

Contract Reference No. AFCD/SQ/23/08/C

**Mai Po Inner Deep Bay Ramsar Site
Waterbird Monitoring Programme
2008 - 09**

**Egretty Counts in Hong Kong,
with particular reference to the Mai Po
Inner Deep Bay Ramsar Site**

Summer 2008 Report



Submitted by

The Hong Kong Bird Watching Society Ltd.
Approved Charitable Institution of a Public Character

to Agriculture, Fisheries and Conservation Department, Hong
Kong SAR Government

October 2008



This report is printed on Recycled Paper

Contract Reference No. AFCD/SQ/23/08/C

Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Waterbird Count Coordinator

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The project is part of the "Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme 2008-09" funded by Agriculture, Fisheries and Conservation Department, Hong Kong SAR Government (AFCD).

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This publication should be cited as

Anon, 2008. Summer 2008 Report: Egretty Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site. Report by Hong Kong Bird Watching Society to the Agriculture, Fisheries and Conservation Department, Hong Kong Special Administrative Region Government.

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Summer 2008 Report: Egretty Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site

Report



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

**EGRETRY COUNTS IN HONG KONG, WITH PARTICULAR REFERENCE TO THE
MAI PO INNER DEEP BAY RAMSAR SITE**

SUMMER 2008 REPORT

Summary

In the 2008 breeding season, a total of 234 nests of three ardeid species in seven egrettries (thereafter colonies) were recorded in the Deep Bay area. Chinese Pond Heron (*Ardeola bacchus*) and Little Egret (*Egretta garzetta*) were the dominant species in the Deep Bay area (58.5% and 41.0% of the total number of nests respectively). The number of nests in the Deep Bay area accounted for 35% of the total in Hong Kong in 2008. These two species were also dominant in Hong Kong (30.9% of the total number of nests in Hong Kong each), while the least abundant of the regularly breeding ardeids was Cattle Egret (8.7%). The total number of nests in Hong Kong in 2008 was 664 nests of five species in 19 colonies. A new colony was established at Ngau Hom Shek, Outer Deep Bay, but abandonment of colonies at Ha Mei San Tsuen, Tai O and Sham Po was noted. Compared with 2007 totals of 275 nests in the Deep Bay area and 822 nests in Hong Kong, there has been a 15% decrease in the Deep Bay area and 19% decrease in Hong Kong as a whole. The rate of decline in nests varies between sites and species, and the cold weather in February 2008 may explain part of the decrease.

1 INTRODUCTION

Breeding activity is an important aspect of population dynamics. Nesting populations of colonial waterbirds are counted as part of long-term monitoring studies in Mediterranean Europe (Tourenq *et al.* 2000), Australia (McKilligan 2001) and the United States (Gawlik *et al.* 1998). In East and Southeast Asia long-term records of breeding populations of colonial nesting ardeids only exist in Hong Kong and Vietnam (Lansdown *et al.* 2000). Reporting of the number of nesting pairs in Hong Kong, organized by the Hong Kong Bird Watching Society, started as early as 1958, but was suspended between 1975 and 1989 (Young and Cha 1995). Recording was far from complete, and on many occasions only breeding species were recorded with no count of nesting pairs made. In addition, not all colonies were counted each year. The recording of numbers of nests in the Deep Bay area, as part of the long-term monitoring of waterbird abundance in the Mai Po Inner Deep Bay Ramsar Site, started in 1998. Both breeding species and the number of nesting pairs, in the Deep Bay area and elsewhere in Hong Kong were recorded. A review of the trends of nests of five ardeid species between 1989 and 2004 in Hong Kong and the influence of weather on the trends was published in 2006 (Wong and Young 2006).

2 METHODS

Active and abandoned colonies which were identified in the past two years (i.e. 2006 and 2007), were surveyed once a month between April and July 2008 (Table 1, Figure 1, Appendix 1). A nesting colony of egrets and herons is defined as an area in which more than a pair of these birds was recorded building nests, laying eggs and raising young. Active nests, determined by the presence of incubating adults or chicks, were counted directly from vantage points or along the edge of the colony with 10x binoculars or naked-eye, depending on the proximity between the surveyor and the colony. The number of nests in colonies surveyed more than once was taken to be the sum of the highest count of the number of nests of each species. Apart from the number of nests, the nesting substratum was also identified. Nearly all nests on Little Green Island were invisible as they were hidden in vegetation or built inside bushes. Landing locations were marked on a sketch of Little Green Island and repeated landings around the same location were considered as one nest.

