Pollinator Challenge 2015

Based on the Penn State Extension Master Gardener certification program

Austinites are once again challenged to create wildlife-friendly yards using native plants, but with an added challenge of supporting our pollinators with specific plant palettes and garden husbandry. This year, make a home for bees, butterflies, beetles, moths, hummingbirds in your backyard. For additional resources to assist with pollinator plant species, see Lady Bird Johnson Wildflower Center's plant database at wildflower.org/plants and for additional resources for Central Texas pollinator plants visit: http://www.wildflower.org/collections/. For Pollinator Partnership's regional plant guides visit http://pollinator.org/guides.htm.

To enter the Pollinator Challenge, submit this form to wildlife@austintexas.gov by 11/30/2015. Or submit the form via mail using address: Wildlife Austin, 919 W. 28 ½ St. Austin, TX 78705

Upon completion of the Challenge, please request a pre-paid "Butterfly Crossing" sign. Sign may be picked up at 919 W. 28 ½ St.

Free Sign!

Name: _____

*Address of Pollinator Habitat:*_____

*Email:*_____ *Phone number:* _____

*Neighborhood:*_____ *Watershed:*_____

Don't know your neighborhood? Visit http://ancweb.org/anc-resources/neighborhood-groups
Don't know your watershed? Visit http://www.austintexas.gov/GIS/FindYourWatershed

Has your habitat already been certified with National Wildlife Federation?

If so, please provide that NWF certification number here: _____

☐ **Check here if you have NOT yet been certified with National Wildlife Federation and are interested in Wildlife Austin mailing a pre-paid application (valued at $20) to your address. Completing the Pollinator Challenge will also fulfill the requirements of NWF certification.**

STEP 1: PROVIDE FOOD SOURCES

Nectar and Pollen Sources: Pollinators need a diversity of nectar and pollen sources to sustain them. How do you provide food for pollinators? Choose plants that provide pollen and nectar sources from early spring to late fall and with various flower shapes. Avoid hybrids and cultivars; usually native plants are the best providers of nectar and larval food. Planting in clumps rather than single plants is more attractive to pollinators.

From the lists below, select the pollinator friendly native plants that you have on your property. Check all that apply:

TREES (*Check at least 4 species of trees/shrubs.)*
____Hackberry (*Celtis spp.)* larval host for butterflies, can also provide shelter
____Oak (*Quercus spp.)* larval host for butterflies, can also provide shelter
Spring Flowering
____Anacacho Orchid Tree (*Bauhinia lunariodes)*, attracts butterflies and bees
____Eve's Necklace (*Styphnolobium affine)* prefers well drained soil; attracts bees/nectar insects
____Goldenball Leadtree *(Leucaena retusa),* attracts butterflies and bees
____Honey Mesquite (*Prosopis glandulosa var. glandulosa*) flowers in spring and summer, insect nectar source
____Mexican Buckeye (*Ungnadia speciosa)* attracts butterflies and bees
____Mexican Plum (*Prunus Mexicana)* attracts butterflies, bees, larval plant
____Red Buckeye (*Aesculus pavia var. pavia*) attracts hummingbirds
____Texas Redbud (*Cercis canadensis var. texensis)* attracts bees, larval plant
____Wafer Ash (*Ptelea trifoliate*) attracts butterflies also larval plant
Spring and Fall Flowering
____Kidneywood (*Eysenhardtia texana)* attracts butterflies and bees

Other_____

SHRUBS
Spring Flowering
____Agarita (*Mahonia trifoliolata)* attracts butterflies and bees.
____Cherry Sage (*Salvia greggii)* flowers in spring through fall, prefers well drained soil, attracts butterflies/hummingbirds
____Coralbean (*Erythrina herbacea)* attracts hummingbirds
____Elbow Bush (*Forestiera pubescens)*, prefers well drained soil, attracts butterflies/bees
____Spicebush (*Lindera benzoin*) butterfly larval host plant, can provide shelter
____Turk's Cap (*Malvaviscus arboreus* var. *drummondii)* flowers in spring through fall, attracts hummingbirds/butterflies
____Western White Honeysuckle (*Lonicera albiflora)* attracts butterflies/bees
Summer Flowering
____American Beautyberry (*Callicarpa americana)* attracts bees
____Bee Brush (*Aloysia gratissima)* attracts butterflies and bees
____Buttonbush (*Cephalanthus occidentalis)* attracts bees/beetles/butterflies
____Cenizo (*Leucophyllum frutescens)* flowers after rain in summer, attracts bees and hummingbirds
____Mealy Blue Sage (*Salvia farinacea)* attracts butterflies and bees
____Rock Rose (*Pavonia lasiopetala)* prefers well drained soil, attracts butterflies and bees
Summer and Fall Flowering
____Black Dalea (*Dalea frutescens)* attracts bees
____Crimsoneyed rosemallow *(Hibiscus moscheutos)* attracts hummingbirds
____Desert Globemallow (*Sphaeralcea ambigua)* attracts bees/butterflies
____Flame Acanthus (*Anisacanthus quadrifidus* var. *wrightii)* attracts hummingbirds/butterflies
____Texas Lantana (*Lantana urticoides)* attracts butterflies

