

Pipevine Swallowtail caterpillar on Pipevine

# **BUTTERFLY HOST PLANTS FOR SOUTH JERSEY LANDSCAPES**

(January, 2020 Edition)

Jesse Connor for the South Jersey Butterfly Project, <u>www.blogs.stockton.edu/sjbfs/</u> & the Native Plant Society of New Jersey, <u>http://www.npsnj.org/</u>

NOTE: This list begins with native trees and shrubs because, along with native grasses, they make up the vast majority of native host plants. They are more persistent in the landscape over time and region and also provide more dependable and abundant leaf food than do perennials. The moral: Add native trees and shrubs to your backyard habitat!

COMMON NAME	SCIENTIFIC NAME	BUTTERFLY SPECIES
NATIVE TREES:		
Birches	Betula spp	Red-spotted Purple
Black Cherry	Prunus serotina	Eastern Tiger Swallowtail, Red-spotted Purple, Coral Hairstreak, Striped Hairstreak, Spring Azure
Black Locust	Robina pseudoacacia	Silver-spotted Skipper
Eastern Redcedar	Juniperus virginiana	Juniper Hairstreak
Elms	Ulmus spp	Question Mark, Mourning Cloak, Eastern Comma
Flowering Dogwood	Cornus Florida	Spring Azure
Hackberry	Celtis occidentalis, Celtis pumila	American Snout, Hackberry and Tawny Emperors, Question Mark, Mourning Cloak
Hickories	Carya spp	Banded Hairstreak
Hollies	llex spp	Henry's Elfin, Holly Azure
Oaks	Quercus spp	Banded, Edwards, Oak, and White-M Hairstreaks, Sleepy, Juvenal's and Horace's Duskywings
Pines	Pinus spp	Eastern Pine Elfin
Sassafras	Sassafras albidum	Spicebush Swallowtail
Sweetbay	Magnolia virginiana	Eastern Tiger Swallowtail
Tuliptree	Linodendron tulipifera	Eastern Tiger Swallowtail
Willows	Salix spp	Viceroy, Mourning Cloak, Red-spotted Purple

## NATIVE HOST PLANTS

NATIVE SHRUBS:		
Blueberries	Vaccinium spp	Spring Azure, Striped Hairstreak, Henry's Elfin, Brown Elfin
Dogwoods	Cornus spp	Spring Azure, Summer Azure
Spicebush	Lindera benzoin	Spicebush Swallowtail
Viburnums	Viburnum spp	Spring Azure, Summer Azure
Willows	Salix spp	Viceroy, Mourning Cloak, Red-spotted Purple
Winged sumac	Rhus copallina	Red-banded Hairstreak
NATIVE PERENNIALS		
Asters	Aster, Symphyotrichium, Eurybia	Pearl Crescent, Painted Lady
Blue False Indigo, Wild Indigo	Baptisia australis, Baptisia tinctoria	Silver-spotted Skipper, Wild Indigo Duskywing, Frosted Elfin
Bush Clovers	Lespedeza spp	Southern and Northern Cloudywings, Hoary Edge, Eastern-tailed Blue
False Nettle	Boehmeria cylindrica	Red Admiral, Question Mark, Eastern Comma
Gerardia	Agalinis purpurea	Common Buckeye
Golden Alexander	Zizia aurea	Black Swallowtail
Lupine	Lupinis perennis	Wild Indigo Duskywing, Frosted Elfin
Milkweeds	Asclepias spp	Monarch
Mustard Family	Arabis spp. (rock cresses), Lepidium virginicum (Wild pepper grass) and Cardamine parviflora	Falcate Orangetip
Partridge Pea (annual) and	Chamaecrista fasciculata,	Cloudless Sulphur, Little Yellow
Sensitive Plant	Chamaecrista nictitans	
Pussytoes	Antennaria spp	American Lady
Senna	Senna marilandica	Cloudless Sulphur, Sleepy Orange
Sweet everlasting	Pseudognaphalium obtusifolium	American Lady
Tick-trefoils	Desmodium spp.	Grey Hairstreak, Eastern Tailed-Blue, Southern and Northern Cloudywings, Hoary Edge
Violets	Viola spp	Variegated, Meadow, and Great Spangled Fritillaries
NATIVE GRASSES		
Bluegrasses	Poa spp	Little Wood-Satyr, Common Wood-nymph, Peck's, Tawny-edged, Least and Delaware Skippers
Bluestem grasses	Andropogon, Schizachyrium	Swarthy, Crossline, Delaware, and Cobweb Skippers
Panic grasses, Switchgrass	Panicum spp	Tawny-edged Skipper, Delaware Skipper, Northern Broken-dash
Purpletop	Tridens flava	Common Wood-nymph, Little Glassywing, Zabulon Skipper, Crossline Skipper
NATIVE VINES		
Pipevine	Aristolochia durior	Pipevine Swallowtail

