



EDITORIAL

Greetings from New Zealand. I hope that whether you are reading this in Australasia or further afield, you are safe and well. In these difficult times, it can be the little things that help us focus on what really matters in our lives. In the southern hemisphere, those include seeing the migratory waders return. Every year, the Bar-tailed godwits (*Limosa lapponica*) arrive and feed voraciously. As they rest and feed and get stronger (and fatter) it gives hope to those of us lucky enough to observe them.



Bar-tailed godwit, *Limosa lapponica*, at Manawatu Estuary, New Zealand, 08/01/2021 (by Imogen Warren)

It is great to see such a variety of articles in this edition of Stilt. We have an interesting combination of species-specific articles and others focusing on shorebird sites. There is a lot of work involved in the manuscript to publication process. Our Editorial Board put in a great deal of effort to work with authors to ensure scientific quality and that the research or report is given an appropriate airing.

I would like to introduce <u>Assistant Professor Chi-Yeung Jimmy Choi</u>, one of our Board members. Jimmy works at the School of Environmental Science and Engineering, Southern University of Science and Technology, Shenzhen, China. I have asked him to tell us a little about himself:

"I was trained as an ecologist with expertise in animal ecology and conservation biology. I first came to know about shorebirds when studying for my Masters as I investigated the wintering ecology of Dunlin (*Calidris alpina*) in Shanghai. This marked the beginning of my wandering journey, following migratory shorebirds to many coastal wetlands in mainland China, to their breeding grounds in the Arctic tundra in Alaska, wintering coastal wetlands in New Zealand and Australia, studying shorebird ecology, the threats that they are facing and ways to mitigate those threats. Migratory shorebirds also connected me to many shorebird enthusiasts along the flyway that I would otherwise never meet.

Being the same age as *Stilt*, it was my great pleasure to join Stilt's Editorial Board in 2016 November. The journal provides an excellent venue for shorebird enthusiasts, especially amateurs, to share their observations and findings internationally. For example, the results of many important local-scale surveys conducted in the Yellow/Bohai Seas were published in the Stilt. This first-hand data helped to identify the important shorebird sites in the Yellow/Bohai Seas and laid the critical baseline for future research, monitoring and management. Stilt also published results on shorebird banding expeditions and flag resighting analysis, revealing the oldest shorebird banded, seen, or the migration route of shorebirds. Without Stilt, some of these articles may get buried in local journals in other languages inaccessible to international readers or even not getting published. In short, Stilt is an invaluable source of reference that shorebird enthusiasts could turn to, for learning more about the amazing story of shorebirds".

For *Stilt* 76, Jimmy worked on the Point Moore and Separation Point article and for the author Marcus Singor, Birdlife WA osprey observer, the review process was great and Jimmy's constructive and informative feedback improved the quality of their manuscript. Professionalism, enthusiasm and valuable suggestions seem to be the key ingredients to add value to publications. Thanks Jimmy.

Australasian Shorebird Conference 2021 (ASC 2021)

A reminder that the 2021 Australasian Shorebird, jointly organised by The QWSG and AWSG, and under the theme "Global strategies, Local actions", has been postponed to March 2022. For more details, please be in touch with David Edwards, Chair QWSG and Alison Russell-French OAM Chair AWSG.

I would like to thank the Editorial and Production team for their contribution to the journal. Also, a big thanks to our contributors. We are reviewing our processes so that our communication and systems are smoother. We will see you in May 2022 for *Stilt* 77.

Imogen Warren Editor

A NOTE FROM THE AWSG CHAIR

I took over as Chair of the Australasian Wader Studies Group (AWSG) in 2018 following the appointment of the previous Chair Mr. Doug Watkins to the Chief Executive position in the East Asian – Australasian Flyway Partnership (EAAFP) Secretariat. As a Partner of the EAAFP, we maintain a close and effective working relationship with Doug and the Secretariat in the pursuit of conservation of migratory shorebirds and their habitat.

The AWSG Committee now meets on a quarterly basis rather than biannually to more actively pursue our business. The following matters provide a brief outline of the work that the Committee has been progressing over the last two years.

