Abstract

The study of local cetaceans in Venezuela has a very recent history, and few efforts have been made in the assessment of coastal populations based on field research. The occurrence of whales and dolphins along the northeast coast of Venezuela has been documented through sightings and stranding records. Given the underwater topographical features and the influence of upwelling processes, this area is considered a very productive coastal ecosystem. Our objective was to establish the sighting frequency and relative abundance of bottlenose dolphins in the area. Sighting records were gathered on bottlenose dolphins and other cetacean species occurring along the northeast coast of Margarita Island and Los Frailes Archipelago through direct observation during land-based (6 surveys, 48 hours of observation) and boat-based surveys (24 surveys, 121 hours of observation, 1295 km covered). A sighting frequency was calculated using two methodologies and then compared, considering: 1) a mean effective observation time (4.27 hours), and 2) distance covered with cetacean sightings (1108 km). A third method is proposed relating a mean effective distance covered with cetacean sightings and expressed as a percentage. The abundance index was calculated using the mean effective observation time. The sighting frequency of Tursiops truncatus in the study area was 3 - 4 sightings per day of 4.27 observation hours, or by 185 kilometers covered. The relative abundance was calculated as 35 dolphins in the study area, so a total population of less than 60 dolphins could inhabit the proposed range. Tursiops truncatus is the dominant species in the northeast coast of Margarita Island and Los Frailes Archipelago with 70% of all the sightings, so this locality could be termed as the distribution range of a possible local population of bottlenose dolphins. Rev. Biol. Trop. 53(3-4): 595-600. Epub 2005 Oct 3.

Keywords

Tursiops truncatus, abundance, sighting frequency, Margarita Island, Venezuela.