



NATIVE AND ADAPTED PLANTS

FOR TEXAS LANDSCAPES

TEXAS A&M GRILIFE RESEARCH EXTENSION

Native and Adapted Plants for Texas Landscapes

ative and adapted plants are the ideal choice for an aesthetically pleasing water efficient landscape. Whether vou are interested in a well-manicured look, or a more naturalistic landscape design, there are a number of plants with various structures, textures, and colors to meet your needs and help you save precious time and money.

Benefits of Native & Adapted Plants

Native and better-adapted plants in home and business landscapes serve as environmentally sustainable assets that are usually labor efficient compared with resource intensive varieties. Some of the characteristics leading more Texans to incorporate native and adapted varieties include:

- Drought tolerance
- Heat tolerance
- Water efficiency
- Typically low fertilizer requirements
- Typically low pesticide requirements



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What do you mean by Native and Adapted?

Native plants are hardy, having evolved in our (sometimes) and unpredictable harsh climate. They thrive on the soils that occur here and on the specific nutrients those soils provide. Native plants also tend to be more resistant to pest pressures of native insects and diseases common to North Texas. A plant might be native to:

- Texas
- Your Region
- Your County
- Your City

Adapted plants are also hardy but have been introduced to Texas landscapes through the horticulture industry. Most often, they originate from areas with similar soil types, Climates and /or hardiness zones.



Flip to the back of your booklet for a list of our 100 favorite native and adapted plants for North Texas and beyond!

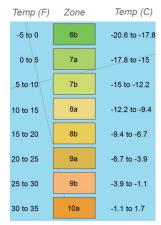
Remember, even thought a plant is native to Texas, it is important to make sure it is well adapted to our area. i.e. A plant Native to Corpus Christi may not feel so at home in Dallas.

There are also many plants available that have native parents, but have been bred for improved ornamental characteristics.

Texas Plant Hardiness Zones

Adapted from USDA national plant hardiness zone map





Average Annual Extreme Minimum Temperature 1976-2005

Example: North Texas Zone 8a (Visit NOAA.gov for weather data in your area)

Avg. Low Temp. 10-15 °F **Record Low** -8°F 1980 **Record High** 113°F 1980 Avg. First Freeze Nov. 22 Avg. Last Freeze March 13 Avg. Yearly Rainfall 40.55" (Can range from 20"-50")

Common Soils Poor draining clays & clay loams, mostly alkaline, pH 7.5 to 7.8

Sandy loams and sandy soils can also be present.

Before you Plant: Soil Preparation, Amendments



A number of amendments can be added to your soil to ensure the richest growing environment for your plants. Soil amendments can improve a number of planting bed characteristics like drainage, soil fertility and pH level. Two of the most common and helpful amendments for improvingTexas soils are compost and expanded shale.

Compost is a nutrient rich soil conditioner consisting of broken down organic material. Incorporate or top-dress $\frac{1}{2}$ " to 2" of compost into the soil to improve drainage while maintaining your soil's water-holding capacity. Compost:

- Improves soil texture
- · Contains macro and micronutrients
- Neutralizes pH
- Increases water holding capacity
- Reduces water evaporation

Expanded Shale is a porous, lightweight aggregate with the ability to improve drainage in <u>clay</u> soils and hold moisture at the same time. Expanded shale is most effective when incorporated into the soil when establishing a new planting bed. Add up to 3" then till or mix in thoroughly to a depth of 6" with a shovel or spade.

Don't Guess, Soil Test!

One of the best methods for evaluating your soil is to collect and mail a soil sample to the Texas A&M Soil Testing Laboratory. Step-by-step instructions for submitting your sample are available at http://soiltesting.tamu.edu. For as little as \$12 per sample, you will receive a detailed analysis of your soil and recommendations on how you can improve soil fertility.

