FACTSHEET: Incidental bycatch monitoring in pelagic commercial fisheries (PETS)
Version: [v1, 22/02/2023]

Sampling protocol: PETS

Sampling objective(s): data collection of catches for pelagic freezer trawlers

Start of sampling: 2004

Sampling ongoing: yes

Data use

From 2004 onwards – data collected for incidental bycatch provided on request to relevant end-users such as ICES.

Sampling design and method

Annually 32 observer trips are carried out on board commercial fishing vessels; 12 trips on board pelagic freezer trawlers active in EU waters, 10 trips on board demersal active vessels, and 10 trips on board demersal passive vessels. See also factsheets PEL1, DEMACT1, DEMPAS on how the trips are selected.

Next to sampling the catch or discards and recording operational- and catch data, the scientific observer records rare, incidental bycatches on a haul basis.

Sampling protocol and data capture

In the field

For each observer trip, one observer goes onboard a commercial vessel or trawler. Operational- and catch data are collected each time the fishing gear is deployed (each 'haul') during a fishing trip. With each haul the following information is registered: vessel position (at start and end); haul duration; depth; weather conditions; nr nets/fykes/fishing rods (passive observer trips), type of net (passive observer trips), length of fyke line (passive observer trips), type of bait (passive observer trips), and the volumes of catches and landings.

Next to sampling the catch or discards, the observer is instructed to monitor all rare, incidental bycatches for all hauls from the bridge and at deck and corresponding observation effort (expressed in the time observed of catch processing at the conveyer belt in case of the passive fisheries outboard). In the case of the pelagic fisheries the observer also records whether a shark catcher was used and if positive whether the observer checked the shark catcher on rare, incidental bycatches. In the case of the passive fisheries the observer also records whether pingers are used. If species cannot be identified by the observer, pictures are taken and identification occurs back at the lab.

Data is written down on specific measurements lists and entered in the computer later on (pelagic observer trips) or back at the lab (demersal observer trips).

In the lab

In case a species could not be identified by the observer, species identification is conducted on shore by designated experts based on pictures taken by the observer.

In case not all collected data could be inserted in Billie Turf on board, the observer can do so once back on shore.

Data quality

Quality assurance procedure

Measurement lists of collected data are archived at WMR 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.

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Factsheet latest update: 22/02/2023

Factsheet latest review: 22/02/2023