

# *Inviting Nature Back Home*

## *A Complete Guide to Updating Your Landscape for Birds, Bees and Butterflies*



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Presented by



## Overview FAQ

**Where has nature gone?** For many people, it's only on the Nature Channel. Only 5% of the land in the continental USA is undisturbed by development or agriculture. This shrinks the natural homes and feeding grounds of wildlife to 1/20<sup>th</sup> of its original size.

**How can we invite nature back?** Since 95% of the land in Texas is privately owned, and 80% of the population lives in urban areas, it is up to us, the urban and suburban residents, to provide for nature. We can invite nature back home by including habitat (food, shelter, and water) for wildlife such as butterflies and moths. These will then attract birds, lizards, frogs, and toads. The best way to do this is by adding native plants to our home landscapes.

*"...now, for the first time  
in its history, gardeners  
have become important  
players in the management  
of our nation's wildlife."*

*Douglas Tallamy in  
Bringing Nature Home*

**Will my yard have to become a prairie?** Not at all! You can have any style of landscape and still include native plants. Over time, the goal is to have natives as half of the plants in your yard.

**What is a native plant?** It's a plant that has been growing here since before Columbus landed in America in 1492; in other words, plants that have grown and survived here for over 500 years. Some natives can grow in a wide variety of conditions but most need a defined climate, soil, light and amount of water. Texas has over 5000 native plants but very few grow state wide. To get you started we have included a list of native plants with pictures for the Dallas.

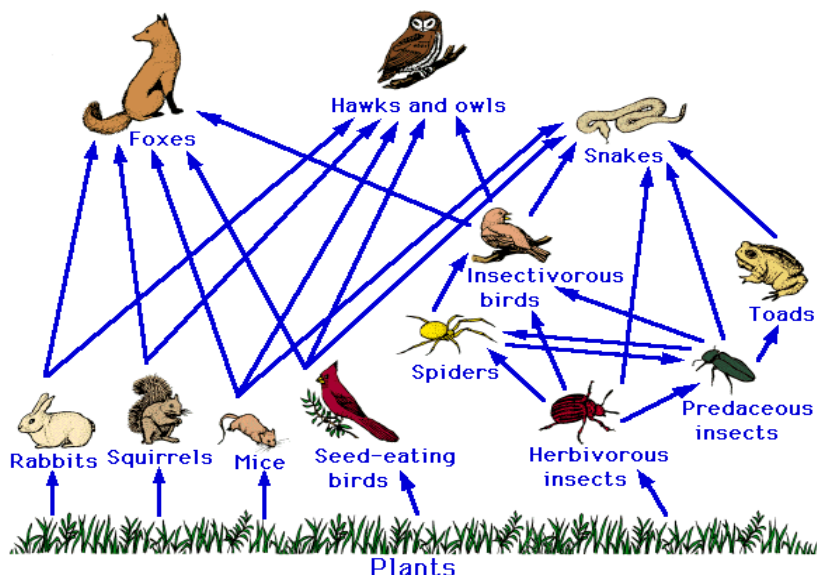
**What about the plants I see in my neighborhood?** Many were brought from abroad or other parts of the country by people who settled here. As ships sailed around the world they brought plants here and people started using them. Many of these plants died but others grew well and have become what we call "adapted plants". These plants are readily available at garden centers and are widely used throughout the region. Perhaps you have a Chinese pistache tree, English ivy, or Japanese yew. You may not be aware that the Bermuda grass you have is from Africa and probably came to the US accidentally in the form of seeds in the hay used for bedding on the slave ships. Or that St. Augustine grass is native to the Gulf of Mexico region, the West Indies and Western Africa.

**Why does it matter where a plant came from?** It matters because so many of the smallest creatures can only eat and use energy from the plants they have evolved with. Most non-native plants do not provide food for our local insects that are so necessary for a healthy environment for humans as well as other animals. All life depends on plants which are the foundation of the food web.

**Are there any other reasons to use native plants?** Definitely. Due to the exploding population in Texas, especially in the Dallas area, and recurring cycles of drought, water has become a huge issue throughout the state. Replacing thirsty "alien" plants such as St Augustine grass and azaleas with hardy, native shrubs, flowers, grasses, trees and groundcovers is critical to saving water in the home landscape. These plants not only survive in Texas, they thrive! Natives require less work because most of them don't need to be mowed, edged, raked or fertilized. The roots of native plants grow deeper than alien plants so they help break up our dense clay soil. Lastly, native plants provide a sense of place so your yard will be unique to our area instead of looking like the generic fast food restaurants across the country.

## Linking Plants and Animals

**How are they linked?** Food chains are the link between plants and animals. In a food chain there are different types of organisms: Producers, Consumers, and Decomposers. Producers are plants that create energy through photosynthesis; Consumers eat the Producers. When Producers (plants) and Consumers (animals) die, Decomposers are there to help break down the nutrients from their remains. This is how those nutrients are returned to the plants; thus continuing the food chain. Land and water plants are the foundation of the food chain. Animals get energy by eating plants and other animals



For example, caterpillars eat plants, small birds eat the caterpillars, then owls eat the small birds, and eagles eat the owls. When the eagles die, Decomposers break down their remains to feed the soil. If one part of the food chain is altered, the whole food chain is affected.

