New Records of Broad-Billed Sandpiper Calidris falcinellus in Banyuasin Peninsula (South Sumatra, Indonesia) After 32 Years

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NEW RECORDS OF BROAD-BILLED SANDPIPER *CALIDRIS FALCINELLUS* IN BANYUASIN PENINSULA (SOUTH SUMATRA, INDONESIA) AFTER 32 YEARS

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Broad-billed Sandpiper *Calidris falcinellus* is an uncommon migrant to northern Sumatra but a rare visitor in the rest of the Greater Sundas (central and southern Sumatra, Borneo, Java and Bali). Until 2018 this species had been recorded just once (on 1 December 1988) in the Banyuasin Peninsula, South Sumatra Province, Indonesia. Three records of Broad-billed Sandpiper on 16 March 2018, 15 October and 7 December 2020 in Barong River are recent records for Banyuasin Peninsula after 32 years (1988-2018) of no observations.

INTRODUCTION

Wetlands in Sumatra, Indonesia, particularly in the east coast of the island, provide habitat for more than 35 species of migratory shorebirds (Iqbal *et al.* 2013). Since the summary provided by Bamford *et al.* (2008) in which they identified eight important sites for migratory shorebirds in Indonesia, dozens more sites have been identified by observers across the archipelago, and there 47 migratory shorebird species have now been recorded (Crossland *et al.* 2006, Putra *et al.* 2020). Banyuasin Peninsula is one of the most important sites that confirmed more 78,000 migratory shorebirds use the site, supporting at least seven populations at 1% level or supported in internationally important numbers (Verheugt *et al.* 1990, Conklin *et al.* 2014).

Banyuasin eninsula comprises the largest mangrove area within the Indo-Malayan region and the only mangrove area that still has an intact natural transition into adjacent freshwater and peat swamp forest (Silvius et al. 2016). There are 28 shorebird species reported in Banyuasin Peninsula with Broad-billed Sandpiper Calidris falcinellus considered a locally vagrant species (Verheugt et al. 1990, Verheugt et al. 1993, Iqbal et al. 2020). During 13 months of surveys on the Banyuasin Peninsula from August 1988 to August 1989, Verheught et al. (1990) counted a total of 280,519 waders of 25 species with monthly totals ranging from 2146 in May 1989 to 78,561 in October 1988. Broad-billed Sandpiper was only recorded on one occasion -15 birds in December 1988. In this paper, we report two recent observations of Broad-billed Sandpiper in the Barong River sector of Banyuasin Peninsula in 2020, representing the first records of this species in 32 years.

SURVEY SITE

Barong River geographically lies at 02°09'S, 104°53'E. This area is part of Banyuasin Peninsula, Banyuasin Dua subdistrict, Banyuasin district, South Sumatra Province, Indonesia. In terms of conservation area management, the area is under Berbak Sembilang National Park. The habitat is a coastal zone of mangrove forest, and many areas have been converted to aquaculture ponds. The substrate is extremely soft and muddy, providing excellent roosting and feeding ground for numerous waterbirds and shorebirds (Figure 1).



Figure. 1. Map showing the Banyuasin Peninsula, South Sumatra, Indonesia.

BROAD-BILLED SANDPIPER RECORDS

Broad-billed Sandpiper were observed three times in 2018 and 2020 at Barong River, Banyuasin Peninsula, South Sumatra Province, Indonesia.Four Broad-billed Sandpipers were sighted on 16 March 2018 and six on 15

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October 2020, on the aquaculture ponds of Barong River. The birds have small size body, short necked, slightly decurved bill and kinked downwards at the tip, short dark-grey legs, double supercilium that joins at forehead, greyish or bownish crown, whitish double supercilium, upperparts are dull grey or brown with diffuse pale fringes (Figure 2 and 3).



Figure 2. An individual Broad-billed Sandpipers *Calidris falcinellus* with Lesser Sandplover *Charadrius mongolus*, on the 16 March 2018 at the aquaculture ponds in Barong River, Banyuasin Peninsula, South Sumatra, Indonesia (©Muhamad Iqbal).



Figure 3. Broad-billed Sandpiper *Calidris falcinellus*, on the 15 October 2020 at the aquaculture ponds in Barong River, Banyuasin Peninsula, South Sumatra, Indonesia (©Deni Mulyana).

