

Louisiana Native Pollinator Trees

Dr. Chrissy Mogren

Landscaping trees into your yard provides numerous benefits such as shade, improving drainage, and habitat for pollinators and other wildlife. While bees are adapted to life in prairies as opposed to forests, they can still utilize resources provided by flowering trees when incorporated into a pollinator-oriented landscape. In addition to providing floral food resources, native trees are also host plants to a number of beautiful native butterflies and moths. As you walk through Trees & Trails, keep an eye out for signs indicating which trees provide important resources for Louisiana native bees, butterflies, and moths!



[Photo credit](#)

Certain Louisiana native trees are particularly beneficial for native bees. These include black willow, buttonbush, parsley hawthorn, red maple, and tupelo, which provide pollen at critical times of the year when female bees are provisioning their nests. Many of these (black willow, buttonbush, red maple, and tupelo), in addition to boxelder, persimmon, tulip poplar, and Virginia sweetspire, are particularly beneficial to honey bees which convert the nectar from these plants into honey crops. Parsley hawthorn, persimmon, and tulip poplar are also beneficial to butterflies that feed on nectar.

Horace's duskywing (*Erynnis horatius*, Hesperiidae)

This small butterfly is common throughout the eastern United States, including southern Louisiana. The adults are common in open woodlands and along forest edges, where they feed on nectar of dogbane, buttonbush, sneezeweed, goldenrod, peppermint, boneset, and wintercress. Larvae feed on the young leaves of their host plants (**Live oak** and **Water oak**), where they rest in leaf nests.



[Photo credit](#)

Gray hairstreak (*Strynum melinus*, Lycaenidae)

Adults of this species are common visitors to flowers and are found in open meadow areas. They can be distinguished from other hairstreaks by having a large orange patch and single tail on their hind wings. Eggs are laid on the flowers of host plants (including pea, clover, cotton, mallow, and **pecan**), where caterpillars feed on the flowers and fruits. Caterpillars may cause economic damage to bean and cotton crops.



[Photo credit](#)

Juniper hairstreak (*Callophrys gryneus*, Lycaenidae)

This widespread, green butterfly specializes on junipers and **red cedars**, among others. Females lay a single egg on the tips of the leaves, which the caterpillars consume once hatching. Adults feed on the nectar of a variety of flowers and are commonly spotted in open meadow areas.



[Photo credit](#)

Striped hairstreak (*Satyrium liparops*, Lycaenidae)

This species resides in forest openings and edges and shaded swamps. **Ironwood** and **oak** are known host plants for the larvae, which feed on buds, leaves, flowers, and young fruit. Adults prefer nectar from milkweed, dogbane, goldenrod, meadowsweet, viburnum, and white sweet clover.



© KP McFarland

[Photo credit](#)

White M hairstreak (*Parrhasius m-album*, Lycaenidae)

This hairstreak is so named because of the distinctive “M” shape present on the underside of the hind wings. **Live oak** and other oak species are hosts for the larvae, and adults will drink nectar from a wide variety of flowers. They are common in forested areas.



[Photo credit](#)

Eastern comma (*Polytonia comma*, Nymphalidae)

Named for the white “comma” shape on the underside of the hind wing. This species is found in wooded habitats near water sources. Host plants include all species of elm and nettle, including **American elm**. Larvae feed on leaves at night and form shelters from rolled leaves and silk during the day. Adults feed on rotting food and tree sap.



[Photo credit](#)

Hackberry emperor
(*Asterocampa celtis*,
Nymphalidae)

Although the adults superficially resemble the Painted Lady butterfly, they can be distinguished by the orange and black eyespots on their forewings. The larvae are specialized, and only feed on the various species of **hackberry**. Adults may be spotted along wooded streams and feed on sap, rotting fruit, dung, and carrion.



[Photo credit](#)

Mourning cloak
(*Nymphalis antiopa*,
Nymphalidae)

This butterfly occupies a wide range of habitats, so long as host plants are present. Larvae feed on **black willow** and **American elm**, among others, and live in a communal web where they feed on young leaves. Once adults emerge in June-July, they feed briefly on tree sap before entering a period of dormancy. They can be observed again in the fall when foraging to store energy for hibernation.



[Photo credit](#)

Painted lady (*Vanessa cardui*, Nymphalidae)

This cosmopolitan species is the mostly widely distributed butterfly in the world, and is present on every continent except Australia and Antarctica. There are over 100 identified larval host plants, including **American elm**. Painted ladies prefer open habitats, especially gardens, and adults prefer to feed on composite flowers that are 3-6 ft high. Larvae live in silk nests where they feed on the leaves of the host plant.



[Photo credit](#)

Question mark (*Polygonia interrogationis*, Nymphalidae)

Named for the white “question mark” shape on the underside of the hind wing. Unlike many other species, females lay eggs on plants that are unlikely to be suitable hosts for the larvae, which must search for a suitable host (including **American elm**). Adults will feed on nectar from flowers, but only when preferred food sources (rotting fruit, tree sap, dung, and carrion) are unavailable.



