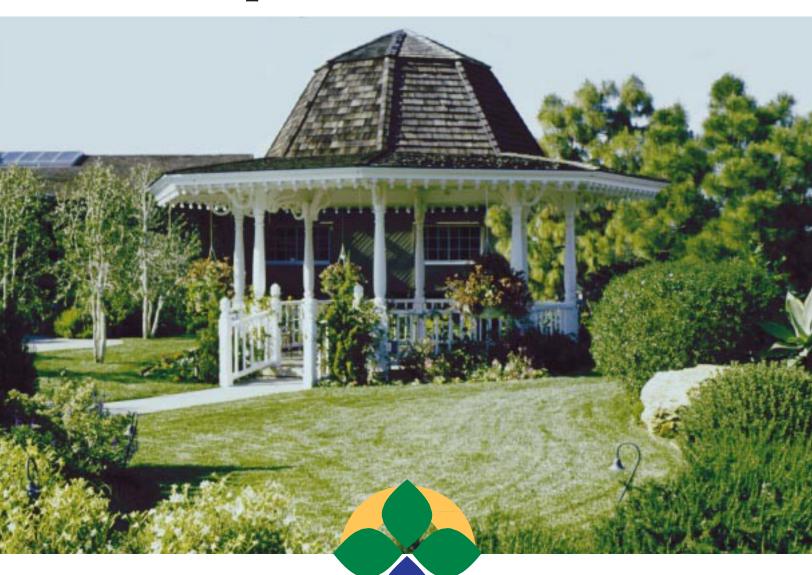


# **Xeriscape**<sup>™</sup> Landscape Water Conservation





Douglas F. Welsh, Extension Horticulturist William C. Welch, Extension Landscape Horticulturist The Texas A&M University System

Water has become a critical issue for the future prosperity of Texas. Booming populations have increased the demand on the state's already limited supply of high-quality water. In addition, seasonal fluctuations in rainfall and periodic droughts create a feast-to-famine cycle in Texas.

In urban areas, about 25 percent of the water supply is used to water landscapes and gardens. In the summer, as much as 60 percent of the water the average household uses may be for landscape maintenance Many traditional landscapes require large amounts of water, and much of this water is applied inefficiently.

To reduce the excessive use of water for maintaining landscapes, the Texas Agricultural Extension Service encourages Texans to adopt Xeriscape landscaping. This concept conserves water and protects the environment. Xeriscape landscapes need not be cactus and rock gardens. They can be cool, green landscapes full of beautiful plants maintained with water-efficient practices.

The seven water-saving principles of Xeriscape landscaping are not new; they have been practiced in the landscape industry for decades. Combining all seven into a comprehensive program of landscape water conservation is what makes Xeriscape landscaping unique. The principles are:

- ★ Planning and design
- ★ Soil analysis and preparation
- ★ Practical turf areas
- ★ Appropriate plant selection
- ★ Efficient irrigation
- ★ Use of mulches
- ★ Appropriate maintenance

By incorporating these seven principles, you can help preserve our most precious natural resource—water.

#### Start With a Plan

Creating a water-efficient landscape begins with a well-thought-out landscape

design. Sketch your yard, showing the locations of buildings, trees, shrubs, gardens and grass areas. Then consider how you use the various areas of your yard, how you want your yard to look, the amount of maintenance you plan to give it, and the budget you can afford. Also pinpoint the areas of your landscape that require the most water. The purpose of planning is to design a landscape that will have the appearance and function you desire while conserving water. Local landscape architects, designers, nurserymen and county Extension agents can help in this decision making. You can implement your landscape design gradually over several years.

# Analyze and Prepare the Soil

Have your soil tested. (Your county Extension agent can tell you how.) The test results will tell you what kinds and amounts of fertilizer your soil needs, and whether you should add organic matter. Most soils benefit greatly from organic matter. Adding organic matter to the soil of shrub and flower bed areas makes plants healthier. Organic matter also helps the soil absorb and store water. As a rule-of-thumb, till in 4 to 6 inches of organic material such as shredded pine bark, compost or leaves. It is not necessary to incorporate organic matter for trees, and for large turfgrass areas it is not economically feasible.

