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# **Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme**

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Shorebird Monitoring 2003-2004 Report

Y. T. Yu, G.J. Carey and H.K. Ying



The Hong Kong Bird  
Watching Society Limited



Agriculture, Fisheries and  
Conservation Department

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

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## **Waterbird Count Coordinator**

YU Yat Tung

## **Project Funding**

Agriculture, Fisheries and Conservation Department

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Data from July 2003 – March 2004

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# **Shorebird Monitoring at the Mai Po Marshes and Inner Deep Bay**

## **2003-2004 Report**

Y. T. Yu, G. J. Carey and H. K. Ying

## **REPORT**



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

**MAI PO INNER DEEP BAY RAMSAR SITE  
WATERBIRD MONITORING PROGRAMME**

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Programme 2003 / 04

Shorebird Monitoring

July 2003 - June 2004

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**Shorebird Monitoring: 2003-2004 Report**

Y. T. Yu, G. J. Carey and H. K. Ying<sup>1</sup>

**Introduction**

Systematic, long-term monitoring of waterbirds in the Mai Po and Inner Deep Bay Ramsar Site commenced in March 1998. This project is administered, coordinated and executed by the Hong Kong Bird Watching Society, and funded by the Agriculture, Fisheries and Conservation Department. Counts of shorebirds (also called waders) form one part of this programme, the other components being monthly counts of waterbirds and surveys of ardeid nesting colonies. This report concerns the shorebird monitoring component for autumn 2003 and spring 2004.

**Methodology**

During spring and autumn migration shorebird migrants feed on the intertidal mudflats of Deep Bay and, during the high tide period, roost in the hinterland. The size and geographic layout of Deep Bay is such that it is not viable to count shorebirds when they are feeding in the intertidal areas, except for a short period immediately prior to and after the tide has reached or withdrawn past the two 'boardwalk' hides situated at the edge of the bay (facilities provided by the WWF-HK Mai Po Marshes Nature Reserve (MPNR) – see Map 1). Consequently, counts need to be made mainly during high tide when birds are roosting inland.

Since the mid 1980s management activities at the MPNR have generally ensured that there are suitable roosting areas on the reserve that allow counts to be made with a relatively high degree of accuracy for many species. Depending on the height of the tide, these high tide periods when full counts can realistically be made lasts up to four hours, in addition to the time spent in the boardwalk hides.

However, on some days the tide does not reach a height sufficient to force birds to roost inland or even to move close to the boardwalk hides, which means that accurate counts cannot be

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made. Consequently, the census period is divided into 'blocks' of days that are long enough to ensure the likely occurrence of a high tide sufficient to allow at least one count to be made, yet short enough to ensure that counts are made with sufficient frequency that the majority of birds utilizing the bay during that season can be recorded.

Taking into account these factors the following schedule is used:

- 22 March to 17 May: one count every block of three days
- 18-31 May: one count per week
- 1 June to 15 July: two counts per month
- 16 July to 4 November: one count per week

The equipment used consisted of 8x or 10x binoculars and a telescope with wide angle 32x or 20-60x zoom eyepieces. Counting was carried out by observers experienced in bird counting and identification, in order to achieve a higher degree of accuracy. The procedure for each count was as follows:

- Count birds on the rising tide, beginning at a tidal height of around 1.7m.
- Count birds on the falling tide until such a time as counting is no longer possible due to distance from the observer.
- Count birds roosting in MPNR using a bicycle (essential on some days to complete the count during the time available).

In some cases where counts were made on days with a relatively low early morning or late afternoon high tide, counts were made prior to high tide on the reserve, where night-time roosting waders were present. Counts were carried out by the authors of this report. The numbers of each species in winter were monitored as part of the monthly waterbird counts.

When counting from the boardwalk hides at the edge of Deep Bay, emphasis was placed on counting species that do not generally roost on the reserve or are difficult to count there, in particular small-sized waders including sand plovers, Broad-billed Sandpiper and Red-necked Stint. The sand plovers, stints and Broad-billed Sandpipers have roosted outside MPNR in recent years. They appear to be flying up the Shenzhen River mouth to other unobservable roost sites. These could only be counted accurately on the falling tide. In addition, double checking or refining of counts made on the reserve can be made at the boardwalk, in particular to the number of Curlew Sandpiper which is usually the most numerous species and might constitute up to 50% of shorebirds present on any given date. Species that have a tendency to arrive *en masse* at the mudflat when the tide is falling are suitable for such counts. In contrast, the falling tide cannot be relied on for the larger shorebirds such as *Tringa* sandpipers, as while numerous, they generally behave differently. They arrive in small groups and stay in the same

place over a longer period of time. Hence they are usually counted at a roost site during the high tide roosting period.

Birds carrying coloured leg-flags are also recorded. In previous years the vast majority of these would have been placed on birds in Australia; however, a flagging programme has now commenced in Hong Kong, and such birds are frequently recorded. In autumn, moulting of birds would also enable us to record the age of some waders as adults, non-adults, juveniles or first-summer birds.

It should be noted that habitat management by WWF-HK for roosting areas for shorebirds contribute to the essential data collected for this monitoring programme. During autumn 2003 and spring 2004 roosting shorebirds were mainly in pond 8, 11 and 16/17 but also in pond 20, 22 and 23 occasionally (see Map 1). There were no phenomena that were considered to have significantly affected the accuracy of counts. Habitat management activities in pond 16-17 of MPNR that aims to enhance its attractiveness and capacity of the shorebird roosting site is on going and it has largely been completed. The outcome is not yet fully known but shorebird numbers during the 2004 spring migration in pond 16-17 were at times high, although they fluctuated. One possible reason was disturbances from predatory birds. A Red-necked Stint was observed being caught by a Black Kite *Milvus migrans* which perched on trees adjacent to pond 16-17 (Y.T. Yu *pers. obs.*). High numbers of waders can still be present in this pond. A notable example was over 2000 Red-necked Stints were recorded during 2004 spring, a species that had not roosted in numbers on the reserve for some years.

## Results

Results of all wader counts are presented in full in Appendices 1 and 2. The numbers of selected species are illustrated graphically in Appendix 3.

### *Autumn 2003*

Figure 1 shows fluctuation in the total number of shorebirds from August to October 2003. Numbers only increased slowly in August and early September. The first peak in numbers appeared on 23 September, when 3,277 birds were counted, but then numbers dropped till the second-half of the October. Numbers rose to 3,471 birds and 3,957 birds on 27 October and 4 November respectively. The later number is the maximum number of shorebirds in autumn 2003. However, this largely comprised some waders wintering in Mai Po and Deep Bay area.

The peak in late September largely comprised Common Greenshank (1,229), Marsh Sandpiper (833) and Common Redshank (302). However, some individuals of these species can also stay during the winter in the Mai Po and Deep Bay area.



It appears from Figure 1 that for some species the first winter visitors began to arrive in early September. Analysis of the patterns of occurrence of some individual species (see Figure 2 -19) indicates that wintering birds might begin to arrive at the following times:

Pacific Golden Plover – mid October (Figure 3, c.f. early October in 2002, end September in 2001)

Kentish Plover – early November (Figure 4, c.f. mid October in 2002 and 2001)

Grey Plover – early October (Figure 5, c.f. mid September in 2002, mid October in 2001)

Lesser Sand Plover – late November (Figure 6, c.f. mid September in 2002, mid October in 2001)

Black-tailed Godwit – early September (Figure 8, c.f. late August in 2002, mid September in 2001)

Eurasian Curlew – mid September (Figure 11, c.f. mid September in 2002, mid August in 2001)

Spotted Redshank – mid October (Figure 12, c.f. late September in 2002, mid September in 2001)

Marsh Sandpiper – mid September (Figure 14, c.f. early September in 2002, mid September in 2001)

Common Greenshank – late September (Figure 15, c.f. early September in 2002)

Great Knot – early October (Figure 17, c.f. early October in 2001)

Species that occur primarily as passage migrants in the latter half of the autumn are Greater Sand Plover (Figure 7), Bar-tailed Godwit (Figure 9), Whimbrel (Figure 10), Wood Sandpiper (Figure 16), Great Knot (Figure 17), Red Knot (Figure 18) and Broad-billed Sandpiper (Figure 19). The greatest number of Common Redshank occurred early in the autumn, while Common Greenshank seemed to be mainly passing through Hong Kong in the third week of September in autumn 2003.

#### *Winter 2003-2004*

A minimum aggregate total of 13,534 waders was recorded wintering in Hong Kong during winter 2003-04. There was an increase of 16% from the figure of 11,689 in winter 2002-03. The count of 13,534 was achieved by summing the peak counts of each species during the midwinter waterbird counts of December, January and February. The bulk of birds, approximately 83%, comprised Pied Avocet (3,500), Dunlin (2,430), Marsh Sandpiper (2,249), Kentish Plover (2,210) and Eurasian Curlew (850). It is noted that the increase of the aggregate total is resulted from the 're-appearance' of Kentish Plover and Dunlin, which were not counted in the monthly waterbird counts during winter 2002-03. It is unlikely, however, that they were actually absent in this period.

#### *Spring 2004*

The figure for the minimum number of birds passing through, including some estimate of turnover, was 16,431, slightly lower than the figure of 2003 (16,984) and 2002 (17,421). The peak daily count was 9,640 on 17 April 2004, which is lower than the same figure of 2003 (11,391) but higher than that in of 2002 (8,271).

During spring 2004, a new Hong Kong high count of 300 Sharp-tailed Sandpipers was made on 10 May and a total of 6,000 Curlew Sandpipers were counted on 22 April, which equals to the historical peak number. Some species showed relatively high number when we compare their results to those in recent years: for example Black-tailed Godwit (1190), Red Knot (120), Great Knot (199) and Long-toed Stint (36 – unusually high number for the Mai Po Nature Reserve). On the other hand, some species showed relatively low numbers, for example, Greater Sand Plover (241) and Lesser Sand Plover (59), which were present in low numbers in previous springs. However, a count of 500 Sand Plover spp. on 8 April during the ebb tide from the Mai Po boardwalk indicated that these species may have had a high tide roost site outside the MPNR. Furthermore, we found the high counts of Common Redshank (823), Wood Sandpiper (125), Terek Sandpiper (327), Grey-tailed Tattler (10) and Asian Dowitcher (33) have become relatively low in recent years.

#### *Summer 2004*

The number of waders recorded in summer is similar to previous years. A total of 466 were counted in July 2003 (cf. 488 in July 2002) and 632 in June 2004 (cf. 593 in June 2003). These counts were mostly comprised of Common Redshank (160 in July 2003) and Terek Sandpiper (327 in June 2004). These species are known to be “early arrival and late departure” species.

#### *Total numbers recorded*

In an attempt to estimate the actual number of migrant waders that utilized the Mai Po and Inner Deep Bay Ramsar Site during the 12-month period from July 2003 to June 2004, the peak winter (defined as December to February) count obtained during winter waterbird counts can generally be added to the estimated minimum number of birds passing through during the spring and autumn migration seasons (see Table 1). For some species, however, it is not possible to rule out some overlap in individuals occurring in different seasons; consequently, such records (marked by a dash in Table 1) are excluded from the calculation.

With regard to the number of birds passing through during each migration season, the estimated minimum number of individuals is estimated by taking the peak count or by summing the number of ‘new’ birds between successive peaks and troughs where such a pattern was observed and where it was felt that such peaks included an element of newly-arrived birds.

It can be seen that a minimum of 31,114 shorebirds utilized the Ramsar Site during the 12-month period from July 2003 to June 2004; this is higher than the 28,514 in the period from July 2002 to June 2003 and also slightly higher than the 30,759 recorded in the same period of 2001-2002. The increase is probably due to the presence of significant numbers of Kentish

Plover and Dunlin in the mid-winter count, which had not been the case in the two previous winters. Of this total, 18,095 were migrant shorebirds recorded during autumn and spring migrations, with 14,470 occurring on spring passage.

The ten highest numbers species recorded in this 12-month period were: Curlew Sandpiper (6,066, 19.5% of the total number of shorebirds in the same period), Pied Avocet (3,500, 11.2%), Dunlin (2,436, 7.8%), Red-necked Stint (2,321, 7.5%), Marsh Sandpiper (2,249, 7.2%), Kentish Plover (2,222, 7.1%), Common Greenshank (1,951, 6.3%), Common Redshank (1,934, 6.2%), Spotted Redshank (1,767, 5.7%) and Black-tailed Godwit (1,597, 5.1%).

Shorebird turnover rates in Hong Kong have yet to be determined; however, Howes and Bakewell (1989) quoted studies using marked birds in Morocco and Malaysia as indicating that the total number of shorebirds using a given area during migration lies in the range 3 – 4.5 times the peak daily count of passage shorebird species. Using this as the calculation basis, with peak day counts of 16,431 in spring and 2,367 in early autumn, totaling 18,828, Deep Bay may have supported in the range 56,484 to 84,726 migrant shorebirds during 2003-2004.

Table 1. Estimated minimum number of shorebirds utilizing the Mai Po Inner Deep Bay Ramsar Site during the 12-month period July 2003 to June 2004.

Year	2003-04				2002-03	2001-02	2000-01
	autumn	winter	spring	Minimum	Minimum	Minimum	Minimum
Pheasant-tailed Jacana <i>Hydrophasianus chirugus</i>	0	1	0	1	1	1	0
Greater Painted-snipe <i>Rostratula bengalensis</i>	1	0	0	1	1	7	0
Black-winged Stilt <i>Himantopus himantopus</i>	227	43	132	402	296	569	443
Pied Avocet <i>Recurvirostra avosetta</i>	-	3500	-	3500	5864	1957	1926
Oriental Pratincole <i>Glareola maldivarum</i>	0	0	4	4	10	1	4
Northern Lapwing <i>Vanellus vanellus</i>	0	1	0	1	0	0	0
Grey-headed Lapwing <i>V. cinereus</i>	1	0	0	1	1	1	4
Pacific Golden Plover <i>Pluvialis fulva</i>	229	120	221	570	708	353	602
Grey Plover <i>P. squatarola</i>	13	454	-	467	307	298	313
Little Ringed Plover <i>Charadrius dubius</i>	-	77	-	77	191	243	253
Kentish Plover <i>C. alexandrinus</i>	12	2210	-	2222	31	1	2375
Lesser Sand Plover <i>C. mongolus</i>	6	5	59	70	119	112	53
Greater Sand Plover <i>C. leschenaultii</i>	187	2	241	430	243	983	828

