

Humpback Whale Satellite-tracking Reveal the Connectivity Between the Northern Lesser Antilles and the Importance of Regional Collaboration to Conserve Marine Biodiversity

Los Resultados del Seguimiento Satelital de Ballenas Jorobadas Indican una Conectividad entre las Islas del Norte de las Antillas Menores y la Importancia de la Cooperación Regional para Preservar la Biodiversidad Marina

Les Résultats du Suivi Satellitaire de Baleines à Bosse Révèlent la Connectivité entre les Iles du Nord des Petites Antilles et l'importance d'une Collaboration Régionale pour Préserver la Biodiversité Marine

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EXTENDED ABSTRACT

To efficiently protect marine migratory species and conserve marine biodiversity, knowledge of animal movements and how these movements relate to political boundaries and current marine protected areas and/or marine sanctuaries is required.

We used satellite tracking to study the movements of migratory Humpback whales (*Megaptera novaeangliae*) within the area of the Northern Lesser Antilles during their 2014 reproductive season (mission MEGARA 2014). Eight individuals were followed for an average of 13 ± 11 days (max = 26 days). During that time, Humpback whales traveled back and forth between islands and revealed an unexpected strong connectivity between the islands of Saint-Martin, Anguilla, Saint-Barthélemy, and Barbuda on one hand, and Saint-Martin, Anguilla, the Virgin Islands, and the Dominican Republic on the other hand. Humpback whales therefore seem to be a shared *resource* among the islands and countries of the Northern Lesser Antilles and Great Antilles highlighting the need for regional cooperation and offering scientific support for a larger transboundary marine sanctuary.

Ultimately, such partnership between the AGOA sanctuary, the sanctuary of the Dutch islands, and the waters of Anguilla would support a common strategy for joint conservation and scientific actions on the totality of the breeding ground of Humpback whales in the Northern Lesser Antilles and help conserve marine biodiversity.

KEY WORDS: Humpback whales, satellite tracking, Northern Lesser Antilles, islands, connectivity.



Figure 1. Satellite-tracking process of Humpback whales in the Northern Lesser Antilles (RNSM©).



Figure 2. Tag deployed in the flank of an adult Humpback whale (RNSM©).



Figure 3. Satellite-tracking of 8 Humpback whales in the Northern Lesser Antilles (seaturtle©; <http://www.seaturtle.org/tracking/>)