Australian national migratory shorebird program

The Shorebirds 2020 project (S2020) was a joint initiative established in 2007 by AWSG and Birds Australia. In 1981 AWSG initiated counts of shorebirds at selected sites and has been a major driver for shorebird counting since then. The program has now come to an end and has been replaced by the National Shorebird Monitoring Program. We have a vast network of around 1600 volunteers who have played a crucial role in and contributed significantly to monitoring of shorebirds since inception of the project and their monitoring has been seamlessly transitioned into the National Shorebird Monitoring program. National Shorebird Monitoring continues to be a critical undertaking, providing unique nation-wide information on the state of Australia's shorebirds from 520 shorebird areas.

BirdLife Australia and AWSG are aiming to (re)appoint state coordinators in all Australian states and territories in 2020 to install a decentralised network to coordinate count efforts, close survey gaps and to address the demographic problem of an aging counter population by increased recruitment efforts through events and workshops. Several key publications have been revised and reprinted, such as the Shorebird ID Booklet and a new Wetland Bird ID Booklet (refer http://birdlife.org.au/sb-monitoring and download access booklets via http://birdlife.org.au/projects/shorebirds-2020/counter-res ources).

AWSG Newsletter Tattler

After a period of production difficulties, a special Edition of the AWSG Newsletter *Tattler* "A Year in Review" was produced late in 2019. Phil Straw, AWSG Flyway Liaison Officer, has taken on the role of editor of *Tattler*. The

Newsletter aims to provide articles of interest both within Australia and in the Flyway. Articles for *Tattler* are encouraged from all respective shorebird networks.

Stilt

In July 2020, the AWSG Committee welcomed Imogen Warren as the new *Stilt* editor. Imogen lives in the Manawatu Ramsar site in New Zealand and is involved with Birds NZ. She comes to AWSG with loads of experience in editing and proofreading, and has experience in websites and photography through her own site <u>imogenwarrenphotography.net</u>. Imogen worked with Dr Birgita Hansen, former editor, during a transition into the role and she is assisted by the editorial board with the scientific review process and making decisions about the scientific appropriateness of author contributions. Imogen's editorial work in producing Stilt has continued the high standard of production of AWSG's centrepiece ornithological publication.

Key AWSG Research and Science Directions

In 2020, the AWSG Committee focused on reviewing AWSG's portfolio of research activities across the EAAF. There has been significant discussion about the current AWSG research activities with the main points raised being:

- Re-appraisal of flyway populations 2016. Given the rapid declines in some species this project, delivered in 2016, should be undertaken at least every 5 years, which would align it with the lifespan of the Australian Government's Wildlife Conservation Plan for Migratory Shorebirds.
- Migration/flagging. It was agreed that a review of the effectiveness of plain leg flags should be conducted, and that contact should be made with Japan, Taiwan and other international bodies regarding the benefits of plain flags on Red-necked Stints.
- Global Flyway Network. AWSG is looking to establish a formal agreement with the Global Flyway Network (GFN) given the close cooperation taking place between both organisations.
- Terns. It was agreed that Stilt should continue to be the publication for material on Terns and that further efforts should be made to find analysts for the data – perhaps through collaboration with the Australian Seabird Group. It was noted that there will be a Seabird Conference 4-8 October 2021. Further development of AWSG research and science directions is ongoing.

AWSG Communications Plan and Communications Officer position

Led by Committee member Dr Amanda Lilleyman, AWSG has prepared a draft communications plan to guide CEPA activities and identify priority areas for attention including the need for a dedicated AWSG Communications Officer. The communications plan for AWSG includes Facebook, Twitter and other social media platforms, as well as an updated website, closer integration with BirdLife Australia communication streams and renewed development and delivery of traditional communications platforms Stilt and Tattler.

New NT Shorebird Banding Project

The AWSG Committee supported a proposal for an NT Shorebird Banding Project for catching and banding shore birds in the Northern Territory. Dr Amanda Lilleyman, who proposed the project, stated that she would like the project to come under the AWSG banner and would seek the necessary Animal Ethics and ABBBS permits for the project.

Development of database listing all AWSG and VWSG Publications

The AWSG Committee, led by Dr Danny Rogers, is investigating the means to develop a framework for listing all AWSG and VWSG publications on an online accessible platform. A number of possible systems that could be adopted for use have been suggested and additional work is being undertaken to determine which search engine would be most useful for AWSG to be involved with including relevant controls and functionality.

