

# THE STATUS AND HISTORY OF THE BLACK TERN *CHLIDONIAS NIGER* IN CHILE

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## ABSTRACT

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Three Black Terns *Chlidonias niger* were observed and photographed in northern Chile in November 2018. Here, I summarize the occurrence of this species in Chilean territory and clarify the record for a specimen collected in 1859 during the *Novara* expedition: a typo in the original report led to a series of transcription errors that were perpetuated for ~150 years.

**Key words:** Black Tern, *Chlidonias niger*, southern distribution, Chile

The Black Tern *Chlidonias niger* is a seabird that breeds in the Northern Hemisphere, is widespread in North America and Europe, and exhibits post-breeding southward movements along the eastern and western coasts of the Americas. Its winter distribution in the Americas has been described as “from Mexico (rarely) to Panama S to Peru, and through the Gulf Coast to N South America; being accidental in Chile and Argentina” (Gochfeld & Burger 1996).

August von Pelzeln had the task of describing the birds collected during the voyage of the frigate *Novara* when it circumnavigated the globe (1857–1859). In his report, he mentioned the collection of *Hydrochelidon plumbea* (= *Chlidonias niger*) (NMW 38679) and he wrote “Chile - Ein Weibchen im See gefangen”, which translates to “Chile - a female caught in a lake”. No other information was provided (von Pelzeln 1865). The original label (Fig. 1) and the catalogue entry indicated “in See gefangen auf der Reise von

Valparaiso”, meaning that the bird was collected on the high seas during the trip from Valparaiso, Chile [to the Strait of Magellan], rather than on a lake or near the coast (H.-M. Berg pers. comm.). The *Novara* left Valparaiso on 11 May 1859. According to the ship track (von Pelzeln 1865), they were quickly moving south on 12 May, but between the 15th and 17th, they travelled west at a much reduced speed. Likely, winds had weakened, which facilitated the collecting of birds at sea; otherwise it would have been an extremely difficult task. The potential collection location would have been between 36°S and 37°S (off Concepción), between 77°W and 78°W, and at least 333 km from the coast. The specimen obtained was in the process of acquiring its breeding plumage (Fig. 1) and, without doubt, it was a straggler—instead of moving north to breed, it went south.

The spelling error of “im See gefangen” instead of “in See gefangen” in von Pelzeln’s 1865 publication concerning the collecting locality led to a series of misinterpretations. Using von Pelzeln’s citations as justification, Sclater (1867) included Black Tern on his list of Chilean birds under the name *H. fissipes*. This was based on the specimen reported by von Pelzeln as *H. plumbea*, and no other comment was added. Reed (1896), using the name *H. nigra*, mentioned only that it was not a common bird (information most likely based on Sclater). Hellmayr (1932) used the name *Chlidonias nigra surinamensis* and indicated that the only record of the Black Tern for Chile was collected on a lake in the vicinity of Santiago. Hellmayr (1932) regarded the species’ status in Chile as an “occasional winter visitor”, but the species would have been a summer visitor to Chile, not a winter visitor. Hellmayr misinterpreted von Pelzeln’s account, however, by adding the speculation that “the specimen was shot in the vicinity of Santiago”, a statement that led to a series of transcription errors that were perpetuated in the literature for over 150 years. The *Novara* naturalists visited Santiago and its surroundings in 1859 when there were several small swampy lakes around the city. The visit to Santiago by the naturalists combined with the text, which seemed to indicate to Hellmayr that the specimen was secured on a lake, led him to conclude that the vicinity of Santiago was the collecting locality. In their publications covering



**Fig. 1.** Specimen label of the Black Tern collected by the *Novara* expedition in Chile (NMW 38679). Courtesy of Natural History Museum Vienna/Bird Collection, photograph by H.-M. Berg.

