Appendix V Description and Bibliography

East Texas Pineywoods

Mostly deep, dark, and evergreen, the Piney Woods region of East Texas is an extension of the rich pine/hardwood forests of the southeastern United States. Gently rolling hills cloaked with pines and oaks, and rich bottomlands with tall hardwoods characterize these forests, while intermittent pockets of evergreen shrub bogs, open seepage slopes, and cypress-tupelo swamps form a patchwork quilt throughout. Frequent long-term flooding plays an essential role in maintaining these bottomland hardwood communities. Flowering dogwoods are scattered about the moist uplands -- their beautiful white bracts gleaming through the oak woodlands in the spring. The region's 35 to 60 inches of rain each year support not only pines -- mainly loblolly, shortleaf, and longleaf -- but also swamp and streamside stands of hardwoods (beech oaks, elm, and magnolia) and a myriad of woodland specialties -- sphagnum mosses, ferns, pitcher plants, sundews, pipeworts and orchids (Winkler, 1982).

Elevations range from near sea level to almost 500 feet with an average annual temperature of 66° F. The growing season approaches 250 days in the south and 230 days near the Red River in the north. Highly weathered soils are sandy or loamy and very deep. As most of the 15.8 million acres of the region is prime timber land, conversion of these woodlands to plantations of loblolly or slash pine has permanently altered many of the natural forest communities.

East Texas boasts a rich diversity of wildlife. Fifteen species of Texas breeding birds nest predominantly in this eco-region. Three of these species, including the Pine Warbler, Brown-headed Nuthatch and the endangered Red-cockaded Woodpecker are confined almost exclusively, in Texas, to the Piney woods forest for breeding. The Bachman's Sparrow nests locally in Texas only in the longleaf pine uplands of this region, while wintering Bald Eagles set up winter roosts in undisturbed woodlands near rivers and lakes. Other avian specialties of the Piney Woods include the Wood Thrush, Hooded Warbler, Prothonotary Warbler, and Barred Owl, the dark-eyed, noisy denizen of deep bottomland forests. Characteristic mammals of the region include River Otter, Gray Squirrel, Flying Squirrel, and the erstwhile Louisiana Black Bear. Although the Louisiana Black Bear is currently absent from the Piney Woods, suitable habitat still exists to support future populations of this East Texas specialty.

TEXAS WILDSCAPES NATIVE PLANT TABLES BIBLIOGRAPHY - EAST TEXAS PINEY WOODS

The following references were used to compile the above tables and regional description of the East Texas Piney Woods:

- Ajilvsgi, G. 1979. Wildflowers of the Big Thicket, East Texas, and Western Louisiana. College Station, Texas: Texas A&M Press.
- Ajilvsgi, G. 1984. Wildflowers of Texas. Bryan, Texas: Shearer Publishing Inc.
- Ajilvsgi, G. 1991. <u>Butterfly Gardening for the South</u>. Dallas, Texas: Taylor Publishing Company.
- Brown, C.A. 1972. <u>Wildflowers of Louisiana and Adjoining States</u>. Baton Rouge, Louisiana: Louisiana State University Press.
- Correll, D. and M. Johnston. 1979. <u>Manual of the Vascular Plants of Texas</u>. Richardson, Texas: University of Texas.
- Cox, P. and P. Leslie. 1988. <u>Texas Trees; A Friendly Guide</u>. San Antonio, Texas: Corona Press.
- Fisher, C.D. 1984. Texas birds: diversity and preservation. In: <u>Protection of Texas</u> <u>Natural Diversity: An Introduction for Natural Resource Planners and Managers</u>. (eds.) E.G. Carls and J. Neal. College Station, Texas: Texas A&M University Press.
- Gould, F. 1975. <u>The Grasses of Texas</u>. College Station, Texas: Texas A&M University Press.
- Loughmiller, C. and L. Loughmiller. 1984. <u>Texas Wildflowers: A Field Guide</u>. Austin, Texas. University of Texas Press.
- Martin, A.C., H.S. Zim, and A.L. Nelson. 1951. <u>American Wildlife and Plants A Guide</u> to Wildlife Food Habits. New York: Dover Publications.
- Nixon, E. 1985. Trees, Shrubs, and Woody Vines of East Texas. Nacogdoches, Texas: Bruce Lyndon Cunningham Productions.
- Pope, T., N. Oldenwald, and C. Fryling. 1993. <u>Attracting Birds to Southern Gardens</u>. Dallas: Taylor Publishing Company.
- Simpson, B.J. 1989. <u>A Field Guide to Texas Trees</u>. Austin, Texas: Texas Monthly Press.
- Texas General Land Office. 1980. "The Natural Heritage of Texas." Austin, Texas: Nature Conservancy.
- Tufts, C. 1988. The Backyard Naturalist. Washington, D.C.: National Wildlife Federation.
- Tveten, J and G. Tveten. 1993. <u>Wildflowers of Houston</u>. Houston, Texas: Rice University Press.
- Vines, R.A. 1960. <u>Trees, Shrubs, and Woody Vines of the Southwest</u>. Austin, Texas: University of Texas Press.
- Wasowski, S. and A. Wasowski. 1989. <u>Native Texas Plants: Landscaping Region by</u> <u>Region</u>. Austin, Texas: Texas Monthly Press.
- Winckler, S. 1982. Texas Diversity: From the Piney Woods to the Trans-Pecos. In: <u>The</u> <u>Nature Conservancy News</u>: 32(5).

WildScapes Plant Tables -- Pineywoods

| | | | | | | | | | | | | | | , | VE | GETATION ZONE | |
|---|--------------------------------|---------------------------|---|---|-------------------------|---|--|---|-----|---|-----|-----|-----|-----|----------------------------|---|--|
| SPECIES | FAMILY | HABIT/ HEIGHT | FLOWER | FRUIT | SUN EXPOSURE | HABITAT | SOILS & MOISTURE REGIME | | | | 5 (| 6 7 | 8 9 | 9 1 | 0 | ORNAMENTAL VALUE | WILDLIFE VALUE |
| Acer rubrum v. drummondii Drummond red maple | Aceraceae - Maple Family | 90'-100' Tree, large | clusters, | Samara with two wings. March- June | Full sun, Part shade | Prefers wet areas on sandy lands, swamps & alluvial forest. Also found on drier ridges throughout Piney woods in East TX. | Sands, loams, and clays. Likes acid soils. Mesic- hydric, poor drainage O.K. | x | | | | | | | 0 | Large shade tree with simple distinctively-shaped leaves which turn red in the fall. Popular ornamental and shade tree, as they are beautiful both spring & fall. Relatively short-lived with shallow root system. Does well in Houston. Deciduous. | Many kinds of birds feed on the winged seeds, i.e. woodpeckers, cardinals, finches, robins, cedar waxwings, warblers, & sparrows, also squirrels & rabbits. Good cover & nesting tree. Good substrate for insectivorous birds. Foliage browsed by deer. |
| <i>Betula nigra</i> River birch | Betulaceae Birch Family | 25' - 90' Tree, large | ous catkins, m brown & f green on | Cones, cylinder- shaped with small winged seeds. April-June | | Occurs in wetlands near creeks, swamps & sloughs | Sands, loams, or clays. Mesic-hydric, poor drainage O.K. | × | × | | | | | | N F S f f I | Attractive ornamental tree with dark red-brown bark beeling off branches in bapery sheets. Has graceful silhouette and good yellow fall color. Fast grower but short lived. Doesn't tolerate flooding, but likes moist soils. Does well in Houston. Deciduous. | Several species of small birds including chickadees and finches eat the ripe seeds. Twigs & buds are browsed by white-tailed deer. Beaver, rabbits & squirrels also eat various parts. |
| Celtis laevigata Sugarberry | Elm Family | 40' - 60' Tree, large | ous, small, | Berry (drupe), orange- red to purplish- black. July-Aug. | shade | Rocky or alluvial soils along streams, in woodlands & thickets. | Sands, loams, and clays. Prefers rich soils, but will tolerate wide range. Well- drained, mesic to xeric; drought tolerant once established. | | < X | X | XX | xx | x | x | á | Fast-growing shade tree adapted to most soils. Very drought tolerant. Yellow autumn color. Deciduous. | Fruit eaten by bluebirds, robins, cardinals, mockingbirds, cedar waxwings, thrashers, & sparrows. Good nest & cover tree, esp. for neotropical migrants. Larval food plant for Question Mark, Mourning Cloak, Pale Emperor, Snout & Hackberry butterflies. |
| Fagus grandifolia American beech | Fagaceae - Beech Family | 80' - 100' Tree, large | inconspicu- ous m & f flowers on same tree. April-May | Nut. Sept. - Nov | Full sun, part shade | Grows in deep, rich, fertile soils along streams & woodlands of Piney woods region. | Sandy loams, alluvial soils. Well-drained, mesic. | X | | | | | | | t a l | Handsome shade tree with beautiful shiny green leaves and smooth gray bark. Leaves turn copper gold in the fall. Deciduous. | Excellent cover & nesting tree. Prickly burrs contain sweet nuts relished by several kinds of game & songbirds, i.e. woodpeckers, titmice, nuthatches, jays & sparrows. Also eaten by raccoon, beaver, opossum & fox. Deer eat nuts & browse leaves. |

