

## Selected Butterfly Host Plant List with Habitat & Nectar Notes

For Butterfly Workshop March 2021

By Betsy Washington

Species	Caterpillar Host Plants	Habitat - Nectar Notes
<b>Swallowtails, <i>Papilionidae</i></b>		Early instars mimic bird droppings, older instars are smooth and brightly colored, all have fleshy retractable organs above head that give off pungent odor extended.
<b>Pipevine Swallowtail</b>	Virginia Snakeroot, Dutchman's Pipe  Caterpillars accumulate (aristolochic acid) toxic chemicals from host plants that are toxic to predators.	Deciduous woodlands, edges, dry or moist, grasslands where nectar sources occur. Some nectar sources are Bergamot, lilac, azaleas, phlox, verbenas, lantana, petunias, & more
<b>Spicebush Swallowtail</b>	Spicebush, Sassafras, Red Bay (aromatic Laurel Family)  Caterpillars mimic bird droppings; live in leaf shelters, like many swallowtails.	Open woodlands and edges, Nectar from Japanese honeysuckle, jewelweed, thistles, milkweed, azalea, dogbane, lantana, sweet pepperbush and more
<b>Black Swallowtail</b>	Carrots, Parsley, Dill, Rue, Queen Anne's Lace, Golden Alexanders  All contain carotenoids - phytochemicals	Fields, meadows, gardens - where hosts occur. Nectar on wide variety of flowers – red clover, milkweeds, thistles, composites, & more
<b>Eastern Tiger Swallowtail</b>	Tulip Poplar, Black Cherry, Sweetbay Magnolia, (some sources include Ash and/or Birch)  Caterpillars feed on leaves and rest on silk mats on top of leaves.	Deciduous woodlands near edges and watercourses, often in suburban gardens. Nectar from wide variety of plants: wild cherry, lilac, Milkweed, Joe-Pye Weed, Purple coneflowers , Sweet Pepperbush +
<b>Zebra Swallowtail</b>	Paw Paw Hosts contain toxic acetogenins which are regurgitated when threatened. Adults fly in understory near host plants, especially along water-courses and lay eggs on undersides of leaves – cats eat new leaves. Moth defoliation in summer causes new leaves for later reproduction.	Adults seek moisture from puddling, damp sand & nectar from flowers including blueberry, blackberry, lilac, redbud, verberna, dogbane, purple coneflowers, and milkweeds. Short proboscis; no tubular flowers.
<b>Whites and Sulphurs, <i>Pieridae Family</i></b>		Often treated as agricultural pests and harmed by pesticides. Large family of slug-shaped caterpillars
<b><i>Whites Subfamily</i></b>	Hosts are mostly Mustards. Seeds and flowers of host plants are main food.	Early instars are usually dull yellow-green, getting patterns as they mature.
<b>Cabbage White</b>	Brassicas- mustard, cabbage, kale, broccoli.	Considered an agricultural pest and populations have declined because of pesticides.
<b>Falcate Orangetip</b>	Cresses in genus Arabis (rock cresses) including Spring & Winter Cresses & Cardamine spp. (toothworts). Non-native Field Rape, Mustards, Tower Mustard in parts of VA in later spring.	Woodland edges and openings in early spring. Hosts occur along streams or rich woods. Adults nectar on variety of early

