



The International Black-faced Spoonbill Census 2010

黑臉琵鷺全球同步普查 2010

Hong Kong Bird Watching Society
香港觀鳥會

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The International Black-faced Spoonbill Census 2010

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Black-faced Spoonbill *Platalea minor* at Mai Po Nature Reserve, Hong Kong.

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The Hong Kong Bird Watching Society Ltd.

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香港觀鳥會有限公司
(認可公共性質慈善機構)

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The International Black-faced Spoonbill Census 2010

English Report

The International Black-faced Spoonbill Census 2010

Yat-tung Yu

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Hong Kong Bird Watching Society

Abstract

The annual International Black-faced Spoonbill Census was conducted on 8-10 January 2010. This is an important initiative to gather comparable figures for assessing the health of the wintering population and distribution range of the Black-faced Spoonbill on an annual basis. This census recorded a total of 2,347 Black-faced Spoonbills, scoring a new height for the population of this species. This record peak count also represents an increase of 15% from the last year's figure. Same as previous censuses, Tsengwen River estuary of Tainan as well as Deep Bay between Hong Kong and Shenzhen are the two biggest wintering sites of the Black-faced Spoonbill. A total of 95 Black-faced Spoonbills were also observed at Xinhua Bay, Fujian, which has now evolved into another important wintering site of this globally endangered species.

Introduction

Black-faced Spoonbill *Platalea minor* is listed as a globally endangered species due to its small known population and restricted range (Collar *et al.* 1994, BirdLife International 2000, 2004, 2010). This species inhabits along the coastal areas on the eastern fringe of Asia (Hancock *et al.* 1992, del Hoyo *et al.* 1992, Yu and Swennen 2004). In early 1990s, this species began to draw the attention of conservationists as fewer than 300 individuals were left at a few sites in the East Asian region (Kennerley 1990). Subsequently, this annual census was inaugurated in 1993 with a view to assessing the wintering population of the Black-faced Spoonbills. Since then, the wintering population was found to be recovering through natural population expansion and conservation efforts in some of the sites. Numbers thereafter exceeded 1,000 individuals in 2003 (Yu 2003) and soared further to over 2,000 in both 2008 and 2009 (Yu 2009).

This census was regarded as one of high priority by Severinghaus *et al.* (1995) because it proved to be an effective means for gathering annual figures on the

population and distribution of wintering Black-faced Spoonbills through international cooperation. The Hong Kong Bird Watching Society, an affiliate of BirdLife International, began to spearhead this census since 2003 onwards. This report aims to present results of the censuses conducted in January 2010.

Method

Previous censuses were unanimously held in mid-winter as the wintering populations of spoonbills seemed to be stable at around this time of the year. In addition, the exact dates for the censuses usually coincide with dates of high tides in Red River Delta in Vietnam and Deep Bay between Hong Kong and Shenzhen because high tide facilitates the counting in these sites. As for the 2010 census, the census period was scheduled in 8-10 January. Geographical area covered by this census is shown in map 1. Guildlines were sent to surveyors in advance of the census as the technical basis. Most of field counts were done within the census period but, for some sites which are in close proximity such as Mai Po and Futian in the Deep Bay area where the spoonbills can fly between these sites within an hour, counts were conducted in the two sites simultaneously. All counts in the census were made with binoculars and telescopes.

Counting of spoonbills is attributed to the voluntary efforts by observers including experienced bird watchers, conservationists, researchers, ornithologists and government officers working in reserves. Census results were summarized by coordinators in the respective regions or individual counters before passing to the international coordinator for further analysis and announcement.

Results and discussion

Overview

This census recorded a total of 2,347 Black-faced Spoonbills in the East Asia region, with the majority along the coast. This figure symbolizes a new high population height for this species since the founding of this census and also embraces an increase of 15% from the last year's toll (table 1 and 9). The average increase rate maintains at 13% (with SD = 10, table 9). In particular, such increase is mainly contributed by an upsurge in the number of the Black-faced Spoonbills recorded in the two largest wintering sites, Tainan area and Deep Bay. An increase is also observed in Japan, as contrasted to the decrease in mainland China and Vietnam, details of which will be discussed below.

Black-faced Spoonbills were found in 52 sites in this census, higher than 43 sites in 2008 and 44 sites in 2009. All the main wintering sites, referred as those sites with more than 2% of the overall wintering populations, are included in the surveys for almost all years, thus minimizing the risk of missing any large groups of wintering Black-faced Spoonbills. In nowadays, the known global population stands at 2,347 individuals, so the 1% population level comprises 23 birds. Sites with more than 23 individuals are therefore listed as important sites for this species. This will be further elaborated below.

Taiwan

In 2010 census, Taiwan still accommodates the largest group of wintering Black-faced Spoonbills in the world, with the number ascending to another new peak level at 1,280 individuals (table 2). This figure represents an increase of 16% from the toll of 2009. Chi-ku and Sitsao of Tainan area is the largest wintering ground in the world, where a total of 1,185 individuals were recorded during this census, constituting 51% of the world population. Smaller groups were recorded in other parts of Taiwan such as Hsinchu, Changhua, Ilan, Kinmen. In particular, it is worthwhile to note that a total of 69 birds were recorded at Chiayi County. More details of the count in Taiwan are shown in table 1 and 2.

Pearl River Estuary (including Deep Bay between Hong Kong and Shenzhen, Taipa in Macao)

Deep Bay (Hong Kong and Shenzhen): 462 birds **Macao:** 39 birds

The total number of wintering Black-faced Spoonbills in the Pearl River Estuary was 501 individuals, scoring a new height for the count in this area and, for the first time, exceeding the level of 500 individuals. This figure also symbolizes a significant increase of 30% from that in 2009. This increase is mainly attributed to the boost in the number of birds in the Deep Bay area where a total of 462 birds were counted during the census, making a great leap of 38% from the previous year's figure. Same as previous censuses, the latest census covered many sites in Deep Bay area including Mai Po Nature Reserve, Lok Ma Chau fishponds, Tsim Bei Tsui intertidal area, Hong Kong Wetland Park and Futian National Nature Reserve at Shenzhen. This figure represented 20% of the global wintering population.

Situation of the wintering site in Macao is, on the other hand, not so good as that in the Deep Bay area. A total of 39 birds were counted during the census, representing a decrease of 25% from the 2009 census figure, but the census figure of

this year still constitutes 1.6% of the global wintering population. The main loafing area of the spoonbill wintering in Macao is deteriorating because of the development to pave way for tourism industry, whereas the feeding area of these birds is largely unknown. Moreover, both the Government and the public still have low awareness towards the situation. Conservation of the wintering site of Black-faced Spoonbills is a really challenge.

China Mainland and Hainan Island

The number of wintering Black-faced Spoonbills in mainland China (including Hainan Island) is sliding in recent years, against the general increasing trend of the global population. In this census, a total of 234 Black-faced Spoonbills were recorded in this area, bearing a decrease of 5% from the previous year's figure (table 4). This figure represented 10% of the known global population.

One major reason of this decline is the fewer spoonbills recorded in Hainan (Dongfeng), while the number in Guangdong (Haifeng) was just comparable to the 2009 figure. 95 birds were recorded at Xinhua Bay, Fujian, being the largest flock counted in the mainland China. Unfortunately, no survey could be arranged in sites along the coast of Jiangsu, Zhejiang and Guangxi.

