# Northwest Atlantic



# Fisheries Organization

Serial No. N491

NAFO SCS Doc. 82/VI/10

SCIENTIFIC COUNCIL MEETING - JUNE 1982

Report to the CWP on NAFO Fishery Statistical Program,
Publications and Data-Processing

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 to the 11th Session of the CWP, which will be held at Luxembourg during 21-28 July 1982.
- 2. Plans for the 11th Session were finalized at the Inter-Agency Consultation on Atlantic Fishery Statistics, held at Woods Hole, USA, during 3-4 October 1981. The report of that meeting is reproduced in NAFO SCS Doc. 82/VI/9, which also contains the Agenda and the Provisional List of Documents for the 11th Session in July 1982.
- 3. As agreed at the June 1981 Meeting of the Scientific Council (NAFO Sci. Coun. Rep. 1981, page 27), NAFO representation at the 11th Session of the CWP will be as follows:

Dr. T. K. Pitt, Chairman of STACREC

Capt. J. G. Boavida, Portugal

Mr. V. M. Hodder, Assistant Executive Secretary

### REPORT ON NAFO FISHERY STATISTICAL PROGRAM, PUBLICATIONS AND DATA-PROCESSING

V. M. Hodder Assistant Executive Secretary, NAFO

#### A. FISHERY STATISTICS

Fishery statistics for the Northwest Atlantic (Major Fishing Area 21) are acquired by the NAFO Secretariat through the STATLANT system which is operated under the aegis of the CWP. The system, developed over many years through the cooperative efforts of the various intergovernmental agencies of the CWP, was inherited by NAFO when it replaced ICNAF (International Commission for the Northwest Atlantic Fisheries) in 1979. Basically, the system for the Northwest Atlantic involves the distribution of STATLANT 21A and 21B forms and notes by the Secretary of the CWP to the statistical offices of all countries known to have fished in the region, and the subsequent submission directly to the NAFO Secretariat of the completed reports in accordance with certain deadlines.

#### 1. STATLANT 21A (Annual Catch Statistics)

The deadline for the reporting of the STATLANT 21A annual summaries is 15 April of each year for the preceding year's data. These data are generally classed as provisional (or preliminary) and represent the initial inventory of nominal catches by species and NAFO division, for review and use at the Regular June Meeting of the Scientific Council. Even though very few countries meet the deadline for submitting these STATLANT 21A reports to the Secretariat, generally the data for most countries are received by early June, in time for computer-tabulation and preparation as a document for the June Meeting. This document represents the advance release of Northwest Atlantic fishery statistics for the preceding year, pending the later submission of more detailed statistics on STATLANT 21B forms.

#### 2. STATLANT 21B (Detailed Catch and Effort Statistics)

The deadline for the submission of STATLANT 21B reports is currently 30 June of each year for the preceding year's data. These reports contain the final official national statistics of nominal catch and effort (the latter for vessels 50 GRT and over) broken down by division, gear, tonnage class, main species sought, and month, and are used for compilation of the various tables published in the Statistical Bulletin. In view of the detailed nature of these statistics, countries with facilities to provide the Secretariat with the data on computer printout or magnetic tape are encouraged to do so, provided that the format of presentation is consistent with the STATLANT 21B format and the magnetic tape compatible with the NAFO computer system. Annual STATLANT 21A data are not normally used in compiling the data for the Statistical Bulletin unless no other information is available or supplied after repeated requests for the STATLANT 21B report.

The Scientific Council of NAFO in 1979 decided to continue the "volume" numbering of the Statistical Bulletin for the Northwest Atlantic (formerly ICNAF Statistical Bulletin), and its first issue was published in July 1981 as Vol. 29 for the year 1979. A significant change in the format of that issue involved the incorporation of a new Table 5 as replacement for Tables 5 and 6 in earlier ICNAF issues (see Section D.1).

Under ICNAF, it was customary to publish the Statistical Bulletin about 6 months after the deadline for receipt of the data, but the extension of fisheries jurisdiction by coastal states in 1977 and the complication of acquiring and assigning data from joint venture operations between coastal states and other countries have resulted in significant delays of 12 months or more beyond the indicated deadline before recent issues of the Bulletin could be published (see also Section D.4).

