A New Bird Record in China : Red-breasted Flycatcher (*Ficedula parva*)

LI Hai-tao^{1,*}, CHEN Liang¹, HO Chi-kong², LIU Yang³

(1. Beijing Birdwatching Society, Beijing 100875; 2. Hong Kong Birdwatching Society, Hong Kong;
3. Evolutionary Biology Center, Uppsala University, Sweden)

Abstract: The Red-breasted Flycatcher (*Ficedula parva*) and Taiga Flycatcher (*F albicila*) have long been considered having a conspecific status under the species Red-throated Flycatcher (*F parva*). Based on the studies on the morphology, vocalizations and molecular biology, the two subspecies have recently been split into separate species that are allopatrically distributed in the Palearctic region. Before our report, there was no formal record of taxon *parva* in China. Between April and May of 2007, two birds of *parva* were recorded respectively at Potoi Island, Hong Kong SAR and Xiangyundao Tree Farm, Laoting, Hebei Province, the first known recording of this species in China. We also briefly discussed the general characteristics and field identification of Red-breasted Flycatchers in this article.

Key words: Ficedula parva; Ficedula albicilla; China; New bird record

中国鸟类新记录种——红胸姬鹟(Ficedula parva)

李海涛^{1,*},陈亮¹,何志刚²,刘阳³

(1.北京观鸟会,北京 100875; 2. 香港观鸟会,香港; 3. Evolutionary Biology Center, Uppsala University, Sweden)

摘要: 2007 年 4-5 月间,笔者在中国河北省乐亭县祥云岛林场及香港特别行政区蒲台岛分别记录到红胸姬 鹟(*Ficedula parva*),为中国鸟类物种新记录。红胸姬鹟和 *F. albicilla* 原为红喉姬鹟(*F. parva*)的两个亚种,近 年来很多著者依据形态、鸣声、分子等证据,认为两者应为在古北界异域分布(allopatric)的对种(semispecies)。本文亦就两者的鉴定特征和野外辨识要点进行了讨论。

关键词: 红胸姬鹟; 红喉姬鹟; 中国; 鸟类新记录 中图分类号: Q959.739 文献标识码: A 文章编号: 0254-5853(2008)03-0325-03

Taiga Flycatcher (Ficedula albicila) and Red-breasted Flycatcher (F. parva) have long been considered having a conspecific status under the species Red-throated Flycatcher (F parva). The former taxon, breeding in Heilongjiang and Jilin provinces of Northeast China (Cheng, 1987) and wintering in Yunnan Province (Cheng, 1987; Yang, 2004), is a common migrant through most regions of China (except Tibet and Taiwan) (Cheng, 1987); the latter, mainly breeding in continental Europe with a wintering population in the north on the Indian continent (Rasmussen & Anderton, 2005), has no confirmed specimen and field record in China (Zheng, 2005). Recent studies on its morphology, vocalization and molecular biology support the treatment that the two

subspecies should be split into separate species: Taiga Flycatcher and Red-breasted Flycatcher. This idea has been accepted by some researchers (e.g. Sangster et al, 2004; Gill & Wright, 2006). On April 11, 2007, HO Chi-kong and other birdwatchers from the Hong Kong Birdwatching Society recorded and photographed a female individual of *parva* at Potoi Island, Hong Kong SAR ($22^{\circ}9'54^{"}N$, $114^{\circ}15'21"E$) (Fig. 1). On May 19 of the same year, a male *parva* was observed at Xiangyundao Tree Farm, Laoting, Heibei Province (Fig. 2). High-quality digital photos were taken of the two birds. After careful analysis of these photos, our observations proved that *F parva* was apparently a new bird record in China.

Received date: 2008-02-02; Accepted date: 2008-04-17 *Corresponding author (通讯作者), E-mail: bmlee@highteam.com 收稿日期: 2008-02-02; 接受日期: 2008-04-17

The two Red-breasted Flycatchers we observed were estimated to be about 11 cm in length, with a body size similar to a large-sized warbler and slightly smaller than the Taiga Flycatcher. The main field identification characteristics to differentiate *parva* from *albicila*: *parva*'s bill has an extensive pale base on the lower mandible, but *albicila*'s bill is dark (Fig. 3). The bird recorded in Hebei Province is an adult male, with bright rufous-orange extending from the throat to the upper breast (the rufous area extends as age increases), and a greyish cheek and head. The male adults of Taiga flycatchers have rufous orange only appearing on the throat, which is bordered below by a pale grey breast-band, with darker and browner cheeks. These



Fig. 1 Female individual of *Ficedula parva* (by HO Pi-pen at Potoi Island, Hong Kong)



Fig. 3 Pale base on lower mandible of *Ficedula parva* (by LIU Yang at Bingsmark Bird-ringing Station, Sweden)

characteristics can be seen in the field and were shown on the photos taken in Hebei. Meanwhile, we also scrutinized specimens of the two species collected in the Swedish Museum of Natural History and the Institute of Zoology, the Chinese Academy of Sciences, and found that the differences in the two species also included the Red-breasted Flycatcher's upper-tail coverts being a dull dark brown, but the Taiga Flycatcher's being jet-black (Fig. 4). The characteristics can also be used to differentiate the female (the individual seen in Hong Kong) and sub-adult *parva* from *albicilla's*. Interestingly, recognized by an experienced British birdwatcher Paul Holt, one *albicilla* specimen stored in the Zoology