#### Be Practical with Turf Areas

When designing the landscape, keep in mind that turfgrasses need more water and maintenance than most other plants. To conserve water, reduce the size of the lawn by including patios, decks, shrub beds and groundcovers in the landscape design.

Also consider the ease of watering turf areas. Areas that are long and narrow, small, or oddly shaped are difficult to water efficiently. Confine grass to blocky, squarish areas that are easier to maintain.

# Select Appropriate Plants

Select trees, shrubs and groundcovers that are adapted to your region's soil and climate. Texas is blessed with an abundance of beautiful native plants from which to choose. Most require less water and fertilizer and have fewer pest problems than non-adapted exotic plants that have been introduced into Texas landscapes.

Native Texas plants are becoming more available at retail nurseries and garden centers. Combining Texas natives with welladapted exotic plants is one key to a beautiful, interesting landscape that conserves water

When it comes to selecting a turfgrass, remember that the different varieties have very different water requirements. One of the best ways to conserve water is to select a grass that is adapted to your area of the state and that has a low demand for water.

Refer to the tables in this publication for landscape plants adapted to and recommended for your area. Your county Extension agent or local nurseryman also can make suggestions.

# Water Efficiently

Tremendous amounts of water are applied to lawns and gardens, but much of it is never absorbed by the plants and put to use. Some water runs off because it is applied too rapidly, and some water evaporates from exposed, unmulched soil; but, the greatest waste of water is applying too much too often.

When too much water is applied to the landscape it can leach nutrients deep into the soil away from plant roots, and possibly pollute groundwater. Runoff also can cause pollution by carrying fertilizers and pesticides into streams and lakes. These problems can be eliminated with proper watering techniques.

#### Lawns

Most lawns receive twice as much water as they need. The key to watering lawns is to apply the water only when the grass needs it, but water thoroughly. This creates a deep, well-rooted lawn that efficiently uses water stored in the soil.

To know when to water the lawn, simply observe the grass. Wilting and discoloration are signs of water stress. At the first sign of wilting, you have 24 to 48 hours to water before serious injury occurs. Apply 1 inch of water to the lawn as rapidly as possible without runoff.

#### Trees and Shrubs

Newly planted trees and shrubs should be watered frequently until they are well rooted, which may take two growing seasons. Once established, plants should be watered less frequently so they will develop deep roots and be better able to withstand drought.

In the absence of rain, most trees and shrubs benefit from a once-a-month, thorough watering during the growing season. Normal lawn watering is not a substitute for thorough tree and shrub watering. The feeding root system of a tree or shrub is located within the top 12 inches of the soil and at the "dripline" of the plant. The dripline is the area directly below the outermost reach- es of the branches. Apply water and fertilizer from just inside to a little beyond the dripline, not at the trunk. Simply lay a slowly running hose on the ground and move it around the dripline as each area becomes saturated to a depth of 8 to 10 inches. For large trees, this watering technique may take several hours.

#### **Irrigation Systems**

The goal of any irrigation system is to give plants enough water without wasting it. By zoning an irrigation system, grass areas can be watered separately and more frequently than groundcovers, shrubs and trees. Sprinkler and drip irrigation can be used together to conserve water in the landscape.

**Sprinkler irrigation.** Most people water with sprinklers—either hose-end sprinklers or permanent, underground systems. A permanent sprinkler system can be more water-efficient than a hose-end sprinkler, but both systems require little maintenance and apply large volumes of water in a short

time. If you have a permanent sprinkler system, make sure the sprinkler heads are positioned properly to avoid watering sidewalks and driveways. Also adjust sprinkler heads so that they spray large droplets of water instead of a fog or fine mist, which evaporates quickly and may drift away with the wind. With either hose-end sprinklers or permanent systems, water between late evening and mid-morning so that water won't evaporate quickly and be wasted.

