

Reassessment of the impact of nest collection on
the Edible-nest Swiftlet in the Andaman Islands



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submitted by
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This work is dedicated to



Dr. Ravi Sankaran (1963 - 2009)

Dr. Ravi Sankaran still remains a renowned ornithologist who developed his own approach to wildlife conservation issues. He had worked to conserve several charismatic and highly endangered bird species like the Lesser Florican, the Nicobar Megapod, the Narcondam Hornbill and the Edible-nest Swiftlet. Other than these, he also worked in several exclusive conservation programs across the country.

Dr. Sankaran with his unique line of thoughts designed the *in-situ* and *ex-situ* conservation of the Edible-nest Swiftlet in the Andaman and Nicobar Islands, which he put into action in 2001. He designed and supervised the Swiftlet research work that took place from January 2004 to February 2009 and is described in my Ph.D. thesis.

Part of Ravi's immense volume of work has been described in this report. We always wanted to revisit the swiftlet caves in A&N islands towards expansion of the *in-situ* conservation program. But because of his untimely demise it could not happen. However, his experiences during 1998 survey he shared guided me a lot during this survey.

He was a dedicated naturalist, a dear friend, a caring mentor, an exceptional guide and a perfect teacher.

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Contents

Summary	1-2
Chapter 1 Introduction	3-7
Chapter 2 Study Area and Methodology	8-15
Chapter 3 Result and Discussion	16-26
Chapter 4 Conclusions and Recommendations	27-30
References	31-34

SUMMARY

Due to its nutritious and medicinal properties, edible nest of a swiftlet has been considered a precious food in Chinese community ever since the Tang (907 AD) and Sung (960–1279 AD) dynasties. The intriguing biological trait of making its nest with saliva is threatening survival of the Edible-nest Swiftlet (*Aerodramus fuciphagus*) populations in caves. By the early 18th century, due to its rising demand, edible nest production and trafficking became one of the biggest illegal trades. Because of the high demand and value in the international trade, today edible nest is categorized among the world's most valuable natural products. This is resulting in its extensive exploitation throughout its range. The over-exploitation of its nests in the last few decades has caused drastic reduction in the wild populations of the Edible-nest Swiftlets across their range, some as much as 80% - 90% and led to its local extinction in certain areas.

After a survey in 1998 more than 80% of decline was observed in the population of the Edible-nest Swiftlet (*Aerodramus fuciphagus inexpectatus*) within a decade in Andaman and Nicobar Islands. This alarming condition resulted into coalition of the scientists from Sàlim Ali Centre of Ornithology and Natural History (SACON) and the managers from Andaman Forest Department (AFD) towards strategising and implementation of the *in-situ* and *ex-situ* conservation program for the survival of the species and management of this natural resource. With the help of Ministry of Environment and Forests, the Edible-nest Swiftlet conservation program is being implemented through local participation for sustainable use of this natural resource towards economic development of the islands and the people. At present part of the Edible-nest Swiftlet population in caves of the Andaman Islands is under protection from last more than a decade, part of the population is defended from 2010 onwards and part of the population in the islands is still undefended.

Present study was proposed to resurvey the caves visited during 1998 to estimate population of the Edible -nest Swiftlet and also understand impact of the uncontrolled nest collection on the populations in undefended caves of Andaman Islands. The

objectives of the study were to estimate the breeding population of the Edible-nest Swiftlet throughout the Andaman Islands, assess the extent of the nest collection in Andaman Islands, identify the potential populations towards expansion of the on-going conservation program. As it is not feasible to depute people on the every remote island with small population, the population of more than 100 breeding birds (50 nests) is considered as the potential population for initiating the conservation program. The survey was conducted during the Edible-nest Swiftlet breeding season in 2012 and 2013. Through this survey an attempt was also made to find the undefended populations with the potential to initiate the in-situ conservation program. All the possible caves visited earlier were revisited. The survey methods like nest count method were followed estimate the populations of the Edible-nest Swiftlet in different caves. With the population of the Edible-nest Swiftlet also the population of the Glossy Swiftlet *Collocalia esculenta* and presence of bats was observed as co-roosting fauna.

The survey came up with some very important results towards conservation of the species. New caves with population of the Edible-nest Swiftlet were discovered on the remote islands of the Andaman group. Most of the population was observed to be under tremendous nest collection pressure at the undefended sites. The species is found to be not breeding on some islands and also on the verge of being wiped out from many other islands of Andaman group. The Edible-nest Swiftlet have already deserted many caves. Only two inaccessible sites were found with the potential population where the *in-situ* conservation could be initiated.

Survey should be conducted immediately to understand the unsecured population of the Edible-nest Swiftlet in the Nicobar Islands. The on-going conservation efforts by SACON and AFD should continue and Immediate action required should be initiated to save the Edible-nest Swiftlet populations in the unguarded caves of the Andaman and Nicobar Islands.