

R1/12

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FRV *SCOTIA*

Cruise 1093S

REPORT

6-26 August 1993

Personnel

K A Coull	HSO (in charge)
D S Beveridge	SO
C G Davis	ASO
M C Donald	ASO
D J Tait	ASO
L Hastie	RA (18-26 August)
A V Schie	Visitor

Objective

To undertake a trawling survey of the North Sea.

Out-turn Days per Project: 21 days DAC1

Narrative

Scotia sailed from Aberdeen at 1100 on 6 August. Trawling commenced on the stations east of Aberdeen and continued uninterrupted on the southern part of the survey area. With favourable weather conditions *Scotia* completed the stations in the German, Danish and Norwegian sectors before docking at Lerwick at 0900 on 18 August for the mid-cruise break. The vessel sailed again at 0930 the following day and recommenced work on the stations in the Shetland region. With poor weather conditions forecast, the opportunity was taken to complete the stations off Orkney and the Moray Firth. With sampling of the survey area completed the vessel returned to Aberdeen on the evening of 25 August.

Results

The survey area was successfully covered with a total of 89 hauls being completed.

The numbers of cod, haddock and whiting caught per 10 hours fishing during the August groundfish surveys since 1982 are shown in Tables 1, 2 and 3 respectively. The number of 0-group haddock and whiting caught were lower than in any of the previous three years. However, the numbers of 1-group and 2-group haddock and whiting caught compare very favourably with results from previous years. The number of 2-group cod (1991 year class) caught were the highest since the 1985 survey (1983 year class).

The numbers of 0-group haddock and whiting caught per hour in each statistical rectangle are shown in Figures 1 and 2 respectively. All length frequency, haul summary data and age data for cod, haddock, whiting and saithe were punched at sea and stored on micro-computer. The Scanmar system was used throughout the cruise to monitor headline height, wingspread and distance covered during each haul.

K A Coull
15 November 1993

Seen in draft: P Ramsay IOC

Table 1 Numbers of Cod per 10 Hours Fishing -- North Sea

Survey Year	Valid Hauls	Age								
		0	1	2	3	4	5	6	7	8
1982	77	0.2	61.4	35.1	57.2	18.3	9.2	5.9	1.4	0.5
83	79	2.3	32.5	78.0	18.1	19.7	7.5	2.3	1.5	0.0
84	82	0.0	81.9	39.1	25.3	5.0	5.7	1.6	0.5	0.2
85	83	0.0	6.6	114.3	19.7	11.2	3.0	2.4	0.6	1.0
86	80	0.7	80.1	10.4	39.6	5.7	3.9	1.9	0.6	0.0
87	73	0.0	21.9	69.5	3.4	9.2	2.9	0.7	0.2	0.0
88	86	1.3	16.2	28.8	16.5	2.5	3.3	1.2	0.4	0.0
89	86	0.3	56.1	13.5	16.8	9.5	2.0	0.8	0.5	0.0
90	85	2.9	11.4	49.0	5.9	7.4	2.6	0.9	0.8	0.0
91	90	1.4	30.3	15.4	13.3	1.3	0.6	0.4	0.2	0.0
92	87	0.5	64.2	19.3	7.2	6.7	2.9	1.8	1.2	0.2
93	87	3.6	34.7	74.9	10.1	2.5	1.2	0.3	0.0	0.1

Table 2 Numbers of Haddock per 10 Hours Fishing - North Sea

Survey Year	Valid Hauls	Age								
		0	1	2	3	4	5	6	7	8
1982	77	1235	2488	996	1336	115	7	2	1	2
83	79	2203	1813	1611	372	455	53	12	1	1
84	82	873	4367	788	336	55	65	9	5	1
85	83	818	1976	2981	232	103	14	22	4	2
86	80	1747	2329	574	598	36	27	4	3	+
87	73	277	2393	704	106	128	8	5	1	2
88	86	406	467	1982	170	27	23	2	1	+
89	86	432	886	214	574	31	4	7	1	+
90	85	3163	1002	240	32	103	7	1	3	1
91	90	3471	1705	178	21	5	16	2	+	1
92	87	8270	3832	963	48	8	3	8	+	+
93	87	859	5836	1380	269	6	4	1	3	+

