Report (報告)

**Migrating Black Drongo *Dicrurus macrocercus* Feeding on
Passerines on a Stopover Island, Korea**

Gil-Pyo Hong*, Gi-Chang Bing*, Chang-Yong Choi*,¹⁾ Hyun-Young Nam*,
Il-Jae Won*, Sung-Jin Kim*, Jong-Gil Park* and Hee-Young Chae*

Abstract. A migrating Black Drongo *Dicrurus macrocercus* was observed consecutively feeding on a Siberian Stonechat *Saxicola maura* and an Asian Stubtail *Urosphena squameiceps* on Hongdo Island, Jeonnam Province, Korea. Unlike previous reports of occasional, apparently exceptional, avian predation by the Black Drongo, this sequential observation suggests that the Black Drongo may selectively hunt avian prey. During Black Drongo migration, when other migrating passerines are abundant and insect availability is relatively low, such behavior would help meet its high energy demands.

Key words: Asian Stubtail *Urosphena squameiceps*, Avian predation, Black Drongo *Dicrurus macrocercus*, Siberian Stonechat *Saxicola maura*.

キーワード: ヤブサメ *Urosphena squameiceps*, 鳥類捕食, オウチュウ *Dicrurus macrocercus*, ノビタキ *Saxicola maura*.

The Black Drongo *Dicrurus macrocercus* is a small passerine bird widely distributed in Asia and commonly observed in open country with trees (Vaurie 1959). The Black Drongo is an omnivore, feeding predominantly on a variety of insects, and occasionally on reptiles, fish, bats, and birds (Ali and Ripley 1983, Senthilmurugan 2005). The previously reported avian prey species of the Black Drongo were Tickell's Blue Flycatcher *Muscicapa tickelliae*, *Prinia* spp., *Aegithina* spp., *Zosterops* spp. including the Indian White-eye *Zosterops palpebrosa*, and some martins (Hirundinidae) (Osmaston 1922, Ali & Ripley 1983, Sridharan & Sivasubramanian 1987, D'Silva *et al.* 1990, Jayson & Ramachandran 1994). In this report, we document predatory behavior by a migrating Black Drongo observed consecutively feeding on two passerine species that have not been previously reported as avian prey of the Black Drongo.

On 25 April 2009, we observed foraging behaviors of an adult Black Drongo for 31 min from 4 : 45 pm to 5 : 16 pm in a dry cropland area (N 34° 40' 47.4", E 125° 11' 32.8") on Hongdo Island, Jeonnam Province, Korea. Hongdo Island is a common stopover site for migratory birds that are crossing the Yellow Sea. According to our four-year monitoring, a small number of migratory Black Drongo pass through this area in May and June, and previously, all were young birds in first plumages.

At 4 : 45 pm, an adult Black Drongo was observed on the ground feeding on a female Siberian Stonechat *Saxicola maura* (Fig. 1A). The Black Drongo pecked out portions of

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* Migratory Birds Center, National Park Research Institute, Hongdo-ri, Shinan County, Jeonnam Province 535-916, Republic of Korea.

¹⁾ Corresponding Author. E-mail: subbuteo@hanmail.net

Fig. 1. An adult Black Drongo observed feeding on migrating passerines on Hongdo Island, Jeonnam Province, Korea. (A) The Black Drongo holding a female Siberian Stonechat (*Saxicola maura*) under its feet (4 : 57 pm). (B) The Black Drongo with an Asian Stubtail (*Urosphena squameiceps*) immediately after the initial attack (5 : 01 pm). (C) The Black Drongo pecking at the head of the captured Asian Stubtail (5 : 03 pm). (D) The Siberian Stonechat with the crushed head that was pecked by the Black Drongo (5 : 12 pm).

the neck and head of the victim, but also appeared alert to its surroundings. It soon abandoned the dead prey, possibly due to disturbance by the observers, and landed on a nearby branch after a short flight. For a few minutes, the Black Drongo perched and sought for other prey on the branch.

At 5 : 01 pm, after a rapid gliding flight to the ground, the Black Drongo grabbed an Asian Stubtail *Urosphena squameiceps* that had been foraging on the ground (Fig. 1B). The Black Drongo landed on the ground, approximately 3 m from the site of the initial attack on the Asian Stubtail, holding the writhing stubtail under its feet. It then killed the prey by pecking at its neck. At 5 : 02 pm, the Black Drongo flew a short distance (approximately 5 m), carrying the Asian Stubtail in its feet, to a nearby crop field where it landed and then fed on the head and neck areas of the dead Asian Stubtail (Fig. 1C). At 5 : 16 pm, the Black Drongo flew away carrying the Asian Stubtail in its feet. We then lost visual contact with the Black Drongo.

During the observation period, neither of the prey birds was fully consumed, possibly

due to disturbance of the Black Drongo by the observers. Upon examination, the Siberian Stonechat was missing its brain, the majority of the skull, and much of the neck musculature; however, there was no evidence of damage to the body (Fig. 1D). The Asian Stubtail carcass could not be found.

We did not observe the whole foraging process on the two prey birds. However, the Black Drongo was observed employing a perch-and-wait foraging strategy prior to capturing the Asian Stubtail. Furthermore, it killed the birds by striking the prey with the bill at the back of head and the nape area, similar to behavior observed in raptors and shrikes. Although the feet of the Black Drongo did not serve as the killing tool, they were used to hold the victim during the killing process, and to carry the victim to another location. Regarding the mean biomass of the Black Drongo (57.2 ± 5.0 g, mean $\pm$ SD, $n = 26$; Shiu *et al.* 2005), the Asian Stubtail (8.3 ± 0.9 g, $n = 30$) and the Siberian Stonechat (13.7 ± 3.9 g, $n = 232$) weighed up to 14.5% and 24.0% of the mean body mass of the Black Drongo, respectively.

This observation is the first record of predation by the Black Drongo on birds in Korea. In addition, the two avian prey species (Asian Stubtail and Siberian Stonechat) are new items in the diet of the Black Drongo. A previous report had indicated that occasional foraging attacks on birds by the Black Drongo may occur when insect availability is low (Jayson & Ramachandran 1994). However, this observation of consecutive foraging on birds suggests that the Black Drongo may selectively forage for avian prey in a migratory area where avian prey is abundant and at a time when insect abundance is relatively low. We suggest that such selective predatory behavior may help the Black Drongo to meet its demands for high energy levels during migration.

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大韓民国の離島における渡り途中のオウチュウによる スズメ目鳥類の捕食

大韓民国全羅南道紅島において、渡り途中のオウチュウ *Dicrurus macrocercus* がノビタキ *Saxicola maura* とヤブサメ *Urosphena squameiceps* を続けて捕食する行動が観察された。これまで報告されている明らかに例外的なオウチュウの鳥類捕食の事例とは異なり、今回の観察は本種が鳥類を選択的に捕食する可能性があることを示唆するものである。利用可能な昆虫類は乏しいが、スズメ目鳥類は豊富な環境に遭遇した場合、このような行動は、渡り途中のオウチュウの高いエネルギー要求を満たす有効な手段となり得るであろう。

洪佶杓・氷基昌・崔昶溶*・南賢榮・元壹載・金盛珍・朴鍾吉・蔡熙永: Migratory Birds Center, National Park Research Institute, Hongdo-ri, Shinan County, Jeonnam Province 535-916, Republic of Korea.

* 責任著者