

Hummingbird Gardening



Hummingbirds in Our Area

- Black chin



- Ruby throat



- Rufous



There are other hummingbirds in Texas, but, are more common in far West Texas and along the Gulf Coast.

Hummingbirds are Insectivores

- Many of the plants that attract butterflies will attract the small insects hummers like.
- Limiting insecticides will provide hummers with the protein they and their babies need.
- Nectar provides hummers with the calories they need to keep them going.



Feeder Rules

- Change contents of your feeder frequently. at least every 3-4 days.
- No honey, artificial sweeteners or dyes. Sugar, water; that's it.
- If you find mold in your feeder, wash with bleach and water; rinse thoroughly.
- Place feeders less than 5 ft or more than 15 ft. from windows.



4 to 1 ratio of
water to sugar

You don't have to have a feeder to attract hummingbirds.

There are plenty of plants that will do the job.

Whether you want to fill a garden or just some flower pots, there are plenty of choices.

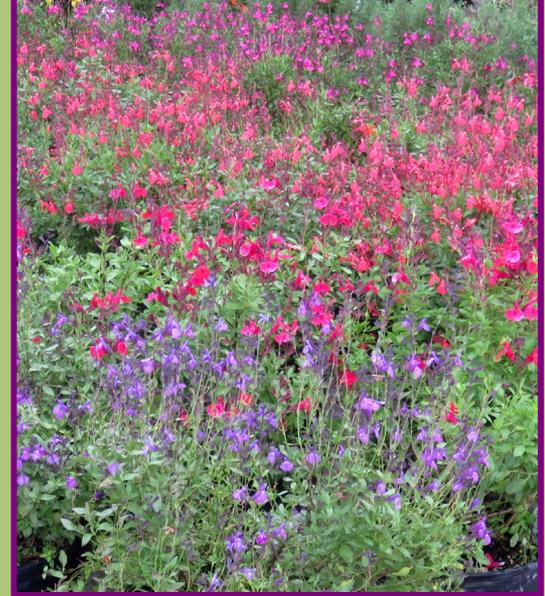


Nectar Plants for Hummers

- Flame acanthus
- Salvia greggii
(most salvias)
- Turks Cap
- Cannas
- Coral honeysuckle
- Lantana
- Desert willow
- Larkspur
- Hibiscus
- Petunias
- Red yucca



Hummers are more about sight than smell.



They are attracted to reds, oranges, and pinks.



Think bell or trumpet shaped flowers

Provide Water



- Moving water attracts birds, and hummingbirds are no exception.
- Bubblers, fountains, and shallow birdbaths provide water for bathing.
- Misters that spray on nearby bushes work well, too.



If you want to take a hummingbird field trip, visit the Hummer House Bed and Breakfast in Christoval, south of San Angelo.



It's the home of the largest concentration of breeding black chin hummingbirds, as well as, painted buntings.



Day visitors are welcome to visit the Observation Room Saturday's from 9-1 from April through July.

A photograph of a prairie landscape. The foreground is filled with tall, green grasses and numerous yellow wildflowers. In the middle ground, there is a dense line of green trees. The sky is a vibrant blue with scattered white clouds. The text "Making your own Pocket Prairie" is overlaid in the center in a white, serif font, with both lines underlined.