In addition to existing colonies, potential new nesting sites were also visited; these potential new colonies were located by personal observations and information from birdwatchers, environmentalists and the public. A new nesting site is considered as a new nesting colony, if it is at least 500 m away from an existing colony, because the lowest feeding range of a colony is about 500 m (L. C. Wong unpublished data), thus overlapping of feeding habitats of nesting sites within 500 m is expected to be high and combining breeding birds in locations within 500 m would avoid defining numerous small nesting sites in the same area.

3. RESULTS and DISCUSSION

3.1 Breeding population in the 2008 breeding season

A total of 664 nests were recorded at 19 colonies in Hong Kong (Table 1, Figure 1-22, Appendix 2). Underestimation of the number of nests at A Chau, Yeung Chau, Little Green Island colonies may have occurred as some nests were built in dense vegetation, and were thus invisible. No minor shifting of the active colonies was noted, except at Lam Tsuen, where the colony relocated to a bamboo stand 400 m south of the location used in 2007. Nesting was only seen in one bamboo stand at Tai Tong in the present monitoring, with two other stands abandoned. The Ha Mei San Tsuen, Tai O and Sham Po colonies were abandoned. The breeding birds of the abandoned Sham Po colony appeared to establish a new site at Ngau Hom Shek, located 700 m northeast of the Western Corridor. Visits to Centre Island, Hong Kong Park, San Po Tsui (Lantau) and Heung Yip Road (Aberdeen) were made, but no breeding was noted.

Table 1. The number of nests at surveyed colonies in the Hong Kong in 2008 (*: Deep Bay colonies).

	Great Egret	Little Egret	Black-crowned Night Heron	Chinese Pond Heron	Cattle Egret	Total	%
1. Mai Po Village*		2		55		57	8.6
2. Tam Kon Chau*				23		23	3.5
3. Mai Po Lung Village*		16		21		37	5.6
4. Tung Shing Lane*		24		24	1	49	7.4
5. Pak Nai*		5		3		8	1.2
6. Pak Nai 2*		45		6		51	7.7
7. Ngau Hom Shek*		4		5		9	1.4
8. Ho Sheung Heung	1	25		29	18	73	11.0
9. A Chau	49	9	50	2	25	135	20.3
10. Tai Po Market	10	23	12		3	48	7.2
11. Penfold Park	19	14	8	2		43	6.5
12. Yeung Chau	20	5	13		2	40	6.0
13. Shuen Wan				2		2	0.3
14. Lam Tsuen				3		3	0.5
15. Ma On Kong				4		4	0.6
16. Ha Che				16		16	2.4
17. Tai Tong				10	9	19	2.9
18. Tuen Mun		15				15	2.3
19. Little Green Island	2	18	12			32	4.8
Total	101	205	95	205	58	664	100.0
%	15.2	30.9	14.3	30.9	8.7	100.0	

The highest number of nests was recorded at the A Chau colony (135 nests, 20.0% of total nests in Hong Kong), while the smallest was at the Shuen Wan colony (2 nests, 0.3% of total nests in Hong Kong, Table 1). A Chau contained the highest number of nests of Great Egret (49 nests, 49% of the total number of nests of this species), Black-crowned Night Herons (50 nests, 53% of the total number of nests of this species) and Cattle Egret (*Bubulcus ibis*, 25 nests, 43% the total number of nests of this species) in Hong Kong. With regard to Little Egret (*Egretta garzetta*), the Pak Nai 2 colony (45 nests, 22% of total number of Little Egret nests) is the most important site, while the Mai Po Village colony is the main nesting site of Chinese Pond Heron (55 nests, 27% of the total number of Chinese Pond Heron nests).

