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# Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme 2012 - 13

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

# **Summer 2012 Report**



Submitted by
The Hong Kong Bird Watching Society
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to Agriculture, Fisheries and Conservation Department, Hong Kong SAR Government

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## Contract Ref.: AFCD/SQ/50/12 Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site 2012-13

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Summer 2012 Report: Egretry Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site

# Report



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

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

#### **SUMMER 2012 REPORT**

## **Summary**

In the 2012 breeding season (April 2012 to July 2012), a total of 273 nests of two ardeid species (Little Egret (*Egretta garzetta*) and Chinese Pond Heron (*Ardeola bacchus*) were recorded at eight egretries (hereinafter referred to as 'colonies') in the Deep Bay area. The number of nests in the Deep Bay area accounted for 32.0% of the total number of nests in Hong Kong. The Chinese Pond Heron (*Ardeola bacchus*) was the dominant species in the Deep Bay area accounting for 66.9% of the total number of nests. The total number of nests in Hong Kong in 2012 was 852 with five species at 21 colonies. Two new colonies including 'Ngau Hom Sha' and 'San Sang Sun Tsuen' were discovered, while two colonies named 'Pak Lai' and 'Yeung Chau' (in Plover Cove) were abandoned. Little Egret (*Egretta garzetta*, 37.0%) was the dominant species in Hong Kong, while Eastern Cattle Egret (*Bubulcus coromandus*, 3.2%) was the least abundant breeding ardeids. Comparing with the records of 2011 (287 nests in the Deep Bay area and 799 nests in Hong Kong), there was a 5.1% decrease in the Deep Bay area and a 6.2% increase in the number of nests in Hong Kong as a whole. These changes were merely natural fluctuations.

#### 1 INTRODUCTION

Breeding activity is an important aspect of population dynamics. Nesting populations of colonial waterbirds are recorded as part of the 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 monitoring of breeding populations of colonial nesting ardeids has only been conducted in Hong Kong and Vietnam (Lansdown *et al.* 2000). Reporting of the number of nesting pairs of ardeids in Hong Kong had started as early as 1958 by The Hong Kong Bird Watching Society (HKBWS), but was suspended between 1975 and 1989 (Young and Cha 1995). A review of the trends of numbers of nests of five ardeid species in Hong Kong between 1989 and 2004 and the influence of weather on such trends was published in 2006 (Wong and Young 2006). Following the establishment of the Mai Po Inner Deep Bay Ramsar Site, a long-term waterbird monitoring programme has been implemented since 1998 which was coordinated by the HKBWS with support rendered by the Agriculture, Fisheries and

Conservation Department of the Hong Kong SAR Government. Under the Waterbird Monitoring Programme, egretry counts are conducted with a view to recording the population of nesting ardeids in terms of the number of nests in the Deep Bay area and elsewhere in Hong Kong.

### 2 METHODS

Active and abandoned colonies identified in the past three years (2009, 2010 and 2011) were surveyed once a month between April 2012 and July 2012 (Table 1, Figure 1, Appendix 1). A nesting colony of egrets and herons is defined as an area in which more than one pair of these birds are recorded for 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 a colony with the use of 10x binoculars or by the naked-eye, depending on the proximity between the surveyor and the colony. In case nests were hidden in vegetation making the counting difficult, their number would then be estimated. In this connection, landing locations were marked on a sketch and repeated landings around the same location were considered as one nest. This methodology was adopted at the Little Green Island, A Chau, Sha Chau and Yeung Chau colonies where most nests were hidden in vegetation. As each colony was surveyed at least once a month, the highest count of the number of nests for each species was taken as the result of the egretry count. Apart from the number of nests, the nesting substratum was also examined in most of the colonies that were accessible.

In addition to the existing colonies, new nesting sites were also monitored. These new nesting sites were identified by personal observations of the surveyors or through the information provided by birdwatchers, the general public, or the AFCD. A nesting site was considered as a new nesting colony if it located at least 500m away from an existing colony, taking into account the lowest foraging range of a colony was usually about 500m (L.C. Wong unpublished data). Combining breeding birds in locations within 500m could avoid defining too many small nesting sites in the same area.

