

Scaly Winged Wonders of Sikkim

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Insects have catered to the aesthetic needs of human being since time immemorial. They represent a diverse group of small organisms starting from disgusting mosquitoes, bedbugs, flies to highly beneficial silkworm, honey bee, lac insect and resplendent butterflies.



Orange Oakleaf



Yellow Orange Tip

Butterflies are beautiful insects that have scaly wings. The different colour scales determine the colour pattern of butterfly. They are active during daytime and can be seen fluttering from one flower to another in search of nectar. There are four stages in the life cycle of butterfly. They are *egg, caterpillar, pupa and adult*. The butterflies that we see represent the adult stage. A butterfly completes its life cycle in about 3 months; however an adult butterfly lives only for 15-20 days. We often consider moths also as butterflies but both of them are entirely different organisms having distinct characteristics. Moths, like butterflies, also

are insects with scaly wings. They have more scales and hair than butterflies. They are active mostly during night and are attracted to light. They are not as colourful as butterflies. The moths and butterflies also differ in flying patterns and other behaviors.

Owing to the high variation in vegetation and climate and its unique geographical location, Sikkim represents one of the hotspots of butterflies in the world. Out of about 1500 species of butterflies in India, nearly 700 species are found in the state. Sikkim represents a mere 0.2% of the geographical area of the country, but harbors nearly 50% of the butterfly diversity.



Cruiser



Large Yeoman

The high diversity of butterflies has endowed them to inhabit different habitats, forests and climatic conditions. They are found everywhere right from the tropical valleys to the alpine meadows. However they are more abundant in the hot, humid river valleys and their number reduces with altitude. In Sikkim, some of the butterfly hotspots are Namprikthang in Dzongu, Rangrang, 32 number camp, Namphing-Pabong near Sirwani, Theeng near Chungthang and Legship.



Orange Oakleaf

The butterflies show distinct seasonal pattern. The spring months of March, April and May and the autumn months of October and November are the best season for observing butterflies. During peak monsoon from June to August and peak winter from December to February the number of butterflies goes down. Sunny mornings between 8 am to 12 noon are best for observing butterflies.

Pictorial field guides aid in butterfly identification. For Sikkim “*The Butterflies of Sikkim Himalaya and their Natural History*” by Meena Haribal is the best field guide covering 400 species of butterflies. Patience is the virtue of butterfly watching. Wait for them to come to you. Butterflies are not only fragile but also shy and hence care should be taken not to disturb and catch them. Carry a good field guide for field identification. A camera will be an added benefit. They bask early in the sunny mornings, which is the best time to photograph them.



Azure Sapphire

Butterflies exhibit different kinds of behaviour. They are seen puddling in muddy ground, basking on plants or rocks, sailing majestically in the air, fluttering in the flowers and flying high above the treetops. Like birds, butterflies also migrate.



Common Map

They have directional movement from one place to another, often long distances up to 3000 km, in search of food, mate and shelter. Patrolling behavior, usually exhibited by male butterflies, by way of random movement within their territory to keep away other butterflies. They also have hill topping behavior which is the tendency of butterflies to occupy vantage positions especially tree tops, hilltops to identify food sources. Sometimes many butterflies of different

species congregate in wet, muddy grounds to obtain minerals. Basking i.e. sitting flat on any surface with their wings open to warm themselves is usual behavior exhibited by butterflies in the early morning hours.

Butterflies have many important roles in nature. They play a vital role in pollination of flowers. They also are important food for birds, lizard, spiders, preying mantis and other organisms. Owing to their resplendent colours and patterns they add to nature’s beauty and of late butterfly parks have been developed to attract tourists. Being sensitive to changes in environment, they are good indicators of changes in climate, habitat and environment. Conservation of butterflies is a great challenge among present day ecologist. Habitat damage resulting from construction activities and spreading of weeds pose a distinct threat to the long-term survival of butterflies. It causes the loss of larval food plants and adult breeding and feeding microhabitat. Collection of butterflies for commercial purposes poses another threat. All the butterflies of the state are protected under the Wildlife (Protection) Act – 1972. Catching or killing butterflies even in your own backyard can put you behind bars. Butterflies like Kaiser-I-Hind, Bhutan Glory and some Apollos are so rare and protected that killing them invites the same punishment as killing a tiger or lion.



Popinjay

The beauty, behaviour and the variation in size of butterflies astonish anyone who carefully observes them. The largest butterfly of Sikkim is Common birdwing (wing span- 14-19 cm), whose size is equivalent or even larger than some of the smallest birds. The smallest butterfly of Sikkim is a Common brownie (wing span 1.4-2.5 cm), having few mm body size. Many species such as Bhutan Glory, Red Appollo, Blue Tiger are rare & endangered. Sikkim is also blessed with many beautiful butterflies. Kaiser-I-Hind, Bhutan Glory, Peacocks and Appollo's are magnificent scaly winged insects.



Blue Duchess

Preservation of these glorious insects and their habitats is desperately required. Butterflies are also nature's creation and have equal right to live in this earth. Protect them and their habitats. Observe them whenever there is an opportunity. Who knows your observation might be unique information to science. Apart from these, we can also initiate butterfly tourism in select hotspots to add another dimension to the tourism sector



Autumn Leaf



Red Lacewing



White Commodore