The format of presentation of the tabular material in the NAFO Statistic Bulletin continues to follow generally the proposals of the CWP at an inter-agency consultation in Rome, Italy, in January 1973, regarding the presentation of material in regional statistical bulletins. Each issue of the NAFO Bulletin also contains (i) a list of Northwest Atlantic species items with the 3-alpha species identifiers, (ii) descriptions of the fishing effort measures applicable to Northwest Atlantic fisheries, and (iii) the gears and their abbreviations applicable to the NAFO Area, all having been adopted on the basis of proposals of the CWP.

CWP Doc. 11/11 for CWP Session, 21-28 July 1982.

#### B. AUTOMATIC DATA-PROCESSING PROCEDURES

Computer processing of STATLANT 21A and 21B data has been operational in the ICNAF/NAFO Secretariat since the autumn of 1971, and ICNAF Statistical Bulletin Vol. 20 (issued in March 1972) was the first to contain tabular material prepared almost entirely from computer printout. This process has continued since then with minor modification, based on input and output programing developed to efficiently utilize the standardized reporting of data on the STATLANT 21B form.

#### 1. Computer Facilities

Computer facilities since 1975 include a remote job-entry terminal with direct access to an IBM 370/155 computer, operated by Maritime Computer Services Limited, Halifax, Nova Scotia. The remote job-entry terminal is a COMTERM 1000 series, consisting of a card reader (300 per minute), line printer (300 per minute) and a display console. Card-punching and verifying is done on an IBM 129 Data Recorder which also has the optional interpreting feature. The Secretariat also has an independent connection with the computer through a teletype terminal (DECWRITER II) providing the option of time-sharing (TSO).

#### 2. Treatment of STATLANT 21 Statistics

The processing of Northwest Atlantic fisheries statistics has remained essentially unchanged since the system was set up in 1972, culminating in the direct use of computer printout in preparing all Statistical Bulletins issued by ICNAF and NAFO since 1972, and in the provision of advance data to experts and working groups for stock assessments. A description of the processing system was presented at previous sessions of the CWP and will not be repeated here (see CWP-10/11, presented at the 10th Session of the CWP, July 1980).

#### C. IMPLEMENTATION OF CWP RECOMMENDATIONS

#### 1. Scientific Council Meeting, September 1980

Immediately following the Tenth Session of the CWP in July 1980, the Scientific Council at its meeting in September 1980 reviewed the provisional draft of the CWP report and agreed to the following proposals:

- The NAFO Secretariat, in all future statistical tabulations where space is limited, should use the ISO list of 3-letter standard country abbreviations, subject to the confirmation by the states concerned. [The countries affected by the change were subsequently advised of the recommendation, and the only exception to using the basic ISO list was the request by French representatives to the Council that FRA-M and FRA-SP be retained for tabulating statistics reported by Metropolitan France and the French islands of St. Pierre and Miquelon respectively. It should also be noted that CAN-M, CAN-N and CAN-Q are used for the three components of Canadian data involved, and that the country identifiers for members states of the European Economic Community (EEC) (being a Contracting Party of NAFO) are prefixed by the letter "E" in some tabulations, e.g. E/GRL, E/DEU, etc.]
- b) The Council noted the proposal to restructure the CWP as a truly international body outside the aegis of FAO and agreed unanimously to the terms of reference for the Future Structure of the CWP, as set out in Appendix 12 of the Report of the Tenth Session of the CWP.

#### Scientific Council Meeting, June 1981

At its June 1981 Meeting, the Scientific Council reviewed the published report of the CWP's Tenth Session and reaffirmed previous commitments regarding:

- use of the International Standard Statistical Classifications of Fishing Gears (ISSCFG),
- b) use of 3-alpha species identifiers when space limitations require the use of abbreviations.

- use of the standardized STATLANT forms and notes for acquiring offical national fishery statistics, and
- d) the allocation of catches by nationality where cooperative arrangements between coastal states and other countries are involved.

The Council also welcomed the effort of FAO in compiling an up-to-date list of conversion factors (landings to nominal catches), and endorsed the CWP recommendation that FAO establish a computerized data base of national conversion factors and provide for regular updating at 3-year intervals.

