

**Contract Ref.: AFCD/SQ/40/16/C**

**Mai Po Inner Deep Bay Ramsar Site  
Waterbird Monitoring Programme  
2016 - 17**

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

**Summer 2017 Report**



**Submitted by  
The Hong Kong Bird Watching Society**

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

**November 2017**



*Printed on Recycled Paper*

**Contract Ref.: AFCD/SQ/40/16/C**  
**Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site 2016-17**

---

**Waterbird Count Coordinator**

YU Yat Tung  
The Hong Kong Bird Watching Society

**Report Writing and Data Contributors**

Captain L.C. WONG, TAM Yip Shing, Josephine Y.P. WONG,  
Luke, C.K. WOO, Louis, C. L. FUNG, CHEUNG MOK, Jose Alberto and Ching Yuen HO  
Egret Research Group,  
The Hong Kong Bird Watching Society

**Copyright**

The project is part of the  
“Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme 2016-17” of  
Agriculture, Fisheries and Conservation Department,  
Hong Kong SAR Government.

All the data shall be the property of the Government with full copyright

**Report is available for public information at**

Agriculture, Fisheries and Conservation Department  
Hong Kong SAR Government  
7/F, Cheung Sha Wan Government Offices  
303 Cheung Sha Wan Road  
Kowloon, Hong Kong

Email: [mailbox@afcd.gov.hk](mailto:mailbox@afcd.gov.hk) Website: [www.afcd.gov.hk](http://www.afcd.gov.hk)

and

The Hong Kong Bird Watching Society  
7C, V Ga Building, 532 Castle Peak Road  
Lai Chi Kwok, Kowloon, Hong Kong  
E-mail: [hkbws@hkbws.org.hk](mailto:hkbws@hkbws.org.hk) Website: [www.hkbws.org.hk](http://www.hkbws.org.hk)

**This publication should be cited as**

Anon, 2017. Summer 2017 Report: Egretty Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site. Report by The Hong Kong Bird Watching Society to the Agriculture, Fisheries and Conservation Department, Hong Kong Special Administrative Region Government.

## TABLE OF CONTENTS

### REPORT

Summary .....	4
1. Introduction.....	4
2. Methods .....	4
3. Results and Discussion .....	5
3.1 Breeding population in the 2017 breeding season.....	5
3.2 Colonies in the Deep Bay area.....	8
3.3 A comparison of the number of nests with records of the previous year....	9
3.4 Nesting substrates.....	10
3.5 Training workshop for ardeid nesting colony monitoring .....	12
3.6 Tree pruning at Tai Po Market colony .....	12
4. Conclusion.....	13
5. Acknowledgements.....	13
6. References .....	13

### TABLES

Table 1. The number of nests at surveyed colonies in Hong Kong in 2017 .....	7
Table 2. The relative importance of the Deep Bay colonies compared to the other colonies in Hong Kong in 2017 .....	8
Table 3. Number of nests recorded at the Deep Bay area from 2008 to 2017.....	9
Table 4. A comparison of the number of nests of ardeids in Hong Kong in 2016 and 2017.....	9
Table 5. A comparison on the number of nests of individual colony between 2016 and 2017 .....	10
Table 6. Plant species utilized by ardeids as nesting substrates in 2017 .....	11

### FIGURES

Figure 1. Location of nesting colonies (egretries) in Hong Kong in 2017 .....	15
Figure 2. Total number of ardeid nests in Hong Kong with reference to the number of nests in the Deep Bay area from 2008 to 2017.....	16

### APPENDICES

Appendix 1. Survey date(s) of nesting colonies and additional sites in 2017 .....	17
Appendix 2. The number of nests recorded in each monthly count of the 24 colonies in 2017 .....	18

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

## SUMMER 2017 REPORT

### Summary

In the 2017 breeding season (April to July), a total of 537 nests of four ardeid species, i.e. the Great Egret (*Ardea alba*), Little Egret (*Egretta garzetta*), Black-crowned Night Heron (*Nycticorax nycticorax*) and Chinese Pond Heron (*Ardeola bacchus*), were recorded in ten egrettries (hereinafter referred to as 'colonies') in the Deep Bay area. The number of nests in this area accounted for 43.1% of the total number of nests in Hong Kong. The Chinese Pond Heron was the dominant species in the Deep Bay area, accounting for 55.7% of the total number of nests in this area. A total of 1,245 nests of five species of ardeids (i.e. the above four species and Eastern Cattle Egret (*Bubulcus coromandus*)) in 24 colonies were recorded in Hong Kong in 2017. The Little Egret (35.5%) was the dominant species in Hong Kong, while the Eastern Cattle Egret (2.7%) was the least abundant one. Compared with the 2016 records (620 nests in the Deep Bay area and 1,248 nests in Hong Kong), there was a 13.4% and 0.2% decrease in the number of nests recorded in the Deep Bay area and Hong Kong, respectively. The decreases may be due to the natural fluctuation of number of breeding ardeids as 2015 and 2016 had the peak numbers of nests recorded in recent years. The number of nests recorded in 2017 remained relatively high. New egrettries were recorded at Mai Po mangrove and The Chinese University of Hong Kong while the egrettry at Mai Po Marshes Nature Reserve was abandoned in 2017.

