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Report to the CWP on NAFO Statistical Program,

Data-Processing and Publications, 1984-86

by

Assistant Executive Secretary

1. The appended report was prepared, in accordance with NAFO's commitment as a participating agency of the CWP (Coordinating Working Party on Atlantic Fishery Statistics), for presentation on the 13th Session of the CWP, which will be held in Rome, Italy, during 11-18 February 1987.
2. Plans for the 13th Session were finalized at the Inter-Agency Consultation on Atlantic Fishery Statistics, held in London, England, during 5-6 October 1985. The report of that meeting is reproduced as NAFO SCS Doc. 86/4, which also contains the Agenda and the Provisional List of Documents for the 13th Session in February 1987.

REPORT ON NAFO FISHERY STATISTICAL PROGRAM, DATA-PROCESSING AND PUBLICATIONS, 1984-86 *

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A. ACQUISITION OF FISHERY STATISTICS

The Scientific Council of NAFO continues to support the acquisition of fishery statistics for the Northwest Atlantic (FAO Fishing Area 21) through the STATLANT system, which is coordinated by the CWP. The system, which was inherited by NAFO in 1979 when it replaced ICNAF (one of the founding members of the CWP in 1960), involves basically the distribution for NAFO of STATLANT 21A and 21B forms and notes by the CWP Secretary to the statistical offices of all countries known to have fished in the region.

1. STATLANT 21A (Annual Catch Summary)

The deadline for the submission of this provisional report is 15 April of each year for the preceding year's data. These provisional data represent the initial inventory of nominal catches by species and NAFO division for review and use by the Standing Committee on Fishery Science (STACFIS) at the June meeting of the Scientific Council. The early deadline is intended to provide sufficient time for the reports to reach the NAFO Secretariat before the June Meeting, so that a reasonably complete inventory of the preceding year's nominal catches would be available at the start of the meeting.

Although sufficient data were generally available to allow the timely production of the annual inventory during the ICNAF regime prior to 1980, this has not been achievable during the past 4-5 years due to the lack of attention being given by a few countries to the submission of STATLANT 21A reports. For example, in 1983 and 1984 (Table 1), only about half of the STATLANT 21A reports were available on 31 May (6 weeks after the deadline), and the production of a partial inventory during the course of the June meeting in these years was not warranted due to the missing reports. Consequently, the "Fishery Trends" sections of the reports of the Standing Committee on Fishery Science (STACFIS) and the Scientific Council could not be completed for approval until the annual meeting in September of each year.

There was some improvement in the timely reporting of STATLANT 21A data for 1985, in that about two-thirds of the reports were available on 31 May 1986 (Table 1) and others arrived shortly thereafter. Thus, this was the first time in several years that the 21A returns were complete enough for the preparation of an inventory of provisional catches in time for consideration at the June 1986 Meeting. The only outstanding reports at that time were those of Faroe Islands and Italy, but data for the latter country on fishing in Sub-areas 5 and 6 were obtained from "Fisheries of the United States, 1985".

2. STATLANT 21B (Detailed Catch and Effort Data)

Although the deadline for the submission of STATLANT 21B reports has remained the same as traditionally (30 June for the preceding year's data), significant delays in the acquisition of the final catch and effort statistics from member states of Contracting Parties in recent years has had a detrimental impact on the timely publication of NAFO Statistical Bulletin and the annual updating of statistics for assessment purposes.

- a) Reports for 1983 (Table 1). Seven of the STATLANT 21B reports were outstanding on 31 August 1984 (2 months after the deadline), and 5 were still outstanding at the end of 1984 (i.e. Faroe Islands, France, Italy, United Kingdom and USA). The French report was the last to be received in November 1985 (17 months after the deadline), and it came from EUROSTAT instead of the French statistical office. That report for 1983 was very deficient in that, for the first time, there was no separation of France (M) and France (SP) data and no breakdown of the catch and effort data by tonnage class. Consequently, NAFO Statistical Bulletin Vol. 33 was not published until December 1985.

