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TITLE: Evidence of a seamount effect on aggregating visitors

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ABSTRACT:

MEPS Marine Ecology Progress Series Contact the journal Facebook Twitter RSS Mailing List Subscribe to our mailing list via Mailchimp HomeLatest VolumeAbout the JournalEditorsTheme Sections MEPS 357:23-32 (2008) - DOI: https://doi.org/10.3354/meps07269 Evidence of a seamount effect on aggregating visitors Telmo Morato1,2,*, Divya Alice Varkey2, Carla Damaso1, Miguel Machete1, Marco Santos1, Rui Prieto1, Ricardo S. Santos1, Tony J. Pitcher2 1Departamento de Oceanografia e Pescas, Universidade dos Açores, 9901-862, Horta, Portugal 2Fisheries Centre, Aquatic Ecosystems Research Laboratory, 2202 Main Mall, University of British Columbia, Vancouver, British Columbia V6T 1Z4, Canada *Email: t.morato@fisheries.ubc.ca ABSTRACT: It has been suggested that seamounts hold higher abundances of some ?visiting? animals, such as tuna, sharks, billfishes, marine mammals, sea-turtles and even seabirds, but this has been based on sparse records, and warrants further examination. In this paper we use data from a fishery observer program to examine whether the predicted higher abundances of tuna, marine mammals, sea turtles and seabirds actually occur around Azores seamounts and to map the distribution of the various species. Our results indicate that some marine predators (skipjack Katsuwonus pelamis and bigeye tuna Thunnus obesus, common dolphin Delphinus delphis and Cory?s shearwater Calonectris diomedea borealis) were significantly more abundant in the vicinity of some shallow-water seamount summits. Our methodology, however, failed to demonstrate a seamount association for bottlenose dolphins Tursiops truncatus, spotted dolphin Stenella frontalis, sperm whale Physeter macrocephalus, terns Sterna hirundo and S. dougalli, yellow-legged gull Larus cachinnans atlantis and loggerhead sea turtles Caretta caretta. Seamounts may act as feeding stations for some of these visitors. Not all seamounts, however, seemed to be equally important for these associations. Only seamounts shallower than 400 m depth showed significant aggregation effects. These seamounts may be considered hotspots of marine life in the Azores, and a special effort should be made in order to ensure a sustainable management of these habitats. KEY WORDS: Seamounts · Tuna · Seabirds · Marine mammals · Sea turtles · Association · Azores Full text in pdf format Supplementary appendix PreviousNextCite this article as: Morato T, Varkey DA, Damaso C, Machete M and others (2008) Evidence of a seamount effect on aggregating visitors. Mar Ecol Prog Ser 357:23-32. https://doi.org/10.3354/meps07269Export citation RSS - Facebook - Tweet - linkedIn Cited by Published in MEPS Vol. 357. Online publication date: April 07, 2008 Print ISSN: 0171-8630; Online ISSN: 1616-1599 

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