

Tender Reference No. AFCD/SQ/22/11

**Mai Po Inner Deep Bay Ramsar Site
Waterbird Monitoring Programme
2011 - 12**

**Monthly Waterbird Monitoring
Winter 2011 - 12 Report**



Submitted by
The Hong Kong Bird Watching Society
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Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

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Winter 2011-12 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Report



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

MAI PO INNER DEEP BAY RAMSAR SITE WATERBIRD MONITORING PROGRAMME

Programme 2011/12

Monthly Waterbird Count

Oct 2011 - Mar 2012

Winter 2011-2012 Report

Y.T. YU

1. Introduction

Long-term monitoring of waterbirds provides an insight into the health of wetlands; it concerns not only the waterbird community, but also the entire ecosystem in Deep Bay. Waterbird Monitoring Programme provides important baseline information for the management of Mai Po Inner Deep Bay Ramsar Site. This was administered and executed by the Hong Kong Bird Watching Society (HKBWS) under subvention from the Agriculture, Fisheries and Conservation Department (AFCD) from December 1998 to March 2004. Starting from April 2004, the Waterbird Monitoring Programme was arranged under service contracts funded by AFCD.

The Waterbird Monitoring Programme comprises three major components, namely, monthly waterbird count, shorebird count and egret count. The monthly waterbird counts are conducted in the Deep Bay area including the Mai Po Inner Deep Bay Ramsar Site, fishpond areas and mudflat adjacent to the Ramsar Site; the shorebird counts are conducted at the key feeding and loafing sites in the Mai Po Marshes Nature Reserve and intertidal mudflat during the migration seasons; and the egret counts are conducted all around Hong Kong during the breeding season. This report focuses on the results of the monthly counts of waterbirds during the winter period from October 2011 to March 2012 under the tender reference number AFCD/SQ/22/11.

2. Methodology

The coordinated mid-monthly counts of wintering waterbirds in Hong Kong were carried out by accredited waterbird surveyors of the HKBWS, with support rendered by reserve staff of the Hong Kong Wetland Park on 9 October 2011, 13 November 2011, 18 December 2011, 15 January 2012, 12 February 2012 and 11 March 2012. The survey area included the Mai Po Inner Deep Bay Ramsar Site (the 'Ramsar Site') and wetland areas around the Ramsar Site (the 'Deep Bay area'). The Deep Bay

area covered the Ramsar Site and survey sites including mudflat between Tsim Bei Tsui to Lau Fau Shan, fishpond areas at Ma Tso Lung, Sam Po Shue, San Tin, Mai Po San Tsuen, Tam Kon Chau, Tai Sang Wai, Lut Chau, Luen Hing Wai, Wing Kei Tsuen, Nam Sang Wai, Tsim Bei Tsui and Tin Shui Wai. Besides, the survey also covered the Hong Kong Wetland Park, and the Futian National Nature Reserve at Shenzhen Special Economic Zone in mainland China. Maps 1, 2 and 3 show the location of each of the survey sites within the survey area, together with the boundary of the Mai Po Inner Deep Bay Ramsar Site. Figures collected from the monthly waterbird counts were grouped and presented with respect to two main areas: (1) Ramsar Site and (2) Deep Bay area.

This monitoring programme involved the counting of waterbirds in the above survey area. Habitat types included fishponds, *gei wais*, storm water channel, streams, intertidal mudflat, mangroves, reedbed and marshes. The survey sites, in particular the intertidal areas of Inner Deep Bay, were surveyed simultaneously so as to avoid double-counting as far as possible.

During the winter months, substantial number of waterbirds were present in the Deep Bay intertidal area. However, there were only a few days with diurnal tides high enough to force all waterbirds off the mudflat to the roosting sites in Mai Po and/or close to the floating bird watching hides. All counts were conducted on dates with rising tide, preferably 1.8 m or above. High-tide counts of individual species conducted within one week from the scheduled survey date were included if they were considered to provide more accurate counting result than those gathered on the counting day. This methodology has been described in details in the Waterbird Count Handbook (Carey 2002, Map 1 to 3).

Additional low-tide counts were conducted in the mid-winter period (i.e. December to February) on the same dates scheduled for high-tide counts so as to provide supplementary information on the number of some waterbird species including ducks, gulls which preferred to stay in the intertidal area during low-tide. Counting was conducted in a synchronous manner at the jetty outside the police station in Tsim Bei Tsui and at the Futian National Nature Reserve in Shenzhen.

3. Results and discussion

3.1. Results of winter waterbird counts

All survey areas in the Deep Bay area and the Ramsar Site were covered during the survey period in the winter months. A full dataset of the surveys are provided in Appendix 1. Table 1 shows a comparison of the peak counts. In 2011-12, the peak count was 68,080 birds recorded in February 2012, of which 45,744 (67%) birds were recorded at the Ramsar Site. Compared to the results of last year, the peak count at the Deep Bay area has decreased slightly by 1% while the peak count at the Ramsar Site has increased by 7%. As the peak was in February this year, the number of waterbirds recorded in January 2012 was far less than that recorded in January of the previous year, there was a decrease of 28% and 19% at the Deep Bay area and the Ramsar Site respectively.

The count conducted in February showed that wintering ‘ducks and grebes’ was the largest waterbird group with 25,739 individuals (38%), followed by ‘shorebirds’ with 25,299 individuals (37%). These were also the peak counts for the two waterbird groups in this winter (Table 2). The number of wintering Great Cormorants reached the peak in February with 9,636 individuals recorded.

Compared to the results of the previous year, increases were observed in the peak counts of ‘ardeids’ and ‘shorebirds’, whereas decreases were observed in the peak counts of ‘cormorants’, ‘ducks and grebes’, ‘rails and coots’, and ‘gulls and terns’ (Table 3). The winter peak count of ‘gulls and terns’ showed a decrease of 45% which was the lowest record since 2001-02.

Table 1. Comparison of the number of waterbirds recorded at the Deep Bay area and the Ramsar Site in winter 2007-08 to 2011-12. The Ramsar Site covers part of the Deep Bay area, with details shown in Maps 2 and 3.

		Winter 2007-08*	Winter 2008-09	Winter 2009-10*	Winter 2010-11*	Winter 2011-12
Winter peak monthly count [^]	Deep Bay	90,132	78,155	76,882	68,635	68,080
	Ramsar Site	56,823	27,526	39,000	42,699	45,744
January count	Deep Bay	90,132	71,264	76,882	68,635	49,202
	Ramsar Site	56,823	30,539	39,000	42,699	34,561

[^] Winter peak monthly count[^] refers to the highest count between October to March 2012 in the winter period.

* Counts of the whole Deep Bay area peaked in January for the winters in 2007-08, 2009-10 and 2010-11.

Table 2. Number of waterbirds counted in winter 2011-2012 by groups and sites

Group	Site	Oct	Nov	Dec	Jan	Feb	Mar
Cormorants	Deep Bay area	889	5,738	9,431	8,303	9,636	5,907
	Ramsar Site	575	5,027	8,109	3,151	3,795	5,030
	Starling Inlet	0	3	7	111	18	109
Ardeids	Deep Bay area	2,685	3,507	3,384	2,830	2,645	2,224
	Ramsar Site	1,482	1,465	1,400	1,526	1,063	1,113
	Starling Inlet	288	174	113	185	567	361
Ducks and grebes	Deep Bay area	1738	13,997	23,107	13,711	25,739	6,407
	Ramsar Site	101	6,398	10,349	9,131	17,029	1,934
	Starling Inlet	5	10	13	14	17	22
Rails and Coots	Deep Bay area	78	90	191	206	155	213
	Ramsar Site	35	29	85	83	47	98
	Starling Inlet	1	12	15	21	23	22
Shorebirds	Deep Bay area	4,327	11,873	16,784	19,024	25,299	11,668
	Ramsar Site	3,044	3,207	12,241	16,070	20,568	8,669
	Starling Inlet	10	28	9	56	9	6
Gulls and terns	Deep Bay area	30	1,237	2,393	5,128	4,606	2,121
	Ramsar Site	13	536	1,477	4,600	3,242	1,240
	Starling Inlet	0	0	0	0	0	0
Total	Deep Bay area	9,747	36,442	55,290	49,202	68,080	28,540
	Ramsar Site	5,250	16,662	33,661	34,561	45,744	18,084
	Starling Inlet	304	227	157	387	634	520

Table 3. Peak number of different waterbird groups in the Deep Bay area during the mid-winter period (i.e. December to February) from 2001 to 2012

Winter	Cormorants	Ardeids	Ducks and Grebes	Rails and coots	Shore-birds	Gulls and Terns
2001-02	6,230 (Jan)	4,400 (Jan)	18,987 (Dec)	195 (Jan)	10,242 (Jan)	13,302 (Jan)
2002-03	7,959 (Jan)	4,702 (Jan)	20,203 (Jan)	219 (Dec)	9,849 (Feb)	13,191 (Jan)
2003-04 ^	8,964 (Jan)	3,963 (Dec)	16,856 (Feb)	362 (Jan)	12,856 (Jan)	8,469 (Dec)
2004-05	9,552 (Jan)	6,425 (Dec)	22,521 (Jan)	384 (Feb)	9,806 (Feb)	9,346 (Dec)
2005-06	10,347	4,345	19,657	597	13,695	14,417

	(Jan)	(Jan)	(Feb)	(Dec)	(Feb)	(Feb)
2006-07	10,081 (Jan)	4,396 (Dec)	33,779 (Feb)	798 (Feb)	19,054 (Feb)	12,000 (Jan)
2007-08	11,144 (Jan)	3,549 (Jan)	35,066 (Jan)	866 (Jan)	27,720 (Jan)	11,787 (Jan)
2008-09	8,736 (Jan)	4,384 (Feb)	38,099 (Feb)	460 (Jan)	24,069 (Feb)	11,212 (Dec)
2009-10	10,758 (Feb)	3,357 (Jan)	28,700 (Jan)	523 (Jan)	23,926 (Jan)	11,331 (Jan)
2010-11	10,023 (Feb)	3,006 (Dec)	30,628 (Dec)	332 (Jan)	20,708 (Jan)	9,393 (Jan)
2011-12	9,636 (Feb)	3,384 (Dec)	25,739 (Feb)	206 (Jan)	25,299 (Feb)	5,128 (Jan)

^ Counts in mid-winter period of 2003-04 were modified by incorporating the results of additional counts. Details are referred to in Part II: additional counts of waterbirds in Deep Bay Intertidal area in January and February 2004 in Yu (2004) and Anon. (2005).

Synchronised low-tide counts were conducted in the intertidal area at Tsim Bei Tsui and Futian National Nature Reserve, Shenzhen in December, January and February. Figures collected in the low-tide counts could serve as supplementary information for high-tide counts as some bird species preferred to stay in the intertidal mudflat during the low-tide periods. Examples of such bird species which were recorded in this winter included Black-headed Gull and Black-winged Stilt. Results of low-tide counts of different waterbird groups are listed in Table 4 and details are shown in Appendix 2.

Low-tide count has been proven as an effective method to acquire additional information of ducks and gulls which prefer to stay in the intertidal area of the Deep Bay area (Anon 2011). Height of tide and visibility are important factors affecting the counts of waterbirds in the low tide period. In this winter, the low tide counts were conducted in a less favourable condition because of poor visibility as a result of persistently poor weather condition including heavy rainfall in January.

Table 4. Number of waterbird groups recorded at the Deep Bay area during low-tide counts, winter 2011-12. Number in parenthesis represents the results recorded within the area of the Ramsar Site.

	December 2011	January 2012	February 2012
Cormorants	51 (21)	70 (Nil)	8,159 (2,600)
Ardeids	426 (218)	192 (Nil)	194 (50)
Ducks, grebes and pelicans	11,247 (720)	3,241 (789)	7,324 (2,465)
Rails and Coots	11 (Nil)	57 (Nil)	64 (Nil)
Waders	12,369 (1,226)	2,011 (Nil)	4,319 (652)
Gulls and terns	2,378 (1,462)	5,128 (4,600)	834 (756)
Total	26,482 (3,647)	10,699 (5,459)	20,894 (6,523)
High-tide count total	55,208 (34,008)	48,784 (34,149)	67,094 (45,886)
Aggregate total from low-tide count	55,290 (33,661)	49,202 (34,561)	68,080 (45,744)

In order to avoid stochastic biases for adopting the January count solely and to acquire a more accurate profile of the number of waterbirds that were dependent on Deep Bay as their habitat for at least a period in the winter, the total peak count in the mid-winter period (December to February) was also extracted to show the maximum number of waterbirds that used the Deep Bay area, in other words, supported by the area in the 2011-12 winter. The total peak count for 2011-12 winter was 72,492 birds, including 7,813 unidentified ducks (Appendix 3). That was a decrease of 5% when compared to the result of 76,679 individuals recorded in last winter. Table 5 shows a comparison of the total peak counts in the winters from 2006-07 to 2011-12. The number of waterbird species found was 64 in winter 2011-12, slightly fewer than last winter.

Table 5. Total peak counts in the winters of past six years

	Winter 2006-07	Winter 2007-08	Winter 2008-09	Winter 2009-10	Winter 2010-11	Winter 2011-12
Total peak count	80,108	90,986	87,633	87,379	76,679	72,492
Total no. of positively-identified waterbird species	71	71	70	75	67	64

In the winter period, the ten most numerous waterbird species recorded in the Deep Bay area (Table 6) included, namely, the most abundant Pied Avocet *Recurvirostra avousetta* (14,604), followed by Great Cormorant *Phalacrocorax carbo* (9,636), Northern Shoveler *Anas clypeata* (7,560), Black-headed Gull *Chroicephalus ridibundus* (4,964), Tufted Duck *Aythya fuligula* (3,305), Dunlin *Calidris alpina* (3,100), Eurasian Wigeon *Anas penelope* (2,919), Kentish Plover *Charadrius alexandrinus* (2,640), Northern Pintail *Anas acuta* (2,413) and Marsh Sandpiper *Tringa stagnatilis* (2,237). These ten waterbird species together made up a total of 53,831 individuals, constituting 74% of all the waterbirds recorded in the winter period. Furthermore, the number of waterbirds recorded at Hong Kong side was higher than that at the Futian National Nature Reserve during the high tide period. Regular movement of wintering waterbirds in the Deep Bay area from Mai Po during the high tide period to Futian during the low tide period was also observed.