**Drip irrigation.** Drip irrigation is more efficient and more beneficial to plants than sprinkler irrigation. In areas of the state where water quality is poor (i.e., high salt content), drip irrigation is also safer for landscapes. Drip irrigation slowly applies water to soil. The water flows under low pressure through emitters, bubblers, or spray heads placed at each plant. There is little chance that water applied by drip irrigation will be wasted by evaporation or runoff. If you aren't familiar with drip irrigation, seek advice from professionals and experiment with it in small sections of the landscape. This will acquaint you with the benefits of drip irrigation.

#### **Conserve Moisture with Mulches**

Mulch is a layer of nonliving material covering the soil surface around plants. Mulches can be organic materials such as pine bark, compost and woodchips; or inorganic materials such as lava rock, limestone or permeable plastic (not sheet plastic).

Use a mulch wherever possible. A good mulch conserves water by significantly reducing moisture evaporation from the soil. Mulch also reduces weeds, prevents soil compaction, and keeps soil temperatures more moderate.

#### **Use Good Maintenance Practices**

Mowing grass at the proper height conserves water because it encourages root systems to grow deeper and become more water-efficient. Mow St. Augustinegrass and buffalograss at 3 inches, Bermudagrass at 1 inch, centipedegrass and Zoysiagrass at 2 inches.

Fertilizing the lawn at the proper time and using the proper amount can save time, effort and money by reducing mowing and watering. Fertilizers also can be a major source of pollution of streams and groundwater if too much is applied. Fertilize the lawn once in the spring and again in the fall. Use a slow-release form of nitrogen in the spring application and a quick-release form in the fall. Apply only 1 pound of actual nitrogen fertilizer per 1,000 square feet of lawn at one time. With this schedule, no other fertilizer is needed to maintain most shrubs and trees in the lawn area.

Check your irrigation system periodically and maintain it so that it will operate efficiently. Properly time any insect and disease control measures, and eliminate weeds (they compete with other plants for water).

A well-designed landscape that uses Xeriscape principles can reduce maintenance by as much as 50 percent through reduced mowing, once-a-year mulching, the elimination of unadapted plants that require lots of water, and efficient irrigation.

#### Commit to Water Conservation

Water must be a vital concern for everyone in Texas because it is a limited and fragile resource. Many people believe that watering landscapes is a nonessential luxury. In times of severe drought, rationing may limit the amount of water we can use for our lawns and gardens. Therefore, Texans have a special responsibility to conserve water and protect its quality. Xeriscaping conserves water in the landscape without sacrificing beauty and plant diversity. By following these guidelines, you can proudly create your own Xeriscape landscape.



Planning and design is the starting point for any water-wise landscape.



Soil analysis will determine whether the soil should be improved so that it will absorb a nd hold moisture better.



*Practical turf* areas are neither too large (turfgrass requires more water than other plants) nor difficult to water efficiently.



Appropriate plant selection keeps the landscape more in tune with the natural environment. Native plants generally use less water than exotic plants, but there is room for both in a well-designed landscape





Efficient irrigation can save 30 to 50 percent of the water bill for an average home.



*Use mulches* in flower and shrub beds to reduce water evaporation from the soil.





Appropriate maintenance preserves the landscape's beauty and conserves water. Prune, weed, fertilize, irrigate, and control pests properly.



# Outstanding Landscape Plants for Texas

#### **Plant Adaptation Map**

Region 1 - East Texas (Texarkana, Houston, Tyler, Beaumont, Nacogdoches)

Region 2 - South Texas (Corpus Christi, Brownsville, Laredo, Del Rio)

Region 3 - Central Texas (Austin, Waco, Bryan/College Station, San Antonio)

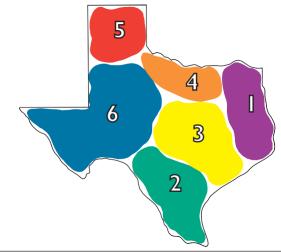
Region 4 - North Central Texas (Dallas, Ft. Worth, Denton, Wichita Falls)

Region 5 - Panhandle (Armadillo)

Region 6 - West Texas (El Paso, Lubbock, San Angelo, Midland, Abilene)

