

R1/12

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FRV *Scotia*

Cruise 1998S

## REPORT

9-27 November 1998

### Personnel

A P Robb	B3 (in charge)
A W Newton	B3
D G Reid	B3
C G Davis	B1
M C Mathewson	A4
D J Tait	A4
F N Burns	A3
I Penny	A3
K Hughes	PhD Student
F Woods	Visitor (19-27 November)

**Out turn days per project:** 19 days MFO1t

### Gear

GOV trawl (BT137) with ground gear C (with belly lines) and 20 mm cod-end.

### Objective

To participate in the ICES coordinated Western Division Bottom trawl survey.

### Area

West of Scotland, N W Ireland, Irish Sea.

### Narrative

*Scotia* sailed from Aberdeen at 1430 hours on 9 November and proceeded north towards the survey area. However, severe weather conditions forced the ship to shelter overnight in the Moray Firth before commencing fishing the next day in statistical rectangle 46E6. Generally, fishing operations were carried out each day between 0700 hours and 2100 hours. Work continued steadily westward and then southwards until 16 November, when bad weather interrupted progress. Fishing recommenced the next day and the outer, western stations were completed successfully before *Scotia* docked in Dublin on 20 November for the port call. The vessel sailed again the following morning and recommenced work in the Irish Sea area. Later the same day, bad weather once again interrupted trawling operations for a short period. When the weather improved the ship worked northwards, up through the Minches. On the morning of 26 November, deteriorating weather conditions meant that the remaining stations had to be abandoned and the ship headed for Aberdeen, docking at 0100 hours on 27 November.

## Results

Despite mixed weather conditions only three trawl stations were not sampled. A total of 57 valid trawl tows were made with the GOV. Hauls were of 30 minutes duration. Table 1 gives the catch weights for the major species and Table 2 gives provisional indices for the main species caught during the survey. The indices for Haddock and Whiting point toward less than average recruitment whereas the index for Norway pout points toward a higher than average value. The indices for Herring and Mackerel may be subject to further revision.

The otoliths collected from all the demersal species and from mackerel were aged at sea. Herring otoliths were brought back for ageing in the Laboratory. All haul data was punched at sea. The scanmar system was used to monitor headline height, wing spread, door spread, distance covered and net speed during each haul. Bottom temperature was monitored using a mini logger attached to the trawl. The thermosalinograph was run throughout the cruise to record surface temperature and salinity.

