

Butterflies

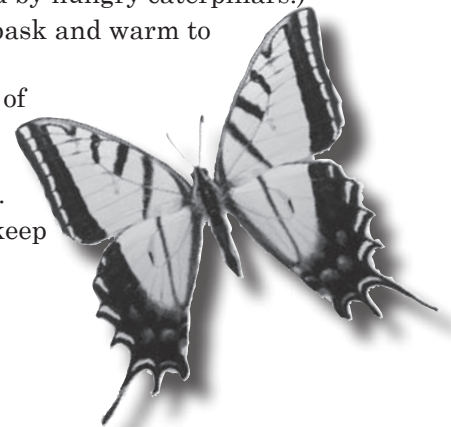


Facts:

- Female butterflies usually are bigger and live longer than male butterflies.
- A butterfly has compound eyes: each eye is made up of about 6,000 tiny lenses.
- The wings of butterflies and moths are actually transparent. The iridescent scales, which overlap like shingles on a roof, give the wings the colors that we see.
- The Queen Alexandra's birdwing from the island of New Guinea is the largest butterfly, with a wingspan of 11 inches! The smallest is only 1/8 inch wide!
- The top butterfly flight speed is 12 miles per hour. Some moths can fly 25 miles per hour!
- Most butterflies make no sound, but some in Florida and Texas make a loud clicking sound with their wings.
- The female moth produces a scent that a male moth can smell a mile away.
- Butterflies are related to crabs and lobsters! Like those sea creatures, butterflies have skeletons on the outside of their bodies. They're arthropods: insects, crustaceans, millipedes, centipedes and arachnids.
- Butterflies weigh only as much as two rose petals, but can fly thousands of miles.
- Butterflies can't hear, but they can feel vibrations. Many butterflies can taste with their feet to find out whether or not the leaf they sit on will be good caterpillar food, and so a good place to lay eggs.
- A caterpillar grows to about 27,000 times the size it was when it first emerged from its egg. Because the caterpillar's skin doesn't grow along with it as ours does, it must periodically shed the skin as it becomes too tight. Most caterpillars molt five times before entering the pupa stage.
- Butterflies do not get bigger as they age — a young butterfly is a caterpillar!
- Butterflies don't have mouths that allow them to bite or chew. They (along with most moths) have a proboscis, a long straw-like structure which they use to drink nectar and juices from tubular flowers that other pollinators can't reach. When not in use, the proboscis remains coiled like a garden hose.
- Adult butterflies pollinate many different plant species, and many flowers have specific adaptations for attracting them.
- Many butterfly attractors bear dense clusters of small flowers so the butterfly can sip nectar simply by moving its proboscis from one blossom to another, thus conserving energy while feeding.
- Most butterflies (and many other insects) can see ultraviolet, a color that is invisible to human eyes. Many flowers and butterfly wings include ultraviolet in their color mix. Within a species, the presence or absence of these markings typically helps to differentiate between males and females (but hard for **us** to tell!).
- Flowers also use the secret (to us) communication line of ultraviolet. The flower's color, form, aroma and nectar guides work together as signals and signposts to efficiently guide the butterfly to the source of nectar.
- The blooms that we enjoy with our eyes and noses are also the beacons, landing platforms and launching pads for pollinators. In the process, insects get dusted with pollen, which they carry to other flowers. This, in turn, helps the plants produce seed and reproduce.
- Most butterflies prefer flowers that are pink, red, purple or yellow and that are open all day. Most moths lean toward pale or white flowers that open in the evening.

Strategies: You can help butterflies resist the pressures that threaten them in several ways:

- Limit use of pesticides, or use the least toxic and most specific needed. All life stages are extremely sensitive!
- Plant both caterpillar host plants and butterfly nectar plants (preferably natives), or at least recognize and preserve existing plants. (Use other plants to hide the host plants defoliated by hungry caterpillars.)
- Provide a bowl of wet sand as a source of water, and flat rocks on which to bask and warm to "flying temperature" (86°). Plant in a sunny area protected from the wind.
- Understand the negative effects on native butterflies of the "romantic" idea of releasing butterflies at weddings (well, romantic unless you are releasing non-native butterflies, or at a time and/or place where they won't have the right plants and conditions to live, or if they are poached, or mishandled ...).
- Read about butterflies to become a better-educated partner in the effort to keep these amazing "flying flowers" with us.



