



MAPPING COMMUNITY INTEREST HABITATS IN THE COLUMBRETES ARCHIPELAGO, AN EXTRAORDINARY HOT SPOT OF BIODIVERSITY

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Introduction

The Columbretes Archipelago has been protected since 1987 and included as an Site of Community Importance in 2006. So far research has focused on the description of specific species and spots [1, 2]. This study develops focuses on the habitats distribution within the whole protected site by combining **scientific knowledge** and **distribution modeling** (DM) following the steps developed in other SCIs of Spain [3, 4].

Method

Data sampling was carried out in **multidisciplinary surveys** (fig. A) taking place in two periods (2009-2013 and 2018-2021). Habitat data was recorded by means of ROV, towed video, SCUBA diving and snorkel transects (fig. B and C). Environmental data, via echosounder, water sampler carousel and dredge sampling (fig. D and E). Data analysis were performed with R and ArcGIS.

Results

The cartography shows a surface of **19.47 km²** occupied by the Habitat Directive communities (fig. F and G) sandbanks (1110), reefs (1170) and structures affected by gas emissions (1180) meaning a 13.9% of the protected site (dark caves, 8330, were identified). In comparison to other marine SCIs, Columbretes has the highest diversity of priority conservation habitats (tab. A).

Conclusions

This study has produced the **first high resolution complete bionomic map of the submerged environment of the Columbretes Archipelago**. This map will become an essential tool for the design of management measures and conservation tasks.

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References

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