



## Area Size

257 km<sup>2</sup>

## Qualifying Species and Criteria

Dwarf Sperm Whale – *Kogia sima*

Criterion B (2)

## Other Marine Mammal Species Documented

*Feresa attenuata*, *Globicephala macrorhynchus*, *Lagenodelphis hosei*, *Megaptera novaeangliae*, *Mesoplodon europaeus*, *Orcinus orca*, *Physeter macrocephalus*, *Pseudorca crassidens*, *Stenella attenuata*, *Stenella clymene*, *Stenella frontalis*, *Stenella longirostris*, *Ziphius cavirostris*

## Summary

The IMMA is located on the south-western coast of the island of St. Vincent in the Eastern Caribbean. It encompasses part of the east coast of St. Vincent and Bequia and the channel between these islands. The main island of St. Vincent is of volcanic origin and is surrounded by a steep insular slope. This IMMA hosts important concentrations of dwarf sperm whales (*Kogia sima*). Encounter rates of dwarf sperm whales are the highest recorded at the global scale. Twelve other cetacean species have been recorded in the area and are featured in more detail in a wider Eastern Caribbean IMMA.

# St. Vincent-Bequia Channel IMMA

## Description:

The IMMA is located on the south-western coast of the island of St. Vincent in the Eastern Caribbean. It encompasses part of the east coast of St. Vincent and Bequia and the channel between these islands. The main habitat in the IMMA is a steep slope. The main island of St. Vincent is of volcanic origin and is surrounded by a steep insular slope; the waters are oligotrophic and highly stratified and mostly influenced by the North Equatorial current.

## Criterion B: Distribution and Abundance

### Sub-criterion B2: Aggregations

Data from boat-based surveys in the region indicate that encounter rates of dwarf sperm whales (*Kogia sima*) in this IMMA are the highest ever recorded on a global scale (MacLeod et al., 2004; Kiszka et al., 2024; Baird et al., 2021). Indeed, encounter rates off St. Vincent are almost 20 times higher than off the Big Island of Hawai'i (Baird et al., 2021) and about four times higher than off Abaco in the Bahamas (MacLeod et al., 2004). Data also suggest that the cetacean community of St. Vincent has a unique composition as 37% of all cetacean sightings are dwarf sperm whales, whereas this proportion is 3.5% off the main island of Hawai'i (Baird et al., 2021), for example. Site fidelity is unknown, and the full extent of the population using this area's home range remains unknown (Kiszka et al., 2024). A photo-identification catalogue was initiated in 2022, resulting in the identification of 22 individuals (including two females accompanied by a calf). No re-sightings have been recorded, neither within field seasons nor between years, which suggests that only a small proportion of the population was identified, or



Figure 1: Dwarf sperm whale (*Kogia sima*) observed in St. Vincent-Bequia Channel. Photo credit: J. Kiszka (Florida International University).



Figure 2: Dwarf sperm whales (*Kogia sima*) flukes observed in St. Vincent-Bequia Channel. Photo credit: J. Kiszka (Florida International University).



Figure 3: Fraser's dolphins (*Lagenodelphis hosei*) observed in St. Vincent-Bequia Channel. Photo credit: J. Kiszka (Florida International University).

that the range of the population is much larger than the area of study within the IMMA. Future dedicated field efforts will attempt to investigate site fidelity and the abundance of dwarf sperm whales off St. Vincent.

## Supporting Information

Baird, R.W., Mahaffy, S.D. and Lerma, J.K. 2021. 'Site fidelity, spatial use, and behavior of dwarf sperm whales in Hawaiian waters: using small-boat surveys, photo-identification, and unmanned aerial systems to study a difficult-to-study species'. *Marine Mammal Science*, 38:326-348.

Caldwell, D.K., Caldwell, M.C. and Arrindell, G. 1973. 'Dwarf sperm whales, *Kogia simus*, from the Lesser

Antillean island of St. Vincent'. *Journal of Mammalogy*, 54:515-517.

Fielding, R. and Kiszka, J. 2021. 'Artisanal and aboriginal subsistence whaling in St. Vincent and the Grenadines (Eastern Caribbean): history, catch characteristics and needs for research and management'. *Frontiers in Marine Science*, 8: 668597.

Hemsi, S., Caputo, M., Heithaus, M.R., and Kiszka, J. 2024. 'Variability in community structure, occurrence and group dynamics of odontocete cetaceans in the eastern Caribbean'. Unpublished report to the National Science Foundation, Florida International University. 25pp.

Kiszka, J., Maricato, G. and Caputo, M. 2024. 'Habitat suitability, occurrence, and behavior of dwarf sperm whales (*Kogia sima*) off St. Vincent and the Grenadines, Eastern Caribbean'. Advances in Marine Biology (in review).

Marin, D., Kiszka, J. and Caballero, S. (submitted). 'Genetic population structure of the pantropical spotted dolphin in the Caribbean region'.

Restrepo Garzon, N., Kiszka, J., Martínez, J.G., Mignucci, A., Castelblanco-Martínez, N., Niño-Torres, C.A., Fielding, R., Bergfelt, D., and Caballero, S. 2024. 'Population genomics of the short-finned pilot whale (*Globicephala macrorhynchus*) in the Caribbean: implications for the management of artisanal whaling'. Unpublished report.

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