Red River Delta, Vietnam

A total of 46 Black-faced Spoonbills were recorded in the Red River Delta, 27% lower than previous year's count. The decrease may be due to the unfavourable tidal situation during the census period for the most part. As in many previous censuses, all birds were recorded in the Xuan Thuy area in the Red River Delta. Survey was also carried out in Thai Thuy IBA, another site in the Red River Delta area, and Ha Ham Island, but no Black-faced Spoonbill could be found there.

Japan

More than 200 birds were recorded in Japan in two previous censuses, and for this census, a new peak count of 258 individuals was made in the western part of Japan (table 6). This means an increase by 20% from the 2009 figure and constitutes 11% of the world population. The largest wintering flock in Japan comprised 27 birds at Shira-kawa River estuary, Kumamoto Prefecture. In addition, wintering Black-faced Spoonbills were recorded in 30 sites in this census (table 1).

Republic of Korea

A total of 27 individuals were recorded at Jeju Island, of which fifteen were

recorded at Hado-ri and the remaining twelve were presented at Seongsanpo. The wintering Black-faced Spoonbill remains relatively stable of a level of 25 individuals at Jeju Island for many years, but this year turned up with an increase of two birds from the previous year. This total number represented 1% of the world population.

Thailand

There were only two records from Thailand in the winter 2009-10. One immature bird was presented and photographed at Nong Bong Kai, Chiangsan, Chiangrai province from 18 December 2009 to 27 February 2010, being a rather unusual inland record. The distance to the nearest coast, i.e. Red River Delta, is about 680km. Another individual was found at Pak Thale, Ban Laem, Phetchaburi in January and February 2010. Hence, at least one was recorded in Thailand during the period of this census.

Philippines

No Black-faced Spoonbill was found in the Philippine in this census. Candaba, the site with a Black-faced Spoonbill found in January 2009, was surveyed in this census but to no avail. Bird watching activities are still unpopular in the Philippines, so many wetland areas are still not included in waterbird survey.

Conclusion

The number of Black-faced Spoonbill returns to the rising path again after a slight decline in the previous year. It is a very encouraging sign to the conservation of this endangered species because it proves that the population is still on the way to recovery. As mentioned, a significant increase is observed in Taiwan, Deep Bay and Japan, but the decrease in mainland China and Vietnam is really an alarm. This species depends mainly to several pockets of intertidal area in the East Asia region (Yu and Swennen 2004). Given that hunting and habitat destruction are still not eradicated from many places in these areas, the increase of numbers in sites with better protection such as Taiwan, Hong Kong and Japan just renders this species to further congregate in only in a few sites. This is not a good direction for the long term survival of the spoonbills.

Sites with more than 1% of the world population of the Black-faced Spoonbills (i.e. 23 individuals) from the census are listed below and are considered important sites for the conservation of the spoonbills.

- Tsengwen River estuary area including Chiku and Sitsao, Tainan – 1,185 birds (51%),
- Deep Bay, Hong Kong and Shenzhen – 462 birds (20%),
- Xinhua Bay, Fujian – 95 birds (4.0%),
- Haifeng, Guangdong – 72 birds (3.1%),
- Changhua River estuary, Hainan – 46 birds (2.0%),
- Xuan Thuy, Red River Delta, Vietnam – 46 birds (2.0%),
- Taipa-coloane, Macao – 39 birds (1.7%),
- New Port and Shira-kawa River estuary, Kumamoto – 27 birds (1.1%),
- Jeju Island – 27 birds (1.1%).

**The International Black-faced Spoonbill Census
2010**

黑臉琵鷺全球同步普查 2010

Chinese Report
中文報告

黑臉琵鷺全球同步普查: 2010

余日東
(翻譯: 陳健德)

香港觀鳥會 黑臉琵鷺研究組

撮要

黑臉琵鷺的週年普查已於 2010 年 1 月 8-10 日舉行。這項週年普查具相當重要性，因為普查每年搜集相類的數據，讓我們可以檢視黑臉琵鷺越冬種群的健康和分佈狀況。今次普查錄得 2,347 隻黑臉琵鷺，這個結果創下普查開展以來黑臉琵鷺數目的新高，比往年的數量上升達 15%。一如過去的普查，台南曾文溪口和香港與深圳間的后海灣仍然是黑臉琵鷺的最大越冬地點。另外，在今次普查中福建的興化灣錄得 95 隻黑臉琵鷺，成為這個全球性瀕危物種的另一個重要越冬地點。

引言

黑臉琵鷺 *Platylea minor* 種群細小，加上分布範圍狹窄，因此被列入全球受脅鳥種名單 (Collar et al. 1994, 國際鳥盟 2000, 2004, 2010)。這個鳥種棲息於東亞沿海地區 (Hancock et al. 1992, del Hoyo et al. 1992, Yu and Swennen 2004)。1990 年代初，黑臉琵鷺全球數目少於三百隻，並僅在東亞幾個地點錄得，從此在保育方面受到廣泛關注 (Kennerley 1990)。自從 1993 年開始，每年冬季都有進行全球同步普查，以評估黑臉琵鷺的越冬種群狀況。因應種群的自然增長和一些地點所付出的保育努力，越冬黑臉琵鷺的數量逐步上升，在 2003 年超越 1,000 隻 (Yu 2003)，於 2008 年和 2009 年更超過 2,000 隻 (Yu 2009)。

這項普查並被劉小如等 (1995) 列入為優先保育次序，因為這樣的國際協作調查已證實為有效的工具，提供越冬黑臉琵鷺數量和分佈資料。國際鳥盟支會香港觀鳥會於 2003 年起開始統籌該全球同步普查。本報告會詳述 2010 年一月所進行的普查結果。

普查方法

過往的普查均會選擇於隆冬時份進行，皆因琵鷺數量於冬季中期較為穩定，而普查必須訂於那些位於香港與深圳間的后海灣和越南春水 (紅河口國家公園) 潮水高漲的日子進行，因為高漲的潮水有利數點工作。由此，2010 的普查安排在 1 月 8-10 日舉行。地圖 1 顯示全球同步普查的進行地點。在普查之前，本會向各參與者提供普查指引作為技術基礎。大部份的實地數點都是在普查期間進行，不過部份地點，例如后海灣的香港米埔和深圳福田距離咫尺，琵鷺可於一個小時內飛越這兩個地點。因此，這些地點的點算工作有需要以同步方式，利用雙筒和單筒望遠鏡進行。

琵鷺普查有賴各地資深觀鳥者、保育工作者、研究員、鳥類學家和保護區內工作的官員共同義務合作。各地的統籌員和個別的數點人員收集和整理普查紀錄後，將結果提交給國際統籌員，作進一步的分析和公佈結果。

結果及討論

綜觀

今次普查在東亞地區共錄得2,347隻黑臉琵鷺，主要在沿海一帶。這個結果更創下普查開展以來黑臉琵鷺數目的新高，比往年的數量上升達15%（表1及9）。而數字每年維持以平均13%上升（SD = 10，詳見表9）。普查錄得的黑臉琵鷺越見增多，主要源於兩大越冬地點，即台南地區和後海灣的增長。日本的數量亦有所增加，不過中國大陸和越南的數量卻同時下滑，詳情會在下面分解。

