

R1/12

Not to be cited without prior reference to the FRS Marine Laboratory

FRV *Scotia*

Cruise 1301S, Part II

## REPORT

1-16 September 2001

### Personnel

A W Newton (In charge)  
K J Peach  
H Dobby  
T Blasdale  
R Watret  
M Gault  
M Mackey Visitor (UCC, Cork)

### Objectives

To undertake a demersal survey on the Rockall Plateau.

Out-turn days per project: 16 days, M01T

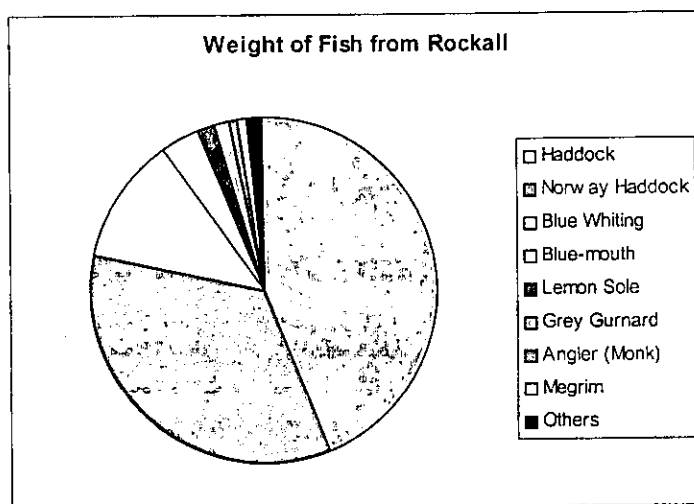
### Narrative

*Scotia* sailed from Aberdeen at 1230 hours on Saturday 1 September and made direct passage to the fishing grounds at Rockall. The vessel arrived on the grounds at 0830 hours on Monday 3 September and immediately began trawling on stations in the northern sector. However, only four hauls were completed before a serious problem developed with the 20/20 trawl winch system. After consultation with the Marine Laboratory and the shore superintendent it was decided that *Scotia* would have to steam to Ullapool in order to await spare parts. The spares were picked up at 2330 hours on Tuesday and gear trials undertaken in Annat Bay (off Ullapool). The winch system still did not function and the vessel was forced to return to Ullapool to await a technician from Norway. Repairs were finally effected on Friday and *Scotia* left Ullapool at 1555 hours on 7 September. (During this enforced delay it had been decided that the survey should be extended by two days to compensate for the down time; M Mackey elected to disembark at this point as he had other commitments during the extended period.) Fishing began again at midnight on Saturday 8 September, this time at the southern edge of Rockall Bank. During the next five days *Scotia* gradually worked northwards and whilst the sea conditions varied between force 3 and 8 the vessel was able to operate without any lost of time to weather or other factors. The survey was completed at 0930 hours on Friday 13 September and passage made for Aberdeen. *Scotia* docked in her home port at 2230 hours on Saturday 15 September.

## Results

In 1999 the Rockall survey was undertaken for the first time by the new Scotia and the opportunity was taken to change the survey gear from the Aberdeen 48' trawl to the GOV trawl (see the 1999 cruise report). The successful trials in 1999 now mean that the standard gear for Rockall is the GOV trawl fitted with groundgear C and an internal liner of 20 mm. Forty-four of the standard 46 trawling stations were surveyed, each for 30 minutes. The two missing stations were both on the Empress of Britain Bank, just off the southern tip of Rockall Bank. There was one foul haul when a number of boulders were caught in the codend but this station was repeated with no damage the second time.

In total 11.3 tonnes of fish were caught and as is to be expected haddock were the dominant species, providing 44% of the catch. The next most important species was *Sebastes viviparous* (34%) followed by *Micromesistius poutassou* (12%) and then by *Helicolenus dactylopterus* (3%). 26 different species were encountered but the only other significant species, contributing approximately 1% each to the catch, were lemon sole, grey gurnard, monks and megrim.



The primary objective of the survey is to assess the state of the haddock stock on Rockall Plateau; normally this is done by comparing the strength of the respective year classes in the current year with previous years. Table 1 summarises the preliminary results from this survey and the final results from past years. The initial impression is that currently there are very few commercial sized haddock on the Plateau; most of the commercial size fish probably belong to the 1998 (three year olds) and the 1997 year classes (4 year olds) whilst the 1999 year class appears to be the lowest on record since 1985. However, the 0-group fish, ie the 2001 brood stock appear to be in plentiful numbers at the moment and whilst the short term outlook for the Rockall fishery is not hopeful, the fishery may 'pick up' towards the end of 2002 as the 2001 year class recruits to the commercial fishery.

Table 1. Numbers of haddock per 10 hours - Rockall 1991-2001

Year	Age								
	0	1	2	3	4	5	6	7	8
1991	14458	16398	4431	683	315	228	37	64	3
1992	20336	44912	14631	3150	647	127	200	4	35
1993	15220	37959	15689	3716	1104	183	38	73	21
1994	23474	13287	11399	4314	969	203	30	12	4
1995	16923	16971	6648	5993	1935	483	200	16	
1996	33578	19420	5903	1940	1317	325	69	6	1
1997	28897	10693	2384	538	292	281	71	9	1
1998	No survey								
1999	9934	9708	2603	779	291	186	103	66	23
2000	No survey								
2001	31813	7455	521	Data not yet available					

Currently the Marine Laboratory is re-evaluating the weight/length relationship that should be applied to Rockall haddock; to this end 689 haddock were measured, sexed and weighed for total and gutted weight.

The GOV trawl was continuously monitored by Scanmar equipment in order to measure essential parameters of the net. Table 2 provides a summary of the measurements obtained.

Table 2. GOV Parameters at Rockall

	Door Spread	Wing End Spread	Headline Height
Observations	36	28	43
Mean	90.8	21.2	4.4

A W Newton  
2 October 2001

Seen in Draft: Captain P Ramsay, OIC *Scotia*