{rokbox title=|Ejemplar de cabracho :: Foto: José Coll Montserrat (Direcció General de Medi Rural i Marí del Govern de les Illes Balears)| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-olga-reñones-et-al-areas-marinas-protegidas-2013-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-olga-reñones-et-al-areas-marinas-protegidas-2013.jpg{/rokbox}

Josep Coll, Antoni Garcia-Rubies, Gabriel Morey, **Olga Reñones**, **Diego Álvarez-Berastegui**, Oliver Navarro and Antoni M. Grau, (2013).
Using no-take marine reserves as a tool for evaluating rocky-reef fish resources in the western Mediterranean
. ICES J. Mar. Sci. (2013) doi: 10.1093/icesjms/fst025.

Abstract: The use of MPAs to recover fish stocks in littoral areas of the western Mediterranean has made it possible to obtain time dataseries on the biomass evolution over the last decade. The biomass of six fully protected MPAs increased between two- and threefold over a period of five years. After this time the biomass remained stable. This pattern allowed us to adjust logistic curves between the biomass and protection time, and to estimate the carrying capacity (K) of each site. In the present study we investigate the relationships between carrying capacity (K) and habitat characteristics at each protected site. The relationships between habitat/environmental variables and K are analysed by applying generalized linear models. Environmental descriptors showing major effects on biomass are related to depth, exposure, rugosity, and offshore slope at different spatial scales. Comparison of observed and predicted values using the model for exploited sites in the Balearic Islands made it possible to determine their conservation status. This empirical approach to the relationships between environmental factors and fish assemblage biomass could constitute a very useful tool when traditional fishery management based on catch and effort data from the artisanal and recreational fleets is difficult to apply.

Keywords: carrying capacity, environment fish, no-take areas, reference points