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# HABITAT UTILIZATION BY MALABAR PIED HORNBILL IN ATHIKADAVU VALLEY, WESTERN GHATS

## PROJECT REPORT



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**Habitat Utilization by Malabar Pied Hornbill in Athikadavu Valley,  
Western Ghats  
(Funded from SACON's Research Contingency funds)**

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2003

## CONTENTS

	Page No.
Summary-----	1
Introduction-----	2
Objectives-----	3
Study Area-----	3
Methods-----	5
Results-----	7
Discussion-----	14
Conservation Implications-----	18
Acknowledgements-----	22
References-----	22
Appendix-----	26

## SUMMARY

Fruiting phenology of potential food plants of birds, 18 fleshy-fruited tree species and frugivory by the Malabar Pied Hornbill was studied for a year (December 2000 to December 2001) in Coimbatore Forest Division (between 10°37'-11°31' N and 76°39'-77°5' E) Western Ghats. Seven species of figs and 11 non-figs comprising 147 tagged trees were monitored fortnightly for fruiting activities. Seasonal variations in fruiting activity were noticed. The overall number of tree species and individuals in fruits showed a definite increase with the onset of summer (March), which was also Malabar Pied Hornbill's breeding season. This peak in fruiting is mainly attributed to the peak in fruiting by figs. The mean number of fruiting figs was 5.53 during the non-breeding season and 12 in the breeding season.

A total of 13 fruit species including five fig species and eight non-figs were recorded in the diet of the Malabar Pied Hornbill. During the non-breeding period (May to February), hornbills' major diet include fig, *Ficus benghalensis* (36.3%) followed by *Strychnos nux-vomica* (20%). During breeding period (March- April), two nests were monitored for 150 hours. Ninety eight percent of food deliveries to nest inmates were fruits belonging to six species. The major fruit species delivered were *F.benghalensis* (56.85%) followed by *Putranjiva roxburghii* (20.7%). Most preferred fruit during the breeding and non-breeding season was *Ficus benghalensis* (PI= 0.99, 0.98 respectively). Though four fruit species formed major food for the Malabar Pied Hornbill in the study site, *F. benghalensis* by forming a major and preferred diet in both breeding and non-breeding period emerges as the "pivotal" or "key-stone species" in the riverine forest ecosystem in Western Ghats. Various threat factors affecting this habitat have been identified. Recommendations for effective management of the habitat suggested.