| Fraxinus americana White ash | Oleaceae - Olive Family | 60' - 70' Tree, large | inconspicu- ous m & f flower clusters. April-May | Samara. Aug Sept. | Full sun, part shade | Grows in deep, rich moist soils on slopes & stream bottoms in eastern third of Texas. | Sands, loams & clays. Needs moisture, but good drainage. | X | ×× | × | | Beautiful shade tree with compound leaves turning delicate shades of pink, orange & purple in fall. Trees in open condition have short trunk & round top, in the forest, long trunk & narrow crown. Deciduous. | Excellent cover & nesting tree. Seeds are eaten by several species of birds, i.e., wood duck, bobwhite, sapsuckers, cedar waxwings, finches, cardinals & sparrows. Deer browse leaves. LHP for Mourning cloak, Two-tailed and Tiger swallowtails. |
|--|--|---------------------------|---|--|-------------------------|--|---|---|----|---|--|---|---|
| <i>Liquidamber</i> <i>styraciflua</i> Sweetgum | Hamameli- daceae Witch hazel Family | 60' - 100' Tree, large | inconspicu- ous m & f greenish flowers on same tree. March-May | arranged in spiny globe. Sept | shade | Grows in low wet areas on acid sands, flooded river bottoms, also in drier upland hills. | Sands, loams & clay loams. Needs moisture, mesic. | X | ×× | | | symmetrical pyramidal crown and striking star-shaped leaves. Leaves turn gorgeous colors in the fall, from gold to bright scarlet then to deep crimson. Fast | Good protective cover and nesting tree. At least 25 specie of birds feed upon the fruit as do beaver, gray & fox squirrels. Birds include mallards, doves, finches, juncoes, sparrows, towhees, chickadees, titmice & siskins. |
| <i>Nyssa sylvatica</i> Black gum | Nyssaceae - Tupelo Family | 80' - 100' Tree, large | inconspicu- ous m & f greenish flowers, sometimes on same or different trees. April- June | | shade | Rich bottomland soils in East TX. Piney Woods, along streams and creek bottoms, or moist open woods in sandy soils. | Sands, sandy loams, and clays. Likes acid soils. Mesic-hydric, likes moisture, poor drainage O.K. | × | ×× | | | flat-topped crown. Has | Dark fruits provide an early source of food for a variety of birds & mammals. Favored by bluebirds, catbirds, mockingbirds, robins, summer tanagers & finches. Good substrate for insectivorous birds. Foliage browsed by deer. Bees attracted to flowers. |
| <i>Quercus alba</i> White oak | Fagaceae - Beech Family | 80' - 100' Tree, large | inconspicu- ous m & f catkins in clusters & at tips. April-May | | Full sun, part shade | Prefers rich, deep soils of East Texas Piney woods forests | Sands, loams & loamy clays. Acid soils. Well-drained mesic-hydric. Seasonal poor drainage tolerated. | X | ×× | | | tree with dark green simple leaves, paler below. Slow- growing but good fall color, leaves turning bright red. Bark is off-white & flaky. Well | Squirrels, deer, wild turkey & bobwhite eat acorns, as do jays, woodpeckers &wood duck. Good cover & nest tree & good substrate for insectivorous birds. Larval host plant of Juvenile duskywing, Banded hairstreak, White H hairstreak & Edwards hairstreak. |

| <i>Quercus</i> falcata Southern red oak | Fagaceae - Beech Family | 60' - 70' Tree, large | ous m & f downy catkins, on the same tree. | | Full sun, part shade | Prefers upland sites in the forests of East Texas. | Sands, to sandy loams. Likes acid soils. Well- drained, mesic. | X> | | | | | Large shade tree with open, round-topped crown & stout branches. Deeply lobed leaves are attractive & produce showy red autumn color. Fast growing & long- lived. Does not like clay soils. Deciduous. | Small acorns are eaten by several species of birds, woodpeckers, jays, game birds, etc. Deer, fox & squirrels also relish them. Good cover & nesting tree & good substrate for insectivorous birds. LHP of Banded hairstreak & White M hairstreak. |
|--|-------------------------------|---------------------------|---|---|-------------------------|---|---|----|-----|-----|---|--|---|---|
| Quercus michauxii Swamp chestnut oak | Fagaceae - Beech Family | 60' - 80' Tree, large | inconspicu- ous greenish m & f catkins. April-May | Acorns. SeptOct. | | Prefers moist woods associated with major rivers & streams in East Texas. | acid soils. | x> | < | | | | Attractive shade tree with simple shallowly toothed leaves, woolly on the bottom. This long-lived tree prefers moist soils. Grows well in Houston; tolerates gumbo soils. Deciduous. | Acorns are sought after by many species of wildlife esp. wild turkey, quail, mourning dove, woodpeckers & jays. Good cover & nesting tree & good substrate for insectivorous birds. LHP of Juvenal's & Horace's duskywing, Northern & White M hairstreaks. |
| Quercus nigra Water oak | Fagaceae - Beech Family | 60' - 80' Tree, large | inconspicu- ous m catkins & f spikes. April-May | Acorns ripening every 2 years. Sept Oct. | Full sun, part shade | bottoms, also moist upland woods in timber region of East Texas. | Sands, loams, clays, likes acid soils. Tolerates gumbo. Fast growing & easy to transplant. Mesic-hydric, poor drainage O.K. | XX | < x | | | | Medium to large-sized shade tree with a round top and dull blue-green leaves held until December. Grows on variety of sites, tolerates gumbo. Does well in Houston. Deciduous. | Sweet edible acorns favored by over 17 species of birds & also mammals, i.e. deer, raccoons, opossums & squirrels. Good nesting & cover tree. Good substrate for insectivorous birds. Larval host plant of Horace's Duskywing, White M & Northern hairstreaks. |
| Quercus phellos Willow oak | Fagaceae - Beech Family | 60' - 100' Tree, large | inconspicu- ous m hairy catkins & f clusters on same tree. March-May | | Full sun, part shade | bottomlands & floodplains associated with major rivers, | Sands, loams & clays; tolerates poorly drained hardpans. Mesic-hydric. | ×> | < X | | | | A graceful, airy oak with attractive golden leaves in the fall. This fast-growing shade tree has lustrous foliage & a high-branching crown. Does not tolerate dry sites. Grows well in Houston. Deciduous. | Abundant acorns eaten by several species of wildlife that feed in bottomlands, i.e, squirrels, beaver & fox; jays, woodpeckers & wood duck. Good cover & nesting tree. Good substrate for insectivorous birds. LHP of Horace's duskywing & White M hairstreak. |
| Quercus shumardii Shumard red oak | Fagaceae - Beech Family | 50' - 100' Tree, large | inconspicu- ous catkins, m & f, greenish. March-May | | | Prefers moist forest & limestone upper woods | Sands, loams & clays. Well- drained, mesic. | X> | < X | . X | x | | Gorgeous shade tree with beautiful leaves. Red color in autumn. Fast-growing & disease resistant. Deciduous. | Acorns eaten by a number of birds & mammals. Good cover and nesting tree. Good substrate for insectivorous birds. Larval host plant for a few species of Duskywings. |

