Doon Watch Nature Series for Dehradun Live Hindustan Times by Sanjay Sondhi

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Butterflies and moths-nature's winged marvels

During a recent visit to Chakrata, we were sitting outdoors at night. At a light bulb nearby, I noticed dozens of moths, in different shapes, sizes and colours. The next day, during our forest walk, we saw many butterflies, and this set me thinking, about how these insects, while being similar, were as different as chalk and cheese. Despite their similarity in having wings with powdery scales, and hence being part of an insect group called Lepidoptera (meaning scaled wings in Latin), there are many differences to tell them apart.

Typically, butterflies are active during the day, basking in the warmth of the sun. Moths, however, are active during the night, and are attracted to light bulbs or fires. While the "active by day and night" rule generally works, there are some exceptions. Day Flying Moths are a group of pretty colored moths that fly during the day. Maybe they suffer from short-term memory loss (shades of Ghajini!)-every morning they forget that they are not supposed to fly during the day!



The other way to tell moths and butterflies apart is to look at their antennae. Butterflies have antennae whose tips are club shaped or hooked. The antennae of moths come in many shapes and sizes; some are shaped like slender sticks, while others have feathery antennae. The antennae for butterflies and moth serve as sense organs. In some cases, such as the Atlas Moth, India's largest moth, the male's antennae sense the presence of the female from more than a kilometer away!



Butterflies and moths also differ in the way they sit. Butterflies sit with their wings open, when in the sun, or sometimes with their wings closed vertically over the body. In most moths, the wings are folded over the body like a tent. Butterflies and moths also have different flights. In moths, the fore and hind wings are often locked together which results in a weak fluttering flight. In butterflies, the wings are never linked and hence they fly with regular and strong wingbeats.

The feeding habits of these insects also differ. Butterflies visit flowers that bloom during the day to feed on nectar. Moth frequent flowers that bloom at night, such as Jasmine or Raat-ki-rani. In fact, both moths and butterflies are pollinators, and by flying at different times during the day, end up pollinating different flowers. Interestingly, many moths, lack mouth parts (a long tube- like organ called proboscis) and do not feed during their adult stage at all! They have very short lives of only a few weeks, during which they mate and die.

In many countries, people associate butterflies with Valentine's Day, as a gesture of love and peace. These pretty creatures are nature's gifts to mankind. By protecting our environment, lets do our bit to ensure their survival, and make that our Valentine's Day gift to Mother Nature, something not even the Shiv Sena can object to!

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