

R1/12

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FRV *Scotia*

8SR90

Cruise 8/90

Report

1-21 August 1990

Personnel

K A Coull	HSO (in charge)
G I Henderson	SO
K J Peach	ASO
C G Davis	ASO
J P Oddy	ASO
A McCarthy	Visitor (13-21 August)

Objective

To undertake a demersal trawling survey of the North Sea.

Narative

Scotia sailed at mid day on 1 August, and trawling commenced at the stations east of Aberdeen. With good weather conditions *Scotia* covered the southern and eastern part of the survey before docking at Lerwick for a half landing on 13 August. Work recommenced on 14 August on the stations in the Shetland region before working south, completing the survey on the evening of 20 August.

Results

The survey area was successfully covered, with a total of 86 hauls being completed. Catch rates generally ranged from 2-18 baskets per hour with the exception being 46 baskets (33 of whiting) from 38F1.

The numbers at each age of cod, haddock, whiting and saithe are given in tables 1-4 for each sampling area. For haddock and whiting, the numbers of "0" group fish were significantly higher than in recent years. Numbers per hour are given in Figure 1 and Figure 2 for haddock and whiting.

All length frequency and haul summary data were punched at sea and stored on floppy disk using a BBC micro-computer. All cod, haddock, whiting and saithe otoliths were read at sea.

Otoliths collected

Cod	Haddock	Whiting	Saithe	Pout	Herring	Sprat	Mackerel
648	1893	1592	495	305	1382	58	402

K A Coull

21 September 1990

Seen in draft. N M Mackenzie, OIC

Table 1 Cod

Numbers at age (per 10 hours)

Age	Shetland		Viking		Moray Firth		Buchan		Forties		Central		Humber	
	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
0	-	-	-	-	-	-	-	-	-	5	1	7	-	1
1	47	4	31	3	18	-	22	9	45	17	67	16	179	19
2	11	80	22	82	-	3	1	8	26	83	16	42	13	40
3	36	20	43	7	-	-	1	1	26	3	11	3	4	7
4	22	15	24	25	-	-	3	1	9	11	5	2	9	9
5	3	3	2	5	-	-	1	1	5	5	1	-	1	6
6	-	1	5	2	-	-	1	1	1	1	-	1	1	-
7+	1	1	2	-	-	-	-	-	1	2	-	1	-	-

Table 2 Haddock

Numbers at age (per 10 hours)

Age	Shetland		Viking		Moray Firth		Buchan		Forties		Central		Humber	
	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
0	84	860	678	4677	250	2070	250	3239	852	3211	586	4189	46	3163
1	583	784	546	417	88	100	1898	1647	1070	1305	587	1031	628	310
2	290	349	332	81	-	48	269	336	349	287	120	171	18	211
3	721	66	345	73	48	3	972	14	566	39	424	24	419	8
4	55	152	41	76	-	10	31	165	23	66	26	93	27	49
5	11	24	13	3	-	3	3	6	1	3	1	2	2	3
6	4	4	9	-	-	-	6	-	1	1	9	-	19	-
7+	3	12	5	6	-	-	2	1	1	2	-	2	-	6

Table 3 Whiting

Numbers at age (per 10 hours)

Age	Shetland		Viking		Moray Firth		Buchan		Forties		Central		Humber	
	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
0	32	600	417	11152	693	3518	174	410	331	3551	943	907	1	48
1	701	83	20	18	3628	3066	7855	2635	239	170	2041	944	20453	15539
2	519	1030	103	274	15	1579	994	3687	412	801	700	627	2369	9576
3	1179	151	314	125	8	-	1027	143	633	332	548	227	802	846
4	383	380	126	168	-	8	208	176	140	197	54	134	101	938
5	49	98	8	52	-	3	2	47	14	32	1	13	13	113
6	4	4	3	2	-	-	14	-	1	1	2	9	23	11
7+	1	1	2	2	-	-	-	2	1	-	1	3	1	-

Table 4 Saithe

Numbers at age (per 10 hours)

