

Extract from ICNAF Redbook 1968 Part I

At the meeting of ICNAF's Standing Committee on Research and Statistics in May 1968, several points of relevance to ICES were discussed. They have been extracted below. (The page references in the margin are to Redbook 1968 Part I).

Assessments Sub-Committee

When reviewing the report of the Sub-Committee, the Research and Statistics Committee noted i.a.:

(p.3) Subarea 1

The total nominal catch of cod from Subarea 1 in 1967 (ca. 418 thousand tons) increased by about 12% compared to that in 1966 and is the second largest ever taken in the Subarea (1962: 451 thousand tons). Catches of redfish continued to decrease (12 thousand tons).

There was an increase in fishing activity from 1965 to 1966 with a corresponding decrease in catch-per-unit effort. In 1967 catch-per-unit effort increased again due to the increase in mean weight of the predominating 1960 and 1961 year-classes.

The Committee also noted that cod in Subarea 1 (and haddock in Subarea 5) are demonstrably overexploited.

Statistics and Sampling Sub-Committee

(p.70) 4. Implementation of decisions on length measuring

After reviewing previous ICNAF decisions on length measuring, no changes were suggested. The Secretariat again requested that countries state the length and interval of measurement used in all documents and reports. The Sub-Committee

recommends (23)

- (i) that the decisions on length measuring as recorded on page 53 of Redbook 1967, Part I, again be brought to the attention of all concerned;
- (ii) that measuring problems concerning herring be referred to the Herring Sub-Committee which should also note ICES action.

The Sub-Committee noted that Res.Doc.68/96 shows very good agreement in results between different measuring methods in certain instances for cod, redfish and American plaice.

(The Research and Statistics Committee in this connection noted the general conformity of methods now in use for measuring groundfish species).

(p.70) 5. Review of the ICNAF List of Vessels

The Sub-Committee, having reviewed replies received by the ICNAF Secretariat in response to Recommendation 5 (1967), and statements on the ICES and OECD activities in related fields,

recommends (24)

- (i) that the Secretariat proceed with the preparation and publication of the 1968 List of Vessels in accordance with existing recommendations;
- (ii) that the details with regard to propellers and electronic equipment be deleted, except for (a) echosounder-vertical and (b) echosounder-ranging or horizontal;
- (iii) that the Secretariat explore the feasibility of obtaining call signals for each vessel;

- (iv) that the (CWP) be requested to review ways and means of compiling and publishing statistics on the "potential" fishing fleet in the North-west Atlantic (bearing in mind the world-wide implication).

7. Fishing effort concepts: standardization and clarification

The Sub-Committee, on reviewing current practices and problems of national reporting offices,

recommends (26)

- (i) that the ICNAF Secretariat ask countries to report the criteria they use when completing the box "main species sought" on the STANA 1W form;
- (ii) that the CWP consider improving the definition of the effort measure "days on ground".

While considering the lay-out etc. of the ICNAF Statistical Bulletin, the Sub-Committee recommended i.a.:

- (p.73) (v) that the Secretary of the CWP investigate through correspondence with national reporting offices the possibility of clarifying the North Atlantic catches reported as halibut. This action should establish clearly the extent to which the figures for the various fishing areas refer to either Hippoglossus hippoglossus or Reinhardtius hippoglossoides.

(p.73) 11. Standardization of tabular symbols and abbreviations

In the light of Res.Doc.68/28 and a report by the Secretary of the CWP, the Sub-Committee

recommends (29)

that the Secretariat continue to use the present symbols and abbreviations in Statistical Bulletin Vol.17 and in other statistical presentations, until a standard list has been proposed by the CWP for all agencies.

(p.74) 13. Cooperation with ICES, FAO and the CWP

The Sub-Committee reviewed reports submitted by the ICNAF Secretariat and by ICES, FAO and the CWP Secretary. It expressed its great satisfaction with the continued cooperation between all the agencies concerned with North Atlantic statistics.

The Sub-Committee noted that, in the field of fishery statistics, it is becoming obvious that an Atlantic-wide, if not a world-wide, approach *Annals-1969* is becoming necessary; the work of the national offices and reporting to the different fishery bodies can only be kept to a minimum if all these agencies coordinate and standardize their regular requests to national offices.