**NOTE** - Plants with number 7 are adaptable to most areas of Texas.

★ Texas native



#### **Turfgrasses**

Common name	Scientific name	Best adapted for	Notes
Bermudagrass	Cynodon dactylon	7	Good drought tolerance; produces dense turf; poor shade tolerance; plant seed or sod
★ Buffalograss	Buchloe dactyloides	3,4,5,6	Excellent drought tolerance; produces thin turf; poor shade tolerance; plant seed or sod
Carpetgrass	Axonopus affinis	1	Adapted to moist sites; tolerates partial shade; many seedheads; thin turf; plant seed
Centipedegrass	Eremochloa ophiuroides	1	Low maintenance; tolerates partial shade; tolerates drought; plant seed or sod
St. Augustinegrass	Stenotaphrum secundatum	1,2,3,4	Produces dense turf; good shade tolerance; poor drought tolerance; plantsod
Tall fescue	Festuca arundinacea	4,5	Under irrigation, remains green year-round; good shade tolerance; poor drought tolerance; plant seed
Zoysiagrass	Zoysia spp.	7	Produces dense turf; good shade tolerance; good drought tolerance; plantsod

#### **Vines**

Common name	Scientific name	Best adapted for	Exposure	Notes
Boston ivy	Parthenocissus tricuspidata	7	Sun/shade	Deciduous; fall color; clings to walls
Bougainvillea	Bougainvillea sp.	2	Sun	Evergreen; many flower colors; plant outdoors in extreme southern Texas only or provide winter protection
Carolina jesssamine	Gelsemium sempervirens	1,2,3,4	Sun/shade	Evergreen; yellow spring flowers
Clematis	Clematis sp.	5	Shade	Beautiful blooms; deciduous vines
Confederate jasmine	Trachelospermum jasminoides	1,2,3,4	Sun/shade	Evergreen; fragrant white spring flowers
Coral honeysuckle	Lonicera sempervirens	7	Sun	Coral flower in summer
Coralvine	Antigonon leptopus	1,2,3,4,6	Sun	Pink flowers in late summer and fall
English ivy	Hedera helix	7	Shade	Evergreen; green or variegated foliage; loves shade
Fig ivy	Ficus pumila (repens)	1,2,3,4	Sun/shade	Evergreen; clings to walls

# Vines (continued)

	Common name	Scientific name	Best adapted for	Exposure	Notes
*	Improved trumpet vine	Camsis radicans	7	Sun/shade	Orange flowers in summer and fall
	Lady Banksia	Rosa banksia	1,2,3,4,6	Sun	Spring flowers in yellow or white
	Mermaid rose	Rosa x bractaeta	1,2,3,4,6	Sun	Fragrant, pale yellow flower; vigorous climber; pest-resistant
	Rosa x fortuniana	Rosa x fortuniana	1,2,3,4,6	Sun	Fragrant, white flowers; vigorous climber; pest-resistant
	Silverlace vine	Polygonum aubertii	3,4,5,6	Sun/shade	Fluffy masses of white flowers
*	Virginia creeper	Parthenocissus quinquefolia	7	Sun/shade	Clings to walls; fall color
	Wisteria	Wisteria sp.	7	Sun/shade	Blue clusters of flowers in spring

#### Groundcovers

Common name	Scientific name	Best adapted for	Exposure	Notes
Ajuga	Ajuga reptans	7	Shade	Variety of foliage colors and blue flowers; requires well-drained soil
Asiatic jasmine	Trachelospermum asiaticum	1,2,3,4,6	Sun/shade	Evergreen; green or variegated foliage
Confederate jasmine	Trachelospermum jasminoides	1,2,3,4	Sun/shade	Evergreen; fragrant, white spring flowers
English ivy	Hedera Helix	7	Shade	Evergreen; green or variegated foliage
Liriope	Liriope muscari	7	Sun/shade	Evergreen; grass-like foliage; purple blooms; varieties: big blue, gigantic
Monkey grass	Ophiopogon japonicus	7	Sun/shade	Evergreen, grass-like foliage; dwarf and standard varieties
Prostrate rosemary	Rosmarinus officinalis	2	Sun	Grayish-green, fragrant foliage; light blue flowers
Santolina	Santolina sp.	3,4,5,6	Sun	Species with green or silver foliage
Trailing juniper	Juniperus sp.	3,4,5,6	Sun	Several varieties available; not suitable for wet, humid areas
Vinca	Vinca major	7	Shade	Blue flowers and dark green foliage

