Mai Po Inner Deep Bay Ramsar Site **Waterbird Monitoring Programme** 2014 - 15

Monthly Waterbird Monitoring

Biannual Report 2 October 2014 to March 2015



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Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme 2014-15

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Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

Monthly Waterbird Monitoring Biannual Report 2 (October 2014 to March 2015)

Report



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

Monthly Waterbird Monitoring Biannual Report 2

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 the Deep Bay area. The Waterbird Monitoring Programme provides important baseline information for the management of the Mai Po Inner Deep Bay Ramsar Site (the 'Ramsar Site'). From December 1997 to March 2004, the programme was administered and executed by the Hong Kong Bird Watching Society (HKBWS) under a subvention from the Agriculture, Fisheries and Conservation Department (AFCD). Since April 2004, the programme has been arranged under service contracts funded by the AFCD.

The Waterbird Monitoring Programme comprises three major components: monthly waterbird counts, shorebird counts and egretry counts. The monthly waterbird counts are conducted in the Deep Bay area, including the Mai Po Inner Deep Bay Rasmar 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 egretry 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 2014 to March 2015 under contract reference number AFCD/SQ/49/14/C.

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 from reserve staff of Hong Kong Wetland Park, on 12 October 2014, 9 November 2014, 7 December 2014, 11 January 2015, 8 February 2015 and 8 March 2015. The survey area included the Ramsar Site and wetland areas around the Ramsar Site (the 'Deep Bay area'). The Deep Bay area covered the Ramsar Site and the surrounding area, including the mudflat between Tsim Bei Tsui and Lau Fau Shan, and the fishpond areas in 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 and Tsim Bei Tsui. The area also covered Hong Kong Wetland Park, in Tin Shui Wai, and the Futian National Nature Reserve, in the Shenzhen Special Economic Zone in the Mainland. Maps 1, 2 and 3 show the location of each of the survey sites in the survey area, together with the boundary of the Mai Po Inner Deep Bay Ramsar Site. Figures collected from the monthly waterbird counts are grouped and presented with respect to two main areas: (1) the Ramsar Site and (2) the Deep Bay area.

This monitoring programme involved the counting of waterbirds in these two survey areas. Habitat types included fishponds, *gei wais*, storm-water channels, streams, intertidal mudflats, mangroves, reedbeds 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 numbers of waterbirds were present in the Deep Bay intertidal area. Waterbirds follow tidal movements to utilize different parts of the mudflats. They usually spend more time feeding during low-tide along the water's edge and more time resting either on the water surface or in the higher area of the mudflats during high tide. At high tide, the waterbirds move closer to the Mai Po boardwalk birdwatching hides, and therefore, waterbird counts conducted during high-tide periods are highly accurate. All counts were conducted on dates with a rising tide, preferably 1.7 m or above.

However, there were a few days when diurnal tides not 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 for the high-tide counts. Also, ducks may scatter in the river channel, and gulls may float on the bay far away from the boardwalk birdwatching hides at high tide, but they stay in the intertidal area at low tide. The low-tide count has been proven to be an effective method to acquire additional information on ducks and gulls, which prefer to stay in the intertidal area of Deep Bay (Anon 2011). Though the distance between birds and surveyors is sometimes too long during low-tide periods for waterbird species identification, and the surveyors cannot access the mudflat area at low tide, the low-tide count still helps provide peak numbers of some species or groups of waterbirds, which are used to determine the total waterbird abundance.

Low-tide counts were conducted in the mid-winter period (i.e. December to February) on the same dates scheduled for high-tide counts. The counts were

conducted in a synchronous manner at the jetty outside the police station in Tsim Bei Tsui and in the Futian National Nature Reserve in Shenzhen in December, January and February. The results of the low-tide count were treated and combined with those of the high-tide count to produce the monthly figures.

Other counts of individual species conducted within one week of the scheduled survey date were included if they were considered to provide more accurate counting results than those gathered on the counting day. The methodology is described in detail in the Waterbird Count Handbook (Anon. 2014).

Additional voluntary surveys of Great Cormorants were conducted from December to February at their known evening roosting sites in the Mai Po Marshes Nature Reserve and Nam Sang Wai in order to obtain more accurate information about their wintering population.

3. Results and discussion

3.1. Results of winter waterbird counts

All areas within the Deep Bay area and the Ramsar Site were covered during the survey period. Table 1 shows a comparison of the peak counts over the five winters from 2010-11 to 2014-15. The peak count of waterbirds in the Deep Bay area in winter 2014-15 was 52,584 individuals, recorded in January 2015, an increase of 20% over that of the previous winter (43,874 individuals). In the Ramsar Site, the peak count was 27,775 individuals, recorded in January 2015, an increase of 3% over the peak count of the previous winter (26,861 individuals). The January count has long been used to compare the long-term trend in waterbird numbers. It showed a 20% increase in the Deep Bay area (43,874 individuals in 2014) and a 9% increase in the Ramsar Site (25,467 individuals in 2014) over the previous January. The full data set of the surveys is provided in Appendix 1.

Table 1. Comparison of the number of waterbirds recorded at the Deep Bay area and the Ramsar Site from winter 2010-11 to winter 2014-15. The Ramsar Site covers part of the Deep Bay area, with details shown in Maps 2 and 3.

		Winter	Winter	Winter	Winter	Winter
		2010-11*	2011-12	2012-13*	2013-14*	2014-15*
Winter peak	Deep Bay	68,635	68,080	55,871	43,874	52,584
monthly count^	Ramsar Site	42,699	45,744	31,171	26,861	27,775

January count	Deep Bay	68,635	49,202	55,871	43,874	52,584
	Ramsar Site	42,699	34,561	30,012	25,467	27,775

[^] The winter peak monthly count refers to the highest count from December to February in the winter period.

The results collected in the low-tide counts serve as supplementary information for the high-tide counts, as Grey-headed Lapwing, Black-tailed Godwit, Dunlin and Black-tailed Gull were more easily observed at low-tide periods this winter. The long distance between the birds and surveyors during low-tide counts makes good visibility a curcial factor in the accuracy of the counts. All the low-tide counts were conducted under good visibility this winter. The results of low-tide counts of the different waterbird groups are listed in Table 2 and further details are provided in Appendix 2.

Table 2. Number of waterbird groups recorded in the Deep Bay area during low-tide counts in mid-winter 2014-15. The number in parenthesis represents the results recorded in the Ramsar Site.

	December 2014	January 2015	February 2015
Cormorants	1,079 (818)	210 (180)	680 (182)
Ardeids	599 (365)	474 (153)	408 (126)
Ducks, grebes and	3,366 (1,765)	5,000 (3,805)	7,452 (3,666)
pelicans			
Rails and coots	49 (0)	54 (2)	86 (0)
Shorebirds	7,538 (697)	5,278 (3,090)	5,862 (2,112)
Gulls and terns	3,011 (1,679)	4,190 (3,970)	1,529 (1,473)
Total	15,462 (5,359)	15,206 (11,200)	16,017 (7,559)
High-tide count	38,029 (16,692)	51,009 (26,201)	39,692 (21,428)
total			
Aggregate total	38,321 (16,813)	52,584 (27,775)	39,692 (21,428)
from low-tide			
count			

The combined result of high-tide and low-tide counts show that the January count was the peak count for this winter (Table 3). Four waterbird groups had the peak number recorded in January, including wintering shorebirds, which was the most abundant waterbird group, with 18,261 individuals (accounting for 35% of the total number), followed by ducks and grebes, with 13,985 individuals (27%),

^{*} Counts in the whole Deep Bay area peaked in January for the winters in 2010-11, 2012-13, 2014-15 and 2014-15.

cormorants, with 9,891 individuals (19%), and gulls and terns, with 7,129 individuals (14%). The waterbird group ardeids had a peak count of 4,026 individuals, recorded in the November, and rails and coots had a peak count of 179 individuals, recorded in December.

Table 3. Number of waterbirds counted in winter 2014-2015 by groups and sites.

Bold figures are the highest in this winter period.

Group	Site	Oct	Nov	Dec	Jan	Feb	Mar
Cormorants	Deep Bay area	1,020		8,629	9,891	8,021	3,782
Cormorants	-		4,112				
	Ramsar Site	417	2,275	4,269	5,641	3,997	2,550
	Starling Inlet	1	26	108	51	105	190
Ardeids	Deep Bay area	2,159	4,026	3,569	3,158	3,050	2,940
	Ramsar Site	894	2,039	1,944	1,200	1,214	1,468
	Starling Inlet	161	157	121	164	173	129
Ducks and	Deep Bay area	852	6,439	9,284	13,985	10,656	9,534
grebes	Ramsar Site	224	2,045	3,037	5,468	4,987	2,668
	Starling Inlet	1	6	4	22	23	23
Rails and	Deep Bay area	83	120	179	160	141	175
Coots	Ramsar Site	31	38	68	52	45	64
	Starling Inlet	2	11	11	6	11	27
Shorebirds	Deep Bay area	2,112	5,773	12,339	18,261	10,719	11,169
	Ramsar Site	1,086	3,241	5,816	9,661	5,905	6,125
	Starling Inlet	10	7	1	46	26	0
Gulls and terns	Deep Bay area	11	2,863	4,321	7,129	7,105	3,761
	Ramsar Site	5	861	1,679	5,753	5,280	3,580
	Starling Inlet	0	21	0	0	0	0
Total	Deep Bay area	6,237	23,333	38,321	52,584	39,692	31,361
	Ramsar Site	2,657	10,499	16,813	27,775	21,428	1,6455
	Starling Inlet	175	228	245	289	338	369

Compared to the results of the previous year, there were increases in the peak counts of all the waterbird groups, except gulls and terns, and rails and coots. There was a substantial increase of 69% in the number of ducks and grebes compared with that of the previous winter (Table 4).

Table 4. Peak number of different waterbird groups in the Deep Bay area during the mid-winter period (i.e. December to February) from 2002-03 to 2014-15.

Winter	Cormorants	Ardeids	Ducks and	Rails and	Shore-	Gulls and	
			Grebes	coots	birds	Terns	
2002.02	7,959	4,702	20,203	219	9,849	13,191	
2002-03	(Jan)	(Jan)	(Jan)	(Dec)	(Feb)	(Jan)	
2002.044	8,964	3,963	16,856	362	12,856	8,469	
2003-04^	(Jan)	(Dec)	(Feb)	(Jan)	(Jan)	(Dec)	
2004.05	9,552	6,425	22,521	384	9,806	9,346	
2004-05	(Jan)	(Dec)	(Jan)	(Feb)	(Feb)	(Dec)	
2005.06	10,347	4,345	19,657	597	13,695	14,417	
2005-06	(Jan)	(Jan)	(Feb)	(Dec)	(Feb)	(Feb)	
2006-07	10,081	4,396	33,779	798	19,054	12,000	
2006-07	(Jan)	(Dec)	(Feb)	(Feb)	(Feb)	(Jan)	
2007-08	11,144	3,549	35,066	866	27,720	11,787	
2007-06	(Jan)	(Jan)	(Jan)	(Jan)	(Jan)	(Jan)	
2008-09	8,736	4,384	38,099	460	24,069	11,212	
2006-09	(Jan)	(Feb)	(Feb)	(Jan)	(Feb)	(Dec)	
2009-10	10,758	3,357	28,700	523	23,926	11,331	
2009-10	(Feb)	(Jan)	(Jan)	(Jan)	(Jan)	(Jan)	
2010-11	10,023	3,006	30,628	332	20,708	9,393	
2010-11	(Feb)	(Dec)	(Dec)	(Jan)	(Jan)	(Jan)	
2011-12	9,636	3,384	25,739	206	25,299	5,128	
2011-12	(Feb)	(Dec)	(Feb)	(Jan)	(Feb)	(Jan)	
2012-13	10,569	2,773	13,169	163	22,320	7,955	
2012-13	(Jan)	(Jan)	(Dec)	(Jan)	(Jan)	(Jan)	
2013-14	8,761	2,728	8,259	199	17,573	9,216	
2013-1 4	(Feb)	(Feb)	(Dec)	(Dec)	(Jan)	(Jan)	
2014-15	9,891	3,569	13,985	179	18,261	7,129	
2014-13	(Jan)	(Dec)	(Jan)	(Dec)	(Jan)	(Jan)	

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

To avoid stochastic biases for solely adopting the January count (which has been widely used internationally for population estimates) and to acquire a more accurate profile of the number of waterbirds that were dependent on Deep Bay as their

habitat for at least part of the winter, the total peak count (i.e. the sum of the peak numbers of each waterbird species) in the mid-winter period (December to February) was extracted to show the maximum number of waterbirds that used the Deep Bay area in winter 2014-15. The total peak count for winter 2014-15 was 53,711 birds (Table 5 and Appendix 3), an increase of 4% over the 51,573 individuals recorded in the previous winter. A comparison of the total peak counts in the five winters from 2010-11 to 2014-15 is shown in Table 5. A comparison of the difference using the total peak count and January count to present the waterbird population is shown in Figure 1. There is a decreasing trend in the waterbird population from the high count of 90,986 individuals in winter 2007-08, while there was no obvious trend in the number of waterbird species.

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

	Winter	Winter	Winter	Winter	Winter
	2010-11	2011-12	2012-13	2014-15	2014-15
Total peak count	76,679	72,492	61,674	51,573	53,711
Total no. of					
positively-identified	67	64	69	69	66
waterbird species					

The 10 most numerous waterbird species recorded in the Deep Bay area in mid-winter (December to February) are shown in Table 6. These 10 waterbird species together made up a total of 43,146 individuals, constituting 80% of the total peak count of waterbirds recorded in the mid-winter period. This figure is similar to that of previous winters (winter 2013-14: 85%, winter 2012-13: 84%, winter 2011-12: 74%, winter 2010-11: 78%, winter 2009-10: 86%, winter 2008-09: 84%, and winter 2007-08: 84%). The number of waterbirds recorded on the Hong Kong side was higher than that in the Futian National Nature Reserve during the high-tide period. Surveyors also observed 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.

Table 6. The 10 most numerous wintering waterbird species recorded in the Deep Bay area of Hong Kong and Shenzhen in mid-winter (December to February).

Species	Number of birds at	Number of birds at	Total
	Hong Kong side	Futian (i.e. Shenzhen)	number
Pied Avocet	6,553	4,404	10,957
Great Cormorant	9,891	0	9,891
Black-headed Gull	6,930	16	6,946

Northern Shoveler	1,741	2,207	3,948
Eurasian Wigeon	2,515	386	2,901
Tufted Duck	2,663	110	2,773
Northern Pintail	1,101	920	2,021
Dunlin	1,570	0	1,570
Marsh Sandpiper	676	430	1,106
Little Egret	944	91	1,035
Total	34,584	8,564	43,148
	(80.2%)	(19.8%)	

3.2 Species of conservation significance

Some waterbird species recorded in the Deep Bay area are of conservation significance because they are globally threatened, according to BirdLife International (2014), or if the Deep Bay area supports at least 1% of their regional or flyway population. The data related to the '1% of the regional or flyway population' was adopted from Wetlands International (2015). The focus is on the wintering population, which refers to mid-winter peak counts (December to February), and significant figures in the other months during the study period are provided as supplementary information. Brief reviews of the important waterbird species recorded in winter 2014-15 are shown below.

Great Cormorant *Phalacrocorax carbo*

Coordinated counts at evening roosting sites in the Mai Po Marshes Nature Reserve and Nam Sang Wai in December 2014, January and February 2015 recorded 8,629, 9,891 and 8,021 individuals, respectively. The peak count (January 2015) showed an increase of 13% over that of the previous winter (8,761 individuals). Applying 1% of the regional population at 1,000 individuals (Wetlands International 2015), the Deep Bay wintering population of this species constituted nearly 10% of the regional population in winter 2014-15.

Great Egret Ardea alba

The mid-winter peak count was 949 individuals, recorded in December. Although this was an increase of 9% over that of the previous winter (871 individuals), the wintering population was just below the 1% regional population of 1,000 individuals (Wetlands International 2015). It is worth noting that the highest count in the whole survey period was 1,124 individuals, recorded in November 2014, which showed that the number of Great Egrets recorded in Deep Bay, possibly

involving passage individuals, once exceeded the 1% regional population.

Black-faced Spoonbill Platalea minor

Endangered

The International Black-faced Spoonbill Census in mid-January 2015 recorded a total of 3,272 individuals in the East Asia region (HKBWS 2015). The highest count of wintering Black-faced Spoonbills (i.e. from December to February) in the Deep Bay area was 455 individuals, recorded in the December count, which was an increase of 71% over that of the previous winter (266 individuals). The Deep Bay area supported 14% of the known world population of this species in winter 2014-15.