今次普查錄得黑臉琵鷺在 52 個地點越冬，比 2008 年的 43 個和 2009 年的 44 個地點還要高。每次普查均會涵蓋所有曾經錄得越冬黑臉琵鷺數目達到總數 2% 的地點，故此減低遺漏大群黑臉琵鷺的機會。如今全球黑臉琵鷺的數目達 2,347 隻，因此總數 1% 的水平訂於 23 隻。任何地方倘若錄得 23 隻黑臉琵鷺或以上，均被視作此種的重要越冬地點，詳情會在下面分解。

台灣

2010 年普查中，台灣仍然擁有世上最大群的越冬黑臉琵鷺，數目再創新高，達 1,280 隻（表 2）。這個數目較 2009 年上升 16%。另外，台南七股和四草仍然是全球最大的黑臉琵鷺越冬地，普查中共有 1,185 隻黑臉琵鷺在此錄得，佔該種總數的 51%。少數的黑臉琵鷺也有在台灣其他地點錄得，計有新竹、彰化、宜蘭、金門，而其中一個值得留意的紀錄，就是嘉義縣錄得 69 隻黑臉琵鷺。有關台灣方面的調查，詳情可見於表 1 和 2。

珠江河口(包括香港和深圳的後海灣，以及澳門氹仔路環)

後海灣(香港及深圳): 462 隻, 澳門: 39 隻

在珠江河口地區錄得的黑臉琵鷺，數目達501隻，為這個地區至今的最高紀錄，更首度衝破500隻的大關。今年數目比2009年大增30%，主要原因是後海灣地區紀錄到462隻黑臉琵鷺，比去年大幅增加38%。一如過去的普查，今年調查覆蓋後海灣地區多個地點，包括米埔自然保護區、落馬州魚塘、尖鼻咀潮汐帶、香港濕地公園以及深圳福田自然保護區。後海灣地區的數目佔該種越冬種群的20%。

然而，澳門越冬地點的情況並沒有如後海灣地區的般理想，是次調查只錄得 39 隻黑臉琵鷺，比 2009 年普查的數目少了 25%，只佔該種越冬種群的 1.6%。隨著旅遊業的發

展，琵鷺在澳門的主要越冬地點正不斷惡化，我們至今對牠們的覓食地點仍然不甚了解。除此之外，政府以至公眾對琵鷺在澳門的情況關注依然偏低，保護黑臉琵鷺越冬地點的工作存在不少挑戰。

中國大陸和海南島

近年來，中國大陸（包括海南島）錄得的黑臉琵鷺越來越少，與全球數量的上升趨勢大相逕庭。今年，這個地區只錄得234隻黑臉琵鷺，較往年數目下跌5%（表4），佔全球已知總數的10%。

海南島東方昌化江河口錄得的黑臉琵鷺數目有所下降，應該是中國大陸數量減少的主要原因。畢竟，今年廣東海豐的紀錄與上年大致相若，而在今次普查中，福建除了興化灣外，沒有其他地點錄得較多的黑臉琵鷺，顯示此種如今只集中在一個地點。可惜的是，江蘇、浙江以至廣西沿海均沒有安排普查，此種在以上各地的情況不得而知。

越南紅河口

今次普查中，黑臉琵鷺在紅河三角洲的數目達 46 隻，比去年少了 27%。調查期間的潮汐情況並不理想，可能是導致數目下跌的主要因素。一如過去的普查，所有的紀錄都是在紅河三角洲的春水地區錄得。調查亦有在同屬紅河三角洲的 Thai Thuy 的國際鳥類重要地點，以及 Ha Ham Island 進行，不過以上地點均沒有紀錄。

日本

在過去兩次的普查裡，日本都錄得超過 200 隻的黑臉琵鷺，而今年的普查更創出新高，在日本西部錄得 258 隻（表 6）。這意味數目超出 2009 年數字逾 20%，穩佔全球數目 11%。日本最大的越冬種群在熊本縣的白川河口錄得，共有 27 隻。今次普查的紀錄顯示，黑臉琵鷺在日本的越冬地點達到 30 個（表 1）。

韓國

今次的普查在濟州島錄得總共27隻黑臉琵鷺，15隻在Hado-ri及其餘12隻在城山浦。在濟州島越冬的黑臉琵鷺數目相對穩定，多年以來維持25隻左右的水平，今年增加兩隻，而這裡的數目已佔全球總數1%。

泰國

2009-10 年度冬季泰國有兩個黑臉琵鷺的紀錄。第一個紀錄在泰國北部清萊省清盛 Nong Bok Kai 有一隻幼鳥由 2009 年 12 月至 10 年 2 月逗留在當地，另外一隻在碧武里 Laem Pak Bia 的 Pak Thale 錄得，出現在 1 月 23 日至 2 月 7 日。所以今冬在泰國有最少一隻黑臉琵鷺。

菲律賓

今次普查中，菲律賓沒有錄得黑臉琵鷺。普查亦有造訪曾於 2009 年 1 月錄得黑臉琵鷺的 Candaba，可惜沒有任何發現。菲律賓的觀鳥活動處於起步階段，很多濕地地點仍未納入水鳥調查中。

總結

黑臉琵鷺數目繼往年稍微下降後今年重拾升軌，意味種群的復甦趨勢得以維持，對這個瀕危物種的保育來說，這是一個非常令人鼓舞的現象。正如上述，黑臉琵鷺的數目在台灣、后海灣和日本顯著增長，不過中國大陸和越南的數量卻同時下滑，情況敲響警號。這些國家的大部份地方未受恰當保護，打獵和生境破壞仍然存在。相反，台灣、香港和日本對棲息地實施較佳的保護及管理，致使這些地方錄得的數目增長，亦使黑臉琵鷺進一步集中於少數的棲地，這對本種的長遠生存並不是一個良好的方向。黑臉琵鷺的主要生境是多個在東亞區內的細小潮汐間濕地(Yu and Swennen 2004)，這些棲息地的保護是對這鳥種的長遠生存有很重要的意義。

任何地方所錄得的黑臉琵鷺數目倘若超過全球數量的 1%（亦即 23 隻）的話，均會視為保育此種的重要地點，現將這些地點臚列如下。

- 台灣台南曾文溪口，包括七股及四草 - 1,1185 隻 (51%),
- 香港和深圳后海灣 - 462 隻 (20%),
- 福建興化灣- 95 隻 (4.0%),
- 廣東海豐- 72 隻 (3.1%),
- 海南島昌化江口- 46 隻 (2.0%),
- 越南紅河口春水國家公園 - 46 隻 (2.0%),
- 澳門氹仔路環 - 39 隻 (1.7%),
- 日本九州島熊本縣新港和白川水源河口- 27 隻(1.1%),
- 韓國濟州島- 27 隻 (1.1%),



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Acknowledgements and References

