A NOVEL BEHAVIOR OBSERVED IN HUMPBACK WHALES ON WINTERING GROUNDS AT ABROLHOS BANK (BRAZIL) AND THE COMOROS ARCHIPELAGO (SOUTHEASTERN AFRICA)

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We describe a novel behavior, termed 'tail-up', observed in humpback whales on wintering grounds on Abrolhos Bank, Brazil and in the Comoros Islands off southeastern Africa. The behaviour involves the whale positioned vertically in the water column with its tail and a portion of the caudal peduncle in the air. The length of tailing-up time between surfacings to breathe ranged from a few seconds to approximately 15 minutes. The maximum observed duration of a tail-up bout on any one day was ten hours, which was the maximum length of any observation period, and some individuals engage in the behavior for two consecutive days. With the exception of calves, tail-up behaviour was observed in all classes of whale. At Abrolhos, tail-ups were recorded in 76 (5.7%) of 1324 groups observed from a shore station, and in 215 (16.0%) of 1343 groups observed from vessel surveys; biases in each method suggest that the true frequency lies between these two figures. Tail-ups differ from "sailing" behavior in southern right whales in duration and variable orientation of the whale relative to wind direction. The purpose of tail-up behavior is unknown, but its frequency and the prolonged duration of some bouts suggest that it performs an important function, perhaps related to energetics. The apparent absence of this phenomenon in other studied humpback whale populations suggests that tail-ups represent a culturally transmitted behavior.
Part of this study was financed by Petrobras and Abrolhos National Marine Park /IBAMA.

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A COMBINED ACOUSTIC AND VISUAL SURVEY OF HUMPBACK WHALES OFF SOUTHEAST QUEENSLAND, AUSTRALIA

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During their migrations between low latitude breeding areas and high latitude feeding areas, male humpback whales are frequently heard singing, often continuously for many hours, and the sounds are audible for tens of kilometres. The stock that passes close to the coast of southeast Queensland, Australia has been extensively surveyed visually, but little is known of movements of whales that pass out of sight of land. Acoustic surveying may be useful in quantifying whale movements in oceanic waters beyond the range of land surveying, and it might also be a useful addition to visual monitoring. Here we present the results of a combined acoustic/visual survey of the 1997 southward migration past Peregian Beach on the southeast coast of Queensland to assess the effectiveness of acoustic surveying by comparison with visual observations. We discuss the possible use of such surveys for obtaining information about offshore migratory routes and increasing the accuracy of population estimates when combined with visual surveys.

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