

## A review of the status of Great Knot in the United Arab Emirates, with comments on observations from a newly discovered wintering site

by Oscar Campbell and Peter Hellyer



The world's largest *Calidrid* sandpiper, the Great Knot *Calidris tenuirostris*, breeds on gently sloping plateau or montane tundra in the north east Siberian sub-Arctic, from the Verkhoyansk Mountains east to the south Chukotskiy Peninsula and winters mainly in Australia and (to a lesser extent) south-east Asia, with small numbers as far west as the Arabian Gulf (Van Gils & Wiersma, 1996). The current population is estimated to be 290,000 individuals, down from 380,000 in 2006. It is therefore a species of conservation concern, currently classified as Vulnerable, on account of observed and predicted population declines of 30-49% over 22 years (BirdLife International 2015).

Declines have been noted both on the wintering grounds in Australia (Fuller & Gallo, 2015) and at migration sites in Japan and the Yellow Sea (Korea and eastern China), where recent land reclamation (most notably at Saemangeum, South Korea) has resulted in a precipitous decline in numbers of birds using such stopovers during spring passage. Environmental pollution, human disturbance (including hunting) and climate change are other significant threats (BirdLife International 2015).

Arabia is at the westernmost extremity of the species' wintering range, with numbers small, peripheral and highly localised compared to those further east. Barr al Hikman, Oman, holds the largest wintering populations in Arabia with a maximum count of 1260 recorded there in February 1996 (Eriksen & Victor, 2013). In the Arabian Gulf, the species currently occurs in greatest numbers in Iran, although it was almost unknown from that country prior to 2000. Over 100 have been recorded in several recent winters on the mudflats of Hormozgan Province (Khaleghizadeh *et al.*, 2011) with a maximum of 432 found in 2005. Elsewhere, Great Knot is a very uncommon winter visitor to Kuwait (highest day count of 19, March 2004; Pope, 2013), very scarce or a vagrant to the Eastern Region of the Kingdom of Saudi Arabia (just five records 1984 to 1991; J Babbington *in litt*) and a vagrant to Qatar (first record in 2008; Chalmers, 2009). However, the species is well-known from the UAE, where, since the first record in 1986, it has proven to be a regular visitor, albeit highly localised and in generally rather small numbers (Pedersen & Aspinall, 2010). To October 2014, the UAE Bird Database (records provided by T. Pedersen and C. Richardson *in litt*) contained 229 records of Great Knot.

## Timing of records from the UAE

The vast majority of database records are from November to March. Just 4% are from September and 3% from August. Of these 17 August-September records, four are from two sites where the species does not over-winter (Kalba, Sharjah Emirate and Fujairah Port Beach, Fujairah Emirate, both on the UAE's east coast) and clearly pertain to recently arrived migrants that have either not yet re-orientated to the Arabian Gulf or, perhaps more likely, are en-route to Barr al Hikman, Oman. In the latter country, the species is a vagrant away from Barr al Hikman (Eriksen & Victor, 2013) with migrant records away from overwintering sites as infrequent as they are in the UAE. 7% of UAE records date from April, mainly from the accessible (and hence well-watched) wintering site of Khor al Beida, Umm al-Qaiwain Emirate (see below); virtually all April records are from the first half of the month. There is also one record on 8<sup>th</sup> May, indicating that, exceptionally, stragglers may remain until long after most have departed. Almost all have departed from Oman by mid-March (Eriksen & Victor, 2013).

