

Revision of the CWP Handbook of Fisheries Statistics

with focus on the
capture fisheries statistics

FS.2.1 Revised section on Logbook guidelines

Document CWP-IS/2019/9

This presentation

Outlines:

- The purpose of the handbook
- The revision process
- Proposed updates to existing sections of the Handbook
- Proposed upgraded section on logbook guidelines

Handbook purpose

The Handbook is a web-based publication which:

- Documents concepts that are relevant for fisheries and aquaculture statistics
- Defines statistical standards for specialised concepts as adopted by CWP
- Defines statistical standards for concepts that have a wider scope as adopted internationally (e.g. UN Statistical standards)
- Reviews methodological issues that are specific for fisheries and aquaculture statistics
- Defines minimum requirements for data collection
- Defines desirable level of information.

Handbook contents

5 chapters

Introduction

General concepts

Capture fisheries statistics

Aquaculture statistics

Socio-economic data

Tools/resources

Tools and resources

Search facility

Search

Aim of the proposed revisions

Focus here is on capture fisheries statistics, to

- Improve the harmonization of common datasets structures and metadata to facilitate data reporting and exchange among national, regional and international fishery organisations, for use in fishery statistics.
- Promote the integration of data across all types of capture fisheries (e.g. small-scale, large-scale, artisanal, industrial)
- Align the Handbook with relevant regional and global initiatives involving fishery data and statistics (e.g. FIRMS, GRSF, FLUX)

Revision process

- The Handbook was revised by FAO staff and the CWP Secretariat
- The development of logbook guidelines follows earlier CWP recommendations that work on logbook is needed to help harmonize and mainstream statistical reporting from data collection
- Elements of the revision draw on recent regional and global initiatives involving fisheries, data and statistics (e.g. FIRMS, GRSF, PSMA, FLUX, WECAFC)
- Draft document was circulated to CWP Members for comment in February
- Document (CWP-IS/2019/9) incorporates feedback received from SPRFMO, NAFO, ICES, EC and GFCM.

CWP consideration

CWP is invited to:

- Review the proposed additions and amendments to the Handbook, focused on capture fisheries statistics
- Approve the revised Handbook text and definitions, including the addition of logbook guidelines

Note: Agreed updates will be incorporated in the Handbook during the intersessional period.

Provenance of definitions

Some definitions were either

- retained as published in the CWP Handbook or
- with minor edits to improve clarity (e.g. 'fishery fleet' 'fishing vessel')

Others definitions were drawn from recent relevant applications, including:

- FIRMS
- GRSF
- FAO (e.g. glossary SSKF RDB GFCM WECAFC)
- PSMA
- IMO (e.g. vessel specifications)
- Other sources (e.g. FLUX ICES NAFO SPRFMO EC CCAMLR tRFMOs NOAA)

Proposed revised contents

Introduction

Methodology for data collection

revised

General concepts

Conversion factors

moved from capture fisheries

Time units

revised

Date and time standard

new

Capture fisheries statistics

Catch and landings

revised

Nationality of catch and landings

revised

Fishery Fleet

revised

Fishing Gear Classification

revised

Fishing effort

revised

Logbook guidelines

upgraded

Integrated environmental and economic accounting for fisheries

no change

Fisheries statistics for an ecosystem approach

no change

CWP Handbook: Introduction

- Revised to update the introductory page and the section on methodology for data collection.
- Other sections remain as published.

CWP Handbook: General concepts

- Proposed to move 'conversion factors' into 'general concepts' as conversion factors apply to both capture fisheries and aquaculture.
- New paragraph on date and time in the section 'time units'.
- Other sections remain as published.