鳴謝及參考資料

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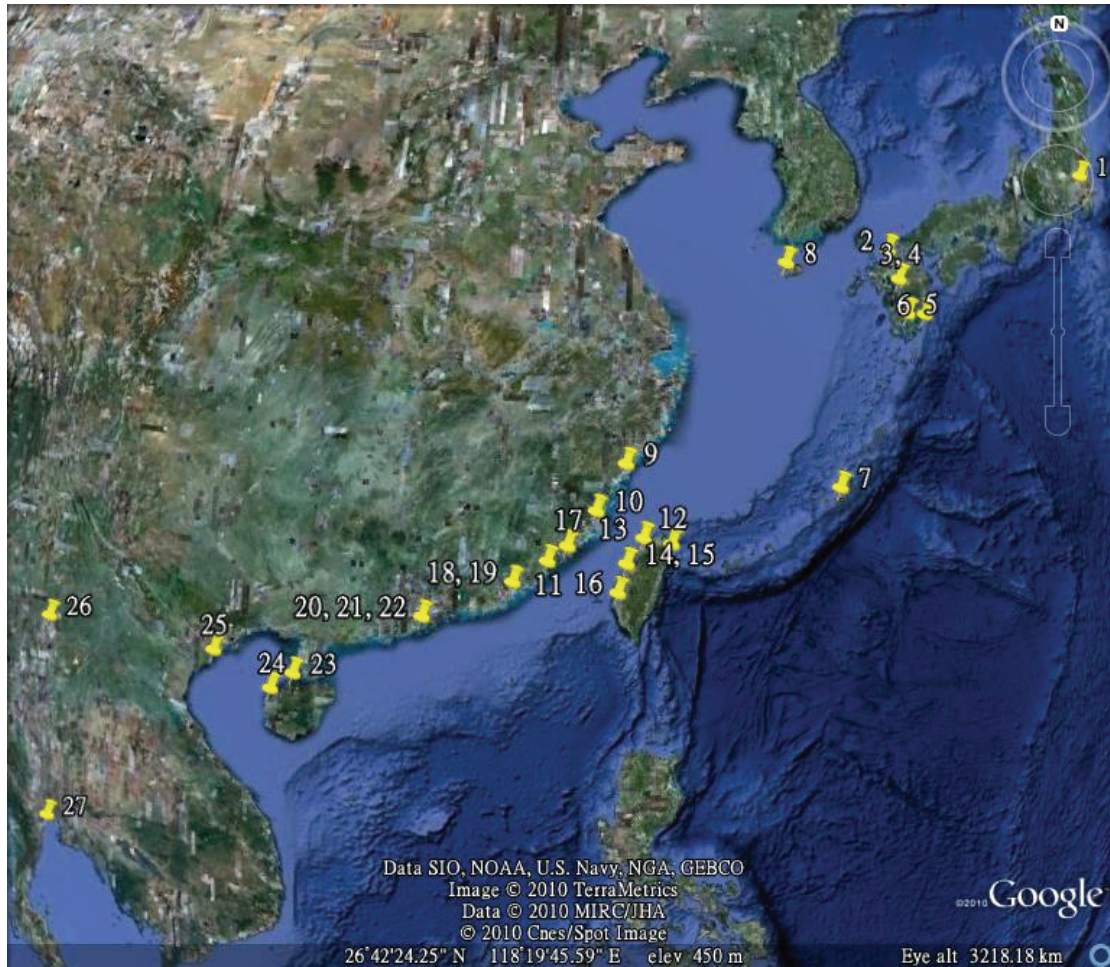
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Map
地圖



Map 1. Locations of wintering Black-faced Spoonbills in winter 2009-10. 1) Ibaraki, Japan; 2) Fukuoka, Japan; 3) Saga, Japan; 4) Kumamoto, Japan; 5) Miyazaki, Japan; 6) Kagoshima, Japan; 7) Nansei-shoto Islands, Japan; 8) Jeju, Republic of Korea; 9) Xiapu, Fujian; 10) Xinhua Bay (Fuqing and Putian), Fujian; 11) Southern Fujian; 12) Ilan, Taiwan; 13) Hsinchu, Taiwan; 14) Changhua, Taiwan; 15) Chiayi, Taiwan; 16) Tainan (Chiku and Sitsao, Taiwan; 17) Kinmen, Taiwan; 18) Shantou, Guangdong; 19) Haifeng, Guangdong; 20) Guangzhou, Guangdong; 21) Deep Bay, Hong Kong and Shenzhen; 22) Taipa, Macao; 23) Lingao, Hainan; 24) Changhua River estuary, Hainan; 25) Xuan Thuy, Vietnam; 26) Chiangrai, Thailand; 27) Phatchaburi, Thailand.

地圖 1. 2009-10 冬季年黑臉琵鷺全球同步普查地點: 1) 日本茨城縣; 2) 日本福岡縣; 3) 日本佐賀縣; 4) 日本熊本縣; 5) 日本宮崎縣; 6) 日本鹿兒島縣; 7) 日本西南群島; 8) 韓國濟州島; 9) 福建霞浦; 10) 福建興化灣(福清和莆田); 11) 福建南部; 12) 台灣宜蘭; 13) 台灣新竹; 14) 台灣彰化; 15) 台灣嘉義; 16) 台灣台南(七股和四草); 17) 台灣金門; 18) 廣東汕頭; 19) 廣東海豐; 20) 廣東廣州; 21) 香港和深圳前海灣, 22) 澳門路環; 23) 海南臨高; 24) 海南昌化江口; 25) 越南紅河口春水; 26) 泰國清萊; 27) 泰國碧武里。



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Tables

圖表

Table 1. Number of Black-faced Spoonbills in different locations of East Asia, winter 2009-10. Numbers in parenthesis are extra birds counted outside the census period.

表 1. 2009-10 年冬季東亞各地的黑臉琵鷺數量

Region 地區	Location 地點	2010	Number 數量	Reported by 普查員 / 記錄者
China mainland 中國大陸	Funing Bay, Xiapu, Fujian 福建 霞浦 福寧灣	9 Jan 1 月 9 日	8	Fujian Wildlife and Wetland Resource Monitoring Centre, Xiapu Forestry Bureau. 福建省野生動物與濕地資源監測中心, 霞浦林業局
China mainland 中國大陸	Xinhua Bay, Fuqian/Putian, Fujian 福建 福清/莆田 興化灣	10 Jan 1 月 10 日	95	Fujian Wildlife and Wetland Resource Monitoring Centre, Fujian Bird Watching Society, Changle Forestry Bureau, Putian Bird Watching Society, Xiamen Bird Watching Society, Xiapu Forestry Bureau, Yuanxiao Forestry Bureau. 福建省野生動物與濕地資源監測中心, 福建觀鳥會, 長樂林業局, 莆田觀鳥會, 廈門觀鳥會, 霞浦林業局, 雲霄林業局
China mainland 中國大陸	Southern Fujian 福建南部	10 Jan 1 月 10 日	1	Xiamen Bird Watching Society 廈門觀鳥會
China mainland 中國大陸	Shantou, Guangdong 廣東 汕頭	8-10 Jan 1 月 8 至 10 日	2	Zheng Kanghua 鄭康華
China mainland 中國大陸	Haifeng, Guangdong 廣東 海豐	8-10 Jan 1 月 8 至 10 日	72	Zeng Xianwu, 曾向武
China mainland 中國大陸	Panyu, Guangzhou, Guangdong 廣東 廣州 番禺	10 Jan 1 月 10 日	2	Bu Biao, Wu Kansong, Wang Huiguang, Li Wenjie, Li Lingdong, Xu faming, Li Mingxuan, He Chang, Yu Haiyan 卜標, 吳坎宋, 王輝廣, 李文杰, 李令東, 徐發銘, 黎明軒, 何暢, 虞海燕
China mainland 中國大陸	Houshui Bay, Lingao, Hainan 海南省 臨高 后水灣	8-10 Jan 1 月 8 至 10 日	7	Xu Jingjie, Wen Meicheng, He Zukun, Greeneyes, Dongzhaigang NNR office 許景杰, 溫美程, 何祖坤, 綠眼睛, 東寨港保護區辦公室
China mainland 中國大陸	Changhua River estuary, Dongfang, Hainan 海南省 東方 昌化江口	8-10 Jan 1 月 8 至 10 日	46	Xu Jingjie, Wen Meicheng, He Zukun, Greeneyes, Dongzhaigang NNR office 許景杰, 溫美程, 何祖坤, 綠眼睛, 東寨港保護區辦公室

