

SEABIRDS AND OFFSHORE AQUACULTURE CAGES INTERACTIONS IN GRAN CANARIA

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Abstract:

Concerns about the environmental effects of aquaculture have raised during last decades due to the global expansion of the industry (FAO Fisheries and Aquaculture, 2021). Currently, the gilt-head bream (*Sparus aurata*) and the European bass (*Dicentrarchus labrax*) are the two species farmed industrially in Gran Canaria. While offshore aquaculture may affect wildlife distribution, there is a lack of information on birds presence and abundance in association with these industrial facilities. The aim of this study was to investigate interactions between offshore sea cages and the seabird community, using simultaneous scan-sampling of two aquaculture and two adjacent control sites in the east coast of Gran Canaria from March to May 2022. While species diversity did not differ between the cages and control sites, the yellow-legged gull (*Larus michahellis*) was more abundant in aquaculture than in control sites. More specifically, evidence for gulls aggregation is clear in Tufia, the southern study site. In line with this result, a previous study reported the dominance of Laridae in mussel suspension culture in the Ireland coast (Roycroft et al., 2004). The use of cages as perching platforms plus increased food availability in aquaculture sites seem to increase abundance of seabirds, particularly gulls. However, detrimental effects in seabirds survival and reproduction rates caused by aquaculture activity are not studied in this work. Further investigation would be useful to test the influence of this industry on wildlife health.

Key words: Aquaculture, Gran Canaria coast, seabirds, *Larus michahellis*

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