Time units:

Date and time standard

- For compatibility of national and regional fishery statistics, it is recommended that date and time must be recorded in ISO 8601 format using the Gregorian calendar and 24-hour time keeping system.
- ISO format
 - date as YYYY-MM-DD
 - time as hh:mm:ss
 - date time as YYYY-MM-DDThh:mm:ss
(seconds may be provided optionally)

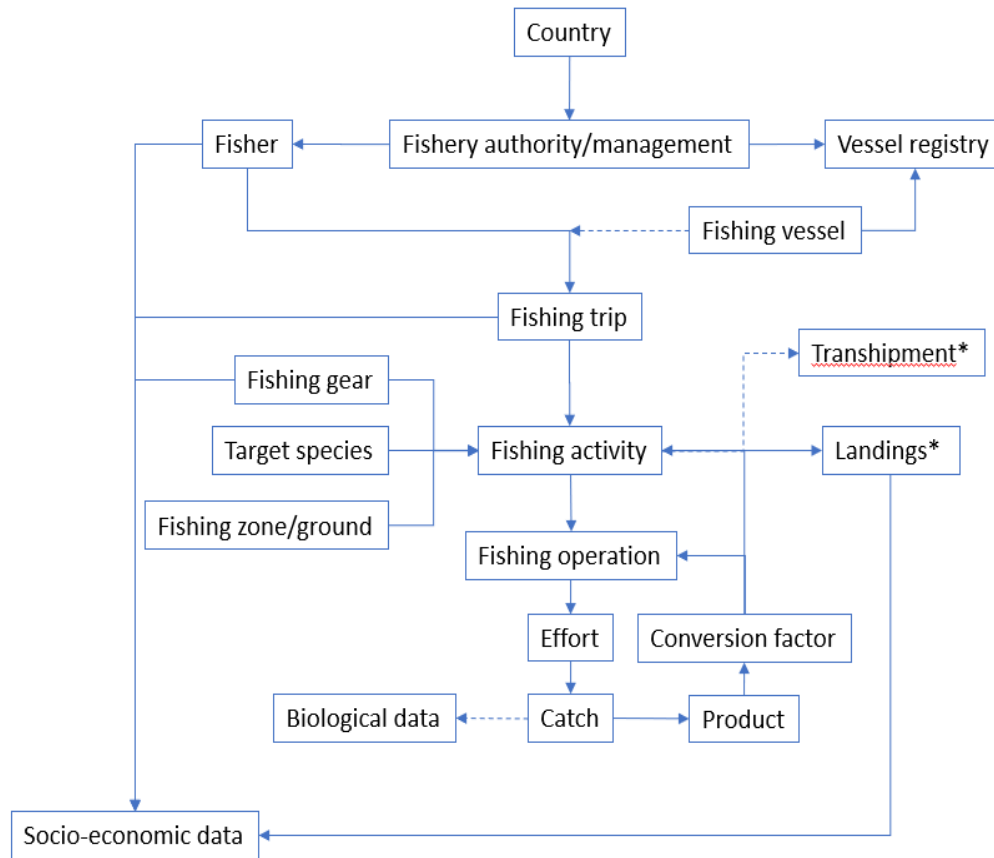
CWP Handbook: Capture fisheries statistics

- Revised introductory page and sections on catch and landings, nationality of catch and landings, fishery fleet, fishing gear classification, fishing effort, and logbooks and VMS.
- Upgraded section on logbook guidelines for statistical purposes.
- Revise the menu selection order for the sections on conversion factors and fishing effort for improved flow.
- Other sections remain as published.

