#### R1/3

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

FRV Clupea

Cruise 1002C

### **REPORT**

27 June - 11 July 2002

### Personnel

I Tuck

(In charge)

C Shand

A Weetman

## **Objectives**

- To obtain estimates of distribution and abundance of Nephrops in the Firth of Forth and Moray Firth using underwater cameras.
- To collect sediment samples at each station.
- To use trawl caught samples of Nephrops to examine biological features at different sites throughout the survey areas.
- The TV survey will also be used to collect data on other potential commercial species.
- Make video observations of crab and lobster habitat using the drop frame.

Estimated Days per Project: 15 Days MF01TC

### **Narrative**

Clupea sailed from Fraserburgh at 1200 hours on Thursday 27 June 2002 and steamed for the Firth of Forth. TV survey work commenced at 0700 hours on 28 June in the outer Firth, working towards the west. The survey consisted of 41 stations, which were completed by lunch on 1 July, after which the TV sledge gear was changed over for use with the drop frame system. At each TV station, a sediment sample was collected for granulometric analysis. In addition to the TV stations, three trawls were undertaken for biological samples. Throughout 2 July and the morning of 3 July, 21 TV transects were carried out over the lobster and crab grounds off North Berwick and Fife Ness with the drop frame system. *Clupea* left the Firth of Forth area at midday on 3 July, and headed for Fraserburgh for the half landing.

TV survey work recommenced in the Moray Firth on 5 July. A total of 46 TV stations were completed by midday on 10 July, with sediment samples collected at each of these TV station. Four trawls were also undertaken for biological samples. Following completion of the Nephrops TV work, four stations were also examined on the crab ground North of Fraserburgh, before the vessel returned to port. Unloading was carried out on Thursday 11 July.

# Results

Station locations are shown in Figures 1 and 2.

Final analysis of the video tapes will be carried out within the laboratory.

lan Tuck 21 August 2001

Seen in draft: A Simpson, OIC

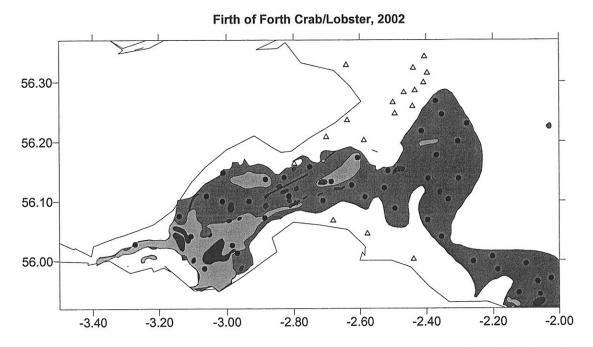


Figure 1. Locations of Nephrops ( $\bullet$ ) and crab / lobster ( $\Delta$ ) stations in the Firth of Forth.

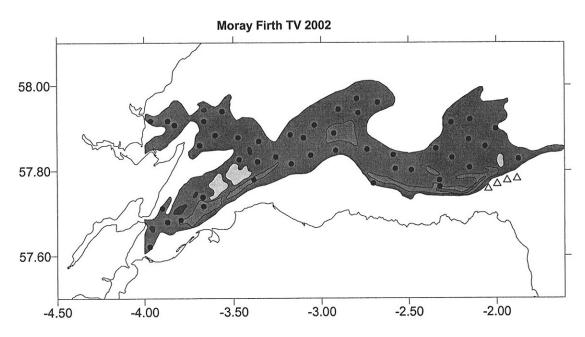


Figure 2. Locations of Nephrops ( $\bullet$ ) and crab ( $\Delta$ ) stations in the Moray Firth.