Table 6. The ten most numerous wintering waterbird species recorded at Deep Bay in Hong Kong and Shenzhen, Deep Bay.

	Number of birds at Hong Kong side	Number of birds at Futian (i.e. Shenzhen)	Total number
Pied Avocet	13,597	1,007	14,604
Great Cormorant	9,636	0	9,636
Northern Shoveler	5,729	1,831	7,560
Black-headed Gull	4,558	406	4,964
Tufted Duck	608	2,700	3,308
Dunlin	3,060	40	3,100
Eurasian Wigeon	2,875	44	2,919
Kentish Plover	2,600	40	2,640
Northern Pintail	2,411	2	2,413
Marsh Sandpiper	2,195	42	2,237
Total	47,269 (88.6%)	6,112 (11.4%)	53,831

3.2 Species of conservation significance

Some waterbird species that appeared in the Deep Bay Area were of conservation significance. This was partly attributable to their globally threatened status as classified by BirdLife International (2000, 2008, 2012), or because at least 1% of their regional or flyway population was supported by the Deep Bay area. The data of '1% of the regional or flyway population' was adopted from Wetlands International (2012). Brief reviews of the important waterbird species recorded in

winter 2011-12 are appended below.

Great Cormorant *Phalacrocorax carbo*

Organised counts at roosting sites were conducted at Mai Po Marshes Nature Reserve and Nam Sang Wai in December 2011, January 2012 and February 2012. A total number of 8,303 and 9,636 birds were counted in January and February respectively. The peak count in February had a decrease of 4% as compared to that recorded in the previous winter. Applying the criterion that the 1% regional population at 1,000 individuals (Wetland International 2012), the Deep Bay area had supported 9.6% of the regional population in winter 2011-12.

Black-faced Spoonbill *Platalea minor*

Endangered

In December 2011, a total of 488 Black-faced Spoonbills (equivalent to 18% of the known world population) were recorded in the Deep Bay area. This was the peak count in this winter, with a 11% increase from the previous winter. The International Black-faced Spoonbill Census took place in the same week as the monthly waterbird monitoring in January 2012. The Census recorded a total of 2,693 individuals in East Asia region, of which 442 individuals (equivalent to 16% of the world population) were recorded in Deep Bay area during the census (HKBWS 2012).

Falcated Duck *Anas falcata*

Near Threatened

A total of 28 individuals were recorded in February 2012. This was not only the peak count in this winter, but also the highest record for this species in the Deep Bay area taken in last decade. There was only a single bird found in December 2011.

Northern Pintail *Anas acuta*

The peak count for this species was 2,413 individuals recorded in February 2012 that was a 33% decrease from the peak count (3,622 individuals) of the previous year. Applying the criterion that the 1% regional population at 2,400 individuals (Wetland International 2012), the Deep Bay area had supported 1% of the regional population in winter 2011-12.

Northern Shoveler *Anas clypeata*

The peak count for this species was 7,560 individuals recorded in January 2012, that was a 22% decrease from the peak count (9,674 individuals) of the previous winter. This species had a peak count of 20,008 individuals in winter 2009-10 and its number started to decline in the past two winters. On the basis that the 1% regional population was 5,000 individuals (Wetland International 2012), about 1.5% of the regional population had stayed in the Deep Bay area in this winter.

Baer's Pochard *Aythya baeri*

Critically Endangered

Only a single individual was recorded in February 2012. Baer's Pochard has undergone a very rapid decline in its regional population due to habitat destruction and excessive hunting in breeding and wintering grounds. This species has been upgraded to "Critically Endangered" in 2012 (BirdLife International 2012). In Deep Bay area, this species has become very rare in recent years.

Tufted Duck *Aythya fuligula*

The highest count for this species was 3,308 individuals recorded in February 2012, a significant decrease of 43% from the peak count (5,823 individuals) of the previous year. On the basis that the 1% regional population was 2,400 individuals (Wetland International 2012), the Deep Bay area had supported about 1.4% of the regional population, and most of these birds (2,400 individuals) were recorded at the Futian National Nature Reserve, Shenzhen.

Pied Avocet *Recurvirostra avosetta*

The peak count was 14,604 individuals recorded in February 2012, an increase of 33% from the peak count of the previous year (i.e. 10,944 individuals). This was also the second highest record for this species counted in the Deep Bay area. Throughout the winter period, over 10,000 individuals were recorded. On the basis that the 1% regional population was 1,000 individuals (Wetland International 2012), the Deep Bay area had supported 14% of the regional population in this winter.

Black-tailed Godwit *Limosa limosa*

Near Threatened

A total of 520 individuals were recorded in February 2012. This was also the peak count in this winter, and most of the birds were recorded at the Futian National Nature Reserve, Shenzhen. There was a sharp decrease of 72% from the peak count (1,900 individuals) of the previous winter (2010-11), and a decrease of 30% from the peak count (752 individuals) of 2009-10 winter. The 1% regional population was 1,400 individuals (Wetland International 2012).

Eurasian Curlew *Numenius arquata*

Near Threatened

The winter peak count for this species was 1,128 individuals recorded in December 2011, a 30% decrease from the peak count (1,602 individuals) of the previous winter which was the highest record for this species in the Deep Bay area. As the 1% regional population was 1,000 individuals (Wetlands International 2012), this peak count represented 1.1% of the regional population.

Common Greenshank *Tringa nebularia*

The peak count for this species was 944 individuals recorded in December 2011, a decrease of 18% from the peak count recorded in the previous winter (1,149 individuals). On the basis that the 1% regional population was 1,000 individuals (Wetlands International 2012), the peak count of 944 individuals was equivalent to nearly 1% of the regional population.

Nordmann's Greenshank *Tringa guttifer* Endangered

A single individual of this endangered species was recorded in March 2012. The global population of this species was estimated at 400 to 600 individuals, and the 1% regional population was 5 individuals (Wetland International 2012).

Saunders's Gull *Chroicocephalus saundersi* Vulnerable

The peak count in this winter was 57 individuals made in February 2012, which almost doubled the peak count of 30 individuals recorded in the previous year. The global population was estimated between the range of 7,100 to 9,600 individuals (BirdLife International 2012) and the 1% population threshold was 71 birds (Wetlands International 2012).

3.2 *Other notable counts*

Greater Crested Grebe *Podiceps cristatus*

The peak count in this winter was 420 birds made in December 2011. As the 1% regional population was set at 350 individuals (Wetland International 2012), this peak count represented 1.2% of the regional population.

Eastern Great Egret *Ardea alba*

This species was common and widespread in the Deep Bay area throughout the year and high numbers were recorded in winter months. The peak count in this winter was 916 individuals recorded in December 2012, a 14% increase from the peak count (804 individuals) of the previous year. The peak count of 916 individuals nearly reached the threshold of 1% regional population which was set at 1,000 (Wetland International 2012).

Common Shelduck *Tadorna tadorna*

6 individuals were recorded in February 2012 but none was recorded in other months and also last winter. This species has suffered a drastic decline in its number in the Deep Bay area in recent years, and the historical peak count was 4,011 individuals recorded in January 1988 (Carey *et al.* 2011).

Common Teal *Anas crecca*

This is one of the most commonly seen ducks in the Deep Bay area (Carey *et al.* 2002). However, it has declined in number in recent winters. The peak count in this winter was 937 individuals made in December 2012, with a decrease of 36% from the peak count (1,459 individuals) recorded in the previous winter. In winter 2008-09, the peak count was as high as 2,332 individuals.

Eurasian Coot *Fulica atra*

The peak count was only 9 individuals recorded in January 2012, while the peak count was 125 birds in the previous winter. This indicated that this species had almost disappeared from the Deep Bay area in this winter. This species had once been a very common wintering bird in the Deep Bay area.

Little Ringed Plover *Charadrius dubius*

The population in the Deep Bay area occasionally met the threshold of 1% regional population which was 250 individuals (Wetland International 2012) (e.g. 315 individuals in February 2009). The peak count in this winter was only 123 individuals recorded in January 2012, obviously lower than the 1% threshold.

Kentish Plover *Charadrius alexandrinus*

The peak count for this species was 2,640 individuals recorded in January 2012. It was more than triple of the peak count (720 individuals) recorded in the previous year. On the basis that the threshold of 1% regional population was 1,000 individuals (Wetland International 2012), this peak count was equivalent to 2.6% of the regional population.

Spotted Redshank *Tringa erythropus*

The peak count was 30 individuals made in December 2011, exhibiting a drastic decline of 84% from the peak count (160 individuals) recorded in the previous winter. This was another waterbird species which was once very common in the Deep Bay area but has become very scarce in recent winters. The threshold of 1% regional population of this species is now set at 250 individuals (Wetland International 2012), indicating that this species may suffer a decline of their regional population.

Marsh Sandpiper *Tringa stagnatillis*

This species often presents in large flock in the Deep Bay area during winter. The peak count was 2,237 individuals recorded in February 2012, a 40% decrease from the peak count (3,705 individuals) of last winter, and a decrease of 22% from the peak count (2,884 individuals) of 2009-10 winter.

Black-headed Gull *Chroicocephalus ridibundis*

A peak count of 4,964 individuals was recorded in January 2012, a sharp decline of 46% from the peak count (9,160 individuals) of last winter. This species has declined in number in the Deep Bay area and the reason is still unknown.

4. Conclusion

After the peak count of 90,986 individuals recorded in winter 2007-08, the numbers of waterbirds recorded have declined in last three consecutive winters (Figure 1). The figures, including the January count, the peak monthly count, the total winter peak count and the number of waterbird species, have all shown a decreasing trend. The low-tide counts, that were supposed to provide supplementary information including the number of waterbird species which spent most of the time utilising the inter-tidal mudflat area, did not yield better results. This indicated that the number of wintering waterbirds in the intertidal area might actually be on the low side regardless of the tidal height.

The total number of waterbirds has decreased in this winter. The proportion of the ten most numerous waterbird species to all waterbirds was also less than that recorded in the previous years (winter 2011-12: 74%, winter 2010-11: 78%, winter 2009-10: 86%, winter 2008-09: 84%, winter 2007-08: 84%). This indicated that certain common species have become less predominant in this winter. Taking a closer look at the data collected in this winter, there were fewer wintering ducks (i.e. Northern Shovelers, Eurasian Wigeon, Northern Pintail and Tufted Duck), while there were increases in the number of other waterbird species including Pied Avocets and Kentish Plover. The total number of waterbird species recorded in this winter was 64 species.

Among the 64 waterbird species recorded in this winter, a total of 17 species were of conservation concern, including 7 globally threatened or near-threatened species (namely, Black-faced Spoonbill, Falcated Duck, Baer's Pochard, Black-tailed Godwit, Eurasian Curlew, Nordmann's Greenshank and Saunders's Gull) and 10 other species with a minimum of 1% of the global or regional population were recorded at the Deep Bay area. The regular waterbird monitoring programme helps to provide information on both spatial abundance and temporal fluctuation which reflects the trend or health of the waterbird population including the globally threatened species.

The unstable and persistently poor weather condition in January 2012 might have led to the decrease in number of waterbirds recorded. Apart from that, cross-border fishermen who were spotted occasionally in the mudflat area in front of the Mai Po boardwalk hides might also have caused disturbance to the waterbirds utilising the mudflat area. There have also been occasional records during the winter of 2011-12 and in early spring of 2012 that lines of traps placed by the fishermen in the mudflat in front of the boardwalk hides could also cause potential problem to waterbirds (<http://www.hkbws.org.hk/BBS/viewthread.php?tid=16468&extra=page%3D1>), and waterbird surveyors at Shenzhen side had reported that about a hundred fishermen were found working in the mudflat area at the Futian National Nature Reserve. To reduce disturbance to waterbirds, it is suggested that the AFCD to communicate with the relevant parties to step up surveillance checks on person entering the restricted area if he/she is the holder of a valid permit.

5. Acknowledgements

I would like to thank the following surveyors who participated in the counts: John Allcock, Geoff Carey, Bonnie Chan, Gary Chow, Forrest Fong, Martin Hale, John and Jemi Holmes, Tony Hung, W.M. Hung, Aaron Keung, Alan Lam, Roger H. Lee, R.W. Lewthwaite, Austin Ng, C.C. Pang, Carmen Or, Y.H. Sung, Captain Wong, Shenzhen Bird Watching Society. I also thank the reserve staff of the Hong Kong Wetland Park for their contribution in collecting waterbird data.

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Figure

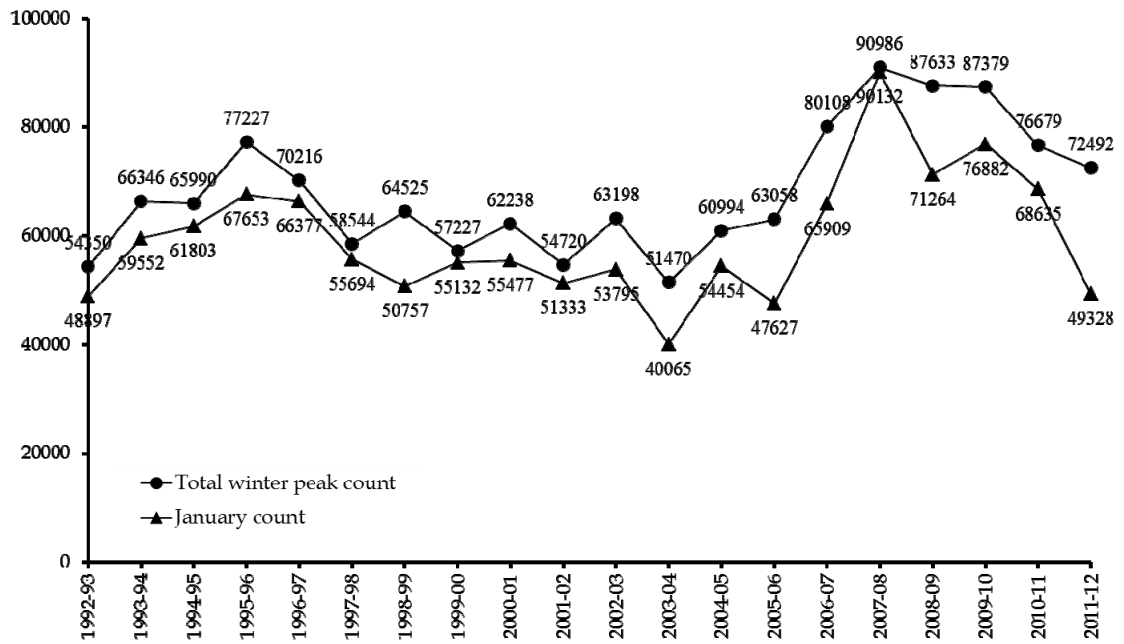


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Figure 1. Total winter peak counts and January (mid-winter) counts, 1992-2012.