#### **Perennials**

		Best adapted			Flowering	
Common name	Scientific name	for	Exposure	Flower color	season	Height
Autumn sage	Salvia greggii	2,3,4,6	Sun	White, red, pink, salmon	Spring to fall	2-3 ft.
Baby sun/sunray coreopsis	Coreopsis grandiflora	7	Sun	Yellow, orange	Late spring, summer	1 ft.
Bearded iris	Iris xiphioides	7	Sun/shade	Many	Spring	1-3 ft.
Blue plumbago	Plumbago auriculata	1,2,3	Sun/shade	Blue, white	Summer, fall	3 ft.
Bouncing bet	Sapinara officinalis	7	Sun/shade	Pink	Summer	1-2 ft.
Cigar plant	Cuphea micropetala	1,2,3	Sun/shade	Red/yellow	Summer, fall	3-4 ft.
Daylily	Hemerocallis sp.	7	Sun	Many	Spring, summer	1-3 ft.

# Perennials (continued)

	_		Best adapted	_		Flowering	
	Common name	Scientific name	for	Exposure	Flower color	season	Height
	Firebush	Hamelia patens	1,2,3	Sun	Reddish-orange	Summer, fall	3-5 ft.
	Garden canna	Canna x generalis	7	Sun/shade	Yellow, red, pink, salmon	Summer	2-4 ft.
	Goldsturm rudbeckia	Rudbeckia x goldsturm	7	Sun	Yellow	Summer	2 ft.
*	Hinckley's columbine	Aquilegia hinckleyana	2,3,5	Shade	Yellow	Spring	18 in.
*	Indian blanket	Gaillardia sp.	7	Sun	Reddish-yellow	Spring to fall	18 in.
*	Lantana	Lantana sp.	1,2,3,6	Sun	Many	Spring to fall	1-2 ft.
	Lousiana iris	Iris fulva x Iris giganticaerulea x Iris foliosa	7	Sun/shade	Many	Spring	3 ft.
*	Mealy cup sage	Salvia farinacea	1,2,3,4,6	Sun	Blue, white, purple	Spring, summer, fall	3 ft.
	Mexican oregano	Poliomentha longiflora	1,2,3,6	Sun	Pink	Summer	1-2 ft.
	Mexican sage	Salvia leucantha	2,3	Sun	Blue	Spring to fall	3-4 ft.
*	Moonbeam/ Zagreb coreopsis	Coreopsis verticillata	7	Sun	Yellow, orange	Late spring, summer	2-3 ft.
*	Pavonia	Pavonia lasiopetala	1,2,3	Sun/shade	Pink	Spring to fall	3-4 ft.
*	Perennial verbena	<i>Verbena</i> sp.	1,2,3,4,6	Sun	Many	Spring to fall	6 in1 ft.
*	Pink rainlily	Zephyranthes grandiflora	7	Sun/shade	Pink	Summer	1 ft.
*	Purple coneflower	Echinacea angustifolia	7	Sun	Purple	Spring to fall	18 in.
	Rosemary	Rosmarinus officinalis	1,2,3,4,6	Sun/shade	Blue	Summer, fall	1-4 ft.
	Society garlic	Tulbaghia violacea	7	Sun/shade	Lavender	Spring to fall	18 in.
	Sweet violet	Viola adorata	7	Shade	Purple	Winter, spring	6-8 in.
*	White rain lily	Zephyranthes candida	1,2,3,4,6	Sun/shade	White	Summer	1 ft.