Black-tailed Godwit <i>Limosa limosa</i>	17	390	1190	1597	721	902	1368
Bar-tailed Godwit <i>Limosa lapponica</i>	28	2	8	38	15	26	48
Whimbrel <i>Numenius phaeopus</i>	116	1	32	149	174	174	138
Eurasian Curlew <i>N. arquata</i>	-	850	-	850	1014	558	836
Far Eastern Curlew <i>N. madagascariensis</i>	2	0	4	6	11	5	15
Spotted Redshank <i>Tringa erythropus</i>	14	339	1414	1767	1828	2500	1626
Common Redshank <i>T. totanus</i>	921	190	823	1934	2456	2085	2779
Marsh Sandpiper <i>T. stagnatilis</i>	-	2249	-	2249	2051	2278	1529
Common Greenshank <i>T. nebularia</i>	1229	-	722	1951	940	1679	2068
Nordmann's Greenshank <i>T. guttifer</i>	2	0	24	26	36	15	31
Green Sandpiper <i>T. ochropus</i>	0	31	-	31	45	54	46
Wood Sandpiper <i>T. glareola</i>	219	38	125	382	488	801	336
Terek Sandpiper <i>Xenus cinereus</i>	173	0	327	500	557	660	547
Common Sandpiper <i>Actitis hypoleucos</i>	4	73	4	81	103	107	130
Grey-tailed Tattler <i>Heteroscelus brevipes</i>	9	0	10	19	42	72	62
Ruddy Turnstone <i>Arenaria interpres</i>	1	0	80	81	88	77	102
Red-necked Phalarope <i>Phalaropus lobatus</i>	0	0	2	2	44	22	32
Pintail/Swinhoe's Snipe <i>Gallinago stenura/megala</i>	1	0	0	1	5	0	0
Common Snipe <i>Gallinago gallinago</i>	2	6	1	9	17	8	0
Long-billed Dowitcher <i>Limnodromus scolopaceus</i>	-	-	2	2	3	3	3
Asian Dowitcher <i>Limnodromus semipalmatus</i>	8	0	33	41	549	40	58
Red Knot <i>Calidris canutus</i>	5	0	120	125	64	97	44
Great Knot <i>C. tenuirostris</i>	23	-	199	222	206	229	590
Sanderling <i>C. alba</i>	0	0	16	16	22	9	6
Red-necked Stint <i>C. ruficollis</i>	80	2	2239	2321	2597	2570	1185
Little Stint <i>C. minuta</i>	0	0	5	5	4	3	0
Temminck's Stint <i>C. temminckii</i>	0	4	0	4	28	35	14
Long-toed Stint <i>C. subminuta</i>	11	0	36	47	24	11	21

Pectoral Sandpiper <i>C. melanotos</i>	0	0	2	2	0	2	0
Sharp-tailed Sandpiper <i>C. acuminata</i>	9	0	300	309	244	248	68
Dunlin <i>C. alpine</i>	4	2430	2	2436	6	2	3103
Curlew Sandpiper <i>C. ferruginea</i>	65	1	6000	6066	4583	5716	5810
Spoon-billed Sandpiper <i>Eurynorhynchus pygmeus</i>	0	0	7	7	6	2	1
Broad-billed Sandpiper <i>Limicola falcinellus</i>	5	0	81	86	178	62	180
Ruff <i>Philomachus pugnax</i>	1	-	5	6	4	2	3
<b>NUMBER OF SPECIES</b>	38	29	42	48	46	47	41
<b>TOTAL NUMBER OF BIRDS</b>	3625	13019 <sup>^</sup>	14470 <sup>#</sup>	31114	28514	30759	29580

Note: a dash indicates that birds were recorded, but not thought to comprise different individuals to those in other seasons.

<sup>^</sup>: Peak counts of 489 Common Greenshanks, one Long-billed Dowitcher, 24 Great Knots and one Ruff were excluded in the winter total number because some birds might be present in counts of autumn 2003 and spring 2004.

<sup>#</sup>: The spring peak count of 1964 Marsh Sandpiper was not included in the spring total number because some birds might have been recorded in winter counts.

### *Regional important numbers*

A new publication, Waterbird Population Estimates – Third Edition (Wetland International 2002), made detailed reviews and estimates on the known population size and the 1% level of the flyway or regional population of all waterbird species that is criterion 3c for determining a wetland of international importance. Significant proportions of the populations of some wader species pass through the Mai Po and Inner Deep Bay Ramsar site. These species are listed in Table 2 with their flyway or regional population, numbers recorded in Ramsar site and percentages of the flyway or regional population during the course of July 2003 to June 2004.

Table 2. Species recorded in flyway/regional important numbers in Deep Bay during July 2003 to June 2004.

Species	Flyway/regional population	Number recorded	Percentage
Pied Avocet <i>Recurvirostra avosetta</i>	25,000 – 100,000	3,500	3.5 – 14%
Kentish Plover <i>Charadrius alexandrius</i>	100,000	2,210	2.2%
Black-tailed Godwit <i>Limosa limosa</i>	160,000	1,597	1.0%
Eurasian Curlew <i>Numenius arquata</i>	35,000	850	2.4%
Spotted Redshank <i>Tringa erythropus</i>	25,000 – 100,000	1,767	1.8 - 7.1%
Common Redshank <i>Tringa totanus</i>	1,000 (1% level)	1,934	1.9%
Marsh Sandpiper <i>Tringa stagnatilis</i>	90,000	2,249	2.5%
Common Greenshank <i>Tringa nebularia</i>	55,000	1,951	3.9%

Terek Sandpiper <i>Xenus cinereus</i>	50,000	500	1.0%
Curlew Sandpiper <i>Calidris ferruginea</i>	180,000	6,066	3.4%

#### *Globally Threatened species*

With regard to species listed in BirdLife International (2000, 2004), the following were recorded during July 2003 to June 2004 (population figures from Wetland International (2002)):

- Far Eastern Curlew: listed as Least Concern currently and previously as Near Threatened, the world population is estimated to be 38,000 birds. Six birds were recorded during July 2003 to June 2004.
- Nordmann's Greenshank: listed as Endangered (i.e. facing a very high risk of extinction in the wild in the near future), the world population is estimated to be 250 to 1,000 birds. Two were recorded in autumn 2003 and a total of 24 birds (11 adults and 13 first-summer birds) were recorded in spring 2004, which constituted 2.4 to 9.6% of the world population. This number is lower than the figure in previous year (cf. 35 in spring 2003).
- Asian Dowitcher: listed as Near-threatened, the world population is estimated to be 23,000. The peak count was only 33 birds in spring 2004, which is lower than peak counts in spring 2001 and 2002 when 40 and 49 birds were counted respectively. An exceptional peak count of 540 was made in May 2003.
- Spoon-billed Sandpiper: listed as Endangered, the world population is estimated to be fewer than 2,500 individuals and the population is considered to be decreasing. A total of seven individuals were seen in Mai Po during the 2004 spring migration. This is higher than the peak count of six birds in spring 2003 and this is also a relatively high number compared to recent years.

#### *Other observations*

The regular observations brought a series of observation of leg-flagged birds. Some of these refer to the wader colour ringing programme that commenced in Hong Kong since 2002, while the majority were attached in Australia. A total of 159 sighting records of these waders in Hong Kong were submitted from July 2003 to June 2004. All these were recorded at MPNR. Of these records, Curlew Sandpiper and Red-necked Stint were reported most frequently, 62 (38%) and 50 (31%) respectively.

A total of 61 (38%) records referred to the birds flagged at MPNR. In addition, 53 (33%) records were waders carrying a single orange flag on right tibia which was attached in

Southeastern Australia. Waders with a single yellow flag and orange and yellow flags originated from the Northwestern and Southern Australia respectively were also reported in Hong Kong. The most notable record of a globally threatened Nordmann's Greenshank with white and black flags on the right leg was sighted on 19 April. This is the first colour flag sighting record of this species and this bird was fitted with these flags at Chongmindao, Shanghai (Clive Minton and Wang Tianhou *per. comm.*). These records have been sent to the Australian Wader Studies Group, the organizer of the leg-flagging programme. More details refer to Appendix 4.

Some waders were identified according to their age-class of juvenile or non-juvenile. Most of the records were obtained in autumn. However, the counting conditions in autumn 2003 were not favourable to this task due to high mobility of waders between different roost sites, increasing the difficulty of observation. No detailed record is provided in this report.

### **Acknowledgements**

We would like to thank Lew Young and staff at the WWF-HK MPNR for much help in habitat management to ensure a suitable roosting location for wader roosting. We are also grateful to members of the Hong Kong Bird Watching Society for providing sightings of the colour-flagged waders.

### **References**

**BirdLife International. 2000.** Threatened Birds of the World. Lynx Edicions and BirdLife International. Barcelona and Cambridge, UK.

**BirdLife International. 2004.** Threatened Birds of the World 2004. CD-ROM. Cambridge, UK: BirdLife International.

**Wetland International. 2002.** Waterbird Population Estimates – Third Edition. Wetland International Global Series No.12, Wageningen, The Netherlands.

**Howes, J and Bakewell, D. 1989.** Shorebird Studies Manual. AWB Publication No. 55. Kuala Lumpur.

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# Shorebird Monitoring at the Mai Po Marshes and Inner Deep Bay

## 2003-2004 Report

Y. T. Yu, G. J. Carey and H. K. Ying

### MAP



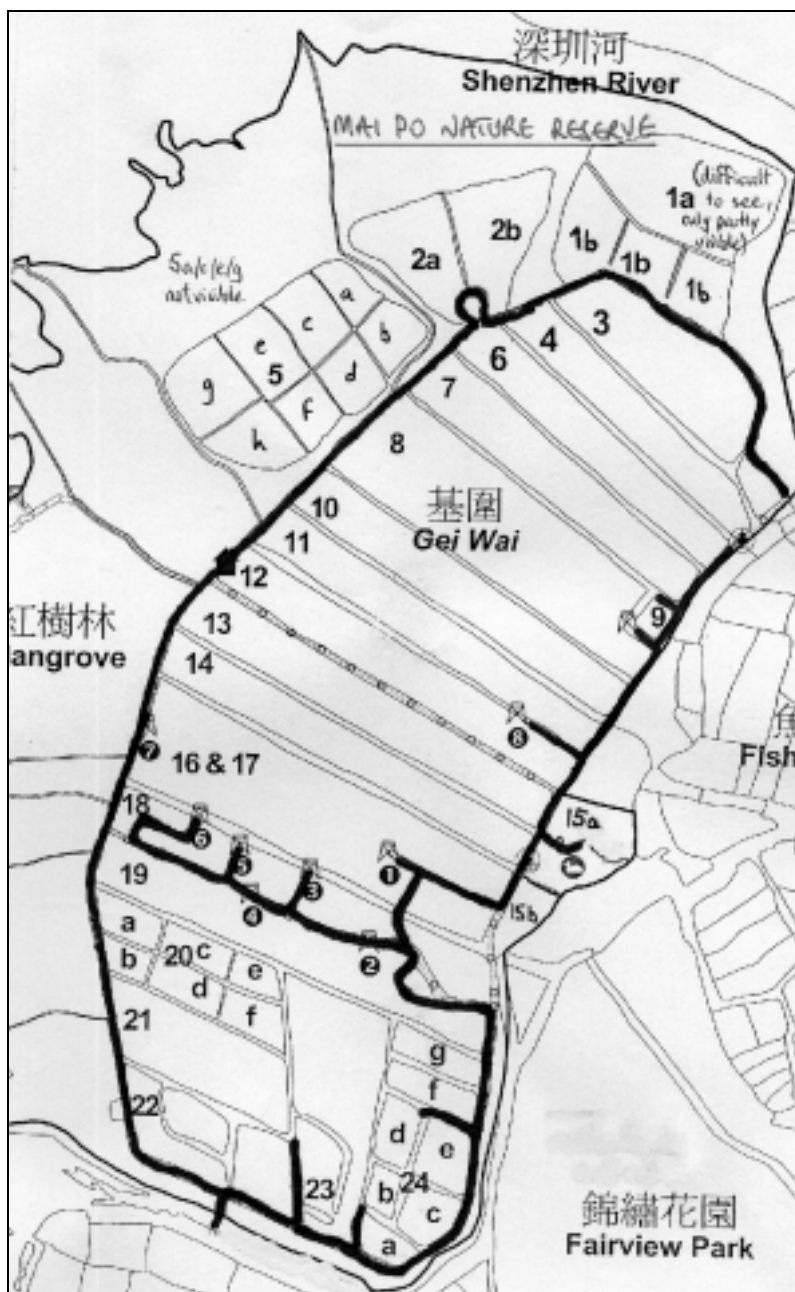
The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department



Map 1: Mai Po Marshes Nature Reserve



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# **Shorebird Monitoring at the Mai Po Marshes and Inner Deep Bay**

## **2003-2004 Report**

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### ***Appendix***



The Hong Kong Bird Watching Society Limited



Agriculture, Fisheries and Conservation Department

**Counts of shorebirds in the Mai Po Inner Deep Bay Ramsar Site in autumn 2003**

Appendix 1

	1-15 Jul	16-22 Jul	23-29 Jul	30-5 Aug	6-12 Aug	13-19 Aug	20-26 Aug	27-2 Sep	3-9 Sep	10-16 Sep	17-23 Sep	24-30 Sep	1-7 Oct	8-14 Oct	15-21 Oct	22-28 Oct	29-4 Nov	Peak count	Peak count
Pheasant-tailed Jacana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greater Painted-snipe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Black-winged Stilt	18	35	32	46	35	30	31	23	173	74	227	115	135	64	143	38	5	227	227
Pied Avocet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	275	593	593	593
Oriental Pratincole	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Northern Lapwing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grey-headed Lapwing	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Pacific Golden Plover	0	0	0	0	0	1	4	2	50	52	62	70	57	111	229	66	35	229	229
Grey Plover	12	6	6	14	4	12	5	13	2	13	14	12	14	19	33	49	39	13	49
Common Ringed Plover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Ringed Plover	15	1	0	7	5	4	0	0	0	0	4	0	5	0	27	22	14	12	27
Kentish Plover	0	0	0	0	0	0	0	0	0	0	12	0	2	0	33	2	950	12	950
Lesser Sand Plover	0	0	6	2	0	0	1	0	2	0	0	0	0	0	0	0	2	6	6
Greater Sand Plover	1	22	40	174	187	57	126	11	95	44	62	12	39	0	0	1	1	187	187
Oriental Plover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black-tailed Godwit	7	6	8	8	17	9	43	57	146	174	201	218	226	290	328	448	320	17	448
Bar-tailed Godwit	0	0	0	0	0	0	0	0	0	14	23	28	5	3	4	3	2	28	28
Little Curlew	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1
Whimbrel	27	10	0	17	45	69	79	116	65	76	44	56	5	8	16	11	5	116	116
Eurasian Curlew	16	20	28	30	26	25	28	35	8	31	54	45	48	41	43	53	31	54	54
Far Eastern Curlew	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1
Spotted Redshank	0	0	1	2	4	3	6	2	14	9	46	6	29	5	117	193	353	14	353
Common Redshank	160	641	921	656	318	394	286	268	161	228	302	147	87	143	43	95	53	921	921
Marsh Sandpiper	0	0	1	0	1	6	16	51	104	159	833	503	702	870	577	1497	911	1497	1497
Common Greenshank	83	117	284	365	343	464	765	625	989	670	1229	848	640	859	267	685	356	1229	1229
Nordmann's Greenshank	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1
Green Sandpiper	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Wood Sandpiper	6	55	13	69	158	9	73	8	219	74	154	105	40	33	55	9	18	219	219
Terek Sandpiper	116	160	49	34	65	2	66	89	173	2	3	0	1	0	2	0	0	173	173
Common Sandpiper	1	0	1	2	0	2	1	0	1	2	4	3	0	0	0	3	0	4	4
Grey-tailed Tattler	0	0	0	6	9	1	3	0	1	0	0	0	0	0	0	0	0	9	9
Ruddy Turnstone	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Red-necked Phalarope	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pintail/Swinhoe's Snipe	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Common Snipe	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Long-billed Dowitcher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
Asian Dowitcher	0	0	1	0	4	8	4	2	5	0	1	0	0	0	0	0	0	8	8
Red Knot	0	0	0	0	0	0	0	0	0	1	0	2	5	0	3	2	1	5	5
Great Knot	1	1	0	2	0	1	23	0	4	3	7	15	8	12	10	11	11	23	23
Sanderling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-necked Stint	1	15	2	16	29	3	80	0	69	8	35	12	14	2	1	0	2	80	80
Little Stint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Temminck's Stint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long-toed Stint	0	0	0	0	1	0	5	0	11	0	0	0	1	0	0	0	0	11	11
Pectoral Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sharp-tailed Sandpiper	0	0	0	0	0	1	0	1	9	2	0	0	0	0	2	0	0	9	9
Dunlin	0	0	0	0	0	0	0	0	0	4	0	3	2	0	100	7	250	4	250
Curlew Sandpiper	1	51	20	65	4	11	38	25	26	12	3	0	2	1	1	0	3	65	65
Spoon-billed Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Broad-billed Sandpiper	0	3	0	3	0	0	3	0	2	3	5	0	0	1	0	0	0	5	5
Ruff	0	0	0	0	0	0	0	1	1	0	1	0	0	1	1	1	0	1	1
Sand Plover sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small wader sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large <i>tringa</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>466</b>	<b>1143</b>	<b>1415</b>	<b>1521</b>	<b>1256</b>	<b>1112</b>	<b>1687</b>	<b>1329</b>	<b>2335</b>	<b>1655</b>	<b>3327</b>	<b>2203</b>	<b>2066</b>	<b>2465</b>	<b>2077</b>	<b>3471</b>	<b>3957</b>	<b>2397</b>	<b>2397</b>