The Sub-Committee

recommends (30)

- (i) that ICNAF continue to provide copies of the report of this Sub-Committee for distribution to ICES;
- (ii) that this Sub-Committee continue to receive the reports, complete or abbreviated, of the ICES Statistics Committee;
- (iii) that the ICNAF Secretariat continue the existing close collaboration with the CWP Secretariat;
- (iv) that the Assistant Executive Secretary of ICNAF and the Secretary of the CWP revise, where necessary, the Notes for the Completion of the STANA 1W and 2 Forms before these are distributed in January 1969;
- (v) that ICNAF accept the proposed changes in (a) the name of the CWP from "Continuing Working Party on Fishery Statistics in the North Atlantic Area" to "Coordinating Working Party on Atlantic Fishery Statistics" and in (b) the representation on

CWP

the inter-agency CWP as proposed by the 3rd Session of the FAO Committee on Fisheries (COFI), Rome, 24-30 April 1968, and as endorsed by the ICES Bureau at its meeting in May 1968;

- (vi) that ICNAF continue to participate in all future sessions of the CWP whenever such sessions deal with matters of direct and significant concern to the North Atlantic.

The Sub-Committee, noting that acceptance by ICNAF of the COFI proposals (which depends as far as FAO's participation is concerned, on approval by the October 1968 session of the FAO Council), entitles ICNAF to appoint according to ICNAF's own constitutional procedures to the CWP up to four representatives.

recommends (31)

- (i) that the Executive Secretary and the Chairman of the Statistics Sub-Committee participate in future meetings of the CWP dealing with the North Atlantic;
- (ii) that Canada and Denmark be invited to participate in the 6th Session of the CWP;
- (iii) that Denmark and the United States be invited to participate in that Session of CWP, following the 6th Session which would deal with the North Atlantic.

(p.76) Sub-Committee on Gear and Selectivity

2. Tabular Summaries of Selectivity Data

The summary of data presented in meeting documents from 1962 to 1967 has been published in Redbook, Part III, 1967. It was felt that in view of the programme of preparing 5-year summaries of selectivity data, it would not be necessary to summarise these data annually. It was noted that data should be presented in the form recommended in Redbook 1965, Part I, pp. 64-65, as this would simplify preparation of summaries.

The Sub-Committee discussed a request from ICES to consider preparation of joint summaries of selectivity data and agreed that this was worthwhile. It was decided that the ICNAF Secretariat should contact ICES to determine whether the present form of ICNAF summaries was suitable, and to ask for any suggestions concerning modification.

In this connection the Research and Statistics Committee decided:

(p.11) b) Tabular Summaries of Selectivity Data

R&S considered that 5-year summaries of selectivity data are adequate. Annual summaries will therefore be discontinued. It also considered collaboration with ICES in the preparation of these summaries, and instructed the Secretariat to investigate the compatibility of the present ICNAF and ICES summary forms.

(p.76) 3. Selectivity of Different Codend Materials

Reports of selectivity experiments in the ICES area (Comm.Doc.68/14) with polypropylene split fibre, confirmed previous evidence that the kind of polypropylene fibre used (split fibre, monofilament or multifilament) does not appreciably influence polypropylene selectivity.

USSR presented a summary (Res.Doc.68/58) of selectivity data - comparing selection properties of manila with those of polyamide (Kapron). This study indicated that mesh size differentials for polyamide might be greater than those presently approved by the Commission. USSR therefore wished the Sub-Committee to endorse an alteration of the present polyamide equivalent to that calculated in Res.Doc.68/58. The Sub-Committee, however, while recognising the practical difficulties of USSR, felt that the whole subject of differences in selection properties of various materials deserved further careful study, especially in view of the ICES Liaison Committee's suggestion

(Conn.Doc.68/14) that ICES undertake a study of variability in selectivity data. It was agreed that ICNAF scientists should immediately undertake a similar review, and in view of the fact that data from the northeast Atlantic would be required for a complete analysis, the Sub-Committee

recommends (6)

- (i) that an ICNAF Working Group on Selectivity Analysis be formed to undertake a review of variability in selectivity data, including the scientific basis of mesh size differentials for different twine materials;
- (ii) that the Chairman of R&S appoint a Convener for this Working Group;
- (iii) that experts be appointed to the Working Group by interested member countries;
- (iv) that ICES be invited to participate, in order to make a joint study of these problems;
- (v) that the Working Group meet at a mutually convenient time and place after the ICES meeting in 1968, but before the NEAFC meeting in 1969, so that its report could be available to NEAFC as well as ICNAF.