In terms of the number of nests, Little Egret and Chinese Pond Heron (each 205 nests, 31% of the total number of nests, Table 1) were the most abundant, while Cattle Egret was the least numerous (58 nests, 9%). Chinese Pond Heron and Little Egret were also the two most widespread species, recorded at 15 and 13 colonies, respectively.

3.2 Colonies in the Deep Bay area

A total of 234 nests of three species was recorded in seven colonies in the Deep Bay area in the 2008 breeding season (Table 2). Tam Kon Chau is the only colony that falls within the boundary of the Mai Po Inner Deep Bay Ramsar Site. No breeding of Great Egrets and Black-crowned Night Herons was noted in Deep Bay in 2008; these two species bred in the Deep Bay area until 2006 and 2003, respectively. The Chinese Pond Heron and the Little Egret were the two dominant breeding ardeids in the Deep Bay area (CPH: 58.5% of the total nests in the Deep Bay area; LE: 41%), while only one nest of the Cattle Egret was recorded (0.5%). The total number of nests in the Deep Bay colonies comprised 35% of the Hong Kong total.

Table 2. The relative importance of Deep Bay colonies to the others in Hong Kong in 2008. Colonies in the Deep Bay area are Mai Po Village, Tam Kon Chau, Mai Po Lung Village, Tung Shing Lane Pak Nai, Pak Nai 2 and Ngau Hom Shek,.

Species	No. of nests in Deep Bay	No. of nests in Hong Kong	Deep Bay nests as % of all nests in Hong Kong
Great Egret		101	
Little Egret	96	205	46.8
Black-crowned Night Heron		95	
Chinese Pond Heron	137	205	66.8
Cattle Egret	1	58	1.7
Total	234	664	35.2

3.3 Nesting habitats

Bamboo was the main nesting substrate of egrets and herons nesting in North and Northwest New Territories (Table 3). Birds at the Tam Kon Chau and Penfold Park colonies built their nests on Banyan trees (*Ficus microcarpa*). The exotic tree *Lagerstroemia speciosa* was used by ardeids for nesting in the Tuen Mun colony. The majority of nests on the A Chau colony were built on Cuban Bast (*Hibiscus tiliaceus*), while unidentified coastal plants were used by birds nesting on Little Green Island. On Yeung Chau, most nests were noted inside climbers, which may provide shelter against bad weather and sun exposure.

Table 3. Plants utilized by ardeids as nesting habitats in 2008

	Bamboo	<i>Ficus microcarpa</i>	Exotic trees	Other plants	Remarks
1. Mai Po Village	+			<i>Celtis sinensis</i>	
2. Tam Kon Chau		+			
3. Mai Po Lung Village	+			Lychee and Longgan trees	
4. Tung Shing Lane	+			Lychee and Longgan trees	<i>Celtis sinensis</i>
5. Pak Nai	+				
6. Pak Nai 2	+				
7. Ngau Hom Shek	+				
8. Ho Sheung Heung	+				
9. A Chau				Mainly on <i>Hibiscus titiaces</i> , <i>Mallotus mamiculatus</i>	
10. Tai Po Market					No detailed plant survey was conducted
11. Penfold Park		+	+		<i>Acacia confusa</i>
12. Yeung Chau					No detailed plant survey was conducted
13. Shuen Wan				<i>Cinnamomum camphora</i>	
14. Lam Tsuen	+				
15. Ma On Kong	+			Lychee and Longgan trees	
16. Ha Che		+			
17. Tai Tong	+				
18. Tuen Mun			+		<i>Lagerstroemia speciosa</i>
19. Little Green Island					No detailed plant survey was conducted

3.4 A comparison of the number of nests with the previous year

After a 20% decrease in the overall number of nests in Hong Kong between 2006 and 2007, a further 19% decrease was recorded between 2007 and 2008 (Table 4). The Deep Bay population showed a 15% decrease in the total number of nests. Great Egret, Little Egret and Chinese Pond Heron showed 17-28% decrease in the total number of nests, while Cattle Egret showed a minor decrease (1 nest, 1.7%). No change in Black-crowned Night Heron was noted. The largest colony, in terms of the total number of nests, was Ho Sheung Heung in 2007, but was A Chau in 2008. No obvious habitat loss was observed in 2008, and the decline in nests in Hong Kong may be related to the persistent cold weather in February 2008 (see below). Such a sustained decline over two years does, however, give some cause for concern.

