

The Distribution of gull *Larus* species on the Red Sea coast of Sudan

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Summary

We present information on the status of gull species on the Red Sea coast of Sudan on the basis of observations made during a ten day visit to the region in January 2010. Seven gull taxa were recorded in this time. Sooty *Larus hemprichii*, Slender-billed *L. genei*, and Pallas's *L. ichthyaetus* Gulls were all widespread along the coast, with Sooty Gull being the most abundant species encountered. Our sightings confirmed Pallas's Gull as a winter visitor to this coast, and showed that Slender-billed Gull is widespread here. White-eyed *L. leucophthalmus*, Steppe *L. (cachinnans) barabensis*, Baltic *L. fuscus fuscus*, and Black-headed *L. ridibundus* Gulls were also encountered, but only around the harbours of Port Sudan and Suakin.

Introduction

The distribution of gull species along the Red Sea coast of Sudan is a matter of considerable uncertainty in the literature. Cramp & Simmons (1983) and Urban *et al.* (1986) depict the Sudanese coast as within the range of Sooty *Larus hemprichii*, White-eyed *L. leucophthalmus*, Black-headed *L. ridibundus*, and Lesser Black-backed *L. fuscus* Gulls. Cramp & Simmons (1983) additionally show the range of Herring Gull *L. argentatus* as including the Sudanese coast, although which of the several subspecies included within this taxon is involved is unclear. Del Hoyo *et al.* (1996) show the Sudanese coast within the breeding ranges of Sooty and White-eyed Gulls, and within the wintering ranges of Black-headed, Slender-billed *L. genei*, Yellow-legged (which they term *L. cachinnans*), Lesser Black-backed *L.f. heuglini* and Pallas's *L. ichthyaetus* Gulls. The maps in Sinclair & Ryan (2003) conform to those in Urban *et al.* (1986) in placing Sudan outside the ranges of Slender-billed and Pallas's Gulls, although they note a vagrant record of the latter from inland Sudan. Urban *et al.* (1986) describe both Slender-billed and Pallas's Gulls as vagrants to Sudan, apparently on the basis of records from the Khartoum area. Sinclair & Ryan (2003) also distinguish between Lesser Black-backed and Heuglin's *L. (fuscus) heuglini* Gulls, but only map the former as present along the Sudanese coast.

In the most comprehensive treatment of these taxa, Olsen & Larsson (2003) concur with del Hoyo *et al.* (1996) in placing the Sudanese coast within the breeding ranges of Sooty and White-eyed Gulls, and within the wintering ranges of Black-headed, Slender-billed and Pallas's Gulls. They place Sudan on the migration route of Lesser black-backed Gull, the Baltic Gull *L. fuscus fuscus*, and within the wintering range of Heuglin's Gull. The main winter area of the latter is described as the southern Red Sea, but with individuals distributed sparsely through the northern Red Sea. Olsen

& Larsson (2003) also depict the wintering range of *L. cachinnans* as overlapping the Sudanese coast, although in this context *cachinnans* refers to Caspian *L. c. cachinnans* and Steppe *L. c. barabensis* Gulls. Olsen & Larsson (2003) describe Caspian Gull as common in the Persian Gulf and UAE in winter, scarce south to Socotra, and probably present in the southern Red Sea. They describe Steppe Gull as mainly wintering in the Persian Gulf and Oman, but also along the coast of the Arabian Peninsula south to the south Red Sea.

Part of the confusion over which gull taxa are present on the Sudanese coast can be ascribed to taxonomic uncertainty, for example, with respect to the former Herring Gull (*cachinnans/barabensis/michahellis*) and Lesser black-backed Gull (*fuscus/heuglini*) complexes. However, the confusion can also be ascribed in part to a lack of primary information on the distribution of gull species in Sudan. The basis for the inclusion or otherwise of Sudan within the ranges of gull species in the monographs and handbooks cited above is unclear, and indeed Sudan barely receives direct mention in any of them. The most recent attempt at a comprehensive assessment of bird distributions in Sudan appears to be the atlas compiled by Nikolaus (1987) from published information and his own field data. Nikolaus (1987) records the following gulls on the Red Sea coast: Herring Gull *L. argentatus heuglini*, rare; Lesser Black-backed Gull *L. fuscus fuscus*, common on passage, uncommon in winter; Slender-billed Gull, uncommon; Sooty Gull, very common; Pallas's Gull, rare, recorded as a winter visitor but all dated records from March; White-eyed Gull, seasonally common; Mediterranean Gull *L. melanocephalus*, vagrant? two records; Little Gull *L. minutus*, rare, vagrant?; Black-headed Gull, locally very common, uncommon elsewhere. Since this atlas, very little information on Sudanese birds has been published, and coverage by resident or visiting birdwatchers has apparently been minimal.