In this connection the R&S Committee remarked:

- (p.12)
- (i) Polypropylene fibre is manufactured as split fibre, monofilament and multifilament. It has been confirmed that this difference does not appreciably influence the selectivity of codends made of polypropylene; (QWR PA)
 - (ii) USSR presented data showing that the mesh size equivalent for polyamide (Kapron) might be smaller than that approved by the Commission at present, and asked R&S to endorse a proposal to alter the equivalent to recognise this. R&S considers, however, that the whole subject of mesh size equivalents should be reviewed, and, noting that ICES is of the same opinion, R&S

recommends (6)

- (i) that an ICNAF Working Group on Selectivity Analysis be formed to undertake a review of variability in selection data, including the scientific basis of mesh size differentials for different twine materials;
- (ii) that the Chairman of R&S appoint a convener for this working group;
- (iii) that experts be appointed to the working group by interested member countries;
- (iv) that ICES be invited to participate, in order to make a joint study of these problems;
- (v) that the working group meet at a mutually convenient time so that its report could be available for the next meetings of both ICNAF and NEAFC.

(p.77) 7. Summary of trawl material and mesh size sampling data

Submissions for 1967 were reviewed (Res.Doc.68/25). It was noted that NEAFC has now adopted a form similar to that used in ICNAF for reporting this data. It is evident that manila codends are now very seldom used in the Commission Area, though mesh regulation is based on manila mesh sizes.

(p.78) 8. Adoption of standard gauge for enforcement

The Sub-Committee has no new advice to offer the Commission on the subject. As noted in last year's report, there is no scientific basis for preference of either of the gauges considered at that time (ICNAF gauge or modified NEAFC gauge) and the choice of gauge for enforcement purposes must be based on other than scientific principles.

(p.78) 9. Topside Chafing Gear

Further experiments on Polish chafers (Res.Doc.68/100, Comm.Doc.68/14) confirmed all previous evidence that this chafer has no appreciable effect on codend selectivity, thus proving effective in protecting small fish. USSR informed the Sub-Committee that this chafer seemed to be effective in practical use, and that it is now widely used on USSR ships.

The Sub-Committee recognised that this chafer has not been in use for a very long period, and difficulties with respect to its strengthening function might arise. Further experiments with Polish chafers having twine size greater than codend twine size (Res.Doc.68/4) indicate that increased twine size in the chafer may not materially reduce codend selection, but that more information concerning this modification is required.

Progress toward means of elimination of topside chafers by means of heavier netting twines in the codend was reported by UK (Res.Doc.68/16). The Sub-Committee welcomed this report, and urged further work along these lines because of the importance of this topic to the Commission.

10. Field Identification of Net Materials

One contribution on this topic (Res.Doc.68/94) was presented and discussed, but it is clear that no foolproof means of identifying various synthetics in the field has yet been described. It is possible that some simple chemical test might be devised. Anticipating possible future difficulties in this regard, the Sub-Committee would welcome descriptions of procedures now in use, particularly for polypropylene, polyethylene and polyamide twines.

11. Hook Selection

Data relating to hook selection were presented in Res.Doc.68/2 and 68/10. No definite conclusions were drawn from these studies, but the Sub-Committee noted that differences in hook selectivity were more easily demonstrated for longlines than for various handline gears.