- b) Reports for 1984 (Table 1). Analysis of the STATLANT 21B returns indicated that 7 reports were outstanding on 31 August 1985, and 5 were not available at the end of 1985 (Canada-N, Faroe Islands, Greenland, Italy and USA. Three of these reports became available in early 1986, and Italian data for 1984 (in the absence of an official return) were obtained from "Fisheries of the United States, 1984". As for the 1983 data, the French report for 1984 did not distinguish the France (M) and France (SP) data, and there was no breakdown of the catch and effort data by tonnage class. The absence of Faroese data for 1984 and some problems with one component of the Canadian data has delayed publication of Statistical Bulletin Vol. 34 for a longer period than any other in the history of ICNAF and NAFO. (Data were still missing in January 1987.)
- c) Reports for 1985 (Table 1). Analysis of the STATLANT 21B returns indicated that 8 reports were outstanding on 31 August 1986 and, despite the 30 June deadline, 5 were not available at the end of 1986 (Canada-N, Denmark-M, Italy, Faroe Islands and USA). In the absence of an official report, Italian data were obtained from "Fisheries of the United States, 1984". The French report continues to provide no separation of data for France (M) and France (SP) and no breakdown of catch and effort data by tonnage class. Publication of Statistical Bulletin Vol. 35 will be undertaken as soon as the STATLANT 21B database for 1985 is complete (hopefully before the end of 1987).

Table 1. Dates of receipt of STATLANT 21A and 21B reports for 1983-85 (* indicates EEC member states; X indicates no report to end of 1986).

Country or Component	STATLANT 21A (Deadline, 15 April)			STATLANT 21B (Deadline, 30 June)		
	1983	1984	1985	1983	1984	1985
Bulgaria	No fishing	No fishing	No fishing	No fishing	No fishing	No fishing
Canada-M	03 Apr 84	04 Apr 85	09 Apr 86	03 Apr 84	04 Apr 85	22 Jul 86
Canada-N	17 Apr 84	03 Jun 85	28 May 86	09 Nov 84	10 Mar 86	X
Canada-Q	30 Apr 84	24 May 85	16 May 86	30 Apr 84	06 Aug 85	28 Jul 86
Cuba	06 Jun 84	17 May 85	10 Apr 86	10 Sep 84	20 Jun 85	05 Jun 86
*Denmark	12 Apr 84	17 Apr 85	16 Apr 86	30 Jul 84	26 Jul 85	X
*France-M	} ¹ 06 Jun 84	25 Nov 85	02 Jun 86	25 Nov 85	25 Nov 85	02 Jun 86
*France-SP						
*Germany, F. R.	14 May 84	15 Apr 85	21 Apr 86	29 Aug 84	01 Aug 85	07 Jul 86
*Italy	18 Feb 85	X	X	18 Feb 85	X	X
*Portugal	22 May 84	07 Jun 85	07 Jun 86	22 May 84	11 Jul 85	07 Jun 86
*Spain	01 Jun 84	24 Jun 85	05 May 86	01 Jun 84	24 Jun 85	05 May 86
*United Kingdom	08 Mar 85	24 Jun 85	No fishing	08 Mar 85	24 Jun 85	No fishing
Faroe Islands	07 Jun 84	20 Jun 85	X	01 Apr 85	X	X
German Dem. Rep.	19 Apr 84	27 Mar 85	04 Apr 86	14 Jun 84	02 Jul 85	20 Nov 86
Greenland	01 Jun 84	13 Apr 85	04 Jun 86	03 Aug 84	26 Apr 86	08 Sep 86
Iceland	No fishing	No fishing	No fishing	No fishing	No fishing	No fishing
Japan	18 May 84	23 May 85	11 Jun 86	18 May 84	23 May 85	11 Jun 86
Norway	08 Jun 84	07 Jul 85	14 Apr 86	08 Jun 84	07 Jul 85	23 May 86
Poland	27 Jul 84	13 Aug 85	05 May 86	27 Jul 84	07 Oct 85	26 Jun 86
Romania	No fishing	No fishing	No fishing	No fishing	No fishing	No fishing
USSR	30 Apr 84	22 May 85	28 Apr 86	29 Jun 84	09 Jul 85	11 Jul 86
USA	06 Jun 84	20 Jun 85	28 May 86	27 May 85	16 Jun 86	X
Korea, S.	14 May 84	08 Jul 85	X	14 May 84	08 Jul 85	X
Total reports	23	23	23	23	23	23
21A by 31 May	13	12	16			
21B by 31 August				16	16	15

¹ Combined data not consistent with historical database.