#### D. RECENT NAFO DECISIONS ON STATISTICAL MATTERS

#### 1. New Format for NAFO Statistical Bulletin Table 5

For some time, fishery scientists have been concerned about the overall usefulness of the detailed catch and effort data presented in Table 5 of ICNAF Statistical Bulletins, due to grouping of data for some important species under such categories as "Other groundfish", "Other pegagic fish", "Other finfish" and "Invertebrates". Consequently, severals formats for a new Table 5 were considered, and one was selected for use in the Statistical Bulletin to start with the first NAFO issue (Vol. 29 for the year 1979). In view of the little use made of Table 6 in the ICNAF issues, it was agreed that this table should not be continued in the NAFO Bulletin. It was estimated that the new Table 5 (replacing Tables 5 and 6) would increase the size of the Statistic Bulletin by 20-25% (the actual increase for Vol. 29 being 22%). A sample page of the new format is at Appendix I).

#### 2. Amendments to NAFO List of Species Items

To promote the more refined breakdown of statistics for certain species items, the Scientific Council amended the NAFO List of Species Items to make provision for the reporting by species of "Atlantic wolffish" and "spotted wolffish", "golden redfish" and "beaked redfish", and "roundnose grenadier" and "roughhead grenadier". The species item "blue ling" was also added to the list. Also, the Council, after obtaining the views of taxonomic experts, agreed that the genus name for roundnose grenadier in its "List of Species" should be changed from *Macrourus* to *Coryphaenoides*.

#### 3. Reporting of Large Unspecified Catches

Noting that a substantial portion of the overall nominal catch of finfish reported each year by some countries consists of a large amount not broken down by species and appears variously under such groups as "Groundfish (NS)", "Pelagic fish (NS)" and "Finfish (NS)", and considering the serious effect that such reporting may have on the results of stock assessments, the Scientific Council strongly recommended that countries reporting large quantities of unspecified finfish in their national statistics should conduct studies during the fishing operations with a view to providing an estimated breakdown of such quantities by species in future years.

#### 4. Deterioration in National Reporting of Statistics

The Scientific Council was greatly concerned about the deterioration in national reporting through the STATLANT system, particularly the STATLANT 21B reports which provide the basis for the Statistical Bulletin and much of the assessment work, and agreed to transmit to Contracting Parties, through the General Council of NAFO, its grave concern about this matter (see Appendix II).

#### E. RESEARCH AND STATISTICAL PUBLICATIONS AND REPORTS

#### 1. Publications

- a) NAFO Statistical Bulletin, Vol. 29 for 1979 (issued in July 1981)
  " " , Vol. 30 for 1980 (to be issued in July 1982)
- b) ICNAF Sampling Yearbook, Vol. 22 for 1977 (issued in December 1980)
  " " , Vol. 23 for 1978 (issued in December 1981)
- c) Scientific Council Reports, 1979-80 (issued in December 1980)
  " " , 1980 (issued in December 1981)

