

Hong Kong Bird Watching Society

Organized by:





Sponsored by:





Coordinator

Yat-tung Yu Hong Kong Bird Watching Society

Data contributors

(Republic of Korea 韓國) Choi Chang-Yong, Ji Nam-Joon, Kang Chang-Wan, Kang Hee-Man, Kang In-Yeop, Kim Eun-Mi, Ko Gyeong-Nam, Lee Jae-Won, Park Jae-Wook. (China mainland and Hainan 中國大陸及海南島) Bai Qingquan 白清泉, Bu Biao 卜標, Chen Chuqing 陳春慶, Chen Fang 陳方, Chen Jiajun 沈家駿, Chen Jianbin 陳劍斌, Chen Junteng 陳俊騰, Chen Lei 陳鐳, Chen Lidan 陳荔丹, Chen Lin 陳林, Chen Qiongfa 陳瓊發, Chen Sirong 陳施容, Chen Xiaoming 陳曉明, Chen Xichang 陳錫昌, Chen Yongchang 陳永昌, Deng Chufeng 鄧楚楓,, Gao Chuan 高川, Guan Guangwen 關廣文, Han Yongxiang 韓永祥, Hao Xianing 郝夏寧, He Xin 何鑫, Hu Weining 胡偉寧, Huang Gan 黃淦, Huang Haiqun 黃海 群, Huang Jiyou 黃紀游, Huang Li 黃立, Huang Ping 黃萍, Huang Xueding 黃學鼎, Karen Barretto, Li Fei 李飛, Li Jing 李晶, Li Shiming 李仕銘, Li Shining 李仕寧, Li Yao 李堯, Li Yi 李藝, Li Zhicheng 李志成, Li Zongfeng 李宗豐, Liang Xumin 梁旭明, Lily, Lin Huantang 林渙棠, Lin Nengqian 林能強, Lin Shaona 林少娜, Lin Siming 林思明, Lin Weijian 林煒健, Lin Xiuyun 林秀雲, Liu Bin 劉彬, Liu Bofeng 劉伯鋒, Liu Fang 劉芳, Lu Gang 盧剛, Lu Huyi 呂護益, Lu Xueying 盧雪英, Luo Chen 羅琛, Luo Shengxiao 羅勝 校, Ni Guanghui 倪光輝, Ou Dongping 歐東平, Pan Jiecong 潘傑聰, Richard Lewthwaite, Ruan Yue 阮 躍, Ruy Barretto, Sun Yujian 孫玉劍, Tang Weimin 唐為民, Tang Zhenghua 湯正華, Tian Suixing 田穂興, Wang Changsong 王常松, Wang Jian 王劍, Wang Jian 王劍, Wang Jun 王軍, Wang Qingliang 王青良, Wang Xiaojiang 王小江, Wang Xueliang 王學良, Wen Baoda 文寶達, Weng Zhene 翁楨娥, Wu Kansong 吳坎宋, Wu Xiurong 吳秀蓉, Xia Qinli 夏欽麗, Xia Xu 夏旭, Xie Shoumian 謝首冕, Xie Zhaoyi 謝釗毅, Xiong Guangping 熊光萍, Xu Juan 徐娟, Xu Ke 許珂, Xu Meng 徐萌, Yan Shaohua 嚴少華, Yang Chenxi 楊晨曦, Yang Jin 楊金, Yang Jun 楊俊, Yang Jun 楊駿, Yang Zhaohui 楊朝暉, Yao Li 姚力, Yu Haiyan 虞 海燕, Yu Xi 余希, 'Yu Yian' '雨燕', Yuan Bing 袁屏, Zeng Xiangwu 曾向武, Zhang Guoan 張國安, Zhang Lin 章麟, Zhang Wei 張偉, Zhang Wenyao 張文耀, Zheng Jianyu 鄭劍瑜, Zheng Kanghua 鄭康 華, Zheng Sexin 鄭色鑫, Zheng Sexin 鄭色鑫, Zheng Yixian 鄭依仙, Zhong Zhiqiang 鍾志強, Zhu Jie 朱 傑, Zhu Xiaoyuan 朱小元, Zhuang Jun 莊珺, Zhuang Weimin 庄偉民, Zou Weiming 鄒維明, Dongzhaigong National Nature Reserve office 東寨港保護區辦公室, Fujian Bid Watching Society 福建 省觀鳥會, Fujian Province Forestry Bureau 福建省林業廳, Fujian province Wildlife protection and management centre 福建省野生動植物保護與管理中心調查, Putian Bird Watching Society 莆田觀鳥會, Wild Bird Society of Shanghai 上海野鳥會, Shenzhen Bird Watching Society 深圳觀鳥會, Xiamen Bird Watching Society 廈門市觀鳥會, Xiapu Forestry Bureau 霞浦林業局. (Japan 日本) Shiori Asai 浅井詩 織, Sayo Chohata 丁畑佐代, Keiichi Ebi 衣斐継一, Hiroki Eguchi 江口浩喜, Dai Fujioka 藤岡大, Tetsuryo Fukumoto 福元哲良, Reiko Fukushima 福嶋令子, Emi Fukuzono 福園恵美, Baku Hamamoto 浜本麦, Atsuto Hamasuna 濱砂淳人, Saori Hamasuna 濱砂佐織, Masataka Hanada 花田正孝, Kozo Hashimoto 橋本幸三, Takuro Hattori 服部卓朗, Osamu Hayashi 林修, Sakuji Higuchi 樋口作二,

Yasuhiro Ide 井手保宏, Masatoshi Ikeda 池田正稔, Kenzaburoh Inoue 井上賢三郎, Masasue Ishihara 石 原政末, Mitsuo Iwaihara 祝原光雄, Hiromi Kashio 加塩弘, Kenko Kashio 加塩研子, Syotaroh Kawabata 河端正太郎, Syotaroh Kawabata 川端正太郎, Naoto Kihara 木原直人, Hiromasa Kimura 木村浩昌, Masuko Kinoshita 木下益子, Shinji Koba 木庭慎治, Masahiro Kobayashi 小林雅裕, Yukihiro Kominami 古南幸弘, Kiyotaka Kotegawa 小手川清隆, Kimiko Kouno 河野紀美子, Hirishige Kubo 久保寬成, Hiroshi Kukita 久木田廣, Jun Kwano河野惇, Jun-ich Maeda 前田潤一, Tamaki Maeda 濱田麥, Kazuhiro Maeda 前田和浩,Isamu Manayoshi 又吉勇, Fumi Matsubara 松原史, Masakazu Matsufuji 松富士将和, Yoshifumi Matsumoto 松本芳文, Satiru Matsumoto 松本悟, Kazuaki Matsuo 松尾一秋, Hiroshi Mitsunaga 光永ひろし, Minoru Mitsuta 満田實, Sayaka Miyagi 宮城清香, Kunitaro Miyagi 宮城国太郎, Yasuko Miyagi 宮城靖子, Suu Miyano 宮野壽, Keiko Miyano 宮野圭子, Yasuo Miyazaki 宮崎八州男, Fumio Mizoguchi 溝口文男, Takashi Morikawa 森河隆志, Takako Morikawa 森河貴子, Yukako Mutsukado 睦門由果子, Syoko Nakahara 中原昌子, Satoshi Nakahara 中原聡, Miwako Nakanishi 中石 美和子, Kansaku Nakao 中尾寬作, Tadashi Nakao 中尾禎志, Makoto Nishimura 西村誠, Hiroe Ogi 荻洋 枝, Hiroto Okabe 岡部海都, Masashi Okazaki 岡崎昭司, Yoshie Okusu 奥主義恵, Satomi Sakaguchi 坂口 里美, Hiroko Sato 佐藤裕子, Koji Shinjo 新城公次, Hisayoshi Shiraishi 白石久善, Hajime Shiraishi 白石 肇, Ken-ichi Shiraishi 白石健一, Naoto Tagano 栂野直人, Shungo Takahashi 高橋俊吾, Shigeki Takano 高野茂樹, Naoko Takayama 高山直子, Takafumi Takeda 武田尊史, Koji Takenaka 竹中孝司, Yukinori Takeshita 竹下将明, Shoji Tashiro 田代省二, Yoshiteru Tatiyama 立山芳輝, Ryoji Tokitsu 時津良治, Makoto Tominaga 冨永誠, Yasuko Tomishima 富島靖子, Hiroshi Tomita 冨田宏, Mitsunori Tsuchiya 土 谷光憲, Madoka Uchimura 内村円, Tsukasa Uemura 上村司, Toru Watanbe 渡辺徹, Fumihiko Yamada 山田文彦, Hiroshi Yamaguchi 山口廣, Hiroko Yamaguchi 山口宏子, Kazunori Yamamoto 山本和紀, Masakuni Yamashiro 山城正邦, Mamoru Yasunaga 安永衛, Seizaburoh Yasuo 安尾征三郎, Shinichi Yoshida 吉田新一, Shin Yosizato 吉里伸. (Taiwan 台灣) 台南市野鳥學會 (Wild Bird Society of Tainan city), 台南縣黑面琵鷺巡守隊 (Black-faced Spoonbill Patrol Team of Tainan county), 台南縣黑面琵鷺 保育學會 (Black-faced Spoonbill Conservation Association), 宜蘭縣野鳥學會 (Wild Bird Society of Ilan), 台東縣野鳥學會 (Wild Bird Society of Taitung), 新竹市野鳥學會 (Wild Bird Society of Shinchu), 雲林縣野鳥學會 (Wild Bird Socity of Yunlin), 嘉義縣野鳥學會 (Wild Bird Society of Chiayi), 高雄市 野鳥學會 (Wild Bird Society of Kaoshiung), 屏東縣野鳥學會 (Wild Bird Society of Pingtung), 苗栗縣 自然生態學會 (Maoli Nature Society), 彰化縣野鳥學會 (Wild Bird Society of Changhua),金門縣野鳥 學會 (Wild Bird Society of Kimmin), 馬祖野鳥學會(Wild Bird Society of Matzu), 花蓮縣野鳥學會 (Wild Bird Society of Hualin), 台北市野鳥學會(Wild Bird Society of Taipei), 桃園縣野鳥學會(Wild Bird Society of Taoyuan), 及上述鳥會之自願調查員 and volunteer surveyors of the socities above, 光 洋應用材料科技公司 (葉秋瑩, 詹勳立, 劉盈宏). (Hong Kong 香港) John Allcock, Geoff Carey, Christina Chan, Cheung Ho-fai, Camille Chung, Bowie Fung, Ho Yuen-wa, John Holmes, Alvin Hui, Hui Tin-yan, Tony Hung, Aaron Keung, Adonia Lam, Dilys Lam, Shirley Lam, Lam Wai-ling, Paul Leader, Banson Leung, Evans Leung, Teresa Leung, Mike Leven, Li Wing, Helen Lo, Janice Lo, Yusei Lo, Austin Ng, Pang Chun-chiu, Sung Yik-hei, Hugo To, Dickson Wong, Michael H.M. Wong, Yiu Sze-wing, Yu Yat-tung, AEC Ltd., Agriculture, Fisheries and Conservation Department (Macao 澳門)