Concepts and definitions

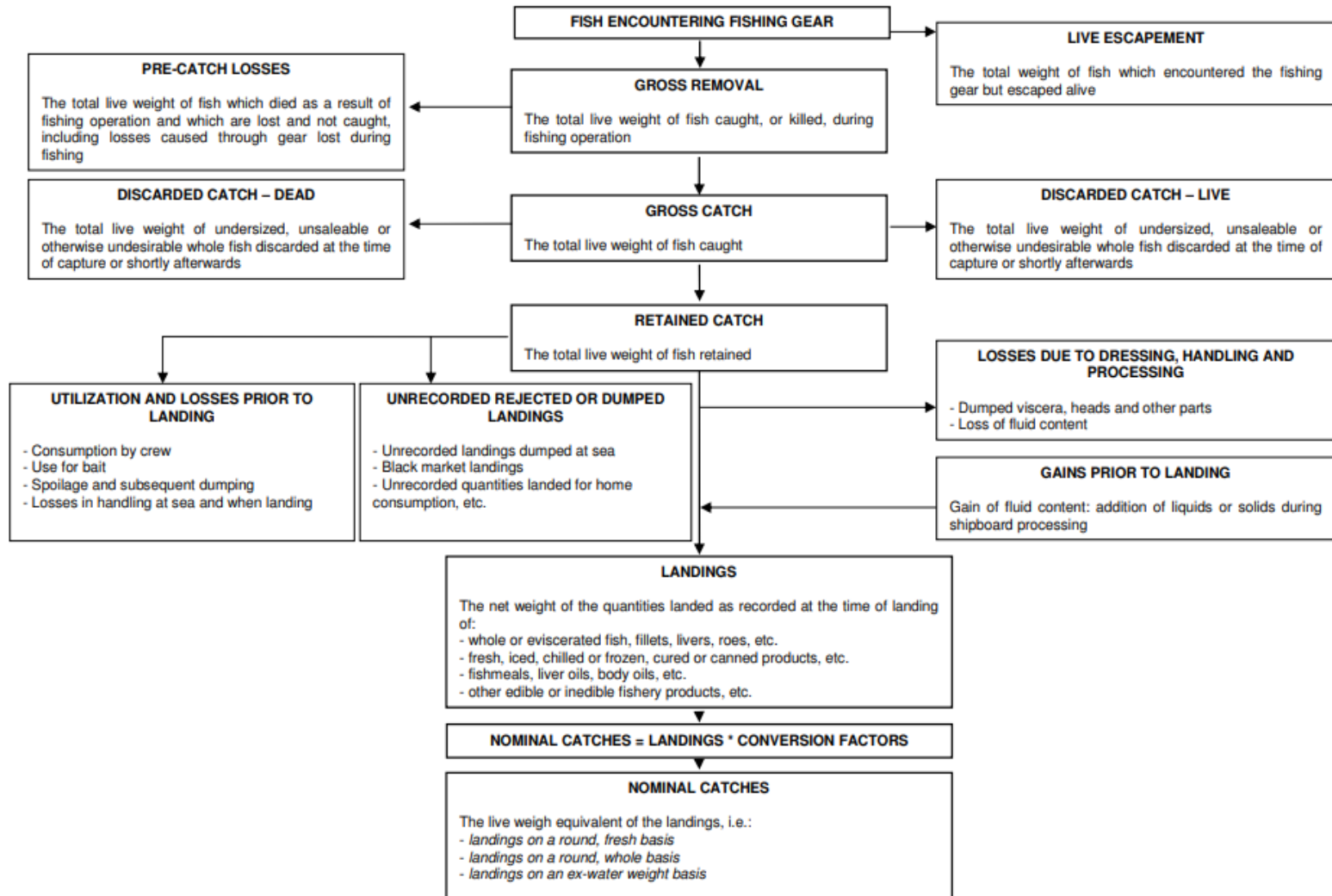
- Capture fishery
- Catch (as published in the Handbook)

Capture fishery concept



Key components (boxes) of a capture fishery and flow of logbook data (arrows) during the course of fishing. * = Subset of fishing activity; dashed line: optional.

Catch concept



Catch concepts diagram (as published in the Handbook)

Fishery Fleet

- Revised text with minor edits to improve clarity.
- CWP-26 is requested to endorse a revised ISSCFV classification. Further revision may be required according to the outcome of the meeting.