- d) Journal of Northwest Atlantic Fishery Science, Vol. 1 (issued in December 1980)
  " " " " , Vol. 2 (issued in October 1981)
  " " , Vol. 3(1) (issued in May 1982)
- e) NAFO Scientific Council Studies
  - No. 1. Miscellaneous Selected Papers (issued in March 1981)
  - No. 2. Manual on Groundfish Surveys (issued in December 1981)
  - No. 3. Miscellaneous Selected Papers (issued in April 1982)
- f) NAFO Meeting Documents Index, 1979-80 (issued in March 1981)
  " " , 1981 (issued in February 1982)
- 2. Meeting Documents Relevant to Statistics (September 1980 to July 1982)
  - a) Provisional nominal catches in the Northwest Atlantic, 1979 (NAFO SCS Doc. 80/IX/27).
  - b) Deterioration in national reporting of fishery statistics for the Northwest Atlantic (NAFO GC Doc. 80/IX/11).
  - CWP recommendations of direct importance to the NAFO Scientific Council (NAFO SCS Doc. 80/IX/29).
  - d) Sealing statistics for the Northwest Atlantic, 1980 (NAFO SCS Doc. 80/XI/33).
  - e) Report to Scientific Council on inadequate response to specified data requirements for stock assessments (NAFO SCS Doc. 81/II/1).
  - f) Report of the tenth session of the Coordinating Working Party on Atlantic Fishery Statistics (CWP) (NAFO SCS Doc. 81/VI/3).
  - g) Extracts from resolutions passed at the 68th Statutory Meeting of ICES, October 1980 (NAFO SCS Doc. 81/VI/5).
  - h) Historial catches of selected species by stock area and country for the period 1970-79 (NAFO SCS Doc. 81/VI/10).
  - CWP recommendations and proposals relevant to the work of the Scientific Council NAFO SCS Doc. 81/VI/11).
  - j) Provisional nominal catches in the Northwest Atlantic, 1980 (NAFO SCS Doc. 81/VI/15).
  - k) Provisional list of sampling data for 1979 (NAFO SCS Doc. 81/VI/16).
  - 1) Notes on statistical activities and publications, 1980/81 (NAFO SCS Doc. 81/VI/17).
  - m) Report by the Scientific Council to the Fisheries Commission on its review of gear definitions (NAFO SCS Doc. 81/IX/21).
  - n) Provisional sealing statistics for the Northwest Atlantic, 1981 (NAFO SCS Doc. 81/XI/28).
  - o) Historial catches of selected species by stock area and country for the period 1971-80 (NAFO SCS Doc. 82/V1/2).
  - p) Extracts from resolutions passed at the 69th Statutory Meeting of ICES, October 1981 (NAFO SCS Doc. 82/VI/3).
  - q) Proposed NAFO/ICES study on redfish (NAFO SCS Doc. 82/VI/5).
  - r) Provisional nominal catches for the Northwest Atlantic, 1981 (NAFO SCS Doc. 82/VI/7).
  - s) Notes on statistical activities and publications, 1981/82 (NAFO SCS Doc. 82/VI/6).
    - [The above list of publications and meeting documents continue from the list previously reported in Document CWP-10/11 (July 1980).]

## APPENDIX I

TABLE 5. NOMINAL CATCHES AND FISHING EFFORT BY DIVISION, COUNTRY, GEAR, TONNAGE CLASS, MAIN SPECIES, AND MONTH - 1879.

