

A record of Sooty Tern *Onychoprion fuscatus* from Gujarat, India

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The Sooty Tern *Onychoprion fuscatus* is a seabird of the tropical oceans that breeds on islands throughout the equatorial zone. Within limits of the Indian Subcontinent, its race *O. f. nubilosa* is known to breed in Lakshadweep on the Cherbaniani Reef, and the Pitti Islands, the Vengurla Rocks off the western coast of the Indian Peninsula, north-western Sri Lanka, and, reportedly, in the Maldives (Ali & Ripley 1981; Pande *et al.* 2007; Rasmussen & Anderton 2012). Storm blown vagrants have occurred far inland (Ali & Ripley 1981; Robin & Rao 2006; Taher *et al.* 2011).

No recent field guides for India show a record of the species in Gujarat (Kazmierczak 2000; Grimmett *et al.* 2011; Rasmussen & Anderton 2012). Ali (1954) did not come across the species during his survey of the birds of Gujarat. Consequently, Khacher (1996) did not mention the species in his account of the birds of Gujarat but admitted that our knowledge of terns, especially migratory and more marine ones, is comparatively meager, and that more information is needed. Parasharya *et al.* (2004) have listed the species based on a suspected sighting from Vadinar, Gulf of Kachchh (Tatu 1992). In this paper, we report the species within Gujarat state with photographic evidence; provide its morphometric measurements, and also present other unpublished records from the state.

Observations

On 18 May 2012, Mautik Dave, Director-World Wide Fund for Nature (WWF), Valsad Division, informed MUJ of a tern that had

been rescued by Punit Patel at Khadki Village, near Pardi Town (20.517°N, 72.933°E), Valsad District, in Gujarat. Khadki is seven kilometers east of the coast. The tern was feeble and unable to fly, though it would spread its wings when disturbed [18]. The bird was photographed and its plumage described. It was weighed and sexed the next day, when it died. Its morphometric measurements (after Dhindsa & Sandhu 1984; Reynolds *et al.* 2008) were taken using ruled scale, divider, and digital vernier calipers to the nearest 0.1 mm. It was weighed on a 'Pesola' spring balance (300 g capacity, 1.0 g sensitivity) (Table 1). The specimen was dry preserved.

The tern was a female in adult plumage, and therefore was easily identified as a Sooty Tern. It had brownish-black upper parts and wings, whereas the under parts were white [19]. The white on its forehead did not extend beyond its eyes. A thin black line starting from the base of its mandibles reached till the base of a black crown. The leading edge of the wing was white. White outer-tail feathers were longest and gave a border-like appearance to the tail. The remaining tail feathers were black. The depth of the tail fork was c. 90 mm. The tail extended 10 mm beyond the wing tip. The remiges and rectrices were all new, and no moult was observed in the contour feathers. The beak and legs were black.

As evident from the data in Table 1, the tarsus and tail length values of the current record are the highest from amongst all published reports from India. The wing length was within the range recorded by Baker (1929), but slightly shorter than the value given for a female bird by Mathew & Shukkur (1974). The



Photos: xxxxxxxxxxxx

18. Adult Sooty Tern *Onychoprion fuscatus* on the ground. Note white forehead, prominent black line from bill to eye, white edge to the forewing, and white outer edge of the entire, prominently forked tail.



19. The Sooty Tern's head, back, and dorsal wing plumage was darker, tending towards black.

Table 1. A comparison of morphometric data of Sooty Tern *Onychoprion fuscatus* from Gujarat with some previous records

Body parts Sex	Jat & Parasharya 2015 Female (With regressed ovary)	Baker 1929 Male & Female	Mathew & Shukkur 1974 Female (With regressed ovary)	Ambedkar 1981 Male	Robin & Rao 2006 Female
Body weight (g)	98.5	—	—	—	—
Body length (mm)	385	—	—	—	355
Wing length (mm)	291	278–297	297	288	287
Beak length (mm)	46 (tip of maxilla to base of skull)	—	—	—	42.7
Bill–head	90.6	—	—	—	—
Culmen (mm)	41	35–42	39	42	—
Beak height (mm)	104	—	—	—	—
Beak width (mm)	84	—	—	—	—
Tarsus length (mm)	27	23–24	23	19	22.6
Tail length (mm) (Outer feathers)	172	145–162 (Outer feathers)	147	159	145

length of the culmen was within the range given by Baker (1929), but 2.0 mm longer than the value given for a female bird by Mathew & Shukkur (1974). Measurements of all the parameters of the current bird were larger than those reported by Robin & Rao (2006), for a female collected from the Valparai Plateau, in the Western Ghats. Other morphometric parameters reported, could not be compared, as they were not reported earlier from Indian samples.

Discussion

Sooty Tern was provisionally listed from Gujarat by Parasharya *et al.* (2004) based on earlier 'suspected' records, including Tatu (1992), and a sight record by M. K. Shivabhadrasinhji, Bakul Shukla, and Mrudula Shukla (Bakul Shukla, *pers. comm., verbally*) at Bhavnagar (Gulf of Khambhat), following a cyclone in 1976. Arpit Deomurari photographed a juvenile Sooty Tern on 06 May 2008 at Ajad Island (22.367°N, 69.383°E), off the coast of Poshitra, in the Gulf of Kachchh, Gujarat (Deomurari 2008). Subsequently, he recorded and photographed five immature birds, on 22 April 2012, at Charakala Salt pans (Arpit Deomurari, *pers. comm., verbally*). Hence, this specimen substantiates earlier sight and photographic records of its occurrence within Gujarat. Past and present records from Gujarat indicate the possibility of its occurrence along the entire coastline. However, we need to watch out for wind-blown birds after cyclonic / stormy weather.

Though the species is known to occur in Indian Territory, there are no specimens available in the collection of the Bombay Natural History Society, Mumbai (Abdulali 1970a, b). In recent past, morphometric measurements of only four parameters, from three specimens, were recorded (Mathew & Shukkur 1974; Ambedkar 1981; Robin & Rao 2006). We felt that reporting detailed morphometric measurements of a bird was ornithologically important.

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