

East Channel association

**Regional Environmental
Monitoring & Management
Reporting Programme**

Collated Data Reporting

Fishing Activity Report Series: Volume 1, Issue 2

The East Channel Association (ECA)

The ECA is an association of marine aggregate companies who are permitted, or have applied for permission, to extract sand and gravel from the East Channel Region (ECR). Read more about their plans and operations at www.eastchannel.info

The companies of the ECA are:



Britannia Aggregates Ltd



DEME Building Materials Ltd



Hanson Aggregates Marine Ltd
(now part of the Heidelberg Cement Group)



United Marine Dredging Ltd



Volker Dredging Ltd

The ECA Charter

The companies of the ECA have committed to operate under the terms of a 'code of practice' known as the ECA Charter.

The ECA Charter

The ECA have developed a code of practice to assist management of their activities. The ECA are committed to managing their activities cooperatively in the ECR in order to:

- Implement the results and recommendations of the REA and ensuing studies as appropriate to individual applications.
- Co-operate with and fund future regional environmental studies and research.
- Recognise the results of further environmental studies and respond to recommendations.
- Monitor, mitigate and manage environmental impacts and operational activity on a regional basis.
- Carefully manage dredge areas, with an aim of reducing the dredged area to a minimum.
- Restrict operational dredging areas through zoning of permission areas.
- Only target resources >2m thick.
- Minimise screening.
- Ensure transparency – make all relevant dredging data publicly available through regular company reporting.
- Enable Audit – all relevant data will be made available for analysis by independent experts.

Document Information

This document forms a component of the East Channel Region (ECR) Fishing Activity Report Series. Fishing activity reporting, in turn forms part of the overall ECA Regional Environmental Monitoring and Management (REMM) Reporting Programme. A full description of the ECA REMM Reporting Programme can be viewed online at www.eastchannel.info.

This report should be cited as:

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Data presented in this report has been provided to the ECA by Defra. Information included in the report has also been acquired from ICES.

This report has been completed on behalf of the ECA by MarineSpace Ltd. Any queries regarding the information included in the report may be directed to the Regional Development Manager at:

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1. Introduction

This document has been produced as an update regarding fishing activity reporting for the East Channel Region (ECR). The document should be read in conjunction with relevant information contained in the East Channel Regional Environmental Assessment (Posford Haskoning, 2003) and previous reports of fishing activity in the ECR (MarineSpace, 2008).

Due to the nature of the data collated under the East Channel Association's (ECA) fishing activity reporting initiative, this issue of the series will not provide in-depth analysis of the data but will simply provide an update of the reporting activities for the previous twelve months. Further, in-depth analysis of fishing activity in the study region will be undertaken for the first substantive review of dredging that will be completed prior to the end of the fifth year of dredging in the region (to be issued March 2011).

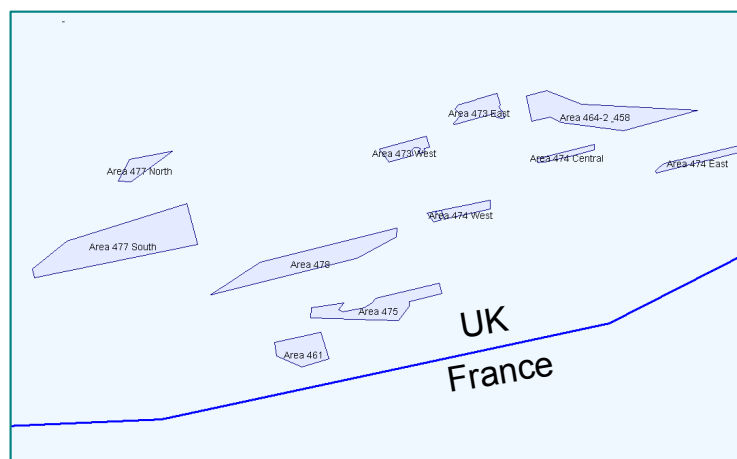
1.1. Reporting Activity Summary

A summary of previous assessments of fishing activity and analysis of more up-to-date data was presented in the previous fishing activity report (Volume 1, Issue 1, MarineSpace, 2008). Since this report, the latest Defra MFA overflight sightings data have been acquired and input to the ECA data library. Additionally, reports generated by other investigations of fishing activity have been acquired and are being reviewed to determine their utility for the purposes of informing the ECA's fishing activity reporting initiative.

2. Summary of 2007 Overflight Sightings Data

The ECA database was updated through acquisition of the most recent set of overflight sightings data (Marine & Fisheries Agency, 2007). This data has been processed as per the data included in the Volume 1, Issue 1 fishing activity assessment and the results are presented below. Figure 1 shows the location of dredging and application areas within the ECR.