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		bloomers including flowers of early hosts, violets, spring beauty.
<b><i>Sulphur Subfamily</i></b>	Feed primarily on Legumes, eating leaves but some flowers and buds.	Caterpillars vary but usually green with lateral stripe.
<b>Cloudless Sulphur</b>	Partridge Pea, Wild Sennas (and Sicklepods to south of us), Soybeans, Baptisias,	Open areas, fields, disturbed areas where hosts are found. Migrates south in large waves in winter but high. Adults have long tongues & can feed on tubular flowers. Attracted to red flowers, but use wide variety of nectar flowers.
<b>Clouded Sulphur</b>	Partridge Pea, Alfalfa, White Clover, Peas	Open, sunny areas, fields with clover & alfalfa, roadsides, gardens, meadows. Nectar on a wide variety of flowers.
<b>Orange Sulphur</b>	Alfalfa, White clover, white sweet clover  First flight moving north in early June	More common in our area than Clouded. Found in open areas, alfalfa fields, nectars on variety of plants including dandelions, milkweeds, asters, goldenrods
<b>Sleepy Orange</b>	Partridge Peas, Wild Sennas, Sicklepod	Open areas, roadsides, fields. In wooded areas early in spring before nectar plants emerge in open fields. Nectars on blue mistflowers, goldenrods, asters and others.
<b>Little Yellow</b>	Partridge Pea, Wild Sensitive Plant, White Clover, alfalfa	Tiny, tiny inner black spot, flits low and fast close to ground nectaring on low flowers. Males avidly sip minerals in damp earth and 'puddle parties' in late summer.
<b>GOSSAMER WINGS, LYCAENIDAE</b>		
	Primarily feed on buds, flowers, and fruits of host plants and adopt color of part they are feeding on making them hard to find. Some bore into fruits to feed, and others nest in leaf litter below host trees.	Most tended by ants which get honeydew for caterpillars and protect them from predators. Look for ants!
<b><i>Hairstreak Subfamily</i></b>	Some species eat flowers and fruit, others feed on leaves. Early fliers over-winter as chrysalis.	
<b>Red-banded Hairstreak</b>	Buds and leaves of Wax Myrtle and Winged Sumac ( <i>R. copallina</i> ), and to lesser extent <i>R. typhina</i> . Will feed on rotting host leaves on ground as well as Oaks.	Meadows w/ wildflowers, woodland edges/openings, near shorelines w/ wax myrtles. Easy to attract to gardens w/ goldenrod, mints, sedum & others.
<b>Gray Hairstreak</b>	Wild Sensitive Plant, Rose and Seashore Mallow.	Ubiquitous with wide distribution, open areas, shores and marshes, and nectar sources.
<b><i>Blues Subfamily</i></b>	Small, similar which make them hard to ID. Hosts on a variety of plants, but	Most tended by ants. Look for ants near flower buds to find!

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	caterpillars feed on new growth of flowers, leaves.	
<b>Eastern-tailed Blue</b>	Legumes, lawn clovers, especially White Clover, Partridge-pea, Alfalfa, Wild Sensitive Plant, vetch. Blakney adds bush clovers.	Widespread in open areas, especially disturbed. Flies low and weakly. Tends to congregate in groups in moist areas near streams, ponds instead of puddling. Plant low nectar plants & add mud puddles to attract.
<b>Azures</b> (Taxonomy is confused, often identified by host plants, time of flight).	Extremely varied, but in East mostly Dogwoods, also Blackhaw & other Viburnums, Black Cherries, N.J. Tea, Blueberries. Dogwood shrubs in summer.	“Everywhere”; deciduous woodlands, edges, openings, roadsides, gardens, and parks. Tiny, flutter up and down to hosts, in open areas.
<b>Henry’s Elfin</b>	American Holly, Inkberry, Redbuds Males patrol from hollies, female lays eggs on flower buds of redbuds, old host leaf of hollies Blakney says winterberry holly. Reports from NC of viburnums, blueberries, etc.	One single Spring flight. Flies at time redbuds are blooming cats eat flowers and new leaves. Forests, openings and trails – near pine-oak forests.
<b>Eastern Pine Elfin</b>	Virginia Pine, White Pines where occur  Typically lay eggs and cats feed on newly emerging needles of hard pines.	One spring flight at time pine buds are breaking. Young stands of pines, early successional pine forests, edges
<b>BRUSH-FOOTED BUTTERFLIES, NYMPHALIDAE FAMILY</b>		
<b>Variiegated Fritillary</b>	Violets (Blue, Bird's Foot, Field/Wild Pansy) And Passion Flower (2 spp. here – P incarnata and lutea)	Open situations, milkweeds, Mints like Mountain Mints, sunflowers, many other nectar-rich flowers.
<b>Great Spangled Fritillary</b>	Mainly Common Blue Violet, Bird's foot, Wild Field Pansy	Much more common along and points west of I-95 corridor & NOVA. Nectars on variety including purple coneflowers, Bidens, mints
<b>Common Buckeye</b>	Caterpillars feed on buds, leaves of many hosts: Vervain, Purple False Foxglove, Speedwells, frog-fruits, Snapdragons	Open or disturbed areas, meadows, marshes for frogfruit. Many nectar-rich flowers. Adults love watermelon!
<b>Pearl Crescent</b>	Asters - Calico, Frost, New England, Blue Wood Asters	Common in open sunny areas, gardens. Some favored nectar sources are Milkweeds, Purple coneflowers, Black-eyed susans, Coreopsis.
<b>Monarch</b>	Milkweeds, Sandvine/Honeyvine (both fairly aggressive vines in milkweed fam.)	Adults love milkweed which are nectar rich (plant lots!) but also many other nectar-rich flowers.