Leung Va (Vietnam 越南) Hoang Thanh Ha, Le Trong Trai, Le Manh Hung, Pham Vu Anh, Phan Van Truong, David Sanchez Vicente, BirdLife Vietnam Programme Office, Vietnam Bird Club, Xuan Thuy National Park. (The Philippines 菲律賓) Carlo Custodio, Mike Lu, George Reyes, Department of Environment and Natural Reseources, Wild Bird Club Philippine. (Thailand 泰國) Uaiphorn Khwanphae, Sampong Nuamsawat, Smith Sutibut, Bird Conservation Society of Thailand.

Copyright

The Hong Kong Bird Watching Society. All rights reserved.

The publisher hereby gives permission to teachers, students, educational institutions, research institutions, conservation organizations and the media to make use of short extracts of the text and also charts in this publication for non-commercial educational, scientific and conservation purpose, provided always that due acknowledgement is given and that a copy of the work containing such extracts and charts is sent to the publisher for record.

Published by

The Hong Kong Bird Watching Society BirdLife International Partner Designate

Available from

The Hong Kong Bird Watching Society
14/F, Ruby Commercial Building,
480 Nathan Road,
Yau Mau Tei, Kowloon, Hong Kong
Postal address: G.P.O. Box 12460, Hong Kong

Tel: (852) 2377 4387 Fax: (852) 2314 3687

E-mail: hkbws@hkbws.org.hk Website: www.hkbws.org.hk

Recommended citation

Chan K.T. and Yu, Y.T. 2012. International Black-faced Spoonbill Census 2011 & 2012. Black-faced Spoonbill Research Group, Hong Kong Bird Watching Society. Hong Kong.

Cover photo

Black-faced Spoonbills Platalea minor at Mai Po Nature Reserve, Hong Kong. Credited by Yat-tung Yu

The Hong Kong Bird Watching Society

TABLE OF CONTENTS

English Report	
Abstract1	1
Introduction1	1
Method1	2
Results and discussion	
Overview	12
Taiwan 1	13
Pearl River Estuary1	13
China Mainland and Hainan Island1	4
Red River Delta, Vietnam1	15
Japan1	15
Republic of Korea1	15
Cambodia1	16
Thailand1	16
Philippines1	16
Conclusion1	16
Acknowledgements2	25
References2	<u>2</u> 5
Мар	
Map 1a. Locations of wintering Black-faced Spoonbills in winters of 2010-11 and	i
2011-12	27
Map 1b. Locations of wintering Black-faced Spoonbills in winters of 2010-11 and	1
2011-12	
Tables	
Table 1 Numbers of Black-faced Spoonbills in different locations of East Asia,	
winters of 2010-11 and 2011-12	30

Table 2	Sites visited with no Black-faced Spoonbill spotted during or near the	
	census periods	33
Table 3	Numbers of Black-faced Spoonbills in Taiwan during the international	
	censuses	35
Table 4	Numbers of Black-faced Spoonbills in the Pearl River Estuary during	
	the international censuses	35
Table 5	Numbers of Black-faced Spoonbills in China Mainland and Hainan	
	Island during the international censuses	35
Table 6	Numbers of Black-faced Spoonbills in the Red River Delta, Vietnam	
	during the international censuses	36
Table 7	Numbers of Black-faced Spoonbills in Japan during the international	
	censuses	36
Table 8	Numbers of Black-faced Spoonbills in Jeju Island, Republic of Korea	
	during the international censuses	36
Table 9	Numbers and percentage increase of total number of Black-faced	
	Spoonbills during the international censuses	37
Figures		
Figure 1	Known wintering Black-faced Spoonbill population from winter	
	1989-90 to 2011-12	39
Figure 2a	Percentages of Black-faced Spoonbills in different wintering areas	
	during the 2011 international census	39
Figure 2b	Percentages of Black-faced Spoonbills in different wintering areas	
	during the 2012 international census	40
Figure 3	Trends of known Black-faced Spoonbills in the world and in three	
	important congregation sites: Tainan of Taiwan, Deep Bay of Hong	
	Kong, Red River Delta of Vietnam from the international censuses	40
Appendi	x	
Appendix	Counts of Black-faced Spoonbills in Hong Kong during the	
	International Black-faced Spoonbill Census 2011	42
Appendix	c 2 Counts of Black-faced Spoonbills in Hong Kong during the	
	International Black-faced Spoonbill Census 2012	43

黑臉琵鷺全球同步普查 2011 及 2012

香港觀鳥會

目 錄

中文報告

撮要		19
引言		19
普查方法		19
結果及討		
綜觀		20
台灣		20
珠江潭	 ¶□	20
中國大	、陸及海南島	21
越南紅	[河口	21
日本		21
韓國		22
柬埔寨	Ę	22
泰國		22
菲律領	Numer	22
總結		22
鳴謝		25
參考資料		25
地圖		
 地圖 1a 20	010-11 及 2011-12 黑臉琵鷺冬季棲息地點	27
地圖 1b20	010-11 及 2011-12 黑臉琵鷺冬季棲息地點	28
圖表		
表 1	2010-11 及 2011-12 冬季東亞各地的黑臉琵鷺數量	30
	全球同步普查期間曾進行調查但未有錄得琵鷺的地方	
	全球同步普查期間在台灣錄得的黑臉琵鷺數量	
	全球同步普查期間在珠江河口錄得的黑臉琵鷺數量	
	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	

表	6	全球同步普查期間在越南紅河口錄得的黑臉琵鷺數量	36
表	7	全球同步普查期間在日本錄得的黑臉琵鷺數量	36
表	8	全球同步普查期間在韓國濟州島錄得的黑臉琵鷺數量	36
表	9	全球同步普查期間錄得的黑臉琵鷺總數及增長百分比	37
圖月	1		
昌	1	已知的黑臉琵鷺渡冬族群於 1989-90 至 2011-12 年冬季數量	39
昌	2a	2011 全球同步普查期間黑臉琵鷺在不同越冬地的全球百分比	39
昌	2b	2012 全球同步普查期間黑臉琵鷺在不同越冬地的全球百分比	40
昌	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、香港后海灣和越南紅河口)的數量趨勢	40
附銀	彖		
附欽	— 彔 1	2011年黑臉琵鷺全球同步普查香港結果	42
附銀	第 2	2012 年黑臉琵鷺全球同步普查香港結果	43

English Report

Kin-tak Chan and Yat-tung Yu

Black-faced Spoonbill Research Group, Hong Kong Bird Watching Society

Abstract

The annual International Black-faced Spoonbill Census was conducted on 21-23 January 2011 and 13-15 January 2012. These censuses serve as an important initiative to acquire 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 1,839 Black-faced Spoonbills in 2011, embracing a drastic drop by 21.6% from 2010. Nevertheless, the total count scored its peak of 2,693 Black-faced Spoonbills in 2012 since the inception of this census in the mid-1990s, reflecting a robust revival by 46.4% from the previous year. Same as previous censuses, Tsengwen River estuary of Tainan as well as Deep Bay between Hong Kong and Shenzhen maintained as the two largest wintering sites of the Black-faced Spoonbill. In 2011 and 2012, respectively 74 and 113 Black-faced Spoonbills were also observed at Haifeng, Guangdong, and Xinhua Bay, Fujian, which have currently evolved into two other important wintering sites of this globally endangered species in mainland China.

Introduction

Black-faced Spoonbill *Platalea minor* is listed as a globally endangered species due to its small known population and restricted range (BirdLife International 2012). 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, BirdLife International 2012). In early 1990s, this species began to draw the attention of conservationists as fewer than 300 individuals were confined to 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 2009 and 2010 (Yu 2010).

This annual census was regarded as one of high priority in the conservation plans of this endangered species (Severinghaus *et al.* 1995, Chan *et al.* 2010) because it proved to be an effective means for gathering annual figures on the population and distribution of wintering Black-faced Spoonbills through international collaboration. The Hong Kong Bird Watching Society, a BirdLife Partner Designate, began to spearhead this census from 2003 onwards. This report aims to append results of the censuses undertaken in January of two consecutive years from 2011 to 2012.

