

From 'cats' to winged fairies

Yash, my 15-year-old son, burst in through the door. 'Dad, there are dozens of cats on a plant outside!' Sitting at my desk, I looked at my son with some concern. While we do have a pet cat called Tiger, to see dozens of the feline species on a plant could only mean that my son was hallucinating. 'Son, how can there be dozens of cats on a plant?' I asked. 'Not those cats, Dad,' he replied. It gradually dawned on this doltish writer that my son was referring to caterpillars, which we often refer to as 'cats' in our own family jargon!

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I strolled out with Yash onto the road. He showed me a plant on which there were dozens of green caterpillars. The caterpillars were feeding ravenously on the leaves of the plant. On some leaves, there were three or four 'cats' devouring the leaf in a hurry, such that in a few minutes all that was left was a groaning leaf stalk, sagging with the weight of the caterpillars, which were hanging on precariously. They moved quickly to another leaf and started eating gluttonously, all over again. When I went close to the caterpillars, to my surprise, they reacted. They started to make jerky movements on the leaf, as though trying to scare me off! This is their defence mechanism against potential predators.

The caterpillars we were observing were those of the Common Emigrant butterfly (*Catopsila pomona*). Following the life cycle of the emigrant, over the next few weeks, in its natural surroundings threw up many interesting facets.

Most butterflies lay their eggs on just a few plant species, on whose leaves their caterpillars feed. The known food plants of the emigrant include Amaltas (*Cassia fistula*), Chakunda (*Cassia tora*), and Kasuanda (*Cassia sophera*). We observed that the butterflies only laid their eggs on the Kasaunda, completely ignoring the

other plants, which must have been feeling pretty awful at being discriminated against. The floral caste system at work!

While the butterflies can exhibit a great deal of colour variation, the bright yellow butterfly with purple markings in the photograph, is the female. After mating with the male, the female lays tiny eggs on leaves. These white eggs are shaped like the menhirs that Obelix carves out in the famous comic series! Often, a single leaf will have many eggs on it, from which emerge caterpillars, rapidly devouring all that comes in their way. If all the leaves are consumed, they do not hesitate to eat the fruit. The caterpillars grow quickly. As they grow, they shed their skin three or four times. Efficiency personified, and following the motto of waste not, they devour their shed skin, as this provides them nutrition. Waste management warriors, I must say!

After 7–10 days of the feeding frenzy, the 'cats' turn into a green chrysalis. When I mistakenly happened to touch a chrysalis, it wriggled, twisting this way and that—clearly a protection mechanism. A few weeks later, the metamorphosis of the caterpillar into a winged fairy is complete. The butterfly emerges from the chrysalis, and waits for a while till its wings dry. After half an hour, the dainty insect sails off into its marvellous world.

Often, because of the large numbers of eggs laid simultaneously, hundreds of emigrant butterflies emerge at the same time. A few months ago, I watched in amazement, as a sea of butterflies flitted by, all headed in the same direction! They have a powerful bouncing flight because of which the butterfly is often referred to as the Yellow Bounder. Many butterfly species migrate long distances, sometimes up to 500 km. However, the local migration or dispersal of the Emigrant is supposedly because of the large number of butterflies that emerge. Facing a food shortage, they disperse, looking for larval food plants, so that they can continue their life cycle. However, why do they all fly in the same direction? Why do they not fly in different directions so that they can increase their chances of finding food? Well, we do not know for sure! It is enigmas like these that keep my interest in nature alive. ■

Photo 1: Mating emigrant butterflies
Photo 2: Emigrant caterpillars on *Cassia sophera*
Photo 3: Emigrant chrysalis