## 1 INTRODUCTION

Following the establishment of the Mai Po Inner Deep Bay Ramsar Site, a long-term waterbird monitoring programme has been carrying out since 1998. The programme is coordinated by the Hong Kong Bird Watching Society (HKBWS) and is currently a commissioned study of the Agriculture, Fisheries and Conservation Department (AFCD) of the Hong Kong SAR Government. Under the Waterbird Monitoring Programme, egrettry counts are conducted with an aim to record the population of tree-nesting ardeids, in terms of the number of nests in the Deep Bay area and elsewhere in Hong Kong. The present report documents the results of the egrettry count between April and July 2017. A review of the nesting ardeids in Hong Kong between the 1950s and 1990s can be found in Young and Cha (1995), while the trends and their relationship with weather was documented in Wong and Young (2006).

## 2 METHODS

Active and abandoned colonies identified in the past three years (2014 - 2016) were surveyed once per month between April and July 2017 (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 building nests, laying eggs and raising young. Active nests, determined by the presence of incubating adults or chicks, were counted directly from vantage points along the edge of a colony with the use of 10x binoculars or by the naked eye, depending on the distance between the surveyor and the colony. In case nests were hidden in vegetation which made the counting difficult, their numbers were estimated. In these cases, landing locations were marked on a sketch and repeated landings around the same location were considered as a nest. This methodology was adopted for the Little Green Island, Sha Chau, A Chau, Mai Po mangrove and Ma Wan colonies, where most of the nests were hidden in vegetation. Estimation of nests based on the position of newly fledged chicks was also used during the latter part of breeding season. As the new colony at the Mai Po mangrove is very remote, it was counted from a vantage point which was 2.5 km away from the colony. The highest count of the number of nests of a particular species recorded during the survey period was taken as the number of nests of that species of the egretty. In addition to the number of nests, the nesting substratum was examined in most of the colonies that were accessible. Nomenclature of egrets and herons follows the annotated checklist of birds of Hong Kong (Hong Kong Bird Watching Society, 2017).

Both existing and new nesting colonies, if any, were monitored. New nesting colonies were identified by personal observations of the surveyors or through information provided by birdwatchers, the general public or the AFCD. A nesting site would be considered as a new nesting colony if it was at least 500 m away from an existing colony, since the lowest foraging range of a colony is usually about 500 m (L. C. Wong, unpublished data). Combining breeding birds in locations within 500 m could avoid having to define too many small nesting sites in the same area.

### **3 RESULTS and DISCUSSION**

#### **3.1 Breeding population in the 2017 breeding season**

A total of 1,245 nests were recorded in 24 colonies in Hong Kong (Table 1, Figure 1, Appendix 2). All colonies active in 2016 were found to be active in 2017, except the one at Mai Po Marshes Nature Reserve. New colonies were found at the Mai Po mangrove and The Chinese University of Hong Kong. Though the number of nest recorded at San Sang San Tsuen reduced to only 1 nest, it was still regarded as a colony for better monitoring of this colony which was discovered in 2012. Highlights of the present breeding season were as follows:

- The colony at Mai Po Village was the largest in Hong Kong, with 239 nests, about 19.2% of the total number of nests in Hong Kong.
- Two new colonies were reported in May. The Chinese University of Hong Kong (CUHK) was a small colony of Black-crowned Night Herons in the

campus, while the one at the Mai Po mangrove was a mixed species colony. It was situated on the seaward side of the mangrove within the Frontier Closed Area. The CUHK colony was easily accessible, but the Mai Po mangrove colony was very remote without any access. Therefore, the Mai Po mangrove colony was counted from a vantage point (coordinates: 22.486104, 114.009754) at Tsim Bei Tsui, a distant but disturbance-free approach. However, this method affected the counting accuracy.

- A possible colony of Chinese Pond Heron at Ting Kok was reported in May. Characterized breeding calls of this species were heard during the monthly count in May, but no nest was found. Subsequent monthly counts revealed no sign of breeding. As no active nest was seen, this site was not considered as a colony. Nevertheless, it will be visited next year.
- The Mai Po Marshes Nature Reserve colony was abandoned this year. No sign of vandalism was observed, e.g. the mangrove trees were intact. It was suspected that the breeding birds at this colony relocated to the Mai Po mangrove colony, which was 1.7 km away from the abandoned one.
- Abandoned colonies in previous years at Tam Kon Chau, Pak Nai and Ngau Hom Sha were visited, but no breeding activities were recorded.
- The Tai Po Market colony was affected by a tree pruning work by the Leisure and Cultural Services Department on 6 June 2017. Tree pruning work, which caused fallen chicks and nests, was undertaken at the edge of the colony along the pavement of Kwong Fuk Road. Details as described in Section 3.6.
- Part of the Mai Po Village colony was fenced off in May 2017, but the fencing work only lasted for a few days and there was no obvious impact to the breeding ardeids.

The largest colony in Hong Kong was the Mai Po Village colony (239 nests, 19.2% of total nests recorded in Hong Kong), which supported the highest number of nests of Chinese Pond Herons (140 nests, 36.6% of the total number of nests of this species) and Little Egrets (99 nests, 22.4% of the total number of Little Egret nests) in Hong Kong. The second largest colony was the Tai Po Market colony (217 nests, 17.4% of the total number of nests in Hong Kong), which supported the highest number of nests of Black-crowned Night Herons (77 nests, 37.9% of the total number of nests of this species in Hong Kong). The third largest colony was the A Chau colony (87 nests, 7.0% of the total number of nests in Hong Kong), which supported the highest number of nests of Great Egret (70 nests, 38.0% of the total number of nests of this species in Hong Kong). The lowest number of nests was recorded at the San Sang San Tsuen colony (1 nest, 0.1% of the total number of nests in Hong Kong). The Ho Sheung Heung colony supported the highest number of nests of Eastern Cattle Egrets (28 nests, 84.8% of the total number of nests of this species).