Table 4. A comparison of nests in 2008 with the previous year

	2007	2008	Percentage change
Great Egret	135	101	-25.2%
Little Egret	248	205	-17.3%
Black-crowned Night Heron	95	95	0.0%
Chinese Pond Heron	285	205	-28.0%
Cattle Egret	59	58	-1.7%
Sub-total in Deep Bay	275	234	-14.9%
Total in Hong Kong	822	664	-19.2%

3.5 Population decline in 2008

Although, the total number of nests decreased in the present breeding season, the decline is site-specific. An increase in nests was recorded in six colonies, while a decrease in nest was recorded in 11 colonies (Table 5). The Ngau Hom Shek colony cannot be compared due to its relocation from the previous Sham Po colony. Intertidal feeding habitats, e.g. shallow coastal waters and mudflats, were the dominant feeding habitat at colonies showing an increase in nests, except at Mai Po Village where fishponds were the dominant feeding habitat. The population increase at Mai Po Village and Penfold Park may be attributed to the relocation of breeding birds from the Mai Po Lung Village and Yeung Chau colonies, respectively. The sharp increase in the number of nests at Pak Nai 2 occurred because this new site was found in late 2007 breeding season, and thus underestimation of nests is likely to occur in 2007.

With the exception of Yeung Chau, the dominant habitats at colonies showing a decrease in nests, were man-made, for example fishponds, farmlands and nullahs (Anon in press). Birds at Ho Sheung Heung, Yeung Chau and Mai Po Lung also commenced breeding later than in previous years (Anon in press), starting in late April this year, compared to early or mid April in previous years. The population decrease appears to be associated with the cold weather in February 2008. The cold spell, which started on 24 January, persisted for 24 days until 16 February¹. The monthly mean temperature of 13.3 degrees was 3.0 degrees below the 30-year average. The cold weather warning was issued from 24 January until 18 February 2008. During the cold spell, a substantial mortality of fish was reported in South China fishponds². No significant drop in the number of ardeids was noted during the winter waterbird counts, suggesting that no significant mortality occurred. Reduced prey availability prior to breeding

¹ The weather of February 2008, The Hong Kong Observatory (<http://www.hko.gov.hk/wxinfo/pastwx/mws200802.htm>)

² China Daily, Hong Kong edition – 31 January 2008

may affect health condition in breeding birds, while reduced prey availability during the breeding season may have resulted in fewer breeding attempts.

Table 5. The number of nests by colonies in 2007 and 2008

	2007	2008	Percentage change (%)
Increase			
Mai Po Village	34	57	67.6
Tai Po Market	31	48	54.8
Penfold Park	35	43	22.9
A Chau	106	135	27.4
Little Green Island	29	32	10.3
Pak Nai 2	16	51	218.8
Decrease			
Tung Shing Lane	78	49	-37.2
Tam Kon Chau	26	23	-11.5
Pak Nai	17	8	-52.9
Ho Sheung Heung	119	73	-38.7
Yeung Chau	91	40	-56.0
Mai Po Lung Village	49	37	-24.5
Tai Tong	39	19	-51.3
Ha Che	20	16	-20.0
Ma On Kong	9	4	-55.6
Tuen Mun	26	15	-42.3
Shuen Wan	3	2	-33.3
Remain unchanged			
Lam Tsuen	3	3	0.0

The assumption of decline in prey availability at fishponds is reinforced by the difference of habitat use pattern of Chinese Pond Heron nesting at the Ho Sheung Heung colony between 2002 and 2008. A total of 41% of departure flights of this species from the colony were seen to land at fishponds at Hoo Hok Wai in 2002, but this total dropped to 23% in 2008, suggesting that prey availability at these fishponds may have decreased. It is not known whether this reflects a long-term change in habitat use or a decline in prey availability in 2008.

