

Notable updates on the status of selected waders and African Skimmer Rynchops flavirostris in Mozambique

Authors: Allport, Gary, and Hogg, James W. T.

Source: Bulletin of the British Ornithologists' Club, 144(4): 338-366

Published By: British Ornithologists' Club

URL: https://doi.org/10.25226/bboc.v144i4.2024.a2

The BioOne Digital Library (https://bioone.org/) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (https://bioone.org/subscribe), the BioOne Complete Archive (https://bioone.org/archive), and the BioOne eBooks program offerings ESA eBook Collection (https://bioone.org/esa-ebooks) and CSIRO Publishing BioSelect Collection (https://bioone.org/esa-ebooks) and CSIRO Publishing BioSelect Collection (https://bioone.org/esa-ebooks)

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commmercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Notable updates on the status of selected waders and African Skimmer Rynchops flavirostris in Mozambique

by Gary Allport 🕩 & James W. T. Hogg

Received 13 December 2023; revised 22 September 2024; published 4 December 2024 http://zoobank.org/urn:lsid:zoobank.org:pub:97E48362-6A20-4356-B0DF-1F5BB8899760

Summary.—The status in Mozambique of all waders (Charadriidae, Dromadidae, Glareolidae, Haematopodidae, Scolopacidae, Turnicidae) is reviewed covering records up to June 2024. Significant updates are presented for 18 rare or vagrant species, four additional species of IUCN Near Threatened status and eight others of interest. The first documented national records of African Oystercatcher Haematopus moquini, Madagascar Pratincole Glareola ocularis, Pacific Golden Plover Pluvialis fulva, Caspian Plover Charadrius asiaticus, Great Knot Calidris tenuirostris, Broad-billed Sandpiper C. falcinellus and Common Redshank Tringa totanus are reported. No documented records of Long-toed Stint Calidris subminuta or Spotted Redshank *Tringa erythropus* were found. Among Near Threatened species, numbers of Red Knot Calidris canutus and Eurasian Curlew Numenius arquata have declined recently in Mozambique, those of Great Snipe Gallinago media may be stable but warrant further survey, whilst numbers of Bar-tailed Godwit Limosa lapponica and Curlew Sandpiper C. ferruginea (the latter globally Vulnerable) are probably stable. A record of a possible Steppe Curlew N. a. suschkini is reported from Maputo province. Internationally important counts are reported at seven sites for Chestnut-banded Plover Charadrius pallidus, Bar-tailed Godwit, Tibetan Sandplover C. atrifrons, Crab Plover Dromas ardeola and Curlew Sandpiper, as well as for African Skimmer Rynchops flavirostris whose status we also reviewed. Further surveys of wetlands are a high priority, particularly on the coasts of central and northern Mozambique, and of major freshwater wetlands throughout the country.

Mozambique stretches along 2,700 km of the Indian Ocean coast in south-east Africa, with numerous estuaries and low-lying brackish and freshwater wetlands in the coastal plains. These form wintering areas for many Palearctic migrant wading birds, as well as habitats for Afrotropical migrants and residents in multiple families (Charadriidae, Dromadidae, Glareolidae, Haematopodidae, Scolopacidae, Turnicidae). Of the 74 species of waders known from the southern African subregion (sensu Hockey et al. 2005, i.e. Africa south of a line running east to west from the Cuene River in Namibia, along the northern Zimbabwe border and the Zambesi River in Mozambique) 56 have been recorded in Mozambique (Peacock 2016, this work).

Hockey et al. (1986) reviewed records of rare and vagrant scolopacids in southern Africa, including from Mozambique, and Hockey et al. (2005) updated and summarised status of all wader species. Since then, there has been increasing interest in Mozambique by field ornithologists, many of them visiting from South Africa, with a focus on sites in the southern African subregion (Hockey et al. 2005). With increasing access to high-quality identification aids (e.g. Peacock 2016), ease of documentation with digital photography and the sharing of observations via citizen science tools such as BirdLasser and eBird, many new sightings have been reported, among them interesting new records of waders.

We reviewed existing information on all waders in Mozambique plus African Skimmer Rynchops flavirostris due to its ecological affiliation. We present accounts for all species with significant updates to status including those at risk (IUCN Red List categories Near Threatened to Critically Endangered), rare and vagrant waders in Mozambique and, in some cases, the wider subregion. We have treated records pre-2005, which were also covered in prior texts up to and including Hockey et al. (2005), as historical, and records between January 2005 and May 2024 as recent. We sought to evaluate the extent to which a species' status has either changed or become better understood in the light of recent data, and have included details for all those species we considered to be of interest.

Methods

Species were selected for inclusion based on the following criteria: (1) Red List status of Near Threatened or a higher category of threat (BirdLife International 2024); (2) rarity in terms of national or regional records; and (3) other species with a notable update in status based on recent records. Thirty species met one or other of these criteria (Table 1) in one or other of three groups: (i) rare and vagrant species, (ii) Near Threatened species not covered by the first category, and (iii) additional species of interest. Species accounts are presented in taxonomic order within each of these groups.

We aimed to determine the veracity of records based on available evidence and we highlight all those that are documented. For rarities, we consider as documented a field observation (involving one or more individuals) that has met one or more of the following criteria: accepted by a rarities committee, with details made available; or reviewed and published in a journal, with details provided to establish the identification; or records based on museum specimens. Similarly, sightings mentioned in the Recent Reports section of Bulletin of the African Bird Club and records submitted to publicly accessible citizen science platforms (eBird, SABAP2; see below) if evidenced with a photograph or sound-recording are also treated as documented. Rarity reports without evidence, i.e. if the above criteria are not met, are considered undocumented, even if citizen science records have been accepted by platform reviewers or published in a journal. We have attempted to include all significant undocumented records in our review, but in the case of first national records we make recommendations for future treatment.

To minimise observer bias, particularly where individual birds were reported by many observers at one locality over a short period of time, we have tried to account for observer effort. One 'record/month' (as shown in Table 1) from eBird (Auer et al. 2024) or SABAP2 (Brooks & Ryan 2024) is defined as one or more entries in a calendar month, per year, per site. For example, Sharp-tailed Sandpiper was reported in 34 eBird checklists, but many of these are 'duplicate' records on the same day or within a few days of each other. Thus, the 34 eBird checklists at the same location in 12 different months over five years are treated in Table 1 as 12 record/months.

The main body of new information is from observations mostly in southern Mozambique (south of the Rio Save) across the range of coastal sites outlined in Allport (2018a); 24 visits to the Vilanculos Coastal Wildlife Sanctuary which is better known, and hereafter referred to, as San Sebastian (see Appendix 1 for detail of locations) during April 2018–August 2021 (see Appendix 1 of Allport et al. 2022 for details of dates and observers); and a shorebird survey of the Great Bazaruto Key Biodiversity Area comprising Bazaruto National Park and the abutting coastal wetlands of Bartolomeu Dias to the north and San Sebastian to the south (Wildlife Conservation Society et al. 2021) on 24 November-4 December 2023 (Ryan et al. submitted).

TABLE 1

Status and records from main sources for species covered in this paper. Red List status from BirdLife International (2024): LC = Least Concern; NT = Near Threatened; VU = Vulnerable; EN = Endangered. To minimise observer bias, particularly where individual birds were reported by many observers at one locality over a short period of time, we have tried to account for observer effort to eliminate or reduce spatial and temporal bias in reporting. One 'record/month' from eBird (Auer *et al.* 2024) or SABAP2 (Brooks & Ryan 2024) is defined as one or more entries in a calendar month, per year, per site, e.g., Curlew Sandpiper is recorded on >930 eBird checklists between 2005 and June 2024, which becomes 123 'record/months' (see main text). eBird data prior to 2005 in parentheses.

Sp	ecies covered i	n this review		
Species	Red List Status	Rationale for inclusion	eBird record/ months	SABAP2 record/ months
	Rare and vagra	ant species		
African Oystercatcher Haematopus moquini	LC	National rarity	13	0
Eurasian Oystercatcher Haematopus ostralegus	NT	Regular but scarce visitor	22	6
Madagascar Pratincole Glareola ocularis	NT	National rarity	1	1
Pacific Golden Plover Pluvialis fulva	LC	Regional rarity	3	1
Chestnut-banded Plover Charadrius pallidus	LC	Scarce and local	27 (4)	6
Caspian Plover Charadrius asiaticus	LC	National rarity	5	2
Black-tailed Godwit Limosa limosa	NT	National rarity	1	0
Great Knot Calidris tenuirostris	EN	Continental rarity	2	1
Red Knot Calidris canutus	NT	Nationally scarce	14	3
Broad-billed Sandpiper Calidris falcinellus	VU	National rarity	1	1
Sharp-tailed Sandpiper Calidris acuminata	VU	Continental rarity	12	0
Long-toed Stint Calidris subminuta	LC	Continental rarity	0	0
Red-necked Stint Calidris ruficollis	NT	Continental rarity	1	0
White-rumped Sandpiper Calidris fuscicollis	VU	Continental rarity	4	1
Pectoral Sandpiper Calidris melanotos	LC	Regional rarity	13	5
Green Sandpiper Tringa ochropus	LC	Nationally scarce	9	4
Common Redshank Tringa totanus	LC	Regional rarity	4	1
Spotted Redshank Tringa erythropus	LC	Regional rarity	0	0
Global	ly and Near T	hreatened species		
Grey Plover Pluvialis squatarola	VU	Fairly common visitor	103 (7)	70
Eurasian Curlew Numenius arquata	NT	Scarce visitor	41 (3)	12
Bar-tailed Godwit Limosa lapponica	NT	Locally common visitor	74 (7)	45
Curlew Sandpiper Calidris ferruginea	VU	Common visitor	123 (7)	74
Great Snipe Gallinago media	NT	Local visitor	10	7
	Other species	of interest		
Tibetan Sand Plover Charadrius atrifrons	LC	Regular but scarce visitor	77 (5)	44
Long-toed Lapwing Vanellus crassirostris	LC	Local resident	44	27
Crab Plover Dromas ardeola	LC	Local visitor	52 (6)	27
Terek Sandpiper Xenus cinereus	LC	Fairly common visitor	103 (10)	59

@ **()** (§

Gary Allport & James W. T. Hogg	341		Bull. B.O.C. 2024 144(4)		
Black-rumped Buttonquail Turnix nanus	LC	Scarce resident	27 (1)	24	
Bronze-winged Courser Rhinoptilus chalcopterus	LC	Scarce resident	15 (1)	7	
Temminck's Courser Cursorius temminckii	LC	Rare resident	49	34	
African Skimmer Rynchops flavirostris	LC	Rare resident	34 (2)	15	

Until recently there had been generally poor access to and coverage of freshwater and brackish wetlands in Mozambique, but two sites near Maputo have now been studied quite intensively: Macaneta (>400 site visits; Allport 2018b, Allport 2021) and the wetlands at Bela Vista (>96 visits since October 2020).

Bird records from Mozambique have not been consistently captured, reviewed and published so, in order to undertake a thorough review, we have drawn information from all recently published and grey literature. We reference data from the Southern African Bird Atlas Project 2 (SABAP2), where observers use a mobile phone app and website (https:// www.birdlasser.com/) or atlas cards to submit records (Brooks & Ryan 2024). Note that data gathering for SABAP2 commenced in 2007, so we consider all these data as recent. Records in the eBird database are cited as Auer et al. (2024). Specific eBird checklists are referenced by the checklist number, e.g. S1234567 and can be accessed via the eBird website using the URL syntax https://ebird.org/checklist/S... Both datasets are published periodically and can be accessed via the Global Biodiversity Information Facility (GBIF). Records for species of interest were identified by opening the relevant dataset in GBIF, with additional records not yet captured by the latter being accessed via the eBird website. Most eBird data were collected post-2005; for information, we show record/month totals for species prior to 2005 in Table 1. Many observers use both eBird and SABAP2/BirdLasser, so care was taken to account for duplicated records.

The atlas of the birds of Mozambique (Parker 1999, 2005) is a major source of information on the nation's avifauna; Parker (1999) covered the territory south of the Save River and Parker (2005) treated the provinces of Manica, Sofala and Tete. Thus, the atlas covered all southern Mozambique along with the relatively small area of Tete province north of the Zambezi and therefore outside the southern African subregion sensu Hockey et al. (2005). The avifauna of the rest of northern Mozambique is yet to be covered by a major study.

With respect to Hockey et al. (1986), it is not clear from their text what information was reviewed for each record, including the first records for Mozambique of Long-toed Stint Calidris subminuta, Red-necked Stint C. ruficollis and Broad-billed Sandpiper C. falcinellus. The original rarities submissions were retained by the Southern African Rarities Committee and transferred to BirdLife South Africa when the latter assumed support for the committee in the 1990s. A portion of the files including the Mozambique wader records reviewed by Hockey et al. (1986) was lost during an office relocation and, as a result, details for several species are no longer available (H. Smit-Robinson in litt. 2021). Since the details were lost, we were unable to interrogate these reports in light of updated knowledge and the records are now effectively undocumented.