____Woolly Butterflybush (*Buddleja marrubiifolia)* attracts butterflies

Fall Flowering

____Evergreen Sumac (*Rhus virens)* attracts butterflies and bees
____Fall Aster (*Aster oblongifolium)* attracts butterflies, moths, bees
____Jack in the Bush (*Chromolaena odorata)* attracts butterflies, moths, bees
____Maximilian Sunflower (*Helianthus maximiliani)* attracts butterflies, bees and beetles
____Shrubby Boneset (*Ageratina havanensis)* prefers well drained soil, attracts butterflies and moths

Other_____

NATIVE PERENNIAL FLOWERS, GRASSES and VINES

(Check at least 6 species, with 2 flowering in spring, 2 flowering in summer and 2 flowering in fall.)

Flowers

Spring Flowering

____Antelope Horns (*Asclepias asperula)* attracts bees/butterflies, larval plant, prefers well drained soils
____Golden Grounsel (*Packera obovate)* attracts butterflies
____Green Milkweed (*Asclepias viridis)* attracts bees/butterflies, larval plant, prefers well drained soils
____Gulf Coast Penstemon (*Penstemon tenuis)* attracts hummingbirds
____Heartleaf Skullcap (*Scutellaria ovata* subsp. *bracteata)* attracts butterflies
____Hill Country Penstemon (*Penstemon triflorus)* attracts hummingbirds
____Standing Cypress (*Ipomopsis rubra)* attracts butterflies and hummingbirds; biennial
____Swamp Milkweed *(Asclepias incarnate*) attracts bees/butterflies, larval plant, prefers moist to wet soils
____Wild Bergamot (*Monarda fistulosa)* attracts butterflies and hummingbirds
____Yarrow (*Achillea millefolium)* attracts butterflies/bees/moths. Naturalized (not a native) plant.

Spring and Summer Flowering

____Cedar Sage (*Salvia roemeriana)* attracts hummingbirds
____Lanceleaf Coreopsis (*Coreopsis lanceolata)* attracts butterflies/beetles/bees
____Missouri Primrose (*Oenothera missouriensis)* attracts bees/moths/butterflies
____Purple Coneflower (*Echinacea purpurea)* attracts butterflies/bees/hummingbirds
____Red Yucca (*Hesperaloe parviflora)* attracts hummingbirds
____Rock Penstemon (*Penstemon baccharifolius)* attracts hummingbirds
____Spiderwort (*Tradescantia spp*) attracts bees
____Twistleaf Yucca (*Yucca rupicola)* attracts moths, larval plant
____Winecup (*Callirhoe involucrate)* attracts bees, larval plant

Summer Flowering

____American Basketflower (*Centaurea americana)* attracts bees/beetles/flies/butterflies (annual)
____Anise Hyssop (*Agastache foeniculum)* attracts butterflies/ bees/hummingbirds
____Blackfoot Daisy (*Melampodium leucanthum)* attracts bees and butterflies
____Butterflyweed (*Asclepias tuberosa)* attracts bees/butterflies, prefers moist soils
____Illinois Bundleflower (*Desmanthus illinoensis)* attracts bees
____Texas Milkweed (*Asclepias texana*) attracts bees/butterflies, larval plant, prefers well drained soils

Summer and Fall Flowering

____Black-Eyed Susan, (*Rudbeckia fulgida)* attracts bees/butterflies
____Gregg's Mistflower (*Conoclinium greggii)* attracts butterflies, moths, bees
____Partidge Pea (*Chamaerchrista fasiculata)* attracts bees (annual)
____Pyramid Bush *(Melochia tomentosa)* attracts butterflies, moths, bees
____Texas Betony (*Stachys coccinea)* attracts hummingbirds
____Zexmenia (*Wedelia texana)* attracts butterflies, bees

Fall Flowering

____Cusp Gayfeather (*Liatris mucronata)* attracts bees/butterflies/hummingbirds
____Frostweed (*Verbesina virginica)* attracts bees/butterflies/moths
____Golden Eye Daisy (*Viguiera dentata*) attracts butterflies/ bees/ beetles/moths
____Skeleton Leaf Goldeneye (*Viguiera stenoloba)* attracts butterflies/ bees/ beetles/moths