**So we need to have insects in our yards?** YES! Serious pests comprise less than 1% of the one million species of insects. The other 99% are beneficial or do no harm. Some of the good ones actually eat the bad ones so the beneficial insects are a very important method of pest control. Bumble bees and honey bees are essential to plant reproduction because they pollinate the plants. Caterpillars turn into butterflies and moths that also help pollinate. Frogs, lizards and birds all eat insects so if we want to see them in our yards and help them to survive as a species, we need to provide food for them. This means we also need to stop using insecticides except when absolutely necessary because they can kill the beneficial insects as well as the pests.

**OK, I'm beginning to see the bigger issue. Can you help me get started?** YES! On the following pages, we will provide information on best practices to help you with soil, water, plants and wildlife. There is also a list of good reliable references where you can find more information.

Unfortunately, expansive, well-manicured yards with clipped turf and only tall trees do not support a great diversity of wildlife. Despite the allure of a rich carpet of plushness under your feet, the truth is that a neatly manicured lawn extending from property line to property line will be nearly as devoid of wildlife as a parking lot.

Kelly Conrad Bender in *Texas Wildscapes: Gardening for Wildlife*

## *Preparing Your Soil*

Soil provides plants with nutrients, water, air and structure. Dallas is part of the Blackland Prairie ecosystem, once one of the most fertile areas of the country, but since then our soil has been compromised by agriculture and development and it “ain’t what it used to be.” We must work with the soil we have and help it become a great growing medium again.

**Analyze your soil.** Is it soft to walk on? Does it absorb water quickly or slowly? Do you see worms and other life in it? Does it have the nutrients that plants need? All these questions need to be answered in order to maximize your new plants’ chance to grow and thrive. You can answer some of these questions with your own observations and for others it is best to have your soil tested at a lab. The test results will tell you if and how you need to improve your soil to create the best growing conditions.

**“The nation that  
destroys its soil  
destroys itself.”**

**Franklin D.  
Roosevelt**

**Do it yourself soil tests.** To determine what kind of soil you have, squeeze a handful of wet soil through your fingers. Sandy soil is gritty and crumbles, silty soil is firm and silky and if you can make a baseball with it, it is clay. To see what kind of drainage your soil provides, dig a round hole about 6 inches across and 10 inches deep. Fill it with water and let it drain completely. Then fill it again and note how long it takes to drain the second time. One hour is excellent drainage; 1-4 hours is good to poor, but acceptable. If it takes less than 15 minutes or more than 4 hours you definitely need to add compost (organic matter) and mulch.

**Most of our soils need organic material for aeration and improved drainage.** Most of the Dallas area has clay soil that has become very compacted. Plants need air, nutrition and water in the soil to grow. Compacted soils need to be amended to provide some air and make the nutrients available. Organic material is defined as things that were once alive. Compost is organic plant material that has decayed so thoroughly that you can’t recognize what it was originally but the rich nutrients remain. By adding compost with other organic amendments and mixing them well into the top 8 inches of soil, you create a much better growing environment for the roots. Use a ratio of one part compost to every 3 to 5 parts of soil. By doing this you will raise the level of the plant bed several inches. Compost also contains living organisms that improve the soil and thus the plants. If you have sandy soil adding compost will supply nutrients and help the soil retain moisture. Healthy soil should contain visible signs of life, like worms. To keep the soil loose it is best to minimize foot traffic; if the bed is so large you will need to walk in it, it’s a good idea to create a clear path through it.

**Use mulch to protect and improve the soil.** The most beneficial mulch for most landscape beds comes from “used” plant materials like wood chips, grass clippings, and shredded leaves. Again, it’s organic material and that is a very good thing. It should be applied after planting a new bed to a depth of about 3 inches but not right up against the plant stems. Mulch keeps the soil cooler in summer and warmer in winter, it keeps the soil moisture from evaporating, prevents erosion, and helps prevent weeds. Organic mulch will break down and improve the soil: this year’s mulch is next year’s compost. It is best to check the depth of the mulch once or twice a year and add more to maintain a 3 inch depth. For desert plants like cactus, it is appropriate to use pebbles or rocks as mulch.

## *Planting Your New Landscape*

**Plan before you plant: Start with the end in mind.** Most people benefit from learning about garden design from books, magazines, videos and/or by hiring a landscape designer or architect. No matter who will plan your new yard, the first step is to look carefully at what you already have. This means analyzing your property by starting with either the plat plan you received when you bought your house, or using a software program or drawing one on graph paper. Be sure to measure everything and include all the buildings, patio, driveway, pool, outbuildings, retaining walls, slopes, ponds, service area (air conditioner, trash pad, compost pile) and anything else that is permanent. Then draw in the existing landscape features like trees, shrubs, flower beds, lawn, and groundcovers. If you have an irrigation system, draw in the different zones. Also include any areas that don't drain well and the directional orientation of the property. All this will help you decide where you want to make changes.