3. Delinquency in National Reporting of Fishery Statistics

The Scientific Council continues to be greatly concerned about the delinquency in the national reporting of fishery statistics through the STATLANT System, particularly the STATLANT 21B reports, which provide the basis for much of the assessment work and for the

NAFO Statistical Bulletin series. The Secretariat regularly sends reminders to the statistical offices, which tend to ignore the deadlines, and sometimes to the national representatives of Contracting Parties on the Scientific Council in the case of persistent non-respondents, but this seems to have little impact in promoting the timely reporting of the data. Perhaps, in addition to dispatching the STATLANT forms and notes on behalf of its members agencies, the CWP should take a more active role in promoting the timely submission of the data, by emphasizing the purpose and importance of the deadlines instead of simply giving a date on the first page of the notes. Perhaps, the deadlines could be clearly shown on the forms themselves as constant reminders to the clerks to get them completed on time.

B. DATA PROCESSING

1. Introduction

Computer processing of STATLANT 21A and 21B fishery statistics has been operational in the ICNAF/NAFO Secretariat since early 1972, and procedures have remained essentially unchanged since then. STATLANT 21A data form the basis of the initial (provisional) inventory of nominal catches in the Northwest Atlantic by species and division, until the more detailed catch and effort data become available several months later and are published in the Statistical Bulletin.

2. Treatment of Data

The system has worked well over the years, with the major contributors of data (Canada and USA) providing their fishery statistics in digital STATLANT 21B format on computer tapes, which are compatible with the NAFO system. Several countries with comparatively small amounts of data submit their statistics on computer printout. A detailed description of the processing system was presented at earlier sessions of the CWP (e.g. see Doc. CWP-10/11).

Expansion of the computerized database of Northwest Atlantic fishery statistics backward from 1972 has progressed slowly, and, at present, the data base includes data for all years back to 1962.

C. NAFO MATTERS RELEVANT TO THE CWP

1. Maritime Boundary between Canada and USA in Relation to NAFO Statistical Boundaries

Following the decision of the International Court of Justice (ICJ) which defined the maritime boundary between Canada and the USA, the Scientific Council examined the implications of altering its subarea/division boundaries to coincide with the Canada-USA boundary (Fig. 1), particularly with regard to maintaining and continuing the historical database of fishery statistics for the Gulf of Maine region. It was determined that adoption of that part of the ICJ Line which criss-crosses the NAFO boundary between Divisions 4X and 5Y would not result in significant disruption of the historical fisheries statistics series. The remainder of the ICJ Line which passes southwestward across Subdivision 5Ze divides that subdivision into two parts for the purpose of reporting statistics.

At its meeting in June 1986 (NAFO Sci. Coun. Rep., 1986, page 30-31), the Scientific Council endorsed the proposal that the statistical boundary between Subareas 4 and 5 be modified, and a slightly amended proposal was adopted by the General Council at its meeting in September 1986 (Appendix I).

The Scientific Council recommended that catches in Subdivision 5Ze be reported in future as being from Subdivision 5Zc (east of the Canada-USA boundary) and from Subdivision 5Zu (west of the Canada-USA boundary). Since Canada and USA are the only countries fishing in Subdivision 5Ze, both countries will report data for Subdivision 5Zc and 5Zu in 1986.

The STATLANT 21 forms should be modified to reflect this change before the end of 1987.