The cold weather may have had a significant impact on the numbers of Chinese Pond Heron and Little Egret, which declined by 28% and 17%, respectively. The prey items of these two species is mostly small fish, shrimps and insects (Wong *et al.* 2002 and Young 2004), which may become vulnerable during the cold weather. The availability of these prey items may have been low during the 2008 breeding season, leading to a low number of breeding attempts this year.

The impact on Great Egret is uncertain. Although this species showed a 25% decline in the total number of nests, the decline was contributed by those at the Yeung Chau and A Chau colonies

(Table 6). The decline in nests at Yeung Chau is probably associated with the substantial mortality of marine culture fish in fish farm rafts at the Yim Tin Tsai area³. Great Egret is known to make use of fish farm rafts, for instance they have been seen on the fish farm rafts at Sha Tau Kok frequently, presumably feeding on the cultured fish or fish attracted by the floating rafts (L. C. Wong pers. comm.). The decrease in marine culture fish may result in reduced prey availability. The decline in the nest numbers of Great Egret on A Chau is not well understood, but is probably also related to the decrease in prey availability at nearby fishponds and fish farm rafts at Sha Tau Kok. The diet of Black-crowned Night Herons consists of large fish (Wong *et al.* 2002), which may be more tolerant to cold temperature, thus food availability was stable and there was no decline in the number of nests of this species.

Table 6. The number of nests of Great Egret by colonies in 2007 and 2008

	2007	2008	Percentage change (%)
Ho Sheung Heung		1	
A Chau	59	49	-16.9
Tai Po Market		10	
Penfold Park	9	19	111.1
Yeung Chau	67	20	-70.1
Little Green Island		2	
Total	135	101	-25.2

In regard to the temperature tolerance of prey of Cattle Egrets, i.e. frogs and insects, in particular grasshoppers, they may have been more tolerant of cold weather than the small fish prey of Little Egret and Chinese Pond Heron, so were available for breeding Cattle Egrets, explaining the stable population level in 2008. Also, being largely migratory, adults of this species may have avoided direct impacts of cold weather during February 2008.

3.6 Decline in nests at the A Chau colony

As reported in previous egret count reports, the number of nests of Black-crowned Night Herons at A Chau has decreased since 2002. There were 50 nests in this year and the population appears to be steady. As there is a sizable Black-crowned Night Heron colony at Daya Bay, Shenzhen (E.M.S. Kilburn, pers. comm.), it is suggested that a survey of the site should be undertaken in the upcoming breeding season to investigate whether there could be a movement of breeding birds between these two colonies. Also, a study of the breeding performance, prey analysis and feeding habitat use by nesting Black-crowned Night Herons on A Chau is proposed to better understand the ecology of this species in Hong Kong.

³ SingTao Daily – 15 February 2008

3.7 Protection of colonies against minor construction and maintenance works

A disturbance case at the Ho Heung Sheung colony by maintenance work of a public utility was noted in late April. In order to minimize disturbance to the nesting birds by these works in the future, it is recommended that communication between the Government and public utilities regarding minor works at nesting colonies should be strengthened.

3.8 Training workshop for ardeid nesting colony monitoring

A training workshop was conducted during the breeding seasons between 2006 and 2008. Participants of the training workshop joined the subsequent counts in 2007 and 2008. In view of the success of this training workshop, it is recommended that this open training workshop should be conducted again in the future.

3.9 Monitoring of feeding habitat use pattern of important colonies

An AFCD funded flight line study investigating the feeding habitat use pattern by breeding birds was conducted at four colonies (A Chau, Yeung Chau, Ho Sheung Heung and Mai Po Lung) in the 2008 breeding season by the HKBWS. It is recommended that such studies should be extended to other key colonies, for instance Pak Nai 2, Penfold Park, Tai Po Market and Tung Shing Lane in the upcoming breeding seasons. This information will help us to understand the use of nearby feeding habitats by nesting ardeids, so that protection of these habitats can be enhanced. Also, it is hoped that a generalization model of the minimum area of feeding habitats needed to support a viable nesting population could be worked out.