## Sites utilised in the UAE

On present knowledge (but see below), by far the most important site for currently for Great Knot in the UAE (producing 83% of database records) is Khor al Beida, (including the Dreamland beach area to the north, which constitutes part of the same estuarine / lagoonal complex). Most counts from Khor al Beida are small, with 58% of records referring to 20 or fewer individuals. This undoubtedly reflects the difficulty of locating roosting birds that may use a variety of sites over a large and complex intertidal area, many parts of which are simply inaccessible. Apart from a marked decline in records from winters 1999/00 to 2004/05 and an apparently exceptional series of records from February and March 2009 (when three counts exceeded 100, possibly due to an unusual influx of passage birds joining the wintering flock), peak numbers recorded each winter have remained broadly similar from 1991/1992 to 2013/14 (see Figure 1), given the vagaries of observer effort and the observation difficulties alluded to above. Figure 2 indicates the months in which the annual peak count was made over this period. March dominates, and may indicate passage birds from elsewhere staging at the site (possibly not every year) but Khor al Beida is clearly as important for overwintering birds as it is for passage migrants. Since 1996, there have been no sites in the UAE away from Khor al Beida from where Great Knot has been regularly reported.

However, a series of reports between 1993 and 2001 (mainly 1993 to 1996) from the island of Marawah (now a marine sanctuary managed by the Environment Agency – Abu Dhabi, EAD) and the adjacent Hail Shoal (Abu Dhabi Emirate; 24.38 N,

53.41 E; 40km north of Mirfa) were made at a time when access to the island was facilitated in association with regular seasons of archaeological excavations. Maximum numbers recorded during this period from this site greatly exceed any counts from Khor al Beida; 48% of 21 reports involved 100 or more birds and five counts exceeded 250 birds. The peak, indeed the highest ever reported total in the Arabian Gulf (and, for that matter, Arabia away from Barr al Hikman), was 607 on 18<sup>th</sup> September 1994. At the time it was uncertain as to whether these birds constituted a wintering or passage population (Aspinall, 1993) but records of 282 in November 1993 and 54 in January 1995 indicate that some, and perhaps many, birds over-winter at this site. In contrast to this, and as alluded to above, September (and October) numbers at Khor al Beida, despite far greater observer effort over many years, have been insignificant. Since 1996, coverage at Marawah / Hail Shoal has been extremely erratic but a record of 162 in February 2001 imply that this site was utilised for almost a decade (at least). Inaccessibility, rather than absence of birds, is likely to be causing the dearth of records from this site, and updated information would be most welcome.

## A newly discovered site for Great Knot in Abu Dhabi Emirate

In 2013, regular bird surveys were restarted by the authors on Balghelam Island, Abu Dhabi emirate (24.57 N, 54.51 E; 19km north east of downtown Abu Dhabi and 115km east north east of Hail Shoal) after a gap of nine years. 36 Great Knot were discovered on 23<sup>rd</sup> March 2013 amongst Bar-tailed Godwits *Limosa lapponica* and Grey Plover *Pluvialis apricaria* (species with which they regularly associate at Khor al Beida) on a high tide roost at the western end of the island. Other records were forthcoming on 17<sup>th</sup> January 2014 (13 individuals) and 21<sup>st</sup> March 2015 (three individuals). Visits on 27<sup>th</sup> April and 5<sup>th</sup> October 2013 and 11<sup>th</sup> October 2014 failed to locate any birds, although tidal conditions were detrimental during the April 2013 visit. The absence of roosting birds during October visits may indicate absence during autumn / early winter or simply, as at Khor al Beida, reflect the availability of alternative roosting sites in this vast and largely inaccessible area.

On each visit when birds were located, they were found either on Ra's Yah, a low, flat, rocky headland at the western end of the island and just above current High Water Mark (this headland having been formed during a period of higher sea levels) or on an adjacent sandy bay. On each occasion, they were amongst many hundreds of other waders close to a sandy track. Birds were found standing motionless on the water's edge or when flying up as mixed flocks of Bar-tailed Godwits and Grey Plovers jostled and temporarily took off to circle the area. Birds were also seen to depart