Figure 1. Total number of waders recorded at Mai Po Inner Deep Bay, autumn 2003

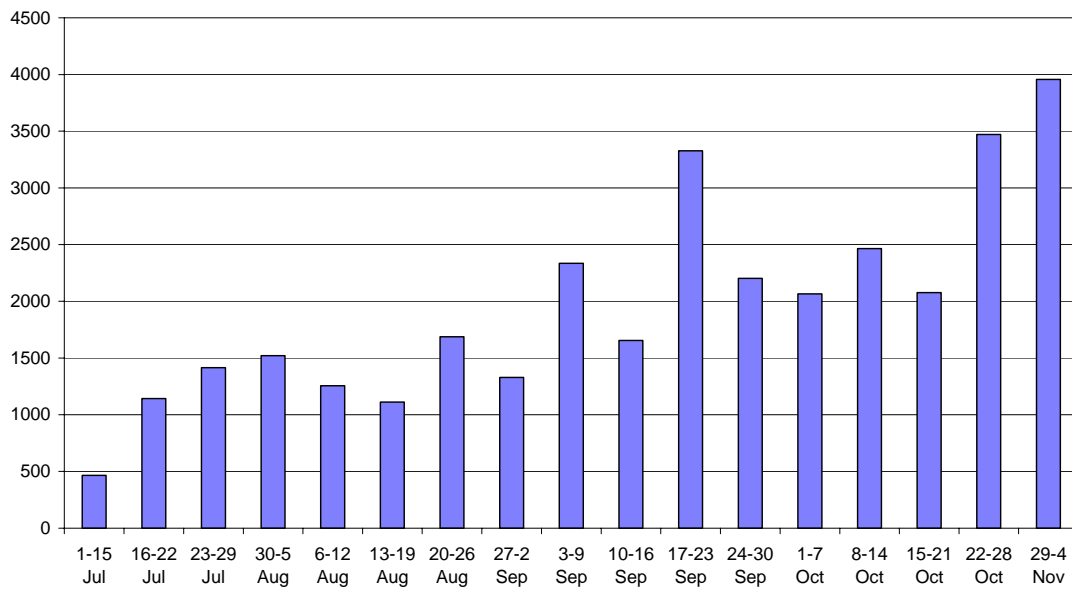


Figure 2. Counts of Black-winged Stilt at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

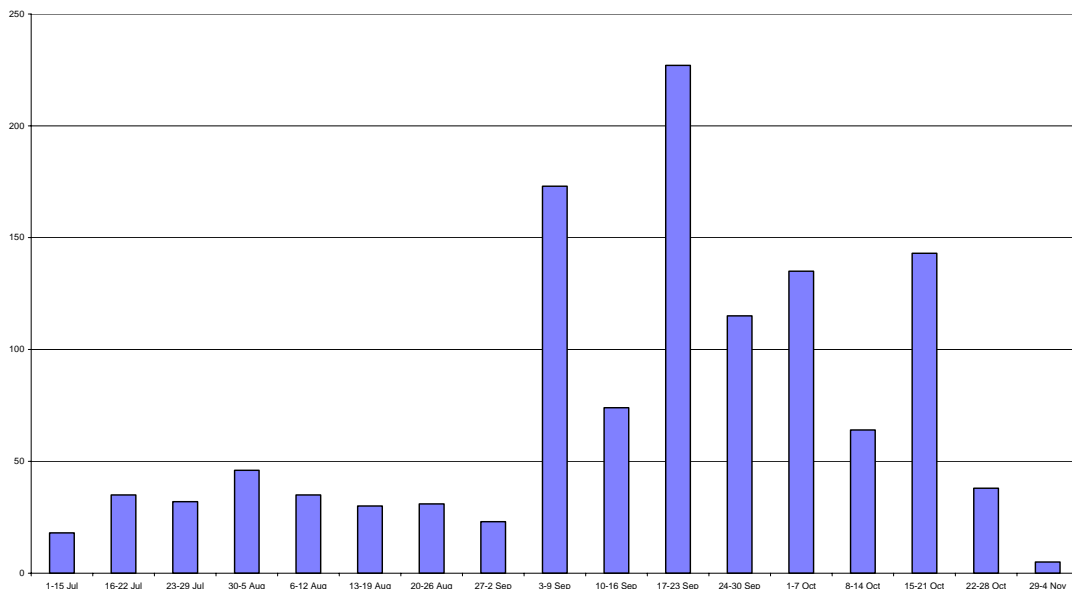


Figure 3. Counts of Pacific Golden Plover at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

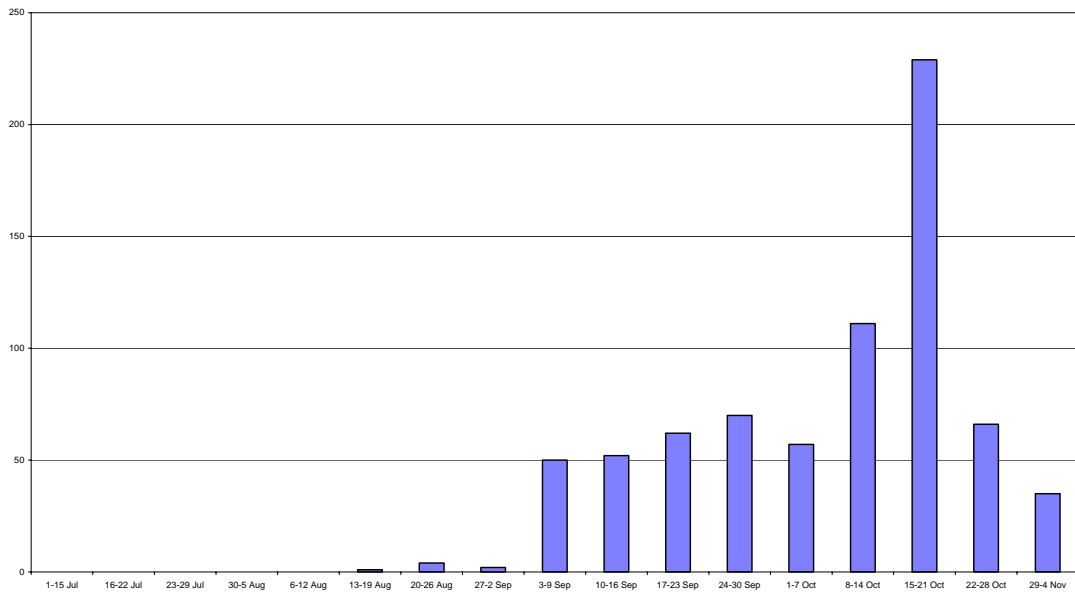


Figure 4. Counts of Kentish Plover at Mai Inner Deep Bay Ramsar Site, autumn 2003

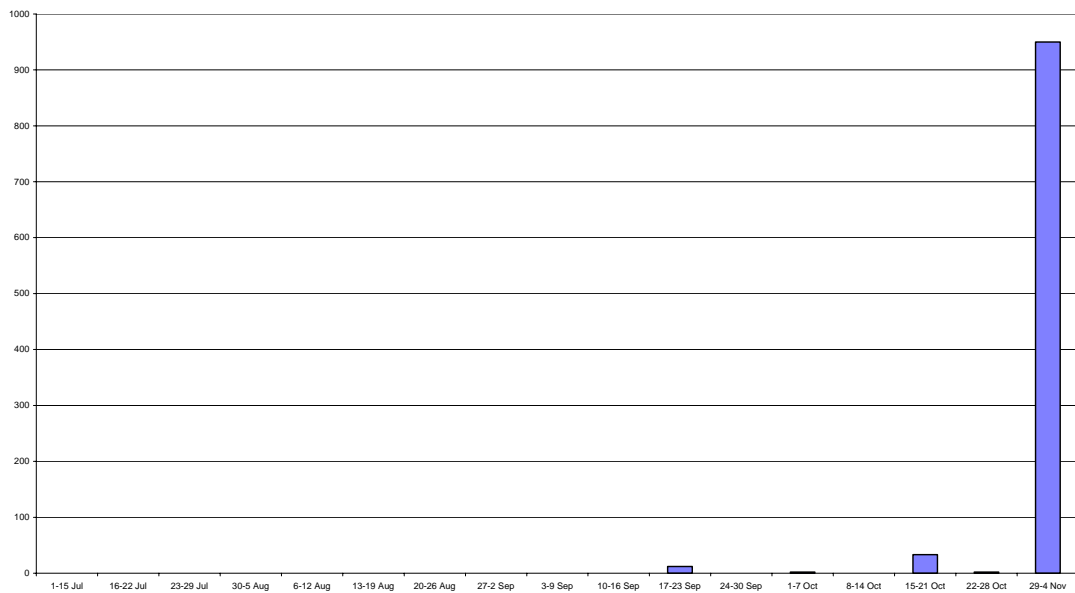


Figure 5. Counts of Grey Plover at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

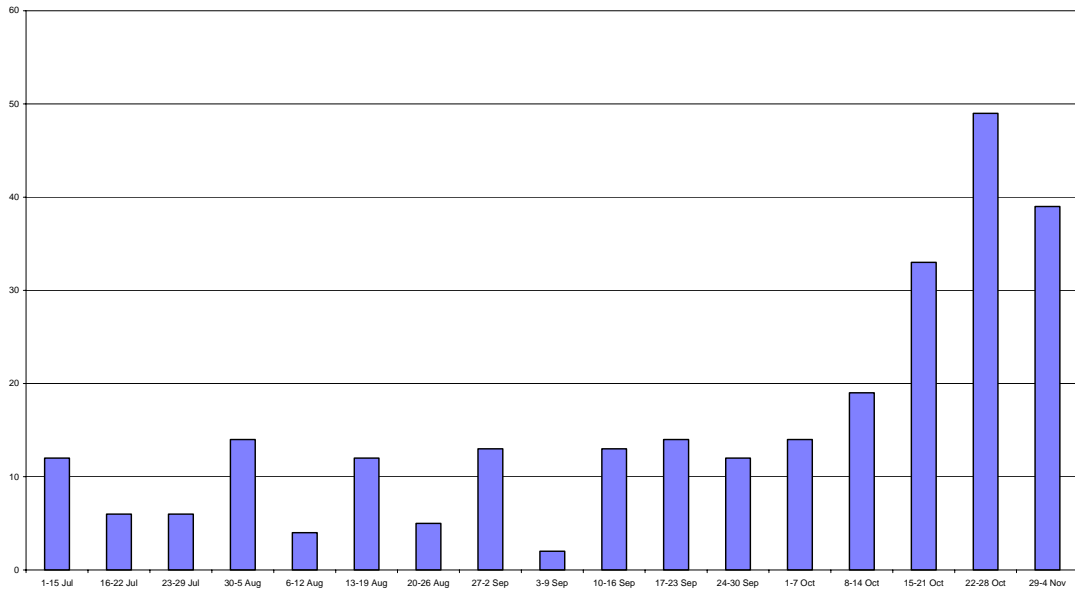


Figure 6. Counts of Lesser Sand Plover at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

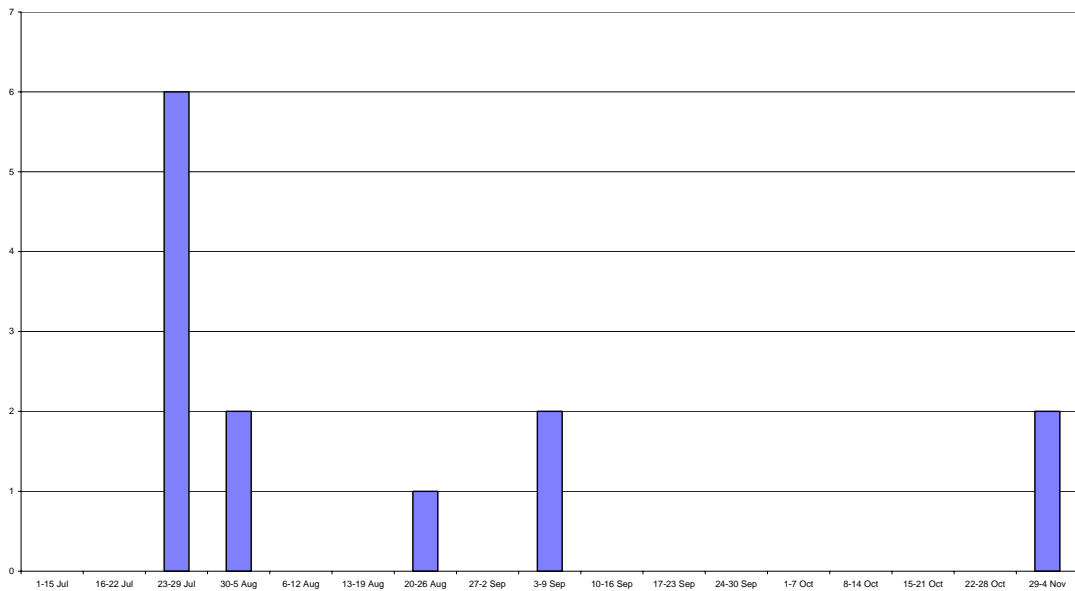


Figure 7. Counts of Greater Sand Plover at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

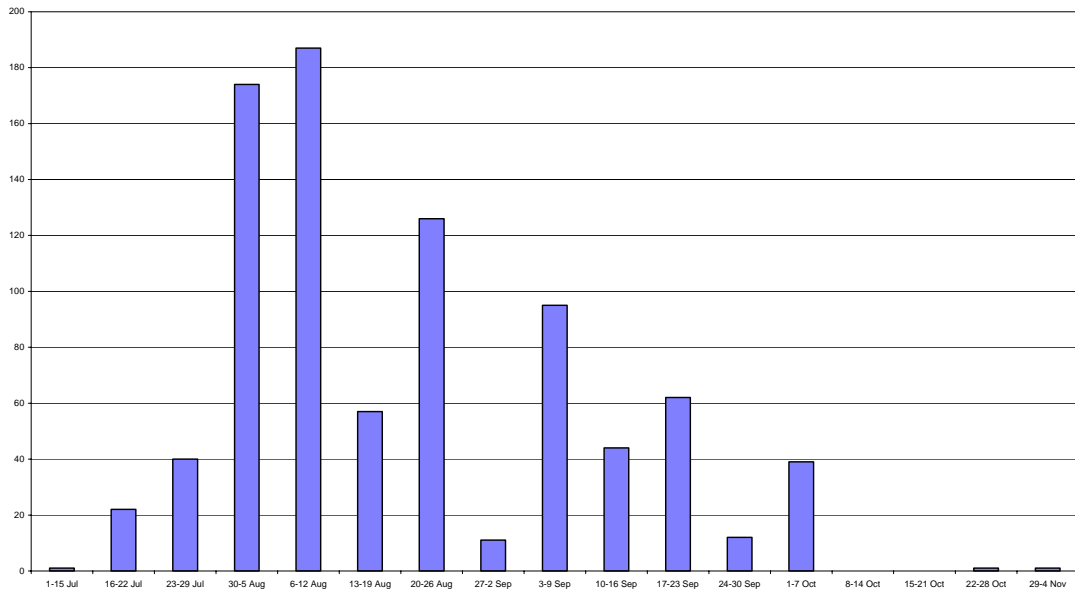


Figure 8. Counts of Black-tailed Godwit at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