Note: number of waterbirds in winter 2003-04 was modified and details are referred to Anon. (2005). Statistics for winters 1997-98, 1998-99, 1999-00 and 2005-06 have also been revised.

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Maps

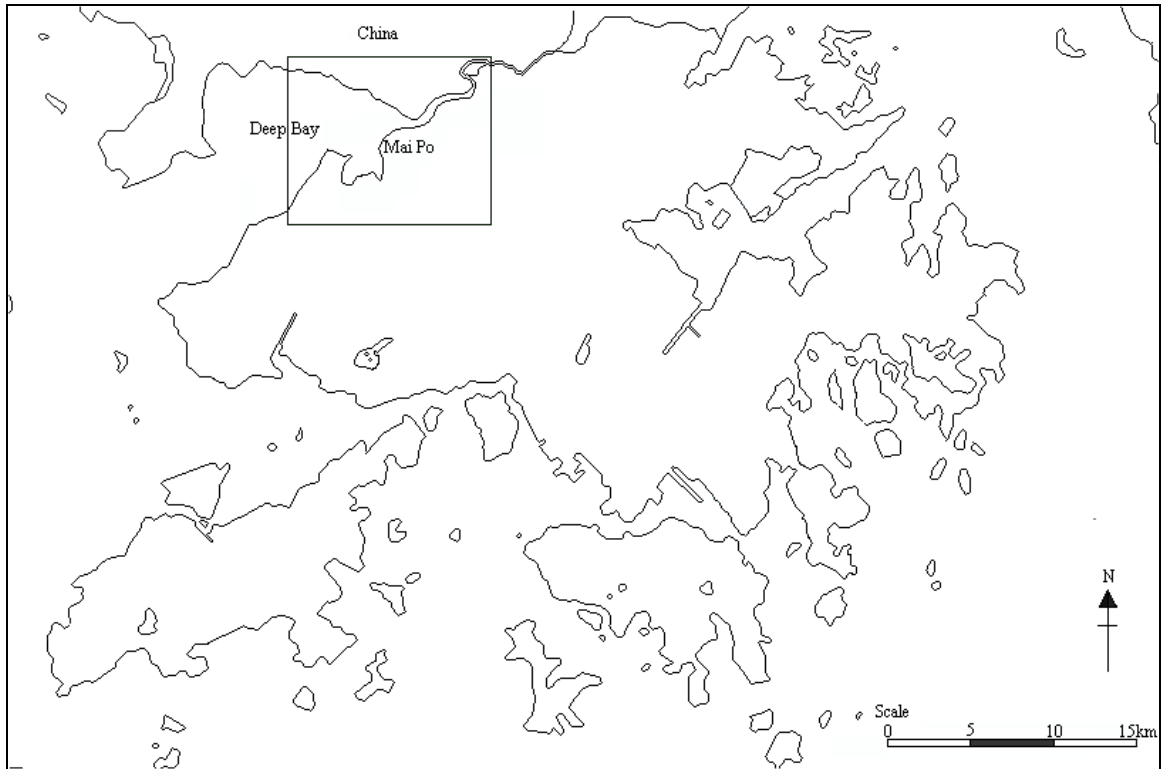


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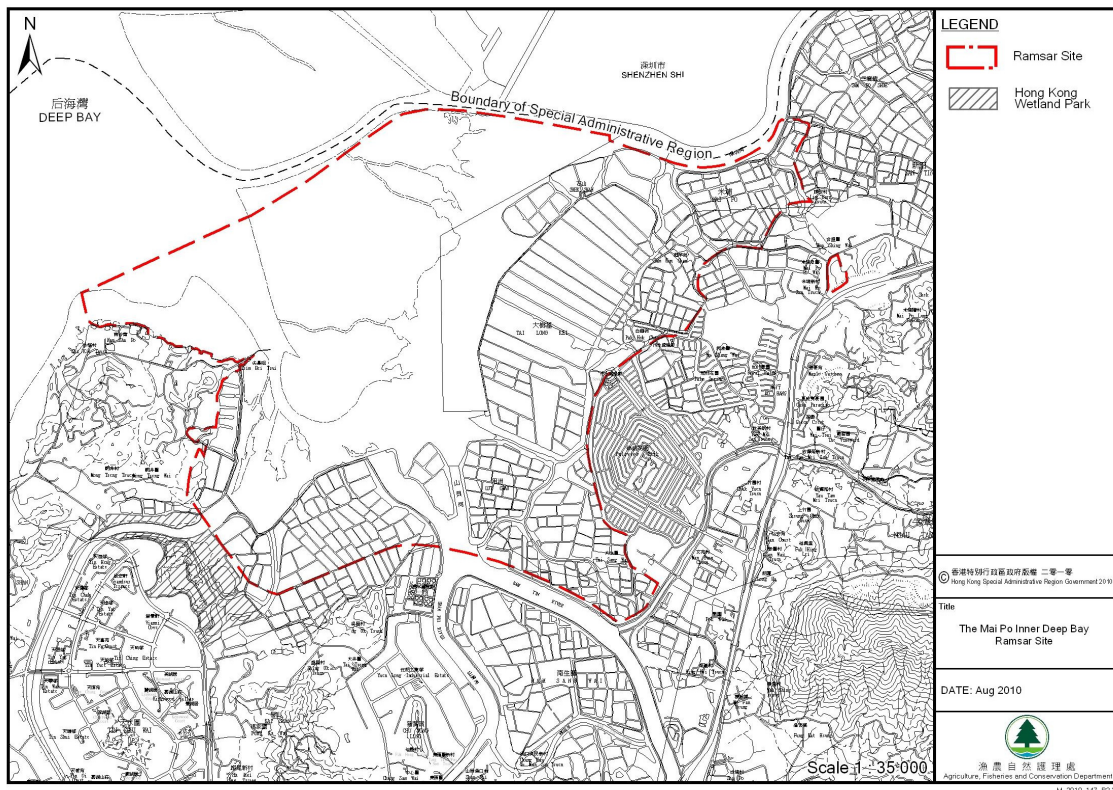


Agriculture, Fisheries and Conservation Department

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

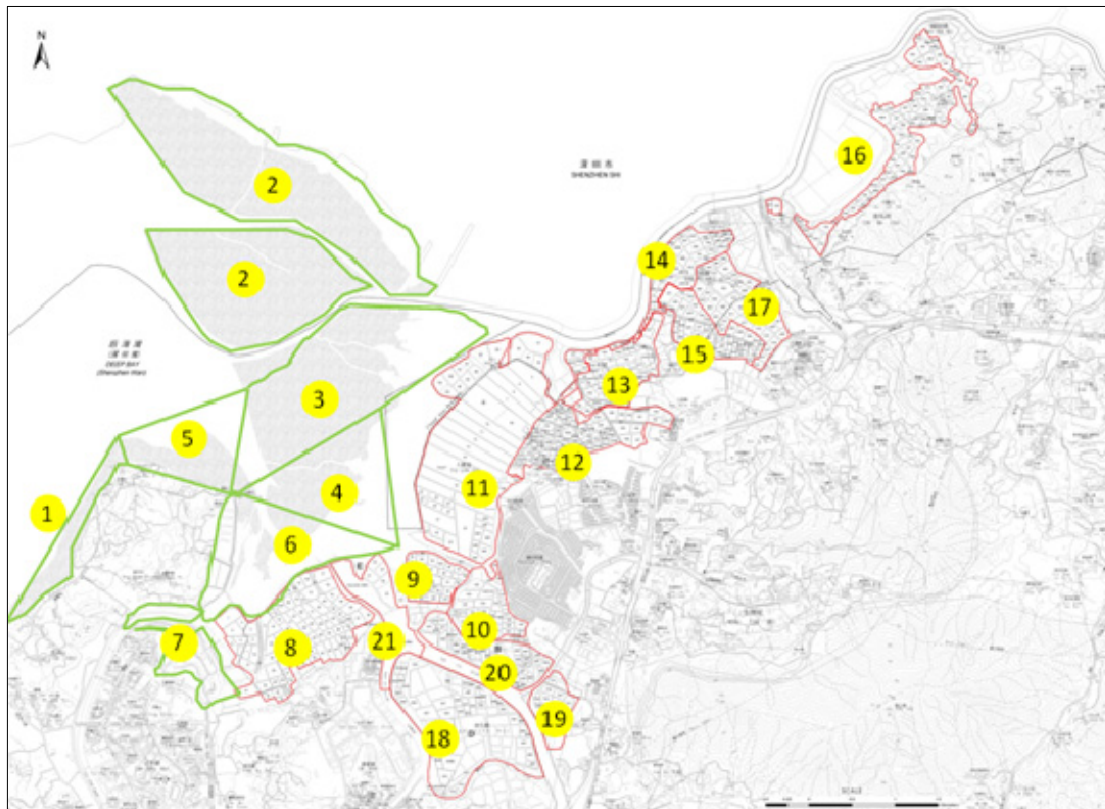


Map 2. Boundary of Mai Po Inner Deep Bay Ramsar Site.



Source: AFCD

Map 3. Location of survey sites of the Waterbird Monitoring Programme
 (1: Tsim Bei Tsui to Nim Wan; 2: Deep Bay 'A'; 3: Deep Bay 'B'; 4: Deep Bay 'C'; 5: Deep Bay 'D'; 6: Deep Bay 'E'; 7: Hong Kong Wetland Park; 8: Deep Bay 'F' (Tsim Bei Tsui fishpond); 9: Lut Chau; 10: Tai Sang Wai; 11: Mai Po Marshes Nature Reserve; 12: Tam Kon Chau; 13: Mai Po San Tsuen; 14: Shenzhen River 'A'; 15: San Tin; 16: Shenzhen River 'B'; 17: Sham Po Shue; 18: Nam Sang Wai; 19: Wing Kei Tsuen; 20: Luen Hin Wai; 21: Shan Pui River.)



Winter 2011-12 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Appendix 1



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Summary of Waterbird Count, October 2011

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	9	6	1		1			7	0	0	7				15	0	29	16	6	32	8	60	1	69	137	5
Great Crested Grebe	1		7																		0			0	8	
Great Cormorant	18	20	5					17	2	135	100				7	0	11	55	7	7	505	68	2	575	889	
Dalmatian Pelican																					0			0	0	
Grey Heron	98	18	28		1	6	37	23	43	33	11	16	3	1	10	2	3	7	0	6	180	45	79	304	526	21
Purple Heron										1											7			7	8	
Great Egret	70	20	12	2	2	2	22	21	78	66	57	6	1	7	27	6	27	23	6	58	119	130	103	352	632	106
Intermediate Egret	1	0		8				0	1	1	0				0	0	0	0	0	0	14	0	9	23	25	4
Little Egret	30	31	96	34		7	30	61	30	62	312	5	10	9	89	3	54	3	20	102	31	465	101	597	1019	68
Swinhoe's Egret																					0			0	0	
Pacific Reef Egret																					0			0	0	
Cattle Egret	3	0						0	0	1	0				1	24	0	11	24	52	1	35	0	36	117	82
Chinese Pond Heron	39	36	6			3	4	12	6	4	20	1	1	1	46	2	5	33	21	11	16	97	13	126	267	3
Striated Heron	0	0						0	0	0	0				0	0	0	0	0	0	1	0	0	1	1	
B-c Night Heron	32	1	2		3			0	1	0	3		4		0	0	0	5	0	0	22	5	4	31	73	4
Yellow Bittern	5	1						1	1	1	1	2			0	0	0	0	1	1	3	2	0	5	17	
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	2	0	8					0	0	0	0				0	0	0	0	0	0	0	0	0	0	10	
Falcatad Duck																					0			0	0	
Gadwall																					0			0	0	
Baikal Teal																					0			0	0	
Common Teal	46	0		1				0	0	0	0				0	0	0	0	0	0	4	0	1	5	51	
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	21																				6			6	27	
Northern Shoveler				21																	0		21	21	21	
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.	9		1475																		0			0	1484	
Slaty-breasted Rail																					0			0	0	
Water Rail																					0			0	0	
White-breasted Waterhen	16	7	1	1				4	3	1	2	4			5	0	2	5	1	3	7	14	3	24	62	1
Watercock																					0			0	0	
Common Moorhen	1	0	4					0	0	0	0				0	0	0	2	0	0	9	2	0	11	16	
Eurasian Coot																					0			0	0	
Pheasant-tailed Jacana	5																				1			1	6	1

