

Survey of House Swift and Barn Swallow Nests in Hong Kong

2003 Report



Submitted by
Swift and Swallow Research Group

to the **Hong Kong Bird Watching Society** Ltd.
Approved Charitable Institution of a Public Character

July 2009

Survey of House Swift and Barn Swallow Nests in Hong Kong

Coordinator

TSIM Siu Tai

The Hong Kong Bird Watching Society Ltd.

Report Writing and Data Contributors

Apache W.M. LAU, S.T. TSIM, Captain L.C. WONG, Sophia H.Y. WONG,
and William M.K. WONG

Swift and Swallow Research Group

The Hong Kong Bird Watching Society Ltd.

Copyright

All the data shall be the property of
the Hong Kong Bird Watching Society Ltd. with full copyright.

Report available for public information

The Hong Kong Bird Watching Society Ltd.

14/F, Ruby Commercial Building, 480 Nathan Road, Kowloon, Hong Kong

E-mail: hkbws@hkbws.org.hk

Website: www.hkbws.org.hk

This publication should be cited as

Anon, 2009. 2003 Report: Survey of House Swift and Barn Swallow Nests in Hong Kong. Report by
Swift and Swallow Research Group to the Hong Kong Bird Watching Society Ltd.

TABLE OF CONTENTS

Summary	4
Introduction	4
Methodology	6
Results and Discussion	6
Conclusion	7
Acknowledgement	8
References	8

TABLES

Table 1. Survey of House Swift (HS) and Barn Swallow (BS) nests in 1991 and 2002	5
Table 2. Survey of House Swift (HS) and Barn Swallow (BS) nests at 5 selected sites in 2003	7

SURVEY OF HOUSE SWIFT AND BARN SWALLOW NESTS IN HONG KONG

2003 REPORT

Summary

This is the first report published by Swift and Swallow Research Group, the Hong Kong Bird Watching Society. In this study, 456 House Swift nests and 5 Barn Swallow nests were recorded at 5 study sites in Hong Kong. Comparing the nest counts at common studied sites, the House Swift nest counts in 2003 showed 2% variation to the counts in 2002. In order to collect baseline information on the trend of nest counts at different sites, also their distributions, it is suggested to carry out the swift and swallow nest survey annually in a long run, but the number of study sites and covered area should be expanded.

Introduction

1. House Swift (*Apus nipalensis*) and Barn Swallow (*Hirundo nistica*) are aerial insect feeders classified into Family Apodidae and Hirundinidae respectively (Monroe and Sibley, 1993). In Hong Kong, House Swifts (HS) are common residents and abundant spring migrants, but Barn Swallows (BS) are common summer visitors and abundant spring migrants (Carey *et. al.*, 2001). Both House Swift and Barn Swallow are breeding locally and their habitats especially breeding sites are highly associated with urban and sub-urban environment. Typically their nests are built under eaves and beams of man-made structure (del Hoyo *et. al.*, 1999).
2. HS and BS are protected by the Law of Hong Kong. According to Chapter 170 “Wild Animals Protection Ordinance”, Section 4 states that no person shall, except in accordance with a special permit, hunt or willfully disturb any protected wild animal. Section 5 of Cap. 170 also states that no person shall, except in accordance with a special permit, take, remove, injure, destroy or willfully disturb a nest or egg of any protected wild animal. However, destroy of Swift and Swallow nests by human were occasionally reported no matter it was an accident or a willful action (personal observations).
3. Unfledged chicks of House Swift have been recorded at the Chinese University of Hong Kong (CUHK) between 1 June and 10 September (Wong, 1994). Given the swift eggs need 3 weeks for incubation period (del Hoyo *et. al.*, 1999), the breeding period of HS

should be started in May and probably ended in September/October. For Barn Swallow, the breeding period may be started as early as February/March in Hong Kong (Carey *et al.*, 2001).

4. The earliest systematic swift and swallow nest survey could be traced back to 1991 and such the survey was coordinated by a member of HKBWS named Fox Wong. Mr. Wong carried out the survey at three sites in New Territories including Yuen Long Town, Sheung Shui Town (i.e. Shek Wu Hui) and Tai Po Market. It was found that some 1,300 House Swift nests and 95 Barn Swallows nests were counted in these sites (Wong, 1994). Eleven years afterward, another member of HKBWS named Captain Wong did a similar survey at these sites and some other sites in 2002. He noted that the counts of House Swift nests at Sheung Shui Town and Tai Po Market were dropped from 373 and 227 in 1991 to 128 and 76 in 2002 (Table 1), respectively (Wong, L.C. *pers. commun.*).
5. For the Barn Swallow, the nest counts at Sheung Shui Town and Tai Po Market were dropped from 8 and 15 in 1991 to 1 and 5 in 2002 (Table 1), respectively (Wong, L.C. *pers. commun.*). The reduction of nest numbers varied from some 67% for House Swift and 66 - 87% for Barn Swallow. The results gave alarm to the sustainability of House Swift and Barn Swallow breeding in Hong Kong although they are not locally and globally threatened at that moment.

Table 1. Survey of House Swift (HS) and Barn Swallow (BS) nests in 1991 and 2002.