**Add variety to create more interest.** The best landscapes include a variety of levels, textures, and blooming seasons. Aim to have more than just tall trees, a row of shrubs and groundcover by adding in some ornamental trees and plants of different heights. Even if you want to have just a few colors, you can have plants with different textures, sizes and shapes of leaves and flowers. Your yard will be enhanced by growing some plants that bloom in winter, some in spring, summer and fall. It is not only more attractive but it provides food to sustain wildlife throughout the year.

*"People began to look on the native plant movement as, potentially, the most significant occurrence in the history of gardening since the invention of the garden hose"*

*Sally Wasowski in *Requiem for a Lawnmower**

**Put the right plant in the right place.** Plan for success by choosing the correct plants for the number of hours of sun that particular area gets each day and group your plants by their water needs so you don't drown one because another needs wet soil. You can add native plants to your existing garden beds or create a new bed by removing some of your lawn. You might plant a bed of native and adapted plants specifically to attract butterflies and/or hummingbirds where you can see them through a window. As existing plants in your garden die, try replacing them with native ones. Native plants can also grow in outside containers. Natives can be included in any style garden, in sun or shade as appropriate for the plant, and they come in all sizes from groundcovers to huge trees and everything in between. Over time aim to have at least half your plants be natives. For best results, read the tags that come with your plant or use garden reference materials to determine how large they will grow so you don't waste money by purchasing too many plants for the space available. A new garden bed should have a lot of empty space for the new plants to grow. If you don't like the empty spots you can always plant some annual flowers until the permanent plants grow to cover the unfilled space. Landscapes are living art that are always changing, not static like a painting or photo.

**Planting in the fall is best.** As with all plants that live more than one growing season (perennials), fall and winter are the best times to plant. This allows the roots to develop well over the winter, and the soil is more likely to retain moisture without as much supplemental watering. Just remember that many natives lose their leaves and turn brown with the first freeze, but that doesn't mean the plant has died. Spring is the next best season and may



offer more choices and a better supply of plants. Planting in summer requires more watering to establish new plants.

**Full service nurseries are the best place to shop.** They are much more likely to have native plants than the “big box” stores, and they usually have knowledgeable staff. Natives are about the same price as other plants or may cost a little more. Remember the bigger the plant, the bigger the price. They are also available at many plant sales held by non-profit gardening and nature organizations.

**Place your plants in the soil carefully.** The hole you dig for the new plant (except for trees) should be twice as wide as and 6 inches deeper than the soil in the pot. The best way to test this is to put the pot in the hole before removing the plant to check that there is space all around it. Then add soil back into the hole until the soil in the pot is an inch or so higher than the soil in the planting bed. This provides loose soil for the roots to grow into and ensures the plant won't drown when watered. If the roots are growing around the root ball when you remove the plant from the pot, loosen them slightly so they can grow straight into the soil. Water immediately with a gentle flow from your hose until you don't see any air bubbles; this tells you the soil and roots are saturated.

**Trees have different requirements.** For trees, roots will grow outward 2-3 times further than the width of the tree canopy. They should therefore be planted in native soil, without modification. Otherwise, the roots will want to stay in the perfect conditions you have supplied by amending the soil. It is smart to make sure you are planting your tree in a place where it will not interfere with utility lines above or below ground when it reaches full size. When planting trees, the hole should be 2-3 times the width of the root ball. Be sure to expose the root flare at the top surface of the root ball, then measure the height of the root ball (excluding the pot) before digging the hole. Your new tree should be set on firm ground so it won't sink into the ground. If it does sink below the level of the surrounding soil, water will stand against the trunk and it will rot. It is acceptable to plant the tree ½ to 1 inch higher than the surrounding soil, but not lower. The roots should be loosened so they will extend outward, especially if they are curled around the root ball. Some “girdling” roots may even need to be cut if you are unable to straighten them. Use a sharp instrument when cutting the roots so the wound will be as small as possible and heal faster. After the correct depth is prepared and your tree has been placed in the hole, rotate it around so the major branches don't head towards your house or to the street since there are city codes dictating the clearance height above the street and sidewalk. After positioning the tree straight, begin putting the soil from the hole back into it. Tap down to remove air pockets, especially with clay soil, and water thoroughly after each 1/3<sup>rd</sup> of the hole is filled. After the soil is filled to the top of the hole, use the left over soil to build a raised ridge around and a little larger than the hole you dug. Water again with a gentle flow from your hose until you don't see any air bubbles; this tells you the soil and roots are saturated.

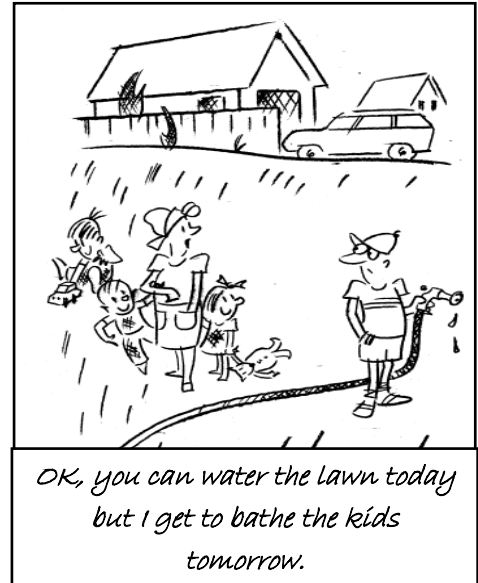
**Apply mulch after you have planted.** Mulch is like icing on a cake and one of the best things you can do for your soil and plants. There is more information on mulch in the soil section.

