ASPECTS OF THE ECOLOGY OF BIRDS IN NUWARA ELIYA AND ADJACENT AREAS OF SRI LANKA

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The central hill zone of Sri Lanka represents one of the areas rich in bird life, in terms of both species richness and bird habitat diversity. The present study, conducted from the beginning of February to the end of May 2003, was carried out in six habitat types in a selected area in the central hill zone, namely primary montane forest, secondary montane forest, open scrub, grassland, grassland-forest interface and home garden.

Point counts with unlimited distance (Variable Circular Plot Method or VCPM) used in conjunction with BIODIVERSITY PRO and DISTANCE software indicate that primary montane forests have the highest bird species diversity (with a Shannon Index [Log Base 10] of 1.218), followed by grassland-forest interface (1.216). Home garden habitat has the lowest bird species diversity (with a Shannon Index [Log Base 10] of 1.142). The species evenness index used (Shannon Evenness) indicate that species evenness is highest in open scrub habitat (with an index value of 0.971). This was also found to be indicative from the dominance index used (Berger-Parker Index with an index value of 0.125).

In terms of similarity, the primary and secondary montane forests rank together as habitats in which the bird species composition is most similar. In terms of habitat preferences, it was found that a considerable number of bird species preferred primary montane forests. Furthermore, there was a marked preference by frugivores and nectarivores for the primary montane forests.

Estimates of density from DISTANCE software indicate that black crow has the highest density in the study area (154.17 individuals per km^2) followed by grey tit (117.40), common tailorbird (111.42), and Sri Lanka white-eye (105.84), the last of which is an endemic species.