| <i>Ulmus americana</i> American elm | Ulmaceae Elm Family | 40' - 80' Tree, large | inconspicu- ous red to green flowers. FebApril | | Full sun, part shade | Prefers rich soils along streams & lowland areas | Sands, loams & clays. Well- drained, mesic. | X | ×> | ×× | X | | xx | Excellent shade tree turning yellow gold in autumn. Fast growing & handsome shape. Long-lived. Larval host plant to Comma, Question Mark, Mourning Cloak & Painted Lady. Deciduous. | Seeds & buds eaten by gamebirds, woodpeckers, chickadees, robins, vireos, sparrows, orioles & finches. Good cover & nest tree with plenty of insects for insectivorous birds. Deer browse leaves; squirrels, foxes & rabbits eat seeds & buds. |
|--|---------------------------------------|--------------------------|--|-----------------------|--|---|--|---|-----|----|---|---|----|--|--|
| <i>Ulmus crassifolia</i> Cedar elm | Ulmaceae - Elm Family | 30' - 60' Tree, large | inconspicu- ous greenish flowers. July-Sept. | | Full sun, part shade | Prefers woodlands, ravines & open slopes | Sands, loams, and clays. Mesic; seasonal poor drainage O.K. | x | ×> | ×× | X | X | xx | Good shade tree, each with a unique shape. Fast growing & long lived. Excellent yellow fall color. LHP for Mourning Cloak & Question Mark. Deciduous. | Seeds & buds eaten by gamebirds, woodpeckers, chickadees, finches, sparrows & warblers. Good nesting and cover tree with lots of insects for insectivorous birds. Deer browse leaves; squirrels, foxes & rabbits eat seeds & buds. |
| Asimina triloba Common paw paw | Annonaceae Custard Apple Family | Tree, small | Exotic maroon fleshy flowers. April-May | SeptOct. | | Prefers deep rich soils of bottomlands & creek valleys in deep East & northeast Texas. | Sands, sandy loams, loams & clays. Mesic-hydric soils; prefers moist situations. | X | x > | × | | | | Tropical-looking understory tree with large aromatic leaves. Leaves turn rich butter yellow in the fall. Prefers moist situations protected from the wind. Deciduous. | The luscious fruit is eaten by several kinds of wildlife, both birds & mammals. Fruits rarely stay on the tree long enough to get ripe. Larval host plant of the Zebra swallowtail. |
| | Betulaceae - Birch Family | | inconspicu- ous m & female catkins on same tree. March - May | clusters. SeptOct. | dappled | Prefers rich bottomlands, often along steams in moist woods. | Sands, loams & clays. Well- drained, mesic-hydric soils. | x | ×> | × | | | | Airy, graceful understory tree. Simple, alternate leaves & jaunty fruits. Notable for its beautiful trunk which is smooth & sinewy. Shade tolerant. Though it likes moisture, it doesn't tolerate flooding. Slow-growing & short-lived but pretty. Deciduous. | Nutlets are eaten by squirrels & other small mammals. Birds such as cardinals & finches also savor them. Larval host plant of Striped hairstreak, Red-spotted purple & Tiger swallowtail. |
| Crataegus marshallii Parsley hawthorn | Rosaceae - Rose Family | 10' - 25' Tree, small | Showy white flowers. March | haws. SeptOct. | Full sun, dappled shade, part shade | Prefers sandy woodlands & pastures. Found mostly along fencelines and woodland edges in East Texas. | Sands & sandy loams, acid. Also tolerates calcareous soils. Well- drained, mesic. | x |) | × | | | | Beautiful blossoms add a touch of ethereal beauty to this understory tree. Usually with several trunks & flaky gray bark revealing an orange layer underneath. Fruits are a shiny bright red color. Deciduous. | Beautiful white blossoms attract nectar lovers. Red haws are gone in a flash as they are highly prized by many species of birds, also by mammals. Large thorns make it a good protective cover & nest tree. Larval host plant of the Gray Hairstreak. |

| <i>virginiana</i> Common witch hazel | Hamamelida ceae - Witch Hazel Family | Tree, small | appear when leaves drop in fall. Oct. - Nov. | are woody & 2-celled with torpedo like seeds which explode from capsule. Nov Dec. of the next year. | shade, part shade, shade | drained woodlands, often associated with creeks & streams. | Sands, loams & clays, acid or calcareous. Well-drained, mesic. | X | X | | x | x | | | Attractive fall-blooming understory large shrub or small tree. Often used as ornamental. Yellow blossoms appear in fall after leaves have dropped. Provides excellent fall color of gold. Deciduous. | Birds of at least 5 species eat the seeds, if they get to them before they are shot out of "ballistic" capsules. Cottontails, beaver & white- tailed deer also eat seeds on the ground as well as young twigs. |
|--|--|--------------------------|--|---|--------------------------------------|---|--|----|-----|---|----|---|---|---|---|---|
| Deciduous | Aquifoliacea e Holly Family | 10' - 30' Tree, small | | red on f tree. Sept | shade | streams and | Sands, loams & clays. Well- drained, mesic. Seasonal poor drainage O.K. | ×> | < X | × | × | x | | | Good understory tree or accent tree with spreading open crown, often with inclined trunk. Female trees have red berries held over winter, very ornamental. Deciduous. | Fruits are eaten by several species of birds, bobwhite, doves, robins, cedar waxwings, bluebirds, jays & mockingbirds. Squirrels, opossum, rabbits & fox eat berries too. Flower nectar & pollen attract several insects. Good nest tree. |
| American holly | Aquifoliacea e Holly Family | | ous m & f greenish flowers on | red on f tree, persist through winter. | shade, dappled shade, shade | | Sands & loams, acidic soils. Well- drained, mesic. | X> | | | | | | | Slow-growing, long-lived understory leaves with narrow bushy triangular crown and Christmas holly evergreen leaves and brilliant red berries on female trees. This is a handsome ornamental all year round, also useful as a screening plant. Evergreen. | Excellent cover and nesting tree. Red berries are relished by several species of birds. Larval host plant for Henry's Elfin. |
| | Moraceae Fig Family | 35' - 40' Tree, small | inconspicu- ous m & f greenish flowers. March- June | (syncarp | shade, dappled | along streams, | Sands, loams & clays. Well- drained, mesic. | XX | × | X | ×× | X | X | x | Handsome understory tree with polymorphic leaves, reddish black fruit and broad spreading crown. Deciduous. | Red mulberries are the prime source of spring fruit for neotropical migrant birds. 21 species devour them as soon as they ripen as do squirrels, raccoons, opossums & skunks. Larval host plant for Mourning Cloak. |

| Prunus caroliniana Cherry-laurel | Rosaceae - Rose Family | 20' - 30' Tree, small | Showy creamy white elongated spike-like racemes. March-April | Berries, blue- black. Aug Sept. | Full sun, part shade, dappled shade | drained, deep | Sands, loams & clay loams. Well-drained, mesic. | x | × | | | | Attractive tree with shiny green simple evergreen leaves with finely serrated edges. Fast-growing, but somewhat short-lived; is easy to train into a hedge or can grow to handsome shade tree. Evergreen. | Good nectar plant for bees & other insects in the spring. Birds love the black berries which persist throughout the winter. Sometimes the berries ferment making robins, cedar waxwings tipsy. Larval host plant for a few species of butterflies. |
|--|---|--|---|--|--|--|--|---|----|----|----|--|--|---|
| Rhamnus caroliniana Carolina buckthorn | Rhamnacea e - Buckthorn Family | 12' - 20 Tree, small | ous, small greenish- | Drupes, reddish brown. Aug Sept. | Full sun, part shade, shade | Prefers moist woods, fence rows, along creeks, heads of draws & canyon slopes. | Sands, loams & clays. Well- drained, mesic. | | | | xx | | Very attractive understory tree with pretty leaves and berries. Quite ornamental and adapted to a wide range of sites. Has good fall color & fruits borne over a long time. Deciduous. | When ripe, fruits are devoured by several species of birds, i.e. thrashers, robins, mockingbirds, cardinals, finches, etc. Flowers are good nectar source for bees, butterflies & other insects. Larval host plant for Gray hairstreak. |
| Rhus copallina Flameleaf sumac | Anacardiace ae Sumac Family | 15' - 25' Tree, small | m & f flowers, small greenish white, on separate trees. July- Aug. | Drupes, small red, in clusters, remain after leaves fall. Sept. - Nov. | shade, dappled | Prefers fence rows, fields and bottomlands in East & East Central TX. Tolerates rocky areas. | Sands, loams & clays. Well- drained, mesic. | x | ×× | ×> | xx | | A small, commonly clump- forming shrub or small tree with elegant compound leaves and showy red fruit clusters. Only trees with f flowers have fruit. Beautiful red color in the fall. Fast growing. Deciduous. | Fruit is eaten by at least 21 species of birds, Flowers attract numerous insects in spring, good nectar source for bees & butterflies. Larval host plant for Red-banded hairstreak. |
| Vaccinium arboreum Farkleberry | Ericaceae - Heath Family | 15' - 30' Tree, small | small drooping, urn-shaped white flowers. May-June | Berries, blue. SeptOct. | shade | Prefers open mixed woods, dry sterile hillsides or pimple mounds in bottomland woods. Found in East Texas west to Bastrop & Nueces counties. | Well-drained, | x | ×× | | | | Attractive irregular shrub to small tree with shiny smooth dark green leaves. Good understory tree. Tree had good red fall color fading to deep purple. Persistent to Evergreen. | The small blue berries which ripen in the fall are devoured by several species of resident & wintering birds. Berries also sought after by various small mammals, i.e., squirrels, rabbits, etc. Larval host plant to Henry's elfin & Striped hairstreak. |
| Acer barbatum Southern sugar maple (Florida maple) | Aceraceae - Maple Family | 30' - 40' Tree, small ornamental | inconspicu- ous, yellowish green flowers. March-April | double- winged, rose colored. | shade | Prefers rich moist soils in low woodlands or along streams in East Texas. | Sands, loams & clays. Well- drained, mesic. | x | | | | | Medium-sized ornamental shade tree with beautiful leaves which turn yellow to salmon then to scarlet in the autumn. In summer the leaves are dark green above & somewhat hairy & whitish below. Deciduous. | Many species of birds forage on the winged seeds in the autumn such as purple finches, pine siskins, American goldfinch, woodpeckers, cardinals & sparrows. Seeds are also eaten by white-tailed deer. |