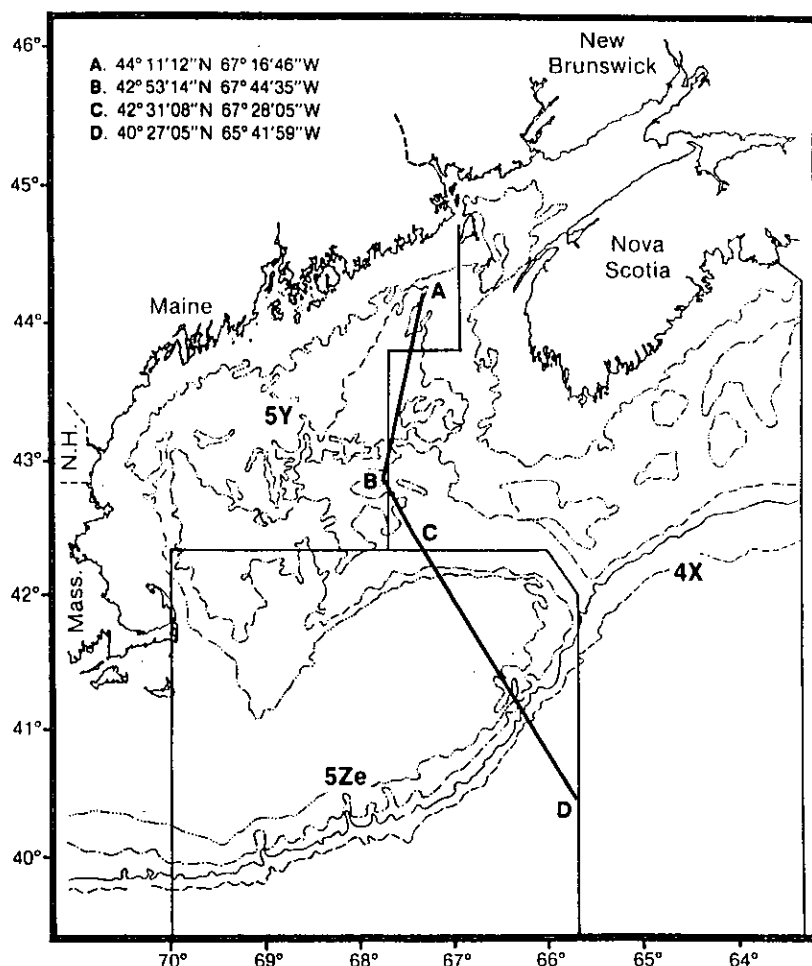


Fig. 1. The ICJ line in relation to current NAFO statistical boundaries in the Gulf of Maine-Georges Bank region.

2. Conversion factors

In the past, the Scientific Council has welcomed the effort of FAO in compiling and maintaining an up-to-date base of conversion factors, and, at its meeting in June 1986, the Secretariat was requested to prepare a document containing national conversion factors, including the latest information from FAO.

Contact with the CWP Secretary in mid-1986 indicated that the latest information available continues to be the material in FAO Fisheries Circular No. 725, entitled "Quantity Conversion Factors: Atlantic Fish Species, Landed or Product Weight to Live Weight", which was issued in 1980. It was noted, however, that countries had been requested to provide updates of their previous reports. In the absence of any additional information and, upon being informed that FAO Fish. Circ. No. 725 was out of print, the Secretariat prepared a condensed version of that document for distribution among NAFO representatives in September 1986 (SCS Doc. 86/25, 45 pages). It is anticipated that FAO may report some up-to-date information to the CWP in February 1987.

3. Missing Effort Data and Prorating Practices

At its meeting in June 1985, the Scientific Council endorsed the concern of the Standing Committee on Research Coordination (STACREC) about the possible effect of significant effort prorating on the accuracy of stock assessments, and, as a first evaluation, requested the Secretariat to contact statistical offices for information on the extent of prorating of effort data when the STATLANT 21B reports are being prepared. The few respondents to the question left the general impression that prorating was not currently a serious problem. Nevertheless, in order to keep the situation under review, STACREC recommended that an additional line should be added to the STATLANT 21B form requesting information on the percentage of prorated fishing effort, if any.

The CWP is therefore requested to consider this matter insofar as STATLANT 21B form is concerned by using Line 4 (currently unused) to indicate "Percent of prorated fishing effort".

4. Reissue of Five Statistical Bulletins

When the Scientific Council was informed of errors in fishing effort data, that were previously reported for 4 years by Canada and 1 year by the USA, it was decided that the tabular data should be revised where necessary, and that updated versions of the specific volumes should be reissued. Consequently, revised editions of Vol. 27, 28, 29, 30 and 31 were prepared and issued during 1984 and 1985.