Figure 1 The ECR Licence and Application Areas



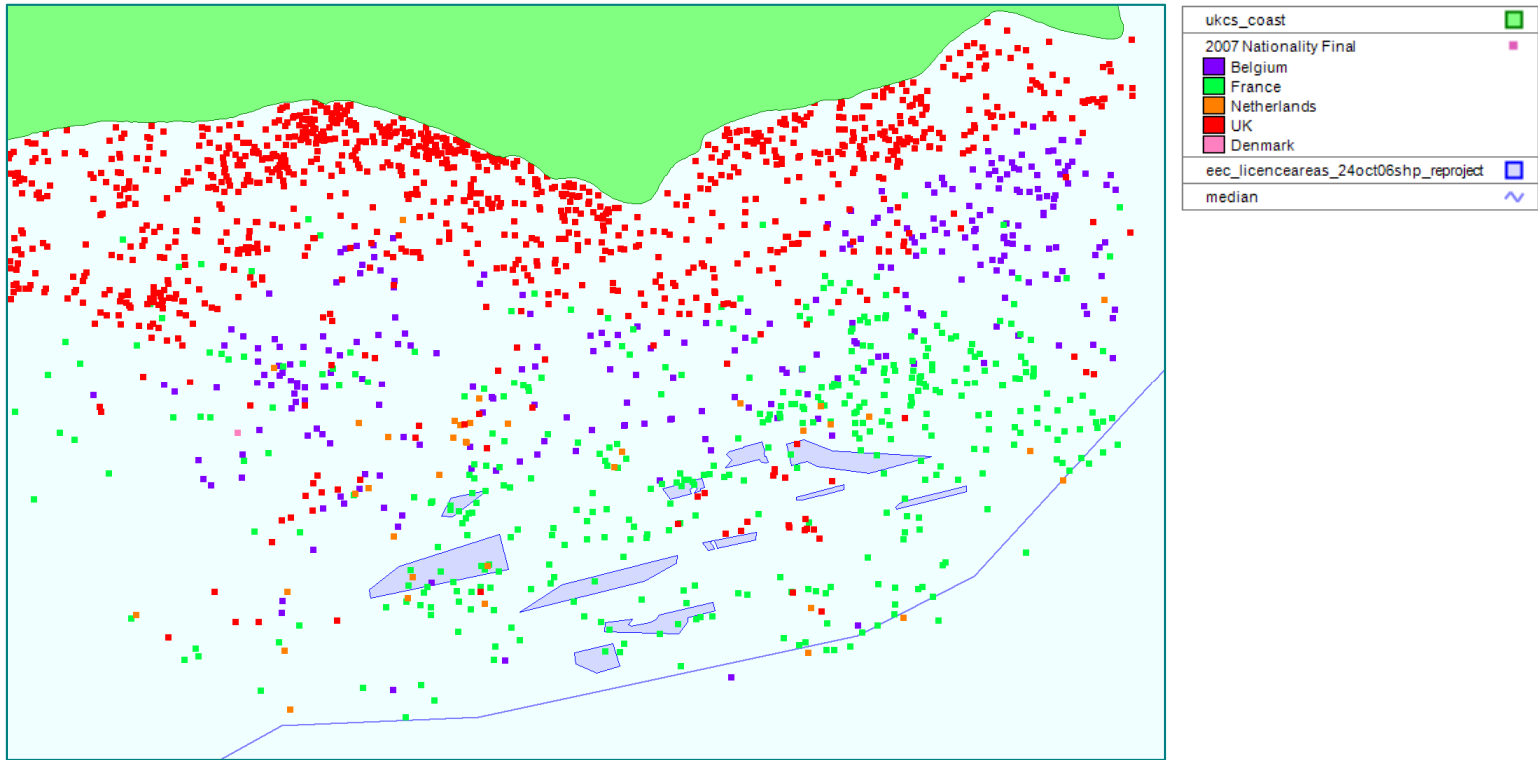
2.1. Fishing Activity by Nationality 2007

Defra overflight data for 2007 were acquired and filtered to isolate the location of vessels of different nationalities. Only vessels with a defined nationality and identified as actively fishing were considered in this assessment. All sightings of vessels actively fishing for each year were plotted. The results of the analysis are shown in Figure 2.

The results show that in 2007 the majority of vessels operating in the vicinity of the ECR dredging licence areas were French. The majority of Belgian vessels were active closer to the coast of the UK and the majority of UK vessels operated within the 12 mile limit. Some Belgian, Dutch and UK vessels were identified operating in the vicinity of the ECR dredging areas. This general pattern of fishing activity is in broad agreement with the findings of the previous fishing activity study (MarineSpace, 2008).

As in previous assessments of activity, some concentration of Belgian vessel was evident in the region to the SSE of Dungeness and to the SE of Beachy Head. In this area, Belgian vessels tended to concentrate effort along the 6 mile fishing limit although this concentration was variable. French vessels were active across the region but concentrations of activity were evident to the north and east of Area 464/458. UK vessels were most active within the 6 mile limit as might be expected.

Figure 2 2007 Activity by Nationality



2.2. Fishing Activity by Type 2007

The available data were sorted and plotted to determine the types of gear employed within the East Channel Region. The results are shown in Figure 3. As with the analysis of nationality the overflight data were filtered to only include sightings of vessels actively fishing and also to remove any sightings that did not include a gear type reference.