In January 2010 we spent ten days on the Red Sea coast of Sudan as part of the range-wide survey of the Slender-billed Curlew *Numenius tenuirostris*, during which time we had the opportunity to observe gulls at a number of sites. Here, we summarize our observations, with the aim of providing additional information about the status of gull species along the Sudanese coast.

Locations

Figure 1 maps the locations of sites visited along the Red Sea coast of Sudan during our survey, with site names, GPS coordinates and visit dates given in Table 1. These sites were visited on the basis of their potential to house wintering Slender-billed Curlews, and were identified based on existing coastal IBAs (Fishpool & Evans 2001), IWC sites (Delaney *et al.* 2009), one previous record of Slender-billed Curlew from the Red Sea Coast (RSPB 2010a) and using Google Earth to identify other potentially suitable (*i.e.* saltmarsh, freshwater or freshmarsh) sites. These sites were carefully surveyed using visual searches with binoculars and telescopes. The coastal road in Sudan runs North-South through the Red Sea State *c.* 1–10 km inland. As far as possible the survey team stayed within sight of the coastline, allowing opportunistic stops at potentially suitable habitat along the route.



Figure 1. Sites visited in northern, central and southern sections of the Sudanese Red Sea coastline. Numbers refer to the numbers for sites given in Table 1.

Table 1. List of sites surveyed during to the survey of the Sudanese coasts, with GPS coordinates and date of visit.

Site #	Name	Coordinates	Date
1	Oseif – north	21°47.498'N, 36°51.643'E	21 Jan 2010
2	Oseif – south	21°45.610'N, 36°52.141'E	21 Jan 2010
3		21°43.184'N, 36°52.742'E	21 Jan 2010
4		21°41.144'N, 36°53.111'E	21 Jan 2010
5		21°38.398'N, 36°53.809'E	23 Jan 2010
6		21°29.246'N, 36°56.946'E	23 Jan 2010
7	Shana'ab Bay - north	21°23.923'N, 36°58.372'E	21 Jan 2010
7	Shana'ab Bay - north	21°23.923'N, 36°58.372'E	23 Jan 2010
8	Shana'ab Bay	21°20.490'N, 37°00.584'E	21 Jan 2010
9	Dunganab Bay IBA	21°10.761'N, 37°05.838'E	22 Jan 2010
10	Dunganab Bay IBA	21°13.862'N, 37°07.703'E	22 Jan 2010
11	Dunganab Bay IBA	21°03.568'N, 37°17.016'E	22 Jan 2010
12	Dunganab Bay IBA	20°53.992'N, 37°09.105'E	23 Jan 2010
13		20°27.625'N, 37°10.681'E	23 Jan 2010
14	Avons, bay	20°07.499'N, 37°12.078'E	20 Jan 2010
15	Avons, river mouth	20°02.744'N, 37°11.950'E	20 Jan 2010
16	Port Sudan	19°39.547'N, 37°14.188'E	23 Jan 2010
17	Suakin	19°08.170'N, 37°20.863'E	24 Jan 2010
18	Suakin Archipelago IBA	19°04.410'N, 37°22.295'E	26 Jan 2010
19	Suakin Archipelago IBA	18°59.413'N, 37°23.692'E	26 Jan 2010

Species

Sooty Gull *Larus hemprichii*

The most frequently encountered gull on the Sudanese coast, present in all bays and harbours visited from Oseif in the north to Suakin in the south (Plate 1). Numbers

varied from singles at Avons river mouth (site 15), to small flocks (e.g. c. 20 birds at Oseif (site 1) on 21 January). Sooty Gull was very common around the harbours at Port Sudan and Suakin (sites 16 and 17).



Plate 1. White-eyed Gull *Larus leucophthalmus*; left and Sooty Gull *L. hemprichii*, right at Suakin island, Sudan, on 24 January 2010.

White-eyed Gull *Larus leucophthalmus*

White-eyed Gull was much less widespread along the Sudanese coast than the superficially similar Sooty Gull. We only encountered this species around the harbours of Suakin (Plate 1) and Port Sudan (sites 16 and 17) on 24 and 25 January, respectively, and even here it was outnumbered around 10 to 1 by Sooty Gull.

Steppe Gull *Larus (cachinnans) barabensis*

Birds evidently of this taxon were the most frequently encountered of the large, “white-headed” gulls seen on the Sudanese coast (Plates 2–5), albeit only present around the harbours of Suakin and Port Sudan (sites 16 and 17). Birds we assigned to this taxon all possessed long, slender, parallel-sided bills, long, slender hind-quarters, and long, slender legs. The mantle colour of these birds appeared quite variable, depending on individual, lighting conditions, and perhaps age (the adults looking slightly darker than the 2nd year birds, e.g. Plate 2). However, all appeared darker-backed than Herring Gull, and in general were reminiscent of or darker than Yellow-legged Gull in shade (e.g. Plates 2–4).