#### 3 RESULTS and DISCUSSION

### 3.1 Breeding population in the 2012 breeding season

A total of 852 nests were recorded at 21 colonies in Hong Kong (Table 1, Figure 1, Appendix 2). The names of various species of egrets and herons were in accordance with the annotated checklist of birds of Hong Kong (Hong Kong Bird Watching Society 2012). Highlights of the egretry counts in 2012 were as follows:

- The colony at 'Mai Po Village' was the largest in Hong Kong with 154 nests, about 18% of the total number of nests in Hong Kong.
- Two new colonies at 'San Sang Sun Tsuen' and 'Ngau Hom Sha' were discovered in 2012.
- The 'Pak Lai' and 'Yeung Chau (Plover Cove)' colonies were abandoned.
- The 'Ocean Park' colony was discovered by a staff of Ocean Park in July 2011, and nest count was commenced in the same month. During the survey conducted in April 2012, some chicks of Little Egret and Black-crowned Night Heron and their eggshells were observed. No active nest was noted from June 2012 onwards. A reasonable inference was that this breeding flock of egrets and herons had started breeding 1 to 2 months prior to April 2012.
- The total number of nests at the 'Tai Po Market' colony was 124, an increase of 74.7% from the corresponding record of the previous year (i.e. 71 nests).
- The total number of nests at the 'Pak Nai 2' colony was 12, a decrease of 77.4% from the corresponding record of the previous year (i.e. 53 nests). This was possibly due to the felling of bamboos which were the nesting substrate observed during the survey in June 2012.
- The total number of nests at the 'Man Kam To Road' colony decreased from 23 nests in June 2012 to 5 nests in July 2012, which was possibly due to the clearance of nesting substrate between June and July.

Table 1. Number of nests recorded at surveyed colonies in Hong Kong in 2012

		Great Egret	Little Egret	Black- crowned Night Heron	Chinese Pond Heron	Eastern Cattle Egret	Total	%	Rank
Deep F	Bay area								
1.	Mai Po Village		29		125		154	18.1	1
2.	Mai Po Lung Village				12		12	1.4	15
3.	Tung Shing Lane		37		29		66	7.7	5
4.	Ngau Hom Shek				1		1	0.1	19
5.	Ngau Hom Sha		2		4		6	0.7	17

		Great Egret	Little Egret	Black- crowned Night Heron	Chinese Pond Heron	Eastern Cattle Egret	Total	%	Rank
6.	Pak Nai 2		10		2		12	1.4	14
7.	San Sang Sun Tsuen		4		3		7	0.8	16
8.	Sha Kiu Village		15				15	1.8	12
Elsewh	ere in the New Territo	ries							
9.	Ho Sheung Heung		33		4	12	49	5.8	7
10.	Man Kam To Road		6		21		27	3.2	10
11.	Ping Che		+		13		13	1.5	14
12.	A Chau*#	61	4	10		14	89	10.4	4
13.	Tai Po Market	49	36	38		1	124	14.6	2
14.	Lam Tsuen				13		13	1.5	14
15.	Ha Che		6		29		35	4.1	9
16.	Tai Tong				4		4	0.5	18
17.	Tuen Mun		22				22	2.6	11
18.	Penfold Park	29	10	15	3		57	6.7	6
19.	Sha Chau*#	2	69	22			93	10.9	3
Hong K	Kong Island								
20.	Little Green Island*		25	14			39	4.6	8
21.	Tai Shue Wan, Ocean Park		7	7			14	1.6	13
Total		141	315	106	263	27	852	100.0	
%		16.5	37.0	12.4	30.9	3.2	100.0		ı

Note: \* Nests at A Chau, Sha Chau and Little Green Island were built in dense vegetation and often out of sight. The number of nests might have been underestimated.