**Take care of your plants.** Natives generally need much less care and maintenance than “alien” plants. Of course, they do need to be watered well for the first growing season, but after that most need very little supplemental water except in extreme drought and even then once a month is usually enough. Most natives are perennial which means they live for many years. The ones that die back with the first freeze should be cut back some time before spring.

## Using Water Wisely

We're all aware of the drought in Texas and how it has added to our need for water conservation. The bigger issue, however, is that the population is expected to double in the next 50 years and we don't have enough water for them. We need to continue to reduce the 50% of our summer water used for our landscapes.

**Water deeply and infrequently.** Roots are the foundation of a plant and deep roots make the plant healthier so it can survive drought, floods, pests, and disease. Roots grow to find water so applying enough to penetrate down to a depth of at least 8 inches, preferably further, is the best way to accomplish this. You can determine how far down the water is penetrating by using a straight metal cylinder like a piece of rebar or a long screwdriver to see how far down you can push it. Usually it takes an application of about 1 inch of water to soak into the soil 8 inches deep, but it is best to check your soil to be sure.



**Check your sprinklers.** A good way to determine how much water is being applied is to place some straight-sided bowls or cans around the area. Then turn on the sprinkler and watch to see how long it takes to accumulate 1 inch of water in the cans or until the water starts to run off on to pavement. If there is run-off you want to set your sprinkler to run for a shorter period of time to let the water soak in for a while and then set it to run again until you get 1 inch of water in the cans. You may have to repeat the soak and water cycle again before reaching the 1 inch level. Even if you don't have run-off you may want to cycle and soak method to insure a deep watering. You also need to check your sprinkler for broken heads and replace them. If you have heads that are spraying non-living things like concrete, adjust them or replace the heads with ones that spray a smaller pattern. Most water departments offer a free sprinkler audit to let you know what needs to be done to create maximum watering efficiency.

**Turn your sprinklers off automatic and only water when you need to.** Yes, this is harder to figure out when there are water restrictions, but it prevents wasting water when the plants don't need it. Lawns need water only when you can see your footprints in the grass or it has turned a dull grayish-green color.

**Water as close to the ground as possible.** Plants take water in through their roots so water the ground instead of the plants. Drip irrigation systems or soaker hoses work best in landscape beds. For lawns, it is best to have a sprinkler that emits the water close to the ground instead of up in the air to avoid evaporation. Large water drops are also more efficient than small ones. The heads on irrigation systems can be easily changed to accomplish this.

**Water new plants frequently.** New plants have small roots that can't hold much water so they will need water frequently, probably daily if planted in the summer, for the first two weeks. It is quite possible that the soil they were potted in will dry out much faster than the surrounding soil, so check it often.

Cartoon from *Requiem for a Lawnmower* by Sally Wysowski & Andy Wysowski

**Use a moisture meter and rain gauge.** During a plant's first growing season it is very helpful to use a moisture meter to determine when to water. Just stick it in the ground to get an immediate reading of the amount of moisture in the soil so you can tell when to water. They are available at nurseries and big box stores and cost about \$10. Rain gauges tell you how much rain has fallen so you can tell if your plants were watered adequately by the rain. If there was an inch of rain, it is as if you watered an inch, so you don't need to water again for a while. Rain gauges are also widely available at a low price.



**Use drip irrigation or soaker hoses.** These are the best ways to water your landscape beds because they apply water directly to the soil. Drip irrigation can be installed by a professional or you can do it yourself. You can wind a soaker hose so it will be within 6-12 inches of each plant and hold it in place with landscape pins. With both these methods the hoses should be placed directly on the soil, under the mulch. They have less pressure than a regular hose or sprinkler and apply water at a much slower rate so they need to run much longer. These methods may have fewer restrictions on their use than regular sprinklers so check to see what your city allows.

**Hand watering works too.** You can use a regular hose with a nozzle that provides a gentle spray to water the soil around your plants.

**Collect rain water.** Another good way to save water is to collect rainwater in a covered barrel. Many people start with a 50-gallon barrel that connects to a gutter down spout. This can be used to water a small bed, some tomatoes or container plants. Rain barrels are now available at many nurseries and big box stores. Homeowner associations and city codes may restrict where you place rain barrels so be sure to check the rules before making a purchase.



Photo by Janet D Smith; diagram from [www.llojibwe.org](http://www.llojibwe.org)



## ***Attracting Birds, Bees, and Butterflies***

The wildlife we can expect to see most often in the urban and suburban Dallas area are birds and insects.

