

R1/12

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

FRV *Scotia*

Cruise 0305S

## **REPORT**

15 February – 8 March 2005

### **Personnel**

K A Coull  
A P Robb  
M Mathewson  
F Burns  
R Watret  
J Mair  
A Tait

### **Objectives**

1. To take part in the International Bottom Trawl Survey in the North Sea.
2. To collect 50 live dogfish (*Scyllium caniculus*) for Aberdeen University.
3. To complete two trawl stations in the vicinity of the proposed Buzzard Field Development area.

**Out-turn days per project:** 21 days – RV0501/10348

### **Narrative**

Due to delays in completing gear trials after the scheduled refit, the start of the trip was delayed by one day.

*Scotia* sailed from Aberdeen at 0900 on 16 February and started work on the stations in the Aberdeen Bank and Montrose Bank locations. As the Methot Net was being deployed from the starboard hangar area for the first time, implications for changes to the risk assessment were considered. With deployment and retrieval procedures of the gear proving very effective, the vessel continued with this work, completing 8 hauls overnight. Work continued on stations on the southern part of the survey until the evening of 19 February when the forecast of strong North Westerly winds prompted a change of plans and the vessel then moved in to the Moray Firth region. *Scotia* then worked northwards, completing stations off the Orkney Islands and west of Shetland and then worked in a southerly direction on the stations off the east of Shetland. With good progress being made, the opportunity to repeat the station in statistical rectangle 46E8 was taken. *Scotia* docked at Aberdeen in the early hours of 26 February for the mid-cruise break and departed again at 0500 on 27 February. Work resumed on the station east of Peterhead and two hauls were also completed in the vicinity of the Buzzard Field Development Area. Favourable weather conditions permitted *Scotia* to work uninterrupted on the eastern boundary of the survey area with the allocated stations being completed on the morning of 4 March. Having been notified by the Co-ordinating Country of the International coverage, *Scotia* completed two stations in the

Ling Bank area and then headed northwards. Trawl and Methot stations were completed on the northern and western borders of the International Survey area with work being completed at mid-day on 7 March.

*Scotia* proceeded to Aberdeen where unloading took place on the morning of 8 March.

## Results

### Trawling

The GOV was used throughout the cruise with groundgear “A” (152 mm rubber disks) being used in the southern part of the survey area and groundgear “B” (305 mm bobbins) being used in the northern part. The Scanmar system was used throughout the cruise to monitor headline height, wing spread, door spread and distance covered during each tow.

A total of 62 valid hauls was achieved with all allocated stations being sampled as well as a further 10 stations being done to assist in fulfilling the international coverage. Table 1 shows the preliminary indices for all vessels participating in this international survey. The indices are based on the numbers of fish caught per hour below a pre-defined length selected as a probable delimiter of 1+ fish. While the numbers encountered are relatively low compared to the species average for cod, haddock, whiting, Norway pout and herring, the numbers of sprat and mackerel are rather high.

Table 1. Preliminary indices for Quarter 1 International Bottom Trawl Survey (All countries)

	Final 2004	Preminary 2005	Mean (average 1980–2004)
Cod	6.7	2.3	9
Haddock	72	77	660
Whiting	184	168	574
Norway pout	893	768	2912
Herring	979	1204	2047
Sprat	1639	4417	1298
Mackerel	10.4	1104	57

### Methot net sampling

A total of 122 Methot Net hauls were carried out in order to obtain an estimate of the numbers of pre-metamorphosing herring larvae. The Methot Net was deployed over the starboard side of the vessel and this proved to be more effective than the previous method of deployment over the stern. A new electronic flow-meter (EF 325) was in use for the first time and proved to be more user friendly than the previous one.

### Biological sampling

Additional biological data were collected from species listed in the EU Data Collection Regulation (EC) No 1639/2001 and No 1581/2004.

### Age determination

Otoliths from cod, haddock, whiting, saithe and Norway pout were aged at sea.

### **Buzzard field sampling**

Two hauls were completed in the vicinity of the proposed Buzzard Field Development area. The position of one of the hauls will be incorporated in to future surveys and used as a standard survey station.

