

FIRST RECORD OF *Fregetta tropica* (PROCELLARIIFORMES: HYDROBATIDAE) ON THE COAST OF RIO GRANDE DO SUL, BRAZIL

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Black-bellied Storm Petrel *Fregetta tropica* (Gould 1844) is a small member of the order Procellariiformes (Sick 1997). It has nocturnal habits and is difficult to visualize and count (Wahram 1990). The reproductive area of this species is restricted to islands in the circumpolar Antarctic region, and when it is not reproducing it can be found close to the equator, in the Atlantic, Indian and Pacific oceans (Beck and Brown 1971, del Hoyo *et al.* 1992). The oldest record of *F. tropica* in Brazil (5° S / 30° W) was reported by Sperling (1872-75) during a journey to Tristão da Cunha, but this was based only on offshore sightings (Sperling 1872). To the state of Rio Grande do Sul (RS) there is a single record of an individual of *Fregetta* sp. in September 1990, but due to its advanced state of decomposition the identification was compromised. Only the skull was collected and deposited in the collection of the Museum of Zoology of the Universidade do Vale do Rio dos Sinos (Belton 1994). A dead *F. tropica* on the coast of Bahia was considered to be the first record of this species in Brazil (Lima *et al.* 1997). Although it occurs in Brazil (del Hoyo *et al.* 1992) the species has only been mentioned as occurring in the regions of the São Pedro e São Paulo Archipelago and Fernando de Noronha (Teixeira *et al.* 1986). Sick (1997) also observed a Black-bellied Storm Petrel and a White-bellied Storm Petrel *Fregetta grallaria* (Vieillot 1818) between Rio de Janeiro and the São Pedro e São Paulo Archipelago, however data for describing the distribution of this species in Brazil are still lacking (Vooren & Brusque 1999).

There have been a series of errors regarding the records and concrete locations of this species. These errors have been published in general works

and were based on imprecise records in which original data was erroneously advertised (Olmos 2000). A legitimate specimen from January 1847, which was placed in the Natural History Museum at Tring, was ignored but should be considered as the first record of this species in Bahia (12°S 30° 30'W), Brazil, instead of Lima *et al.* (1997). The Black-bellied Storm Petrel *F. tropica* is often confused with the White-bellied Storm Petrel *F. grallaria*, and also with Wilson's storm-petrel *Oceanites oceanicus* (Kuhl 1820) due to its similar color patterns and morphology. This may have skewed records of *F. tropica* along the Brazilian coastline. The morphological similarity between species could have influenced the decision of authors such as Blake (1977), who did not include the Brazilian coast in the distribution of *F. tropica*, and Bencke *et al.* (2010), who did not include this species in the RS species list. The *F. tropica* individual was found on 27th May 2013 between 9:00 and 10:00 am. (Figure 1 and 2). The RS coast is an important feeding and resting area for many marine birds from the northern and southern hemispheres, particularly those from Antarctica (Petry *et al.* 2002, Petersen & Petry 2011, Petry *et al.* 2012), due to the Subtropical Convergence in the area. This zone is created by the meeting of two ocean currents (the warm Brazil Current and the cold Malvinas Current), which creates a nutrient-rich environment (Vooren & Brusque 1999). Census of pelagic birds between RS and Rio de Janeiro (RJ) performed on the Brazilian navy ships returning from Antarctica are another monitoring activity performed by our team. During this census, several species, including *F. tropica*, have been documented within 60 nautical miles of the Brazilian coastline. Factors such as weather,

distance and light determine which marine bird species appear in pelagic censuses and species such as Black-bellied and White-bellied Storm Petrels can be easily confused. All of the supposed past records that did not include samples of biological material, skins or photographs are almost impossible to use to diagnose the determination of individuals such as *F. tropica*. However, based on the data cited, we can conclude that this species is a rare visitor, and increased observation effort would increase observations of individuals and confirm previous records. Based on this note, we believe that this species should definitively be included in the list of species of RS, Brazil.



Figure 1. *Fregetta tropica* individual found impaired on the Rio Grande do Sul coast. (Photography: César Santos).



Figure 2. Ventral side of the *Fregetta tropica* found on the Rio Grande do Sul coast. (Photography: César Santos).

MATERIAL AND METHODS

This note presents photo documentation of a living *F. tropica* on the RS coast (30°39'01.9"S / 50°26'33.1"W), Brazil. Using a motor vehicle we sampled 120 km of sandy beaches between Balneário Pinhal (30°14'55"S / 50°13'47"W) and Mostardas (31°10'52"S / 50°50'03"W) in the mid-coastal region of Rio Grande do Sul state in southern Brazil. The route was done at an average speed of 30km/h. These surveys have been performed monthly since the 1990's and all live and dead species of birds have been documented.

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