Falcated Duck Anas falcata

Near Threatened

Two individuals were recorded in December 2014, lower than the peak count of seven individuals recorded in the previous winter. This species was usually recorded in small numbers (fewer than 10 birds) in previous winters.

Northern Pintail Anas acuta

The 1% of the regional population level of this species was set at 2,400 individuals (Wetlands International 2015). The peak count was 2,021 individuals, recorded in February 2015, and therefore, this winter record did not meet the 1% level, even though there was an increase of 43% over that of the previous winter (1,410 individuals).

Northern Shoveler *Anas clypeata*

The 1% of the regional population number is set at 5,000 individuals (Wetlands International 2015). The peak count of this species was 3,948 individuals, recorded in February 2015, and therefore, the winter 2014-15 count was less than 1% of the regional population. The count was 42% higher than that of the previous winter (2,775 individuals).

Tufted Duck Aythya fuligula

The peak count in the mid-winter period was 2,773 individuals, recorded in January 2015, an increase of 75% over that of the previous winter (1,585 individuals). The 1% regional population level is set at 2,400 individuals (Wetlands International 2015), so the Deep Bay area supported over 1% of the known world population of this species in winter 2014-15.

Pied Avocet Recurvirostra avosetta

A total of 10,957 individuals were recorded in the January count, which was the peak count of this winter and a decrease of 7% from the peak count of the previous year (11,794 individuals). Applying the criterion of 1% of the regional population at 1,000 individuals (Wetlands International 2015), this winter peak count constituted nearly 11% of the regional population in winter 2014-15.

Black-tailed Godwit Limosa limosa

Near Threatened

A total of 780 individuals were recorded in Futian during the high-tide period of the January count. This was the peak count of winter 2014-15 and an increase of 11% over the peak count of the previous winter (700 individuals). This species was more frequently present in Futian during the mid-winter period. The 1% regional population was 1,400 individuals (Wetlands International 2015).

Eurasian Curlew Numenius arquata

Near Threatened

The winter peak count of this species was 1,005 individuals, recorded in December 2014, a decrease of 22% from the peak of the previous winter (1,297 individuals). As the 1% regional population was 1,000 individuals (Wetlands International 2015), this winter peak count constituted 1% of the regional population in winter 2014-15.

Common Greenshank Tringa nebularia

The winter peak count was 735 individuals, recorded in December, a decrease of 12% from the peak count of the previous winter (836 individuals). As the 1% regional population is set at 1,000 individuals (Wetlands International 2015), the wintering population did not meet the 1% level.

[Nordmann's Greenshank Tringa guttifer

Endangered

None were recorded this winter. The global population is estimated at 400-600 individuals and 1% of the global population is set at 5 individuals (Wetlands International 2015).]

Great Knot Calidris tenuirostris

Vulnerable

The peak count was 30 individuals, recorded in October, but it may have included passage individuals. The highest number in the mid-winter period was 15 individuals, recorded in the January count, a 25% increase from the peak count of 12 birds in the previous winter. The world population is estimated at 290,000 individuals, so 1% of the global population is 2,900 individuals (Wetlands

International 2015). The population of this species is rapidly declining due to habitat deterioration (BirdLife International 2015).

Relict Gull Ichthyaetus relictus

Vulnerable

A single individual was recorded in the counts of January and February. The global population is estimated at 12,000 individuals, so the 1% of the global population is estimated at 120 individuals (Wetlands International 2015).

Saunders's Gull Chroicocephalus saundersi

Vulnerable

The peak count was 65 individuals, recorded in February 2015, an increase of 76% over the peak count of the previous year (37 individuals). The global population is estimated at 14,000 individuals, so 1% of the global population is 140 individuals (Wetlands International 2015).

3.3 *Other notable counts*

Greater Crested Grebe *Podiceps cristatus*

The peak count of this species was 100 individuals, recorded in December 2014. This winter result was similar to that of the previous winter (103 individuals in November 2013). This was considerably below 1% of the regional population, which was set at 350 individuals (Wetlands International 2015).

[Common Shelduck Tadorna tadorna

This species was not recorded in winter 2014-15 or in the previous winter. This species has seen a drastic decline from the peak count of 4,011 individuals in January 1998 (Carey *et al.* 2001) to only one or none in recent years.]

Eurasian Teal Anas crecca

The peak count of this species was 842 individuals, recorded in February, a significant increase of 170% over the peak count of the previous winter (311 individuals). This species was once one of the most common ducks in the Deep Bay area, with a peak count of 5,348 individuals in February 1996 (Carey *et al.* 2001), but its numbers continued to fall in recent years: 2,332 individuals in 2008-09 winter, 1,459 individuals in winter 2010-11, 937 individuals in winter 2011-12, 512 individuals in winter 2012-13 and 311 individuals in winter 2013-14. The count was far below 1% of the regional population for this species, which is set at 7,700 individuals (Wetlands International 2015).

Eurasian Coot Fulica atra

The peak count was 42 individuals, recorded in January, a decrease of 12% from the peak count of 48 birds in the previous winter. This peak count was far lower than that in the past. The highest count, 3,245 individuals, was in January 1992 (Carey *et al.* 2001). This year's count was far below 1% of the regional population for this species, which is set at 20,000 indviduals (Wetlands International 2015).

Grey Plover Pluvialis squatarola

The peak count was 594 individuals, recorded in December 2014, a decrease of 29% from the peak count in the previous winter (833 individuals). This year's count was less than 1% of the regional population for this species, which is set at 1,000 individuals (Wetlands International 2015).

Little Ringed Plover Charadrius dubius

One per cent of the regional population is set at 250 individuals (Wetlands International 2015). The population in the Deep Bay area occasionally exceeds this level (e.g. 315 individuals in February 2009), but the peak count this winter was only 90 individuals, far below the 1% level, even though there was an increase of 32% over that of the previous winter.

Kentish Plover Charadrius alexandrinus

The mid-winter peak count for this species was 429 individuals, recorded in December 2014, a decrease of 22% from the peak count of 549 individuals in the previous winter. The annual mid-winter peak count of this species has fluctuated in recent years (720, 2,640, 3,221, 549, 429 individuals in the past five winters). This winter's count was far less than 1% of the regional population, which is set at 1,000 individuals (Wetlands International 2015).

Spotted Redshank *Tringa erythropus*

The highest count in the mid-winter period was 88 individuals, recorded in January 2015, a decrease of 25% from the peak count of 117 individuals in the previous winter. This species continues its drastic decline from the historical peak count of 2,500 individuals in 2002. This count was far below 1% of the regional population, which is set at 250 individuals (Wetlands International 2015). The peak count in the whole study period was 123 individuals recorded in March 2015, which also not exceeded the 1% level and may have included passage individuals.

Marsh Sandpiper Tringa stagnatillis

The peak count for this species was 1,106 individuals in January 2015, a significant increase of 361% from the peak count in the previous winter (240 individuals). This species was also common in the Deep Bay mudflat area five winters ago, when 1,710 and 2,884 individuals were recorded in February 2010 and January 2011, respectively. This winter's count was considerably below 1% of the regional population, which is set at 10,000 individuals (Wetlands International 2015).

Black-headed Gull Chroicocephalus ridibundis

The peak count was 6,964 individuals, recorded in Febuary 2015, a decrease of 23% from the peak count (9,000 individuals) in the previous winter. This species was once one of the most abundant waterbird species in the region, with the highest count of 20,629 individuals in winter 1995-96 (Carey *et al.* 2001), but its numbers have declined since then, with recent winter results usually falling in the range of 5,000 to 10,000 individuals. This winter's count was less than 1% of the regional population, which is set at 20,000 individuals (Wetlands International 2015).

3.4 Other information collected

Additional field surveys were conducted in December 2014 to collect more information on fishpond conditions for waterbirds. Out of 635 surveyed fishponds, 88 ponds had wires set up across them (Map 4) and 500 were actively managed (Map 5).

Table 7. Number of wired fishponds and managed fishponds.

Location of surveyed fishponds	No. of fishponds	Wired	Managed
	surveyed	ponds	ponds
Shenzhen River 'B'	112	15	72
Shenzhen River 'A'	34	0	33
Sam Po Shue	45	9	42
San Tin	52	3	40
Mai Po San Tsuen	45	5	32
Tam Kon Chau	104	44	97
Lut Chau	28	0	28
Tai Sang Wai	33	0	33
Luen Hing Wai and Wing Kei Tsuen	56	0	35
Nam Sang Wai	38	0	17
Tsim Bei Tsui	88	12	71
Total	635	88	500

4. Conclusion

In the period from October 2014 to March 2015, the peak winter count of waterbirds in the Deep Bay area was 53,711 individuals, including 18,550 shorebirds, 13,985 ducks and grebes, 9,891 cormorants, 7,250 gulls and terns, 3,832 egrets and herons, and 203 rails and coots. This peak count was higher than that of the previous winter, but there was still a declining trend from the peak count of 90,986 individuals in winter 2007-08. The peak count showed a decrease in species diversity, as 66 waterbird species were recorded this winter compared to 69 species in the previous winter. The 10 most numerous waterbird species constituted 80% of the total peak count in winter 2014-15, similar to that of winter 2013-14.

The low-tide count conducted this winter provided supplementary information about many species, such as the Grey-headed Lapwing, Black-tailed Godwit, Dunlin, and Black-tailed Gull. Many of these species prefer mudflats to habitats such as *gei* wais. Therefore, the low-tide count helped to increase survey accuracy for some species which prefer the Deep Bay intertidal mudflat area at low tide.

A total of 7 globally threatened or near-threatened waterbird species (i.e. the Black-faced Spoonbill, Falcated Duck, Black-tailed Godwit, Eurasian Curlew, Great Knot, Relict Gull and Saunders's Gull) and a total of 6 species having at least 1% of the regional population for the species (i.e. the Great Cormorant, Great Egret (in the November count), Black-faced Spoonbill, Tufted Duck, Pied Avocet and Eurasian Curlew) were recorded in the Deep Bay area in during the 2014-15 survey period. The Black-headed Gull showed a decrease again this winter, continuing a falling trend since the peak count of 20,629 in winter 1995-96. There has been a short-term (10-year) decline in the winter counts of the Chinese Spot-billed Duck, Great Egret, Spotted Redshank and Black-headed Gull, and a long-term (20 year) decline in the winter counts of the Falcated Duck, Common Shelduck and Eurasian Coot. Only the mid-winter peak count of the Great Egret this winter was higher than that of the previous winter; the counts of all other species remained low. The reasons for the decline of these species have not been fully studied or understood. More information on the numbers of wintering waterbirds in other coastal and inland wetland sites in the Mainland is needed as a reference for the figures recorded in the Deep Bay area.

Cross-border fishermen were again sighted during the low-tide count in the Deep Bay mudflat area this winter. Up to eight fishermen were found working on the mudflat and creating a disturbance to the waterbirds on the mudflat. Before more

information is available to understand the reasons for the decline in the number of waterbirds in Hong Kong, regular patrols and enforcement by the AFCD are an important means of avoiding further aggravation or disturbances to the waterbirds and to achieve better accuracy in the count.

5. Acknowledgements

We would like to thank the following surveyors who participated in the counts: K.H. Chan, Gary Chow, Camille Chung, Johnson Chung, Forrest and Emily Fong, Helen Fong, Vivian Fu, Mike Leven, Martin Hale, Jocelyn Ho, John and Jemi Holmes, W.M. Hung, Aaron Keung, Cecilia Kwan, N.Y. Lai, Alan Lam, Shirley Lam, Roger H. Lee, R.W. Lewthwaite, Austin Ng, C.C. Pang, Y.K. So, Y.H. Sung, Graham Talbot, Ivan Tse, Captain Wong, Walkman Wong, Haley Yeung, H.K. Ying, and the Shenzhen Bird Watching Society. We would also like to thank the reserve staff of Hong Kong Wetland Park for their contribution in collecting waterbird data.

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Mai Po Inner Deep Bay Ramsar Site Waterbird Monitorig Programme

Monthly Waterbird Monitoring Biannual Report 2 (October 2014 to March 2015)

Figure

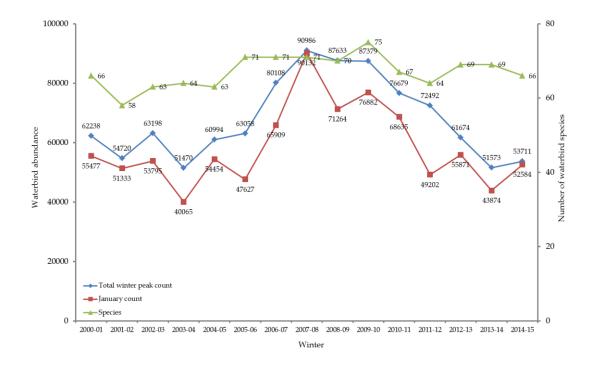


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Figure 1. Total winter peak counts and January (mid-winter) counts, from 2000-01 to 2014-15.



Note: number of waterbirds in winter 2003-04 was modified and details are referred to Anon (2005). Statistics for 2005-06 have also been revised.

Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

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Maps

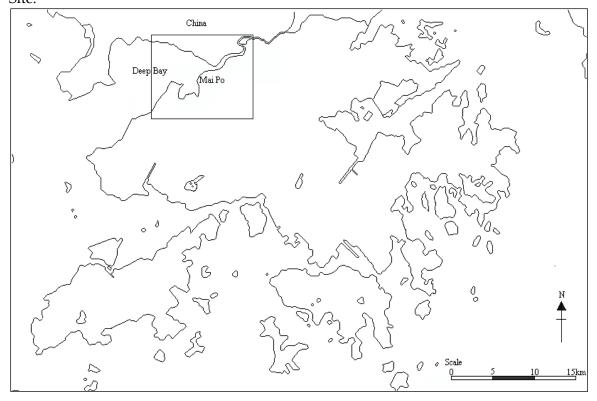


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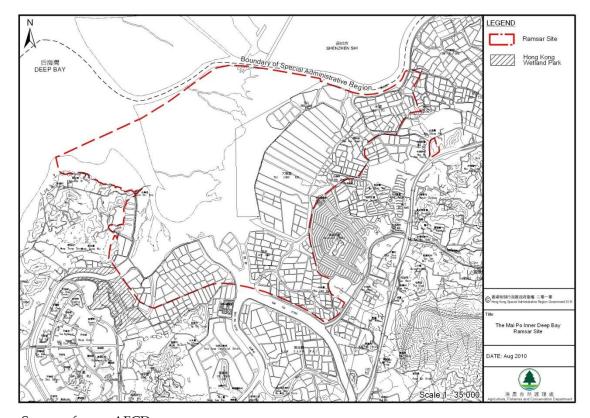


Agriculture, Fisheries and Conservation Department

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



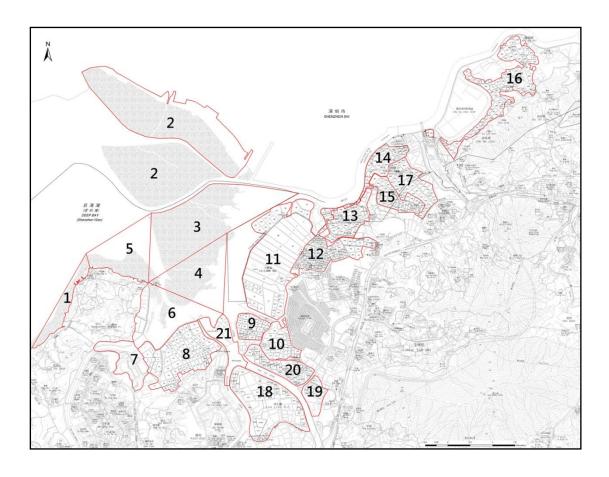
Map 2. Boundary of Mai Po Inner Deep Bay Ramsar Site.



Source of map: AFCD

Map 3. Location of survey sites of the Waterbird Monitoring Programme.