We consider Parker (1999, 2005) and Hockey et al. (2005) as the last consolidated information for the region's waders, thus records pre-dating those publications are referred to here as historical, as are any pre-2005 records we found not included in those texts. Some historical data may have been overlooked including 'new' data made available as notebooks have been digitised via citizen science platforms. Records since 2005 are referred

We checked high site counts against the Ramsar 1% threshold site population criterion for the relevant subpopulations of the species concerned, sourcing threshold data via the

Critical Sites Network tool (Critical Sites 2023); site counts that exceed the criterion are flagged below. However, we do not present a full review of all site counts of international importance because some regularly occurring species not covered here will meet this criterion at certain sites. Therefore, this paper should not be considered a complete review of all known internationally important waterbird sites in Mozambique.

Rare and vagrant waders

AFRICAN OYSTERCATCHER Haematopus moquini

Least Concern

A bird noted by de Boer & Bento (1999) close to three European Oystercatchers H. ostralegus at Ilha da Inhaca in December 1996 was apparently the first record for Mozambique (Parker 1999), although any supporting details are unpublished to our knowledge. There have been 12 further records since, eight of them documented (Table 2, Fig. 1) most in May-August and as far north as San Sebastian.

Endemic to coastal southern Africa, from Namibia to Eastern Cape, South Africa (Hockey et al. 2005). Adults are sedentary but on the west coast juveniles travel 1,000-2,000 km north to central Namibia/southern Angola; on the east coast, movements from Eastern Cape to KwaZulu-Natal mostly remain within the breeding range (Underhill et al. 1999, Hockey et al. 2003, 2005, Hockey & Kirwan 2020). Of 11 birds photographed two (involving three birds) at San Sebastian showed features of adults (M. Buckham, S142833045), four together at Ponta da Macaneta were immature, albeit probably not in their

TABLE 2 Records of African Oystercatcher Haematopus moquini in Mozambique.

Date	Count	Locality	Source	Supporting evidence
December 1996	1	Ilha da Inhaca	de Boer & Bento (1999)	
July 2012	1	San Sebastian	Read et al. (2014); A. Lund in litt. (2023)	
12 August 2012	1	Rio Limpopo mouth	observer unknown; sa-rarebirdnews@ googlegroups.com in <i>Bull. Afr. Bird Cl.</i> 20: 100	
13 June 2014	1 (imm)	Ponta Malongane	A. Joubert <i>per</i> T. Hardaker in <i>Bull. Afr. Bird Cl.</i> 21: 244	Photographed (Fig. 1)
30 July 2015	1	Inhambane	K. Williams, S26164376	
First week May 2017	4	Pomene	observer unknown; T. Hardaker in <i>Bull. Afr.</i> <i>Bird Cl.</i> 24: 241	
5 July 2020	1	South of Ilha da Inhaca	G. Pollard, S71472770; GA, T. Hardaker & E. Marais in <i>Bull. Afr. Bird Cl.</i> 28: 108	Photographed
14 May 2021	1 (1st-y)	Ponta da Macaneta	A. Delegencio, S110291802	Photographed
13 August 2022– 29 January 2023	3–5	San Sebastian	N. Perrins S117026972; T. Hardaker in <i>Bull. Afr. Bird Cl.</i> 30: 117	Photographed
19 June 2023	4 (all imm)	Ponta da Macaneta	E. Marais <i>in litt</i> . (2023), S. Liebert & JH, S142075233	Photographed
26 June 2023	(2 ad, 1 imm)	San Sebastian	M. Buckham in litt. (2023), S142833045	Photographed
25 November 2023– 1 January 2024	1 (ad)	San Sebastian	JH, A. McLean, C. Dorse, S156130241; Ryan et al. (submitted); C. Dednam in litt. (2023), S157854234, E. le Roux in litt. (2024)	Photographed
29 May 2024	3 (imm)	Dunes de Dovela	T. Bruneau in litt. (2024), S178007383	Photographed

first year (E. Marais in litt. 2023; S. Liebert & JH, S142075233) and one at Macaneta was a juvenile following the ageing criteria of Peacock (2016). The southern Mozambique coastline predominately comprises sandy beaches and muddy estuaries, and thus is not ideal for a species that prefers rocky habitats (Hockey et al. 2005). However, breeding productivity has increased since 1980, to some extent following the invasion of rocky shores by alien Mediterranean mussel Mytilus galloprovincialis, which has now also spread east and is apparently Figure 1. African Oystercatcher Haematopus moquini at increase and perhaps spread in range (Brown & Hockey 2007, Brown et al. 2019).



partially responsible for the population Ponta Malongane on 13 June 2014, the first documented record of the species in Mozambique (© A. Joubert)

Further records are thus more likely in Mozambique.

EURASIAN OYSTERCATCHER Haematopus ostralegus

Near Threatened

A rare non-breeding Palearctic summer migrant to southern Mozambique with groups of five to six recorded at Ilha do Bazaruto in several years, and three at Inhaca in December 1996 (Parker 1999, de Boer & Bento 1999). There is a historical sighting at Maputo on 4 June 1957, but with no further details (Hockey et al. 2005).

Since 1996, it has been reported in small numbers (<10) near-annually and many records have been documented photographically at Beira, Ilha de Benguerra, Ilha de Magaruque (Bazaruto archipelago), Inhambane, Quirimbas, Rio Savanne, San Sebastian and Vilankulos (Hockey et al. 2005, Auer et al. 2024, Brooks & Ryan 2024; T. Hardaker in Bull. Afr. Bird Cl. 9: 147, 16: 107, 19: 104, 20: 225, 25: 242, 27: 112, M. Wilson in Bull. Afr. Bird Cl. 17: 121, E. Marais in Bull. Afr. Bird Cl. 22: 244, GA & T. Hardaker in Bull. Afr. Bird Cl. 26: 113, 27: 270, GA & D. Gilroy in Bull. Afr. Bird Cl. 26: 240, JH & T. Hardaker in Bull. Afr. Bird Cl. 28: 257-258, GA, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 112, JH & T. Hardaker in Bull. Afr. Bird. Cl. 29: 249, T. Hardaker in Bull. Afr. Bird Cl. 30: 117; C. Read in litt. 2022). At San Sebastian there were at least 25 observations during 2005-24, in all months except August (Auer et al. 2024; C. Read in litt. 2022) with a max. 18 on 13 February 2020 (C. Read, E. Marais & A. McLean, S65037134). There is one record from northernmost Mozambique: two at Afungi Peninsula on 2 November 2014 (B. Abi Jummaa, S40280559). The southernmost recent records are from mudflats at the north end of Maputo Bay: one on 9 June 2013 (GA, S14375371), two on 16 May 2016 (GA, S94918989), one on 9 June 2019 (GA, S94919094), one at Ponta da Macaneta on 23 March 2021 (G. Rowan, JH & T. Hardaker in Bull. Afr. Bird Cl. 28: 258) and two at Maputo on 29 March-2 April 2023 (JH, S132109057).

In southern Africa H. ostralegus is a rare but annual non-breeding visitor with <20 birds per annum, mostly in December-March, but with records in all months (Peacock 2016). Based on the observations reported here, the species is a very uncommon but regular and local visitor, most frequent in the boreal winter.

MADAGASCAR PRATINCOLE Glareola ocularis

Near Threatened

Britton (1977) noted that a supposed record at the Zambezi Delta was erroneous and had been already discounted by Benson (1971). One photographed at the Quirimbas archipelago on 30 September–1 October 2010 (D. Hoddinott in Bull. Afr. Bird Cl. 18: 101) is apparently the first documented record for Mozambique. There is a subsequent record at Mahate, north of Pemba, on 9 September 2014 (D. McKenzie, S68312772; Brooks & Ryan 2024); however, the single photograph in support is not conclusively identifiable to species and no additional information on this bird is in the public domain.

During the austral winter non-breeders are concentrated at key sites in East Africa, with thousands at specific coastal sites in Tanzania and Kenya (Delany et al. 2009). One reached the Eastern Cape of South Africa in 2005 and 2007, details of which only came to light in 2020 as the first record for southern Africa (Peacock 2020). The species' range is often said to include northern Mozambique (Delany et al. 2009, Maclean & Kirwan 2020) with a possible migrant population of <5,000 birds visiting Tanzania and Mozambique (Delany et al. 2009). The species was not mentioned by Clancey (1996) or Parker (1999, 2005), although their coverage did not extend sufficiently far north to include likely passage or wintering areas. Authors of major texts seem, not unreasonably, to have assumed that as the species breeds south of Mozambique and winters to the north that it must occur regularly, at least on passage. Similar assumptions have been made for other species, e.g., Pearl-breasted Swallow Hirundo dimidiata (Allport et al. 2021), where no evidence is available to support mapped but presumed distributions in Mozambique. The low observer coverage in the likely area of occurrence has probably led to the lack of records from what is possibly a brief passage period, with perhaps very few or no resident birds. Any future records of the species in Mozambique should be documented.

PACIFIC GOLDEN PLOVER Pluvialis fulva

Least Concern

No records mentioned for southern Mozambique by Parker (1999), however an observation at Ilha dos Portugueses off Ilha da Inhaca, in February 1987 was mentioned in Parker (2005) but no details were given by the observers (Nilsson & Shubin 1998).



Figure 2. First-year Pacific Golden Plover *Pluvialis fulva*, Ponta da Barra, Inhambane, Mozambique, 21 October 2007; note short primary projection and longer tertials, which distinguish it from American Golden Plover *P. dominica*; first documented record for Mozambique (© M. Booysen)

© S BY NC

TABLE 3 Records (all involving single birds) of Pacific Golden Plover Pluvialis fulva in Mozambique.

		*	
Date	Locality	Source	Supporting evidence
February 1987	Ilha dos Portugueses / Ilha da Inhaca	Nilsson & Shubin (1998), Parker (2005)	
9 December 2007	Rio Zambezi mouth	P. Collins, G. Graham, J. Graham & N. du Preez in <i>Bull. Afr. Bird Cl.</i> 15: 274	
21 October 2007	Ponta da Barra	M. Booysen in litt. (2021)	Photographed (Fig. 2)
20 January–18 April 2008	Ponta da Barra	E. Marais in litt. (2019), M. Booysen in litt. (2021)	
20 March 2015	Ponta da Barra	M. Booysen <i>in litt.</i> (2021), GA in <i>Bull. Afr. Bird Cl.</i> 22: 244	
10 December 2016	Rio Maria	E. Marais <i>in litt</i> . (2022), T. Hardaker & GA in <i>Bull. Afr. Bird Cl</i> . 24: 108	
8-17 December 2009	Quirimbas archipelago	Borghesio & Gagliardi (2011)	
14 September 2021	Bela Vista wetlands	JH, S94640883; GA, JH & T. Hardaker in <i>Bull</i> . <i>Afr. Bird Cl.</i> 29: 112	Photographed
21 March 2022	San Sebastian	A. McLean, S105831544; JH & T. Hardaker in <i>Bull. Afr. Bird Cl.</i> 29: 249	Photographed
25 November 2023	San Sebastian	JH, A. McLean, C. Dorse, S156130241; Ryan et al. (submitted)	Photographed

There have been a further nine reports (Table 3) in Mozambique, all in September-April (four with supporting evidence) indicating that it is a vagrant to the country. Three or four P. fulva are typically recorded in southern Africa annually (Peacock 2016) and in Mozambique the species is possibly overlooked given low observer coverage and the potential for confusion with Grey Plover P. squatarola, which is superficially similar in nonbreeding plumage.

CHESTNUT-BANDED PLOVER Charadrius pallidus

Least Concern

Reported as common and breeding at Beira by Clancey (1996) but the nesting event may have been an opportunistic response to unusual local conditions as there have been no further breeding records in Mozambique (Parker 2005). Recorded on five occasions, singly or in pairs, in February, May, September and December around Bazaruto and Inhambane (Parker 1999) and it was noted further south at Bela Vista by Clancey (1996) and at Lagoa Xinguti, Maputo Special Reserve (date unknown, but prior to 1999; Parker & de Boer 2000).

More recently, observed infrequently at Xai-Xai, Ilha de Magaruque (Bazaruto archipelago), Beira and at Rio Savanne, in groups of <10 (C. Read in litt. 2021; Auer et al. 2024, Brooks & Ryan 2024) and with greater frequency in the Tofo and Inhambane area (eight records) and at San Sebastian (13 records), with larger counts of 15 on 6 August 2018 at San Sebastian (GA, S47777348) and 32 on 11 November 2019 at Tofo (J. York, S62237498). A notable inland record involved 12 at Lago Cuduhi on 17 November 2023 (JH, T. Bruneau, B. Cholley, S154625689). No further records in the far south of Mozambique until September 2021, when JH found three at Bela Vista. Since then it has been observed (by JH pers. obs., S. Liebert, T. & A.-M. Moore & T. Taimo) several times at Bela Vista and Salinas Zacharia with some significant counts (Table 4): 129 on 2 September 2022 and 141 on 24 June 2023 at Bela Vista were exceptional, and the latter exceeds the Ramsar 1% threshold of 130 birds

TABLE 4 Summary of recent records of Chestnut-banded Plover Charadrius pallidus in Maputo province, Mozambique.