Method

Previous censuses were unanimously held in mid-winter, in the belief that the wintering populations of spoonbills apparently remain stable at around this time of the year. In addition, the exact dates scheduled for the censuses usually coincide with dates of high tides in Red River Delta in Vietnam and Deep Bay between Hong Kong and Shenzhen, given that high tide facilitates the counting in these sites. As for the 2011 and 2012 censuses, the census periods were scheduled on 21-23 January 2011 and 13-15 January 2012. Geographical area covered by this census is shown in map 1. Guidelines were sent to surveyors in advance of the census as the technical basis adopted. Most of field counts were done within the census period though, 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 censuses were made with binoculars and telescopes.

Counting of spoonbills is indebted 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 onward transmission to the international coordinator for in-depth analysis and announcement.

Results and discussion

Overview

This census recorded a total of 1,839 and 2,693 Black-faced Spoonbills in the

East Asia region for 2011 and 2012 respectively, with the majority along the coast. This figure, nevertheless, accounts for an acute drop by 21.6% from the toll of 2010 followed by a V-shaped revival by 46.4% (table 1 and 9). The average population growth rate surges to 13.3% (with SD = 14.8, table 9). In particular, both the fall in 2011 and the rise in 2012 are mainly attributable to the significant fluctuations in the numbers of Black-faced Spoonbills recorded in the largest wintering site, Tainan area, and mainland China. Nevertheless, a drop is, on the other hand, observed in Pearl River Estuary and Vietnam in 2011 and 2012, against steady increases in Japan and Korea, details of which are discussed below.

Black-faced Spoonbills were found in 56 sites in both censuses of 2011 and 2012, higher than 44 sites in 2009 and 52 sites in 2010. All the main wintering sites, referred as those sites with more than 1% of the overall wintering populations, are included in the surveys for almost all years, thereby allaying the risk of missing any considerable groups of wintering Black-faced Spoonbills. As the population figures fluctuated in recent years, the figures from the last five years were averaged to yield a 1% population level of this species, i.e. 22 individuals. Sites with more than 22 Black-faced Spoonbills are therefore considered as important sites for this species. The findings for each of the sites are elaborated below.

Taiwan

2011: 834 birds **2012:** 1,562 birds

Taiwan has always been the largest congregation site of the Black-faced Spoonbills in the world (table 3). The 2011 figure, however, demonstrates a plunge of 34.8% from the toll of 2010, whereas the 2012 figure displays a robust recovery by 87.3% from the previous year. Chi-ku and Sitsao of Tainan area is in combination the largest wintering ground in the world, where a total of 767and 1,307individuals were recorded during the 2011and 2012 census respectively, constituting 41.7% and 58% of the global population respectively. In particular, it is worthwhile to note that a total of 36 and 227 birds were recorded at Chiayi County in 2011 and 2012 respectively, indicating the emergence of another large congregation site. Smaller groups were scattered in other parts of Taiwan, including Ilan and Kinmen. More details of the count in Taiwan are available in table 1 and 3.

Pearl River Estuary (includingDeepBay between Hong Kong and Shenzhen, Taipa in Macao)

2011: 460 birds, including 411 birds in Deep Bay and 49 birds in Taipa

2012: 444 birds, including 393 birds in Deep Bay and 51 birds in Taipa

The numbers of wintering Black-faced Spoonbills in the Pearl River Estuary area dropped consecutively in these two censuses, with a significant decrease of 8.2% in 2011 followed by a further fall of 3.5% in 2012. The decreases in these two years are mainly attributed to the fall in the number of birds in the Deep Bay area, where a total of 411 birds and 393 birds were present in 2011 and 2012 respectively, symbolizing a plunge of 11% and 4.4% from the previous year's counts. Same as previous censuses, the latest censuses covered numerous 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 22.3% and 14.6% of the global wintering population in 2011 and 2012 respectively.

Situation of the wintering site in Macao is, on the other hand, not as good as that in the Deep Bay area. Totally 49 and 51 birds were counted during the census in 2011 and 2012 respectively, showing an acute increase of 25.6% in 2011 coupled with a mild rise by 4.1% in 2012, and the figures still constitute 2.7% and 1.9% of the global wintering population in these two years. The main loafing area of the spoonbill wintering in Macao has been deteriorating because of the ambitious development to pave way for the 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 real challenge.

China Mainland and Hainan Island

2011: 198 birds **2012:** 328 birds

The number of wintering Black-faced Spoonbills in mainland China (including Hainan Island) is fluctuating in recent years, consistent with the general trend of the global population. In the 2011 census, a total of 198 Black-faced Spoonbills were recorded in this area, bearing a decrease of 15.4% from the previous year's figure, whereas the toll reached a record peak of 328 birds in 2012, symbolizing a 65.7% increase (table 5). This 2012 figure represented 12.2% of the known global population.

One major reason leading to the decline in 2011 is the fewer spoonbills recorded in Hainan (Dongfang) and Fujian (Xinhua Bay). However, situation improved manifestly in 2012 as a total of 113 birds were recorded at Xinhua Bay, Fujian, being the largest flock counted in the mainland China. Moreover, another

flock of 49 birds were recorded at Wenzhou, Zhejiang, which boosted the total population recorded in mainland China. This is also the first sighting in Zhejiang since 2006, indicating that some birds might reside in this province.

Red River Delta, Vietnam

2011: 49 birds **2012:** 35 birds

A total of 49 and 35 Black-faced Spoonbills were recorded in the Red River Delta in 2011 and 2012 respectively, where the 2011 figure is 6.5% higher than the 2010 count, but the 2012 toll is 28.6% lower than that of 2011. The fluctuation might be due to the varied tidal situation during the census period, but it might also reflect that the situation of Red River Delta becomes unfavourable to Black-faced Spoonbills. Same as 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

2011: 270 birds **2012:** 284 birds

More than 200 birds were recorded in Japan in three consecutive censuses, and for the recent censuses, new peak counts of 270 individuals in 2011 and 284 individuals in 2012 were reached in the western part of Japan (table 7). This represents an increase by 4.7% from the 2010 figure and 5.2% from the 2011 figure, and constitutes 14.7% and 10.5% of the global population in 2011 and 2012 respectively. Kumamoto Prefecture held the largest flocks of the wintering Black-faced Spoonbill in Japan, with 33 birds at Kagami River estuary in 2011 and 27 birds in the area of Kumamoto Port and Shirakawa River estuary. In addition, Black-faced Spoonbills were found wintering in 35 and 29 sites in census of 2011 and 2012 respectively (table 1).

Republic of Korea

2011: 26 birds **2012:** 40 birds

In 2011, a total of 26 individuals were recorded at Jeju Island (14 at Hado-ri and 12 at Seongsanpo), while in 2012 the number soared to 31 birds (17 at Hado-ri, 13 at Seongsanpo and one at Geugseong-ri). In addition, nine were observed at Shinan, Haenam County, Jeollanam-do in 2012 census, a rare winter record away from Jeju Island. The total numbers in these two years maintained to be 1.5% of the world population.

Cambodia

2011: 1 bird **2012**: (2 birds outside the census period)

Results from recent satellite-tracking studies revealed that one immature Black-faced Spoonbill stayed in Takéo, Cambodia during the period of the 2011 census. Subsequently, researchers commissioned a survey in the area based on this information and managed to find four first-winter individuals on 12-13 February 2011. This is the first evidence ever attained to date indicating that some Black-faced Spoonbills, especially young birds, could stay in the Southeast Asia. In winter 2011-12, two individuals were found on 23 February 2012 but none during the census period.

Thailand

2011: 1 bird **2012:** (2 birds outside the census period)

Single was recorded at Pak Thale, Patchaburi, Inner Gulf of Thailand during the 2011 census, while two were recorded at this area in 2012, though outside the census period. A few immature individuals appeared to be present regularly in Inner Gulf of Thailand, particularly at Pak Thale, in recent years.

Philippines

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

Conclusion

Although the most recent survey turns up with a record high count, this species is dependant on several pockets of intertidal area in the East Asia region (Yu and Swennen 2004) and the increase of numbers was only found in a few sites. This is hardly a desirable direction for the long term survival of the spoonbills. Given that hunting and habitat destruction are yet eradicated from many places in these areas, this species is still encountering considerable risk of extinction in near future.

The number of Black-faced Spoonbills had decreased and subsequently increased in the two latest censuses. Significant fluctuation is observed in Taiwan and mainland China, where huge flocks of birds were found in 'new' sites, e.g. at Chiayi and Wenzhou. The 'decrease' of number in the census might only be brought about by birds staying in areas which were not covered in these surveys. As such, survey efforts should be arranged to ensure the inclusion of these sites in forthcoming censuses.

Sites with more than 1% of the world population of the Black-faced Spoonbills (i.e. 22 individuals) from the census are listed below. They are considered important sites for the conservation of the spoonbills.

- Tsengwen River estuary area including Chiku and Sitsao, Tainan 1,307 birds in 2012 (59%),
- Deep Bay, Hong Kong and Shenzhen 393 birds in 2012 (18%),
- Chiayi, Taiwan 227 birds in 2012 (13%),
- Xinhua Bay, Fujian 113 bird in 2012 (5.1%),
- Haifeng, Guangdong 81 birds in 2012 (3.7%),
- Sigang, Changhua River estuary, Hainan 57 birds in 2011 (2.6%),
- Taipa-coloane, Macao 51 birds in 2012 (2.3%),
- Wenzhou, Zhejiang 49 birds in 2012 (2.2%),
- XuanThuy, Red River Delta, Vietnam 49 birds in 2011 (2.2%),
- Kagami River estuary, Kumamoto 33 birds in 2011 (1.5%),
- Jeju Island, Republic of Korea 31 birds in 2012 (1.4%),
- Kumamoto Port and Shira-kawa River estuary, Kumamoto 30 birds in 2011 (1.4%),
- Imazu tidal flat, Zuibaiji River estuary, Fukuoka 23 birds in 2012 (1.0%),
- Kajikisuzaki regulation pond, Kagoshima 23 birds in 2011 (1.0%).

