# The First Record of Far Eastern Curlew (Numenius madagascariensis) in British Columbia. By Rick Toochin and Don Cecile. Submitted: April 15, 2018.

#### **Introduction and Distribution**

The Far Eastern Curlew (Numenius madagascariensis) is the largest migratory shorebird in the world. This species is found only along the East Asian–Australasian Flyway. The Far Eastern Curlew breeds on open mossy or transitional bogs, moss-lichen bogs and wet meadows, and on the swampy shores of small lakes in Siberia and Kamchatka in Russia, as well as in north-eastern Mongolia and China (Hayman et al. 1986, del Hoyo et al. 1996). The Yellow Sea of the Republic of Korea and China is a vitally important stopover site on migration. This species is also a common passage migrant in Japan and Indonesia, and is occasionally recorded moving through Thailand, Brunei, Bangladesh, Vietnam, Philippines, Malaysia and Singapore (O'Brien et al. 2006). During the winter a few birds occur in southern Republic of Korea, Japan, China, and Taiwan (Brazil 2009, EAAFP 2017). About 25% of the population is thought to winter in the Philippines, Indonesia and Papua New Guinea. Most birds, approximately 73% or 28,000 individuals, spend the winter in Australia, where birds are found primarily on the coast of all states, particularly the north, east and south-east regions including Tasmania (Bamford et al. 2008, BirdLife 2016). In the early 2000's, the global population of the Far Eastern Curlew was estimated at 38,000 individuals (BirdLife 2016). Unfortunately due to the fact that the global population is declining, the true population size is likely to be much smaller, and may not exceed 20,000 individuals (BirdLife 2016).

In May 2015, the Australian Government listed Far Eastern Curlew as critically endangered under its national environmental law (TSSC 2015). In Australia, this species has declined by 81.4% over three generations and has been declining steadily in the last 30 years by 30–49% Garnett *et al.* 2011). As a result of their sharp decline, the Far Eastern Curlew has been assessed as IUCN Endangered in 2015, compared to its status as Vulnerable in 2010, Near Threatened in 2000 and Least Concern in 1990 (Garnett *et al.* 2011, BirdLife 2016). The number of birds stopping over during migration at Saemangeum, Republic of Korea has decreased by over 30% which is about 1,800 birds, between 2006 and 2008 due to the reclamation of tidal flats (Moores 2006). Habitat loss and deterioration of this and other staging areas in the Yellow Sea have caused a rapid decline in the global population and further proposed reclamation projects are predicted to cause additional declines (Amano *et al.* 2010, Yang *et al.* 2011). The species is now listed as globally Endangered on IUCN Red List (BirdLife 2016). There are concerted efforts underway to save this species from almost certain extinction (Crosby 2015, EAAF 2017).

The Far Eastern Curlew does not wander much from its core range and as a result there a very few vagrancy records. The only region in North America where it occurs is in western Alaska where it is a very rare spring vagrant in the Western and Central Aleutian Islands (West 2008). Elsewhere in the state this species is a casual vagrant at St. Paul Island and accidental in the spring anywhere in western Alaska (West 2008). There is a recent record of an adult photographed at Lake Laberge, Yukon from May 31 – June 1, 2017 (Swick 2017). The only other record outside of Alaska is of a bird photographed in the fall in Boundary Bay Delta (Campbell *et al.* 1990b).

#### **Identification and Similar Species**

The identification of the Far Eastern Curlew is covered in most standard North American field guides. This is the largest curlew in the world measuring 53-64 cm, with a wingspan of 88-104 cm, and weighing 600-800 grams (O'Brien et al. 2006). In the context of British Columbia, the only species likely to be encountered that might pose come identification issues is the Longbilled Curlew (Numenius americanus). This species is overall slightly smaller, but very similar in size measuring 50-65 cm, with a wingspan of 76-99 cm, and weighs 445-792 grams (O'Brien et al. 2006). This species has a plain buff breast with light cinnamon streaks on the neck, throat and upper chest down the flanks. In flight, the Long-billed Curlew has cinnamon under-wing coverts and along the upper-wing secondary edge (Sibley 2000, Dunn and Alderfer 2011). The call is a distinct ascending "cur-lee" (Dunn and Alderfer 2011). Overall the Far Eastern Curlew, by comparison, is a paler bird that lacks the rich cinnamon-buff tones and is much heavier striped on the throat, breast, and ventral area (Paulson 2005). In flight, the Far Eastern Curlew looks large with a long bill, and looks entirely brown with no white on back or rump (Hayman et al. 1986, Paulson 2005). In flight, the secondaries and inner-primaries of the upper-wing are notched white (Paulson 2005, Brazil 2009). Also in flight the under-wing coverts and axillaries are densely barred brown, appearing darker than the rear belly (Hayman et al. 1986, Brazil 2009). There is moderate dimorphism in size with the females having a distinctly longer bill (Paulson 2005).

