

R1/12

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FRV *Scotia*

Cruise 0805S

REPORT

4–24 June 2005

Personnel

Ian Tuck (In charge)
Jim Kinnear
Charlie Shand
Adrian Weetman
Jim Drewery
Barry Ward
Peter Fenwick Aberdeen University

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. Collect additional sediment samples from the Fladen Ground for the Analytical Investigations group.
- 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. Information on size at maturity collected will contribute to EU data gathering regulation requirements.
- f) To collect samples of *Arctica islandica* for studies of shell chemistry and age.
- g) Conduct video transects of the Buzzard Field site to collect baseline data for Serpent project.

Out-turn Days per Project: 21 days MF01tc (RV0503, 10354)

Narrative

Scotia sailed from Aberdeen midmorning on 4 June, with work commencing that afternoon at the Buzzard Field, and the proceeding on to the Fladen Ground. Work was completed at the Fladen Ground on the evening of 8 June, the vessel then proceeding to the North Minch, to

start work at 0930 on 9 June. The vessel worked across to the west side of the Minch, and then proceeded down the west side, starting in the South Minch in the evening of 10 June, and worked down the west side of the South Minch, completing stations at the Stanton Bank on the morning of 12 June, and then steaming for the Clyde. The vessel started work in the Clyde on the afternoon of 12 June, continuing until the early morning of 14 June, when it was necessary to steam to Belfast for the pilot. The half landing was from 0900 on 14 June to 0900 on 15 June. On leaving Belfast the vessel steamed to the Clyde, completing the survey in the afternoon, and steaming to the Sound of Jura. After completing the stations here, the vessel moved to the South Minch to complete the stations in the east of the area, and then the North Minch. Following a request from SEERAD during the cruise, additional TV stations were completed in the Applecross area. Stations in the North Minch were completed in the evening of 19 June, when the vessel steamed to the Noup. Nine stations were attempted here, but very poor visibility meant that only 2 stations were completed. After completing work here the vessel returned to the Fladen, where additional TV stations and fishing were completed, before conducting additional work in the Devil's Hole area. *Scotia* returned to Aberdeen to meet the pilot at 0530 on the morning of 24 June.

Seventeen successful trawl hauls were completed during the trip. All *Nephrops* catches were used to collect data for morphometric analysis.

Results

Station locations are shown in Figure 1.

Area	TV stations	Trawls
Fladen	72	4
North Minch	52	3
South Minch	38	3
Clyde	43	3
Stanton Bank	8	1
Sound of Jura	12	1
Noup	9	
Devil's Hole	29	2

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

Ian Tuck
23 November 2005

Seen in draft: P Ramsay, OIC *Scotia*

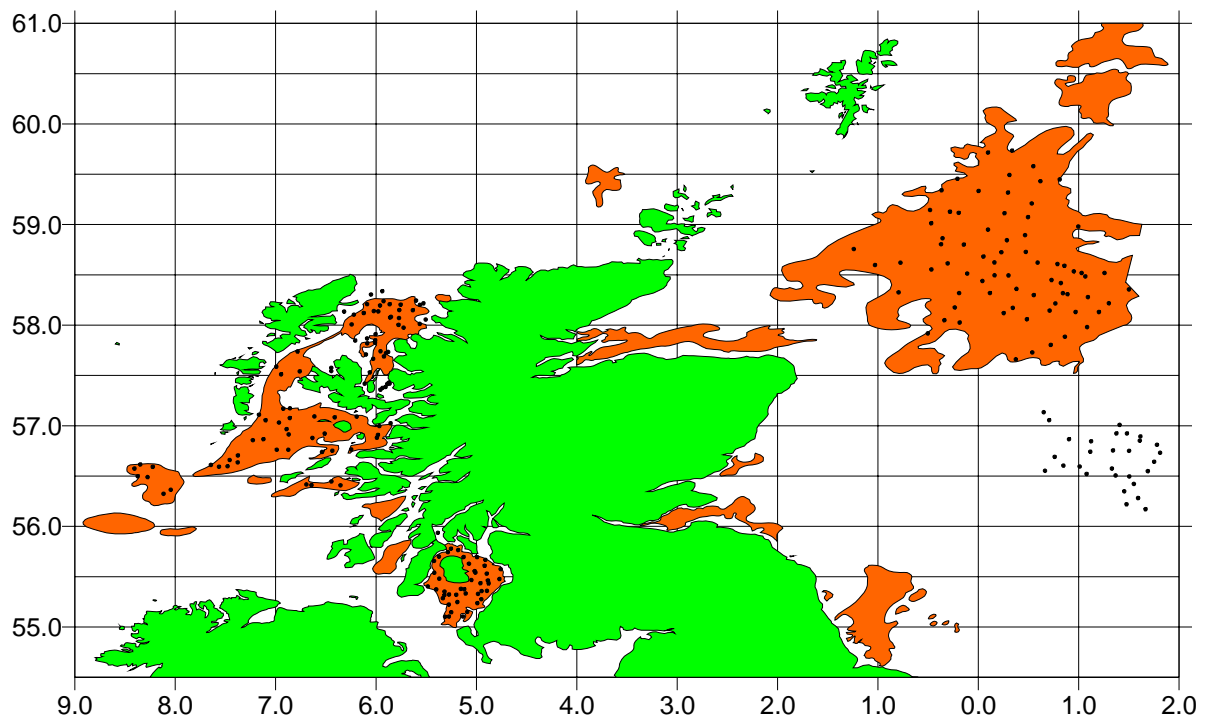


Figure 1 TV survey station locations from cruise 0805S.