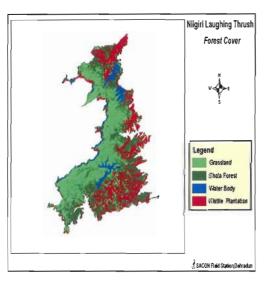
A STUDY ON THE POPULATION AND HABITAT SUITABILITY OF THE NILGIRI LAUGHING THRUSH GARRULAX CACHINNANS











SÁLIM ALI CENTRE FOR ORNITHOLOGY AND NATURAL HISTORY





A STUDY ON THE POPULATION AND HABITAT SUITABILITY OF THE NILGIRI LAUGHING THRUSH GARRULAX CACHINNANS

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Sálim Ali Centre for Ornithology and Natural History

Principal Investigator Lalitha Vijayan

Consultant S.N. Prasad

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SUMMARY

Tropical forests are richer in biological diversity and support a large number of habitat specialist species. Human disturbances, affect the patterns and processes in the natural communities. Degradation or decline of evergreen forests in the southern Western Ghats was discernible (47%) during 1960 to 1988 which has probably led to the decline of many species, especially the endemics because of their specialization in the habitat requirements. Hence, assessing the status and habitats of such endemics and its habitat is an urgent global need. The Nilgiri Laughing Thrush Garrulax cachinnans is one of the 16 species of birds endemic to the Western Ghats which is one of the 24 Global Hotspots of Biodiversity as well as one of the 218 Endemic Bird Areas of the World. This thrush is the only bird endemic to the Nilgiris and inhabits a very restricted range in the shola forests of the Upper Nilgiris. It is included in the globally threatened list in the Red Data Book of the Birds of Asia. However, there was no estimate of its population. Hence, a preliminary study was carried out during February to December 2000 and in the present study during July 2001 to March 2003 to assess the same in its distribution range. Information and data on the distribution of this species were collected literature, birdwatchers, and various museums inside and outside the country. These areas of sightings and other probable areas were surveyed for the species. The present study was undertaken mostly in the environs of Coonor, Kothagiri, Naduvattam, Ooty, Doddabetta, Upper Bhavani, Avalanche, Emerald valley, Codguppa RF, Pitchalbeta RF and Mukurthi in the Nilgiris, Tamil Nadu and Thodukki in the Attappady Valley and Sispara-Walakkad in the Silent Valley in the Kerala part of the Nilgiri Hills.

The survey revealed that the Nilgiri Laughing Thrush is facing local extinction in a few places mentioned in the earlier reports. Among the localities surveyed, the Upper Nilgiri plateau (including the Mukurti National Park and a small part of the Silent Valley National Park) still supports the major population as this area has more number of less disturbed shola patches in different size classes. Smaller and isolated sholas as well as highly disturbed sholas did not have this thrush. The shola forest was identified and classified into various size classes. The sample data on the Nilgiri Laughing Thrush obtained from the surveys were used to calculate the average density in different areas. The average density of this thrush was 1 pair per hectare inside the protected areas while it was only 0.58 in the shola forests outside the National Parks. A total of 10,734 ha (35%) of the 30,183 ha in the Upper Nilgiris analyzed was identified as shola forest. This was three times more than that reported in the previous study. The proportion of the shola forest was more (35% as against 13%) while grassland was only 38% (in place of 64%). Reservoirs also cover a large area in this region. In most locations, the shola forests and plantations were adjacent. Habitat suitability analyses were done taking various habitat parameters such as canopy cover, presence of stream, size of the patch and distance from

plantations. The preliminary models generated show that the total population should be around 3000. However this needs to be checked and corrected based on the ground data and the revised criteria.

The major threat to this species has been the disturbance to the shola forest by way of degradation and alteration into plantations and reservoirs. However, there has been a welcome move to stop further conversion of forests and grasslands into plantations in Nilgiris. The present study reiterates the importance of protecting the shola forests for the conservation of this endangered thrush and other endemics and, recommends that (1) shola forests and grasslands shall not be converted into plantations of anykind, (2) include the entire laughing thrush habitats in the Nilgiris into the Mukurthi National Park and call it as the Mukurthi National Park and Nilgiri Laughing Thrush Sanctuary, the later will help give emphasis on the bird and (3) restoration of the shola forests with involvement of the local community.