

BIRDS, BEES, AND BUTTERFLIES :  
**GARDENING FOR  
WILDLIFE**

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TEXAS A&M  
**AGRILIFE**  
RESEARCH | EXTENSION



# On The Wild Side: Gardening to Attract Wildlife

**A**n often overlooked asset of many regionally native and adapted plants is their ability to attract and provide food and habitat for wildlife – literally breathing life into your landscape! Many native birds, butterflies, bees, and other welcome animals actually depend on these plants for survival. There are a number of plants with various structures, textures, and colors to meet the needs of homeowners interested in manicured and naturalistic landscape designs alike. Regardless of your personal aesthetic or the types of wildlife you're interested to attract, there is a native and adapted plant pallet to suit your tastes while boosting water efficiency at home!

## 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 when 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

## Before you begin: Pesticide and fertilizer awarness

**ALWAYS** apply fertilizers and pesticides adhering strictly to label Instructions.

Practice **INTEGRATED** Pest Management (IPM) whose goal is to eliminate pest problems, **NOT** to eradicate pests. IPM helps to strengthen and stabilize the landscape by creating conditions that are more favorable for plants than for pests:

1. **IDENTIFY THE INSECT FIRST!** Is it a friend or foe?
2. If it is a pest, does the population warrant treatment? (high numbers, damage to plant)
3. Consider treatment options that are less toxic to you and the environment.
4. Make sure the treatment, organic or inorganic, will not adversely affect beneficial insects like bees, earthworms, and caterpillars.

Visit <http://ipm.tamu.edu> for IPM information.

## What do you mean by Native & Adapted?

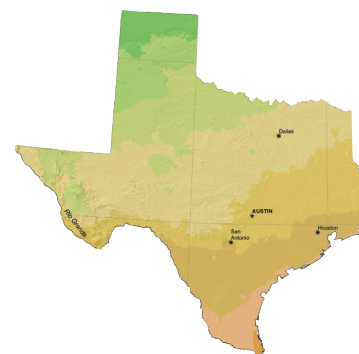
**Native** plants are hardy, having evolved in our (sometimes) harsh and unpredictable climate. They thrive on the soils that occur here and on the specific nutrients those soils provide. Native plants also tend to be more resistant to pest pressures of insects and diseases common to North Texas. A plant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

- Texas
- North Texas
- 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.

### Texas Plant Hardiness Zones

*Adapted from USDA national plant hardiness zone map*



Temp (F)	Zone	Temp (C)
-5 to 0	6b	-20.6 to -17.8
0 to 5	7a	-17.8 to -15
5 to 10	7b	-15 to -12.2
10 to 15	8a	-12.2 to -9.4
15 to 20	8b	-9.4 to -6.7
20 to 25	9a	-6.7 to -3.9
25 to 30	9b	-3.9 to -1.1
30 to 35	10a	-1.1 to 1.7

*Average Annual Extreme Minimum Temperature 1976-2005*

**Remember**, even though 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.

### 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 1899  
**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.**



# What Wildlife do You Hope to Attract? .....

One of the most important aspects of the planning process is to consider which animal species you would like to welcome to your landscape, focusing on providing three key resources: **food, water, and shelter**. As you design and install your wildlife friendly

garden, you can incorporate these features with the help of native and adapted plant material, pervious hardscapes, and rainwater harvesting systems for the best quality water sources for wildlife.

## Birds .....

### Water: A bathing source



Look for a bird bath that is only 1"-2" deep, gently sloping and made from a material that is easy to clean. Consider utilizing a 2-3ft pedestal and/or placing near plant material with spiny or thorny foliage (to provide cover from cats or other predators). Add sand or small pebbles to the bottom to provide secure footing. Clean and change water regularly to prevent algal growth and use BT mosquito dunks or bits per label instructions to prevent any mosquito activity.

### Bird feeder: A food source



Feeders come in a variety of shapes and sizes depending on the birds you would like to attract. Maintain your feeder regularly, keeping it clean and unclogged. (*Visit [Audubon.org](http://Audubon.org) for more info*)

- Black sunflower seeds – Songbirds
- Safflower, millet, nyger – Finches, Dove, Cardinals
- Suet - Woodpeckers, Fat Loving Birds
- Nuts - Jays
- Fruit - Orioles

### Mulch: A natural feeding area



Insects, pillbugs, earthworms, and other important food sources for songbirds make their home in the 2-4 inches of mulch around perennials, shrubs, and trees (not to mention the water savings!)

### Brush pile: A bird shelter



A few neatly stacked branches or limbs can provide shelter for birds and other wildlife in extreme weather.

## Select plants for birds

Oak, Juniper, Yaupon Holly, Possumhaw Holly, Cherry Laurel, Redbud, Desert Willow, Texas Persimmon, Wax Myrtle, Mexican Plum, American Beautyberry, Inland Sea Oats, Indiangrass, Muhly Grass, Coral Honeysuckle

### Bordering: A song bird habitat

Implement a border with regionally native and adapted trees and shrubs for a native bird habitat during severe weather events. Layer your plant life with the shortest up front and tallest toward the rear. Create vertical niches for a variety of bird habitats, and consider a natural evergreen hedge or windbreak on the north side of your property to block cold north winds.