AWSG Scientific Committee

Collaborations with universities and other research organisations led to several publications making use of AWSG data. The scientific committee continued its basic work of overseeing requests for AWSG data. A key activity of the committee has been completing a review of the shorebird banding program in north-western Australia.

Global Flyway Network Update

Due to the COVID-19 pandemic, Global Flyway Network (GFN) researchers from Australia, The Netherlands and the United Kingdom were unable to travel to China. Luckily, GFN colleague Miss Katherine Leung was able to lead the fieldwork. Katherine was ably assisted in the fieldwork by six additional scanners, Mr. Guan Xiangyu, a Beijing bird guide, Miss Gao Chang, a freelance investigator from Beijing and graduate from Beijing Normal University (BNU) under

our long-time collaborator Professor Zhang Zhengwang, Miss Wu Entao, Miss Guo Jia and Miss He Ying, research assistants at Beijing Forestry University, and our close colleague Mr Hebo Peng. GFN thanks them all for their efforts in difficult times. The costs this year were covered by the Center for East Asian-Australasian Flyway Studies (CEAAF) at Beijing Forestry University (BFU) under the leadership of Professor Lei Guangchun. The team was in the field from 4 May to 7 June 2019, 34 days (less than a usual spring field season of 56 days).

The main findings from fieldwork showed that on the Luannan Coast in 2020, Red Knot *Calidris canutus* were never present in such large numbers as in 2019. The biggest single count in 2020 was 20,000 on 24 May. This is in stark contrast to the 47,537 counted on 22 May 2019. The numbers of Red Knot using the Luannan Coast varies a lot from year to year. Relatively large numbers were present in 2014, 2015 and 2018. However, relatively low numbers were recorded during 2016 and 2017. Given that food resources usually determine distributions, the benthic food at Luannan and other sites determine the numbers of Red Knot that come to Luannan.

Despite the shorter study period and subsequently lower numbers, as in previous years, these records reflect the vital importance of the area for Red Knots from NWA and throughout the EAAF.

MYSMA Counts 28 November - 3rd December 2020

The AWSG maintained its scientific program in North-western Australia, with banding expeditions in February 2020 and 2021 and continuation of the ongoing collaboration with the Global Flyways Network on studies of survival of north-western Australian Shorebirds. The MYSMA (Monitoring Yellow Sea Migrants in Australia) project continued the series of large-scale repeatable shorebird counts that have been carried out by the AWSG in two of Australia's premier shorebird sites (Roebuck Bay and Eighty Mile Beach) since 2004; MYSMA surveys were carried in June and December 2019. A major report on results from the MYSMA program was completed, reviewing trends in north-western Australia since 2004 and recommending future directions for the monitoring program. The report was published in 2020.In 2018, after consultation with the main funders, the Western Australian Department of Biodiversity, Conservation and Attractions (DBCA), we reduced the program to one winter count and one summer count each year, following an analysis by Danny Rogers et al. (2020) that demonstrated that the reduced program would bring costs down by ~40% with little impact on our capacity to detect change.

The report by Rogers et al. (2020) provides much additional information on shorebird monitoring in North-western Australia; it is available online here.

Toward the end of 2020, the MYSMA team undertook another comprehensive survey of the Broome region and counted 309,591 shorebirds (44 species) during the 5-day survey. Numbers were broadly consistent with those in recent surveys. Once entered and vetted, the data will be included in the AWSG's MYSMA database, and also the database of Birdlife Australia's National Shorebird count program.

Highlights included a Buff-breasted Sandpiper Calidris subruficollis - the first record of this South American vagrant in northern Australia and the third record for WA. Still more remarkably, the team found two Nordmann's Greenshank Tringa guttifer: one on Eighty Mile Beach, the second at Bush Point. These are the 6th and 7th Australian records of this critically endangered species, which usually spends the non-breeding season in south-east Asia. It is noteworthy that ALL previous Australian records of Nordmann's Greenshank have been found during MYSMA surveys - an indication of how exciting the shorebird populations in north-western Australia are, and of the careful scrutiny that they are given by MYSMA teams. In January 2021, a Nordmann's was finally found in Australia outside NWA, on the Cairns foreshore.