Adult birds have a long de-curved bill that is black with varying amounts of pink to reddish on the base of the lower or both mandibles (Paulson 2005, Brazil 2009). This colour is found at the extreme on the basal two-thirds of the bill (Paulson 2005). The legs are long and dull gray (Dunn and Alderfer 2011). Upper-parts vary from gray-brown to a warm reddish-brown (Paulson 2005, Brazil 2009). The feathers have dark central stripes and regular bars (Paulson 2005). The breast is extensively, but finely streaked and flanks are also finely streaked (Hayman *et al.* 1986). Primaries P7 and P8 are diffusely pale tipped (Hayman *et al.* 1986).

Juvenile birds are more distinctly marked above than adults (Paulson 2005, Brazil 2009). The scapulars are dark brown with buff notches, the tertials are brown with buffy-brown notches (Paulson 2005). The feather edges are neatly edged and notched buff-white (Hayman *et al.* 1986). Birds are typically less striped below and have finer breast stripes than found on adult birds (Paulson 2005). Sharp white primary tips extend to primary P7 and P8 (Hayman *et al.* 1986). Birds at this age are best distinguished in the fall by plumage wear and a shorter bill than that of adult birds (Paulson 2005).

The Far Eastern Curlew has a plaintive "curee, curee, curee" that is given often (Paulson 2005). Its repetitiveness is quite distinct from other curlew species. It also gives a "cui-ui-ui-ui" alarm call, similar to a Whimbrel (*Numenius phaepus*), but is more musical in tone (Paulson 2005).

## **Occurrence and Documentation**

The Far Eastern Curlew is an accidental vagrant in British Columbia with one photographed record at the foot of 112<sup>th</sup> St., in Boundary Bay, Delta on September 24, 1984 (Campbell *et al.* 1990b). This bird was found by John Ireland and Brian M. Kautesk and was photographed by the late Ervio Sian before it disappeared on the high tide (T. Plath Pers. Comm.). This bird was found on muddy sandy beach habitat, the habitat the Far Eastern Curlew prefers to use in migration (O'Brien *et al.* 2006). The timing of this bird fits perfectly with migration timing in northeast Asia (O'Brien *et al.* 2006, Bamford *et al.* 2008). The Far Eastern Curlew stages in post breeding flocks of adult birds in early July and departs for the wintering grounds by late July and early August (O'Brien *et al.* 2006). Peak passage in the Yellow Sea region of China occurs during August and September with juveniles continuing migration from mid-September through October (O'Brien *et al.* 2006, Bamford *et al.* 2008, Yang *et al.* 2011). The population of the Far Eastern Curlew continues to decline making any future records highly unlikely.

## **Acknowledgements**

We wish to thank Barbara McKee for reviewing the manuscript.

## **References**

 Amano, T.; Szekely, T.; Koyama, K.; Amano, H.; Sutherland, W. J. 2010. A framework for monitoring the status of populations: an example from wader populations in the East Asian-Australasian flyway. Biological Conservation 143: 2238-2247.

