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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.

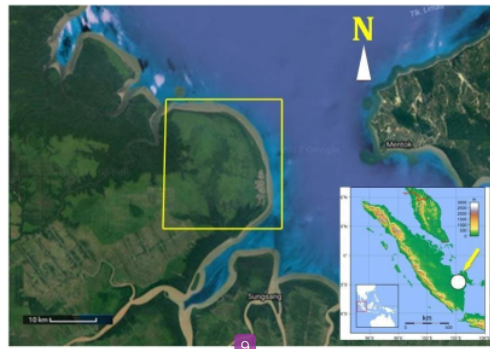
INTRODUCTION

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 Peninsula 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, Verheugt *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).



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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

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 brownish 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 occurring 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.

No.	Date	No. Species of waders	Total No. of waders	Number of Broad-billed Sandpiper	References/ Observers
1	1 December 1988	20	18,600	15	Verheugt <i>et al.</i> 1990
2	January to August 1989	30	82,736	0	Verheugt <i>et al.</i> 1990
3	31 July 2001	10	7,100	0	Unpublished data
4	10 November 2001	11	18,500	0	Unpublished data
5	26 February 2002	6	4,025	0	Unpublished data
6	17 June 2002	>1	160	0	Unpublished data
7	9 Oktober 2002	11	9,500	0	Unpublished data
8	31 Juli 2003	7	2,500	0	Unpublished data
9	21 October 2003	7	10,000	0	Unpublished data
10	24 Februari 2004	>10	20,000	0	Unpublished data
11	May 2010 (undated)	7	4,421	0	Unpublished data
12	December 2011 (undated)	15	10,985	0	Unpublished data
13	14 September 2012	>1	50	0	Unpublished data
14	December 2012 (undated)	>1	2	0	Unpublished data
15	November 2014 (undated)	17	49,309	0	Unpublished data
16	8 September 2017	>1	374	0	Iqbal <i>et al.</i> 2019
17	24 February 2018	>1	200	0	Iqbal <i>et al.</i> 2019
18	16 March 2018	>5	1,000	4	Unpublished data
19	24 March 2018	>1	500	0	Iqbal <i>et al.</i> 2019
20	12 May 2018	>1	150	0	Iqbal <i>et al.</i> 2019
21	24 November 2018	>1	363	0	Iqbal <i>et al.</i> 2019
22	20-24 December 2019	25	8,812	0	Unpublished data
23	15 October 2020	25	69,819	6	Our survey
24	7 December 2020	13	5,000	40	Our survey

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

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 occurred 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. 10 dillah & 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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