

First record of a humpback whale, *Megaptera novaeangliae* (Borowski, 1781), stranding in Pará State, Northern coast of Brazil

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(With 1 figure)

Humpback whales (*Megaptera novaeangliae*) are found worldwide in all major oceans. They occur primarily in coastal and continental shelf waters and are highly migratory. It feeds during summer in mid-and high latitudes and mates and calves during winter in tropical or subtropical waters, often concentrated around islands or reef systems (Clapham and Mead, 1999).

Current information on the distribution of humpback whales in Brazil shows that the species is abundant at Abrolhos Bank 16° 40 and 19° 30 S (Martins et al., 2001; Morete et al., 2003), northeastern Brazil. Occasional sightings and strandings have been reported from Rio Grande do Sul 34° S to Maranhão State 2° S (e.g. Pinedo, 1985; Lodi, 1994; Siciliano, 1997; Furtado-Neto et al., 1998; Pizzorno et al., 1998; Severo et al., 2004; Magalhães et al., 2008). The present paper reports the northern most record of a humpback whale (*M. novaeangliae*) stranding in Brazilian coast.

On October 2008, a whale carcass was found by fishermen on Peruquara beach (00° 42' 26,0" S and 46° 57' 53,4" W), Quatipuru, Pará State, northern coast of Brazil. The stranding area consist of a coast of indentation, formed by lowlands with numerous indentations (for) corresponding to the outfall of the rivers and the various islands there (SUDEPE, 1975), forming a series of small estuaries (MMA, 1996). The continental shelf is wide, with islands and sand banks that are periodically flooded by the sea because the tidal amplitude which together with the Golfão Maranhense is the largest of Brazil (8 m) (SUDEPE, 1975). The northern region is highly influenced by the North Brazil Current which carries the waters of the outer continental shelf and slope to the northwest (MMA, 2006).

The whale carcass measured 10 m long and was in advanced state of decomposition (Code 4 according to Geraci and Lounsbury, 2005), with no head or flippers. The species identification was held by the number of throat grooves, body size and mainly by analyses of the scapula. According to Clapham and Mead (1999), the scapula of the humpback whale is extremely diagnostic,

lacking the acromion and having a very vestigial coracoid process. In all other cetaceans, both of the processes are strikingly large and well developed, especially the acromion. Also, Leatherwood and Reeves (1983) emphasize the robust body of the humpback whale in comparison with the other baleopterids and gives 14-35 throat grooves for this specie, extending to the nave. The specimen stranded in Pará had 27 throat grooves and the scapula shows all the characteristics mentioned above, measuring 130 cm in length and 84 in width (Figure 1).

The whale's cause of death was not identified, although tissue samples were collected for further analysis. Nevertheless, seismic prospecting surveys were held in Pará-Maranhão Basin on the stranding period (unpublished information), a fact that must be observed with attention since harmful effects of this activity on marine mammals are not yet clear (Parente, 2008).

The present report of this species in this region, in addition with strandings that occurred along Ceará (Furtado-Neto et al., 1998), Piauí (Severo et al., 2004)



Figure 1. Right scapula of the humpback whale (*Megaptera novaeangliae*) stranded on Peruquara beach, northern coast of Brazil (130 × 84 cm), evidencing the vestigial coracoid and the absence of the acromion.

and Maranhão State coast (Magalhães et al., 2008), may indicate a possible increase of the humpback whale population along the Southwestern Atlantic, probably extending their distribution area towards the northern coast of Brazil, like others authors supposed (Lodi, 1994; Andriolo et al., 2006; Magalhães et al., 2008; Rossi-Santos et al., 2008). Although it is not yet clear whether these areas correspond to the typical range of the species, there are signs that with population growth it is reoccupying areas further north, where it should be their historical occurrence (Milton Marcondes, personal communication). Dutch whalers present historical records of sightings and catches of humpback whales off the northern Brazilian coast in the first decades of the twentieth century (Slijper and Van Utrecht, 1959 apud Siciliano et al., 2008).

Genetic analyses will be conducted to identify the stock of this specimen and verify if it is from a Southern or Northern population, although the date of the stranding (October) suggests the former alternative (stock A). Nevertheless, this is the northern most record of the species in the Brazilian coast.

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