CANARY ISLANDS, THE HOTSPOT OF SEA TURTLE ENTANGLEMENT IN THE EUROPEAN WATERS

Liria-Loza A.*^{1,2}, Ostiategui-Francia P.^{1,2}, Hernández-Santana Y.³ and Fariñas-Bermejo A.²

¹ University of Las Palmas Gran Canaria, ECOAQUA Institute, Las Palmas Gran Canaria, SPAIN. *carettana@gmail.com, patriciaostiategui@gmail.com*

> ² ADS Biodiversidad, Gran Canaria, SPAIN andreafarinasbermejo@gmail.com
> ³ University of La Laguna, Santa Cruz de Tenerife, SPAIN. alu0101163055@ull.edu.es

Abstract:

The European Project INDICIT proposed sea turtles as marine litter indicator in the European waters, using both, litter ingestion and entanglement on marine debris. Standardized protocols were developed for sampling and shared homogenized data collected in different European regions to conduct regional and global analysis.

Important difficulties were found to harmonize marine debris classification involved on entanglement. Based on litter classification developed by the Marine Strategy Framework Directive (MSFD), an innovative tool was used to identify the most important debris involved on entanglement, through a deep search of pictures and videos of entangled macrofauna on most popular social media (Facebook, Instagram, YouTube, Google, Twitter).

A total of 744 images of entangled macrofauna in the European waters were obtained by INDICIT Partners. Moreover, most part of images were entangled sea turtles (72,3%) and were in the Canary Islands (53,2%), identifying this region as a hotspot of entanglement in the European waters, and matching with the great impact of entanglement on sea turtles observed on data collected by stranding networks in this region.

Important results were obtained from this research: 1. Improvement of the Standard protocol to monitor entanglement on marine debris in the European waters (included on INDICIT project); 2. Images are fundamental to identify litter impact on marine biota, so image storage tools are highly recommended to be included on stranding networks (*RedPromar App* in Canary Islands); 3. Main litter items involved on sea turtle's entanglement in the Canary Islands were identified.

Key words: sea turtles, loggerhead, entanglement, marine debris, social media, Canary Islands

Acknowledgments:

The DG-Environment (EU) funding INDICIT project and all INDICIT partners for collaborate in the process to develop this important protocol and conduct this deep research. The people in charge of stranding networks in the Canary Islands (*Cabildos Insulares*) for letting us deep inside their databases to confirm the great impact of entanglement on sea turtles in the Canary Islands. The Canary Islands Government (Environmental department) to support us to develop a common protocol to collect data on stranded sea turtles in the Canary Islands, including the *RedPromar* tool and all the results obtained by INDICIT project.