In 2007, the most common gear types employed were trawls – both demersal and pelagic. Beam trawls were identified in similar concentrations as those identified as Belgian vessels ie just beyond the 6 mile fishing limit with concentrations to the SSE of Dungeness. The use of unspecified trawl gear was widespread across the region. Much of the unspecified trawling activity was in areas where French vessels were noted as being active. It is not possible to determine the exact nature of these trawling activities (ie whether demersal, scallop dredge or pelagic). Whilst some potting and pair trawling activity was identifiable offshore, in the vicinity of the ECR licence areas, the fishing activity in the region was dominated by trawling and scallop dredging.

In the inshore waters of the UK more varied activity was recorded, including greater use of pots and drift/gill net gear.

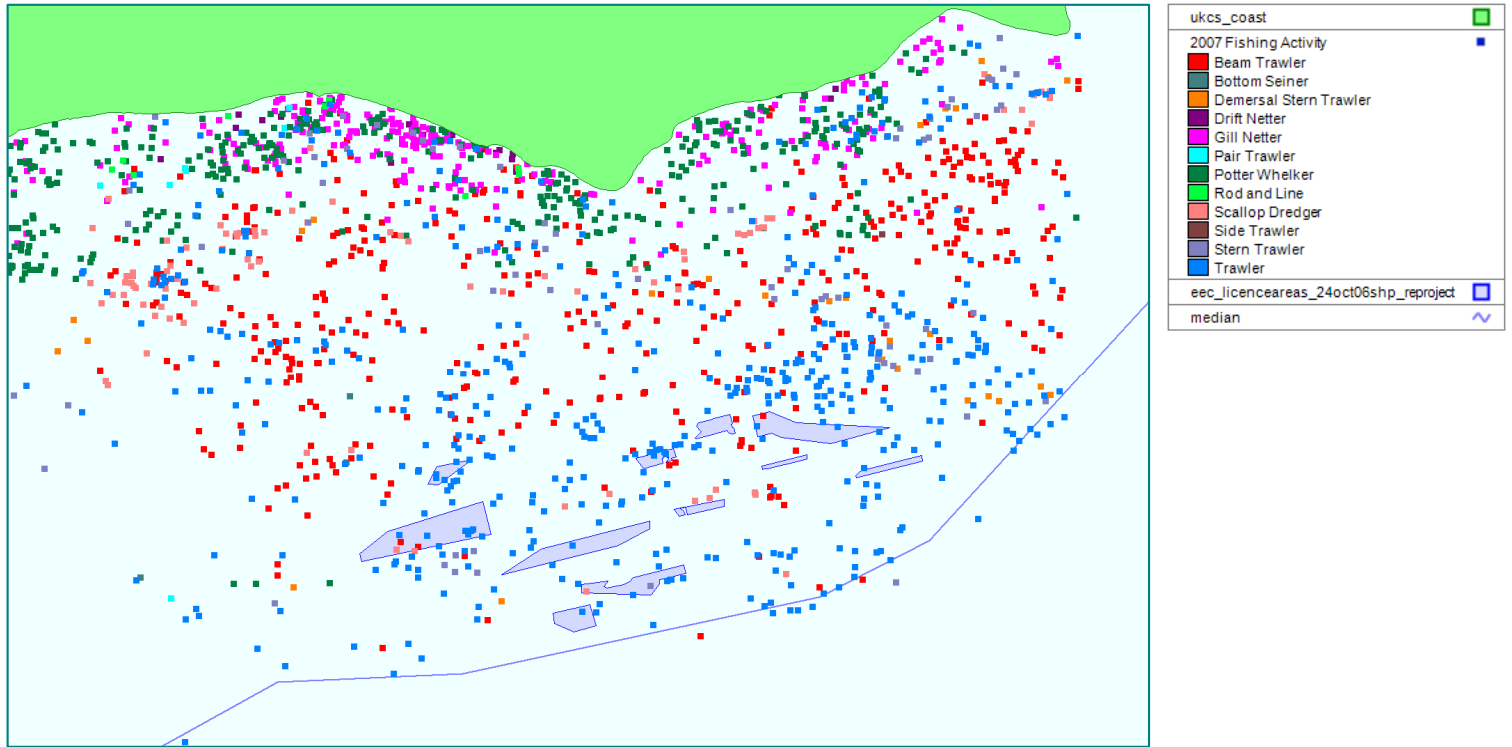
The pattern of fishing type presented in this update, is in broad agreement with the findings of the previous assessment, insofar as the main gear types employed are the same and the general location of activities is similar.

2.3. Fishing Activity by Season 2007

Available data was also collated and analysed to determine the variability of activity on a seasonal basis. The results are shown in Figures 4a-d with activity by gear type plotted for 1st Quarter to 4th Quarter inclusive for 2007.

For the data available to this assessment, the results show that greatest fishing activity was recorded in 1st quarter although high levels of activity also occurred in the 4th quarter. During the 1st quarter trawling (both generic trawling and beam trawling) was widespread but also concentrated in an area to the north and east of Area 464/458.

Figure 3 2007 Activity by Type



There was also a concentration of activity to the west of the ECR, in the vicinity of Area 477 South, of a similar intensity to that which occurred to the north of Area 464/458. Inshore, potting and whelking activity was most common.