**Birds:** Hummingbirds are fun to watch and they are very easy to attract with native plants. They start migrating northward through our area in mid-March and southward from July through October, and some are seen all summer. They hover over the bloom and drink the nectar of flowers such as Turk's cap, autumn sage, flame acanthus, and red yucca. This gives them quick energy to catch insects, their primary source of the protein they also need. They are tiny birds and the males have color on their throats that is only fully visible in sunlight. Most of the hummingbirds we see in our region are Ruby-Throated with a few Black-Chinned. A remarkable thing about hummingbirds is that they remember every place they have ever had a drink of nectar so once they find your flowers, they will return year after year.

Other birds that frequent our yards include Northern Cardinals, Mockingbirds, Carolina Chickadees, Carolina Wrens, Blue Jays, Tufted Titmice, House Finch, Goldfinch, several species of doves, small Downy Woodpeckers, large Red-Bellied Woodpeckers, Robins, Juncos, Cedar Waxwings, and a variety of sparrows. All birds nest in the spring to raise their families. All except the finch and dove feed caterpillars to their babies. It takes 600-1000 caterpillars to feed a baby chickadee. Caterpillars hatch out of the tiny eggs laid on many of our native plants by butterflies and moths. Although insects are a large part of their diets, many birds also eat seeds, berries, and nuts from native plants.



*Ruby-throated Hummingbird*



*Cedar Waxwing*



*Red-bellied Woodpecker*



*Northern Cardinal*

Because all birds need water to drink and bathe in, a good way to attract them to your yard is to provide features like misters, birdbaths, fountains, or a shallow pond. A mister uses very little water but birds love to fly through the mist. Birds can sit on the side of a water feature to drink but they will only take baths in shallow water. Moving water is easier for them to see and will keep mosquitoes from being able to reproduce. There are devices called water wigglers to move the water in birdbaths while fountains and ponds can have pumps that recycle water.

**Butterflies:** They are so colorful and captivating that many people forget they are insects. In the adult stage they drink nectar from flowers and it is easy to provide this by using native and old heirloom varieties of flowers. Many of the new hybrid flowers don't have nectar and neither do roses, begonias, poppies and clematis so they don't provide butterfly food. Each species of butterfly lays eggs on specific species of plants that are called "host"

Photos: Hummingbird by George Boyd; other birds by Rick Murphy

plants. When a caterpillar hatches from an egg, it eats the leaves and sometimes the blossoms of the host plant. People who love butterflies grow host plants just for the caterpillars, and they don't mind that the leaves are eaten. Some of these caterpillars are also consumed by the birds but the butterfly lays enough eggs so it can continue to reproduce and its species can survive. The native passion vine is the host for the Gulf Fritillary, our most common orange butterfly. Many native plants are hosts but we need also to plant tropical milkweed for the Monarch and Queen butterflies and fennel and dill for the Eastern Black Swallowtails.



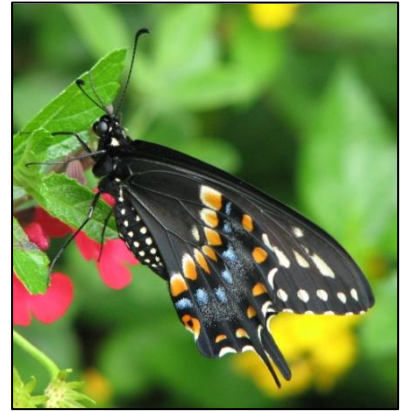
*Gulf Fritillary laying egg*



*Monarch*



*Queens*



*Black Swallowtail*

**Moths:** These are active mostly at night and are much less colorful than their butterfly cousins but they are important pollinators for the night-blooming plants. The night-blooming plants are usually white or light in color and have a fragrance to attract the moths.

**Bees:** The vast majority of bees are so busy working that they only sting when they are threatened. European honey bees and native bumble bees are the most important pollinators of the edible plants that provide one-third of the food we eat. They also pollinate ornamental flowers so they can reproduce. Many other native bees (leaf-cutter bees, mason bees, squash bees, mining bees and sweat bees) are solitary rather than social like the honey and bumble bees that live in hives but they still have a noticeable impact on pollination. Most live in the ground so it is good to leave some bare soil for them to use in an out-of-the-way area of your yard where they won't be disturbed. Others live in cavities in dead trees or nesting boxes that homeowners can build or buy.



*Bumble bee and honey bee*

**Wasps:** This subspecies of bee that includes hornets, yellow jackets and mud daubers, is also very beneficial to humans. These wasps lay their eggs on insects that damage plants and the wasp larva eat the pest insect. They can, however, sting repeatedly so it is best to stay away from their nests.

**Insecticides:** It is not necessary to use chemical insecticides in most landscapes because there is seldom a damaging infestation of harmful insects. The Integrated Pest Management (IPM) system is a good one to follow. On the rare occasion if it is necessary to use a pesticide, follow the directions and apply when there is no breeze and the pollinators are not active, usually early in the morning or just before sunset.

# *Choosing Native Plants for Dallas County*

## *Large Trees*



**Cedar Elm** *Ulmus crassifolia*, 50-70 ft tall, 50-60 ft wide, sun to part shade, very low water.

Gold leaves in fall that drop in winter.

