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Alba Serrat, Maria Teresa Farriols, Sergio Ramírez-Amaro, Francesc Ordines, Beatriz Guijarro, Francesca Ferragut-Perello and Enric Massutí, 2023. [Conservation Status Assessment of Demersal Elasmobranchs in the Balearic Islands \(Western Mediterranean\) over the Last Two Decades.](https://doi.org/10.3390/fishes8050230)

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Abstract: More than half of the Mediterranean sharks and rays are threatened by fishing exploitation. However, population assessments are limited by the scarcity of specific data on fishing catches. In this study, we assessed temporal trends of the indicators developed within the European Marine Strategy Framework Directive over the last two decades in order to assess the conservation status of demersal sharks and batoids in the Balearic Islands, which represent an important fraction of the bycatch of bottom trawling in this area. On the basis of a georeferenced, fishery-independent dataset of 19 species of elasmobranchs, we analyzed 20 year time series (2002–2021) of nine indicators regarding area distribution, population size, population status, and community structure. Between 30% and 50% of the elasmobranch species and functional groups showed increasing trends in distribution area and population size. This was especially true for batoids, whereas the distribution area and population size of most sharks remained stable over the study period. The remaining indicators showed stability or, in some cases, variable trends. Only in one case did we find a negative trend sustained all along the time series (i.e., the proportion of *R. radula* large individuals in relation to the reference period). Overall, our results suggest that the populations of elasmobranchs from the Balearic Islands show stable or recovery trends, mainly in terms of distribution area and density. However, it remains elusive whether this community can recover to the levels of more than half a century ago, before the development of the bottom trawl fishery, or whether this apparent current steady state should be interpreted as a new equilibrium.

Keywords: vulnerable species, sharks, rays, European Marine Strategy Framework, Mediterranean