## Impact assessment of nest collection on the Edible-nest Swiftlet in the Nicobar islands



R Sankaran

Sálim Ali Centre for Ornithology & Natural History

# Impact assessment of nest collection on the Edible-nest Swiftlet in the Nicobar islands

A study funded by TRAFFIC-India / WWF-India



R Sankaran

SACON Occasional Report 1

Sálim Ali Centre for Ornithology & Natural History Coimbatore, India R Sankaran is a scientist in the Division of Avian Ecology. He was awarded a Doctorate from the Bombay University for his studies on the breeding behaviour of the Lesser Florican Sypheotides indica and the Bengal Florican Houbaropsis bengalensis. He has worked in diverse habitats that include the terai of Uttar Pradesh, the subhumid grasslands of western India, the Thar desert, the Himalayas, and the Andaman & Nicobar islands. He is currently studying the endemic avifauna of the Andaman & Nicobar islands and is involved in the conservation of the Lesser Florican.

: Sálim Ali Centre for Ornithology & Natural History

1995

Published by : Director

0

Sálim Ali Centre for Ornithology & Natural History Kalampalayam P.O., Coimbatore 641 010, India. Phone: (91) (422) 392273, 395383; Fax: (91) (422) 398232; Grams: SACON; e-mail (internet):centre@sacon.ernet.in

Type setting by : K.K. Rama Krishnan

Printed at : Kalaikathir Achchagam, Avanashi Road,

Coimbatore 641 037, Phone: 215454.

### Contents

Acknowledgements Foreword Abstract	i ii iii
Introduction Edible-nest Swiftlets in India History of nest collection in the Nicobar islands Local Names Legal Status	1 2 3 4 4
Objectives	4
Methods	5
The Nicobar group of islands	7
Results & Discussion Status Nesting Season Habitat Nest Collection Nest Yield Value & trade	8 8 10 12 13 15 15
Conservation Perspectives Impact of nest collection Status Can there be sustainable exploitation? Conservation	16 16 18 18 20
Conclusion	21
Literature cited	22
Appendix	24
About SACON	26
List of Figures & Tables	
Figure 1. The Nicobar group of islands.  Table 1. Number of caves occupied by cave dwelling species (swiftlets and bats) in the Nicobar islands.  Table 2. Population estimate of breeding pairs of the	9
Edible-nest Swiftlet in the Nicobar islands.	9
Table 3. Past and present nest yields for some caves in the Nicobar islands.	10
Table 4. Dates of nest completion and presence of eggs or young	11

#### Acknowledgements

I wish to thank the Forest Department, Andaman & Nicobar islands, without whose active involvement this study would not have been possible. I wish to particularly thank Mr C. P. Oberoi IFS, Principal Chief Conservator of Forests, Mr R. D'Souza IFS, Chief Wildlife Warden, and Mr I.H. Khan IFS, Conservator of Forests, Planning and Utilisation, and Mr Tarun Coomar IFS, Deputy Conservator of Forests, Planning and Utilisation, for their help and support.

Special thanks are due to Mr T. Nautiyal, Assistant Conservator of Forests, Wildlife, Nicobar district for all his help. I also thank Mr Pankaj Agrawal IFS, Deputy Conservator of Forests, and Mr Yadav, Assistant Conservator of Forests, Wildlife, Nicobar district, for the useful discussions I had with them. The Forest Department Staff of the Nicobar division were extremely helpful, and I wish to particularly acknowledge the assistance given to me by Range Officers Mr Ayub Hassan, Mr Martin, Mr Vijayan and the boatmen Jonal and Albert.

I thank Mr S.A. Awaradi, Deputy Commissioner Nicobar District for all the support given to me by the district adminstration. The information and help I received from several people proved invaluable to this study. Of special mention are Maj. K. Varadha, Capt. Shetty, Jugulu Maheto, Lamboo, Benjamin Paul, Mark Paul, Jugnu Ulysses, David Owen, Rev. Sylvanus Wilifred, Inkainla, Moses and Daniel.

This study would not have been possible but for the interest shown by TRAFFIC-India. Discussions with Vivek Menon in 1993, and subsequent follow up by Brig. R. Talwar and Mr Ram Veer Singh, has been largely responsible for initiating the conservation of the Edible-nest Swiftlet in India, of which this survey of the Nicobar islands is but the beginning. I thank Mr Madhusudan Katti for commenting on a draft of this report, and Mr R Parry-Jones for providing me with some reference material.

