Reference

Gorankar, P., 2013. Red-necked Falcon *Falco chicquera chicquera*—Colour aberrant individual. Website URL: http://orientalbirdimages.org/search.php?Bird_ ID=1050&Bird_Image_ID=87734. [Accessed on 15 April 2020.] — Kushal Adaki, Anirudh Kamakeri & Vaidehi Gunjal Kushal Adaki, 301, 3rd Floor, Kubera Apartment, Club Road, Desai Cross, Hubli 580030, Karnataka, India. E-mail: djkushal@gmail.com Anirudh Kamakeri, C/o Dr N. S. Kamakeri, #26-Ramnagar Kempgeri, Dharwad 580004, Karnataka, India. E-mail: drkamakerins2013@gmail.com Vaidehi Gunjal, Ashirwad, Plot No 8&9, Khushi Garden, Rajatgiri, Dharwad 580004, Karnataka, India. E-mail: vaigunjal@gmail.com

Windblown Red-footed Boobies *Sula sula* from the northern Malabar Coast of Kerala

The Red-footed Booby *Sula sula* is the most pelagic of the boobies (Sulidae), which are widely distributed throughout the pantropical latitudes in the Atlantic, Pacific, and Indian Oceans (Nelson 1978). Of its three races, *S. s. rubripes* breeds on islands of the Indian Ocean, and the Tropical West- and Central Pacific Ocean, eastwards to the Hawaiian Islands. It is, probably, subspecies found in India.

An adult Red-footed Booby is known to have different colour morphs, but bright red feet, and a pink-based bluish-grey bill are its distinguishable features. The different types of morphs are: white, black-tailed white, brown, white-tailed brown, whiteheaded-white-tailed brown, and morphs that are intermediate between these (Carboneras et al. 2020). The juveniles are brown, or grey-brown with darker streaks, and are usually paler below, with grey or greyish-pink legs and feet, and a blackish bill. Here, we report the sighting of the species from two different locations on the northern coast of Kerala.

On 29 August 2019, an exhausted bird (hereafter, Bird 1) was found on the ground near the Government Hospital, Kanhangad (12.31°N, 75.10°E), in Kasaragod. Jayesh T.V. photographed it and sent the picture to us for identification. Overall it was brownish, with paler foreneck and abdomen, fleshy legs, pinkish bill with blackish tip, and bluish grey facial skin—all pointing towards a juvenile Red-footed Booby. As the outer primaries were old, and inner new **[48]**, the bird might have been in its late first- or early second molt (Gutiérrez 2010). It remained at the same site for more than an hour, and then flew away by its own.



48. Images of Bird 1 sighted in Kasaragod District.

On 05 September 2019, fishermen from Ayikkara harbour (11.85°N, 75.37°E), Kannur, reported the sighting of another Redfooted Booby (hereafter, Bird 2). It was kept at the fish market till our rescuer, Sreejith Harvest, collected it [49]. Similar to Bird 1, it was also a juvenile bird, which is supposed to be less than two years old (referring to the images in Gutiérrez 2010). As Bird 2 was exhausted, it was taken to the District Veterinary Hospital for treatment. It was dewormed and given primary treatment. It was fed with marine fishes daily, in the morning, at noon, and in the evening. After a month in rehabilitation, Bird 2 had regained health. We found wing fluttering behaviour and high food (two to four medium-sized sardines) intake during the morning. Bird 2 was occasionally taken to the beach with the intent of releasing it, but this ended in failure, as it didn't show any urge to fly. This was done once every week, but it just took short flights and returned to shore. Finally, on 25 January 2020 we released it at the same site where it was found [50].



49. Images of Bird 2 sighted in Kannur District.



50. Rehabilitated Red-footed Booby (Bird 2) in Kannur before release.

We assume that both the birds were juveniles, and different individuals, since Bird 1 was paler than Bird 2. We believe that heavy monsoon winds, during the August–September, might have blown these birds inland. They are known to be sensitive to strong wind conditions, leading to poor flight stability (Yamamoto et al. 2017).

A summary of Red-footed Booby reports from India is listed in Table 1, where two of them were pelagic records, and four were records of windblown birds.

