Somial No. 90

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES

THIRD ANNUAL MEETING

Subdivision of Subareas

At the Second Annual Meeting of the Commission, the following recommendation was passed:

"That the Commission adopt the statistical areas defined in the "Report to the Committee on Research and Statistics by the Sub-Committee on Division of Commission Subareas" as a tentative framework for the compilation of statistics and review at the time of the next Annual Meeting, the suitability of the areas and the progress made in their use."

The above recommendation will be dealt with here as follows:

- 1) suitability of the areas.
- 2) progress made in their use.

1) <u>Suitability of the areas</u>: The subdivision by areas has mainly to be governed by the needs of biologists for statistics reflecting the toll on stocks of fishing effort expanded. That is, if fishing effort and consequently the quantities caught are to show the variations in abundance of stocks, subdivision of the areas where such fishing effort is expanded have to coincide with the natural habitat of the stocks. From a biological viewpoint there would, for example be no need to subdivide in subunits a homogeneous area inhabited by one and the same stock. There can hardly be any doubt that some of the subunits planned or proposed at the Second Annual Meeting are within one and the same natural habitat.

An ideal division of Subareas in subunits would be made by a consideration of:

1) the bottom conditions of the area (including depth)

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- 2) the hydrographic conditions
- 3) the knowledge of the distribution of the stock and their migration

It may well be that areas traditionally fished should also be considered without jeopardizing biologists needs.

Two other considerations have to be taken into account.

The most important of the two is that subunits when chosen have to remain the same for a very long period of time. Changes in the division of subunits would make the statistics incomparable from year to year or month to month. The second consideration is that of accurate statistics. Inaccuracies in statistics are much more serious for subunits than for Subareas. Should inaccuracies be present, their magnitude relative to the total catch is likely to be larger than inaccuracies for Subareas, because the danger of error is greater. Here, there can be a certain degree of conflict between biologists needs for very refined statistics, and the practical aspect of collecting such statistics. That is, caution should be exercised so that practical difficulties in the collecting of statistics for small subunits would not defeat the purposes of biologists who need accurate statistics.

Statistics for 1951 published by the Commission in its Second Annual Report give a breakdown of the catch by Subareas. Five out of ten countries, however, could not submit statistics by Subareas. These catches not attributed to any Subarea accounted for 242,275 Metric tons (20%) out of the total groundfish catch of 1,260,043 tons for the Convention Area. It is agreed however that the results of the first attempt at statistics by Subareas were rather good.

It is necessary that together with statistics by subunits, statistics on the basis of the five Subareas be submitted to the Commission, even by countries who are collecting data on the basis of chosen subunits. This would keep statistics inside a workable framework until all countries report on the basis of subunits.

The division of the Convention Subareas in subunits proposed at the Second Annual Meeting is shown here on maps which were attached to Document "Basic Statistical Requirements of the International Commission for the Northwest Fisheries" dated 1 October 1952.

2) <u>Progress made in their use</u>: Unfortunately, it is at present impossible to assess the progress made as only a few countries have to date submitted their statistics for 1952, namely, Canada, Iceland, Italy, Norway, United Kingdom and the United States.

Of these countries, only Norway and the United Kingdom gave statistics according to the breakdown of Subarea 1 into subunits.

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J. Côté, Commission Statistican.

APP. TO SURIAL NO. 90

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES <u>Document No. 18</u> Appendix

THIRD ANNUAL MEETING

Proposed revision of division of Subareas 2 and 3

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W. Templeman and A. M. Fleming

The attached revision of the unit-area breakdown for Subarea 3, which was proposed at the Second Annual Meeting of the Commission, is submitted to the Committee on Research and Statistics for consideration. One change in Subarea 2 is also proposed.

<u>Subarea 3</u>. The changes are fairly extensive and have, we feel, eliminated several trouble spots which existed in the division which was accepted as a tentative framework at the Second Annual Meeting of the Commission. We have lettered the subdivisions temporarily for purpose of identification.

- B. This inshore area has been improved to exclude water below 200 fathoms likely to be fished by offshore trawlers fishing for redfish. It still includes grounds likely to be fished by long-liners. On the basis of information gained during this summer's longlining operations on the east coast we have altered the position of the boundary between B and C.
- H.I. The line separating the Placentia Bay area from Fortune Bay which must have been inadvertently or otherwise omitted from the breakdown accepted last year has been drawn in. This is drawn on the longitude through Pt. May, the boundary point between the two Fisheries Officers' districts in this region.
 - O. This subdivision which includes St. Pierre Bank has been altered so that all of St. Pierre Bank is included and the western section of the Grand Bank which was previously included with a portion of St. Pierre Bank is now separated.
- P.Q. This subdivision has eliminated the trouble spot on the south western edge of the Grand Bank where boundaries of four of the former subunits intersected. This is an area of quite intense fishing at some times in the year. Our present subdivision divides the southern part of the Grand Bank into eastern and western sections, a much better arrangement than the previous one, and more sensible as far as the fishery on the bank is concerned.
 - L. This unit will now show fishing on the northern part of the bank which may extend from close to the fifty fathom contour to well over the hundred fathom contour.
 - M. The northeastern section of the Grand Bank is included in this unit.

N. Flemish Cap has been separated off from the Grand Bank by the boundary line which runs in the deep channel between the two.

Some of the boundary lines have been shifted to take in water below the 200 fathom contour in anticipation of future redfish fishery extending to greater depths.

The former units which took in areas where no fishing whatever has been carried on and where most depths are over a thousand fathoms have been eliminated. These areas are unlikely to be used for ground fishing.

<u>Subarea 2</u>. The boundary line between area G and I has been shifted to the deep channel between Hamilton Inlet Bank and the shallow ridge to the south.

March 26, 1953.

THE END