

ANNUAL MEETING - MAY/JUNE 1960Report on the Expert Meeting on Fishery
Statistics in the North Atlantic Area

Edinburgh, September 1959

by R.S. Keir

The above meeting was held in Edinburgh, Scotland on 22nd-29th September, 1959. It was convened by FAO, with the joint sponsorship of ICNAF and ICES.

Mr. A.J. Aglen (United Kingdom) was elected Chairman of the meeting and Mr. B.B. Parrish (United Kingdom) and Mr. L.P.D. Gertenbach (FAO) were appointed Technical Secretary and General Secretary respectively. Two committees were set up: one, under the chairmanship of Mr. J.B. Rutherford (Canada), to consider the primary industry statistics; the other, under the chairmanship of Dr. S.D.J. van Dijk (Netherlands), to consider the statistics of the processing and distribution industries.

The meeting studied the whole field of fishery statistics but concentrated, at the suggestion of the Chairman, on those problems and other aspects of statistics which seem prima facie to require attention, and on arriving at agreed recommendations for action. This advice has also been followed in preparing this summary of the report. Therefore, while copies of the full report are available at this Annual Meeting, only selected points which require action by ICNAF now are dealt with here.

The next steps for ICNAF are: firstly, to consider the proposals specially directed at ICNAF (section A, below) and to make appropriate recommendations concerning them; secondly, to consider the more general recommendations concerning the collection and publication of statistics (in section B); and, thirdly, to allocate research tasks and program investigations in those fields where the joint meeting did not make specific recommendations but where it saw the need for further investigations (section C).

A. Proposals Specially Directed to ICNAF

1. The Meeting recommends, however, that since the statistics submitted to and published by the international organizations are (apart from the landings published by FAO and referred to above) in the form of nominal catch (as defined in paragraph 25), ICNAF be recommended in future to request statistics from member countries in that form. (ESTANA, par. 41, p. 16)
2. The Meeting notes that ICES and ICNAF both publish statistics for the West Greenland and Newfoundland areas. The Meeting considers this to be unnecessary and not in accordance with its aims of simplification of reporting and publishing the statistical data. (ESTANA, par. 49, p. 17)
3. It was noted that catch and effort data are now being broken down by statistical rectangles in some ICES publications. This has proved possible because data are collected by member governments of countries in the North East Atlantic by a system of Unit Areas established many years ago. In view of the increasing importance of having data available by small areas, the Meeting recommends that ICNAF should be asked to consider the adoption of this system in its area.
(ESTANA, par. 48, p. 16)

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4. That the international bodies concerned should give early consideration to their likely requirements in this (economic) field and to state them as fully as possible.
(ESTANA, paragraph 18, page 8)

B. Collecting and Publication of Statistics

1. Catch Statistics - Definitions:

The Meeting recommends to Governments and international bodies the adoption in their statistical publications of the following terms:

- Gross catch - The weight of the fish taken from the sea.
Discarded catch - That part of the gross catch which, as whole fish, is returned to the sea at the time of capture.
Retained catch - That part of the gross catch which, as whole fish, is not discarded.
Landings - The weight of fish and fish products brought ashore.
Nominal catch - The live-weight equivalent of the landings.

Note: The difference between retained catch and landings is accounted for by:

- (1) Consumption by the crew;
- (2) Use for bait;
- (3) Dumping of guts, heads and other parts of retained fish;
- (4) Dumping of fish (whole or processed) because of spoilage or for other reasons;
- (5) Loss or gain of fluid content.

Synonyms:

Gross catch - Real catch
Nominal catch - Landings round fresh

The Meeting also recommends that the term landings should not be used synonymously with number of arrivals or trips.

Where English is used in national publications the above terms should be adopted; for their French and Spanish equivalents see this Report in these languages; where countries use other languages they should notify the international organizations of equivalent terms in these languages. (ESTANA, par. 25, pp.11-12)

2. Effort Statistics - Definitions:

Hours fished (otter trawl) - The total number of hours during which the otter trawl was on the bottom and fishing.
Fished days - The number of days on which any fishing took place.

3. Classification of Fishing Units:

The Meeting suggests to governments that the following two-way classification is a sufficient basis for supplying effort data for both inshore and offshore fisheries to ICES and ICNAF. It recognises, however, that additions or revisions may be necessary as other types of gear come into commoner use, or to make the list conform to international standard terminology.