黑臉琵鷺全球同步普查 2011 及 2012

Chinese Report 中文報告

2011 及 2012 年黑臉琵鷺全球同步普查

陳健德 余日東

香港觀鳥會 黑臉琵鷺研究組

撮要

黑臉琵鷺的週年普查分別於 2011 年 1 月 21-23 日和 2012 年 1 月 13-15 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,讓我們可以按年檢視黑臉琵鷺越冬種群的健康和分佈狀況。2011 年的普查只錄得 1,839 隻黑臉琵鷺,比之前一年 大幅下跌 21.6%。然而,2012 年的普查錄得 2,693 隻黑臉琵鷺,這個結果創下普查在九十年代中期開展以來黑臉琵鷺數目的新高,比 2011 年的數量強勁反彈達 46.4%。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兩個最大越冬 地點。另外,在 2011 和 2012 年的普查中,廣東的海豐和福建的興化灣分別錄得 74 隻和 113 隻黑臉琵鷺,這兩個地點現已成為這個全球性瀕危物種的重要越冬地點。

引言

黑臉琵鷺 Platelea 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(國際鳥盟 2012)。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, 國際鳥盟 2012)。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 年突破 1,000 隻(Yu 2003),於 2009 年和 2010 年更超過 2,000 隻(Yu 2010)。

這項普查是黑臉琵鷺保育計劃的優先項目(Severinghaus et al. 1995, Chan et al. 2010),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2011 和 2012 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看來較為穩定,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,2011 和 2012 年的普查分別安排在2011 年 1 月 21-23 日和 2012 年 1 月 13-15 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維行。

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承擔。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,作進一步的分析和結果公佈。

結果及討論

綜觀

2011和2012年的普查在東亞地區分別錄得1,839隻和2,693隻黑臉琵鷺,主要在沿海一帶。可惜,這個結果顯示,黑臉琵鷺在2011年的數目,足足比2010年的下跌21.6%;可幸的是,黑臉琵鷺的數目在2012年即以46.4%大幅反彈(表1及9),而數字的平均增幅更上升至13.3%(SD = 14.8,詳見表9)。2011年普查錄得黑臉琵鷺數目大跌,及至2012年重拾升軌,主要源於兩個越冬地點,即台南地區和中國大陸在這段時間的數量波動。不過,后海灣和越南的數量按年下滑,相反日本和韓國的數量持續增加,詳情會在下面分解。

2011 和 2012 年兩次普查錄得黑臉琵鷺在 56 個地點越冬,比 2009 年的 44 個和 2010 年的 52 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 1%的地點,以減低遺漏大群黑臉琵鷺的機會。由於近年來全球黑臉琵鷺的數目上落波幅較大,因此經參考最近五年的數字後,總數 1%訂於 22 隻的水平。任何地方倘若錄得 22 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

2011:834 隻 2012:1,562 隻

台灣一直擁有世上最大群的越冬黑臉琵鷺(表 3)。然而,2011 年錄得的數目比 2010 年大跌 34.8%,不過這個數目在 2012 年急速反彈,較 2011 年上升 87.3%。另外,台南七股和四草仍然是全球最大的黑臉琵鷺越冬地,2011 和 2012 年的普查中分別有 767 隻和 1,307 隻黑臉琵鷺在此錄得,分別佔該種總數的 41.7%和 58%。值得留意的是,2011 和 2012 年的普查中嘉義縣分別錄得 36 隻和 227 隻,顯示該處有可能成為另一個大型的黑臉琵鷺集結地。少數的黑臉琵鷺也有在台灣其他地點錄得,計有宜蘭、金門。有關台灣方面的調查,詳情可見於表 1 和 3。

珠江河口(包括香港和深圳的后海灣,以及澳門氹仔路環)

2011:460 隻,包括后海灣(香港及深圳)的411 隻,以及澳門的49 隻**2012**:444 隻,包括后海灣(香港及深圳)的393 隻,以及澳門的51 隻

在珠江河口地區錄得的黑臉琵鷺,數目在兩年的普查按年下降,2011年顯著下跌8.2%,2012年再跌3.5%。2011和2012年,后海灣錄得的黑臉琵鷺越來越少,分別有411隻和393隻,相比往年下跌11%和4.4%,致令整個珠江河口地區錄得的黑臉琵鷺數目在兩年間下滑。一如過去的普查,這兩年調查覆蓋后海灣地區多個地點,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。后海灣地區的數目在2011和2012年分別佔該種越冬種群的22.3%和14.6%。

然而,澳門越冬地點的情況並沒有如后海灣地區的般理想,2011 和 2012 年的調查分別只錄得49隻和51隻黑臉琵鷺,數目在2011 和 2012年分別上升25.6%和4.1%,而數目仍佔該種在2011和2012年越冬種群的2.7%和1.9%。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)錄得的黑臉琵鷺變化幅度大,與全球數量的上升趨勢大致相若。在2011年的調查,這個地區僅錄得198隻黑臉琵鷺,比往年下降15.4%;不過,2012年則錄得328隻,是有史以來的最高數字,較往年數目大幅上升65.7%(表5)。2012年的數量,正好佔全球已知總數的12.2%。

海南島東方昌化江河口和福建興化灣錄得的黑臉琵鷺數目有所下降,應該是2011年中國大陸數量減少的主要原因。然而,情況在2012年出現大逆轉。單在福建興化灣,2012年共錄得113隻黑臉琵鷺,是中國大陸數點到的最大群。另外,浙江溫州錄得一群49隻的黑臉琵鷺,將中國大陸的數目進一步推高。這亦是浙江在2006年以來的首個紀錄,相信本種有可能在這個省停留。

越南紅河口

2011:49 隻 2012:35 隻

在 2011 和 2012 年的普查中,黑臉琵鷺在紅河三角州的數目分別為 49 隻和 35 隻,2011 年的數量比 2010 年增加 6.5%,不過 2012 年卻比 2011 年大幅下跌 28.6%。調查期間不同的潮汐情況,可能是導致數目變化的主要因素;然而這個情況,可能反映紅河三角州的條件,開始對黑臉琵鷺變得不太適合。一如過去的普查,所有的紀錄都是在紅河三角州的春水地區錄得。調查亦有在同屬紅河三角州的 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

2011:270 隻 2012:284 隻

在過去三次的普查裡,日本都錄得超過 200 隻的黑臉琵鷺,而 2011 和 2012 年的普查更屢創新高,分別在日本西部錄得 270 隻和 284 隻 (表 7)。這意味 2011 年的數目超出 2010 年數字逾 4.7%,2012 年更比 2011 年上升 5.2%,在 2011 和 2012 年分別穩佔全球數目的 14.7%和 10.5%。日本最大的越冬種群在熊本縣錄得,2011 年在鏡川河口錄得 33 隻,2012 年在新港和白川河口共有 27 隻。兩次普查的紀錄顯示,黑臉琵鷺在日本的越冬地點於 2011 和 2012 年分別達到 35 個和 29 個 (表 1)。

韓國

2011:26 隻 2012:40 隻

2011年的普查在濟州島錄得總共26隻黑臉琵鷺(即14隻在Hado-ri及其餘12隻在城山浦),而在2012年則上升至31隻(即17隻在Hado-ri,13隻在城山浦,及其餘1隻在Geugseong-ri)。另外,2012年在Jellanam道Haenam縣的Shinan錄得9隻黑臉琵鷺,為該種在濟州島以外的一筆罕有紀錄。韓國在近兩年的數目維持全球總數的1.5%。

柬埔寨

2011:1隻 2012:2隻 (在普查以外時間錄得)

最近的衛星追蹤研究顯示,在2011年普查進行期間,也有1隻未成年的黑臉琵鷺在柬埔寨的Takéo逗留。其後,研究人員根據這筆資料,在該地區進行調查,結果在2011年2月12-13日找到4隻首年渡冬的個體。這是至今首次錄得黑臉琵鷺(尤其是未成年鳥)停歇在東南亞的紀錄。在2011-12年度的冬季,2012年2月23日曾經錄得兩隻黑臉琵鷺,不過在普查進行期間則沒有紀錄。

泰國

2011:1 隻 2012:2 隻(在普查以外時間錄得)

2011 年普查中,在泰國海內灣 Patchaburi 地區的 Pak Thale 錄得單隻黑臉琵鷺紀錄, 2012 年在同一地點也有兩隻,不過可惜只在普查以外時間錄得。近年來,似乎有少數 幼鳥經常在泰國海內灣,尤其是 Pak Thale 出現。

菲律賓

兩次普查中,菲律賓均沒有錄得黑臉琵鷺。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

儘管在近年的普查中,黑臉琵鷺的數目屢創新高,本種主要集中於幾個在東亞區內的細小潮汐間濕地(Yu and Swennen 2004),而數目的增長只在幾個地點出現,這種情形

對琵鷺的長遠生存並非是一個理想的方向。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,令這品種在短期內仍然面對很大的絕種威脅。