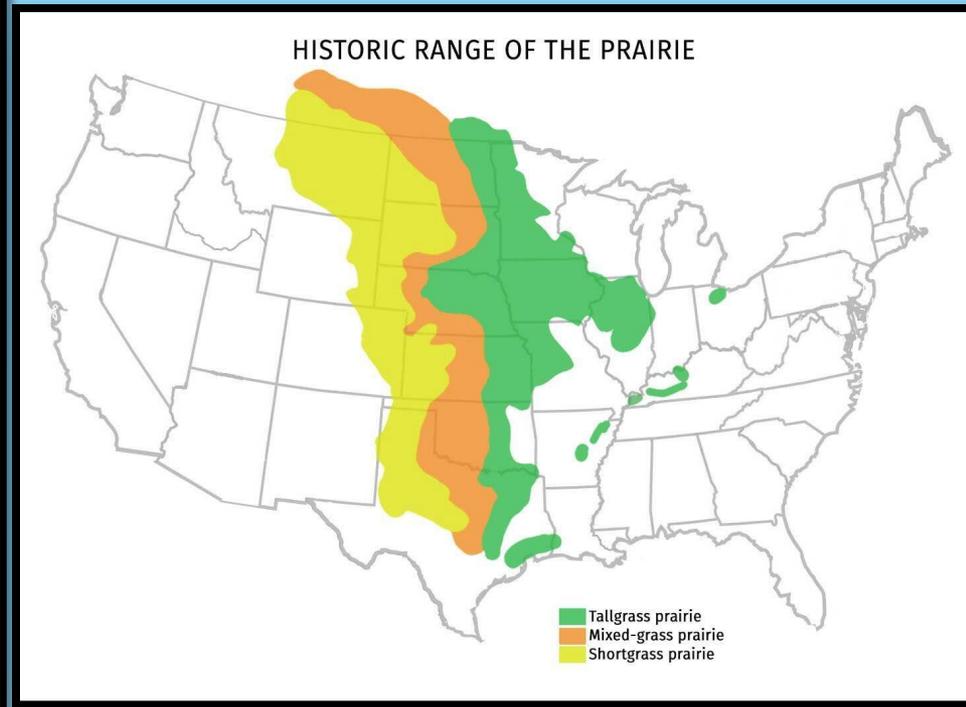
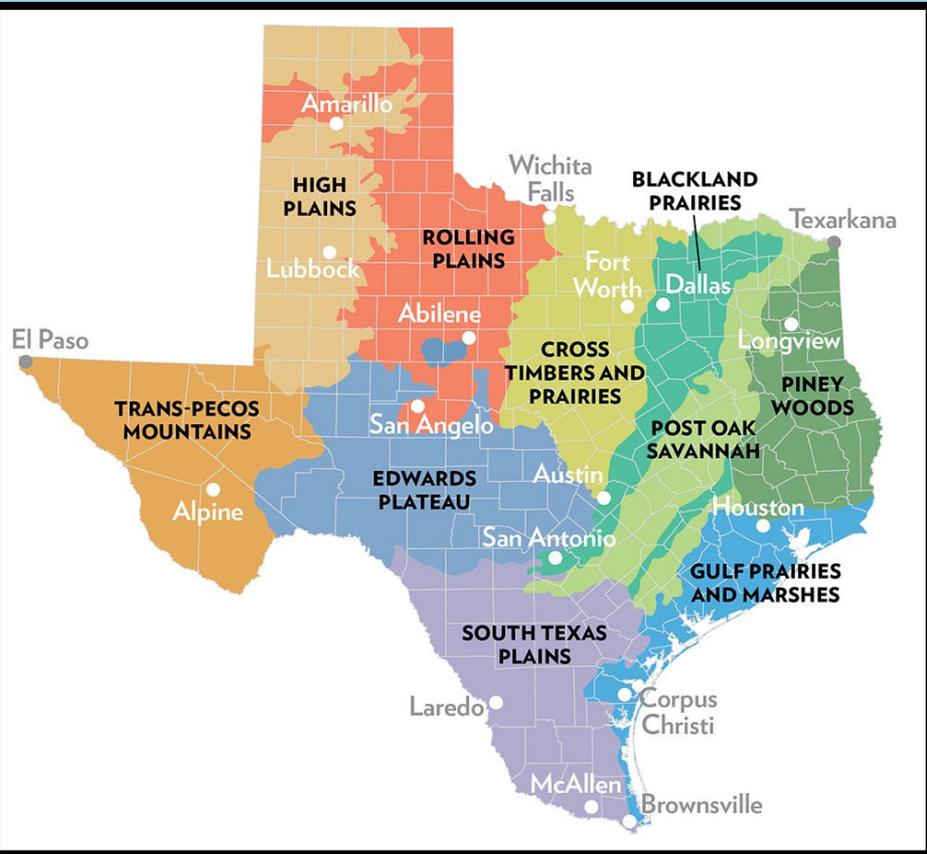
Making your own
Pocket Prairie

What is a prairie?