Survey Sites	HS		BS	
	1991 ^a	2002 ^b	1991 ^a	2002 ^b
Cheung Sha Wan	No data	No data	No data	10
CUHK	No data	203	No data	0
Fan Leng Town (Luen Wo Hui)	No data	40	No data	No data
Fan Leng Wai	No data	No data	No data	40
Mong Kok	No data	No data	No data	10
Sheung Shui Town (Shek Wu Hui)	373	128	8	1
Tai O	No data	No data	No data	10
Tai Po Market	227	76	15	5
Yuen Long Town	724	No data	72	No data
Total =	1324	447	95	66

a, Wong, 1994

b, Wong, L.C., *pers. commun.*

6. Some members of Hong Kong Bird Watching Society (HKBWS) have established a working group called “Swift and Swallow Research Group” under the HKBWS in 2003/2004. The Research Group is one of the study groups of the Society working in voluntary basis. Survey of House Swift and Barn Swallow nests in Hong Kong, the present study, is considered as one of the long term conservation measures to these bird species.
7. The objective of this study is to collect baseline information of House Swift and Barn Swallow nest and their nest distribution in Hong Kong.

Methodology

8. Study area: The survey covered 5 selected sites including campus of the Chinese University of Hong Kong (CUHK), Fan Leng Town (also known as Luen Wo Hui), Sai Fung Town, Sheung Shui Town (also known as Shek Wu Hui) and Tai Po Market.
9. Study period: The survey was carried out in between November and December 2003 that it was not an ideal period of time to identify whether the nest is actively used or not by target bird species especially to Barn Swallow. However, House Swift nests are being utilized through out the whole year, therefore the limitation of study period would not have adverse impact on counting the number of active nest.
10. Nest counting: The surveyors walked through the streets in the assigned study area, watching on every street and every building, and recorded any swift or swallow nest on there. Counting of nest number was assisted by using binocular. The nest counts in this study represent the total counts of active and abandoned nests in 2003.

Results and Discussion

11. Counts of House Swift nest: Totally 456 House Swift (HS) nests were recorded at 5 study sites in 2003 (Table 2). When compared with 447 HS nests recorded in 2002 (Wong, L.C., *pers. commun.*), there was 2% variation in nest counts between 2002 and 2003. Among the 5 study sites, campus of CUHK showed highest HS nest counts at 197 and Sheung Shui Town showed the second highest counts at 139 (Table 2). When compared with the counts in 2002, HS nest counts at CUHK and Fan Leng Town showed negative variation from 3 to 12.5% (Table 2). For the sites of Sheung Shui Town and Tai Po Market, HS nest counts showed positive variation from 8.6 to 11.8% between

year 2002 and 2003 (Table 2).

12. Counts of Barn Swallow nest: Totally 5 BS nests were noted at the 5 study sites in 2003 (Table 2). However, there were 6 BS nests recorded at these sites in 2002 (Wong, L.C., *pers. commun.*).

Table 2. Survey of House Swift (HS) and Barn Swallow (BS) nests at 5 selected sites in 2003.

Survey Sites	Nest counts	
	HS	BS
CUHK	197 ^a	0
Fan Leng Town (Luen Wo Hui)	35 ^b	0
Sai Kung Town	0	5
Sheung Shui Town (Shek Wu Hui)	139 ^c	0
Tai Po Market	85 ^d	0
Total =	456	5

Notes:

a, decreased by 3.0% when compared with 203 House Swift nests recorded in 2002 (Wong, L.C., *pers. commun.*)

b, decreased by 12.5% when compared with 40 House Swift nests recorded in 2002 (Wong, L.C., *pers. commun.*)

c, increased 8.6% when compared with 128 House Swift nests recorded in 2002 (Wong, L.C., *pers. commun.*)

d, increased by 11.8% when compared with 76 House Swift nests recorded in 2002 (Wong, L.C., *pers. commun.*)

13. Limitations: Two limitations should be noted in this study. The first limitation, which was generated by the lack of man power to conduct field survey, was the small number of study sites that only very small portion of urban and sub-urban area of Hong Kong was covered. Depending on the availability of man power, the Research Group would expand the number of study sites as good as possible in future. The second limitation was that the present study was conducted at non-breeding period of HS and BS, but there was no unacceptable impact on counting HS nests. However, at non-breeding season, it would be difficult to distinguish the status of BS nest whether it is active or abandoned. The Research Group guarantees to perform the nest survey at breeding period in next year.

Conclusion

14. In this study, 456 House Swift nests and 5 Barn Swallow nests were recorded at 5 study sites in Hong Kong. Comparing the nest counts at common studied sites, the House Swift nest counts in 2003 showed 2% variation to the counts in 2002. In order to collect baseline information on the trend of nest counts at different sites, also their

distributions, it is suggested to carry out the swift and swallow nest survey annually in a long run, but the number of study sites and covered area should be expanded.

Acknowledgement

We wish to thank the Hong Kong Bird Watching Society supports us to establish Swift and Swallow Research Group.

References

- Carey, G.J., Chalmers, M.L., Diskin, D.A., Kennerley, P.R., Leader, P.J., Leven, M.R., Lewthwaite, R.W., Melville, D.S., Turnbull, M. and Young, L. 2001. *The Avifauna of Hong Kong*. Hong Kong Bird Watching Society, Hong Kong.
- del Hoyo, Josep; Illiott, Andrew; Sargatal, Jordi (Ed.) 1999. *Handbook of the Bird of the World*, Volumn 5. Published by Lynx Edicions pp. 759. ISBN 84-87334-25-3.
- Monroe, B.L. and Sibley, C.G. 1993. *A World Checklist of Birds*. Yale University Press.
- Wong, F.K.O. 1994. Report on a WWF Hong Kong survey of nesting swifts and swallow. *Hong Kong Bird Report 1993*. pp 206-209. The Hong Kong Bird Watching Society, Hong Kong.