Fig. 2 Male individual of *Ficedula parva* (by LI Hai-tao at Xiangyundao Tree Farm, Laoting, Hebei)



Fig. 4 Uppertail-coverts of *Ficedula parva* and *F* albicilla (upper speciemen is *parva* and lower is albicilla) (by LIU Yang from Institute of Zoology, the Chinese Academy of Sciences)

Institute is actually a female *parva*. The specimen is marked with an identification label but there is a lack of detailed information on the collection site. The two birds of *parva* we recorded were during migration, we only heard the dull and husky calls of "*trrrt*" at the fields, a little bit difficult to distinguish from *albicilla*'s. According to references, however, the two species' songs are quite distinctive (Rasmussen & Anderton, 2005).

The Red-breasted Flycatcher had long been treated as the subspecies of F. parva, based on Vaurie's point (1959) that hybridization occasionally occurred between parva and albicilla in Russia's Siberia. Handbook of Birds of the World (Volume 11) parallels this idea (del Hoyo et al, 2006). But some authors suspected reliability of the hybrid individuals (Inskipp et al, 1996). Svensson (1992) and Rassmussen & Anderton (2005) put forward that the two subspecies are semispecies that are allopatrically distributed in the Palearctic region based on the significant differences in morphology and vocalizations. Molecular markers were also employed to study the differences between the two taxa. A genetic distance of 6.4% was estimated between the two based on sequences of mitochondrial cytochrome b gene, which has constituted direct evidence for the "split idea"(Li & Zhang, 2004). Therefore, the "split idea" of parva and albicilla is accepted and recommended by "A Checklist of the Birds of Britain " by **British** Ornithologists' Union (Sangster et al, 2004), the recent

world list by International Ornithological Congress (Gill & Wright, 2006) and the Clements Checklists of Birds of the World (Clements, 2007).

The F. parva breeds in continental Europe, eastwards to the Ural Mountains, Caucasus Mountains, northern Iran, western Himalayas (del Hoyo et al, 2006) and in Asia, and winters in the north on the Indian continent (Rassmussen & Anderton, 2005). One would expect to see the bird in western Xinjiang Uygur Autonomous Region and southwestern Tibet in China during winter and migratory seasons. There were field records of the bird in South Korea in April 2003 and November, 2004 (Nial Moore in litt.). Together with the records from Korea and China, we infer that F. parva may appear in East Asia during the migratory season. Very few "straggling" individuals are likely to disperse further and to migrate with flocks of F. albicilla. It is possible that there are more specimens of parva in some institutes or museums in China, but remain misidentified as albicilla

Acknowledgement: We are indebted to Prof. Lei Fu-min from Institute of Zoology, the Chinese Academy of Sciences and Dr. Per Alström from The Swedish Species Information Centre for their kind help in our access to specimen collection. We also thank to Dr. Nial Moore from Sungkonghue University in Seoul for providing related information in Korea.

Reference:

- Cheng TH. 1987. A Synopsis of the Avifauna of China[M]. Beijing: Science Press, 846-847.
- Clements JF. 2007. The Clements Checklists of Birds of the World (Sixth edition) [M]. New York: Cornell University Press, 450.
- del Hoyo J, Elliot A, Christie D. 2006. Handbook of the Birds of the World. Volume 11: Old World Flycatchers to Old World Warblers[M]. Barcelona: Lynx Edicions.
- Gill F, Wright M. 2006. Birds of the World: Recommended English Names[M]. New Jersey: Princeton University Press, 179.
- Inskipp T, Lindsey N, Duckworth W. 1996. An Annotated Checklist of the Birds of the Oriental Region[M]. Bedfordshire: Oriental Bird Club, 139.
- Li W, Zhang YY. 2004. Subspecific taxonomy of *Ficedula parva* based on sequences of mitochondrial cytochrome *b* gene[J]. *Zool Res*, **25**: 127-131.

- Rasmussen PC, Anderton JC. 2005. Bird of South Asia. The Ripely Guide.Vol 2[M]. Washinton DC, Barcelona: Smithsonian Institute and Lynx Edicions, 376-377.
- Sangster G, Collinson JM, Helbig AJ, Knox AG, Parkin DT. 2004. Taxonomic recommendations for British birds: second report[J]. *Ibis*, 146: 153–157.
- Svensson L. 1992. Identification Guide to European Passerine (4th editon) [M]. Stockholm: Sturegatan Press, 223.
- Vaurie C. 1959. The Birds of the Palearctic Fauna: Order Passeriformes[M]. London: Witherby, 321-322.
- Yang L. 2004. The Avifaunna of Yunnan (Vol. II Passeriformes), China[M]. Kunming: Yunnan Science and Technology Press, 634-635.
- Zheng GM. 2005. A Checklist on the Classification and Distribution of the Birds of China[M]. Beijing: Science Press, 239.