- A prairie is a type of grassland ecosystem characterized by grasses, wildflowers, and other herbaceous plants, with limited tree cover.
- Historically, prairies covered an estimated 677,394 square miles - nearly a quarter of the lower 48 states - from 550 million to 1 billion acres.



Historical Prairies



Pocket Prairie: prairie but smaller

A pocket prairie is a miniature prairie of an acre or less that features native plants, grasses and forbs. Once established, these parcels of habitat are easy to maintain and provide food and shelter for pollinators and birds, as well as adding beauty to your garden.



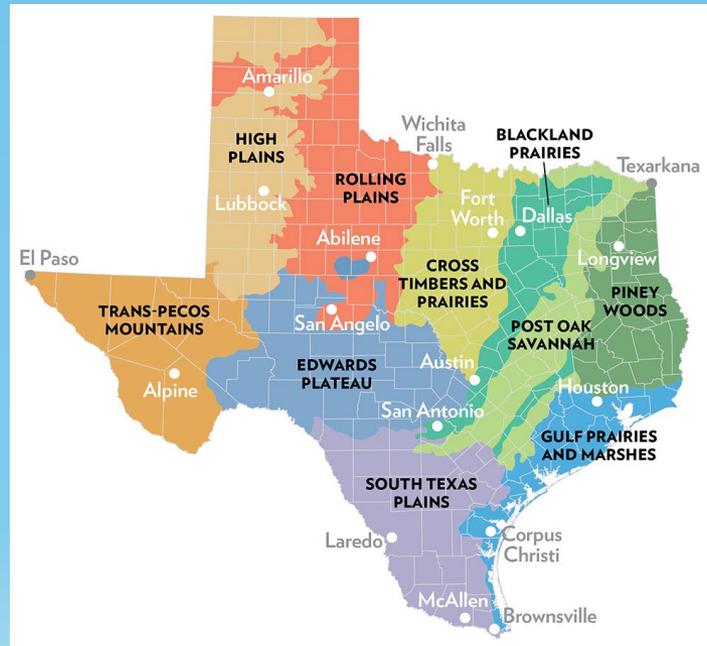
Site selection and size

- Sunlight
- Soils
- Access
- Maintenance
- Marginal areas
- Areas with limited irrigation



Species selection

- Natives only if possible
- Number of species
- Grass/ Forb mix
- Site specific species



Native Grasses

Southern Rolling Plains

- Western wheatgrass
- Big bluestem
- Sand big bluestem
- Sideoats grama
- Blue grama
- Hairy grama
- Buffalograss
- Canada wildrye
- Curly mesquite
- Texas bluegrass
- Switchgrass
- Indiangrass

Edwards Plateau

- Silver bluestem
- Canada wildrye
- Big muhly
- Little bluestem
- Indiangrass
- Hairy grama
- Buffalograss
- Lindheimer muhly
- Seep muhly
- Big Bluestem
- Eastern Gammagrass
- Blue Gramma
- Switchgrass
- Texas cupgrass



Native Grasses



Native Forbs

Southern Rolling Plains

- Winecup
- Square-bud evening-primrose
- Englemann daisy
- Blackfoot daisy
- Missouri evening-primrose
- Pink plains penstemon
- Mexican hat
- Mealy sage
- Copper-mallow
- Huisache-daisy
- Indian blanket
- Yellow plainsman
- Blue flax
- Tahoka daisy
- Prairie verbena

Edwards

Plateau

- Columbine
- Butterfly weed
- Englemann's daisy
- Dotted gayfeather
- Turk's cap
- Cedar sage
- Standing cypress
- Brown-eyed susan
- Greenthread
- Orange zexmenia
- Bush sunflower
- Maximillian sunflower
- Texas skeleton plant
- Upright, Purple prairie coneflower
- Bush morning glory
- Standing cypress
- Wild petunia
- White, Purple winecup