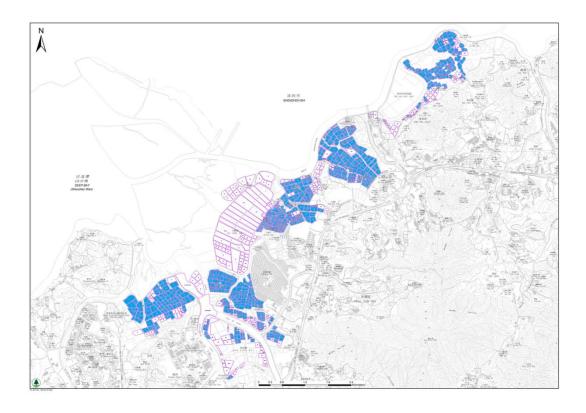
(1: Tsim Bei Tsui to Lau Fau Shan; 2: Deep Bay 'A'; 3: Deep Bay 'B'; 4: Deep Bay 'C'; 5: Deep Bay 'D'; 6: Deep Bay 'E'; 7: Hong Kong Wetland Park; 8: Deep Bay 'F' (Tsim Bei Tsui fishpond); 9: Lut Chau; 10: Tai Sang Wai; 11: Mai Po Marshes Nature Reserve; 12: Tam Kon Chau; 13: Mai Po San Tsuen; 14: Shenzhen 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 north.)



Map 4. Distribution of wired ponds (in red) in fishpond area in the Deep Bay area, surveyed in December 2014.



Map 5. Distribution of managed ponds (in blue) in fishpond area in the Deep Bay area, surveyed in December 2014.



Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

Monthly Waterbird Monitoring Biannual Report 2 (October 2014 to March 2015)

Appendix 1



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Agriculture, Fisheries and Conservation Department

Summary of Waterbird Count, October 2014

	_		1		1		1	1		I	1	1	1	1		1	1	1	1				D		DEED	
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	11	35						10	0	6	5 4	4			31	0	9	2	23	54	17	39		56	206	1
Great Crested Grebe							1		Ť												0		Ť	0	0	
Great Cormorant	318	51	15				1	37	0	102	13	16			8	0	5	24	15	61	355	62	0	417	1020	1
Dalmatian Pelican	510		- 10						Ĭ	102	10	10			Ŭ				10	- 01	0		Ü	0	0	
Grey Heron	21	25	17	13	13	6	1	10	2	35	11	23			32	6	4	8	24	13	-	59	32	160	332	
Purple Heron	1		- 1,	13	13		1	10		3.					32	Ü			2.	13	3	- 57	32	3	4	
Great Egret	19		42	76	27	6	1	12	1	56	44	2	3	14	11	4	18	5	56	74	U	87	109	285	621	
Intermediate Egret	2	~ -		70			1	0		(1.	5			0				9		17	22	
Little Egret	15		55	81	14	6	i 1	14	2	57			1	15	52		75	_			29	162		293	768	
Swinhoe's Egret	10			01			1						1	- 10			,,,	- 10			0	102	102	0	700	-
Pacific Reef Heron										1											0		†	0	0	
Eastern Cattle Egret	1	8	1					0	0	() 3	5		1	2	1	35	0	8	8	1	37	0	38	74	
Chinese Pond Heron	28						1	4	0	,	, ,			1	40	_	17					69		88	301	
Striated Heron	0			<u> </u>			1	0	U	 		_	†	1	0	_						0)		3	301	
B-c Night Heron	10						1	0		,	. 0				4	_ ~	Ŭ					2.	-	4	23	
Yellow Bittern	10	1						0	0	(0		V				-	0	-	1	4	
Cinnamon Bittern	1							·	Ů	 	, ,	_					Ů		Ŭ	Ŭ	0		Ŭ	0	0	<u>'</u>
Eurasian Bittern										1											0		†	0	0	1
Black Stork							1														0			0	0	`
Black-headed Ibis							1														0			0	0	4
Eurasian Spoonbill				1			1														0		1	1	1	
Black-faced Spoonbill			5	1			1														0		1	1	6	-
Common Shelduck				1			1														0		1	0	0	
Eurasian Wigeon	0	0	42					0	0	(0				0	0	0	0	0	0		0	0	54	96	
Falcated Duck	0	0	72				1	U	U	\ \	, ,				0	U	0	0	- 0	0	0	0	U	0	0	
Gadwall							1							1							0			0	0	1
Baikal Teal																					0		†	0	0	
Eurasian Teal	33	0		3			1	0	0	(0				0	0	0	0	0	0	-	0	3	62	95	1
Mallard	33	0		3			1	U	U	\ \	, ,				0	U	0	0	- 0	0	0	0	3	02	0	
Spot-billed Duck							1														0			0	0	+
Chinese Spot-billed Duck																					1		†	1	1	+
Indian Spot-billed Duck																					0		†	0	0	
Northern Pintail			6																		15		†	15	21	
Garganey	2		65																		32		†	32	99	
Northern Shoveler			250				1														0		1	4	254	
Common Pochard			230	1			1														0			0	0	
Baer's Pochard							1														0			0	0	4
Tufted Duck																					0		 	0	0	'
Greater Scaup					1		1		1				1			1				1	0			0	0	
Red-breasted Merganser																					0		†	0	0	
Duck sp.	1		80	1	 		1	1		 	+		 	 		 		1			0		+	0	80	
Slaty-breasted Rail			80	1	 		 			-	+		 	 		1					0		 	0	<u> </u>	1
Eastern Water Rail			 		 		 			-	+		 	 		1					0		 	0	<u>U</u>	<u> </u>
White-breasted Waterhen	3	7	2	1	1		1	2	0		i 4		1	 	8	2	1	3	1	1	3	17	0	20	<u>u</u> 46	
Watercock	3	/		1	-		1		- 0	(4		-	-	8		1	3	1	4	0	17	U	20	<u>46</u>	
	2		12		-		1		0		0	3	-	-	4	0	0	0	0	1	7	4	0	U	37	
Common Moorhen		6	13	1	-		1	0	- 0	1	. 0	3	-	-	4	0	0	0	0	1	/	4	0	11		
Eurasian Coot			l	l .			1	1			1					<u> </u>		1			0			U	0	

Greater Patrick-Surjuge 0 0 0 0 0 0 0 0 0	les	1 1		ì	1		1	1	1		1				1			ī				i	1 1	-1	اد	
Black-owinged Stift	Pheasant-tailed Jacana							-													1			1	1	
Pick Associated 10																								-		
Circums Markinger Circums Circ		94	2					23		18	9				2	9	5	17	3	15						
Northern Jayoring Section Secti																				1				46		
Grey-headed Larwine				10												1					-			1		
Pacific Colone River 4 1 1 1 1 1 1 1 1 1																								-	-	
Grey Prover Common Ringed Prover Common Ringed Prover S 2 0 7 0 0 2 2 23 0 5 5 0 8 5 1 19 0 20 66 Common Ringed Prover S 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Prover S 2 1 1 9 0 20 66 Common Ringed Ringed Prover S 2 1 1 9 0 20 66 Common Ringed																					U					
Control Ringed Plover				4																	0			-		
Little Kingael Plover S					15																1		15		16	
Kentish Plover																					0			-		
Leser Sand Plover 1	Little Ringed Plover	8	2	0				7	0	0	2			23	0	5	5	0	8	5	1	19	0	20	66	
Creater Sand Plover	Kentish Plover			1										4		60					9	60		69	74	1
Black-Inteled Corbot Solidary	Lesser Sand Plover			1																	0			0	1	
Black-Inteled Corbot Solidary	Greater Sand Plover				1									1							0		1	1		5
Base-tailed Godwit	Black-tailed Godwit				555																8		555	563	563	
Winthere					3																0					
Eurostan Curlew	Whimbrel				5								2	2							1		5	6		
Far Eastern Curlew	Eurasian Curlew				2									1							20					
Sported RedShank																										
Common Rechank																								0		
Marsh Sandpiner				273											1	5										
Common Greenshank 1 98		4									1				1											
Nordmann's Greenshank		-									1	1	5		1	5					239					
Green Sandpiper 1 2 3 0 0 1 2 0 2 1 0 1 1 7 0 8 14 Wood Sandpiper 20 7 102 0 0 0 0 0 0 0 0 0		1		70								-	3		1							0				-
Wood Sandpiper		1	2					3	0	0	0	1			2	0	2	1	0	1	1	7	0			-
Terek Sandpiper			7	102				0	0	0	7	1						0		1	0	,	·			
Common Sandpiper		20		102				0	U	0					U	U	U	0	U	- +	,		U			
Circy-tailed Tattler Circy		0	12	11				1	0	1	2			1	12	6	0	1	0	0			0			
Red-necked Phalarope		U	12	- 11				4	U	1				1	13	U	0	1	0	0			U			
Red-necked Phalarope														1											1	
Pintail Snipe						-				1				1							,			v	1	
Swinhoe's Snipe																								-	v	
Pintail/Swinhoe's Snipe 3																								-		
Common Snipe		2				-		-		-															-	
Snipe sp.				10						<u> </u>						- 1	1		1					-		
Long-billed Dowitcher		1		10						<u> </u>						1	1		1							
Asian Dowitcher					-														1							
Red Knot 30 0 0 0 0 30 Sanderling 0					1																		1			
Great Knot 30 0 0 0 30 0 0 0 0																					-			-	-	
Sanderling				2.0		\vdash		-		1											-			Ü	v	
Red-necked Stint				30		 		 		<u> </u>														-		
Little Stint 0 0 Temminck's Stint 0 0 Long-toed Stint 0 0 Pectoral Sandpiper 0 0 Sharp-tailed Sandpiper 0 0 Dunlin 1 0 1 Curlew Sandpiper 0 1 1 Spoon-billed Sandpiper 0 0 0 Broad-billed Sandpiper 0 0 0 Ruff 0 0 0						 		<u> </u>		<u> </u>														-		
Temminck's Stint																					-			-		
Long-toed Stint								ļ													-			v	v	
Pectoral Sandpiper																								-		
Sharp-tailed Sandpiper 0 0 0 Dunlin 1 0 1 1 1 Curlew Sandpiper 1 0 1								ļ		ļ														-		
Dunlin 1 0 1 1 Curlew Sandpiper 1 0 1																					-			-		
Curlew Sandpiper 1 0 1	Sharp-tailed Sandpiper																				-			Ü		
Spoon-billed Sandpiper 0 0 0 Broad-billed Sandpiper 0 0 0 Ruff 0 0 0	Dunlin				1																0		1	1	1	
Spoon-billed Sandpiper 0 0 0 Broad-billed Sandpiper 0 0 0 Ruff 0 0 0	Curlew Sandpiper				1																		1	-	1	
Broad-billed Sandpiper	Spoon-billed Sandpiper																				0			0	0	
	Broad-billed Sandpiper																				0			0	0	
Small wader spp. 0 0	Ruff																				0			0	0	
	Small wader spp.																				0			0	0	

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Wader sp.			60	1																	0			0	00	
Black-tailed Gull Heuglin's Gull																					0			0	V	
- 17							1													-	0			0		
Caspian Gull Slaty-backed Gull																					0			0	<u>U</u>	
Pallas's Gull																					0			0	<u>U</u>	
Large Gull spp.																					0			0	v	
Brown-headed Gull																					0			0		
Black-headed Gull	0	0						0	0	0	1				0	0	0	0	0	0			0	1	<u>U</u>	
Saunders's Gull	U	U						U	U	0	1				U	U	U	U	U	U	0		U	0	0	
Whiskered Tern															3			4		2	0			4	10	
White-winged Tern															3			4		3	0			0	10	
Gull-billed Tern																					0			0	0	-
Caspian Tern																					0			0	0	
Total	599	344	1331	767	54	18	2	126	5	290	137	63	11	64	210	119	189	89	202	481	1127		841	2657	6237	
Total	399	344	1331	/0/	34	10) <u> </u>	120		290	137	0.3	11	04	219	119	109	0,9	202	401	1147	009	041	2037	0237	173
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	1020	16%	417	16%	1	1%																				
Ardeids etc	2159	35%	894	34%	161	92%																				
Ducks, grebes, pelicans	852	14%	224	8%	1	1%																				
Rails, coot etc	83	1%	31	1%	2	1%																				
Shorebirds	2112	34%	1086	41%	10	6%																				
Gulls and terns	11	0%	5	0%	0	0%																				
TOTAL	6237	100%	2657	100%	175	100%																				
Date of count: 12 Oct 2014																										
High tide measured at TBT: 2	.2m	1		1																						
7																										
Wetland-dependent species																										
	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	ткс	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal	Ramsar Site	DEEP BAY	Starling Inlet
Species				ļ				(===)														r	areas	~	AREA	
Western Osprey			3												_						1		_	1	4	
Black Kite	0	4	3					2	0	9	3				3	1	7	4	3	4	25	18	0	43	68	
White-bellied Sea Eagle																					0			0	0	
Eastern Marsh Harrier							ļ			<u> </u>											2			2	2	
Eastern Buzzard							ļ		_		-				_		_				0			0	0	
Greater Spotted Eagle	0	-					1	0	0		0				0	Ü	Ü	U	_ ~				Ü	0		
Eastern Imperial Eagle	0	0						0	0	0	0				0	0	0	0	0	0	,		0	0	-	
Peregrine Falcon	_		_					_	_		~		 	-	_		_				0			0	-	
Pied Kingfisher	2		2	-				0	0	_ ~	2	1	 	-	3			0	0		2	5	0	7	14	
Common Kingfisher	2		3	1			1	1	0	1	1	1	 	 	5			1	5		J		V	12	25 10	
White-throated Kingfisher	2		J	_			1	0	0		0				Ü	V	U		0		0					_
Black-capped Kingfisher	0			_			1	0	0	1	0				0		v	U	_					0		
Red-billed Starling Collared Crow	3			-			1	0	Ŭ		0				0	-	0	0	0			5		0 10	13	
Pied Harrier	1	0		1				- 0	0	1 0	0	1			U	1		2	U	U)	0	10	13	
rieu namei	1	1	<u> </u>		l				l				l	l	l		l	l					1			

Summary of Waterbird Count, November 2014

								DBF					Sha	NW/						Ī		Ramsar	Ramsar	Ramsar	DEEP	Starling
SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	(TBT)	SPR	NSW	LHW	WEP	Kiu	LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	ponds	intertidal areas	C!4.	BAY AREA	Inlet
Little Grebe	19	36	6					6	0	8	3	8			44	0	17	29	20	42	23	84	0	107	261	5
Great Crested Grebe			2																		0			0	2	2
Great Cormorant	1117	225	35	1100				360	0	113	38	65			32	0	0	131	55	119	722	453	1100	2275	4112	26
Dalmatian Pelican																					0			0	0	
Grev Heron	130	63	74	17	4	1	31	25	5	102	14	32	1	23	29	9	7	30	7	24	203	90	58	351	831	39
Purple Heron	1											1									0			0	2	
Great Egret	50	48	73	233	11	1	7	128	14	35	8	4	1	37	74	4	16	12	75	79	214		262	714	1124	79
Intermediate Egret	2	2				_		0	0			0		-	5	1	1	0	0				0		21	
Little Egret	30	96	235	32	46	3	6	38	9	_	-			37	149	15	31	17	58		102		96		1125	
Swinhoe's Egret	20	,,,	200							,,					1.,	- 10					0		,,,	0	0	
Pacific Reef Heron																					0			0	0	
Eastern Cattle Egret	0	14	3					8	0	0	4	1			11	2.	9	0	5	8	0		0	30	65	1
Chinese Pond Heron	41	46	36	4				3	8	15	28	1		3	53	9	10	36	41	32			11		394	
Striated Heron	0	0	30					0	0	0					0	0			0		0		0		0	
B-c Night Heron	15	14						0	0	_		v			0	0			0	_ ~	0		0	Ŭ,	30	
Yellow Bittern	0	0						0	v	Ŭ	-	-			0	0		_ ~	1	-			0	Ŭ	1	
Cinnamon Bittern	Ü							·		Ü		Ů			U	Ů				Ů	0			0	0	`
Eurasian Bittern																					0			0	0	
Black Stork																					0			0	0	,
Black-headed Ibis																					0			0	0	,
Eurasian Spoonbill			2																1		0			0	3	<u>, </u>
Black-faced Spoonbill	52		93	71	16*		53	42*	2	3								2	18*	3	151		124	317	430	<i>'</i>
Common Shelduck	32			/ 1	10		33	72											10		0		124	0	- 430	
Eurasian Wigeon	13	2	93	112		62	1	0	0	1	0	3			0	0	0	0	0	0	29		175	204	316	
Falcated Duck	13		93	112		02	1	U	U	1	U	3			U	U	U	U	U	U	0		173	0	310	
Gadwall																					0			0	0	,
Baikal Teal																					0			0	0	,
Eurasian Teal	110	330		18		1	1	0	13	24	0				3	0	0	23	2	22.	71		33	U	619	,
Mallard	110	330		10		1	1	U	13	24	U					U	U	23	3	22	0		33	127	019	
Spot-billed Duck																					0			0	0	,
Chinese Spot-billed Duck										1											6			6	7	<u>, </u>
Indian Spot-billed Duck										1											0			0		<u> </u>
Northern Pintail	9	1	7	207					1			3								43	109		208	317	380	
Garganey	2	1	50	207					1			2								43	109		200	317 4	<u> </u>	
Northern Shoveler	20	0	1089	129	12	16			7	72		87								27	825		136	961	2292	
Common Pochard	20	0	1009	129	12	10			/	12		0/								21	0		130	901	2292 0	
																								0		<u>, </u>
Baer's Pochard			1001																	-	0			U	1204	,
Tufted Duck			1201																	60	43			43	1304	
Greater Scaup																					0			U	0	,
Red-breasted Merganser			1000	27.6*								1					1			1	0		27.	0	1200	,
Duck sp.			1200	2/6°								1					1			1	0		276	276	1200	
Slaty-breasted Rail	-					-					 	1					1	-	<u> </u>	<u> </u>	0			0	0	,
Eastern Water Rail										_					_	_	<u> </u>	<u> </u>	ļ .	ļ .	0			0	0	,
White-breasted Waterhen	1	14	1					1	1	0	3	ļ			2	1	1	6	4	1	0		0	10	36	
Watercock												ļ					ļ				0			0	0	
Common Moorhen	4	4	27					2	0	1	0	ļ			8	0	0	7	4	15	7	16	0	23	79	
Eurasian Coot		4																1			0			0	5	,