AWSG NWA2020 Shorebird and Tern Expedition – February 2021

This year, 2021, we celebrated the 40th anniversary of the North-West Australia Wader and Tern Expedition. The first expedition to catch waders was in 1981, and members from the AWSG had just discovered the importance of the Roebuck Bay and Eighty Mile Beach region. The early work included counts of how many birds were in the region, where they occurred, what the most appropriate survey methods might be, and to catch and colour mark as many waders as possible. The team caught 1189 waders from 12 species. An impressive first catch for the region and it has gone down in history. The Expedition in 2021 was significantly impacted by COVID 19 and was limited to fewer participants and species caught. A report on the Expedition is currently in preparation.

Banding and Leg-flagging Databases Updates

With financial support from the Wettenhall Small Grants program awarded to the Victorian Wader Studies Group (VWSG) and logistic support from Deakin University, Dr Aaron Spence and Professor Marcel Klaassen (AWSG Committee Member) have completed the process of transferring all VWSG and AWSG banding databases to a web-based platform. This move, including transferring both the metal-band and the flag-sighting databases, has enabled VWSG and AWSG to better interrogate and present over 40 years of data.

The BirdMark portal is specially designed to accept submissions of resightings of colour marked waders along our flyway. It supports multiple different languages, offering the possibility for volunteers and researchers to enter and submit observations both interactively or as a file. It can be accessed here. Videos on the various ways in which this can be done are included in the Help Guides provided on the portal. Feedback on flagged shorebird observations, including a history of the birds that have been observed, will be returned to the observer within a couple of days of submitting data.

With the launch of this site, we hope to further boost the reporting of marked shorebirds, which is crucial for ongoing conservation and scientific research, informing on the birds' population dynamics, movements and site use. The potential for other overviews to be generated and readily shared with the group and the wider public through the internet has now been improved dramatically.

Shorebird Science Meeting in the Republic of Korea

The 1st East Asian-Australasian Flyway (EAAF) Shorebird Science Meeting, which was due to be held at the National Institute of Ecology, Seocheon-gun, Chungcheongnam-do, Republic of Korea (May 5-8th, 2020), was moved online, taking place from 3-6 November 2020 due to the coronavirus situation. A full report of the meeting can be found online with presentations being available on the EAAFSSM Official YouTube Channel. The AWSG was well represented at the meeting and gave a number of presentations at the Meeting. It is expected that outcomes from the meeting will feed into discussion at the East Asian - Australasian Flyway Partnership (EAAFP) Shorebird Working Group which will be held in conjunction with the next EAAFP Meeting of the Partners 2022 or 2023.

Meeting of the Partners (MOP) of the EAAFP

The 11th Meeting of the Partners (MoP) was originally scheduled for mid-March 2020 then 2021 but owing to the COVID 19 pandemic the Australian Government and Secretariat of the EAAFP have resolved to postpone the MoP until March 2022. The date and arrangements for the MoP will continue to be reviewed in light of the COVID pandemic.

Australasian Shorebird Conference (ASC)

The Queensland Wader Studies Group (QWSG) and AWSG are joint organisers of the Australasian Shorebird Conference and plans were to hold the Conference after the EAAFP MoP in March 2021. However, this was postponed owing to the COVID19 pandemic and closure of borders to international travellers in Australia. The QWSG and AWSG Organising Committee will continue to review potential dates and arrangements for the Conference and provide information to update possible timing for the Conference.

I would like to extend my appreciation to the Committee for their efforts and dedication over the last two years in contributing to an extensive program of work on migratory shorebirds both in Australia and in the Flyway. I would also like to acknowledge the tremendous effort from our volunteers who are an integral part of the monitoring and counting of shorebirds and contribute to our knowledge base.

Alison Russell-French OAM

Chair, Australasian Wader Studies Group

OBITUARY KEN ROGERS (1939 – 2021)

The birding world lost a friend when Ken Rogers died on 18th February 2021 aged 81. Over 50 years Ken made a substantial contribution to ornithology in both the UK and Australia where he arrived in 1980 with his wife Annie and son Danny and daughter Maryam.

Soon after their arrival they met the inimitable Clive Minton who immediately saw a like-minded spirit in Ken and thereby commenced 40 years of contributing to shorebird and other ornithological studies in Australasia and the flyway.



Ken was born in Lancashire, UK, in 1939 and developed a love of the outdoors which remained throughout his life. Although a talented student in the sciences and mathematics at Kings College, he preferred to spend his time in the theatre and the arts and yes, socialising in pubs. As son Danny has pointed out elsewhere, he had an attitude to learning that embraced reading, thinking, and questioning, attributes that stayed with him for his life.