Plate 2. Second winter (left) and adult (right) Steppe Gulls *Larus (cachinnans) barabensis* by the fish docks at Port Sudan, 25 January 2010.



Adult birds (Plates 2, 3) had bright yellow legs and bills, the latter with red gony spots, and unstreaked heads. In flight, a broad white trailing edge to the wing was apparent, and the wing tip was extensively black, lacking the intrusion of paler tongues (Plate 3). The outermost primary (P10) had a small white mirror (Plate 3), and there were white primary spots visible in the folded wing. Primary moult was apparently complete in the adult photographed (Plate 3). Second winter birds had largely dark wing tips, pink legs, broad black subterminal bands on otherwise pale yellow bills, and unstreaked white heads (Plates 2 and 4). First winter birds (Plate 5) were pale and notably white-headed, exaggerated by a collar of brown streaks; they also showed all dark bills, long, pink legs, a clear contrast between the greyish mantle

and browner wings, a broad pale bar formed by the tips of the greater secondary coverts on the upperwing in flight, and a broad, solid black terminal band on an otherwise white tail. Eye colour varied from all dark to pale, becoming paler with age (c.f. Plates 2–5).



Plate 3. Adult (left) and 2nd ? winter (right) Steppe Gull *Larus (cachinnans) barabensis*, Port Sudan fish docks, 25 January 2010. The inset shows the same two birds.



Plate 4. Second? winter Steppe Gull *Larus (cachinnans) barabensis* by the fish docks at Port Sudan, 25 January 2010.



Plate 5. First winter Steppe Gull *Larus (cachinnans) barabensis* by the fish docks at Port Sudan, 25 January 2010 (far left). Both photographs are of the same individual.

Baltic Gull *Larus fuscus fuscus*

One bird seen at Suakin (site 17) on 24 January, and small numbers at Port Sudan (site 16) fish docks on 25th (Plate 6) were probably this taxon. These birds were very dark-backed, with relatively long primary projection beyond the tail. The adult bird depicted in Plate 6 shows fine brown streaking around the pale eye and a necklace of brown streaks, a tricoloured yellow bill with a black band and a small red gonydeal spot. This bird also has pale yellow legs, and restricted white spots on the folded wings.



Plate 6. Adult Baltic Gull *Larus (fuscus) fuscus* by the fish docks at Port Sudan, 25 January 2010. This bird bears a black plastic ring on the tarsus.



Plate 7. Adult Pallas's Gull *Larus ichthyæetus* at Avons (20° 7.499'N; 37° 12.078'E), Sudan, on 21 January 2010.

Pallas's Gull *Larus ichthyæetus*

A total of seven individuals of this distinctive species were encountered along the coast: one adult in the bay at Avons (site 14) on 20 January (Plate 7), one first winter at site 4 on 21st, 4 (2 adults, 2 second winters) at site 5 on 23rd, and one first winter at Suakin (site 17) on 24th. Thus, this species was present essentially along the entire surveyed length of the Sudanese coast, albeit in small numbers.

Black-headed Gull *Larus ridibundus*

A flock of around 30 birds on the mud at the estuary at Port Sudan (site 16) on 25 January constituted the only record during the coastal survey, although a solitary winter-plumaged adult was also seen at the confluence of the White and Blue Niles in Khartoum on 16 January.

Slender-billed Gull *Larus genei*

We encountered Slender-billed Gulls at more or less every coastal site surveyed from Oseif (site 1) in the north (Plate 8) down to mangroves south of Suakin (site 19), although always in small numbers (usually one or two birds per site). All birds seen were adults.



Plate 8. Slender-billed Gull *Larus genei*, centre with Sooty Gulls *L. hemprichii* and Crested Tern *Sterna bergii*, in flight at Oseff, Sudan, on 21 January 2010.

Discussion

Our survey of the Sudanese coast in January 2010 was brief and by no means comprehensive. Our observations were concentrated on areas of mud, mangrove and marsh around bays and inlets, and also any areas of freshwater we encountered, as these habitats were judged most likely to harbour Slender-billed Curlew, the focal species of the survey. Most of the Sudanese coastline consists of a narrow strip of sand between either raised ancient reefs or desert, and much of it is fringed with extant coral reef. We largely ignored such stretches, and in consequence have few observations of birds by or over open sea. Nevertheless, such is the paucity of recent observations from the Sudanese coast that even our relatively limited visit helps to clarify uncertainties about the distributions of gull species along it.