Db +-:11 T	İ	11	i	i		1 1	ĺ		I	I	ı	1	I	1 1	ı i		İ	1 1	Í	0	İ	İ	1	0	1	
Pheasant-tailed Jacana	2	1									-													v	1	
Greater Painted-snipe	2										1									0				0	3	
Black-winged Stilt	1	8	643	3				61						6	2	4	29		25	0				101	803	
Pied Avocet		8	457	263			5	36	45					14			18	3	125	16		29	9	338	990	
Oriental Pratincole																				0				0	0	
Northern Lapwing																				0				0	0	
Grey-headed Lapwing	1		6																	0				0	7	
Pacific Golden Plover			30	470																0		47	0	470	500	
Grey Plover				55																0		5	5	55	55	
Common Ringed Plover																				0				0	0	
Little Ringed Plover	1	14					0	0	0	0			22	4	0	0	2	4	2	2	5		0	7	51	
Kentish Plover			9	520			,		Ť				31						_	0		52	0	520	560	6
Lesser Sand Plover				320									31							0		32		0	0	
Greater Sand Plover				16																0		1	6	16	16	1
Black-tailed Godwit			120	10																0		1	0	0	120	1
Bar-tailed Godwit			120																	0				0	0	
Whimbrel																				0			-	0	0	
				101																		10	.1	-	v	
Eurasian Curlew				101																0		10	11	101	101	
Far Eastern Curlew																				0			_	0	0	
Spotted Redshank				91					4											0		9		91	95	
Common Redshank			238	112																0		11		112	350	
Marsh Sandpiper	2	1	439	223				3	J					1				1		0		22		226	673	
Common Greenshank	1		81	314				14					2		2			6	2	31		32	.8	361	453	
Nordmann's Greenshank																				0				0	0	
Green Sandpiper	1	8	1				6	0	4	0				5	1	3	1	2	2	0	15		0	15	34	
Wood Sandpiper	1	26	16				0	0	3	1				2	0	0	4	1	11	0	5		0	5	65	
Terek Sandpiper			6																	0				0	6	
Common Sandpiper	3	17	3				1	0	1	1			1	20	9	5	9	12	9	1	40		0	41	92	
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			İ														1			0				1	1	
Common Snipe	6	1	1														1			0				0	8	
Snipe sp.	0	2																2		0				0	4	
Long-billed Dowitcher			-																	0				0	0	
Asian Dowitcher			-																	0				0	0	
Red Knot																				-			-	0	0	
				2																0			2	v	3	
Great Knot				3																0			3	3		
Sanderling				3					 	-		1	 	1			 			0		-	3	3	3	
Red-necked Stint																				0				0	0	
Little Stint									 	ļ		ļ	ļ	1			ļ			0		1		0	0	
Temminck's Stint		3															5		1	0				5	9	
Long-toed Stint									ļ											0				0	0	
Pectoral Sandpiper																				0				0	0	
Sharp-tailed Sandpiper																				0				0	0	
Dunlin				740																0		74	.0	740	740	
Curlew Sandpiper																				0				0	0	
Spoon-billed Sandpiper		İ																		0				0	0	
Broad-billed Sandpiper																				0				0	0	
Ruff			Ì																	0				0	0	
Small wader spp.			j																	0				0	0	
Dillair wader spp.									l	1	l	l	l	1			l		I	U	1	l		V	U	

Jxx7 1	1 1	ĺ	1	1	1 20	1 1	1	ı	ı	1	1	1	1	1	1	1	1	1	ı	Í	1 0	Л	1 20	1 201	20	ĺ
Wader sp.					30					1					<u> </u>	<u> </u>					0		30		30	
Black-tailed Gull				_						1	1	1		1	ļ	-					0			5	0	
Heuglin's Gull				5									ļ		1		ļ				0		5	U	5	
Caspian Gull										ļ	ļ	ļ		ļ	<u> </u>	<u> </u>					0			0	0	
Slaty-backed Gull																					0			0	0	
Pallas's Gull																					0			0	0	
Large Gull spp.																					0			0	0	
Brown-headed Gull										ļ .					ļ						0			0	0	
Black-headed Gull	0	0	2002	850				0	0	C	0				0	0	0	0	0	0	0		000	850	2852	20
Saunders's Gull				6																	0		6	U	6	1
Whiskered Tern																					0			0	0	
White-winged Tern																					0			0	0	
Gull-billed Tern																					0			0	0	
Caspian Tern																					0			0	0	
Total	1635	996	8279	5698	103	84	99	583	174	527	136	211	2	156	462	55	104	363	305	764	2597	1504	6398	10499	23333	228
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	4112	17.6%	2275	21.7%	26	11.4%																				
Ardeids etc	4026	17.3%	2039	19.4%	157	68.9%																				
Ducks, grebes, pelicans	6439	27.6%	2045	19.5%	6																					
Rails, coot etc	120	0.5%	38	0.4%	11	4.8%																				
Shorebirds	5773	24.7%	3241	30.9%	7	3.1%																				
Gulls and terns	2863	12.3%	861	8.2%	21																					
TOTAL	23333	100.0%	10499			100.0%																				
101111	20000	1001070	10.55	1000070		1000070																				
Date of count: 9 Nov 2014																										
High tide measured at TBT:	2.1m																									
* = count not included in the	total																									
Wetland-dependent																										
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
Western Osprey			2	2			1					0		2	1					1	2		areas	2	13	
Black Kite	1	1		2			2	2	1		1	0		15	1 2	2 2	2	1	2	2	0		-	20	54	2
White-bellied Sea Eagle	1	1	3	3					1	C	1	0		13		2	3	4		3	0		0	0	0	
Eastern Marsh Harrier												0									0			0	0	
Eastern Marsh Harrier Eastern Buzzard			3				3	1		1		1		1	1	1					0			1	10	
	1	0	1					0	0	1		0	-	1			0	0	0	0	1		0	1		
Greater Spotted Eagle Eastern Imperial Eagle	1	0	1					0	0			-	-	}	0	0 0		0	0	1	0	V	0	0	<u>3</u>	
	1	U	1					U	U	U	U	0			U	0	U	U	0	1	0	-	U	0	1	
Peregrine Falcon	3	5	3					1	2	3	0		1	}	0	1	0	2	1	2	4		0	Ü	29	
Pied Kingfisher	0		3					0		J		_	1	1		_			3	7			-		53	
Common Kingfisher		12	3	-				·	v			_	1	2	13			Ŭ	1		1					
White-throated Kingfisher	1	3	3	2				0	1		U		1	1 2	. 0	0 0			0		0		3	/	23	2
Black-capped Kingfisher	0	0	3					1.5	0	0		U	1	1	0			-	U	U	-	-	0	0	7	
Red-billed Starling	0	2.	1					15	0			0		5	1	0 2			0	-	0				21	
Crosted Serpent Facile	0	2	1				1	6	U	1	1	1 0		5	1	. 2	15	2	1 2	0	5	25	0	30	44	
Crested Serpant Eagle	i l					I	1	l	<u> </u>	<u> </u>	<u> </u>	1	<u> </u>	<u> </u>	<u> </u>	1	<u> </u>	<u> </u>	<u> </u>	l	l		i			

Summary of Waterbird Count, December 2014

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW /	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	21	37						15	0	8	6	6	5		68	3 4	22	32	26	47	25	118	0	143	317	4
Great Crested Grebe			22	. 5	5 4	40	28							1							0		77	77	100	
Great Cormorant%	128*	541*	253*					575*	52*	4360	64*	81*			44*	4*	26*	264*	177*	8*	4269			4269	8629	108
Dalmatian Pelican																					0			0	0	
Grey Heron	49	74	66	14	17	4	45	15	51	28	8	15	1	18	16	52	31	53	5	10	163	176	114	453	735	30
Purple Heron												1									1			1	2	
Great Egret	6	73	108	165	5 12	4	1 24	174	70	10	5	3		8	19	0	16	18	114	14	106	205	275	586	949	80
Intermediate Egret	0	1						0	0	0	()			0	0 0	(0	0	0	1	0	0	1	2	
Little Egret	15	173	91	8	3	1	1	84	32	9	13	2	3	12	50	59	57	208	112	20	82	355	45	482	1035	8
Swinhoe's Egret																					0			0	0	
Pacific Reef Heron																					0			0	0	
Eastern Cattle Egret	0	6						0	0	0	()			3	42	(0	15	0	0	45	0	45	66	
Chinese Pond Heron	18	55	29					4	0	17	20	1		2	38			19	26	7	13			101	270	
Striated Heron	0							0	0						0										0	
B-c Night Heron	25							Ö		0	Č				0		Č		-	_ ~	14			14	53	
Yellow Bittern	0							Ö	0	0	(0	0 0	Č		0	0	0		0	0	0	
Cinnamon Bittern								Ŭ	Ü							, ,					0		Ü	0	0	
Eurasian Bittern																					0			0	0	
Black Stork																1					0			0	0	
Black-headed Ibis																1					0			0	-	
Eurasian Spoonbill	1				1		1								1	1					1	1		2.	2	
Black-faced Spoonbill	1	5	38				31	12	22	3		110			36	:		18	3	1	175	31	53	259	455	
Common Shelduck	1		30	1			31	12		3		110	1		30	,		10		1	0		33	239	433	
Eurasian Wigeon	124	12	135	1020)	64	1 29	0	0	0	(47	200	5	0	0	(0	6	. 0	100		1113	1213	1742	
Falcated Duck	124	12	133	1020	,	0-	23	- 0	0	0		4/	200		0	, 0		0	0	0	0		1113	0	1/42	
Gadwall	1				1		1									1			ļ		0			0	1	\vdash
Baikal Teal	1				1		1									1			ļ		0			0	0	\vdash
Eurasian Teal	48	55			1		1	0	7	2	(11			26	1 0	(53	29	20	15		7	88	266	
Mallard	40	33			1		1	U	/			11			20	0		33	29	20	0		/	00	200	1
Spot-billed Duck					1		1									1			ļ		2			2.	2	
Chinese Spot-billed Duck																					6			6		
					1		1									1	-				0			0		
Indian Spot-billed Duck		1	36	203	,		-					8	200								115		203			
Northern Pintail		1	30	203	,		-																203	318	563	
Garganey	22.		1.10	101					4.5	100		120			34			25	11	_	3		524	3	8	——
Northern Shoveler	22	8	443	491	l l	11	4		45	108		128	40		34	1		27	11	5	328		534	906	1705	
Common Pochard																	ļ				0			0	0	
Baer's Pochard	 	<u> </u>	1.0		1	-	1			 	1	—	1200	 			<u> </u>	-	<u> </u>	<u> </u>	0			0	1501	
Tufted Duck	14	3	13					21				11	1200		24	ŀ				5	213			214	1504	
Greater Scaup																			<u> </u>		0			0	0	
Red-breasted Merganser	1			<u> </u>	1		1				ļ	1	1		1	<u> </u>		<u> </u>	<u> </u>		0			0	0	
Smew	1				1		1					<u> </u>	1		<u> </u>				<u> </u>		0			0	_	
Duck sp.	1		3000	 	1		1				ļ	<u> </u>	ļ		L	<u> </u>		ļ	<u> </u>		67			67	3067	
Slaty-breasted Rail																ļ	ļ		ļ	<u> </u>	0			0	0	
Eastern Water Rail	1			ļ										<u> </u>				ļ	<u> </u>		0			0	0	
White-breasted Waterhen	2	10	3			1	l	2	0	4	1	3		1	15	5 0	1	. 2	1	5	1	16	1	18	52	
Watercock																					0			0	0	
Common Moorhen	7	4	25					2	0	4	(10			10	0	(12	1	11	23	23	0	46	109	11
Eurasian Coot	1		11												1					2	3	1		4	18	1

In	1	i i		1			ı		ı			ı		İ		i			1 1	ı	ام	1		ام	اه
Pheasant-tailed Jacana																					0			0	0
Greater Painted-snipe																					0			0	0
Black-winged Stilt			249	8				33		112					3			2	4	32	0	37	8	45	443
Pied Avocet	5	5	2880	1407				3	180	309	2	25			38			44	16	29	371	27	1587	1985	5314
Oriental Pratincole																					0			0	0
Northern Lapwing																					0			0	0
Grey-headed Lapwing			7																		0			0	7
Pacific Golden Plover			29	56																	0		56	56	85
Grev Plover				486										4							5		486	491	495
Common Ringed Plover				100																	0		100	0	0
Little Ringed Plover	14	27						0	0	0	6			20	10	1	0	0	12	0	0	10	0	10	90
Kentish Plover	14	21		422				U	U	U	0			7		1	U	0	12	U	0	10	422	422	429
Lesser Sand Plover				422										/			-				0	-	422		
																					-			0	0
Greater Sand Plover			210																		0			0	0
Black-tailed Godwit			210																		0		2	0	210
Bar-tailed Godwit				2																	0		2	2	2
Whimbrel																					0			0	0
Eurasian Curlew			277	584						1				1							142		584	726	1005
Far Eastern Curlew																					0			0	0
Spotted Redshank				3						4		16									0		3	3	23
Common Redshank			151									12			2						0	2		2	165
Marsh Sandpiper	4		24	485						1	1	72							1	2	52	4	485	541	642
Common Greenshank			113	247						34			50	5	4				1	2	279	2	247	528	735
Nordmann's Greenshank																					0			0	0
Green Sandpiper	3	13						0	0	0	0				6	1	0	1	0	3	0	7	0	7	27
Wood Sandpiper	3							15			9				5	0		4	1	5	0	28	0	28	116
Terek Sandpiper	3	33	30					13	0	1						0			1		0	20	- 0	0	0
Common Sandpiper	2.	20	7			2		4	0	2	0			2.	9	0	0	2.	16	9	3	11	2	16	78
Grey-tailed Tattler		20	/					4	U		U				9	U	U		10	9	0	11		0	0
	-																				0				-
Ruddy Turnstone																	1							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	8													2						1	1		2	15
Snipe sp,																				2	0			0	2
Long-billed Dowitcher																					0			0	0
Asian Dowitcher																					0			0	0
Red Knot																					0			0	0
Great Knot				9																	0		9	9	9
Sanderling																					0			0	0
Red-necked Stint																			i i		0			0	0
Little Stint										İ							1 1				0	t		0	0
Temminck's Stint	5																 		2		0	5		5	7
Long-toed Stint																	+ +				0	3		0	0
Pectoral Sandpiper	<u> </u>																+ +				0	-		0	0
Cham toiled Candainan	-									-		-					1				0			0	0
Sharp-tailed Sandpiper	 			1000								 					1		 				1000		-
Dunlin	 			1008			-			-							₩.				0		1008	1008	1008
Curlew Sandpiper												ļ									0			0	0
Spoon-billed Sandpiper	ļ																.				0			0	0
Broad-billed Sandpiper																					0			0	0
Ruff																					0			0	0
Small wader spp.																					70			70	70
Wader sp.			1000																		70			70	1070

