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**Mai Po Inner Deep Bay Ramsar Site
Waterbird Monitoring Programme
2010 - 11**

**Monthly Waterbird Monitoring
Summer 2010 Report**



Submitted by
The Hong Kong Bird Watching Society Ltd.
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Hong Kong SAR Government

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Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Waterbird Count Coordinator

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Summer 2010 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Report



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

Waterbird Monitoring Programme at the Mai Po Inner Deep Bay Ramsar Site

Monthly Waterbird Monitoring Summer 2010 Report

1. Introduction

Comprehensive counts of waterbirds in the Deep Bay area were inaugurated as part of the Wetland international - Asian Waterbird Census has been undertaken by the Hong Kong Bird Watching Society (HKBWS) since 1979. These continued in every January (excluding 1980) until 1992-93 when the duration covered by the counts was expanded to cover the winter period from November to March as a part of the HKBWS "Winter Waterbird Count". With the establishment of the Mai Po Inner Deep Bay Ramsar Site, a monthly waterbird monitoring programme was developed which was coordinated and carried out by the HKBWS with support rendered by the Agriculture, Fisheries and Conservation Department (AFCD) since 1998. Monthly counts of waterbirds in the site form a major part of this programme, supplemented by counts of shorebirds during the migration season, and egret surveys during the breeding season. Monthly summary reports are compiled, while seasonal reports are produced bi-annually, i.e. a summer report covering the period from April to September, and the winter report from October to March of the ensuing year. This report is concerned with the summer period of 2010 under the contract referenced AFCD/SQ/19/10 during the period 2009-10.

2. Methodology

The methodology used and the areas covered are described in detail in the *Waterbird Count Handbook* (Carey undated, Carey 2002, Map 1, Map 2). It involves surveying specified areas and, where possible, recording number of birds in individual fishponds or *gei wais*. Inter-tidal areas of Inner Deep Bay were surveyed simultaneously to avoid double-counting as far as possible. Counts are conducted during a rising tide, preferably one that comes to about 2.0 m. Higher counts of individual species recorded in one week before/after the count date are also included if such figures are considered to be more accurate than that recorded on the count day.

Numbers of waterbirds in this report are mainly presented with reference to two main areas: Deep Bay area and Mai Po Inner Deep Bay (Ramsar Site). Details of these areas can be referred to the winter waterbird count report (Anon. 2010).

3. Results

In summer 2010, the monthly waterbird count was scheduled on 18th April, 16th May, 13th June, 11th July, 8th August and 12th September. All the survey areas were covered in all these counts, except Shenzhen River B (SRB or called Ma Tso Lung) where was not surveyed in September 2010 due to the failure of the vehicle during the survey. There were no alternative count day can be scheduled due to the unfavourable daytime tidal condition. According to records of the same months in previous years, the SRB site accounts for approximately 5% of the total number of waterbirds in September. Therefore, overall figure was slightly affected.

The total numbers of the waterbirds in the whole Deep Bay areas in these months are 22,884 in April, 3,433 in May, 1,919 in June, 1,881 in July, 4,147 in August and 5,333 in September and the tolls in the Ramsar Site are: 13,973, 2,474, 746, 951, 2,879 and 3,862. All these above figures are also shown in figure 1 and 2.

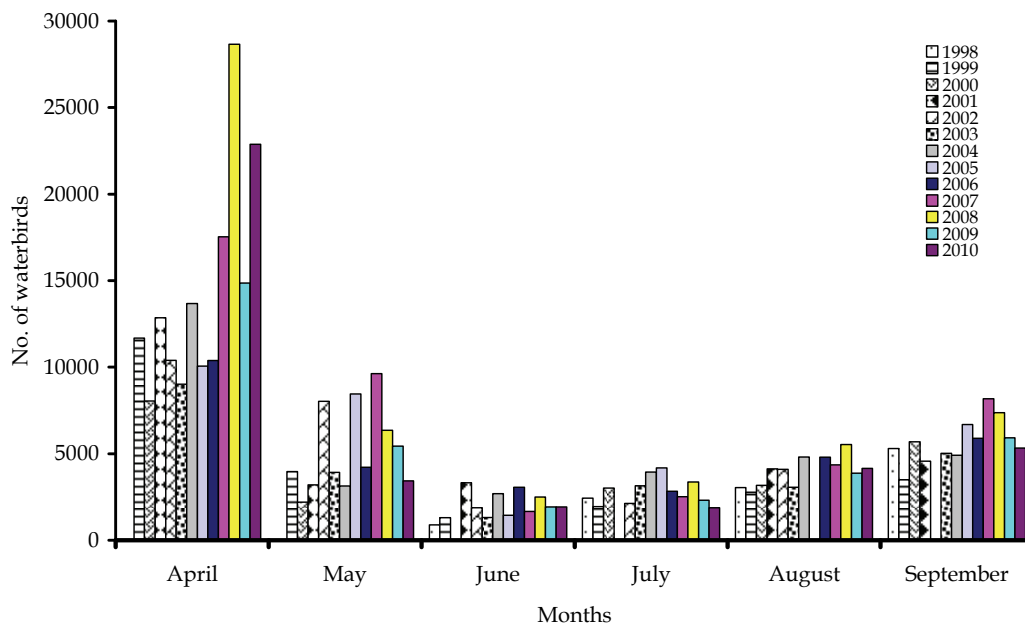


Figure 1. Waterbird numbers in summer in the Deep Bay area, 1998-2010.

Results of all counts in summer months from 1999 onwards are arrayed in Table 1a and 1b. Details of counts in summer 2010 were reported in the monthly summaries which are available from the Waterbird Monitoring Programme website at: http://www.hkbws.org.hk/web/eng/waterbird_report_eng.htm.

Summaries of each count are given in Table 2a to 2f and Table 3a to 3b. The following paragraphs 3.1 to 3.7 are discussions of the results with reference to each of the waterbird group and globally threatened species, supplemented by figure 1 to 7 which compares figures of each waterbird group counted in the summer months since 2000.

