THE USE OF SEDIMENTARY INTERTIDAL SYSTEM AS RECREATIONAL HAND FISHING AREA AND ITS IMPACTS ON EELGRASS BEDS (*ZOSTERA MARINA*) IN WEST BRITTANY (FRANCE)

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ABSTRACT

Hard fishing on intertidal soft sediments for bivalves on the low water period of spring tides induces strong perturbations of sediments and associated fauna and flora. This activity has been increasing these last years and the tools used are becoming more and more destructive for the biotope. Many of the sediments sheltering rich populations of Veneridae and others bivalves are often colonized by *Zostera marina* beds. *Zostera* beds are recognized as habitats of high value in term of patrimonial, ecological and economical interests. A study aimed to understand the consequenses of the the hand fishing perturbations on habitat and on community of the *Zostera* beds is driven in West Brittany in the bay of Brest. The first results show that the impacts on the habitat are both on the the *Zostera* population and on the sediment characteristics. The impacts on the associated community results in a drastic decrease of the specific and functional biodiversity, abundance and biomass. Small opportunistic polychaetes became dominant and according the frequency of the perturbation, the *Zostera* beds community is progressively replaced by a heterogeneous muddy sand community. This human activity can be considered as contributing to the uniformisation and standardization of the soft sediment intertidal system by decreasing the diversity of habitats, ecosystem functions and species. From this results, management proposals should be done to decrease the impacts while taking in account the sensitivity of the users of the intertidal area towards their traditional fishing activity.