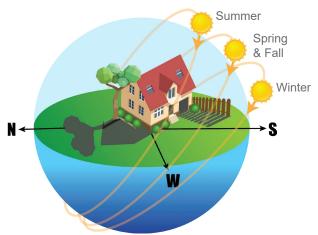


Planting

Spacing and Placement: "Right Plant, Right place"

A healthy native or adapted plant is a valuable asset, but to ensure the best success, it needs to be planted properly and in the right place, depending on its specific requirements. Read your plant's tag and pay close attention to its hardiness zone, light requirements, size and spacing. Pay special attention to sunlight obstructions such as trees, buildings, fences and other plants in your landscape, and consider how shade conditions change with the sun's position at different times of the year.

The sun's position in the sky at noon during in each season



Full Sun: Direct sunlight on plant all day Part Sun: Filtered light, 2-3hrs without direct sun Part Shade: Dappled light, 4-5hrs without direct sun

No turf below part shade

Full Shade: No direct sunlight on plant all day but may be bright due to reflective light

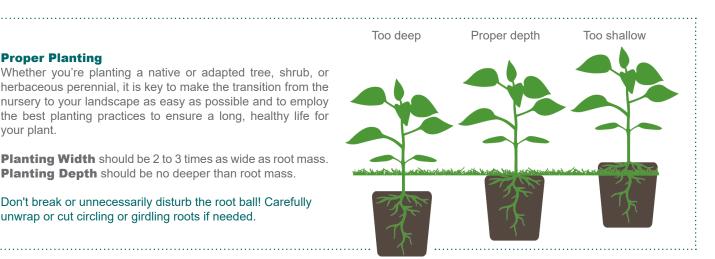
Dense Shade: Deep shade, no direct sunlight all day and may appear dark with minimal to no reflective light

Proper Planting

Whether you're planting a native or adapted tree, shrub, or herbaceous perennial, it is key to make the transition from the nursery to your landscape as easy as possible and to employ the best planting practices to ensure a long, healthy life for your plant.

Planting Width should be 2 to 3 times as wide as root mass. Planting Depth should be no deeper than root mass.

Don't break or unnecessarily disturb the root ball! Carefully unwrap or cut circling or girdling roots if needed.



Planting a Tree

Avoid planting your tree in the hottest summer months. For best results, plant when the tree is dormant.

Be sure to remove any twine, tape or tags from your tree.

The top of the tree's root mass should be at or slightly above the existing grade (dotted line.)

Mulch between 2" and 4" deep but be sure to leave a 1" to 2" clearance between the tree trunk and your mulch.

Only stake your tree for stabilization in windy or high traffic areas. Secure with wide, flexible material. Remove after 1 year.

> The root flare at the base of your tree should be visible once planted.

Backfill with native soil from the new hole.

Your hole should be 2-3 times the width of your root ball.

Carefully remove containers, wrappings, wires and ties from root mass before planting. Unwrap any circling roots.

Make sure your root mass is sitting on firm, undisturbed soil at the bottom of your hole.

Mulching



Applying mulch around your planted areas is crucial to a successful garden. A number of natural materials work well as mulch. Hardwood, cedar, cypress and pine straw mulches are all strong options. Water University recommends between 2" and 4" of mulch for most applications. Be sure to taper off near plant bases to avoid fungal problems and other pest issues.

The benefits of mulching are many; they include:

- Increased water absorbing capacity
- Increased water holding capacity
- Reduced water evaporation
- Reduced erosion
- Weed control
- Soil temperature moderation
- Increased soil nutrition as mulch breaks down

Maintenance

Proper maintenance is one of the most important components of a beautiful and healthy, water efficient landscape. A good design is the first step along your road to success. It is important to design your landscape in a way that does not exceed your maintenance capabilities. A well designed landscape filled with native and adapted plants, trees, shrubs and turfgrasses will provide you with lots of enjoyment and will require minimal need for upkeep labor throughout the year.

WaterUniversity.TAMU.edu



Visit our searchable "Plants of North Texas" database for information on the care and characteristics of more than 200 plants adapted to North Texas and beyond, including Texas A&M AgriLife Water University's top 100 list, found on the back cover of this booklet.