																	METRI	C TON	ROUND	PRESH
DIV	COUNTRY	GLAR	TUN MS	3 P	SPECIES/EFFORT	JAL	,	EB	MAR	APR	MAY	JUN	JUL	AUG	3EP	OCT	NOV	020		TOTAL
0 A E	E/DNK	0182	3 P	AN	N PRANN					~ ~ * * *					21	~~~~~ 5	2			29
				•	TOTAL		•				٠.				21	6	2			29
	E/DNK	0182	4 P	AN	N PRAWN					ф Ф 10 44 40 40 6					*	8	27	3		38
					TOTAL		•	•		•			•	•	•	8	27	3	•	38
0 A E	E/FRA-M	0185	6 P	AN	N PHAWN							*			**************************************	7				7
	n				TOTAL	•		•	•			•	•	•		7			•	7
0 A E	E/GRL	0185	4 Р	A N	N PRAWN		,		0			1		1			13		******	15
					TOTAL HOURS FISHED			- ,		-		i 3		1 3	•		13			15
***					DAYS FISHED			 				1		1			51 4			57 6
0 A E	E/GRL	0182	5. P	AN.	N PRAWN	•	• •	•		•	•	•	10	3	- 66	3	52	-		134
					TOTAL HOURS FISHED		. :					•	10 31	3 13	99	28	52 180			134 474
		****			DAYS FISHED								3		18	2	14			39
OA F	FRO	018*	4 P	A N	N PRAWN	•	• , .				•					. •			115	115
		-			TOTAL		•												; 415	115
0 4 1	NOR	OTBA	4 P	AN	N-PRAWN	•	•	-			•		6	15	11	8	8	5	e ye. 👻	53
4000	0000000				TOTAL				00000				6 ••••••	15	11	8	8	5		53
UA A	NOH	OTB	4 P	A N	N PRAWN	4	ı	•		•	•		102	56	169	387	•	. 7		718
					TOTAL HOURS FISHED	14							102	56 294	169 666	387 1490			•	718 2886
-000	*****				DAYS FISHED							~~~~	35	25	56 *****	150			•	261
0 4 1	NOR	018	5 P/	AN	N PRAWN		•	•			•		4	•		16		•	•	50
				,	TOTAL HOURS FISHED DAYS FISHED	•			-	e =	•	10 15 4	20 1	•	-	16 54 6		•	•	20 74 7
0 B E	E/DEU	0185	7 G	HL	G HALIBUT FINFISH (NS)		,	*	*		•			*		94 34	*	# # W W W W		94
					TOTAL HOURS FISHED							•	•	•	•	128				128 187
0000					DAYS FISHED											14			•	14
0B F	FHO	LLS	4 GI	HL :	G HALIBUT	•	•		•		. •		•	•	•	•	•		50	50
		~~~~			TOTAL		•					******			*****	,			50	50
0 ช . ร	SUN	0185	7 Q1	HL	REDFISHES G HALIBUT R GRENADIER	•	•		•				• •	•	•	•	531 60	456 46	•	9 987 106
					TOTAL		•	•		•		- · · · · <u>-</u>	•	•		•	600	502		1102
					HOURS FISHED DAYS FISHED DAYS ON GROUND			•	•				•				384 46 58	347 32 39		731 78 97
1A E	E/GRL	0182			N PRAWN	4.1		1		47	57	27		*	•					173
					TOTAL HOURS FISHED DAYS FISHED	107		1 7 1		47 99 8	57 189 13				•	•	•			173 488 42
	E/GRL				N PRAWN			1	• • • • • • • • • • • • • • • • • • •	112	4						•••••	•••••		410
					TOTAL	228		1	6	112	4				•		•			410
					HOURS FISHED DAYS FISHED	281	) , ' '	5	12	157	5	10		•		-	•	•		564 46
1A E	E/GRL	0185	5 . P		N PRAWN	62			*	78	50		20000			~~~~				253
					TOTAL HOURS FISHED DAYS FISHED	6 2 7 7			-	78 91 6	29 65 7	143			•	<b>o</b>	•	•	•	253 376
1A E	E/GRL							 1	1	11				75	.50	59	14		- - - -	433
			- T		G HALIBUT	49	1		175	112	168		630	498	379	216 1	57	59		3036
					G COD R GRENADIER			8	24 2	14	9	18	56 4		101	53	14	6	-	433 21
					WOLFFISHES A SALMON CAPELIN		•				2	3.	32	801	98 5	100	1	1	97	357 124 75

	E 5. (C	DNIINU	0)				1		1							MFTOTO	TONS	ROUND	FRFQ
 11 u	COUNTRY	GLAR	11)N P	4SP	SPECIES/EFFURT		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		TOTA
					CHARS (NS)								1		*****	~~~~		*****	
					N PRAWN	412	67	553	394	593	759	808	448	806	524	345	276	2984	863
					TOTAL	459	203	425	535	806	1414	1728	1288	1442	933	431	342	3106	1313
A	NOR	018	5	PAN	N PRAWN	•		•	•	•	•	•	•	•	14	9	•	•	
					TOTAL HOURS FISHED	•	-		•					•	14	9 25	•	•	·
					DAYS FISHED			*****	~						4	5	•		
ı	CAN-H	018	4	PAN	N PRAWN	•			•	•	•		•	•	72	164		•	23
					TOTAL HOURS FISHED	•	_			•	•	-		•	72 334	164 1002			51
					DAYS FISHED			-		•			•	•	34	80	-	. •	131
18	E/DNK	0182	3	PAN	N PRAWN	•		•	•	-	74	50	32	24	19	32	28		2
					TOTAL	-		•	•		74	50	32	24	19	32	28		29