Black-tailed Gull Heuglin's Gull Caspian Gull Slaty-backed Gull Pallas's Gull Large Gull spp. Brown-headed Gull Black-headed Gull Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern		2800	1 1007 15				150													0 0 0		25	25 0	25 0	
Caspian Gull Slaty-backed Gull Pallas's Gull Large Gull spp. Brown-headed Gull Black-headed Gull Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern			1007				150													V		23	0	0	
Slaty-backed Gull Pallas's Gull Large Gull spp. Brown-headed Gull Black-headed Gull O Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150													U			,		, ,
Pallas's Gull Large Gull spp. Brown-headed Gull Black-headed Gull 0 Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150													0					
Large Gull spp. Brown-headed Gull Black-headed Gull 0 Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150													0		1	0	<u>0</u>	$\overline{}$
Brown-headed Gull Black-headed Gull 0 Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150													0		1	0		$\overline{}$
Black-headed Gull 0 Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150													0			0	0	
Saunders's Gull Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern							150		323	0				0	0	0	0	0	0	0	150	1157	Ü		
Whiskered Tern White-winged Tern Gull-billed Tern Caspian Tern	641	11002	15				100	0	323	U				U	U	0	U	U	U	0	150		1307	4280	
White-winged Tern Gull-billed Tern Caspian Tern	641	11002																		0		15	15	15	
Gull-billed Tern Caspian Tern	641	11002																		0			0	0	
Caspian Tern	641	11002																		0			0	<u>U</u>	
	641	11002																		0			0	<u>U</u>	
T-4-1 206	041		7671	26	127	162	534	407	5340	71	486	1694	86	419	172	137	495	402	231	6719	1454	8519	16692	38029	245
Total 396		11803	76/1	36	127	162	534	407	5340	/1	480	1694	80	419	172	137	495	402	231	6/19	1454	8519	10092	38029	245
Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants 8629	22.7%	4269	25.6%	108	44.1%																				
Ardeids etc 3569	9.4%	1944	11.6%	121	49.4%																				
Ducks, grebes, pelicans 9284	24.4%	3037	18.2%	4	1.6%																				
Rails, coot etc 179	0.5%	68	0.4%	11	4.5%																				
Shorebirds 12047	31.7%	6026	36.1%	1	0.4%																				
Gulls and terns 4321	11.4%	1348	8.1%	0	0.0%																				
TOTAL 38029	100.0%	16692	100.0%	245	100.0%																				
30025	100.0 /0	10072	100.0 /0	243	100.0 /0																				
Date of count: 07 Dec 2014																									
* = count not included in the total	% = coun	t made at	evening 1	roost																					
Wetland-dependent species																									
SRA Species	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	ТКС	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Western Osprey		0	4																	1		4	5	5	
Black Kite 1	2						3	0	4	3				1	5	12	4	2.	3	9	26	1	36	50	
White-bellied Sea Eagle		0						Ŭ						-		- 12			Ü	0		-	0	0	
Eastern Marsh Harrier	1	0	1																	0		1	1	2	
Eastern Buzzard	1	0	_															1		1			1	3	
Greater Spotted Eagle 3	0	0					0	0	1	0				0	0	0	0	0	0	0	0	0	0	4	
Eastern Imperial Eagle 0		_ ~					0	0	0	0				0	0		0	0	0	0	0	0	0	0	
Peregrine Falcon	Ŭ	0						Ŭ	Ŭ					Ü			Ü	Ŭ	Ů	1	Ü	Ŭ	1	1	
Pied Kingfisher 0	9	6					0	0	0	0				0	0	0	4	4	1	3	4	0	7	27	2
Common Kingfisher 3	16				1		1	0	5	1				10			1	3	0	3	7	1	11	45	
White-throated Kingfisher 0	2	2					3	0	0	0				1	0		0	0	0	0	4	0	4	8	
Black-capped Kingfisher 0	0					1	0	0	0	0				0			0	0	0	0	0		2	3	
Red-billed Starling 16	12	6				16	0	0	64	0				84	46	0	100	94	140	48	230	16	294	626	
Collared Crow 2					1		5	0	2	1				3	3	4	2	0	0	19	18		38	43	
Black-winged Kite	1								l																(
Collared Crow 2					1	10		_	2	1				3	3	4	2								

Summary of Waterbird Count, January 2015

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW /	TKC	LC	TSW	MPST	ST	SPS		nsar nde	amsar ertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe	17	45	3					8	0	8	10) 3			32	2 2	2 5	31	13	0	49	63	0	112	226	13
Great Crested Grebe				3	16	4	12						2	. 12	!						0			0	49	7
Great Cormorant%	213*	290*	98*					319*	93*	4250	54*	6*			17*	6*	44*	154*	25*	12*	5641 507	* 41	*	5641	9891	51
Dalmatian Pelican																					0			0	0	
Grey Heron	144	132	281	30	2	5	11	12	20	79	10) 19	5	9	24	11	1 12	2 17	3	1	89	73	68	230	916	33
Purple Heron																		1			0			0	1	-
Great Egret	12	67	7 169	173	2	26	5 5	64	19	30	7	7 3	2	. 12	27	1 4	1 6	5 5	16	3	53	47	224	324	705	119
Intermediate Egret	0			18				0)			0) () 0	3	1	1	1	19		27	
Little Egret	8	89	171			5	6	7		18	12	2 2	. 3	8	123	3 9	20) 4	43	1	79	144	142	365	739	10
Swinhoe's Egret	Ť																				0			0	0	
Pacific Reef Heron																					0			0	0	
Eastern Cattle Egret	0	13	3					0	0	0	(0			1	. 22	2. 4	1 1	2	0	0	28	0	28	43	
Chinese Pond Heron	34			8			1	4			_	-		1	7	7 8	3 11	22	13	3	8	58	21	87	267	2.
Striated Heron	0			Ŭ				0		0		0		1	0) (0	0	0	0		0	
B-c Night Heron	5	39)					0		6	Č	0 0			0) () (35	0	0	0	35	1	36	86	
Yellow Bittern	0		+					0		0		0 0			0) (_	0	0	0	0	0	0	
Cinnamon Bittern	Ĭ							·	Ŭ	Ŭ					Ĭ					Ŭ	0			0	0	
Eurasian Bittern															1						0			0	0	
Black Stork																					0			0	0	
Black-headed Ibis																					0			0	0	
Eurasian Spoonbill	1																				2			2	2	
Black-faced Spoonbill	3	1	152	5	4		2		4	5		105				1	1	5			86	6	15	107	372	
Common Shelduck		1	132									103					1	1			0	- 0	13	0	0	
Eurasian Wigeon	43		386	1670	23	6	149	1	0	18	() 5	346	30) () () () (0	0	224	1	1848	2073	2901	-
Falcated Duck	13		, 500	1070		·	117	-	Ŭ	10		, ,	310	30	<u> </u>	,	,	,		Ŭ	0	-	1010	0	0	-
Gadwall	1																				1			1	1	
Baikal Teal	1																				0			0	0	
Eurasian Teal	7	63	3				274	0	0	3	C) 15	5		0) () () (7	0	248	0	274	522	622	
Mallard	<u> </u>	0.0		1			271		Ŭ			, 13				,	,	,		Ü	0		1	1	1	
Spot-billed Duck	1																				0			0	0	
Chinese Spot-billed Duck																					0			0	0	
Indian Spot-billed Duck																					0			0	0	
Northern Pintail	1	3	3 210	676		285	428					4	. 18		3	1					33		1389	1422	1660	
Garganev	1		60			203	720					12		1		1					0		1307	0	72	
Northern Shoveler	32	,	1028	178		6	76		230	691		42	_		9)					655		490	1145	3034	
Common Pochard	32		1020	170			, , , ,		230	071		72	. 07								0		770	0	0	
Baer's Pochard	1																				0			0	0	
Tufted Duck	Q	Δ	110				2	115	5	104			2350)	35	i		2			37	2	7	46	2773	2
Greater Scaup	 	_	110					113		104			2330		33	1		1			0		,	0	0	
Smew																					1			1	1	
Red-breasted Merganser																					0			0	0	
Duck sp.			2500		1		1		1		1	1			1	1	+	1	1		145			145	2645	
Slaty-breasted Rail	1		2300	 	1		+		 			+	 	 	1	1	+	+	 	-	0			143	2045	
Eastern Water Rail	+	 	+	 	1		+					+	1	1	 	1	+	+		1	0			0	0	
White-breasted Waterhen	0	1 -	7 4	1	1		+ +	0	0	1	() 1	1	1	1	1	1 1	1	1	0	1	4	0	5	19	
Watercock	1	<u>'</u>	4	1	1		+ +	U	- 0	1		, 1	1	1	1	1	1	1	1	0	0	4	U	0	19	
Common Moorhen	2	2 10) 46	1	-		+	0	2	2	-) 2	1	1	2	3 () () 8	1	0	18	13	0	31	99	
	5	, 10	20		 		+-+	- 0	1 2	3	(3	1	1	3) (7 (1 8	4	0		15	U	31 16	42	
Eurasian Coot	1 5	1	20		<u> </u>	l			<u> </u>	l	<u> </u>	1	1	1	1	1	1	1	<u> </u>	<u> </u>	16			16	42	1

Dharant tailed Issue	ı	ı	1		1 1	1	ı	ı	Ì	ı	ı	Ì	i i	i i	ĺ	1 1	1	1 1	ı <u>ı</u>	ol	1	1	0	0	
Pheasant-tailed Jacana					 						-											-	Ţ		
Greater Painted-snipe	_				 						2									0			0	2	
Black-winged Stilt	5	1	139	28				2			2					10			4	0	10	30	40	334	
Pied Avocet	3	1	4404	4252		345	476	640	723		18	45							43	7		5713	5720	10957	
Oriental Pratincole																				0			0	0	
Northern Lapwing																				0			0	0	
Grey-headed Lapwing	3																			0			0	3	
Pacific Golden Plover				226	5															0		226	226	226	
Grey Plover				338								8								2		338	340	348	6
Common Ringed Plover																				0			0	0	
Little Ringed Plover	1	21		2				0 0	0]	1 9		9	0	0	0	0	1	1	0	1	2	3	45	
Kentish Plover				323									3							0		323	323	326	
Lesser Sand Plover				3																0		3	3	3	
Greater Sand Plover																				0			0	0	35
Black-tailed Godwit			780																	0			0	780	
Bar-tailed Godwit			, 00	2																0		2	2.	2	
Whimbrel	1			1							1									0		1	1	1	
Eurasian Curlew	+		320	233		-	15			1	1	85								0	+	248	248	653	
Far Eastern Curlew	+		320	233			1.0	-		1	+	0.5							-	0	+	270	0	033	
Spotted Redshank	+		1	9	 	-	-			 	79					 			-	0	+	9	9	88	
Common Redshank	+		100	94							19									0		94	94	194	
Marsh Sandpiper	+		430	569						1	107								-	0	+	569	569	1106	
			430					21	11	-	164	1.5		1											
Common Greenshank				366				21	11		164	15		1						16		387	403	594	4
Nordmann's Greenshank								0 0		<u> </u>										0			0	0	
Green Sandpiper	3	4						0 0	-		l			0	0	-		1	2	0	2	0	2	12	
Wood Sandpiper	6	24		1				0 0	0]	1 1			0	0	0	0	0	3	0	1	1	2	36	
Terek Sandpiper				1																0		1	1	1	
Common Sandpiper	0	18	18	1		1		0 0	1	() 1		1	1	6	2	4	3	0	1	13	2	16	58	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	20	5	6																1	0			0	32	
Long-billed Dowitcher																				0			0	0	
Asian Dowitcher																				0			0	0	
Red Knot																				0			0	Ō	
Great Knot				3																0		3	3	3	
Sanderling					l															0			0	0	
Red-necked Stint											1									0			0	0	
Little Stint	+				 	-	-			1	1									0	+	+	0	0	
Temminck's Stint	+		1	16		-				1	+								-	0	-	16	16	16	
Long-toed Stint	+			10	+			-		1	+									0	+	10	0	0	
Pectoral Sandpiper	+		1		 	-	-			 	+					 			-	0	+		0	0	
								_		<u> </u>	+					\vdash				0			0	0	
Sharp-tailed Sandpiper	+		+		 					1	+					 				Ü	+	-	Ü	0	
Dunlin											1									0			0	v	
Curlew Sandpiper	-									1	+									0			0	0	
Spoon-billed Sandpiper																				0			0	0	
Broad-billed Sandpiper										1	1									0			0	0	
Ruff										1	1									0			0	0	
					1 1	1			l	1	1					1 1		ı I		0			0	0	
Small wader spp.																				U			Ü		
Small wader spp. Wader sp. Black-tailed Gull			800				70													0		70	70	870	

Heuglin's Gull	l I		I	232	1	1 1	l l		l		I	1 1		ı	1 1	1	1 1	I 1	I	1 1	0	I	232	232	232	1 1
Caspian Gull				2.2																	0		232	232	2.2	
Slaty-backed Gull				1																	0		1	1	1	
Pallas's Gull				2																	0		2.	2.	2	
Large Gull spp.																					0		_	0	0	
Brown-headed Gull																					0			0	0	
Relict Gull				1																	0		1	1	1	
Black-headed Gull	1	0	650	3852	15	275	205	15	935	725	0				0	171	21	0	0	0	0	207	5282	5489	6865	
Saunders's Gull				25																	0		25	25	25	
Whiskered Tern																					0			0	0	
White-winged Tern																					0			0	0	
Gull-billed Tern																					0			0	0	
Caspian Tern																					0			0	0	
Total	363	610	12811	13461	63	958	1732	226	1904	6858	51	598	2971	85	267	235	92	138	110	63	7413	709	18079	26201	51009	289
Total	303	010	12011	13401	0.5	750	1732	220	1707	0050	31	370	2711	0.5	201	233	72	130	110	0.5	7413	707	10077	20201	31007	207
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	9891	19.4%	5641	21.5%	51	17.6%																				
Ardeids etc	3158	6.2%	1200																							
Ducks, grebes, pelicans	13985	27.4%	5468	20.9%	22	7.6%																				
Rails, coot etc	160	0.3%	52		6																					
Shorebirds	16690	32.7%	8091		-																					
Gulls and terns	7128	14.0%	5752		- 1 0	0.0%																				
					U																					
TOTAL	51012	100.0%	26204	100.0%	289	100.0%																				
Date of count: 11 Jan 2015																										
High tide measured at TBT: 1.	.8m			1	1																					
# includes a count made up to		either sid	e of the co	ount date																						
* = count not included in the to		% = coun			oost																					
Wetland-dependent 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
Western Osprey			2.	3									1	4							1		arcus	1	11	
Black Kite	3	1	2	J			1	0	0	7	2	1		10	1	0	1	2	4	0	6	6	1	13	41	
White-bellied Sea Eagle			0				1			,	_	1		10	-		1		<u> </u>	Ü	0	Ů	-	0	0	
Eastern Marsh Harrier			1																		2.			2.	3	
Eastern Buzzard			0				1							1							0			0	2	
Greater Spotted Eagle	1	0	0				-	0	0	0	0	0			0	0	0	0	0	0	1	0	0	1	2	
Eastern Imperial Eagle	1	0						0				0			0			,	0	0	0	0	0	0	3	
Peregrine Falcon			2																		0			0	2	
Pied Kingfisher	0	6	4					0	0	0	0	0		1	0	0	0	1	1	0	8	1	0	9	21	1
Common Kingfisher	2	7	3					0	0	2	0	1			1	0	0	2	0	0	2	2	0	4	20	3
White-throated Kingfisher	0	5	2	1				1	0	1	0	1	2	2	1	0	1	0	1	0	0	4	1	5	18	
Black-capped Kingfisher	0	0	2					0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	5	2
Red-billed Starling	4	22						_	_	445	_									-			-		204	
Collared Crow	4	23	2					0	0	117	0	Ü		2	0	20	10 30		110	0	0 14	30	0	30 49	284 61	

