

Implementation of **eco-tourist underwater routs** in the Algarve (South of Portugal) as a way of preserving exuberant marine ecosystems

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Objectives | The aim of this ongoing project (EcoSub) is to describe the underwater tourism in the Algarve Region (South of Portugal), aiming its transformation into sustainable eco-tourism.

Methodology | In order to achieve these objectives, two underwater routes were created, in some of the most popular scuba diving spots of the study area. From May to September 2008, the spots were monitored, and all underwater tourists that visited them were questioned. The questionnaires, at this point, aimed at the socio-economic description of the divers, their experience, the impact they caused in the ecosystem, their perception of the ecosystem and their knowledge about the underwater fauna and flora, as well as their sensibility on protecting it. After September, routes were implemented and new questionnaires were done to each diver. The objective of the new questionnaires was, above all already mentioned, the impact of the signs, of the new given information before each dive, and the eco-diving experience. To implement the diving routes, a team of three scientists dived in the area, at least, 5 times, counting and identifying fauna and flora, as well as diver's behaviour. The main interesting points were spotted. Then, underwater acrylic slates were designed with the map of the dive, the places where the plate was positioned (important spots) the depth and the ground. In the other side of the plate, 8 photos with examples of fauna and flora more likely to be seen in the spot were shown.

Main results and contributions | Results show that most divers were married, of all ages, with medium income rates. During their diving experience, most divers refer to have extreme care in handling underwater ecosystem, but, using ghost divers, we could understand that the case was different, and the biodiversity, although enjoyed and observed was, in most of the cases, disturbed. Nevertheless, the majority of questioned divers thought that diving with the signs was an experience more satisfactory than without the routes. An increasing understanding of underwater life was noted, as

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divers saw in the plates what they were about to see live. The talk of the instructor on board should be strongly considered when dealing with his problem, once its improvement showed clear results of a better care in marine live preservation.

Conclusions | The implementation of eco-tourism facilities assumes great relevance in the ecosystem sustainable management. In underwater eco-tourism the implementation of the proposed routes seems to increase public sensibility to sustainability visitation of underwater pristine areas.