Prefers alkaline soil but is adaptable to others.

Prune for shape or to raise canopy.

Upright form, adapted to rocky soils; can withstand heavy, poorly drained clay soils and moderately compacted soils. Very long life; hosts butterflies and moths



**Bur Oak** *Quercus macrocarpa*, 60-80 ft tall, 30-50 ft wide, sun to part shade, very low water.

Large acorns, drops leaves in winter.

Prefers limestone or clay soil.

Prune for shape or to raise canopy.

Large, majestic, very adaptable; needs lots of space and deep soil; susceptible to powdery mildew.



**Chinquapin Oak** *Quercus muehlenbergii*, 45-110 ft tall, 50-70 ft wide, sun to part-shade, low water.

Yellow and rust leaves in fall that drop in winter.

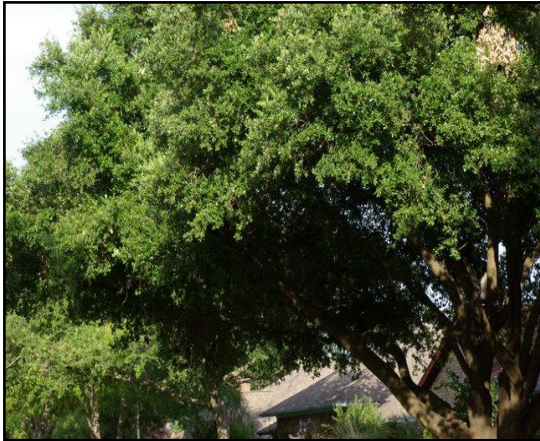
Prefers rocky or sandy soil, mildly alkaline.

Prune for shape or to raise canopy.

Sensitive to lawn chemicals and car exhaust. Stately form; good for deeper soils; requires additional water until established.

Top and bottom photos by Rick Murphy; middle from USDA





**Live Oak** *Quercus fusiformis*, 20-50 ft tall, 30-100 ft wide, low to very low water, briefly drops leaves in spring.

Evergreen

Prefers well-drained clay, sand, loam, limestone, calcareous soil.

Avoid pruning February - June; paint any pruning wounds immediately to prevent oak wilt.

Oak wilt susceptible; likes large open spaces.



**Shumard Oak** *Quercus shumardii*, 30-120 ft tall, to 60 ft wide, sun to part shade, low to very low water, drops leaves in winter.

Prefers deep soil.

Avoid pruning February - June; paint any pruning wounds immediately to prevent oak wilt.

Often mislabeled in the nursery, confused with Texas Red Oak: acorn cups enclose less than 1/3 of acorn, there are veins under the leaves and tiny hairs.

## ***Ornamental Trees***



**Mexican Plum** *Prunus mexicana*, 15-25 ft tall, 15-20 ft wide, sun to part shade, low water, drops leaves in winter.

White-pink flowers in spring.

Prefers well-drained clay, sand, loam or limestone soil.

Prune to shape or raise canopy.

Fragrantly sweet flowers, edible fruit. Needs good drainage and deep soil. Good in full sun or as an understory tree.



**Texas Redbud** *Cercis canadensis* var., 15-20 ft tall, 15-20 ft wide, sun to part shade, low water, drops leaves in winter.

Pinkish purple flowers in spring.

Prefers well-drained clay, sand, loam or limestone soil.

Prune to shape or raise canopy; remove suckers.

“Texas” leaves are large and less wavy than “Mexican”

## ***Shrubs***



**American Beautyberry** *Callicarpa americana*, 3-6 ft tall, 6 ft wide, part shade to full shade, low water, dies back in winter.

Purple berries in the fall.

Prefers well-drained clay, sand, loam or limestone soil.

Cut back after first freeze.

Birds, especially mockingbirds, love the berries in the fall. Great understory shrub.



**Autumn Sage** *Salvia greggii*, 2-3 ft wide and tall, full sun, low water, evergreen.

White, pink, coral or purple flowers spring through fall.

Prefers well-drained clay, sand, loam or limestone soil.

If leggy, cut back by a third or half.

Hummingbirds love this flower. If you keep snipping off the tips, it will bloom constantly spring through fall.

Top photo by Sally & Andy Wysowski; others by Janet D Smith





**Coralberry** *Symphoricarpos orbiculatus*, 2-4 ft tall, 1-3 ft wide, part to full shade, medium water, drops leaves in winter.

Magenta berries in the fall and winter.

Prefers well-drained clay, sand or loam soil.

Cut back in winter if it gets leggy. Control runners as needed.

Spreads by runners. Susceptible to powdery mildew. Does well in moist soil with compost added. Can be used as a tall ground cover or compact shrub.