18	E/DNK	0182	4	PAN	N PRAWN	25	25	•	-	72	. 26	36		39	52	54	58		3
		· · ·			TOTAL	25	25	-		72	26	36	•	39	52	54	58	. •	3
В	E/DNK	0182	5	PAN	N PRAWN	62	41	•	70	150	•	•					52	265	6
					TOTAL	62	41	-	70	150			•	•	•	. •	52	265	6
18	E/FRA-M	0185	6	PAN	N PRAWN	-	-	•	•	-	-	115	93	42	97				3
		<u> 1 28.</u>	`. 		TOTAL	• • .		•	•			115	93	42	97	• .	•	•	3
18	E/GRL	0185	3	PAN	N PRAWN	40	24	46	21	34	57	37				26	10		2
					TOTAL HOURS FISHED	40 176	112	46 144	21 72	34 76	57 177	37 129	•	•	•	26	10	•	5
				<u> </u>	DAYS FISHED	15	11	13	9	. 8	17	9		<del>-</del>	•	215	72 5	•	11
18	E/GRL	0182	4	PAN	N PRAWN	31	57	128	122	230	131	158	93	•		17	39		10
					TOTAL HOURS FISHED	31 74	57 100	128	122	230 344	131 238	158 360	93 278		:	17 74	39 195	•	10
					DAYS FISHED	10	7	19	12	25	19	23	18			7	14		20
18	E/GRL	0182	5	CAT	REDFISHES A HALIBUT	:	1 1	•				•	-		•	•	1	-	
			. ,		G COD WOLFFISHES	-	1	•								•	4		
					TOTAL		3	٠.									12	_	
					HOURS FISHED		8	•	•				-	•,	•		5		
1 B	E/GRL	0182	5	PAN	COD														
					REDFISHES WOLFFISHES		. ! .			•				4	1	. 3			
	er Par		4		N PRAWN	17	9	738	719	727	507	498	538	352	218	214	173	•	46
					TOTAL HOURS FISHED	17 27	18	738 823	719: 752	727 991	507 972	498 1201	538 1526	326 876	222 911	217 922	173 811	•	98
					DAYS FISHED	3	3	63	57 	66 •••••	64	76	101	69	68	56	50		6
18	E/GRL	NK .	5	MIX	COD G HALIBUT	65	84	63 156	93	214 139	505 85	620 107	136	38 12	53 164	19 166	13 75	7 111	17
					A HALIBUT G COD	103	63	115	112	105	124	131	14	11	18 197	182	129	1 6	15
					WOLFFISHES A SALMON		: : : : : : : : : : : : : : : : : : :		•	5	37	129	63 133	56 6	100	65	5.	21 214	3
					CAPELIN Chars (NS)	:	. !:	-	-	•	1	$\frac{1}{7}$	18	-				1	
					N PRAWN	43	63	128	108	65	76	136	66	110	114	63	52		10
					TOTAL	213	215	462	413	525	833	1137	550	377	646	500	274	393	65
8	FRO	018*	4	PAN	N PRAWN		<u> </u>		•	• '	•		. •	•	•	77	•	•	
					TOTAL HOURS FISHED	•				•	•	-	-		•	77 369	•	•	. 3
					DAYS FISHED DAYS ON GROUND			•	-	•		•	-		•	23			
8	FRO	018	4	PAN	COD N PRAWN		7	• .			******		•••••					16	

18 NOR

PAN N PRAWN

# Northwest Atlantic



# Fisheries Organization

Serial No. N237

NAFO/GC Doc. 80/IX/11

## SECOND ANNUAL MEETING - SEPTEMBER 1980

## Deterioration in National Reporting of Fishery Statistics for the Northwest Atlantic

The Scientific Council wishes to inform the General Council that complete provisional nominal catch statistics for the Northwest Atlantic (Subareas 0 to 6) for 1979 were not available at the time of its meeting in June 1980, despite the 15 April 1980 deadline for the submission of these data on STATLANT 21A The Scientific Council also notes that the more detailed catch and effort data for 1979 (STATLANT 21B reports with the deadline of 30 June 1980) are still outstanding for several countries (Faroe Islands, Federal Republic of Germany, Ireland, Italy and United Kingdom). However, unofficial data are in hand for Federal Republic of Germany. The Scientific Council is gravely concerned about the deterioration in national reporting of fishery statistics through the STATLANT system, particularly with regard to the STATLANT 21B returns which form the basis for the Statistical Bulletin and much of the assessment work, and recommends that this matter be brought to the attention of Contracting Parties through the General Council, since it concerns the acquisition of fishery statistics for the NAFO Convention Area as a whole and not just the NAFO Regulatory Area.