Date (month/year)	Locality	No. observations	Max. count	Sources
September 2021	Bela Vista	3	13 (11 ad, 2 juv)	JH, S94640883, S94966022
September 2021	Salinas Zacharia	1	7	JH, S94922121
May 2022	Salinas Zacharia	2	3	JH, S111568895, T. & A. M. Moore <i>in litt.</i> 2022, S111719717
June 2022	Salinas Zacharia	1	3	S. Liebert in litt. 2022, S111856953
July 2022	Bela Vista	2	5	JH, S114450691, S115479584
August 2022	Bela Vista	2	6	JH & T. Moore in litt. (2022), S116651106. JH, S117195417
September 2022	Bela Vista	1	129	JH, S117940575
June 2023	Bela Vista	1	141	JH, T. & A. M. Moore & P. Vrooman <i>in litt.</i> (2023), S142521066
July 2023	Bela Vista	1	76	JH, S143991455
August 2023	Bela Vista	3	64	JH, S146402181. JH, A. Taas & H. Costa in litt. (2023), S147035923. JH, S147766229
September 2023	Bela Vista	2	50	JH, S149766796, S150251934
November 2023	Bela Vista	1	1	JH, S154893270

for the southern Africa population (pallidus), making the site internationally important for the species (Critical Sites 2023). Surveys of the Great Bazaruto Key Biodiversity Area in November-December 2023 found >400 individuals in the Bartolomeu Dias area (Ryan et al. submitted), well above the Ramsar 1% criterion. There are extensive saltpans at Nova Mambone, unsurveyed at least in recent times, which may hold significant numbers of the species.

In southern Africa C. p. pallidus is considered resident, partially migratory and nomadic, moving in response to drying of inland habitats (Simmons et al. 2007, Wiersma et al. 2020) with some evidence of opportunistic breeding (Delany et al. 2009). The species is often found in (hyper-)saline habitats, some of which hold large numbers of Greater Phoenicopterus roseus and Lesser Flamingos Phoeniconaias minor, both of which are presumed to move to the coast of Mozambique from Botswana (Parker 1999, Hockey et al. 2005) and Chestnut-banded Plovers in southern Mozambique may have similar origins. There are no reports proving the species nests in Mozambique, although it has been recorded in small numbers in all months. Larger numbers are observed in August-November, which does suggest post-breeding dispersal. In Mozambique, the species is thus a local and generally uncommon non-breeding visitor. Further observer effort is needed in Inharrime province, especially at Nova Mambone.

CASPIAN PLOVER Charadrius asiaticus

Least Concern

Very poorly known in Mozambique: four published but undocumented records by Rosa Pinto, from Maputo (Clancey 1996, Parker 1999), Albufeira Cahorra Bassa in November 1992 (S. Edwards in Parker 2005), the Rio Save in Zinave National Park in October 1997 (Parker 1999) and the Rio Urema floodplain in August 1999 (R. Cassidy in Parker 2005). Three records were mapped in Hockey et al. (2005) but without details.

Recent reports involve singles at Salinas Zacharia on 12 April 2011 (GA, S97106345, description provided) and Benga, Tete province on 30 October 2013 (D. McKenzie in litt.



Figure 3. Caspian Plover Charadrius asiaticus, Gorongosa National Park, Mozambique, 23 October 2016; the first documented country record (© Z. Pohlen)

2013; Brooks & Ryan 2024). A flock of 36 at Gorongosa National Park on 17 October 2016 (Z. Pohlen & C. Gesmundo in litt. 2016; S33982187; Fig. 3) was the first record supported by a photograph and was followed by a series of observations, mostly of 1-2 birds, until 16 November 2016. Finally, one at Macaneta on 4–25 February 2024 (JH & S. Jones, S160628994, T. & A. M. Moore, S161197293, JH, S162839291).

Mostly spends the non-breeding season north and west of Mozambique in Zambia, northern Namibia, Botswana, western Zimbabwe and north-west South Africa (Hockey et al. 2005). A very rare vagrant to Mozambique in August-April and any future observations should be reported with full details.

BLACK-TAILED GODWIT Limosa limosa

Near Threatened

Just two records: two birds seen on the Urema floodplain, probably within Gorongosa National Park, in August 1999 (Parker 2005) and one at Rio Sungwe in Gorongosa National Park on 24-25 November 2017, which was the first documented record (Z. Pohlen & C. Gesmundo, S41369625; Pohlen et al. 2020).

Forty-three records were reported in southern Africa by Hockey et al. (1986) prior to 1984, with all but one at inland wetlands in eastern and southern South Africa. Apparently increasing, Peacock (2016) noted that more recently there have been 5-10 records annually in the southern African subregion. It is a vagrant to Mozambique but is probably underrecorded due to a lack of coverage of inland freshwater wetlands.

GREAT KNOT Calidris tenuirostris

Endangered

The first record in Mozambique, and the second for the subregion, was at Ponta da Barra on 29 December 2004. This record was presented by Peacock (2016) and his field notes, which we consider to establish the identification, appear in Fig. 4. The same locality subsequently hosted a series of records, with three on 20 September 2008 (M. Booysen in litt. 2008; photo at https://groups.google.com/g/sa-rarebirdnews/c/1fDa3ThihC8/m/5fxIkRZ0gHEJ), one on

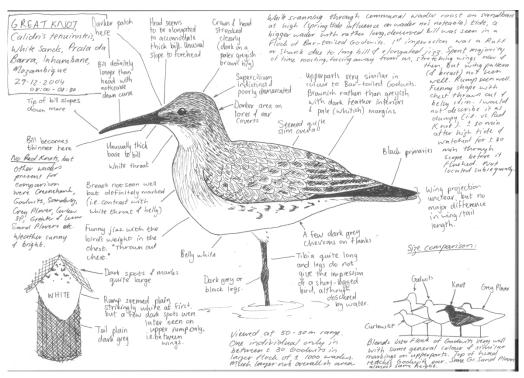


Figure 4. Field notes and sketches by Faansie Peacock (reproduced with permission from Peacock 2016) of Great Knot *Calidris tenuirostris*, Ponta da Barra, Mozambique, 29 December 2004; the first record for Mozambique and second for southern Africa (© F. Peacock)



Figure 5. One of two Great Knots *Calidris tenuirostris*, Ponta da Barra, Mozambique, 6 March 2015 (© M. Booysen)

30 April 2014 (E. Marais in litt. 2014, S94982808; documented) and two on 6-21 March 2015 (M. Booysen in litt. 2020; Fig. 5). After a gap of eight years, one was at San Sebastian on 18 December 2023 (E. Marais, S167296521, JH & T. Hardaker in Bull. Afr. Bird Cl. 31: 117).

Breeds in north-east Siberia (Lappo et al. 2012) and winters mainly in coastal South-East Asia and Australia but also west to South Asia and Arabia (van Gils et al. 2020a). It is a vagrant to Africa with records in Morocco, Djibouti and Uganda, but the first sub-Saharan record was at West Coast National Park, South Africa in December 2000 and (presumably) the same bird returned in March-April 2002 and October 2002-March 2003 (Cohen & Winter 2003). The relatively small Arabian and western Indian Ocean population (2,000-5,000 birds) is recognised as separate (Delany et al. 2009). The series of records at Ponta da Barra of, presumably, at least four birds probably returning to use this locality is remarkable, especially given the paucity of records further north in Africa; it may be that birds in Mozambique are from the Arabian wintering population.

RED KNOT Calidris canutus

Near Threatened

The first record involved a bird shot at Maputo on 30 August 1969; it had been ringed at Dungeness, Kent, UK, confirming that nominate C. c. canutus occurs in southern Africa (Clancey 1996). Subsequently, several counts of up to 135 were made at Maputo and Ilha da Inhaca during 1975-78 (Vittery 1989). Few details were given of these records or those by Herdam (1994), but they were cited by Parker (1999), who reported presence at Maputo in groups of up to 80 birds in June, September, November and December, from 1977 to 1983. Parker (2005) mentioned a sighting of c.10 at San Sebastian in March 2003 (D. Pietersen) but the record was not included by Read et al. (2014).

More recently, one at Pomene on 30 September-6 October 2017 (Cizek 2017) and eight records at San Sebastian, in March 2013, January 2014, September 2019, June 2020, May 2021, June 2021, April 2023 and November 2023 (C. Read in litt. 2023; Auer et al. 2024); the largest count was 13 on 11 May 2021 (N. Perrins, S88193202). Further south, one at Ilha da Inhaca on 28 June 2018 (A. Parkes, S63751684) and in Maputo Bay one on 24 November 2013, eight on 20 August 2016, one on 18–19 September 2018 (GA; first photographic record, S48604712) and one at Macaneta on 15 November 2021 (D. Minney, S76271793, GA, T. Hardaker & E. Marais in Bull. Afr. Bird Cl. 28: 108). Up to three in Maputo Bay on 7 January-29 March 2023 (S. Liebert, S125617146, JH, S125764911, S129580117) and 2-6 on 13 March-11 April 2024 (JH, S164593049, S168096645).

Migrants of the nominate race stage in the Wadden Sea, then travel non-stop to coasts of West Africa and from there some reach southern Africa arriving from October (Delany et al. 2009). There is an almost complete absence of records on the east coast of Africa, e.g., five sight records reported by Stevenson & Fanshawe (2020), with an additional two records in Tanzania (N. Baker in litt. 2023). In southern Africa it is a fairly common migrant to a few key sites on the west coast of South Africa but is sporadic further east (Peacock 2016). With little evidence for migration south along the East African coast, it seems likely that birds in Mozambique have moved east and north around the Cape of Good Hope. The species was an uncommon visitor to southern Africa in the late 19th and early 20th centuries (Vincent 1952 cited in Summers et al. 2011) with a notable increase in the 1970s and 1980s, when c.12,500 were recorded at several sites in the region (Summers et al. 2011). In the 1970s to mid-1980s it was more frequent and numerous in Mozambique (Hockey et al. 2005) than at present and the historic high counts coincided with a peak in records in South Africa. It has been postulated that birds arrived in South Africa as a large population (500,000 birds at that time) spilled south from preferred wintering sites in West Africa; evidently, some made it to Mozambique. Since then there has been a sharp reduction in numbers wintering in West Africa, in turn in South Africa (Summers *et al.* 2011) and thus Mozambique. Red Knot is now a scarce visitor to southern Mozambique in the boreal winter.

BROAD-BILLED SANDPIPER Calidris falcinellus

Vulnerable

The map in Hockey *et al.* (1986) showed two records at Ilha da Inhaca, and Hockey *et al.* (2005) also mapped two locations, Ilha da Inhaca and one slightly further north in Maputo Bay. Neither account cited sources and the original material pertaining to these records, probably held by the Southern African Rarities Committee, has unfortunately been lost. One record on Ilha da Inhaca was subsequently noted by de Boer & Bento (1999) as being from Berruti & Sinclair (1983) but the latter does not serve to substantiate the record. This source was not cited by Hockey *et al.* (1986) and neither record was noted by Clancey (1996). Two Broad-billed Sandpipers were reported at Ponta da Barra on 16 January 2006 (M. Booysen in *Bull. Afr. Bird Cl.* 13: 227) but this record has been subsequently withdrawn by the observer (M. Booysen *in litt.* 2021). There are thus no documented historical records.

Two recent records are both documented. Two photographed on 4 March 2022 at Lagoa Muangane, San Sebastian (E. Marais & G. Skead *in litt*. 2022, S150787572, JH & T. Hardaker in *Bull*. *Afr. Bird Cl*. 29: 249; Fig. 6) is the first documented record for Mozambique. Thereafter there was a series of photographically documented observations at Bela Vista where up to six were present on 10–29 March 2022 (all JH, S104538387, S105349756, S105524744, S105754940, S105820742), which appears to be the highest count ever in southern Africa (JH & T. Hardaker in *Bull*. *Afr. Bird Cl*. 29: 249, T. Hardaker *in litt*. 2022).

A vagrant in southern Africa with 34 records in September–February up to 1984, with most bird/months in January (Hockey *et al.* 1986). Records were on the west coast, notably Namibia and Langebaan Lagoon, and in the east, with a cluster of 16 records at Richards Bay, KwaZulu-Natal. The historical reports in Mozambique established the notion that Broad-billed Sandpiper occurs regularly in the country and the most recent specialist work



Figure 6. Broad-billed Sandpipers *Calidris falcinellus*, Lagoa Muangane, San Sebastian, Inhambane, Mozambique, 4 March 2022; the first documented country record (© P. Scholtz)

(Peacock 2016) showed a significant coastal range for the species in Maputo and Inhambane provinces, apparently based on the small number of undocumented records. However, the two recent records demonstrate that the species does occur in Mozambique but is extremely rare; future records should be documented.

