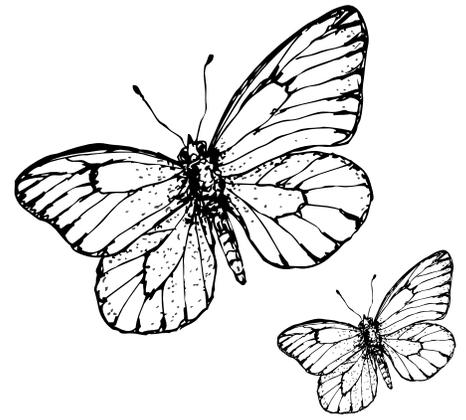




Trees and Shrubs for Pollinators



Although nonwoody flowering plant species often dominate discussions of pollinator habitat improvement, many native woody plants are essential in supporting a wide range of insect species. These plants provide butterflies and moths (lepidopterans) with larval food sources (leaf, stem tissue) and adult food sources (nectar, sap, rotting fruit). Many lepidopterans feed on a range of plant species; however, some require a specific plant or group of plant species to feed and complete their life cycle. The Kansas Forest Service Conservation Tree Program offers the following tree and shrub species that demonstrate various benefits to lepidopteran species in Kansas:

- **American plum** (*Prunus americana*): though known for supporting upland game birds and producing edible fruit, also hosts many butterfly larvae, including Henry's elfin (*Callophrys henrici*), spring azure (*Celastrina ladon*), summer azure (*Celastrina neglecta*), and coral hairstreak (*Satyrium titus*). Members of the *Prunus* genus are broadly supportive of lepidopteran species¹. As early flowering plants, they are also valuable nectar and pollen sources to a variety of bee families. Other *Prunus* species offered by the Conservation Tree Program include **sandhill plum** (*Prunus angustifolia*), **chokecherry** (*Prunus virginiana*), and **black cherry** (*Prunus serotina*)
- **Eastern cottonwood** (*Populus deltoides*): the state tree of Kansas, is perhaps lesser known as a supporter of many butterfly and moth larvae, including the mourning cloak (*Nymphalis antiopa*), red-spotted purple (*Limenitis arthemis astyanax*), viceroy (*Limenitis archippus*), and tiger swallowtail (*Papilio glaucus*).
- **Buttonbush** (*Cephalanthus occidentalis*): common along ponds, lakeshores, prairie marshes, and streams, buttonbush's fibrous and resilient root system is useful in preventing erosion along banks. As a nectar source, it is widely recognized as important for many insects, including the monarch butterfly (*Danaus plexippus*)². It is also a host plant for many lepidopteran larvae, including the titan sphinx moth (*Aellopos titan*), hydrangea sphinx moth (*Darapsa versicolor*), and beautiful wood nymph (*Eudryas grata*).



- **Pawpaw** (*Asimina triloba*): while this small, understory tree produces edible fruit for humans, the zebra swallowtail (*Eurytides marcellus*) caterpillar feeds exclusively on the leaves of this member of the custard apple family (*Annonaceae*).
- **Hackberry** (*Celtis occidentalis*): grows well statewide and can be used as a windbreak, a winter wildlife food source, and a timber species. It also hosts numerous lepidopteran species, including the hackberry emperor (*Asterocampa celtis*), tawny emperor (*Asterocampa clyton*), American snout (*Libytheana carinenta*), question mark (*Polygonia interrogationis*), and mourning cloak (*Nymphalis antiopa*).
- **Oak** (*Quercus spp.*): although oaks are better known for their stature, timber production value, or benefits to wildlife, this genus supports the largest number of lepidopteran species compared to any other plant genera (woody or herbaceous), at least in some areas of the United States¹. Some lepidopterans in Kansas that rely on members of the *Quercus* genus are the Edwards' hairstreak (*Satyrium edwardsii*), banded hairstreak (*Satyrium calanus*), gray hairstreak (*Strymon melinus*), Horace's duskywing (*Erynnis boratius*), and the polyphemus moth (*Antheraea polyphemus*).



References

¹Tallamy, D.W., and Shropshire, K.J. Ranking Lepidopteran Use of Native versus Introduced Plants. Society for Conservation Biology. Vol. 23 No. 4 (Aug. 2009), pp. 941-947

²Fallon, C., Adamson, N.C., Jepsen, K, Stine, A., and Vaughan, M. Monarch Nectar Plants: Southern Plains. 2017. The Xerces Society for Invertebrate Conservation.

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