## **Top 10: Lists of Native Plants for Pollinators**

In order to make my top 10 a plant must have: (1) a long-lasting bloom, (2) rich nectar and pollen source, and (3) drought and heat tolerance.

BONUS: A plant that hosts butterfly caterpillars, such as milkweed, which is also one of the best plant indicators of ozone pollution.

EXTRA CREDIT: Thyme provides a chemical called thymol, a natural fungicide that protects bees from the fungus that's killing them. Buy as many thyme plants as you can and plant generously throughout beds.

If everyone would plant thyme and milkweed, bees and butterflies would be in a lot better situation!

The plants listed are native to Houston, Texas. To search for native plants in your region, go to the Lady Bird Johnson Wildflower Center database.

My designs and lists are free for you to use, as long as you ensure a pesticide-free yard. Avoid toxic pesticides, use organic alternatives which are safer for your family and pets. Please support plant nurseries that guarantee plants grown without pesticides.

#### **Soil Preparation**

Use an area (ie, 15' x 3') with good *south-eastern exposure* that is protected from winds. For those without a small garden area, use roof gardens, porches, and windowsills.

Install a diversity of flowering plants with *diverse bloom-times, color, shapes and sizes,* and group a minimum of 5-7 same-species plants together.

Avoid wood bark mulch, most native bees dwell in the ground and can't build nests over mulch; consider compost instead, it provides similar weed suppression and water retention properties, yet allows for nesting and improves your soil.

#### Preparing the entire garden bed area

- For every 4 square feet, one bag of organic compost
- Mix in a balanced organic fertilizer (I like Down to Earth brand)

For our Houston gumbo soil, I recommended using a shovel and mini pick axe to dig a hole a few inches larger than the plant roots. Use a hori hori for finer digging and weeding.

#### Recipe for plant holes

Add WITH plant, roughly:

- 50% potting mix such as Nature's Yield (low cost) or Happy Frog (high cost)
- 25% compost/mulch (any organic brand)
- 25% coconut coir (place block in bucket of water, will expand generously)
- Handful of "plant food" (fertilizer), I prefer MicroLife Fertilizer (Houston company!), or you can find Happy Frog (high cost), or another organic fertilizer (low cost), but use one containing mycorrhizae (beneficial microbes)
- Handful of Earthworm Castings
- Generous pinch of rock phosphate, buy the bulk bucket not the brand names. A large container of rock phosphate is relatively inexpensive and will last practically forever. Phosphate aids root growth and establishment of new plants it's my favorite secret weapon in the garden!

Remove weed mats and mulch prior to spreading seeds, then replace.

Key to Plant Descriptions		
This symbol means plant is edible or has been used medicinally		
Habit	Height	Design
Groundcover	Stays under 1 ft, typically 6-8 inches high, spreading and spilling habit	Plant in containers or in front of garden area
Low	1-2 ft tall	Plant in groups of 5-7 in front of garden
Med	2-4 ft tall	Plant in groups of 3-5 in middle of garden
High	4-6 ft tall	Plant in back or sides of garden
Very High	6-12 ft tall	Plant in back of garden or to provide privacy screen
Vine	Climbing habit	Requires structure for support such as lattice

### **Top Garden Companion Plants**

Insects provide natural pest-control, richer soil, and higher yields. Creating an insectary involves eliminating pesticide use and adding plants and garden practices that attract a diversity of beneficial organisms.

Companion plants attract pollinators and predators – insects that eat pests! They can also serve as a sacrificial crop, or "trap crop" that tempts pests away from your prized vegetables. Sometimes these plants also help fix nitrogen or enhance minerals in the soil (eg. buckwheat and clover). Some, such as marigolds, release chemicals from their roots that have insecticidal and fungicidal effects.

Plant	Beneficials Attracted	Pests Repelled	Crop Companions
Borage	Bees, lacewings, spiders, ground beetles	Tomato hornworms, cabbage worms, snails, slugs	Tomatoes, strawberries, squash
Buckwheat and Crimson Clover	Predatory stink bugs, assassin bugs, soldier beetles, bees, hover flies, wasps	Stink bugs, potato beetles, bean beetles, corn borer, cabbage looper, snails, slugs	Potatoes Note: increases soil minerals
Carrot family (dill, parsley, rue, fennel, cilantro, Queen Anne's Lace)	Ladybugs, lacewings, wasps, bees, hover flies, minute pirate bugs	Soil nematodes, aphids, spider mites, whiteflies, scales, mealybugs, tomato hornworms	Cucumbers, onions, lettuce, tomatoes Note: host plants for Swallowtail butterfly
Aster family (coreopsis, zinnia, echinacea, yarrow)	Bees, hover flies, wasps, assassin bugs, green lynx	Whiteflies, carrot flies, bean beetles, cabbage worm	Plant freely especially with tomatoes, peppers, onions
Mint family (basil, oregano, thyme*, lavender, rosemary)	Bees, hover flies, wasps, lacewings	Thrips, aphids, spider mites, bean beetles, scales, mealybugs, cabbage worm, carrot fly, fleas	Cabbage, kale broccoli, carrots, beans, peppers
Sunflowers	Bees, minute pirate bug, wasps, soldier beetles	Snails, slugs; attracts aphids and ants away from vegetables	

<sup>\*</sup> Thyme provides a chemical called thymol, a natural fungicide that protects bees from the fungus that's killing them. It is a gorgeous groundcover that spills beautifully over edges of beds and containers.