Greater Painted Snipe	7																			0			0	7		
Black-winged Stilt	71	2	122					2	1	28		13			8	5	12	2	26	38	6	147	46	193	483	
Pied Avocet	1																					65		65	66	
Oriental Pratincole																						1		1	1	
Northern Lapwing																						0		0	0	
Grey-headed Lapwing																						0		0	0	
Pacific Golden Plover			410																			0		0	410	
Grey Plover																						2		2	2	
Common Ringed Plover																						0		0	0	
Little Ringed Plover	16	11	8					6	0	0	3				34	0	0	13	1	0	0	56	0	56	92	
Kentish Plover																						0		0	0	
Lesser Sand Plover																						0		0	0	
Greater Sand Plover			3																			0		0	3	7
Black-tailed Godwit																						465		465	465	
Bar-tailed Godwit																						2		2	2	
Whimbrel																						2		2	2	
Eurasian Curlew																						98		98	98	
Far Eastern Curlew																						2		2	2	
Spotted Redshank																						3		3	3	
Common Redshank			38																			77		77	116	
Marsh Sandpiper	14									15	10							34			6	890	34	924	969	
Common Greenshank	5		47									26	20		15						8	5	958	15	973	1084
Nordmann's Greenshank																						0		0	0	
Green Sandpiper	2	2					8	0	0	0	7			1	0	1	0	0	0	0	0	9	0	9	21	1
Wood Sandpiper	62	10	179				0	0	1	1	4			1	4	0	6	22	5	3	88	33	0	121	386	
Terek Sandpiper																						0		0	0	
Common Sandpiper	8	9	8				1	3	2	2	0	4	1	3	5	6	4	6	11	2	3	27	2	32	78	1
Grey-tailed Tattler																						0		0	0	
Ruddy Turnstone																						0		0	0	
Red-necked Phalarope																						0		0	0	
Pintail Snipe																						0		0	0	
Swinhoe's Snipe																						0		0	0	
Pintail/Swinhoe's Snipe	1																					0	1	1	1	
Common Snipe	8		1											1			5	2				0	5	5	17	
Long-billed Dowitcher																						0		0	0	
Asian Dowitcher																						0		0	0	
Red Knot																						0		0	0	
Great Knot																						0		0	0	
Sanderling																						0		0	0	
Red-necked Stint			1																			0		0	1	
Little Stint																						0		0	0	
Temminck's Stint														5			6					0	11	11	11	
Long-toed Stint																						0		0	0	
Pectoral Sandpiper																						0		0	0	
Sharp-tailed Sandpiper																						0		0	0	
Dunlin																						1		1	1	
Curlew Sandpiper																						0		0	0	
Spoon-billed Sandpiper																						0		0	0	
Broad-billed Sandpiper																						0		0	0	
Ruff																						0		0	0	
Small wader spp.																						0		0	0	
Wader sp.																						0		0	0	
Black-tailed Gull																						0		0	0	

Heuglin's Gull																							0			0		0	
Yellow-legged Gull																								0			0		0
Slaty-backed Gull																								0			0		0
Pallas's Gull																								0			0		0
Large Gull spp.																								0			0		0
Brown-headed Gull																								0			0		0
Black-headed Gull	0	0													0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saunders's Gull																								0			0		0
Whiskered Tern		10													5	1	7						4	0	13		13	30	
White-winged Tern																								0			0		0
Gull-billed Tern																								0			0		0
Caspian Tern																								0			0		0
Total	601	185	2461	67	7	19	93	165	168	354	527	88	40	31	274	57	150	272	158	292	3738	1173	339	5250	9747	304			

	Deep Bay Area	%	Ramsar Site	%	SI																								
Cormorants	889	9.1	575	11.0	0	0																							
Ardeids etc	2685	27.5	1482	28.2	288	0																							
Ducks, grebes, pelicans	1738	17.8	101	1.9	5	0																							
Rails, Coot etc	78	0.8	35	0.7	1	0																							
Shorebirds	4327	44.4	3044	58.0	10	0																							
Gulls and terns	30	0.3	13	0.2	0	0																							
TOTAL	9747		5250		304	0																							

Date of count: 9 Oct 2011
n/c = site not counted High tide measured at TBT:
indicates count consists of or includes a count made up to one week either side of the count date
% = count made at evening roost

Wetland-dependant species																											
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet	
Osprey															1						2	1		3		3	
Black Kite	2	4						3	1	2	2				2	2	0	2	2	2	8	7	0	15	32		
White-bellied Sea Eagle																					0			0	0		
Eastern Marsh Harrier																					1			1	1		
Common Buzzard																					0			0	0		
Greater Spotted Eagle	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0		
Imperial Eagle	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0		
Peregrine Falcon	1																			1		0		0	2		
Pied Kingfisher	4	2	1					0	0	0	0	1			2	2	0	2	3	1	3	4	0	7	21	1	
Common Kingfisher	11	6	1	1				4	0	2	0				11	0	3	3	5	2	5	17	1	23	54	1	
White-throated Kingfisher	2	2	2					2	0	0	0				1	2	1	0	2	0	3	6	0	9	17	2	
Black-capped Kingfisher	0	0	1	1				0	0	0	0				0	0	0	0	0	0	0	0	1	1	2		
Red-billed Starling	0	0						0	0	0	0				0	0	0	2	0	0	8	2	0	10	10		
Collared Crow	2	2	2					1	1	2	0				2	4	3	0	0	0	10	11	0	21	29	2	

Summary of Waterbird Count, November 2011

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW/LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	33	2						27	0	1	3	2			40	0	18	13	8	41	9	75	0	84	197	8
Great Crested Grebe	1																				0			0	1	
Great Cormorant	388	84	27	1404				116	44	22	61	25			26	8	28	287	30	92	3096	493	1438	5027	5738	3
Dalmatian Pelican																					0			0	0	
Grey Heron	269	26	133	17	14	3	28	22	110	2	21	43		34	20	9	12	18	7	20	132	80	172	384	940	40
Purple Heron									1											1	3	1		4	5	
Great Egret	193	18	239	136	51	15	26	8	43	0	7	7		259	18	2	11	20	32	27	57	59	271	387	1169	102
Intermediate Egret	4	0		27				2	0	0	0				1	0	2	0	0	0	16	4	27	47	52	2
Little Egret	63	41	135	85	7	1	12	9	77	4	13	6		61	67	14	29	14	20	42	53	125	180	358	753	25
Swinhoe's Egret																					0			0	0	
Pacific Reef Egret																					0			0	0	
Cattle Egret	1	3						2	0	0	0				0	1	7	2	2	2	2	12	0	14	22	
Chinese Pond Heron	29	33	54	11	0	0	1	3	2	2	14			6	24	5	5	17	15	13	12	57	13	82	246	4
Striated Heron	0	0						1	0	0	0				0	0	0	0	0	0	0	1	0	1	1	
B-c Night Heron	17	2		2				0	0	0	1				0	0	0	0	0	1	1	0	2	3	24	1
Yellow Bittern	0	0						0	0	0	0	1			0	0	0	0	0	1	0	0	0	0	2	
Cinnamon Bittern																					0			0	0	
Great Bittern	1																				0			0	1	
Black Stork																					0			0	0	
Black-headed Ibis																					0			0	0	
Eurasian Spoonbill																					0			0	0	
Black-faced Spoonbill	1		25	9	0	0	46		54			26			12						119	12	54	185	292	
Common Shelduck																					0			0	0	
Eurasian Wigeon	125	0	5	90	0	1	0	0	0	0	0	35			0	0	0	0	0	0	22	0	91	113	278	
Falcated Duck																					0			0	0	
Gadwall																					0			0	0	
Baikal Teal																					0			0	0	
Common Teal	595	0		9	4	0	0	0	30	0	1	28			0	0	0	0	0	0	63	0	43	106	730	1
Mallard																					0			0	0	
Spot-billed Duck																					0			0	0	
Chinese Spotbill																					1			1	1	
Burmese Spotbill																					0			0	0	
Northern Pintail	2		3	650								1									55		650	705	711	
Garganey	2											4									2			2	8	
Northern Shoveler	6		2010	2050	400	0	9		135			67									92		2594	2686	4769	
Common Pochard																					0			0	0	
Baer's Pochard																					0			0	0	
Tufted Duck	1								101												0	1	100	101	102	1
Greater Scaup																					0			0	0	
Red-breasted Merganser																					0			0	0	
Duck sp.			4600	2600																	0		2600	2600	7200	
Slaty-breasted Rail																					0			0	0	
Water Rail																					0			0	0	
White-breasted Waterhen	4	5						1	1	0	1			1	2	0	0	3	0	0	1	5	1	7	19	
Watercock																					0			0	0	
Common Moorhen	7	0	30	1				0	0	0	1	4			1	0	1	5	0	6	14	7	1	22	70	12
Eurasian Coot			1																		0			0	1	

Pheasant-tailed Jacana																				1			1	1	
Greater Painted Snipe																				0			0	0	
Black-winged Stilt	40		339	2				158	5		3	2					24	0		155	155	573			
Pied Avocet	95		2400	7				26									2	0		33	33	2530	20		
Oriental Pratincole																				0			0	0	
Northern Lapwing																				0			0	0	
Grey-headed Lapwing																				0			0	0	
Pacific Golden Plover			320																	0			0	320	
Grey Plover				124																0		124	124	124	
Common Ringed Plover																				0			0	0	
Little Ringed Plover	1	0	13					0	0	0	0			23	16	0	7	5	8	18	0	28	0	28	91
Kentish Plover			71	638																0		638	638	709	
Lesser Sand Plover																				0			0	0	
Greater Sand Plover																				0			0	0	7
Black-tailed Godwit			100	1																0		1	1	101	
Bar-tailed Godwit																				0			0	0	
Whimbrel				1																0		1	1	1	
Eurasian Curlew			32	126																0		126	126	158	
Far Eastern Curlew				1																0		1	1	1	
Spotted Redshank			5										1							1	1		2	7	
Common Redshank	1		350	78																0		78	78	429	
Marsh Sandpiper	5		141	74				25					1							0	1	99	100	246	
Common Greenshank	1	1	304	313				31			2		2					1	7	2	344	353	662	1	
Nordmann's Greenshank																				0			0	0	
Green Sandpiper	3	3	1				5	1	0	3			1	2	2	2	0	4	2	0	14	1	15	29	
Wood Sandpiper	2	5	6				0	0	0	0				16	0	0	1	13	5	0	16	0	16	48	
Terek Sandpiper			1	2																0		2	2	3	
Common Sandpiper	2	6	27	6			1	1	1	1	6	4		2	13	3	2	5	13	7	1	22	8	31	101
Grey-tailed Tattler																				0			0	0	
Ruddy Turnstone																				0			0	0	
Red-necked Phalarope																				0			0	0	
Pintail Snipe																				0			0	0	
Swinhoe's Snipe																				0			0	0	
Pintail/Swinhoe's Snipe																				0			0	0	
Common Snipe			3																	0			0	3	
Long-billed Dowitcher																				0			0	0	
Asian Dowitcher																				0			0	0	
Red Knot																				0			0	0	
Great Knot																				0			0	0	
Sanderling																				0			0	0	
Red-necked Stint				32																0		32	32	32	
Little Stint																				0			0	0	
Temminck's Stint			2															2		0			0	4	
Long-toed Stint																				0			0	0	
Pectoral Sandpiper																				0			0	0	
Sharp-tailed Sandpiper																				0			0	0	
Dunlin			50	1470																0		1470	1470	1520	
Curlew Sandpiper																				0			0	0	
Spoon-billed Sandpiper																				0			0	0	
Broad-billed Sandpiper																				0			0	0	
Ruff																				0			0	0	
Small wader spp.																				0			0	0	
Wader sp.			4180																	0			0	4180	

Summary of Waterbird Count, December 2011

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	27	12	2					26	0	5	5	2	2		15	0	34	45	4	31	26	98	0	124	236	13
Great Crested Grebe	1		312	25	2	51	6		1						2						20		26	46	420	
Great Cormorant	144	71	803					95	47	6	106	71			27	0	9	124	31	14	7883	191	35	8109	9431	7
Dalmatian Pelican																					0			0	0	
Grey Heron	196	56	40	3	9	3	21	16	33	63	32	24	4	8	20	1	4	13	11	9	199	74	69	342	765	33
Purple Heron																					4			4	4	
Great Egret	61	281	38	197	25		16	12	11	21	8	6	5	35	11	13	33	9	66	15	53	78	249	380	916	41
Intermediate Egret	8	1		8				0	0	0	0				0	0	0	0	0	0	4	0	8	12	21	
Little Egret	80	134	105	25	5		3	13	34	47	170	6	2	17	119	9	54	9	45	17	34	208	67	309	928	27
Swinhoe's Egret																					0			0	0	
Pacific Reef Egret																					0			0	0	
Cattle Egret	0	9						0	0	0	0				0	0	5	3	6	3	4	8	0	12	30	
Chinese Pond Heron	25	24	10	1				7	6	6	12	2	2	5	22	1	11	22	22	17	8	68	5	81	203	2
Striated Heron	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	2	0						0	0	1	0				4	0	0	0	0	0	19	4	0	23	26	10
Yellow Bittern	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
Cinnamon Bittern																					0			0	0	
Great Bittern																					0			0	0	
Black Stork																					0			0	0	
Black-headed Ibis																					0			0	0	
Eurasian Spoonbill	2														1						0			0	3	
Black-faced Spoonbill	184		6	1			25		19			14			68	25	5			3	138	54	45	237	488	
Common Shelduck																					0			0	0	
Eurasian Wigeon	288	0	44	2433	10	24	16	0	0	13	0	39			0	0	0	0	0	0	52	0	2483	2535	2919	
Falcated Duck	1																				0			0	1	
Gadwall																					0			0	0	
Baikal Teal																					0			0	0	
Common Teal	861	0						0	20	19	0	10			4	0	0	0	3	0	20	4	20	44	937	
Mallard																					0			0	0	
Spot-billed Duck																					0			0	0	
Chinese Spotbill																					2			2	2	
Burmese Spotbill																					0			0	0	
Northern Pintail	18			419	90		40			5		51									187		549	736	810	
Garganey	10											38									0			0	48	
Northern Shoveler	108		1533	1182	400	1	85		900	168		101									517		2568	3085	4995	
Common Pochard																					1			1	1	
Baer's Pochard																					0			0	0	
Tufted Duck	2		2100				18			60											219		18	237	2399	
Greater Scaup																					0			0	0	
Red-breasted Merganser																					0			0	0	
Duck sp.			6800	2239			1300														0		3539	3539	10339	
Slaty-breasted Rail																					0			0	0	
Water Rail																					0			0	0	
White-breasted Waterhen	3	3	1	1		1		2	0	1	0	3			3	1	0	2	2	0	3	6	2	11	26	2
Watercock																					0			0	0	
Common Moorhen	9	1	45	1				3	0	7	0	19			4	1	2	4	0	0	61	10	1	72	157	13
Eurasian Coot	5									1											2			2	8	
Pheasant-tailed Jacana	1																				0			0	1	