| <i>Aesculus pavia</i> Red buckeye | Hippocastan aceae Horse chestnut Family | | Showy red/yellow tubular flowers in clusters. March | | shade, | along streams, thickets & rocky | Sands, loams & clays. Well- drained, mesic. Moderate moisture. | XX | | X | X X | Showy small tree or shrub with rounded crown, distinctive flower clusters and attractive palmate leaves. Blooms very early; loses leaves early. Good understory tree. Deciduous, early. | The scarlet tubular flowers are visited by hummingbirds. Butterflies are also attracted to the nectar. Seeds are poisonous, however, and not eaten by wildlife. |
|---|--|--|--|--|--|---|--|----|---|----|-----|--|--|
| | Leguminosa e - Legume Family | 10' - 40' Tree, small ornamental | Showy magenta pea-like flowers, before leaves. March | brownish- red, in | shade, dappled shade | sandy areas, upland woods, woodland edges & and along stream banks in | Sands, loams & heavy black clays. Well- drained, mesic. Moderate moisture. | XX | × | x | | Highly ornamental and showy small tree with spreading, flat or rounded crown. Good understory tree or accent plant. Fast growing, usually with single trunk. Deciduous. | Beautiful magenta flowers are copious early nectar source for butterflies, moths, bees, etc. Seeds are eaten by a number of species of birds; foliage browsed by white-tailed deer. Larval host plant to Henry's Elfin. |
| Chionanthus virginica Fringe Tree | Oleaceae - Olive Family | 15' - 20' Tree, ornamental | Showy white flowers in loose hanging clusters with subtle fragrance. April | in grape- | dappled shade | throughout Piney Woods of East Texas west to | Sands, loams & clays, prefers acid soils. Well- drained, mesic. | XX | | | | Highly ornamental tree which is breathtaking when in bloom. Males plants have more spectacular flowers. Leaves are dark green & glossy and turn yellow in the autumn. Deciduous. | Flowers are excellent nectar source for butterflies, moths, & bees. Fruit is relished by many species of birds including woodpeckers, bluejays, mockingbirds and cardinals. |
| Cornus florida Flowering dogwood | Cornaceae - Dogwood Family | 25' -40' Tree, ornamental | Showy white flowers (bracts). March-May | Berries, red. Aug Sept. | Dappled shade, part shade; can tolerate full sun. Very shade tolerant. | | Sands, sandy loams, loams, slightly acid soils. Well- drained, mesic. | × | x | | | Medium-sized tree with graceful horizontal branches turning up at the tip. Single trunk is short & dark green leaves are opposite, simple, turning various red shades in the fall. Spectacular in spring, striking in fall. Good under shade trees. Deciduous. | Twenty-eight species of birds forage on the berries, from large gamebirds to small songbirds. Squirrels & white-tailed deer also favor fruit. Larval host plant for Spring Azure butterfly. |
| Crataegus viridis Green hawthorn | Rosaceae - Rose Family | 20' - 35' Tree, ornamental | Showy, white perfect flowers. March-April | Pome (apple-like fruit) orange or red in color. Sept Nov. | shade | alluvial woods, also sandy fields | Sands, loams & clays. Medium to high moisture. Seasonal poor drainage O.K. | XX | | XX | × | Medium-sized tree forming a broad rounded crown, serrated dark green shiny leaves, with bark that shreds into small scales. Often thornless. Deciduous. | Beautiful white flowers with yellow stamens attract bees & butterflies. Red orange haws disappear quickly, highly prized by several species of birds & mammals. Good cover & nesting tree. Larval host plant for some Hairstreaks. |

| Halesia diptera Two-winged silverbell | Stryracacea e Styrax Family | | | corky fruit, July | | Prefers moist woods & streamsides in southern half of East Texas Piney Woods | Sands, sandy loams; prefers acid soils. Well-drained, mesic. | X | | | | Beautiful white-flowering ornamental understory tree. Excellent accent plant. Will tolerate sun or shade; blooms best with more sun. Fast growing. Deciduous. | Hummingbirds are attracted to the flowers, as well as several kinds of insects. Gray & Fox squirrels eat the fruit. |
|---|-------------------------------------|-----------------------------------|--|---------------------------------------|---|---|---|---|---|--|--|---|---|
| Liriodendron tulipifera Yellow poplar (Tulip tree) | Magnoliacea e Magnolia Family | 80' - 100' Tree, ornamental | Showy greenish yellow flowers. April | Capsules. SeptOct. | | Prefers moist, fertile soils of rich woodlands | Sands, sandy loams. Well- drained, mesic. | X | | | | Introduced & not native to Texas, but fast-growing ornamental related to the magnolia. Beautiful leaves and flowers. Excellent shade tree. Leaves turn yellow in the fall. Persistent. | Hummingbirds feed on flower nectar & seed-eaters like the cardinals, finches & sparrows eat the seeds from the cone-like fruit. Larval host plant for Spicebush swallowtail. |
| Magnolia grandiflora Southern magnolia | Magnoliacea e Magnolia Family | | , | | Full sun, part sun | Deep, rich soils of woodlands, along streams & bottomlands | Sands, loams & clays, acid or calcareous. Well-drained, mesic. | x | | | | Magnificent shade tree with stately appearance, deep, dark leather leaves & gorgeous white flowers. Highly ornamental. Will grow well outside its natural range once established. Good growth rate, will tolerate pollution. Evergreen. | Red seeds are eaten by squirrels & many specie of birds, i.e., woodpeckers, vireos, kingbirds, robins, thrashers & cardinals. Good cover & nest tree for birds. Colorful beetles & moths are attracted to flowers. Old specimens are good den trees. |
| Magnolia virginiana Sweet bay | Magnoliacea e Magnolia Family | Tree, | | reddish, | Full sun, part sun, dappled shade | Prefers moist soils of swaps & baygall woodlands | Sands, sandy loams & loams, acid soils preferred. Mesic-hydric, poor drainage O.K. | x | × | | | Semi-evergreen ornamental tree with leaves bright & glossy green on top & silky white underneath. Beautiful, fragrant flowers very showy. Other plantings can grow underneath. Tolerates Houston gumbo. Persistent to almost evergreen. | Moths & beetles are attracted to the lemon- scented flowers. |
| Prunus umbellata Flatwoods plum | Rosaceae - Rose Family | 10' - 15' Tree, ornamental | white | Plum, red- purple. Aug Sept. | Full sun, part shade | Prefers woodland edges & fencerows | Sands, sandy loams, acid soils. Well- drained, mesic. | X | | | | Very beautiful small flowering plum makes excellent accent plant. Does not sucker or form thickets. Leaves are smaller than other plums. Deciduous. | Bees & butterflies seek nectar from the clouds of flowers. Bluebirds, mockingbirds & woodpeckers all lover the fruit as do small mammals. Larval host plant for some species of Swallowtail butterflies. |

| | Rosaceae - Rose Family | 60' - 100' Tree, ornamental | white perfect flowers, | small purple black, sweet or tart. June- | Full sun, part shade | Prefers eastern woodlands, thickets, fencerows & areas along roadsides. | Sands, loams & clays. Well- drained, mesic. | XX | × | x | | | | Attractive ornamental with decorative flowers, copious fruits, shiny green leaves & grayish brown horizontally striped bark. Easy to grow. Other varieties available for all regions of Texas except South TX. Deciduous. | Copious fruits are eagerly devoured by a wide variety of wildlife including 33 kinds of birds, raccoons, opossums, squirrels & rabbits. Foliage is not browsed by deer. Larval host plant to some Hairstreak species. |
|-----------------------------------|------------------------------------|-----------------------------------|--|---|--|---|--|----|---|----|---|---|---|--|--|
| americana | Styracaceae - Styrax Family | 12' - 15' Tree, ornamental | Showy, elegantly shaped white flowers. May-June | | Part shade, dappled shade | Prefers moist soils of the Big Thicket, in moist woods & river bottoms. | Sands, sandy loams, prefers acid soils. Mesic-hydric, poor drainage O.K. | x | | | | | | Beautiful white flowering ornamental small tree, similar to Two-winged Silver-bell. Does well in Houston. Deciduous. | White flowers attract many kinds of insects, especially bees & butterflies. Fruit is especially favored by the wood duck. Also eaten by other species of birds. |
| virginiana | Cupressace ae Cypress Family | 30' - 60' Conifer | ous m catkins, f cones, appearing on separate | berry-like, | Full sun, part shade, dappled shade | | Sands, loams & clays. Well- drained, mesic. Tolerate dry land. | × | X | x> | × | X | × | Evergreen tree of variable shape, with scalelike or appressed leaves. Foliage is dense and aromatic. Often planted as an ornamental. Long-lived and slow-growing. Evergreen. | Dense-foliaged tree is excellent cover and nesting tree. Bluebirds, mockingbirds, robins, cedar waxwings, thrashers, warblers, finches & sparrows relish fruit, esp. in winter. Opossum also eat fruit. Larval host plant to Olive hairstreak. |
| Pinus echinata Short-leaf pine | | 80' - 100' Conifer | | mature in fall, persist on branches. SeptOct. | shade | Prefers well- drained slopes, hills & flat woodlands, old fields & upland woods in East Texas | Sands, loams, clays. Tolerates a variety of soils, but prefers acid. Well-drained, mesic. | × | x | | | | | Small-coned pine, relatively fast growing, makes a good ornamental. Will reliably sprout from the base. Evergreen. | Provides excellent cover & nesting substrate for birds, cavities for woodpeckers. Many birds & mammals eat the seeds exposed as 2- year old cones open, i.e., doves, woodpeckers, chickadees, titmice, sparrows, goldfinch, siskins. LHP of Eastern Pine Elfin. |
| Pinus palustris Long-leaf pine | | 80' - 100' Conifer | | large, 6 - 10". | Full sun, intolerant of shade | Prefers deep sandhills in extreme southeast Texas. | Sands, sandy loams, acid soils preferred. Well-drained, mesic (high rainfall with excellent drainage). | × | | | | | | Fast-growing, large-coned pine with long, droopy needles. Has good ornamental potential. Resistant to fire. Has interesting "grass stage." Evergreen. | Provides excellent cover & nesting substrate for birds, cavities for woodpeckers. Many birds & mammals eat the seeds exposed as 2- year old cones open, i.e., doves, woodpeckers, chickadees, titmice, sparrows, goldfinch, siskins. LHP of Eastern Pine Elfin. |