His interest in passerine banding was foremost over the first two decades in Australia and in the 1980's he commenced compiling his observations and findings into a guide to the ageing and sexing of bush birds. This was published as Banders Aid in 1986 and emphasised the two principles so important today; safe banding practices and careful attention to data accuracy and recording. It was around this time that shorebird research was developing, and Ken soon found his niche alongside other

workers such as Clive, Brett Lane, Mark Barter and others. With his professional background in operations research and applied statistics, he started analysing field data and contributing to the publishing of papers. While this may not be the priority of many of us, Ken had an ability to make some sense of the data and find ways of demonstrating the often-complex relationships and potential impacts, in an understandable and digestible way. All of this was done with an abundance of humour and a constant willingness to help anyone who would listen.

It wasn't until around the new millennium that I was introduced to Ken and Annie at Ninks Road through Mark Barter. As a relative newcomer to shorebird studies, Mark was one of my mentors and suggested that Ken could provide help in understanding ways of interpreting data. Our irregular meetings at Ninks Road were

memorable for the debates and exchange of ideas. Although I was a novice, Ken was a patient teacher and provided enormous encouragement to take a holistic view and try different ways of looking at data as a means to provide a basis for conservation strategies. These meetings not only showed his skill with numbers but also his imaginative approach to data analysis. All of this was accompanied by much storytelling, debate and even quotes from Elizabethan literature which was one of Ken's other passions.

Perhaps one of Ken's greatest contributions to the AWSG was as editor of Stilt 50. This was a milestone edition of 325 pages containing 27 papers, many providing an overview of the status of shorebirds in our flyway. In the words of Mike Newman 'it was probably the apex of amateur publication of AWSG field studies' and is still proving useful today. At that time, it highlighted the contribution being made by the AWSG to international shorebird conservation. Ken had an ability to help and encourage first time authors and non-English speakers, to get their findings into print while at the same time being rigorous in the use of language and presentation. In his editorial to that edition, he states that 'The aim of this issue is to showcase the status of waders throughout the flyway, the problems they face, the ways in which they are addressed, and what has been learned from the studies'. At that same time in 2006 he commented on the 'the size and task facing Australian wader buffs', a challenge that the AWSG took up in the years to follow. He recognised that nearly all monitoring of Australian wader populations by banding and monitoring at that time was, and still is, carried out by amateurs or citizen scientists to use current terminology. He recognised that he could make a significant contribution by developing and encouraging the use of relevant analytical techniques and through assisting workers in their use.

Ken was especially interested in biometrics and moult data as well as looking to make sense of the extensive population data available, much of which had not been analysed up until that time. In regard to the former he developed a useful software package (SHEBA) to analyse bird biometrics. The AWSG managed the PMP (Population Monitoring Program) from the 1980's that demonstrated long term population changes. However, because of the destruction of stopover sites in Asia, a more rapid detection of change in shorebird populations was needed to promote a more responsive conservation management. Through the rigorous advice of Ken (and Danny) the AWSG initiated the Monitoring Yellow Sea Migrants in Australia (MYSMA) project in 2004. Part

of the impetus for this project was the need to find a more sensitive way to monitor shorebird populations in Australia. The fact that this program is still being maintained is a tribute to Ken and others for their foresight and ability to implement a program based on good science.

Ken was unable to join a lot of the shorebird field work in later years but in the background, he contributed an enormous amount through his erudite discussions, expert mathematical and statistical skills and constant willingness to help and support the less experienced, all accompanied by a unique sense of humour. Over the years he published at least 50 papers. We value Ken's contribution as a scientist, trainer and mentor and the legacy for future workers that he has left behind.

As important as his passion for birds and numbers, it was his family that was his highest priority throughout his life. He supported Annie following her illness and helped pick the family up after the disastrous bushfires of 2009 destroyed their property at Ninks Road. He was a friend and colleague to so many people throughout the birding world and will be remembered not only for his backroom contributions but his willingness to always be there to help others whatever their need and to do so with humility and a sense of humour. Brett Lane summarised his character succinctly: 'What a brilliant thinker, generous mentor and barrel of fun Ken was'. Our condolences to his son Danny and daughter, Maryam.