Native Forbs



Seedbed preparation

- Remove all existing vegetation and root systems in the area to reduce the competition for nutrients, light, and water.
- Disturb the soil surface to ensure good seed to soil contact
- Amend soil if necessary



Seeding and Planting

- Broadcast
- Drilling
- Hand seeding
- Potted plants



Management and upkeep

- Mowing & Trimming
- Hand clearing
- Prescribed fire
- Grazing



A wide-angle photograph of a field of yellow wildflowers, likely black-eyed Susans, in full bloom. The flowers are interspersed with tall, green grasses. In the background, a dense line of green trees stretches across the horizon. The sky is a vibrant blue, filled with scattered, fluffy white clouds. The overall scene is bright and sunny.

Questions?

Butterfly Gardening



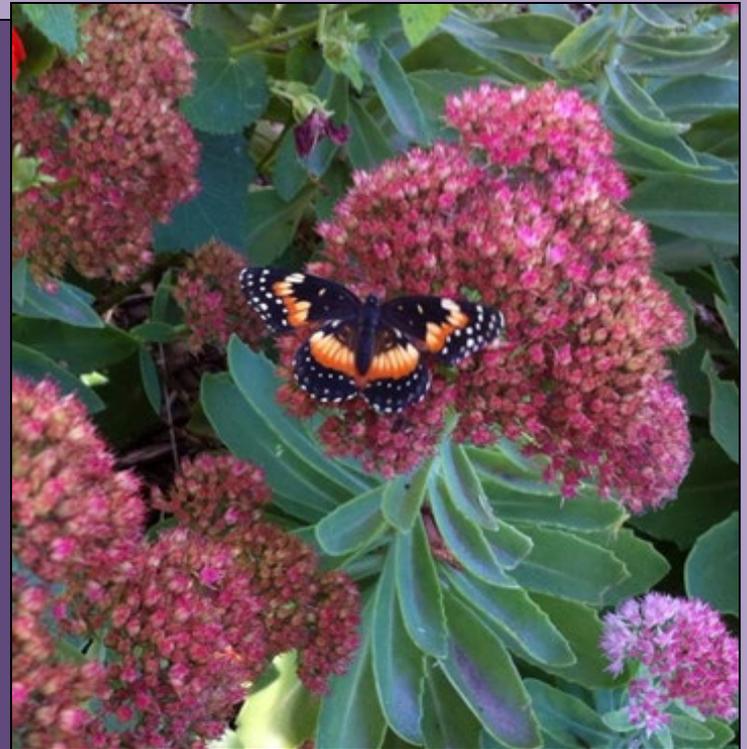
in the Big Country



Sulfurs, queen, and painted lady enjoy lavender

The Keys to Success!

- Go native
- Host Plants
- Nectar plants
- Friendly Environment



Border Patch on Sedum

Why Natives?

- Most butterflies have a close relationship to the plants they have developed with for millennia.
- Some imported plants can be harmful to native butterflies.
- Native plants can also handle our delightful Texas climate and pests .



Monarch caterpillar
enjoying some milkweed

Don't start from scratch.

- Add some natives to your existing garden.
- As you replace plants, go with native species.



