

# Three Australian leg-flagged Great Knots (*Calidris tenuirostris*) found on the islet coast of Jinmen (Quimoy) in Fujian, China

Chung-Wei YEN

National Museum of Natural Science, Taichung Taiwan 404, China

## DEAR EDITOR:

On April 7, 2013, approximately 50 Great Knots (*Calidris tenuirostris*), Red Knots (*C. canutus*) and Bar-tailed Godwits (*Limosa lapponica*) were seen on the coast of Jinmen (Quimoy) (N24°26'; E118°18') in Fujian, China. Among these birds, three Great Knots were banded with Australian yellow leg-flags (ENE, LCC and USP in Figures 1, 2 and 3, respectively), which are new to Jinmen.

Great Knots are long distance migrants on the trans-pacific



Figure 1 Leg-flag ENE of Great Knot (*Calidris tenuirostris*)



Figure 2 Leg-flag LCC of Great Knot (*Calidris tenuirostris*)



Figure 3 Leg-flag USP of Great Knot (*Calidris tenuirostris*)

route. During the spring northbound flight to Siberia, Great Knots fly nonstop for 5 420 km from Australia to Chongming Dongtan in the Yangtze River estuary of China (Barter & Wang, 1990; Battley et al, 2001; Choi et al, 2009; Ma et al, 2011; Pennycuik & Battley, 2003; Zhang et al, 2011), followed by a stopover at the Yalujiang estuary of northern China (Choi et al, 2009; Ma et al, 2011) before reaching their breeding grounds in Siberia. Jinmen is a small island located on the southern coast of Fujian, China. During the spring northbound migration, many shorebirds such as Great Knots, Red Knots, Dunlins (*C. alpina*), Red-necked Stints (*C. ruficollis*), Lesser Sand Plovers (*Charadrius mongolus*) and Bar-tailed Godwits stopover in Jinmen and gain small fuel stores for further migration flight (Yen & Shu, 2002). Our observations are the first to report on Great Knot stopover at Jinmen.

According to Australian records, Great Knot ENE was banded as a one-year-old on November 27, 2007, at Roebuck Bay in Broome (S18°00'; E122°37'), Australia. From 2008 to 2012, it was resighted at Roebuck Bay every year, and it was recaptured

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\*Corresponding author, E-mail: cwy1939@gmail.com

on August 28, 2011, when it was five years old. Bird LCC was banded on November 10, 2008, at Roebuck Bay, at two years of age. It was resighted in Roebuck Bay every year. Bird USP was banded on October 15, 2011, at Roebuck Bay. It was recaptured at the same bay on March 6, 2012, at two years of age.

The migration strategies of shorebirds are categorized into hop, skip and jump patterns (Boere & Stroud, 2006; Colwell, 2010). Some shorebirds hop short distances between stopover areas and gain small fuel stores. Other species skip among stopover sites and accumulate moderate fuel loads, while some species jump long distances after accumulating large lipid reserves. The migration flight of Great Knots in autumn exhibits a jump pattern, whereby they move long distances nonstop. In spring, however, they skip between stopover sites to accumulate moderate fuel loads as they move towards their breeding grounds. The three leg-flagged Great Knots observed in this research provide evidence that some individuals stopover at Jinmen in Fujian, China, during their northbound migration flight, which was previously unknown.

## REFERENCES

- Barter M, Wang TH. 1990. Can waders fly non-stop from Australia to China?. *Stilt*, **17**: 36-39.
- Battley PF, Dietz MW, Piersma T, Dekinga A, Tang S, Hulsman K. 2001. Is long-distance bird flight equivalent to a high-energy fast? Body composition changes in freely migrating and captive fasting Great Knots. *Physiological and Biochemical Zoology*. **74**(3): 435-449.
- Boere GC, Stroud DA. 2006. The flyway concept: What it is and what it isn't. *In*: Boere GC, Galbraith CA, Stroud DA. Waterbirds around the world. Edinburgh UK: The Stationary Office 40-47.
- Choi CY, Gan XJ, Zhang KJ, Chen JK, Ma ZJ. 2009. Body condition and fuel deposition patterns of Calidrid sandpipers during migratory stopover. *Ardea*, **97**(1): 61-70.
- Colwell MA. 2010. Shorebird Ecology, Conservation, and Management. Berkeley University of California Press.
- Ma ZJ, Hua N, Zhang X, Guo HQ, Zhao B, Ma Q, Xue WJ, Tang CD. 2011. Wind conditions affect stopover decisions and fuel stores of shorebirds migrating through the south Yellow Sea. *Ibis*, **153**(4): 755-767.
- Pennycuik CJ, Battley PF. 2003. Burning the engine: a time-marching computation of fat and protein consumption in a 5420-Km non-stop flight by Great Knots, *Calidris tenuirostris*. *Oikos*, **103**(2): 323-332.
- Yen CW, Shu YM, 2002. Species diversity of birds at the Wujiang estuary of Jinmen, Fujian Province. *Zoological Research*, **23**(6): 483-491.
- Zhang X, Hua N, Ma Q, Xue WJ, Feng XS, Wu W, Tang CD, Ma ZJ, 2011. Diet of Great Knots (*Calidris tenuirostris*) during spring stopover at Chongming Dongtan, China. *Chinese Birds*, **2**(1): 27-32.

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## Journal Correction

The description of the cover image of the volume 35, issue 6, released on 18 November 2014, contained error.

The scientific name of the cover image was incorrect and should have been *Macaca leonine*. The online version has been corrected. *Zoological Research* apologizes to the authors and readers for the mistake.