| <i>inus taeda</i> Loblolly pine | Pinaceae - Pine Family | 60' - 100' Conifer | inconspicu- ous, m & f cones. FebMarch | Cones, medium- sized, 2- 6" long, light reddish brown, often armed with prickles. SeptOct. | Full sun, some shade | Woods, Gulf Coast Prairies & Marshes & Oak Woods & Prairies, | Sands, sandy loams, acid soils preferred; but tolerates many other soil types. Also tolerates poor drainage. Well-drained, mesic but is more drought tolerant than long-leaf. | ×× | | | | | | Fast-growing, medium-coned pine with spreading branches & compact rounded crown. Also fire resistent. Highly drought tolerant. Most common pine in Eastern forests. Has good ornamental potential. Evergreen. | Provides excellent cover & nesting substrate for birds, cavities for woodpeckers. Many birds & mammals eat the seeds exposed as 2- year old cones open, i.e., doves, woodpeckers, chickadees, titmice, sparrows, goldfinch, siskins. LHP of Eastern Pine Elfin. |
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| Taxodium distichum Bald cypress | Taxodiaceae Bald Cypress Family | Conifer | ous 5'-long drooping clusters of m cones. F | wrinkled, rounded, 1-inch in diameter. Sept Oct. | Full sun, part shade | | Sands, loams & clays. Mesic-hydric, seasonal poor drainage O.K. | XX | X | x | > | K X | | Large conifer with feathery, deciduous, needle-like leaves. Fast-growing with reliable bronze fall color. Long-lived tree often used as ornamental. Spanish moss (good nesting material) festoons branches. Deciduous. | Excellent cover & nesting tree. Seeds eaten by many different kinds of birds, esp. waterfowl & sandhill cranes. Squirrels, & many other forms of wildlife eat seed cones. Good foraging substrate for insectivorous birds. |
| Asimina parviflora Dwarf paw paw | Annonaceae - Custard Apple Family | | fleshy flowers. | | Part shade, dappled shade | | Sands, 7 loams, slightly acid. Well- drained, mesic. | х | x | | | | | Small-sized version of the common paw paw. Deciduous. | The luscious fruit is eaten by several species of birds. It is also eaten by gray fox, opossum, raccoons & squirrels. Fruit is highly nuitritive. Larval host plant of Zebra Swallowtail. |
| Callicarpa americana American beauty-berry | e - Vervain Family | | white or pink | magenta, in clusters at nodes. Aug Nov. | | and bottomlands, woods & thickets. | Sands, loams & clays. Likes rich soils. Well-drained, mesic. | XX | | | | X | | Open, much branched shrub with showy magenta berries. Has mounding form. Likes to be watered during dry periods. Deciduous. | Fruits are favored by several species of birds, i.e, bobwhite, mockingbirds, cardinals, thrashers, robins, finches & towhees. Raccoons, opossum & gray fox also relish berries. |
| Cephalanthus occidentalis Buttonbush | | 5' - 20' Shrub | Showy, creamy white round heads. June-Sept. | clusters, | Full sun, part shade | Prefers moist soils near swamps, ponds, along streams & stream margins. | Sands, loams, clays. Likes limestone soils. Mesic/hydric. Moderate to high moisture. Seasonally poor drainage O.K. | ×× | | X | ×× | K X | XX | Shrub or small tree growing in low areas, often with swollen base. Leaves opposite & whorled., variously shaped. Bright yellow anthers around white flower balls create a halo effect. Highly ornamental. Suitable for bog or pond area. Deciduous. | Flowers attract hordes of bees, butterflies & other insects. Fruits are highly favored by more than 25 species of birds, including waterfowl, cardinals, finches, sparrows, etc. |

| <i>Euonymus americanus</i> Strawberry bush | Celastracea e Strawberry Bush Family | 4' - 6' Shrub | purple | containing red fruits. Sept | Part shade, dappled shade, shade | Prefers muddy moist soils along streams & woods. | Sands, sandy loams, clays & gumbos. Mesic-hydric, likes moisture, poor drainage O.K. | X | X | | | | Airy understory shrub with bright red fruits held for a long time through the fall. It prefers the shade and tolerates poor drainage. Drier areas are O.K., if it stays in the shade. Good for Houston. Deciduous. | Several species of birds favor the red fruits, including Eastern bluebirds, mockingbirds, thrashers, sparrows & warblers. Small terrestrial mammals such as rabbits, squirrels & raccoons also enjoy eating the fruit. |
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| <i>Itea virginica</i> Virginia sweetspire | Saxifragace ae Saxifrage Family | 4' - 6' Shrub | terminal raceme. | two- | Part shade, dappled shade | Prefers rich soils along swamps & streamsides. | Sands, loams, & clays, acid soils preferred. Hydric, poor drainage O.K. | xx | | | | | Attractive understory shrub that does well in moist situations. Excellent erosion control. Flowers showy, drooping white spires, leaves turn a bright red in the fall. It is highly tolerant of poor drainage. Need lots of water in the summer. Deciduous. | The flowers are an excellent nectar source for various kinds of insects. Shrub provides good cover for small animals. |
| Lantana horrida Lantana | Verbenacea e Vervain Family | 3' - 6' Shrub | orange heads made up of tiny florets. | | Full sun, part shade | | Sands, loams & clays. Well- drained, xeric to mesic. | xx | XX | × | XX | | | Colorful, long-blooming flowers attract both butterflies and hummingbirds throughout the season. Northern cardinals and other species of birds eat the ripe fruit. Fairly deer resistant. Larval host plant of the Painted Lady. |
| <i>Myrica cerifera</i> Wax myrtle | Myricaceae - Wax myrtle Family | 6' - 12' Shrub | inconspicu- ous whitish flowers. March-April | globose, waxy. | shade, | Prefers moist or dry soils of piney woods & hardwoods. Woodlands & grasslands in East Texas. | Sands, loams & clays. Mesic, poor drainage O.K. can tolerate drier substrate. | xx | X | | | | Softly shaped, low-growing evergreen shrub. Is fast growing & has aromatic leaves & distinctive waxy pale bluish berries. If left unpruned, it is naturally shrubby looking. Tolerates poor drainage. Evergreen. | Dense growth provides excellent cover & nesting sites. Over 40 species of birds eat the waxy berries, cedar waxwings, robins, cardinals, mockingbirds, warblers, towhees, & sparrows. Eaten by bobwhite, quail & turkey, too. LHP for Red-banded hairstreak. |
| Rhododendro n canescens Hoary azalea | Ericaceae - Heath Family | 6' - 8' Shrub | flowers. | dark | Part shade, dappled shade | Prefers moist soils on edges of bogs & seeps in pine flatwoods | Sands & loams, prefers acid soils. Well-drained, mesic. | x | | | | | Highly ornamental shrub, both airy & graceful, with exquisite flowers. Has a wild & woodsy allure. Prefers moist, though well-drained spots in acid sands in the eastern portion of the state. Deciduous. | Flowers are excellent nectar source for butterflies & bees. Galls forming in twigs are edible by a number species of wildlife. Larval host plant of the Comma butterfly. |