### **Ornamental grasses**

	Common name	Scientific name	Best adapted for	Exposure	Flowering season	Height
*	Big bluestem	Andropogon gerardii	7	Sun	Summer, fall	3-4 ft.
	Fountain grass	Pennisetum ruppelii	7	Sun	Summer	3 ft.
*	Muhly grass	Muehlenbergia lindheimeri	2,3,4,6	Sun	Summer	3 ft.
	Pampas grass	Cortaderia selloana	7	Sun	Summer, fall	7 ft.
*	Purple autumn grass	Miscanthus sinensis	7	Sun	Summer	3-4 ft.
	Sideoats gramma	Bouteloua curtipendula	7	Sun	Summer	2-3 ft.

# Shrubs

Common name	Scientific name	Best adapted for	Exposure	Notes
Dwarf shrubs (1 to 3	3 feet tall)			
Dwarf burford holly	Ilex cornuta rotunda burfordii	7	Sun/shade	Glossy evergreen foliage
Dwarf Chinese holly	Ilex cornuta rotunda	7	Sun/shade	Glossy evergreen foliage
Dwarf pittosporum	Pittosporum tobira wheeleri	1,2,3	Sun/shade	Small, round evergreen
► Dwarf yaupon holly	Ilex vomitoria nana	7	Sun/shade	Glossy evergreen foliage
Nandina: harbour dwarf, gulf stream, nana	Nandina spp.	7	Sun/shade	Reddish evergreen foliage
Red yucca	Hesperaloe parvifolia	7	Sun	Red flowers on tall spikes
Rosemary	Rosmarinus officinalis	1,2,3,4,6	Sun	Fragrant bluish-green foliage; blue flowers; herb
Small shrubs (3 to 5	5 feettall)			
Barberry	Berberis thunbergii atropurpurea	1,3,4,5,6	Sun	Red evergreen foliage
Bridal wreath spirea	Spirea cantoniensis (S. reevesiand	7	Sun/shade	Sprawling; fern-like; white spring blooms
China rose	Rosa chinensis	1,2,3,4,6	Sun	Hardy; long-blooming; pest-resistant; varieties: Old Blush (pink) and Cramiosi Superior (red)
Dwarf burford holly	Ilex cornuta rotunda burfordii	7	Sun/shade	Glossy evergreen foliage
Dwarf palmetto	Sabal minor	1,2,3,4,6	Sun/shade	Trunkless, bushy palm
Flowering quince	Chaenomeles japonica	7	Sun	Deciduous shrub; spring blooming (red, pink, white or orange)
Glossy abelia	Abelia grandiflora	7	Sun/shade	Bronze evergreen foliage and white flowers
Grayleaf cotoneaster	Cotoneaster glaucophylla	1,3,4,5,6	Sun/shade	Sprawling evergreen shrub; dusty gray foliage
Indian hawthorne	Raphiolepis indica	7	Sun/shade	Spring flowering; blue berries in fall; evergreen
Japanese boxwood	Buxus japonica	7	Sun/shade	Evergreen foliage
Juniper	Juniperus sp.	1,3,4,5,6	Sun	Tough, evergreen shrub; many varieties available
Nandina compact	Nandina domestica compacta	7	Sun/shade	Reddish evergreen foliage and red fall berries
Tea rose	Rosa adorata	1,2,3,4,6	Sun	Hardy; long blooming; pest-resistant; excellent varieties: Mrs. B.R. Cant (rose), Mrs. Dudley Cross (yellow) and Duchesse de Brandant (pink)
Medium shrubs (6 to	o 9 feet tall)			
Agarita	Mahonia trifoliata	2,3,4,6	Sun	Holly-like evergreen foliage; yellow spring flowers; red edible berries
Althea	Hibiscus syriacas	7	Sun	Upright; deciduous; many colors; summer blooming
Burford holly	Ilex cornuta burfordii	7	E	Glossy evergreen foliage
★ Central Texas sage	Leucophyllum sp.	2,3,4,6	Sun	Dusty gray evergreen foliage; blooms throughout summer
Chinese horned holly	Ilex cornuta	7	Sun/shade	Glossy evergreen foliage
Eleagnus	Eleagnus fruitlandi	7	Sun	Evergreen with grayish-greenfoliage
Forsythia	Forsythia intermedia spectabilis	1,3,4,5,6	Sun/shade	Yellow spring flowers
Fraser photinia	Photinia x fraseri	7	Sun/shade	Red new foliage; evergreen

