

R1/6

IN CONFIDENCE: Not to be quoted without prior reference to the laboratory

Cruise 9/83  
FRV CLUPEA  
REPORT  
8-23 September 1983

9CR83  
AG

### Objective

- 1) To take part in the ICES coordinated herring larval surveys off the east coast of Scotland.
- 2) To collect surface water samples for radio-caesium monitoring.

### Narrative

CLUPEA left Buckie at 1400 on 8 September in bad weather and headed for stations in the Moray Firth. A water sample was taken off Buckie and with sea conditions becoming too rough for sampling to be carried out in safety, CLUPEA headed for shelter in Gamrie Bay. On 9 September further stations in the Moray Firth were attempted but worsening sea conditions forced CLUPEA to seek stations in more sheltered waters. A water sample was taken off Montrose before sheltering in Arbroath Bay. Further stations were attempted on 10 September before gales stopped work and CLUPEA headed for Largo Bay.

With an improvement in the weather the survey was resumed on 12 September. Flowmeter calibrations were made and the first survey was completed on 14 September. A start was made in the Moray Firth on the second coverage before CLUPEA docked in Aberdeen for the half landing.

After the half landing CLUPEA headed for stations to the north east of Peterhead. Storm force winds forced work to stop in the early hours of 18 September and CLUPEA headed for shelter in St Andrews Bay. Following a moderation in the weather work was resumed on 20 September. During the morning of 21 September the cable metering system stopped working and the Simrad Netsonde developed a fault in the afternoon. Work was resumed in the evening after repairs to the cable metering system and flowmeter calibrations were made. The second coverage of the survey area was completed, except for two stations, in time for the CLUPEA to catch the tide for Leith dock in the afternoon of 22 September.