#### Above Canopy

*Vultures, Hawks,  
Swallows, Swifts*

#### Canopy

*Oak, Pecan, Elm*

*Owls, Woodpeckers,  
Thrushes, Warblers*

#### Midstory

*Maples, Junipers,  
Soapberry,  
Cherry Laurel*

*Jays, Chickadees, Vireos*

#### Understory

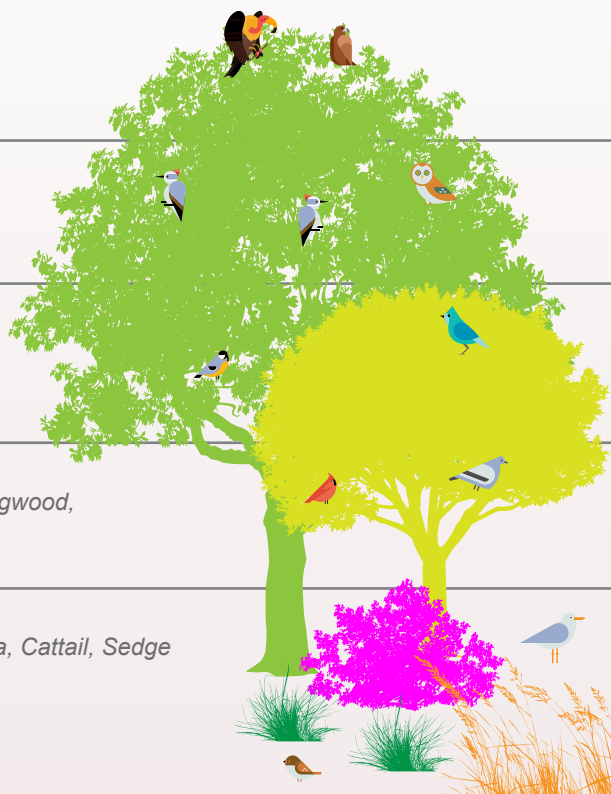
*Mexican Buckeye, Dogwood,  
Yaupon, Agarita*

*Mockingbirds, Cardinals,  
Wrens, Doves*

#### Groundcover

*Bluestem, Blue Grama, Cattail, Sedge*

*Sparrows, Herons,  
Mallards, Sandpipers*



## Hummingbirds

### Feeder



In addition to nectar producing plants, a feeder maintained from March until 2 weeks after you see the last hummingbird of the season is sure to attract many hummingbirds to your landscape.

- Clean and refill your feeder with fresh nectar 2- 3 times a week
- Fill it with 1 part table sugar and 4 parts water
- Use 2-3 feeders through summer months
- Space feeders far apart to avoid competition
- **DO NOT** use honey or food coloring



#### Did you know

Hummingbirds can serve as a measure of pest control throughout the landscape as they eat tiny flying insects, small beetles, weevils, flies, gnats, mosquitoes, aphids, mites, leafhoppers, flying ants, wasps and even spiders.



## Plants



*Contrary to popular belief, plants of a range of colors besides red, like this mealy blue sage, do very well at attracting hummingbirds.*

The right plants in your landscape can create a viable habitat for hummingbirds. Your selection should include a pallet that produces nectar and attracts insects for hummingbird food. A landscape of native and adapted trees, shrubs, and grasses will provide nesting material as morning dew supplies a water source. Make sure the species you select are varied and include:

- Different blooming seasons
- Deep-throated, tubular flowers
- Different colors, NOT just red

## Select plants for hummingbirds

Mealy Blue Sage, Autumn Sage, Black and Blue Sage, Scarlet Sage, Lyre-leaf Sage, Turk's Cap, Flame Acanthus, Cross Vine, Coral Honeysuckle, Texas Betony

## Butterflies

### Water

A shallow bowl of wet sand, gravel, or stones, and fruit in a protected spot, in full sun, allows for butterfly “puddling,” which meets water, salt, and other nutrient needs.



### Food

Butterfly food includes flower nectars and wet fruit like melon, banana and citrus. Include these in feeding dishes.



### Shelter

Butterfly shelter includes trees (dead or alive), tall grasses, and even rock piles.



Plants

Consider planting “larval host plants” for specific species. For black swallowtail, try parsley, dill, fennel, and common rue. For gulf fritillary, try maypops and other passion vines. For Henry’s elfin, try redbud, viburnum and yaupon holly.

For painted lady, try plant thistles and mallows. For pipevine swallowtail, plant native pipevine species and for monarch, **native** milkweeds. More info on host species visit [butterfliesandmoths.org](http://butterfliesandmoths.org)

Provide plants that

- Bloom year round
- Include red, yellow, orange, pink, and purple flowers
- Include clusters of tubular shaped petals

BE ADVISED

Avoid planting tropical milkweed (*Asclepias curassavica*) or be diligent in cutting it back as necessary in early fall to mitigate potential effects on migration patterns. Take the same approach to deter the protozoic parasite *Ophryocystis elektroscirrha* (OE), due to its potential effects on breeding.



Antelope horns is one of several viable milkweeds for attracting monarch butterflies.

Select plants for butterflies

Mistflower, Cenizo, Turk’s Cap, Purple Passionflower, Purple Coneflower, Texas Lantana, Cross Vine, Coral Honeysuckle, Butterfly Weed, Green Milkweed, Antelope Horns

Bees

Why attract bees?

In addition to the benefits they bring to a range of ecosystems, bees are the most effective pollinators of plant life on the planet. Plants thrive in their presence and either struggle or fail to proliferate without them. In addition to the familiar European honeybee, 4,000 species of native or wild bees exist in the continental U.S.including, bumblebees, carpenter bees, sweat bees, leafcutter bees, and mason bees, each playing an important role.

Unfortunately, many of these bee populations are in serious decline.



Planting for bees

Select a diverse, flowering pallet of plants for your landscape, focusing heavily on wildflowers and regional native and adapted plant species. Choose varieties that produce blue, purple, and yellow blooms.

Select plants for bees

Mealy Blue Sage, Black and Blue Salvia, Mistflower, Texas Mountain Laurel, Texas Lantana, Columbine, Zexmenia, Redbud, Vitex, Fall Aster, Horsemint, Anise Hyssop