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<b>Viceroy</b>	Willows, Cottonwood, Black Cherry  Caterpillars store salicylic acid from willow family hosts as a <i>chemical defense</i> .  Larvae mimic bird droppings and hide in leaf shelters.	Prefer wet habitats along streams, rivers and ponds where its hosts occur along banks. Adults prefer composite flowers but also feed on aphids, rotten fruit, carrion and feces, especially early in spring.
<b>Red-spotted Purple</b>	Caterpillars feed on foliage of variety of deciduous trees and shrubs, including willows, cottonwoods, wild cherry, apple, hawthorn, and crab apple, oaks, deerberry, and more. (NABA++)	The adults visit flowers, but they prefer to absorb moisture and nutrients from puddles, damp ground, sap flows, decaying fruit, and animal droppings. Love over-ripe watermelon!
<b>SKIPPERS, HESPERIDAE FAMILY</b>		
		Nearly all caterpillars hide in folded leaf nests on hosts.
<b>Spread-wing Subfamily</b>	Caterpillars of varied subfamily generally feed on Legumes, Mallows, or Oaks and other trees.	Adults usually hold wings open
<b>Silver-spotted Skipper</b>	Legumes – generalist on them – even kudzu! Black Locusts, American & Chinese Wisteria, Partridge-pea, Sennas, False Indigo-bush, Kudzu, Tick Trefoil+	Widespread in woodland edges and open areas, common in gardens on variety of flowers.
<b>Juvenal’s Duskywing</b>	Oaks (White, Red, Spanish, Swamp Chestnut) especially tender young leaves	Woodland trail openings near Oaks. Adults nectar on spring wildflowers of woodlands. One flight in spring – Late Feb – Mid May.
<b>Grass-Skipper Subfamily</b>	Mostly feed on grasses and sedges	Adults usually hold wings closed
<b>Fiery Skipper</b>	Bermuda grass, Crab Grasses, St. Augustine Grass.  Cats. make folded leaf shelters placed horizontally in sod.	Grassy areas, lawns, roadsides. Adults love Verbena, also sweet pepperbush, milkweeds, asters, sneezeweed, ironweed, thistles.
<b>Zabulon Skipper</b>	Purpletop, Purple Lovegrass & other Lovegrasses, Wild Rye, others	Moist woodland edges, openings, gardens. Nectar from a variety of flowers including, red clover, selfheal; & natives blackberry, milkweeds, buttonbush, joe-pye weed, thistles

**Sources:** A variety of Sources were used, but most weight was put on the following sources, combined with Flora of Virginia to verify host plants actually occurring in our area.

- Butterfly Caterpillars and their Host Plants of the Williamsburg Area, Adrienne Frank et. al.
- Northern Virginia Butterflies and Skippers, A Field Guide, Robert Blakney
- Butterflies and Moths of North America, <https://www.butterfliesandmoths.org/>
- Alabama Butterfly Atlas, <https://alabama.butterflyatlas.usf.edu/species/details/>

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- Univ. of Florida Entomology Dept. UF/IFAS, <http://entnemdept.ufl.edu/>
- Caterpillars in the Field and Garden, Thomas J, Allen, Jim Brock, and Jeffrey Glassberg