D. RESEARCH AND STATISTICAL PUBLICATIONS AND REPORTS

1. Publications (July 1984-December 1986)

- a) ICNAF Statistical Bulletin, Vol. 27 for 1977 (Rev.) (December 1985)
 " " " Vol. 28 for 1978 (Rev.) (September 1985)
 NAFO Statistical Bulletin, Vol. 29 for 1979 (Rev.) (November 1984)
 " " " Vol. 30 for 1980 (Rev.) (October 1984)
 " " " Vol. 31 for 1981 (Rev.) (March 1985)
 " " " Vol. 32 for 1982 (December 1984)
 " " " Vol. 33 for 1983 (December 1985)
- b) Scientific Council Reports, 1984 (December 1984)
 " " " 1985 (December 1985)
 " " " 1986 (December 1986)
- c) Journal of Northwest Atlantic Fishery Science, Vol. 5(2) (November 1984)
 " " " " Vol. 6(1) (June 1985)
 " " " " Vol. 6(2) (December 1985)
 " " " " Vol. 7(1) (December 1986)
- d) NAFO Scientific Council Studies, No. 7 (August 1984)
 " " " " No. 8 (April 1985)
 " " " " No. 9 (November 1985)
 " " " " No. 10 (August 1986)
- e) NAFO Index of Meeting Documents, 1979-84 (March 1985)
 Provisional Index of Research and Summary Documents for 1985 (March 1986)

2. Meeting Documents Relevant to Statistics (July 1984-December 1986)

- a) Provisional nominal catches in the Northwest Atlantic, 1983 (NAFO SCS Doc. 84/22, 49 pages).
- b) Provisional sealing statistics for 1984 (NAFO SCS Doc. 85/1, 2 pages).
- c) Report of the Twelfth Session of the Coordinating Working on Atlantic Fishery Statistics (CWP), July 1984 (SCS Doc. 85/3, 1 page, Revised).

- d) Historical catches of selected species by stock area and country for the period 1973-83 (NAFO SCS Doc. 85/9, 38 pages).
- e) Provisional lists of sampling data, 1979-83 (NAFO SCS Doc. 85/18, 72 pages).
- f) Preliminary list of sampling data, 1984 (NAFO SCS Doc. 85/19, 25 pages).
- g) Notes on statistical activities and related publications (NAFO SCS Doc. 85/21, 3 pages).
- h) Provisional nominal catches in the Northwest Atlantic, 1984 (NAFO SCS Doc. 85/25, 55 pages).
- i) Historical catches selected species by stock area and country for the period 1963-84 (NAFO SCS Doc. 86/2, 73 pages).
- j) Report of the ad hoc Interagency Consultation on Atlantic Fishery Statistics, London, England, 5-6 October 1985 (NAFO SCS Doc. 86/4, 4 pages).
- k) Preliminary list of sampling data, 1985 (NAFO SCS Doc. 86/20, 32 pages).
- l) Notes on statistical activities and publications since June 1985 (NAFO SCS Doc. 86/21, 3 pages).
- m) Provisional nominal catches in the Northwest Atlantic, 1985 (NAFO SCS Doc. 86/22, 52 pages).
- n) Notes on NAFO sampling program (NAFO SCS Doc. 86/23, 8 pages).

APPENDIX I. STATISTICAL BOUNDARY BETWEEN SUBAREAS 4 AND 5

The following extract from a resolution adopted by the General Council at the 8th Annual Meeting of NAFO in September 1986 defines the boundary line between Subareas 4 and 5 (modifications underlined) as follows:

Beginning at the terminus of the international boundary between the United States of America and Canada in Grand Manan Channel, at a point at 44°46'35.346" north latitude; 66°54'11.253" west longitude; thence due south to the parallel of 43°50' north latitude; thence due west to the meridian of 67°24'27.24" west longitude; thence along a geodetic line in a southwesterly direction to a point at 42°53'14" north latitude and 67°44'35" west longitude; thence along a geodetic line in a southeasterly direction to a point at 42°31'08" north latitude and 67°28'05" west longitude; thence along a geodetic line to a point at 42°20' north latitude and 67°18'13.15" west longitude; thence due east to a point in 66°00' west longitude; thence along a rhumb line in a southeasterly direction to a point at 42°00' north latitude and 65°40' west longitude and thence due south to the parallel of 39°00' north latitude.