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FRV *Scotia*

Cruise 1304S

REPORT

10-29 September 2004

Personnel

Ian Tuck	(In charge)
Jim Kinnear	(10-18 Sept)
Charlie Shand	
Rory Campbell	
Jim Drewery	
Barry Ward	
Beth Mouat	SNH
Aimee Oakham	UCNW (10-18 Sept)

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. 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.

Estimated Days per Project: 20 days MF01tc (RV0410, 10325)

Narrative

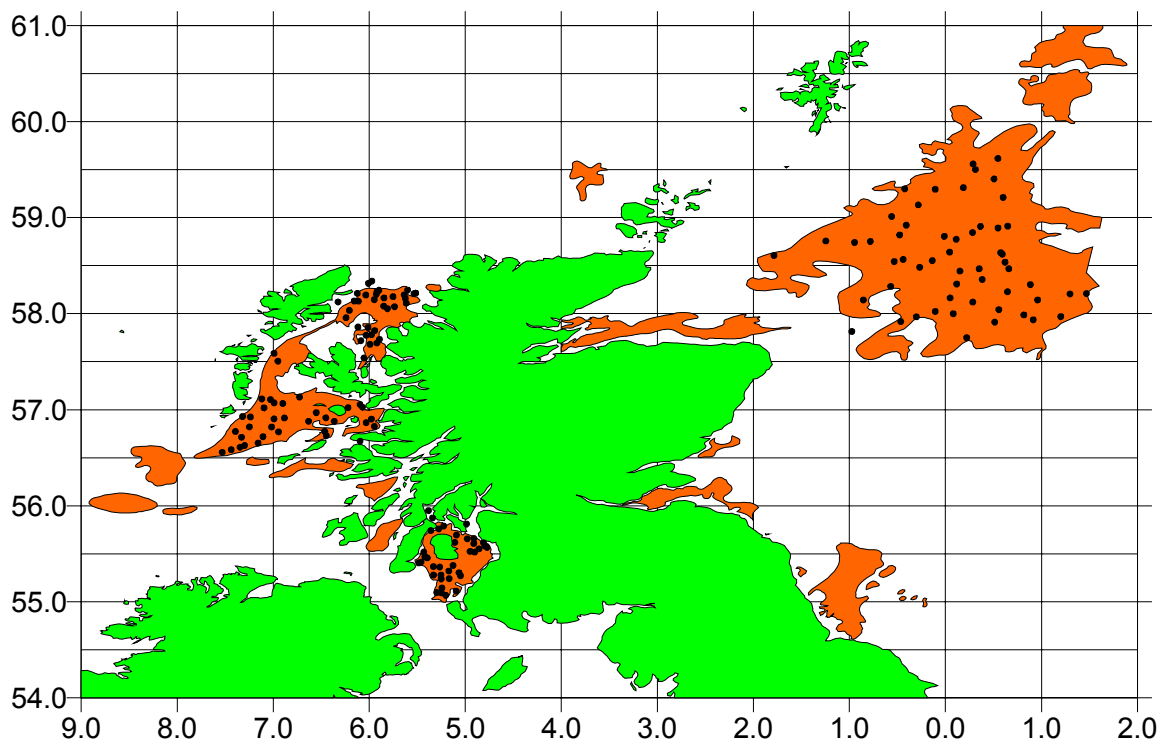
Scotia sailed from Aberdeen midmorning on 10 September, with work commencing that afternoon at the Buzzard Field, and the proceeding on to the Fladen Ground. The weather worsened through 11 September, and operations were abandoned in the evening, when the vessel steamed to the North Minch, starting work there in the evening of 12 September. Work proceeded well in the North Minch, and the vessel entered the South Minch in the evening of 24 September, and continued working in west side of the North Minch until the weather worsened and the vessel steamed to the Clyde. Work restarted off Brodick Bay on the evening

of 16 September, and continued anti-clockwise around Arran until the early morning of 18 September when it was necessary to steam to Greenock for the half landing. *Scotia* left Greenock on the morning of 19 September, and continued working south through the Clyde until weather stopped operations in the evening, and the vessel dodged through the night. Three further stations were completed on the morning of 20 September, but very poor weather prevented further progress south, and so *Scotia* steamed to the Sound of Islay to wait for an improvement in conditions. On the morning of 21 September, *Scotia* steamed through the Sound of Islay and up through the Sound of Mull, starting TV work in the afternoon in the mouth of Loch Sunart. Further stations were completed around the Small Isles, and then over to the west near Barra. Through 23 and 24 September *Scotia* steamed from the South Minch round to the Fladen, where work started again on the evening of 24 September. TV work continued until the evening of 26 September, when poor weather prevented operations for 12 hours, work restarting on the next morning. *Scotia* arrived in Aberdeen at 0300 on 29 September, and unloading took place later that morning.

Ten successful trawl hauls were completed during the trip, of which eight were used for comparison of reproductive condition and morphometrics in different areas.

Results

Station locations are shown in Figure 1.



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

I Tuck
15 November 2004

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