SHARP-TAILED SANDPIPER Calidris acuminata

Vulnerable

The first record for continental Africa was a bird at Macaneta, Mozambique on 4 and 18 February 2018, which was joined by a second on 2-21 March, with one remaining until 16 April 2018 (Allport 2018b). Subsequently there have been further records, all singles at the same locality, on 21 February 2019-20 April 2019, 16 October 2019-13 February 2020 (O. Hamerlynck in litt. 2019 and 2020; JH, S64411469; Allport 2021), 21–22 February 2021 (Z. Hamerlynck in litt. 2021; JH, S82070701) and 5-10 April 2023 (E. Marais in litt. 2023, S133786901). All were adults and the photographs suggest only two birds were involved, one of which appears to have been recorded at the site during five of the six non-breeding seasons.

Breeds in Arctic Siberia, winters in Australasia and is widely recorded as a vagrant to North America, Europe, Central Asia, the Indian Ocean islands and Madagascar (Mlodinow et al. 2024). There is some evidence that the breeding range is extending west in Siberia, which may make vagrancy to Africa more likely (Allport 2018b). Subsequently, there has been a record at Banc d'Arguin, Mauritania, the second locality in continental Africa, on 2 December 2018 (Gnep et al. 2021).

LONG-TOED STINT Calidris subminuta

Least Concern

One was reported at Maputo in February 1977 (Hockey et al. 1986, 2005). Remarkably, it was reported alongside the Red-necked Stint C. ruficollis in February 1977 (see below), and was said to have been observed at close quarters, enabling the long toes to be seen (Hockey et al. 1986). Nevertheless, the observer has subsequently withdrawn the record in light of more recent information, as Least Sandpiper C. minutilla could not be excluded (A. Vittery in litt. 2015). The original material relating to the record, probably held by the Southern African Rarities Committee, has been lost.

A scarce migrant in the Middle East, presumably involving very small numbers en route to wintering grounds in East Africa (Eriksen & Victor 2013) where it is regular but rare in November–May (Urban et al. 1986, Stevenson & Fanshawe 2020). Perhaps surprisingly, there have been just four records in southern Africa (Hockey et al. 2005, Peacock 2016), including the now retracted record from Maputo. In the absence of documentation and of support by the original observer, the species should now be excluded from the list of birds of Mozambique.

RED-NECKED STINT Calidris ruficollis

Near Threatened

An historical record in Mozambique, in the austral summer of 1977, involving a single seen regularly on the beach at Costa do Sol, Maputo (Hockey et al. 1986), has subsequently been withdrawn by the observer (A. Vittery in litt. 2015; Allport 2016). The original material relating to this record, probably held by the Southern African Rarities Committee, has been lost.

The only record anywhere in southern Africa since 1994 was a single at a man-made, temporary wetland on the outskirts of Maputo on 9 September 2015, where it remained until at least 28 September 2015, and was seen by many observers (Allport 2016). It was an adult completing moult into non-breeding plumage, but field identification was straightforward based on structure and vocalisations, following Sinclair & Nicholls (1976), Grant & Jonsson

(1984) and Bakewell (2014). There have been several suspected Red-necked Stints in Mozambique and South Africa since 2015 but none has been established beyond doubt.

An annual visitor to Africa in small numbers, with records in Somalia (Ash & Miskell 1998) and Kenya (Finch & Turner 1989). It is a vagrant in southern Africa, with the first record in Durban, KwaZulu-Natal, in November 1963 (Hockey et al. 1986), after which it was near-annual, with 26 records up to 1994, most from the Durban area and Berg River estuary, Western Cape, in August-April, the majority in October. Most involved birds in partial or full breeding plumage, so confusion with Little Stint C. minuta was less likely (Hockey et al. 2005). It seems remarkable that the species was regular in the region from 1963 to 1994 but so rare since. There is no evidence of a major change in the species' breeding range, although its distribution is still not well known (Lappo et al. 2012). However, monitoring in the non-breeding range at sites in Australia suggests a long-term decline in the north-east Siberian breeding population (Straw 2002) driven by wetland loss in the Yellow Sea (Studds et al. 2017) and the change in status in southern Africa may be symptomatic of this trend.

WHITE-RUMPED SANDPIPER Calidris fuscicollis

Vulnerable

Three recent records. The first was photographed at Macaneta and was present intermittently during 22 September-19 October 2018 (Allport 2020), the second at Bela Vista on 25 March-6 April 2022 (JH, T. & A. M. Moore, S105524744, S105754940, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 249; documented) and the third at Salinas Zacharia, Matola, on 28 September 2022 (JH & T. Moore, S119552454, JH & T. Hardaker in Bull. Afr. Bird Cl. 30: 117; documented). The latter was the 37th record for southern Africa (T. Hardaker in litt. 2022, JH & T. Hardaker in Bull. Afr. Bird Cl. 30: 117).

A frequent vagrant to northern Europe (Lees & Gilroy 2022) but just three southern African records were mentioned by Hockey et al. (1986). Since then there have been >35 documented records in the subregion, a marked increase probably due to observer awareness (Allport 2020). It is a rare vagrant in Mozambique but increased observer effort is likely to produce more sightings.

PECTORAL SANDPIPER Calidris melanotos

Least Concern

The first record was at a freshwater flood near Maputo on 14 January 2017 (Allport 2018c; S33711100) and was followed by a series of records at Macaneta; 1-2, 20 February-31 March 2018; one, 10 November 2018–23 January 2019; two, 6-21 March 2019; one, 29 September 2019; one, 12 March 2021; and 1–2, 30 August–24 September 2022 (Allport 2018b, 2021; JH pers. obs., JH in Bull. Afr. Bird Cl. 30: 117). In addition, singles were at Rio Savanne near Beira on 7 December 2019 (E. Marais, S94973254) and Bela Vista, Maputo province, in April 2022 (JH, S106588752). All birds aged in the field or from photographs were adults.

Breeds in tundra of North America and north-east Siberia and winters mostly in South America, but is a regular visitor to Africa, with records in 23 countries (Urban et al. 1986, Hockey et al. 1986). Considered possibly a 'pseudo-vagrant' (Gilroy & Lees 2003) apparently on intentional, regular passage to wintering quarters in Africa (Lees & Gilroy 2004, 2022). Regular in southern Africa with up to five each winter. Peak arrival is later than most other migrant waders in the region, suggesting that they slowly move south through the continent (Allport 2018b). Given the regular reports in South Africa, the first record for Mozambique was long expected and presumably reflects the previous lack of observer coverage of suitable wetlands (Allport 2018b).

The series of records at Macaneta may involve a small number of returning birds but it is notable that there were no long-staying birds in the 2019–20 season, in line with a dearth of records elsewhere in southern Africa the same boreal winter (T. Hardaker in litt. 2020),

perhaps reflecting a link to transatlantic vagrancy. There were 44 records in the UK in 2019, the lowest annual total since 1997, with the mean annual total being 126 during 2010-19 (White & Kehoe 2021). Whilst these data apply only to a single year it may suggest a stronger link between annual transatlantic vagrancy and boreal winter occurrence in Africa than was postulated by Lees & Gilroy (2004, 2022).

GREEN SANDPIPER Tringa ochropus

Least Concern

The first records involved specimens taken near Beira by Sheppard, on 29 January 1907 (Hockey et al. 1986) and 16 February 1910 (Ditsong National Museum of Natural History, Pretoria; formerly the Transvaal Museum). It was reported as common around Beira by Sheppard (1909 cited in Hockey et al. 1986). Clancey (1996) reported birds at Gorongosa, Parker (1999) one from Bazaruto in January 1989, with five in central Mozambique in November, December and January (Parker 2005). Hockey et al. (1986) mentioned other early records in Mozambique, but the mapped locations and numbers are unclear.

Recently, in Gorongosa National Park there was one on 29 November 2015 and two on 9 December 2015 (H. Ware Carlisle & J. Carlisle in litt. 2015, S26224987), with ten reports of 1-3 birds during 8 October-11 December 2016 (Z. Pohlen & C. Gesmundo, S32650529; Brooks & Ryan 2024) and one on 5-12 December 2017 (GA, T. Hardaker & M. Mason in Bull. Afr. Bird Cl. 25: 99). Elsewhere, two on 9 November 1996 (K. Groenendijk in litt. 2023, S17658207) and present (but not counted) on 8 February 1997 (K. Groenendijk in litt. 2023, S17667489) at Lago Chivanene, Inhambane (which site has been surveyed regularly in the last decade, without further records). One was at a roadside pool near the Rio Buzi on 1 December 2022 (JH & T. Bruneau, S123281185, JH in Bull. Afr. Bird Cl. 30: 117). Several of these records were documented.

A widespread migrant in East Africa (Britton 1980). Hockey et al. (1986) noted 86 records in southern Africa, mostly in wet grassland areas of Zimbabwe. In Mozambique there are very few records south of the Rio Save, despite more frequent reports at similar latitudes in South Africa. The inland region south of the Save is sandy and flat and largely lacks the wooded streams this species prefers (unlike neighbouring South Africa) and is thus probably unsuitable (V. Parker in litt. 2022). It is a rare visitor to Mozambique in the austral summer, albeit probably under-reported.

COMMON REDSHANK Tringa totanus

Historical records in Mozambique unclear. Parker (2005) noted that a report from Beira (Winterbottom 1936) was subsequently retracted (Benson 1936), although it seems to have been included in Hockey et al. (2005) and perhaps also by Peacock (2016).

Subsequently, recorded as follows: singles at Ilha do Bazaruto on 4 November 1997 (K. Groenendijk, S1766796), Maputo on 12 March 2006 (R. Grey in Hockey et al. 2005 and Bull. Afr. Bird Cl. 14: 101), Barra on 19 April 2008 (M. Booysen in litt. 2021; the first to be documented, see Fig. 7), Panda/ Chacane Wetlands on 5 November 2009 (M. Booysen in litt. 2021, T. Hardaker in Least Concern



Figure 7. Common Redshank Tringa totanus, Ponta da Barra, Inhambane, Mozambique, 19 April 2008; the Bull. Afr. Bird Cl. 17: 121) and San Sebastian first documented country record (© M. Booysen)

Peninsula on 5 July 2022 (E. Marais, S150769750; documented), 10 April (E. Marais, S150769567; documented) and 15 June 2023 (C. Read, S143119501; documented), the last three all probably the same bird.

An uncommon migrant in East Africa with no records south of Dar es Salaam, Tanzania (Britton 1980) and rare in southern Africa; Hockey et al. (1986) found 56 records prior to 1984. As the 1936 record was retracted, there are seven records involving five individuals, two of them documented, indicating that it is a very rare vagrant in Mozambique.

SPOTTED REDSHANK *Tringa erythropus*

Least Concern

One reportedly observed at Ilha da Inhaca (de Boer & Bento 1999) but, like the Broad-billed Sandpiper, this record seems to have stemmed from an unsupported report in Berruti & Sinclair (1983)—see above. No further information is apparently available (Parker 1999). Hockey et al. (2005) and Peacock (2016) reported a record at Bazaruto on 23 December 2002 and, whilst Hockey et al. (2005) provided details of the observer, no further information was given. Like other rarities from this period, any paperwork has been lost (H. Smit-Robinson in litt. 2021). Since neither of the reported sightings were documented or their details reviewed, we recommend the species is not included in the Mozambique list, meaning any future records should be documented and reported.

The limit of the non-breeding range is southern Tanzania (Britton 1980). Hockey et al. (1986) confirmed only one southern African record, a specimen from Marondera, Zimbabwe on 20 January 1979 (Worsley-Worswick 1980).

Globally threatened and Near Threatened species

GREY PLOVER Pluvialis squatarola

Vulnerable

Parker (1999) reported P. squatarola to be a common non-breeding Palearctic migrant, usually in small groups but occasionally hundreds together. Notable counts included 800 in November 1978 at Ilha da Inhaca (A. Vittery in de Boer & Bento 1999), 900 there in January 1996 (W. F. de Boer in Parker 1999) and 1,221 in January 1996 at the Bazaruto archipelago (Köhler & Köhler 1996, Parker 1999). The estimated population in southern Mozambique was 10,000 birds. Reported as less common in central Mozambique with an estimated 1,000 birds (Parker 2005), although a group of 2,000 was reported at the Zambezi estuary in October 1999 (Bento 2000).

More recently, the species has been reported in all months at many locations widely spread along the coast. In the north 1,284 were at the Quirimbas archipelago in December 2009 (Borghesio & Gagliardi 2011), whilst further south the largest numbers have been at the San Sebastian Peninsula with 13 counts in excess of 500 birds, and as many as 750-1,400 during September-April (Auer et al. 2024). In the Great Bazaruto Key Biodiversity Area, 2,840 were present in November–December 2023 (Ryan et al. in prep.). Further south maxima of 150 at Pomene, 440 at Ponta da Barra and 360 in Maputo Bay (Auer et al. 2024). The Ramsar 1% site criterion is 900 individuals (Critical Sites 2023) so historical data suggest Ilha da Inhaca and the Zambezi estuary both qualified, and more recently the Quirimbas archipelago and Great Bazaruto Key Biodiversity Area have proven internationally important. The current overwintering population is probably smaller than the 11,000 summed by Parker (1999, 2005) but regular counts at San Sebastian do not suggest a significant decline is ongoing so Parker's totals were perhaps overestimates.

