

Urban Nature Watch for TerraGreen

by Sanjay Sondhi

Published in December 2010



Common Wanderer-the intriguing mimic

Curiosity, they say, is the start of many a journey. Despite having no formal training, I have spent decades observing nature at work. Every walk into a forest, grassland, or even my garden, throws up some interesting sights, that arouses my curiosity. Many of these questions get answered purely by observation, some by reading books or browsing the internet, while many remain just that-questions!

A few days ago, during a nature trail in Dehradun, my son, Yash pointed out a butterfly with a slow, lazy flight. On the upper side, the butterfly was brown with white streaks and spots. Without a second thought, I replied "It is the Glassy Tiger", which is a fairly common butterfly throughout most of India. "Dad, it looks different", Yash responded. With the assurance so typical of ignorant (and arrogant!) adults, I dismissively waved my hand at him. A few minutes later, my persistent son called out again "Dad, its not a Glassy Tiger! The butterfly has got its wings open, and its got yellow markings!" Turning back, I once again looked at the butterfly. Oops-he was right! The butterfly was definitely not the Glassy Tiger. A chastened father now hastened to pay a little more attention to the butterfly!



The butterfly was the female of the Common Wanderer *Pareronia valeria*. While the male Common Wanderer is blue with black stripes, the female butterfly of the

Common Wanderer mimics another butterfly, the Glassy Tiger *Parantica aglea* in coloration, marking and even flight. Caterpillars of many butterflies feed on plants that have toxins or chemicals. During the process of metamorphosis, when the caterpillars grows into a butterfly, the chemicals continue to exist in the adult butterfly. When predators, such as birds, feed on these butterflies, they find them distasteful. After the first few "yucks!", the predators learn to leave this unpalatable food out of their diet. Many of these distasteful butterflies advertise themselves, by means of bright colours and a slow flight-an "eat me if you can" kinda attitude!

Now comes the interesting part. Many other butterflies mimic the unpalatable ones. So the Glassy Tiger, which is distasteful to predators, is mimicked by the Common Wanderer female in order to avoid being eaten by predators. This kind of mimicry is called Batesian mimicry, named after Henry Walter Bates, a 19 th. century English naturalist. Batesian mimicry is not that uncommon, but the Common Wanderer we were watching had an even more intriguing story to tell!

The yellow markings that my son, Yash, had seen, meant that the butterfly we were seeing was a different form of the Common Wanderer *Pareronia valeria philomela*. This form is rarely seen, and that too, in south and north east India, so seeing it in Dehradun was extremely unusual. In addition, this form mimics a butterfly called the Yellow Glassy Tiger *Parantica aspasia*, which is found only east of Myanmar, and is not found in India at all!

We were left scratching our heads. Why and how could a butterfly mimic another butterfly, which is not even found here! Multiple theories exist. One theory states that the Yellow Glassy Tiger may have been found in India at some time in the past, but owing to climatic or other unknown changes, has now disappeared. Another theory states that perhaps, the Common Wanderer wanders around i.e migrates, just like its name suggests! However, there are no records of any Common Wanderers migrating westwards to India from Myanmar. Yet another theory guessed that a bird called the wagtail, which migrates to India from the east carries the eggs of this butterfly!

Whew-this was like clutching at straws! None of these theories seem to make any sense. The truth is-just like so many other mysteries in nature-we don't really know! Its twists in tales these that keep my interest in nature alive. And you can do the same-keep you eyes and ears open, and nature will pique your curiosity too!

Photograph caption: The Common Wanderer form *philomela*

Sanjay Sondhi is a Dehradun based naturalist.

© Sanjay Sondhi, TITLI TRUST

Urban Nature Watch appears in TerraGreen, TERI's (www.terin.org) monthly magazine.