The third observation was of at least 40 Broad-billed Sandpipers on 7 December 2020 in the same area. The birds were small shorebirds, when feeding and standing they seemed to be of a similar size to Mongolian Plover *Charadrius mongolus* and Curlew Sandpiper *Calidris ferruginea*, which are two common shorebirds occuring in the coastal zone of Banyuasin Peninsula. After examination with various guides (Sonobe & Usui 1993, Hayman *et al.* 1986, Chandler 2009, Robson 2011), the characters were confirmed to be adult non-breeding Broad-billed Sandpiper.

DISCUSSION

Broad-billed Sandpiper has two subspecies: *Calidris falcinellus falcinellus*, which breeds in Scandinavia and Northeast Russia, and spends the non-breeding period

from East Africa (rarely to South Africa) through Red Sea and Arabia to West India and Sri Lanka; and *Calidris falcinellus sibirica*, which breeds in Northeast Siberia and spends the non-breeding period from Northeast India through Asia, Indonesia to Australia (del Hoyo & Collar 2004). The subspecies *sibirica* has brighter, more rufous fringes to the upperpart and a cinnamon wash to breast in breeding plumage, the upper supercilium is less well defined (Haymen *et al.* 1986). This subspecies is uncommon to fairly common coastal winter visitor and passage migrant in Southeast Asia, (Robson 2011).

 Table 1. Shorebirds monitoring in Banyuasin peninsula between

 1988 to 2020, and Broad-billed Sandpiper records.

D (37	N MALEY A AL D.A. (
Date					
				Observers	
	of waders	waders	u u		
				Verheugt et al. 1990	
	30			Verheugt et al. 1990	
31 July 2001	10	7,100	0	Unpublished data	
10 November 2001	11	18,500	0	Unpublished data	
26 February 2002	6	4,025	0	Unpublished data	
17 June 2002	>1	160	0	Unpublished data	
9 Oktober 2002	11	9,500	0	Unpublished data	
31 Juli 2003	7	2,500	0	Unpublished data	
21 October 2003	7	10,000	0	Unpublished data	
24 Februari 2004	>10	20,000	0	Unpublished data	
May 2010 (undated)	7	4,421	0	Unpublished data	
December 2011	15	10,985	0	Unpublished data	
(undated)				-	
14 September 2012	>1	50	0	Unpublished data	
December 2012	>1	2	0	Unpublished data	
(undated)				-	
November 2014	17	49,309	0	Unpublished data	
(undated)				-	
8 September 2017	>1	374	0	Iqbal et al. 2019	
24 February 2018	>1	200	0	Iqbal et al. 2019	
16 March 2018	>5	1,000	4	Unpublished data.	
24 March 2018	>1	500	0	Iqbal et al. 2019	
12 May 2018	>1	150	0	Iqbal et al. 2019	
24 November 2018	>1	363	0	Iqbal et al. 2019	
20-24 December 2019	25	8,812	0	Unpublished data	
15 October 2020	25	69,819	6	Our survey	
7 December 2020	13	5,000	40	Our survey	
	31 July 2001 10 November 2001 26 February 2002 17 June 2002 9 Oktober 2003 21 October 2003 21 October 2003 24 Februari 2004 May 2010 (undated) December 2011 (undated) 14 September 2012 (undated) November 2012 (undated) 8 September 2012 (undated) 8 September 2017 24 February 2018 16 March 2018 24 May 2018 12 May 2018 20 Avormber 2019 15 October 2020	Species of waders 1 December 1988 20 January to August 1989 30 31 July 2001 10 10 November 2001 11 26 February 2002 6 17 June 2002 >1 9 Oktober 2001 11 31 July 2003 7 21 October 2003 7 22 Nother 2003 7 21 October 2003 7 22 Nother 2012 >1 December 2011 15 (undated) 7 10 Aveember 2014 17 (undated) 7 8 September 2017 >1 24 Kerbury 2018 >1 16 March 2018 >1 12 May 2018 >1 24 Aprick 2018 >1 20-24 December 2019 25 <	Species of waders No. of waders 1 December 1988 20 18,600 January to August 1989 30 82,736 31 July 2001 10 7,100 10 November 2001 11 18,500 26 February 2002 6 4,025 17 June 2002 >1 160 9 Oktober 2001 11 9,500 21 October 2002 11 9,500 21 October 2003 7 10,000 24 Februari 2004 >10 20,000 May 2010 (undated) 7 4,421 December 2012 >1 50 December 2012 >1 50 December 2012 >1 50 Quedated) 7 2,400 (undated) 11 374 24 February 2018 >1 300 12 May 2018 >1 150 24 November 2018 >1 363 20-24 December 2018 >1 363 20-24 December 2019 25 8,812	Species pf waters No. of waters Broad-bille d Sandopier 1 December 1988 20 18,600 15 January to August 1989 30 82,736 0 31 July 2001 10 7,100 0 10 November 2001 11 18,500 0 26 February 2002 6 4,025 0 17 June 2002 >1 160 0 9 Oktober 2002 11 9,500 0 21 October 2003 7 2,500 0 21 October 2003 7 1,000 0 24 Februari 2004 >10 20,000 0 May 2010 (undated) 7 4,421 0 14 September 2012 >1 50 0 14 September 2012 >1 374 0 14 September 2017 >1 374 0 14 September 2018 >1 200 0 16 March 2018 >5 1,000 4 24 Hebruary 2018 >1 500	