				室
Hong Kong and Shenzhen 香港和深圳	Deep Bay Bay, including Mai Po, Hong Kong and Futian, Shenzhen 后海灣、包括香港米埔及深圳福田	8-10 Jan 1 月 8 至 10 日	462	Asia Ecological Consultants, Agriculture, Fisheries and Conservation Department, Hong Kong Bird Watching Society and Shenzhen Bird Watching Society 亞洲生態環境顧問公司、漁農自然護理署、香港觀鳥會及深圳市觀鳥協會
Macao 澳門	Taipa-coloane 氹仔-路環	8-10 Jan 1 月 8 至 10 日	39	Leung Va, Silvia Choi 梁華及蔡靜亞
Taiwan 台灣	Changhua 彰化	8-10 Jan 1 月 8 至 10 日	2	黃聖揚
Taiwan 台灣	Chiku and environs, Tainan 台南 七股及附近地區	10 Jan 1 月 10 日	802	Black-faced Spoonbill Conservation Association, Black-faced Spoonbill Patrol team 黑面琵鷺保育協會, 黑面琵鷺巡守隊
Taiwan 台灣	Sitsao and environs, Tainan 台南市 四草及附近地區	10 Jan 1 月 10 日	383	Wild Bird Society of Tainan city 台南市野鳥學會
Taiwan 台灣	Aoku Chiayi 嘉義 鰲鼓	9 Jan 1 月 9 日	13	陳建樺, 陳建安
Taiwan 台灣	Chiayi 嘉義 布袋鹽田	9 Jan 1 月 9 日	56	王徵吉
Taiwan 台灣	Hsinchu 新竹	10 Jan 1 月 10 日	2	Wild Bird Society of Hsinchu 新竹野鳥學會
Taiwan 台灣	Ilan 宜蘭 塭底及五十二甲	8-10 Jan 1 月 8 至 10 日	16	洪慧意, 胡林志
Taiwan 台灣	Kinmen 金門	9 Jan 1 月 9 日	6	李新團, 許菁華
Vietnam 越南	Red River Delta, Xuan Thuy National Park 紅河口 春水國家公園	10 Jan 1 月 10 日	46	Phan Van Truong
Japan 日本	Honshu: Ibaraki Pref. Hasaki-cho, Shubana Tone River estuary 本州島 茨城縣 波崎町 洲鼻	10 Jan 1 月 10 日	3	Shigeru Tokumoto 德元茂
Japan 日本	Kyushu: Fukuoka Pref., Karita Reclamation 九州島 福岡縣 苅田埋立地	10 Jan 1 月 10 日	10	Satoshi Takeda 田代省二
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Tsuyazaki Irie 九州島 福岡縣 津屋崎	10 Jan 1 月 10 日	1	Kimiko Kouno 河野紀美子
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Zuibaiji River estuary, Imazu tidal flat 九州島 福岡縣 瑞梅寺河 今津干潟	10 Jan 1 月 10 日	21	Hiroto Okabe 岡部海都
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Artificial Island reclamation at Hakata Bay. 九州島 福岡縣 人工島埋立地	10 Jan 1 月 10 日	8	Koji Takenaka, Takuro Hattori 花田正孝, 竹中孝司
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Wajiro tidal flat (coast). 九州島 福岡縣 和白乾潟(海岸)	10 Jan 1 月 10 日	1	Kouji Takenaka 花田正孝
Japan	Kyushu: Fukuoka Pref., Fukuoka	10 Jan	9	Takuro Hattori, Masuko

日本	City, Tatara River estuary 九州島 福岡縣 多多良川河口	1 月 10 日		Kinoshita 服部卓朗, 木下マス子
Japan 日本	Kyushu: Fukuoka Pref., Gannosu coast 九州島 福岡縣 雁ノ巣海岸	10 Jan 1 月 10 日	2	Kouji Takenaka 花田正孝
Japan 日本	Kyushu: Fukuoka Pref., Itosima City, Raizan River estuary 九州島 福岡縣 雷山河口	10 Jan 1 月 10 日	1	Satoru Matsumoto 松本悟
Japan 日本	Kyushu: Fukuoka Pref., Itosima City, Kanoubaru-ike pond 九州島 福岡縣 葉原池	10 Jan 1 月 10 日	1	Satoru Matsumoto 松本悟
Japan 日本	Kyushu: Fukuoka Pref., Itosima City, Kafuri Bay (tidal flat) 九州島 福岡縣 加布里灣	10 Jan 1 月 10 日	3	Mitsunori Tsuchiya 土谷光憲
Japan 日本	Kyushu: Saga Pref., Daijugarami 九州島 佐賀縣 大授搦	10 Jan 1 月 10 日	8	Mitsunori Tsuchiya 土谷光憲
Japan 日本	Kyushu: Saga Pref., Hayatsue River estuary 九州島 佐賀縣 早津江河口	10 Jan 1 月 10 日	1	Mitsunori Tsuchiya 土谷光憲
Japan 日本	Kyushu: Saga Pref., Hama River estuary 九州島 佐賀縣 濱川河口	10 Jan 1 月 10 日	1	Yasuo Miyazaki 宮崎八洲夫
Japan 日本	Kyushu: Saga Pref., Nanaura coast 九州島 佐賀縣 七浦海岸	10 Jan 1 月 10 日	17	Yasuo Miyazaki 宮崎八洲夫
Japan 日本	Kyushu: Kumamoto Pref., Arao coast 九州島 熊本縣 荒尾海岸	9 Jan 1 月 9 日	5	Seizaburo Yasuo, Masaaki Takesita 安尾征三郎, 竹下將明
Japan 日本	Kyushu: Kumamoto Pref., Kumamoto New Port & Shira-kawa River estuary 九州島 熊本縣 新港, 白川河口	9 Jan 1 月 9 日	27	Yoshihumi Matsumoto, Minoru Beppu, Masami Ishihara, Satomi Sakaguchi, Shun Asada, Fumiya Matsuda 松本芳文, 別府穰, 石原政 末, 坂口里美, 淺田駿, 松 田史哉
Japan 日本	Kyushu: Kumamoto Pref., Hi-kawa River estuary 九州島 熊本縣 氷川河口	9 Jan 1 月 9 日	16	Atsuto Hamasuna, Saori Hamasuna, Junichi Maeda 濱砂淳人、濱砂佐織、前田 潤一
Japan 日本	Kyushu: Kumamoto Pref., Kikuchi River estuary 九州島 熊本縣 菊池川河口	9 Jan 1 月 9 日	9	Hiroshi Mitsunaga 光永汪
Japan 日本	Kyushu: Kumamoto Pref., Midori River estuary 九州島 熊本縣 綠川河口	9 Jan 1 月 9 日	9	Hisayoshi Shiraishi, Kazunori Yamamoto 白石久喜, 山本和紀
Japan 日本	Kyushu: Kumamoto Pref., estuaries of Ohno River & Suna River 九州島 熊本縣 大野川及砂川河口	9 Jan 1 月 9 日	22	Ken-ichi Shiraishi, Youka Fujimoto, Youko Murata 白石健一, 藤本洋子, 村田 葉子
Japan 日本	Kyushu: Kumamoto Pref., Kagami River estuary 九州島 熊本縣 鏡川河口	9 Jan 1 月 9 日	8	Teisi Nakao, Hideo Sakai 中尾禎志, 坂井英雄
Japan 日本	Kyushu: Kumamoto Pref., Mae/Kuma River estuary 九州島 熊本縣 前川/球磨河口	9 Jan 1 月 9 日	10	Shigeki Takano, Shiori Asai, Masahiro Etho, Mr. Yamaguchi, Sakiko Honda 高野茂樹, 浅井しおり, 江 藤正宏, 山口孚, 本田佐規 子