Fishing Gear Classification

- Revised text to reflect the current status of ISSCFG. Annexes M I and II have been removed, and Annex M III is now Annex M with a revised heading.
- References and resources remain as published, with the addition a reference to...
 - FAO. Report of the twenty-four session of the Coordinating Working Party on Fishery Statistics. Rome, Italy, 5-8 February 2013. FAO Fisheries and Aquaculture Report. No. 1077. Rome, FAO. 2014. 124p.

Fishing effort

- Standard measures of effort for each ISSCFG category of fishing gear are listed in Table 1. The parameters from haul-by-haul data required to obtain these standard measures are listed in a new Table 2.
- CWP ad-hoc Task Group on reference harmonization for capture fisheries and aquaculture is currently developing the standard measures of effort and globally applicable outcomes of this work will be reflected here in due course.

Level of granularity

- Fishers use logbooks to record information on fishing trips, related activities and operations, including vessel (if used) and trip specifications and catch and effort.
- The level of detail reported in a logbook (i.e. granularity) may be defined as a condition of a fishing licence issued by a fishery authority.
- At the highest level of granularity, relevant data are recorded for each fishing operation (e.g. haul-by-haul)
- At lower levels of granularity, data may be recorded for each fishing activity, aggregated fishing activities (e.g. daily reporting) or for a fishing trip.

Proposed upgraded logbook guidelines

The guidelines

- address inadequacies identified by the CWP concerning reliable capture fishery statistics
- complement the work of the ad-hoc Task Group on “Reference harmonization for capture fisheries and aquaculture statistics”
- positioned as a conceptual layer with generalized concepts applicable to both large-scale and small-scale fisheries. Implementation guidelines at either regional and/or national level are needed for implementation.

Logbook guidelines

- Upgraded global guidelines for collecting data which may be used *inter alia* for statistical purposes.
- Identify common information that should be collected in all types of capture fisheries.
- Consistent with the Code of Conduct for Responsible Fisheries.
- May be referred to by regional and national authorities to develop their own implementation of guidelines/formats to ensure that appropriate standards are complied with when reporting fishery statistics at national and regional levels.

Logbook guidelines

- Provide standard concepts and definitions for logbooks for use for statistical purposes.
- Promote a modular approach to the development of regional and national logbook programs.
 - Each module contributes to an incremental increase in the level of detail in data collection and reporting for a fishing trip and related activities.
- Provide flexibility in the collection and reporting of essential data and fishery information required to meet monitoring, assessment, management and statistical needs of a fishery/management authority.

Logbook modules

- Modular approach encompasses a broad range of data types which may be reported in:
 - a simple logsheet recording the daily activity of a small-scale fisher, or
 - a detailed logbook recording information for each fishing operation (i.e. haul-by-haul or per haul data).
- Method of collecting statistical information on capture fisheries,
- May also assist fishing crew in recording systematic information on fishing for their future reference and decision-making.