Age	Shetland		Viking		Moray Firth		Buchan		Forties		Central		Humber	
	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	11	-	-	-	-	-	-	-	-	1	-	2	-	-
2	4	36	20	46	-	-	1	77	4	48	-	1	-	-
3	29	64	43	228	-	3	-	19	33	62	-	1	1	-
4	17	11	35	26	-	-	-	-	45	15	-	-	-	-
5	7	3	6	24	-	-	-	-	19	12	1	-	-	-
6	7	2	18	2	-	-	1	-	21	8	6	1	-	-
7+	7	11	10	11	-	-	-	-	4	11	3	-	-	-

Haddock 0-group nos/hour

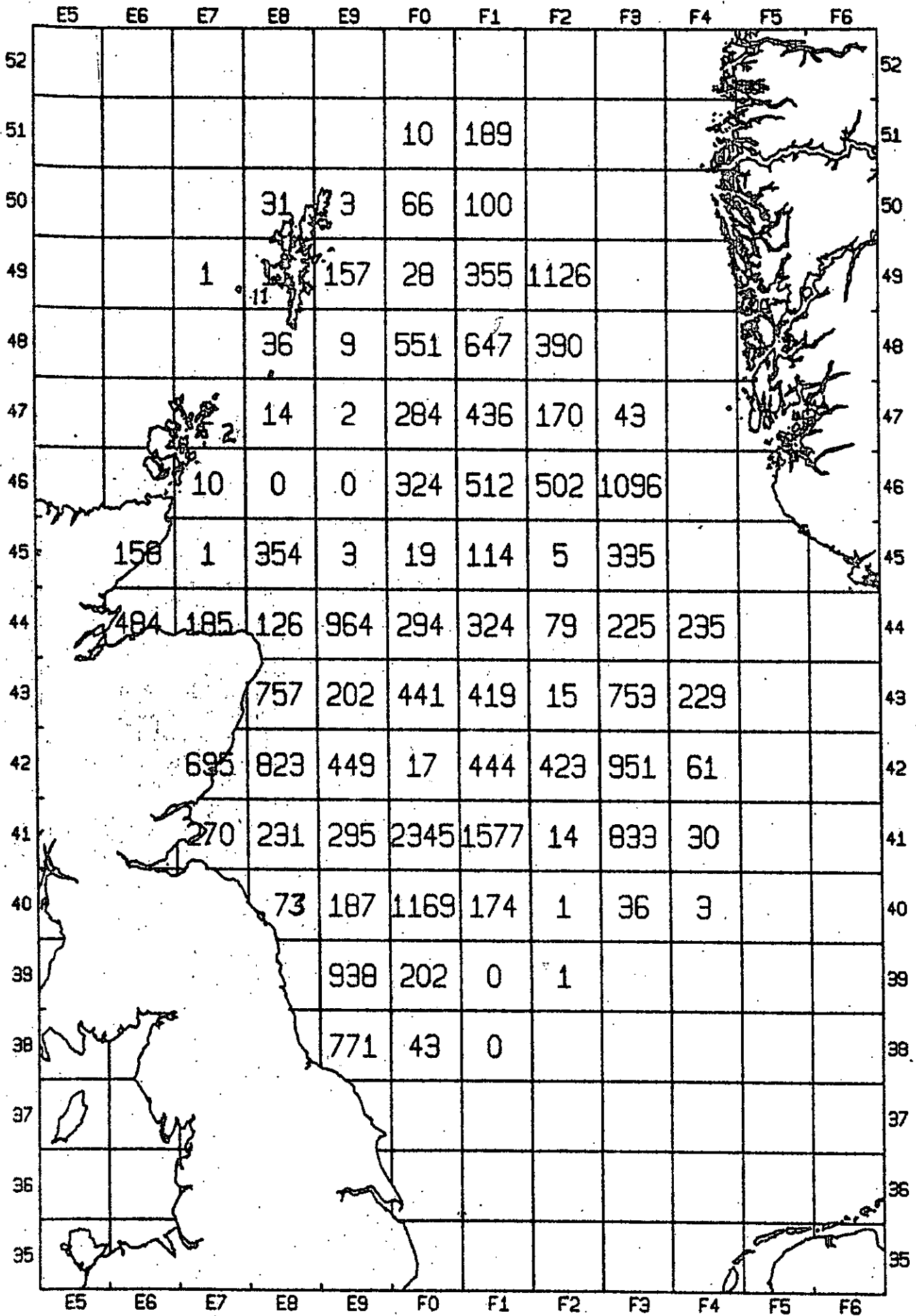


FIGURE 1

Whiting 0-group nas/hour

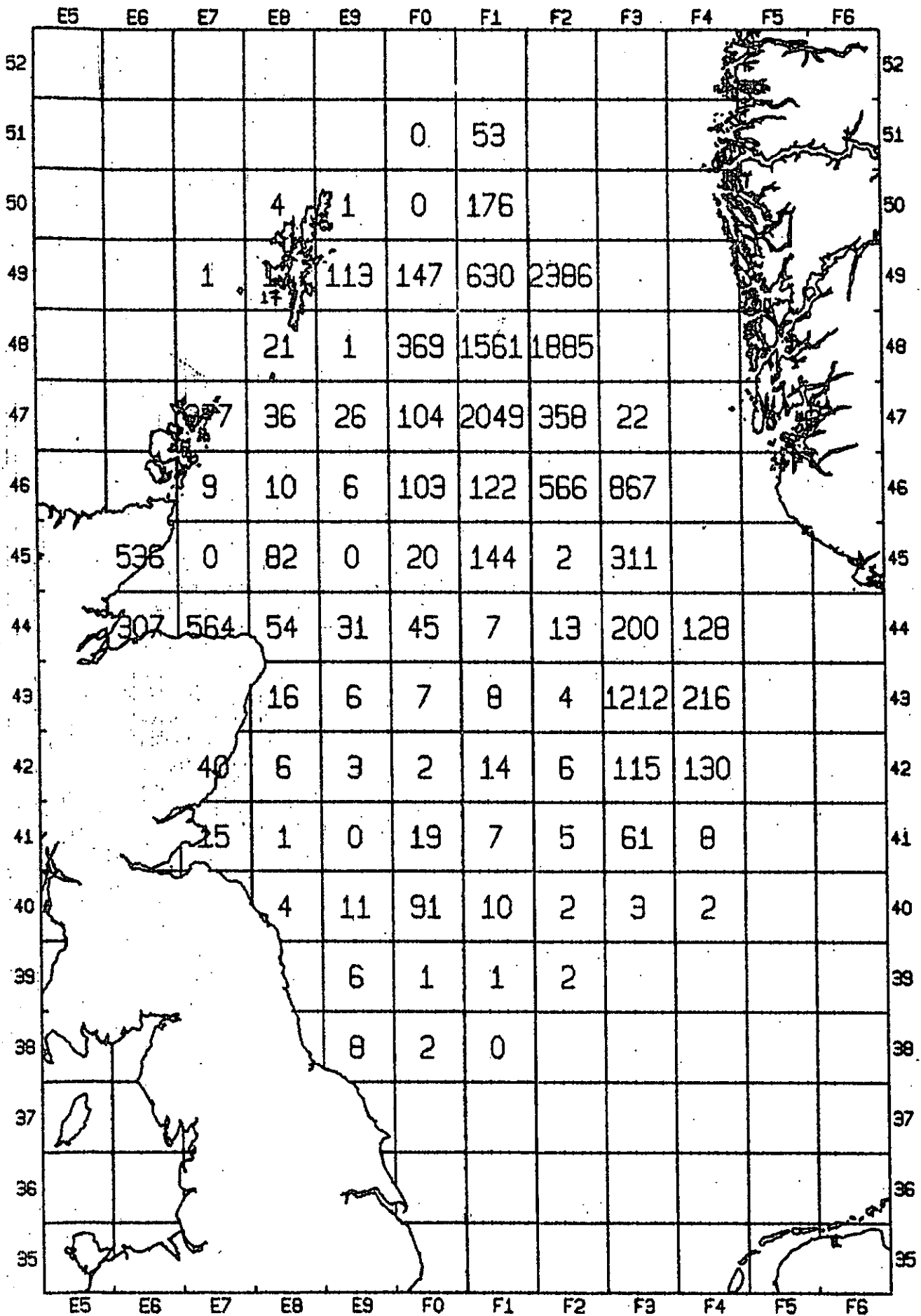


FIGURE 2

Scotia 1 - 21 August 1990 Cruise 8/90