The highest number of nests was recorded at the 'Mai Po Village' colony (154 nests, 18.1% of total nests in Hong Kong, Table 1) which contained the highest number of Chinese Pond Herons (*Ardeola bacchus*, 125 nests, 47.5% of the total number of nests of this species), whereas the lowest was recorded at the 'Ngau Hom Shek' colony (1 nest, 0.1% of total nests in Hong Kong). The second largest colony was the 'Tai Po Market' colony (124 nests, 14.6% of total nests in Hong Kong, Table 1) which supported the highest number of nests of Black-crowned Night Herons (*Nycticorax nycticorax*, 38 nests, 35.8% of the total number of nests of this species). The third largest colony was 'Sha Chau' which supported the highest number of nests of Little Egrets (*Egretta garzetta*, 69 nests, 21.9% of total number of Little Egret nests). The 'A Chau' colony supported the highest number of nests of Great Egrets (*Ardea alba*, 61 nests, 43.3% of the total number of nests of this species) and Eastern Cattle Egrets (*Bubulcus coromandus*, 14 nests, 51.9% of the total number of nests of this species).

<sup>\*</sup> Site of Special Scientific Interest (SSSI)

<sup>&#</sup>x27;+' = present but no active nest was found

In terms of the number of nests, the Little Egret and Chinese Pond Heron (Little Egret: 315 nests, 37.0% of the total number of nests; Chinese Pond Heron: 263 nests, 30.9% of the total number of nests; Table 1) were the two most abundant and widespread species, while the Eastern Cattle Egret was the least numerous (27 nests, 3.2%). The Little Egret was recorded in 16 colonies, while the Chinese Pond Heron was recorded in 14 colonies.

## 3.2 Colonies in the Deep Bay area

A total of 273 nests were recorded at 8 colonies in the Deep Bay area in the 2012 breeding season (Table 2), and they comprised 32.0% of the total number of nests in Hong Kong. Only two ardeid species, the Little Egret and the Chinese Pond Heron, nested in the Deep Bay area. The Little Egret was the dominant species accounting for 66.9% of the total number of nests in the Deep Bay area (Table 2). Two new colonies of the Little Egret and Chinese Pond Heron were found at 'San Sang Sun Tsuen' and 'Ngau Hom Sha' in this breeding season (Table 1).

A summary of the number of nests of five ardeid species recorded in the Deep Bay area in the last decade (i.e. from 2003 to 2012) is shown in Table 3. There were a small number of nests of Great Egrets recorded in the Deep Bay area until 2006. The last pair of Eastern Cattle Egret breeding in the Deep Bay area was observed and recorded at 'Tung Shing Lane' in 2009. The last record of Black-crowned Night Heron breeding in the Deep Bay area was reported in 2002 (Anon 2012). Except the high count in 2005, 2006 and 2009, the number of nests for Chinese Pond Heron fluctuated between 150 and 200. Although the number of nests of the Little Egret reached the highest in 2006 and lowest in 2003 and 2010, it exhibited no obvious trend during the 10-year period.

Table 2. Relative importance of the Deep Bay colonies comparing to the other colonies in Hong Kong in 2012. (Colonies in the Deep Bay area include Mai Po Village, Mai Po Lung Village, Tung Shing Lane, Ngau Hom Sha, Pak Nai 2, Sha Kiu Village, San Sang Sun Tsuen 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		141	
Little Egret	97	315	30.8
Black-crowned Night Heron		106	
Chinese Pond Heron	176	263	66.9
Eastern Cattle Egret		27	
Total	273	852	32.0

Table 3. Number of nests recorded at the Deep Bay area from 2003 to 2012

	Great Egrets	Little Egret	Black-crowned Night Heron	Chinese Pond Heron	Eastern Cattle Egret	Total no. of nests in Deep Bay
2003	2	85		119	3	209
2004		100		133	9	242
2005		126		203	4	333
2006	3	165		235	3	406
2007		119		152	4	275
2008		96		137	1	234
2009		95		212	1	308
2010		85		163		248
2011		133		154		287
2012		97		176		273