4. CONCLUSION

In 2008, a total of 644 nests of five species in 19 colonies were recorded in Hong Kong, including 234 nests of three species in seven colonies in the Deep Bay area. Compared with 2007, there was a decrease in 19% and 15% in Hong Kong and Deep Bay, respectively. The decline is site and species-specific and may relate to the prolonged cold weather in February 2008. The decline has been continued for two consecutive years and thus conservation actions should be considered if further decline is noted in 2009. Recommendations on the management of local nesting population are:

- (1) Investigating the nesting population of Black-crowned Night Herons at Daya Bay, Shenzhen as relocation of nesting birds between Daya Bay and Starling Inlet cannot be ruled out. A detailed study of the breeding performance, prey analysis and feeding habitat use by those on A Chau is proposed,

- (2) In order to avoid and minimize disturbance due to minor works, circulation of the latest location of colonies amongst government departments and public utilities is recommended,
- (3) Continuing the egret count training workshop in 2009, and
- (4) Monitoring the feeding habitat use by birds nesting at Pak Nai 2, Penfold Park, Tai Po Market and Tung Shing Lane.

5. ACKNOWLEDGEMENTS

We are grateful to Lo Wai Yan for assisting with the administration work. Gratitude is due to Louise Fung, Josephine Wong, Jose Cheung and Tam Yip Shing for conducting the survey, Mike Kilburn and one referee for reviewing of this report. Gratitude is also expressed to the landowners at the Ho Sheung Heung and Ha Che colonies for allowing us to conduct counts in their properties.