Summary of Waterbird Count, February 2015

		Ī			1							1	~-					1	1			Ramsar	L	DEEP G
SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF	SPR	NSW	LHW	WEP	Sha	NW/	TKC	LC	TSW	MPST	ST	SPS	MPNR Ramsar	intertidal	Ramsar	RAY Starling
	02412	5112	2212	222	220			(TBT)	0111	1 10 11			Kiu	LFS			15		-	010	ponds	areas	Site	AREA Inlet
Little Grebe	19	42	:	1				17	1	6	5	2			18	0	15	28	10	31	12 74	0	86	207 8
Great Crested Grebe			1	6										46						1	0		0	63 8
Great Cormorant%	435*	254*	902*			35*		505*	24*	4024	20*	89*			7*	2*	14*	142*	25*	79*	3997		3997	8021 105
Dalmatian Pelican																					0		0	0
Grey Heron	132	119	7	5 5	2 3		13	13	16	92	3	92		34	7	7	9	20	1	11	72 45	83	200	771 25
Purple Heron												1									0		0	1
Great Egret	45	161	3	8 13	2 19	,	9	8	155	40	6	8		15	10	2	8	18	13	17	88 46	164	298	792 122
Intermediate Egret	2			10.				0		0		Ŭ		10	0	_	1	0		0		6		11
Little Egret	10						3	8	_	15			5	21	135	-		32	55	110	94 255	57		784 23
Swinhoe's Egret	10	Ŭ.			1				-	- 10					100	12	1			110	0		0	
Pacific Reef Heron																					0		0	0
Eastern Cattle Egret	0	13						15	0	0	0	1			0	0	3	0	5	2	0 17	0	17	39 2
Chinese Pond Heron	4	42		6	2		1	13	_	11	7	1	1	2	13			28	, ,	5	6 55	5		185
Striated Heron	0				,	 	1	0					1		0					0			- 00	0
B-c Night Heron	5			+	+	1	1	0			-				0	_				0		U	U	108
Yellow Bittern	0				1			0		-					0				_	0	0 44	0		
	1	U	1					U	0	0	U				0	U	0	U	0	U		U		0
Cinnamon Bittern	1		1						<u> </u>												0		0	1
Eurasian Bittern					-							ļ									1		1	1
Black Stork									ļ												0		0	0
Black-headed Ibis																					0		0	-
Eurasian Spoonbill	1																				0		0	
Black-faced Spoonbill		15	4	7 1	1 4		25		46	6		113			5	1		34			49 40	86		356
Common Shelduck																					0		0	0
Eurasian Wigeon	24	0	40	0 121	1 84	. 3	135	0	0	20	0	20	23		0	0	0	0	0	0	409 0	1436	1845	2332
Falcated Duck																					0		0	0
Gadwall																					2		2	2
Baikal Teal																					0		0	0
Eurasian Teal	0	98	}	6	7		24	0	0	71	0	44			0	0	0	0	0	0	68 0	91	159	372 7
Mallard																					0		0	0
Spot-billed Duck																					0		0	0
Chinese Spot-billed Duck																					0		0	0
Indian Spot-billed Duck																					0		0	0
Northern Pintail			92	0 683	220		164					6									26	1069	1095	2021
Garganey	2	1			3																0	3	3	6
Northern Shoveler	2	2	220	7 19	1		19		430	732		45									317	643	960	3948
Common Pochard																					0		0	0
Baer's Pochard																					0		0	0
Tufted Duck		1	24	0	180)	398	13	8	14							1	3			246 12	578	836	1104
Greater Scaup																					0		0	0
Smew			1	1	1	1	1			1		1					1	1			1		1	1
Red-breasted Merganser				+	1																0		0	0
Duck sp.			60	0	1																0		0	600
Slaty-breasted Rail		t	- 50	_	1	<u> </u>											<u> </u>				0		0	000
Eastern Water Rail	t	†		0	1	1	1			1		1					1	1			0		0	0
White-breasted Waterhen	0	7		2	2	 	2	0	0	1	1				1	1	0	2	0	2	1 5	1	10	23 3
Watercock	"	 	1	4	+ - 4	1	 	- 0	1 0	1	1	1			1	1	1 0	- 3	1 0		0	4	0	0
	0	13	4	7	+	1	1	0	0	1	0	2			0	0	0	1 5	- 0	7	0 23	0	-	94 8
Common Moorhen	0	13		6	1	<u> </u>	1	- 0	0	1	1 0	3			8	- 0	0	15	1 0	/	0 23	1 0	23 12	24 8
Eurasian Coot	4	l	1	U	1	1			1		l				1	1	1	<u> </u>	1		<u> </u>	<u> </u>	12	24

les	1 1				ı	ı				1	ı	1			1				1 1	1	اه		ام	اه
Pheasant-tailed Jacana																					0		0	0
Greater Painted-snipe	ļ <u> </u>																				0		0	0
Black-winged Stilt			47	26					130	157		3									0	156	156	363
Pied Avocet			2897	2949	8		12		510	680		26						1	12		197 1	3479	3677	7292
Oriental Pratincole																					0		0	0
Northern Lapwing																					1		1	1
Grey-headed Lapwing			3							2											0		0	5
Pacific Golden Plover																					0		0	0
Grey Plover				363										1							0	363	363	364 11
Common Ringed Plover																					0		0	0
Little Ringed Plover	3	15		7				0	0	0	0	3		3	0	0	0	8	0	0	1 8	7	16	40
Kentish Plover		10							Ŭ						Ů	Ů	Ü		Ü	Ü	0	<i>'</i>	0	0
Lesser Sand Plover	 																				0		0	0
Greater Sand Plover	 																				0	1	0	0 10
Black-tailed Godwit	 			1																	0	1	1	1
	 			<u>1</u>								-										1		
Bar-tailed Godwit	 			1									2.5								0	1	1	1
Whimbrel	 		27.5	1								ļ	25								0	1	1	26 1
Eurasian Curlew	ļ		256	287					2	1				2							0	289	289	548
Far Eastern Curlew																					0		0	0
Spotted Redshank			4							5											19	1	20	29
Common Redshank				17								106									0	17	17	123
Marsh Sandpiper				863								68									16	863	879	947
Common Greenshank				242			1		140	19		145	11	8							4	383	387	570 4
Nordmann's Greenshank																					0		0	0
Green Sandpiper	1	7						0	0	0	0			2	2	0	3	3	3	3	0 6	0	6	24
Wood Sandpiper	7	28	8	1				0				3			1	0		11	1	2	0 15	1	16	66
Terek Sandpiper	<u> </u>	20								-						U		- 11	-		0	1	0	0
Common Sandpiper	2	13	3	1				3	0	8	1		1	3	5	3	2	6	1	1	1 16	1	18	54
Grey-tailed Tattler		13		1					- 0		1		1		5			0	1	1	0	1	0	0
Ruddy Turnstone	 																				0		0	0
Red-necked Phalarope	 																				0	1	0	0
	 																				0			0
Pintail Snipe	 											-									~	-	0	v
Swinhoe's Snipe	 											1									0		0	0
Pintail/Swinhoe's Snipe																					0		0	0
Common Snipe	3	5										ļ									0		0	8
Long-billed Dowitcher	ļ																				0		0	0
Asian Dowitcher	ļ																				0		0	0
Red Knot																					0		0	0
Great Knot				3																	0	3	3	3
Sanderling																					0		0	0
Red-necked Stint																					0		0	0
Little Stint																					0		0	0
Temminck's Stint				7																	0	7	7	7
Long-toed Stint																					0		0	0
Pectoral Sandpiper																					0	i i	0	Ö
Sharp-tailed Sandpiper	i i																				0		0	0
Dunlin	†																				0		0	0
Curlew Sandpiper	 																				0	 	0	0
Spoon-billed Sandpiper	 											1									0	1	0	0
	 								-			-										 		<u> </u>
Broad-billed Sandpiper	 																		-		0		0	0
Ruff											1	1							<u> </u>		0		0	0
Small wader spp.	ļ								ļ			ļ									0		0	0
Wader sp.			200				47					ļ									0	47	47	247
Black-tailed Gull												1									0		0	0

Heuglin's Gull	l I		1 1	90	i	ı	i	ı	ı	l 1	ı	1 1	İ	1 1	İ	ı	1	I I	i i		0	Ì	90	90	91	
Caspian Gull				90						1											0		90		2	
Slaty-backed Gull																					0			0	_	
Pallas's Gull																					0			0	v	
Large Gull spp.																					0			0	0	
Brown-headed Gull																					0			0	0	
Relict Gull				1																	0		1	1	1	
Black-headed Gull	0	0	16	4148		66	3	22	790	1481	0				0	349	71	0	0	0	0		5029	5122	6946	
Saunders's Gull	U		10	65		- 00			170	1401	- 0				0	347	/1	U		0	0	, .	65	65	65	
Whiskered Tern				- 05																	0		0.5	0	0.0	
White-winged Tern																					0			0	0	
Gull-billed Tern																					0			0	v	
Caspian Tern																					0			0	0	
*	2.5	===	044.4	44.402			0.5	400			40			40=	201	204	202	251	440	404			45000	Ü	U	220
Total	267	726	8114	11493	521	69	856	100	2232	7387	40	689	66	137	206	381	202	254	119	194	5639	757	15032	21428	39692	338
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	8021	20.2%	3997	18.7%	105	31.1%																				
Ardeids etc	3050	7.7%	1214	5.7%	173	51.2%																				
Ducks, grebes, pelicans	10656	26.8%	4987	23.3%	23																					
Rails, coot etc	141	0.4%	45	0.2%	11																					
Shorebirds	10719	27.0%	5905	27.6%	26																					
Gulls and terns	7105	17.9%	5280	24.6%	0																					
TOTAL	39692	100.0%	21428	100.0%	338	100.0%																				
Date of count: 8 Feb 2015																										
High tide measured at TBT: 1	9m		l																							
* = count not included in the t		% = coun	t made at	evening																						
- count not meraded in the t	otui	70 — Coun	l made at	o vening																						
Wetland-dependent species																										
•								DDE					Cl	NW/								D	Ramsar	Ramsar	DEEP	C412
	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	intertidal	Site	BAY	Starling Inlet
Species								(161)					Kiu	LFS								ponus	areas	Site	AREA	Illet
Western Osprey				5			1					1									1		6	7	8	1
Black Kite	1	2		4				7	0	6	0				2	1	1	4	0	0	10	13	11	34	38	1
White-bellied Sea Eagle																					0			0	0	
Eastern Marsh Harrier				1																	0			0	1	
Eastern Buzzard	1	2															1	1			1	2	1	4	6	
Greater Spotted Eagle	1							0							0			-	0	0	0			O		
Eastern Imperial Eagle	0	0						0	0	0	0				0	0	0	0	0	0	0		0	Ü	-	
Peregrine Falcon									ļ							ļ					0			0	-	
Pied Kingfisher	0		3					0	1	1	0				0		0	0	1	0	0		1	1	9	
Common Kingfisher	0							0		5					0			1	0	0	2	5		8	20	
White-throated Kingfisher	1							0							1	0			Ü	0	Ü				4	
Black-capped Kingfisher	0		-					0							0	U		0	Ü	0	0		Ŭ	V	1	
Red-billed Starling	0							0							2	0		0	0	0	0		0	130	173	
Collared Crow	0	0	1	1				2	0	2	0				3	16	2	5	0	0	5	10	1	16	37	
Crested Serpent Eagle																										1

Summary of Waterbird Count, March 2015

GDE CHEC	GD 4	CDD	DD 4	DDD	DDG	DDD	DDE	DBF	CDD	NICITY		XX/E/D	Sha	NW/	TITE	1.0	TECLE	A A DOT	CITE	GDG	AADNID	Ramsar ponds	Ramsar	Ramsar	DEEP	Starling
SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	(TBT)	SPR	NSW	LHW	WEP			TKC	LC	ISW	MPST	51	SPS	MPNK	ponds	intertidal areas	Site	BAY AREA	Inlet
Little Grebe	50	41	1					3	0	3	2	. 2			23	(12	2 45	6	45	27	75	0	102	260	5
Great Crested Grebe			1											12							0			0	13	17
Great Cormorant	174	413	104	71				298	78	161	63	102			26	12	2 47	136	26	57	2014	417	119	2550	3782	190
Dalmatian Pelican																					0			0	0	
Grey Heron	48	22	46	1	2		25	5	40	52	3	57		4	1	6	5 3	3 22	0	4	229	38	68		570	21
Purple Heron																		1			2	1		3		
Great Egret	18	58	90	81	52		17	43	24	25	8	2		5	24	10) 9	192	36	45	38	203	174	415	777	94
Intermediate Egret	2							0		1	0				6	ì		,			2	5	0	7		
Little Egret	15	82	112	47	24		14	9	5	35	20	3	1	45	168	30	40	39	91	42	119	224	90	433	941	11
Swinhoe's Egret																					0			0		
Pacific Reef Heron																					0			0		
Eastern Cattle Egret	0	29						0		0	0	1			4	(, 1	. 7	9	U		12		27		
Chinese Pond Heron	16		12					3		40			1	1	35							63	2	7=		2
Striated Heron	0	V						0		0					0	(, ,	,	,		·	0	0	Ü	-	
B-c Night Heron	0							0	-	v	0				0		, ,	, 10	_	-		- 10	0	10		
Yellow Bittern	0	0						0	0	0	0				0	(0	0	0	0		0	0	0		
Cinnamon Bittern																					0			0		
Eurasian Bittern																					0			0	·	
Black Stork																					0			0	-	
Black-headed Ibis																					0			0	-	
Eurasian Spoonbill																					5			5		
Black-faced Spoonbill	2	1	34	9	2		11	7	17			90			6			2			81	13	39		262	
Common Shelduck																					0			0	V	
Eurasian Wigeon	22	0	665	498			9	0	8	22	0	23			0	(0	0	0	0	335	0	515	850		.
Falcated Duck																					0			0	0	
Gadwall																					3			3	3	
Baikal Teal												ļ									0			0		
Eurasian Teal	10	6		3			4	0	6	29	0	8			0	(0) 1	0	0	17/	1	13	163		
Mallard																					0			0	-	
Spot-billed Duck																					0			0		
Chinese Spot-billed Duck																					3			3		
Indian Spot-billed Duck																					0			0	٥	
Northern Pintail			756							- 8		4									26		312	338		
Garganey			2	2					1			17									43		3	46		
Northern Shoveler		3	1721	53	ļ		ļ		108	220		83	ļ	26	2			1			689	3	161	853	2906	1
Common Pochard					ļ		ļ					ļ	ļ				-			1	0			0		
Baer's Pochard					L			_				ļ	ļ				-			1	0			0	-	
Tufted Duck	4	1	2990	12	42		17	7		45		-	-		28		-	8			50	13	71			<u> </u>
Greater Scaup					ļ		ļ					ļ	ļ								0			0	0	<u> </u>
Smew					ļ		ļ					ļ	ļ				-			1	1			1	1	
Red-breasted Merganser											1	 	 	-		1	1				0			0		
Duck sp.							35				1	 	 	-		1	1				140		35			
Slaty-breasted Rail					<u> </u>		 				1	 	 	-		1	1				0			0		<u> </u>
Eastern Water Rail			_		 		ļ	_	_			ļ	ļ	_	_				_		0	_		0		
White-breasted Waterhen	1	14	2		ļ		<u> </u>	0	0	7	3	<u> </u>	<u> </u>	2	2	() 0	4	9	1	3	8	0	11	.0	2
Watercock	_				ļ		<u> </u>		.	_	_	<u> </u>	 	<u> </u>		_					0		_	0		
Common Moorhen	3	13	43		ļ		<u> </u>	1	0	0	0	7	<u> </u>	2	11	(0	14	0	0	9	26	0	35		
Eurasian Coot	5		1	1	<u> </u>]	<u> </u>		<u> </u>		1	<u> </u>	<u> </u>	1		1	1			1	18		<u> </u>	18	24	