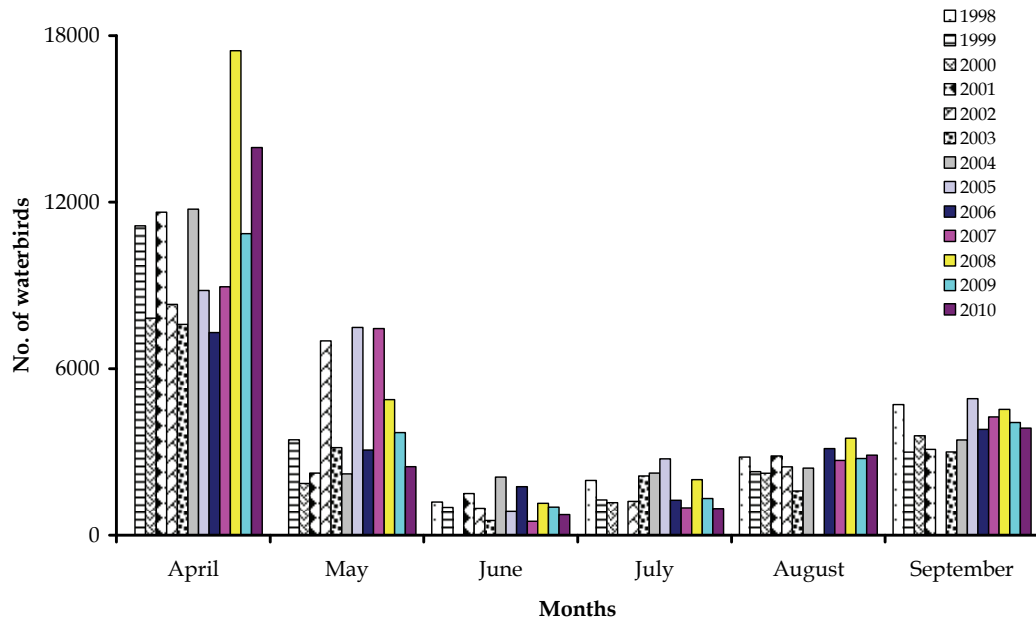


Figure 2. Waterbird numbers in summer in the Ramsar Site, 1998-2010.

3.1 Great Cormorant

In the summer months of 2010, only six Great Cormorants *Phalacrocorax carbo* were recorded in the April count and none in the other months. This species is mainly a winter visitor in the Deep Bay area.

3.2 Ardeids

The highest count of this group in Deep Bay area is 2,170 during the September count, symbolising an increase of 13% from the previous year's peak count in September (figure 3). The highest single species count was 843 Little Egrets *Egretta garzetta* in the September count, being an increase of 7% from the previous year's peak count. Eastern Great Egret *Ardea modesta* has the highest count of 659 individuals recorded in the September, also yielding an increase of 13%, while Chinese Pond Heron *Ardeola bacchus* only has a high count of 252 individuals in the September count, showing a slight increase of 4% from the previous year.

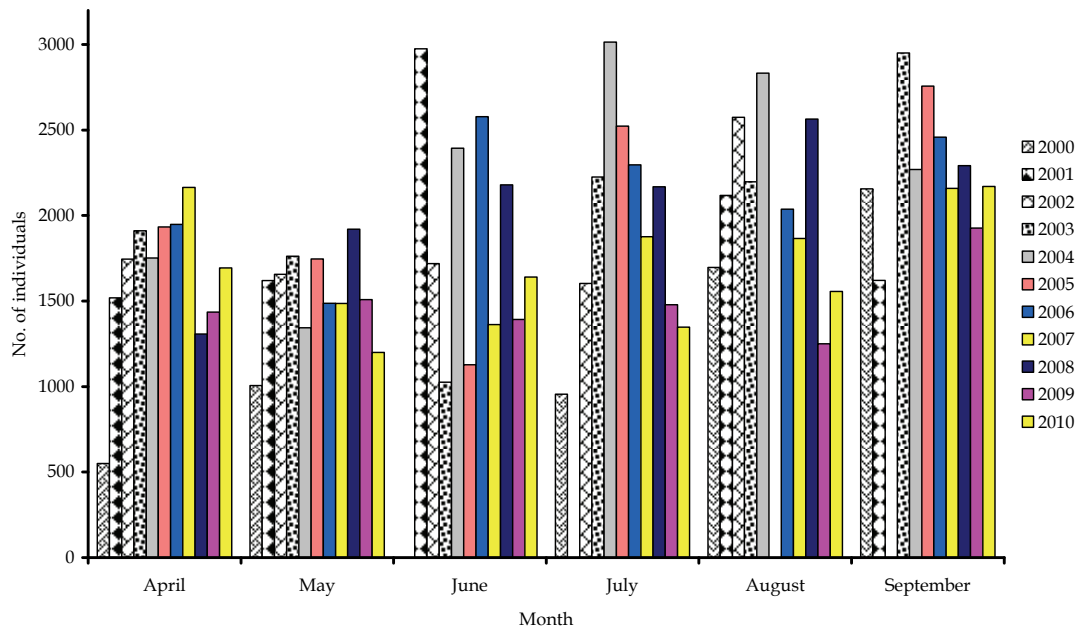


Figure 3. Numbers of Ardeids in the Deep Bay area in summer months (2000-2010).

Egretry count was also undertaken in the summer to monitor the breeding ardeid populations in Hong Kong under this Waterbird Monitoring Programme, further details can be found in the Egretry Report published in the later part of this year.

3.3 Ducks, Grebes, Pelicans

As most wintering ducks have left the Deep Bay area in the summer months, number of this group is usually low. As such, the toll is mainly attributed to the population of a passage duck species including Garganey *Anas querquedula* and the resident population of Little Grebe *Tachybaptus ruficollis*. In summer 2010, the highest count of this group was 333 during the April count, while the counts in other months are analogous to the results in the previous year (figure 4). The largest count of a single species in this group was 135 Little Grebes in the April count.

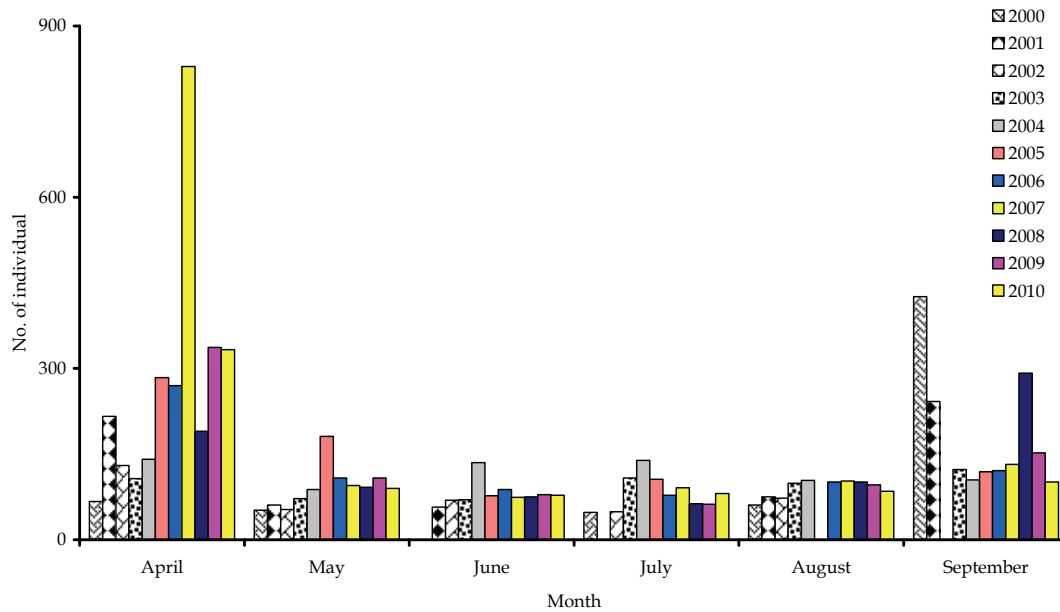


Figure 4. Numbers of Ducks and Grebes in the Deep Bay area in summer months (2000-10).