近兩年普查錄得的黑臉琵鷺數目先下跌後回升,其中台灣和中國大陸的數量反覆,大 群琵鷺在「新」地點,例如嘉義和溫州出現。普查中的所謂數目「下跌」,可能是由 於琵鷺停歇在一些沒有進行普查的地點。因此,往後的普查應該涵蓋這些地點。

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 22 隻)的話,均會視為保育此種的重要地點,現將這些地點膽列如下。

- 台灣台南曾文溪口,包括七股及四草 2012 年有 1,307 隻 (59%),
- 香港和深圳后海灣 2012 年有 393 隻 (18%),
- 台灣嘉義 2012 年有 227 隻 (13%),
- 福建興化灣- 2012 年有 113 隻 (5.1%),
- 廣東海豐-2012年有81隻 (3.7%),
- 海南島昌化江口-2011年有57隻 (2.6%),
- 澳門氹仔路環 2012 年有 51 隻 (2.3%),
- 浙江溫州-2012年有49隻 (2.2%),
- 越南紅河□春水國家公園 2011 年有 49 隻 (2.2%),
- 日本熊本縣鏡川河口 2011 年有 33 隻(1.5%),
- 韓國濟州島-2012年有31隻 (1.4%),
- 日本熊本縣新港及白川河口-2011年有30隻 (1.4%),
- 日本福岡縣瑞梅寺河今津干潟-2012年有23隻(1.0%),
- 日本鹿兒島縣加治木須崎調整池-2011 年有23隻(1.0%),

黑臉琵鷺全球同步普查 2011 及 2012

Acknowledgements and References 鳴謝及參考資料

Acknowledgments 鳴謝

My heartfelt gratitude goes to all the following counters, data contributors and organizations who participated and coordinated the censuses. A list of all participants is appended at the beginning of this report. I am also indebted to Mr. Chan Kin Tak for his assistance in editing this report.

是次普查能順利完成,全賴各熱心普查員協力收集資料。我要感謝所有參加野外調查, 提供資料及協助聯絡或統籌的各位同仁,參加者的名單已在本報告開端列出,及陳健 德先生為這報告作編輯及校對。

References 参考資料

BirdLife International 2012. Species factsheet: *Platalea minor*. Downloaded from http://www.birdlife.org on 10/10/2012.

Chan, S. Fang, W.H, Lee, K.S., Yamada, Y. and Yu, Y.T. 2010. International Single Species Action for the conservation of the Black-faced Spoonbill (*Platelea minor*). BirdLife International Asia Division & CMS Secretariat, Tokyo & Bonn, Germany.

Hancock, J.A., Kushlan, J.A. and Kahl, M.P. 1992. Storks, Ibises and Spoonbills of the World. Academic Press. London.

del Hoyo, J., Elliott, A. and Saragatal, J. (Eds.). 1992. Handbook of the Birds of the World Volume 1. Lynx Edicions. Barcelona.

Kennerley, P.R. 1990. A review of the status and distribution of the Black-faced Spoonbill. Hong Kong Bird Report 1989: 83-100.

Severinghaus, L.L., Brouwer, K., Chan, S. Chong, J.R., Coulter, M.C., Poorter, E.P.R. and Wang, Y. 1995. Action plan for the Black-faced Spoonbill *Platalea minor*. "Task Force to Develop an Action plan for the Preservation of the Black-faced Spoonbill" Taipei, Taiwan. January 16-22, 1995.

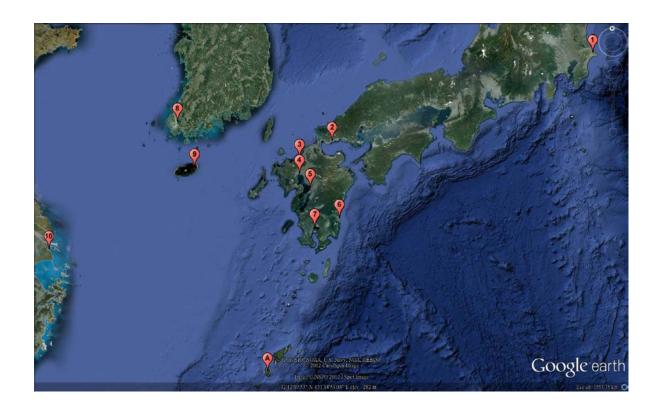
Yu, Y.T. 2003. International Black-faced Spoonbill Census: 24-26 January 2003. The Hong Kong Bird Watching Society. Hong Kong.

Yu, Y.T. 2010. International Black-faced Spoonbill Census 2010. Black-faced Spoonbill Research Group, Hong Kong Bird Watching Society. Hong Kong.

Yu, Y.T. and Swennen, C. 2004. Habitat use of the Black-faced Spoonbill. Waterbirds 27(2): 129-134.

黑臉琵鷺全球同步普查 2011 及 2012

Map 地圖



Map 1a. Locations of wintering Black-faced Spoonbills in winter 2010-11 and 2011-12.

1) Ibaraki, Japan; 2) Yamaguchi, Japan; 3) Fukuoka, Japan; 4) Saga, Japan; 5) Kumanmoto, Japan; 6) Miyazaki, Japan; 7) Kagoshima, Japan; 8) Shinan, Republic of Korea; 9) Jeju, Republic of Korea; 10) Shanghai, China; A) Amami Island, Japan.

地圖 1a. 2010-11 及 2011-12 冬季年黑臉琵鷺全球同步普查地點: 1) 日本茨城縣; 2) 日本山口縣; 3)日本福岡縣; 4) 日本佐賀縣; 5) 日本熊本縣; 6) 日本宮崎縣; 7) 日本鹿児島縣; 8) 韓國 Shinan; 9)) 韓國濟州島; 10) 中國上海; A) 日本奄尾群島.



Map 1b. Locations of wintering Black-faced Spoonbills in winter 2010-11 and 2011-12. A) Amami Island, Japan; B) Okinawa, Japan; C) Ilan, Taiwan; D) Hualin, Taiwan; E) Miaoli, Taiwan; F) Chiayi, Taiwan; G) Tainan, Tawain; H) Kaohsiung, Taiwan; I) Pingtung, Taiwan; J) Wenzhou, Zhejiang; K) Xiapu, Fujian; L) Mingjiang estuary; M) Xinhua Bay (Fuqing and Putian), Fujian; N) Kinmen, Taiwan; O) Pratas Island, Taiwan; P) Shantou, Guangdong; Q) Haifeng, Guangdong; R) Deep Bay, Hong Kong and Shenzhen; S) Guangzhou, Guangdong; T) Taipa, Macao; 1) Lingao, Hainan; 2) Changhua River estuary, Hainan; 3) Xuan Thuy, Vietnam; 4) Takéo, Cambodia; 5) Ban Pak Thale, Thailand.

地圖 1b. 2010-11 及 2012 冬季年黑臉琵鷺全球同步普查地點: A) 日本奄尾群島; B) 日本沖繩群島; C) 台灣宜蘭; D) 台灣花蓮; E) 台灣苗栗; F) 台灣嘉義; G) 台灣台南(七股和四草); H) 台灣高雄; I) 台灣屏東; J) 浙江溫州; K) 福建霞浦; L) 福建閩江口; M) 福建興化灣(福清和莆田); N) 台灣金門; O) 台灣東沙群島 P) 廣東汕頭; Q) 廣東海豐; R) 香港和深圳后海灣; S) 廣東廣州; T) 澳門路氹; 1) 海南臨高; 2) 海南昌化江口; 3) 越南紅河口春水; 4) 柬埔寨茶膠省; 5) 泰國 Ban Pak Thale.

黑臉琵鷺全球同步普查 2011 及 2012

Tables

圖表

Table 1. Number of Black-faced Spoonbills in different locations of East Asia, winter 2010-11 and 2011-12. Numbers in parenthesis are extra birds counted outside the census period.

表 1.2010-11 及 2011-12 年冬季東亞各地的黑臉琵鷺數量

Region 地區	Location 地點	2011	Number 數量	2012	Number 數量
China mainland 中國大陸	Dongtian and Wetland Park, Chongming, Shanghai 上海 崇明 東灘及濕地公園	22-23 Jan 1月 22-23 日	2	14 Jan 1 月 14 日	2
China mainland 中國大陸	Nanhui, Shanghai 上海 南匯	22 Jan 1 月 22 日	1	15 Jan 1 月 15 日	6
China mainland 中國大陸	Lingkun, Wenzhou, Zhejiang 浙江 溫州 靈昆	No report 沒有報告	N/A	13 Jan 1 月 13 日	49
China mainland 中國大陸	Funing Bay, Xiapu, Fujian 福建 霞浦 福寧灣	22 Jan 1 月 22 日	11	13 Jan 1 月 13 日	1
China mainland 中國大陸	Minjiang estuary, Fuzhou, Fujian 福建 福州 閩江口	21 Jan 1月21日	1	13 Jan 1 月 13 日	21
China mainland 中國大陸	Xinhua Bay, Fuqian, Putian, Fujian 福建 福清,莆田 興化灣	22 Jan 1月 22 日	41	14 Jan 1月14日	113
China mainland 中國大陸	Shantou, Guangdong 廣東 汕頭	22-23 Jan 1月 22-23 日	0	14 Jan 1 月 14 日	3
China mainland 中國大陸	Haifeng, Guangdong 廣東 海豐	21-23 Jan 1月21-23日	74	13-15 Jan 1月13-15日	81
China mainland 中國大陸	Nansha, Guangzhou, Guangdong 廣東 廣州 南沙	22 Jan 1 月 22 日	2	13 Jan 1 月 13 日	8
China mainland 中國大陸	Xinying, Lingao, Hainan 海南省 臨高 新盈	21 Jan 1 月 21 日	9	14 Jan 1 月 14 日	13
China mainland 中國大陸	Changhua River estuary, Dongfang, Hainan 海南省 東方 昌化江口	22 Jan 1 月 22 日	57	14 Jan 1 月 14 日	31
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	21-23 Jan 1月21-23日	411	13-15 Jan 1月13-15日	393
Macao 澳門	Taipa-coloane 氹仔-路環	21-23 Jan 1月21-23日	49	13-15 Jan 1月13-15日	51
Taiwan 台灣	Miaoli 苗栗	22-23 Jan 1月22-23日	1	14-15 Jan 1月 14-15 日	0
Taiwan 台灣	Chiayi 嘉義	22-23 Jan 1月22-23日	36	14-15 Jan 1月 14-15 日	227
Taiwan 台灣	Kinmen 金門	22-23 Jan 1月22-23日	5	14-15 Jan 1月14-15日	5
Taiwan 台灣	Tainan 台南 包括七股,四草及土城	22-23 Jan 1月22-23日	767	14-15 Jan 1月14-15日	1307
Taiwan 台灣	Kaoshiung 高雄 包括茄萣及高屏溪口	22-23 Jan 1月22-23日	12	14-15 Jan 1月14-15日	7
Taiwan 台灣	Pingtung 屏東	22-23 Jan 1月22-23 日	1	14-15 Jan 1月14-15日	0
Taiwan 台灣	Ilan 宜蘭	22-23 Jan 1月22-23 日	12	14-15 Jan 1月14-15日	14

