

# Commercial marine fishery

## Quality Report

## Quality Report

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### 1 Contact

#### 1.1 Contact organisation

Natural Resources Institute Finland

#### 1.2 Contact organisation unit

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### 2 Metadata update

#### 2.1 Metadata last certified

15.5.2023

#### 2.2 Metadata last posted

15.5.2023

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### 2.3 Metadata last update

15.5.2023

## 3 Statistical presentation

### 3.1 Data description

Commercial marine fishery statistics comprise information on the number of Finnish commercial marine fishermen, the volume and value of the catch and the fishing effort.

### 3.2 Classification system

In the statistics, the volume and distribution of catch are given according to the regions used by the International Council for the Exploration of the Sea (ICES).

### 3.3 Sector coverage

The catch statistics include the entire catch of Finnish commercial marine fishermen, including the part of the catch landed outside Finland. Foreign vessels also land their catches in Finland, but such catches are not included in the Finnish catch statistics.

### 3.4 Statistical concepts and definitions

Commercial marine fishery statistics (until 2016, Professional marine fishery statistics) are based on periodic catch declarations by commercial fishermen.

Commercial fishing is an activity in which fish are caught for sale or in which all or part of the fish caught is sold. According to Finnish fisheries law and EU Common Fisheries Policy regulations, non-commercial fishermen are not allowed to sell their catches, except for the occasional sale of a small quantity of fish or crab directly to the consumer in inland waters. Commercial fishermen have some rights that differ from recreational fishermen. They can sell their catch and receive public subsidies. In addition, commercial fishermen can use more than 240 metres of nets and 100 hooks per boat, a trawl, and a big trap net for salmon and trout.

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A commercial fisherman may be a natural person (person or business) or a legal person (limited liability company, limited partnership or general partnership), engaged in fishing for commercial purposes.

According to the Fishing Act (379/2015), all commercial fishermen must be entered in the register on commercial fishermen and the Act on the registration of fishing and aquaculture vessels operating at sea (690/2010) obliges all vessels and boats engaged in commercial marine fishing under a Finnish flag to be registered. Both registers are maintained by Southwest Finland Centre for Economic Development, Transport and the Environment. In Åland, the Provincial Government maintains a register of fishing vessels engaged in commercial fishing.

The regionalization used in the statistics is consistent with the spatial classification of the International Council for the Exploration of the Sea (ICES). Catch statistics are presented in accordance with international practice as a nominal catch.

Nominal catch refers to catches landed by fishermen in Finland or abroad or transshipped at sea. For statistical purposes, this is reported in kilograms live weight, i.e. the weight of ungutted fish. Discarded fish, for example fish damaged by seals, are not included in the nominal catch.

The catch is reported by species and fishing gear. The amount of catch is calculated separately for each species based on non-zero observations during the reporting period and presented in trap net, gill net, trawl and hook days. For instance, trap net fishing with two trap nets over ten days accounts for twenty trap net days. The reporting period is one fishing effort in the fishing logbook and the landing report of coastal vessels of less than 10 metres length, and one month on the coastal fishing report.

The number of units of fishing gear is calculated as the sum of fisherman-specific highest numbers of units of gear simultaneously used for fishing. The number of fishing days is the total number of fishing days of all fishermen for the gear in question, regardless of whether or not there was a catch. Fishing gear is used for different lengths of time and its number varies. This variation is taken into account in fishing gear days

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(trap net, gillnet and trawl days), for example five days of fishing with ten nets totals fifty net days.

### 3.5 Statistical unit

Data collection includes all commercial marine fishermen. A commercial fisherman may be a natural person (person or business) or a legal person (limited liability company, limited partnership or general partnership), engaged in fishing for commercial purposes.

### 3.6 Statistical population

The statistical population is formed by a register on commercial marine fishermen. The statistics are comprehensive. This means that all commercial marine fishers are included in the statistical population.

### 3.7 Reference area

The reference area of the statistics is the entire marine area, based on the international regionalisation, and for fisherman the national regionalisation according to the area of residence.

### 3.8 Time coverage

Information is available since the 1950s.

### 3.9 Base period

The statistics are not an index.

## 4 Unit of measure

The quantities of catch are given in thousands of kilogrammes, catch of salmon is also given in head counts. The value of catch is given in Euros.