In the 2nd quarter activity was less intensive throughout the region and much less activity occurred offshore. There was still evidence of concentrations of activity in similar areas to those described above, albeit less so than in the 1st quarter.

Trawling was still the most common fishing method in offshore waters during the 2nd quarter and inshore a reduction in potting and whelking activity was recorded.

In the 3rd quarter, there was a further region-wide lowering of fishing intensity. This is particularly noticeable in the vicinity of the ECR dredging licence areas where activity is virtually non-existent. Inshore, gill netting was the most commonly occurring activity.

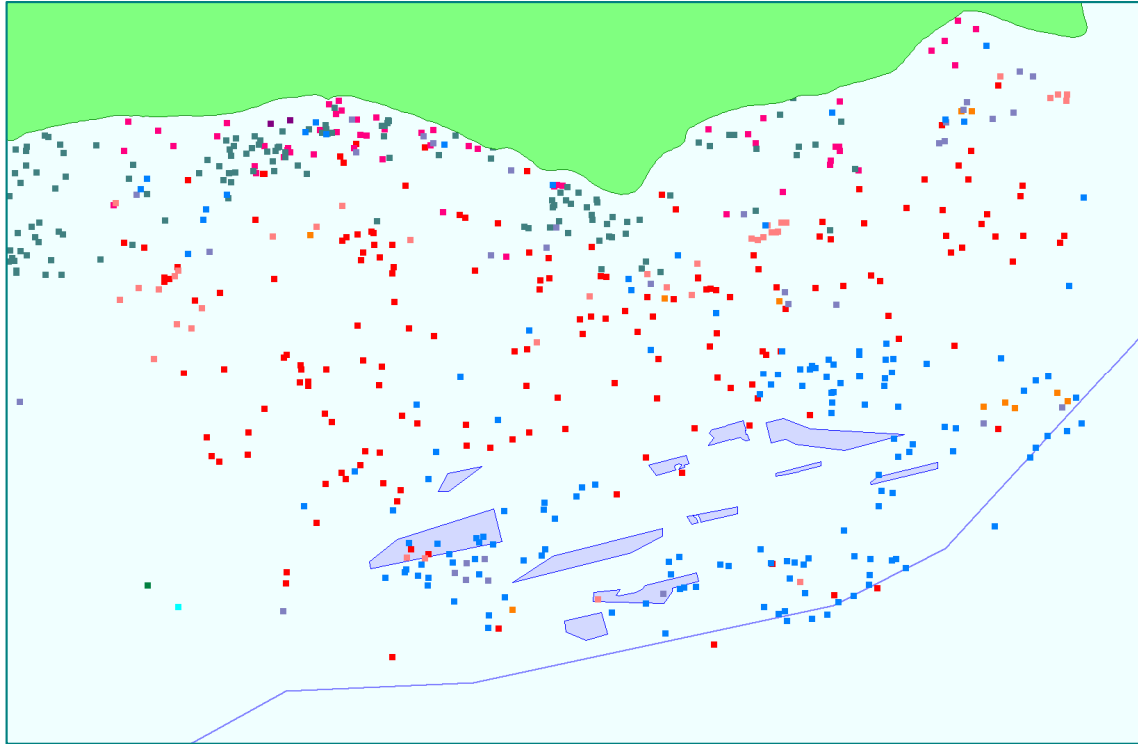
Fishing activity increased in the 4th quarter compared to that evident in the 2nd and 3rd quarters. Activity was more evenly spread across the region. Trawling was most common in the offshore waters with a noticeable concentration of activity around Area 473 West.

The review of 2007 data shows that there are clear similarities in the location, timing and type of fishing activity compared with the data presented in the previous assessment (MarineSpace, 2008). Trawling was widespread throughout the region with concentrations of effort evident in some areas. Inshore, potting/whelking and gill netting are the most commonly occurring activities.

