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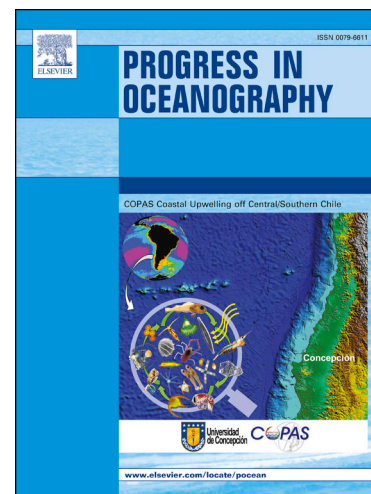
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Assessing the Environmental Status of the short-beaked common dolphin (*Delphinus delphis*) in North-western Spanish waters using abundance trends and safe removal limits.

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ABSTRACT

Monitoring and assessment of the status of marine mammal populations is a requirement of the European Marine Strategy Framework Directive (MSFD). Due to the difficulty of collecting data in the marine environment and because many populations of these highly mobile species inhabit waters of several Member States, monitoring of marine mammals is particularly challenging. In the present work we have used a 10-year time-series of data collected from multidisciplinary research surveys to estimate common dolphin (*Delphinus delphis*) abundance and trends in continental shelf waters of the northwest Spanish sub-region. We argue that this approach provides a valuable addition to large-scale dedicated surveys, offering a shorter interval between surveys and hence offering the possibility to track abundance changes at a regional scale. Trends in the number of dolphins present in the study area over the last 10 years show a mean increase of about 9.6% per year, which results in an evaluation of Good Environmental Status for the species in the area using the abundance indicator adopted in the framework of the MSFD. Data obtained from dedicated dual-platform surveys have been used to correct the detection bias in our data collected using single-platforms (attraction toward the observation platform and animals missed on the track-line), to obtain absolute abundance estimates for calculating bycatch limits. The average abundance over the study period was 12831 dolphins [CI 95%; 9025, 18242] calculated with the conventional distance sampling methodology, 4747 [3307, 6816] corrected for attraction and missed animals on the track-line, and 22510 [15776, 32120] corrected only for missed animals on the track-line. The estimated safe bycatch limit for this area calculated from these abundance values were 218 [153, 310], 81 [56, 115] and 383 [268, 546] per year, respectively. Comparing these figures with estimates based on different

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