

Survey of House Swift and Barn Swallow Nests in Hong Kong

2004 Report



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Survey of House Swift and Barn Swallow Nests in Hong Kong

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SURVEY OF HOUSE SWIFT AND BARN SWALLOW NESTS IN HONG KONG

2004 REPORT

Summary

In 2004, 727 House Swift nests and 54 Barn Swallow nests were recorded at 7 study sites. Comparing the nest counts at common study sites (5 sites) between year 2003 and 2004, the House Swift nest counts showed 9.2% increasing in 2004. House Swift nest counts at Yuen Long Town significantly dropped 62.4% from 724 nests in 1991 to 272 nests in 2004. Similarly, Barn Swallow nest counts at Yuen Long Town significantly dropped 94.4% from 72 nests in 1991 to 4 nests in 2004. We speculate that the dropping of nest counts was mainly caused by the quick modernization of shops as well as urban redevelopment at Yuen Long Town in the past 10 years, resulting in reduction of suitable nesting sites i.e. eaves and beams for both House Swift and Barn Swallow. Destruction of a House Swift nesting site with some 20 nests was also noted in 2004.

Introduction

1. House Swift (*Apus nipalensis*) and Barn Swallow (*Hirundo nisttica*) 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, and 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 the eaves and beams of man-made structure (del Hoyo *et. al.*, 1999).
2. House Swift and Barn Swallow, which are wild birds, are protected by the Law of Hong Kong, Chapter 170 “Wild Animals Protection Ordinance”. 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. In Hong Kong, the breeding period of HS should be started in April/May and probably ended in October/November (Wong, 1994; Anon, 2009). For Barn Swallow, the breeding period may be started as early as February/March in Hong Kong (Carey *et. al.*,

2001) and ended in July/August.

4. In our previous study, totally 456 House Swift nests and 5 Barn Swallow nests were recorded at 5 study sites including campus of the Chinese University of Hong Kong (CUHK), Fan Leng Town (i.e. Luen Wo Hui), Sai Kung Town, Sheung Shui Town (i.e. Shek Wu Hui) and Tai Po Market in 2003 (Anon, 2009). The House Swift nest counts showed only 2% variation when compared with the Wong's study carried out in 2002 (Wong, L.C., *pers. commun.*). However, the nest counts of 2003 showed significant reduction when compared with the counts in 1991 (Wong, 1994).
5. The objective of this study is to collect baseline information of House Swift and Barn Swallow nest count and their nest distribution in Hong Kong.

Methodology

6. Study area: The survey covered 7 selected sites including (i) Cheung Chau, (ii) campus of the Chinese University of Hong Kong (CUHK), (iii) Fan Leng Town (also known as Luen Wo Hui), (iv) Sai Kung Town, (v) Sheung Shui Town (as known as Shek Wu Hui), (vi) Tai Po Market and (vii) Yuen Long Town.
7. Study period: The survey was carried out in the period of May to July 2004 that the time falls within the breeding season of both House Swift and Barn Swallow in Hong Kong.
8. 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 including active and abandoned nest on there. The present of bird droppings and/or observation of birds flying "in and out" the nest are the important indicators to determine whether the nest is active or not. Counting of nest number was assisted by using binocular. The nest counts presented in this study represent the number of active nests in 2004.

Results and Discussion

House Swift

9. Counts of House Swift nest: Totally 727 HS nests were recorded at 7 study sites in 2004 (Table 1). When compared with the 456 HS nests recorded at common sites (i.e. 5

sites) in 2003 (Anon, 2009), the sum of HS nest counts at the same study sites were slightly increased by 42 nests or 9.2% in 2004 (Table 1).

