

FIRST RECORD OF THE RED-FOOTED BOOBY *SULA SULA* FOR IRAN

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ABSTRACT

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The Red-footed Booby *Sula sula*, a pelagic seabird of the family Sulidae, is widespread in the tropical Atlantic, Indian, and Pacific oceans. Here, we present details and photographs of the first well-documented record of the species for Iran, on the coast of the Persian Gulf, northern Indian Ocean.

Key words: Red-footed Booby, *Sula sula*, Iran, Persian Gulf, Gulf of Oman

The Red-footed Booby *Sula sula* is a highly pelagic seabird that is widespread in tropical oceans (Nelson 1978). The species breeds across the Pacific, Atlantic, and Indian oceans; northern Australia; the Caribbean Sea; and Hawaii, and it winters in most tropical oceans, except the eastern Atlantic. It is considered to be the most pelagic and widespread of the Sulidae (Nelson 1978, Enticott & Tipling 2002).

The adult is polymorphic with plumage that resemble other Sulidae: the main forms are white, brown, and white-tailed brown; and there are several intermediate forms, including black-tailed white, golden white, and white-headed white-tailed brown (Nelson 1978, Howell & Zufelt 2019). However, in all cases, adults are distinguished by coral-red feet, bright blue facial skin, and bluish bill with a pink base and upper mandible. Juveniles are brown overall, often with a darker breast band, a blackish bill, and dull-pinkish feet. First-year birds resemble an immature Brown Booby *Sula leucogaster* but are smaller, more lightly built, and have darker underwings, a dark-tipped pinkish bill, and pink feet. Older immatures are intermediate towards the variable adult plumages (Howell & Zufelt 2019).

Three subspecies have been recognized on the basis of geographic location: *S. sula sula* (Atlantic), *S. sula websteri* (Eastern Pacific), and *S. sula rubripes* (Indopacific) (Clements *et al.* 2019). The nominate subspecies, *S. sula sula*, breeds on islands of the Caribbean and off Brazil. *S. sula websteri* breeds on islands off western Mexico, Central America, and the Galápagos Islands. *S. sula rubripes* breeds on islands of tropical Pacific and Indian oceans and is the subspecies most likely to occur in the Persian Gulf and Oman Sea (Nelson 1978, Howell & Zufelt 2019).

Occurrence and documentation

In the Middle East, the Red-footed Booby is regarded as an accidental vagrant to Oman and the UAE (BirdLife International 2018, Porter & Aspinall 2010). Previous to our sighting, there was no adequately documented record for Iran (Kaboli *et al.* 2012, BirdLife International 2021, eBird 2021). An offshore sighting by Captain Peter W.G. Chilman, recorded in his personal notes, was ship-assisted and considered invalid by the 2021 modifications to sighting criteria set by the Iran Bird Record Committee (IBRC 2021): on 27 August 1979, an immature Red-footed Booby landed on Capt. Chilman's

vessel about 64 km north of Port of Sur, eastern Oman (23°08'N, 059°36'E), and stayed on board as the ship sailed northward to the Oman Sea, through UAE waters, eventually reaching Iran. The bird departed the ship next day, about 27 km southwest of Bandar-e Lengeh, Iran (26°21'N, 054°43'E).

Below is an excerpt from Captain Chilman's notes (J. Eriksen pers. comm.):

“Red-footed Booby (*S. sula rubripes*). P W G Chilman - 1 positive (observed onboard) 27/28 AUG 79 east of Quriyat by 30 nms: Immature. First seen on foc'sle at 0900 on 27th August in position 23°08'N, 59°36'E. Didn't move all day even when closely approached, sitting with wings spread. On 28th fishing from foc'sle. Usually sat with bill open. Last seen at dusk 1800 on 28th in position 26°21'N 54°43'E. Dark brown above with white flecks. Paler brown head and underside. Primaries and tail dark brown. Pink bill with dark tip. Bluish around eye. Red feet, pinkish white claws. Moulting heavily.”

There are also two entirely pelagic observations for the Oman Sea: one individual was observed on the morning of 15 February 2012 (Pettebone 2012a), and two individuals were seen flying alongside a ship on the afternoon of 28 March 2012 at 23°46'05.16"N, 060°55'22.08"E (Pettebone 2012b). Pettebone noted a bluish bill; the black wing tips and bright white body of a white morph; and the distinct body structure of a booby, but he did not see the feet. Below, we confirm the only non-ship-assisted occurrence for Iran, documented with photographs.

On 18 January 2020, on our way back from an ornithological field survey, a large, long-winged, largely brownish booby was observed at 27°06'03.15"N, 056°49'36.87"E off Koor-e Tiab, Hormozgan, in southern Iran (Fig. 1). It circled a few times directly overhead at a height of about 20 m and then flew off. We were on a boat but very close to the shore. The weather was mostly cloudy, cool, and at times windy. One of us (AK) documented the bird with photographs (Fig. 2). Identification was based on Porter & Aspinall (2010). The bird was initially suspected to be a juvenile Brown Booby, but the distinctive coral-red feet, pinkish bill with a dark grey tip, and bluish facial skin confirmed identification as Red-footed Booby. Overall,