**Table 1. The number of nests at surveyed colonies in Hong Kong in 2017.**

	Great Egret	Little Egret	Black-crowned Night Heron	Chinese Pond Heron	Eastern Cattle Egret	Total	%	Rank
Deep Bay area								
1. Mai Po Village		99		140		239	19.2	1
2. Mai Po Lung Village		14		41		55	4.4	8
3. Tung Shing Lane		21		61		82	6.6	4
4. Ngau Hom Shek		2		16		18	1.4	19
5. Tsim Bei Tsui	16	2	1			19	1.5	18
6. Pak Nai 2		14		6		20	1.6	15
7. Shenzhen Bay Bridge		14		6		20	1.6	15
8. Sha Kiu Village		6		28		34	2.7	11
9. San Sang San Tsuen				1		1	0.1	24
10. Mai Po mangrove*	26	18	5			49	3.9	9
Elsewhere in the New Territories								
11. Ho Sheung Heung		18		12	28	58	4.7	7
12. Man Kam To Road		14		18		32	2.6	13
13. Ping Che				13		13	1.0	21
14. A Chau*	70	2	15			87	7.0	3
15. Tai Tong (Pak Sha Tsuen)		5		11	4	20	1.6	15
16. Ha Che		2		20		22	1.8	14
17. Lam Tsuen 2		1		4		5	0.4	23
18. Tai Po Market	47	92	77		1	217	17.4	2
19. Tuen Mun		17				17	1.4	20
20. Penfold Park	13	34	21	6		74	5.9	6
21. Sha Chau*	3	17	14			34	2.7	11
22. Ma Wan*	1	20	20			41	3.3	10
23. The Chinese University of Hong Kong			8			8	0.6	22
Hong Kong Island								
24. Little Green Island*	8	30	42			80	6.4	5
Total	184	442	203	383	33	1,245	<b>100.0</b>	
%	14.8	35.5	16.3	30.8	2.7	<b>100.0</b>		

Note: \* Some nests at the Mai Po mangrove, A Chau, Sha Chau, Ma Wan and Little Green Island were found in dense vegetation and may have been overlooked. The number of nests might have been underestimated.

Regarding the number of nests recorded, the Little Egret was the most abundant (442 nests, 35.5% of the total number of nests) and widespread species (21 out of 24 colonies). The Eastern Cattle Egret was the least abundant (33 nests, 2.7%) and most restricted species (3 out of 24 colonies).

### 3.2 Colonies in the Deep Bay area

A total of 537 nests of four ardeid species were recorded in ten colonies within the Deep Bay area in the 2017 breeding season (Table 2). This is the third highest record since the present monitoring commenced in 1998. The number of nests in the Deep Bay area comprised 43.1% of the total number of nests in Hong Kong. The Deep Bay colonies supported the majority of breeding Little Egrets (43.0%) and Chinese Pond Herons (78.1%), in terms of the number of nests. The Chinese Pond Heron was the dominant species, making up 55.7% of the total number of nests in the Deep Bay area.

**Table 2. The relative importance of the Deep Bay colonies compared to the other colonies in Hong Kong in 2017.** (Colonies in the Deep Bay area include Mai Po Village, Mai Po Lung Village, Tsim Bei Tsui, Tung Shing Lane, Ngau Hom Shek, Pak Nai 2, Shenzhen Bay Bridge, Sha Kiu Village, San Sang San Tsuen and the Mai Po Mangrove)

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	42	184	22.8%
Little Egret	190	442	43.0%
Black-crowned Night Heron	6	203	3.0%
Chinese Pond Heron	299	383	78.1%
Eastern Cattle Egret	0	33	0.0%
Total	537	1,245	43.1%

A summary of the number of nests of the five ardeid species recorded in the Deep Bay area in the last decade (i.e. from 2008 to 2017) is shown in Table 3. Both number of nests Little Egret and Chinese Pond Heron exhibited minor increases from 2016, of which that of Chinese Pond Herons reached a new peak. However, number of nests of Great Egret and Black-crowned Night Heron showed a decrease. Unlike 2015 and 2016, no breeding of Eastern Cattle Egret was noted in the Deep Bay area in 2017. In general, the total number of nests in Deep Bay still remained high.



**Table 3. Number of nests recorded in the Deep Bay area from 2008 to 2017.**

	Great Egret	Little Egret	Black-crowned Night Heron	Chinese Pond Heron	Eastern Cattle Egret	Total no. of nests in Deep Bay
2008		96		137	1	234
2009		95		212	1	308
2010		85		163		248
2011		133		154		287
2012		97		176		273
2013		91		168		259
2014	1	190		227		418
2015	163	260	72	295	12	802
2016	100	188	27	297	8	620
2017	42	190	6	299		537

**3.3 A comparison of the number of nests with records of the previous year**

When compared with the survey results of the whole of Hong Kong in 2016, an increase in the number of nests of Little Egret and Black-crowned Night Heron in 2017 was noted (Table 4). The other species showed a decrease in number of nests, in particular Eastern Cattle Egrets (23% decrease). The decline in the number of nests of Great Egret, Chinese Pond Heron species is not well understood, given the key feeding habitats of these species, i.e. wetlands, were largely intact. For Eastern Cattle Egrets, it was suspected that its decrease may associate with the deterioration of their preferred feeding habitats, i.e. farmlands and short grasslands. Nevertheless, the total number of nests in 2017 remained high and is the third largest in this decade.

