

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

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The "Cat's" Story

This is not a story about the antics about our pet cat Tiger (though I am sure I could easily write pages about her tricks as well!). This is the tale of the survival tactics adopted by butterfly and moth caterpillars, in their effort to beat predators and emerge as adults.

This "cat" story was prompted when I observed some caterpillars of the Common Castor (*Ariadne merione*) butterfly. The food plant for these caterpillars is the castor oil plant (*Ricinus communis*), which grows abundantly around Dehradun. The caterpillar, green in colour with a pale stripe down the body had positioned itself along the radiating pink veins on the plant's leaf (see photograph). By doing so, the caterpillar merged really well with the leaf, making itself invisible to potential predators.



This set me thinking-what are the other strategies adopted by caterpillars in order to beat the odds. On one occasion, I recall seeing many caterpillars under a fruiting jamun tree. These caterpillars were beautiful-bright green, with stripes of blue. Accompanying these brilliant colours were loads of spines on the caterpillars body. By chance, I happened to pick up the caterpillar, and its spines pricked me. Ouch-the caterpillars spines caused a severe swelling accompanied by the most dreadful itch!

The Green Coat Moth (*Parasa lepida*) caterpillar itchy spines keeps most predators away. For ignorant souls (like me), the itch ensures that the caterpillars are left well alone!

Many moth and butterfly caterpillars absorb chemicals from plant leaves that makes them distasteful to predators, both at the larval and the adult stage. The caterpillar of the Plain Tiger (*Danaus chrysippus*) butterfly feeds on the *Aak* or Giant Milkweed Plant (*Calotropis gigantea*). Toxins absorbed by the caterpillar make both the caterpillar and the butterfly distasteful to potential predators.

Caterpillars of some butterflies belonging to the family Lycaenidae (or Blues) adopt a unique strategy. These caterpillars secrete a sweet honey-like liquid which is sought after by ants. So, these caterpillars are tended to by ants, who get their food from the caterpillars and in turn, provide them with protection!

At the Lime plant in our house, I have often observed the Lime Swallowtail butterfly lay her eggs. When the caterpillars first emerge from the eggs, they are black with white mottling, and look very much like "bird shit"! A casual observer (and potential predators) will overlook them. When the caterpillars grow larger, they shed their skin, and change colour. This time, they are green, and their colour matches that of the green leaves of the lime plant. Hence, even during their short 3 weeks of life as a caterpillar, they change their survival strategies!

Sometimes, "cat" strategies don't work. On one occasion when I was raising a hawkmoth caterpillar, little realising that Tiger, our pet cat, was watching my activities with interest. One night, easily removing the netting that I used to cover the bucket, Tiger devoured the caterpillar and that was the end of this "cat's" story!

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Making a difference: Wake up the amateur naturalist in you! Watch for caterpillars in your garden, and observe what strategies they adopt for survival! Learning and appreciating nature is the first step in joining the movement to protect earth and make a difference.

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