R1/12

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV Scotia

Cruise 1597S

### REPORT

25 November - 15 December 1997

Par 2?

Half Landing: Dublin

## Personnel

A P Robb HSO (in charge)

C G Davis SO
M C Mathewson ASO
D J Tait ASO
I Penny ASO

K Farrel Visitor (15-25 December)

### Gear

GOV Trawl (BT137) with ground gear C (with belly lines) and 20 mm cod end

Outturn days per project: 21 days EBA1

# Objective

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

## Narrative

After some 12 hours delay *Scotia* sailed from Aberdeen at 2200 hours on 25 December and proceeded northwards. Work commenced the following day at the trawling positions off Cape Wrath and continued westward and then southwards towards the Irish coast.

An average of five trawl hauls per day were carried out until 2 December when operations were suspended for a some hours due to poor weather conditions. Fishing recommenced later the same day and continued without any problems until *Scotia* docked in Dublin at 1000 hours on 5 December for the half landing. All of the outer stations to the west of Scotland and Ireland were completed before entering port. Whilst in harbour discussions took place with the Irish coordinator of the western division surveys and additional information on towing positions in the Irish sea was obtained.

Scotia sailed at 1000 hours on 6 December and recommenced work the same day at the positions around the Isle of Man. Progress was however short-lived as bad weather interrupted work on the afternoon of the 7th and the ship had to dodge until the morning of 9 December. Sampling then continued up through the Minches to the area north of the Butt of Lewis and then eastwards towards Shetland but again bad weather interrupted work on the afternoon of 12 December for a few hours. On the evening of 13 December, after the five scheduled survey

hauls had been completed, the ship proceeded to the Burra Haaf area where three additional trawl hauls were carried out to obtain *Nephrops* samples for ecotoxological analysis.

On the evening of 14 December the remainder of the survey was completed and the ship steamed through the Pentland firth to the Halibut Bank area where additional tows were also carried out for *Nephrops* samples. *Scotia* then headed for Aberdeen docking at 1400 hours on 15 December.

#### Results

Despite interruptions from bad weather the survey was completed successfully. A total of 61 valid hauls were made throughout the area. An additional eight hauls were carried out in the Burra Haaf and on the Halibut Bank to obtain *Nephrops* samples for ecotoxological analysis. Short (60 m) sweeps were used for all tows and each haul was monitored for headline height, wing end, door spread and the speed of the net through the water. Bulk catches varied from 90 kg to 2,550 kg per hour. The majority of the otoliths collected were read at sea and Table 1 gives the preliminary indices for the main species (excluding herring and sprat) caught during the trip. First winter mackerel were caught throughout the survey area and generally catches of these were greater than in 1996.

Samples of haddock and saithe were deep frozen and returned to the laboratory for calorimetric studies. Length/weight information was collected for a number of species. Temperature and salinity data was collected throughout the survey area.

A P Robb 8 January 1998

Seen in draft: D Fraser

TABLE 1

Numbers at age per ten hours fishing

Age	Cod		Haddock		Whiting		Saithe		Mackerel		Herring		Sprat		N pout	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
0	0	1	2907	3713	5154	8001	0	0	410	873	5		0		83945	23730
1	1	11	761	1359	1908	2869	365	0	3968	103	503		300		16480	9594
2	14	2	656	282	1116	951	21	1	267	15	1307		356		10614	1131
3	5	1	70	151	570	323	10	3	83	4	1573		81		49	808
4	3	1	137	25	188	160	1	1	6	4	445		3		0	0
5	1	1	57	26	51	46	0	1	2	1	361		0		0	0
6	0	0	24	14 -	6	12	0	0	0	1	139		0		0	0
7	0	0	6	4	1	1	0	0	1	0	116		0		0	0
8	0	0	1	3	0	0	0	0	0	0	208		0		0	0