**Table 4. A comparison of the number of nests of ardeids in Hong Kong in 2016 and 2017.**

	2016	2017	Percentage change (%)
Great Egret	221	184	-16.7
Little Egret	393	442	+12.5
Black-crowned Night Heron	184	203	+10.3
Chinese Pond Heron	407	383	-5.9
Eastern Cattle Egret	43	33	-23.3
Sub-total in Deep Bay	620	537	-13.4
Total in Hong Kong	1,248	1245	-0.2

When comparing the number of nests in individual colonies between 2016 and 2017, 11 colonies had more nests in 2017, while another 11 colonies had fewer nests (Table 5). A sharp increase was noted at Pak Nai 2, Ping Che, Ngau Hom Shek, Tai Po Market and Little Green Island, while sharp decline was noted at

Tsim Bei Tsui, Sha Kiu Village, San Sang San Tsuen and Lam Tsuen 2. Meanwhile, the Mai Po Marshes Nature Reserve was abandoned. The decline in Tsim Bei Tsui and Sha Kiu Village and the abandonment of Mai Po Marshes Nature Reserve might be associated with the re-grouping of breeding birds in this part of Deep Bay as a new colony was established at the Mai Po mangrove. The decline observed in the Lam Tsuen 2 colony might be associated with a construction work nearby.

**Table 5. A comparison of the number of nests of individual colony between 2016 and 2017**

	2016	2017	Change (%)		2016	2017	Change (%)
Mai Po Village	202	239	+18.3	Man Kam To Road	41	32	-22.0
Mai Po Marshes NR	79	0	-100	Ping Che	7	13	+85.7
Mai Po Lung Village	84	55	-34.5	A Chau	83	87	+4.8
Tung Shing Lane	61	82	+34.4	Ha Che	23	22	-4.3
Ngau Hom Shek	11	18	+63.6	Lam Tsuen 2	17	5	-70.6
Tsim Bei Tsui	69	19	-72.5	Tai Po Market	151	217	+43.7
Pak Nai 2	11	20	+81.8	Tuen Mun	30	17	-43.3
Shenzhen Bay Bridge	18	20	+11.1	Penfold Park	76	74	-2.6
Sha Kiu Village	80	34	-57.5	Little Green Island	23	80	+247.8
San Sang San Tsuen	5	1	-80.0	Sha Chau	28	34	+21.4
Mai Po Mangrove	N.A.	49	N.A.	Ma Wan	62	41	-33.9
Ho Sheung Heung	57	58	+1.8	The Chinese			
Tai Tong (Pak Sha Tsuen)	30	20	-33.3	University of Hong Kong	N.A.	8	N.A.

N.A.: Not applicable

### 3.4 Nesting substrates

Bamboo was the main nesting substrate for egrets and herons nesting in the north and northwest New Territories. It was used in 13 out of the 24 colonies (Table 5). The mangrove species, *Kandelia obovata*, was the main nesting substrate of two colonies in Deep Bay (Mai Po mangrove and Tsim Bei Tsui). Birds at the Penfold Park colony built their nests on Banyan trees (*Ficus microcarpa*). The exotic tree *Acacia auriculiformis* was used as nesting substrate by ardeids in the Tuen Mun colony. Most nests in Mai Po Village were built on Chinese Hackberry (*Celtis sinensis*) and Banyan Tree (*Ficus microcarpa*). The majority of nests in the A Chau colony were built on mangroves (*Kandelia obovata*) and Cuban Bast (*Hibiscus tiliaceus*).

**Table 6. Plant species utilized by ardeids as nesting substrates in 2017**

Site	Site	Bamboo	Tree species	Remarks
1	Mai Po Village	+	<i>Albizia lebbbeck</i> <i>Aleurites moluccana</i> <i>Celtis sinensis</i> <i>Ficus microcarpa</i> <i>Melia azedarach</i>	
2	Mai Po Lung Village	+	<i>Ficus microcarpa</i> <i>Litchi chinensis</i> <i>Dimocarpus longan</i>	
3	Tung Shing Lane	+	<i>Litchi chinensis</i> <i>Dimocarpus longan</i> <i>Celtis sinensis</i>	
4	Ngau Hom Shek	+		
5	Tsim Bei Tsui		<i>Kandelia obovata</i>	
6	Pak Nai 2	+		
7	Shenzhen Bay Bridge	+		
8	Sha Kiu Village	+	<i>Celtis sinensis</i>	
9	San Sang San Tsuen	+		
10	Mai Po mangrove		<i>Kandelia obovata</i>	
11	Ho Sheung Heung	+	<i>Cleistocalyx nervosum</i> <i>Litchi chinensis</i> <i>Sterculia nobilis</i>	
12	Man Kam To Road	+	<i>Acacia auriculiformis</i> <i>Bischofia javanica</i> <i>Ficus microcarpa</i> <i>Ficus virens</i> <i>Leucaena leucocephala</i> <i>Senna siamea</i>	
13	Ping Che	+		
14	A Chau		<i>Hibiscus tiliaceus</i> <i>Kandelia obovata</i>	
15	Tai Tong (Pak Sha Tsuen)	+		
16	Ha Che		<i>Ficus microcarpa</i>	
17	Lam Tsuen 2		<i>Celtis sinensis</i>	
18	Tai Po Market		<i>Ficus variegata</i>	

