

## *The Question Mark*

By Kim Smith

In early July of last summer, this gentle winged beauty arrived in near-perfect condition. Almost daily he nectared from the ‘Nanho Purple’ butterfly bush and adjacent verbenas. Seemingly tractable, I stretched out my free hand while photographing—to my utter delight—he alighted. By mid-August our weariful caller had become a fragment, a creature of struggling forewings and remnant tattered, shredded scraps of hindwings. Nevertheless, we continued to find him in the garden, warming his ragged wings and nectaring from blossom to blossom.

The Question Mark butterfly belongs to the angelwing, or *Polygonia* genus, of the Brushfoot family (Nymphalid) of butterflies. The origin of the name *Polygonia* is derived from the Greek word *poly*, meaning many, and *gonia*, which means corners or angles. The scalloped and deeply notched wing margins, along with the mottled, dead leaf-like colors of the underwings, allow it to blend with the surrounding foliage when motionless with wings folded, a form of mimicry to deceive predatory birds. Angelwings of the East Coast with “punctuation” names most commonly seen are Eastern Commas and Question Marks. The Gray, Green, and Hoary Commas are residents of northern, boreal regions, and the Satyr Comma, also called Golden Angelwing, is among the most rarely seen. The punctuation butterflies are named for the pearly white markings in the center of the ventral, or underside, of each hindwings. The Question Mark was once called the Violet-Tip for its striking violet wing margins.

In the north, the Question Mark is double brooded. *Polygonia interrogationis* present a marked case of dimorphism; the difference in coloration between the fall/spring form (*fabricii*) and the summer form (*umbrosa*) is so striking they were at one time thought to be two distinct species. The overwintering adults of the *fabricii* form are on the wing in the spring, ovipositing eggs until the end of May. The *fabricii* are vivid orange with contrasting black spots, longer tails than the summer form, and luminescent violet-white wing edges. The male Question Mark looks for females by perching on foliage or tree trunks, chasing away other insects and, occasionally, confronting birds and human passers-by. The elongated barrel-shaped bluish-green eggs are laid singly or in “chains” of six or more stacked vertically, one on top of the other. The summer form emerges and flies from May through September. The forewings are a deeper, rusty-orange and the hindwings are almost entirely clouded black, with a comparatively thinner violet edging. The *umbrosa* brood lay eggs that then develop into the *fabricii* brood. In northern regions, during the winter months, the *fabricii* brood either hibernates in various shelters or migrates south.

A hibernaculum is a leafy structure constructed by some species of caterpillars when they hibernate. It is often made by folding a leaf over and securing it with silk; a tiny, cozy “sleeping bag.” In the case of the Question Mark, where the *fabricii* form overwinters as an adult, a different type of hibernaculum, or overwintering box, can be provided. The hibernaculum resembles a bird box, with an opening at the bottom and slits along the side. Areas frequented by angelwings generally have an abundance of natural overwintering sites such as hollow logs, loose bark of tree crevices, and the eaves of homes.

The Question Mark butterfly generally prefers tree sap and rotting and fermenting fruit, which are rich in amino acids, along with dung, soil, and carrion, which provide needed salts and minerals. When these are unavailable they will nectar at native wildflowers—common milkweed, asters, summersweet, as well as non-native butterfly attractants that have similarly

shaped floral structures to that of the forenamed wildflowers, with clusters and panicles of tiny tubular-shaped florets.

The most common host plants of the Question Mark caterpillars are American elm tree (*Ulmus americanus*), slippery elm tree (*U. rubra*), and hackberry (*Celtis*). Although desirable for a large estate, elms and hackberry are trees that would quickly outgrow a small garden. Members of the nettle family (*Urtica*) are also common Question Mark caterpillar food plants. The absence of stinging hairs separates smallspike false nettle (*Boehmeria cylindrica*) from stinging nettle and wood nettle, making it a more suitable choice for the garden. Arranged in clusters along upwardly curving spikes, the flowers of false nettle are minute and green. The opposite-paired toothed leaves are an elongated ovate-shape. False nettle grows to a four-foot bushy shrub in sun to light shade in rich moist soil and occurs naturally in woods and moist thickets, west from Minnesota to New England, south to Florida and Texas. *Boehmeria cylindrica* is also an important food plant for the Red Admiral (*Vanessa atalanta*). Host plants for the Eastern Comma include wood nettle (*Laportea canadensis*), false nettle, and elms (*Ulmus*).

I was saddened when, by the end of August, there were no more sightings of the Question Mark. By taking temporary residence in our garden, the Question Mark's visit prompted me to seek a smallspike false nettle plant. As is so typical with wildflowers, it was only available to purchase in a four-inch pot. Although we may have to wait several years before Question Mark caterpillars grace our garden, if you plant native wildflowers, the Lepidoptera will come.

Kim Smith is a residential and garden designer. Preorders for her forthcoming book *Oh Garden of Fresh Possibilities! ~ Notes from a Gloucester Garden*, September 2008, are available through her website at [www.kimsmithdesigns.com](http://www.kimsmithdesigns.com) and Toad Hall Bookstore at [www.toadhallbooks.org](http://www.toadhallbooks.org). Kim will be happy to respond to readers' questions and comments at [kimsmithdesigns@hotmail.com](mailto:kimsmithdesigns@hotmail.com).

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