## Preliminary assessment on the current knowledge of the Chinese Crested Tern (*Sterna bernsteini*)

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The Chinese Crested Tern (*Sterna bernsteini*; hereafter regarded as CCT, Plate I) is perhaps the most enigmatic tern bird in the world – though discovered as early as in 1863, but, compared with most other tern species, so few the records of this tern had far been reported in the last 50 years or even 150 years.

It hence has been considered, during the last two decade years, a Critically Endangered (CR) bird and used to be believed being of only about 100 birds left in the world (BirdLife International, 2001), moreover, according to the latest Species Datasheet issued by BirdLife International quite recently, a dramatic decline, caused more likely by human disturbance, happened to the bird in the last two or three years, making the CCT population apparently fallen to less than 50 individuals in the wild (BirdLife International, 2008).

Besides, only two small breeding colonies of the tern confirmedly reported since so far, they are both on the offshore islands along the SE Chinese coast, with no more than 10 breeding pairs could be counted as the highest total of one year at most (Chen et al., 2009).

In 2009, two important articles on the Chinese Crested Tern got published, by Chen et al. (2009) and by Liu et al. (2009), successively, and, based upon that and also on other reports such as by Zhang

et al. (2004), Chen et al. (2005), Jiang et al. (2005), Delany and Scott (2006), Chen (2007a), Chen (2007b), Chen (2007c), Jiang (2007), Zhang (2007) and China Ornithological Society (2008), together with the works both by Wang et al. (2006) and by Yan et al. (2006), we summarized all the findings of the Chinese Crested Tern in China from the very late 1990s to present as below (Table 1).

For those CCT birds mentioned in Table 1, except a few one-time sightings such as one bird seen over the Chongming Island of Shanghai and four birds seen at the Xisha Archipelago in the South China Sea in 2004 together with the sighting of one bird on the Dagang coast of Tianjin, each numeral is to represent the highest number of the CCT birds counted at each location of the year, and, for the observed adult birds only. So, two remarkably higher numbers appeared in 2004 and 2009, with over 30 and over 20 birds of the due year respectively.

Anyway, although being of such a tiny population as far known worldwide, still, it can be recognized that the Chinese Crested Tern currently might be regarded as being of three small flocks (difficult to say subpopulation), assuming that the four birds found at the Xisha Archipelago in the South China Sea in April 2004 were wintering wanderers, or the birds in migration (Fig. 1).

1) The (Taiwan) Straits flock: a small breeding colony confirmed (at Mazu Island firstly) in the year 2000 with the main feeding and resting habitat, around the Min River estuary, for the birds in the flock confirmed in 2004, and, though not sure if those birds preferring choosing Mazu Island and/or

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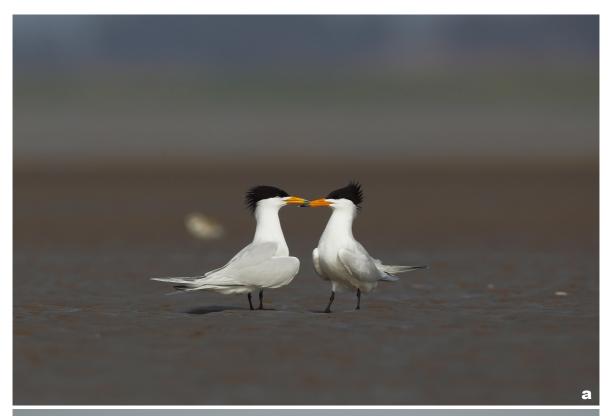




Plate I Chinese Crested Tern (Sterna bernsteini). Photos by Lin Chen on 19 April 2010 (a) and 18 May 2010 (b) at Min River estuary.

Year	Tianjin	Shanghai	Zhejiang	Fujian		South China Sea
	(Dagang coast)	(Chongming Isl.)	(Jiushan Isl. and	Mazu Isl. and	Min River	(Xisha Archipelago)
			Wushishan Isl.)	Baiquan Isl.	estuary	
1998				1		
1999				1		
2000				6		
2001				1		
2002				6		
2003				2		
2004		1 (Sept. 5)	10-20	12	2	4 (April)
2005				2	3	
2006				6	4	
2007			8	4	8	
2008	1 (Sept. 5)		4	21	5	
2009			4	14	17	

Table 1 Records of the Chinese Crested Tern seen and counted at localities since 1998

Baiquan Island to nest randomly or alternatively, results of the 10-year census work, 2000–2009, might bring with it such a true fact of showing a somewhat stable flock in the region of the channel during the last decade years, moreover, the occurrence of this flock might surely be much longer of its history to

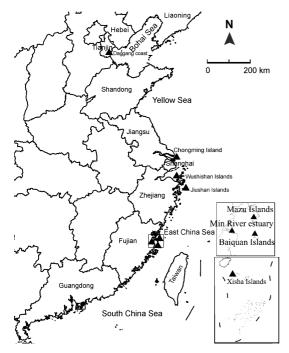


Fig. 1 Sketch map of records of the CCT birds since late 1990s

the region, when considering two bird skins collected from Fuzhou (Foochow) as early as in April 1916 (BirdLife International, 2001).

- 2) The (Greater) Zhoushan (Archipelago) flock: though a breeding colony of the tern found on/around the Jiushan Archipelago, since the number of the birds in the flock "fluctuated annually" (Chen et al., 2005), we thought the Zhoushan Archipelago might hence be more properly to represent those numerous offshore islands and islets along the Zhejiang coast; anyway, this is a newly-reported CCT flock, more information is needed for further assessment.
- 3) The northern (Chinese coast) flock: doubtlessly, there used to be a CCT flock once occurring along the northern Chinese coast, both of the Bohai and the Yellow Sea, as quite a bit amount of skins of the CCT bird collected near Qingdao of Shangdong Province from the very late 19th century to late 1930s (BirdLife International, 2001), this flock might quite possibly in the past be appearing in the rim of the Yellow Sea, and, the quite recent sightings of the CCT bird evidenced the current occurrence of the flock.

For a tern bird, occupying such a large region during the breeding season but so far with so few of its breeding records, it is therefore proper and reasonable to regard the bird being Critically Endangered.

Whereas, to us, the question is – what a portion of the CCT's world population that we can say under monitoring, or, simply to say, in our hand or at our hand? 80%, 50%, or, less 20%, or even less than

10%?

By any means, those CCT birds are showing to us a very good sample that a tern bird with such a tiny population could have virtually and eventually survived in nature for 50 years, or even longer.

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## 试论对黑嘴端凤头燕鸥的当前认知

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