### NON-NATIVE HOST PLANTS

Canna	Canna spp	Brazilian Skipper
Carrot Family Plants	Dill, Fennel, Parsley, Queen Anne's	Black Swallowtail
	Lace	
Clovers	Trifolium spp, Melilotus alba (White	Eastern Tailed-blue, Clouded Sulphur, Orange
	sweet clover)	Sulphur
Crabgrass	Digitaria spp	Fiery Skipper, Sachem
Hairy Bitter-Cress	Cardamine hirsuta	Falcate Orangetip
Hollyhock	Althea spp	Painted Lady, Common Checkered Skipper
Lambsquarters	Chenopodium album	Common Sootywing, Hayhurst's Scallopwing
Phragmites	Phragmites communis	Broad-winged Skipper
Plantain	Plantago spp	Common Buckeye
Sheep sorrel	Rumex acetosella	American Copper
*Stinging Nettle	Urtica dioica	Eastern Comma, Red Admiral, Question Mark

WHY ARE NON-NATIVES ON THIS LIST? None of us would consider planting weedy, non-native plants, like crabgrass, sheep sorrel, and hairy bittercress in our yards. However, since some of these plants invade our yards no matter what we do, it can be helpful to know which native butterflies use them. We can then manage accordingly by leaving patches of sheep sorrel, hairy bitter-cress, or clovers for American Coppers, Falcate Orangetips, and Eastern Tailed-blues. You might also want to consider raising lawnmower height to the recommended 3"– 4" which allows the caterpillars of sachems to successfully pupate from leaf nests made at the base of crabgrass.

\*Stinging nettle, despite its name, is a valuable non-native host plant. It is best grown in a large galvanized container to prevent its roots from spreading into the garden or yard.

**CAUTIONARY NOTE ABOUT NEONICOTINOIDS:** It is difficult to find native plants in big box stores (and even some nurseries) and sometimes impossible to learn what insecticides were used on them. It's best to track down nurseries when you can talk to the growers directly. Be sure to ask about insecticide applications. Neonicotinoids are systemic insecticides. Plants treated with them will kill both caterpillars and adult butterflies.

**NOTE:** The lists above are not complete. I have included those plants that are relatively easy to find and I have not included some that are troublesome. I have also left out some sedges and grasses which are host plants for skippers but beyond the scope of this list.

#### SOURCES:

Butterflies of New Jersey: A Guide to Their Status, Distribution, Conservation & Appreciation by Michael Gochfeld and Joanna Burger (Rutgers University Press, 1997)
Butterflies of the East Coast: An Observer's Guide by Rich Cech and Guy Tudor (Princeton University Press, 2005)
Bringing Nature Home by Douglas W. Tallamy (Timber Press, 2007)
Pat Sutton, pers. comments and help.
NABA/North Jersey Butterfly Club, www.naba.org/chapters/nabanj/

#### South Jersey Butterfly Project, <u>www.blogs.stockton.edu/sjbfs/</u> South Jersey Butterflies: 55 Species You Can Find

Since 2008, the **South Jersey Butterfly Project** has been tracking butterflies in the NJ's southern eight counties: Burlington, Ocean, Camden, Atlantic, Gloucester, Salem, Cumberland, and Cape May.

We chart which species are flying when, in what numbers, and lots more. So far, we have documented the abundance, seasonality, habitats, and behavior of 108 species. Fifty-five of them are listed here.