| Smooth | Anacardiace ae Sumac Family | 3' - 10' Shrub | Cluster of small white flowers. June-Aug. | | Full sun, part shade | sandy hillsides & | Sands, loams & claims. Mesic-xeric, well-drained. | XX | | x | | sometimes small tree with lance-shaped compound leaves. Excellent for erosion control & beautiful red fall color. Prefers sand, but will do well in other soil types. Outside its range it needs | lowers provide lots of ectar for butterflies & other isects. The fruit is eaten by ottontails, white-tailed deer nd nearly 35 species of irds. Wild turkey & obwhite also love fruits. arval host plant of some pecies of Hairstreaks. |
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| Sassafras albidum Sassafras | Lauraceae Laurel Family | 15' - 20' Shrub | Showy yellow drooping clusters, before leaves sprout. March-April | blue- black, lustrous. Sept. | Full sun, part shade | on road cuts & along fence rows | Sands, loams & clays. Poor, dry upland soils tolerated. Well-drained, mesic. | x | X | | | aromatic shrub. Quite ornamental with variously shaped leaves. Leaves turn yellow orange & red in fall. Female plants put on better display. Not drought tolerant, good for East Texas only. | lue black fruits are bobbled p by several species of irds, i.e., king birds, great- rested flycatchers, gray atbirds, brown thrashers, obins, bluebirds, vireos, varblers & sparrows. LHP f Palamedes, Spicebush & iger swallowtails. |
| <i>Viburnum acerifolium</i> Maple-leaf viburnum (Arrow-wood) | Caprifoliace ae Honeysuckle Family | 2' - 6' Shrub | Showy small white flowers in flattened cymes . April-May | red to | dappled shade | | Sands, loams & clays. Likes acid soils. Well-drained, mesic. | х | x | | | erect or ascending branches and attractive maple-like leaves. Quite ornamental with attractive flowers & sp fruits. Has excellent fall color | lowers are popular with ectar-loving insects such s bees & butterflies. Fruits re relished by several pecies of birds. Foliage is rowsed by white-tailed eer. |
| reticulata | Aristolochiac eae Pipevine Family | Weak climber. Vine | amazingly | with many seeds. Aug. | full shade | Prefers humus of pine hardwood forest, pine savannahs & rocky woods | Sands, sandy loams, loams. Well-drained, mesic. | x | Х | | | flower. Plant is good ground vir cover. Deciduous. ho | he leaves and stems of this ine are used as a larval ost plant for the Pipevine wallowtail |
| capreolata | | Climber to 50'. Vine | Showy, tubular flowers, red on outside, yellow on inside. March-April | with winged seeds. Aug Sept. | shade, dappled | woodlands, | Sands, loams & clays. Moderate to high moisture. Seasonal poor drainage O.K. | XX | | x | | clinging to bricks, stones & tul fences as well as other att shrubs & trees. Profuse es flowers when in bloom. hu Tolerates pollution well. co Persistent. wh | triking orange & yellow ubular flowers are highly ttractive to butterflies and specially the Ruby-throated ummingbird. Bloom time oincides with migration then other sources of ectar are scarce, helping his little mite on the way. |

| radicans | | Climber "to the sky". Vine | Showy orange tubular flowers in dense clusters. June-Sept. | | | variety of soils throughout Eastern half of Texas | Sands, loams & clays. Mesic; moderate moisture; poor drainage O.K. | xx | X | X | xx | X | Striking vine adapted to nearly every soil type.This is premier plant to attract hummingbirds. Both Ruby-throat and Black- chinned hummers are highly fond of it. Copious nectar sustains these beauties. The plant is also an excellent nectar source for the larger butterflies. |
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| <i>crispa</i> Blue jasmine | Ranunculac eae Buttercup Family | Climber to 10'. Vine | Showy lavender bell-shaped flowers with flared edges. March- June | Aug | Part shade, dappled shade | woods. | Sands, loams & clays. Will tolerate gumbo. Mesic-hydric. Poor drainage O.K. | xx | x | x | | | Very elegant flowers. Works well on a lattice but does not climb high. Can sprawl over low structures such as planter boxes or patio pots. Deciduous. Lavender blue flowers attract many kinds of insects including butterflies. Several species of birds eat the ripe achenes. |
| <i>carolinus</i> Carolina | Menesperm aceae Moonseed Family | Climber to 15'. Vine | inconspicu- ous greenish flowers. July-Aug. | | | soils of woods & | Sands, loams & clays. Tolerates gumbo soils of Houston. Well-drained, mesic. | XX | X | X | x | X | Relatively fast growing, slender twining vine that prefers full some & some kind of support. Leaves are attractively shaped and fruits are highly ornamental. Will grow over shrubs & small trees. Evergreen.Dense clusters of brilliant red fruit are relished by bluebirds, mockingbirds, cardinals, robins, warblers & sparrows. |
| Carólina jessamine | Logania Family | Climber to 50'. Vine | Showy yellow tubular flowers in clusters, fragrant. January - April | flattened, elliptic with numerous dull brown narrowly winged seeds. SeptOct. | shade | woodlands in East Texas | Sands, sandy loams, loams, clays. Mesic. | ×× | | | | | Highly ornamental climbing vine with opposite leaves and gorgeous yellow flowers. Sometimes forms rich carpets on the ground. Parts of this plant are poisonous. Often planted in areas where it is not native. Used as a screen or to cover walls. Evergreen. Cascades of yellow flowers attract myriads of insects. Provides good cover and hiding places for small birds. Seeds are eaten by the bobwhite quail and leaves are eaten by the marsh rabbit. |
| sempervirens Coral | Caprifoliace ae Honeysuckle Family | Climber to 40'. Vine | Showy orange red tubular flowers in clusters. March - Dec. | | | fertile soils of East Texas, | Sands, loams & clays. Mesic-hydric, poor drainage O.K. | XX | X | X | × | | A beautiful everblooming vine that grows well & is well- behaved. Likes morning sun & afternoon dappled shade. Needs extra water when getting established, but not later. Persistent. Ruby-throated and Black- chinned hummers are attracted to this vine spring, summer and fall, esp. during migration. Orioles also sip nectar, as do butterflies. Fruit-eating birds relish the succulent red berries in the fall. LHP of Spring Azure. |

| Parthenocissu s quinquefolia Virginia creeper | Vitaceae Grape Family | Climber & ground cover. Vine | inconspicu- ous greenish flowers. May-June | Sept Nov. | shade, dappled shade | Prefers rich soils of woodlands & thickets & rocky banks in eastern half of TX. | Sands, loams, clays. Tolerates gumbo soils. Well-drained, mesic. | XX | | X | X | X | | | Very attractive vine with lush green palmate leaves. Vigorous climber well able to cloak walls, columns, etc by fastening on to masonry. Also good ground cover. Striking red-orange fall color. Deciduous. | Many species of birds compete for the blue-black berries including woodpeckers, kingbirds, great-crested flycatchers, titmice, cardinals, mockingbirds, bluebirds, warblers & sparrows. |
|--|--|------------------------------------|---|---|----------------------------|---|---|----|---|---|-----|-----|----|---|---|--|
| Passiflora incarnata May-pop | Passiflorace ae Passionflow er Family | ground | Showy Pink-purple flower. April-Sept. | with seeds. June-Oct. | dappled shade | fields, along roadsides & streams & woodland edges in Eastern 1/3 of TX. | Sands, loams & clays. Well- drained, mesic. | ×> | | X | × | | | | This healthy climber is graced with an unbelievable intricate & eye-catching flower. It uses its tendrils for climbing & is often found sprawling over the ground, thus serving as excellent ground cover. Dormant in winter. | These beautiful vines are larval food plants for the Zebra long-wing, Gulf Fritillary & Julia butterflies. Several species of birds dine on the ripened fruits. |
| Rosa setigera Prairie rose | Rosaceae Rose Family | Climber from 9' -15'. Vine | Showy rose-pink flowers. May | Rosehips, red. July- Aug. | shade | Prefers openings and post oak woodlands | Sands, loams & clays, esp. calcareous soils. Well- drained, mesic. | X | X | X | X | | | | Luscious rose-red blossoms gradually fade to white, leaving all shades in between in a tapestry of pinks. Shiny leaves turn reddish in the fall. This vine has no thorns. Fruits are bright red and highly decorative. Deciduous. | Several species of birds devour the red fruits including cardinals, mockingbirds, bluebirds, woodpeckers, Great-crested flycatchers, catbirds & thrashers. |
| Wisteria macrostachya Texas wisteria | e - Legume | Climber to 25'. Vine | Showy clusters of lavender purple flowers. May-June | Legumes with seeds. SeptOct. | | Prefers moist soils of woods & streambanks of East Texas. | Sands, loams & clays. Well- drained, mesic. | ХУ | X | X | x > | × | | | This native wisteria has dark green shiny leaves and showy lavender flowers. Climbs by twining so needs support such as arbors or walls. Deciduous. | Flowers attract several kinds of insects. Stems and leaves are used as the larval host plant of the Long-tailed skipper. |
| Andropogon gerardi Big blue stem | Poaceae Grass Family | 3' - 6'. Grass | Flowering spikelets of green to golden-tan in form of turkey foot. Aug Nov. | Seeds. Sets seed shortly after flowering. | | Prefers moist soils of meadows & prairies in the eastern 1/2 of state | Sands, loams & clays, acid or calcareous. Needs moderate moisture, mesic. | ×× | × | X | ×× | < X | xx | X | This big prairie perennial can be used as meadow grass with wildflowers, a pocket tallgrass prairie or a garden accent. Adds dramatic component. Needs rich, deep soil with moisture. Good erosion control. Best placed at slope bottom . Dormant in winter. | Provides good cover & food for many species of wildlife. Grass parts used as nesting & denning material. Larval host plant of Delaware Skipper, Dusted Skipper, Bunchgrass Skipper, Large Wood Nymph, Cobweb, Clouded & Beard grass skippers. |
| Andropogon glomeratus Bushy bluestem | Poaceae Grass Family | 3' - 4'. Grass | Flowering spikelets green to buffy gold. Sept Nov. | Seeds. Sets seed shortly after flowering. | · · | Prefers low moist sites | Sands, sandy loams, soils can be fairly sterile. Mesic, poor drainage O.K. | XX | × | X | × > | ×× | xx | X | Very attractive bunch grass for moist areas. Especially pretty in the fall. Tolerates poor drainage. Warm-season perennial. | Provides food & cover for many species of wild birds & mammals. Culms, leaves are used as nesting & denning material. Larval host plant of several eastern skippers. |