			<i>Macaranga tanarius</i> <i>Celtis siensis</i> <i>Mangifera indica</i>	
19	Tuen Mun		<i>Acacia auriculiformis</i>	
20	Penfold Park		<i>Ficus microcarpa</i>	
21	Sha Chau			No observation was made
22	Ma Wan			No observation was made
23	The Chinese University of Hong Kong	+		
24	Little Green Island			No observation was made

### 3.5 Training workshop for ardeid nesting colony monitoring

A training workshop was conducted during the breeding season on 23 April 2017. A total of 24 participants joined the workshop and the practical sessions on nests counting in the Tung Shing Lane and Mai Po Village colonies.

### 3.6 Tree pruning at Tai Po Market colony

On 6 June, tree maintenance work at the Tai Po Market colony along Kwong Fuk Road was undertaken by the New Territories East Tree Team of Leisure and Cultural Services Department (LCSD). According to the Legco paper LC Paper No. CB(2)1690/16-17(01), the case was referred to LCSD by Food and Environmental Hygiene Department. Neither Tree Management Office (TMO) nor AFCD was consulted prior to the pruning.

Branches along the pavement of Kwong Fuk Road were cleared, and a number of nests and chicks were affected. Subsequent rescue actions were undertaken by AFCD, The Society for the Prevention of Cruelty to Animals and Kadoorie Farm and Botanic Garden (KFBG). The thirteen chicks rescued on 6 June were all dead, either upon arrival at KFBG or after treatment (Tai Po District Council 2017).

To prevent similar incident in the future, departments or other organisations responsible for tree maintenance works should consult relevant government departments (i.e. AFCD and TMO) if nests are found on trees with proposed tree works. Tree work may be scheduled after the breeding season if there is no urgent safety concern.

#### 4 CONCLUSION

In 2017, a total of 1,245 nests of five species in 24 colonies were recorded in Hong Kong, including 537 nests of four species in 10 colonies in the Deep Bay area. When compared to the results in 2016, there was a 13.4% and a 0.2% decrease in the number of nests in Deep Bay area and Hong Kong overall, respectively. The decrease in the number of nests in 2017 is not well understood but it could be a natural fluctuation and the total number of nests remained high.

#### 5 ACKNOWLEDGEMENTS

We would like to thank Rachel Poon and Stanley Chan who assisted in the survey. Gratitude should also be expressed to the landowner (Mrs Cheng) next to the Ha Che colony for allowing us to conduct the survey at her property. We would also like to thank Marine Parks Division of AFCD for the arrangement of vessel for the surveys at Sha Chau.

#### 6 REFERENCES

- Hong Kong Bird Watching Society, 2017. 'HK\_List\_2017-05-17.pdf' [online]. Available from: <http://www.hkbws.org.hk/BBS/viewthread.php?tid=26511&extra=page%3D1> [Accessed October 2017].
- LC Paper No. CB(2)1690/16-17(01). Death of egret chicks due to nest destruction during pruning work in Tai Po  
<http://www.legco.gov.hk/yr16-17/english/panels/ha/papers/hacb2-1690-1-e.pdf>
- Tai Po District Council, Environment, Housing and Works Committee (2017, September 13). Fifth Meeting. Retrieved from [http://www.districtcouncils.gov.hk/tp/doc/2016\\_2019/tc/committee\\_meetings\\_minutes/EHWC/EHWC\\_M5\\_20170913\\_Revised.pdf](http://www.districtcouncils.gov.hk/tp/doc/2016_2019/tc/committee_meetings_minutes/EHWC/EHWC_M5_20170913_Revised.pdf)
- Wong, L.C. and L Young. 2006. Nest Numbers of Five Ardeids in Hong Kong, South China, 1989-2004: Does Weather Affect The Trend? *Waterbirds* 29: 61-68
- Young, L. and M.W. Cha. 1995. The history and status of egrettries in Hong Kong with notes on those in the Pearl River delta, Guangdong, China. *Hong Kong Bird Report* 1994: 196-215.

