Mapping of under 12m vessel fishing activity (MMO1264)

Aim

This project aimed to improve understanding of, and access to, information describing fishing activity by fishing vessels under 12 metres in length. Delivered through a review of the scope, advantages and limitations of currently available fishing activity data, and presentation of new spatial data for the under 12m fleet, this project is intended to support policy and regulatory decision making based on such data.

Introduction and methodology

Commercial fishing vessel activity in England is regulated by the Marine Management Organisation (MMO). Reporting requirements vary, but generally increase as the catching capacity and the size of vessels increase. This means MMO has less data available for smaller vessels (under 12m) which comprise the majority of the fleet in England (88% of vessels).

An accurate understanding of inshore fishing vessel activity is important in terms of regulators and policy makers being able make the best decisions for fisheries management, as well as informing marine conservation, marine planning and licensing, as well as fishers themselves in matters such as proving historic track records to benefit from continued access.

The project provided an exhaustive review of existing data sources to describing under 12m fishing activity, providing a description of the data and any associated advantages and limitations for example years or locations covered, fishing methods included or the resolution at which the data is available.
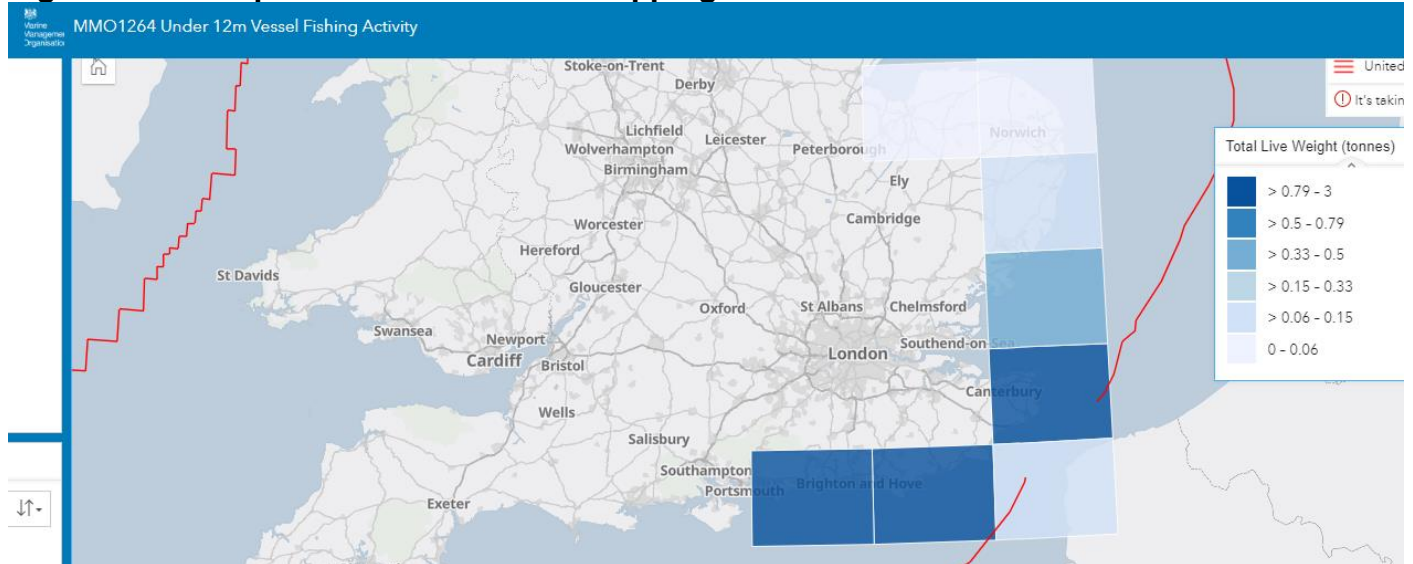
The project also provided new data. The project initially intended to use a vessel sightings-based approach to create a current picture of activity around England. However, upon investigation there wasn't enough appropriate data to meaningful analyse. The next best source of data was judged to be the UK's annual return to the European Union (EU) Commission's Scientific, Technical and Economic Committee for Fisheries (STECF) Fisheries Dependent Information (FDI) call. This data set includes sales note data submitted by the buyers of the fish for under 10m vessels and paper logbooks for 10-12m vessels.

Results

The main output from this project alongside a general review of datasets is a web-based mapping tool (Figure 1), where it is possible to choose to display one of three map types: fishing effort (in terms of days), the amount of fish landed from the area (in live weight tonnes) and the value of fish landed (in GBP). Effort data covers all UK vessels in UK waters and can be filtered by Nationality, vessel length group, gear type and year (2014-2020). Landing's data is restricted to the under 12m fleet in English waters and can be filtered by species, Nationality, vessel length group, gear type and year (2016-2020).

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Figure 1 – Example screenshot of the mapping tool

Conclusions and recommendations

It is recommended that the new Inshore Vessel Monitoring System (iVMS) for under 12m vessels and the Record your Catch application (Catch App) for under 10m vessels data sources should be investigated for data quality and utility. The aspiration is that data can be combined to form the most definitive spatial activity data for policy and scientific assessment. Catch App began full enforcement in Feb 2022 and the iVMS is being rolled out, MMO will be able to begin to draw down data for analysis, in the interim it would make sense to attempt to repeat this mapping exercise with the data gathered for the STECF data call on an annual basis to enable the most up to date data to be used, noting though that the UK no longer submits this data to STECF and conversations are ongoing about how fishing activity data is submitted to ICES.

MMO comments

This work was commissioned as part of a wider programme of planned work to improve under 12m fishing vessel data in support of decision making including marine planning and protected area management. This data will remain relevant in describing historic distributions of fishing and integrate with new data becoming available including the roll out and development of iVMS, remote electronic monitoring, Catch-app and the continual improvement of strategic data. MMO will be investigating user needs for and experiences of fishing activity data as part of our intent to make fishing activity data more accessible and develop data products of more utility more quickly.

Further information

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