EURASIAN CURLEW Numenius arquata

Near Threatened

Historically, found at a small number of sites in coastal southern Mozambique during the boreal winter, with a population estimated at *c*.250 birds by Parker (1999); there were, however, no published counts to underpin this estimate. The max. published single count was of 48 at Ilha da Inhaca in January in 1989 (Nilsson & Shubin 1998) but most observations at this and other sites have involved much smaller numbers since.

Recent records at San Sebastian where up to ten were observed in August–March during 2008–23 (Read *et al.* 2014, Auer *et al.* 2024; C. Read *in litt.* 2023) suggest some regularly overwinter there. The most regular wintering location is in the estuarine confluence of the Rios Tembe, Umbuluzi and Matola in south-west Maputo Bay, where up to 12 were regularly recorded in September–March 2012–23 at a high-tide roost on saltpans at Salinas Zacharia (Auer *et al.* 2024).

Three subspecies of *N. arquata* breeding across the temperate Palearctic, all of which winter in Africa in significant numbers. The nominate breeds in Europe to the Urals and is a relatively short-distance migrant to north-west Africa and the Mediterranean (Delany *et al.* 2009). The eastern subspecies *orientalis* breeds from southern Siberia to north-east China and winters in coastal sub-Saharan Africa, Madagascar, and from the south Caspian Sea through the northern tropics east to Indonesia. This subspecies became more numerous in eastern and central Europe during the 20th century, and its migration routes now extend further west (Smit & Piersma 1989). A little-known third taxon *suschkini* was described from a specimen collected in Senegal (Neuman 1929); evidence suggests that it breeds in the south Urals and Kazakhstan—hence the vernacular name Steppe Curlew—but the wintering range is unknown, aside from the type locality (Engelmoer & Roselaar 1998, Delany *et al.* 2009).

Birds from the eastern and western subspecies are visually distinct morphologically. Nominate *arquata* and *suschkini* are smaller than *orientalis* with less sexual dimorphism in size; *arquata* usually has barred axillaries and a dark-streaked lower rump and uppertail-coverts, whereas *suschkini* has white axillaries and a paler uppertail (Engelmoer & Roselaar



Figure 8. Seven Eurasian Curlews *Numenius arquata*, Salinas Zacharia, Mozambique, 12 January 2012, including at least two birds with strong supercilia and crown-stripes, and the bird on left also has white uppertail-coverts, features thought to be characteristic of *N. a. suschkini* (Gary Allport)

1998). It is reported that Steppe Curlew has a more distinct head pattern, with a strongly marked supercilium and crown-stripe, akin to Whimbrel N. phaeopus (Köhler et al. 2012). Eastern orientalis has an on average longer bill and tarsus, with white axillaries, pale uppertail-coverts, and is highly sexually dimorphic in size (Engelmoer & Roselaar 1998). Discrimination of suschkini has been considered uncertain (Köhler et al. 2012) but recent range-wide genetic studies revealed three distinct breeding populations corresponding to the established subspecies, with the affinity of Steppe Curlew found to be closer to European populations (Tan et al. 2019).

N. a. orientalis is an uncommon but regular non-breeding migrant to coastal sites in southern Africa; there have been no definite records of nominate arquata in the subregion (Hockey et al. 2005). The population is estimated at probably fewer than 1,000 birds (Hockey et al. 2005, Delany et al. 2009). In South Africa and Namibia c.500 have been estimated, despite a count of 1,370 at Langebaan Lagoon (Summers et al. 1987, Taylor et al. 2015). Zwartkops Estuary is the only other site of significance with c.60. Confidence in the current regional population estimate is low and the estimate for southern Mozambique, south of the Zambezi, is now thought likely to be 100 birds or fewer.

The birds in Maputo Bay and at San Sebastian have included regular records of orientalis, however, on 12 January 2012 two birds among a group of nine had strong supercilia and crown-stripes (GA & R. Hughes; Fig. 8), features considered characteristic of suschkini (Köhler et al. 2012). The significance of the record was not appreciated at the time so no photographs were taken of the birds in flight, but images of them at rest show the crown feature and suggest that at least one had a pale uppertail (Fig. 8). Were these birds to be suschkini it would represent a potentially important indication of the taxon's non-breeding range.

BAR-TAILED GODWIT Limosa lapponica

Near Threatened

Parker (1999) thought it was an uncommon non-breeding Palearctic migrant to southern Mozambique in the austral summer, estimating the national population at >7,000. It was found singly or in flocks of up to ten, but occasionally in larger flocks. Parker (2005) noted just one record from central Mozambique at Rio Savanne in December 1999. An exceptional 5,523 were estimated on the Bazaruto archipelago in January 1998 (Köhler & Köhler 1999), but this was based, in part, on extrapolation. Nevertheless, it was the largest concentration reported in southern Africa and suggested a population exceeding the Ramsar 1% population threshold for international importance of 1,200 birds (Delany et al. 2009).

More recently, Borghesio & Gagliardi (2011) reported 309 at the Quirimbas archipelago on 8-17 December 2009, including 280 on Ilha do Ibo. It has been found regularly on the coast from Ilha da Inhaca, Costa do Sol (Maputo), Maxixe/Inhambane/Tofo/Barra, San Sebastian, Vilankulos and the Bazaruto archipelago (Auer et al. 2024). Further north, it has been reported at Mecufi, Mocimba de Praia and the Quirimbas archipelago. There are records in all months except June and July, usually in groups <100. Counts in excess of 100 are available in November, December, February, March and May, with recent maxima of: 160 on 7 August 2016, 600 on 14 February 2020 and 900 on 11 May 2021 at San Sebastian (C. Read in litt. 2023; Auer et al. 2024), and 650 on 5 April 2018 at Barra (GA, S44357155). A survey of the Great Bazaruto Key Biodiversity Area in November-December 2023 found >3,000 (Ryan et al. submitted), confirming the area remains internationally important for the species. Including the area from Maxixe/Inhambane/Tofo/Barra north to San Sebastian, Vilankulos and the Bazaruto archipelago, it seems reasonable that the population in Mozambique is still 7,000 birds or more. Following Bom et al. (2022) the subspecies is expected to be *L. l. yamalensis*.



CURLEW SANDPIPER Calidris ferruginea

Vulnerable

In southern and central Mozambique, the species was considered a common non-breeding Palearctic migrant by Parker (1999, 2005), who reported high counts of 4,410 in January 1997 at Bazaruto (P. & U. Köhler), >2,000 in January 1997 at Ilha da Inhaca (F. de Boer), >800 in January 1998 in Maputo (C. Bento), >1,050 in October 1999 at Chinde at the mouth of the Zambezi (Bento 2000) and >450 in October 1999 at the Rio Buzi mouth (Parker 2005). The estimated populations in southern and central Mozambique were >20,000 and >10,000 respectively (Parker 1999, 2005).

More recently, it has been reported on >920 eBird checklists for Mozambique (116 record/months, Table 1) and, aside from those at Quirimbas (see below), there are no records of significant numbers north of Beira. This must reflect observer coverage and it is possible that large numbers do use coastal wetlands in central and northern Mozambique. A notable count was 2,045 at the Quirimbas archipelago, including 1,167 on Ilha do Ibo, during 8-17 December 2009 (Borghesio & Gagliardi 2011). In southern Mozambique it is regularly seen on tidal flats or at roost sites in numbers >400 birds. Recent maxima include 1,200 on 9 September 2018 at Costa do Sol in Maputo (GA & B. Briggs, S48393994), and >1,480 on 8 December 2022 (JH, S123625345) and >3,500 on 24 January 2024 at Bela Vista (JH & T. Moore, S159669921). Surveys of the Great Bazaruto Key Biodiversity Area on 24–30 November 2023 counted 5,980 (Ryan et al. submitted) principally at San Sebastian and the Bazaruto archipelago, exceeding the Ramsar 1% criterion of 4,000 birds (Critical Sites 2023).

Most of the peak counts are in September in southern Mozambique, linked to significant arrivals of migrating birds, with further high counts in February and March prior to northbound migration. These indicate that birds either arrive in large groups, disperse locally, then re-aggregate pre-departure, or that they are en route to wintering grounds further south or inland. There are, however, no records of major concentrations south of Mozambique (Hockey et al. 2005, Auer et al. 2024). The exceptional count at Bela Vista in January mirrored unprecedented numbers of other waterbirds at the site at the time, suggesting local foraging conditions were especially favourable.

Currently, only one area is known to be internationally important for the species but it is likely that the wider Maputo Bay population exceeds the threshold on an annual basis and other sites further north may also qualify, especially during passage. Like Parker (1999, 2005), we consider the species to be a common visitor. It seems reasonable to suppose that central and southern Mozambique continue to host 30,000 birds, but significantly more could be found at as yet unsurveyed or poorly known coastal sites, such as the delta of the Zambezi.

GREAT SNIPE Gallinago media

Near Threatened

In central Mozambique a regular migrant to a restricted area of marshlands, probably in small numbers, but a rarity elsewhere (Parker 2005). Mostly recorded at Rio Savanne, with records in the adjacent Rio Pungwe Valley to Tica and Lagoa de Ura (Clancey 1996). There are c.40 recent records in this area (Auer et al. 2024, Brooks & Ryan 2024) mostly in December (n = 9), January (n = 5) and February (n = 7) but until April at least. Most records have involved singles, but up to 4-6 occasionally, in a relatively small area of accessible wet grassland between Beira and the Zambezi delta.

There are no records north of the Zambezi, almost certainly reflecting lack of observer effort, but there are a few records of singles at sites to the south including Gorongosa National Park (Clancey 1996) and Lagoa Muangane, San Sebastian, on 8 November 2022 (C. Read, D. Gilroy in litt. 2023). There is also a pre-1920 record at Marracuene (Rosa Pinto in

Hockey et al. 1986) and one at nearby Macaneta on 21 March 2019 (Allport 2021; S54065409, photograph).

Intra-African movements are driven by rainfall and the local condition of temporary wetlands in the winter quarters (Lindström et al. 2016). Birds breeding in the east of its range migrate south along the Nile Valley to the Ethiopian plateau, arriving in August-September, with large numbers staying until the grasslands dry out in October, whereafter they move south following the rains (Massoli-Novelli 1988, van Gils et al. 2020b). One at Rio Savanne on 17 August 2011 was thought to have arrived recently (E. Marais in litt. 2021, S95007594), which perhaps suggests that at least some on the eastern flyway choose not to stage in Ethiopia but make their way directly further south. 2011 was a 'wet' year in Ethiopia with heavy summer rains (Teferi Taye et al. 2021) so this bird was not driven further south by lack of suitable habitat.

The species has declined over its entire breeding range since 1850 (Hockey et al. 2005) and is thought to be still undergoing a moderately rapid decrease, owing primarily to breeding habitat loss and degradation, as well as hunting pressure. It almost meets the requirements for listing as a threatened species but is currently considered Near Threatened (BirdLife International 2023). The decline in numbers is evident from historical records in southern Africa; a fairly common visitor in the austral summer as far south as eastern South Africa during 1850-1900 it is now restricted to a fairly narrow band across northern Namibia, Botswana, Zimbabwe and Mozambique (Hockey et al. 2005). Great Snipe is a secretive bird, so the details above are no more than suggestive that the Zambezi Valley and delta in Mozambique is a significant wintering area (Parker 1999). The area warrants a dedicated survey.

Other species of interest

TIBETAN SAND PLOVER Charadrius atrifrons

Least Concern

Clancey (1996) reported only two records but Parker (1999, 2005) mentioned 16 in southern Mozambique, and one in central Mozambique, noting that similarity with Greater Sand Plover C. leschenaultii may result in misidentification and under-reporting. A notable count was 456 at the Bazaruto archipelago in January 1998 (Köhler & Köhler in Parker 1999).

Since then improvements in identification information, optics and observer numbers mean that the species has been recorded more frequently and in increased numbers (Peacock 2016). Recent high counts include: 1,600 on 5 April 2018 at Ponta da Barra (GA, S44357155), and at San Sebastian, 2,170 on 13 February 2020 (A. McLean, C. Read & E. Marais, S65237428), 2,150 on 11 May 2021, 2,400 on 16 May 2021 (N. Perrins, S88193202, S88587216) and 1,052 on 26 May 2021 (E. Marais, S96557649). Systematic counts on 24–30 November 2023 found >4,000 in the Great Bazaruto Key Biodiversity Area (Ryan et al. submitted). There are several counts of >500 in the Ponta da Barra and San Sebastian areas (Auer et al. 2024) and it is regularly recorded in Maputo Bay, usually 10-15 with one record of 35 (Auer et al. 2024). Several high counts at Barra, San Sebastian and the Great Bazaruto KBA exceed the Ramsar 1% criteria of 1,300, confirming the global significance of the Mozambique coast. The species is a regular and locally common Palearctic migrant visitor.

