

A REPORT ON THE MIGRATION OF BUTTERFLIES IN ARALAM WILDLIFE SANCTUARY, KERALA

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Butterflies are known for their migratory flights. Williams (1938) recorded many migratory flights of butterflies from India and Sri Lanka. He recorded 33 species from the Indian region. Wynter Blyth (1957) listed most frequent migrant species from India: the emigrants, *Catopsilia* spp., The Common Albatross *Appias albina* (Boisduval), The Common Crow *Euploea core* (Cramer), The Blue Tiger *Tirumala limniace* (Cramer), The Common Tiger, *Danaus genutia* (Linnaeus), The Lime Butterfly *Papilio demoleus* Linnaeus, The Great Eggfly *Hypolimnas bolina* (Linnaeus), The Pea Blue *Lampides boeticus* (Linnaeus) mainly from Palni Hills, Nilgiri Hills and the Himalaya. The most important observations are those made by Evershed (1910) at Kodaikanal in the Palni Hills and of Larsen (1978, 1987a,b) in the Nilgiris. In the present communication we are presenting an observation of migration at Aralam Wildlife Sanctuary (11°53' N to 75°56' E), Kannur District, northern Kerala, located at the Brahmagiri Hill slopes of the southern Western Ghats.

On 16 December 2000 while trekking along the Cheenkannipuzha, a tributary of Valapattanam River in Aralam Wildlife Sanctuary, we came across a large number of white butterflies speedily flying away in an east-west direction across the Kuruckathodu Stream. We made an attempt to count them. At about 0930hr we counted about 40 members per minute. The count increased to approximately 140 individuals at 1130hr. Thereafter, the activity subsided and ultimately stopped at 1400hr. The dominant migratory species was the Common Albatross, *Appias albina* (Boisduval) accompanied by some members of the Painted Sawtooth *Prioneris sita* (C & R Felder), Lesser Gull *Cepora nadina* Lucas, Great Orange Tip *Hebomoia glaucippe* Linnaeus and the Blue Mormon *Papilio polymnestor* (Cramer) all flying in small swarms consisting of 5-40 members at a height of 1.5-2.5m above ground level. The butterflies were apparently migrating from the Mackootam Range of Coorg forest in Karnataka towards Valaymchal about 10km southwest of the present site in the Aralam Wildlife Sanctuary, Kerala. During the flight, some members of the Common Albatross were seen resting on the

white flowers of *Eupatorium odoratum* growing on the stream side. Otherwise, they were keeping their flight mostly over the open areas of the stream or road gaining an easier line of progress.

The same migratory flight was again observed on 28 December 2000 and continued until the second week of January 2001. The species composition was the same and the density was about 72 members per minute. Last migratory flight of the season was observed on 13 January 2001. During these months of migration, loose parties of Common Albatross were observed all along the open areas of the Sanctuary. The activity of the migratory swarms increased during the peak day hours. During overcast days their activity was found reduced or almost absent. It is assumed that intensity of sunlight plays a role in deciding the activity pattern of the migrant butterflies.

During the same period of time many migratory flights of Common Albatross were also reported in other areas of Kannur and Kasaragod districts in an east-west direction apparently emanating from the adjacent Coorg forests.

All known migration studies on the butterflies in India were confined to the Tamil Nadu, Karnataka and north-eastern hill forests and none pertained to the Kerala part of the Western Ghats. According to Home (1935), the Common Albatross butterfly is a regular migratory species in Coorg and he cited it as "first seen on 2 October, after which it disappeared till it reappeared in myriads at the end of December, all along the river from Urti downwards". The present migratory swarms of Common Albatross are probably following the same legendary path as mentioned by him, reaching Kuruckathode from Urti river and further westwards. Larsen (1978, 1987) observed migration of Common Albatross every year in late May and in early June taking place in Nilgiri Hills in the north-south direction.

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