[Photo credit](#)

Red-spotted purple
(*Limenitis arthemis*,
Nymphalidae)

Like the Viceroy, the Red-spotted purple is a mimic of the poisonous Pipevine swallowtail. Adults feeds on sap flows, rotting fruit, carrion, dung, and nectar from small white flowers. Larvae develop on a number of tree species, including **oak, willow,** and **ironwood.**



[Photo credit](#)

Viceroy (*Limenitis archippus*, Nymphalidae)

This butterfly closely resembles the monarch as a defense mechanism against predation. Larvae develop on **willow trees**, where they are nocturnal feeders on the catkins and leaves. Younger caterpillars make balls out of leaf bits, dung, and silk that they hang from the leaf on which they are feeding, possibly to distract potential predators. Older caterpillars make shelters by rolling leaf tips. While adults prefer composite flowers such as asters and goldenrod, they will feed on honeydew (produced by aphids), carrion, dung, and decaying fungi when flowers are scarce.



[Photo credit](#)

Eastern tiger swallowtail (*Papilio glaucus*, Papilionidae)

Females of this species have two forms: one that is yellow with black stripes (like the male), and one that is black with darker black stripes. They are well adapted to forest edges and suburban areas, where adults can be observed sipping nectar from a variety of flowers. Larval hosts include **Tulip poplar**, **Ironwood**, and **willow**.



[Photo credit](#)

Zebra swallowtail (*Eurytides marcellus*, Papilionidae)

These striking swallowtails can be observed flying in the south from March through December. Larvae are specialized and only feed on the leaves of **pawpaw**, where they can be found on the underside of leaves. Adults breed in woodland areas and feed on nectar from a variety of flowers in open fields. While management is not typically needed to preserve this butterfly, maintaining pawpaw in various stages of succession will ensure visitation nearly year round.



[Photo credit](#)

Spotted apatelodes (*Apatelodes torrefacta*, Apatelodidae)

Larval hosts for the fuzzy caterpillars include **ash**, **maple**, and **oak**. Very little is known about the biology of this species.



[Photo credit](#)

Banded tussock moth (*Halysidota tessellaris*, Erebidae)

Larvae and adults feed upon plants high in alkaloids, and are able to sequester these compounds as a form of defense against predation. Larval host plants include **ash**, **elm**, and **hackberry**, among others. Adults are attracted to decaying plant materials.



[Photo credit 1](#)

[Photo credit 2](#)

Cecropia moth (*Hyalophora cecropia*, Saturniidae)

While this large and showy species may be rare in parts of its range, it can be found in many successional areas, including urban and suburban environments. Larval host plants include **Boxelder**. Adults do not feed.



[Photo credit](#)

Luna moth (*Actias luna*, Saturniidae)

These very large and showy moths are common in eastern North American forests. Females lay their eggs on host trees, including **persimmon** and **sweet gum**, where the larvae feed on leaves. Males can be distinguished from females by their plumose antennae. Adults do not feed.



[Photo credit](#)

Promethea moth (*Callosamia promethea*, Saturniidae)

Adults are found in woodland habitats containing the larval host plants, where females lay eggs in rows of 4-10. Males are black, which females are brownish to reddish. Young caterpillars feed together on the leaves of **sweetbay magnolia**, **black cherry**, and a number of other species. Older caterpillars are solitary, and will cut the stem of a leaf they had been feeding on, possibly as a defense mechanism to prevent predators from visually locating feeding larvae. Adults do not feed.



[Photo credit](#)

Rosy maple moth (*Dryocampa rubicunda*, Saturniidae)

Although adults can vary in color, typically they are distinguished by cream to yellowish and pink markings on their upper wings. Adults can be observed flying during late evening. As their name suggests, larvae feed on **red maple**. Adults do not feed.



[Photo credit](#)

Tuliptree silkmoth (*Callosamia angulifera*, Saturniidae)

Males and females of the Tuliptree silkmoth differ in that males are brown while females are more yellowish. Both sexes are darker in the summer. They are found mostly in wooded areas where the larvae feed on **Tulip poplars**. Adults do not feed.



[Photo credit](#)

Baldcypress sphinx moth (*Isoparce cupressi*, Sphingidae)

This species is found in cypress swamps where the only known host plant (**Baldcypress**) grows. Adults are plain light brown, but larvae are conspicuous and brightly marked. Adults have reduced mouthparts, meaning they may not feed.



Hydrangea sphinx moth (*Darapsa versicolor*, Sphingidae)

Not much is known about the biology of this large greenish moth. Larval host plants include hydrangea, as their name suggests, as well as **Buttonbush**. The feeding habits of adults are unknown.



[Photo credit](#)

Pawpaw sphinx (*Dolba hyloeus*, Sphingidae)

Larval host plants include the **pawpaw**, some species of holly, and inkberry. The adults have long mouthparts, and drink nectar from deep-throated flowers including bouncing bet, petunia, jasmine, and mimosa.



[Photo credit](#)

Rustic sphinx (*Manduca rustica*, Sphingidae)

Adults of this species superficially resemble those of the pawpaw sphinx with the addition of three sets of yellow spots on the abdomen. Adults feed on nectar late at night from deep-throated flowers, including petunia and moonflower. Larvae feed on a variety of different host plants, including **fringetree**.



[Photo credit](#)

Small-eyed sphinx (*Paonias myops*, Sphingidae)

Larvae of this widespread species feed on a variety of plants, including **black cherry**, chokecherry, sour cherry, serviceberry, and basswood and are found mostly in wooded and suburban areas. Little is known about their life history. Adults have large blue and yellow eyespots on their hindwings, and do not feed.



[Photo credit](#)