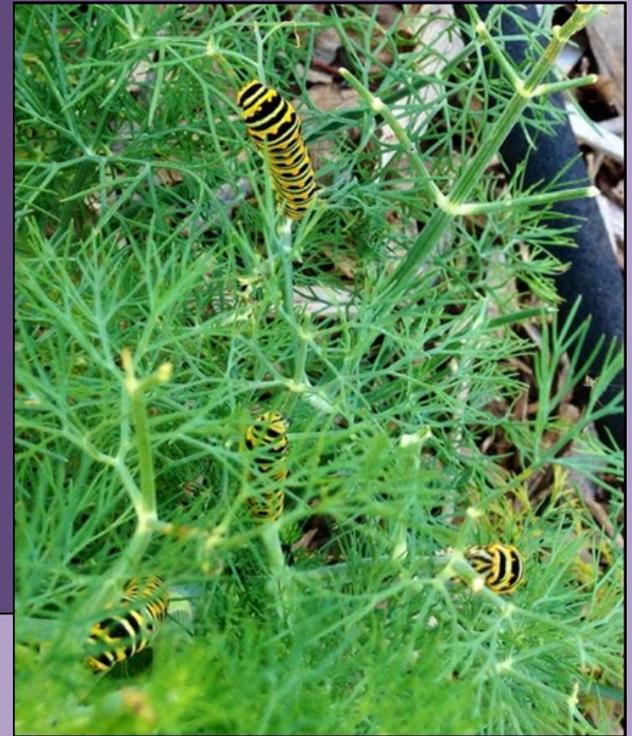
Crescents on blackfoot daisy

Host Plants

- You can't have butterflies without caterpillars.
- Host plants attract butterflies to your garden and keep them coming back.
- Watching butterflies leaving their chrysalis can be lots of fun.



Swallowtail
caterpillars on dill



TOP HOST PLANTS

1. **Fennell, dill, parsley, rue:** black and tiger swallowtails
2. **Milkweed:** monarchs, queens.
3. **Passion vine:** fritillaries
4. **Hollyhocks and asters:** painted lady
5. **Ruellia, acanthus, snapdragon, frogfruit:** buckeyes
6. **Sunflowers:** bordered patch, checker spot, and dainty sulphur

Swallowtail on verbena



Trees are Host Plants, too.

- **Oak** : various dusky wings and hairstreaks
- **Willow**: viceroy, western tiger swallowtail, mourning cloak, red-spotted purple
- **Hackberry**: question mark, hackberry and tawny emperor
- **Honey Mesquite**: ceraunus, Reakirt's, and marine blues



Question mark butterfly

For an extensive list of host plants and the butterflies who love to eat them, check: dallasbutterflies.com



Emperor on horsemint



Fritillary on pentas

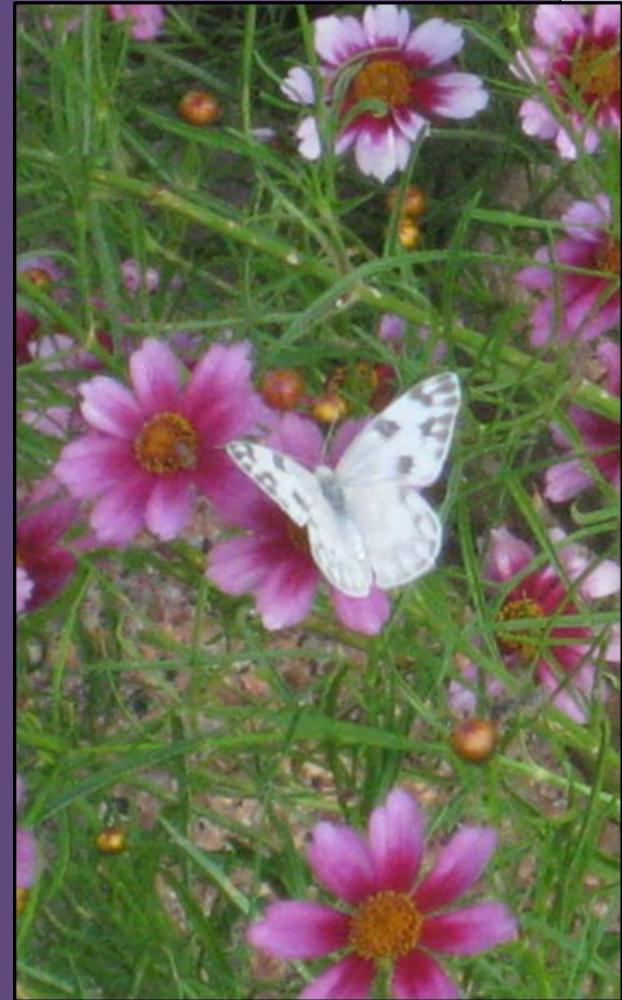
Nectar Plants

- Butterflies like flowers that have a surface they can land on.
- Compound or composite flowers like sunflowers and daisies provide butterflies with more bang for their buck.

