**Use of Swedish designed escape grids to optimise the size selectivity of *Pandalus Borealis* in the Danish trawl fishery**

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**Abstract**

Considerable work has been undertaken to optimise species selectivity in shrimp fisheries around the world through the use of sorting grids. More recently, there has been focus on using such grids to further optimise the size selectivity of the target species within these fisheries. In Sweden, a new version of the Nordmøre grid has been developed to reduce the capture of small deepwater shrimp (Pandalus borealis). The grid has been developed following an extensive media debate in Sweden and Norway about discarding of small shrimp, the implementation of real-time closures in Norwegian waters in 2016 to protect juvenile shrimps, and also as a means of optimising the value of the quotas (i.e. higher proportion of large shrimp), which are often restrictive in Sweden and Norway.

The combination grid consists of an escape grid for shrimp with 10 mm bar spacing mounted in the lower section and a standard grid with 19 mm bar spacing in the upper section to sort out fish by-catch, where the fish catch enters the upper codend through a hole in the top of the grid. Here, we tested the Swedish designed escape grid in the Danish Pandalus fishery to determine its suitability in the fishery.

A reduction in marketable shrimps has the possibility to reduce the economics in the fishery, and since almost the entire catch of shrimps caught by the Danish fleet are marketable, an alternative design or bar spacing in the escape grid may be required for the Danish fleet to avoid considerable economic loss. This international collaboration was facilitated as part of industry-science collaboration.

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