### 3.3 Comparison of the number of nests with records of the previous year

The increase in the nesting population in the 2012 breeding season was attributable to the discovery of two new colonies at 'Ngau Hom Sha' and 'San Sang Sun Tsuen', which contributed 13 nests to the count result. In addition, there were increases in the number of nests at 'Mai Po Village' (6 nest), 'Mai Po Lung Village' (7 nests), 'Tung Shing Lane' (5 nests), 'Man Kam To Road' (4 nests), 'Ping Che' (6 nests), 'A Chau' (2 nests), 'Tai Po Market' (53 nests), 'Lam Tsuen' (2 nests), 'Ha Che' (7 nests), 'Tuen Mun' (3 nests), 'Penfold Park' (15 nests), 'Sha Chau' (29 nests) and 'Ocean Park' (11 nests) that further augmented the total count by 150 nests.

However, the number of nests in some colonies decreased in large extent. They included 'Pak Nai 2' (41 nests), 'Ngau Hom Shek' (1 nest), 'Ho Sheung Heung' (1 nest), 'Tai Tong' (5 nests), 'Little Green Island' (6 nests) and 'Sha Kiu Village' (1 nest). In addition, the 'Pak Nai' (1 nest) and 'Yeung Chau (Plover Cove)' (53 nests) colonies were abandoned. These resulted in a decline of about 109 nests.

The number of nests recorded at the 'Tai Po market' colony in 2012 had an increase of 74.7% from that of the previous year. The colony generally expanded to the eastern side along Kwong Fuk Road. The 'Yeung Chau (Plover Cove)' colony was abandoned although there was no apparent disturbance in the surrounding vegetation. Presumably, some breeding birds had shifted from the 'Yeung Chau (Plover Cove)' colony to the 'Tai Po Market' colony.

Vegetation at the 'Man Kam To' and 'Pak Lai 2' colonies was cleared during June and July and during May and June respectively. This included the removal of some bamboos which formed the main part of the egretry, and the pruning of some mature trees growing within the area.

Comparing to the number of nests recorded in 2011, more nests of Great Egrets, Black-crowned Night Herons and Chinese Pond Herons were found in 2012, while fewer nests of Eastern Cattle Egrets and Little Egrets were noted.

The reason for the change in population for other ardeid species was not known as no significant change in the condition of feeding habitats was observed during the egretry survey. The change in population might have been caused by unidentified factors such as prey availability and weather.

Table 4. Comparison of the number of nests recorded in 2012 with records of the preceding breeding season

	2011	2012	Percentage change (%)
Great Egret	124	141	13.7%
Little Egret	345	315	-8.7%
Black-crowned Night Heron	69	106	53.6%
Chinese Pond Heron	229	263	12.9%
Eastern Cattle Egret	32	27	-15.6%
Sub-total in Deep Bay	291	273	-6.2%
Total in Hong Kong	803	852	6.1%

#### 3.4 Nesting substrates

Bamboo was the main nesting substrate of egrets and herons nesting in North and Northwest New Territories. It was used in 13 out of the 21 colonies (Table 5). Birds at the 'Penfold Park' colony built their nests on Banyan trees (*Ficus microcarpa*). The exotic tree *Acacia auriculiformis* was used by ardeids for nesting at the 'Tuen Mun' colony. Most nests at the 'Mai Po Village' colony were found on Chinese Hackberry (*Celtis sinensis*). The majority of nests at the 'A Chau' colony were built on Cuban Bast (*Hibiscus tiliaceus*). In addition, palm species, *Caryota ochlandra*, was used by nesting birds at the 'Ocean Park' colony.