Taiwan	Hualien	22-23 Jan	0	14-15 Jan	1
台灣 Taiwan	花蓮 Pratas Island	1月22-23日 22-23 Jan		1月14-15日 14-15 Jan	
台灣	東沙群島	1月22-23日	0	14-15 Jan 1月14-15日	1
Japan 日本	Honshu: Ibaraki Pref. Hasaki-cho, Shubana Tone River estuary 本州島 茨城縣 波崎町 洲鼻	22 Jan 1 月 22 日	1	12,19 Jan 1月12,19日	(1)
Japan 日本	Honshu: Yamaguchi Pref., Yamaguchi City, Yamaguchi Bay 本州島 山口県 山口市 山口湾	No report 沒有報告	N/A	15 Jan 1 月 15 日	2
Japan 日本	Kyushu: Fukuoka Pref., Kanda Reclamation Pond 九州島 福岡縣 苅田埋立地池	23 Jan 1月23日	2	15 Jan 1 月 15 日	0
Japan 日本	Kyushu: Fukuoka Pref., Yukuhashi City, Imagawa River estuary 九州島 福岡縣 行橋市 今川河口	23 Jan 1月23日	4	14 Jan 1月14日	14
Japan 日本	Kyushu: Fukuoka Pref., Kitakyusyu City, Sone tidal flat, Kusami River estuary 九州島 福岡縣 曽根幹潟 朽網川河口	23 Jan 1月23日	2	14 Jan 1月14日	0
Japan 日本	Kyushu: Fukuoka Pref., Fukutu City, Tsuyazaki Irie 九州島 福岡縣 津屋崎	23 Jan 1月23日	7	15 Jan 1 月 15 日	6
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	23 Jan 1月 23日	1	No report 沒有報告	N/A
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Wajiro tidal flat (coast). 九州島 福岡縣 和白乾潟(海岸)	23 Jan 1月23日	0	No report 沒有報告	N/A
Japan 日本	Kyushu: Fukuoka Pref., Gannosu coast 九州島 福岡縣 雁丿巢海岸	23 Jan 1月23日	1	15 Jan 1 月 15 日	0
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Tatara River estuary 九州島 福岡縣 多多良川河口	23 Jan 1月23日	12	15 Jan 1 月 15 日	12
Japan 日本	Kyushu: Fukuoka Pref., Fukuoka City, Zuibaiji River estuary, Imazu tidal flat 九州島 福岡縣 瑞梅寺川河口 今津干潟	23 Jan 1月23日	23	15 Jan 1 月 15 日	23
Japan 日本	Kyushu: Fukuoka Pref., Itosima City, Kafuri Bay (tidal flat) 九州島 福岡縣 加布里灣	23 Jan 1月23日	7	No report 沒有報告	N/A
Japan 日本	Kyushu: Fukuoka Pref., Maebara City, Kafuri, Izumi River estuary 九州島 福岡県 前原市 志摩町加布里	No report 沒有報告	N/A	15 Jan 1 月 15 日	8
Japan 日本	Kyushu: Fukuoka Pref., Itoshima City, Fukuryu-ike pond 九州島 福岡縣 伏龍貯水池	23 Jan 1月23日	1	No survey 沒有調查	N/A
Japan 日本	Kyushu: Fukuoka Pref., Yanagawa City, Chikugo River estuary 九州島 福岡縣 筑後川河口	23 Jan 1月23日	17	15 Jan 1 月 15 日	10
Japan 日本	Kyushu: Fukuoka Pref., Yanagawa City, Okinohata River estuary 九州島 福岡縣 沖之端川河口	23 Jan 1月23日	5	15 Jan 1 月 15 日	4
Japan 日本	Kyushu: Saga Pref.,Daijugarami 九州島 佐賀縣 大授搦	23 Jan 1月23日	3	15 Jan 1 月 15 日	11
Japan 日本	Kyushu: Saga Pref., Hayatue River estuary 九州島 佐賀縣 早津江川河口	23 Jan 1 月 23 日	2	15 Jan 1 月 15 日	0
Japan 日本	Kyuahu: Saga Pref., Kase-machi boko tadal flat	No report 沒有報告	N/A	13 Jan 1 月 13 日	4
	1	·/~/4 IV I		/ 3 = ~ H	

	九州島 佐賀県 嘉瀬町 戊甲搦				
Japan 日本	Kyushu: Saga Pref., Hama River estuary 九州島 佐賀縣 濱川河口	23 Jan 1 月 23 日	17	13 Jan 1 月 13 日	14
Japan 日本	Kyushu: Saga Pref., Shiraishi-machi Tadae River 九州島 佐賀県 白石町 只江川	No report 沒有報告	N/A	15 Jan 1 月 15 日	1
Japan 日本	Kyushu: Kumamoto Pref., Arao coast 九州島 熊本縣 荒尾海岸	22 Jan 1 月 22 日	4	15 Jan 1 月 15 日	0
Japan 日本	Kyushu: Kumamoto Pref., Kikuchi River estuary 九州島 熊本縣 菊池川河口	22 Jan 1月22日	5	15 Jan 1 月 15 日	3
Japan 日本	Kyushu: Kumamoto Pref., Shira-kawa River estuary 九州島 熊本縣 白川河口	22 Jan 1月22日	30	15 Jan 1 月 15 日	27
Japan 日本	Kyushu: Kumamoto Pref., Hi-kawa River estuary 九州島 熊本縣 氷川河口	22 Jan 1月22日	1	15 Jan 1月15日	0
Japan 日本	Kyushu: Kumamoto Pref., Midori River estuary 九州島 熊本縣 綠川河口	22 Jan 1月 22 日	1	15 Jan 1 月 15 日	19
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	22 Jan 1月22日	3	15 Jan 1 月 15 日	15
Japan 日本	Kyushu: Kumamoto Pref., Kagami River estuary 九州島 熊本縣 鏡川河口	22 Jan 1月22日	33	15 Jan 1 月 15 日	23
Japan 日本	Kyushu: Kumamoto Pref., Mae/Kuma River estuary 九州島 熊本縣 前川/球磨河口	22 Jan 1月 22 日	4	15 Jan 1月15日	0
Japan 日本	Kyushu: Miyazaki Pref., Hitotsuse River estuary 九州島 宮崎縣 一瀬川河口	23 Jan 1月 23 日	13	14 Jan 1月14日	14
Japan 日本	Kyushu: Miyazaki Pref., Kushima City Tenjin River 九州島 宮崎縣 串間市 天神川	23 Jan 1月23日	7	15 Jan 1 月 15 日	5
Japan 日本	Kyushu: Kagoshima Pref., Izumi City Arasaki Cane Wintering site 九州島 鹿兒島縣 出水市 荒崎鶴類護理 區	22 Jan 1 月 22 日	1	15 Jan 1月 15 日	1
Japan 日本	Kyushu: Kagoshima Pref., Minamisateuma Akougi 九州島 鹿兒島縣 南薩摩市	23 Jan 1月23日	1	No report 沒有報告	N/A
Japan 日本	Kyushu: Kagoshima Pref., Manose River estuary 九州島 鹿兒島縣 萬之瀬川河口	23 Jan 1月23日	13	14 Jan 1 月 14 日	15
Japan 日本	Kyushu: Kagoshima Pref., Kajikisuzaki regulation pond 九州島 鹿兒島縣 加治木須崎調整池	23 Jan 1月23日	23	15 Jan 1 月 15 日	6
Japan 日本	Kyushu: Kagoshima Pref., the regulation pond next to Hayato Port 九州島 鹿兒島縣 隼人港横調整池	23 Jan 1月23日	0	15 Jan 1 月 15 日	26
Japan 日本	Kyushu: Kagoshima Pref., Tabaru River 九州島 鹿児島縣 大崎町 田原川河口	No report 沒有報告	N/A	15 Jan 1 月 15 日	4
Japan 日本	Kyushu: Kagoshima Pref., Hishida River estuary 九州島 鹿兒島縣 大崎町 菱田川河口	23 Jan 1月 23日	4	15 Jan 1月 15日	3
Japan 日本	Nansei-ahoto Islands: Kagoshima Pref., Amami Islands, Tokunoshima Island 九州島 鹿兒島縣 奄美群島 徳之島 天城 町	21 Jan 1月 21日	2	No report 沒有報告	N/A