---

## Summer 2017 Report: Egretty Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site

### Figures



The Hong Kong Bird Watching Society

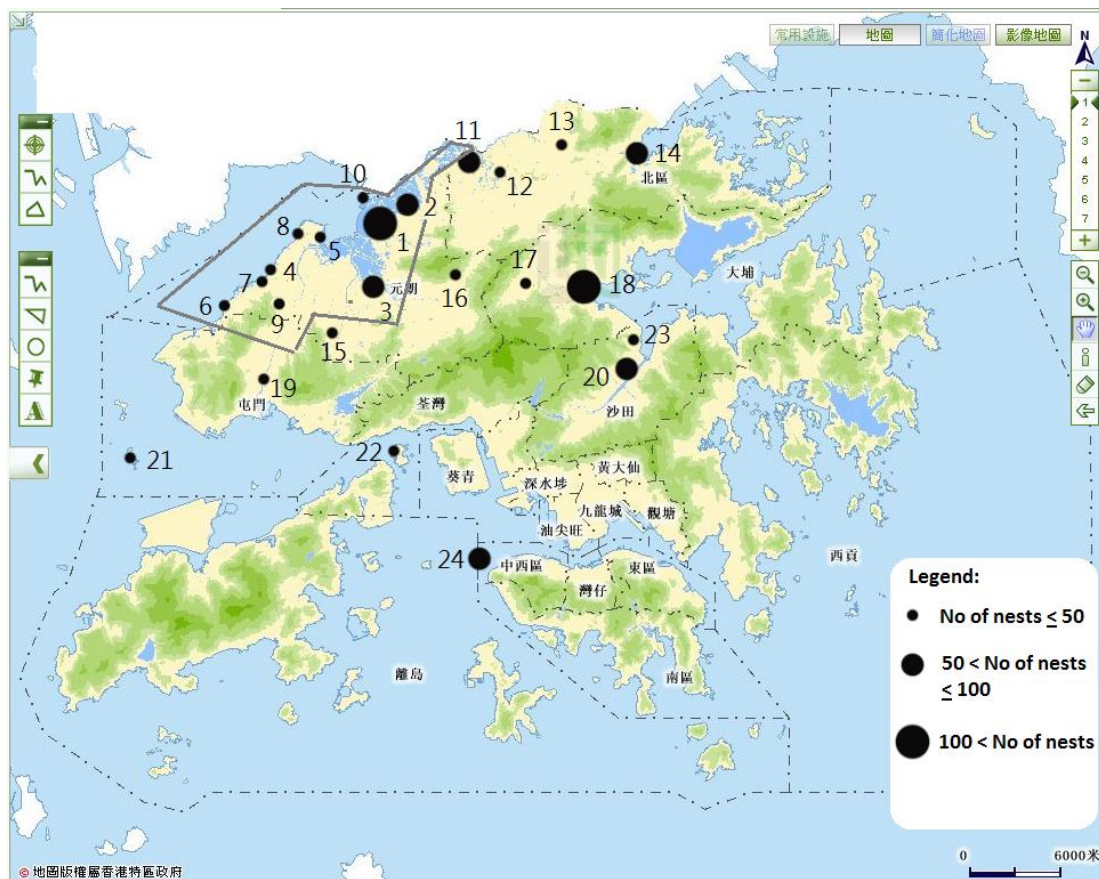


Agriculture, Fisheries and Conservation Department

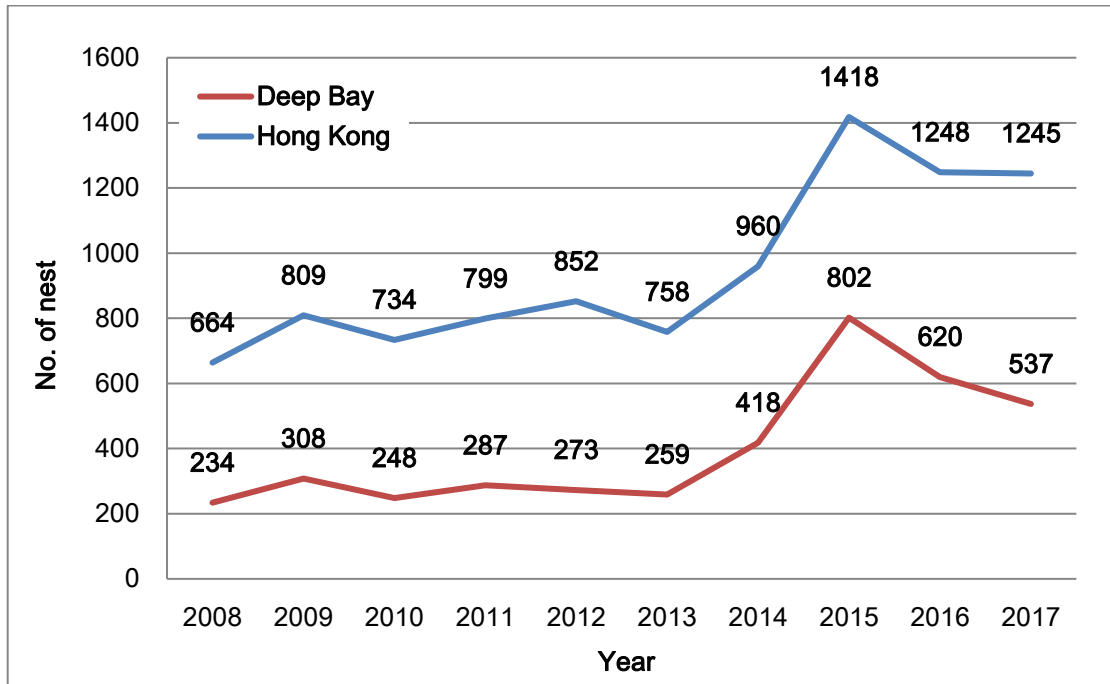
**Figure 1. Location of nesting colonies (egretries) in Hong Kong in 2017**

(The enclosed are the Deep Bay colonies)