lm	ı	1	1	i	1	1 1		ı	ı	1	1	ı	i			1 1	1	ı		0	1	1	ام	ام	ı
Pheasant-tailed Jacana																	_			0			0		
Greater Painted-snipe																				0			0	0	
Black-winged Stilt	13		201						4	123		1							25	0			9	372	<u>'</u>
Pied Avocet	49		2817	2927	'				58	175		46		120			7		2	184		2985	3176	6385	
Oriental Pratincole																				0			0	0	
Northern Lapwing																				0			0		
Grey-headed Lapwing			6							3										0			0	9	
Pacific Golden Plover				26																0		26	26	26	
Grey Plover			10	445	i															0		445	445	455	<u>'</u>
Common Ringed Plover																				0			0	0	
Little Ringed Plover	0	4						0	0	0	0	3		2	7	0	0 1	1	0	0	5	0	5	18	
Kentish Plover				58	3															0		58	58	58	ĺ
Lesser Sand Plover				6	5															0		6	6	6	
Greater Sand Plover				28																0		28	28	28	
Black-tailed Godwit			60																	0		321	321	381	ĺ
Bar-tailed Godwit			30	4																0		4	4	4	
Whimbrel				<u> </u>	1												1			0			0	_	
Eurasian Curlew			590	398	: 					1		1					1	<u> </u>		0		398	398	990	
Far Eastern Curlew			270	370	1					- 1							1	<u> </u>		0		270	0		
Spotted Redshank			6	16								101					<u> </u>			0		16	16	123	
Common Redshank			30							4		27								10		242	252	313	
Marsh Sandpiper			2									172								0		411	411	585	
Common Greenshank			14							14		286							2	95		122	217	533	
Nordmann's Greenshank			17	122	-					17		200								0		122	0	0	
Green Sandpiper	2	12			-			1	0	0	0				5	0	1 1	0	1	0		0	4	26	
Wood Sandpiper	0	10	7					0	v	U	0	3			19	-	0 7	U	1	0		-	25	65	
Terek Sandpiper	U	10	/					U	U	0	- 0	3			19	U	0 /	10	1	0		U	0		
Common Sandpiper	0	17	15		1			1	0	3	0	1		1	40	2	2 (1	2	0		0	42		
Grey-tailed Tattler	U	1 /	13					1	U	3	0	1		1	70			_		0		U	0	0	
Ruddy Turnstone																				0			0		
Red-necked Phalarope																				0			0		
Pintail Snipe																				0			0		
Swinhoe's Snipe					1															0			0		
Pintail/Swinhoe's Snipe					1															0			0		
Common Snipe		- 5	2		1							2					1			0	1		1	10	
Long-billed Dowitcher		3			1												1			0	1		0		
Asian Dowitcher					1															0			0	-	
Red Knot				2	,															0		2	2	2	
Great Knot				18																0		18	18	18	
Sanderling				10) <u> </u>															0		10	0		
Red-necked Stint					1							-					1	1		0		+	0	0	
Little Stint												 					-			0			0	-	
Temminck's Stint										4		 					-			0			0		
Long-toed Stint					1					4										0		+	0		
						-	-					-					+	1		0		+	0	0	
Pectoral Sandpiper					1									-			-	 		0		+	0	0	
Sharp-tailed Sandpiper	+			((0)		 											+	1		0		660	660	660	
Dunlin Godoo Soodoines	+			660	_	 											+	<u> </u>				000		000	
Curlew Sandpiper				1	-												-	<u> </u>		0		1	0	0	
Spoon-billed Sandpiper	+				1		-										-	1				+			
Broad-billed Sandpiper	+				1												-	1		0		+	0		
Ruff	1				1	1						 					-			0			0		
Small wader spp.					-															0		+	0	0	
Wader sp.					-															0			0	0	
Black-tailed Gull				1	.															0		1	1	1	

Heuglin's Gull	i i	ĺ		93	l	ı	i	i	1 1			İ	l	1 1	1		1 1		I	l	I 0	1	93	93	93	l I
Caspian Gull				/3																	0		73	0	0	
Slaty-backed Gull																					0			0	0	
Pallas's Gull				2.																	0		2.	2	2	
Large Gull spp.																					0			0		
Brown-headed Gull																					0			0	0	
Relict Gull				1																	0		1	1	1	
Black-headed Gull	1	0	113	487	1050	7		44	327	57	0				0	807	60	0	0	0	700	901	1871	3472	3653	
Saunders's Gull				11																	0		11	11	11	
Whiskered Tern																					0			0	0	
White-winged Tern																					0			0	0	
Gull-billed Tern																					0			0	0	
Caspian Tern																					0			0	0	
Total	435	779	10453	7369	1172	2 7	132	422	678	1040	105	1045	2	220	407	869	185	543	214	265	5019	2108	9328	16455	31361	369
	Deep	%	Ramsar	%	SI	%																				
	Bay Area	70	Site	/0	51	70																				
Cormorants	3782	12.1%	2550	15.5%	190	51.5%																				
Ardeids etc	2940	9.4%	1468	8.9%	129	35.0%																				
Ducks, grebes, pelicans	9534	30.4%	2668	16.2%	23	6.2%																				
Rails, coot etc	175	0.6%	64	0.4%	27	7.3%																				
Shorebirds	11169	35.6%	6125	37.2%	0	0.0%																				
Gulls and terns	3761	12.0%	3580	21.8%	0	0.0%																				
TOTAL	31361	100.0%	16455	100.0%	369	100.0%																				
Date of count: 8 Mar 2015																										
High tide measured at TBT:	2.3m					1																				

Wetland-dependent																										
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
Western Osprey			2	2								0	-					2			2	2	2	7	AKEA	
Black Kite	0	0	2	1			1	1	1	4	0				2	0	0	<u> </u>	1	0	25	7	4	36	43	1
White-bellied Sea Eagle	U	U		1			1	1	1	- 4	0	0				0	U	- 4	1	0	0	,	4	0		1
Eastern Marsh Harrier			1	1								0									1		1	2	3	
Eastern Buzzard		1	1							1		0			1					1	1		1	1	5	
Greater Spotted Eagle	1	0	1					0	0	0	0	0			0	0	0	0	0	0	1	0	0	1	•	
Eastern Imperial Eagle	1	0				1		0		0	0				0	0				_		0	,			
Peregrine Falcon			1									0									0			0		
Pied Kingfisher	3	3	1					0	0	1	0	0			0	0	0	4	0	0	2	4	0	6	14	3
Common Kingfisher	0	7	1				1	0	0	0	1	0			6	1	1	2	0	1	4	10	1	15	25	
White-throated Kingfisher	0	1	2					1	0	0	0				1	0	0	0	0	0	1	0	0	1	7	2
Black-capped Kingfisher	0	0		1				0	0	0	0	0			0	0	0	0	0			0	1	1		1
Red-billed Starling	0	13				ļ		0	0	0	0	0			4	0	0	0	Ŭ		-	4	0	4	19	
Collared Crow	1	0	9		2	!		0	0	0	0	2			5	0	0	6	0	0	15	8	2	25	40	1
Crested Goshawk Crested Serpent Eagle						ļ																				1

Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

Monthly Waterbird Monitoring Biannual Report 2 (October 2014 to March 2015)

Appendix 2



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Low-tide Count, December 2014

	1		1						1 1														Ramsar	_	DEEP	~ · · ·
SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF	SPR	NSW	LHW	WEP	Sha	NW/	TKC	LC	TSW	MPST	ST	SPS	MPNR	Ramsar	intertidal	Ramsar	BAY	Starling
								(IRI)					Kiu	LFS								ponds	areas	Site	AREA	Inlet
Little Grebe			5																				0	0	5	
Great Crested Grebe			20		42																		42	42	62	
Great Cormorant			295		760	7	17																801	801	1079	
Dalmatian Pelican																							70	70	0	
Grey Heron			55		37	2	5																39	39	99	
Purple Heron																							32		0	
Great Egret			80		80	1	. 22																81	81	183	
Intermediate Egret																							0		0	
Little Egret			65		140	10	21																150	150	236	
Swinhoe's Egret																							0	0	0	
Pacific Reef Heron																							0	0	0	
Eastern Cattle Egret																							0		0	
Chinese Pond Heron			41		2	1	2																10		46	-
Striated Heron					_																		0		0	-
B-c Night Heron			8																				0	0	8	
Yellow Bittern			Ü																				0	0	0	
Cinnamon Bittern																							0	0	0	
Eurasian Bittern																							0		0	
Black Stork																							0		0	
Black-headed Ibis																							0		0	
Eurasian Spoonbill																							0	0	0	
Black-faced Spoonbill			24		3																		3	3	27	
Common Shelduck			24		3																		0	0	0	
Eurasian Wigeon			119		22	28	3 15																50		184	-
Falcated Duck			2			20	, 13																0		2	
Gadwall																							0		0	
Baikal Teal																							0	0	0	
Eurasian Teal						6																	6	6	6	
Mallard							<u>'</u>																0	0	0	-
Spot-billed Duck																							0		0	
Chinese Spot-billed Duck																							22	22	0	
Indian Spot-billed Duck																							180	180	0	
Northern Pintail	1		29		20	4																	52	52	53	
Garganey	1		23		20	1	1																1	32	33	
Northern Shoveler	1		1150		60	17	,																77	77	1227	
Common Pochard	1		1130		00	1 /																	0		1227	
Baer's Pochard	1																						0	0	0	
Tufted Duck	1		26	1	1		1									<u> </u>			 				0		26	
Greater Scaup			20				1																0	0	0	
Red-breasted Merganser	-		-				1												 				0		0	
	-		550		-	1050										<u> </u>			 				1250	0 1250	1800	
Duck sp.	-		550			1250	<u>'</u>												 				1250	1250	1900	
Slaty-breasted Rail	-		-		-		-									<u> </u>			 				0	V	0	
Eastern Water Rail	1		12	 	-		1						-		-	<u> </u>	-		 	1			U	0	- 0	
White-breasted Waterhen	1		13	-			1												 	1			0	,	13	
Watercock	1		27	<u> </u>	-		1						-		-	<u> </u>	-		 	1			0	0	0	
Common Moorhen	 		27	 	1		1									1			<u> </u>				0	0	27	
Eurasian Coot	-		9				1												<u> </u>	.			0	0	9	
Pheasant-tailed Jacana	1															l			İ.				0	0	0	

la , p: , i :	1 1	ı	Ì		Ī	i	Ì	i	ì		i	 Ī	1 1	ı			İ	l ol	ol	0	1 1
Greater Painted-snipe		2.12																		v	
Black-winged Stilt		243																0	0	243	
Pied Avocet		2140		133	25													158	158	2298	
Oriental Pratincole																		0	0	0	
Northern Lapwing																		0	0	0	
Grey-headed Lapwing		7																0	0	7	
Pacific Golden Plover		30																0	0	30	
Grey Plover		42		1	2													3	3	45	<u> </u>
Common Ringed Plover																		0	0	0	
Little Ringed Plover																		0	0	0	
Kentish Plover		2																0	0	2	
Lesser Sand Plover																		0	0	0	
Greater Sand Plover																		0	0	0	
Black-tailed Godwit		502																0	0	502	
Bar-tailed Godwit		302																0	0	0	
Whimbrel																		0	0	0	
Eurasian Curlew		15		23	15	1												38	38	54	
Far Eastern Curlew		13		23	13	1							1		-				0	0	
													\vdash		-			0	-	0	
Spotted Redshank				1							-			1	1			0	0		
Common Redshank		1																0	0	1	
Marsh Sandpiper				6	5										 			11	11	11	
Common Greenshank		143		121	100													221	221	364	
Nordmann's Greenshank																		0	0	0	
Green Sandpiper		1																0	0	1	
Wood Sandpiper		28																0	0	28	
Terek Sandpiper																		0	0	0	
Common Sandpiper		11																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		1																0	0	1	
Snipe sp,		1																0	0	0	
Long-billed Dowitcher																		0	0	0	
Asian Dowitcher																		0	0	0	
Red Knot													1		-			0	0	0	
													1							0	
Great Knot													1					0	0	U	
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		40																0	0	40	
Curlew Sandpiper																		0	0	0	
Spoon-billed Sandpiper																		0	0	0	
Broad-billed Sandpiper																		0	0	0	
Ruff																		0	0	0	
Small wader spp.				1										1				0	0	0	
Wader sp.		3600		300														300	300	3900	
Black-tailed Gull		2000		500														0	0	0	
Diack-tanca Gall				1		l				1	l						l	U	U	U	

Heuglin's Gull	ı	i	ì	ı	1 1		ı	ı	i	ı	ı	ı	ı	ı	1	ı		1	ı	ı	1 1	I	0	0	0	
Caspian Gull					-		ļ								-								0	0	0	
Slaty-backed Gull																							0	0	0	
Pallas's Gull																							0	0	0	
Large Gull spp.					9																		9	9	9	
Brown-headed Gull					, ,																		0	0	0	
Black-headed Gull			1332		1670																		1670	1670	3002	
Saunders's Gull			1332		1070																		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	10656	0	3429	1474	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5276	5276	15642	0
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	1079	6.9%	801	15.2%	0																					
Ardeids etc	599	3.8%	315	6.0%	0																					
Ducks, grebes, pelicans	3366	21.5%	1750	33.2%	0																					
Rails, coot etc	49	0.3%	0	0.0%	0																					
Shorebirds	7538	48.2%	731	13.9%	0																					
Gulls and terns	3011	19.2%	1679	31.8%	0																					
TOTAL	15642	100.0%	5276	100.0%	0																					
Date of count: 07 Dec 2014 High tide measured at TBT: 1.	0																									
* = count not included in the t																										
· = count not included in the t	otai																									-
Wetland-dependent species																										
								DBF					Sha	NW/								Ramsar	Ramsar	Ramsar	DEEP	Starling
	SRA	SRB	DBA	DBB	DBC	DBD	DBE	(TBT)	SPR	NSW	LHW	WEP	Kiu	LFS	TKC	LC	TSW	MPST	ST	SPS	MPNR	ponds	intertidal	Site	BAY	Inlet
Species								(1 B 1)					Kiu	LFS								ponus	areas	Site	AREA	Illet
Western Osprey			2	1	1																			0	4	
Black Kite			2																			26	0	26	2	
White-bellied Sea Eagle																								0	0	
Eastern Marsh Harrier													ļ											0	0	
Eastern Buzzard			1																					0	1	
Greater Spotted Eagle			0																			0	- v	0	0	
Eastern Imperial Eagle			0																			0	0	0	0	
Peregrine Falcon				1	1		1		1	-			1		-							4		0 4	0	
Pied Kingfisher			9										-		-							4	0	7	9	
Common Kingfisher White-throated Kingfisher			6		-		-		-	-												1	0	4	6	
Black-capped Kingfisher			3		1					 			1									0	0	0	3	
Red-billed Starling			171																			230	0	230	<u> </u>	
Collared Crow			6						1													18	0	18	6	
Condict Clow	ļ			1			1	l	1	1	1	·	·	·		l	ı	1	·	·	1	10	U	10	U	

Low-tide Count, January 2015

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	ткс	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Little Grebe					21	32	!																ur cus		53	
Great Crested Grebe																									0	
Great Cormorant			30		180																				210	
Dalmatian Pelican																									0	
Grey Heron			60		4	6	3																		73	
Purple Heron			1																						1	
Great Egret			89		16	2	!																		107	
Intermediate Egret																									0	
Little Egret			127		93	12	4																		236	
Swinhoe's Egret																									0	
Pacific Reef Heron																									0	
Eastern Cattle Egret																									0	
Chinese Pond Heron			25			2	. 1																		28	
Striated Heron																									0	
B-c Night Heron			1																						1	
Yellow Bittern																									0	
Cinnamon Bittern																									0	
Eurasian Bittern																									0	
Black Stork																									0	
Black-headed Ibis																									0	
Eurasian Spoonbill																									0	
Black-faced Spoonbill			18		2		8																		28	
Common Shelduck																									0	
Eurasian Wigeon			62		320	270)																		652	
Falcated Duck																									0	
Gadwall																									0	
Baikal Teal																									0	
Eurasian Teal							14																		14	
Mallard																									0	
Spot-billed Duck																									0	
Chinese Spot-billed Duck																									0	
Indian Spot-billed Duck																									0	
Northern Pintail					210	160)																		370	
Garganey																									0	
Northern Shoveler			633		120	94	4																		851	
Common Pochard																									0	
Baer's Pochard																									0	
Tufted Duck					220	1640)																		1860	
Greater Scaup																									0	
Red-breasted Merganser																									0	
Duck sp.			500			700)																		1200	
Slaty-breasted Rail																									0	
Eastern Water Rail																									0	
White-breasted Waterhen			3			1	1																		5	
Watercock																									0	
Common Moorhen			48																						48	
Eurasian Coot			1																						1	
Pheasant-tailed Jacana																									0	