Top 10 Pollinator Plants		
If everyone v	If everyone would plant thyme and milkweed, bees and butterflies would be in a lot better situation!	
Habit	Plant	
Low	Indian Blanket (Gaillardia pulchella)	
Low	Winecup (Callirhoe involucrate)	
Med	Gayfeather (Liatris)	
Med	Little Bluestem (Schizachyrium scoparium)	
Med	All the Asters! Zinnia, Coreopsis, Echinacea, Sunflower, Rudbeckia, Yarrow	
Med	African Blue Basil (herb)	
Med	Texas Lantana (Lantana urticoides)	
Med	Scarlet Sage (Salvia coccinea)	
High	Coralbean (Erythina herbacea)	
High	Rattlesnake Master (Eryngium yuccifolium)	

Top 10 Hummingbird Plants	
Good rule of thumb: if it's red or orange it attracts hummingbirds. Birds have a weak sense of smell, so it's all about color, with deep, bell-shaped blooms like bee balm and trumpet vine.	
Habit	Plant
Low	Native Milkweed (Asclepias tuberosa, Asclepias viridis)
Med	Gayfeather (Liatris)
Med	Beebalm (Monarda puctata, Monarda citriodora)
Med	Gulf Penstemon (Penstemon tenuis)
Med	Scarlet Sage (Salvia coccinea)
Med	Drummond's Turk's Cap (Malvaviscus arboreus var. drummondii)
High	Texas Redstar (Ipomopsis rubra)
High	Coralbean (Erythina herbacea)
Vine	Crossvine (Bignonia capreolata)
Vine	Trumpet Creeper (Campsis radicans)

# **Top 10 Butterfly Host Plants**

Plant a butterfly nursery for baby butterflies! Kids love this garden. Butterflies also love citrus trees, and garlic and onion plants.

Habit	Host Plant	Butterfly Babies
Groundcover	Frogfruit (Phyla nodiflora)	Phaon Crescent, Buckeye, White Peacock
Low	Partridge Pea (Chamaecrista fasciculata)	Cloudless Sulfur, Orange Sulfur, Sleepy Orange, Little Sulphur
Low	Texas Bluebonnet (Lupinus texensis)	Cassius Blue, Marine Blue, Longtail Skipper, Spotted Skipper, Dorantes Longtail
Low	Winecup (Callirhoe involucrata)	Gray Hairstreak
Low	Native Milkweed (Asclepias tuberosa, Asclepias viridis)	Monarch, Queen
Med	Carrot Family (fennel, dill, parsley, rue, cilantro, Queen Anne's Lace)	Black Swallowtail
Med	Yellow Wild Indigo (Baptista tinctoria)	Frosted Elfin, Wild Indigo Duskywing, Sulfurs
High	Southern Arrowwood (Viburnum dentatum)	Spring Azure, Henry's Elfin
Very High	Indigo Bush (Amorpha fruticosa)	Silver Spotted Skipper, Southern Dogface, California Dogface, Gray Hairstreak, Hoary Edge
Vine	Purple Passionvine (Passiflora incarnata)	Gulf Fritillary, Variegated Fritillary

Top 10 Plants for Shade		
You can still h	You can still have a pollinator garden in shady areas.	
Habit	Plant	
Low	Coralberry (Symphoricarpos orbiculatus)	
Low	Prairie Spiderwort (Tradescantia occidentalis)	
Med	Cardinal Flower (Lobelia cardinalis)	
Med	Blue Mistflower (Conoclinium coelestinum)	
Med	Drummond's Turk's Cap (Malvaviscus arboreus var. drummondii)	
High	Fall Obedient Plant (Physotegia virginiana)	
High	Big Thicket Hibiscus (Hibiscus aculeatus)	
Very High	American Beautyberry (Callicarpa americana)	
Very High	Farkleberry (Vaccinium arboretum)	
Vine	Crossvine (Bignonia capreolata)	

Plant a Year-Round Buffet		
Ensure there is always food available in your yard with plants that bloom during every season!		
Spring Bloomers		
Habit	Plant	
Low	Texas Bluebonnet (Lupinus texensis)	
Low	Winecup (Callirhoe involucrata)	
Low	Pink Evening Primrose (Oenothera speciosa)	
Med	Yellow Wild Indigo (Baptista tinctoria)	
Small Tree	Redbud (Cercis canadensis var. texensis)	
Small Tree	Mexican Plum (Prunus Mexicana)	
Summer Bloc	omers	
Habit	Plant	
Groundcover	Frogfruit (Phyla nodiflora)	
Low	Prairie Spiderwort (Tradescantia occidentalis)	
Med	Little Bluestem (Schizachyrium scoparium)	
Med	Inland Sea Oats (Chasmanthium latifolium)	
High	Rattlesnake Master (Eryngium yuccifolium)	
Tree	Carolina Buckthorn (Frangula caroliniana)	
Small Tree	Red Mulberry (Morus rubra)	
Vine	Coral Honeysuckle (Lonicera sempervirens)	
Fall Bloomers	S	
Habit	Plant	
Med	Blue Mistflower (Conoclinium coelestinum)	
Med	Gayfeather (Liatris)	
Med	Seaside Goldenrod (Solidago sempervirens)	
Med	Gold Muhly (Muhlenbergia capillaris)	
Med	Coneflower (Rudbeckia texana, Rudbeckia hirta)	
High	Fall Obedient Plant (Physotegia virginiana)	
Very High	Buttonbush (Cephalanthus occidentalis)	
Vine	Carolina Jessamine (Gelsemium sempervirens)	