Japan 日本		Nansei-shoto Islands: Okinawa Pref., Awase tidal flat 西南群島:沖繩縣 泡瀨幹潟(海岸)	23 Jan 1月 23日	4	15 Jan 1 月 15 日	1
Japan 日本		Nansei-shoto Islands: Okinawa Pref., Gushi-tidal flat 西南群島:沖繩縣 具志幹潟(海岸)	23 Jan 1月 23日	0	15 Jan 1 月 15 日	9
Japan 日本		Nansei-shoto Islands: Okinawa Pref., Naha/Tomigusuku, Man-ko Tidal Flat 西南諸島 沖繩縣 漫湖幹潟	23 Jan 1月23日	4	15 Jan 1 月 15 日	3
Japan 日本		Nansei-shoto Islands: Okinawa Pref., Tomigusuku, Toyosaki Tidal Flat 西南諸島 沖繩縣 豊見城 豊崎幹潟	23 Jan 1 月 23 日	12	15 Jan 1 月 15 日	1
Korea 韓國	of	Jeju: Hado-ri fishponds 濟州 Hado-ri 漁塘	22-23 Jan 1月 22-23 日	14	15 Jan 1 月 15 日	17
Korea 韓國	of	Jeju: Seongsanpo 濟州 城山浦	22-23 Jan 1月 22-23 日	12	15 Jan 1 月 15 日	13
Korea 韓國	of	Jeju: Geugseong-ri 濟州 Geugseong-ri	No report 沒有報告	N/A	15 Jan 1 月 15 日	1
Republic o Korea 韓國	of	Gangneung, Gangwon 江原道 江陵市	No report 沒有報告	N/A	10 Jan 1 月 10 日	(1)
Republic o Korea 韓國	of	Changwon, Gyeongsangnam 慶尚南道 昌原	15 Jan 1 月 15 日	(2)	No report 沒有報告	N/A
Republic o Korea 韓國	of	Shinan, Jeonnam 全羅南道 Shinan	9 Jan 1 月 9 日	(1)	15 Jan 1 月 15 日	9
Vietnam 越南		Red River Delta, Xuan Thuy National Park 紅河口 春水國家公園	22 Jan 1 月 22 日	49	14 Jan 1 月 14 日	35
Cambodia 柬埔寨		Phumi Rôméenh, Takéo 茶膠省	23 Jan 1 月 23 日	1	23 Feb 2 月 23 日	(2)
Thailand 泰國		Ban Pak Thale, Phatchaburi 碧武里	22 Jan 1 月 22 日	1	1 Jan 1 月 1 日	(2)
Philippine 菲律賓		Mahato, Batan Island, Batanes 巴坦群島	24 Feb 2 月 24 日	(1)	No report 沒有報告	N/A
		Total 總數:		1,839		2,693 (4)

Table 2. Sites visited with no Black-faced Spoonbill spotted 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	2011	2012
China mainland 中國大陸	Zhuanghe, Liaoning 遼寧 庄河 庄河港 蛤蜊島	No survey 沒有調查	14-15 Jan 1 月 14-15 日
China mainland 中國大陸	Rizhao, Shandong 山東 日照	No survey 沒有調查	13-15 Jan 1 月 13-15 日
China mainland 中國大陸	Lianyungang Jiangsu 江蘇 連雲港	No survey 沒有調查	13 Jan 1 月 13 日
China mainland 中國大陸	Yenchang National Nature Reserve, Jiangsu 江蘇 鹽城自然保護區	21-23 Jan 1月 21-23 日	14-15 Jan 1月 14-15 日

China	Dafeng Pere David's Deer Nature Reserve,	23 Jan	14-15 Jan
mainland	Jiangsu	1月 23日	1月 14-15 日
中國大陸 China mainland 中國大陸	江蘇 大豐麋鹿保護區 Lushuiwan, Nanjiang, Jiangsu 江蘇 南京綠水灣濕地	23 Jan 1月 23 日	14 Jan 1月 14 日
China mainland 中國大陸	Tai Lake, Wuxi, Jiangsu 江蘇 無錫 太湖	No survey 沒有調查	14 Jan 1月 14 日
China mainland 中國大陸	Quanzhou Bay, Quanzhou, Fujian 福建 泉州 泉州灣	22-23 Jan 1月 22-23 日	14-15 Jan 1月 14-15日
China mainland 中國大陸	Xiamen Bay, Xiamen, Fujian 福建 廈門 廈門灣	22-23 Jan 1月 22-23 日	14-15 Jan 1月 14-15日
China mainland 中國大陸	Dongshan Bay, Gulei, Fujian 福建 古雷 東山灣	22-23 Jan 1月 22-23 日	14-15 Jan 1 月 14-15 日
China mainland 中國大陸	Jinwan, Zhuhai, Guangdong 廣東 珠海 金灣	No survey 沒有調查	14 Jan 1 月 14 日
China mainland 中國大陸	Dongzhaigong Nature Reserve, Hainan 海南 東寨港自然保護區	21-23 Jan 1月 21-23 日	13-15 Jan 1 月 13-15 日
China mainland 中國大陸	Sanya, Hainan 海南 三亞 三亞河	21-23 Jan 1月 21-23 日	13-15 Jan 1 月 13-15 日
Taiwan	Taipei	22-23 Jan	14-15 Jan
台灣	台北	1月 22-23 日	1月 14-15 日
Taiwan	Taoyun	22-23 Jan	14-15 Jan
台灣	桃園	1月 22-23 日	1 月 14-15 日
Taiwan	Hsinchu	22-23 Jan	14-15 Jan
台灣	新竹	1月 22-23 日	1 月 14-15 日
Taiwan	Miaoli	22-23 Jan	14-15 Jan
台灣	苗栗	1月 22-23 日	1月 14-15 日
Taiwan	Taichung	22-23 Jan	14-15 Jan
台灣	台中	1月 22-23 日	1月 14-15 日
Taiwan	Changhua	22-23 Jan	14-15 Jan
台灣	彰化	1月 22-23 日	1月 14-15 日
Taiwan	Yunlin	22-23 Jan	14-15 Jan
台灣	雲林	1月22-23 日	1月 14-15 日
Taiwan	Taitung	22-23 Jan	14-15 Jan
台灣	台東	1月 22-23 日	1月 14-15日
Taiwan	Penghu	22-23 Jan	14-15 Jan
台灣	澎湖	1月22-23日	1月14-15日
Taiwan	Matzu	22-23 Jan	14-15 Jan
台灣	馬祖	1月22-23日	1月14-15日
Japan	Kyuahu: Saga Pref., Shingomori tadal flat	23 Jan	No survey
日本	九州島 佐賀縣 新籠幹潟	1月 23 日	沒有調查
Japan	Kyushu: Nagasaki Pref., inside the embankment of Isahaya Bay	23 Jan	15 Jan
日本	九州島 長崎縣 諫早幹拓地 調整池	1月 23 日	1 月 15 日
Japan	Kyushu: Kumamoto Pref., Ezuko Lake	22 Jan	15 Jan
日本	九州島 熊本縣 江津湖	1月 22 日	1 月 15 日
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Iriomote-island 西南群島:沖繩縣 西表島	23 Jan 1月 23 日	15 Jan 1月 15 日

Japan 日本	Nansei-shoto Islands: Okinawa Pref., Gushi-tidal flat 西南群島:沖繩縣 具志幹潟(海岸)	23 Jan 1 月 23 日	No survey 沒有調查
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Itoman, Komesu Tidal Flat 西南諸島 沖繩縣 糸滿 米須幹潟	23 Jan 1 月 23 日	No survey 沒有調查
Japan 日本	Nansei-shoto Islands: Okinawa Pref., Ishigaki Is. 西南諸島 沖繩縣 石垣島	23 Jan 1 月 23 日	15 Jan 1 月 15 日
Vietnam	Thai Thuy IBA, Red River Delta	22 Jan	12 Jan
越南		1月 22 日	1 月 12 日
Vietnam	Day River mouth, Red River Delta	No survey	15 Jan
越南		沒有調查	1 月 15 日
Philippine	Candaba, Pampanga	22-23 Jan	14-15 Jan
菲律賓		1月 22-23 日	1月 14-15 日

Table 3. Numbers of Black-faced Spoonbills in Taiwan during the international censuses.

表 3. 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	Jan 02	_
Total	150	206	286	300	298	363	380	380	427	582	=
Year	Jan 03	Jan 04	Jan	. 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10	Jan 11	Jan 12
Total	580*	632	757	7	826	790	1030	1104	1280	834	1562

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

Table 4. Numbers of Black-faced Spoonbills in the Pearl River Estuary during the international censuses.

表 4. 全球同步普查期間在珠江河口錄得的黑臉琵鷺數量

	. 41 42	<u> </u>	41 - 4 III - 1	.,,	2.3.1 3 37	TT/\$000 P CONTING	~,\			
Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01	Jan 02
Hong Kong	50	70	78	99	69	88	96	90	135	136
Shenzhen	nc	nc	nc	nc	32	58	nc	nc	42*	3
Macao	6	12	8	10	13	9	12	6	36	37
Total	56	82	86	109	114	155	108	96	171*	176

Year	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10	Jan 11	Jan 12
Hong Kong	179	238	272	296	320	331	273	429	386	357
Shenzhen	24	5	39	50	36	38	62	33	25	36
Macao	46	50	39	51	48	50	52	39	49	51
Total	249	293	350	397	404	419	387	501	460	444

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

表 5. 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	5-96 Jan 9	7 Jan 98	Jan 99	Jan 00	Jan 01	Jan 02	
Total	15	22	21 2	1 58	5	3	9	72	24	•
Year	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10	Jan 11	Jan 12
Total	17	91	187	206	247	313	247	234	198	328

Table 6. Numbers of Black-faced Spoonbills in Red River Delta, Vietnam during the international censuses.