3. ICES Landings Data

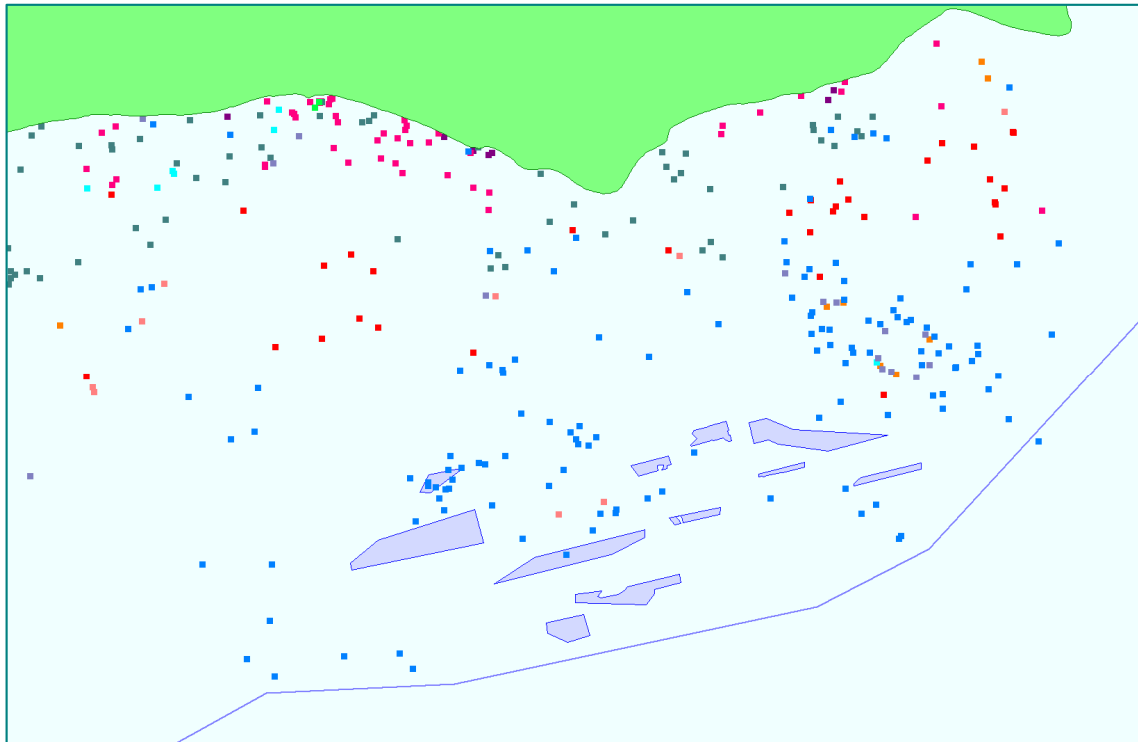
An update of landings data from the ICES Area VIIId was presented in the last fishing activity report (ICES capture data for 2001-2006 accessed using the FAO Fishstat Plus database). Further update of landings data is provided in this report through presentation of 2007 landings data (Figures 5 and 6). Further update will be undertaken as new data are made available by ICES.

Figure 4a Fishing Activity by Season 2007 Q1



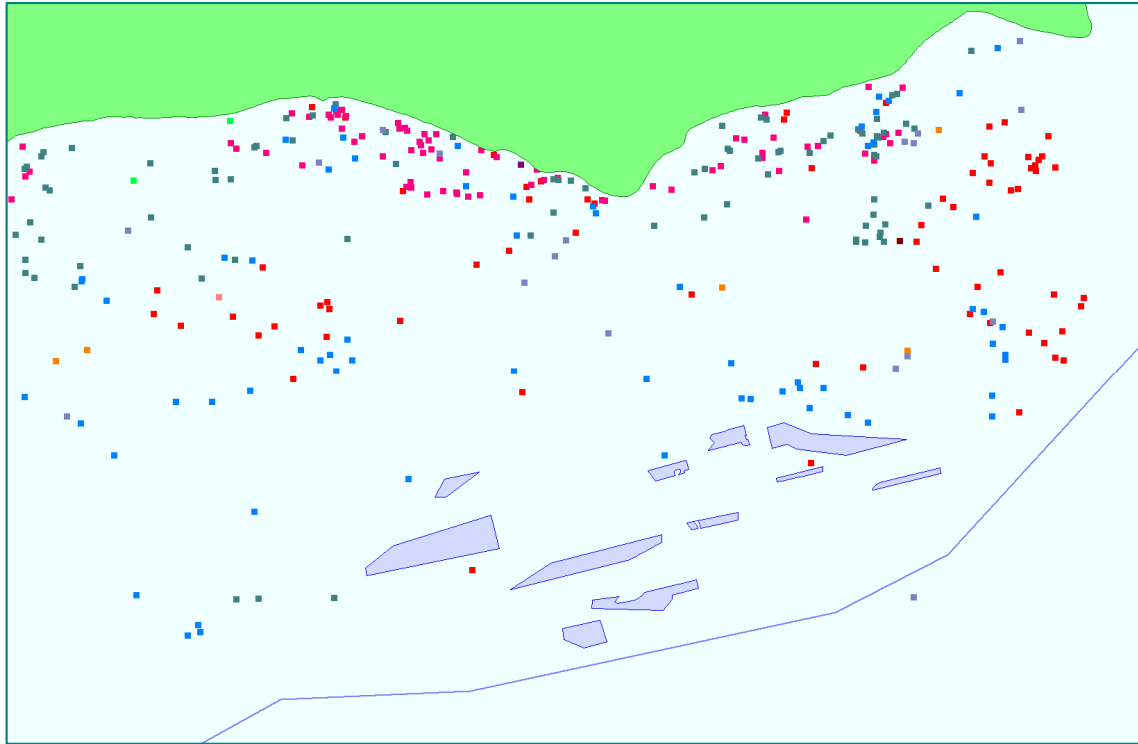
- ukcs_coast
- 2007 Q1 Activity
- Beam Trawler
- Bottom Seiner
- Demersal Stern Trawler
- Drift Netter
- Gill Netter
- Pair Trawler
- Potter Wheelker
- Scallop Dredger
- Stern Trawler
- Trawler
- median
- eec_licenceareas_24oct06shp_reproject

Figure 4b Fishing Activity by Season 2007 Q2



- ukcs_coast
- 2007 Q2 Activity
- Beam Trawler
- Bottom Seiner
- Demersal Stern Trawler
- Drift Netter
- Gill Netter
- Pair Trawler
- Potter Wheelker
- Rod and Line
- Scallop Dredger
- Stern Trawler
- Trawler
- median
- eec_licenceareas_24oct06shp_reproject