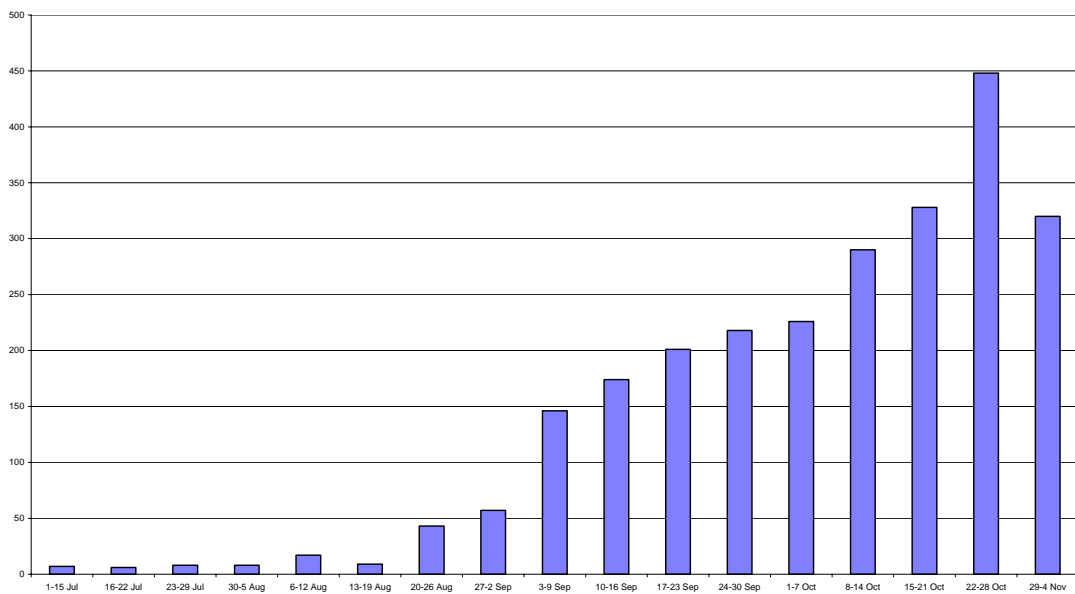




Figure 9. Counts of Bar-tailed Godwit at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

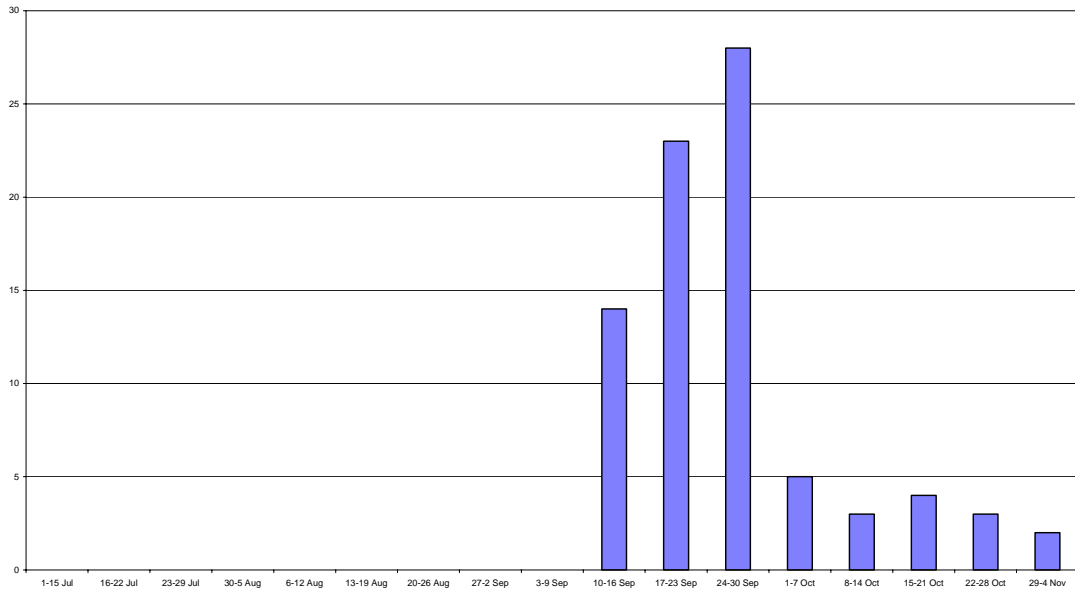


Figure 10. Counts of Whimbrel at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

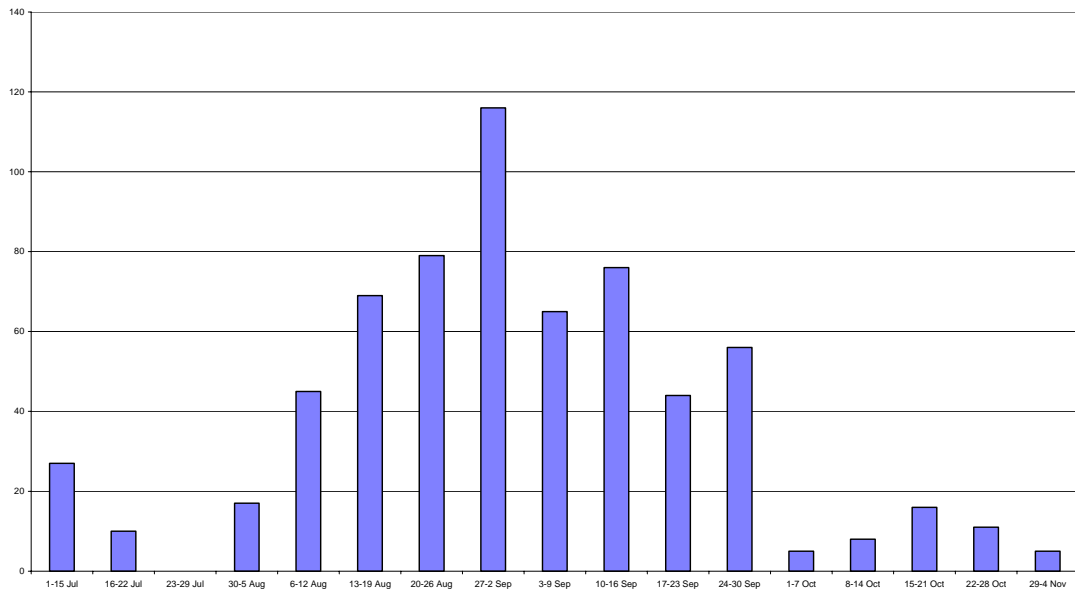


Figure 11. Counts of Eurasian Curlew at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

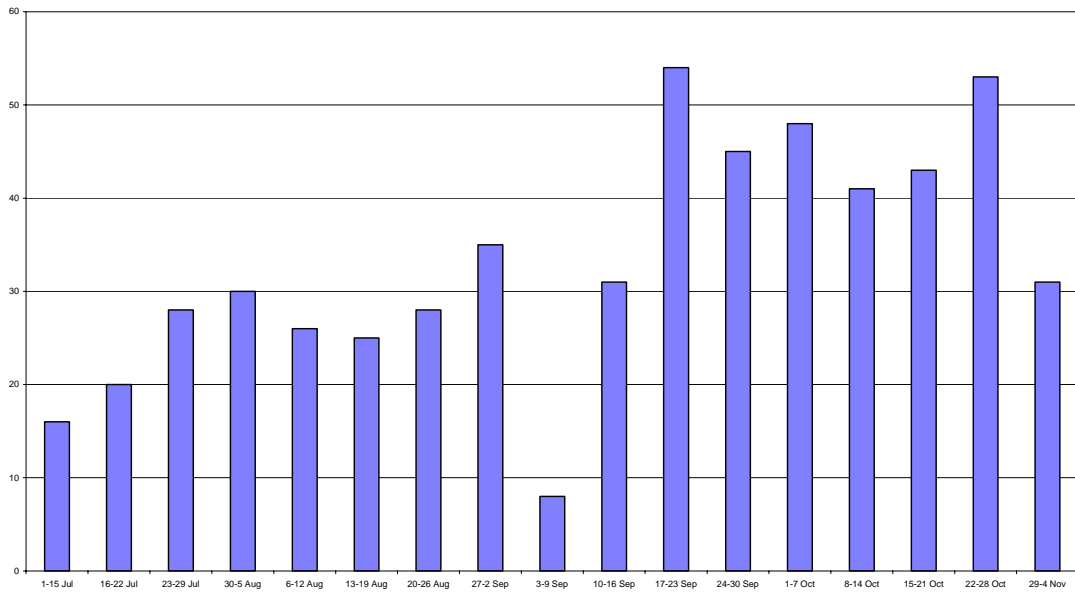


Figure 12. Counts of Spotted Redshank at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

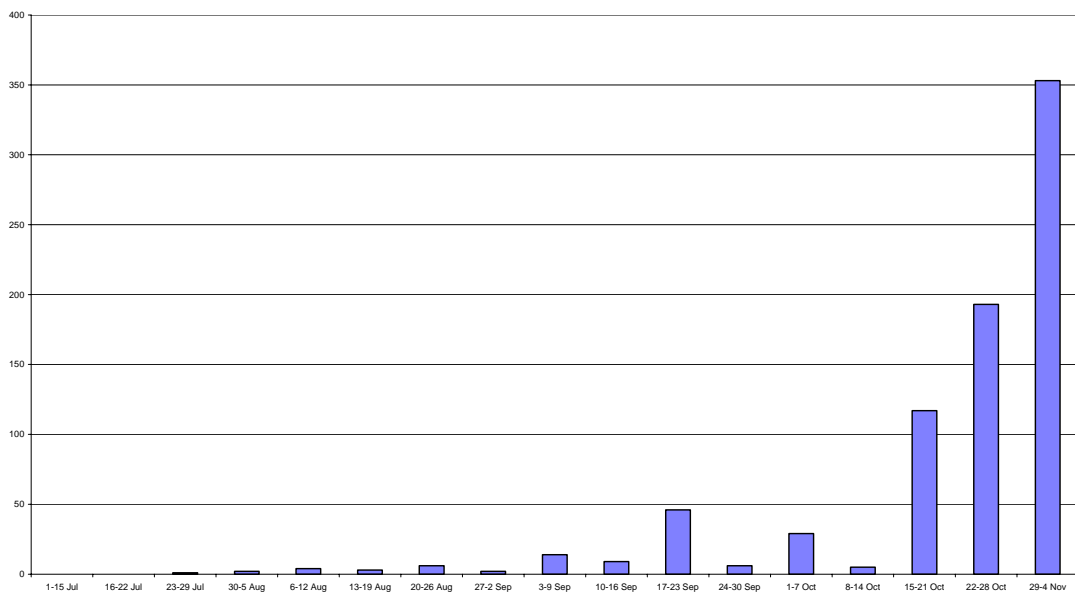


Figure 13. Counts of Common Redshank at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

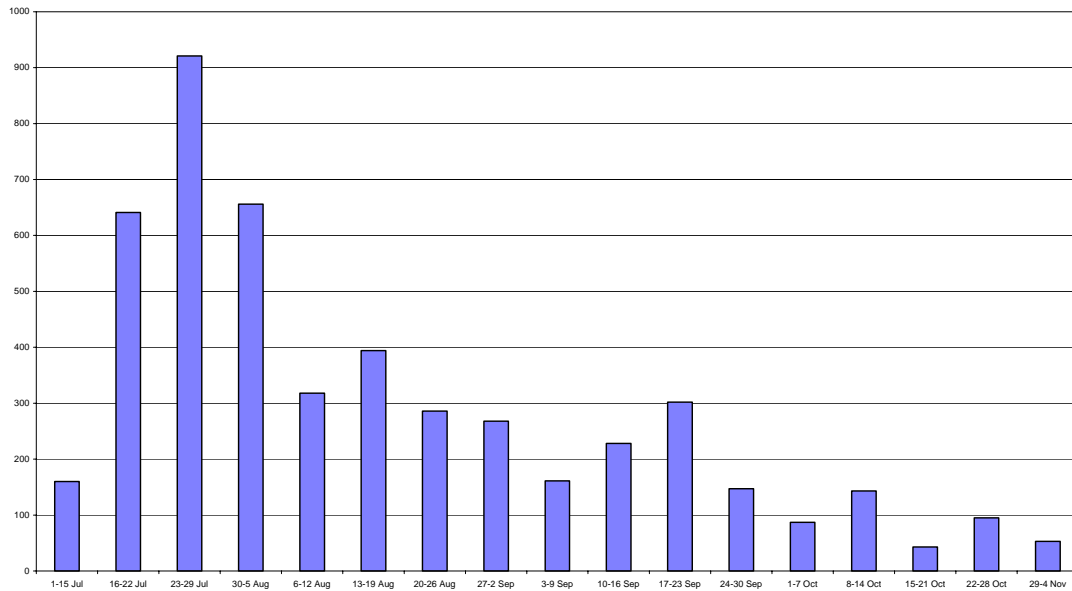


Figure 14. Counts of Marsh Sandpiper at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

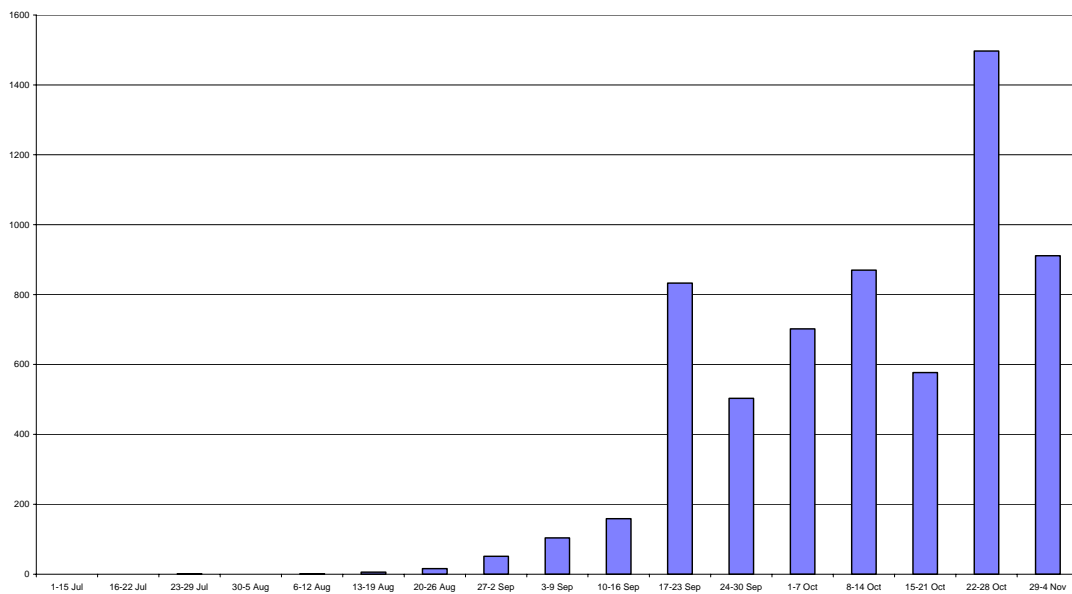


Figure 15. Counts of Common Greenshank at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