Mach Averaged Soft		i		i		i		i,	 i	i	1	1			 Ì		ı	ń.	i	
First Annexis	Greater Painted-snipe		ļ																	0
Disease			ļ	70			1													
Northern Layouing	Pied Avocet			1657	270	775	4												1	2706
A	Oriental Pratincole																			0
Pacific Colone Ployer	Northern Lapwing																		1	0
Gist Proved	Grey-headed Lapwing			4															1	•
Common Rivered Prover																			1	U
Little Ringale Plover - sever Nand Pincer - s						48													1	
Century Cent	Common Ringed Plover																		1	•
Leser Sand Plover	Little Ringed Plover																			0
Greater Sand Plover																				0
Black stailed Godwit	Lesser Sand Plover																			-
Startialed Goldwit	Greater Sand Plover																			
Whimbred				105																105
Literals and Curlow 40 6 12																				0
Camera Redshank	Whimbrel																			V
Sported Redshank	Eurasian Curlew			40	6	121														167
Common Redshunk	Far Eastern Curlew																			0
Marsh Sandpiper																				
Common Greenshank	Common Redshank																			127
Nordmann's Greenshank	Marsh Sandpiper																			48
Green Sandpiper	Common Greenshank					117	1													118
Mood Sandpiper	Nordmann's Greenshank																			0
Terk Sandpiper	Green Sandpiper																			0
Terk Sandpiper	Wood Sandpiper						1													1
Common Sandpiper	Terek Sandpiper																			0
Grey-tailed Tattler Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Phalarope Red-necked Shripe Red-necked Stripe Red Root R	Common Sandpiper			6			1													7
Red-necked Phalarope	Grey-tailed Tattler																			0
Pintal Snipe	Ruddy Turnstone																			0
Pintal Snipe	Red-necked Phalarope																			0
Pintal/Swinhoe's Snipe	Pintail Snipe																			0
Pintal/Swinhoe's Snipe	Swinhoe's Snipe																			0
Common Snipe	Pintail/Swinhoe's Snipe																			0
Asian Dowitcher Red Knot Red Knot Red Short Red Short Red Share	Common Snipe			6																6
Asian Dowitcher Red Knot Red Knot Red Short Red Short Red Share	Long-billed Dowitcher																			0
Great Knot	Asian Dowitcher																			0
Great Knot	Red Knot																			0
Sanderling	Great Knot																			0
Red-necked Stint	Sanderling																			0
Little Stint	Red-necked Stint		1						1											0
Temminck's Stint	Little Stint																			0
Long-toed Stint			1						1											0
Pectoral Sandpiper	Long-toed Stint		1						1											0
Sharp-tailed Sandpiper																				Ö
Dunlin	Sharp-tailed Sandpiper																			0
Curlew Sandpiper 0 Spoon-billed Sandpiper 0 Broad-billed Sandpiper 0 Ruff 0 Small wader spp. 0 Wader sp. 300 Black-tailed Gull 1						1570														1570
Spoon-billed Sandpiper Broad-billed Sandpiper 0 Broad-billed Sandpiper 0 Ruff 0 Small wader spp. 0 Wader sp. 300 Black-tailed Gull 1			† †			1270			1	1		1							1	
Broad-billed Sandpiper		1	1						1										†	ő
Ruff 0 Small wader spp. 0 Wader sp. 300 Black-tailed Gull 1	Broad-billed Sandpiper	1	1						1										†	
Small wader spp. 0 Wader sp. 300 Black-tailed Gull 1	Ruff		1																†	U
Wader sp. 300 300 300 300 300 300 1			† †			<u> </u>			1	<u> </u>		1	l				t		†	
Black-tailed Gull 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			+ +	300	-				+	1	1	1							+	•
			+ +	300	-	1			+	1	1	1							+	
	Heuglin's Gull		+ +		-	1			+	 	1	1							+	0

Caspian Gull	i i		ĺ	Ì	1 1	ĺ	1		1		1	ĺ	ĺ	ĺ	1	Í	1	ĺ	1	1 1		ĺ	Ī	İ	ام ا	i
Slaty-backed Gull																									0	
Pallas's Gull																									0	
Large Gull spp.					28	1																			29	
Brown-headed Gull					20	1																			0	
Black-headed Gull			220		3800	140																			4160	
Saunders's Gull			220		2000	1.0																			0	
Whiskered Tern																									0	
White-winged Tern																									0	
Gull-billed Tern																									0	
Caspian Tern																									0	
Total	0	0	4006	0	5290	5825	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15206	0
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	210	1.4%	0		0																					
Ardeids etc	474	3.1%	0		0																					
Ducks, grebes, pelicans	5000	32.9%	0		0																					
Rails, coot etc	54	0.4%	0		0																					
Shorebirds	5278	34.7%	0		0																					
Gulls and terns	4190	27.6%	0		0																					
TOTAL	15206	100.0%	0		0																					
Date of count: 11 Jan 2015																										
High tide measured at TBT: 1	.8m																									
Wetland-dependent species																										
Species	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	ткс	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA	Starling Inlet
Western Osprey			0	1																			arcas		AKEA 1	
Black Kite			0																						0	
White-bellied Sea Eagle			0																						0	
Eastern Marsh Harrier			0																						0	
Eastern Buzzard			0																						0	
Greater Spotted Eagle			0																						0	
Eastern Imperial Eagle			0																						0	
Peregrine Falcon			0																						0	
Pied Kingfisher			1																						1	
Common Kingfisher			3																						3	
White-throated Kingfisher			1			1																			2	
Black-capped Kingfisher			1																						1	
Red-billed Starling			0																						0	
Collared Crow			2																						2	

Low-tide Count, February 2015

SPECIES	SRA	SRB	DBA	DBB	DBC	DBD	DBE	DBF (TBT)	SPR	NSW	LHW	WEP	Sha Kiu	NW / LFS	ТКС	LC	TSW	MPST	ST	SPS	MPNR	Ramsar ponds	Ramsar intertidal areas	Ramsar Site	DEEP BAY AREA Starling Inlet
Little Grebe			7				9																9	9	16
Great Crested Grebe					5																		5	5	5
Great Cormorant			498		150	32																	182	182	680
Dalmatian Pelican																							0		
Grey Heron			50		14	17																	31	31	81
Purple Heron																							0	0	0
Great Egret			39		31	22	2																55	55	94
Intermediate Egret																							0	0	0
Little Egret			87																				0	0	87
Swinhoe's Egret																							0	0	
Pacific Reef Heron																							0	0	0
Eastern Cattle Egret																							0	0	0
Chinese Pond Heron			33				2																2	2	35
Striated Heron																							0	0	0
B-c Night Heron			7																				0	0	7
Yellow Bittern																							0	0	0
Cinnamon Bittern																							0	0	0
Eurasian Bittern																							0	0	0
Black Stork																							0	0	0
Black-headed Ibis																							0	0	0
Eurasian Spoonbill																							0	0	0
Black-faced Spoonbill			66		32	6																	38	38	104
Common Shelduck																							0	0	0
Eurasian Wigeon			408		46	586	42																674	674	1082
Falcated Duck																							0	0	0
Gadwall																							0	0	0
Baikal Teal																							0	0	0
Eurasian Teal						820	22																842	842	842
Mallard																							0	0	0
Spot-billed Duck																							0	0	0
Chinese Spot-billed Duck																							0	0	0
Indian Spot-billed Duck																							0	0	0
Northern Pintail			881			230																	230	230	1111
Garganey																							0	V	*
Northern Shoveler			1480		31	180	6																217		1697
Common Pochard																							0	0	0
Baer's Pochard																							0	0	0
Tufted Duck			10		140	240	9																389	389	399
Greater Scaup																							0	0	0
Red-breasted Merganser																							0	U	0
Duck sp.			1000		1300																		1300	1300	2300
Slaty-breasted Rail																							0	0	0
Eastern Water Rail																							0	0	0
White-breasted Waterhen			5																				0	0	5
Watercock																							0	0	0
Common Moorhen			74																				0	0	74
Eurasian Coot			7																				0	0	7
Pheasant-tailed Jacana																							0	0	0

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Greater Painted-snipe																			0		0	
Black-winged Stilt		54																	0	0	54	
Pied Avocet		3549		360	590	7													957	957	4506	
Oriental Pratincole																			0	0	0	
Northern Lapwing																			0		0	
Grey-headed Lapwing		9																	0	-	9	
Pacific Golden Plover																			0		0	
Grey Plover					7														7		7	
Common Ringed Plover																			0	0	0	
Little Ringed Plover																			0	0	0	
Kentish Plover																			0	0	0	
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		104		32	56														88	88	192	
Far Eastern Curlew		101		52															0	0	0	
Spotted Redshank																			0	Ü	0	
Common Redshank		2				155													155	155	157	
Marsh Sandpiper				700		3													703	703	703	
Common Greenshank		2		200		3													200	200	202	
Nordmann's Greenshank				200															0		0	$\overline{}$
Green Sandpiper		+ +											-						0	Ţ	0	
Wood Sandpiper		15				1													1	1	16	
Terek Sandpiper		13				1										-			0	0	0	
Common Sandpiper		8				1													1	1	9	
Grey-tailed Tattler		0				1													0	-	0	
Ruddy Turnstone																			0	-	0	
Red-necked Phalarope																			0	Ţ	0	
Pintail Snipe																			0		0	
Swinhoe's Snipe		+ +																	0	0	0	
Pintail/Swinhoe's Snipe																			0	Ü	0	
Common Snipe																			0	-	0	
Long-billed Dowitcher		+						-					-						0		0	
Asian Dowitcher		+						-					-						0		0	
																			_ ~		-	
Red Knot																			0		0	
Great Knot									-										0		0	
Sanderling																-			0	v	0	
Red-necked Stint		+ +																	0	-	0	
Little Stint		+ _																	0		0	
Temminck's Stint		7						L L		 									0	-	7	
Long-toed Stint		+						L L		 									0	Ü	0	
Pectoral Sandpiper																			0		0	
Sharp-tailed Sandpiper																			0	-	0	
Dunlin																			0	-	0	
Curlew Sandpiper																			0		0	
Spoon-billed Sandpiper																			0		0	
Broad-billed Sandpiper																			0	-	0	
Ruff																			0	-	0	
Small wader spp.																			0		0	
Wader sp.																			0	-	0	
Black-tailed Gull																			0		0	
Heuglin's Gull				75	8														83	83	83	

la : an			1 1	ı	1	1	1	ı		ı		ı	ı	ı	1	1		1	1	1 1	1	ı	I 6			
Caspian Gull																							0	0	-	
Slaty-backed Gull																							0		v	
Pallas's Gull																							0	Ü		
Large Gull spp.																							0	0		
Brown-headed Gull					1200	100																	0	0		
Black-headed Gull			56		1200	190																	1390	1390		
Saunders's Gull					ļ																		0	V		
Whiskered Tern					ļ																		0	0	-	
White-winged Tern					1						ļ				1	1							0	0		
Gull-billed Tern					1						ļ				1	1							U	0		
Caspian Tern	0		0.450		1217	2004	250		0		0	0					0			0			0	,		
Total	U	0	8458	U	4316	2984	259	0	U	0	U	U	0	0	0	0	U	0	0	U	0	U	7559	7559	16017	0
	Deep Bay Area	%	Ramsar Site	%	SI	%																				
Cormorants	680	4.2%	182	2.4%	0																					
Ardeids etc	408	2.5%	126	1.7%																						
Ducks, grebes, pelicans	7452	46.5%	3666																							
Rails, coot etc	86	0.5%	0	0.0%	0																					
Shorebirds	5862	36.6%	2112	27.9%	0																					
Gulls and terns	1529	9.5%	1473	19.5%	0																					
TOTAL	16017	100.0%	7559	100.0%	0																					
Date of count: 8 Feb 2015																										
High tide measured at TBT:1.	9m		1			1																				
Wetland-dependent 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
Western Osprey			0																						0	
Black Kite			0																						0	
White-bellied Sea Eagle			0																						0	
Eastern Marsh Harrier			0																						0	
Eastern Buzzard			0																						0	
Greater Spotted Eagle			0																						0	
Eastern Imperial Eagle			0																						0	
Peregrine Falcon			0																						0	
Pied Kingfisher			1				1																		2	
Common Kingfisher			0																						0	
White-throated Kingfisher			2			1																			3	
Black-capped Kingfisher			2					1			1						1								2	
Red-billed Starling			0													1	_								0	
Collared Crow			2	<u> </u>					<u> </u>				<u> </u>		1	1									2	

Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

Monthly Waterbird Monitoring Biannual Report 2 (October 2014 to March 2015)

Appendix 3



The Hong Kong Bird Watching Society



Agriculture, Fisheries and Conservation Department

Peak count of each waterbird species, mid-winter period (December to February) 2014-15.

Cormorant

Crost Cormorant	9 891
Great Cormorant	9,891

Ardeids and Ciconiiformes

Grey Heron	916
Purple Heron	2
Great Egret	949
Intermediate Egret	27
Little Egret	1,035
Swinhoe's Egret	0
Pacific Reef Heron	0
Eastern Cattle Egret	66
Chinese Pond Heron	270
Striated Heron	0
Black-crowned Night Heron	108
Yellow Bittern	0
Cinnamon Bittern	1
Eurasian Bittern	1
Black Stork	0
Oriental Stork	0
Black-headed Ibis	0
Eurasian Spoonbill	2
Black-faced Spoonbill	455
Sub-total:	3,832

Ducks, Grebes and Pelicans

Little Grebe	317
Great Crested Grebe	100
Dalmatian Pelican	0
Common Shelduck	0
Eurasian Wigeon	2,901
Falcated Duck	2
Gadwall	2
Baikal Teal	0
Eurasian Teal	842
Mallard	1
'Unidentified' Spot-billed Duck	2
Chinese Spot-billed Duck	6
Indian Spot-billed Duck	0
Northern Pintail	2,021
Garganey	72
Northern Shoveler	3,948
Common Pochard	0
Baer's Pochard	0
Ferruginous Duck	0
Tufted Duck	2,773
Greater Scaup	0
Smew	1
Red-breasted Merganser	0
Unidentified duck	997
Sub-total:	13,985

Rails and Coots

Slaty-breasted Rail	0
Eastern Water Rail	0
White-breasted Waterhen	52
Ruddy-breasted Crake	0
Watercock	0
Common Moorhen	109
Eurasian Coot	42
Sub-total:	203

Shorebirds

Shorebirds	
Pheasant-tailed Jacana	0
Greater Painted-snipe	2
Black-winged Stilt	443
Pied Avocet	10,957
Oriental Pratincole	0
Northern Lapwing	1
Grey-headed Lapwing	9
Pacific Golden Plover	226
Grey Plover#	594
Common Ringed Plover	0
Little Ringed Plover	90
Kentish Plover	429
Lesser Sand Plover	3
Greater Sand Plover	0
Black-tailed Godwit	780
Bar-tailed Godwit	2
Whimbrel	26
Eurasian Curlew#	1,005
Far Eastern Curlew	0
Spotted Redshank	88
Common Redshank	194
Marsh Sandpiper	1,106
Common Greenshank	735
Nordmann's Greenshank	0
Green Sandpiper	27
Wood Sandpiper	116
Terek Sandpiper	1
Common Sandpiper	78
Grey-tailed Tattler	0
Ruddy Turnstone	0
Red-necked Phalarope	0
Pintail Snipe	0
Swinhoe's Snipe	0
Pintail/Swinhoe's Snipe	0
Unidentified Snipe	2
Common Snipe	32
Long-billed Dowitcher	0
Asian Dowitcher	0
Red Knot#	3
Great Knot#	15
Sanderling	0
Red-necked Stint	0
Little Stint	0
Temminck's Stint	16
Long-toed Stint	0
Pectoral Sandpiper	0
Sharp-tailed Sandpiper	0
onarp-tanea oanapiper	U

Dunlin	1,570
Curlew Sandpiper	0
Spoon-billed Sandpiper	0
Broad-billed Sandpiper	0
Ruff	0
Unidentified small-sized Shorebird	Not included
Sub-total:	18,550

[#] Additional counts from shorebird count in mid-winter period.

Gulls and Terns

Black-tailed Gull	1
Mew Gull	0
Heuglin's Gull	232
Caspian Gull	2
Slaty-backed Gull	1
Pallas's Gull	2
Unidentified large Gull (assumed to be same as Heuglin's Gull)	0
Brown-headed Gull	0
Relict Gull	1
Black-headed Gull	6,946
Saunders's Gull	65
Whiskered Tern	0
White-winged Tern	0
Gull-billed Tern	0
Caspian Tern	0
Sub-total:	7,250

Summary of sub-totals of different waterbird groups, December 2014 to February 2015.

Group		Sub-total
Cormorants		9,891
Ardeids		3,832
Ducks, Grebes and Pelicans		13,985
Rails and Coots		203
Shorebirds		18,550
Gulls and Terns		7,250
	Total	53,711