



## Scientific Note

# Hawksbill turtle (*Eretmochelys imbricata*) (Linnaeus, 1766) found alive on the middle coast of Rio Grande do Sul, Brazil

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**Abstract.** The record of a live individual of Hawksbill Turtle on the coast of Rio Grande do Sul provides data on species distribution as well as a probable use of southern Brazil by the species.

**Key words:** geographical distribution, sea turtle

**Resumo.** Tartaruga-de-pente (*Eretmochelys imbricata*) (Linnaeus, 1766) encontrada viva na costa central do Rio Grande do Sul, Brasil. O registro de um indivíduo vivo de tartaruga-de-pente no litoral do Rio Grande do Sul contribui com dados sobre a distribuição da espécie bem como um provável uso da região sul do Brasil.

**Palavras chave:** distribuição geográfica, tartaruga marinha

The hawksbill turtle, *Eretmochelys imbricata* (Linnaeus, 1766; Cheloniidae) has a worldwide distribution and is mainly found in tropical regions, usually around coral reefs. It migrates long distances to find food (Bjørndal 1997) and to reproduce (Mortimer & Donnelly 2008).

In Brazil, *E. imbricata* occurs from Ceará to São Paulo (Marcovaldi & Laurent 1996) and possibly along the entire Brazilian coast (Marcovaldi & Marcovaldi 1999, Bérnils & Moura-Leite 2010). According to Sanches & Bellini (1999) and Marcovaldi *et al.* (1998) their main feeding areas are the archipelagos of Fernando de Noronha (PE) and Atol das Rocas (RN). Existing records of breeding and nesting areas are mainly in the north and northeast during late spring and summer (Mascarenhas *et al.* 2004, Marcovaldi *et al.* 2007, Santana *et al.* 2009, FAO 2010). According to the International Union for Conservation of Nature - IUCN (2010) *E. imbricata* is classified as critically endangered globally and it also appears as endangered on the Brazilian list of threatened fauna

(MMA 2002). The decline of these populations is related mainly to the degradation of marine and coastal habitats and bycatch in fishing nets (Watson *et al.* 2005, Marcovaldi & Chaloupka 2007), which is a major cause of death for both juveniles and adults (Lutcavage *et al.* 1997, Oravetz 1999, Spotila *et al.* 2000), among other factors. During winter and spring commercial fishing increases in intensity in the south, consequently resulting in increased interactions with anthropogenic and industrial fisheries (Junqueira *et al.* 2005). This note presents information on the occurrence of an *E. imbricata* individual found alive on the coast of Rio Grande do Sul (RS), Brazil.

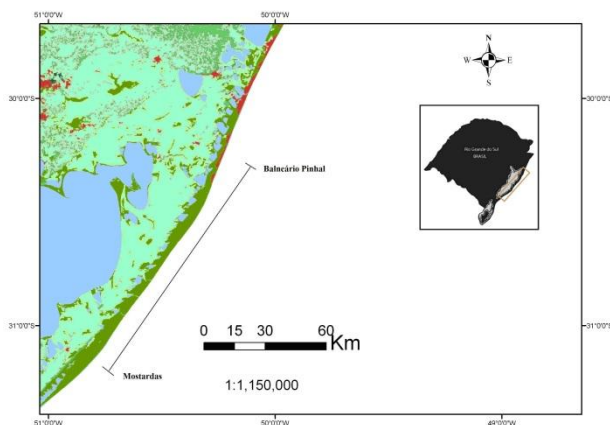
During the period of October 2007 to May 2010, 30 inventories were carried out along 120 km of beach between the towns of Balneário Pinhal (30°14'55"S / 50°13'47"W) and Mostardas (31°10'52"S / 50°50'03"W) (Figure 1) to search of dead turtles. All carcasses were registered during a driving inventory, on May 5<sup>th</sup>, 2010, an individual *E. imbricata* was seen alive (Figure 2), approximately

10 m from the swash zone of the beach, 30°52'49.0"S and 50°36'24.0"W, in Mostardas. The individual showed no signs of apparent injuries. The curved carapace length (CCC), measured with a measuring tape, was used as a parameter to define the stage (juvenile or adult) (Sanchez & Bellini 1999, Bugoni *et al.* 2001). The CCC measured 33 cm, indicating that it was a juvenile.

The Rio Grande do Sul state coastline has a great diversity of marine species since it is located in the region of the Subtropical Convergence, which is characterized by the encounter of two ocean currents, the warm Brazil Current, and the cold Malvinas/Falkland Current. This encounter promotes the enrichment of the sea water, which, associated

with other phenomena like localized upwelling, increase the level of primary productivity, providing food for many animal species. According to MMA (2002) and past studies (Pinedo *et al.* 1996, Bugoni, *et al.* 2003, Monteiro 2004) the coast of RS is an area of extreme biological importance for marine turtles, as it provides significant feeding and development site for species such as, *Chelonia mydas*, *Caretta caretta*, *Dermochelys coriacea*, *Lepidochelys olivacea* and *E. imbricata*.

There are no confirmed records about the presence of *Eretmochelys imbricata* in Uruguay or Argentina (Frazier 1984, Albareda *et al.* 2003), thus the Rio Grande do Sul coastline may be considered the southern limit for the distribution of this specie.



**Figure 1.** Study area between Balneário Pinhal and Mostardas on the coast of Rio Grande do Sul, Brazil. Picture: Rafael G. de Moura.



**Figure 2.** Young individual of *Eretmochelys imbricata* found alive, on the coast of Rio Grande do Sul, Brazil.

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