# Shrubs (continued)

Common name	Scientific name	Best adapted for	Exposure	Notes
Glossy abelia	Abelia grandiflora	7	Sun/shade	Bronze evergreen foliage; white or pink flowers
Green pittosporum	Pittosporum tobira	1,2,3,4,6	Sun/shade	Large evergreen shrub
Indian hawthorne	Raphiolepis indica	7	Sun/shade	Spring flowering; blue berries in fall; evergreen
Italian jasmine	Jasminum humile	7	Sun	Sprawling evergreen; yellow summer flowers
Juniper	Juniperus sp.	1,3,4,5,6	Sun	Tough evergreen; many varieties
Nandina	Nandina domestica	7	Sun/shade	Reddish evergreen foliage; red fall berries
Pomegranate	Punica granatum	1,2,3,4,6	Sun	Large, upright shrub; orange blooms; edible fruit; dwarf variety: Chico
Variegated pittosporum	Pittosporum tobira variegata	1,2,3,4,6	Sun/shade	Green/white variegated evergreen shrub
Winter honeysuckle	Lonicera fragrantissima	7	Sun/shade	Fragrant clusters of white flowers in winter
Large shrubs (10 to a	25 feet tall)			
American holly	llex opaca	1	Sun	Tree-form holly; evergreen foliage; red berries
Arizona cypress	Cupressus arizonica	1,3,4,5,6	Sun	Evergreen for specimen and windbreak plantings
California fan palm	Washingtonia filifera	1,2,3	Sun	Tree-like palm
Cherry laurel	Prunus caroliniana	1,2,3,4,6	Sun/shade	Tree-like evergreen shrub
Chinese photinia	Photinia serrulata	1,3,4,5,6	Sun/shade	Evergreen; red spring foliage; white spring blooms
Crape myrtle	Lagerstroemia indica	7	Sun	Shrubby to tree-like; summer blooming many flower colors available
Lilac	Syringa vulgaris	5	Sun	Deciduous blooming shrub; adapted to alkaline soil
Mock orange	Philadelphus coronarius	1,5	Sun	Fragrant white blooms in latespring
Oleander	Nerium oleander	1,2,3,4,6	Sun	Evergreen foliage; summer blooming; many colors available
Possumhaw	Ilex decidua	1,2,3,4	Sun	Deciduous holly; red to orange berries persist through early winter
Russian olive	Eleagnus angustifolia	4,5,6	Sun/shade	Gray foliage; yellow flowers; ever- green for windbreak plantings
Texas mountain laurel	Sophora secundiflora	2,3,6	Sun/shade	Tree-like evergreen shrub; purple spring flowers
Texas palmetto	Sabal texana	1,2,3,6	Sun	Tall, native Texas palm
Texas persimmon	Diospyros texana	2,3,6	Sun	Tree-like; light gray trunk; fruit edible by animals
Vitex	Vitex agnus-castus	7	Sun	Tree-like; flowers blue or white; summer blooming
Washington hawthorn	Crataegus phaenopyrum	5	Sun	Maple-shaped leaves; white flowers; red berries
Windmill palm	Trachycarpus fortunei	1,2,3,4,6	Sun	Tree-like; fibrous bark
Yaupon holly	Ilex vomitoria	7	Sun/shade	Upright evergreen, spineless holly; red to orange berries