3.4 Rails and Coots

Many species of this group are very secretive, shy and small in body size. Other species in this group are mainly winter visitors, whereas some are rare resident species, e.g. Slaty-breasted Rail *Gallirallus striatus*, with limited number or records in each year. The counts for this group in the summer months usually refer to two common species: White-breasted Waterhen *Amaurornis phoenicurus* and Common Moorhen *Gallinula chloropus*. The highest count was 206 in the April count, bearing a 65% increase from the highest count in the previous year (likewise in April) (figure 5). Counts in the other months were similar to those in the previous years.

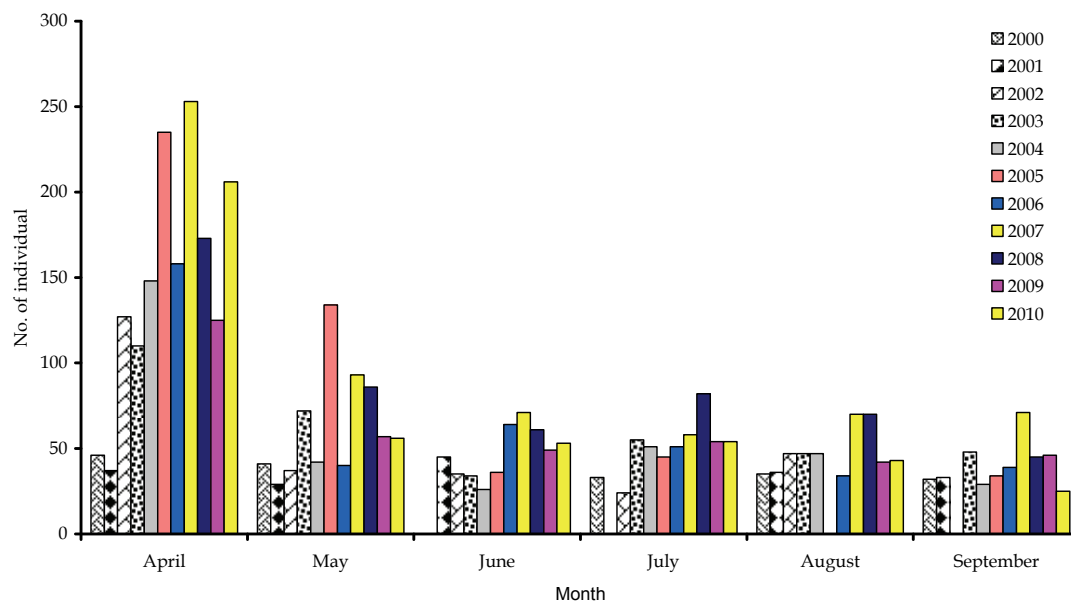


Figure 5. Numbers of Rails and Coots in the Deep Bay area in summer months (2000-10).

3.5 Shorebirds

Shorebirds are recorded in the large number in the Deep Bay area every spring, especially during the April count. This April count recorded a total of 18,768 individuals, being a 58% increase from the previous year's count (also in April) (figure 6). This high number was comprised by large numbers of Red-necked Stint *Calidris ruficollis* and Curlew Sandpiper *Calidris ferruginea*, with 3,694 and 4,316 individuals recorded respectively. The figure of the Red-necked Stint breaks the record for the Deep Bay area, though most of the birds (3,560 individuals) were present in Futian area, Shenzhen. Despite the above, counts in the other summer months are lower than the previous year's counts.

A few shorebird species breeds in the Deep Bay area in the summer and the largest group is the Black-winged Stilt *Himantopus himantopus*. A total of 80 individuals of Black-winged Stilt were recorded in the May count, many of which were considered to be breeding individuals although passage individuals might also be present at around this time of the year. Greater Painted-snipe *Rostratula benghanlensis* is another breeding species in the Deep Bay area but this species was only recorded in small numbers in this summer.

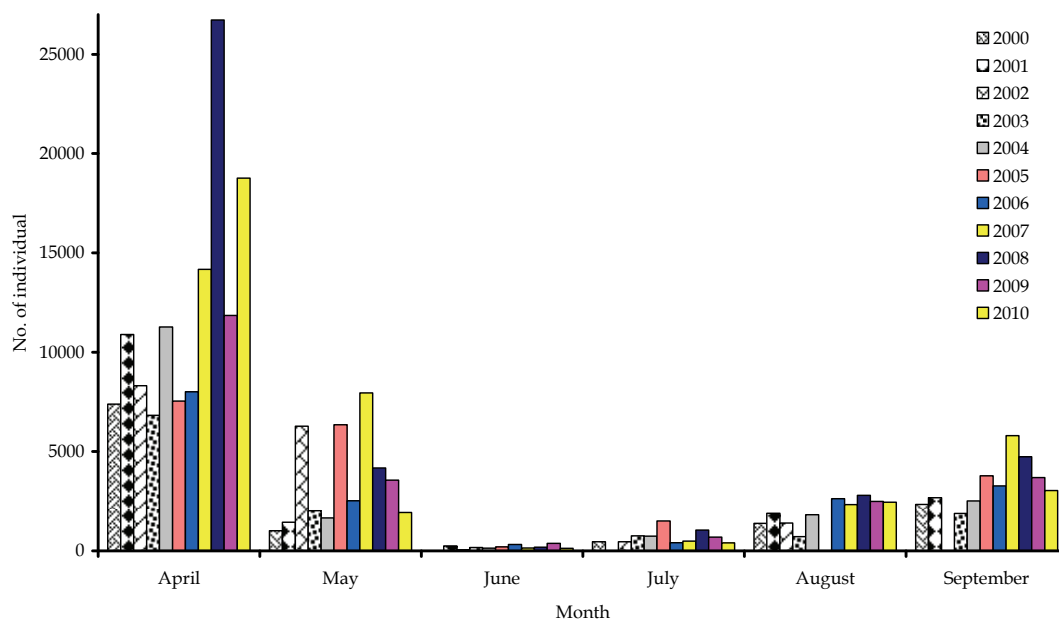


Figure 6. Numbers of Shorebirds in the Deep Bay area in summer months (2000-10).

3.6 Gulls and Terns

Peak count of this group was 1,877 recorded during the April count (figure 7), of which 1,478 Black-headed Gulls *Larus ridibundis* were presented. Black-headed Gull is a common winter visitor in the Deep Bay area and the individuals counted in the survey were part of the wintering group that lingered in the Deep Bay area till this

spring. In addition, the number of individuals of passage terns was small in this spring (April and May) and autumn (August and September), the most notable record being a total of 110 Whiskered Terns *Chlidonias hybrida* counted in the April count.