Ken Gosbell July, 2021

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, 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.

No.	D. (NT	Tr. (1	N 1 6	D.C.
No.	Date	No.	Total	Number of	
		Species	No. of	Broad-bille	Observers
		of waders	waders	d d	
_	4.75 1 4000	1	40.600	Sandpiper	
1	1 December 1988	20	18,600		Verheugt et al. 1990
2	January to August 1989		82,736		Verheugt et al. 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	15	10,985	0	Unpublished data
	(undated)			1 1	•
13	14 September 2012	>1	50	0	Unpublished data
14	December 2012	>1	2	0	Unpublished data
	(undated)				-
15	November 2014	17	49,309	0	Unpublished data
	(undated)				•
16	8 September 2017	>1	374	0	Iqbal et al. 2019
17	24 February 2018	>1	200	0	Iqbal et al. 2019
18	16 March 2018	>5	1,000	4	Unpublished data.
19	24 March 2018	>1	500	0	Iqbal et al. 2019
20	12 May 2018	>1	150	0	Iqbal et al. 2019
21	24 November 2018	>1	363	0	Iqbal et al. 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 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 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, Igbal 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 Broad-billed Sandpiper in Banyuasin peninsula and Sumatra.

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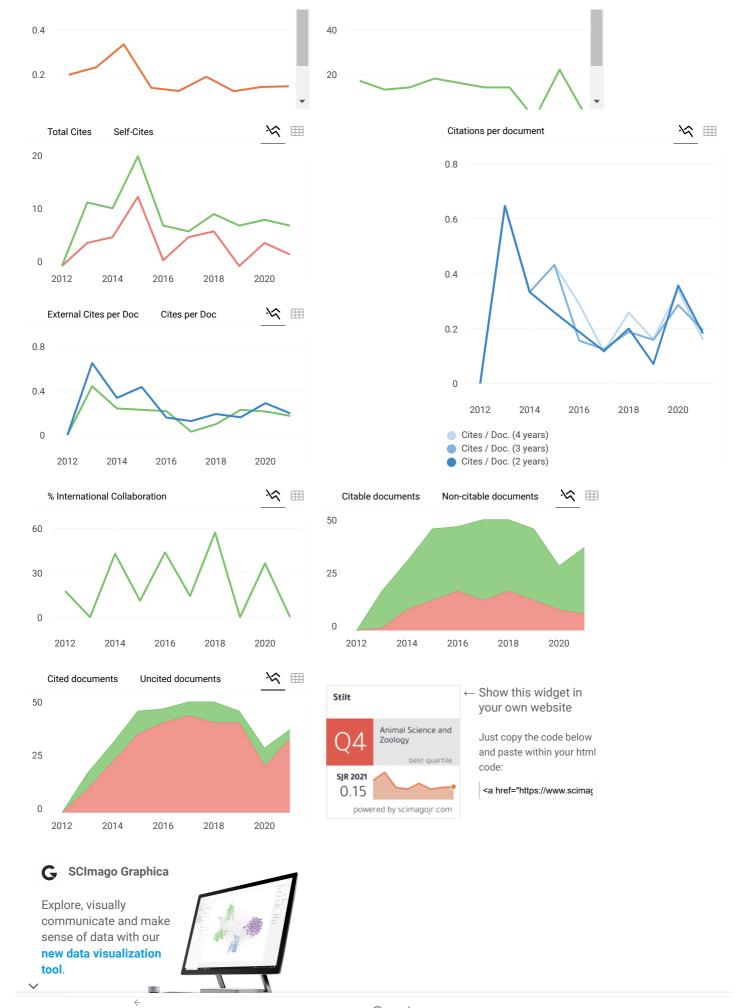
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Books: Kershaw, K.A. 1964. Quantitative and dynamic ecology. Edward Arnold, London.

Reports: Noor, Y.R. 1994. A status overview of shore birds in Indonesia. Pp. 178-88. In: Wells, D.R. & T. Mundur. (Eds.) Conservation of migratory water birds and their wetland habitats in the East Asian Australia Flyway. Asian Wetland Bureau, Malaysia.

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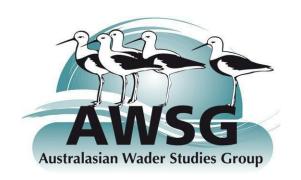
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