

In confidence: Not to be quoted without reference to the Laboratory.

FRV EXPLORER

Cruise 9/79

REPORT

5-27 September 1979

Objectives:

1. To undertake a pot and trawl survey for decapod crustacea off NW Scotland.
2. To make television observations in connection with the first objective.
3. To test sampling methods for lobster larvae.
4. To conduct a herring larval survey to the north and west of Scotland and Northern Ireland (Amendment to replace 1, 2 and 3 dated September 13).

Narrative:

EXPLORER sailed from Aberdeen at 1815h on September 5 and proceeded to the eastern slope of Rockall Bank where crab pots were shot in 330m at 1340h on September 8. Two trawl hauls were undertaken in the same area over the depth range 350-620m. The crab pots were hauled at 0830h on September 9 and reshot over the depth range 440-520m at 1040h on September 10 when two trawl hauls were made over a similar depth range. The crab pots were recovered at 0830h on September 11. A final trawl haul was made over the depth range 290-860m. Further scientific work was prevented by heavy seas. EXPLORER proceeded to the Butt of Lewis and thence to Stornoway where she tied up at 0830h on September 13.

After the completion of minor boiler repairs, EXPLORER sailed from Stornoway at 0830h on September 15. Two Dutch Gulf III plankton nets were collected from the DAFS research station at Loch Ewe at 1630h on September 17. The herring larval survey began at 1955h and continued until 1800h on September 18 where all but one of the outstanding Minch stations had been completed. The survey was resumed at 2310h off north west Ireland and continued with periodic interruptions due to weather until 1730h on September 22 when the last station was abandoned in a severe SW gale. EXPLORER then steamed north to resume the herring larval survey ENE of the Butt of Lewis at 1350h on September 23. This was completed at 2045h. EXPLORER then steamed to the last reported position of a Norwegian barometric buoy some 30 miles north by west of North Rona. No trace of the buoy was found. EXPLORER left the area at 0730h on September 24 and after sheltering in Inganess Bay (Orkney) docked at Aberdeen at 0630h on September 26.

Results:

Objectives 1, 2, 3, decapod crustacea.

The fleet of 40 standard crab pots shot in 330m due east of the Rockall Islet caught single specimens of the following four species, Cancer pagurus L., Cancer bellianus Johnson, Rochinia carpenteri (Thomson) and Geryon affinis A. Milne Edwards and Bouvier. This haul represents the deepest known record of Cancer pagurus. The second fleet shot in the same area over the depth range 440-520m caught 14 specimens of Geryon affinis and six of Cancer bellianus.

A single specimen of Paromola cuvieri (Risso) was taken in a 35 minute haul over the depth range 350-620m also on the eastern slope of Rockall Bank. This haul also included the following species of deeper water fish, Raja circularis Couch, Deania calcea (Lowe), Coryphenoides rupestris Gunnerus and Helicolenus dactylopterus (Delaroche).

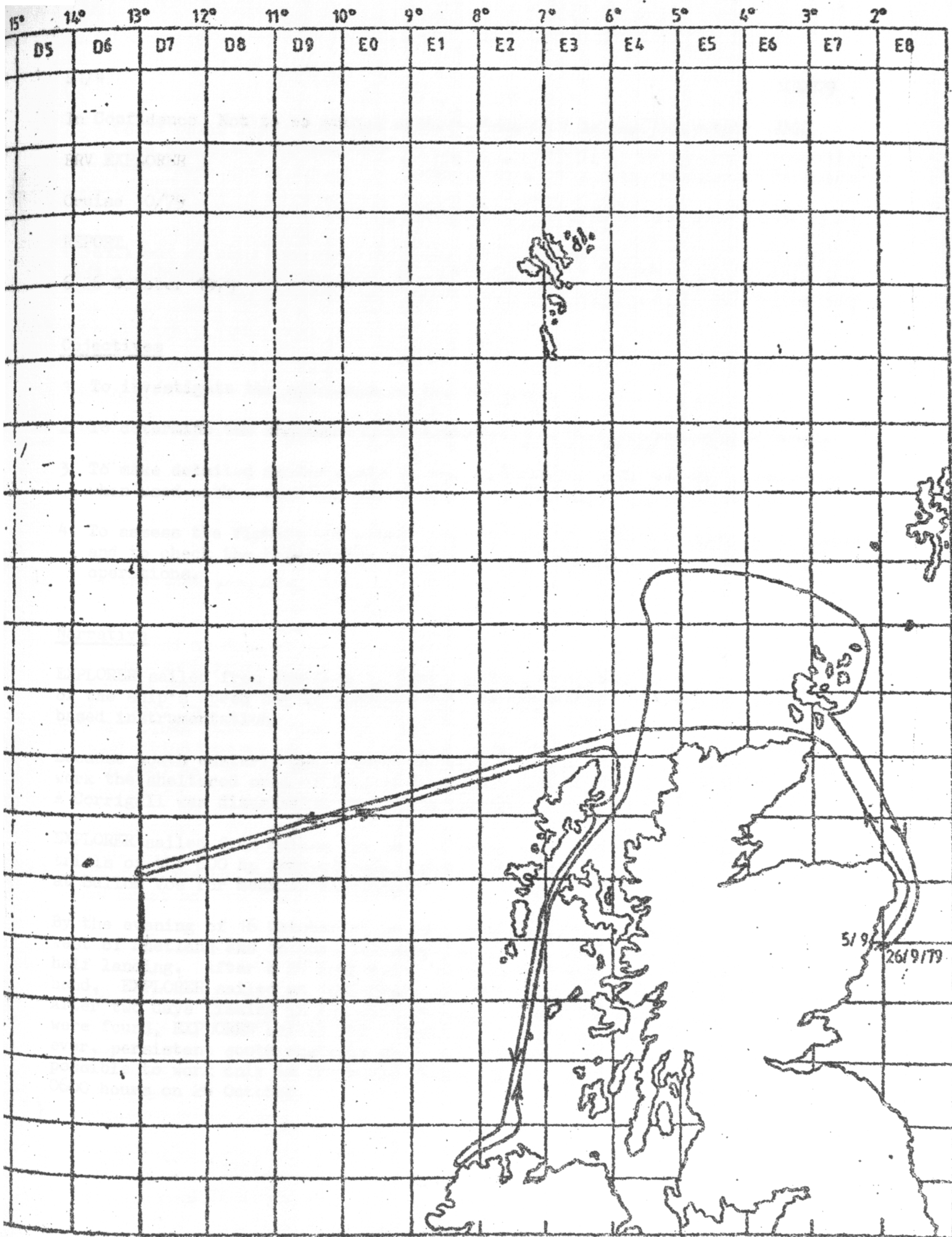
Unfortunately, sea conditions prevented any use being made of the television camera or of the neuston net.

Objective 4, herring larval survey.

Thirty eight samples were obtained for subsequent analysis at the Marine Laboratory.

R G J SHELTON  
17 October 1979

Seen in draft: J W Gillon (Capt.)



ER.V. Explorer 519 — 2619179

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