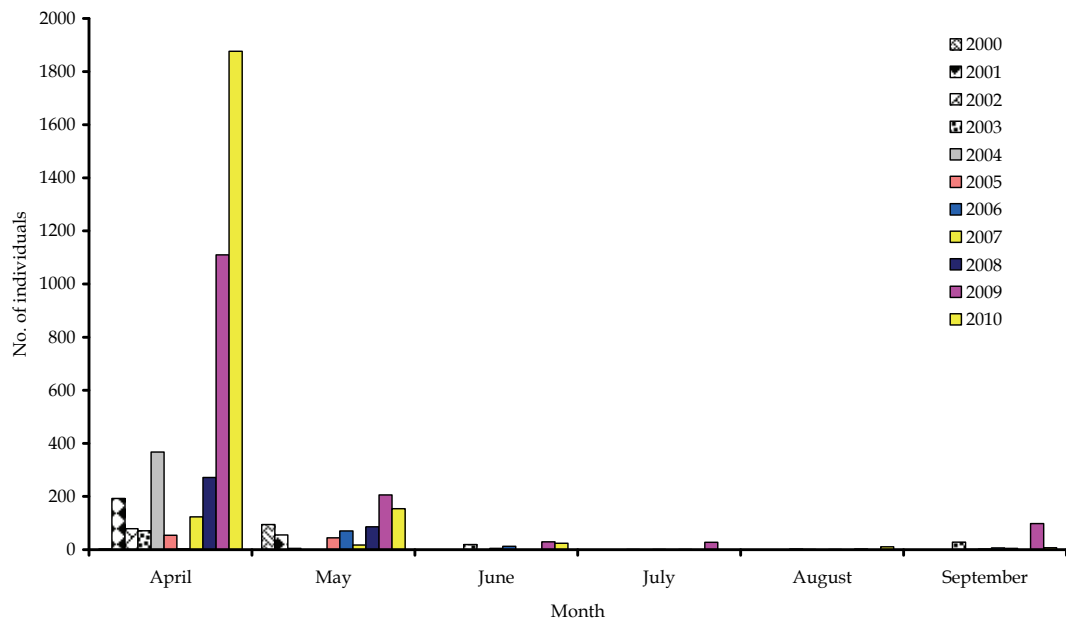


Figure 7. Numbers of Gulls and Terns in the Deep Bay area in summer months (2000-10).

3.7 Globally threatened species

Several globally threatened waterbird species were recorded in this summer period as follows:

Black-faced Spoonbill *Platalea minor* (globally endangered) – high number 235 individuals in April, subsequently 76 in May, 12 in June and seven in July.

Black-tailed Godwit *Limosa limosa* (globally near threatened) – 1,552 in April, 22 in May, two in June and July, 61 in August, 261 in September.

Eurasian Curlew *Numenius arquata* (globally near threatened) – 29 in April, 13 in May, ten in June, 12 in July, 61 in August and 63 in September.

Far Eastern Curlew *Numerius madagascariensis* (globally vulnerable) – 19 in April, three in May

Nordmann's Greenshank *Tringa guttifer* (globally endangered) – two in April, one in May.

Asian Dowitcher *Limnodromus semipalmatus* (globally near threatened) – 44 in April,

two in May, two in July, five in August and 14 in September.

Great Knot *Calidris tenuirostris* (globally vulnerable) - 11 in April, two in August and 17 in September

Chinese Egret *Egretta eulophotes* (globally vulnerable) and Spoon-billed Sandpiper *Eurynorhynchus pygmeus* (globally critically endangered) are regular spring passage migrants in the Deep Bay area. However, both of these species were not recorded during the waterbird count in this summer.

4. Discussion

Numbers of waterbirds in the Deep Bay area in 2010 summer months are apparently higher than those in 2009 because the average of counts in all months is higher (2010: mean = 6,600, SD = 8,087, n = 6; 2009: mean = 4,148, SD = 4,956, n = 6). A slight increase in the average numbers is also shown in the Ramsar Site area too (2010: mean = 4,148, SD = 4,956, n = 6; 2009: mean = 3,953, SD = 3,604, n = 6). This increase of waterbird numbers is mainly contributed by higher numbers of passage shorebirds presented in the April count and larger number of Ardeids present throughout the summer months. This is an encourage sign for the conservation of the Deep Bay and waterbird community that utilizes the area.

5. Acknowledgements

Thank you for the following counters of the Hong Kong Bird Watching Society participated in the counts: John Allcock, Geoff Carey, Bonnie Chan, Gary Chow, Forrest Fong, Martin Hale, John Holmes, Tony Hung, Hung Wai-ming, Alan Lam, Roger Lee, Carmen Or, Pang Chun-chiu, Sung Yik-hei, Jemi Wong and Captain Wong. We also thank members of the Shenzhen Bird Watching Society (SZBWS) members for coordinating the count at Futian National Nature Reserve, and the AFCD for counting at Hong Kong Wetland Park.