Figure 4c Fishing Activity by Season 2007 Q3



ukcs_coast

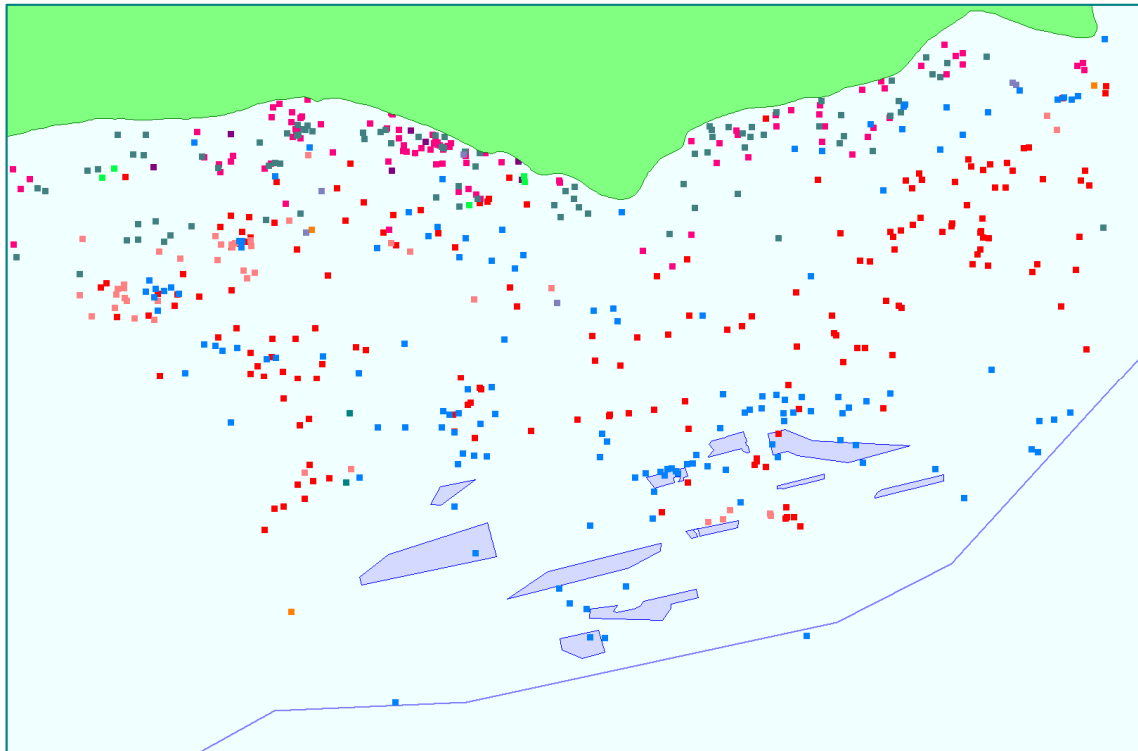
2007 Q3 Activity

- Beam Trawler
- Demersal Stern Trawler
- Drift Netter
- Gill Netter
- Potter Whelker
- Rod and Line
- Scallop Dredger
- Side Trawler
- Stern Trawler
- Trawler

median

eec_licenceareas_24oct06shp_reproject

Figure 4d Fishing Activity by Season 2007 Q4



ukcs_coast

2007 Q4 Activity

- Beam Trawler
- Bottom Seiner
- Demersal Stern Trawler
- Drift Netter
- Gill Netter
- Potter Whelker
- Rod and Line
- Scallop Dredger
- Stern Trawler
- Trawler

median

eec_licenceareas_24oct06shp_reprojected

Figure 5 Landings (tonnes) by species from ICES Area VIId, 2007 (Data Source: ICES Capture Data accessed using FAO FishStat Plus Database)

