What is the value of ecosystem services provided by coralligenous habitats ?

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Abstract

Coralligenous habitats are typically coastal Mediterranean habitats present between about 20 and 120 meters deep. These biogenic hard bottoms, mainly built by calcareous rhodophytes, are among the most important sources of marine Mediterranean biodiversity. A set of ecosystem services, defined as "benefits people obtain from ecosystems" by the Millenium Ecosystem Assessment in 2006, is considered to be resulting. Their identification is limited by the lack of knowledge about the ecosystem functioning. Furthermore, they depend on the type of coralligenous habitats considered as well as on their socio-economic context, since by definition ecosystem services are anthropocentric. A list of services was compiled, based on interviews and focus groups with managers and users of coralligenous habitats in order to complete the few existing bibliography on this issue. Besides, the evaluation of services provided by coralligenous habitats encounters ignorance of such ecosystem by the population, and the lack of available data. In order to conduct an evaluation of these services and to link environmental quality with the level of service provided, variables were selected among the 22 essential biodiversty variables and among the coralligenous habitat status indicators according (i) to their pertinence for the application of economic valuation methods and (ii) to the availability of existing data. This work is a first step to assess the value of ecosystem services provided by coralligenous habitats. It is based on case studies around Marseille's Bay.

Keywords: coralligenous habitats, ecosystem services, economic valuation, essential biodiversity variables

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