6. References

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Maps

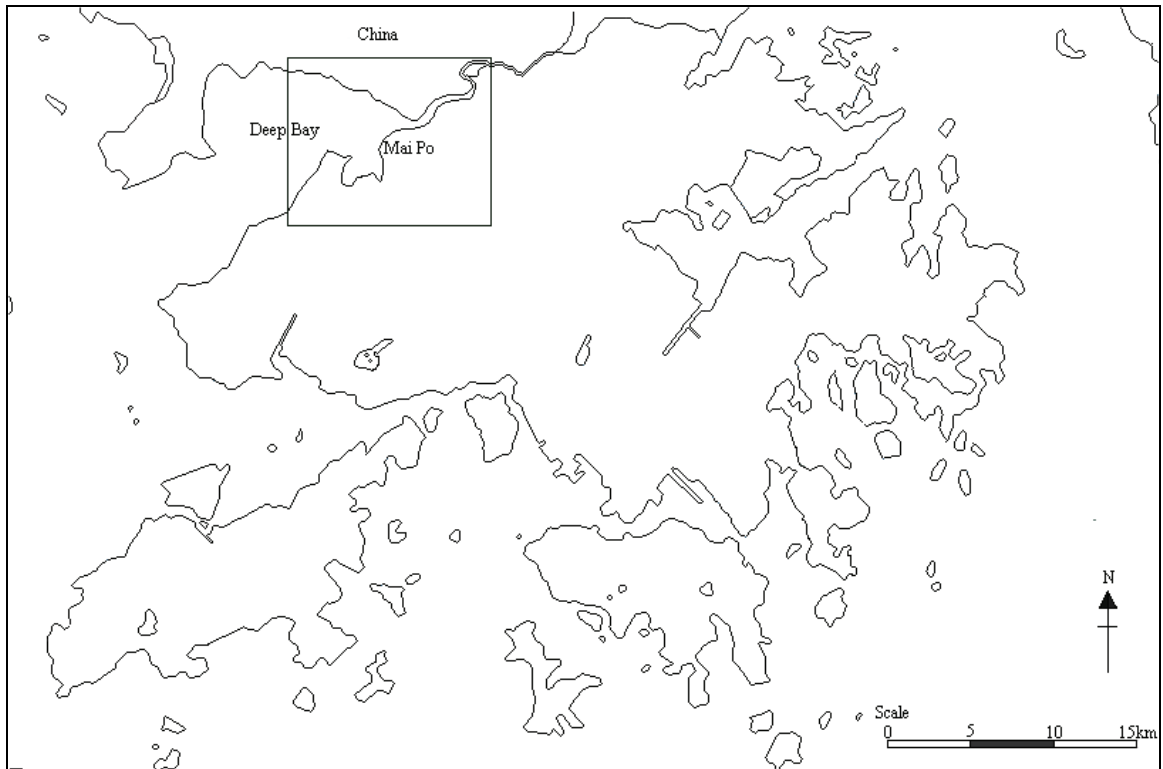


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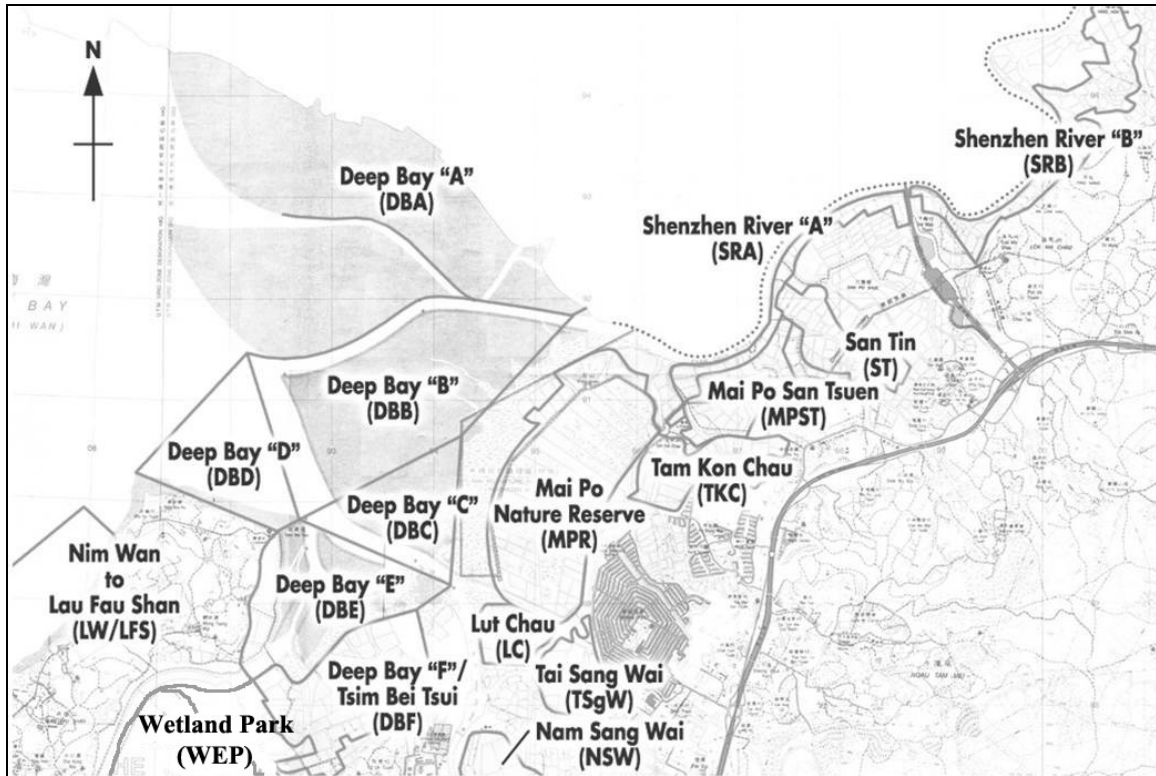


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Map 1. Map of Hong Kong showing location of the Mai Po Inner Deep Bay Ramsar Site



Map 2. Locations of count sites of the Waterbird Monitoring Programme



Summer 2010 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Tables



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Agriculture, Fisheries and Conservation Department

Table 1a. Numbers of waterbird in the whole Deep Bay area during summer months, 1999-2010.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean	SD
Apr	11686	8049	12858	10399	9019	13681	10067	10388	17545	28666	14865	22884	14176	6145
May	3973	2206	3201	8028	3925	3133	8455	4227	9630	6359	5439	3433	5167	2413
Jun	1307	nc	3324	1879	1313	2697	1445	3065	1657	2500	1927	1919	1994	754
Jul	1941	3020	nc	2135	3145	3945	4179	2835	2518	3363	2314	1881	2810	749
Aug	2784	3178	4124	4096	3060	4807	nc	4802	4361	5532	3879	4147	3985	841
Sep	3499	5689	4566	nc	5032	4916	6695	5899	8170	7368	5913	5333	5699	1259

Figure of mean and SD are calculated from the commencement of this programme in 1998 to the latest count. nc = no count.

Table 1b. Numbers of waterbird in the Ramsar Site during summer months, 1999-2010.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Mean	SD
April	11148	7826	11638	8319	7595	11748	8823	7301	8953	17458	10871	13973	10471	3010
May	3438	1862	2238	7000	3153	2302	7482	3069	7443	4884	3695	2474	4079	2108
June	999	nc	1500	967	527	2092	859	1748	501	1147	1011	746	1108	475
July	1273	1173	nc	1217	2133	2237	2748	1255	980	2001	1254	951	1606	584
Aug	2287	2232	2858	2463	1588	2420	nc	3125	2962	3493	2761	2879	2635	486
Sep	2994	3580	3087	nc	3001	3450	4920	3816	4262	4534	4059	3862	3854	664

Figure of mean and SD are calculated from the commencement of this programme in 1998 to the latest count. nc = no count.