LONG-TOED LAPWING Vanellus crassirostris

Least Concern

Previously recorded in central Mozambique with 19 observations in March-June, August, September, November and December (Parker 2005), seven pairs in the Zambezi floodplain (Bento 2000) and 20 birds at Lagoa de Ura (Parker 2005). Only two records were mentioned



by Parker (1999) in the south of the country; at Incoluane (Clancey 1996) and two were reported at a small marsh near San Sebastian (Parker 1999).

More recently, in central Mozambique it is now known to be a fairly common yearround resident at Gorongosa National Park, with counts of up to 50 in all months except February-March (when the park is closed to visitors as rainfall impedes access). Also recorded at Rio Savanne, and on several occasions further north in wetlands around the Zambezi coutadas (Auer et al. 2024, Brooks & Ryan 2024). In southern Mozambique there have been regular records at San Sebastian (Read et al. 2014; C. Read in litt. 2023), the Vilankulos area and at Coconut Bay Lagoas. The latter held birds in August-December, one pair bred, and there was a high count of eight on 8 December 2020 (G. Rowan in litt. 2020). In the far south it has been recorded at Macaneta (twice), Maputo National Park (>4 times), and near Zitundo-Ponta Do Ouro (twice). Overall, it is now known to have a resident breeding population at Gorongosa National Park, and elsewhere moves to suitable habitat depending on local water levels. There are still many parts of Mozambique with suitable habitat and few observers, e.g., Banhine National Park, with many inaccessible swamps inland of the coast. It is patchy but widespread in the country, less frequent in the south, as a wet-season immigrant and local breeder.

TEREK SANDPIPER Xenus cinereus

Least Concern

In central and southern Mozambique, it was considered by Parker (1999, 2005) to be an uncommon and local Palearctic migrant to estuaries and especially mangroves on coasts and occasionally inland, typically in groups of c.20 from October to April. Notable sites were Beira harbour (max. 160), Bazaruto (max. 450) and Ilha da Inhaca, the latter usually holding c.500 but with an exceptional count of 3,200 in November 1976 (Waltner & Sinclair 1981, Hockey et al. 2005). The total number in Mozambique was estimated to exceed 2,000 birds, more than twice that for the rest of the southern African coast (Hockey et al. 2005).

A more recent status assessment suggests a slightly larger population with records of small groups at most sites visited on the Mozambique coast and occasional inland records (Auer et al. 2024, Brooks & Ryan 2024). High counts included 415 at the Quirimbas archipelago in December 2009 (Borghesi & Gagliardi 2011), 115 at San Sebastian on 12 February 2020 (C. Read & E. Marais in litt. 2023), 456 at Inhambane seafront on 6 April 2018 (GA, S45443319), 145 on 30 August 2017 (GA, S38901399) and 180 on 24 March 2024 (JH, T. Moore & D. Moore, S165687838) at Salinas Zacharia, 185 at Costa do Sol, Maputo on 2 September 2017 (GA, S38950631) and 548 in the Bartolomeu Dias area on 1-3 December 2023 (Ryan et al. submitted). These records suggest that c.1,500 birds are present at the main sites in winter, so the national population is likely to exceed 3,000 and the species is a fairly common non-breeding Palearctic visitor to coastal wetlands.

BLACK-RUMPED BUTTONQUAIL Turnix nanus

Least Concern

Reported to be an uncommon resident in damp grasslands of southern and central Mozambique (Parker 1999, 2005) occurring singly or in pairs, with four records in southern Mozambique and five records in central Mozambique, the latter clustered north of Beira on the coastal plain.

More recently, observed regularly but not commonly in both central and southern regions. The majority of records are from the Rio Savanne floodplain north of Beira, an area visited regularly by southern African birders searching for regionally range-restricted wet grassland species using organised flushes; there have been >35 records involving up to six birds in January-March, June-August and October-December (Auer et al. 2024, Brooks & Ryan 2024). There are two records in the far north (Quiterajo and Niassa Hunting Block A,

in Cabo Delgado province) and several widely spread records in central Mozambique, all at relatively well-watched sites including Mt. Gorongosa, Gorongosa National Park and the Zambezi coutadas. In southern Mozambique it has been found at Rio Govuro floodplains, Rio Save woodlands, Lago Dongane (Dunes de Dovela), Chacane wetlands, Funhalouro, Massingir, Limpopo floodplains, Maputo National Park and the Zitundo-Ponta do Ouro area (Auer et al. 2024, Brooks & Ryan 2024). It is now recorded regularly, albeit locally and in small numbers. The pattern is confounded by observers specifically targeting the species at known sites; although a secretive and hard-to-see bird, it seems to be more abundant and widespread than previously thought. It is best considered an uncommon and local resident.

CRAB PLOVER Dromas ardeola

Least Concern

Parker (1999) reported it to be an uncommon non-breeding visitor to the south coast in the austral summer (November-April) with notable records at Bazaruto, a flock of 70 at San Sebastian in March 1995, 40 at Ilha da Inhaca in January 1998 (de Boer & Bento 1999), one at Rio Savanne in December 1999 (Parker 2005) and also reported at Beira (Britton 1967).

More recently, the species has been recorded in all months. At San Sebastian it is regularly recorded during the austral summer in flocks of 50-250, with high counts of 344 on 13 February 2020, 250 on 12 February 2020 and 245 on 2 March 2020 (Read et al. 2014, Auer et al. 2024, Brooks & Ryan 2024; C. Read in litt. 2023). In northern Mozambique, 1,400 were seen on 8-17 December 2009, including 1,250 at a single roost, on Ilha Sengar, Quirimbas archipelago (Borghesi & Gagliardi 2011). The 1% Ramsar Convention threshold for the species is 700 (Delaney et al. 2009), making the archipelago internationally important. Elsewhere it has been recorded regularly at Barra, Bazaruto archipelago, Ilha da Inhaca (1-8 on 14-18 April 2024; M. Krzychylkiewicz & G. Armstrong, S168529218, S169127948, S169129007), Inhambane/Tofo area, Inhassoro, Mocimba de Praia, Palma, Pemba, Pomene, Quirimbas, Rio Maria and Vilankulos (Hockey et al. 2005, Zest for Birds in Bull. Afr. Bird Cl. 9: 69, A. Buys, B. McGaw & M. Booysen in Bull. Afr. Bird Cl. 13: 227, J. Glendinning & R. Grey in Bull. Afr. Bird Cl. 14: 101, M. Booysen in Bull. Afr. Bird Cl. 15: 274, E. Marais in Bull. Afr. Bird Cl. 16: 107, T. Hardaker in Bull. Afr. Bird Cl. 16: 236, 17: 121, 23: 239, 27: 113 & 30: 117, T. Hardaker & S. Overmeyer in Bull. Afr. Bird Cl. 18: 235, sa-rarebirdnews@googlegroups. com in Bull. Afr. Bird Cl. 20: 225, T. Hardaker & A. Ridley in Bull. Afr. Bird Cl. 22: 106, GA in Bull. Afr. Bird Cl. 22: 244, GA & T. Hardaker in Bull. Afr. Bird Cl. 24: 109, 26: 113, 27: 270, D. Gilroy & C. Read in Bull. Afr. Bird Cl. 26: 240, GA, T. Hardaker & M. Mason in Bull. Afr. Bird Cl. 25: 9, GA, E. Marais, J. R. Nicolau & C. Cohen per T. Hardaker in Bull. Afr. Bird Cl. 25: 242, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 248, GA, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 112; Auer et al. 2024, Brooks & Ryan 2024). The species is a patchy but locally common non-breeding visitor to Mozambique and, with at least one site qualifying as internationally important, total numbers are probably significant at a population level.

BRONZE-WINGED COURSER Rhinoptilus chalcopterus

Least Concern

Parker (1999, 2005) thought the species an uncommon summer breeding resident of savanna and woodland in southern and central Mozambique, with most observations along the Rio Limpopo in woodland, and in dry woodland from Banhine National Park to Zinave National Park, with a similar status north of the Rio Save where present around Gorongosa, Sena and Tete.

More recently, there have been scattered records in the austral summer in Niassa and Tete provinces, Chimanimani National Park, Mt. Gorongosa and the Zambezi coutadas. Most records are from Gorongosa National Park where the species is seen regularly (many game drives return to camp after sunset, facilitating observations; R. Lusinga pers. comm.). In southern Mozambique there are far fewer records; one at Tofo on 5 September 2013 (G. Mclean, S15194317), one recently dead on the tideline at Costa do Sol on 29 September 2018 (GA pers. obs.), four near Manhica on 15 April 2021 (A. Delegencio, S89743035) and one at Dunes de Dovela on 27 March 2023 (T. Bruneau, S131973666). Overall, the paucity of records suggests R. chalcopterus is uncommon. However, it is a nocturnal species of dry woodland (Peacock 2016) adept at hiding by day, so the lack of records away from a few sites may reflect the need for nocturnal surveys of suitable habitat.

TEMMINCK'S COURSER Cursorius temminckii

Least Concern

An uncommon breeding resident of grassland and savanna in southern Mozambique, where it was found singly or in pairs (Parker 1999), with a similar pattern of occurrence in central Mozambique (Parker 2005).

More recently it has been recorded in all months except April and October, suggesting year-round occurrence, in singles or as pairs. Often seen around the Coconut Bay Lagoas, with a max. there of five on 4 November 2011 (T. Bruneau, S75810922). In Maputo province it is regular in small numbers (up to 12) on burnt grassland around Zitundo-Ponta do Ouro (JH pers. obs.). North of the Rio Save the species has been seen frequently at the Rio Savanne floodplain, in Gorongosa National Park, at a farm between Gorongosa National Park and the Zimbabwe border, and once at Pemba in the far north (Auer et al. 2024, Brooks & Ryan 2024). It is thus an uncommon and local resident.

AFRICAN SKIMMER Rynchops flavirostris

Least Concern

Parker (2005) found it to be an uncommon breeding intra-African migrant in central Mozambique, seen in all months except January and March, at the Rio Zambezi, Albufeira Cahorra Bassa, the Rio Urema floodplain and Rio Save. A flock of c.300 on the Rio Zambezi in November 1999 was notable (A. Sutherland & J. Rossouw in Parker 2005). It was reported in 1968 at Lagoa de Ura, Tica (Clancey 1996, Hockey et al. 2005). In southern Mozambique, five were seen in June 1996 at the Rio Save, Zinave National Park (Parker 1999); it had been collected there previously (Clancey 1996). There were historical records at Ilha da Inhaca in 1958 and Zinave National Park in 1967 (Hockey et al. 2005).

More recently, it has been recorded on ten or more occasions in far northern Mozambique on the Rio Rovuma in Niassa Reserve, Cabo Delgado province, during 2012-21, with up to six in June, July and September-November (Auer et al. 2024, Brooks & Ryan 2024) and four at Pemba on 31 October 2018 (D. Coleman, S57422680). In central Mozambique it has been found regularly at Gorongosa National Park in May, June and September-December in apparently increasing numbers, with a recent max. of 300 on 25 October 2023 (M. Ortner, S153267508). This exceeds the Ramsar 1% criterion threshold of 100 birds (Critical Sites 2023). It has been seen on the Zambezi near Sena, Mungari Camp (Zambezi coutadas) and near Chemba, and at Rio Savanne (Auer et al. 2024, Brooks & Ryan 2024). In southern Mozambique it is still decidedly uncommon, with singles at Ilha Linene (San Sebastian) on 13 January 2014 (T. Hardaker in Bull. Afr. Bird Cl. 21: 243), Bilene on 17 June 2017 (T. Hardaker in Bull. Afr. Bird Cl. 24: 241), San Sebastian on 25 January 2021 (D. Gilroy, S80453344) and 4 October 2021 (A. McLean in litt. 2021) and Lagoa Muangane on 12 December 2021 (E. Marais, S99024242, GA, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 112). Present at Zinave National Park on 7 April 2022 (G. Rowan in litt. 2022) and 1-2 were seen on six occasions at Salinas Zacharia, Matola, during 22 May-10 October 2022 (T. & A. M. Moore, S111470412, JH, S112507464, J. R. Nicolau, S120529807, JH & T. Hardaker in Bull. Afr. Bird Cl. 29: 249).

In South Africa, the species bred at St. Lucia until 1943, but was considered extinct as a breeding bird by Hockey et al. (2005). However, it returned to breed in Kruger National Park in 2023 (A. Riley in litt. 2023). The population in Mozambique was reportedly declining along the Zambezi, due to the effects of the Kariba and Cahorra Bassa dams on the river (Bento 2000). It probably is still an uncommon breeder along the Zambezi and may nest around Gorongosa National Park. Trends are difficult to discern but recent increases in Gorongosa are encouraging. In the south, there is a paucity of recent data from around Zinave National Park where it may also breed, but the species appears to be a very uncommon and erratic visitor on the Rio Save and elsewhere in southern Mozambique, albeit perhaps increasing slightly.