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(a) Boat Categories:

All classes of fishing craft should be specified according to method of propulsion as follows:

1. Steam
2. Motor
3. Sail
4. Oars

(ESTANA, par. 26, pp. 12-13)

(b) Gear Categories:

1. Otter trawl
2. Pair trawl
3. Beam trawl
4. Danish seine
5. Ring net (including purse seine)
6. Beach seine
7. Drift gill net
8. Bottom gill net
9. Fixed gear (including weirs, traps, pots, creels, etc.)
10. Long-line
11. Hand-line
12. Other line
13. Dory vessel
14. Dredge (scallop, oyster, etc.)
15. Harpoons

The Meeting recommends that Governments should further break down the "Boat Categories" as follows:

1. Steam (a) coal
(b) oil
2. Motor (a) gasoline
(b) diesel and diesel-electric

and that international organizations consult with the Governments to ascertain progress made in this matter with a view to eventual international collection and publication of national statistics.

(ESTANA, par. 27, p. 13)

4. Standard Form:

The Meeting considers that it would be much simpler, both for governments and for the international organizations, if one standard form could be provided on which all returns of nominal catch and effort data to the international agencies would be made. This would show for each region and for each type of fishing effort the nominal catch by species. It was emphasised that the new form would require the same information in the same detail as hitherto, but this would now be supplied according to one standard pattern suitable for use by all three international organizations. (ESTANA, par. 42, p. 16)

It is recommended that two or three governments should be asked by the international organizations to use such a form on an experimental basis for reporting their 1959 nominal catches and efforts. On the basis of the experience gained, final forms should be prepared and circulated for the reporting of the 1960 statistics. (ESTANA, par. 43, p. 16)

FAO was requested to prepare and distribute suitable forms.

5. Conversion Factors:

The Meeting notes that, although in some cases conversion factors may vary between nations because of methods of fishing or transportation, nevertheless these factors should be made available internationally. The Meeting therefore recommends that FAO seek from governments concerned information on the factors used to obtain equivalent live weight. The data should be given for each species and for each condition (gutted, filleted, etc.)

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in which the catch is landed; Particular attention should be given to those fish, e.g. for which no conversion factor is at present used, and to improving the accuracy of factors for salt fish and filleted fish, where the factor is very large. Accurate information on these factors will only be obtained by special observations on vessels at sea, at all seasons and on all fishery grounds under normal commercial conditions, and it is suggested that these observations could be combined with those on discards. The factors should be kept under observation to check on possible changes with changes in commercial practice. (ESTANA, par. 55, p. 17)

6. Fish Discarded at Sea:

The Meeting recommends to governments that every country should send observers to sea on representative sizes and kinds of vessel and to every fishing ground. They should collect information on the numbers, quantities and size composition of fish lost and discarded, for each species individually. As far as possible, an attempt should also be made to determine what proportion of these are dead or dying. (ESTANA, par.63, p.18)

7. Fishing Power:

In addition to the broad tonnage classification there is a need for a definition of the effort in terms of other factors which seem likely to be related to fishing power and cost. Therefore, the Meeting also recommends that in the case of otter trawlers statistics of engine horse-power and vessel length be included in publications. The most suitable scheme would be to retain as the basic classification gross tonnage (modified as above). Within these broad classes it is desirable to specify the average gross tonnage, the average engine horse-power, and the average length, these averages being weighted according to the length of time each unit operates. (ESTANA, par. 29, p. 13)

8. Fishing Time:

The Meeting agrees that in the case of otter trawling, the most realistic index is the number of hours fishing, and it recommends to governments that, where possible, this information should be reported. In the absence of information on "hours fishing" the closest possible approximation to this value should be reported with a precise indication of the methods employed in computing it. (ESTANA, par. 75, p. 20)

In the case of fishing gear categories other than otter trawls, consideration should be given by governments to the reporting of the number of units of operation, and their average time set. For example, in the case of fishing by long-line or other hook and line, it is necessary to report the number of hooks and the hours fished. In the case of Danish seining it is important to arrive at a standard definition of the length of time fishing. Until such a standard is agreed upon, it is recommended that the definition used by governments in collecting statistics be reported to the international agencies. (ESTANA, par. 77, p.20)

C. Problems Requiring Further Investigation

1. Fishing Effort:

The Committee recognises that there is a continued need for information which will lead to a standardization of the classes and units of effort. It is expected that the information already in hand, or being collected, and the research programs recommended will provide a satisfactory basis for the reporting of standard

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effort over all classes of trawlers. Further comparative fishing experiments or studies of changes in the size composition and amounts of fish taken by different gears are likely to be required before standardization can be extended to cover a number of types of gears. (ESTANA, par. E.21, p. A-20)

The Meeting recommends to governments that research should be carried out on the measurement of effort for fisheries in which searching constitutes an integral part of the fishing operation. (ESTANA, par.78, p.20)

2. Discards:

The Meeting agrees that information on fish discarded at sea is necessary to bridge the gap between the retained catch and the total killed. The expression "fish discarded", in normal usage, refers only to the difference between the retained catch and the gross catch. However, the Meeting considers that as the biologist is primarily interested in the total killed, rather than the gross catch, it is necessary to consider all ways in which the retained catch might fall short in the total killed.