Greater Painted Snipe																			0		0	0				
Black-winged Stilt	62		89	5					112					4	1			4	8	13	5	5	23	298		
Pied Avocet	403		2620	7746			30		200	280			3	13			24	2	372	213	7746	8331	11693			
Oriental Pratincole																			0			0	0			
Northern Lapwing																			0			0	0			
Grey-headed Lapwing			1																0			0	1			
Pacific Golden Plover			218	16															0		16	16	234			
Grey Plover																			0			0	0			
Common Ringed Plover																			0			0	0			
Little Ringed Plover	6	0	5				3	0	0	0	6		4	3	0	38	12	2	0	0	56	0	56	79		
Kentish Plover			3																							
Lesser Sand Plover																					890		890	893		
Greater Sand Plover																					0		0	0		
Black-tailed Godwit																					0		0	0		
Bar-tailed Godwit																					0		0	0		
Whimbrel																					0		0	0		
Eurasian Curlew				728																	400		728	1128	1128	
Far Eastern Curlew																					0		0	0		
Spotted Redshank							1						1								28	1	1	30	30	
Common Redshank			29	169			1				1		5								8	5	170	183	213	
Marsh Sandpiper	8		56	661							193		1			4				3	35	5	661	701	961	
Common Greenshank	8		98	507							10		9				1	1	295	6	507	808	944	6		
Nordmann's Greenshank																					0		0	0		
Green Sandpiper	2	5					1	0	4	3	3		5	1	2	0	3	2	0	9	0	9	31			
Wood Sandpiper	62	5					0	0	1	0	5		13	0	11	0	15	10	0	22	0	22	122			
Terek Sandpiper																					0		0	0		
Common Sandpiper	22	8	8				1	0	0	3	1	7		3	15	9	8	6	7	12	0	31	1	32	110	1
Grey-tailed Tattler																					0		0	0		
Ruddy Turnstone																					0		0	0		
Red-necked Phalarope																					0		0	0		
Pintail Snipe																					0		0	0		
Swinhoe's Snipe																					0		0	0		
Pintail/Swinhoe's Snipe																					0		0	0		
Common Snipe	1	2	1													1				0	1		1	5		
Long-billed Dowitcher																					0		0	0		
Asian Dowitcher																					0		0	0		
Red Knot																					0		0	0		
Great Knot																					0		0	0		
Sanderling																					0		0	0		
Red-necked Stint																					0		0	0		
Little Stint																					0		0	0		
Temminck's Stint				10								20		1			10				0	11		11	41	
Long-toed Stint																					0		0	0		
Pectoral Sandpiper																					0		0	0		
Sharp-tailed Sandpiper																					0		0	0		
Dunlin																					0		0	0		
Curlew Sandpiper																					0		0	0		
Spoon-billed Sandpiper																					0		0	0		
Broad-billed Sandpiper																					0		0	0		
Ruff																					0		0	0		
Small wader spp.																					0		0	0		
Wader sp.																					0		0	0		
Black-tailed Gull																					0		1	1	1	
Heuglin's Gull																					0		56	56	56	

Yellow-legged Gull																									0		0	0	
Slaty-backed Gull																										0		0	0
Pallas's Gull																									0		0	0	
Large Gull spp.																									0		0	0	
Brown-headed Gull																									0		0	0	
Black-headed Gull	2	0	485	1200		4		0	150	0	0				0	350	15	0	0	0	0	0		365	1354	1719	2206		
Saunders's Gull				48																					0	48	48	48	
Whiskered Tern																									0		0	0	
White-winged Tern																									0		0	0	
Gull-billed Tern																									0		0	0	
Caspian Tern																									0		0	0	
Total	2612	612	15462	17672	541	85	1562	178	1421	833	337	636	18	72	370	412	232	263	246	147	11497	1533	20978	34008	55208	157			

	Deep Bay Area	%	Ramsar Site	%	SI																								
Cormorants	9431	17.1	8109	23.8	7	0																							
Ardeids etc	3384	6.1	1400	4.1	113	0																							
Ducks, grebes, pelicans	23107	41.9	10349	30.4	13	0																							
Rails, Coot etc	191	0.3	85	0.2	15	0																							
Shorebirds	16784	30.4	12241	36.0	9	0																							
Gulls and terns	2311	4.2	1824	5.4	0	0																							
TOTAL	55208		34008		157	0																							

Date of count: 18 Dec 2011
n/c = site not counted High tide measured at TBT:
indicates count consists of or includes a count made up to one week either side of the count date
% = count made at evening roost

Wetland-dependant species																											
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet	
Osprey			1	2	3	2	1	1									1			1	1	1	2	13		1	
Black Kite	28	1			2		1	1	0	1	2				3	2	4	4	1	1	11	41	2	54	61		
White-bellied Sea Eagle																					0			0	0		
Eastern Marsh Harrier				1																	1			1	2		
Common Buzzard	2	1													1	1	1				1	3		4	7		
Greater Spotted Eagle	0	0						0	0	0	0				0	0	0	0	0	0	3	0	0	3	3		
Imperial Eagle	1	0						0	0	0	0				0	0	0	0	0	0	2	0	0	2	3		
Peregrine Falcon	1																				1			1	2		
Pied Kingfisher	1	2			1	1		0	0	0	1				0	0	2	1	5	0	1	3	2	6	15	3	
Common Kingfisher	6	3		1				2	0	5	29				7	1	3	4	1	4	2	13	1	16	68	4	
White-throated Kingfisher	4	1	2	1		1	1	2	0	0	0			2	1	0	2	0	2	1	2	5	3	10	22	2	
Black-capped Kingfisher	0	0	1	2				0	0	0	0				0	0	0	0	0	0	0	0	2	2	3	3	
Red-billed Starling	41	350						0	0	0	0				149	580	215	0	0	0	23	827	0	850	1358	20	
Collared Crow	1	1				1		1	0	0	0				1	1	0	2	2	0	2	6	1	9	12		
Common Kestrel																					1						

Summary of Waterbird Count, January 2012

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	30	3							0	2	1	2			18	0	9	21	4	38	23	46	0	69	151	12
Great Crested Grebe	1		58	2	11									11							0		2	2	83	
Great Cormorant%	272*	195*	76*		170*				53*	5152	47*	59*			29*	0	0	172*	53*	82*	3151	436*	5*	3151	8303	111
Dalmatian Pelican																					0			0	0	
Grey Heron	180	48	33	8	12	3	11		8	64	31	45	2	1	27	8	18	18	17	43	194	129	40	363	771	33
Purple Heron																					1			1	1	
Great Egret	151	108	20	76	22	4	12		30	10	20	5		3	13	15	7	28	43	9	44	168	143	355	620	119
Intermediate Egret	6	0		4					0	0	0				0	0	0	0	0	0	6	1	4	11	16	
Little Egret	121	56	61	6	5		210		1	20	21	5	8	5	111	4	13	11	16	16	140	162	222	524	830	31
Swinhoe's Egret																					0			0	0	
Pacific Reef Egret																					0			0	0	
Cattle Egret	3	0							0	0	0				0	0	0	0	0	0	0	0	0	0	0	3
Chinese Pond Heron	27	3	10	3					0	9	7	2	1	1	19	1	6	12	18	13	5	42	3	50	137	1
Striated Heron	0	0							0	0	0				0	0	0	0	0	0	0	0	0	0	0	1
B-c Night Heron	0	5	2						0	1	0				0	0	0	0	0	0	0	0	0	0	0	8
Yellow Bittern	0	0							0	0	0				0	0	0	0	0	0	0	0	0	0	0	0
Cinnamon Bittern																					0			0	0	
Great Bittern																					0			0	0	
Black Stork																					0			0	0	
Black-headed Ibis																					0			0	0	
Eurasian Spoonbill	2																				0			0	2	
Black-faced Spoonbill	175		18		18				51		2	32			8						132	21	69	222	442	
Common Shelduck																					0			0	0	
Eurasian Wigeon	282	0	203	875	2	268	6		10	0	0	85	3		0	0	0	0	0	0	343	0	1161	1504	2077	
Falcated Duck																					0			0	0	
Gadwall																					0			0	0	
Baikal Teal																					0			0	0	
Common Teal	601	0			16	57	1		0	43	0	88			0	0	0	0	7	0	17	0	74	91	830	2
Mallard										1											0			0	1	
Spot-billed Duck																					0			0	0	
Chinese Spotbill																					0			0	0	
Burmese Spotbill																					0			0	0	
Northern Pintail	87		2	935	10	60				6		69									720		1005	1725	1889	
Garganey	9			1			1					87									0		2	2	98	
Northern Shoveler	416		1831	3600	14	62	79		677	396	4	73		2							406	16	4418	4840	7560	
Common Pochard																					0			0	0	
Baer's Pochard																					0			0	0	
Tufted Duck	1	3	40		14		2		3	19										1	468	3	17	488	551	
Greater Scaup																					0			0	0	
Red-breasted Merganser																					0			0	0	
Duck sp.	61					410															0		410	410	471	
Slaty-breasted Rail																					0			0	0	
Water Rail																					0			0	0	
White-breasted Waterhen	4	0	5		1			2	0	3	1	1		3	1	1	1	1	6	4	7	7	1	15	41	1
Watercock																					0			0	0	
Common Moorhen	8	1	63					4	2	3	0	14			5	0	0	5	0	4	47	17	0	64	156	19
Eurasian Coot	5																				4			4	9	1
Pheasant-tailed Jacana	1																				0			0	1	

Greater Painted Snipe																					0			0	0		
Black-winged Stilt	32		82	4			1	10	29		64					3	9	69	1	14	84		303				
Pied Avocet	370		365	8200	680			196	277		32			1		1	29	8	12	1144	31	9076	10251	11315	20		
Oriental Pratincole																							0	0			
Northern Lapwing																							0	0			
Grey-headed Lapwing	1																						0	1			
Pacific Golden Plover			296	45																		45	45	341			
Grey Plover				430																		430	430	430	2		
Common Ringed Plover																							0	0			
Little Ringed Plover	8	0	2	5			10	0	0	0	10		61	19	0	0	0	1	7	0	34	5	39	123			
Kentish Plover			40	2250																		350	2250	2600	2640	4	
Lesser Sand Plover				20																		20	20	20			
Greater Sand Plover																						0	0	0	27		
Black-tailed Godwit			150	20			1															1	1	20	22	172	
Bar-tailed Godwit				1																		0	1	1	1		
Whimbrel																							0	0	0		
Eurasian Curlew			800	1				1			1		2									801	801	805			
Far Eastern Curlew																							0	0	0		
Spotted Redshank									5				2									19	2	21	26		
Common Redshank			36	10				1			4		1				2					153	2	11	166	207	
Marsh Sandpiper			50	520					8		150						4	2				63	4	520	587	797	
Common Greenshank	5		97					30	36		99		2	4								203	4	30	237	478	3
Nordmann's Greenshank																							0	0	0		
Green Sandpiper	6	0					2	0	1	1			1	0	0	3	0	6	0	0	5	0	5	20			
Wood Sandpiper	13	0	74				0	0	5	0	10			16	0	0	0	8	19	0	13	0	13	145			
Terek Sandpiper				2																			0	2	2	2	
Common Sandpiper	12	0	11	2	1		2	2	2	5	2	1	10	10	1	1	4	13	11	3	16	5	24	93			
Grey-tailed Tattler																							0	0	0		
Ruddy Turnstone																							0	0	0		
Red-necked Phalarope																							0	0	0		
Pintail Snipe																							0	0	0		
Swinhoe's Snipe																							0	0	0		
Pintail/Swinhoe's Snipe																							0	0	0		
Common Snipe	14		3	1					2								4	3	0		1	1	1	27			
Long-billed Dowitcher																							0	0	0		
Asian Dowitcher																							0	0	0		
Red Knot				2																			0	2	2	2	
Great Knot				18																			0	18	18	18	
Sanderling																							0	0	0		
Red-necked Stint																							0	0	0		
Little Stint																							0	0	0		
Temminck's Stint	1																		3	0	1		1	4			
Long-toed Stint																							0	0	0		
Pectoral Sandpiper																							0	0	0		
Sharp-tailed Sandpiper																							0	0	0		
Dunlin			350	700																			700	700	1050		
Curlew Sandpiper																							0	0	0		
Spoon-billed Sandpiper																							0	0	0		
Broad-billed Sandpiper																							0	0	0		
Ruff																							0	0	0		
Small wader spp.																							0	0	0		
Wader sp.	3																						0	0	3		
Black-tailed Gull																							0	0	0		
Heuglin's Gull					1			2	5														3	3	8		

Yellow-legged Gull																						0			0	0		
Slaty-backed Gull																						0			0	0		
Pallas's Gull																						0			0	0		
Large Gull spp.				240																		0		240	240	240		
Brown-headed Gull																						0			0	0		
Black-headed Gull	18	0	470	1200				16	1770	6	0				0	560	37	1	8	0	334	601	2968	3903	4420			
Saunders's Gull				42																		0		42	42	42		
Whiskered Tern																						0			0	0		
White-winged Tern																						0			0	0		
Gull-billed Tern																						0			0	0		
Caspian Tern																						0			0	0		
Total	2654	227	4372	20022	808	864	322	38	2794	6105	93	880	15	103	254	590	96	142	166	192	8047	1327	24775	34149	48784	387		
	Deep Bay Area	%	Ramsar Site	%	SI																							
Cormorants	8303	17.0	3151	9.2	111	0																						
Ardeids etc	2830	5.8	1526	4.5	185	0																						
Ducks, grebes, pelicans	13711	28.1	9131	26.7	14	0																						
Rails, Coot etc	206	0.4	83	0.2	21	0																						
Shorebirds	19024	39.0	16070	47.1	56	0																						
Gulls and terns	4710	9.7	4188	12.3	0	0																						
TOTAL	48784		34149		387	0																						
Date of count: 15 Jan 2012																												
n/c = site not counted																												
# indicates count consists of or includes a count made up to one week either side of the count date																												
% = count made at evening roost																												
Wetland-dependant species																												
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet		
Osprey	1		1	2	1							1									0			0	6	1		
Black Kite	0	5						1	1	0	0				3	0	0	0	0	0	1	3	0	4	11			
White-bellied Sea Eagle																					0			0	0			
Eastern Marsh Harrier																					1			1	1			
Common Buzzard	2																				1	0		0	3			
Greater Spotted Eagle	0	0						0	0	0	0				0	0	0	0	0	0	1	0	0	1	1			
Imperial Eagle	0	0						0	0	0	0				0	0	0	0	0	0	1	0	0	1	1			
Peregrine Falcon	1																				1			1	2			
Pied Kingfisher	1	0	2		1			0	0	0	0	1			1	0	1	1	1	0	2	2	1	5	11	3		
Common Kingfisher	3	0						1	0	0	5	2			4	0	1	3	4	2	4	5	0	9	29	2		
White-throated Kingfisher	3	0	1		1			0	0	1	0	1			2	0	1	1	0	0	1	2	1	4	12	1		
Black-capped Kingfisher	0	0	2					1	0	0	0				0	0	0	0	0	0	1	0	1	3	3			
Red-billed Starling	28	0	1					0	0	50	0				207	290	0	0	0	0	12	290	0	302	588			
Collared Crow	0	0	2					0	0	0	0				0	1	4	1	0	0	13	6	0	19	21	2		