All my colleagues at SACON were very supportive. I particularly thank Drs V.S. Vijayan, Lalitha Vijayan, Ajith Kumar, H.S. Das, N.K. Ramachandran, V. Santharam, K.K. Rama Krishnan, and V. Gokula who have contributed in many ways to this study. My wife, R. Rajyashri, not only puts up with my extended absences from the hearth, but also largely tolerates her souten, a computer console, and to top it all is on occasion a source of encouragement as well.

#### Foreword

Misconceived beliefs and human avarice have lead to a burgeoning trade in animal and animal products, endangering many a species. The Musk Deer, Rhinoceros, Elephant and Tiger are a few of the glaring examples. Added to this growing list of species that are critically endangered because of trade is the Edible-nest Swiftlet.

Although collection of swiftlets nests dates back to antiquity, these nests became an important commercial item only since the 16th century when the Chinese began to value the culinary delicacy of the bird's nest soup. Today, the wholly white edible nests of swiftlet rank amongst the world's most expensive animal products, being US \$ 2629-4060 for a kilogram in Hong Kong. That populations of Edible-nest Swiftlet are now unable to withstand the magnitude of exploitation is reflected both in the decline of populations as well as the quantum of nests that are harvested annually. This is true of the Nicobar islands as well, where there has been a decline of nearly 85% of the population of the Edible-nest Swiftlet over the last few decades.

Realizing the rapid decline of the population of Edible-nest Swiftlet, SACON undertook a project under the endangered species programme of the Avian Ecology Division to assess the impact of nest collection on the Edible-nest Swiftlet. The first part of this study has been confined to the Nicobar islands. Field work on this species is a hazardous occupation as one has to collect data of the nests in high, dark and dank caves. I record my appreciation on the determination and hard work of Dr R Sankaran, of our Avian Ecology Division, who could successfully complete the study and give useful suggestions for the conservation of this species.

Dr V.S. Vijayan Director

#### **Abstract**

Ever since swiftlet nests became an important item in Chinese cuisine and pharmacy, Edible-nest Swiftlet have been exploited throughout their range. Today, at US \$ 2629-4060 a kg, the edible nests of swiftlet rank amongst the world's most expensive animal products. India has two species of swiftlet that make edible nests. The Indian Edible-nest Swiftlet Collocalia unicolor is found in the Western Ghats, the Malabar coast and in Sri Lanka. The Edible-nest Swiftlet C. fuciphaga occurs in the Andaman & Nicobar islands. The nests of C. unicolor have an admixture of grass, moss or feathers, and is C. fuciphaga makes nests wholly of saliva, of a lesser value. which is of a very high commercial value. The Edible-nest Swiftlet are currently not covered by International Trade Laws, and in India receives no protection by Law as it is not even in Schedule IV of the Indian Wildlife (Protection) Act.

The population of *C. fuciphaga* was estimated to be between 2500 and 3600 breeding birds. Nest collection had taken place in 24 of 36 caves in the Nicobar islands; in 23 it was very intense. In 16 of these, the proportion of plucked nests to the total nests was 90% or more, and in 12 it was 100%. In only one cave was it very low (6%). Intensity of nest collection was the greatest in the Great Nicobar group where only 14% of the nests were intact. In the Nancowry group, 24% of the nests were intact (excluding the one cave where nest collection pressures were unusually low). The decline in population was evidenced through a decline in yields, which ranged between 40% and 95% over the last decade or two, with only one cave not having undergone a significant loss in yield.

The Edible-nest Swiftlet in the Nicobar islands is Critically Threatened (IUCN criteria Alc), as it has undergone a reduction in numbers greater than 80% over the last 10 years. The immediate measure to be taken is to include this species in Schedule I of the Indian Wildlife Protection Act (1972). The only practical way of conserving the species is by effectively stopping the movement of swiftlet nests between and out of the islands, by checking people and cargo embarking or disembarking on all ships and flights to the mainland. Inclusion in at least Appendix II of CITES, will result in importing countries not accepting consignments from India, which would help the conservation of the endangered Indian populations of the Edible-nest Swiftlet.

Keywords: Edible-nest Swiftlet, Andaman & Nicobar islands