10. Site with highest HS nest counts: Among the 7 study sites, Yuen Long Town showed highest HS nest counts, at 272 nests in 2004 (Table 1). CUHK and Tai Po Market were the sites showed the second and third highest counts of HS nests, at 191 and 119 nests respectively (Table 1).
11. Colony with highest HS nest counts: The University Library of CUHK which is a single building supports the largest colony of HS in Hong Kong, some 170 HS nests have been recorded in 2004.
12. Variation of HS nest counts: Compared with the results in 2003 (Anon, 2009), the nest counts at CUHK and Fan Leng Town showed slightly decreasing (6 nests or -3%) and increasing (6 nests or +17.1%) respectively (Table 1). However, HS nest counts at Sheung Shui Town and Tai Po Market showed considerable decreasing (25 nests or -25.2%) and increasing (34 nests or +40%) respectively (Table 1).
13. Compared with the HS nest counts in 1991, the counts at Yuen Long Town significantly dropped 62.4% from 724 nests in 1991 to 272 nests in 2004 (Table 1). We speculate that the dropping of HS nest counts was mainly caused by the quick modernization of shops as well as urban redevelopment at Yuen Long Town in the last 10 years, resulting in reduction of suitable nesting sites i.e. eaves and beams for House Swifts.

Barn Swallow

14. Counts of Barn Swallow nest: Totally 54 BS nests were recorded at 7 study sites in 2004 (Table 1). When compared with the 5 BS nests recorded at 5 common study sites in 2003 (Anon, 2009), the sum of BS nest counts at the same study sites were significantly increased by 15 nests or 300% in 2004 (Table 1).
15. Compared with the BS nest counts in 1991, the counts at Yuen Long Town significantly dropped 94.4% from 72 nests in 1991 to 4 nests in 2004 (Table 1). Similar to the case of House Swifts, we speculate that the dropping of BS nest counts was mainly caused by reduction of suitable nesting sites i.e. eaves and beams for Barn Swallow.

Destruction of nests

16. Incident of nest site destruction: In October 2003, some 10 - 20 nests of House Swift were noted under immediate threat causing by the renovation works of YWCA Building on Man Fuk Road, Ho Man Tin in Kowloon (Figure 1). In view of conserving those

HS nests, the case was immediately reported to AFCD for taking necessary follow up action. However, it was noted that all these HS nests were removed after completion of works in February 2004 (Figure 2). Afterwards, we realize that the HS colony nesting on YWCA building was the sole and the last HS colony living in Ho Man Tin district.

Table 1. Survey of House Swift (HS) and Barn Swallow (BS) nests in 2004.

Survey Sites	HS nest counts		BS nest counts	
	2003 ^a	2004 ^b	2003 ^a	2004 ^b
Cheung Chau	N/A	0	N/A	30
CUHK	197	191 (↓3.0%)	0	0
Fan Leng Town (Luen Wo Hui)	35	41 (↑17.1%)	0	0
Sai Kung Town	0	0	5	7 (↑40%)
Sheung Shui Town (Shek Wu Hui)	139	104 (↓25.2%)	0	0
Tai Po Market	85	119 (↑40%)	0	13
Yuen Long Town	N/A	272 (↓62.4%) ^c	N/A	4 (↓94.4%) ^d
Sub-total of common sites (excluding Cheung Chau & Yuen Long Town)	456	498 (↑9.2%)	5	20 (↑300%)
Total	456	727	5	54

a, Anon, 2009

b, the present study

c, decreased by 62.4% when compared with 724 HS nests recorded at Yuen Long Town in 1991 (Wong, 1994)

d, decreased by 94.4% when compared with 72 BS nests recorded at Yuen Long Town in 1991 (Wong, 1994)

Conclusion

17. 727 House Swift nests and 54 Barn Swallow nest were recorded at 7 study sites in 2004. Among the common study sites, the House Swift nest counts showed 9.2% increasing in 2004 when compared with the counts in 2003. The nest counts of House Swift at Yuen Long Town significantly dropped 62.4% from 724 nests in 1991 to 272 nests in 2004. Similarly, the nest counts of Barn Swallow at Yuen Long Town significantly dropped

94.4% from 72 nests in 1991 to 4 nests in 2004. We speculate that the dropping of nest counts was mainly caused by the quick modernization of shops as well as urban redevelopment at Yuen Long Town in the past 10 years, resulting in reduction of suitable nesting sites i.e. eaves and beams for both House Swift and Barn Swallow. On the other hand, destruction of a House Swift nesting site with some 20 nests in Kowloon was also noted in 2004.



Figure 1. Renovation works to the YWCA Building at Ho Man Tin (Kowloon) was noted in October 2003.

