

SHORT COMMUNICATION

FIRST REPORTED STRANDING OF A DWARF MINKE WHALE, *Balaenoptera acutorostrata* (LACÉPÈDE, 1804), ON THE COAST OF CEARÁ, NORTHEASTERN BRAZIL

Primeiro encalhe documentado de uma baleia-minke-anã, *Balaenoptera acutorostrata* (Lacépède, 1804), na costa do Ceará, Nordeste do Brasil

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ABSTRACT

This paper reports the first stranding of a dwarf minke whale, Balaenoptera acutorostrata, in the State of Ceará, Northeastern Brazil. The animal stranded in advanced state of decomposition on Tabuba Beach (03°38'08"S, 38°42'21"W) on July, 2005. The specimen identification was based on the analyses of skull morphological features and morphometrical characters. This is the second documented record of a dwarf minke whale stranding in latitudes lower than 05°00'S.

Key words: reported stranding, dwarf minke whale, Balaenoptera acutorostrata, distribution, Ceará State.

RESUMO

Este trabalho registra o primeiro encalhe de baleia minke anã, Balaenoptera acutorostrata, no Estado do Ceará, Nordeste do Brasil. O animal encalhou em avançado estado de decomposição na Praia da Tabuba (03°38'08"S, 38°42'21"W), em julho de 2005. A identificação da espécie foi realizada com base nas características morfológicas e morfométricas do crânio. Este é o segundo encalhe documentado da espécie em latitudes menores de 05°00'S.

Palavras-chaves: registro de encalhe, Balaenoptera acutorostrata, baleia minke anã, distribuição, Estado do Ceará.

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In the Southern Hemisphere, minke whales occur from the Antarctic Continent to Australia, New Caledonia, New Zealand, Argentina, Uruguay, Brazil, Chile, Peru, South Africa, Congo, Namibia, Gabon, Angola, Mozambique, and Madagascar (Stewart & Leatherwood, 1985; Arnold *et al.*, 1987; Arnold, 1997). The taxonomy of these whales has been discussed for several decades, and recently two species were recognized in the Southern Hemisphere (Zerbini & Simões-Lopes, 2000; Reeves *et al.*, 2003): the dwarf minke whale, *Balaenoptera acutorostrata* (Lacépède, 1804), small and with white flippers; and the Antarctic minke whale, *Balaenoptera bonaerensis* (Burmeister, 1867), larger and without a white patch on the flippers.

In South America, minke whales are relatively common in Brazil, Uruguay and Argentina (Baldas & Castello, 1986; Zerbini *et al.*, 1996 and 1997; Hassel *et al.*, 2003). In Brazil, data collected during the whaling period (Williamson (1975) and a review on strandings and sightings of minke whales (Zerbini *et al.*, 1997), indicated that these whales usually occur from Paraíba, northeastern region (~5°S), to Rio Grande, southern Brazilian region (~32°S). Nevertheless, recently Meirelles & Furtado-Neto (2004) reported a stranding of an Antarctic minke whale on the coast of Ceará, at 03°32'S; and Magalhães *et al.* (2007), recorded a stranding of a dwarf minke whale in Maranhão, at 02°44'S. This paper reports the first stranding of a dwarf minke

whale, *B. acutorostrata*, on the coast of Ceará, Northeastern Brazil.

On July 2005, a baleen whale (~7.0 m total length) stranded in Tabuba Beach, central coast of the State of Ceará (03°38'08"S, 38°42'21"W) (Figure 1). The rostrum was broken and, due to advanced decomposition, it was not possible to verify the body colour pattern. The animal (REMANE#02C0150/265) had several shark bites on the pectoral fins and ventral surface. The skull and other skeleton parts were collected and placed in the AQUASIS - Associação de Pesquisa e Preservação de Ecossistemas Aquáticos collection.

In the laboratory, the skull was properly cleaned and its morphological features and morphometrical characters were analyzed (Table I). According to literature (*e.g.* Zerbini & Simões-Lopes, 2000), the species was identified as a dwarf minke whale. The diagnostic characters observed were: exposed interparietal bones in the center of the vertex; supraoccipital bones curved backwards in the mid-line and its anterior margin fused with the interparietal bones; innermost margins of the parietal bones connected to the lateral edges of the interparietal bones (Figure 2A); elongated and thin hamular processes of the pterygoid bones (Figure 2B); and straight contour of the anterior border of the frontal bones (Figure 3). Skull sutures were all obliterated, indicating that the animal was physically mature (Class III, according to Zerbini & Simões-Lopes (2000).