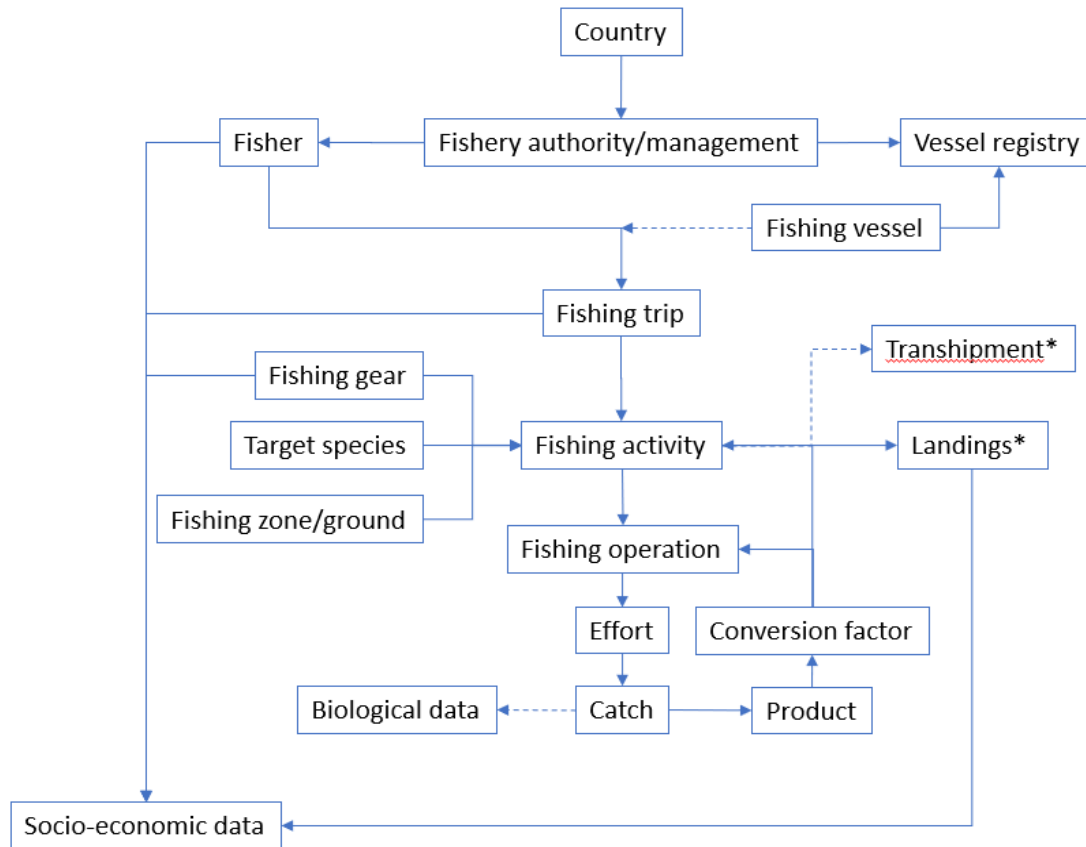
Concepts and definitions used in logbook guidelines

- Capture fishery
- Fishing trip
- Fishing activity
- Fishing operation
- Catch (as published in the Handbook)
- Biological data

Capture fishery concept

- Outlines the key components of the fishery and the flow of logbook data collected during the course of fishing.
- Logbook data may be used to derive fisheries statistics on human fishing activity, including from economic, management, biological/ environmental and technological viewpoints.

Capture fishery concept



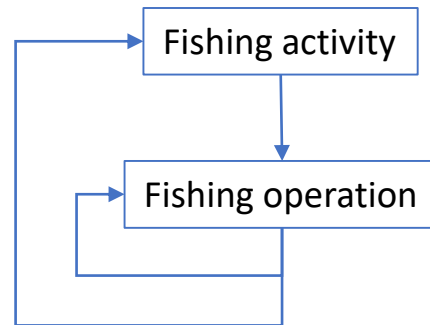
Key components (boxes) of a capture fishery and flow of logbook data (arrows) during the course of fishing. * = Subset of fishing activity; dashed line: optional.

