

### CONSULTATIVE COMMITTEE

#### C-Recommendation

The Consultative Committee recommended that the two Pelagic Fish Committees be requested to agree to a common method of reporting mackerel length measurements, and if possible also to a common method of measurement. If this last cannot be achieved, a conversion factor should be supplied.

#### GEAR AND BEHAVIOUR COMMITTEE

### C-Recommendation

In view of the rather variable estimates of selection factor reported for polyethylene, the Committee recommends:

that member countries should carry out further experiments with polyethylene to establish more precisely the mesh differential for this material.

#### HYDROGRAPHY COMMITTEE

#### C-Recommendations

- (1) It is recommended that, ad hoc intercalibration exercises should be organized whenever research vessels visit more distant laboratories, e.g. the Reykjavik station at Iceland. Such ad hoc exercises are strongly recommended to precede multi-ship investigations.
- (2) The Hydrography Committee considering the unexpectedly scattered results of the recent intercalibration exercise in the nitrate determination in sea-water, considering further that reliable nitrate methods are urgently needed for all kinds of environmental studies recommends that studies of the nitrate determination methods should be carried out at as many laboratories as possible to find the reason for the incomparability of the methods so far applied and to develop procedures for a reliable determination of the nitrate in sea-water and further recommends that different seawater samples should be distributed from one laboratory for analysis of the nitrate concentration by different laboratories at the same time to test the revised nitrate methods for their comparison. The results of these studies should be ready for the C.M. 1968 and presented there.
- (3) The Hydrography Committee being aware that redetermination of the solubility coefficients of oxygen in fresh and in sea-water have been carried out with high precision at several laboratories, and being aware that all these redeterminations made with different techniques led to almost equal results with differencies within the precision of the normally applied methods for the determination of the dissolved oxygen, and being also aware that the tables for the saturation values of oxygen in fresh and in sea-water now in use, differ seriously from the recent measurements and considering the need for reliable and confirmed tables for the saturation values for dissolved oxygen in sea-water from all branches of marine science, recommends

the application of the equation of E.J. Green for the solubility coefficient of oxygen in sea-water for salinities of 0 to 450% and temperatures of 00 to 300°C, with possible extrapolation to - 10°C, together with the Goff-Gratch formulation for the vapour pressure of pure water and the vapour presure lowering by sea salt derived from Arons and Kientzler, as published by E.J. Green and D.A.E. Carrit, for the further calculation of the degree of saturation of oxygen in fresh and in sea-water and tables therefor. It is further recommended that approaches should be made to IBP for the application of the new basis for the oxygen saturation values in inshore and in fresh water as well.

### C-Recommendations of the Hydrography Committee (continued)

(4) The Hydrography Committee

### considering

that the RHENO results as well as other observations have shown the considerable influences of environmental conditions on diffusion processes (e.g. wind, tidal and other currents and particularly current shear);

that most of the available data are from surfaceexperiments, whereas for pollution considerations the near-bottom conditions are at least of the same importance;

that the role of vertical exchange in studies of horizontal diffusion has been underestimated;

#### recommends

that efforts should be made to correlate the influence of environmental conditions with the diffusion parameters as derived from experimental and natural processes;

that special studies of current shear motions in different scales should be made in the North Sea as well as in other Seas, if possible in coordination with the Working Group on Variability of the Oceans;

that further efforts should be made to develop suitable methods and instruments for diffusion experiments in the near-bottom layer, with the aim of preparing a joint experiment as soon as these methods and instruments are available;

that the members of the Working Group should inform each other on plans and progress in diffusion work by bilateral or circular letters.

(5) The Hydrography Committee recommends that following the IOC recommendation and the SCOR proposal at the General Assembly in Rome 1966, the investigation on variability in the five areas mentioned in the Report of the Working Group on the Variability in the Physical Marine Environment be encouraged.

# FISHERIES IMPROVEMENT COMMITTEE

### C-Recommendation

C (1) The Fisheries Improvement Committee <u>recommends</u> that the Hydrography Committee be asked to pay special attention to dispersion studies and the formulation of mathematical models describing hydrographical situations relevant to pollution studies.

### DEMERSAL FISH (NORTHERN) COMMITTEE

### C-Recommendations

- C (1) It is recommended that in relation to the future form of administrative reports the two members of the Committee, Dr. A. Meyer and Mr. J. Jónsson, should present Research Reports for the next meeting of the Committee for its consideration.
- c (2) The ICNAF studies on the otolith-readings of redfish were discussed, and it was thought desirable that the members of ICES participate in these studies.

