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ANNUAL MEETING - JUNE 1967

Report of ICES Comparative Fishing Committee¹

Chairman: Mr. Steinar Olsen
 Rapporteur: Mr. J.J. Zijlstra

1. Proceedings

Two meetings of the Committee were held, on October 4 and 7, the first one being a special session on hydro-acoustic methods in fisheries research.

The Administrative Report for 1965 was checked and adopted.

(1) Acoustic Methods

Following the recommendation of last year (C.Res. 1965/4:9) a special session was held on acoustic methods used in fisheries research. These methods are being applied by ICES countries for the purpose of studying the behaviour and distribution of fish and for abundance estimations.

It appeared that the extent to which these methods are being used differs widely between countries. Whereas in some countries acoustic methods are not used at all for these purposes, others apply them to some extent with standard equipment, and in a few countries considerable effort is being spent in the development of new equipment and methods especially aimed at obtaining estimates of absolute abundance, acoustic identification and sizing. Some interesting contributions were presented by these countries of the most recent advances in this field outlining the future possibilities.

This type of work has also high priority in FAO, and the Committee was informed of the progress made by the FAO/ACMRR Working Party on Speedier Estimation of Fish Abundance, and of FAO's intention to prepare a Training Manual in Acoustic Methods for Fisheries Research.

The Committee agreed that wider application of these methods is highly desirable, and as a step to achieve this aim it recommended the organisation in 1968 of an ICES Training Course in the Use of Acoustic Methods in Fisheries Research. (Rec. No. B (1)).

Furthermore it was considered that rapid exchange of information on the developments going on in this field would be very beneficial and member countries were therefore requested to submit progress reports on their work to the Gear and Behaviour Committee. (Rec. No. C(1)).

(2) Gear and Selectivity

(a) Top-side Chafers. Three written contributions on this item were reviewed, indicating that top-side chafers of double mesh size only slightly affects selection. These results are in agreement with the findings of the ICNAF Sub-Committee on Gear and Selectivity, the report of which was presented. Verbal reports, however, on the use of such chafers on the commercial fisheries, especially on large factory trawlers suggested that the industry may be reluctant to their application, because they do not prevent the cod-end from splitting in case of large catches.

It was felt that more research on this problem is needed, and a recommendation to this effect was adopted. (Rec. No. C (2)).

(b) Mesh Measuring. This item was discussed at length and the Committee agreed that for scientific use the ICES gauge is the most accurate one. For inspection purposes, if spring-loaded gauge cannot be used, other methods of measurement of less precision can be applied, the accuracy of which is partly known.

1) also presented to the 1966 ICES meeting as document C.M: 1966/F:14

(c) Net Materials. In accordance with previous recommendations adopted in 1963 and 1964 the Committee requested member countries to include in the Administrative Report for 1966 information on the materials in use in their commercial fisheries (Rec. No. C (3)).

(d) ISO Sub-Committee on Textile Products for Fishing Nets. The Committee received with appreciation a communication from Mr. A.R. Margetts outlining the work of this ISO Sub-Committee being of relevance to the Comparative Fishing Committee.

(3) Fish Behaviour

One written contribution on fish school behaviour was reviewed. It provoked considerable discussion indicating that this subject deserves more attention in the future. The Committee was informed of the planned FAO Conference on Fish Behaviour in Relation to Fishing Techniques and Tactics which will be held in October 1967.

(4) Follow-up of Recommendations of the Joint ICES/ ICNAF Sampling Meeting

It was realized that little or no action has been taken by the area and fish committees on the recommendations adopted by the Sampling Meeting held last year under the auspices of the Comparative Fishing Committee. The Committee therefore decided to request the relevant ICES committees to consider these recommendations at their 1967 meeting.

(5) Communications from the Statistical Committee

Two communications of the Statistical Committee were submitted to the meeting.

(6) Election of Chairman

Mr. Steinar Olsen was elected Chairman for three years of the Gear and Behaviour Committee.

II. Communications

The following communications were presented and discussed:-

F:1	Steinar Olsen	"Experiments with a topside chafer of double mesh-size".
F:2	R.W. Blacker	"Tests of a large-meshed topside chafer".
F:3 Hydro- acoustic	M.N. Scherbinov & M.D. Truskanov	"Determination of the density of fish concentrations by means of hydroacoustic apparatus".
F:4	D.V. Radakov	"On a peculiarity of schooling behaviour in fish".
F:5 Hydro- acoustic	A. Lindquist	"Application of hydro-acoustic methods on fisheries".
F:6 Hydro- acoustic	R.B. Mitson	"Application of hydro-acoustic methods in fisheries".
F:7	R.E. Craig	"Scottish echo-sounding programme".
F:8 Hydro- acoustic	O. Dragesund & L. Midttun	"The development of acoustic instrumentation in fisheries research and commercial fisheries in Norway".
F:9	L. Midttun	" <u>Note</u> on measurement on target strength at sea".

F:10	Anon.	"Administrative Report".
F:11	F.A.O.	"Prospect on FAO Conference on Fish Behaviour in relation to Fishing Techniques and Tactics".
F:12	ICNAF	"Report of ICNAF Subcommittee on Gear and Selectivity".
F:13	A. Hylan	"Selectivity experiments with a large-meshed topside chafer".

Contributions from other Committees with Reference to the Comparative Fishing Committee:-

Gadoid Fish Anon. Cttee., G:1	"Report on the North-Western Working Group".
Statistical F.A.O. Cttee., S:5	"Report on National Definitions of Fishing Effort Measures".
Statistical F.A.O. Cttee., S:6	"List of National Classes of Fishing Units used in Catch Effort Statistics".
Herring Anon. Cttee., H:23	"Preliminary report of the joint international O-group survey in the Barents Sea and adjacent waters, August-September 1966".

III. Recommendations

B (1) In recent years there have been important developments in the use of acoustic fish detection methods in a wide range of research projects, especially investigations of the distribution and abundance of exploited fish stocks. At present these developments are confined to a small number of countries. The Comparative Fishing Committee considers that there is a pressing need for a wider application of these methods. The Committee therefore recommends that the Council take the necessary steps to organize a Training Course in the Use of Acoustic Methods in Fisheries Research, with special reference to distribution and abundance studies.

The Committee proposes that the course should take place in Bergen, Norway, or Lowestoft, England at an appropriate time in 1968. It should last for about 14 days and should accommodate 20 - 30 trainees, which would require 5 to 6 instructors.

In view of FAO's expressed interest in holding training courses in this field, the Committee recommends that the Council invites the support of FAO in the course.

In order to make the necessary preparations for the course, the Committee also recommends that a Working Group consisting of Dr. Cushing, Mr. Middttun, Mr. Parrish and Mr. Scherbino be set up in collaboration with and that FAO be invited to be represented in this Working Group.

C (1) The Committee recommends that for the purpose of facilitating rapid exchange of information about the developments in acoustic methods, member countries be requested to report progress in this field of research regularly to the Gear and Behaviour Committee.

C (2) The Committee recommends that selectivity experiments with top-side chafers of very large mesh sizes should be continued, including such with different twine dimensions. Experiments on means of eliminating the need to use top-side chafers should also receive priority. Results of such experiments becoming available before February 1967 should be reported directly to the Secretary of the Liaison Committee.

C (3) The Committee recommends that all member countries be requested to include a brief account of the types and proportions of net materials at present in commercial use in their fishing fleets, together with other relevant details of gear, with their Administrative Report for the year 1966 to the Gear and Behaviour Committee.