The quantity of registered fishing vessels is given in numbers. The volume of vessels is given in gross tonnage (GT) and the power in kilowatts.

## 5 Reference period

Calendar year

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### 6 Institutional mandate

The duties of the Natural Resources Institute Finland have been defined in the Act on the Natural Resources Institute Finland (561/2014) and the Act on the Food and Natural Resources Statistics (562/2014). The Act on the Food and Natural Resources Statistics defines the duties of the Natural Resources Institute Finland to be compiling and publishing statistics regarding:

- 1) the structure, production methods, and input in production of agriculture; the production of crops, horticulture, and livestock; the environmental effects of production, and the prices of agricultural products,
- 2) commercial utilisation of forests, activity of the wood market, conservation and maintenance of forests,
- 3) fishing, aquaculture, fisheries, the market of fisheries, and
- 4) the safety of food products.

The act gives the Natural Resources Institute Finland extensive permissions to collect information on agriculture, horticulture, aquaculture, processing and trade of agricultural and aquacultural products, forestry, and the processing and trade of wood.

The Statistics Act (The Statistics Act 280/2004, 361/2013) legislates on, including but not limited to, data collection, data processing, and duty of disclosure. In addition to the Statistics Act, the Personal Data Act and the Act on the Openness of Government Activities are applied when processing data for compiling statistics.

The main document guiding our actions is the perennial European statistical programme, approved by the European Parliament and the Council of Europe, based on which the commission produces an annual work programme. The statistics included in the European Statistical Programme are prescribed in the Council Regulation 322/97.

The Statistical Office of the European Union, Eurostat, and the statistical offices of EU countries must apply the EU's Statistics Act when compiling statistics following the work programme.

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As a supranational regulation, it surpasses the national Statistics Act but in practice there are no contradictions between the Statistics Acts of the EU and Finland.

### 6.1 Legal acts and other agreements

The statistics are compiled based on the Act on the Natural Resources Institute Finland (561/2014), the Act on Food and Natural Resource Statistics (562/2014), the Statistics Act (280/2004), and the Regulation (EC) No 218/2009 of the European Parliament and of the Council on the submission of nominal catch statistics by Member States fishing in the north-east Atlantic. The EU data collection programme for aquaculture (EU) 2017/1004, (EU) 2021/1167, and (EU) 2021/1168 requires data collection on commercial marine fishery.

### 6.2 Data sharing

The commercial marine fishery statistics are published yearly on the Natural Resources Institute Finland website. A webpage, announcements, news, and blogs regarding the statistics can be found on the website of the Natural Resources Institute Finland. Tables relating to the statistics are available on the statistics database of the Natural Resources Institute Finland.

## 7 Confidentiality

### 7.1 Confidentiality - policy

Confidentiality is a base principle of statistics and assures the confidential processing of data provided by informants, and the Natural Resources Institute Finland has undertaken to follow this principle. Micro-data is confidential and must never be released for administrative decision-making, investigation, surveillance, legal proceedings, or similar purposes.

### 7.2 Confidentiality - data treatment

The confidentiality of data collected for statistical purposes is guaranteed according to the Statistics Act (280/2004), the Personal Data Act (523/1999), the Act on the Openness of Government Activities (621/1999), and the EU General Data Protection Regulation (2016/679). Data is protected at all

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stages of processing using the necessary physical and technological solutions. The staff only has access to information necessary for their duties. Unauthorised people do not have access to spaces in which micro-data is processed. Staff members have signed a non-disclosure agreement when entering duty. Intentional breach of confidentiality will be penalised.

## 8 Release policy

The disseminations of the Natural Resources Institute Finland are published online on weekdays at 9:00. Data is public after it has been published on the website.

### 8.1 Release calendar

The publication dates are confirmed in autumn together with the action plans. The release calendar of the following year is published for users in the end of the year. The release calendar holds data on the dates of future publications. The publication dates are published in the calendar at first with an accuracy of one week, and two months prior to the publication date with an accuracy of a day. The calendar also contains direct links to already published statistical publication.

### 8.2 Release calendar access

[Statistical releases calendar | Natural Resources Institute Finland](#)

## 9 Frequency of disseminations

Yearly

## 10 Dissemination format

### 10.1 News release

Preliminary data on commercial marine fishery is published in the end of January of the year following the statistical year. Final statistics are published at the latest in May.