Sub-Committee on Environmental Studies

(p.80) 4. Report on activities of IOC and SCOR

Mr. Lee drew the attention of the Sub-Committee to IOC Resolution V/13 set out in Comm.Doc.68/3. This resolution invites ICNAF to establish together with ICES and IOC a joint coordination body for the North Atlantic. After considerable discussion the Sub-Committee agreed that such a body would be useful and

recommends (7)

- (i) that ICNAF reaffirm the conclusions reached at the discussion in 1967 of the proposal for large-scale hydrographical surveys of the North Atlantic (Redbook 1967, Part I, pp.69-70, No.7);
- (ii) that, nevertheless, the invitation to send two representatives to a Coordinating Group with IOC and ICES should be accepted on the understanding that the main purpose of the group will be the coordination of hydrographic work being undertaken under the auspices of the various international bodies and not the planning of new large-scale programmes of investigation;
- (iii) that ICNAF be represented at the first meeting of the Group which may be held at the forthcoming ICES meeting in October 1968 by the Executive Secretary and one other member.

(p.14) 5. Consideration of Report of the ICES Hydrographic Committee

ICNAF was invited to co-sponsor with ICES, UNESCO, SCOR and IAPSO, the Symposium on Physical Variability of the North Atlantic to be held in Dublin in 1969. R&S

recommends (8)

that ICNAF accept this offer and that a member of the planning group be nominated by R&S. (Dr. A. Alexeev (PINRO, USSR) was sub-

Sub-Committee on Herring and Other Pelagic Fish

(p.85) 7. Review of length measurements used for herring

The Sub-Committee referred to the 1967 Redbook, Part I, Appendix II, item 2(b) and to Res.Doc.68/30. In the latter document is outlined procedures for reporting herring lengths by ICES countries. Because of the general uniformity of the use of total length and reporting to the nearest half centimetre below by ICES countries, the Sub-Committee

recommends (9)

that all herring length measurements made by ICNAF countries be total length and be reported to the half centimetre below.

Sub-Committee on ageing techniques

(p.90) Report of the ICNAF Working Group of Redfish Experts, to which ICES workers were invited to participate, is reproduced below:

"The Working Group was convened on 20-22 May 1968 at the Fisheries Laboratory, Lowestoft, following the recommendation (No. 15) of the Research and Statistics Committee at the ICNAF 1967 Annual Meeting.

Experts from the following member countries were present: Canada (St. John's) (Mr. E.J. Sandeman), Denmark (Dr.P.M. Hansen), Germany, Fed.Rep. (Dr. J. Messtorff, Dr. K. Kosswig, Dr. F. Mombeck), USSR (Dr. A. Alexeev, Mr. Zheltov), UK (Mr. R.W. Blacker), USA (Mr. R.C. Hennemuth).

Dr. A. Meyer, who convened the meeting, was unfortunately unable to attend and Dr. Messtorff agreed to be Chairman.

Dr. H.A. Cole welcomed the delegates.

Mr. Sandeman submitted his paper "Age determination and growth-rate of redfish (*Sebastes* sp.) from selected areas around Newfoundland" (ICNAF Res.Doc.68/29).

There was a short discussion of the problems involved in the determination of redfish age and the group reviewed some of the information available on other methods independent of scale and otolith readings. These included Dr. Hansen's excellent series of data from Godthåb Fjord on length distribution of small redfish (Petersen method) and the tagging experiments of both Dr. Hansen and Mr. Kelly (USA). It was noted that more validation studies are needed and, especially, information on post-larval and pre-settlement stages is required.

The following two days were spent in examination of material brought by the delegates. At present all the experts use otoliths except USSR experts who use scales. Several different techniques for otolith reading are in use: whole otoliths cleared and uncleared and broken otoliths viewed by transmitted or reflected light.

Comparisons were made of cleared whole otoliths, cut otoliths (burnt and unburnt) and scales from the same fish, but scales as well as otoliths were available only for a small number of fish and did not include fish older than twenty years.

It was agreed that the otoliths of redfish from Subarea 5 (Gulf of Maine) presented little problem because of their regular growth pattern. The main difficulty in otoliths from other areas was the interpretation of the innermost zones, but scales from small fish were valuable in helping the interpretation of these early growth zones. In fish older than fifteen years, the outer zones also caused some difficulty. However, it was found that the discrepancies that did exist were much smaller than had been anticipated and the differences in age were usually only one or two years.