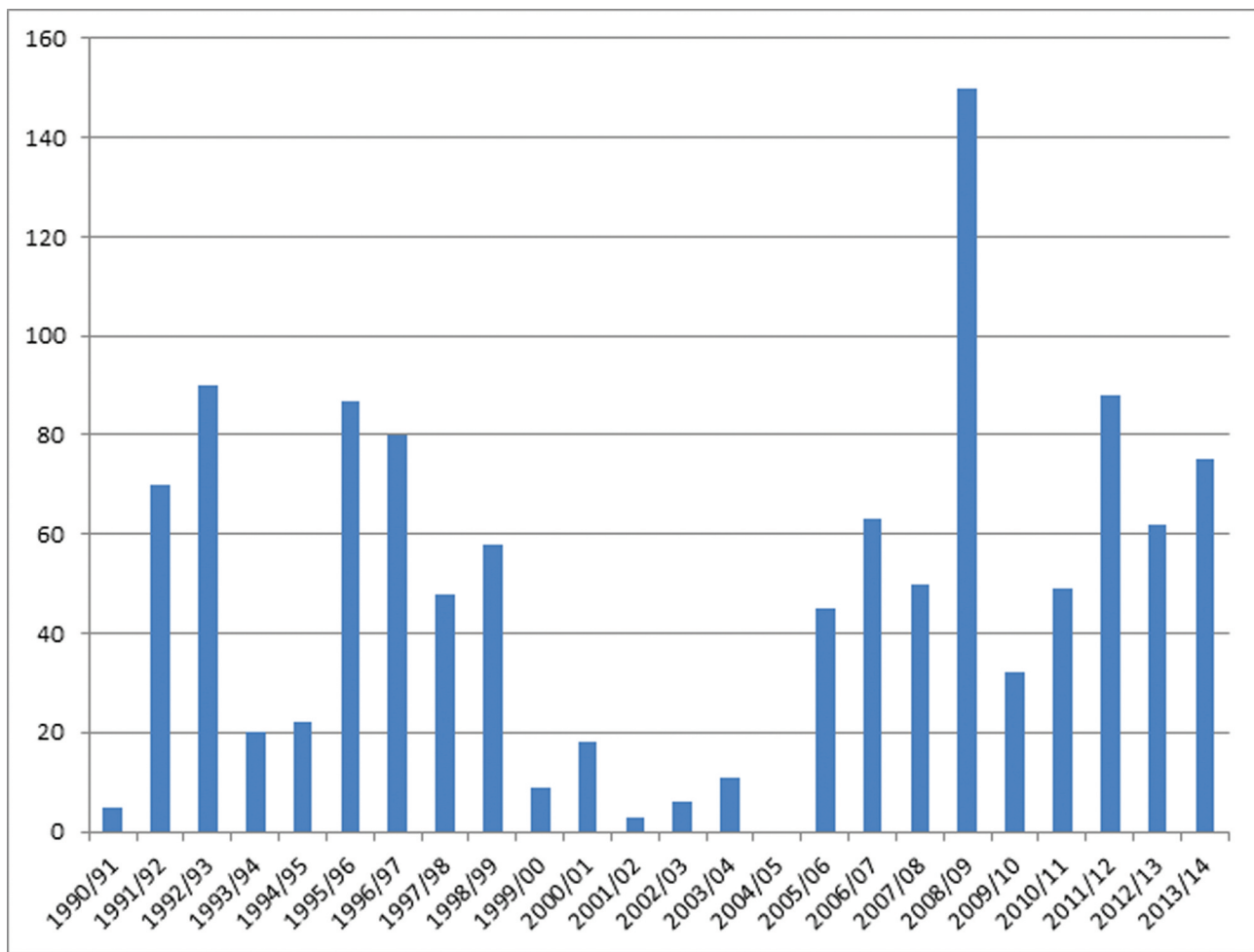


Fig. 1 Peak winter counts of Great Knot *Calidris tenuirostris* from Khor al Beida, Umm al Qawain Emirate, 1990/91 to 2013/14