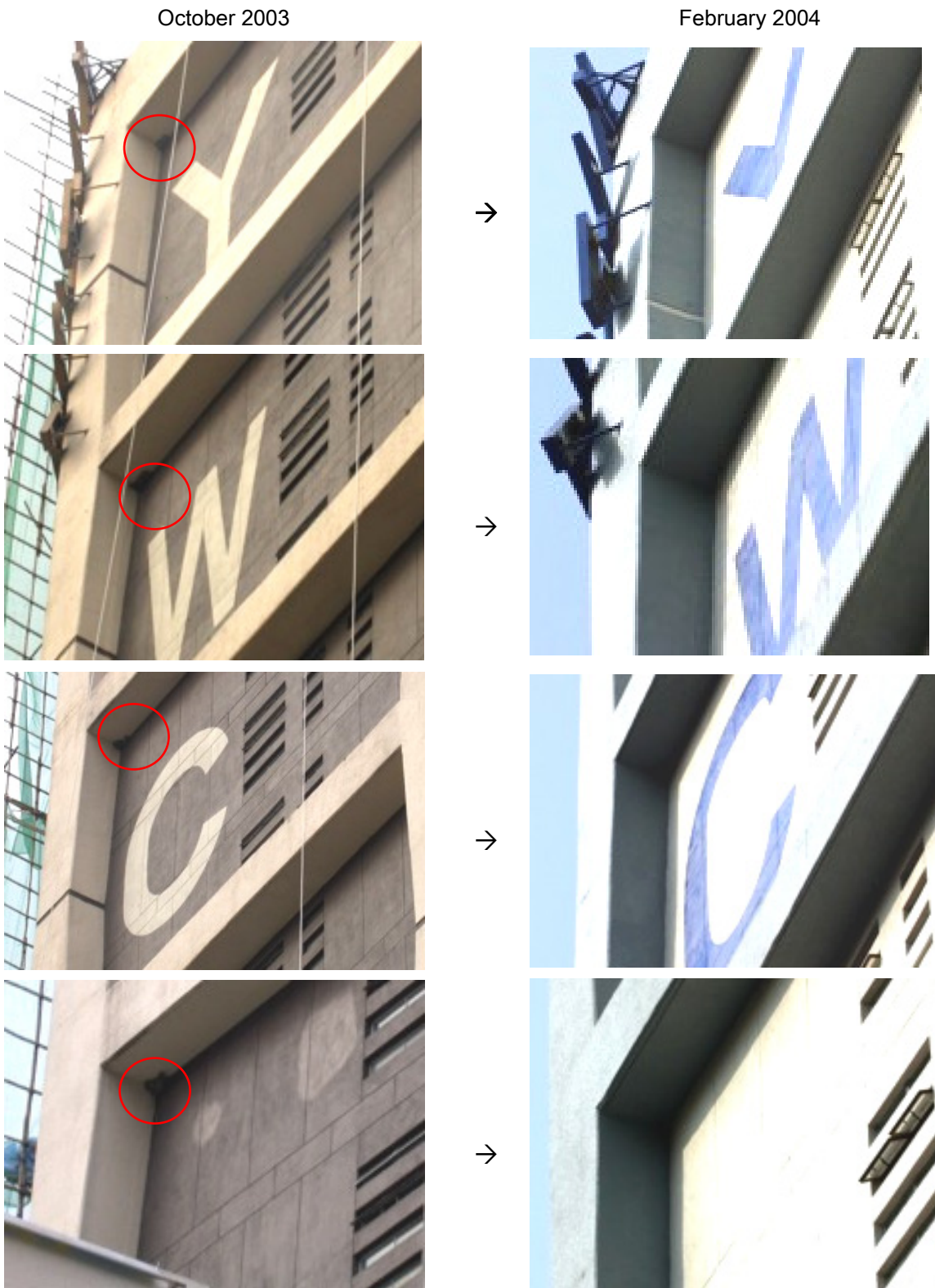


Figure 2. Destruction of HS nests after works. Some 10 - 20 nests of House Swift were noted in October 2003 (left panel). After completion of works in February 2004, all the HS nests were removed (right panel). The red circle indicates the location of HS nests on YWCA Building.

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