## *Flowers*



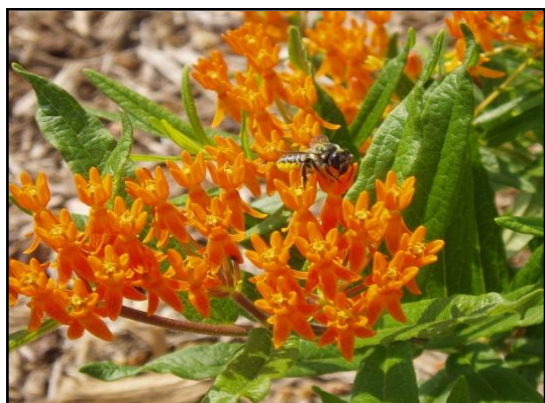
**Blue Mistflower** *Conoclinium coelestinum*, 1-3 ft tall, 2-4 ft wide, sun to part shade, medium water, dies back in winter.

Cluster of light purple flowers spring through fall.

Prefers clay, sand, acid or calcareous soil, poorly drained is okay.

Control spread by pulling.

Aggressive grower so only plant one in any area. Especially attractive to male Monarch and Queen butterflies.



**Butterfly milkweed** *Asclepias tuberosa*, 1-2 ft tall and wide, sun to part shade, low water, drops leaves in winter.

Orange flowers spring and summer.

Prefers well-drained clay, sand, loam or limestone soil.

Large taproot. Be patient for plant to get to full size: it will take four years from a small plant.

Great for bees and butterflies but is not a host plant.

Top photo by Rick Murphy; others by Janet D Smith



**Cedar Sage** *Salvia roemeriana*, 1-2 ft tall, 1 ft wide, part shade to shade, very low water, annual that reseeds freely.

Red flowers in spring and summer.

Prefers well-drained clay, sand, loam or limestone soil.

Keep leaves and much free from area where you want to spread.

Great for hummingbirds. Brings color to shady areas.



**Mealy Blue Sage**, *Salvia farinacea*, 2-3 ft tall and wide, sun to part shade, low water, dies back in winter.

Blue flowers in spring and summer.

Any well-drained soil.

Remove spent blooms to encourage flowering. Cut back to 6 inches in winter.

Flowers attract butterflies, bees and hummingbirds. Best in full sun. “Henry Duelberg” is a popular variety for the home landscape.



**Sundrops**, *Calylophus berlandieri*, 1-2 ft tall and wide, sun to part shade, evergreen, very low water.

Yellow flowers in spring and summer.

Any well-drained soil.

Prune brown leaves and old blooms.

Excellent rock garden plant. “Compact Gold” is a good variety that can be used as a groundcover.

Top photo by Joseph A Marcus; middle by Ray Matthews; bottom by Janet D Smith





**Turk's Cap**, *Malvaviscus arboreas var. drummondii*, 2-3 ft tall, 3-5 ft wide, dies back in winter, low water.

Red flowers June – fall.

Prefers moist clay, sand, loam, or limestone soil.

Cut back to ground in winter.

Attracts hummingbirds, bees, and large butterflies. Fruit for wildlife. Spreads aggressively.

## *Grasses*



**Little Bluestem**, *Schizachyrium scoparium*, 2-5 ft tall, 1-2 ft wide, dies back in winter, low water.

Copper leaves in fall.

Any well-drained soil without compost added.

Cutting back optional.

Basic component of prairies. Lovely copper foliage in fall and winter. Forms attractive columnar clumps.

If watered too much will flop over and not stand up straight.



**Buffalo grass**, *Bouteloua dactyloides*, turf grass 8-12 inches high, full sun, dies back in winter, low water.

Blue green color.

Any well-drained soil.

Mow to 2.5-3 inches or leave unmowed.

Plant from sod only, making sure to remove all previous turf before installing to prevent weeds. Needs very little water.

Top photo by Janet D Smith; middle from nps.gov; bottom from okstate.edu



**Gulf Muhly**, *Muhlenbergia capillaris*, 1.5 ft tall, 1-3 ft wide, sun to part shade, dies back in winter, low to medium water.

Pink seed heads in fall.

Prefers clay, sand or loam soil and seasonal poor drainage is okay.

Cut back in February.

Functions well in meadow gardens and as a general garden plant. Wispy seed heads make great fall color. Plant in groups for best effect.



**Inland Sea Oats**, *Uniola latifolia*, 2-4 ft tall, 2-3 ft wide, part to full shade, drops leaves in winter, low to medium water.

Ivory seed heads in summer and fall.

Prefers clay, sand or loam soil and seasonal poor drainage is okay.

Cut back to 6 inches in February.

Graceful, drooping, wheat-like seed heads. Spreads freely by seed. Prefers moist areas. Easily transplanted. Can be used as a tall groundcover for woodlands.

## *Groundcovers*



**Frogfruit**, *Phyla nodiflora*, 3-6 inches tall, 2+ feet wide, sun to part-shade, semi-evergreen, low to medium water.

White flowers in spring and summer.

Any soil, poorly drained okay.

Cut back to 3 inches in February.

Spreads rapidly. Small flowers provide nectar for skippers. Larval host for butterflies.



## *Vines*



**Coral Honeysuckle**, *Lonicera sempervirens*, 6-12 ft wide, sun to part-shade, semi-evergreen, medium water.

Red to yellow flowers February-June, and in fall.

Any soil, even poor drainage.