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### 10.2 Publications

The statistics for professional marine fishery were published in the Suomen Kalatalous series for 1962–1986, in the SVT-Ympäristö series for 1987–1997 and, since 1998, in the Agriculture, Forestry and Fishery series of the Official Statistics of Finland. The time series statistics for professional marine fishery for 1980–1998 are given in the publication Finnish Fishery Time Series (Official Statistics of Finland: Agriculture, Forestry and Fishery 2001:60).

### 10.3 On-line database

[PxWeb - Commercial marine fishery](#)

### 10.4 Other

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### 10.5 Documentation of methodology

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### 10.6 Quality documentation

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## 11 Quality management

### 11.1 Quality assurance

The Natural Resources Institute Finland follows the Code of Practice and the Quality Assurance Framework of European statistics when compiling statistics. The Code of Practice concern the independence and accountability of statistics authorities, and the quality of processes and published data. The principles are compatible with and supplement the Principles of Official Statistics, agreed upon by the United Nations Statistical Commission. The quality criteria of official statistics in Finland are also compatible with the Code of Practice of European statistics. The principles are also compatible with the European Foundation for Quality Management.

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The annual quality assurance of statistics performed by Statistics Finland includes statistics produced by the Natural Resources Institute Finland.

### 11.2 Quality assessment

The annual quality assurance of statistics performed by Statistics Finland includes statistics produced by the Natural Resources Institute Finland.

## 12 Relevance

### 12.1 User needs

-

### 12.2 User satisfaction

Feedback is collected from the users of the statistics, especially when revising the statistics. Feedback is also received directly. In addition, we investigated the wishes of users for developing the statistics in the autumn of 2021 and beginning of 2022, when updating the work programme for the Natural Resources Institute Finland. We follow the received feedback and take it into consideration in developing the statistics.

### 12.3 Completeness

The statistics comply with all EU regulations and cover all national needs for information.

## 13 Accuracy and reliability

### 13.1 Overall accuracy and reliability

The Fisheries Act (379/2015) obliges all commercial fishing operators to report their catch data. Previously, the fishing activity of those not responding to the catch enquiry was estimated and they were assumed to have acted in the same manner as those having submitted fishing reports, so that the proportion of those who had caught fish and those who had not fished was the same. From 2015 on, statistics are prepared based on the assumption that everyone engaged in commercial

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fishing in the sea areas has complied with the statutory obligations and submitted catch reports.

Catch not meant for market is likely declared insufficiently. The size of this source of error has not been investigated.

### 13.2 Sampling error

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### 13.3 Non-sampling error

#### 13.3.1 Coverage error

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#### 13.3.2 Measurement error

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#### 13.3.3 Non-response error

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#### 13.3.4 Processing error

-

#### 13.3.5 Model-based error

-

## 14 Timeliness and punctuality

### 14.1 Timeliness

The commercial marine fishery statistics are published yearly no later than in May of the year following the statistical year.

### 14.2 Punctuality

The statistics have been published according to the publishing date declared in advance.

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### 15 Coherence and comparability

#### 15.1 Comparability - geographical

Data between national regions included in the statistics is comparable. Data is also comparable to data on fishing published by Eurostat, FAO, and ICES.

#### 15.2 Comparability - over time

An estimate based on catch reports on the fish catch in Finland's sea areas and its value has been published since 1962. The catch assessment methods used in professional fishery statistics in marine areas changed in 1987. The catch estimates for 1980–1986 were adjusted at the time, to make them more comparable to statistics for later years. When the completion of catch reports became a statutory obligation in 1995, fishermen began to report more actively. A lower non-response decreased the estimated proportion of catch and improved the accuracy of the catch estimates. Because the professional marine fishery data collection response rate has traditionally been high, the change has not materially affected the comparability of earlier statistics.