Fishing activity

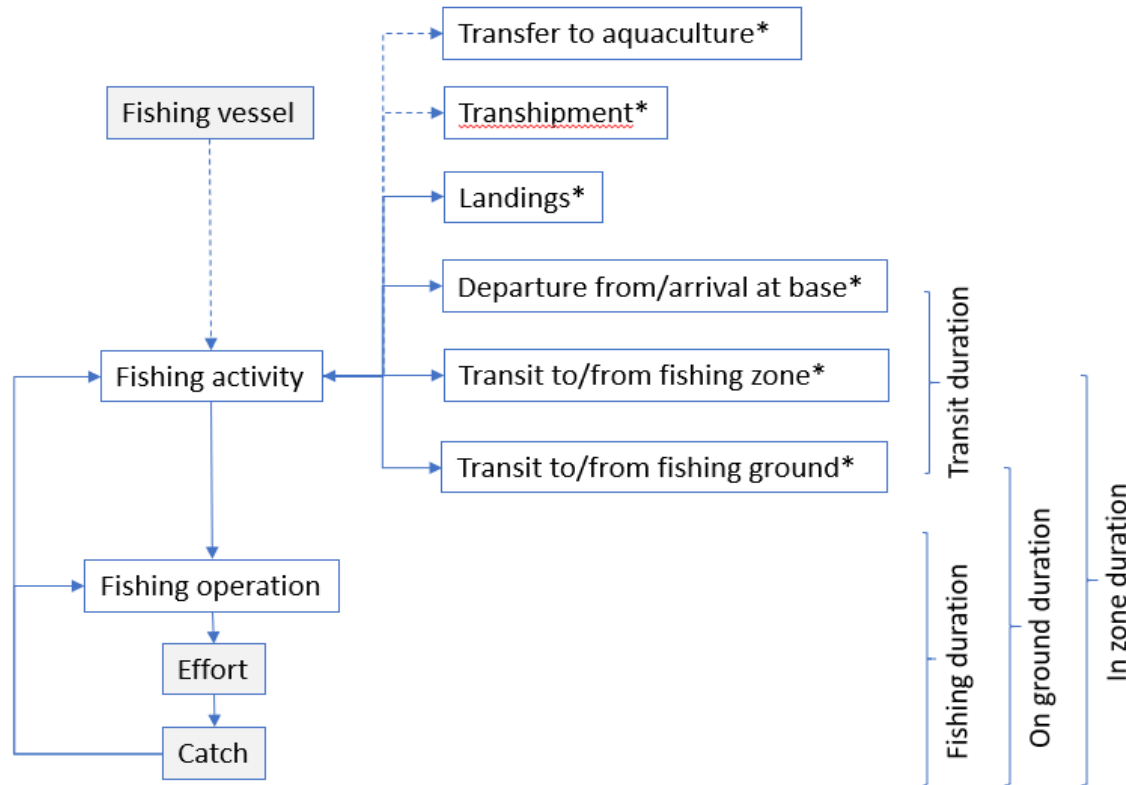
- Any activity conducted with the intention of catching fish in the wild, or transferring, caging or fattening fish in aquaculture.
- A fishing activity may involve one or many fishing operations in which case a fishing activity is characterized by a fishing area, target species and/or fishing gear, and a new activity is recorded when any of these parameters change.
- Fishing activities in capture fisheries include *inter alia* prior notification, landing, departing and returning to port, and entering and exiting fishing areas (i.e. fishing zone or ground), transport of fish for aquaculture, and transshipment.

Fishing operation

- A repeated (i.e. routine) operation within a fishing activity and which may involve *inter alia* searching for fish, deployment and retrieval of fishing gear, removal of catch from the gear.