- |    |                        |    |  |    |                               |
|----|------------------------|----|--|----|-------------------------------|
| 1  | Mai Po Village         | 2  | Mai Po Lung Village                    | 3  | Tung Shing Lane               |
| 4  | Ngau Hom Shek          | 5  | Tsim Bei Tsui                          | 6  | Pak Nai 2<br>(Tin Hau Temple) |
| 7  | Shenzhen Bay<br>Bridge | 8  | Sha Kiu Village                        | 9  | San Sang San<br>Tsuen         |
| 10 | Mai Po Mangrove        | 11 | Ho Sheung Heung                        | 12 | Man Kam To<br>Road            |
| 13 | Ping Che               | 14 | A Chau                                 | 15 | Tai Tong (Pak<br>Sha Tsuen)   |
| 16 | Ha Che                 | 17 | Lam Tsuen 2                            | 18 | Tai Po Market                 |
| 19 | Tuen Mun               | 20 | Penfold Park                           | 21 | Sha Chau                      |
| 22 | Ma Wan                 | 23 | The Chinese University<br>of Hong Kong | 24 | Little Green<br>Island        |



**Figure 2. Total number of ardeid nests in Hong Kong with reference to the number of nests in the Deep Bay area from 2008 to 2017.**





**Appendix 1. Survey date(s) of nesting colonies and additional sites in 2017.**

Colony	Date
<b>Active colonies</b>	
1. Mai Po Village*	23 April, 13 May, 17 June, 8 July
2. Mai Po Lung Village*	24 April, 19 May, 24 June, 14 July
3. Tung Shing Lane*	24 April, 19 May, 24 June, 14 July
4. Ngau Hom Shek*	23 April, 13 May, 17 June, 8 July
5. Tsim Bei Tsui*	23 April, 13 May, 17 June, 8 July
6. Pak Nai 2*	23 April, 13 May, 17 June, 8 July
7. Shenzhen Bay Bridge*	23 April, 13 May, 17 June, 8 July
8. Sha Kiu Village*	23 April, 13 May, 17 June, 8 July
9. San Sang San Tsuen*	24 April, 19 May, 24 June, 14 July
10. Mai Po mangrove*	17 June, 8 July
11. Ho Sheung Heung	24 April, 19 May, 24 June, 14 July
12. Man Kam To Road	24 April, 19 May, 24 June, 14 July
13. Ping Che	29 April, 20 May, 17 June, 16 July
14. A Chau	29 April, 20 May, 17 June, 16 July
15. Tai Tong (Pak Sha Tsuen)	24 April, 19 May, 24 June, 14 July
16. Ha Che	29 April, 20 May, 17 June, 16 July
17. Lam Tsuen 2	29 April, 20 May, 17 June, 16 July
18. Tai Po Market	29 April, 20 May, 17 June, 16 July
19. Tuen Mun	24 April, 19 May, 24 June, 14 July
20. Penfold Park	29 April, 20 May, 17 June, 19 July
21. Sha Chau	24 April, 25 May, 30 June, 14 July
22. Ma Wan	29 April, 27 May, 26 June, 21 July
23. Little Green Island	29 April, 27 May, 24 June, 15 July
24. The Chinese University of Hong Kong	20 May, 17 June, 16 July
<b>Additional sites</b>	
25. Tam Kon Chau*	23 April
26. Ngau Hom Sha*	23 April
27. Pak Nai*	23 April, 27 May, 17 June, 8 July
28. Ting Kok	20 May, 17 June, 16 July
29. Mai Po Marshes Nature Reserve*	23 April, 13 May, 17 June, 8 July

\* within the Deep Bay area

## Appendix 2. The number of nests recorded in each monthly count of the 24 colonies in 2017

### Appendix 2.1. Mai Po Village

	23 April	13 May	17 June	8 July	Max
Little Egret	<b>99</b>	93	45	16	<b>99</b>
Chinese Pond Heron	105	<b>140</b>	90	80	<b>140</b>
Total	204	233	135	96	<b>239</b>

### Appendix 2.2 Mai Po Lung Village

	24 April	19 May	24 June	14 July	Max
Little Egret	6	<b>14</b>	10	3	<b>14</b>
Chinese Pond Heron	<b>41</b>	40	32	29	<b>41</b>
Total	47	54	42	32	<b>55</b>

### Appendix 2.3 Tung Shing Lane

	24 April	19 May	24 June	14 July	Max
Little Egret	8	<b>21</b>	10	2	<b>21</b>
Chinese Pond Heron	51	<b>61</b>	36	31	<b>61</b>
Total	59	82	46	33	<b>82</b>

### Appendix 2.4 Ngau Hom Shek

	23 April	13 May	17 June	8 July	Max
Little Egret	1	<b>2</b>	<b>2</b>	2	<b>2</b>
Chinese Pond Heron	15	<b>16</b>	7	8	<b>16</b>
Total	16	18	9	10	<b>18</b>

### Appendix 2.5 Tsim Bei Tsui

	23 April	13 May	17 June	8 July	Max
Great Egret	<b>16</b>	15	1		<b>16</b>
Little Egret		<b>2</b>			<b>2</b>
Black-crowned Night Heron			<b>1</b>		<b>1</b>
Total	16	17	2	0	<b>19</b>

### Appendix 2.6 Pak Nai 2

	23 April	13 May	17 June	8 July	Max
Little Egret	<b>14</b>	12	3		<b>14</b>
Chinese Pond Heron	<b>6</b>	<b>5</b>	<b>3</b>	1	<b>6</b>
Total	20	17	6	1	<b>20</b>