Table 2a. Summary of waterbird count for April 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	6	0.0	4	0.0	NC
Ardeids	1694	7.4	1005	7.2	NC
Ducks, grebes, pelicans	333	1.5	105	0.8	NC
Rails and coot	206	0.9	91	0.7	NC
Shorebirds	18768	82.0	12393	88.7	NC
Gulls and terns	1877	8.2	375	2.7	NC
Total	22884	100	13973	100	NC

Table 2b. Summary of waterbird count for May 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	0	0.0	0	0.0	0
Ardeids	1200	35.0	512	20.7	202
Ducks, grebes, pelicans	90	2.6	46	1.9	4
Rails and coot	56	1.6	22	0.9	4
Shorebirds	1933	56.3	1858	75.1	0
Gulls and terns	154	4.5	36	1.5	0
Total	3433	100	2474	100	210

Table 2c. Summary of waterbird count for June 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	0	0.0	0	0.0	0
Ardeids	1641	85.5	572	76.7	141
Ducks, grebes, pelicans	78	4.1	39	5.2	0
Rails and coot	53	2.8	22	2.9	3
Shorebirds	123	6.4	105	14.1	0
Gulls and terns	24	1.3	8	1.1	0
Total	1919	100	1011	100	144

Table 2d. Summary of waterbird count for July 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	0	0.0	0	0.0	0
Ardeids	1348	71.7	598	71.7	167
Ducks, grebes, pelicans	81	4.3	34	4.3	0
Rails and coot	54	2.9	9	2.9	0
Shorebirds	398	21.2	310	21.2	0
Gulls and terns	0	0.0	0	0.0	0
Total	1881	100	951	100	167

Table 2e. Summary of waterbird count for August 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	0	0.0	0	0.0	0
Ardeids	1556	37.5	704	24.5	81
Ducks, grebes, pelicans	85	2.0	36	1.3	1
Rails and coot	43	1.0	13	0.5	2
Shorebirds	2452	59.1	2123	73.7	0
Gulls and terns	11	0.3	3	0.1	0
Total	4147	100	2879	100	84

Table 2f. Summary of waterbird count for September 2010. SI: Starling Inlet

	Deep Bay Area	%	Ramsar Site	%	SI
Cormorants	0	0.0	0	0.0	0
Ardeids	2170	40.7	1146	29.7	149
Ducks, grebes, pelicans	101	1.9	62	1.6	1
Rails and coot	25	0.5	13	0.3	1
Shorebirds	3030	56.8	2638	68.3	4
Gulls and terns	7	0.1	3	0.1	4
Total	5333	100	3862	100	159

Table 3a. Numbers of waterbird species groups in whole Deep Bay area, summer 2010.

	April	May	June	July	August	September
Cormorants	6	0	0	0	0	0
Ardeids	1694	1200	1641	1348	1556	2170
Ducks, grebes, pelicans	333	90	78	81	85	101
Rails and coot	206	56	53	54	43	25
Shorebirds	18768	1933	123	398	2452	3030
Gulls and terns	1877	154	24	0	11	7

Table 3b. Numbers of waterbird species groups in Ramsar Site, summer 2010.

	April	May	June	July	August	September
Cormorants	4	0	0	0	0	0
Ardeids	1005	512	572	598	704	1146
Ducks, grebes, pelicans	105	46	39	34	36	62
Rails and coot	91	22	22	9	13	13
Shorebirds	12393	1858	105	310	2123	2638
Gulls and terns	375	36	8	0	3	3

Summer 2010 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Appendices



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Agriculture, Fisheries and Conservation Department

Summary of Waterbird Count, April 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	WEP	NW / LFS	TKC	LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	29	14	2					26	2		15	0	3	5	7	32	41	0	73	135	
Great Crested Grebe			18													0			0	18	
Great Cormorant	0	0	2					0			0	0	0	0	0	4	0	0	4	6	
Dalmatian Pelican																0			0	0	
Grey Heron	1	0	7		9		2	2	25	1	0	1	2	0	0	29	4	11	44	79	
Purple Heron																0			0	0	
Great Egret	4	48	43	20	23	6	10	33		10	9	5	5	6	2	83	42	68	193	307	
Intermediate Egret	3	0		1				0			0	1	1	0	0	21	1	1	23	27	
Little Egret	13	90	138	52	21	3	38		2	30	44	10	14	33	22	312	113	80	505	822	
Swinhoe's Egret																0			0	0	
Pacific Reef Egret																0			0	0	
Cattle Egret	0	0	4					0			0	4	1	0	0	5	5	0	10	14	
Chinese Pond Heron	13	4	17	2				2		4	27	4	8	8	11	18	44	2	64	118	
Striated Heron	0	0		1				0			0	0	0	0	0	3	0	1	4	4	
B-c Night Heron	0	0	61	1			1	0			5	1	2	0	3	10	7	2	19	84	
Yellow Bittern	0	0	1					0			0	0	0	0	0	0	0	0	0	1	
Cinnamon Bittern																0			0	0	
Great Bittern									1							0			0	1	
Black Stork																0			0	0	
Black-headed Ibis																0			0	0	
Eurasian Spoonbill																2			2	2	
Black-faced Spoonbill			65		9			2	26	3	2	1				127	5	9	141	235	
Common Shelduck								0			0	0	0	0	0	27	0	0	27	55	
Eurasian Wigeon	0	0	28					0			0	0	0	0	0	0	0	0	0	0	
Falcated Duck																0			0	0	
Gadwall																0			0	0	
Baikal Teal																0			0	0	
Common Teal	0	0						0			0	0	0	0	0	0	0	0	0	0	
Mallard																0			0	0	
Spot-billed Duck																2			2	2	
Chinese Spotbill																0			0	0	
Burmese Spotbill																0			0	0	
Northern Pintail																0			0	0	
Garganey	4		15													0			0	19	
Northern Shoveler			100													0			0	100	
Common Pochard																0			0	0	
Baer's Pochard																0			0	0	
Tufted Duck			1													3			3	4	
Greater Scaup																0			0	0	
Red-breasted Merganser																0			0	0	
Duck sp.																0			0	0	
Slaty-breasted Rail																0			0	0	
Water Rail																0			0	0	
White-breasted Waterhen	12	3	8	2			1	3	2		4	1	2	1	3	13	5	3	21	55	
Watercock																0			0	0	
Common Moorhen	17	19	21	1			2	5	19		7	1	0	0	1	58	9	3	70	151	
Eurasian Coot																0			0	0	
Pheasant-tailed Jacana																0			0	0	
Greater Painted Snipe																0			0	0	
Black-winged Stilt	14		222	1					29				1			218	1		219	484	
Pied Avocet			1						1							1850			1850	1852	
Oriental Pratincole											74					0			0	74	
Northern Lapwing																0			0	0	