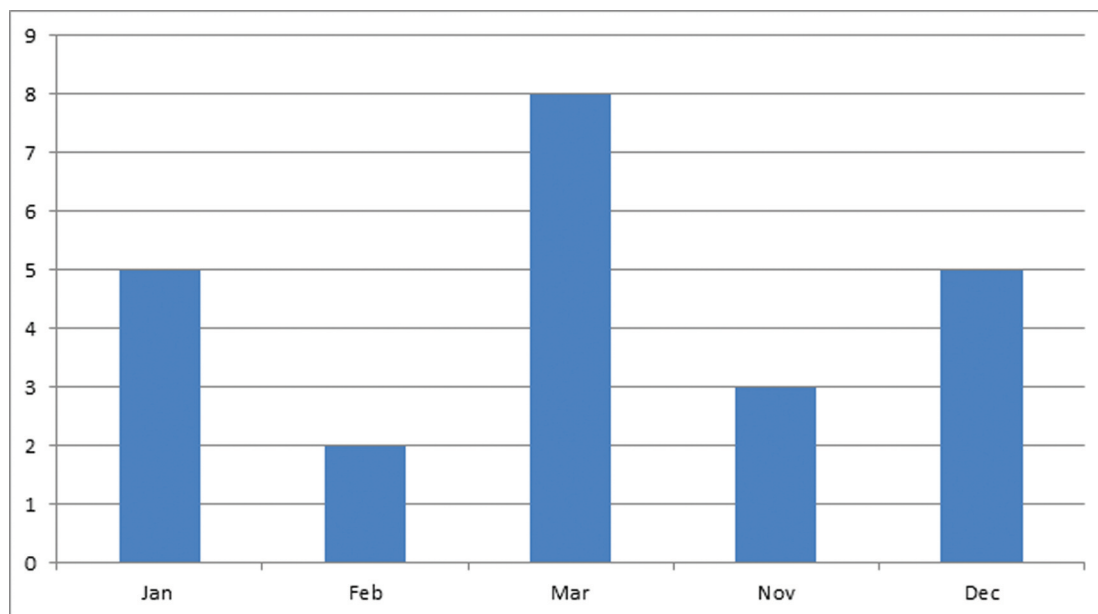


Fig. 2 Month during which peak winter count of Great Knot *Calidris tenuirostris* was made at Khor al Beida, Umm al Qaiwain Emirate, 1990/91 to 2013/14.



Balghelam after disturbance during a falling tide, presumably to visit freshly exposed feeding areas elsewhere.

These records represent the first reports of Great Knot for this site. The species was not recorded during visits that took place between 1993 and 2004 (carried out by Erik Hirschfeld, the late Simon Aspinall and PH), despite the fact that Bar-tailed Godwits and Grey Plovers were regularly recorded in good numbers (maxima of 353, 19<sup>th</sup> January 1996 and 68, 16<sup>th</sup> January 1996 respectively). Visits in 1993, 1994 and 1995 were in October, December and April respectively. Those between 1996 and 2004, however, were in January (six), early February (one) and mid-March (one) and hence within the period during which Great Knot were located in 2013 to 2015.

### Acknowledgements

We are grateful to Sheikh Mohammed bin Surour Al Nahyan, son of the island's owner, Sheikh Surour bin Mohammed Al Nahyan, for arranging for the resumption of regular visits to Balghelam and for the provision of transport and other hospitality during our trips there. Andrew Bailey, Gillian Ensor, Simon Lloyd, Tommy Pedersen, Mark and Louise Smiles and Andrew Ward accompanied us for some of the survey visits. We are also grateful to Tommy Pedersen for maintaining the UAE Bird Database and to Colin Richardson, former Secretary of the Emirates Bird Records Committee and UAE Bird Recorder, for earlier data and many useful comments, without which this paper would not have been possible. Finally, thanks to Jem Babbington and Dick Hornby for promptly and helpfully answering our inquiries.

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