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Figure

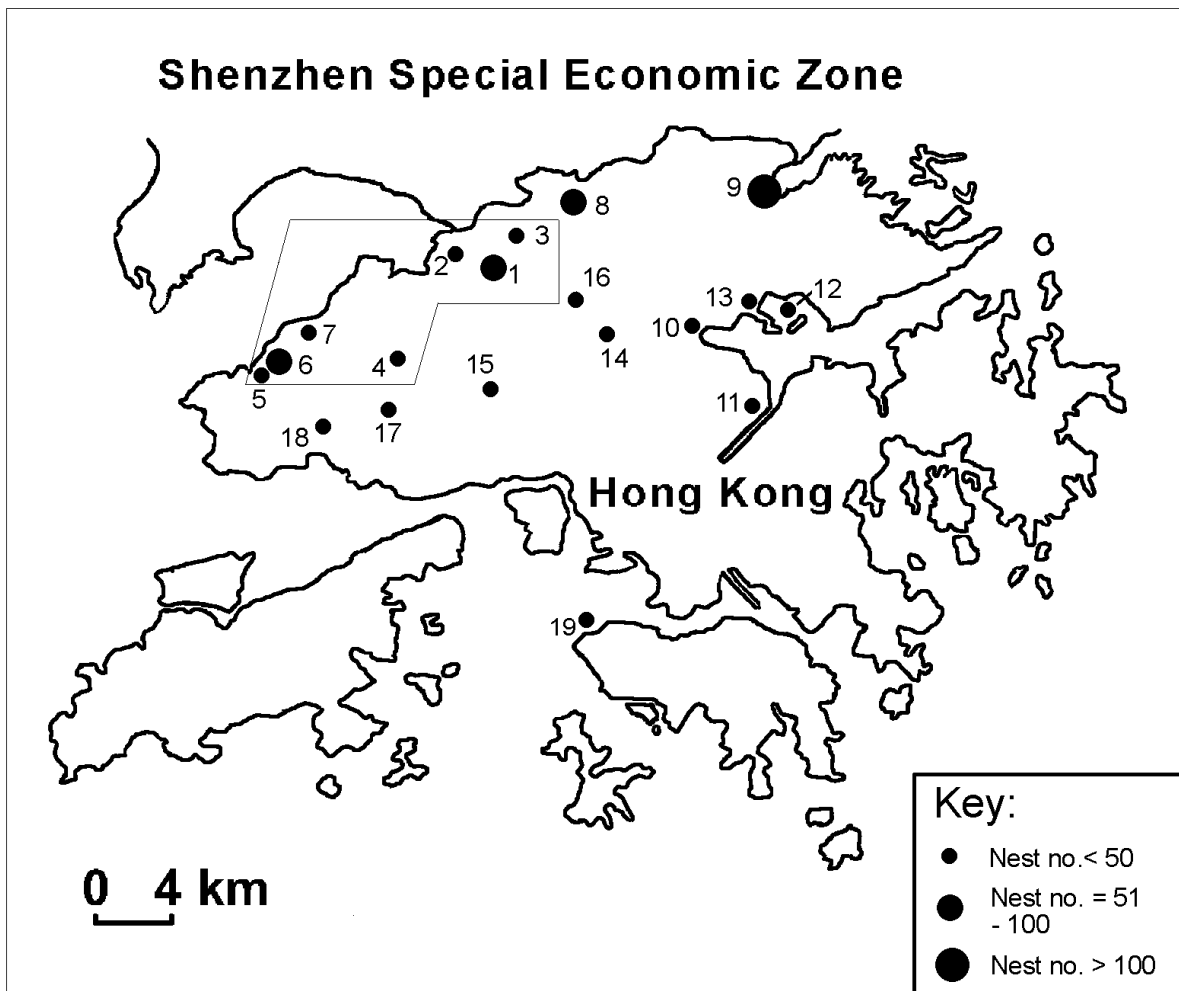


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Figure 1. Locations of colonies in Hong Kong in 2008. Nesting colonies in the Deep Bay area are enclosed. (1: Mai Po Village, 2: Tam Kon Chau, 3: Mai Po Lung Village, 4: Tung Shing Lane, 5: Pak Nai, 6: Pak Nai 2, 7: Ngau Hom Shek, 8: Ho Sheung Heung, 9: A Chau, 10: Tai Po Market, 11: Penfold Park, 12:Yeung Chau, 13: Shuen Wan; 14: Lam Tsuen, 15: Ma On Kong, 16: Ha Che, 17: Tai Tong, 18: Tuen Mun and 19: Little Green Island).



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Appendices



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

Appendix 1. Survey dates of nesting colonies in 2008 (*: Deep Bay colonies).

Colony	Date
Mai Po Village*	26 Apr, 24 May, 21 June, 13 July
Tam Kon Chau*	27 April, 24 May, 21 June, 13 July
Mai Po Lung Village*	26 April, 24 May, 21 June, 13 July
Tung Shing Lane*	27 April, 24 May, 21 June, 13 July
Ha Mei San Tsuen*	27 April, 24 May, 21 June, 13 July
Pak Nai*	25 April, 22 May, 16 June, 25 July
Pak Nai 2*	25 April, 22 May, 16 June, 25 July
Ngau Hom Shek*	25 April, 22 May, 16 June, 25 July
Ho Sheung Heung	26 April, 24 May, 21 June, 26 July
A Chau	21 April, 10 May, 7 June, 19 July
Tai Po Market	22 April, 23 May, 26 June, 22 July
Penfold Park	26 April, 24 May, 21 June, 12 July
Yeung Chau (Plover Cove)	22 April, 30 May, 29 June, 26 July
Shuen Wan	22 April, 30 May, 29 June, 26 July
Lam Tsuen	22 April, 21 May, 25 June, 18 July
Ma On Kong	27 April, 29 May, 21 June, 13 July
Ha Che	26 April, 29 May, 30 June, 13 July
Tai Tong	27 April, 24 May, 21 June, 13 July
Tuen Mun	24 April, 25 May, 23 June, 14 July
Little Green Island	26 April, 23 May, 23 June, 27 July
Tai O	17 May
Heung Yip Road, Aberdeen	3 May, 22 June
Hong Kong Park	1 June
Centre Island	22 April, 30 May, 29 June, 26 July
San Po Tsui, Lantau	17 May

Appendix 2. The number of nests recorded in each count of the 19 colonies in 2008.

Appendix 2.1. Number of nests at Mai Po Village.

