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FRV *Scotia*

Cruise 0903S

REPORT

4-23 June 2003

Personnel

Ian Tuck	(In charge)
Jim Kinnear	
Charlie Shand	
Adrian Weetman	
Jim Drewery	
Barry Ward	
Jennifer Doyle	Marine Institute, Galway (first half of trip)
Roman Kuchta	University of Stirling/Academy of Sciences of the Czech Republic
Ivan Fiala	University of Stirling/Academy of Sciences of the Czech Republic

Objectives

- a) To obtain estimates of distribution and abundance of *Nephrops* in the Fladen Ground, ~~Firth of Clyde, North Minch, South Minch and Stanton Banks~~ using underwater television. If time permits the survey will also include stations in the Sound of Jura and Noup.
- b) To make use of the TV survey to estimate the densities of other shellfish species and benthic organisms and to record evidence of trawling activity.
- c) To collect samples of the sediment at each TV station.
- d) To carry out *Nephrops* trawling in each stratum throughout the survey areas for size and sex composition analysis and examination of biological features.
- e) To collect samples of *Nephrops* for comparison of reproductive condition and morphometrics in different areas.
- f) To collect samples of *Arctica islandica* for studies of shell chemistry and age
- g) To collect fish tissue samples to investigate parasite levels.

Out-turn Days per Project: 20 days MF01tc

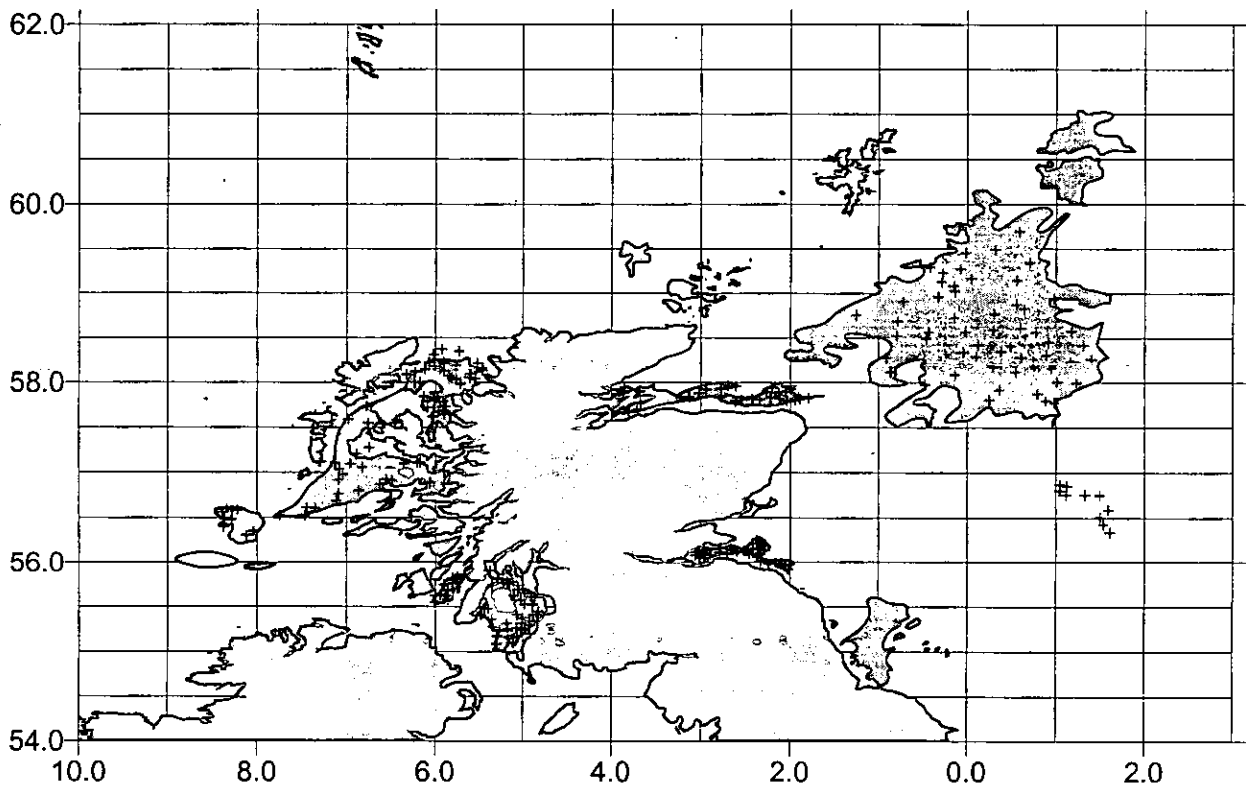
Narrative

Scotia sailed from Aberdeen midmorning on 4 June, with work commencing that evening at the Fladen Ground. The planned survey of sixty stations were completed on 9 June, when the vessel sailed to the west coast, where stations to the west of the North Minch, and the west of the South Minch were surveyed. Poor weather prevented work in the Stanton Bank area, so the vessel proceeded to the Sound of Jura, and then onto the Clyde. Work

commenced in the Clyde on 13 June, and proceeded well despite a breakdown with the bow thruster. The work in the Clyde was completed on 14 June, when the vessel proceeded to Greenock for a half landing, where Jennifer Doyle left the ship. Sailing on the evening of 15 June, repairs to the bow thruster completed, the vessel proceeded to the Stanton Bank area and completed work there before returning to the South Minch. Following completion of the South Minch stations, the vessel proceeded to the North Minch, but gales prevented TV operations in that area, so it was decided to leave these stations for a later cruise, and proceed to the Firth of Forth, work starting there in the morning of 19 June. All stations were completed in the Firth of Forth in the evening of 20 June, and the vessel steamed out to the Devil's Hole area, where further work was conducted until the evening of 22 June, when the vessel commenced the journey back to Aberdeen. *Scotia* arrived in Aberdeen at 6 am on 23 June, and unloading took place later that morning.

Results

Station locations are shown in Figure 1.



Final analysis of the video tapes will be completed within the laboratory.

I Tuck
10 December 2003

Seen in draft: P Barrat, OIC *Scotia*