



MANAGEMENT STRATEGIES AND COMPUTACIONAL MODELING OF CETACEAN'S CARCASSES IN NORTH COASTLINE OF SÃO PAULO, BRAZIL

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RESUMO

In the last decades, Brazil has been increasing efforts to preserve cetaceans along its coast. In scientific research, these organisms are considered of great importance for understanding the health of the marine ecosystem, with a view to contributing significantly to the large-scale cycling of nutrients and to the mitigation of climate change. The presence of whales in the Brazilian coast occurs between July and November, period of migration of these individuals to procreation in warmer waters. Records of sightings and strandings of these organisms indicate that in more than 80% of cases, whale carcasses arrive in the coastal region by the action of winds and sea currents. The organic matter contribution and degrading process of a carcass in urbanized and populated regions can lead to serious public health problems. Their removal and final destination can be very expensive, when possible, and requires proper management techniques. In this work the management strategies for the destination of whale carcasses sighted on the north coast of São Paulo are detailed. With little material and human resources, shows an efficient procedure, avoiding possible accidents to navigation or direct contact between bathers and predators or zoonoses, as well as significantly reducing the expenses and economic damages resulting from the beaching and destination of the carcasses in beaches of great population density and tourism. The simulation of trajectory of these carcasses using computational models, considering the action of winds and marine currents only, is also be present, and proved to be a good tool to predict the final destination of these specimens, inferring the importance of the management carried out.

Palavraschave: cetacean stranding; management strategies; computational model; coastal region.