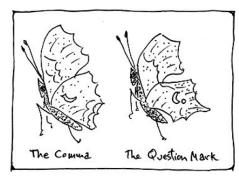


Butterflies on the Hops: Commas and Question Marks

Hop Merchants are butterflies. They eat hops, and they got their name from an idea that hop farmers once had about them. Like other butterflies, these have a caterpillar phase, then a chrysalis, then a winged adult which lays eggs that hatch into caterpillars. The caterpillar living on hop leaves forms a chrysalis which hangs from the plant the same way a Monarch chrysalis hangs from a milkweed. In the case of the Hop Merchant, the chrysalis has dead-leaf camouflage colors: browns and grays. It is like the Monarch in that it also has some shiny decorations. They may be silvery, or they may be gold. The hop farmers back in the day felt they could predict the market price of hops based upon the silver or gold spots on the chrysalises they found hanging in their hop plants. They called the butterflies and the caterpillars Hop Merchants (at right).

Nowadays there must be other ways to predict the price of hops, as the name has been changed to Eastern Comma. There are other Commas among butterflies, all members of the same genus, Polygonia, or "many angles." In fact this group of congeners (members of the same genus) are known collectively as anglewings. Not only do the wings contain angles, they also contain silver curved marks which on some resemble a comma and on others look like a question mark, a comma with a dot near one end. These distinguishing marks can only be seen on the underside of the hindwing, but they do stand out. The butterflies often sit still with wings folded together over their backs and are nearly invisible thanks to their cryptic or camouflage coloring. A very close look will reveal a small silver comma or question mark.

When the butterfly suddenly opens its wings out flat, showing the topsides, there is a flash of orange, which some say startles or confuses a predator, especially if the very



next instant the wings close again and the orange butterfly has vanished.

The Merchants and the Question Marks like to eat nettles, also hops, and we have both of those growing right here. We brought the hop plants home from Wyoming decades back. We'd been visiting friends who had them growing on a trellis over the deck to make a shady place in summer. They gave us a couple of seedlings in a paper cup which we carried in a holder in our car for the next weeks as we camped in the west and then made the long drive home. Now we have our own hops over the deck here. This year we also had caterpillars, feasting on the leaves. I took a few pictures, thinking they must be Hop Merchants, but



it turned out they were Question Marks. Like the Merchants, they will soon pupate and emerge as orange adults (from the top side), then overwinter somewhere protected. They will come out next March, ready to eat all sorts of things. We think of butterflies as needing flowers and nectar, but the anglewings are happy to eat sap, mud, rotting fruit, and even dung which contains fruit. This year the Polygonia interrogationis (the Question Marks) ate up every leaf there was on our hops. Then they must have moved off into the many nettles nearby and made their chrysalises there. Soon they will emerge as bright sparkling fall Question Marks, and then look for wintering places, hibernacula. We'll see them again in March, about the time the Tortoiseshells and other overwintered butterflies come out into the early spring world. I didn't see any Hop Merchants over our deck, but I wonder what their prediction would be for the price of hops this year. I used to buy hops to make beer, using dried flowers. When we got our own plants growing I saved the flowers for my home-brew. This year there won't be a single hop blossom, nor any way to predict the market. This makes it especially fitting

that our resident species this year was called the Question Mark, right? Not to close with a corny name joke, I should be sure to say how much we enjoyed the daily monitoring of the progress of the gorgeous caterpillars themselves. We don't begrudge them this year's hop crop. We have dried flowers from years gone by.

— Bonner McAllester, *Monterey News*