Japan 日本	Kyushu: Miyazaki Pref., Hitotsuse River estuary 九州島 宮崎縣 一瀬川河口	10 Jan 1 月 10 日	10	Hiroko Yamaguchi, Hiroshi Yamaguchi, Hiroshige Kubo, Atsusi Higashi 山口浩子, 山口廣, 久保寛成, 東篤志
Japan 日本	Kyushu: Kagoshima Pref., Manose River estuary 九州島 鹿兒島縣 萬之瀬河口	10 Jan 1 月 10 日	15	Tsukasa Kamimura 上村司
Japan 日本	Kyushu: Kagoshima Pref., Kajikisuzaki regulation pond 九州島 鹿兒島縣 加治木須崎調整池	10 Jan 1 月 10 日	13	Yoshiteru Tateyama 立山芳輝
Japan 日本	Kyushu: Kagoshima Pref., the regulation pond next to Hayato Port 九州島 鹿兒島縣 隼人港橫調整池	10 Jan 1 月 10 日	6	Shuu Miyano 宮野壽
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Awase River estuary 西南群島：沖繩縣 泡瀬干潟	10 Jan 1 月 10 日	3	Masakuni Yamashiro, Sin Yosizato, Isamu Matayosi 山城正邦, 吉里伸, 又吉勇
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Tomigusuku, Senaga Waterway 西南群島：沖繩縣 泡瀬干潟	10 Jan 1 月 10 日	10	Kouji Shinjo, Takafumi Morikawa, Takako Morikawa, Yasuko Tomishima 新城公次、富島靖子、森河隆史、森河貴子
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Ishigakijima- Island, Miyara River estuary 西南群島：沖繩縣 石垣島 官良川河口	10 Jan 1 月 10 日	8	Kunitaro Miyagi, Yasuko Miyagi 宮城國太郎, 宮城靖子
Republic of Korea 韓國	Jeju: Hado-ri fishponds 濟州 Hado-ri 漁塘	9-10 Jan 1 月 9 至 10 日	12	Chung Young-Bae, Kang Chang-Wan, Kang Hee-Man, Kang In-yeop, Kim Eun-Mi, Jeju Wildlife Research Center
Republic of Korea 韓國	Jeju: Seongsanpo 濟州 城山浦	9-10 Jan 1 月 9 至 10 日	15	Chung Young-Bae, Kang Chang-Wan, Kang Hee-Man, Kang In-yeop, Kim Eun-Mi, Jeju Wildlife Research Center
Thailand 泰國	Nong Bong Khai, Chiangrai 清萊	Dec 2009 – Feb 2010 09 年 12 月至 10 年 2 月	1	via Uaiphorn Khwanphae
Thailand 泰國	Laem Pak Bia, Phatchaburi 碧武里	23 Jan-27 Feb 2010 1 月 23 日至 2 月 27 日	(1)	via Uaiphorn Khwanphae
	Total		2347 (1)	

Table 2. Site visited but no Black-faced Spoonbills seen during or near the census period.

表 2. 全球同步普查期間曾進行調查但未有錄得琵鷺的地方

Region 地區	Location 地點	Date 日期	Reported by 普查員 / 記錄者
China mainland 中國大陸	Chongming Dongtan, Shanghai 上海 崇明東灘	9 Jan 1 月 9 日	Shanghai BWS 上海觀鳥會

China mainland 中國大陸	Nanhui, Shanghai 上海 南匯	10 Jan 1 月 10 日	Shanghai BWS 上海觀鳥會
China mainland 中國大陸	Minjiang estuary, Fuzhou, Fujian 福建 福州 閩江口	9 Jan 1 月 9 日	Fujian Wildlife and Wetland Resource Monitoring Centre, Fujian Bird Watching Society, Changle Forestry Bureau, Putian Bird Watching Society, Xiamen Bird Watching Society, Xiapu Forestry Bureau, Yuanxiao Forestry Bureau. 福建省野生動物與濕地資 源監測中心, 福建觀鳥會, 長樂林業局, 莆田觀鳥會, 廈門觀鳥會, 霞浦林業局, 雲霄林業局
China mainland 中國大陸	Dongzhaigong Nature Reserve, Hainan 海南 東寨港自然保護區	8-10 Jan 1 月 8 至 10 日	Xu Jingjie, Greeneye, Dongzhaigang NNR office 許景杰, 綠眼睛, 東寨港保 護區辦公室
Taiwan 台灣	Penghu 澎湖	8-10 Jan 1 月 8 至 10 日	鄭謙遜
Taiwan 台灣	Taitung 台東	8-10 Jan 1 月 8 至 10 日	王克考
Taiwan 台灣	Keelung 基隆	8-10 Jan 1 月 8 至 10 日	Wild Bird Society of Keelung 基隆野鳥學會
Taiwan 台灣	Miaoli 苗栗	8-10 Jan 1 月 8 至 10 日	劉春鳳, 陳琰琰, 林厥雋, 陳淑美, 郭榮信, 黃克禮, 洪維鋒, 洪千惠
Taiwan 台灣	Yunlin 雲林	8-10 Jan 1 月 8 至 10 日	詹宗達
Taiwan 台灣	Hualien 花蓮	8-10 Jan 1 月 8 至 10 日	Wild Bird Society of Hualien 花蓮野鳥學會
Taiwan 台灣	Kaoshiung 高雄	10 Jan 1 月 10 日	吳崇祥, 鄭和泰, 陳瑞龍, 陳培智, 鄭清福, 洪福龍
Taiwan 台灣	Kuandu nature centre, Taipei 台北 關渡自然中心	8-10 Jan 1 月 8 至 10 日	方蕙菁
Taiwan 台灣	Kenting 墾丁	8-10 Jan 1 月 8 至 10 日	蔡乙榮
Japan 日本	Kyushu: Fukuoka Pref., Kitakyusyu City, Sone tidal flat, Kusami River estuary 九州島 福岡縣 曾根幹潟 朽網川河口	9 Jan 1 月 9 日	Satoshi Takeda, Shungo Takashi 中尾寛作、武田尊史、高橋 俊吾
Japan 日本	Kyushu: Fukuoka Pref., Kiyoichou-ike Pond 九州島 福岡縣 駕與丁池	10 Jan 1 月 10 日	Makoto Tominaga, Chiaki Nakahara 中原千秋
Japan 日本	Kyushu: Fukuoka Pref., Kashii coast 九州島 福岡縣 香椎海岸	10 Jan 1 月 10 日	Takuro Hattori 服部卓朗
Japan 日本	Kyushu: Nagasaki Pref., inside the	10 Jan 1 月 10 日	Reiko Fukushima