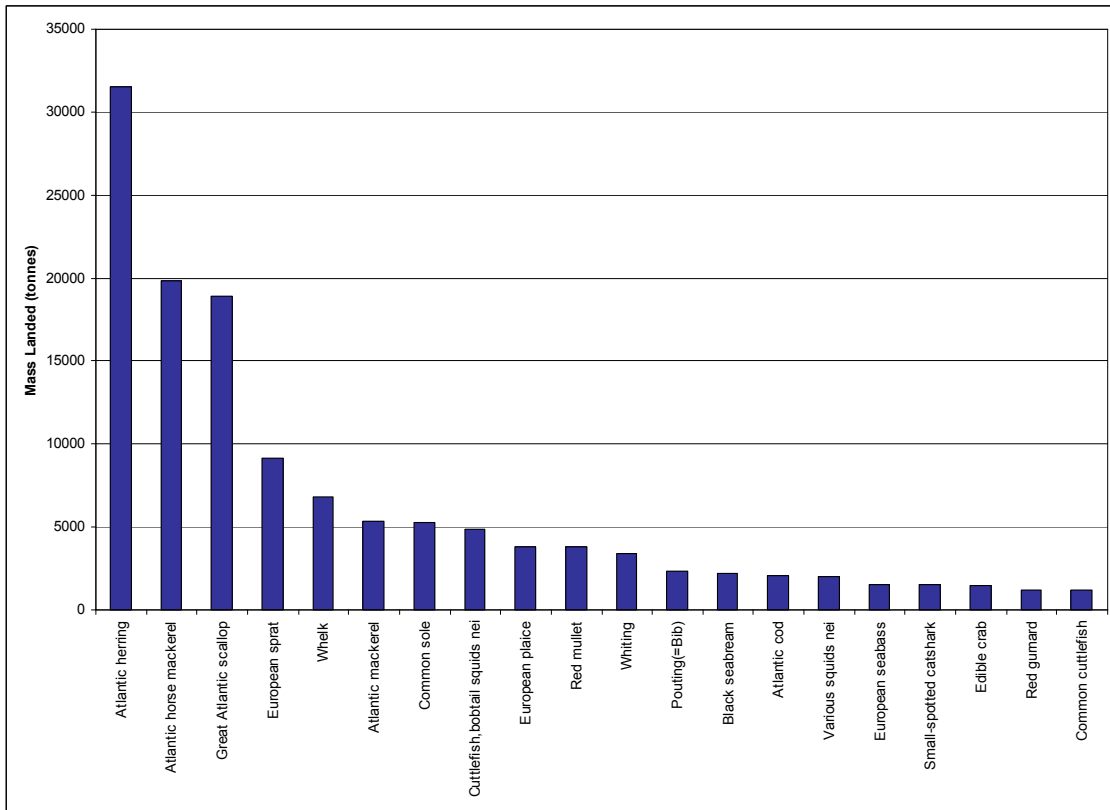
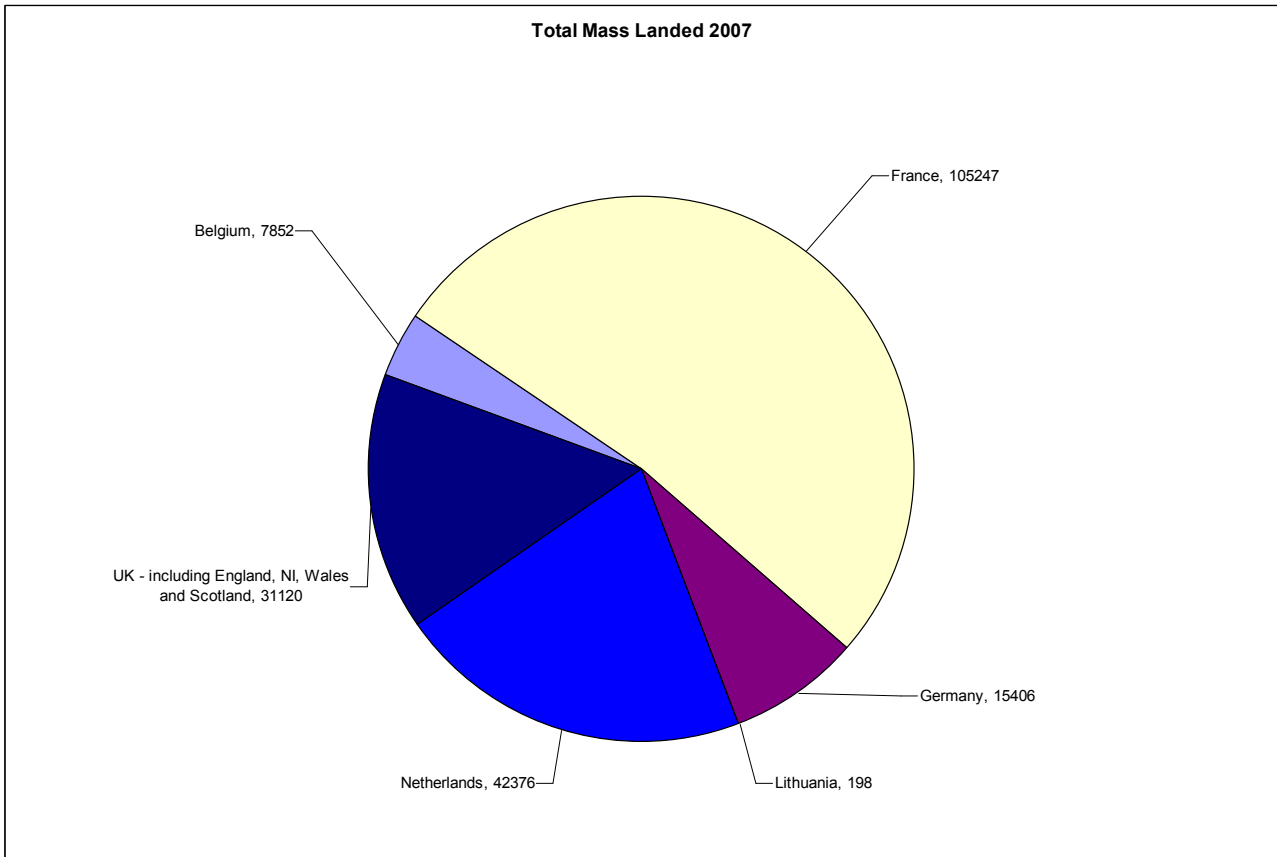


Figure 6 Mass of Fish Landed by Country, 2007 (Data Source: ICES Capture Data accessed using FAO FishStat Plus Database)



The data presented in Figures 5 and 6 show that the greatest tonnage of fish landed in 2007 was herring. Horse mackerel and Atlantic scallop were second and third greatest in terms of tonnage landed. These three species constituted almost 50% of the total tonnage of fish landed from Area VIId in 2007. The top twenty species in terms of tonnage landed constituted over 90% of the total landed in 2007.

