

Recent ornithological observations in Ma Da Forest, Dong Nai Province, Southern Vietnam

Ma Da Forest is situated in the south of Vietnam, 80 km to the northwest of Ho Chi Minh City (see Fig. 1 below) and was once part of the continuous lowland tropical forest of southern Vietnam and Cambodia. Now, due to cutting and chemical warfare Ma Da represents an isolated island of tropical semi-deciduous dipterocarp forest.¹ The climate of Ma Da is markedly seasonal, the dry period lasting from October until May; the annual precipitation slightly exceeds 2000 mm.²

Among the numerous works on the avifauna of southern Vietnam³ there are several dedicated to the birds of Ma Da forest.^{2,4,5,6,7,8} These have mostly been carried out by ornithologists of the joint Russian-Vietnamese Tropica Center.⁹ Work carried out in 1997 characterised the composition and ecology (biotopic preferences and trophic links) of the avifauna of the Ma Da forest.² Authors, working primarily on one sample area of the Ma Da forest, have reported 163 species of arboreal birds including the first records for southern Vietnam of Ratchet-tailed Treepie *Temnurus temnurus*, Black-throated Tit *Aegithalos concinnus*, Blue-and-white Flycatcher *Cyanoptila cyanomelana*, Hainan Blue Flycatcher *Cyornis hainanus* and Tiger Shrike *Lanius tigrinus*.

Unfortunately, there has been continuous logging of valuable trees (*Dipterocarpus*, *Shorea*, *Buhanania*, and *Sindora*) that has continued after the termination of studies in 1997. Thus, the scope of our recent ornithological observations in Ma Da was to check the arboreal avifauna of Ma Da forest and establish whether human activities had resulted in any changes.

During studies carried out from 10-26 April 2001 and 4-10 May 2001 we observed 89 species of bird, of which four had not been previously recorded from this area. These were Japanese Sparrowhawk *Accipiter gularis*, Brown Wood Owl *Strix leptogrammica*, Purple-throated Sunbird *Nectarinia sperata* and Fork-tailed Sunbird *Aethopyga christinae*. Thus the list of birds recorded in Ma Da forest can be expanded to 167 species. Some bird species were not recorded during the study due to the limited amount of time and seasonal restriction. Nevertheless, some preliminary assumptions can still be made.

Previous authors have commented on the 13 species strictly confined to the closed canopy forest.⁷ Of these, we observed only Red-headed Trogon *Harpactes erythrocephalus*, Banded Kingfisher *Lacedo pulchella* and Scaly-crowned Babbler *Malacopteron cinereum*. This suggests that the process of closed forest degradation due to logging decreases the number of stenotopic species confined to such an area.

The selective cutting of large trees also reduced a number of large hole-nesting species such as hornbills. We did not observe Great Hornbill *Buceros bicornis*, which was considered by our predecessors to be a fairly common species of the area, whereas Oriental Pied Hornbill *Anthracoceros albirostris* was recorded frequently. The latter is smaller and does not require nest

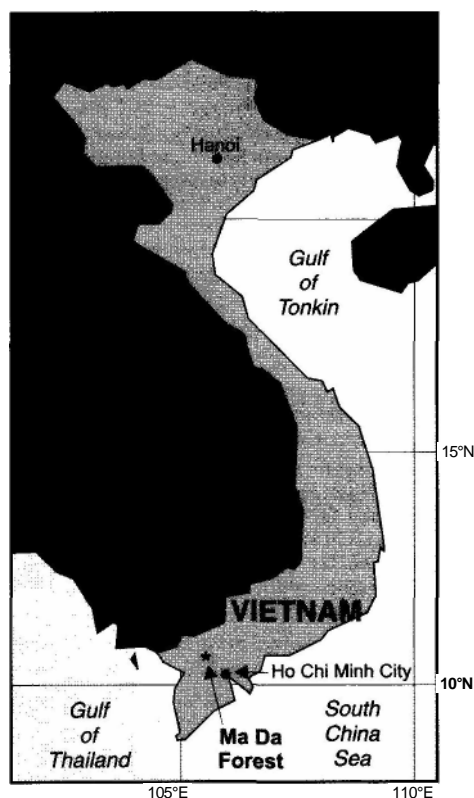


Figure 1. Map showing location of Ma Da Forest, Vietnam

holes in as large a tree as the former. For the same reason, we did not observe White-bellied Woodpecker *Dryocopus javensis* and met Great Slaty Woodpecker *Mulleripicus pulverulentus* just once, whereas smaller species of woodpecker were quite abundant. Species found in the canopy layers and edges of the primary forest² were well represented, supporting the hypothesis that they have a high immunity to forest fragmentation.

Although the list of birds recorded in Ma Da forest has been expanded to 167 species, it is not certain that some of the previously recorded species still inhabit the area. The most vulnerable to selective logging are those found under the closed canopy and/or making their nests in large trees. Species initially confined to the canopy layers of the primary forest and forest edges are highly resistant to fragmentation of the forest.

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