Table 5. Plant species utilized by ardeids as nesting substrates in 2012

		Bamboo	Tree species	Remarks
1.	Mai Po Village	+	Celtis sinensis	
2.	Mai Po Lung Village	+	(i) Litchi chinensis (ii) Dimocarpus longan (iii) Ficus benjamina	
3.	Tung Shing Lane	+	<ul><li>(i) Litchi chinensis</li><li>(ii) Dimocarpus longan</li><li>(ii) Celtis sinensis</li></ul>	
4.	Ngau Hom Sha	+		
5.	Ngau Hom Shek	+		
6.	Pak Nai 2	+		
7.	San Sang Sun Tsuen	+		
8.	Shau Kiu Village	+		No plant survey was conducted
9.	Ho Sheung Heung	+		
10.	Man Kam To Road	+		
11.	Ping Che	+		
12.	A Chau		(i) Hibiscus tiliaceus (ii) Mallotus paniculatus	
13.	Tai Po Market		(i) Ficus variegata (ii) Macaranga tanarius	
14.	Lam Tsuen	+		
15.	Ha Che		Celtis sinensis	
16.	Tai Tong	+		
17.	Tuen Mun		Acacia auriculiformis <sup>1</sup>	
18.	Penfold Park		Ficus microcarpa	
19.	Sha Chau			No plant survey was conducted
20.	Little Green Island			No plant survey was conducted
21.	Tai Shue Wan, Ocean Park		Caryota ochlandra	

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<sup>1:</sup> Previously misidentified as *Lagerstroemia speciosa* before the year 2010.

### 3.5 Training workshop for ardeid nesting colony monitoring

A training workshop was conducted during the breeding season on 28 April 2012 (Figure 4.1-4.2). A total of 17 participants joined the training workshop with subsequent practical sessions on counting nests at 'Man Kam To Road' and 'Mai Po Village' egretries. Attendees were invited to join the counting at various colonies on 5 May 2012, 29 May 2012 and 9 June 2012, and one of these attendees has committed to join the long-term surveys. It is recommended that similar workshops be conducted again in the future.

### 4. CONCLUSION

In 2012, a total of 852 nests of five ardeid species at 21 colonies were recorded in Hong Kong, including 273 nests of two species at 8 colonies in the Deep Bay area. Comparing with the results of the 2011 breeding season, there was a 5.1% increase and a 6.2% decrease in the number of nests in the Hong Kong territory and the Deep Bay area respectively. Two new colonies in the Deep Bay area were discovered, while two colonies, which were previously recorded, were abandoned in 2012. It was concluded that the change in the number of nests was simply a natural fluctuation.

#### 5. ACKNOWLEDGEMENTS

We would like to thank Miss Rachel Poon, Mr. Fabian Pedrazzini and Mr. Stanley Chan who assisted in the survey. Gratitude is also expressed to the landowners at the 'Ha Che' colony and to the staff of Ocean Park for allowing us to conduct the counts.

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# **Figures**



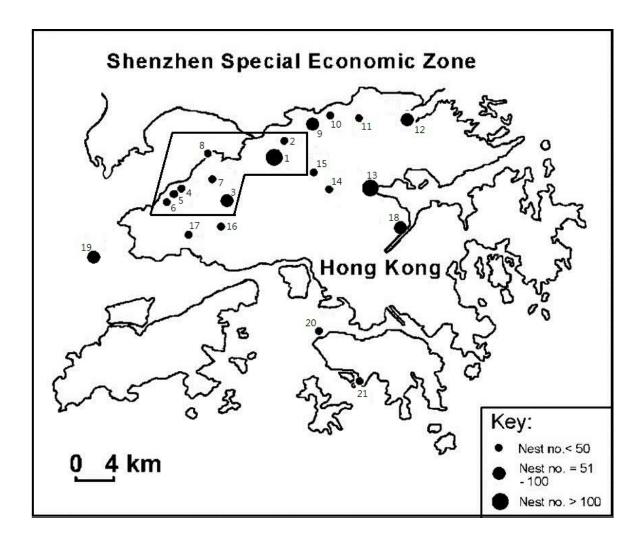
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**Figure 1. Location of colonies in Hong Kong in 2012** (Nesting colonies in the Deep Bay area are attached.)

