

Distribution, habitat use and ecological aspects of the Risso's Dolphin (*Grampus griseus*) in the Wider Caribbean Region

Distribución, uso del hábitat y aspectos ecológicos del delfín de Risso (*Grampus griseus*) en la Región del Gran Caribe

Répartition, utilisation de l'habitat et aspects écologiques du Dauphin de Risso (*Grampus griseus*) dans la Région de la Grande Caraïbe

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ABSTRACT

Risso's dolphin (*Grampus griseus*) is a cosmopolitan dolphin that is distributed throughout the region, including the Wider Caribbean Region (WCR). However, knowledge of different aspects of its distribution and population ecology within the region is scarce. With the aim of preliminarily evaluating the potential distribution and habitat use of Risso's dolphin in the WCR, a total of 202 records from 1967 to 2023 (194 sightings, 7 strandings, and one bycatch) were collected from published literature and online repositories (OBIS SEAMAP and GBIF). For the analysis, the WCR was divided into seven subregions: Gulf of Mexico, Eastern Florida, Greater Antilles, Central America, Southern Caribbean, Eastern Caribbean, and the Guianas, of which the first two subregions accumulated the highest number of records (128 and 42 records, respectively). The 57.92% of the sightings were during the dry season and 42.08% during the rainy season. Habitat distribution and suitability were analyzed using maximum entropy models (MaxEnt). Physical-chemical and bathymetric parameters were considered as explanatory environmental variables, where chlorophyll concentration (55.90%) and distance to the 200 m isobath (20.80%) presented the highest percentage of contribution to the model, which predicted a potential disjunct distribution in the WCR. The information provided by this research could be useful for monitoring, management and conservation of Risso's dolphin, including possible climate change scenarios, in accordance with the Action Plan for the Conservation of Marine Mammals of the SPAW Protocol of the Cartagena Convention.

KEYWORDS: .

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