Past and Present Distribution of Marine Mammals in the Caribbean: A Historical Analysis of Causes and Consequences

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We analyzed 2,134 records of cetaceans, pinnipeds and sirenians for the Caribbean and Bermuda. Those records were classified based on geographical, temporal, and nature of the record (sightings, strandings, captures, etc.). 31 species of marine mammals have been recorded for the area in port-Columbian time. One of the species is now extinct, the Caribbean monk seal (Monachus tropicalis) and two others have shown significant reduction in their current distribution: the West Indies manatee (Trichechus manatus manatus) and the humpback whale (Megaptera novaeangliae). In the first case its decline can be attributed to a combination of both habitat destruction and hunting, while for the former it is overexploitation. The largest number of records correspond to humpback whales (502), although most of those records are exploitative in nature are for localities for which this species is no longer present. The odontocete species with the highest number of records is the boto (Inia geoffrensis) (224) followed by the pantropical spotted dolphin (Stenella attenuata) (195). With the exception of the Caribbean monk seal, the West Indies manatee, and the humpback whale, all other distributional changes over time seem to result from the way data was generated through human-interactions with these animals either through exploitation or research. There are significant differences between the species composition of the Caribbean and the Gulf of Mexico. Yet it is hard to assign "species assemblages" for the Caribbean given the lack of long-term, widespread surveys for the area.