Nikolaus (1987) noted that Pallas's Gull had been recorded as a winter visitor to the Red Sea coast of Sudan, but that all dated records from the coast and from Khartoum were from March. Our observations showed that Pallas's Gull was widespread along

the Sudanese coast in January 2010, and that this species presumably is indeed a winter visitor there, albeit in small numbers. The same can also be said of Slender-billed Gull, which Nikolaus (1987) recorded as an uncommon winter visitor only in the vicinity of Port Sudan and Suakin, but which is clearly widespread along the Sudanese coast. These observations confirm the distributions of these two species in Sudan as depicted in the range maps of del Hoyo *et al.* (1996) and Olsen & Larsson (2003).

We also observed individuals from at least two of the large, white-headed gull taxa in the Herring and Lesser-black backed complexes, but both only in the vicinity of Port Sudan and Suakin harbours. The specific status of forms within these complexes is uncertain, and their identification is difficult and in some cases currently unresolved (Olsen & Larsson 2003). Previous handbooks and monographs (Cramp & Simmons 1983, Urban *et al.* 1986, Grant 1986, del Hoyo *et al.* 1996, Olsen & Larsson 2003) suggest that three taxa from this group might be present on the Sudanese coast in winter – Caspian, Steppe, and Heuglin’s Gulls. The majority of individuals of the large, white-headed gulls present were consistent with identification as Steppe Gull. Plates 2 and 3 show adults, Plates 2 and 4 presumed third winter, Plate 3 a presumed second winter, and Plate 5 a first winter bird ascribed to this taxon. The criteria for separating Steppe from Caspian and Heuglin’s Gulls are evidently not well understood, but the Sudanese birds seem more likely to be Steppe on the basis of mantle colour, overall shape, and plumage details of individual birds (Olsen & Larsson 2003). Steppe Gull mainly winters in the Persian Gulf and Oman, although it also apparently occurs south along the coast of the Arabian peninsula to Socotra and the southern Red Sea, and east to the coast of India (Olsen & Larsson 2003). The breeding range of Caspian is to the west of that of Steppe, while several thousand Caspian Gulls winter in Israel, reaching peak numbers in January and February (Olsen & Larsson 2003). Thus, while Caspian Gull might be expected to occur in Sudan, our observations suggest that Steppe Gull may, in fact, be the more common of the two forms along this coast.

A fourth large, white-headed gull taxon, Baltic Gull, is known to migrate through the Red Sea to wintering grounds in Africa, and it is possible that stragglers might be encountered wintering in Sudan. Of the two dark-backed large gull taxa previously recorded from Sudan (Nikolaus 1987), individuals observed at Suakin and Port Sudan more closely matched Baltic than Heuglin’s Gull. These birds were relatively large and heavy set, and while not as dark-backed in life as Plate 6 would suggest, they were too dark to be Heuglin’s Gull. Nikolaus (1987) records Heuglin’s Gull (as *Larus argentatus heuglini*) as a rare winter visitor to the Port Sudan region, while Olsen & Larsson (2003) describe its wintering range as mainly in the southern Red Sea but with individuals sparsely as far north as Eilat in Israel. Our observations would suggest that Baltic Gull is probably regular in winter in Sudan, and that previous records of Heuglin’s Gull from the Sudanese coast may conceivably relate to Steppe Gull.

White-eyed Gull is resident along the Red Sea coast, breeding on offshore islands. Previous surveys estimated the breeding population on islands along the Sudanese coast at 300–1000 pairs (BirdLife International 2011, Moore and Balzarotti 1983). The species is threatened by introduced predators on the breeding islands (e.g., rats *Rattus* sp.) and from floating and beached oil-spills, and is also under pressure from egg-and chick-collecting, disturbance by fishermen and tourists (and related building) and oil exploration. The species is listed as Near Threatened because it is expected to experience a moderately rapid population decline in the next three generations (33

years) as a consequence of these threats (BirdLife International 2011). On this survey, White-eyed Gulls were seen only around Port Sudan and Suakin, and repeat surveys revisiting the sites surveyed by Moore & Balzarotti (1983) would seem to be a priority for improving understanding of the conservation status of this species (PERSGA 2003).

In conclusion, we recorded seven gull taxa along the Sudanese coast in the course of a ten-day survey visit. Sooty, Slender-billed and Pallas's gulls were all widespread along the coast, with the first of these being by far the most abundant species encountered. Our sightings confirm Pallas's Gull as a winter visitor to this coast, and show also that Slender-billed Gull is more widespread than suggested from the Sudanese bird atlas (Nikolaus 1987). White-eyed, Steppe, Baltic, and Black-headed Gulls were encountered on the coast only around the harbours of Port Sudan and Suakin. As far as we are aware, this is the first time that Steppe Gull has been reported from Sudan, although this may reflect the difficulties of identifying this taxon rather than any change in status. White-eyed Gull is categorized as Near-Threatened by the IUCN, and further investigation of its status in Sudan is a priority, especially given our low frequency of encounters with this species.

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