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## New policies will require new approaches: the case of the Swedish Norway Lobster (*Nephrops norvegicus*) fisheries in the Kattegat and Skagerrak

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Title: New policies will require new approaches: the case of the Swedish Norway Lobster (*Nephrops norvegicus*) fisheries in the Kattegat and Skagerrak

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The common fisheries policy within the EU is evolving towards increased complexity, such as a call for coherence with the MSFD requirements and a landing obligation, posing new requirements and challenges to managers and researchers. Therefore, re-evaluations of current practice are necessary as a basis for management actions. The Swedish fishery for Norway lobster (*Nephrops norvegicus*) in the Kattegat-Skagerrak area provides an interesting case study of relevance to emerging policies in the EU. The fishery has three separate segments defined by gear use (mixed trawling, targeted trawling and creeling), and this provides an obvious case for studying effects from alternative quota allocations among gear types. A screening study was therefore done, taking into consideration area-gear interactions in catch rates, to compare the three different fisheries regarding quantified pressures on the target species, the by-catch species, and the seafloor, as well as to qualitatively evaluate social and economic impacts. In the next step, the outcome of various scenarios was quantified. In the studied areas, it was found that creeling offers a substantial reduction of fishing mortality of both undersized *Nephrops* and fish and reduced seafloor pressure per landed kilo of *Nephrops*. Given that the fishing areas in many cases may be interchangeable between gears, promoting a creel expansion at the expense of demersal trawling in Swedish waters would therefore contribute to the integration of fisheries- and environmental management as called for in the new policies.

Keywords: *Nephrops*, discard, fisheries management, trawl fisheries, creels, seafloor impact

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