FACTSHEET: Sampling demersal passive fisheries through observer trips (DEMPAS)

Version: [v1, 22/02/2023]

Sampling protocol: DEMPAS

Sampling objective(s): data collection of discards for active demersal fleet

Start of sampling: 2011

Sampling ongoing: yes Data use

Primary data use:

From 2011 onwards – data collected for commercial species on request available for relevant end-users such as ICES.

Sampling design and method

Every year 10 observer trips are carried out on board of demersal passive fishing vessels. The 10 trips are divided over the different passive fisheries (i.e. gillnet, fyke and handline fisheries) based on the total number of trips of the demersal passive fishing fleet by gear conducted the year before.

A trial testing of a probabilistic method to select vessels has indicated that such a selection method is not workable for the demersal passive fishing fleet as the activity of the vessels throughout the year is extremely unpredictable and this fishery has a strong seasonal and weather dependent character. Therefore, there is regular contact with a variety of vessels to discuss when they will go out fishing and if a scientific observer can board the vessel. Once a trip is selected the scientific observer boards the vessel when the gear is retrieved. The observer samples discards and records rare, incidental bycatches and corresponding observation effort (expressed in observed metres nets, number of fykes, number of fishing rods). Furthermore, operational- and catch data (e.g. position, depth, weather conditions, volume of landings) are collected.

No length measurements of landings are collected during the observer trips as this fraction is sufficiently covered by the on-shore sampling programme (see also factsheet <u>AUCTION DEM</u>).

Sampling protocol and data capture

In the field

For each discard sampling trip, one observer goes onboard a vessel. Operational- and catch data are collected when the gear is retrieved; gear position, depth, weather conditions, nr nets/fykes/fishing rods, type of net (gillnet trip), length of fyke line (fyke trip), type of bait (handline trip), and total landings.

In general, all discards are sampled. Within the gillnet fisheries it may occur in the case of high discards, that a subsample of discards is taken by the scientific observer at the beginning, mid and end of the net. Numbers at length ('to the cm below') are recorded for all fish species, Norway lobster (*Nephrops norvegicus*) and edible crab (*Cancer pagurus*) in the discards. Numbers without length measurements are recorded for all remaining (benthos) species. Data is written down on specific measurements lists and entered in the computer once back in the lab. The observer also monitors incidental bycatches (see also factsheet <u>PETS</u>).

In the lab

All data collected on board and in the lab is in Billie Turf, the standard in-house data management software.

Data quality

Quality assurance procedure

Measurement lists of collected data are archived at Wageningen Marine Research and inputted data are stored as plain text files at a centralised location for which daily back-up routine is in place. When all data of a sampled trip has been inputted checks for outliers take place. The checks are conducted using standardised scripts (R, SAS) and involve outlier checks for numerical values, consistency checks for text variables, relational checks such as length-weight, length-age relationships, and maps with the sampling positions.

Data storage

National database: After file corrections, the data are stored in one of the centralised databases, FRISBE. The relevant aspects of this database are described in Proc databases.

International database: ICES RDB(ES) https://www.ices.dk/data/data-portals/Pages/RDB-FishFrame.aspx

Data availability

Institutional availability: data is available to people with access rights to the shared location. Read and write rights can be assigned separately.

Public availability: data is available anonymously on aggregated level.

Reference to full documentation:

National manual: Bangma, T., A.S. Couperus, M. Dammers, A.T.M. van Helmond, P. Molenaar, H.M.J. van Overzee, 2022. CVO Handboek Discardsbemonstering en bijvangstregistratie. Versie 4.0, november 2022. CVO rapport 22.026

Review frequency full documentation: national manual is annually reviewed.

Factsheet author(s): van Overzee, H.M.J.

Factsheet latest update: 22/02/2023 Factsheet latest review: 22/02/2023