### PELAGIC FISH (NORTHERN) COMMITTEE

#### C-Recommendations

C (1) In the view of the needs for intensive co-ordinated research in the rapidly changing herring fisheries in the North Sea, the Committee recommended the establishment of two new Working Groups which should take care of the setting-up of research programmes of the co-ordination of the work at sea and of rapid reporting of the results to the Committee in the coming year. The Working Group shall work by correspondence and through meetings during next year's ICES Statutory Meeting. Membership and terms of reference of the Working Group should be as follows:-

### 1. Tagging Working Group

Members: MM. O. Dragesund, Cl. Nédèlec, K. Popp Madsen, K. Postumaand I.G. Baxter.

Terms of reference: Co-ordination of national tagging programmes with the view to eludicate migration, stocksize, stock separation and rate of exploitation in adult North Sea herring. Internal and external tagging has to be carried out in the northern North Sea, particularly in the north-eastern North Sea-Skagerrak area and around Shetlands, in the Minch area, in the pre-spawning and spawning communities of the central North Sea and if possible in the Downs fisheries.

Annual reports of all tagging activities shall be prepared by one member of the Working Group by September each year.

### 2. Larval Survey's Working Group

Members: MM. A.C. Burd, S. Haraldsvik, G. Hempel, A. Saville, and J.J. Zijlstra.

Terms of reference: To determine by larval surveys the location and relative importance of the main spawning areas in the North Sea and adjacent waters. To prepare by May 1968 a detailed report on the gear and technique employed in the larval surveys of various member countries. To compile the data on the distribution and length-composition of herring larvae in the North Sea in 1967/1968. Those reports should be prepared by May 1968 for circulation to members of the Working Group.

The Working Group on Young Herring Surveys, already in existence and engaged in the working-up of the earlier Joint Young Herring Surveys in the North Sea (Rec. A (1)). should be made also responsible to ensure the continuation of spring surveys on the distribution and abundance of young herring in the North Sea with a view to follow closely recruitment to the total North Sea herring population. A joint report on the results of those cruises shall be prepared by August each year. Membership of the Group shall consist of MM. Burd, Popp Madsen, Saville, Schubert and Zijlstra.

- (2) The Committee recommended that the yearly list of herring publications by ICES member countries should be continued. It should include also papers by U.S. scientists dealing with herring.
- (3) The Committee invited Dr. M.N. Lishev and Dr. V. Sjöblom to submit their valuable contributions about the herring stock and herring migrations in the eastern Baltic and the effect of the fishery on them to the editor of Journal du Conseil.
- (4) The Committee recommends that the joint survey of juvenile fish in the Barents Sea and Norwegian waters should be repeated annually.

The survey should be maintained in its present scope and be carried out at the same time of the year as in 1967.

In preparing future surveys, high priority should be given to work on improving the identification and sampling methods by making the catch of juvenile fish more efficient and reliable and by refining and developing further methods of acoustic identification.

Further efforts should be made to develop and utilise precise methods for obtaining unbiased quantitative estimates of the echo-traces using integrators in all vessels, in this context further theoretical and experimental work is required.

The participating scientists should prepare each year at the end of the survey a progress report of their work for submission to the appropriate committees of ICES. It is recommended that a more comprehensive analysis of the data should be published at intervals of 3 to 5 years.

### COMITE DES POISSONS PELAGIQUES (SUD)

#### C-Recommandations

- C (1) Le Comité recommande qu'une technique commune de mensuration soit retenue pour les thons (de l'extrémité du museau au milieu de la fourche caudale).
- C (2) Le Comité recommande que les observations soient faites en Atlantique et en Méditerranée sur le nombre des pinnules et de rayons à la seconde dorsale du thon rouge.
- C (3) Le Comité recommande que les marquages de thons soient intensifiées et plus spécialement dans le Golfe de Gascogne pour le thon rouge.
- C (4) Le Comité recommande que l'étude de la distribution des oeufs et larves de sardine soit étendue et developpée.

#### SHELLFISH AND BENTHOS COMMITTEE

#### C-Recommendation

In investigations into the state of the stocks of lobsters and crabs, interpretation of the results is frequently hampered by the lack of information on fishing effort. It was <u>decided</u>

C (1) that member countries with such fisheries be encouraged to introduce the collection of effort statistics for these fisheries and that the form of the data should be comparable between countries.

## ANADROMOUS AND CATADROMOUS FISH COMMITTEE

# C-Recommendation

C (1) It was recommended that further comparative tagging tests should be made in Canada and Iceland.