1	Mai Po Village	2	Mai Po Lung Village	3	Tung Shing Lane
4	Ngau Hom Shek	5	Ngau Hom Sha	6	Pak Nai 2
7	San Sang Sun Tsuen	8	Sha Kiu Village	9	Ho Sheung Heung
10	Man Kam To Road	11	Ping Che	12	A Chau
13	Tai Po Market	14	Lam Tsuen	15	Ha Che
16	Tai Tong	17	Tuen Mun	18	Penfold Park
19	Sha Chau	20	Little Green Island	21	Ocean Park



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# **Appendices**



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Appendix 1. Survey date(s) of nesting colonies and additional sites in 2012

Colo	Colony Date				
Acti	ive colonies				
1.	Mai Po Village*	28 April	19 May	9 June	7 July
2.	Mai Po Lung Village*	14 April	19 May	9 June	7 July
3.	Tung Shing Lane *	14 April	19 May	9 June	7 July
4.	Ngau Hom Shek*	14 April	19 May	9 June	7 July
5.	Ngau Hom Sha*	14 April	19 May	9 June	7 July
6.	Pak Nai 2*	14 April	19 May	9 June	7 July
7.	San Sang Sun Tsuen*				17 July
8.	Sha Kiu Village*	14 April	19 May	9 June	7 July
9.	Ho Sheung Heung	14 April	19 May	9 June	7 July
10.	Man Kam To Road	28 April	31 May	9 June	14 July
11.	Ping Che	21 April	26 May	9 June	14 July
12.	A Chau	21 April	19 May	9 June	14 July
13.	Tai Po Market	21 April	26 May	9 June	14 July
14.	Lam Tsuen	21 April	26 May	9 June	14 July
15.	Ha Che	21 April	26 May	9 June	14 July
16.	Tai Tong	14 April	19 May	9 June	7 July
17.	Tuen Mun	22 April	29 May	18 June	14 July
18.	Penfold Park	21 April	26 May	29 June	14 July
19.	Sha Chau	22 April	21 May	18 June	14 July
20.	Little Green Island	26 April	27 May	28 June	12 July
21.	Ocean Park	21 April	1 May	16 June	5 July
Add	litional sites				
22.	Tam Kon Chau*		19 May	9 June	7 July
23.	Shuen Wan			9 June	
24.	Yeung Chau (Plover Cove)	21 April	26 May	9 June	14 July
25.	Centre Island	21 April			
26.	Tai O		16 May		
27.	Pak Lai*	14 April	19 May	9 June	7 July
* with	nin the Deep Bay area				