Both Marle & Voous (1988) and MacKinnon & Phillipps (1993) considered Broad-billed Sandpiper as a rare visitor to the Greater Sundas (Sumatra, Borneo, Java and Bali), while Eaton et al. (2016) considered it an uncommon migrant throughout the Indonesian archipelago. The species has only been recorded once in Indonesian Borneo, and is a rare coastal visitor in Java and Bali (MacKinnon 1988, Mann 2008). Records of Broad-billed Sandpiper in most of Sumatra are very limited, but in northern Sumatra Crossland et al. (2006) noted that the species is a locally common migrant in the north-east with flocks of up to 100 observed, and multiple records from Bagan Percut, Deli-Serdang District with max 200 on 30 December 1995 (Crossland et al. 2012). Further north in Aceh, a survey along parts of the east coast from October 2019 to January 2020 recorded a total 342 Broad-billed Sandpipers (Putra et al. 2020). Further south, up to 20 birds were recorded in April 1988 on the

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east coast of Jambi province (Silvius 1986) but there have been no recent records (Tirtaningtyas & Febrianto 2013, Febrianto *et al.* 2019).

Broad-billed Sandpiper has only been recorded once in Banyuasin peninsula, with 15 birds observed on 1 December 1988 (Verheugt et al. 1990, Verheugt et al. 1993). Three observations of Broad-billed Sandpiper in Banyuasin peninsula occured in 2018-2020, which are new recent records for this wetland after 30 years (1988-2018). Survey and monitoring of shorebirds in Banyuasin Peninsula were conducted between 1989 to 2017 (see Table 1), but no Broad-billed Sandpiper were reported. Marle & Voous (1988) stated that Broad-billed Sandpiper is a possibly overlooked winter visitor in Sumatra. Our observations of Broad-billed Sandpiper in Banyuasin peninsula suggest that this shorebird is very similar to the Curlew Sandpiper. The increasing number of birdwatchers and local researchers with long lens cameras will lead to better identification and documentation in the Banyuasin peninsula and elsewhere in Sumatra. In this case, there are some new and interesting records of shorebirds in Sumatra during a last decade (eg. Abdillah & Iqbal 2015, Imansyah & Iqbal 2015, Iqbal et al. 2014, Putra et al. 2018, Muzika et al. 2020). Essentially though, the species has no doubt been overlooked but the numbers are so low that it does seem likely that southern Sumatra does not lie below a major migration route for Broad-billed Sandpiper. In contrast, as it is similar to other species (like Great Knot, Red Knot, Red-necked Stint, etc), the main migration route seems to cross Northern Sumatra. Not only have much larger numbers of Broad-billed Sandpiper been recorded in northern Sumatra compared to the southern provinces, but despite the potential to be overlooked amongst large numbers of Curlew sandpipers, Broad-billed sandpipers have been observed at many sites, on many occasions in northern Sumatra. Further monitoring is needed to better understand the abundance and distribution of Broad-billed Sandpiper in Banyuasin peninsula and Sumatra.

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 ★Marcel J. Silvius, Yus Rusila Noor, I. Reza Lubis, Wim Giesen, Dipa Rais. "Chapter 213-1 Sembilang National Park - Mangrove Reserves of Indonesia", Springer Science and Business Media LLC, 2016 Crossref

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