

R1/12

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FRV *Scotia*

Cruise 0691 Part 2

## REPORT

11-20 June 1991

### Personnel

K A Coull	HSO (in charge)
M A Bell (Miss)	SO
D S Beveridge	SO
K J Peach	ASO
J McWilliam (Miss)	ASO
M C Donald (Miss)	ASO
D J Tait	ASO

### Objective

To participate in a coordinated groundfish survey in the North Sea and, in particular to cover areas not sampled during cruise 5/91 (part 2).

### Narrative

Due to problems with the Windlass, sailing was delayed until 1330 on 12 June. Trawling commenced the same evening at the stations in the Moray Firth. *Scotia* then worked northwards completing the western edge of the survey area before entering the Norwegian sector on 16 May. Work continued on the eastern and central area of survey before *Scotia* headed south to complete the gap left during cruise 5/91 (part 2). *Scotia* docked at Aberdeen at 1200 on 20 June.

### Results

During *Scotia* cruise 5/91 part 2 of 10-19 May, 25 valid hauls were completed. A further 29 valid hauls were completed during cruise 0691S part 2, giving a total coverage of 54 of the 62 programmed stations. This report deals with the results of both cruises.

The Scanmar system worked effectively and was used to monitor headline height, wing spread, door spread and distance covered during each haul.

All length frequency and haul summary data was punched at sea and stored on floppy disk using a BBC microcomputer.

During the May cruise, a total of 3078 fish stomachs were examined as part of an internationally coordinated project. A further 3822 stomachs were examined during the June cruise.

The numbers at each age of cod, haddock, whiting, and saithe are given in Tables 1-4 respectively for each sampling area.

K A Coull  
16 September 1991

Seen in draft: A W MacKenzie

TABLE 1

Cod

Numbers at age (per 10 hours)

	Shetland	Viking	Moray Firth	Buchan	Forties	Central	Danish Coast	Humber	Other North Sea
Hauls valid	6	3	1	10	5	12	4	3	10
Zero Catch						1		2	2
Age 0	-	-	10	-	-	-	-	-	-
1	5	7	-	35	18	8	3	10	18
2	40	57	-	19	62	28	50	-	6
3	102	77	-	31	52	41	31	-	10
4	5	10	-	6	20	1	9	-	6
5	8	7	-	6	6	4	10	-	1
6	3	7	-	2	6	1	5	-	-
7	-	3	-	1	-	-	-	-	-
8	-	-	-	1	2	-	-	-	-
9	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	1

TABLE 2

Haddock

Numbers at age (per 10 hours)

	Shetland	Viking	Moray Firth	Buchan	Forties	Central	Danish Coast	Humber	Other North Sea
Hauls valid	6	3	1	10	5	12	4	3	10
Zero Catch							1	2	6
Age 0	-	3	120	-	-	1	-	-	-
1	1687	6100	330	5144	4044	8794	423	4350	3
2	710	700	70	384	1089	746	183	410	1
3	142	147	40	98	167	67	10	40	-
4	39	43	-	8	24	5	10	50	1
5	96	77	-	94	10	39	5	70	-
6	10	-	-	7	2	1	-	-	-
7	7	7	-	1	-	-	-	-	-
8	3	3	-	2	2	-	-	-	-
9	-	7	-	-	-	-	10	-	-

TABLE 3

## Whiting

Numbers at age (per 10 hours)

	Shetland	Viking	Moray Firth	Buchan	Forties	Central	Danish Coast	Humber	Other North Sea
Hauls valid	6	3	1	10	5	12	4	3	10
Zero Catch									
Age 0	-	-	-	-	-	-	-	-	-
1	11	13	4850	6563	59	2062	13621	93598	8155
2	524	311	10	5123	896	2133	830	29921	2975
3	1382	696	10	5810	579	851	7	9338	1378
4	194	57	-	96	166	92	3	3563	525
5	169	75	-	260	55	58	9	317	86
6	30	128	-	148	6	11	-	190	-
7	12	-	-	1	-	1	-	-	-

TABLE 4

## Saithe

Numbers at age (per 10 hours)

	Shetland	Viking	Moray Firth	Buchan	Forties	Central	Danish Coast	Humber	Other North Sea
Hauls valid	6	3	1	10	5	12	4	3	10
Zero Catch	2		1	7	2	9	4	3	9
Age 0	-	-	-	-	-	-	-	-	-
1	-	-	-	-	2	-	-	-	-
2	-	-	-	-	14	2	-	-	-
3	15	13	-	1	75	1	-	-	1
4	26	27	-	3	70	-	-	-	-
5	21	20	-	1	2	-	-	-	-
6	10	-	-	1	2	-	-	-	-
7	7	7	-	1	-	-	-	-	-
8	13	7	-	-	10	1	-	-	-
9	-	-	-	1	4	-	-	-	-
10	-	-	-	-	4	-	-	-	-
11	-	-	-	-	-	-	-	-	-
12	-	-	-	1	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	1	-	-	-
15	-	-	-	-	-	-	-	-	-
16	-	-	-	-	2	-	-	-	-

SCOTIA 11 - 20 June 1991 Cruise 0691S (Part 2)