| Andropogon ternarius Split-beard bluestem | Poaceae Grass Family | Grass | spikelets green to silvery | Seeds. Sets seed shortly after flowering. | | areas & woodland | Sands & sandy loams. Well-drained, mesic. | XX | K X | XX | × | | | | This beautiful grass is its most beautiful in the autumn backlit by the sun. A good meadow grass planted with wildflowers. Warm-season perennial. | Provides food & cover for many species of wild birds & mammals. Culms, leaves are used as nesting & denning material. Butterflies use grass as shelter on windy days. Larval host plant of several skippers. |
|--|----------------------------|-------------------|---------------------------------------|---|---------------------------------|--|--|----|-----|----|----|----|-----|---|--|--|
| Andropogon virginicus Broomsedge | Poaceae Grass Family | 3' - 4'. Grass | spikelets green to yellow | Seeds. Sets seed shortly after flowering. | dappled shade | woods & prairies, also shaded banks along streams | Sands & sandy loams, loams. Mesic. | ×> | < X | X | | | | | This beautiful grass is its most beautiful in the fall with its perky bushy head that looks like a broom. Takes on a lovely golden color. Warm- season perennial, dies back in winter. | Provides food & cover for many species of wild birds & mammals. Culms, leaves are used as nesting & denning material. Provides fair grazing for wildlife. Butterflies use grass as shelter on windy days. Larval host plant of Zabulon skipper. |
| Bothriochloa saccaroides Silver bluestem | Poaceae Grass Family | 2' - 4'. Grass | spikelets green to silver. May- | Seeds. Sets seed shortly after flowering. | shade | Prefers dryish open areas, woodland edges, along roadsides | Sands, sandy loams, loams & clays. Xeric to mesic. | ×> | ×× | x | X | | | | This grass becomes increasingly beautiful as its seed head ripens and catches the sun light, glowing silvery. This bunchgrass has a conspicuous basal cluster of leaves & stems. Warm- season perennial. | This bunch grass is a fairly good forage grass for white- tailed deer. Parts of the grass are used as nesting & denning material by birds & small mammals. Many species of seed-eating birds eat the ripe seeds. |
| Chasmanthiu m latifolium Inland sea- oats | Poaceae Grass Family | | spikelets green to buffy tan. | Sets seed shortly after flowering. | dappled shade, full shade | woodland soils, often along creek bottoms & near streamsides. | Sands, loams & clays. Mesic, seasonal poor drainage O.K. | | | | | X> | | | In moist soils in shaded areas, this beautiful grass makes a solid mat. Big drooping spikelets are fetching, esp. when turned to whitish gold in the fall. Great garden accent plant in shady moist areas. Warm-season perennial, dies back in winter. | Serves as excellent forage for wildlife esp. birds & mammals. Many parts of the grass used as nesting & denning material. Larval host plant for Northern pearly eye, Pepper & salt skipper, Bell's roadside skipper & Bronzed roadside skipper. |
| <i>Elymus canadensis</i> Canada wildrye | Poaceae Grass Family | 3' - 5'. Grass | | May-Sept. | shade, dappled shade | sites along fence rows, woods | Sands, loams & clays. Well- drained, mesic. | XX | < X | XX | ×X | X> | < X | Х | This tufted grass with attractive seed heads does best in shady areas with adequate moisture. Cool- season tufted perennial. | Provides good early food for many species of birds & small mammals that eat grain. Grass parts, leaves, stems, & spikelets used as nesting & denning material. Larval host plant for Zabulon skipper. |

| <i>Erianthus giganteus</i> Sugarcane plumegrass | Poaceae Grass Family | Grass | green turning | Seeds. Sets seed shortly after flowering. | | areas near streams & lakes, | Sands, loams & clays. Mesic-hydric, poor drainage O.K. | XX | XX | < | | | Excellent grass near a large water garden or near a small stream or lake. Seed heads are gorgeous, glowing a deep peach esp when back-lit by the sun. Warm-season perennial, dies back in winter. | While not an excellent forage grass for wildlife, it provides good cover for both terrestrial and small aquatic animals. Grass parts are used as nesting & denning material. |
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| <i>Muhlenbergia capillaris</i> Hairyawn muhly | Poaceae Grass Family | Grass | | shortly after | shade | openings in pine forests, also in | Sands & sandy loams, well-drained, fairly dry. | X | X | | | | Very beautiful feathery clumps are a great accent for garden. Perfect for a meadow garden with wildflowers. Warm-season perennial, dormant in winter. | Provides forage for seed- eating terrestrial birds & mammals, especially sparrows. Parts of plant are used as nesting & denning material. |
| Panicum virgatum Switchgrass | Poaceae Grass Family | Grass | | Seeds. Oct Nov. | | seasonally moist, open areas | Sands, loams & clays. Moist. Seasonal poor drainage O.K. | XX | xx | × | XX | | Gorgeous tall-grass can be used as dramatic accent plant. Turns deep, rich golden color in fall. Has airy, filigreed seedhead. Can also be used in small pocket prairie. Does great in Houston, loves the extra water. Warm-season perennial bunch grass. | Provides fair grazing for wildlife, seeds sought after by seed-eating birds. Excellent sparrow food in winter. Provides good protective cover and nesting & denning material. Good place for butterflies to get out of the wind. LHP for Delaware skipper. |
| Schizachyrium scoparium Little bluestem | Grass Family | Grass | blue-green to silvery gold. Aug Dec. | Seeds. Sept Dec. | shade | openings, rocky slopes of pastures & rangeland, along forest borders and prairies throughout Texas. | Sands, loams & clays. Well- drained, mesic. | | | | | × × | dominant of the tallgrass prairie. Tolerant of a wide variety of moisture & drought. Little bluestem is a symphony of beautiful color changes through the year from blue- green to coppery gold in the fall. Winter dormancy. | host plant for Dusted skipper, Delaware skipper, Dixie skipper, Cross-line skipper & Cobweb skipper. |
| Sorghastrum nutans Indiangrass | Poaceae Grass Family | Grass | Flowering spikelets a deep yellow. Oct. - Nov. | Nov | some shade O.K. | | Sands, loams & clays. Likes calcareous soils Likes moisture, mesic. | | ×× | x | > | | This gorgeous grass was major component of tallgrass prairie. Striking accent plant or member of pocket tallgrass prairie. Does well in a naturally moist rich swale area. Warm-season perennial bunch grass, dormant in winter. | Stems, leaves used as nesting & denning material. |