Discussion

Despite continued and increasing ornithological efforts in Mozambique, participation and record-keeping continues to be mainly an international effort-greater participation and ownership by a Mozambican constituency is a high priority. As evident from other recent reports from Mozambique, it is clear that there is strong bias in coverage by skilled ornithologists towards the south of the country with a corresponding dearth of information from most areas north of the Zambezi. The status of key coastal and inland wetlands in the northern provinces is poorly known. Even basic surveys of these areas are likely to reveal further sites of importance for waders and are a high priority to improve our knowledge. Similarly, more detailed and coordinated surveys of the difficult-to-access wetland systems in Maputo Bay, the Zambezi and Save River deltas, as well as inland freshwater wetlands, some of which are highly temporal, would further enhance our understanding of species such as Great Snipe, as well as identifying potential Key Biodiversity Areas.

Acknowledgements

JH especially thanks Sarah Love, Georgina & Harriet Hogg who have cheerfully engaged in wader watching over the past few years; family holidays would not be the same without a visit to a mudflat, saltpan or sandbar. GA thanks Emma Brigham, Louis, Jude & Toby Allport for tolerating early morning disappearances. We are immensely grateful to Prof. Peter Ryan for sharing recent count data from San Sebastian, Bazaruto and Bartolomeu Dias; the high counts reaffirmed our opinion of the global significance of the Mozambican coastline for migrant shorebirds. Roeland Bom and other authors cited in the text shared their work from journals behind paywalls. Trevor Hardaker reported rare sightings via the Bulletin of the African Bird Club and the Southern Africa Rare Bird Google Group (sa-rarebirdnews@googlegroups.com). Thanks to birders who shared their details of sightings and those that responded helpfully to queries concerning eBird records: Maans Booysen, Dave Gilroy, Alan Vittery, Kees Groenendijk, Etienne Marais, Mike Buckham, Ian Sinclair and Andre Joubert. Other birders provided excellent company in the field: Albert McLean, Cliff Dorse, Carlos Bento, Carlos Serra, Barnaby Briggs, Ross Hughes, Justin Rhys Nicolau, Olivier & Zev Hamerlynck, Antonio Delegencio, Chris Milligan, the late H. Dean Pittman, Etienne Marais, Adam Riley, Gary Rowan, Tom & Anne Marie Moore, Samuel Liebert, Torres Taimo, Danilo Nhantumbo, Christine Read, Niall Perrins, Dave Minney, Sam Jones and many others. Additionally, thanks to all birders who submitted their observations to citizen science platforms (eBird and SABAP2/BirdLasser) and those that have posted photos of rare waders on social media; these records and documentation have been invaluable during the preparation of this review.

References:

Allport, G. 2016. First documented record of Red-necked Stint Calidris ruficollis for Mozambique. Bull. Afr. Bird Cl. 23: 91-94.

Allport, G. 2018a. Notable recent records of terns, gulls and skuas in southern Mozambique including the first country records of Black Tern Chlidonias niger. Bull. Brit. Orn. Cl. 138: 100-115.

Allport, G. 2018b. First records of Sharp-tailed Sandpiper Calidris acuminata for Mozambique and continental Africa, and additional records of Pectoral Sandpiper C. melanotos in Mozambique, with comments on identification and patterns of occurrence. Bull. Brit. Orn. Cl. 138: 307–317.

Allport, G. 2018c. First record of Pectoral Sandpiper Calidris melanotos for Mozambique. Bull. Afr. Bird Cl. 25:



- Allport, G. 2020. First record of White-rumped Sandpiper Calidris fuscicollis for Mozambique. Bull. Afr. Bird Cl. 27: 240-245.
- Allport, G. 2021. Birds and birding 2013–2020 at Macaneta, southern Mozambique. Afrotrop. Bird Biol. 1: 1–30. Allport, G., Del, D., Hamerlynck, O. & Hamerlynck, Z. 2021. Update on status and records of Blue Swallow Hirundo atrocaerulea and other hirundines from Mozambique. Bull. Brit. Orn. Cl. 141: 142-155.
- Allport, G., Gilroy, D. & Read, C. 2022. The status and distribution of three species of Sternula terns on the eastern coast of Africa and in the western Indian Ocean, with two species new for Mozambique. Bull. Brit. Orn. Cl. 142: 190-208.
- Ash, J. S. & Miskell, J. E. 1998. Birds of Somalia. Pica Press, Robertsbridge.
- Auer, T., Barker, S., Barry, J., Charnoky, M., Curtis, J., Davies, I., Davis, C., Downie, I., Fink, D., Fredericks, T., Ganger, J., Gerbracht, J., Hanks, C., Hochachka, W., Iliff, M., Imani, J., Jordan, A., Levatich, T., Ligocki, S., Long, M. T., Morris, W., Morrow, S., Oldham, L., Padilla Obregon, F., Robinson, O., Rodewald, A., Ruiz-Gutierrez, V., Schloss, M., Smith, A., Smith, J., Stillman, A., Strimas-Mackey, M., Sullivan, B., Weber, D., Wolf, H. & Wood, C. 2024. EOD - eBird Observation Dataset. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.15468/aomfnb (accessed via GBIF.org on 16 September 2024).
- Bakewell, D. 2014. Mainland Penang, 11 January 2014. https://digdeep1962.wordpress.com/2014/01/13/ mainland-penang-11-january-2014/ (accessed 23 September 2021).
- Benson, C. W. 1936. The waders found at Beira. Ostrich 7: 116–119.
- Benson, C. W. 1971. The occurrence of the Madagascar Pratincole in the South Africa sub-region. Bull. Brit. Orn. Cl. 91: 262-263.
- Bento, C. M. 2000. Wetland bird survey of the Zambezi Delta, vol. 2: technical review. Chapter 5: Wetland birds. Pp. 213-232 and 259 in Timberlake, J. (ed.) Biodiversity of the Zambezi Basin wetlands. Biodiversity Foundation for Africa & the Zambezi Society, Harare.
- Berruti, A. & Sinclair, J. C. 1983. Where to watch birds in Southern Africa. Struik, Cape Town.
- BirdLife International. 2023. Species factsheet: Gallinago media. http://www.birdlife.org (accessed 3 April 2023).
- BirdLife International. 2024. IUCN Red List for birds. http://www.birdlife.org (accessed 29 October 2024).
- de Boer, W. F. & Bento, C. M. 1999. Birds of Inhaca Island, Mozambique. BirdLife South Africa/Avian Demography Unit, Johannesburg.
- Bom, R. A., Conklin, J. R., Verkuil, Y. I., Alves, J. A., de Fouw, J., Dekinga, A., Hassell, C. J., Klaassen, R. H. G., Kwarteng, A. Y., Rakhimberdiev, E., Rocha, A., ten Horn, J., Tibbitts, T. L., Tomkovich, P. S., Victor, R. & Piersma, T. 2022. Central-West Siberian-breeding Bar-tailed Godwits (Limosa lapponica) segregate in two morphologically distinct flyway populations. Ibis 164: 468-485.
- Borghesio, L. & Gagliardi, A. 2011. A waterbird survey on the coast of Quirimbas National Park, northern Mozambique. Bull. Afr. Bird Cl. 18: 61-67.
- Britton, P. L. 1967. Some records from Mozambique. Ostrich 38: 46–47.
- Britton, P. L. 1977. The Madagascar Pratincole Glareola ocularis in Africa. Scopus 1: 94–97.
- Britton, P. (ed.) 1980. Birds of East Africa. East Africa Natural History Society, Nairobi.
- Brooks, M. & Ryan, P. 2024. Southern African Bird Atlas Project 2. Version 1.70. FitzPatrick Institute of African Ornithology, Cape Town. https://doi.org/10.2989/00306525.2022.2125097 (accessed via GBIF.org on 16 September 2024).
- Brown, M. & Hockey, P. A. R. 2007. The status and distribution of African Black Oystercatchers Haematopus moquini in KwaZulu-Natal, South Africa. Ostrich 78: 93–96.
- Brown, M., Arendse, B., Mels, B. & Lee, A. T. K. 2019. Bucking the trend: the African Black Oystercatcher as a recent conservation success story. Ostrich 90: 327-333.
- Cizek, A. 2017. Interesting records from Pomene, Inhambane Province, Mozambique. Honeyguide 68: 14-20. Clancey, P. A. 1996. The birds of southern Mozambique. African Bird Books, Westville.
- Cohen, C. & Winter, D. 2003. Great Knot Calidris tenuirostris: a new species for sub-Saharan Africa. Bull. Afr. Bird Cl. 10: 120-121.
- Critical Sites. 2023. http://criticalsites.wetlands.org (accessed 25 March 2023).
- Delany, S., Scott, D., Dodman, T. & Stroud, D. (eds.) 2009. An atlas of wader populations in Africa and western Eurasia. Wetlands International, Wageningen.
- Engelmoer, M. & Roselaar, C. S. 1998. Geographical variation in waders. Springer, Dordrecht.
- Eriksen, J. & Victor, R. 2013. Oman bird list: the official list of the birds of the Sultanate of Oman. Seventh edn. Sultan Qaboos University, Muscat.
- Finch, B. W. & Turner, D. A. 1989. A second Kenya record of the Red-necked Stint Calidris ruficollis. Scopus 13: 120-121.
- Gilroy, J. J. & Lees, A. C. 2003. Vagrancy theories: are autumn vagrants really reverse migrants? Brit. Birds 96: 427-438.
- van Gils, J., Wiersma, P. & Kirwan, G. M. & Sharpe, C. J. 2020a. Great Knot Calidris tenuirostris, version 1.0. In del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A. & de Juana, E. (eds.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bow.grekno.01 (accessed 25 March 2023).



- van Gils, J., Wiersma, P., Kirwan, G. M. & Sharpe, C. J. 2020b. Great Snipe Gallinago media, version 1.0. In del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A. & de Juana, E. (eds.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bow.gresni1.01 (accessed 25 March 2023).
- Gnep, B., Kotlarz, J. & ten Horn, J. 2021. First record of Sharp-tailed Sandpiper for Mauritania. Bull. Afr. Bird Cl. 28: 78-79.
- Grant, P. J. & Jonsson, L. 1984. Identification of stints and peeps. Brit. Birds 77: 293–315.
- Herdam, H. 1994. Beobachtungen zur Vogelwelt von Mozambique. Orn. Jahresb. Mus. Heineanum 12: 1-60.
- Hockey, P. & Kirwan, G. M. 2020. African Oystercatcher Haematopus moquini, version 1.0. In del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A. & de Juana, E. (eds.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bow.afroys1.01 (accessed 25 March 2023).
- Hockey, P. A. R., Brooke, R. K., Cooper, J., Sinclair, J. C. & Tree, A. J. 1986. Rare and vagrant scolopacid waders in southern Africa. Ostrich 57: 37-55.
- Hockey, P. A. R., Leseberg, A. & Loewenthal, D. 2003. Dispersal and migration of juvenile African Black Oystercatchers Haematopus moquini. Ibis 145: E114-E123.
- Hockey, P. A. R., Dean, W. R. J. & Ryan, P. G. (eds.) 2005. Roberts-birds of southern Africa. Seventh edn. Trustees of the John Voelcker Bird Book Fund, Cape Town.
- Köhler, P. & Köhler, U. 1996. The Bazaruto archipelago, Mozambique, a site of potential international importance for Palearctic waterbirds. Ostrich 67: 165–167.
- Köhler, P. & Köhler, U. 1999. Extension of the known non-breeding range of the Bar-tailed Godwit in southern Africa: a major wintering site in Mozambique. Vogelwarte 40: 142-144.
- Köhler, P., Lachmann, L. & Urazaliyev, R. 2012. Numenius species and subspecies in west Kazakhstan. Wader Study Group Bull. 120: 1-10.
- Lappo, E. G., Tomkovich, P. S. & Syroechkovskiy, E. 2012. Atlas of the breeding waders in the Russian Arctic. UF Ofsetnaya Pechat, Moscow.
- Lees, A. C. & Gilroy, J. J. 2004. Pectoral Sandpipers in Europe: vagrancy patterns and the influx of 2003. Brit. Birds 97: 638-646.
- Lees, A. C. & Gilroy, J. J. 2022. Vagrancy in birds. Bloomsbury, London.
- Lindström, A., Alerstam, T., Bahlenberg, P., Ekblom, R., Fox, J. W., Råghall, J. & Klaassen, R. H. G. 2016. The migration of the great snipe Gallinago media: intriguing variations on a grand theme. J. Avian Biol. 47: 321–334.
- Maclean, G. L. & Kirwan, G. M. 2020. Madagascar Pratincole Glareola ocularis, version 1.0. In del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A. & de Juana, E. (eds.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.madpra1.01 (accessed 25 March 2023).
- Massoli-Novelli, R. 1988. Status and habitat of Great Snipe in Ethiopia and its movements in Africa. Pp. 12-15 in Havet, P. & Hirons, G. (eds.) Proceedings of the Third European Woodcock and Snipe Workshop, Paris, France, 14-16 October 1986. International Waterfowl & Wetland Research Bureau, Slimbridge.
- Mlodinow, S. G., Kirwan, G. M., van Gils, J. & Wiersma, P. 2024. Sharp-tailed Sandpiper (Calidris acuminata), version 2.0. In Keeney, B. K. (ed.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY. https://doi. org/10.2173/bow.shtsan.02 (accessed 28 September 2024).
- Neumann, O. 1929. Ueber Rassen des Grossen Brachvogels. Orn. Monatsb. 37: 76-78.
- Nilsson, P. & Shubin, A. 1998. Waders on the southern Mozambique coast. Intern. Wader Stud. 10: 444-447.
- Parker, V. 1999. The atlas of the birds of Sul do Save, southern Mozambique. Avian Demography Unit, Cape Town & Endangered Wildlife Trust, Johannesburg.
- Parker, V. 2005. The atlas of the birds of central Mozambique. Endangered Wildlife Trust, Johannesburg & Avian Demography Unit, Cape Town.
- Parker, V. & de Boer, W. F. 2000. Birds of Maputo Special Reserve. Avian Demography Unit, Cape Town & Endangered Wildlife Trust, Johannesburg.
- Peacock, F. 2016. Chamberlain's waders. Pavo Publishing, Cape Town.
- Peacock, F. 2020. Better late than never; first record of Madagascar Pratincole in South Africa. Afr. BirdLife 8(5): 50–52.
- Pohlen, Z., Gesmundo, C. & Denlinger, J. 2020. First documented record of Black-tailed Godwit Limosa limosa for Mozambique. Bull. Afr. Bird Cl. 27: 252-253.
- Read, C., Tarboton, W. R., Davies, G. B. P., Anderson, M. D. & Anderson, T. A. 2014. An annotated checklist of birds of the Vilanculos Coastal Wildlife Sanctuary, southern Mozambique. Orn. Observ. 5: 370-408.
- Ryan, P. G., Dorse, C., Gilroy, D., Hogg, J., McLean, A., Read, C., Trotzuk, E. & Allport, G. submitted. A baseline survey of coastal birds in the Greater Bazaruto region, central Mozambique. Ostrich.
- Sheppard, D. A. 1909. A list of, and notes on, birds collected and observed in the district of Beira, Portuguese South East Africa. J. S. Afr. Orn. Union 5: 24-49.
- Simmons, R., Baker, N., Braby, R., Dodman, T., Nasirwa, O., Tyler, S., Versfeld, W., Wearne, K. & Wheeler, M. 2007. The Chestnut-banded Plover is an overlooked globally Near Threatened species. Bird Conserv. Intern. 17: 283-293.
- Sinclair, J. C. & Nicholls, G. H. 1976. Red-necked Stint identification. Bokmakierie 28: 58-60.



