

Humpback Whales from the Abrolhos Bank, Brazil: 11 Years of Photoidentification Studies

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The Abrolhos Bank, off the northeast coast of Brazil is the main known breeding ground for the humpback whale in Southern Western Atlantic Ocean. Projeto Baleia Jubarte has been conducting boat surveys for photoidentification studies since 1989. From 1989 to 1999, eight hundred and one (801) different humpback whales were identified through the pigmentation patterns of the ventral flukes. Among the identified whales, 98 (12.2%) were sighted on more than one breeding season during the study period - 72 whales returned in two different seasons; 18 in three seasons; 4 in four seasons; 2 in five seasons; 2 in 6 seasons. The mean residency of whales in the study area for the data obtained between 1995 and 1999, ranged from 10.4 days (1998) to 23.3 days (1995). The maximum residency was observed for a female in 1999, which spent at least 71 days in the study area. The season with the greatest number of resighted whales (n=20) was 1998. Average index of coloration patterns (Rosenbaum *et al.*, 1995) obtained was 2.41. Photographic data collected opportunistically in 1997 and 1999 and during vessel surveys in 2000 off Salvador City (approximately 550 Km northern of the Abrolhos Archipelago) resulted in 15 photoidentified individuals. Three matches of whales previously sighted in the Abrolhos Bank were found, leading us to suppose that the Abrolho's humpbacks use other areas in the Brazilian coast. The photographic data from the Abrolhos Bank is being used in mark-recapture models to determine the abundance of whales in the study area. For a more precise estimation, the distribution and the movement of the whales through its range need to be considered. Therefore, we reiterate the importance to continue the photoidentification cruises in these two areas.