

## SUMMARY

The matter presented in this thesis is summarised hereunder:

1. Two principal study sites (Lalbagh and Sampaje) and two other supplementary sites (Bangalore Military School and Kalkere state forest) were selected to determine the pattern of changes in the avian fauna, in relation to a time scale as well as a space structure. The two principal sites also represent, the diametrically opposite ends of a precipitation scale, which also has a bearing on the extance and composition of the flora.
2. The major topographic features and correlated variations in habitat characteristics of Lalbagh and Sampaje Sampling Sites, have been detailed, to bring out the salient/subtle climatic variations.
3. Over a period of 5 years, at regular intervals, bird counts were taken, to determine the species composition, changes in their absolute and relative densities and presence/ absence of migrants.
4. Each of the bird species recorded has been assigned to specific feeding guilds and the pattern change in community structure is related to climatic and phenological variations.

5. Based on the foraging guilds and vegetation strata, the temporal fluctuations in species/ guild occurrences have been discussed in relation to trophic strategies adopted.
6. On the whole, the thesis includes new information on the pattern of change in the avian communities of Peninsular India.