# Trees

Common name	Scientific name	Best adapted for	Notes
Small trees (20 to 35	feet tall)		
American plum	Prunus americana	5	White blooms in spring; sour fruit good for jelly
Aristocrat pear	Pyrus calleryana 'Aristocrat'	1,3,4,5,6	Spring flowers; fall color
Bradford pear	Pyrus calleryana 'Bradford'	1,3,4,5,6	Spring flowers; fall color
Canaert redcedar	Juniperus virginiana	7	Evergreen for specimen or windbreak
Chinese pistache	Pistacia chinensis	7	Spreading canopy; fall color
Crabapple	Mallus sp.	1,3,4,5,6	Spring flowering tree; many varieties
Desert willow	Chilopsis linearis	2,3,4,5,6	Snapdragon-like flowers in summer; willow-like foliage
Dogwood	Cornus florida	1	Graceful tree; large spring blooms of white and pink
Eldarica pine	Pinus eldarica	2,3,4,6	Best pine for alkaline soils; Christmas-tree shaped
Fan d'Arc osage orange	Maclura pomifera 'Fan d'Arc'	7	Improved fruitless selection
Honey mesquite	Prosopis glandulosa	2,3,4,6	Lacy spreading form
Japanese black pine	Pinus thunbergii	7	Rounded small tree; adapted to alkaline soils
Japanese persimmon	Diospyros kaki	7	Edible showy fruit; glossy green foliage
Mexican plum	Prunus mexicana	7	Fragrant spring flowers; attractive trunk
Nanking cherry	Prunus tomentosa	5	Tough, fruiting, shrubby tree
Panicled golden raintree	Koelreuteria paniculata	3,4,5,6	Showy flowers and seed pods
Pink lady euonymus	Euonymus bungeanus	5	Alkaline-tolerant; deciduous; light green foliage; showy seeds in fall
Redbud	Cercis sp.	7	Spring blooming; excellent varieties: Oklahoma and Forest Pansy
Slash pine	Pinus elliottii	1	Evergreen pine
Soapberry	Sapindus drummondii	7	Fall color
Texas ebony	Pithecellobium flexicaule	2	Airy foliage and flowers
Wild olive	Corida boissieri	2	White flowers and bold foliage
Large trees (above 35	5 feettall)		
Austrian black pine	Pinus nigra	5	Adapted to wind and cold
Bald cypress	Taxodium distichum	1,2,3,4,6	Deciduous conifer; fine-textured foliage; fall color
Black walnut	Juglans nigra	1,5	Good tree but tends to be messy
Blue spruce	Picea pungens 'Glauca'	5	Grayish-blue needles
Bur oak	Quercus macrocarpa	7	Bold foliage; huge acorns
Cedar elm	Ulmus crassifolia	7	Upright growth habit; good streettree
Chinquapin oak	Quercus mehlenbergii	1,2,3,4,6	Round-topped tree; bold foliage
Deodar cedar	Cedrus deodora	7	Bluish-green conifer
Hackberry	Celtis occidentalis	5	Variety 'Shademaster' particularly recommended for area 5
Honey locust	Gleditsia triacanthos	2,3,4,5,6	Thornless varieties available
Kentucky coffee tree	Gymnocladus dioica	5	Upright tree; fine-textured foliage
Lace bark elm	Ulmus parvifolia	7	Textured bark; spreading shade tree
Live oak	Quercus virginiana	1,2,3,4,6	Evergreen shade tree
Loblolly pine	Pinus taeda	1	Evergreen pine

# Trees (continued)

	Common name	Scientific name	Best adapted for	Note
*	Pecan	Carya illinoensis	7	State tree of Texas; edible nuts
	Ponderosa pine	Pinus ponderosa	5	Bushy, attractive tree
*	Shumard oak	Quercus shumardii	1,2,3,4,5	Fall color
*	Southern magnolia	Magnolia grandiflora	1	Bold evergreen tree; large white blooms throughout summer
*	Sweetgum	Liquidamber styraciflua	1	Upright growth habit; fall color
*	Texas red oak	Quercus texana	7	Fall color
*	Wateroak	Quercus nigra	1	Holds foliage well into winter

#### Texas A&M AgriLife Extension Service

AgriLifeExtension.tamu.edu

More Extension publications can be found at AgriLifeBookstore.org

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

 $The Texas A\&M\ University\ System,\ U.S.\ Department\ of\ Agriculture,\ and\ the\ County\ Commissioners\ Courts\ of\ Texas\ Cooperating.$