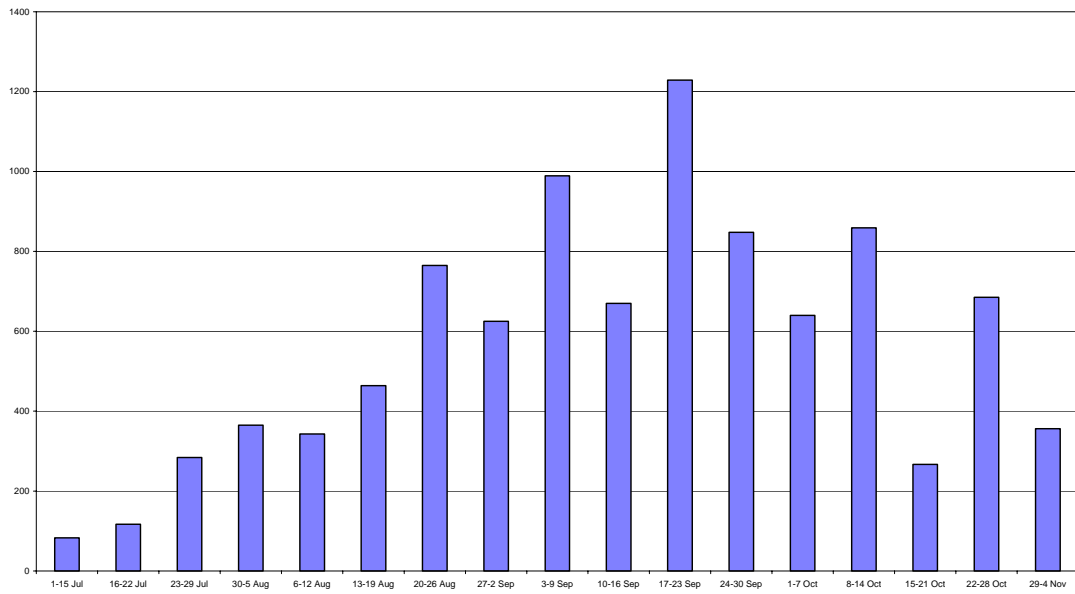


Figure 16. Counts of Wood Sandpiper at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

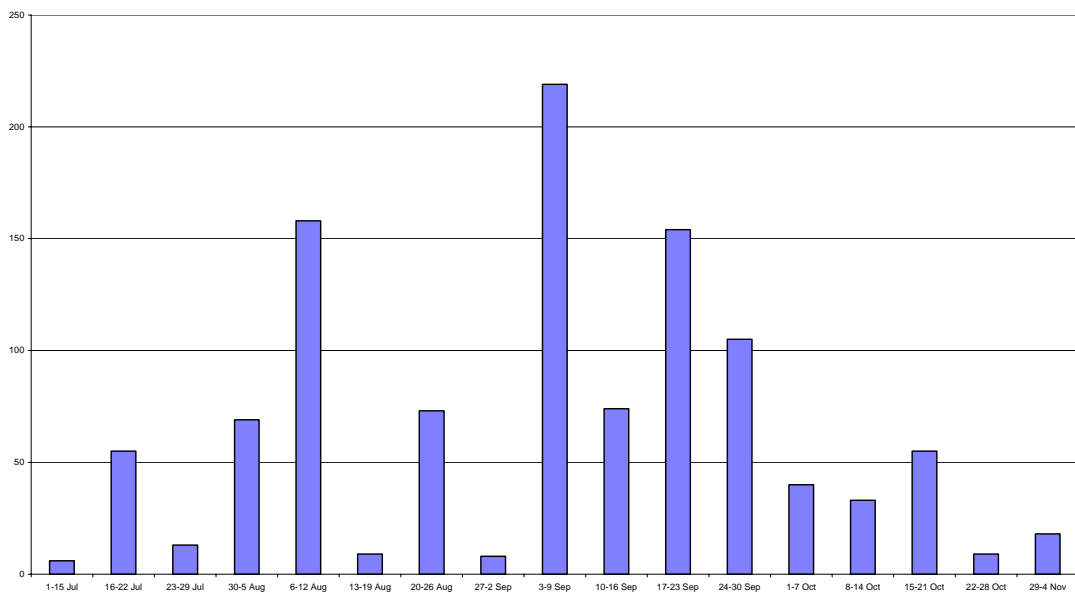


Figure 17. Counts of Great Knot at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

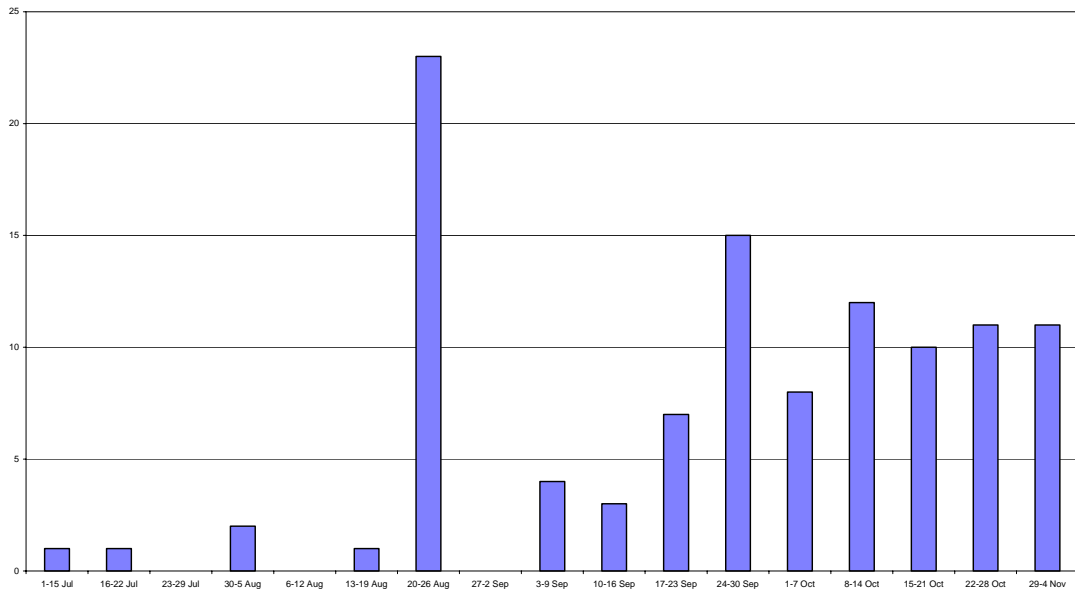


Figure 18. Counts of Red Knot at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

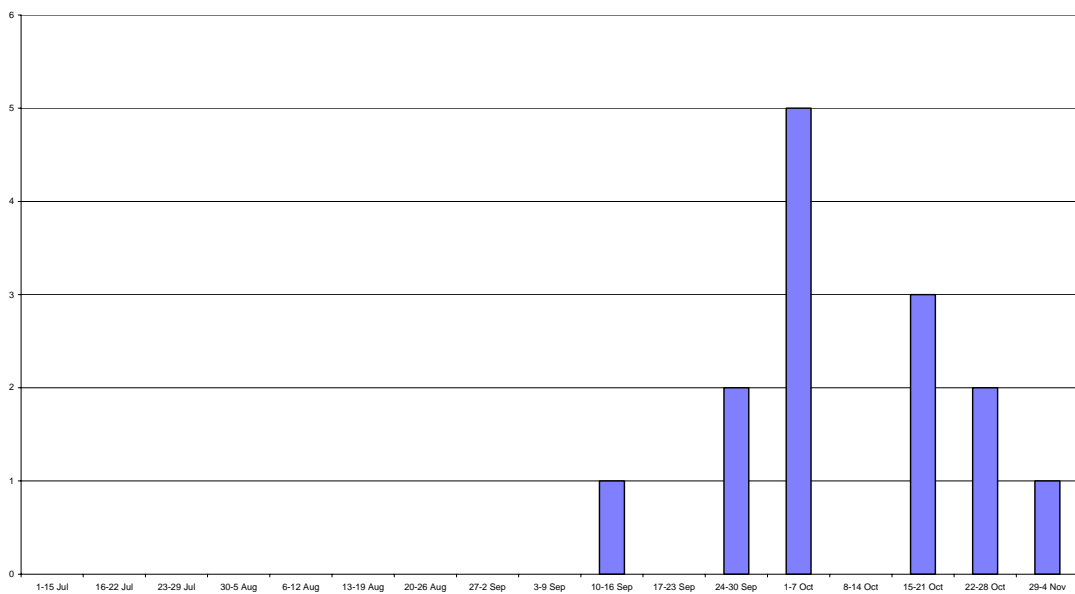


Figure 19. Counts of Broad-billed Sandpiper at Mai Po Inner Deep Bay Ramsar Site, autumn 2003

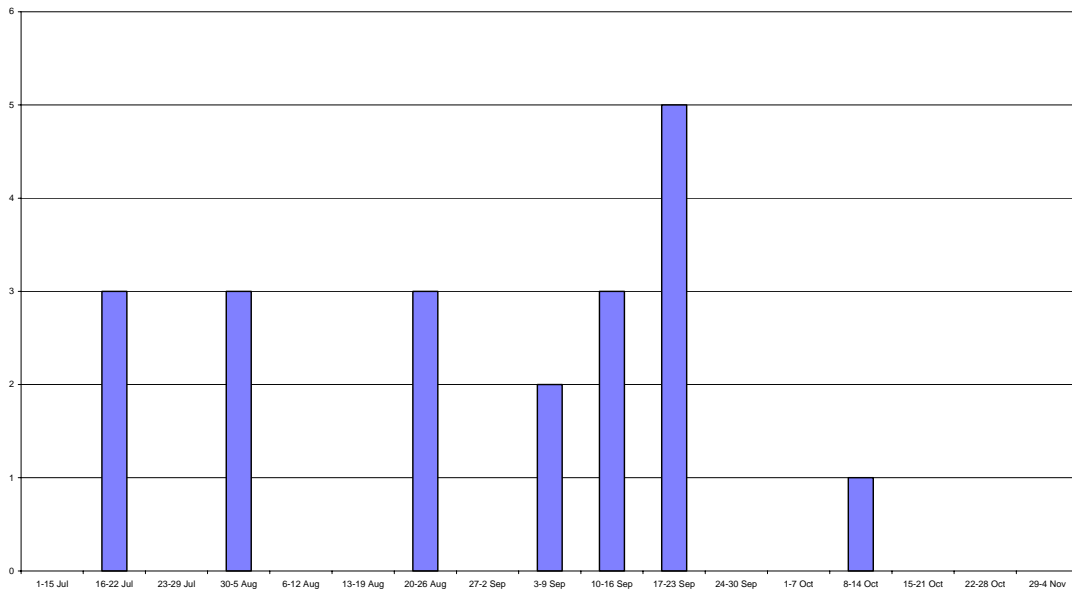


Figure 20. Total number of waders recorded at Mai Po Inner Deep Bay, spring 2004

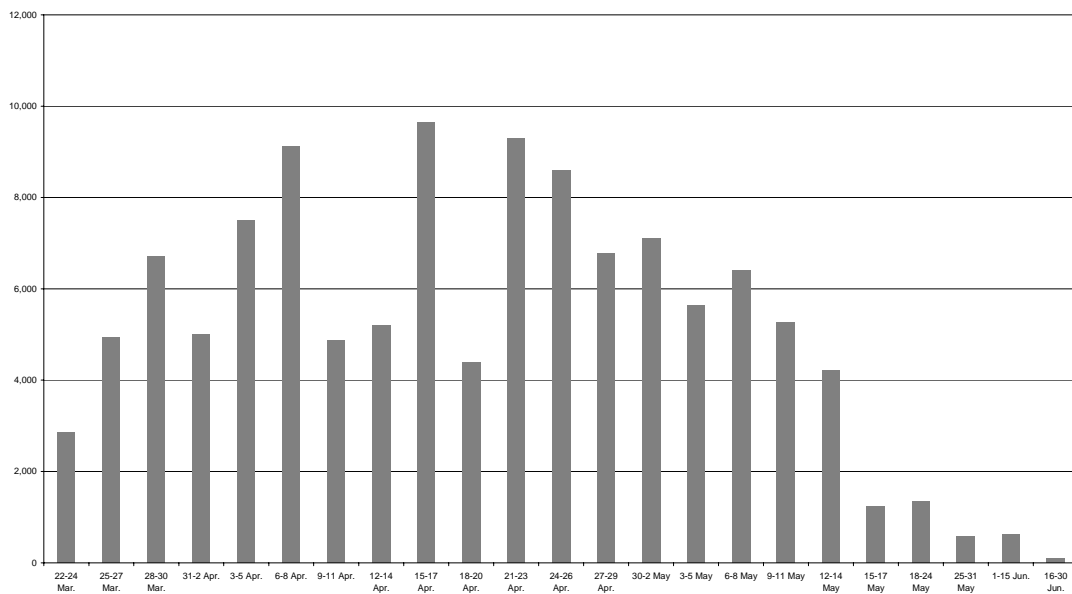


Figure 21. Counts of Pacific Golden Plover at Mai Po Inner Deep Bay Ramsar Site, spring 2004

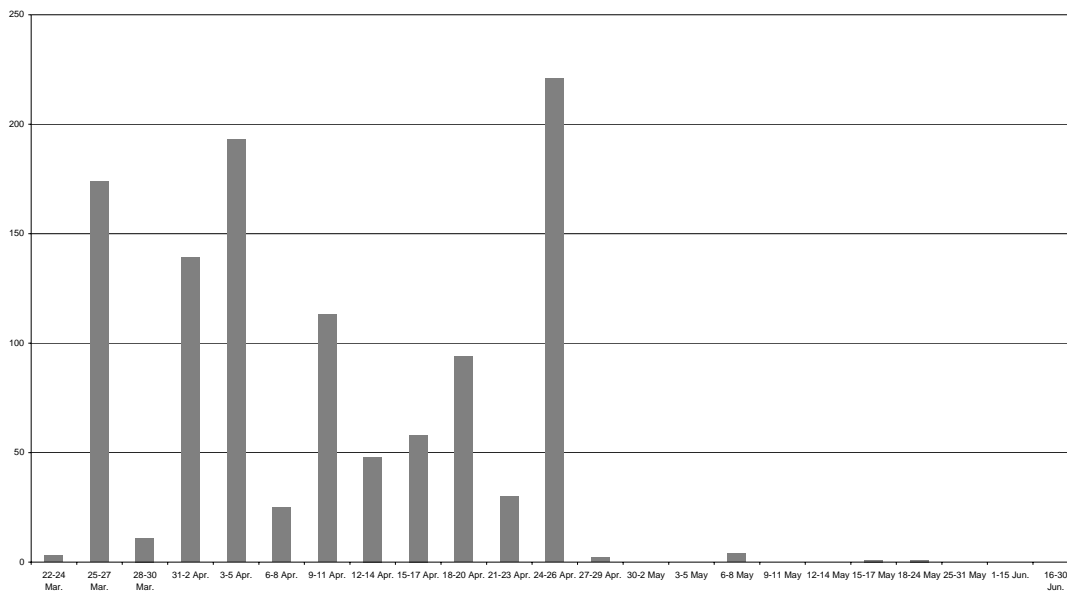


Figure 22. Counts of Lesser Sandplover at Mai Po Inner Deep Bay Ramsar Site, spring 2004