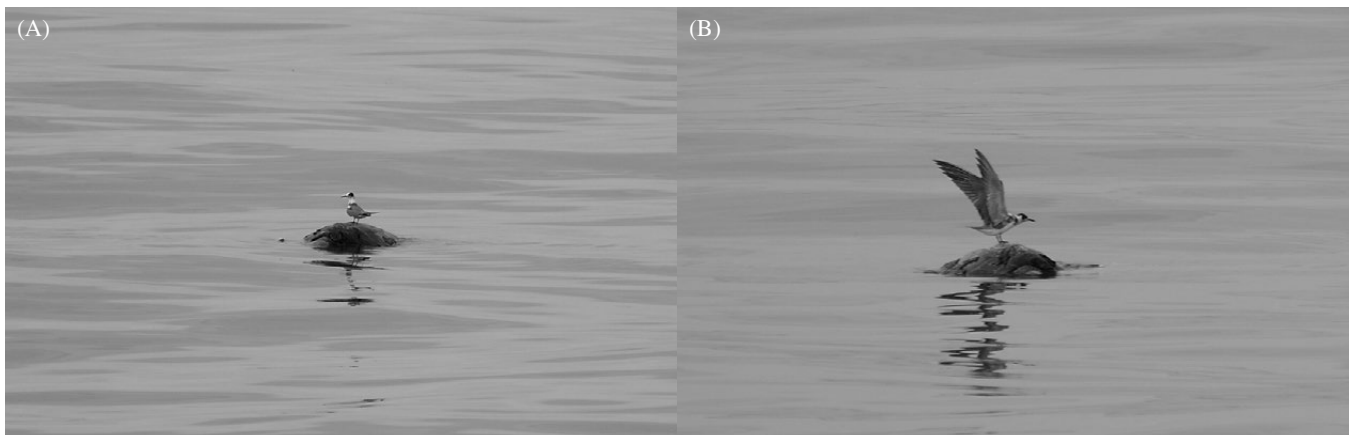
Chilean birds, Murphy (1936), Housse (1945), Hellmayr & Conover (1948), Goodall *et al.* (1951), and Philippi (1964) added no new information but simply repeated that a bird was captured on a lake near Santiago, citing Hellmayr (1932). More recent authors summarizing the Chilean avifauna all followed Hellmayr's statements as well—e.g., Araya & Millie (2000), Jaramillo (2003), and Marín (2004). To further confuse things, Johnson (1967) added that “a single specimen in the Santiago Natural History Museum, was taken many years ago on a lake close to this city” [referring to a specimen of which there is no record in the museum's catalogues, exhibitions, or collections]. Furthermore, Couve *et al.* (2016) indicated that the specimen was collected during winter in a swamp near Santiago. This ignored Barros's attempt to straighten out the record, in which Barros misread (or misinterpreted or both) the actual published and unpublished information (Barros 2015). As examples: a) Hellmayr (1932) never mentioned that a bird was captured in winter [an assertion misinterpreted by many], but only noted in the range subheading that it was an “occasional winter visitor”; b) von Pelzeln (1865) did not mention the capture of the bird at sea, but he wrote “im See gefangen”, which translates to “caught in a lake”; c) the specimen label does not include a date, but the date was mentioned in the entry catalogue (inventory); and d) the label does not mention “near Valparaiso”, but only indicated collection on the high seas after departing from Valparaiso (see above and Fig. 1). Barros (2015) also mentioned an eBird sighting made by Jaramillo & Matus in February 2009 on the northern section of Chiloe Island, which is more than 500 km south of von Pelzeln's specimen and 3000 km south of the individuals observed near the town of Arica (*ca.* 18°28'S); however, we were unable to obtain this record from the database. There are only three accessible reports mentioned on eBird for Chile, at least one of which is mentioned by Barros (2018) (see also below).

Hughes (1988) mentioned that the Black Tern is an irregular visitor on the coastal lagoons of the Mollendo district of Peru, being absent in some years and very abundant in others. With that in mind, it was correctly suggested by Howell (2007) that the species should be expected to occasionally reach northern Chile, and he reported a sighting of a single individual on 23 October 1999 *ca.* 50 km west of Arica. The next record for Chile was a photograph of two individuals that was taken on 22 October 2016 by Fernando Diaz off Arica and reported by Barros (2018). As far as I know, there are no further published sightings of this species for Chile. Two other

unpublished records exist on eBird, one reported by I. Tejada on the same trip as F. Diaz and the other reported by C. Moreno on 22 May 2017, also off Arica.

During passages along the Chilean coast by vessel (from south to north in March 2018 and March 2019 and from north to south in November 2018), we encountered this species first on 15 March 2018 in Peruvian waters at *ca.* 17°52'S, very slightly north of the Chilean border, and I photographed a single bird perched on a floating log. The bird was about 43.5 km from shore and the water temperature was 20.6 °C. On 23 March 2019, we encountered many hundreds of Black Terns at 15°56'S, 76°06'W, *ca.* 126 km south-southwest from San Nicolas (Peru), and we recorded a water temperature of 21.3 °C. The birds were roosting on *Sargassum* “islands” on the western edge of the Peruvian Trench. We passed close enough to photograph 13 of those islands, each of which hosted up to 49 resting terns. I counted 337 terns in total on those 13 islands, with most in basic plumage but some entering their alternate plumage. Many more islands were evident in the distance. On the southbound trip, I observed and photographed three lone Black Terns on 16 November 2018, and all were perched on the carapace of floating loggerhead sea turtles *Caretta caretta* (Fig. 2A, 2B). In these encounters, the farthest position from land was 19°29'S, 70°59'W (*ca.* 74 km west of Pisagua) and the closest was 19°45'S, 70°40'W (*ca.* 55 km west of Pisagua and 140 km south-southwest of Arica). Water temperatures were 21.5 °C.

All recent Black Tern encounters in Chilean waters have been well offshore and in warmer waters. The bird collected in May 1859 by members of the *Novara* expedition was in cooler waters but well offshore and far from the main stream of the cold Humboldt Current. The year 1859 was hot and very dry in Chile, and the years immediately before and after were rainy (Ortlieb 1994). Coincidentally or not, the species was reported in 1999, 2016, 2017, and 2018, which were all dry years associated with La Niña events. During El Niño, the species may be more abundant in these waters, reaching further south. The individuals described here were observed in the months of October, November, March, and May. The *Novara* specimen (from May 1859) and some birds observed in March 2019 were entering their alternate or breeding plumage, while all other adult birds seemed to be in non-breeding plumage. In summary, the most recent data suggests that Black Terns visit Chile in warmer waters and well offshore, and it might well be a regular summer visitor rather than an occasional one or a vagrant.



**Fig. 2.** Two Black Terns observed on 16 November 2018 at about (A) 74 km and (B) 55 km west of Pisagua, Tamarugal province, Chile.

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