When examining statistics on the numbers of fishermen, the changes in fishermen's registers in 1987, 1995 and 2016 must be taken into account. The fishermen's register used before 1987 was defective and the size of the frame population was determined based on the estimated numbers of fishermen by member organizations of the Federation of Finnish Fisheries' Associations. In 1988, the fishermen's register was reformed in an effort to create a comprehensive list of professional fishermen. In the statistics, the reform shows as a reduction in the number of fishermen from 1986 to 1987. The next change occurred in the transition to EU membership in 1995, when the registration of professional fishermen became obligatory under a decision by the Ministry of Agriculture and Forestry. In the statistics, the consequences of the change show as an increase in the total number of registered fishermen in 1995. However, the number of active fishermen remained more or less unchanged. In 2009 and 2010, the number of professional fishermen grew due to revised provisions relating to the sale of

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fish. The new Fishing Act (379/2015) entered into force on 1 January 2016. The register of commercial inland fishermen was abolished, and the commercial fishermen's register was established. All natural and legal persons fishing for sales purposes must be included in the register. The commercial fishermen's register includes two groups: Group 1 is for commercial fishermen whose average turnover from fishing activities in the last three financial years exceeded EUR 10,000, while group 2 is for other commercial fishermen. The consequences of the change shows in the statistics as an increase in the number of registered fishermen in 2016 and 2017. Commercial fishermen have the right to use certain fishing gear and amounts of fishing gear, which has actually encouraged other fishermen to register.

### 15.3 Coherence - cross domain

#### 15.3.1 Coherence between sub annual and annual statistics

The commercial marine fishery statistics are a part of the total fish production statistics.

#### 15.3.2 Coherence with National Accounts

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### 15.4 Coherence – internal

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## 16 Cost and burden

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## 17 Statistical processing

### 17.1 Source data

Source data used for the statistics is the database maintained by the Southwest Finland ELY-Centre and the county administration of Åland, which the Natural Resources Institute Finland has a real-time connection to.

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### 17.2 Frequency of data collection

Commercial fishermen report their catches either for each fishing effort or monthly, depending on the species of catch and used vessel size.

### 17.3 Data collection

Commercial fishermen report their catches either online or with a paper form. The distribution and receiving of catch report forms, and saving the data is performed by the Southwest Finland ELY-Centre and the county administration of Åland. Natural Resources Institute Finland has access to the catch data for statistical purposes. Three types of catch report forms are used:

1. Fishing reports of vessels of 10 metres or more in overall length are usually submitted via the electronic EU logbook directly from the vessel. The following information is reported for each fishing effort: the fishing trip and its duration, the quantity caught (by fish species), the catch area as a statistical rectangle (approximately 55 x 55 km in size, formed on the basis of map coordinates), the fishing gear used and the catch time in hours. Information on the buyer of the catch and the quantity of discarded fish by species is also reported in the fishing logbook. Fishing logbooks must be returned to the ELY Centre or to the Provincial Government of Åland within 48 hours of landing the catch.
2. Fishing reports of vessels under 10 metres in length, with the exception of species with catch quotas (up to 50 kg/day of Baltic herring), are given either on paper or electronically on a monthly coastal fishing journal. The following information is reported: the quantity caught (by fish species), the statistical rectangle, the fishing gear used, the number of fishing gear and fishing days plus the quantity of discarded fish by species. Journals must be returned by the fifth day of the following month to the ELY Centre or to the Provincial Government of Åland.
3. Reports by vessels under 10 metres in length of species with catch quotas (50 kg or more/ day of Baltic herring) are given in landing declarations of coastal vessels under 10 m

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for each fishing effort, either on paper or electronically. The landing declaration must be returned to the ELY Centre or to the Provincial Government of Åland within 48 hours of landing the catch. The following information is reported: the quantity caught by fish species, the statistical rectangle, the fishing gear used, the catch time, the number of fishing gear and fishing days plus the quantity of discarded fish by species.

### 17.4 Data validation

The Natural Resources Institute Finland reviews the data before compilation. Error detection software is used in the search for inconsistencies in stored material. The compatibility of reports by pair trawling vessels is investigated. Faulty data is fixed according to standardised instructions.

### 17.5 Data compilation

Fishermen report the catch of salmon, trout, cod, flounder, European whitefish and rainbow trout as gutted weight. When catch is reported as gutted fish the weight is converted to ungutted fish by the species-specific conversion factor in the national central control register on commercial fishery. The conversion factor of salmon and trout was 1.11; 1.17 for cod, 1.08 for flounder and European whitefish, and 1.2 for rainbow trout.

The value of catches landed in Finland is calculated based on the average prices paid to fishermen for fish, published by Natural Resources Institute Finland. The shares of Baltic herring landed in Finland for human food and animal feed purposes of the total catch are estimated on the basis of fish purchasing information received from the national central control register on commercial fishery.

### 17.6 Seasonal adjustment

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## 18 Comment

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