| <i>Sporobolus asper</i> Tall dropseed | Poaceae Grass Family | 3' - 5'. Grass | Flowering spikelets light green to straw, in contracted panicles. AugOct. | Sept | Full sun, some shade O.K. | rocky prairie sites, open meadows & woods | | x x | X | XX | < X | XX | K | | this species that are adapted to the various soils. Warm- season perennial. | Provides good forage for seed-eating mammals & birds, also fair grazing for larger mammals. Grass parts used as nesting & denning material. |
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| <i>Tripsacum dactyloides</i> Eastern gammagrass | Poaceae Grass Family | 3' - 8'. Grass | Flowering spikelets yellow & cornlike. July-Sept. | April - Nov. | shade, | | & clays. Mesic, likes extra moisture. Seasonal poor drainage O.K. | xx | | | | Х | | | grasses. Also dramatic accent plant. Can be grown in pure stands as pasture grass. Warm-season perennial bunch grass. | Good protective cover for small birds & mammals. Grass parts provide nesting & denning material. Provides very good forage for wildlife. Larval host plant to the Bunchgrass skipper. |
| Callirhoe involucrata Winecup | Malvaceae Mallow Family | 6" - 12" Wildflower | Showy deep magenta to wine-red flowers. March-May | May-July | Full sun, part shade, dappled shade | woods, prairies, meadows & fields | Sands, loams, clays or gravelly soils, either calcareous or acid-based. Well-drained, mesic. | xx | X | XX | < X | XX | < X | X | Beautiful wine-colored wildflowers. Grace any wildflower meadow garden. Tend to sprawl & have trailing stems. They can even clamber over small shrubs. They respond to extra watering by blooming for a much longer of period of time. Perennial. | Winecup is visited by bees which gather pollen from the flowers. |
| Coreopsis lanceolata Lance-leaf coreopsis | Asteraceae Sunflower Family | 8" - 48" Wildflower | Ray flowers splashy yellow, disk flowers deep yellow. March-May | black, flattened | Full sun, part shade, dappled shade | woods & fields in East & South | Sands, clays & loams. Well- drained, mesic. | xx | X | | | | | | grow very easily & provides a | butterflies & bees. Ripe |
| <i>Erythrina herbacea</i> Coralbean | Leguminosa e - Legume Family | 6' - 15' Wildflower; shrub in S. Texas | Showy coral red tubular flowers. May- Dec. | Pods with poisonous red seeds. Oct Dec. | shade | | sands, loams & clays. Well- drained, mesic. | | X | x > | < | | | | Striking shrubby wildflower dies back in winter like a perennial in all areas but south Texas. Flamboyant summer flowers are highly ornamental. Seeds are also attractive, though extremely poisonous. Perennial. | Elegant tubular flowers have copious nectar & are highly attractive to the Ruby- throated hummingbird. Seeds, though highly appealing visually, are poisonous and not eaten by wildlife. |

| <i>Hibiscus militaris</i> Halbert-leaf Rose-mallow | Malvaceae - Mallow Family | 3' - 8' Wildflower | Showy white or pink flowers. May-Oct. | | Full sun, part shade | freshwater marshes & shallow water | Sands, clays & loams. Mesic-hydric, poor drainage O.K. | X | K X | X | | | | | grow to almost 6 feet tall. flowers | s are attracted to the s for the abundant & nectar. |
|--|--|------------------------|---|--|--|---|---|----|-----|----|-----|---|----|---|---|---|
| <i>Liatris pycnostachya</i> Kansas gayfeather | Asteraceae - Sunflower Family | 2' - 5' Wildflower | Showy purple to pale lavender flowers in solitary spikes . AugOct. | Achenes, cylindrical, ribbed & tapered at base. Oct. - Nov. | Full sun, a little shade O.K. | Texas; also open prairie habitats | Sands & loams. Well- drained sandy or rocky soils. | X | | X | | | | | grows well in rock garden or in a pocket prairie or other s | ather is highly sought y bees, butterflies & small insects for its ant nectar in the fall. |
| Lobelia cardinalis Cardinal flower | Campanulac eae Campanula Family | 6" - 6' Wildflower | Showy red tubular flowers, fragrant. May-Oct. | with seeds. | Full sun, part shade, dappled shade | soils in open places along streams, meadows & along | clays & limestone based soils. | ×> | ×× | ×> | ×× | X | ×× | x | equalled for sheer visual hummi impact, planted in dense not fail | al flower is a premiere ingbird plant and will I to draw in any Ruby- s passing through your |
| <i>Malvaviscus drummondii</i> Turk's cap | Mallow Family | shrub in S. Texas | flowers. | fruit, red, flattened. Aug Sept. | Part shade, dappled shade, shade | margins, streamsides, river edges in shady conditions. Low grounds. | Sands, loams & clays. Likes limestone soils, tolerates gumbo. Hydric-mesic, likes moisture. | ×> | < x | ×> | < X | X | | | situations. Forms colonies in shady spots. Serves as good ground cover. Best pruned back after 2 years. Perennial. insects the flow is eate of birds | tive red flowers are opular with ingbirds. Butterflies, I moths & other s are also attracted to wers. The bland fruit en by several species s & small mammals. |
| Phlox divaricata Louisiana phlox | Polemoniace ae Phlox Family | 4" - 18" Wildflower | Showy lavender to white flowers about 1 inch across. March-May | to several, | Full sun, part shade, dappled shade | Prefers humus- rich woodland soils in East Texas | Sands, loams & clays. Well- drained, mesic. | X | | | | | | | attractive splash of lavender myriad | ana phlox attracts Is of insects in the that forage for nectar. |

| | Lamiaceae Mint Family | 1' - 3' Wildflower | Showy magenta or deep reddish- purple flowers. May-June | calyx. July - Nov. | shade, | of bottomland hardwood forest | Sands & clays. Mesic, seasonal poor drainage O.K. | X | | | | | | | Very showy wildflower that is widely cultivated. It spreads by rhizomes to form large colonies. It loves areas along wet depressions & streams. Fairly drought tolerant once established & will grow in a garden away from flowing water. Perennial. | Obedient plant also called beautiful false dragon-head attracts many insects, especially the larger bees. |
|------------------------------------|---|------------------------|---|-------------------------------|-------------------------------------|---|---|----|----|---|----|-----|----|---|--|---|
| Salvia coccinea Scarlet sage | Lamiaceae Mint Family | 2' - 4' Wildflower | tubular flowers. | nutlets. June- | shade, dappled | soils in thickets, chaparral, on edges of open woods from East | Sands, loams, clays & caliche-type soils. Mesic, seasonal poor drainage O.K. | ×> | ×× | | XX | xx | | | Scarlet sage can thrive in any part of the state. It is not very cold-hardy, however. Oddly, it looks better if planted in dry, shady areas with poor soil. In rich soils with lots of water it gets very tall, coarse & slightly unattractive. Perennial. | |
| <i>indivisa</i> Indian | Scrophularia ceae Figwort Family | 6" - 12" Wildflower | | with seeds, | Full sun, a little shade O.K. | meadows, prairies & | Sands, loams & clays. Well- drained, mesic. | X> | ×× | × | XX | x x | | | Indian paintbrush is an excellent choice for a pocket prairie or meadow garden. Grows very well when planted with native grasses. Looks great when interspersed among masses of bluebonnets & showy evening primrose. Annual. | Insects of several varieties are attracted to the small flowers. Hummingbirds will also feed from them, attracted to the red-orange bracts that surround them. Larval host plant of the Buckeye. |
| J | Gentianacea e Gentian Family | 1' - 2' Wildflower | Showy blue-purple flowers. June-Oct. | with seeds. Aug Nov. | shade | prairies, pond edges, open fields & banks along streams throughout much of Texas | Sands, loams & clays. Mesic, seasonal poor drainage O.K. | | | X | | | | | Texas Bluebell, otherwise known as Bluebell Gentian is a showy wildflower that responds favorably to good soils, extra water & a little fertilizer. Leaves are pale greenish blue & very attractive also. Annual. | Texas bluebell is very attractive to several kinds of insects, especially bees & butterflies. |
| | Asteraceae Sunflower | 1' Wildflower | yellow & | Achenes, May - Nov. | Full sun, part shade | grassy areas, prairies, | Sands, loams & clays. Well- drained, xeric to mesic. | X> | ×× | × | XX | x x | XX | X | This is a marvelously easy wildflower to grow & it comes in various coloration patters from mainly yellow to mostly reddish. Blooms most of the season from spring to late fall & provides lots of color to a wildflower meadow. Annual. | Indian blanket attracts bees, butterflies & several other varieties of small insects who forage on the nectar. Ripe seed heads are favorites with many species of seed-eating passerines like the Painted Bunting. |

| <i>Monarda citriodora</i> Horsemint | Lamiaceae Mint Family | Wildflower | purple tripartite | | shade | prairies & meadows throughout Texas | | X X | | | | Aromatic meadow wildflower that is easy to grow. Flowers continue to bloom right through the summer. Does really well planted with Indian blanket amongst species of native grasses. Annual. | variety of other insects who forage on the nectar. |
|--|-----------------------------------|-----------------------|---|----------------|------------------|---|--|-----|----|----|--|--|--|
| Rudbeckia hirta Brown-eyed Susan | Asteraceae Sunflower Family | 1' - 2' Wildflower | Showy yellow ray flowers with dark brown centers, May-Sept. | July - Nov. | dappled shade | | Sands, loams & clays. Well- drained, mesic. | ×× | xx | XX | | prairie. It does especially well if the rains are good or with a little extra watering. It | Bees, butterflies & many other kinds of insects forage for nectar from these flowers all summer. In the fall when the flowers have good to seed, numerous seed-eating birds forage on the ripe achenes. |