The data for 2007 have now been incorporated into the dataset for the ECR and further analysis of landings data will be undertaken for the first substantive review of dredging (due for completion in 2011).

4. Direct Observations of Fishing Activity and Interaction between Fishing and Dredging Vessels

No usable data has been gathered through direct observation of fishing activity by the crews of dredging vessels. Liaison with the fishing industry during 2008 has not highlighted any significant fishing activities in the ECR region that have not already been accounted for in the REA (eg scallop dredging, herring fishing). No information has been presented during fishing liaison meetings to suggest adverse interaction between dredging and fishing vessels.

5. Other Sources of Information Describing Fishing Activities in the Eastern English Channel

The ALSF project entitled 'The scale and impact of fishing activities in the Eastern English Channel: an initial assessment based on existing geophysical survey data' provides region wide data describing the types and locations of fishing activity. The project outputs have now been published (Vanstaen *et al*, 2008). The results of the survey are being reviewed and relevant findings regarding the nature, location and intensity of fishing activities in the ECR will be incorporated into the first substantive review of dredging.

More recently Cefas have begun a project that with objectives that seek to:

- Map the distribution and intensity of bottom (and non-bottom) fishing activities using VMS data
- Evaluate the spatial distribution of fishing activities in relation to mapped seabed habitats from regional environmental characterisation surveys
- Assess the nature of any changes in fishing patterns following the introduction of marine aggregate extraction activities in the Eastern English Channel

The ECA have been approached by Cefas to supply relevant data to the project and have agreed to cooperate wherever possible. The project is due to be completed in 2011 around the same time as the first regional substantive review of dredging is due to be submitted. The ECA will monitor the progress of the project and ensure that relevant findings are incorporated into the first substantive review.

6. Conclusions

The review of data undertaken in this assessment generally supports the findings of the REA and most recent ECR fishing activity assessment. Similar types of fishing activity were evident in the region and similar nationalities prosecuted fish stocks. A similar range of species were targeted in 2007 to those identified in the period of the REA assessment and the ECR Volume 1, Issue 1 assessment.

Activity

The principle fishing activity in the region in 2007 was trawling. French vessels were the most active in the offshore (>12nm from the coast) area. This supports the findings of the REA.

Seasonally, most activity in 2007 in the vicinity of the ECR licence areas occurred in the 1st and 4th quarters although with such a limited data set this finding should be viewed with caution.

Landings

In 2007, the top three countries in terms of landings (tonnes) from Area VIId were 1) France, 2) the Netherlands and 3) the UK. This is in agreement with the findings of the previous ECR fishing activity assessment (MarineSpace, 2008). The same three were also noted as top three in the REA but in a different order; 1) France, 2) the UK and 3) the Netherlands.

The top species landed in 2007 was herring (*Clupea harengus*). More than 30,000 tonnes of herring were landed from Area VIId in this period. The next most common species landed was Horse mackerel with nearly 20,000 tonnes landed.

Findings of Other Studies

The results of the recently completed ALSF study of demersal fishing activity in the Eastern English Channel (EEC) (Vanstaen *et al*, 2008) provide an important overview of the type, location and intensity of fishing activity.

It is evident from the results that certain types of activity are concentrated in discrete sub-areas of the EEC region. The findings of the study will be more fully considered in future assessments carried out as part of this ECR report series.

7. Recommendations

It is recommended that:

Annual updates and assessments of fishing activity should continue up to the first substantive review of dredging activity in the ECR (2010-2011). The scope of the fishing activity assessment as currently pursued, is considered adequate to determine any gross changes in the type and location of the principle fishing activities. The data sources used for this assessment should also be capable of describing gross changes in the mass of species landed from the region.

The results of other studies of fishing activity (eg ALSF projects) should be incorporated into ECR assessments and reported in the first substantive review of dredging.

References

Defra Overflight Data 2007. Supplied by the Marine and Fisheries Agency.

ICES Capture Data. 2007. Acquired from www.ices.dk and accessed through the FAO FishSTAT Plus Database.

MarineSpace, 2008. ECR Fishing Activity Report Series: Volume 1, Issue 1. Report to the East Channel Association.

Posford Haskoning, 2003. Regional Environmental Assessment. Report to the Eastern Channel Association.

Vanstaen, K., Limpenny, D., Lee, J., Eggleton, J., Brown, A., Stelzenmüller, V., Ceri James, Rocks, K. and James, C. 2008. The scale and impact of fishing activities in the Eastern English Channel: an initial assessment based on existing geophysical survey data. Cefas.

