{rokbox title=|Map :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-effects-fishing-closure-area-structure-diversity-continental-shelf-fish-assemblage-mediterranean-tuset-et-al-2021-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-effects-fishing-closure-area-structure-diversity-continental-shelf-fish-assemblage-mediterranean-tuset-et-al-2021.jpg{/rokbox}

V.M. Tuset, **M. Farré**, **U. Fernández-Arcaya**, M. Balcells, A. Lombarte, L. Recasens, 2021.
Effects of a fishing closure area on the structure and diversity of a continental shelf fish assemblage in the NW Mediterranean Sea.
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Abstract: Bottom trawling is the most extensive fishing activity affecting the continental shelf in Mediterranean waters. This gear has caused negative effects on the communities and topography of the seafloor. Temporal or spatial fishing closures have been proposed as strategies to reduce the disturbances caused by overfishing and for biodiversity recovery and restoration of ecosystems. The present study used various indicators to analyze and compare the differences between the demersal fish assemblages in a fishing closure area (FCA) established by the fishers of the Roses port (NW Mediterranean) and those on a fishing ground (FG) to assess the efficiency of this strategy two years after the cessation of fishing. Our findings demonstrated a noticeable increase in the abundance and biomass of all species in the FCA, especially species of small and medium size. Thus, our findings demonstrated that there were detectable shifts in the community (composition, rank abundance plots, ABC curves and diversity metrics) in a short time, evidencing slight disturbance effects on ecosystems. The present study also showed positive effects on the population structure, which had an increase in larger individuals, although the pattern varied between species. In particular, the European hake stock showed an increase in recruits, and the presence of large adults supported the suitability of this protection measure. Consequently, long time periods are not necessary to perceive noticeable benefits in terms of biodiversity recovery and ecosystem restoration in some deep marine ecosystems, and monitoring from the first year of fishing cessation is very important.

Keywords: Bottom trawling, Closure area, Fish community, Recovery, Mediterranean Sea