Summary of Waterbird Count, February 2012

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	28	12	4				1	17	2	1	2	2			10	0	16	17	9	25	46	50	1	97	192	9
Great Crested Grebe			57	25	8	14	9						1	9						1	0		56	56	124	
Great Cormorant%	330*	122*	4341*					332*	67*	5841	25*	29*			48*	0	0	157*	41*	36*	3795	535*	0	3795	9636	18
Dalmatian Pelican																					0		0	0	0	
Grey Heron	149	37	38	6	5	1	16	25	24	7	15	64		10	9	12	12	23	3	14	125	91	50	266	595	45
Purple Heron																					1		1	1	1	
Great Egret	87	105	11	50	4	2	3	34	23	0	3	6		2	16	2	13	14	14	6	23	74	81	178	418	125
Intermediate Egret	9	0		4				0	0	0	6				2	1	1	0	0	0	10	9	4	23	33	2
Little Egret	79	254	70	10	2	3	2	61	3	3	10	2	4	70	164	20	29	22	20	9	75	288	19	382	912	366
Swinhoe's Egret																					0		0	0	0	
Pacific Reef Egret																					0		0	0	0	
Cattle Egret	1	14						0	0	0	0				1	0	8	2	2	1	4	10	0	14	33	
Chinese Pond Heron	43	28	4					6	1	1	4			6	25	3	5	8	14	5	8	46	1	55	161	2
Striated Heron	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	0	35						0	0	1	0				0	0	0	0	0	0	8	0	0	8	44	27
Yellow Bittern	0	0						0	0	0	1				0	0	0	0	0	0	0	1	0	1	1	
Cinnamon Bittern																					0		0	0	0	
Great Bittern																					0		0	0	0	
Black Stork																					0		0	0	0	
Black-headed Ibis																					0		0	0	0	
Eurasian Spoonbill	1																				0		0	0	1	
Black-faced Spoonbill	150		43				14	39			2	115			4		4	4	3		68	53	14	135	446	
Common Shelduck				4																	0		4	4	4	
Eurasian Wigeon	366	0	38	258		37	10	0	0	0	0				0	0	0	0	0	0	321	0	305	626	1030	
Falcated Duck																					28			28	28	
Gadwall																					0		0	0	0	
Baikal Teal																					0		0	0	0	
Common Teal	420	0			12		6	0	2	76	0	4	4		0	0	0	0	0	0	81	2	18	101	605	8
Mallard																					0		0	0	0	
Spot-billed Duck																					0		0	0	0	
Chinese Spotbill																					0		0	0	0	
Burmese Spotbill																					0		0	0	0	
Northern Pintail	54		2	2277	3		3		1												73		2284	2357	2413	
Garganey	9						55					1									5		55	60	70	
Northern Shoveler	454		1329	3696	52	6	3		867	35		3									510	7	4617	5134	6955	
Common Pochard																					0		0	0	0	
Baer's Pochard																					1		1	1	1	
Tufted Duck			2700		7	1	135	45	40												380		183	563	3308	
Greater Scaup																					0		0	0	0	
Red-breasted Merganser																					0		0	0	0	
Duck sp.	7		3000	8000																	0		8000	8000	11007	
Slaty-breasted Rail																					0		0	0	0	
Water Rail																					0		0	0	0	
White-breasted Waterhen	4	0						0	0	0	1	5			2	0	0	1	2	1	6	1	0	7	22	1
Watercock																					0		0	0	0	
Common Moorhen	3	4	61					0	0	5	0	11			10	0	0	1	0	1	30	9	0	39	126	22
Eurasian Coot	6																				1		1	7		
Pheasant-tailed Jacana	2																				0		0	0	2	

Greater Painted Snipe																				0			0	0
Black-winged Stilt	55		48					5	13					1		5		45	6			51	172	
Pied Avocet	352		1007	11787					223		28			5	2	4	1196	7	11787	12990		14604		
Oriental Pratincole																	0				0	0		
Northern Lapwing																	0				0	0		
Grey-headed Lapwing			3														0				0	3		
Pacific Golden Plover			775	585*													0		585	585		775		
Grey Plover				536													0				0	536	8	
Common Ringed Plover																	0				0	0		
Little Ringed Plover	8	1	1					0	0	1	0	7		12	7	4	0	0	0	0	13	0	13	41
Kentish Plover				300								1					0			300	300		301	
Lesser Sand Plover				5													0			5	5		5	
Greater Sand Plover																	0				0	0		
Black-tailed Godwit				92													0			92	92		92	
Bar-tailed Godwit																	0				0	0		
Whimbrel				1													0			1	1		1	
Eurasian Curlew				979													0			979	979		979	
Far Eastern Curlew																	0				0	0		
Spotted Redshank																	0				0	0		
Common Redshank			126	29							4					1		205		29	234		365	
Marsh Sandpiper			42	1990						110	59					5		31		1990	2021		2237	
Common Greenshank	12		188	82						1	156	30	11	1			3	1	256	2	82	340	741	1
Nordmann's Greenshank																	0				0	0		
Green Sandpiper	6	5					2	0	0	0	2		1	1	0	0	1	6	1	1	5	0	6	26
Wood Sandpiper	20	2					0	0	1	0	8			3	0	0	0	12	2	0	3	0	3	48
Terek Sandpiper				2													0				2	2		2
Common Sandpiper	6	7	9				0	0	0	5	2	2	5	6	6	7	6	9	2	2	24	0	26	74
Grey-tailed Tattler																	0				0	0		
Ruddy Turnstone																	0				0	0		
Red-necked Phalarope																	0				0	0		
Pintail Snipe																	0				0	0		
Swinhoe's Snipe																	0				0	0		
Pintail/Swinhoe's Snipe																	0				0	0		
Common Snipe	4										1						0				0	5		
Long-billed Dowitcher																	0				0	0		
Asian Dowitcher																	0				0	0		
Red Knot																	0				0	0		
Great Knot				4													0			4	4		4	
Sanderling																	0				0	0		
Red-necked Stint																	0				0	0		
Little Stint																	0				0	0		
Temminck's Stint											2						0				0	2		
Long-toed Stint																	0				0	0		
Pectoral Sandpiper																	0				0	0		
Sharp-tailed Sandpiper																	0				0	0		
Dunlin			40	3060													0			3060	3060		3100	
Curlew Sandpiper																	0				0	0		
Spoon-billed Sandpiper																	0				0	0		
Broad-billed Sandpiper																	0				0	0		
Ruff																	0				0	0		
Small wader spp.																	0				0	0		
Wader sp.				200													0				0	200		
Black-tailed Gull				8	3												0			3	3		11	
Glaucous Gull					1												0			1	1		1	

Heuglin's Gull			33	270							2										0		270	270	305		
Yellow-legged Gull				3																		0		3	3	3	
Slaty-backed Gull				2																		0		2	2	2	
Pallas's Gull																						0		0	0	0	
Large Gull spp.																						0		0	0	0	
Brown-headed Gull																						0		0	0	0	
Black-headed Gull	35	0	1226	1918				753	0	59	0				0	77	152	1	0	1	5	983	1918	2906	4227		
Saunders's Gull				57																		0		57	57	57	
Whiskered Tern																						0		0	0	0	
White-winged Tern																						0		0	0	0	
Gull-billed Tern																						0		0	0	0	
Caspian Tern																						0		0	0	0	
Total	2370	504	11063	35451	93	64	257	982	968	6380	49	483	41	126	266	125	250	100	112	70	7340	1684	36862	45886	67094	634	
	Deep Bay Area	%	Ramsar Site	%	SI																						
Cormorants	9636	14.4	3795	8.3	18	0																					
Ardeids etc	2645	3.9	1063	2.3	567	0																					
Ducks, grebes, pelicans	25737	38.4	17027	37.1	17	0																					
Rails, Coot etc	155	0.2	47	0.1	23	0																					
Shorebirds	24315	36.2	20712	45.1	9	0																					
Gulls and terns	4606	6.9	3242	7.1	0	0																					
TOTAL	67094		45886		634	0																					
Date of count: 12 Feb 2012																											
n/c = site not counted High tide measured at TBT:																											
# indicates count consists of or includes a count made up to one week either side of the count date																											
% = count made at evening roost																											
Wetland-dependant species																											
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet	
Osprey			7	2		1	1														6		6	17	17	1	
Black Kite	5	5	4	1			2	1	0	3	1	1			3	5	1	6	2	3	28	17	3	48	71		
White-bellied Sea Eagle																					0			0	0		
Eastern Marsh Harrier																					0			0	0		
Common Buzzard	2		1	1							1										4			4	10		
Greater Spotted Eagle	1	0						0	0	0	1				1	0	0	0	0	1	3	2	0	5	7		
Imperial Eagle	1	0						0	0	0	1				2	0	0	0	0	0	4	3	0	7	8		
Peregrine Falcon	1			1																	0			0	2		
Pied Kingfisher	1	1	2					2	0	0	0				0	0	0	1	1	0	0	3	0	3	8	2	
Common Kingfisher	0	3	1					1	0	0	3				6	0	3	2	5	2	4	9	0	13	30	2	
White-throated Kingfisher	1	3	2					0	0	0	0	1			2	0	1	0	2	0	1	3	0	4	13	1	
Black-capped Kingfisher	0	0	1					0	0	0	0				0	0	0	0	0	0	0	0	0	0	1	2	
Red-billed Starling	78	26						8	0	0	0				88	550	15	150	16	24	100	803	0	903	1055		
Collared Crow	1	1	2					3	0	0	0				1	2	3	2	0	0	2	9	0	11	17		
Common Kestrel	1																			1							

Summary of Waterbird Count, March 2012

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	24	16	2					24	2	7	2	1			18	0	11	18	13	34	40	53	0	93	212	9
Great Crested Grebe			6	42	3	2								17							0		47	47	70	
Great Cormorant	142	122	27	7				302	0	411	22	31			82	0	7	268	28	8	4450	573	7	5030	5907	109
Dalmatian Pelican																					0			0	0	
Grey Heron	212	17	10	5			13	34	24	31	5	64	1	8	6	5	1	6	2	1	162	54	38	254	607	82
Purple Heron								1				1									4			4	6	
Great Egret	7	27	62	26		1	6	39	4	42	32	1		4	14	3	85	11	3	0	32	161	36	229	399	254
Intermediate Egret	4	0	1					0	0	0	0				0	0	0	0	0	0	3	0	0	3	8	
Little Egret	18	32	49	16				42	12	5	13	1	10	30	102	7	240	15	10	4	34	325	26	385	640	23
Swinhoe's Egret																					0			0	0	
Pacific Reef Egret																					0			0	0	
Cattle Egret	0	0						0	0	0	0				7	0	0	9	0	17	13	9	0	22	46	
Chinese Pond Heron	12	19	5					10	0	3	2			1	15	6	2	12	13	2	7	45	0	52	109	2
Striated Heron	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	0	48						0	0	1	0				0	0	0	0	0	0	1	0	0	1	50	
Yellow Bittern	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
Cinnamon Bittern																					0			0	0	
Great Bittern																					1			1	1	
Black Stork																					0			0	0	
Black-headed Ibis																					0			0	0	
Eurasian Spoonbill	2														1						0	1		1	3	
Black-faced Spoonbill	66	3	36				1	3			1	88			15		2	4			136	25		161	355	
Common Shelduck				7																	0			7	7	
Eurasian Wigeon	461	0	11	510	3		34	0	0	2	1	33			0	0	0	0	0	0	199	1	547	747	1254	
Falcated Duck																					0			0	0	
Gadwall																					0			0	0	
Baikal Teal																					0			0	0	
Common Teal	472	0		5				0	0	0	0	5			0	0	0	0	0	0	29	0	5	34	511	13
Mallard																					0			0	0	
Spot-billed Duck																					0			0	0	
Chinese Spotbill																					0			0	0	
Burmese Spotbill																					0			0	0	
Northern Pintail	45			20																	19		20	39	84	
Garganey												58									21			21	79	
Northern Shoveler	436		106	350				3	199	135		152							3		297	3	350	650	1681	
Common Pochard																					0			0	0	
Baer's Pochard																					1			1	1	
Tufted Duck			960		76	5	30	60	70												122		111	233	1323	
Greater Scaup																					2			2	2	
Red-breasted Merganser																					0			0	0	
Duck sp.	53		1070		60																0		60	60	1183	
Slaty-breasted Rail																					0			0	0	
Water Rail																					0			0	0	
White-breasted Waterhen	2	6	4		2			3	0	3	1	1		1	4	0	1	1	1	0	2	8	2	12	32	2
Watercock																					0			0	0	
Common Moorhen	11	8	54					2	0	4	2	9			15	0	0	2	5	3	61	21	0	82	176	20
Eurasian Coot	1																				4			4	5	
Pheasant-tailed Jacana	2																				0			0	2	

