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University of Vigo Nationality: Spanish

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Orientation: Sustainable Use of Marine Resources

Specialization Area: Management and Use of Resources

Research Area: 2.1 Research into resources based on knowledge of ecosystems





PhD project: **ECOLOGY AND MANAGEMENT OF SMALL-SCALE BENTHIC FISHERIES**: THE **STALKED BARNACLE IN EUROPE**

Supervisors: Dr. Elena Ojea Fernández-Colmeiro (University of Vigo)

Dr. Gonzalo Macho Rivero (Independent Fisheries Consultant)

Summary:

Despite the undeniable importance of small-scale benthic fisheries (also known as S-fisheries) the approaches used in their management fail to incorporate the spatial heterogeneity of their targeted stocks. This has led to important depletions of S-fisheries worldwide. Taking the European stalked barnacle fisheries as the case study, the aims of this thesis are to increase the understanding of the large-scale biological heterogeneity of benthic stocks and explore models that increase the sustainability of the S-fisheries targeting them. The thesis counts with three objectives: 1) The development of a general governance model that promotes the social, ecological and economical sustainability of S-fisheries, 2) the understanding of the large-scale reproduction and recruitment dynamics of a coastal benthic stock and 3) the assessment of spatial management tools like rotational harvest in S-fisheries. The lessons derived from this thesis contribute to the Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations (particularly SDG 14: Life below water) through policy recommendations that increase the long-term sustainability of S-fisheries from a broad social-ecological perspective.