Spring through Fall Flowering (three seasons!)
____Frogfruit (*Phyla nodifloraa)* flowers in spring and fall, attract butterflies and bees, larval plant
____Tropical Milkweed (Asclepias curassavica) *** (native to Central/South America) flowers spring to fall, attracts bees/butterflies, larval plant, prefers moist soils
____Tropical Sage (*Salvia coccinea)* flowers in spring through fall, attracts hummingbirds/butterflies
____Verbena spp, flowers in spring and fall, attracts butterflies and bees
____White Guara (*Guara lindheimeri)* flowers in spring through fall, attracts butterflies/bees/hummingbirds
****MonarchWatch continues to promote Tropical Milkweed though many in the Central Texas area do not support planting this type of milkweed as it is not as ideal as native varieties. If you do grow it, it is suggested to cut the foliage down to 3" in early October to avoid late season breeding and reduce undesirable colonies of Ophryocystis elektroscirrha, or OE, a protozoan disease that infects and kills Monarchs.*

Vines

Spring Flowering
____Carolina Jessamine (*Gelsemium sempervirens)* attracts hummingbirds
____Coral Honeysuckle (*Lonicera sempervirens)* flowers in spring and summer, attracts hummingbirds
____Crossvine (*Bignonia capreolata)* attracts bees and hummingbirds
____Passion Vine (*Passiflora incarnate)* flowers spring and summer, attracts butterflies/bees/beetles, a larval plant
____Snapdragon Vine (*Maurandella antirrhiniflora)* blooms spring through fall, larval plant, attracts butterflies/bees
____Texas Wisteria (*Wisteria frutescens)* attracts butterflies, a larval plant

Summer Flowering
____Trumpet Vine (*Campsis radicans)* attracts bees and hummingbirds

Grasses
____Big Bluestem (*Andropogon gerardii)* larval host for butterflies, can also provide shelter
____Indiangrass (*Sorghastrum nutans)* larval host for butterflies, can also provide shelter
____Little Bluestem (*Schizachyrium scoparium)* larval host for butterflies, can also provide shelter
____Sideoats Grama (*Bouteloua curtipendula)* larval host for butterflies, can also provide shelter

Other_____

STEP 2: PROVIDE WATER SOURCES

(Check 1 or more)
Like all living things, pollinators need a source of water. How do you provide this in your landscape??
_____Birdbath
_____Stream
_____Butterfly puddling area
_____Garden Pond
_____Other _____

STEP 3: PROVIDE COVER FOR POLLINATORS

(Check 2 or more)
Pollinators need places to nest and to overwinter. How do you provide these in your landscape?
_____Spaces of bare ground
_____Man-made boxes
_____Rock pile/wall
_____Brush pile, Logs, Dead trees
_____Shrub Thicket- evergreen or deciduous
_____Leave garden cleanup until spring
_____Other_____

STEP 4: NUMBER OF POLLINATOR LARVAL PLANTS

(At least 2 plants)

I am hosting these butterfly caterpillars on these plants:

Host Plant: _____ Butterfly Species_____

Host Plant: _____ Butterfly Species_____

Host Plant: _____ Butterfly Species_____

STEP 5: SUSTAINABLE GARDENING METHODS

Safeguard pollinator habitat by using integrated pest management practices and reducing invasive plants.

Invasive Plants: Did you know that invasive plants threaten pollinator habitat by endangering the native plants that pollinators require for survival? Invasive plants that move from our yards to woodlands and natural areas threaten diversity vital to pollinator survival. We can help by not planting invasives and removing existing invasives on our properties.

How do you safeguard pollinator habitat in your landscape?

_____I avoid acquiring invasive ornamental plants

_____I have removed or am removing invasive plants currently on my property.

Indicate invasive species being removed:

____Ligustrum spp.
____Chinese Tallow
____Chinaberry
____Nandina
____Japanese Honeysuckle
____Catsclaw
____Chinese Pistache
____Other _____

Pesticide Use: Poisoning of non-target insects, including bees and other pollinators is an often overlooked factor of pollinator gardening. Even products approved for organic gardening (e.g. Rotenone, *BT (Bacillus thuringiensis)* and Spinosad) are very toxic to pollinators. If a pesticide is made to kill insects it will not discriminate between good species and bad species and many residential and garden pesticides do not include butterfly or bee toxicity on their labels. When purchasing your plants, ask the nursery if they use pesticides. If they do, ask what kind. If they don't know, assume that a pesticide has been used. Remember, some systemic pesticides can be toxic to pollinators for 120 days or more!

____I don't use pesticides

____I occasionally use pesticides, but do all of the following:

____Clearly identify the pest before taking action
____Use less toxic pesticides such as horticultural oil and insecticidal soap
____Always follow label directions
____Never spray plants in bloom
____Spray late in the evening when bees are less active
____Target spray only the problem spots