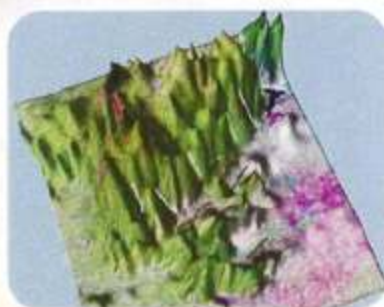


# ***Diversity, Distribution and Seasonality of Insect Communities in Anaikatty Hills***



**Sálim Ali Centre for Ornithology and Natural History (SACON)  
Coimbatore - 641 108, INDIA**

**2006**



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# **Diversity, Distribution and Seasonality of Insect Communities in Anaikatty Hills, Western Ghats**

*Project funded by SACON R&D fund*

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## Chapter 7

### Summary

1. There is a significant variation in the insect community at family level in different microhabitats of the dry deciduous forest in the Anaikatty hills.
2. Seasonal fluctuations were recorded in insect groups; ground insects were abundant during summer while vegetation insects were so during rainy season.
3. Butterfly community in the Anaikatty hills are numerically dominated by pierids; mainly because of the abundance of host plants.
4. There is a bimodal seasonality pattern in the butterflies which is related to the rainfall with the peak in a month's time lag.
5. Monthly mean wind speed showed a negative correlation with the butterfly diversity and the high wind speed could affect the flight and emergence pattern of butterflies.
6. The seasonal segregation among butterflies at family level as well as species level could be because of their variation in resource utilization pattern.
7. Anaikatty hills harbour significant proportion of the butterflies of Western Ghats; many of which are endemic and protected species.
8. Pierid butterflies were more abundant in the mud-puddling, reflecting their numerical abundance in the Anaikatty hills.
9. There is a significant correlation between the butterfly population abundance of the area and mud-puddling incidences.
10. Butterfly migrates in and through the study area during March, April, July, October, November and December.
11. However, such migration of butterflies did not affect the butterfly diversity of the area.
12. Direction of migration changes at local level, but the particular direction was maintained at the regional level.



13. The sex ratio of the migrating butterflies deviates from 1:1.
14. Nymphalids migrate along with other species, while pierids does so alone.
15. The migratory pierids aggregate in mud-puddling while nymphalids do so on the roots of uprooted plants.
16. The migratory butterflies used the bamboos and stream sites; wind protected areas; as aggregation sites.
17. The protection of sites used for mud-puddling and aggregation of migratory butterflies are important for the conservation of butterflies.
18. Since there are specific locations for mud-puddling, breeding and also migratory route, conservation of the butterfly requires protection for the entire area.
19. The breeding activity of birds was found significantly coincided with the butterfly abundance in one-month time lag.
20. Birds' breeding activity was also found significantly correlated with the abundance of smaller sized insect