表 6. 全球同步普查期間在越南紅河口錄得的黑臉琵鷺數量

-100	エババイン			1//251	→ 5×1/1/1 H	ノハハルか トロ	/ /// 3// ±/				_
Year	89-90	93-94	94-95	95-96	Jan 97	Jan 98	Jan 99	Jan 00	Jan 01	Jan 02	_
Total	62	25	23	75	nc	59	34*	46*	47	54*	_
Year	Jan 03	Jan 04	Jan 0)5 Ja	n 06	Jan 07	Jan 08	Jan 09	Jan 10	Jan 11	Jan 12
Total	65*	15	56	74	1	45	49	63	46	49	35

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

Table 7. Numbers of Black-faced Spoonbills in Japan during the international censuses.

表 7. 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 9	4-95 95-	-96 Jan	97 Jan 98	3 Jan 99	Jan 00	Jan 01	Jan 02	
Total	5	16 1	4 31	28	75	60	99	87	107	_
Year	Jan 03	Jan 04	Jan 05	Jan 06	Jan 07	Jan 08	Jan 09	Jan 10	Jan 11	Jan 12
		149	103 (47)	155	189	224	215	258	270	284

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

Table 8. Numbers of Black-faced Spoonbills in Jeju Island, Republic of Korea during the international censuses.

表 8 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	9 Jan 00	Jan 01	Jan 02	
Total	6	nc	nc	15	16	25	14	20	21	29	- -
Year	Jan 03	Jan 04	Jan 05	Jan 06	Jan ()7 Ja:	n 08	Jan 09	Jan 10	Jan 11	Jan 12
Total	22	23	21	21	20	28	3	25	27	26	40

nc = no count

Table 9. Numbers and percentage increase of total number of Black-faced Spoonbills during the international censuses.

表 9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	Jan 03
Total	294	351	430	551	535	613	586	660	828	969	1069
% increase	-	19.4	22.5	28.1	-2.9	14.6	-4.4	12.6	25.5	17.0	10.3
Year	Jan 04	Jan 0	5 Jar	n 06	Jan 07	Jan 08	Jan 09	Jan	10	Jan 11	Jan 12
Total	1206	1475	167	79	1695	2065	2041	234	7	1839	2693
% increase	12.8	22.3	13.	8	1.0	21.8	-1.2	15.0	0	-21.6	46.4
						Average	% increa	se (SD): 1	3.3 (14.8)), n = 19	

黑臉琵鷺全球同步普查 2011 及 2012

Figures 圖片

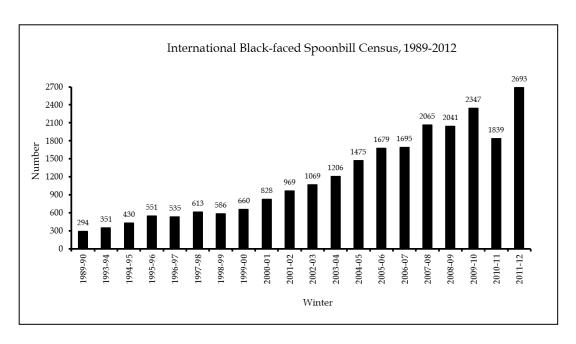


Figure 1 Known wintering Black-faced Spoonbill populations from winter 1989-90 to 2011-12.

圖 1.1989-90 至 2011-12 年冬季已知的黑臉琵鷺數量

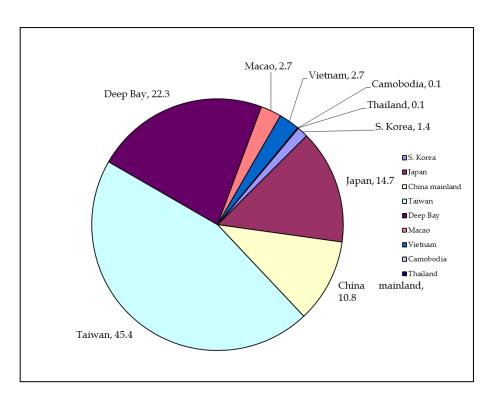


Figure 2a. Percentages of Black-faced Spoonbills in different wintering areas during the 2011 international census.

圖 2a. 2011 全球同步普查期間黑臉琵鷺在不同越冬地的全球百分比

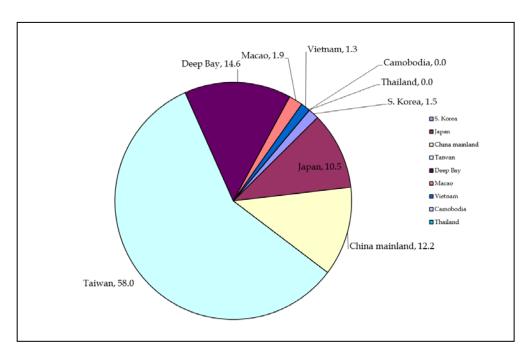


Figure 2b. Percentages of Black-faced Spoonbills in different wintering areas during the 2011 international census.

圖 2b. 2012 全球同步普查期間黑臉琵鷺在不同越冬地的全球百分比

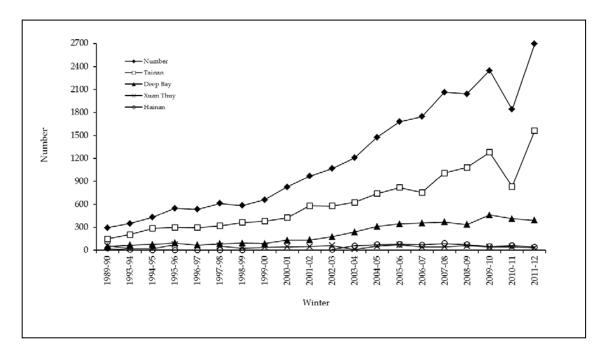


Figure 3. Trends of known Black-faced Spoonbills in the world, in three traditional important congregation sites: Tainan of Taiwan, Deep Bay of Hong Kong and Shenzhen, Red River Delta of Vietnam, and a new site at Hainan Island, China from the international censuses. Numbers were based on a review by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

黑臉琵鷺全球同步普查 2011 及 2012

Appendice

附錄

Appendix 1. Counts in Deep Bay, Hong Kong and Shenzhen during the International Black-faced Spoonbill Census 2011.

a) Counts on 21 January 2011

uj Courtes ou 21 juitaury 201	1		
Place/Time	1100h	1200h	1300h
Mai Po Nature Reserve	275	279	346
and boardwalk			
Lok Ma Chau	36	37	9
Nam Sang Wai	23	25	21
Tsim Bei Tsui area,	14	10	10
including environs of			
Wetland Park			
'Outer' Deep Bay	0	0	0
Futian	24	24	25
Total	372	375	411

b) Counts on 22 January 2011

Place/Time	1130h	1230h	1330h
Mai Po Nature Reserve	88	57	76
and boardwalk			
Lok Ma Chau	231	226	221
Nam Sang Wai	24	23	0
Tsim Bei Tsui area,	28	30	30
including environs of			
Wetland Park			
'Outer' Deep Bay	0	6	0
Futian	24	28	19
Total	395	370	346

c) Counts on 23 January 2011

e) counte on 20 juntating 2011			
Place/Time	1200h	1300h	1400h
Mai Po Nature Reserve	155	164	178
and boardwalk			
Lok Ma Chau	17	46	55
Nam Sang Wai	30	18	0
Tsim Bei Tsui area,	30	0	0
including environs of			
Wetland Park			
'Outer' Deep Bay*	0	25	0
Futian	61	52	52
Total	293	305	285

Appendix 2. Counts in Deep Bay, Hong Kong and Shenzhen during the International Black-faced Spoonbill Census 2012.

a) Counts on 13 January 2012

Place/Time	1230h	1330h	1430h
Mai Po Nature Reserve	264	257	291
and boardwalk			
Lok Ma Chau	24	30	36
Nam Sang Wai	0	0	4
Tsim Bei Tsui area,	55	73	58
including environs of			
Wetland Park			
'Outer' Deep Bay	0	0	0
Futian	NC	NC	NC
Total	343	360	389

b) Counts on 14 January 2012

b) Counts on 14 junuary 2012			
Place/Time	1300h	1400h	1500h
Mai Po Nature Reserve	312	332	285
and boardwalk			
Lok Ma Chau	4	4	20
Nam Sang Wai	4	0	0
Tsim Bei Tsui area,	19	21	27
including environs of			
Wetland Park			
'Outer' Deep Bay	0	0	0
Futian	36	36	36
Total	375	393	368

c) Counts on 15 January 2012

e) counts on 10 juntating 2011			
Place/Time	1330h	1430h	1530h
Mai Po Nature Reserve	64	72	120
and boardwalk			
Lok Ma Chau	159	175	169
Nam Sang Wai	35	33	14
Tsim Bei Tsui area,	69	65	4
including environs of			
Wetland Park			
'Outer' Deep Bay*	0	0	0
Futian	NC	18	NC
Total	327	363	307