Table 3 Numbers of Whiting per 10 Hours Fishing - North Sea

Survey Year	Valid Hauls	Age								
		0	1	2	3	4	5	6	7	8
1982	77	102	653	971	972	224	60	16	3	+
83	79	210	563	578	407	511	116	17	3	5
84	82	442	1048	371	170	77	92	18	5	+
85	83	169	1577	973	247	63	36	18	10	+
86	80	406	1111	452	224	27	5	5	1	0
87	73	120	1405	1150	208	77	16	3	+	+
88	86	642	967	1606	452	70	19	2	0	2
89	86	427	4043	741	733	157	13	6	1	0
90	85	1943	2239	2053	248	255	47	5	1	1
91	90	1379	1769	950	759	51	40	9	+	0
92	87	2417	2925	1267	553	585	47	26	5	-
93	87	247	3169	1168	423	156	182	6	11	+

August 1993 Haddock 0-group nos/hour

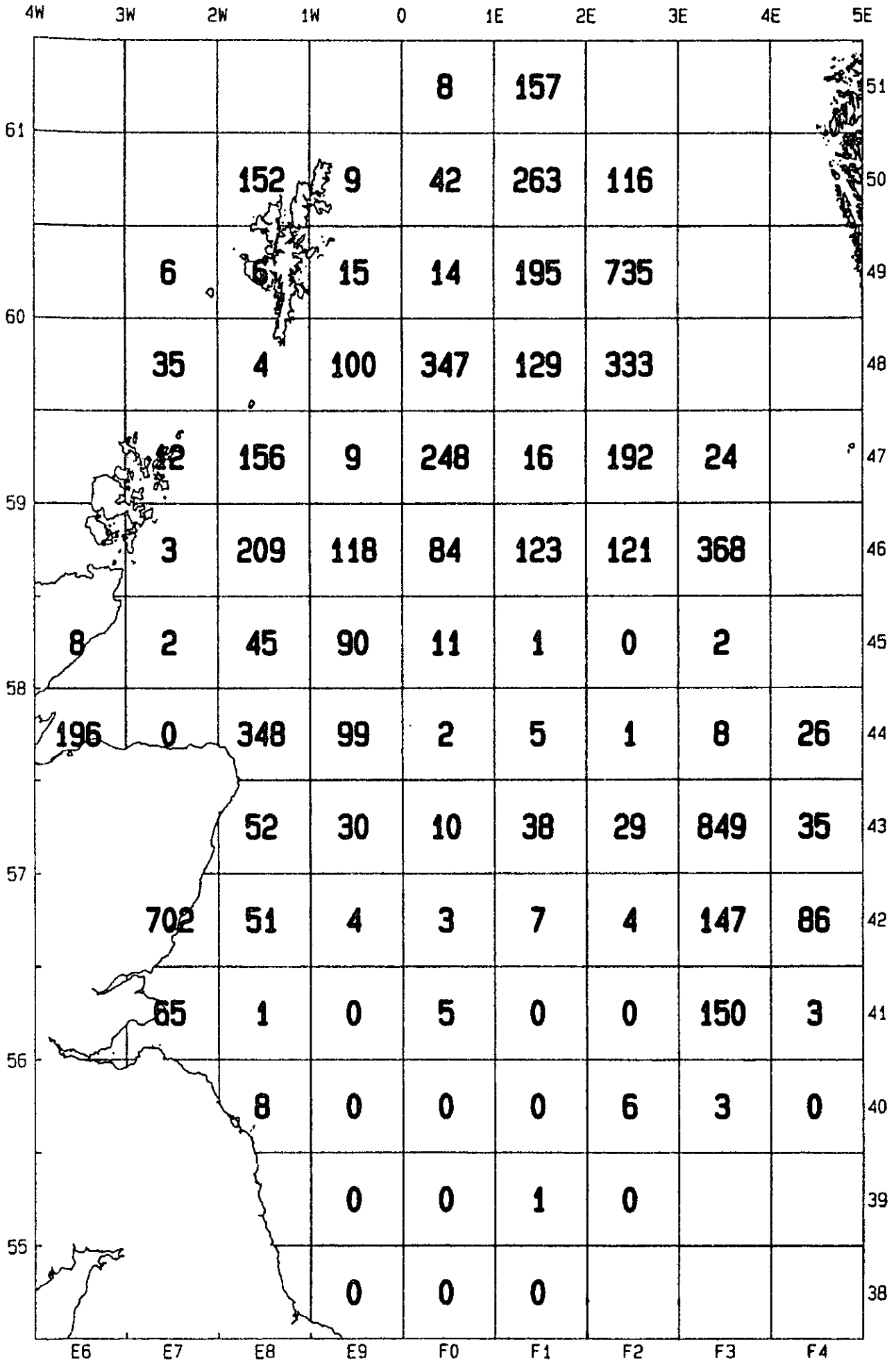


Figure 1

August 1992 Whiting 0-group nos/hour

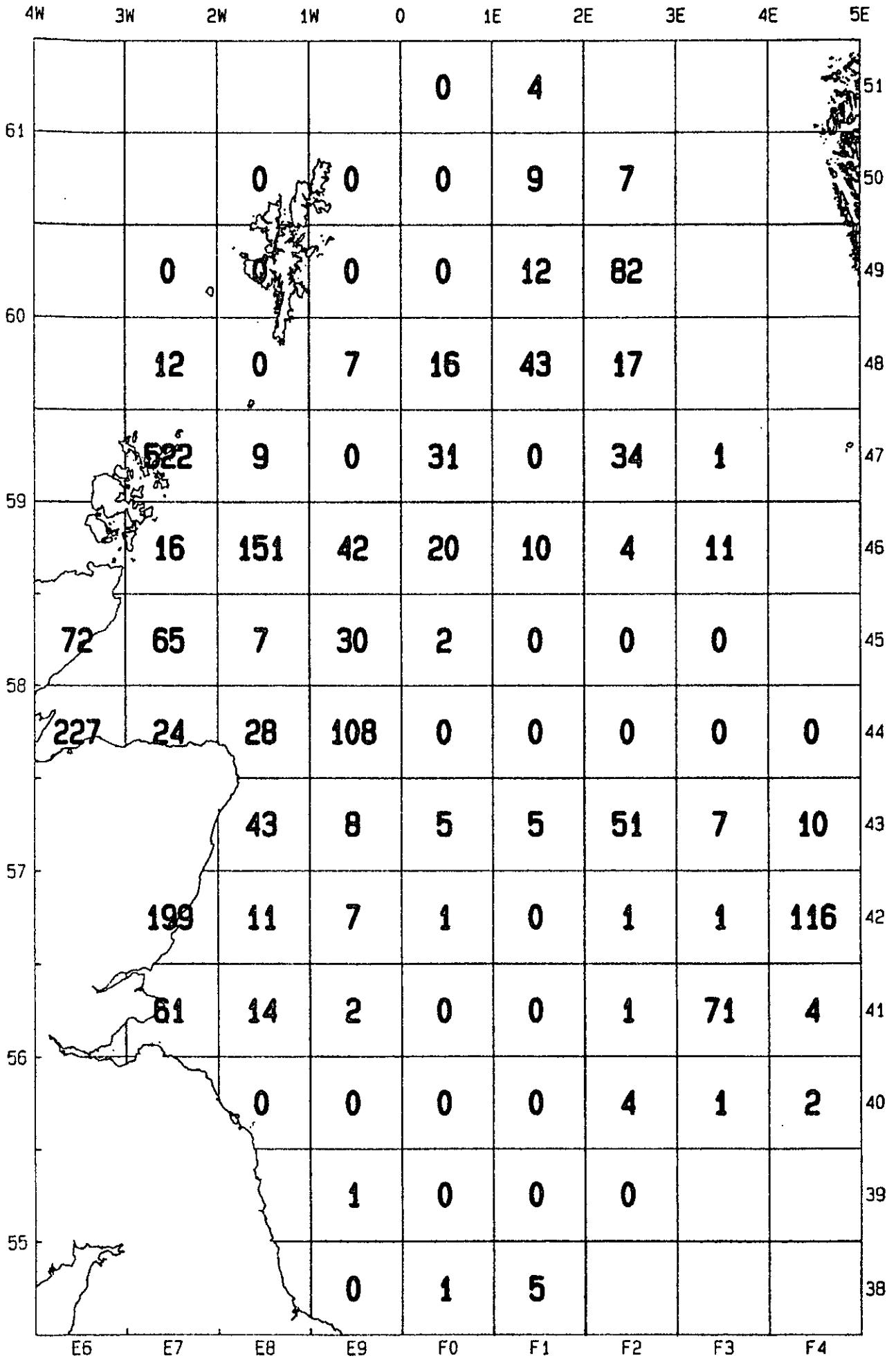


Figure 2

Scotia 6 - 26 August Cruise 1093S