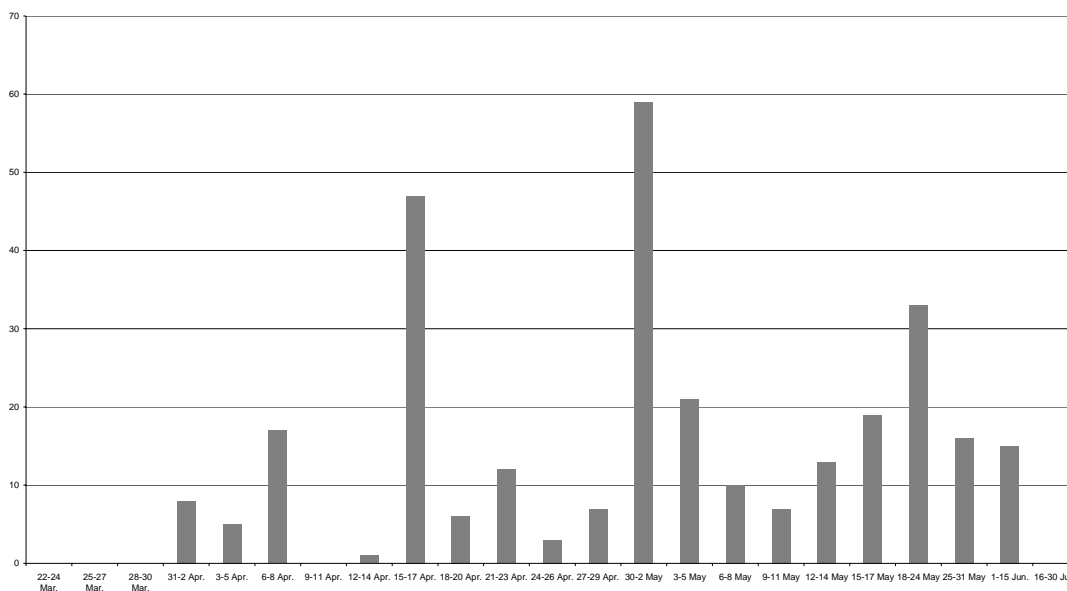


Figure 23. Counts of Greater Sandplover at Mai Po Inner Deep Bay Ramsar Site, spring 2004

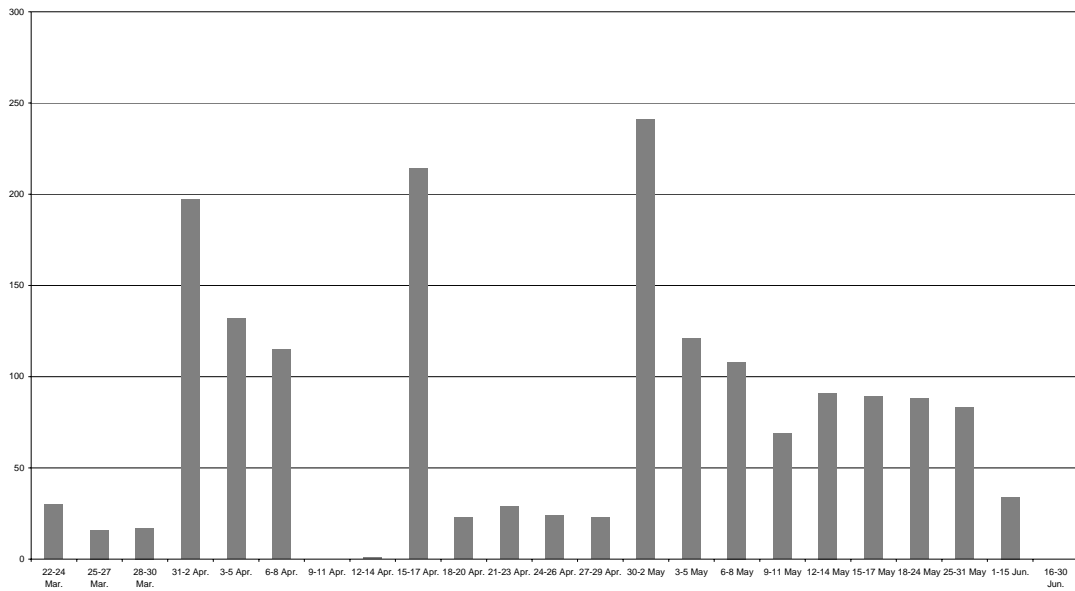


Figure 24. Counts of Black-tailed Godwit at Mai Po Inner Deep Bay Ramsar Site, spring 2004

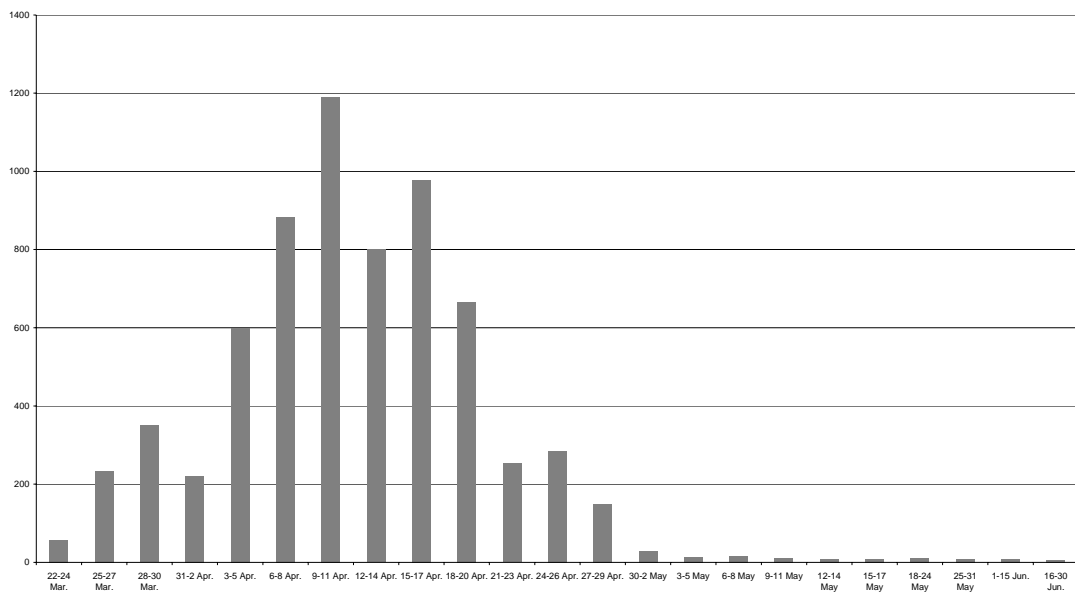




Figure 25. Counts of Spotted Redshank at Mai Po Inner Deep Bay Ramsar Site, spring 2004

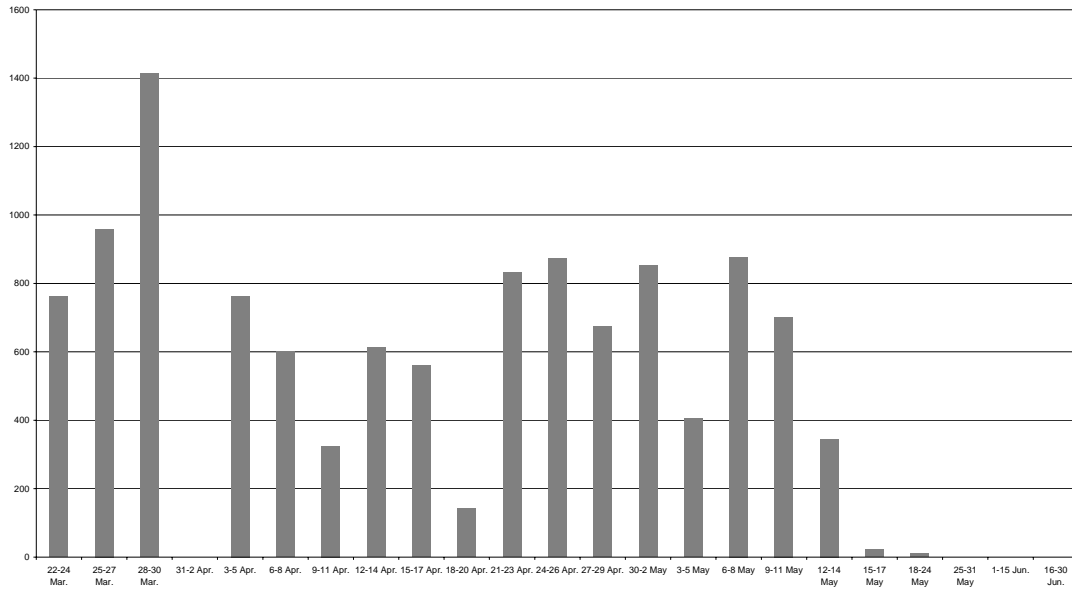


Figure 26. Counts of Common Redshank at Mai Po Inner Deep Bay Ramsar Site, spring 2004

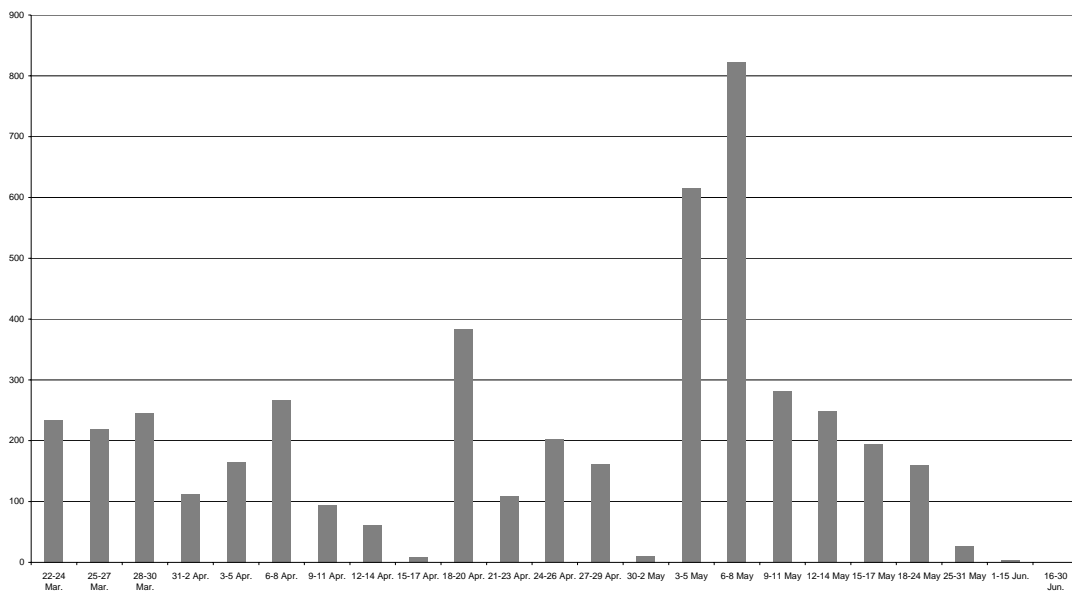


Figure 27. Counts of Marsh Sandpiper at Mai Po Inner Deep Bay Ramsar Site, spring 2004

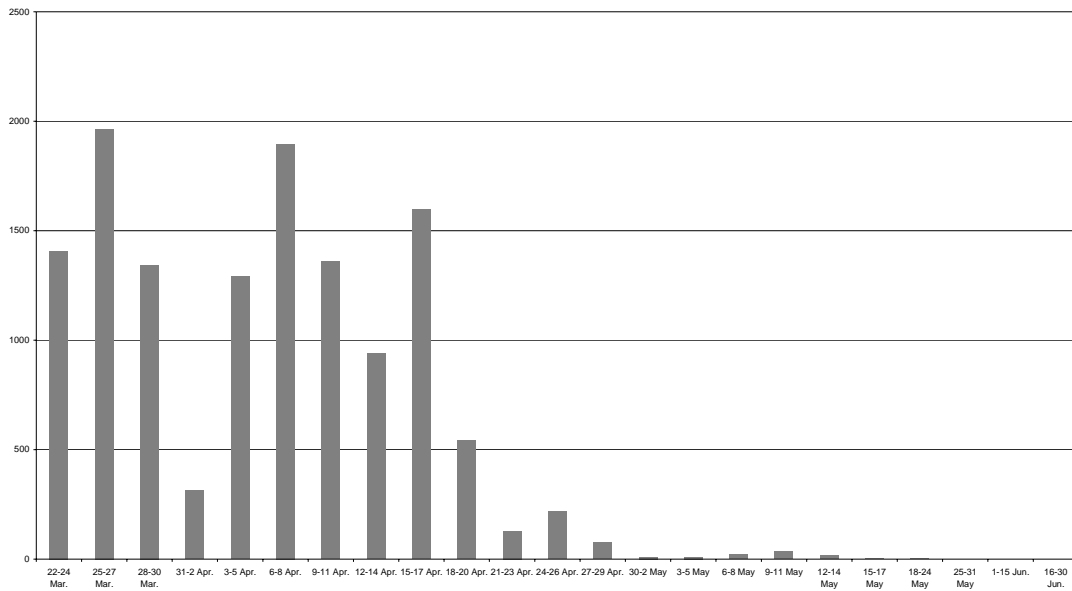


Figure 28. Counts of Common Greenshank at Mai Po Inner Deep Bay Ramsar Site, spring 2004

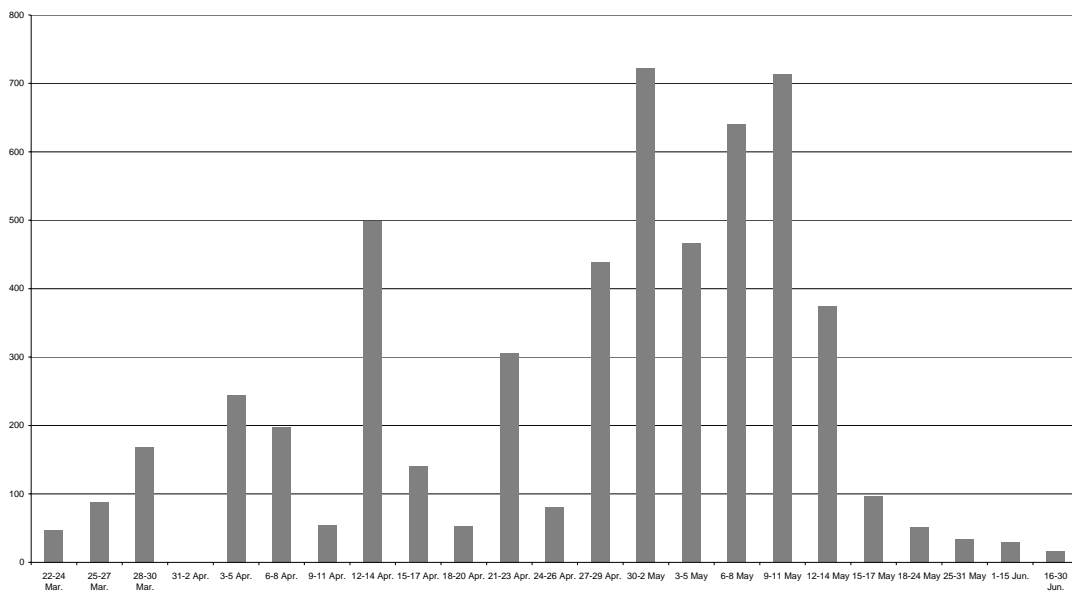


Figure 29. Counts of Terek Sandpiper at Mai Po Inner Deep Bay Ramsar Site, spring 2004