Prune to direct and control growth.

Coral tubular flowers attract hummingbirds. Berries attract birds. Tamer than Japanese honeysuckle.



**Crossvine**, *Bignonia capreolata*, 8-30 ft wide, full sun to shade, evergreen, low water.

Red to yellow flowers March-May.

Any soil, even poor drainage.

Prune to direct and control growth.

Tendrils attach to wall. Attracts hummingbirds. Aggressive climber.



**Virginia Creeper**, *Parthenocissus quinquefolia*, 3-40 wide, full sun to shade, drops leaves in winter, low water.

Any soil, even poor drainage.

Prune to direct and control growth.

Vigorous cover. Good groundcover also. Many birds compete for the berries. Best foliage color and berry production in full sun. Aggressive grower. Remove from trees.



Top 2 photos by Carol Feldman; bottom by Rick Murphy

## *Learning More...*

### **Native Plants**

*Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens* by Douglas Tallamy

*Requiem for a Lawnmower: Gardening in a Warmer Drier World* by Sally Wasowski & Andy Wasowski *Native Texas Plants: Landscaping Region by Region* by Sally Wasowski & Andy Wasowski

*Landscaping with Native Texas Plants* by Sally Wasowski (out of print but used books available)

*Landscaping with Native Plants of Texas* by George Oxford Miller

*Texas Wildscapes: Gardening for Wildlife* by Kelly Conrad Bender

<http://npsot.org> Native Plant Society of Texas for plant lists, classes, local chapters

[www.wildflower.org](http://www.wildflower.org) Lady Bird Johnson Wildflower Center for plant information and lists

### **Nurseries with Native Plants**

Bruce Miller Nurseries, 1000 E. Beltline Rd, Richardson, 75081, 972-238-0204, [www.brucemillernursery.com](http://www.brucemillernursery.com)

North Haven Gardens, 7700 Northaven Rd, Dallas 75230, 214-369-5316, [www.nhg.com](http://www.nhg.com)

Redenta's, 2001 Skillman St, Dallas 75206, 214-823-9424, [www.redentas.com](http://www.redentas.com)

Rohde's, 1651 Wall St., Garland 75041, 972-864-1934, [www.beorganic.com](http://www.beorganic.com)

### **Soil Testing**

Texas A&M AgriLife Extension instructions and form <http://soiltesting.tamu.edu>

### **Trees**

[www.dallastrees.org](http://www.dallastrees.org) Dallas Urban Forest Advisory Committee brochure on how to plant and care for trees

<http://www.arborday.org> Arbor Day Foundation for information about trees

### **General Landscaping**

*Easy Gardens for North Central Texas* by Steve Huddleston and Pamela Crawford

*Lawn Gone: Low-maintenance, Sustainable, Attractive Alternatives for Your Yard* by Pam Penick

*Texas Home Landscaping* by Greg Grant and Roger Holmes

*Trees of Texas* by Stan Tekiela

<http://aggie-horticulture.tamu.edu/earthkind> for gardening tips and plant lists

<http://www.txsmartscape.com> for gardening tips and plants lists

<http://www.dirtdoctor.com> for natural gardening tips

### **Birds**

*Birds of Texas* by Stan Tekiela

<http://www.audubondallas.org> for local bird information

[www.audubon.org](http://www.audubon.org) for bird conservation information

<http://www.nctexasbirds.com> for pictures and sightings of birds locally

[www.allaboutbirds.com](http://www.allaboutbirds.com) for pictures and information about birds in the US

Trinity River Audubon Center in South Dallas

Dogwood Canyon Audubon Center in Cedar Hill

## Butterflies

*Butterfly Gardening for Texas* by Geyata Ajilvsgi

*Life Cycle of Butterflies* by Judy Burris and Wayne Richards

[www.dallasbutterflies.com](http://www.dallasbutterflies.com) to find out what butterflies live here, meetings and field trips

<http://www.learner.org/jnorth> to track the migration of hummingbirds and monarch butterflies

<http://www.texasdiscoverygardens.org> to visit the butterfly conservatory and gardens

<http://www.heardmuseum.org> to visit the outdoor butterfly house and garden

## Bees & Other Insects

*Attracting Native Pollinators* by the Xerces Society.

<http://texasbumblebees.com> to learn more about these native bees

<http://txbeeguild.org> for information about local events and honey

[www.pollinators.org](http://www.pollinators.org) to learn about conservation issues

<http://citybugs.tamu.edu> for information on all the insects we see in our area inside and out

<http://ipm.tamu.edu> to learn about Integrated Pest Management

## Water

<http://savedallaswater.com> for Dallas water conservation tips

<http://agrifecdn.tamu.edu/urbantarranthorticulture/files/2012/03/Drip-Irrigation.pdf> to learn about drip irrigation

<http://rainwaterharvesting.tamu.edu> to learn about rainwater harvesting

## Apps

<http://txmn.org/smartphoneapps> to find a list of nature apps

## Texas Master Naturalists

<http://txmn.org> Texas Master Naturalists

<http://ntmn.org> North Texas Chapter

Written by Janet D Smith

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