Greater Painted Snipe																					0			0	0	
Black-winged Stilt	19		31							166	1							1	1	116	1		117	335		
Pied Avocet	522	5	101	980						19	17	43	5		22		30	15	2	8	6554	84	980	7618	8323	
Oriental Pratincole																					10			10	10	
Northern Lapwing																					0			0	0	
Grey-headed Lapwing																					0			0	0	
Pacific Golden Plover			350																		0			0	350	
Grey Plover																					1			1	1	
Common Ringed Plover																					0			0	0	
Little Ringed Plover	30	10	1				3	0	1	9	5		5	19	0	6	4	0	0	0	0	38	0	38	93	
Kentish Plover			1																		8			8	9	
Lesser Sand Plover																					0			0	0	
Greater Sand Plover																					2			2	2	3
Black-tailed Godwit																					0			0	0	
Bar-tailed Godwit																					0			0	0	
Whimbrel											1										0			0	1	
Eurasian Curlew										1											304			304	305	
Far Eastern Curlew																					0			0	0	
Spotted Redshank	1																				0			0	1	
Common Redshank			1								41			1							133	1		134	176	
Marsh Sandpiper										622			16			3		3	38	17			55	682		
Common Greenshank	2		356							153	30	5					3	1	300	4			304	850	2	
Nordmann's Greenshank																					1			1	1	
Green Sandpiper	1	1				0	0	1	3			1	2	0	0	1	1	1	0	4	0	4	4	12	1	
Wood Sandpiper	5	6	5			2	0	2	2	40			9	0	0	1	2	6	0	12	0	12	80			
Terek Sandpiper																					0			0	0	
Common Sandpiper	4	6	2		1	4	1	2	0	2	1	4	12	5	6	5	4	4	0	28	2	30	63			
Grey-tailed Tattler																					0			0	0	
Ruddy Turnstone																					0			0	0	
Red-necked Phalarope																					0			0	0	
Pintail Snipe																					0			0	0	
Swinhoe's Snipe																					0			0	0	
Pintail/Swinhoe's Snipe	1																				0			0	1	
Common Snipe		3	4							1							1		1	1			2	10		
Long-billed Dowitcher																					0			0	0	
Asian Dowitcher																					0			0	0	
Red Knot																					0			0	0	
Great Knot																					0			0	0	
Sanderling																					0			0	0	
Red-necked Stint											1										7			7	8	
Little Stint																					0			0	0	
Temminck's Stint																					0			0	0	
Long-toed Stint	1																				0			0	1	
Pectoral Sandpiper																					0			0	0	
Sharp-tailed Sandpiper																					0			0	0	
Dunlin			100																		10		10	110		
Curlew Sandpiper			230																		12		12	242		
Spoon-billed Sandpiper																					0			0	0	
Broad-billed Sandpiper																					0			0	0	
Ruff																					0			0	0	
Small wader spp.																					0			0	0	
Wader sp.																					0			0	0	
Black-tailed Gull			2																		0		2	2	2	
Heuglin's Gull			186																		1		186	187	187	

Winter 2011-12 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Appendix 2



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Peak counts of each waterbird species, mid-winter period (December to February) 2011-12.

Cormorants

Great Cormorants	9,636
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Ardeids and Ciconiiformes

Grey Heron	771
Purple Heron	4
Great Egret	916
Intermediate Egret	33
Little Egret	928
Swinhoe's Egret	0
Pacific Reef Egret	0
Cattle Egret	33
Chinese Pond Heron	203
Striated Heron	0
Black-crowned Night Heron	44
Yellow Bittern	1
Cinnamon Bittern	0
Great Bittern	0
Black Stork	0
Black-headed Ibis	0
Eurasian Spoonbill	3
Black-faced Spoonbill	488
Sub-total:	3,424

Ducks, Grebes and Pelicans

Little Grebe	236
Great Crested Grebe	420
Dalmatian Pelican	0
Common Shelduck	6
Eurasian Wigeon	2,919
Falcated Duck	28
Gadwall	0
Baikal Teal	0
Common Teal	937
Mallard	1
'Unassigned' Spotbill	0
Chinese Spotbill	2
Burmese Spotbill	0
Northern Pintail	2,413
Garganey	98
Northern Shoveler	7,560
Common Pochard	1
Baer's Pochard	1
Tufted Duck	3,308
Greater Scaup	0
Smew	0
Red-breasted Merganser	0
Unidentified duck	7,813
Sub-total:	25,743

Rails and Coots

Slaty-breasted Rail	0
Water Rail	0
White-breasted Waterhen	41
Ruddy-breasted Crake	0
Watercock	0

Common Moorhen	157
Eurasian Coot	9
Sub-total:	207

Shorebirds

Pheasant-tailed Jacana	2
Greater Painted Snipe	0
Black-winged Stilt	720
Pied Avocet	14,604
Oriental Pratincole	0
Northern Lapwing	0
Grey-headed Lapwing	3
Pacific Golden Plover	775
Grey Plover	536
Common Ringed Plover	0
Little Ringed Plover	123
Kentish Plover	2,640
Lesser Sand Plover	20
Greater Sand Plover	0
Black-tailed Godwit	520
Bar-tailed Godwit	1
Whimbrel	1
Eurasian Curlew	1,128
Far Eastern Curlew	0
Spotted Redshank	30
Common Redshank	365
Marsh Sandpiper	2,237
Common Greenshank	944
Nordmann's Greenshank	1
Green Sandpiper	31
Wood Sandpiper	145
Terek Sandpiper	10
Common Sandpiper	110
Grey-tailed Tattler	0
Ruddy Turnstone	0
Red-necked Phalarope	0
Pintail Snipe	0
Swinhoe's Snipe	0
Pintail/Swinhoe's Snipe	0
Common Snipe	27
Long-billed Dowitcher	0
Asian Dowitcher	0
Red Knot	2
Great Knot	18
Sanderling	0
Red-necked Stint	0
Little Stint	0
Temminck's Stint	41
Long-toed Stint	0
Pectoral Sandpiper	0
Sharp-tailed Sandpiper	0
Dunlin	3,100
Curlew Sandpiper	0
Spoon-billed Sandpiper	0
Broad-billed Sandpiper	0
Ruff	0
Unidentified small-sized Shorebird	0
Sub-total:	28,133

Gulls and Terns

Black-tailed Gull	11
Glaucous Gull	1
Heuglin's Gull	305

Yellow-legged Gull	3
Slaty-backed Gull	3
Pallas's Gull	0
Unidentified large Gull (assumed to be same as Heuglin's Gull)	240*
Relict Gull	0
Brown-headed Gull	0
Black-headed Gull	4,964
Saunders's Gull	57
Whiskered Tern	0
White-winged Tern	0
Gull-billed Tern	0
Caspian Tern	6
Sub-total:	5,349

Summary of sub-totals of different waterbird groups, December 2011 to February 2012.

Group	Sub-total
Cormorants	9,636
Ardeids	3,424
Ducks, Grebes and Pelicans	25,743
Rails and Coots	207
Shorebirds	28,133
Gulls and Terns	5,349
Total	72,492

Winter 2011-12 Report on Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site

Appendix 3



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

Low-tide count, December 2011

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	0	0	6					0	0	0	0	0	0	0	0	0	0	0	6	
Great Crested Grebe			12												0			0	12	
Great Cormorant	0	0	30	21				0	0	0	0	0	0	0	0	0	21	21	51	
Dalmatian Pelican															0			0	0	
Grey Heron	0	0	67	32				0	0	0	0	0	0	0	0	0	32	32	99	
Purple Heron															0			0	0	
Great Egret	0	0	70	111				0	0	0	0	0	0	0	0	0	111	111	181	
Intermediate Egret	0	0						0	0	0	0	0	0	0	0	0	0	0	0	
Little Egret	0	0	51	61				0	0	0	0	0	0	0	0	0	61	61	112	
Swinhoe's Egret															0			0	0	
Pacific Reef Egret															0			0	0	
Cattle Egret	0	0						0	0	0	0	0	0	0	0	0	0	0	0	
Chinese Pond Heron	0	0	18	14				0	0	0	0	0	0	0	0	0	14	14	32	
Striated Heron	0	0						0	0	0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	0	0						0	0	0	0	0	0	0	0	0	0	0	0	
Yellow Bittern	0	0						0	0	0	0	0	0	0	0	0	0	0	0	
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			2												0			0	2	
Common Shelduck															0			0	0	
Eurasian Wigeon	0	0	155					0	0	0	0	0	0	0	0	0	0	0	155	
Falcatid 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			2954												0			0	2954	
Common Pochard															0			0	0	
Baer's Pochard															0			0	0	
Tufted Duck			600												0			0	600	
Greater Scaup															0			0	0	
Red-breasted Merganser															0			0	0	
Duck sp.			6800	720											0		720	720	7520	
Slaty-breasted Rail															0			0	0	
Water Rail															0			0	0	
White-breasted Waterhen	0	0	1					0	0	0	0	0	0	0	0	0	0	0	1	
Watercock															0			0	0	
Common Moorhen	0	0	10					0	0	0	0	0	0	0	0	0	0	0	10	

Eurasian Coot																	0			0	0
Pheasant-tailed Jacana																	0			0	0
Greater Painted Snipe																	0			0	0
Black-winged Stilt			510														0			0	510
Pied Avocet			2524	670													0	670	670	0	3194
Oriental Pratincole																	0			0	0
Northern Lapwing			1														0			0	1
Grey-headed Lapwing																	0			0	0
Pacific Golden Plover			20														0			0	20
Grey Plover																	0			0	0
Common Ringed Plover																	0			0	0
Little Ringed Plover	0	0	15				0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Kentish Plover			10														0			0	10
Lesser Sand Plover																	0			0	0
Greater Sand Plover																	0			0	0
Black-tailed Godwit																	0			0	0
Bar-tailed Godwit																	0			0	0
Whimbrel																	0			0	0
Eurasian Curlew			15	26													0	26	26	0	41
Far Eastern Curlew																	0			0	0
Spotted Redshank			10														0			0	10
Common Redshank			20														0			0	20
Marsh Sandpiper			22														0			0	22
Common Greenshank			37														0			0	37
Nordmann's Greenshank																	0			0	0
Green Sandpiper	0	0					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood Sandpiper	0	0	20				0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Terek Sandpiper																	0			0	0
Common Sandpiper	0	0	17				0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Grey-tailed Tattler																	0			0	0
Ruddy Turnstone																	0			0	0
Red-necked Phalarope																	0			0	0
Pintail Snipe																	0			0	0
Swinhoe's Snipe																	0			0	0
Pintail/Swinhoe's Snipe																	0			0	0
Common Snipe			2														0			0	2
Long-billed Dowitcher																	0			0	0
Asian Dowitcher																	0			0	0
Red Knot																	0			0	0
Great Knot																	0			0	0
Sanderling																	0			0	0
Red-necked Stint																	0			0	0
Little Stint																	0			0	0
Temminck's Stint																	0			0	0
Long-toed Stint																	0			0	0
Pectoral Sandpiper																	0			0	0
Sharp-tailed Sandpiper																	0			0	0
Dunlin																	0			0	0
Curlew Sandpiper																	0			0	0
Spoon-billed Sandpiper																	0			0	0
Broad-billed Sandpiper																	0			0	0
Ruff																	0			0	0
Small wader spp.				150													0	150	150	0	150

Wader sp.			7920	380																				0				380	380	8300						
Black-tailed Gull																									0				0	0	0					
Heuglin's Gull																									0				0	0	0					
Yellow-legged Gull																									0				0	0	0					
Slaty-backed Gull																									0				0	0	0					
Pallas's Gull																									0				0	0	0					
Large Gull spp.				42																					0		42	42	42	42						
Brown-headed Gull																									0				0	0	0					
Black-headed Gull	0	0	910	1420				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1420	1420	2330							
Saunders's Gull																									0				0	0	0					
Whiskered Tern																									0				0	0	0					
White-winged Tern																									0				0	0	0					
Gull-billed Tern																									0				0	0	0					
Caspian Tern			6																						0				0	6	6					
Total	0	0	22835	3647	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3647	3647	26482	0						
		Deep Bay Area	%	Ramsar Site	%	SI																														
Cormorants		51	0.2	21	0.575816	0	0																													
Ardeids etc		426	1.6	218	5.977516	0	0																													
Ducks, grebes, pelicans		11247	42.5	720	19.74225	0	0																													
Rails, Coot etc		11	0.0	0	0	0	0																													
Shorebirds		12369	46.7	1226	33.61667	0	0																													
Gulls and terns		2378	9.0	1462	40.08774	0	0																													
TOTAL		26482		3647		0	0																													
Date of count: 18 Dec 2011 (low tide)																																				
n/c = site not counted														High tide measured at TBT:																						
# indicates count consists of or includes a count made up to one week either side of the count date																																				
% = count made at evening roost																																				
Wetland-dependant species																																				
		SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet															
Species																																				
Osprey					1											0											0								1	
Black Kite		0	0	2	4				0	0	0	0	0	0	0	0	0	4	4	4															6	
White-bellied Sea Eagle																0																				0
Eastern Marsh Harrier																0																				0
Common Buzzard				3												0																			3	
Greater Spotted Eagle		0	0						0	0	0	0	0	0	0	0	0	0	0	0						0	0	0	0	0	0	0	0	0		
Imperial Eagle		0	0						0	0	0	0	0	0	0	0	0	0	0	0						0	0	0	0	0	0	0	0	0	0	
Peregrine Falcon																0																				0
Pied Kingfisher		0	0		1				0	0	0	0	0	0	0	0	0	1	1	1															1	
Common Kingfisher		0	0	1					0	0	0	0	0	0	0	0	0	0	0	0															1	
White-throated Kingfisher		0	0	2					0	0	0	0	0	0	0	0	0	0	0	0															2	
Black-capped Kingfisher		0	0	2					0	0	0	0	0	0	0	0	0	0	0	0															2	
Red-billed Starling		0	0	7					0	0	0	0	0	0	0	0	0	0	0	0															7	
Collared Crow		0	0	1					0	0	0	0	0	0	0	0	0	0	0	0															1	

