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Habitat use of the Sri Lanka grey hornbill (*Ocyceros gingalensis*) and malabar pied hornbill (*Anthracoceros coronatus coronatus*) at Giritale nature reserve

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Despite the fact that the Grey Hornbill (*Ocyceros gingalensis*) and Malabar Pied Hornbill (*Anthracoceros coronatus coronatus*) are two of the most attractive bird species in Sri Lanka, little information is available regarding their population densities and habitat preference. Twelve line-transacts inside the nature reserve and three line-transacts in the perimeter of the nature reserve was randomly located. Six circular plots (radius of 50m) were selected along these transacts and habitat data were recorded. Cluster analysis revealed the presence of five different habitat types. Three line transects were then placed in each of these habitat types. Each bird contact was assigned to one of five height categories. Density of the two hornbill species was calculated. Total of 101 Grey hornbills and 20 Malabar pied hornbills were recorded during the study period from March 2006 to February 2007 at the study site. The mean abundance of Grey hornbill during the breeding season (from March to August) (Mean±SD, 0.233±0.218) was significantly low when compared to that of the non breeding season (from September to February) (Mean±SD 0.889±0.453) ($t = -3.191$, $p < 0.01$). The mean abundance of Malabar pied hornbill during the breeding season (Mean±SD 0.078±0.078) did not differ significantly from that in the non breeding season (Mean±SD 0.144±0.453) ($t = -0.829$, $p > 0.05$). There was significant difference between the abundance among the five different habitats ($F = 10.84$, $p < 0.0001$) while the abundance of Malabar Pied hornbill did not differ between habitats ($F = 2.156$, $p = 0.0759$). Forests had the highest number of Grey hornbills with large proportion using in the canopy or flying above the canopy. Highest number of both species were observed in the forest and scrub forest while no hornbills were observed in the tank and scrub habitat. The present study revealed that the preferred habitat of the hornbills is the forest also since these birds do not occur in large numbers in the Giritale nature reserve they warrant protection.

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