Summary of Waterbird Count, May 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	WEP	NW/LES	TKC	LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starting Inlet
Little Grebe	23	9	5					7			9	0	3	7	1	23	20	0	43	87	4
Great Crested Grebe																1			1	1	
Great Cormorant	0	0						0			0	0	0	0	0	0	0	0	0	0	
Dalmatian Pelican																					
Grey Heron	1	0	13					1	2		0	0	0	0	0	2	1	0	3	19	
Purple Heron																					
Great Egret	9	30	89	8	27	2	3	44	2	12	52	7	15	3	15	61	68	43	172	379	67
Intermediate Egret	2	0						0			0	0	0	0	0	2	0	0	2	4	2
Little Egret	9	11	210	11	7	1	2	33	5	20	33	12	46	14	8	67	106	28	201	489	11
Swinhoe's Egret																0			0	0	
Pacific Reef Egret																0			0	0	
Cattle Egret	3	4	9					12	1		5	5	2	3	0	4	20	0	24	48	75
Chinese Pond Heron	5	7	22		1			3	1	2	14	5	2	9	6	6	27	1	34	83	1
Striated Heron	0	0	2					0			0	0	0	0	0	3	0	0	3	5	
B-c Night Heron	3	4	70					11		1	0	2	2	0	0	2	15	0	17	95	46
Yellow Bittern	0	0	1					0	1		0	0	0	0	0	0	0	0	0	2	
Cinnamon Bittern																0			0	0	
Great Bittern																0			0	0	
Black Stork																0			0	0	
Black-headed Ibis																0			0	0	
Eurasian Spoonbill																0			0	0	
Black-faced Spoonbill				7					13				3			53	3		56	76	
Common Shelduck																0			0	0	
Eurasian Wigeon	0	0						0			0	0	0	0	0	0	0	0	0	0	
Falcated Duck																0			0	0	
Gadwall																0			0	0	
Baikal Teal																0			0	0	
Common Teal	0	0						0			0	0	0	0	0	0	0	0	0	0	
Mallard																0			0	0	
Spot-billed Duck																0			0	0	
Chinese Spotbill																1		1	1	1	
Burmese Spotbill																0		0	0	0	
Northern Pintail																0		0	0	0	
Garganey																0		0	0	0	
Northern Shoveler																0		0	0	0	
Common Pochard																0		0	0	0	
Baer's Pochard																0		0	0	0	
Tufted Duck																1		1	1	1	
Greater Scaup																0		0	0	0	
Red-breasted Merganser																0		0	0	0	
Duck sp.																0		0	0	0	
Slaty-breasted Rail																0		0	0	0	
Water Rail																0		0	0	0	
White-breasted Waterhen	2	6	3					0	2	1	0	1	4	6	0	4	11	0	15	29	1
Watercock																0		0	0	0	
Common Moorhen	3	4	12					2	1		0	0	0	2	0	3	4	0	7	27	3
Eurasian Coot																0		0	0	0	
Pheasant-tailed Jacana																1		1	1	1	
Greater Painted Snipe									1							0		0	0	1	
Black-winged Stilt	5		9				2		13			1				50	1		51	80	
Pied Avocet																1056			1056	1056	
Oriental Pratincole																2			2	2	
Northern Lapwing																0			0	0	

Summary of Waterbird Count, June 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	WEP	NW/ LFS	TKC LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	27	6	1					7			4	0	1	4	2	24	1	37	76	
Great Crested Grebe					1												1	1	1	
Great Cormorant	0	0						0			0	0	0	0	0	0	0	0	0	
Dalmatian Pelican																				
Grey Heron	3	0	1					0	2		0	0	0	5	3	3	5	8	17	1
Purple Heron																				
Great Egret	89	16	251	1	37	5	7	20	3	3	14	6	14	10	14	79	71	200	569	60
Intermediate Egret	4	0						0			1	0	1	0	0	3	1	4	9	
Little Egret	16	18	379	5	35	2	9	3		20	39	47	5	17	18	93	87	231	706	11
Swinhoe's Egret																0		0	0	
Pacific Reef Egret																				
Cattle Egret	1	0	36					1			0	2	1	14	0	10	18	28	65	25
Chinese Pond Heron	7	8	18					6	2	2	18	0	6	17	18	16	33	49	118	
Striated Heron	0	0						0		1	0	0	0	1	2	0	0	2	4	
B-c Night Heron	16	6	70	1	1		1	1		1	9	3	0	8	3	16	18	37	136	44
Yellow Bittern	0	0	2				1	0	2		0	0	0	0	0	0	1	1	5	
Cinnamon Bittern																				
Great Bittern																				
Black Stork																				
Black-headed Ibis																				
Eurasian Spoonbill																				
Black-faced Spoonbill																				
Common Shelduck																				
Eurasian Wigeon	0	0						0			0	0	0	0	0	0	0	0	0	
Falated Duck																				
Gadwall																				
Baikal Teal																				
Common Teal	0	0						0			0	0	0	0	0	0	0	0	0	
Mallard																				
Spot-billed Duck																				
Chinese Spotbill																				
Burmese Spotbill																				
Northern Pintail																				
Garganey																				
Northern Shoveler																				
Common Pochard																				
Baer's Pochard																				
Tufted Duck																				
Greater Scaup																				
Red-breasted Merganser																				
Duck sp.																				
Slaty-breasted Rail																				
Water Rail																				
White-breasted Waterhen	3	7	5				2	7	3		4	0	5	3	5	4	14	20	48	3
Watercock																				
Common Moorhen	0	0	3				0				0	0	0	0	2	0	0	2	5	
Eurasian Coot																				
Pheasant-tailed Jacana	1																			
Greater Painted Snipe																				
Black-winged Stilt									7		1	1			17	2		19	26	
Pied Avocet			2												9			9	11	
Oriental Pratincole															0			0	0	

Summary of Waterbird Count, July 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	WEP	Sha Kiu	NW/LFS	TKC	LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	35	3	2					12	0	1			8	0	3	2	1	14	20	0	34	81	
Great Crested Grebe																						0	0
Great Cormorant	0	0						0	0				0	0	0	0	0	0	0	0	0	0	0
Dalmatian Pelican																						0	0
Grey Heron	0	0	1					0	0	1			0	0	0	0	0	1	0	0	1	3	0
Purple Heron																						0	0
Great Egret	23	13	95	20	7	41	13	51	15	2		21	11	10	11	4	6	127	85	94	306	470	80
Intermediate Egret	1	0	1					0	1	2			0	0	0	0	0	7	0	1	8	12	
Little Egret	12	24	208	20	2	12	2	17	9		2	3	45	7	9	12	15	75	57	44	176	474	33
Swinhoe's Egret																		0				0	0
Pacific Reef Egret																		0				0	0
Cattle Egret	23	0	35	1				0	0				2	0	0	0	0	2	2	1	5	63	23
Chinese Pond Heron	19	18	9		2			5	2	1	3	6	31	5	8	23	32	14	50	4	68	178	1
Striated Heron	0	0	2					0	0				0	1	0	0	0	2	1	0	3	5	
B-c Night Heron	28	21	57					1	0				1	1	3	3	1	12	7	0	19	128	30
Yellow Bittern	0	0	1					0	0	1			0	0	0	3	0	2	3	0	5	7	
Cinnamon Bittern										1								0			0	1	
Great Bittern																		0			0	0	
Black Stork																		0			0	0	
Black-headed Ibis																		0			0	0	
Eurasian Spoonbill																		0			0	0	
Black-faced Spoonbill																		0			0	0	
Common Shelduck																		7			7	7	
Eurasian Wigeon	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Falcated Duck																		0			0	0	
Gadwall																		0			0	0	
Baikal Teal																		0			0	0	
Common Teal	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Mallard																		0			0	0	
Spot-billed Duck																		0			0	0	
Chinese Spotbill																		0			0	0	
Burmese Spotbill																		0			0	0	
Northern Pintail																		0			0	0	
Garganey																		0			0	0	
Northern Shoveler																		0			0	0	
Common Pochard																		0			0	0	
Baer's Pochard																		0			0	0	
Tufted Duck																		0			0	0	
Greater Scaup																		0			0	0	
Red-breasted Merganser																		0			0	0	
Duck sp.																		0			0	0	
Slaty-breasted Rail																		0			0	0	
Water Rail																		0			0	0	
White-breasted Waterhen	6	4	6					3	0	3	2		5	0	1	1	3	3	4	0	7	37	
Watercock																		0			0	0	
Common Moorhen	0	0	14	1				0	0				0	0	0	1	0	0	1	1	2	16	
Eurasian Coot			1															0			0	1	
Pheasant-tailed Jacana																		0			0	0	
Greater Painted Snipe																		0			0	0	
Black-winged Stilt	2		13													5	1	17	5		22	38	
Pied Avocet																		1			1	1	
Oriental Pratincole																		0			0	0	
Northern Lapwing																		0			0	0	