Low-tide count, January 2012

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW/LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	0	0	1					0	0	0	0				0	0	0	0	0	0	0	0	0	0	1	
Great Crested Grebe			2																			0		0	2	
Great Cormorant	0	0	70					0	0	0	0				0	0	0	0	0	0	0	0	0	0	70	
Dalmatian Pelican																						0		0	0	
Grey Heron	0	0	16	24				0	0	0	0				0	0	0	0	0	0	0	0	24	24	40	
Purple Heron																						0		0	0	
Great Egret	0	0	10	27				0	0	0	0				0	0	0	0	0	0	0	0	27	27	37	
Intermediate Egret	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
Little Egret	0	0	85	19				0	0	0	0				0	0	0	0	0	0	0	0	19	19	104	
Swinhoe's Egret																						0		0	0	
Pacific Reef Egret																						0		0	0	
Cattle Egret	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
Chinese Pond Heron	0	0	8					0	0	0	0				0	0	0	0	0	0	0	0	0	0	8	
Striated Heron	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	
Yellow Bittern	0	0	1					0	0	0	0				0	0	0	0	0	0	0	0	0	0	1	
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			2																			0		0	2	
Common Shelduck				7																		0		0	7	
Eurasian Wigeon	0	0	200	197				0	0	0	0				0	0	0	0	0	0	0	0	197	197	397	
Falcatid Duck																						0		0	0	
Gadwall																						0		0	0	
Baikal Teal																						0		0	0	
Common Teal	0	0		592				0	0	0	0				0	0	0	0	0	0	0	0	592	592	592	
Mallard																						0		0	0	
Spot-billed Duck																						0		0	0	
Chinese Spotbill																						0		0	0	
Burmese Spotbill																						0		0	0	
Northern Pintail			2	36																		0		0	38	
Garganey																						0		0	0	
Northern Shoveler			1834	370																		0		0	2204	
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	0	0	2					0	0	0	0				0	0	0	0	0	0	0	0	0	0	2	
Watercock																						0		0	0	
Common Moorhen	0	0	55					0	0	0	0				0	0	0	0	0	0	0	0	0	0	55	

Eurasian Coot																			0			0	0
Pheasant-tailed Jacana																			0			0	0
Greater Painted Snipe																			0			0	0
Black-winged Stilt			80																0			0	80
Pied Avocet			280	910															0			0	1190
Oriental Pratincole																			0			0	0
Northern Lapwing																			0			0	0
Grey-headed Lapwing																			0			0	0
Pacific Golden Plover			3																0			0	3
Grey Plover				14															0			0	14
Common Ringed Plover																			0			0	0
Little Ringed Plover	0	0	6				0	0	0	0			0	0	0	0	0	0	0	0	0	0	6
Kentish Plover																			0			0	0
Lesser Sand Plover																			0			0	0
Greater Sand Plover																			0			0	0
Black-tailed Godwit			160																0			0	160
Bar-tailed Godwit																			0			0	0
Whimbrel																			0			0	0
Eurasian Curlew			4	87															0			0	91
Far Eastern Curlew																			0			0	0
Spotted Redshank																			0			0	0
Common Redshank			10	110															0			0	120
Marsh Sandpiper			10	25															0			0	35
Common Greenshank			7	266															0			0	273
Nordmann's Greenshank																			0			0	0
Green Sandpiper	0	0					0	0	0	0			0	0	0	0	0	0	0	0	0	0	0
Wood Sandpiper	0	0	20				0	0	0	0			0	0	0	0	0	0	0	0	0	0	20
Terek Sandpiper																			0			0	0
Common Sandpiper	0	0	11				0	0	0	0			0	0	0	0	0	0	0	0	0	0	11
Grey-tailed Tattler																			0			0	0
Ruddy Turnstone																			0			0	0
Red-necked Phalarope																			0			0	0
Pintail Snipe																			0			0	0
Swinhoe's Snipe																			0			0	0
Pintail/Swinhoe's Snipe																			0			0	0
Common Snipe			8																0			0	8
Long-billed Dowitcher																			0			0	0
Asian Dowitcher																			0			0	0
Red Knot																			0			0	0
Great Knot																			0			0	0
Sanderling																			0			0	0
Red-necked Stint																			0			0	0
Little Stint																			0			0	0
Temminck's Stint																			0			0	0
Long-toed Stint																			0			0	0
Pectoral Sandpiper																			0			0	0
Sharp-tailed Sandpiper																			0			0	0
Dunlin																			0			0	0
Curlew Sandpiper																			0			0	0
Spoon-billed Sandpiper																			0			0	0
Broad-billed Sandpiper																			0			0	0
Ruff																			0			0	0
Small wader spp.																			0			0	0

Wader sp.																						0			0	0		
Black-tailed Gull																						0			0	0		
Heuglin's Gull				122																		0			0	122		
Yellow-legged Gull																						0			0	0		
Slaty-backed Gull																						0			0	0		
Pallas's Gull																						0			0	0		
Large Gull spp.																						0			0	0		
Brown-headed Gull																						0			0	0		
Black-headed Gull	0	0	406	4600					0	0	0	0			0	0	0	0	0	0	0	0	0	0	4600	4600	5006	
Saunders's Gull																						0			0	0		
Whiskered Tern																						0			0	0		
White-winged Tern																						0			0	0		
Gull-billed Tern																						0			0	0		
Caspian Tern																						0			0	0		
Total	0	0	3293	7406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4600	4600	10699	0
	Deep Bay Area	%	Ramsar Site	%	SI																							
Cormorants	70	0.7	0	0.0	0	0																						
Ardeids etc	192	1.8	70	1.3	0	0																						
Ducks, grebes, pelicans	3241	30.3	789	14.5	0	0																						
Rails, Coot etc	57	0.5	0	0.0	0	0																						
Shorebirds	2011	18.8	0	0.0	0	0																						
Gulls and terns	5128	47.9	4600	84.3	0	0																						
TOTAL	10699		5459		0	0																						
Date of count: Jan 2012 (low tide)																												
n/c = site not counted High tide measured at TBT:																												
# indicates count consists of or includes a count made up to one week either side of the count date																												
% = count made at evening roost																												
Wetland-dependant species																												
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet		
Osprey				2																		0			0	2		
Black Kite	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0		
White-bellied Sea Eagle																						0			0	0		
Eastern Marsh Harrier																						0			0	0		
Common Buzzard																						0			0	0		
Greater Spotted Eagle	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0		
Imperial Eagle	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0		
Peregrine Falcon																						0			0	0		
Pied Kingfisher	0	0	2					0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	2		
Common Kingfisher	0	0	2					0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	2		
White-throated Kingfisher	0	0	1					0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	1		
Black-capped Kingfisher	0	0	1					0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	1		
Red-billed Starling	0	0						0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0		
Collared Crow	0	0	3					0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	3		

Low-tide count, February 2012

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	0	0	4					0	0				0	0	0	0	0	0	0	0	0	4	
Great Crested Grebe			2	6															0	6	6	8	
Great Cormorant	0	0	5559	2600				0	0				0	0	0	0	0	0	0	2600	2600	8159	
Dalmatian Pelican																			0		0	0	
Grey Heron	0	0	58	12				0	0				0	0	0	0	0	0	0	12	12	70	
Purple Heron																			0		0	0	
Great Egret	0	0	20	9				0	0				0	0	0	0	0	0	0	9	9	29	
Intermediate Egret	0	0	1					0	0				0	0	0	0	0	0	0	0	0	1	
Little Egret	0	0	31	28				0	0				0	0	0	0	0	0	0	28	28	59	
Swinhoe's Egret																		0			0	0	
Pacific Reef Egret																		0			0	0	
Cattle Egret	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
Chinese Pond Heron	0	0	7	1				0	0				0	0	0	0	0	0	0	1	1	8	
Striated Heron	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
B-c Night Heron	0	0	5					0	0				0	0	0	0	0	0	0	0	0	5	
Yellow Bittern	0	0						0	0				0	0	0	0	0	0	0	0	0	0	
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			22															0			0	22	
Common Shelduck				6														0		6	6	6	
Eurasian Wigeon	0	0	9					0	0				0	0	0	0	0	0	0	0	0	9	
Falcatid Duck																		0			0	0	
Gadwall																		0			0	0	
Baikal Teal																		0			0	0	
Common Teal	0	0		460				0	0				0	0	0	0	0	0	0	460	460	460	
Mallard																		0			0	0	
Spot-billed Duck																		0			0	0	
Chinese Spotbill																		0			0	0	
Burmese Spotbill																		0			0	0	
Northern Pintail				12														0		12	12	12	
Garganey																		0			0	0	
Northern Shoveler			2444	42														0		42	42	2486	
Common Pochard																		0			0	0	
Baer's Pochard																		0			0	0	
Tufted Duck			2400	39														0		39	39	2439	
Greater Scaup																		0			0	0	
Red-breasted Merganser																		0			0	0	
Duck sp.				1900														0		1900	1900	1900	
Slaty-breasted Rail																		0			0	0	
Water Rail																		0			0	0	
White-breasted Waterhen	0	0	1					0	0				0	0	0	0	0	0	0	0	0	1	
Watercock																		0			0	0	
Common Moorhen	0	0	63					0	0				0	0	0	0	0	0	0	0	0	63	

Eurasian Coot																	0			0	0
Pheasant-tailed Jacana																	0			0	0
Greater Painted Snipe																	0			0	0
Black-winged Stilt			719	1													0		1	1	720
Pied Avocet			1855	390													0		390	390	2245
Oriental Pratincole																	0			0	0
Northern Lapwing																	0			0	0
Grey-headed Lapwing			3														0			0	3
Pacific Golden Plover			8														0			0	8
Grey Plover			1														0			0	1
Common Ringed Plover																	0			0	0
Little Ringed Plover	0	0	10					0	0				0	0	0	0	0		0	0	10
Kentish Plover			2														0			0	2
Lesser Sand Plover																	0			0	0
Greater Sand Plover																	0			0	0
Black-tailed Godwit			520														0			0	520
Bar-tailed Godwit																	0			0	0
Whimbrel																	0			0	0
Eurasian Curlew			99	67													0		67	67	166
Far Eastern Curlew																	0			0	0
Spotted Redshank																	0			0	0
Common Redshank			46	26													0		26	26	72
Marsh Sandpiper			1														0			0	1
Common Greenshank			54	118													0		118	118	172
Nordmann's Greenshank																	0			0	0
Green Sandpiper	0	0						0	0				0	0	0	0	0		0	0	0
Wood Sandpiper	0	0	27					0	0				0	0	0	0	0		0	0	27
Terek Sandpiper			10														0			0	10
Common Sandpiper	0	0	12					0	0				0	0	0	0	0		0	0	12
Grey-tailed Tattler																	0			0	0
Ruddy Turnstone																	0			0	0
Red-necked Phalarope																	0			0	0
Pintail Snipe																	0			0	0
Swinhoe's Snipe																	0			0	0
Pintail/Swinhoe's Snipe																	0			0	0
Common Snipe																	0			0	0
Long-billed Dowitcher																	0			0	0
Asian Dowitcher																	0			0	0
Red Knot																	0			0	0
Great Knot																	0			0	0
Sanderling																	0			0	0
Red-necked Stint																	0			0	0
Little Stint																	0			0	0
Temminck's Stint																	0			0	0
Long-toed Stint																	0			0	0
Pectoral Sandpiper																	0			0	0
Sharp-tailed Sandpiper																	0			0	0
Dunlin																	0			0	0
Curlew Sandpiper																	0			0	0
Spoon-billed Sandpiper																	0			0	0
Broad-billed Sandpiper																	0			0	0
Ruff																	0			0	0
Small wader spp.																	0			0	0

Wader sp.			300	50															0		50	50	350	
Black-tailed Gull				3															0		3	3	3	
Glaucous Gull				1															0		1	1	1	
Heuglin's Gull				132															0		132	132	132	
Yellow-legged Gull																			0			0	0	
Slaty-backed Gull																			0			0	0	
Pallas's Gull																			0			0	0	
Large Gull spp.																			0			0	0	
Brown-headed Gull																			0			0	0	
Black-headed Gull	0	0	78	620					0	0				0	0	0	0	0	0	0	620	620	698	
Saunders's Gull																			0			0	0	
Whiskered Tern																			0			0	0	
White-winged Tern																			0			0	0	
Gull-billed Tern																			0			0	0	
Caspian Tern																			0			0	0	
Total	0	0	14371	6523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6523	6523	20894	0
	Deep Bay Area	%	Ramsar Site	%	SI																			
Cormorants	8159	39.0	2600	39.9	0	0																		
Ardeids etc	194	0.9	50	0.8	0	0																		
Ducks, grebes, pelicans	7324	35.1	2465	37.8	0	0																		
Rails, Coot etc	64	0.3	0	0.0	0	0																		
Shorebirds	4319	20.7	652	10.0	0	0																		
Gulls and terns	834	4.0	756	11.6	0	0																		
TOTAL	20894		6523		0	0																		
Date of count: 12 Feb 2012 (low tide)																								
n/c = site not counted												High tide measured at TBT:												
# indicates count consists of or includes a count made up to one week either side of the count date																								
% = count made at evening roost																								
Wetland-dependant species																								
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	
Osprey			1	1															0		0	2		
Black Kite	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
White-bellied Sea Eagle																			0		0	0		
Eastern Marsh Harrier			1																0		0	1		
Common Buzzard																			0		0	0		
Greater Spotted Eagle	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
Imperial Eagle	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
Peregrine Falcon																			0		0	0		
Pied Kingfisher	0	0	3					0	0				0	0	0	0	0	0	0	0	0	3		
Common Kingfisher	0	0	2					0	0				0	0	0	0	0	0	0	0	0	2		
White-throated Kingfisher	0	0						0	0				0	0	0	0	0	0	0	0	0	0		
Black-capped Kingfisher	0	0	2					0	0				0	0	0	0	0	0	0	0	0	2		
Red-billed Starling	0	0	2					0	0				0	0	0	0	0	0	0	0	0	2		
Collared Crow	0	0		1				0	0				0	0	0	0	0	0	0	1	1	1		