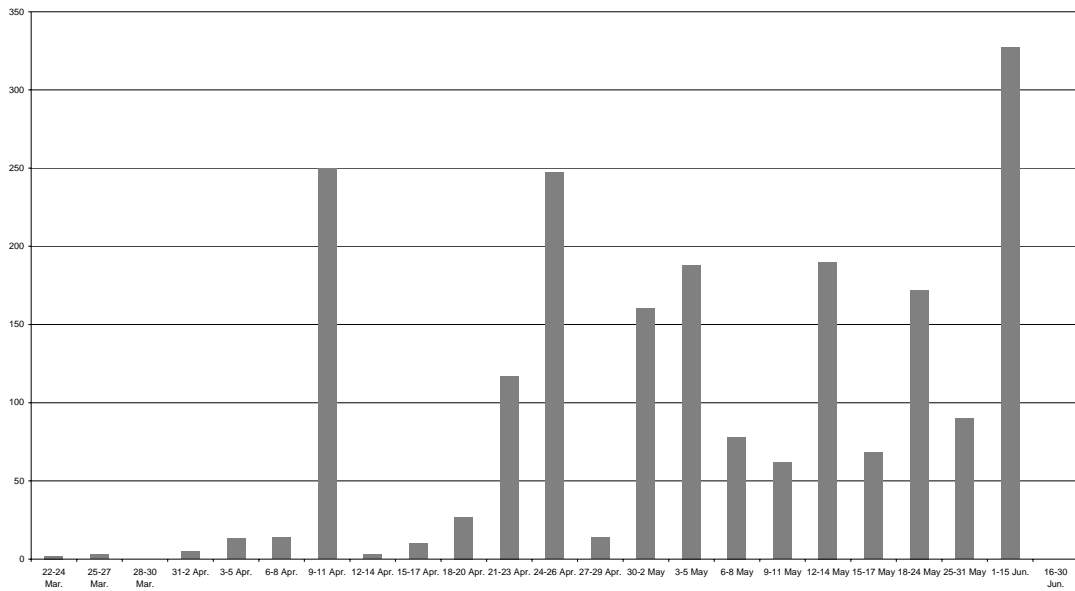


Figure 30. Counts of Grey-tailed Tattler at Mai Po Inner Deep Bay Ramsar Site, spring 2004

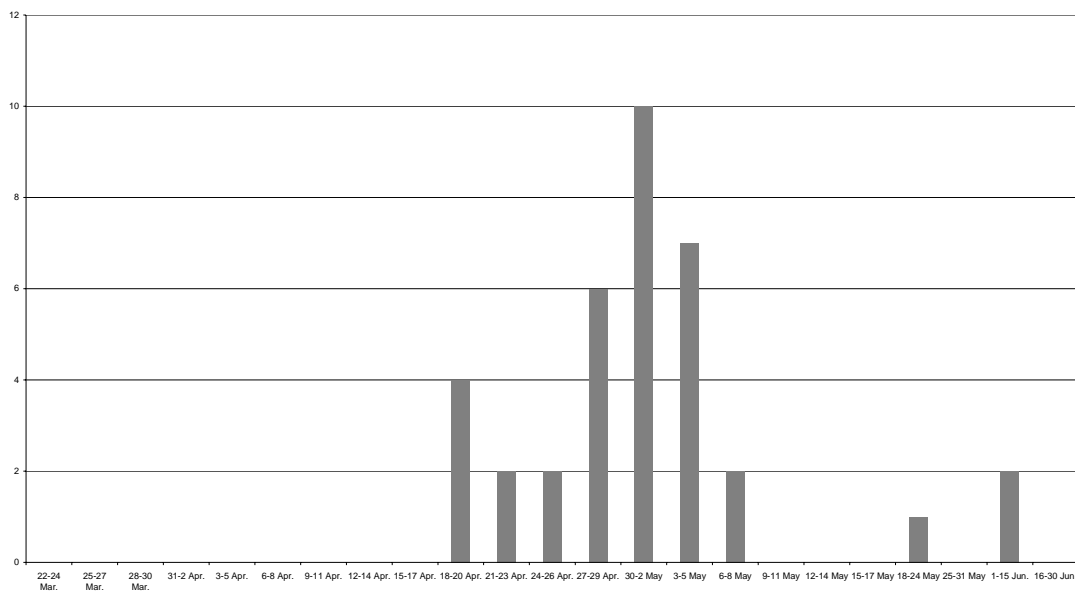


Figure 31. Counts of Ruddy Turnstone at Mai Po Inner Deep Bay Ramsar Site, spring 2004

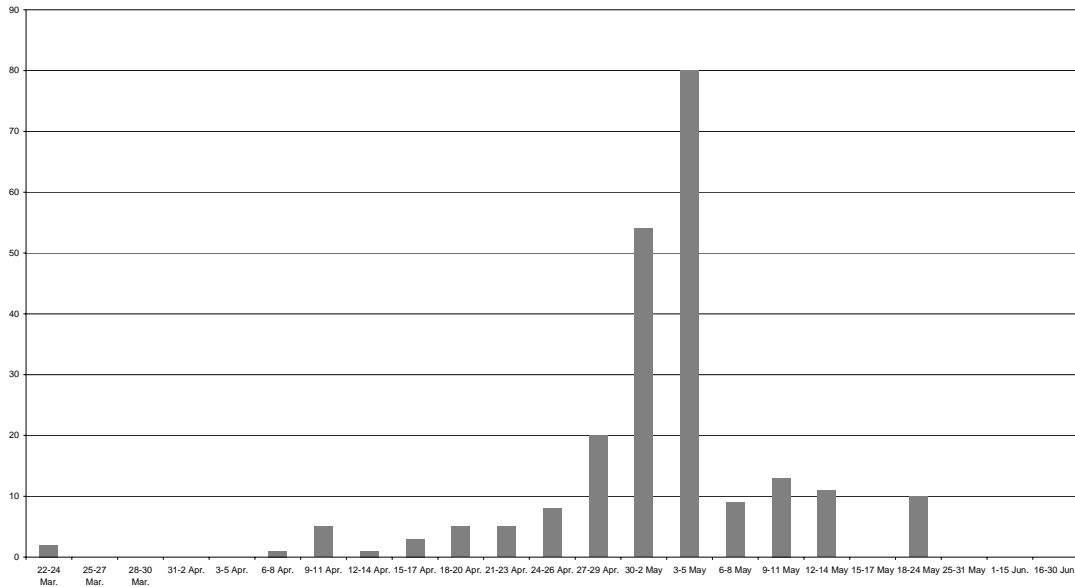


Figure 32. Counts of Asian Dowitcher at Mai Po Inner Deep Bay Ramsar Site, spring 2004

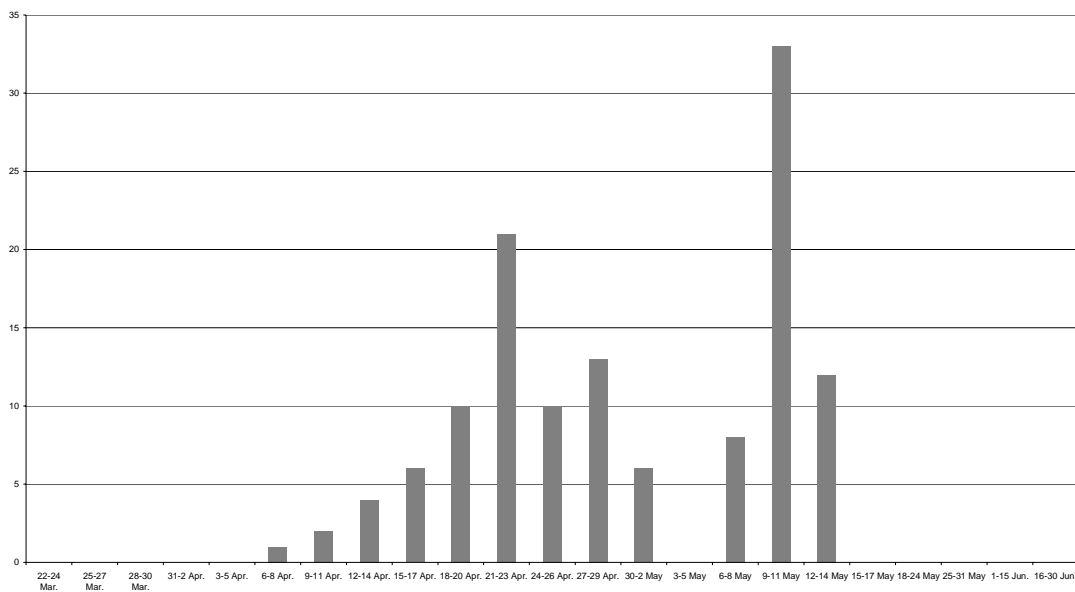


Figure 33. Counts of Red Knot at Mai Po Inner Deep Bay Ramsar Site, spring 2004

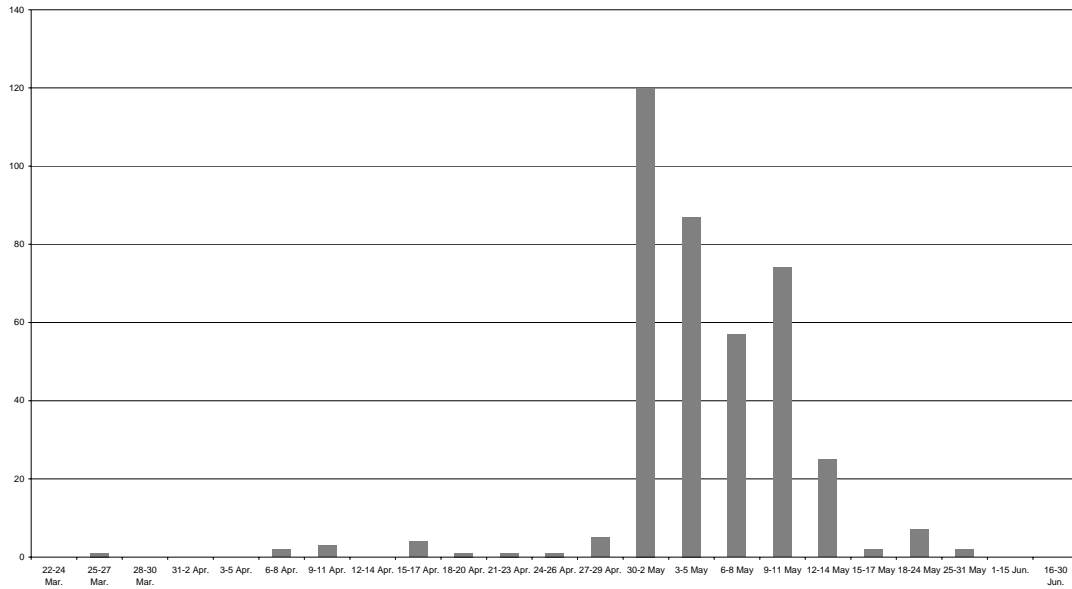


Figure 34. Counts of Great Knot at Mai Po Inner Deep Bay Ramsar Site, spring 2004

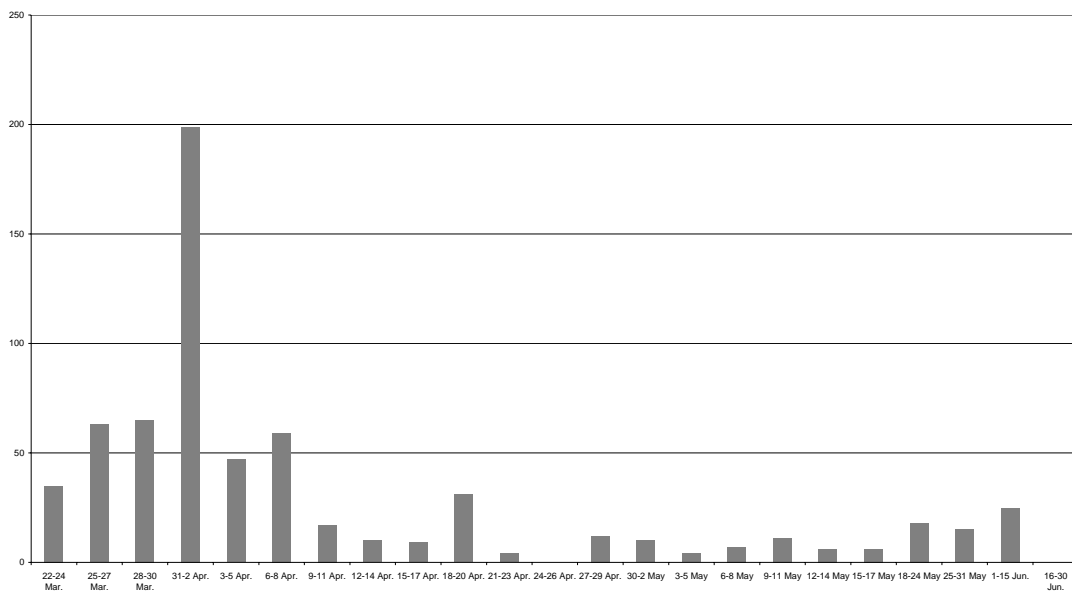


Figure 35. Counts of Red-necked Stint at Mai Po Inner Deep Bay Ramsar Site, spring 2004

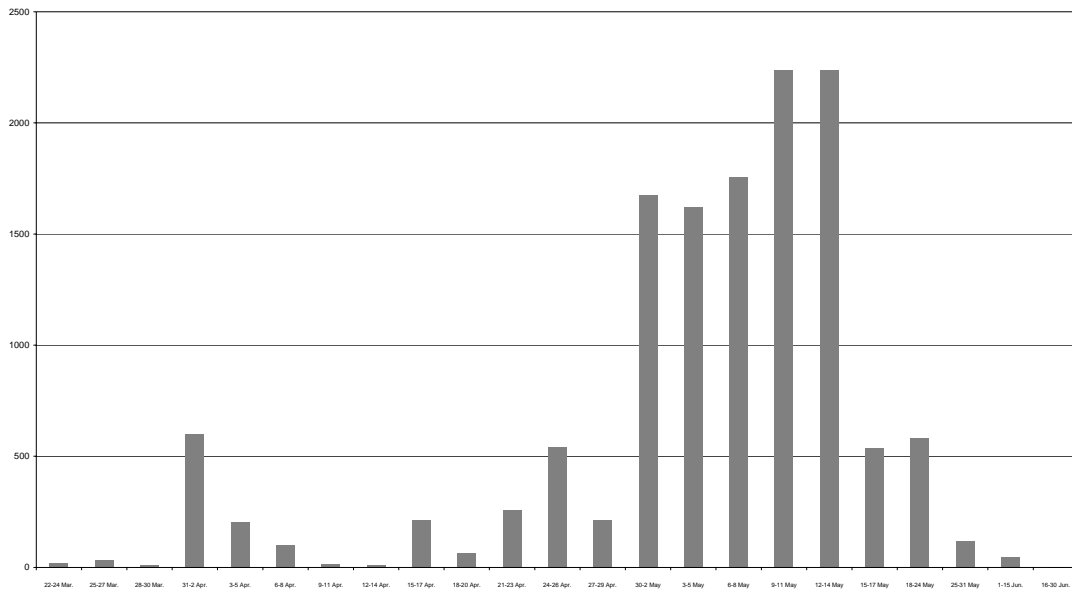


Figure 36. Counts of Sharp-tailed Sandpiper at Mai Po Inner Deep Bay Ramsar Site, spring 2004