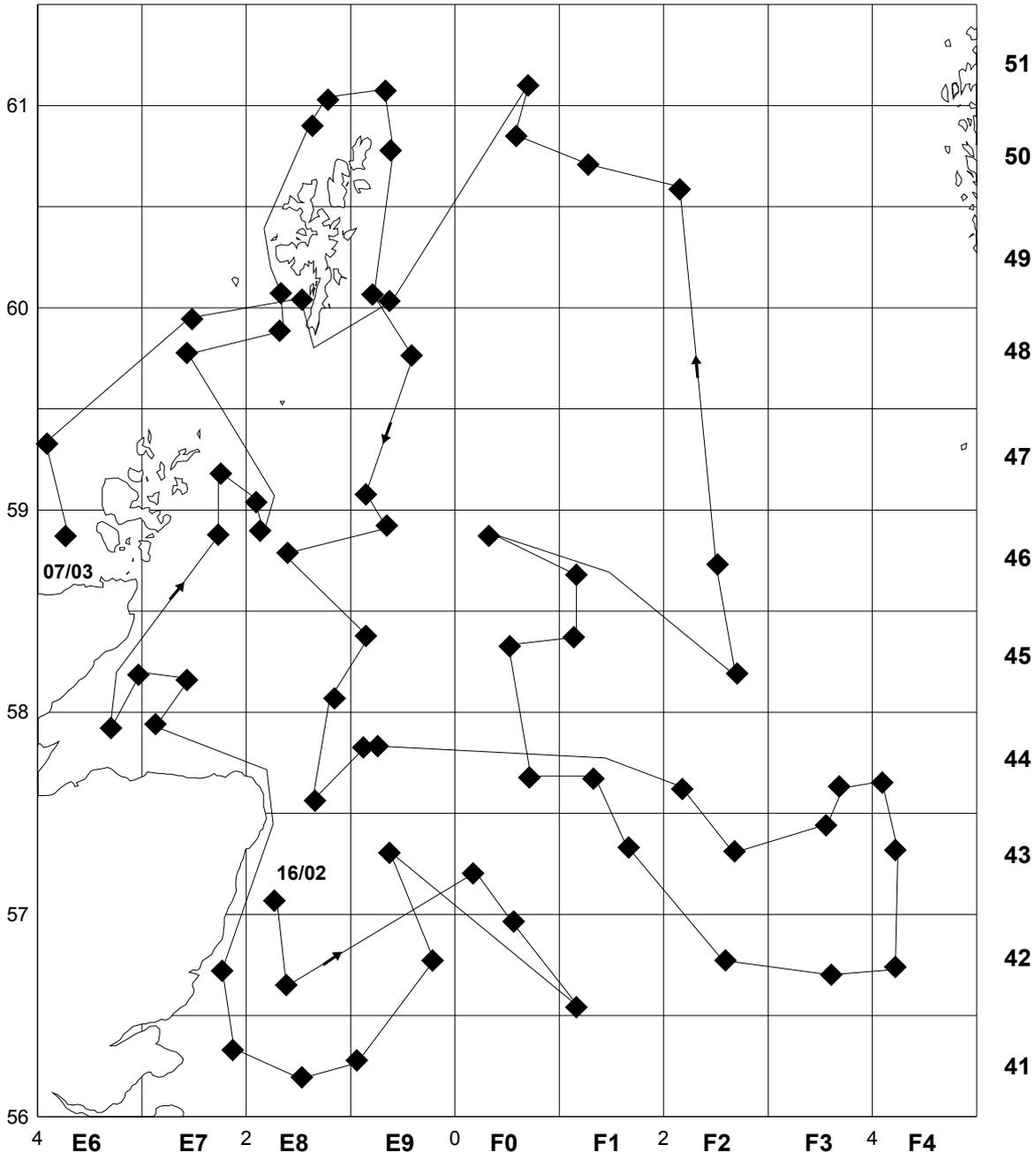
### **Live fish**

A total of 60 live spotted dogfish (*Scyllium caniculus*) were retained onboard for Aberdeen University.

K A Coull  
20 April 2004

Seen in Draft: Captain Peter Barratt, OIC, *Scotia*

IBTS - Quarter 1 Survey 16 Feb - 8 Mar 2005



◆ Trawl Positions