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DCF

Sampling plan description Baltic cod recreational fishery

Region: **Baltic Sea**

Data source: **Recreational fishery targetting cod (*Gadus morhua*)**

1. Introduction

In Poland there is a dedicated fleet segment of private boats and registered charter boats adapted to cod recreational fishery – angling with fishing rods (LHP).

Over the period of 2014-2016, the total number of dedicated cod angling trips decreased from 11.2 to 9.4 thousand trips annually.

For the purpose of sampling of this segment under the UE Data Collection Framework (DCF), the following definitions are applied:

- Primary Sampling Unit - vessel/trip,
- Target population - total number of recreational sea-going trips targetting cod.
- Name of Sampling Scheme - At sea cod recreational fishery.
- Stratification – vessels angling with LHP for Baltic cod per ICES Subdivision and quarter
- Sampling frame - total number of vessels angling with LHP for Baltic cod

2. Sampling plan description

Data sources

In order to monitor the development of *Gadus morhua* recreational fisheries in the Baltic Sea in Poland and to estimate the catch level, following four types of data are collected and data sources used:

1. Data on the number of recreational sea-going trips and the number of anglers participating at those trips - collected from Harbour Master Offices' registers.
2. Data on total weight of fish caught and biological variables (length, weight, sex, maturity and age) - collected and processed from angling trips with observers on-board.
3. Daily reports of recreational catch delivered to regional inspectorates of marine fisheries by owners of charter boats (mandatory catch reporting since March of 2015).

4. Interviews with anglers (questionnaires' survey) – collected during on-board observer trips.

Data on number of recreational sea-going trips and the number of anglers participating in those trips, including the date and time of each angling vessel's departure are registered by the Harbour Master Offices. These registers constitute the comprehensive data source on marine recreational fisheries status.

Observer trips

Main purpose of on-board observed trips is to measure the length and weight of each fish caught in order to determine catch composition and the whole catch of fish during given trip. Representative part of the catch is sampled for other biological data - sex and age (4-5 individual fish per length class where possible).

Coverage

In order to obtain uniform coverage of biological data sampling over the year and by ICES Subdivision, 24 of observed sea-going trips is planned with the aim of having 6 observed trips in each quarter (2 observed trips per month).

3. Data Quality

In order to reduce the potential bias regarding data quality, the monitoring of the *Gadus morhua* recreational fisheries is supplemented by questionnaires' survey and recreational catch data from charter boats' daily reports.

Non-responses and refusals are recorded for questionnaires' survey. At-sea biological sampling is not randomized but based on vessels' availability.

4. Data processing

The total recreational catch of *Gadus morhua* is estimated by raising sample mean weight of the anglers catch from observed trips in a given stratum by the known number of trips at the population level.

References

Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC (OJ L 354, 28.12.2013, p. 22).

Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (OJ L 157, 20.6.2017, p. 1)

Commission Implementing Decision (EU) 2016/1251 of 12 July 2016 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019

Commission Implementing Decision C(2016) 8851 of 15.12.2016 approving the Work Plan submitted by Poland for data collection in the fisheries and aquaculture sector for the period 2017-2019

ICES. 2014. Report of the Working Group on Recreational Fisheries Surveys (WGRFS), 2-6 June 2014, Sukarrieta, Spain. ICES CM 2014\ACOM:37. 662 pp.