Appendix 2. Number of nests recorded in each count at the 21 colonies in 2012

<b>Appendix</b>	2.1	Mai Po	Village
Appendix	4.1.	Iviai i U	v mage

	28 Apr	19 May	9 June	7 July	Max
Little Egret	20	29	12	6	29
Chinese Pond Heron	56	124	125	56	125
Total	76	153	137	62	154

## Appendix 2.2. Mai Po Lung Village

	14 Apr	19 May	9 June	7 July	Max
Chinese Pond Heron	7	11	12	3	12
Total	7	11	12	3	12

# Appendix 2.3. Tung Shing Lane

	14 Apr	19 May	9 June	7 July	Max
Little Egret	20	37	29	7	37
Chinese Pond Heron	12	29	26	11	29
Total	32	66	55	18	66

# Appendix 2.4. Ngau Hom Shek

	14 Apr	19 May	9 June	7 July	Max
Chinese Pond Heron	1	1	1	1	1
Total	1	1	1	1	1

# Appendix 2.5. Ngau Hom Sha

	14 Apr	19 May	9 June	7 July	Max
Little Egret	2	1	2	0	2
Chinese Pond Heron	1	4	2	1	4
Total	3	5	4	1	6

# Appendix 2.6. Pak Nai 2

	14 Apr	19 May	9 June	7 July	Max
Little Egret	9	10	7	0	10
Chinese Pond Heron	0	0	2	1	2
Total	9	10	9	1	12

# Appendix 2.7. San Sang Sun Tsuen

	17 July	Max
Little Egret	4	4
Chinese Pond Heron	3	3
Total	7	7

	14 April	19 May	9 June	7 July	Max
Little Egret	13	15	9	0	15
Total	13	15	9	0	15
Appendix 2.9. Ho Sheung Heu	ıng				
rapponum 2171 110 omeumg 1100	14 Apr	19 May	9 June	7 July	Max
Little Egret	14	33	25	4	33
Chinese Pond Heron	1	4	3	0	4
Eastern Cattle Egret	2	12	4	1	12
Total	17	49	32	5	49
Appendix 2.10. Man Kam To	Road				
	28 Apr	31 May	9 June	14 July	Max
Little Egret	1	6	2	1	6
Chinese Pond Heron	13	19	21	4	21
Total	14	25	23	5	27
Appendix 2.11. Ping Che (+:	present)				
	21 Apr	26 May	9 June	14 July	Max
Chinese Pond Heron	3	13	10	8	13
Little Egret	0	+	0	0	+
Total	3	13	10	8	13
Appendix 2.12. A Chau					
			-		
<u> </u>	21 Apr	19 May	9 June	14 July	Max
Great Egret	21 Apr <b>61</b>	19 May 53	9 June 26	14 July 7	61
Great Egret Little Egret		-			

Appendix 2.13.	Tai Po Market	(Wan Tau	Kok Lane)
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Eastern Cattle Egret

Total

	21 Apr	26 May	9 June	14 July	Max
Great Egret	19	46	24*	0	49*
Little Egret	36	20	18	5	36
Black-crowned Night Heron	26	36	22*	8	38
Eastern Cattle Egret	1	0	0	0	1
Total	82	102	64	13	124

<sup>\*</sup>Additional nests at different location within the same nesting colony were found on 9 June 2012 (3 Great Egrets & 2 Black-crowned Night Herons)

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	21 Apr	26 May	9 June	14 July	Max
Chinese Pond Heron	12	13	12	5	13
Total	12	13	12	5	13

## Appendix 2.15. Ha Che

	21 Apr	26 May	9 June	14 July	Max	
Little Egret	0	6	5	3	6	
Chinese Pond Heron	21	29	29	8	29	
Total	21	35	34	11	35	

# Appendix 2.16. Tai Tong

	14 Apr	21 May	9 June	7 July	Max
Chinese Pond Heron	1	4	2	0	4
Total	1	4	2	0	4

# Appendix 2.17. Tuen Mun

	22 Apr	29 May	18 June	14 July	Max
Little Egret	16	22	19	13	22
Total	16	22	19	13	22

## Appendix 2.18. Penfold Park

	21 Apr	26 May	29 June	14 July	Max
Great Egret	29	19	2	6	29
Little Egret	10	10	5	5	10
Black-crowned Night Heron	15	0	5	2	15
Chinese Pond Heron	1	0	0	3	3
Total	55	29	12	16	57

## Appendix 2.19. Sha Chau

	22 April	21 May	18 June	14 July	Max
Great Egret	0	2	1	0	2
Little Egret	65	69	13	4	69
Black-crowned Night Heron	22	18	1	1	22
Total	87	89	15	5	93

<sup>\*</sup> boat trip was cancelled due to thunderstorm warning

### Appendix 2.20. Little Green Island

	26 Apr	27 May	28 June	12 July	Max
Little Egret	25	17	11	0	25
Black-crowned Night Heron	14	3	4	0	14
Total	39	20	15	0	39

Appendix 2.21. Tai Shue Wan, Ocean Park, Aberdeen

	21 April	1 May	16 June	5 July	Max
Little Egret	3	7	0	0	7
Black-crowned Night Heron	0	7	0	0	7
Total	3	14	0	0	14