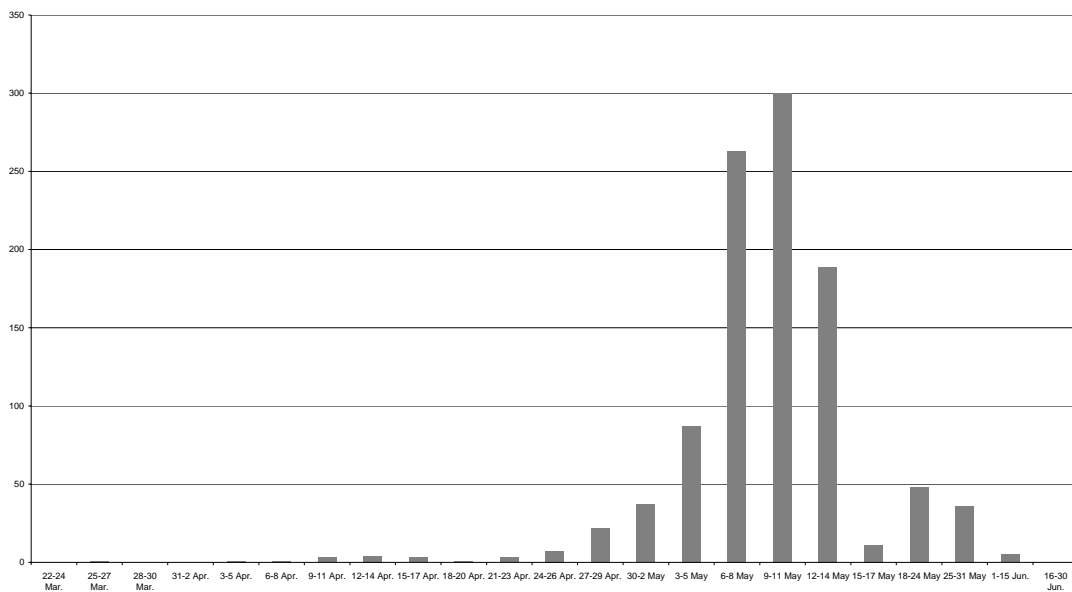


Figure 37. Counts of Curlew Sandpiper at Mai Po Inner Deep Bay Ramsar Site, spring 2004

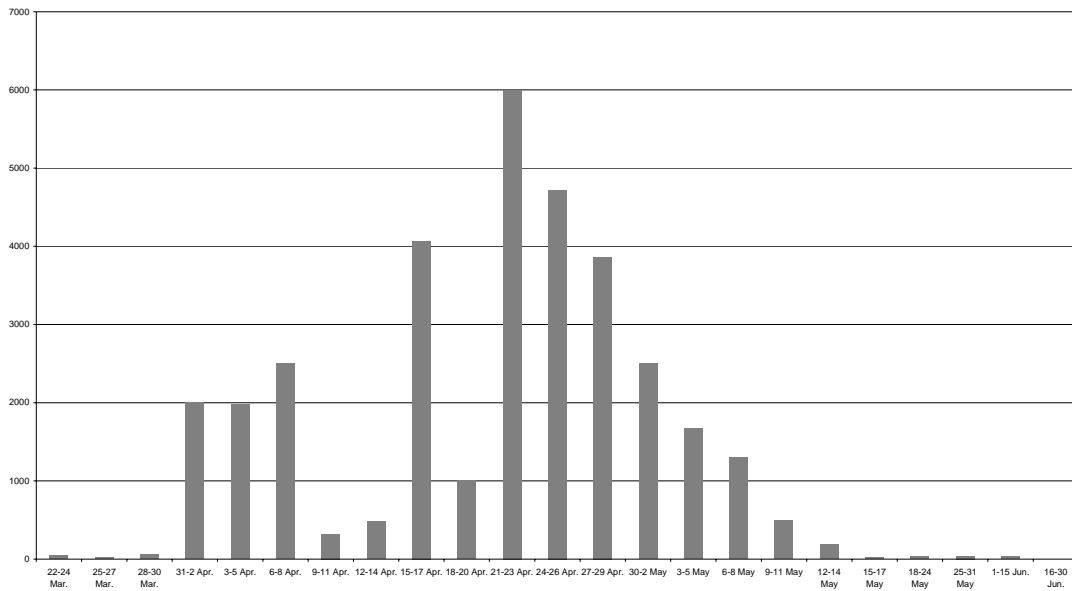
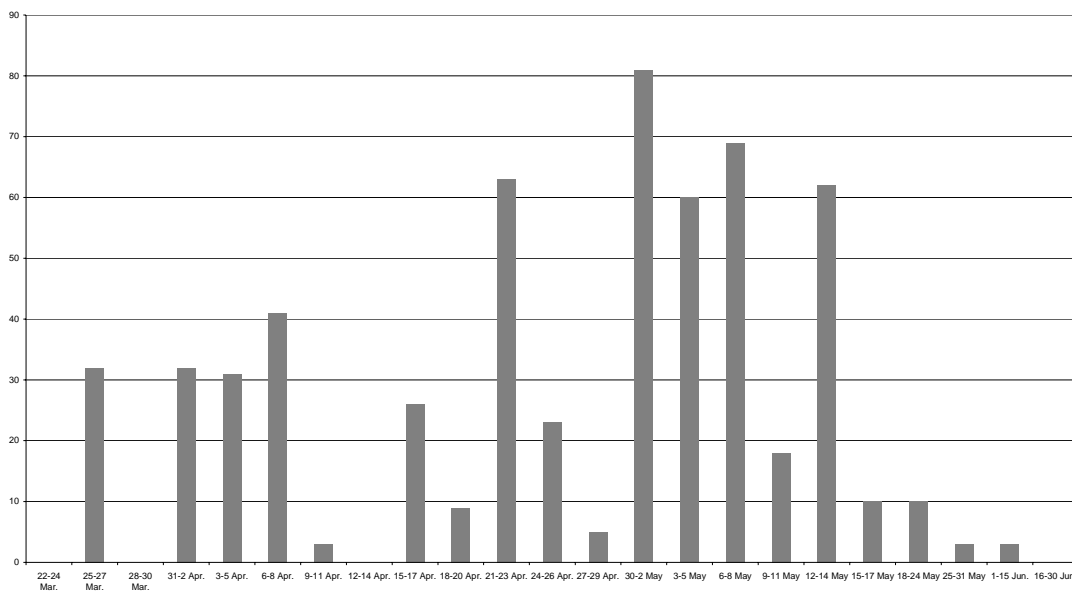


Figure 38. Counts of Broad-billed Sandpiper at Mai Po Inner Deep Bay Ramsar Site, spring 2004



Date	Observer	Species	Breeding plumage	Right Leg				Remarks
				Colour	Position	Colour	Position	
27-Jul-03	Yu Yat-tung	Curlew Sandpiper	Not recorded	Red	above			From Southeastern Australia
11-Aug-03	Yu Yat-tung	Greater Sand Plover	Not recorded	Yellow	above			From Northwestern Australia
11-Aug-03	Yu Yat-tung	Red-necked Stint	Not recorded	Yellow	above			From Northwestern Australia
26-Aug-03	Yu Yat-tung	Red-necked Stint	Not recorded	Red	above			From Southeastern Australia
23-Sep-03	Ying Hak-king	Common Greenshank	0	White	above	Yellow	below	From Mai Po, Hong Kong
23-Sep-03	Ying Hak-king	Common Redshank	0	Yellow	above			From Northwestern Australia
7-Oct-03	Yu Yat-tung	Common Redshank	Not recorded	Yellow	above			From Northwestern Australia
4-Nov-03	Yu Yat-tung	Common Redshank	Not recorded	White or Yellow	above			
4-Nov-03	Yu Yat-tung	Marsh Sandpiper	Not recorded	White or Yellow	above			
21-Mar-04	Ying Hak-king	Common Redshank	0	Yellow	above			From Northwestern Australia
27-Mar-04	GJ Carey	Curlew Sandpiper	5	Yellow	above			From Northwestern Australia
28-Mar-04	Yu Yat-tung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
28-Mar-04	GJ Carey	Great Knot	90	White	above	Yellow	below	From Mai Po, Hong Kong
28-Mar-04	GJ Carey	Great Knot	100	Yellow	above			From Northwestern Australia
5-Apr-04	GJ Carey	Common Redshank	60	White	above	Yellow	below	From Mai Po, Hong Kong
5-Apr-04	GJ Carey	Curlew Sandpiper	10	Orange	above			From Southeastern Australia
5-Apr-04	GJ Carey	Curlew Sandpiper	10	White or Yellow	above			
5-Apr-04	John Holmes	Curlew Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
5-Apr-04	GJ Carey	Curlew Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
5-Apr-04	GJ Carey	Great Knot	60	Orange	above			From Southeastern Australia
5-Apr-04	GJ Carey	Greater Sand Plover	90	Yellow	above			From Northwestern Australia
5-Apr-04	GJ Carey	Red-necked Stint	50	Yellow	above			From Northwestern Australia
6-Apr-04	GJ Carey	Curlew Sandpiper	10	Orange	above			From Southeastern Australia
6-Apr-04	GJ Carey	Great Knot	60	Orange	above			From Southeastern Australia
6-Apr-04	Jemi Wong	Great Knot	75	Orange	above			From Southeastern Australia
8-Apr-04	GJ Carey	Curlew Sandpiper	10	White or Yellow	above			
9-Apr-04	GJ Carey	Curlew Sandpiper	90	White or Yellow	above			
11-Apr-04	Yu Yat-tung	Pacific Golden Plover	Not recorded	White	above	Yellow	below	Flagged at Mai Po on 6 April 2004
11-Apr-04	Yu Yat-tung	Terek Sandpiper	Not recorded	White	above	Yellow	below	Flagged at Mai Po on 6 April 2004
18-Apr-04	GJ Carey	Great Knot	100	Yellow	above			From Northwestern Australia
19-Apr-04	John Holmes	Nordmann's Greenshank	75	White	above	Black	below	Flagged at Chongmindao, Shanghai, China
22-Apr-04	Yu Yat-tung	Broad-billed Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
22-Apr-04	Yu Yat-tung	Curlew Sandpiper	75	Orange	above			From Southeastern Australia
22-Apr-04	Yu Yat-tung	Curlew Sandpiper	100	Orange	above	Yellow	below	From Southern Australia
22-Apr-04	Yu Yat-tung	Curlew Sandpiper	100	Orange	above			From Southeastern Australia
22-Apr-04	Yu Yat-tung	Curlew Sandpiper	100	Yellow	above			From Northwestern Australia
22-Apr-04	John Holmes	Greater Sand Plover	0	White	above	Yellow	below	From Mai Po, Hong Kong
22-Apr-04	John Holmes	Grey Plover	50	White	above	Yellow	below	From Mai Po, Hong Kong
22-Apr-04	John Holmes	Red-necked Stint	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	0	Yellow	above			From Northwestern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Orange	above			From Southeastern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Orange	above			From Southeastern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Orange	above			From Southeastern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Yellow	above			From Northwestern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above	Yellow	below	From Southern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above			From Southeastern Australia
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
23-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Yellow	above			From Northwestern Australia
23-Apr-04	Tam Yiu-leung	Red-necked Stint	25	Yellow	above			From Northwestern Australia
23-Apr-04	Tam Yiu-leung	Red-necked Stint	Not provided	Orange	above	Yellow	below	From Southern Australia
23-Apr-04	Tam Yiu-leung	Sharp-tailed Sandpiper	0	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	0	Yellow	above			From Northwestern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Yellow	above			From Northwestern Australia



24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	25	Yellow	above			From Northwestern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	50	Orange	above			From Southeastern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	50	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above	Yellow	below	From Southern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above	Yellow	below	From Southern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above			From Southeastern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	Orange	above			From Southeastern Australia
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
24-Apr-04	Tam Yiu-leung	Red-necked Stint	25	Orange	above			From Southeastern Australia
24-Apr-04	Tam Yiu-leung	Red-necked Stint	25	Yellow	above			From Northwestern Australia
4-May-04	Yu Yat-tung	Common Greenshank	75	White	above	Yellow	below	From Mai Po, Hong Kong
4-May-04	Yu Yat-tung	Common Sandpiper	Nil	White	above	Yellow	below	Flagged at 3 May 2004
4-May-04	Yu Yat-tung	Red-necked Stint	0	Orange	above			From Southeastern Australia
4-May-04	Yu Yat-tung	Red-necked Stint	25	Orange	above			From Southeastern Australia
7-May-04	Yu Yat-tung	Red-necked Stint	0	Orange	above			From Southeastern Australia
8-May-04	Mike Chalmers	Common Redshank	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
8-May-04	Mike Chalmers	Curlew Sandpiper	Not provided	Yellow	above			From Southeastern Australia
8-May-04	Mike Chalmers	Curlew Sandpiper	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Curlew Sandpiper	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Grey-tailed Tattler	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Red Knot	100	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Red Knot	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Red Knot	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Red Knot	Not provided	Yellow	above			From Northwestern Australia
8-May-04	Mike Chalmers	Red-necked Stint	Not provided	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Curlew Sandpiper	75	Yellow	above			From Northwestern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	0	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	0	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	25	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	50	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	50	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	50	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	50	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above	Yellow	below	From Southern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
10-May-04	Yu Yat-tung	Red-necked Stint	75	White	above	Yellow	below	From Mai Po, Hong Kong
16-May-04	Yu Yat-tung	Red-necked Stint	25	Orange	above			From Southeastern Australia
16-May-04	Yu Yat-tung	Red-necked Stint	25	Orange	above			From Southeastern Australia
16-May-04	Yu Yat-tung	Red-necked Stint	75	Orange	above			From Southeastern Australia
17-May-04	Yu Yat-tung	Grey Plover	0	White	above	Yellow	below	Flagged at 15 May 2004
17-May-04	Yu Yat-tung	Red Knot	100	Yellow	above			From Northwestern Australia
19-May-04	Mike Leven	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Greater Sand Plover	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Greater Sand Plover	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Greater Sand Plover	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Grey Plover	0	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Red Knot	100	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	above	Yellow	below	From Southern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	Orange	Not provided			From Southeastern Australia
19-May-04	Mike Leven	Red-necked Stint	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Red-necked Stint	Not provided	Yellow	Not provided			From Northwestern Australia
19-May-04	Mike Leven	Terek Sandpiper	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Terek Sandpiper	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
19-May-04	Mike Leven	Terek Sandpiper	Not provided	White	above	Yellow	below	From Mai Po, Hong Kong
22-May-04	John Holmes	Red-necked Stint	50	Orange	above			From Southeastern Australia
22-May-04	John Holmes	Red-necked Stint	50	Orange	above			From Southeastern Australia
22-May-04	John Holmes	Red-necked Stint	75	Orange	above	Yellow	below	From Southern Australia
23-May-04	John Holmes	Curlew Sandpiper	0	White	above	Yellow	below	From Mai Po, Hong Kong
23-May-04	John Holmes	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-May-04	John Holmes	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
23-May-04	John Holmes	Curlew Sandpiper	75	White	above	Yellow	below	From Mai Po, Hong Kong
23-May-04	John Holmes	Red-necked Stint	25	Orange	above			From Southeastern Australia

23-May-04	John Holmes	Red-necked Stint	25	Orange	above			From Southeastern Australia
23-May-04	John Holmes	Red-necked Stint	25	Orange	above			From Southeastern Australia
23-May-04	John Holmes	Red-necked Stint	25	Orange	above			From Southeastern Australia
23-May-04	John Holmes	Red-necked Stint	50	Orange	above			From Southeastern Australia
27-May-04	Yu Yat-tung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Curlew Sandpiper	25	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	0	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	0	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	25	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	25	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	25	White	above	Yellow	below	From Mai Po, Hong Kong
27-May-04	Yu Yat-tung	Greater Sand Plover	25	White	above	Yellow	below	From Mai Po, Hong Kong
8-Jun-04	Yu Yat-tung	Red-necked Stint	25	Orange	above			From Southeastern Australia
9-Jun-04	Yu Yat-tung	Red-necked Stint	0	Orange	above	Yellow	below	From Southern Australia
10-Jun-04	Yu Yat-tung	Curlew Sandpiper	0	White	above	Yellow	below	From Mai Po, Hong Kong
11-Jun-04	Yu Yat-tung	Greater Sand Plover	0	White	above	Yellow	below	From Mai Po, Hong Kong