Visit ULandscapeIT for FREE designs

Irrigation



Drip, multi-stream rotor sprinkler and soaker hoses help save water, money and, if maintained properly, can be an incredible asset. Adjust controllers as needed to avoid over watering and monitor your system regularly to check for leaks.

Landscape Rule of Thirds



When designing your landscape, utilize the "rule of thirds" by planting 1/3 drought tolerant turfgrass, 1/3 native and adapted planting beds and 1/3 pervious hardscape. This will give your landscape more visual appeal, usable space and a reduction in water use requirements.



Mowing



Remove no more than 1/3 of the length of your lawn (leaf blade) each time you mow. This will help keep your turfgrass healthy. Remember, a big lawn translates to more mowing, so follow the landscaping rule of thirds. Always use your clippings as mulch. **Don't bag it! Mulch it!**

Mulching



Maintain 2" - 4" of mulch by adding new mulch annually as needed. This will help you save water and control weeds in your native and adapted planting bed. Keep in mind the array of other benefits your mulch will bring as it breaks down and enriches the existing soil.

Pruning



Remove dead material from your plants as needed. This will make way for lush new growth and also help you to maintain the shape of your trees and shrubs for aesthetic appeal.

Water University's 2019 Top 100 Deck Plants for North Texas and Beyond

Native and Adapted Plant Characteristics

Native and Adapted Plants are

•Drought tolerant •Heat tolerant And they typically require •Less water

- •Less fertilizer
- •Fewer pesticides

Order your own deck of our Top 100 Plants for North Texas right here:

http://tinyurl.com/orderplantdeck



Shade Trees

Shantung Maple Eldarica Pine Red Oak Bur Oak Chinquapin Oak Live Oak Cedar Elm Lacebark Elm Arizona Cypress

Ornamental Trees

'Rising Sun' Redbud **Desert Willow** Smoketree Possumhaw Holly Yaupon Holly Wichita Blue Juniper Deciduous Magnolia Wax Myrtle Cherry Laurel Texas Mountain Laurel Vitex 'Bloodgood' Japanese Maple Pomegranate Common Fig 'Ruby Falls' Weeping Redbud 'Skyrocket' Juniper 'Little Gem' Magnolia

Turfgrass

Bermuda St. Augustine Zoysia Buffalo

Palms

Dwarf Palmetto Windmill Palm

Yuccas/Cacti

Soft Leaf Yucca Red Yucca Color Guard Yucca Perennials

Flame Acanthus 'Texas Gold' Columbine Damianita Coreopsis **Cone Flower** Gregg's Mistflower Gaura Texas Star Hibiscus 'Dallas Red' Lantana Texas Lantana New Gold Lantana Turk's Cap Blackfoot Daisy Rock Rose Jerusalem Sage Garden Phlox Rudbeckia 'Henry Duelberg' Sage Black and Blue Salvia Lyre Leaf Sage 'Hot Lips' Salvia Skullcap Lamb's Ear Fall Aster Society Garlic Zexmenia 'Stella De Oro' Daylily

Groundcovers

Horse Herb Snake Herb Purple Wintercreeper Frog Fruit Gray Santolina

Ferns

Holly Fern Southern Wood Fern

Vines

Cross Vine Coral Honeysuckle

Ornamental Grasses

Berkeley Sedge Inland Sea Oats Maiden Grass Zebra Grass Gulf Muhly 'White Cloud' Muhly Mexican Feather Grass Little Bluestem Indiangrass 'Blonde Ambition' Blue Grama

Shrubs

'Kaleidoscope' Abelia 'Rose Creek' Abelia **Butterfly Bush** American Beauty Berry Japanese Aralia Althea/Rose of Sharon Oakleaf Hydrangea St. John's Wort Dwarf Yaupon Holly Andorra Juniper Texas Sage Dwarf Wax Myrtle Rosemary Autumn sage Bridal Wreath Spirea Anthony Waterer Spirea Limemound Spirea Bush Germander Eastern Snowball Viburnum 'Purple Diamond' Fringe Flower 'Tutti Frutti Pink' Buterfly Bush



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Subject matter currently under review