The center of a composite flower is actually made up of lots of little flowers



- They say butterflies prefer purple, pink, yellow, and white. Though I've seen them on every color.
- Plant in groups so you get big clumps of color.
- They are actually attracted more to smell than color.



Checkered white
on coreopsis

- Shoot for as long a bloom period as possible.
- Watch which plants seem to have butterflies on them in each season.
- Host plants are often good nectar plants, too.

Summer

Spring



Fall



Perennials

- Lantana
- Greg's Mistflower
- Yarrow
- Coreopsis
- Blackfoot daisy
- Scabiosa
- Coneflowers
- Mealy cup sage
- Lavender
- Hollyhock
- Liatris



Juniper hairstreak on Greg's mistflower



Red admiral on coreopsis



Annuals

- Zinnias
- Pentas
- Milkweed
- Golden Dewdrop
- Cosmos
- Sunflower
- Petunias

Swallowtail on pentas



Dogface butterflies
on zinnias



Monarch on golden
dewdrop

Trees

- Desert willow
- Mountain Laurel
- Yaupon holly
- Vitex
- Texas sage



Shrubs

- Butterfly bush
- Turk's cap
- Glossy abelia
- Salvia gregii
- Agarita



A Friendly Environment

It's important to make our gardens both inviting and a safe place for butterflies.

Monarch and queens enjoying one of their favorites, mystic spires salvia



Nix the Pesticides

- They kill all insects, even the organics
- Systemics are particularly bad for caterpillars.
- If you absolutely have to use them, do so sparingly and with care.
- I put up with a lot of aphids and some chewed up leaves. Its worth it.



The Issue with Ants

- Fire ants are a real menace to caterpillars.
- I've been told that any thing that will kill ants will kill caterpillars, but caterpillars shouldn't eat ant bait.
- So you weigh the risk.
Which is more dangerous
to your butterfly caterpillars?



Other Things to Include:

- Ornamental grasses provide cover for small butterflies.
- Leaves on the ground in the fall will provide cover for those that winter over. LEAVE the LEAVES!
- Try to avoid watering with an overhead sprinkler, it dilutes nectar.



- A “puddling” area, with a dish of damp sand or area of moist dirt, provides butterflies with important minerals.
- Flat rocks or logs for sunning are appreciated.
- Place puddling area and sunning rocks near open areas.



Gray hairstreak on four nerve daisy

Butterfly Feeder

- Not all butterflies drink nectar. Some like tree sap, rotten fruit, manure, even carrion.
- You can use things like over-ripe bananas and cantaloupe, to attract these butterflies.



Red admiral and question marks
enjoy the feeder



Butterfly Brew

- Mash up bananas or peaches and mix with molasses or brown sugar.
- Add stale beer or yeast.
- Put it in a plastic bottle and seal, but not too tight.
- Put a chunk of bark in a shallow dish and drizzle on some brew. Or you can paint it on fence posts and trees.



Mourning cloaks like tree sap and fruit

Helpful websites

www.butterfliesandmoths.org – my go to website.
Lots of great information.

www.butterfliesathome.com – special page on
Texas butterflies. Includes suggested books and
links to butterfly and nature centers in the state.

www.dallasbutterflies.com – list of host plants.
Also list of native nurseries
in the Metroplex.



Horace's dusky wing on rock

Conservation Sites

www.xerces.org – insect conservation; especially pollinators. Good info. on monarchs.

www.monarchwatch.org – the site for monarch conservation. Information on milkweeds and milkweed sources. Also how to set up your garden as a Monarch Waystation.



Monarch on Greg's mistflower

National Butterfly Center

The National Butterfly Center in Mission, Texas has a butterfly garden certification program.

If your garden meets the criteria, for a fee, you can have your garden officially certified.

They also have a butterfly festival every year.



www.nationalbutterflycenter.org

Hope you enjoyed the program!