Table 1. Reports of Red-footed Booby from India			
State (location)	Date	Bird condition	Reference
West Bengal (New Digha, Baleshwar)	11 May 2011	Died	Karmakar et al. (2011)
Goa (20 NM from the Goa coast)	13 December 2013	Live bird found during voyage	Gandhe (2014)
Karnataka (70–80 NM Mangalore coast)	December 2014	Live bird found during voyage	Lakhman (2015)
Maharashtra (Bhuigaon Beach, Vasai)	05 June 2016	Exhausted bird; died	Lopes & Kasambe (2016)
Kerala (Kanhangad, Kasaragod)	29 August 2019	Exhausted bird; flew away	Bird 1
Kerala (Ayikkara harbour, Kannur)	05 September 2019	Exhausted bird; rescued and released	Bird 2

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References

- Carboneras, C., Christie, D. A., Jutglar, F., Garcia, E. F. J., & Kirwan, G. M., 2020. Redfooted Booby (*Sula sula*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A., & de Juana, E., (eds.). Handbook of the Birds of the World Alive. Lynx Editions, Barcelona. Website URL: https://www.hbw.com/node/52624. [Accessed on 01 April 2020.]
- Gandhe, A., 2014. Seabird observations off the western coast of India. Indian BIRDS 9 (5&6): 137–138.
- Gutiérrez, R., (ed.) 2010. The Red-footed Booby at l'Empordà, Catalonia, on December 2010. 2nd for Europe. Website URL: http://www.rarebirdspain.net/arbsi037.htm. [Accessed on 02 May 2020.]
- Karmakar, S., Ghosh, S., Bhadra, A., & Sen, S., 2011. Birds of India: Red-footed Booby a rare vagrant 2011.
- Lakhman, S. S., 2015. Website URL: https://www.facebook.com/photo.php?fbid=1015 2573126256417&set=gm.10152524072062411&type=3&theater&ifg=1. [Accessed on 02 May 2020.]
- Lopes, A., & Kasambe, R., 2016. Recovery of a Red-footed Booby Sula sula from the Maharashtra coast, India. Indian BIRDS 12 (2&3): 86.
- Nelson, J. B., 1978. The Sulidae: Gannets and Boobies. Oxford: Oxford University Press.
- Yamamoto, T., Kohno, H., Mizutani, A., Sato, H., Yamagishi, H., Fujii, Y.,

Murakoshi, M., & Yoda, K., 2017. Effect of wind on the flight of Brown Booby fledglings. *Ornithological Science* 16: 17–22. Website URL: https://www.jstage.jst.go.jp/article/osj/16/1/16_17/_article/-char/ja/.

Maxim Rodrigues* & R. Roshnath
Malabar Awareness and Rescue Centre for Wildlife, Kannur, Kerala, India.
*E-mail: maxim.rodrigus@gmail.com [Corresponding author]

Oriental Pied Hornbill Anthracoceros albirostris preying upon a Black-crested Bulbul Pycnonotus flaviventris nestling

The Oriental Pied Hornbill *Anthracoceros albirostris* is one of the frequently occurring hornbill species in Chapramari Wildlife Sanctuary (26.87°N, 88.86°E) which lies in the Dooars region of northern West Bengal, India, close to Gorumara National Park. It is dominated by moist deciduous forests.

At 1100 h, on 01 June 2016, we spotted a pair of extremely agitated Black-crested Bulbuls *Pycnonotus flaviventris* perched on the lower branches of a tree. They were calling out loudly. Moments later a male Oriental Pied Hornbill appeared near the bulbuls. The bulbuls got further agitated and started divebombing and attacking the hornbill. Their aggression didn't seem to affect the hornbill in any way, and it went into the understory.

A few seconds later, it flew out of the understory and perched on a branch of a nearby tree. It held, in its beak, a Black-crested Bulbul nestling [51]. The hornbill ignored the continuous distress calls of the bulbuls and gulped down its prey before flying away.



51. Oriental Pied Hornbill with Black-crested Bulbul nestling.

The Black-crested Bulbul is known to make nests c.30–250 cm above the ground. These are cup-shaped, comprising fine twigs, leaves, bark, and fiber, and well hidden in a thick bush or sapling (Ali & Ripley 1983). We assume the hornbill may have discovered the nest's location based on the bulbuls' movements, while they provisioned their offspring.

While Oriental Pied Hornbills are primarily frugivorous, small animals have been recorded as part of their diet. Goyal & Saxena (2018) reported an instance of birds hunting an adult Common Myna *Acridotheres tristis* but failing to consume it. They have been known to hunt and consume insects, fishes, reptiles, small birds and mammals (Ali & Ripley 1983; Poonswad et al. 1998; Kinnaird & O'Brien 2007; Rahman et al. 2019). Rahman et al. 2019 also reported bird chicks to be a part of the hornbill's diet. Infanticide-cannibalism has also been reported in this species (Chan et al. 2007; Ng et al. 2011). This record of it hunting and feeding on the Black-crested Bulbul nestling is further proof to its propensity to feed on birds.

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References

Ali, S., & Ripley, S. D., 1983. Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka. Compact ed. Delhi: Oxford University Press. Pp. i–xlii, 1 1., pp. 1–737, 56 ll.