Thus the basic methods of interpretation seemed to give excellent agreement in ages as determined from otoliths and (or) scales up to fifteen years on these selected samples. It was felt that greater discrepancies would occur in ages as determined by scales and otoliths in older fish and that otoliths were more likely to yield the better estimates of age. An exchange of otoliths and scales is needed to check this and see how far agreement is maintained in representative random samples which cover the complete range of lengths in several stocks. The Working Group agreed that

such an exchange is desirable and the Soviet experts expressed their particular interest in gaining more experience at reading otoliths and that this could be achieved by an exchange of this type.

It is suggested that samples from Subareas 1, 2, 3 and 4 should be exchanged. The samples should include whole otoliths and scales from ten to twelve fish. Germany will provide the sample from Subarea 1, USSR that from Subarea 2 and Canada (St. John's) those from Subareas 3 and 4. Mr. Blacker agreed to prepare photographs to accompany the otoliths and scales and to supervise the exchange, and therefore the samples should be sent to him. The initial exchange should be restricted to members from the Working Group and every endeavour should be made to complete it so that a report can be submitted to the 1969 ICNAF Annual Meeting.

The Group expresses its appreciation and thanks Dr. Cole and his staff, particularly Mr. Blacker and his colleagues, who contributed so much to the success of the meeting."

In order to make further progress, R&S Committee recommended (12)

(p.16)

that an exchange of redfish otoliths and scales be started as outlined in Appendix VI, Annex I, and a report be submitted to the 1969 ICNAF Annual Meeting.

The Second Report of the ICES/ICNAF Joint Working Party on North Atlantic Salmon

(p.21)

After having reviewed the report and its conclusions, R&S Committee approved the report, including its recommendations, but in approving the report also noticed that no new data concerning possible influence of the West Greenland Fishery and high seas fishery on the spawning stock and subsequent recruitment (smolt production) are mentioned in the Working Party's report. R&S, therefore, reiterates the statement made in the first report of the Working Party that

"there is no direct evidence on the probable effect of increased exploitation on subsequent natural production of smolts. The West Greenland fishery may reduce spawning stocks but if this reduction is small, the effect on smolt production will be negligible."

Bearing in mind the recent increase of salmon fishing in the open sea, R&S is of the opinion that the whole question of size of spawning stock and subsequent recruitment should be carefully watched by the Working Party. Having approved the report, R&S

recommends (14)

that the second report of the Joint ICES/ICNAF Working Party when properly approved by ICES be published in the ICES Cooperative Research Report Series A as was the first report of the Working Party.

R&S Committee recommended

b) Status of R&S Sub-Committees

(p.23)

(i) that only the following sub-committees continue to function:

Steering and Publications
Assessments
Environmental
Statistics and Sampling

- (ii) that other matters formerly dealt with by the other sub-committees be referred to the sub-committees named in (i), or be given to working parties, and then dealt with in R&S, or dealt with directly in R&S plenary session.

c) Officers for 1968/69

(i) Sub-Committee Chairmen

The following were elected to serve for the coming year and at the 1969 Annual Meeting:

Assessments:	Mr. B.B. Parrish (UK)
Environmental:	Dr. H.W. Graham (USA)
Statistics and Sampling:	Dr. A.W. May (Canada)

(ii) Representatives on the Steering and Publications Sub-Committee

The following were named members of the Sub-Committee for 1968/69:

USSR, Romania, Poland, France,	Mr.C. Nicolau (Romania)
Portugal, Spain, Iceland,	Dr. R. Monteiro (Portugal)
Norway, Italy, Germany(Fed.Rep.),	Mr. J. Jónsson (Iceland)
Denmark, UK, Canada, USA.	Dr. W. Templenan (Canada)
	Dr. H.W. Graham (USA).

(iii) Chairman of R&S

Mr. Sv.Aa. Horsted (Denmark) was unanimously reelected Chairman of R&S.

(iv) Arrangements for 1969 Meetings

In view of the fact that the assessment work requested by the Standing Committee on Regulatory Measures was only dealt with by a progress report and that additional assessment work was requested by Panels 3, 5 and A (Seals), R&S

recommends (21)

that there be a mid-year meeting of an Assessments group and that, if the Standing Committee on Regulatory Measures has a mid-year session, the best time for the Assessment group to meet would be immediately afterwards and at the same place.