A P Robb  
15 December 1998

Seen in draft: J B Nichols, Master

Table 1 Total Catch weight (kgs) of Main Species caught per half hours fishing

Haul No	Rect	Herring	Sprat	Mackerel	Cod	Haddock	Whiting	Norway Pout	Total Catch (kgs)	Total Catch (Bkts)
476	46E6	73	+	+	0	116	13	12	214	7
477	47E6	+	1	0	0	14	9	280	303	9
478	47E5	+	3	3	1	43	7	6	62	2
479	47E4	4	0	0	0	40	92	49	185	6
480	47E3	14	0	0	+	13	10	33	70	2
481	45E4	6	4	0	2	8	13	172	205	6
482	45E3	1	+	+	5	4	71	142	223	7
483	46E3	+	+	0	0	194	47	418	660	21
484	46E2	2	0	+	8	43	5	+	58	2
485	45E2	7	0	+	0	1	1	0	9	0
486	45E1	12	0	+	2	90	15	75	193	6
487	45E0	7	0	0	3	27	21	58	115	4
488	44E0	367	0	+	0	33	82	60	543	17
489	44E1	7	0	+	2	11	26	13	59	2
490	43E1	8	0	+	0	19	34	4	64	2
491	43E0	4	0	1	0	211	26	483	725	23
492	42E0	0	0	0	1	9	0	+	10	0
493	42E1	8	0	+	0	1	3	5	17	1
494	41E0	0	0	0	0	28	0	+	28	1
495	41E1	4	0	0	0	39	9	6	58	2
496	40E1	17	0	+	0	21	10	+	49	2
497	40E0	0	0	109	6	31	0	+	146	5
498	39E0	0	0	+	0	27	0	+	27	1
499	38D9	0	0	0	0	0	0	0	0	0
500	38D9	13	0	+	0	83	10	2	107	3
501	37D9	8	0	1	0	18	18	+	45	1
502	36D9	5	0	+	0	47	1	+	52	2
503	36D8	0	0	3	0	12	2	3	20	1
504	38E0	8	0	484	1	11	18	1	524	16
505	37E0	6	+	1,285	0	7	35	6	1,339	42
506	37E1	1	1	12	0	10	18	3	43	1
507	38E1	2	1	3	2	0	51	8	67	2
508	39E1	+	0	1	0	2	9	19	30	1
509	39E2	3	0	1	7	34	4	+	49	2
510	39E3	+	+	0	1	0	33	0	34	1
511	39E5	1	+	0	5	5	40	+	51	2
512	39E4	+	+	0	+	1	210	+	210	7
513	38E4	+	8	0	36	3	7	1	55	2
514	37E4	2	2	+	7	1	51	5	68	2
515	35E4	0	0	0	0	0	0	0	0	0
516	35E4	0	0	0	0	5	186	5	196	6
517	35E4	5	1	0	0	0	6	+	12	0
518	36E4	1	3	0	11	2	16	1	34	1
519	36E5	+	+	0	5	15	19	3	42	1
520	36E6	+	2	0	0	+	157	+	159	5
521	37E5	1	3	1	2	+	95	0	100	3
522	37E6	+	9	0	3	0	75	+	87	3
523	38E6	2	1	0	1	1	259	0	264	8

Haul No	Rect	Herring	Sprat	Mackerel	Cod	Haddock	Whiting	Norway Pout	Total Catch (kgs)	Total Catch (Bkts)
524	38E5	+	+	0	5	9	142	+	157	5
525	37E5	1	20	0	17	3	11	2	53	2
526	40E3	+	+	+	0	2	87	0	88	3
527	40E2	0	0	0	0	0	0	0	0	0
528	41E2	113	+	3	+	8	138	16	278	9
529	41E3	1	1	0	0	3	71	1	77	2
530	42E2	+	0	0	3	+	79	110	192	6
531	42E3	+	0	0	1	0	156	34	191	6
532	43E2	+	1	0	6	2	45	33	86	3
533	43E3	+	+	0	2	+	17	19	39	1
534	44E4	+	+	+	3	8	1	31	44	1

Table 2. November West Coast Survey Numbers at age per 10 hours fishing

	Year	No Hauls/Age	0	1	2	3	4	5	6
Cod	1996	28	0	1	14	5	3	1	0
	1997	42	1	11	2	1	1	1	0
	1998	37	+	5	9	1	0	0	0
Haddock	1996	28	2,907	761	656	70	137	57	24
	1997	42	3,713	1,359	282	151	25	26	14
	1998	37	399	1,640	486	148	137	17	33
Whiting	1996	28	5,154	1,908	1,116	570	188	51	6
	1997	42	8,001	2,869	951	323	160	46	12
	1998	37	1,852	2,713	1,124	149	100	20	1
N Pout	1996	28	83,945	16,480	10,614	49	0	0	0
	1997	42	23,730	9,594	1,131	808	0	0	0
	1998	37	51,210	7,874	4,226	13	14	0	0
Herring	1996	28	5	496	1,142	1,623	494	399	164
	1997	42	57	82	382	644	467	473	204
	1998	37	86	59	351	522	533	625	262
Mackerel	1996	28	426	3,933	327	46	2	3	0
	1997	42	873	102	16	4	4	1	1
	1998	37	4,904	54	11	3	0	1	0

# Scotia 9-27 November 1998 Trawling Positions