#### Appendix 2.7 Shenzhen Bay Bridge

	23 April	13 May	17 June	8 July	Max
Little Egret	<b>14</b>	12	3	1	<b>14</b>
Chinese Pond Heron	3	<b>6</b>	2	2	<b>6</b>
Total	17	18	5	3	<b>20</b>

#### Appendix 2.8 Sha Kiu Village

	23 April	13 May	17 June	8 July	Max
Little Egret	<b>6</b>	<b>6</b>	1	3	<b>6</b>
Chinese Pond Heron	26	<b>28</b>	7	11	<b>28</b>
Total	32	34	8	14	<b>34</b>

#### Appendix 2.9 San Sang San Tsuen

	24 April	19 May	24 June	14 July	Max
Chinese Pond Heron		<b>1</b>	<b>1</b>		<b>1</b>
Total	0	1	1	0	<b>1</b>

#### Appendix 2.10 Mai Po Mangrove (First reported in May)

	17 June	8 July	Max
Great Egret	10	<b>26</b>	<b>26</b>
Little Egret	14	<b>18</b>	<b>18</b>
Black-crowned Night Heron	<b>5</b>	3	<b>5</b>
Total	29	47	<b>49</b>

#### Appendix 2.11 Ho Sheung Heung

	24 April	19 May	24 June	14 July	Max
Little Egret	11	12	<b>18</b>	7	<b>18</b>
Chinese Pond Heron	4	<b>12</b>	5	3	<b>12</b>
Eastern Cattle Egret	17	<b>28</b>	7	2	<b>28</b>
Total	32	52	30	12	<b>58</b>

#### Appendix 2.12 Man Kam To Road

	24 April	19 May	24 June	14 July	Max
Little Egret	6	<b>14</b>	4	4	<b>14</b>
Chinese Pond Heron	13	<b>18</b>	12	9	<b>18</b>
Total	19	32	16	13	<b>32</b>

#### Appendix 2.13 Ping Che

	29 April	20 May	17 June	16 July	Max
Chinese Pond Heron	7	<b>13</b>	9	11	<b>13</b>
Total	7	13	9	11	<b>13</b>

Appendix 2.14 A Chau (+: present but no breeding activities were noted)

	29 April	20 May	17 June	16 July	Max
Great Egret	70	55	37	2	70
Little Egret	2				2
Black-crowned Night Heron		15	+		15
Total	72	70	37	2	87

Appendix 2.15 Tai Tong (Pak Sha Tsuen)

	24 April	19 May	24 June	14 July	Max
Little Egret	5	3	2	1	5
Chinese Pond Heron	10	11	5	6	11
Eastern Cattle Egret	4	4	1	1	4
Total	19	18	8	8	20

Appendix 2.16. Ha Che

	29 April	20 May	17 June	16 July	Max
Little Egret			2		2
Chinese Pond Heron	12	20	17	11	20
Total	12	20	19	11	22

Appendix 2.17. Lam Tsuen 2

	29 April	20 May	17 June	16 July	Max
Little Egret	1				1
Chinese Pond Heron	4	4			4
Total	5	4	0	0	5

Appendix 2.18. Tai Po Market

	29 April	20 May	17 June	16 July	Max
Great Egret	47	28	47	30	47
Little Egret	65	92	55	40	92
Black-crowned Night Heron	71	77	65	71	77
Eastern Cattle Egret			1	1	1
Total	183	197	168	142	217

Appendix 2.19. Tuen Mun

	24 April	19 May	24 June	14 July	Max
Little Egret	15	17	9	7	17
Total	15	17	9	7	17

Appendix 2.20. Penfold Park

	29 April	20 May	17 June	19 July	Max
Great Egret	<b>13</b>	11	<b>13</b>	13	<b>13</b>
Little Egret	21	21	<b>34</b>	8	<b>34</b>
Black-crowned Night Heron	7	3	<b>21</b>	16	<b>21</b>
Chinese Pond Heron	3	2	<b>6</b>	3	<b>6</b>
Total	44	37	74	40	<b>74</b>

Appendix 2.21. Sha Chau

	24 April	25 May	30 June	14 July	Max
Great Egret	2	<b>3</b>	1	2	<b>3</b>
Little Egret	16	<b>17</b>	8	10	<b>17</b>
Black-crowned Night Heron	<b>14</b>	13	1	1	<b>14</b>
Total	32	33	10	13	<b>34</b>

Appendix 2.22. Ma Wan

	29 April	27 May	26 June	21 July	Max
Great Egret			<b>1</b>		<b>1</b>
Little Egret	10	<b>20</b>	2	4	<b>20</b>
Black-crowned Night Heron	<b>20</b>	15	2	3	<b>20</b>
Total	30	35	5	7	<b>41</b>

Appendix 2.23. The Chinese University of Hong Kong (First reported in May)

	20 May	17 June	16 July	Max
Black-crowned Night Heron	8			<b>8</b>
Total	8	0	0	<b>8</b>

Appendix 2.24. Little Green Island

	29 April	27 May	24 June	15 July	Max
Great Egret	7	<b>8</b>	4	1	<b>8</b>
Little Egret	<b>30</b>	12	19	7	<b>30</b>
Black-crowned Night Heron	<b>42</b>	9	15		<b>42</b>
Total	79	29	38	8	<b>80</b>