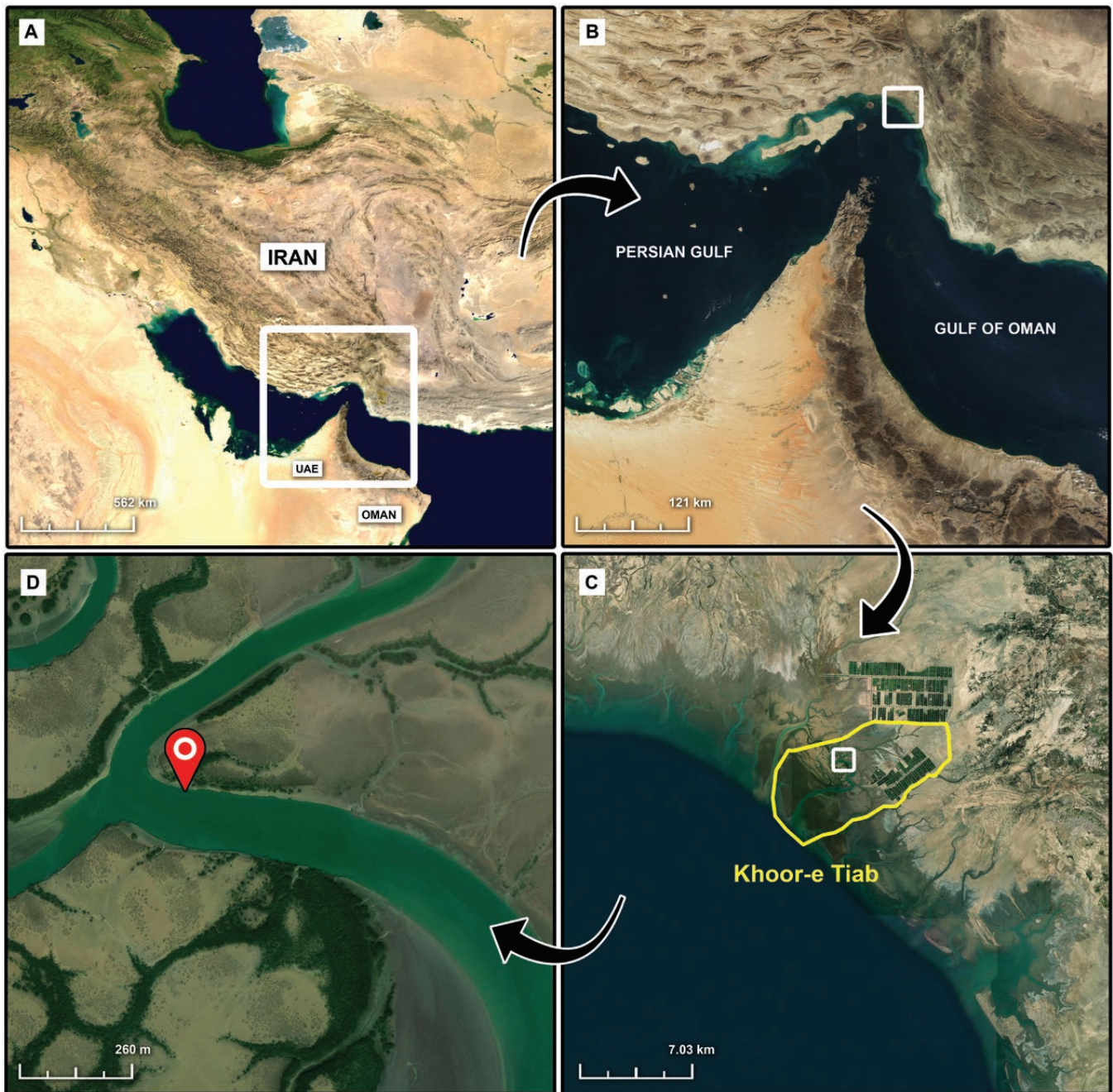


Fig. 1. Maps showing the area where we recorded the Red-footed Booby *Sula sula* in (A) southern Iran, (B) Hormozgan, and (C) Khor-e Tiab. The areas outlined by white squares are enlarged in the subsequent panels, and the polygon in (C) represents the boundary of Khor-e Tiab. Panel (D) shows the exact locality of our Red-footed Booby sighting in Khor-e Tiab, indicated by a pin. Background maps are from NASA (Stöckli 2005) for panels (A) and (B) and from the USGS (2021) for panels (C) and (D).

the booby was brownish above, mottled with white. It had dark brown primaries and tail, a pale neck and abdomen, a pinkish bill with blackish tip, a pinkish base at the lower mandible, and bluish-grey facial skin around the eyes—all pointing towards Red-footed Booby, presumably *S. s. rubripes*. Plumage features, plus two waves of primary molt (with juvenile outer primaries that were retained but very worn), indicated that the individual was completing primary molt and was therefore a white morph in its second molt cycle. The bird was likely not in its third molt cycle, as it had not acquired the more vivid face and bill colors of an adult (Howell & Zufelt 2019).

In addition to the Red-footed Booby, on our one-day expedition we tallied 132 Dalmatian Pelicans *Pelecanus crispus*, 8586 Great Cormorants *Phalacrocorax carbo*, 1772 Greater Flamingos *Phoenicopterus roseus*, 844 Slender-billed Gulls *Chroicocephalus genei*, 547 Caspian Gulls *Larus cachinnans*, 108 Lesser Black-backed Gulls *Larus fuscus*, two Pallas's Gulls *Ichthyaeus ichthyaeus*, one Black-headed Gull *Chroicocephalus ridibundus*, 144 Lesser Crested Terns *Thalasseus bengalensis*, 82 Caspian Terns *Hydroprogne caspia*, 31 Gull-billed Terns *Gelochelidon nilotica*, nine Greater Crested Terns *Thalasseus bergii*, eight Sandwich Terns *Thalasseus sandvicensis*, and six Saunders's Terns *Sterna saundersi*.



Fig. 2. Red-footed Booby *Sula sula* in Khoor-e Tiab, Hormozgan, Iran, Gulf of Oman (photo: AK).

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