

Discards in the fisheries under German flag: Results from 7 years of National Data Collection in the North Sea and North Atlantic

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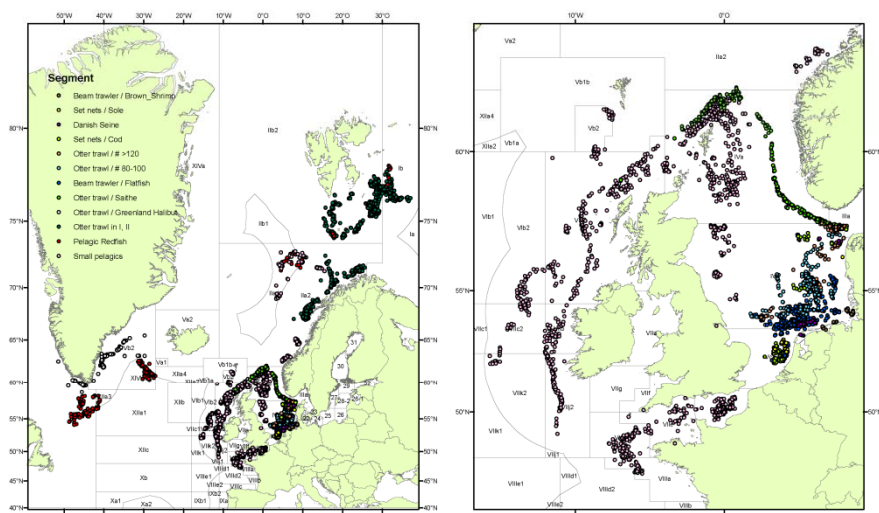


Fig. 1. Geographical distribution (including ICES areas) of sampled hauls by fisheries segments, all trips 2002 to 2008 combined, for the entire area (left) and North Sea/West of British Isles trips only (right)

Results

Overall discard rates (Fig. 2):

- In the beam trawl and the bottom trawl fisheries using codend mesh sizes 80-100 mm, the discard rate is 60-70% based on the percentage of the overall discard in relation to the total catch weight
- the median discard rate in the set net fishery directed on sole is just above 10 %, and the overall average discard rates of all other fisheries are distinctly below 5 %
- within one fisheries segment, discard rates of the individual fishing trips are often highly variable, especially in the beam trawl and bottom trawl fisheries

Catch compositions and discards (Fig.3):

- **Beam trawl fisheries targeting flatfish species and bottom otter trawl fishery (80-100mm):**

The most retained species are plaice and sole, discards >60%, consisting mainly of plaice and dab

- **Brown shrimp beam trawl fishery:**
- 70% of the total catch is brown shrimp, half of the shrimp catch are undersized shrimp which are discarded, overall discard proportion is 65%, consisting of undersized brown shrimp, other invertebrates but also a proportion of small fish

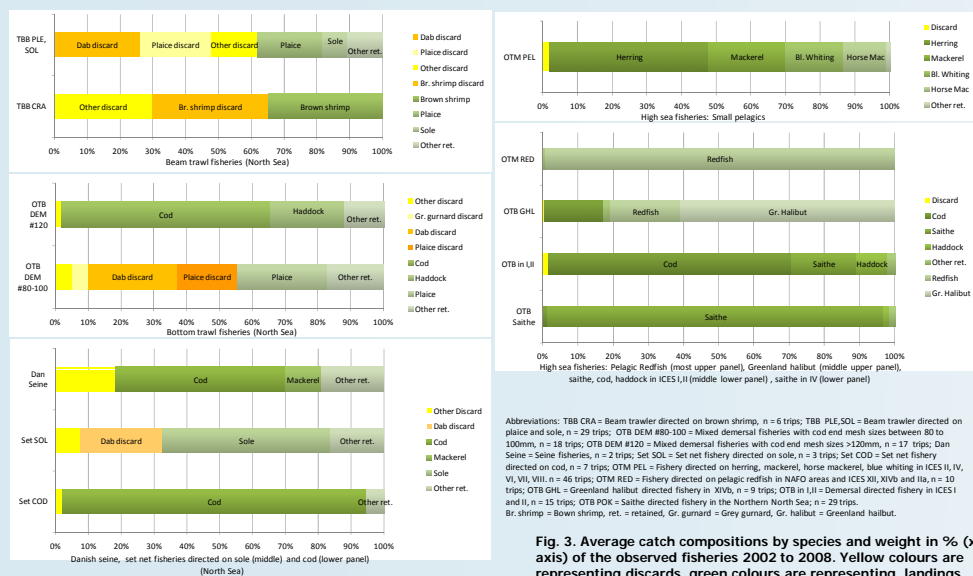


Fig. 3. Average catch compositions by species and weight in % (x-axis) of the observed fisheries 2002 to 2008. Yellow colours are representing discards, green colours are representing landings

Conclusions

Since 2007, the European Commission is increasingly taking the problems of discarding into account, as discarding not only has an impact on the stock assessments, but also ethical and socio-economic impacts which need to be minimized in future. The EU is currently preparing a legislation to minimize discarding step-by-step (STECF, 2008).

However, this process has to be closely monitored by scientists.

The results show that the European Community has already created with the Data Collection Framework an efficient program to observe the commercial fishery which can be used for the surveillance and implementation of sustainable fishing methods.

Introduction

Since 2002, Germany is obliged to collect fishery data to support the European Common Fishery Policy. Sampling of the commercial fishery under German flag is one duty within the EU fisheries data collection programme. During the past 7 years, 191 fishing trips were sampled by scientific observers onboard commercial fishing vessels to collect data on catch compositions with special emphasis on the proportions of landed and discarded fish.

Material and Methods

Data were collected by on-board observers on German fishing vessels operating in the North Sea, Skagerrak and the North Atlantic and targeting different fish species or species assemblages.

Figure 1 shows the positions of the sampled hauls in the different fisheries. Data on the catch composition with the proportions of landings and discards as well as length, weight and age data of the caught fish and invertebrates are collected during the fishing trips.

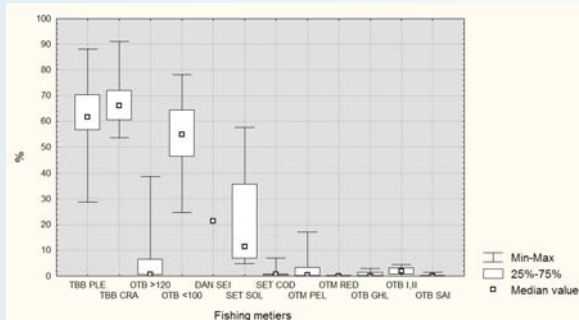


Fig. 2. Proportions of discards in relation to the total catch weight in % by trip in each fisheries segment (for segment codes, see Fig. 3)

- **Mixed demersal fishery (codends >120mm):**

Low discards, most retained species are cod and haddock

- **Seines:**

Discards below 20% of total catch, discarding of fish with low market value

- **Set net fisheries**

Discards depending on target species; directed on sole: >30% discards (consisting mostly of dab); directed on cod: 2% discards

- **High seas fisheries**

The catch composition in the high seas fisheries directed on pelagic species (herring, mackerel, horse mackerel, blue whiting, pelagic redfish), directed on Greenland halibut and Arctic demersal species are very target species specific, and overall show low discard rates

STECF, 2008: Reduction of discarding practices. Report of the Subgroup on Management of Stocks (SGMOS) of the Scientific, Technical and Economic Committee for Fisheries (STECF), SGMOS-08-01, 102 pp.