Summary of Waterbird Count, August 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	31	0	1					5	0	1			23	0	3	5	2	13	22	0	35	84	1
Great Crested Grebe																		1				1	
Great Cormorant	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Dalmatian Pelican																		0				0	
Grey Heron	1	1						1	0				0	0	0	0	0	27	1	0	28	30	
Purple Heron																		0				0	
Great Egret	34	32	74	37	2	11	4	52	9	4		17	17	24	21	8	71	68	120	58	246	485	50
Intermediate Egret	3	0		1				0	0	2			0	2	0	0	0	6	2	1	9	14	
Little Egret	22	42	219	42	1	8	3	16	18	4		4	62	13	10	6	84	152	67	68	287	706	11
Swinhoe's Egret																		0			0	0	
Pacific Reef Egret																		0			0	0	
Cattle Egret	4	1						0	0				0	4	3	0	5	3	7	0	10	20	4
Chinese Pond Heron	52	22	10		4			6	2	3	1	3	31	7	11	21	25	21	68	4	93	219	5
Striated Heron	0	0	4					0	1				0	0	0	0	0	1	1	0	2	6	
B-c Night Heron	6	0	31					0	0				9	1	1	5	3	15	13	0	28	71	11
Yellow Bittern	0	0	1					1	0	2			1	0	0	0	0	1	1	0	1	5	
Cinnamon Bittern																		0			0	0	
Great Bittern																		0			0	0	
Black Stork																		0			0	0	
Black-headed Ibis																		0			0	0	
Eurasian Spoonbill																		0			0	0	
Black-faced Spoonbill																		0			0	0	
Common Shelduck																		0			0	0	
Eurasian Wigeon	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Falcated Duck																		0			0	0	
Gadwall																		0			0	0	
Baikal Teal																		0			0	0	
Common Teal	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Mallard																		0			0	0	
Spot-billed Duck																		0			0	0	
Chinese Spotbill																		0			0	0	
Burmese Spotbill																		0			0	0	
Northern Pintail																		0			0	0	
Garganey																		0			0	0	
Northern Shoveler																		0			0	0	
Common Pochard																		0			0	0	
Baer's Pochard																		0			0	0	
Tufted Duck																		0			0	0	
Greater Scaup																		0			0	0	
Red-breasted Merganser																		0			0	0	
Duck sp.																		0			0	0	
Slaty-breasted Rail																		0			0	0	
Water Rail																		0			0	0	
White-breasted Waterhen	9	1	2					1	1	1			4	1	2	4	6	4	9	0	13	36	2
Watercock																		0			0	0	
Common Moorhen	2	0	5					0	0				0	0	0	0	0	0	0	0	0	7	
Eurasian Coot																		0			0	0	
Pheasant-tailed Jacana																		0			0	0	
Greater Painted Snipe																		1			1	1	
Black-winged Stilt	8		3							5						5	2	11			11	34	
Pied Avocet																		0			0	0	
Oriental Pratincole																		0			0	0	

Summary of Waterbird Count, September 2010

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	WEP	Sha Kiu	NW/LFS	TKC	LC	TSW	MPST	ST	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet	
Little Grebe	23	0						10	0				30	0	13	6	5	13	48	0	61	100	1	
Great Crested Grebe																								
Great Cormorant	0	0						0	0				0	0	0	0	0	0	0	0	0	0	1	
Dalmatian Pelican																								
Grey Heron	26	0	31				6	1	4				0	8	3	11	0	18	24	9	51	108	2	
Purple Heron																								
Great Egret	28	0	164	44	79	8	17	85	36	3		10	17	19	54	7	43	45	188	178	411	659	112	
Intermediate Egret	34	0						0	0	2			0	5	2	0	0	11	7	0	18	54	1	
Little Egret	38	0	226	38	10	32	42	35	103	9	2	13	30	23	68	29	113	32	242	221	495	843	28	
Swinhoe's Egret																								
Pacific Reef Egret																								
Cattle Egret	71	0	13					6	0	3			2	30	6	9	61	1	52	0	53	202	2	
Chinese Pond Heron	87	0	13				1	7	0	3		3	30	2	14	47	37	8	90	1	99	252	4	
Striated Heron	0	0						0	0				0	0	0	1	5	0	0	0	0	5	6	
B-c Night Heron	5	0	22					0	0				0	1	3	3	0	9	5	0	14	43		
Yellow Bittern	2	0	1					0	0				0	0	0	0	0	0	0	0	0	3		
Cinnamon Bittern																								
Great Bittern																								
Black Stork																								
Black-headed Ibis																								
Eurasian Spoonbill																								
Black-faced Spoonbill																								
Common Shelduck																								
Eurasian Wigeon	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
Falated Duck																								
Gadwall																								
Baikal Teal																								
Common Teal	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
Mallard																								
Spot-billed Duck																								
Chinese Spotbill																								
Burmese Spotbill																								
Northern Pintail																								
Garganey																								
Northern Shoveler																								
Common Pochard																								
Baer's Pochard																								
Tufted Duck																								
Greater Scaup																								
Red-breasted Merganser																								
Duck sp.																								
Slaty-breasted Rail																								
Water Rail																								
White-breasted Waterhen	5	0	3		1			0	0	2			1	0	3	3	2	3	8	1	12	23	1	
Watercock																								
Common Moorhen								0	0				0	0	0	0	0	1	0	0	1	2		
Eurasian Coot	1	0																						
Pheasant-tailed Jacana																								
Greater Painted Snipe																								
Black-winged Stilt	19		34				4	6					1		2	26		86	34		120	178		
Pied Avocet																		1				1	1	
Oriental Pratincole																		0				0	0	