Cindy Hintz, Butterfly Chairman for Deep South Region
915 Grady Drive, Johnson City, TN 37604-2940 423-282-9106
CindyHintz3@mac.com

Butterfly	Caterpillar Host Plant	Butterfly Nectar Source
American Painted Lady	Everlasting, Daisy, Burdock	Aster, Dogbane, Goldenrod, Mallow, Privet, Vetch
American Snout	Hackberry	Aster, Dogbane, Dogwood, Goldenrod, Pepperbush
Anise Swallowtail	Queen Anne's Lace	Buddleia, Joe Pye Weed
Baltimore Checkerspot	Turtlehead, False Foxglove, Plantain	Milkweed, Viburnum, Wild Rose
Black Swallowtail	Parsley, Dill, Fennel	Aster, Buddleia, Joe Pye Weed, Alfalfa
Clouded Sulphur	Clover	Goldenrod, Grape Hyacinth, Marigold
Cloudless Sulphur	Cassia, Apple, Clover	Zinnia, Butterfly Bush, Cosmos, Cushion Mum
Comma	Elm, Hops, Nettle	Butterfly Bush, Dandelion
Common Buckeye	Snapdragon, Loosestrife	Carpetweed
Common Checkered Skipper	Mallow/Hollyhock	Shepherd's needles, Fleabane, Aster, Red Clover
Common Sulphur	Vetch	Aster, Dogbane, Goldenrod
Common Wood-nymph	Purpletop Grass	Purple Coneflower
Eastern Pygmy Blue	Glasswort	Salt Bush
Eastern Tailed Blue	Clover, Peas	Dogbane
Falcate Orangetip	Rock Cress, Mustard	Mustard, Strawberry, Chickweed, Violet
Giant Swallowtail	Citrus	Joe Pye Weed, Buddleia
Gorgone Checkerspot	Sunflower	Sunflower, Goldenrod
Gray Hairstreak	Mallow/Hollyhock, Clover, Alfalfa	Thistle, Ice Plant
Great Spangled Fritillary	Violet	Thiste, Black-eyed Susan, Milkweed, Ironweed
Greater Fritillary	Violet	Joe Pye Weed
Gulf Fritillary	Pentas, Passion-vine	Joe Pye Weed
Hackberry Emperor	Hackberry	Sap, Rotting fruit, Dung, Carrion
Little Glassywing	Purpletop Grass	Dogbane, Zinnia
Little Yellow	Cassia, Clover	Clover
Monarch	Milkweed	Dogbane, Buddleia
Mourning Cloak	Willow, Elm, Poplar, Birch, Nettle, Wild Rose	Butterfly Bush, Milkweed, Shasta Daisy, Dogbane
Orange Sulphur	Vetch, Alfalfa, Clover	Alfalfa, Aster, Clover, Verbena
Orange-barred Sulphur	Cassia	Many plants
Painted Lady	Thistle, Daisy, Mallow/Hollyhock, Burdock	Aster, Zinnia
Pearl Crescent	Aster	Dogbane
Pipeline Swallowtail	Dutchman's Pipe, Pipevine	Buddleia
Polydamus Swallowtail	Pipevine	Buddleia
Queen	Milkweed	Milkweed, Beggar-tick, Daisy
Question Mark	Hackberry, Elm, Nettle, Basswood	Aster, Milkweed, Sweet Pepperbush
Red Admiral	Nettle	Stonecrop, Clover, Aster, Dandelion, Goldenrod, Mallow
Red-spotted Purple	Black Cherry, Willow, Poplar	Privet, Poplar
Silver-spotted Skipper	Black Locust, Wisteria	Dogbane, Privet, Clover, Thistle, Winter Cress
Silvery Checkerspot	Sunflower	Cosmos, Blanket Flower, Marigold, Phlox, Zinnia
Sleepy Orange	Cassia, Clover	Blue Porter, Beggar Tick, Aster
Spicebush Swallowtail	Spicebush, Sassafras	Dogbane, Joe Pye Weed, Buddleia
Spring Azure	Dogwood, Viburnum, Blueberry, Spirea, Apple	Blackberry, Cherry, Dogwood, Forget-me-not, Holly
Tawny Emperor	Hackberry	Tree sap, Rotting fruit, Dung, Carrion
Tiger Swallowtail	Black Cherry, Birch, Poplar, Willow	Joe Pye Weed, Buddleia
Variagated Fritillary	Violet, Passion Vine	Joe Pye Weed
Viceroy	Willow, Poplar, Fruit Trees	Thistle, Beggar-tick, Goldenrod, Milkweed
Western Tailed Blue	Clover, Peas	Legumes
White Admiral	Birch, Willow, Poplar, Honeysuckle	Aphid Honeydew, Bramble Blossom
Zabulon Skipper	Purpletop Grass	Blackberry, Vetch, Milkweed, Buttonbush, Thistle
Zebra Longwing	Passion-vine	Verbena, Lantana, Shepard's Needle
Zebra Swallowtail	Pawpaw	Dogbane, Joe Pye Weed, Buddleia, Privet, Blueberry



Table adapted from butterflywebsite.com