- Smit, C. J. & Piersma, T. 1989. Numbers, midwinter distribution, and migration of wader populations using the East Atlantic flyway. Pp. 24–63 in Boyd, H. & Pirot, J.-Y. (eds.) Flyways and reserve networks for water birds: developed from papers presented at the third meeting of the Conference of contracting Parties to the Ramsar Convention, Regina, Saskatchewan, Canada, 28–29 May 1987. IWRB Spec. Publ. 9. International Waterfowl & Wetland Research Bureau, Slimbridge.
- Stevenson, T. & Fanshawe, J. 2020. Birds of East Africa; Kenya, Tanzania, Uganda, Rwanda and Burundi. Second edn. Helm, London.
- Straw, P. 2002. Red-necked Stint and Curlew Sandpiper longer term population trends. The Tattler 31: 2.
- Studds, C. E., Kendall, B. E., Murray, N. J., Wilson, H. B., Rogers D. I., Clemens, R. S., Gosbell, K., Hassell, C. J., Jessop, R., Melville, D. S., Milton, D. A., Minton, C. D. T., Possingham, H. P., Riegen, A. C., Straw, P., Woehler, E. J. & Fuller, R. A. 2017. Rapid population decline in migratory shorebirds relying on Yellow Sea tidal mudflats as stopover sites. *Nat. Comm.* 8: 14895.
- Summers, R. W., Underhill, L. G., Pearson, D. J. & Scott, D. A. 1987. Wader migration systems in southern and eastern Africa and western Asia. *Wader Study Group Bull*. 49: 15–34.
- Summers, R. W., Underhill, L. G. & Waltner, M. 2011. The dispersion of red knots *Calidris canutus* in Africa—is southern Africa a buffer for West Africa? *Afr. J. Mar. Sci.* 33: 203–208.
- Tan, H. Z., Ng, E. Y. X., Tang, Q., Allport, G. A., Jansen, J. F. J., Tomkovich, P. S. & Rheindt, F. E. 2019. Population genomics of two congeneric Palaearctic shorebirds reveals differential impacts of Quaternary climate oscillations across habitat types. Sci. Rep. 9: 18172.
- Taylor, M. R., Peacock, F. & Wanless, R. M. (eds.) 2015. The Eskom Red Data Book of birds of South Africa, Lesotho and Swaziland. BirdLife South Africa, Johannesburg.
- Teferi Taye, M., Dyer, E., Charles, K. J. & Hirons, L. C. 2021. Potential predictability of the Ethiopian summer rains: understanding local variations and their implications for water management decisions. *Sci. Total Environ*. 755: 142604.
- Underhill, L. G., Tree, A. J., Oschadleus, H. D. & Parker, V. 1999. Review of ring recoveries of waterbirds in southern Africa. Avian Demography Unit, Univ. of Cape Town.
- Urban, E. K., Fry, C. H. & Keith, S. (eds.) 1986. The birds of Africa, vol. 2. Academic Press, London.
- Vincent, J. 1952. A checklist of the birds of South Africa. South African Ornithological Society, Cape Town.
- Vittery, A. 1989. Knots in southern Mozambique. Wader Study Group Bull. 55: 17.
- Waltner, M. & Sinclair, J. C. 1981. Distribution, biometrics and moult of the Terek Sandpiper *Xenus cinereus* in southern Africa. Pp. 233–266 *in* Cooper, J. (ed.) *Proceedings of the Symposium on Birds of the Sea and Shore, Cape Town* 1979. African Seabird Group, Cape Town.
- Wildlife Conservation Society, Government of Mozambique & USAID. 2021. Key Biodiversity Areas (KBAs) identified in Mozambique: factsheets, vol. 2. USAID/SPEED+, Maputo.
- White, S. & Kehoe, C. 2021. Report on scarce migrant birds in Britain in 2019. Part 1: non-passerines. *Brit. Birds* 14: 374–396.
- Wiersma, P., Kirwan, G. M. & Boesman, P. F. D. 2020. Chestnut-banded Plover *Charadrius pallidus*, version 1.0. *In* del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A. & de Juana, E. (eds.) *Birds of the world*. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bow.chbplo1.01 (accessed 25 March 2023).
- Winterbottom, J. M. 1936. Notes on birds around Beira in 1935. Ostrich 7: 32-38.
- Worsley-Worswick, P. V. 1980. The Spotted Redshank in Africa south of the equator. Ostrich 51: 251-252.

Addresses: Gary Allport, BirdLife International, The David Attenborough Building, Pembroke Street, Cambridge, CB2 3QZ, UK, e-mail: Gary.Allport@birdlife.org. James Hogg, c/o Scarth Wood Farm, Swainby, Northallerton, North Yorks. DL6 3DJ, UK, e-mail: jwthogg@googlemail.com

Appendix 1. Gazetteer of locations mentioned in the text.

Location	Grid reference (approximately centred on)	Location	Grid reference (approximately centred on)
Albufeira Cahorra Bassa	15°35′08.4″S, 32°42′19.6″E	Afungi Peninsula	10°48′15.8″S, 40°33′16.8″E
Banhine National Park	22°47′47.5″S, 32°53′06.3″E	Bartolomeu Dias area	21°11′52.0″S, 35°06′05.7″E
Bazaruto archipelago	21°41′03.5″S, 35°28′10.5″E	Bela Vista wetlands	26°19′16.5″S, 32°41′13.8″E
Beira	19°48′33.0″S, 34°51′29.8″E	Bilene	25°17′02.0″S, 33°15′23.7″E
Benguerra Island/Ilha de Santo Antonio	21°51′58.3″S, 35°26′24.2″E	Chacane wetland	24°21′24.7″S, 34°55′58.9″E
Cabo Delgado	12°20′17.6″S, 39°26′04.1″E	Chemba	17°09′39.5″S, 34°53′30.0″E
Chimanimani National Park	19°47′34.4″S, 33°05′22.9″E	Chinde	18°34′33.6″S, 36°27′51.7″E
Coconut Bay Lagoas	23°58′17.3″S, 35°28′03.9″E	Dunes de Dovela / Lago Dongane	24°25′45.6″S, 35°13′04.2″E

Funhalouro	23°07′17.9″S, 34°24′11.4″E	Gorongosa National Park	18°50′11.9″S, 34°29′44.3″E
Ilha da Inhaca	26°01′25.3″S, 32°55′42.1″E	Ilha do Ibo	02°20′14.8″S, 40°35′59.6″E
Ilha Linene (Lunene)	22°08′52.0″S, 35°31′27.8″E	Ilha de Magaruque	21°58′15.8″S, 35°25′34.1″E
Incoluane	25°04′00.0″S, 32°56′00.0″E	Inhambane/Tofo area	23°50′44.3″S, 35°27′25.2″E
Inhassoro	21°33′23.2″S, 35°10′56.5″E	Lago Cuduhi	24°21′23.6″S, 34°57′26.8″E
Lagoa Muangane (San Sebastian)	22°16′55.4″S, 35°27′25.6″E	Lagoa de Ura	19°42′35.9″S, 34°19′52.1″E
Lagoa Xinguti (Maputo National Park)	26°30′37.5″S, 32°48′23.9″E	Limpopo floodplains	24°49′38.0″S, 33°34′47.0″E
Macaneta	25°43′50.4″S, 32°42′36.5″E	Mahate	12°31′17.8″S, 40°25′57.3″E
Manhica	25°23′43.7″S, 32°47′53.9″E	Maputo/Costa do Sol	25°55′44.2″S, 32°38′04.9″E
Marracuene	25°44′18.8″S, 32°40′22.7″E	Maputo National Park	26°24′18.9″S, 32°49′12.3″E
Massingir	23°55′26.6″S, 32°09′57.5″E	Maxixe	23°51′47.3″S, 35°21′03.2″E
Mecufi	13°20′31.0″S, 40°32′46.7″E	Mocimboa de Praia	11°21′15.3″S, 40°21′34.2″E
Nova Mambone	20°59′26.7″S, 35°01′21.0″E	Mount Gorongosa/Serra da Gorongosa	18°25′06.6″S, 34°06′36.0″E
Niassa/Niassa Hunting Block A	11°40′23.2″S, 38°17′27.7″E	Palma	10°46′29.8″S, 40°28′50.7″E
Panda	24°03′46.3″S, 34°43′40.1″E	Pemba	12°58′23.3″S, 40°31′10.2″E
Pomene	22°57′56.8″S, 35°33′07.0″E	Ponta da Barra	23°47′27.9″S, 35°31′14.0″E
Ponta da Macaneta	25°52′19.3″S, 32°45′00.9″E	Ponta Malongane	26°47′28.2″S, 32°53′22.1″E
Quirimbas archipelago	12°25′45.4″S, 40°36′11.9″E	Quiterajo	11°45′03.9″S, 40°26′32.5″E
Rio Buzi	19°55′54.8″S, 33°49′08.6″E	Rio Buzi mouth	19°53′04.1″S, 34°45′27.6″E
Rio Govuro floodplains	21°24′44.4″S, 35°04′16.9″E	Rio Limpopo woodlands	23°01′12.7″S, 32°04′43.2″E
Rio Limpopo mouth	25°12′13.9″S, 33°30′49.6″E	Rio Maria	19°46′57.8″S, 34°57′23.9″E
Rio Pungwe Valley	19°36′17.8″S, 34°36′56.0″E	Rio Rovuma	11°10′37.6″S, 39°01′11.1″E
		100 100 / 01110	
Rio Savanne	19°44′29.4″S, 35°01′25.8″E	Salinas Zacharia	25°58′57.8″S, 32°26′48.9″E
Rio Savanne San Sebastian Peninsula	,		· ·
	19°44′29.4″S, 35°01′25.8″E	Salinas Zacharia	25°58′57.8″S, 32°26′48.9″E
San Sebastian Peninsula	19°44′29.4″S, 35°01′25.8″E 22°05′58.4″S, 35°28′41.5″E	Salinas Zacharia Rio Save/Rio Save woodlands	25°58′57.8″S, 32°26′48.9″E 21°08′17.2″S, 34°32′31.5″E
San Sebastian Peninsula Sena	19°44′29.4″S, 35°01′25.8″E 22°05′58.4″S, 35°28′41.5″E 17°27′08.6″S, 35°01′55.9″E	Salinas Zacharia Rio Save/Rio Save woodlands Tete province	25°58′57.8″S, 32°26′48.9″E 21°08′17.2″S, 34°32′31.5″E 16°08′40.9″S, 33°35′42.2″E