(ESTANA, par. 61, p. 18)

The Meeting recognises that complete statistics on these "sources of loss" are not generally available but need to be estimated from experimental and sampling data. The Meeting recognises that special studies will be necessary to estimate this loss, and that there is therefore little likelihood of regular statistics being obtained. (ESTANA, par. 62, p. 18)

The Meeting recognises that, owing to the various methods of treating the catch on different vessels, no one procedure can be outlined for collecting information on fish discarded and, instead, recommends that governments compile reports describing their methods used for estimating and measuring discards.

(ESTANA, par. 64, p. 18)

General:

1. The report of the meeting with documentation will be published by FAO.
2. A Continuing Working Party was proposed to keep under continuous review the progress made in the implementation of the recommendations of the meeting. It was proposed that the Governments of Canada, the Federal Republic of Germany, Iceland, and the United Kingdom, and ICES, ICNAF and FAO be invited to appoint one expert each to serve on the Working Party.

The Resolution of the 10th Session of the FAO Conference on the Report of the Expert Meeting and an abstract from the report of the ICES Statistical Committee's meeting in October 1959 are appended.

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10TH SESSION FAO CONGRESS

Resolution No. 23/59

Fishery Statistics in the North Atlantic Area

The Conference

Notes with satisfaction that the Expert Meeting on Fishery Statistics in the North Atlantic Area, organized by FAO, co-sponsored by the International Council for the Exploration of the Sea and the International Commission for the Northwest Atlantic Fisheries, and held in Edinburgh, Scotland, 22nd-30th September, 1959, has agreed on recommendations to governments and international organizations designed to improve and considerably simplify the collection and reporting of fishery statistics in the North Atlantic area,

Accepts the recommendations of the Meeting that FAO should transmit its report to the governments and international organizations concerned with the request that they consider implementation of the recommendations contained in it,

Accepts further that FAO should, in due course, publish a fully documented edition of the report,

Welcomes the suggestion of the Meeting for the establishment of a Continuing Working Party on Fishery Statistics in the North Atlantic Area to keep under continuous review the progress made in the implementation of the recommendations of the Meeting, consult with the officers of governments and of international organizations with respect to difficulties encountered and, keeping in mind the actual state of fishery statistical services in the different countries, make suggestions for further national and international action in its field to governments and international organizations as appropriate,

Agrees that the Working Party should consist of one governmental expert each nominated by the Governments of Canada, the Federal Republic of Germany, Iceland, and the United Kingdom, one expert each nominated by the Secretary-General of the International Council for the Exploration of the Sea and the Executive Secretary of the International Commission for the Northwest Atlantic Fisheries, one expert nominated by the Director-General of FAO, and such additional experts as may be nominated by the Working Party itself, and

Authorises and requests the Director-General to establish the Working Party in accordance with Article VI of the Constitution and to arrange, as requested by the Meeting, for the FAO Fisheries Division to function as secretariat for the Working Party.

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Abstract from the Report of the
ICES Statistical Committee

Chairman: Prof. J. Lundback

II. Recommendations

The Committee resolved to draw the attention of the Consultative Committee to the report of the "Expert Meeting on Fishery Statistics in the North Atlantic Area", sponsored by FAO, ICNAF and ICES, with the request that certain of its recommendations be endorsed by the Council and submitted to member governments for action. In so doing, attention is particularly drawn to the following items.

1. Overlapping of ICES and ICNAF Statistics

The Committee recommends that ICES ceases to collect and publish statistics from the Newfoundland area, but continues to include all Greenland areas, subdividing eastern and western Greenland, the latter to be annotated as belonging also to the ICNAF area.

2. Standard Forms

The Committee recommends that the newly-drafted standard form, common for the three international bodies, be sent to two or three countries for reporting their statistics for 1959 and that they should be generally circulated for the 1960 statistics.

3. Continuing Working Group of Fishery Statistics in the North Atlantic Area

The Committee recommends that ICES gives full support to that working group, proposed by the meeting in Edinburgh, and to authorise the General Secretary to take part in its meetings.

4. Timeliness

It was strongly stressed that all countries should once more be asked to submit statistical information to the Council's Central Office in due time.

5. Breaking-Down by Species

The group "Various" in the statistical tables should be as small as possible, and a sampling method should be applied in order to assess the composition of "Various" as to species.

6. Discards

The Statistical Committee is conscious of an urgent need for statistics of the part of the catches which are discarded at sea, collected by a suitable sampling method and broken down by species and, if possible, also by size-composition.

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