	26 Apr	24 May	21 June	13 July	Max
Little Egret		1	2		2
Chinese Pond Heron	20	40	55	36	55
Total	20	41	57	36	57

Appendix 2.2. Number of nests at Tam Kon Chau

	27 April	24 May	21 June	13 July	Max
Chinese Pond Heron	23	16	14	0	23

Appendix 2.3. Number of nests at Mai Po Lung Village

	26 April	24 May	21 June	13 July	Max
Little Egret	7	16	8	3	16
Chinese Pond Heron	13	21	5	11	21
Total	20	37	13	14	37

Appendix 2.4. Number of nests at Tung Shing Lane

	27 April	24 May	21 June	13 July	Max
Little Egret	15	24	12	22	24
Cattle Egret				1	1
Chinese Pond Heron	14	23	24	15	24
Total	29	47	36	38	49

Appendix 2.5. Number of nests at Pak Nai

	25 April	22 May	16 June	25 July	Max
Little Egret		5			5
Chinese Pond Heron	1	2	3		3
Sub-total	1	7	3	0	8

Appendix 2.6. Number of nests at Pak Nai 2

	25 April	22 May	16 June	25 July	Max
Little Egret	45	21	5	2	45
Chinese Pond Heron	6	6	3	2	6
Sub-total	51	27	8	4	51

Appendix 2.7. Number of nests at Ngau Hom Shek

	25 Apr	22 May	16 June	25 July	Max
Little Egret		4	2		4
Chinese Pond Heron	1	2	5	4	5
Total	1	6	7	4	9

Appendix 2.8. Number of nests at Ho Sheung Heung

	26 April	24 May	21 June	26 July	Max
Great Egret	1				1
Little Egret	25	20	15	4	25
Cattle Egret	12	18	4		18
Chinese Pond Heron	9	29	22	5	29
Total	47	67	41	7	73

Appendix 2.9. Number of nests at A Chau

	21 April	10 May	7 June	19 July	Max
Great Egret	45	49	15		49
Little Egret	2	9	5		9
Cattle Egret	25	25	15	5	25
Black-crowned Night Heron	50	25	20	10	50
Chinese Pond Heron		2	1		2
Total	122	110	56	15	135

Appendix 2.10. Number of nests at Tai Po Market (Wan Tau Kok Lane)

	22 April	23 May	26 June	22 July	Max
Great Egret	10	7	1		10
Little Egret	22	23	10	5	23
Black-crowned Night Heron	12	10	2	8	12
Cattle Egret		3			3
Total	44	43	13	13	48

Appendix 2.11. Number of nests on Penfold Park

	26 April	24 May	21 Jun	12 July	Max
Great Egret	19	18	9	10	19
Little Egret	10	14	7	5	14
Black-crowned Night Heron	6	8	4	4	8
Chinese Pond Heron		2	2	2	2
Total	35	42	22	21	43

Appendix 2.12. Number of nests on Yueng Chau, Plover Cove

	22 April	30 May	29 June	26 July	Max
Great Egret	10	20	14	10	20
Little Egret	2	5	2	4	5
Cattle Egret		2			2
Black-crowned Night Heron		10	13		13
Total	12	37	29	14	40

Appendix 2.13. Number of nests at Shuen Wan

	22 April	30 May	29 June	26 July	Max
Chinese Pond Heron	1	2	1	0	2

Appendix 2.14. Number of nests at Lam Tsuen.

	22 April	21 May	25 June	18 July	Max
Chinese Pond Heron	2	3	3	2	3

Appendix 2.15. Number of nests at Ma On Kong

	27 April	29 May	21 June	13 July	Max
Chinese Pond Heron	+	2	4	0	4

Appendix 2.16. Number of nests at Ha Che

	26 April	29 May	30 June	13 July	Max
Chinese Pond Heron	10	16	9	10	16

Appendix 2.17. Number of nests at Tai Tong

	27 April	24 May	21 June	13 July	Max
Cattle Egret	7	7	9		9
Chinese Pond Heron	9	10	4	3	10
Total	16	17	13	3	19

Appendix 2.18. Number of nests at Tuen Mun

	24 Apr	25 May	23 June	14 July	Max
Little Egret	15	10	9	8	15

Appendix 2.19. Number of nests at Little Green Island

	26 April	23 May	23 June	27 July	Max
Great Egret	2				2
Little Egret	18	13	11	4	18
Black-crowned Night Heron	12	11	9	3	12
Total	32	24	20	7	32