- Bamford, M., Watkins, D., Bancroft, W., Tischler, G., & Wahl, J. 2008. Migratory Shorebirds of the East Asian -Australasian Flyway: Population estimates and internationally important sites. [Online Resource]. Canberra, ACT: Department of the Environment, Water, Heritage and the Arts, Wetlands International-Oceania. Available from: http://www.environment.gov.au/biodiversity/migratory/publications/shorebirds-eastasia.html. [Accessed: July 17, 2017].
- BirdLife International. 2016. *Numenius madagascariensis*. The IUCN Red List of Threatened Species 2016:e.T22693199A93390578 [Online Resource] Retreived from http://www.iucnredlist.org/details/22693199/0 [Accessed: July 17, 2017].
- Brazil, M. 2009. Birds of East Asia: China, Taiwan, Korea, Japan, and Russia. Princeton Field Guides. Princeton University Press, Princeton, New Jersey. 528pp.
- Campbell, R.W., N. K. Dawe, I. McTaggart-Cowan, J. M. Cooper, G. W. Kaiser, and M. C. E. McNall. 1990b. The Birds of British Columbia – Volume 2 (Nonpasserines [Diurnal Birds of Prey through Woodpeckers]). Victoria: Royal British Columbia Museum.
- Crosby, M. 2015. Bird Life international: Asia-New agreement for the conservation of South Korea's top coastal wetland. [Online Resource] Retrieved from http://www.birdlife.org/asia/news/new-agreement-conservation-southkorea%E2%80%99s-top-coastal-wetland [Accessed: July 17, 2017].
- del Hoyo, J., N. J. Collar, D. A.Christie, A. Elliott, and L. D. C Fishpool. 2014. HBW and BirdLife International Illustrated Checklist of the Birds of the World. Volume 1: Non-passerines. Lynx Edicions BirdLife International, Barcelona, Spain and Cambridge, UK.
- Dunn, J. L. and J. Alderfer. 2011. National Geographic Field Guide to the Birds of North America. National Geographic Society, Washington D.C. 574pp.
- East Asian –Australasian Flyway Partnership (EAAFP). 2017. International single species action plan for the conservation of the Far Eastern Curlew (*Numenius madagascariensis*): As adopted by the 9th Meeting of Partners, Singapore, 11-15 January 2017-EAAFP MOP9 Agenda Item 1.7.7 [Online Resource] Retrieved from http://www.eaaflyway.net/wordpress/new/thepartnership/partners/meetingofpartners /MoP9/EAAFP\_MOP9\_Agenda.1.7.7\_a\_FEC\_International\_Single\_Species\_Action\_Plan\_ adopted\_rev.pdf [Accessed: July 17, 2017].

- Garnett, S. T.; Szabo, J. K.; Dutson, G. 2011. The Action Plan for Australian Birds 2010. CSIRO Publishing, Collingwood.
- Hayman, P., J. Marchant and T. Prater. 1986. Shorebirds: An identification guide to the waders of the world. Boston: Houghton Mifflin Company. 412pp.
- Moores, N. 2006. South Korea's shorebirds: a review of abundance, distribution, threats and conservation status. Stilt 50, 62-72
- O'Brien, M., R. Crossley, and K. Karlson. 2006. The Shorebird Guide. Houghton Mifflin Co., New York. 477pp.
- Paulson, D. 2005. Shorebirds of North America: The Photographic Guide. Princeton University Press, New Jersey. 362pp
- Sibley, D. A. 2000. The Sibley field guide to birds. Alfred A. Knopf, New York. 545pp.
- Swick, N. 2017. ABA Blog: Rare Bird Alert: June 9, 2017 [Online Blog] Retrieved from http://blog.aba.org/2017/06/rare-bird-alert-june-9-2017.html [Accessed: July 17, 2017].
- Threatened Species Scientific Committee (TSSC). 2015. Approved Conservation Advice for Numenius madagascariensis (Eastern Curlew). Canberra: Department of the Environment. [Online Resource] Retrieved from http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon\_id=847 [Accessed July 17, 2017].
- West, G. C. 2008. A Birder's Guide to Alaska. American Birding Association, Colorado Springs, CO. 586 pp.
- Yang, H.Y., B. Chen, M. Barter, T. Piersma, C-F. Zhou, F-S. Li, and Z-W. Zhang. 2011. Impacts of tidal land reclamation in Bohai Bay, China: ongoing losses of critical Yellow Sea waterbird staging and wintering sites. Bird Conservation International 21: 241-259.