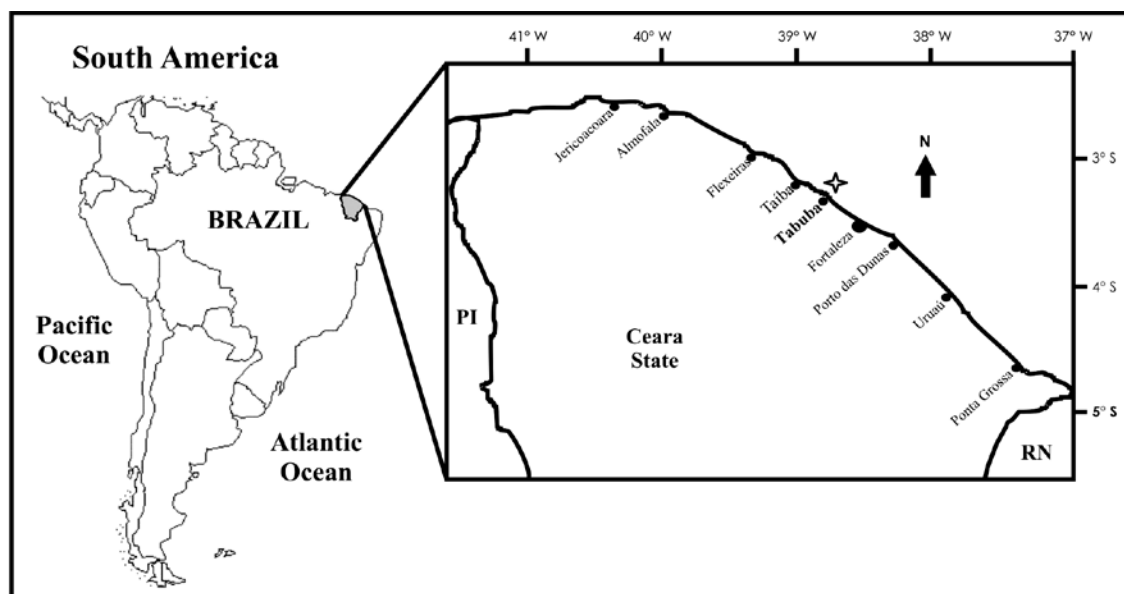


Figure 1 - Dwarf minke whale stranding beach in Ceará State, Northeastern Brazil.

Table I - Skull measurements of the dwarf minke whale stranded in Ceará state, compared with the intervals indicated by Zerbini and Simões-Lopes (2000) for cranial maturity Class III individuals.

Measurement (mm)	Class III dwarf minke whale *	Stranded in Ceará State
Length of nasals (median)	120.20 - 190.7	170
Breadth of nasals (anterior)	85.55 - 107.91	120
Breadth of frontals across nasals	181.54 - 257.81	170
Breadth of skull (squamosal)	800.100 - 969.24	875
Breadth of skull (frontal)	754 - 896.59	840
Breadth of skull (exoccipital bone)	559.26 - 765.88	610
Breadth across occipital condyles	151.23 - 193.69	155
Height of occipital condyle (R)	83.08 - 115.45	100
Height of occipital condyle (L)	77.43 - 113.98	95
Breadth of foramen magnum	62.35 - 87.90	80
Height of foramen magnum	49.01 - 92.17	90
Length: foramen magnum to vertex	340.02 - 441.65	390

* Fonte: Zerbini & Simões-Lopes (2000).

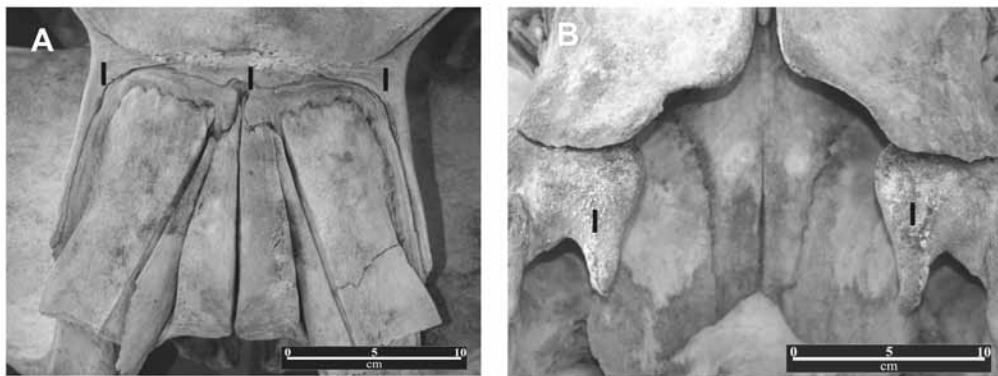


Figure 2 - The skull of the studied whale (REMANE#02C0150/265). (A) dorsal view, showing vertex and the characters that distinguish the two species of minke whales from the Southern Hemisphere (I = Interparietal, P = Parietal) (scale = 10cm); (B) ventral view, showing the hamular processes (H) (typically long and thin) of the pterygoids bones.



Figure 3 - Dorsal view of the skull of the studied whale (REMANE#02C0150/265), showing the straight contour of the anterior border of frontals (F), feature of dwarf minke whales skull (scale = 20 cm).

Some facts may indicate that the species is not common in low latitudes, for example, the low number of confirmed dwarf minke whales captured during the whaling period in Costinha, Paraíba (~ 07°S) (da Rocha & Braga, 1982; Singarajah, 1984) and the small number of strandings in Northeastern Brazil (Zerbini *et al.*, 1997). After the commercial whaling period, the majority of efforts to search for baleen whales in Northeastern Brazil were made in areas where their presence was already known, in latitudes higher than 05°00S (*e.g.*, Zerbini *et al.*, 2000). However, this stranding record and the one in Maranhão (Magalhães *et al.*, 2007) may suggest that dwarf minke whales can occur in more equatorial latitudes in the Southwestern Atlantic Ocean.

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