	embankment of Isahaya Bay 九州島 長崎縣 諫早幹拓地 調整池		福嶋令子
Japan 日本	Kyushu: Kumamoto Pref., Ezuko Lake 九州島 熊本縣 江津湖	9 Jan 1 月 9 日	Shinichi Tagawa, Daichi Tagawa
Japan 日本	Kyushu: Kagoshima Pref., Kokubu tidal flat, Amori River estuary 九州島 鹿児島縣 国分幹拓 天降川河 口	10 Jan 1 月 10 日	Keiko Miyano 宮野啓子
Japan 日本	Kyushu: Kagoshima Pref., Beppu River estuary 九州島 鹿児島縣 別府川河口	10 Jan 1 月 10 日	Yukako Naito 内藤由香子
Japan 日本	Kyushu: Kagoshima Pref., Omoi River estuary 九州島 鹿児島縣 思川河口	10 Jan 1 月 10 日	Seiji Takezoe 竹添星児
Japan 日本	Kyushu: Kagoshima Pref., Aira-machi, thereregulation pond 九州島 鹿児島縣 始良町 エビ養殖場 横調整池	10 Jan 1 月 10 日	Baku Hamamoto 浜本 麦
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Iriomote-island 西南群島：沖縄縣 西表島	10 Jan 1 月 10 日	Shuichi Kuwahara 桑原 修一
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Gushi-tidal flat 西南群島：沖縄縣 具志幹潟(海岸)	10 Jan 1 月 10 日	Okina Nakamoto 仲本興名
Vietnam 越南	Ha Nam Island, Yen Hung District, Quang Ninh Province 廣寧省 安興縣 河南島	9 Jan 1 月 9 日	Nguyen Duc Tu
Vietnam 越南	Thai Thuy IBA, Red River Delta	10 Jan 1 月 10 日	Nguyen Duc Tu
Republic of Korea 韓國	Gyeonggi, Sihwa Lake	9-10 Jan 1 月 9 至 10 日	Choi Chang-yong, Nam Hyun-Young, Korea National Park Migratory Birds Center
Republic of Korea 韓國	Chungnam, Cheonsu Bay	9-10 Jan 1 月 9 至 10 日	Choi Chang-yong, Kim Shin-Hwan
Republic of Korea 韓國	Busan, Nakdong river estuary	9-10 Jan 1 月 9 至 10 日	Kang Seung-Gu, Nakdong Estuary Eco-center
Philippine 菲律賓	Candaba, Pampanga	8-10 Jan 1 月 8 至 10 日	Wild Bird Club Philippine

Table 2. Numbers of Black-faced Spoonbills in Taiwan during the international censuses.

表 2. 全球同步普查期間在台灣錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Total	150	206	286	300	298	363	380	380	427

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	582	580*	632	757	826	790	1030	1104	1280

* This number also included 18 injured and sick individuals from the outbreak of avian botulism.

Table 3. Numbers of Black-faced Spoonbills in the Pearl River Estuary during the international censuses.

表 3. 全球同步普查期間在珠江河口錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Hong Kong	50	70	78	99	69	88	96	90	135
Shenzhen	nc	nc	nc	nc	32	58	nc	nc	42*
Macao	6	12	8	10	13	9	12	6	36
Total	56	82	86	109	114	155	108	96	171*

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Hong Kong	136	179	238	272	296	320	331	273	429
Shenzhen	3	24	5	39	50	36	38	62	33
Macao	37	46	50	39	51	48	50	52	39
Total	176	249	293	350	397	404	419	387	501

nc = no count, *Forty-two birds in Futian was not included in the total number because counts in Mai Po and Futian were not taken simultaneously.

Table 4. Numbers of Black-faced Spoonbills in China Mainland (excludes Futian, Shenzhen) and Hainan Island during the international censuses.

表 4. 全球同步普查期間在中國大陸及海南島錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Total	15	22	21	21	58	5	3	9	72

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	24	17	91	187	206	247	313	247	234

Table 5. Numbers of Black-faced Spoonbills in Red River Delta, Vietnam during the international censuses.

表 5. 全球同步普查期間在越南紅河口錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Total	62	25	23	75	nc	59	34*	46*	47

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	54*	65*	15	56	74	45	49	63	46

nc = no count, * Surveys also included Thai Binh and other places in the Delta.

Table 6. Numbers of Black-faced Spoonbills in Japan during the international censuses.

表 6. 全球同步普查期間在日本錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Total	5	16	14	31	28	75	60	99	87

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	107	128	149	103 (47)	155	189	224	215	258

Number in parenthesis is the birds recorded outside but closed the census period.

Table 7. Numbers of Black-faced Spoonbills in Jeju Island, Republic of Korea during the international censuses.

表 7 全球同步普查期間在韓國濟州島錄得的黑臉琵鷺數量

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01
Total	6	nc	nc	15	16	25	14	20	21

Year	Jan 02	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	29	22	23	21	21	20	28	25	27

nc = no count

Table 8. Numbers and percentage increase of total number of Black-faced Spoonbills during the international censuses.

表 8 全球同步普查的黑臉琵鷺總數及百分比增加

Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01	Jan 02
Total	294	351	430	551	535	613	586	660	828	969
% increase	-	19.4	22.5	28.1	-2.9	14.6	-4.4	12.6	25.5	17.0

Year	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10
Total	1069	1206	1475	1679	1695	2065	2041	2347
% increase	10.3	12.8	22.3	13.8	1.0	21.8	-1.2	15.0
Average % increase (SD): 13.4 (10.0), n = 17								



The International Black-faced Spoonbill Census 2010

黑臉琵鷺全球同步普查 2010

Figures

圖片

International Black-faced Spoonbill Census, 1989-2010

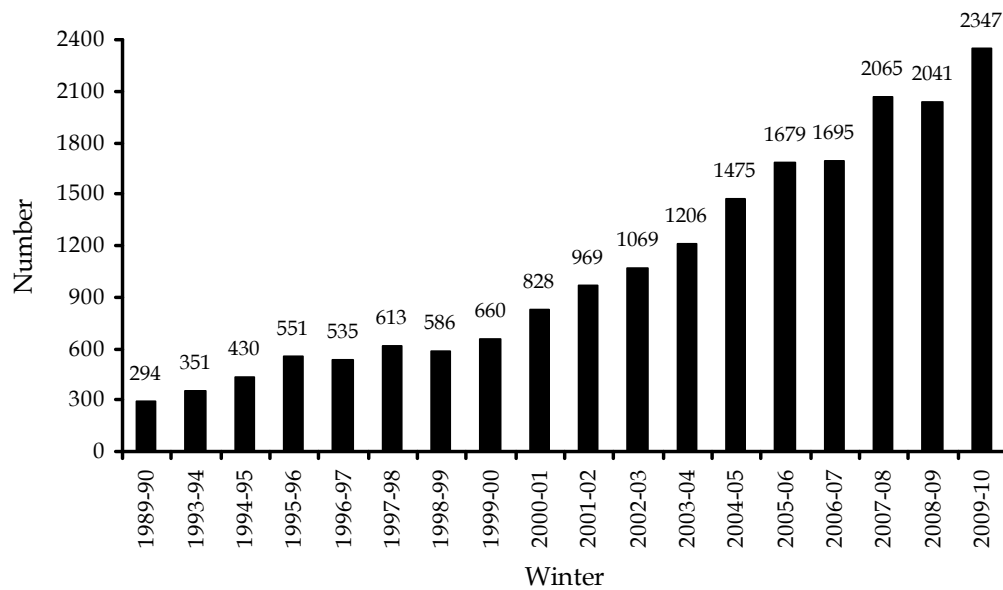


Figure 1 Known wintering Black-faced Spoonbill populations from winter 1989-90 to 2009-10.