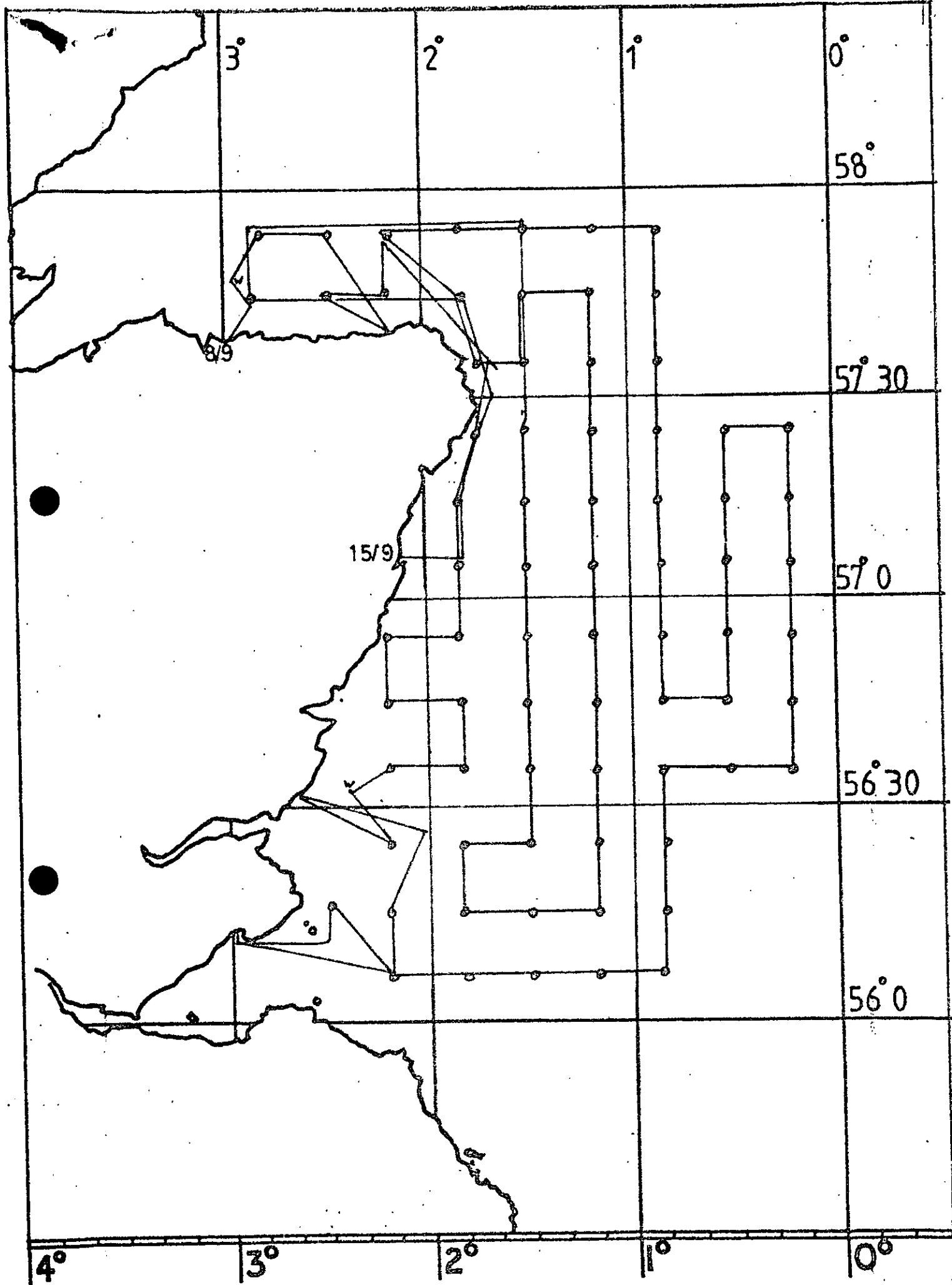
### Results

During the cruise a total of 150 samples were taken despite stoppages due to bad weather. Ten samples were preserved in alcohol for otolith studies. No analysis was carried out on board though visual inspection during sampling indicated that large larvae were present in samples taken off the Buchan coast and smaller larvae were present in samples taken at the eastern edge of the grid. Elsewhere larvae were scarce.

The depth of the Dutch Gulf III sampler was monitored successfully using a cableless netsonde attached to the side of the sampler.

B Edelsten  
11 October 1983

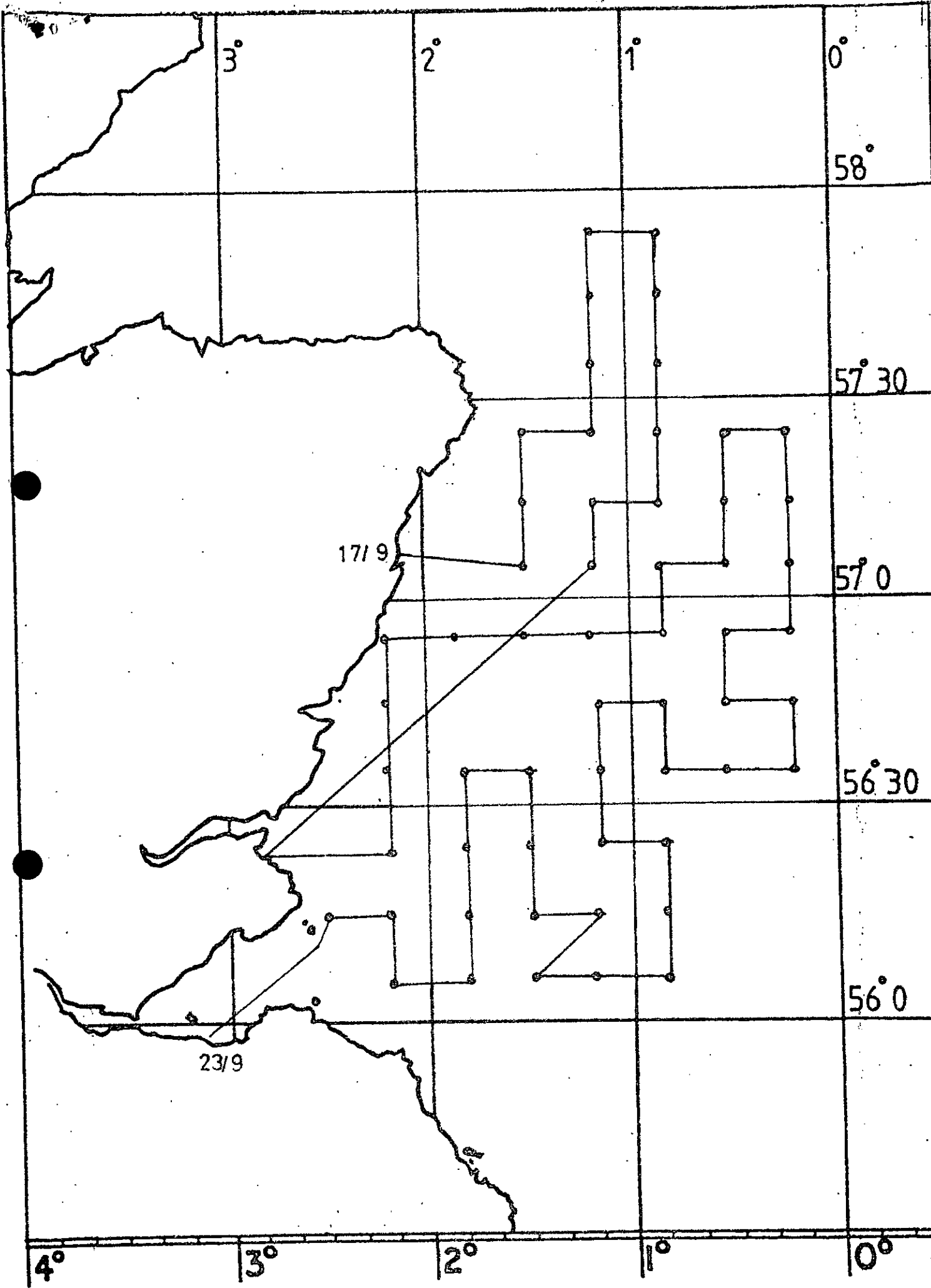
Narrative seen in draft: G Geddes



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