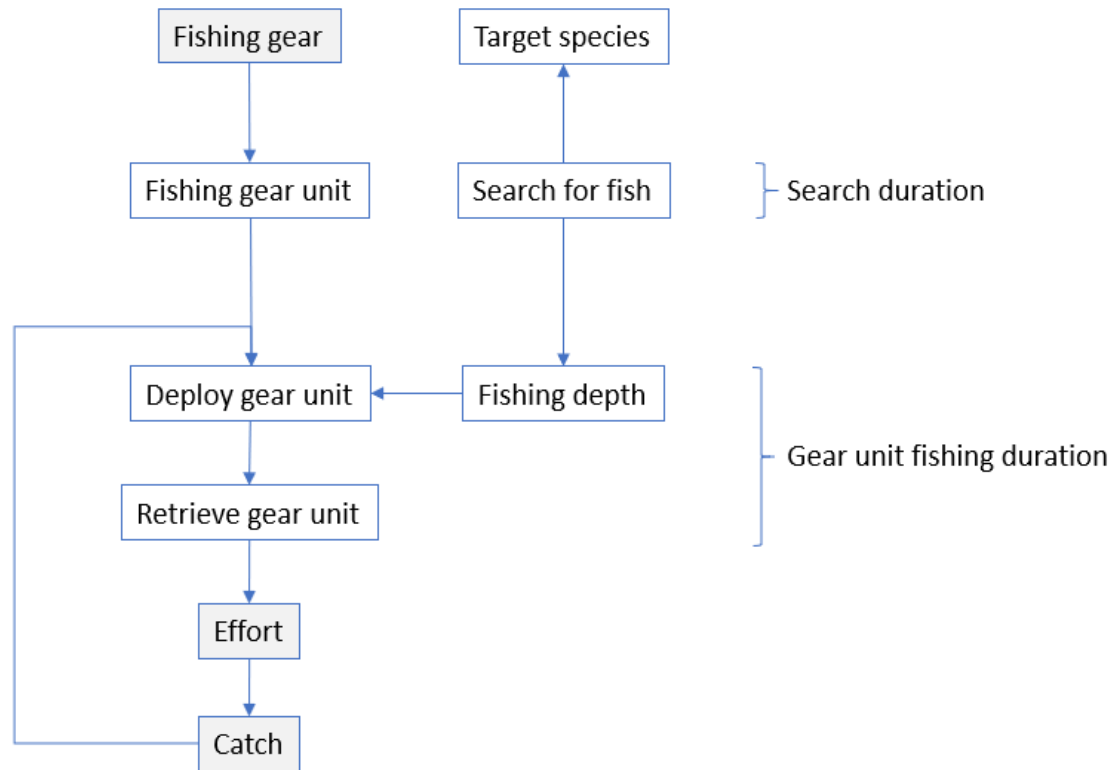


Fishing trip concept



Key components (boxes) of a fishing trip and flow of logbook data (arrows) during the course of fishing. * = Subset of fishing activity; dashed line: optional.

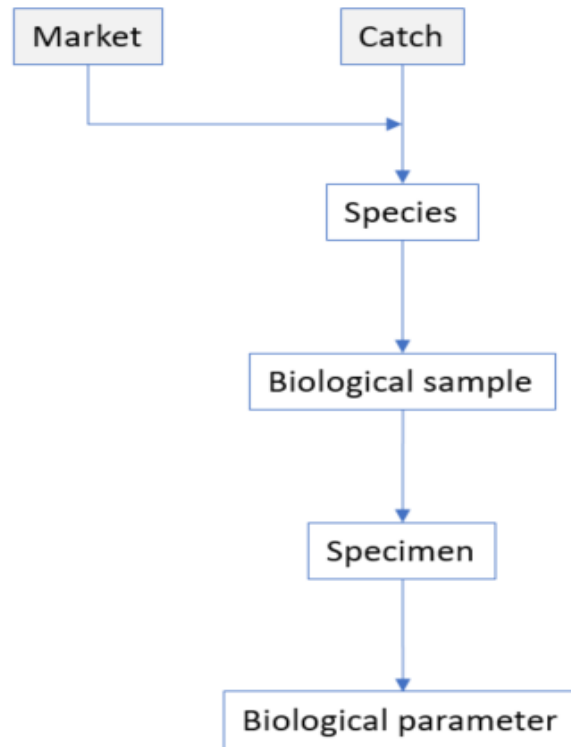
Fishing operation concept



Key components (boxes) of a fishing operation and flow of logbook data (arrows) during the course of fishing.

Fishing operation is a repeated (i.e. routine) operation within a fishing activity and which may involve *inter alia* searching for fish, deployment and retrieval of fishing gear, removal of catch from the gear.

Biological data concept



Biological components (boxes) and flow of logbook data (arrows) during the course of sampling.