圖 1. 1989-90 至 2009-10 年冬季已知的黑臉琵鷺數量

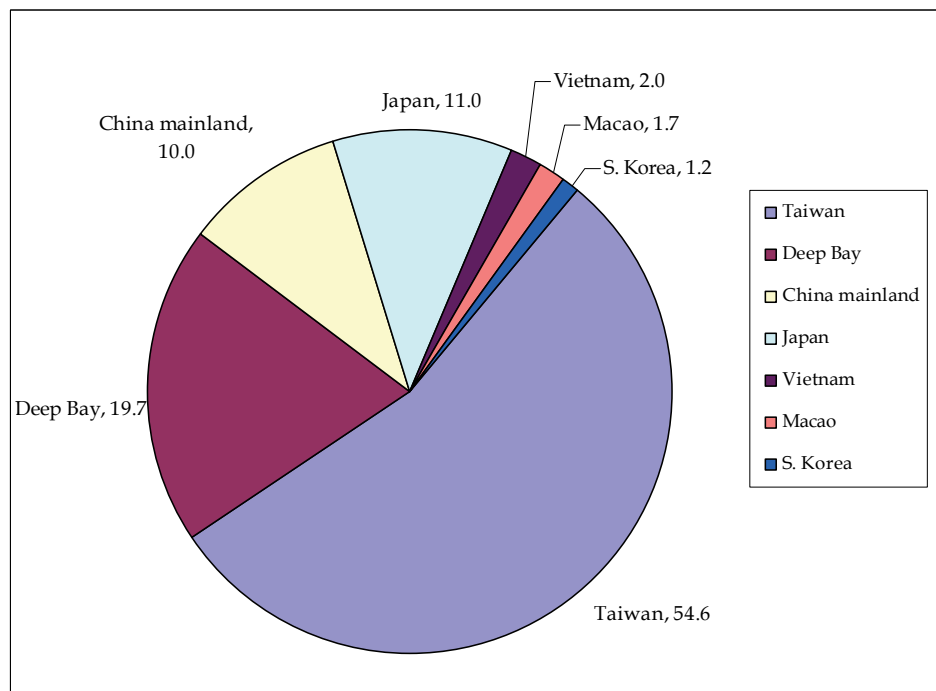


Figure 2. Percentages of Black-faced Spoonbills in different wintering areas during the 2010 international census.

圖 2. 2010 全球同步普查期間黑臉琵鷺在不同越冬地的全球百分比

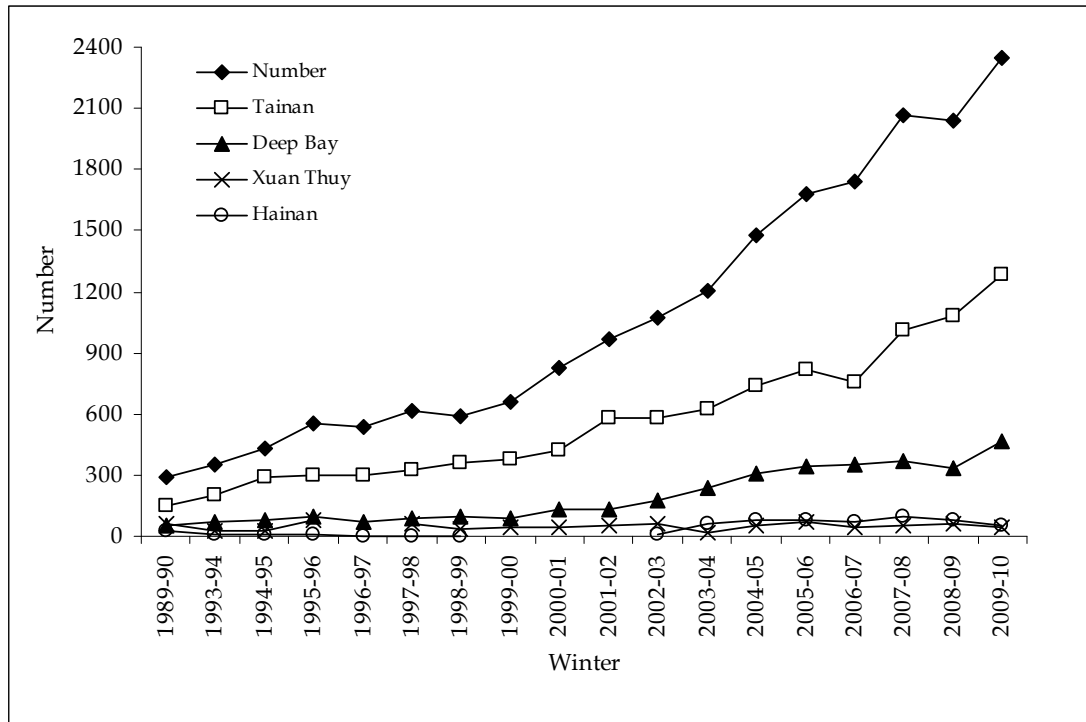


Figure 3. Trends of known Black-faced Spoonbills in the world, in three traditional important congregation sites: Tainan of Taiwan, Deep Bay of Hong Kong and Shenzhen, Red River Delta of Vietnam, and a new site at Hainan Island, China from the international censuses. Numbers were based on a review by Kennerley (1990) and table 3, 4 and 6.

圖 3. 比較全球同步普查的已知黑臉琵鷺數量，以及三個重要聚集點（台灣台南、香港深圳后海灣和越南紅河口）及海南島最近發現地點的數量趨勢



The International Black-faced Spoonbill Census 2010

黑臉琵鷺全球同步普查 2010

Appendix 附錄

Appendix

Appendix 1. Counts in Deep Bay, Hong Kong and Shenzhen during the International Black-faced Spoonbill Census 2010.

附錄 1. 2010 年黑臉琵鷺全球同步普查於后海灣(香港及深圳)所獲得的結果

a) Counts on 8 January 2010

Place/Time	1530h	1630h	1730h
Mai Po Nature Reserve and boardwalk	254	283	225
Lok Ma Chau	11	16	56
Nam Sang Wai	33	31	38
Tsim Bei Tsui area, including environs of Wetland Park	43	39	42
'Outer' Deep Bay	6	6	6
Futian	33	24	24
Total	380	399	391

b) Counts on 9 January 2010

Place/Time	1600h	1700h	1800h
Mai Po Nature Reserve and boardwalk	161	289	207
Lok Ma Chau	65	85	148
Nam Sang Wai	22	0	0
Tsim Bei Tsui area, including environs of Wetland Park	53	55	34
'Outer' Deep Bay	0	0	0
Futian	32	33	20
Total	333	462	409

c) Counts on 10 January 2010

Place/Time	1615h	1715h	1815h
Mai Po Nature Reserve and boardwalk	119	81	56
Lok Ma Chau	235	277	247
Nam Sang Wai	0	0	1
Tsim Bei Tsui area, including environs of Wetland Park	46	38	41
'Outer' Deep Bay*	0	0	0
Futian	12	12	12
Total	412	408	357