## Data Provision for Science-Based FAD Fishery Management: Spanish FAD Management Plan as a Case Study

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## **Abstract**

The use of fish aggregating devices (FADs) in tropical tuna fisheries has increased significantly during recent decades. Concurrently, concern about juvenile tuna mortality, bycatch, and marine debris associated with FAD fisheries increased, and this led to the implementation of FAD management measures and more sustainable designs (e.g., non-entangling or biodegradable FADs, limits on active FADs, etc.). This document reviews data collection and reporting requirements of tuna-Regional Fisheries Management Organizations (t-RFMOs) on drifting FADs and summarizes the work carried out since 2010 under the Spanish FAD management plan to create an adequate standard data collection aimed at improving science-based decision making. The aim of this study is to assist in the strengthening of data collection systems through: (1) a review of the existing data requirements, (2) a review of the status of FAD data collection worldwide and identification of data gaps, and (3) recommendations aimed at improving FAD management through the strengthening of FAD data requirements. Due to the complexities of data collection, we summarize the difficulties faced when processing the data and propose concrete and practical solutions to improve both the data collection system and information quality. © 2022 by the authors. Licensee MDPI, Basel, Switzerland.

## **Author keywords**

Data collection; Data requirements; Fish aggregating device (FAD); Floating object (FOB); Management plan; Tropical purse-seine