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R1/6  
Cruise Report  
FRV 'Clupea'  
25 - 29 July 1977

10CR77

Objectives

Environmental studies in the Firth of Forth area, including

- a) Salinity, temperatures, nutrient, chlorophyll and carbon measurements.
- b) Benthos and sediment collections for pollution studies.
- c) Zooplankton sampling for heavy metal studies.
- d) Collection and processing of large volumes of sea water for pollution studies.
- e) Bacteriological sampling on the sewage sludge dumping grounds at Bell Rock and St Abbs Head.

Narrative

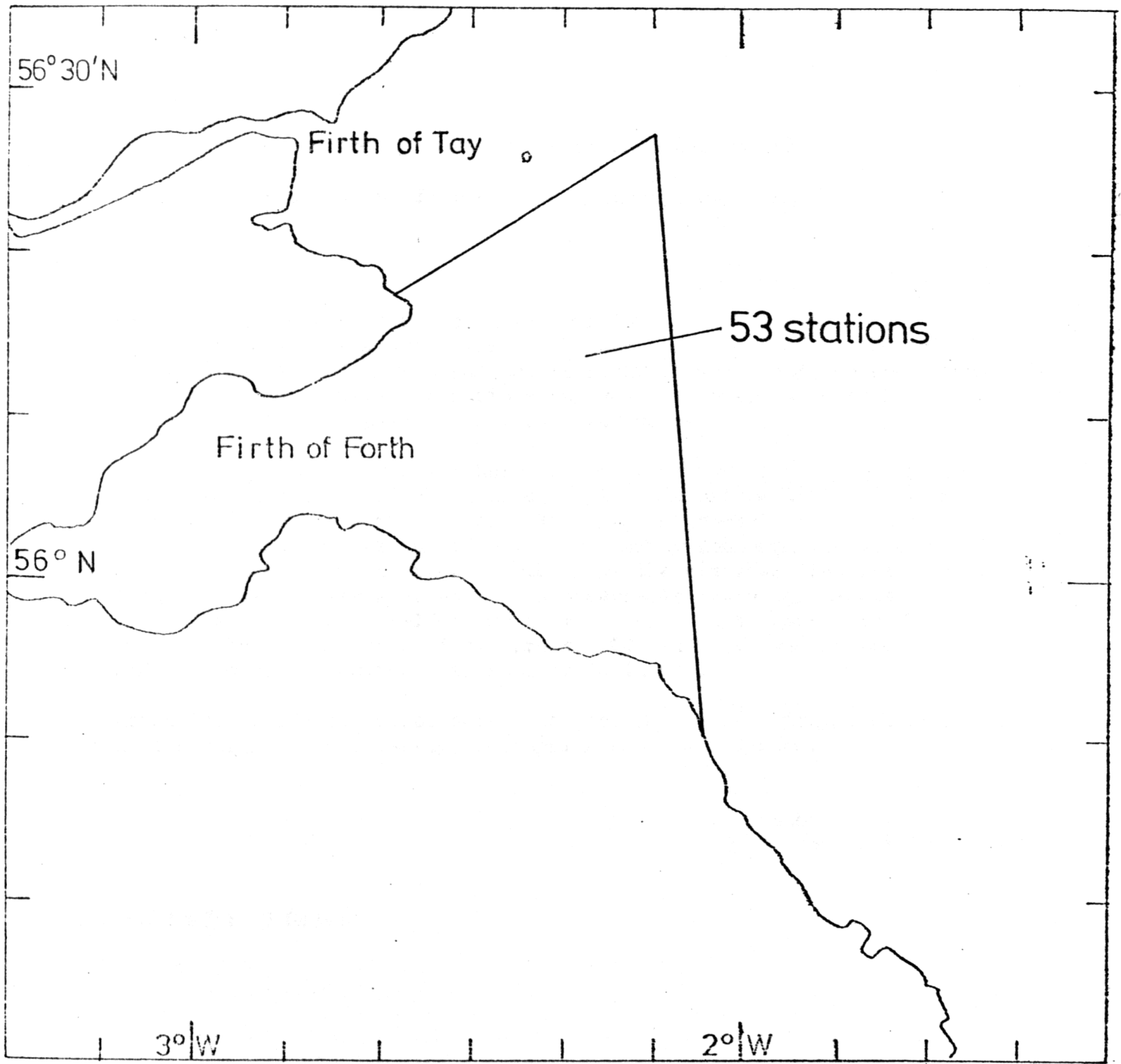
'Clupea' left Aberdeen at 1145 hours on 25 July and proceeded to Bell Rock to collect grab and core samples for bacteriological and benthos studies. On completion of this work, and after a short period at anchor, the routine hydrographic work was commenced at the first of the standard grid lines. This work was completed by mid morning of 27 July and the ship proceeded to a position east of the Forth bridges to start the main part of the grab work and the collection of large samples of sea water and zooplankton for trace metal studies. On passage to the first station the Mate was dropped off at Burntisland by small boat; he was picked up 1½ hours later as the ship moved eastwards along the Firth. During this series of grab stations the ship was stopped in the area of the Edinburgh sewage pipe outfall to collect the core samples for benthos studies. On completion of the grab work at St Abbs Head (1200 hrs, 28/7/77) the ship repeated part of the hydrographic station work in the outer part of the Firth. 'Clupea' then returned to Aberdeen, docking at 0015 hours on 29/7/77.

Results

Despite the inclement weather during the first 24 hours of the programme all but one of the objectives were achieved in the time available. Unfortunately the coring part of the programme was unsuccessful due entirely to the fact that the Craib corer failed to function correctly when operated from the stern of the ship using the plankton winch.

G Topping  
3.8.77

Seen in draft      A Mair



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