We are always on the lookout for new observers. Would you like to participate? It's free and easy. All you need is curiosity! Go to **sjbutterflies.org** or Google **"South Jersey Butterflies"** to find our log and blog and to learn more. (For instance, what are the 50+ species of our area *not* listed here?)

Status and seasonality listed below are averages from 2008-2019. Species listed with "fluctuating numbers" are especially variable, but all species' numbers go up and down from year to year. In some years "widespread" species can be rare, and "uncommon" numerous. Seasonality also shifts with weather and other variables, so we have reports of some individuals outside the average flight periods noted here.

Species marked with an asterisk (\*) are single-brooded: adults emerge to fly for one short period a year. Most SJ species, however, have two or three broods (generations) each year and so can be recorded over several different months. See the sightings log and the blog for more info about when and where to find these butterflies – and also how you might report your own discoveries.



	7
SWALLOWTAILS	
Pipevine Swallowtail	Localized, most frequent in July
Black Swallowtail	Widespread, April-October
E. Tiger Swallowtail	Widespread, April-September
Spicebush Swallowtail	Widespread, May-September
WHITES & SULPHURS	
Cabbage White	Abundant April-October
Falcate Orange-tip*	Localized, usually seen only in April
Clouded Sulphur	Widespread, April-October
Orange Sulphur	Abundant, April-November
Cloudless Sulphur	Migrant from south, usually Aug-Oct
LYCAENIDS	
American Copper	Widespread, April-October
Coral Hairstreak*	Localized, usually seen only June-July
Banded Hairstreak*	Localized, usually seen only June-July
Juniper Hairstreak	Fluctuating yearly numbers, May-August
White-M Hairstreak	Fluctuating yearly numbers, May-Sept
Gray Hairstreak	Widespread, May-October
Red-banded Hairstreak	Fluctuating yearly numbers, May-Oct
Eastern Tailed-Blue	Widespread, April-October
Blueberry Azure*	Localized, usually seen only March-April
Holly Azure*	Localized, usually seen only April-May
Summer Azure	Fairly common, May-September
NYMPHALIDS	
American Snout	Localized near hackberry, May-August
Variegated Fritillary	May-October, some years common
Pearl Crescent	April-October, occ. very numerous
Question Mark	March-May, August-October
Eastern Comma	Virtually same as its lookalike above
Mourning Cloak	Usually first species of spring, March-Oct
American Lady	Widespread, April-October
Painted Lady	Fluctuating yearly numbers; can be rare
Red Admiral	Widespread; records for all 12 months
Common Buckeye	Widespread, April-Oct/November
Red-spotted Purple	Widespread, May-Sept/October
Little Wood-Satyr	Widespread, May-July (possibly *)
Common Wood Nymph	Widespread, June-September
DANAIDS	
Monarch	Uncommon May/June; numerous later

SPREAD-WING SKIPPERS	
Silver-spotted Skipper	Widespread, April-October
Northern Cloudywing	Localized, tough ID, May/June-July
Southern Cloudywing	Like lookalike above
Juvenal's Duskywing*	Widespread, April-May
Horace's Duskywing	Widespread, April/May-September
Wild Indigo Duskywing	Tough ID, lookalikes above, May-Sept
Common Checkered	Fluctuating numbers, June-Sept
Common Sootywing	Fairly common, May-August
FOLDED-WING SKIPPERS	
Least Skipper	Widespread, May-October
Peck's Skipper	Summer, mostly north of Cape May Co
Tawny-edged Skipper	Requires careful ID, May-Sept
Crossline Skipper	Compare lookalike above, May-Sept
Little Glassywing	Fairly common, June-August
Sachem	May-November; often abundant
Rare Skipper*	Localized, brackish rivers in July
Delaware Skipper	Widespread, June-August
Zabulon Skipper	Widespread, May-Sept
Aaron's Skipper	Coastal and localized, June-Sept
Broad-winged Skipper	Coastal, June-Sept, oft abundant
Dun Skipper	Widespread, late May-Sept
Salt-Marsh Skipper	Coastal, June-Sept; oft abundant
Another Species?	See the blog for full list
Not on blog list?	Please photo and report on our log.