

PRESENT STATUS OF HUMPBACK WHALES IN THE CAPE VERDE ISLANDS

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Abstract

During spring 1999 a research cruise around the Cape Verde Islands (Northeast Atlantic Ocean) was made on board the 53 meter R/V Corvette. The goals of the project were to record observations of the humpback (*Megaptera novaeangliae*) during a period of 4 weeks from the end of February to the end of March, 1999. Total sighting effort of 245 hours, covering 1100 nautical miles around the islands of Sal, Boavista, Maio, and partly Santiago. A total of 45 encounters (Group size 1 to 30) lasting nearly 67 hours allowed us to establish a catalogue of fluke photographs of 21 individuals. A preliminary comparison with the North Atlantic Catalogue revealed no photographic matches. Thus the feeding ground origin of these whales remains unknown. Eight (38%) of the 21 identified individuals were resighted over periods of up to 10 days during the study period. This rate of resighting is much higher than that previously recorded from the major grounds of the West Indies (Mattila, D.K. & Clapham, P.J. 1989; Mattila et al. 1989; Mattila et al. 1994) suggesting a certain degree of residency within the archipelago. Humpback whale songs were recorded on numerous occasions and female humpbacks with small calves estimated at less than 5 m have been observed during February, March and April (1991, 1995 and 1996) suggesting that the waters of the Cape Verde Islands archipelago are important for humpback whale mating and calving in the Northeast Atlantic.

Introduction

The Cape Verde Islands are situated about 400 nm west of Dakar (Senegal), between 14th and the 18th degree North and 22nd and 26th degree West (Fig.1). The presence of Humpback whales in the waters around the Cape Verde Islands has been documented since the early times of whaling (Mitchell and Reeves, 1983), but there is a lack of data regarding the present status of the capeverdean Humpbacks (Reiner et al 1996). Even during the Year of the North Atlantic Humpback (YONAH) the Cape Verde Islands were not sampled project (Smith et al. 1999). Although it has been speculated, that the animals which have been observed here during winter months (February until April) are part of the North Atlantic Humpback whale stock (Reiner et al 1996), until now there is no direct proof of it. During the winter seasons of 1990, 1995, 1996 and in the spring of 1999 efforts were made to obtain fluke ID-photographs, to document the behaviors and record the songs of the Humpbacks.

Material and Methods

During 1990, '91, '95, '96 marine mammal surveys were undertaken using a 4.5 meter inflatable boat based in Santa Maria, Sal Island. These surveys to document humpback whales and other cetaceans

were conducted January through May (Reiner et al. 1996). Additional surveys were conducted aboard fishing vessels and private motor vessels in the Boavista region during 1995 and 1996. In 1999, the field season lasted 4 weeks (February 26th until March 25th) with some additional observations during the days of April 6 till 8. The observations were made on board of a 53 m long steel hull motor vessel, the R/S Corvette (Fig. 2), from observation platforms situated at 6 and 8.5 meters above sea level. ID photographs were shot using a reflex camera, with a 300 mm zoom and Agfapan 400 B/W film. Recordings were made using a Sony TCD-D8 DAT and Nagra IV SJ recorder, B&K 8100 microphone and a preamplifier made by Sonartechnik

The sightings

During 1990, 1991, 1995, 1996 effort was concentrated around Santa Maria, and Baia de Murdeira at Sal Island. Several trips between Santa Maria (Sal) and Sal Rei (Boavista) documented humpback sightings in the region, however no fluke photographs were obtained during these surveys, between the two islands. During 1999 it was possible to survey a much larger portion of the archipelago (Fig.3), but efforts were concentrated around the island of Boavista, where the largest concentration of whales was observed: 42 encounters (Group size 1 to 30) lasting nearly 67 hours. The animals were located in the western and south-western part of the island, in water-depths ranging from 40 to 100 meters, and were apparently indifferent or slightly evasive towards the ship.

The Humpbacks seen in the western part of the island were moving continuously: Only in one occasion a whale stopped and lingered close to the ship, turning sideways, as if to have a closer look at it. It must be said, that in this region there is a fair movement of ships, which are not aware or do not consider the presence of these cetaceans when they are navigating. Therefore the whales might have acquired an evasive behavior towards ships. During 11 out of 42 encounters a single whale was observed, but in the western part the whales were seen to travel very often in pairs (9 encounters out of 42, even when >2 whales were in the area). In one occasion several groups of 5 to 6 animals were seen simultaneously: At the beginning the behavior was calm, but during the morning pectoral slaps and tail slaps started and were produced for periods of over a minute. Apart from one occasion, no songs were heard in this location.

In the south western part, in front of the "Curallinho" the animals were not so obvious, usually they were not associated with one another, or the movement might be described as "chasing" one another. All recordings of songs, apart from one occasion, were done in this region.

Six Humpbacks were sighted during 3 encounters around the island of Maio, but the animals were seen only briefly, no pictures could be taken and no attempt was made to listen if they were acoustically active. No Humpbacks were encountered around the islands of Sal or Santiago during 1999.

ID Photographs

A total of 21 new animals were identified in 1999 by fluke ID photographs (Fig. 6). These, together with the 3 pictures taken in previous campaigns, adds up to a total of 24 single animals identified until now in these islands. Preliminary comparisons with the North Atlantic Catalogue showed no matches.

Recordings of songs

Published data on Humpback songs stems from recordings done 20 years ago (Winn et al. 1981). Unpublished recordings have been made in the meantime (Reiner et al. 1996, Wenzel, personal comm.), but no comparison of these recordings with songs from the Caribbean was made. During the 1999 campaign most of the recordings were made in the SW corner of the Island of Boavista. Two songs of one of these singers were recorded under good conditions. Only on one occasion, on April 8th, humpback songs were recorded along the western coast of the Island, in front of Sal Rei. The total listening effort was about 30 hours, and the recordings add up to about 200 minutes, out of which about 15% are of good quality.

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