

R1/3

In confidence - not to be quoted without reference to the Laboratory

Charter vessel  
RRS "Challenger"

MB

CRUISE REPORT 9/85  
3-17 September 1985PersonnelD W McKay  
B Edelsten  
C Telfer

## OBJECTIVE

To carry out herring larvae surveys off the east coast of Scotland as part of the ICES coordinated herring larvae surveys of the North Sea and adjacent waters.

## NARRATIVE

Scientific staff joined "Challenger" at 0830 on 3 September. Following "on hire" inspection and the loading of scientific equipment "Challenger" sailed at 1300. Sampling of the Buchan area was begun at 1500 on 3 September and continued without interruption until 2000 on 11 September when the second survey of the area was completed. The detailed sequence of sampling is shown on the attached track charts.

"Challenger" then proceeded to sample stations in the Orkney/Shetland grid starting in the Moray Firth and working northwards. Having contacted FRV "Scotia" and ascertained that they had sampled all the stations south to 59°N it was decided, because of poor weather conditions in the area, to sample stations north to and including those at 59°05'N, "Challenger" spent the remainder of the cruise resampling some stations in the Buchan area. "Challenger" completed sampling at 0100 on 17 September and returned to Aberdeen where the scientific equipment and samples were unloaded.

## RESULTS

During the cruise a total of 210 samples were taken. Preliminary analysis of the samples from the Buchan area was carried out at sea and contour maps of the combined number of herring and sprat larvae per haul are given in Figure 2. From these it can be seen that clupeoid larvae were widely distributed over the area on both surveys. Although no detailed measurements of the larvae were made small larvae were largely confined to stat square 43E9 on the first survey. On the second survey small larvae were also abundant in this area but a second patch was also found in stat square 41E8.

No onboard analysis of the samples taken in Orkney/Shetland area was possible because of the poor weather conditions but visual examination of the samples indicated that small larvae were largely absent from the Moray Firth area but much more abundant east of Orkney (stat square 46E8)

David W McKay

Seen in draft: P O Mayl Master

7 October 1985

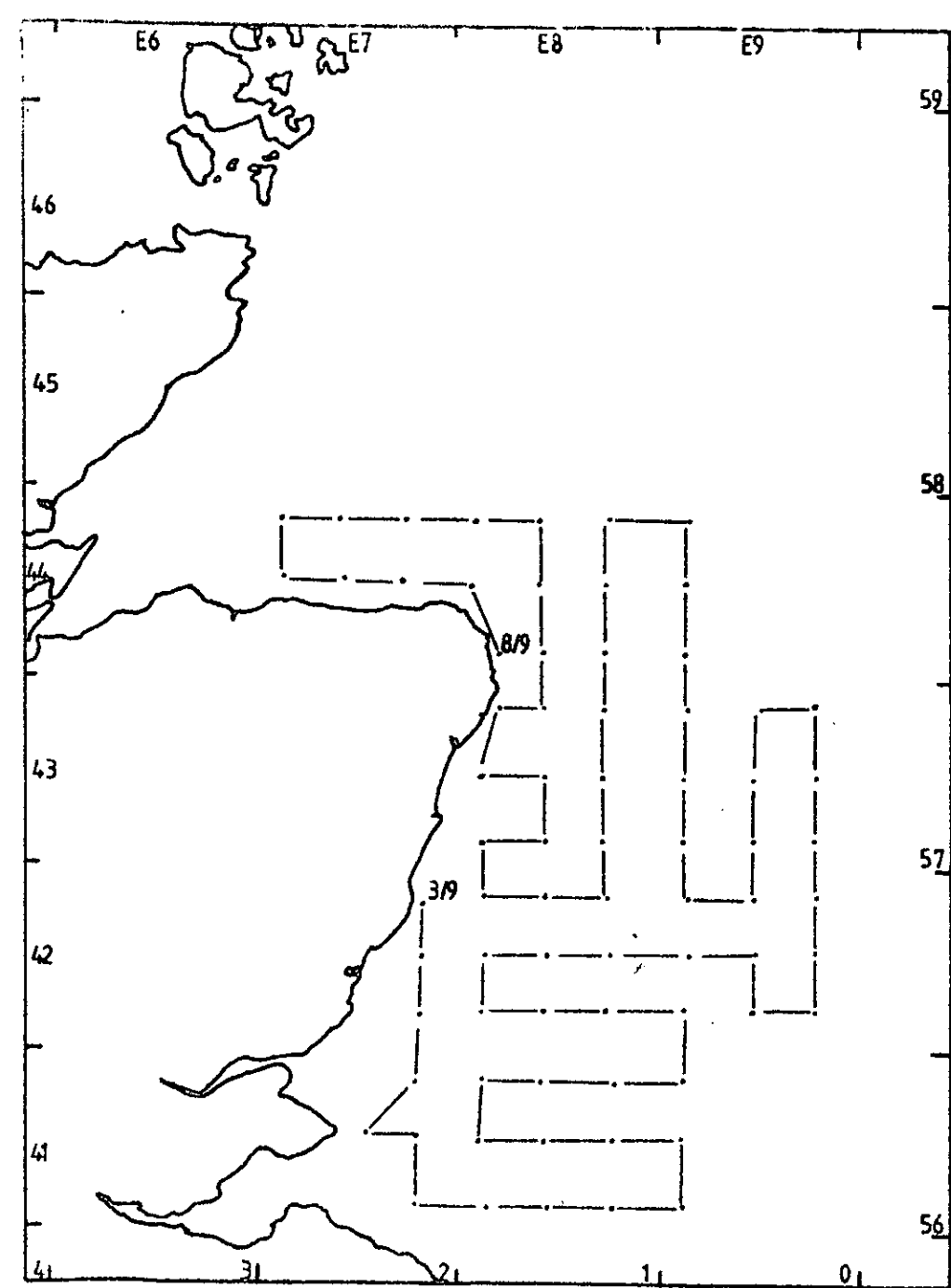
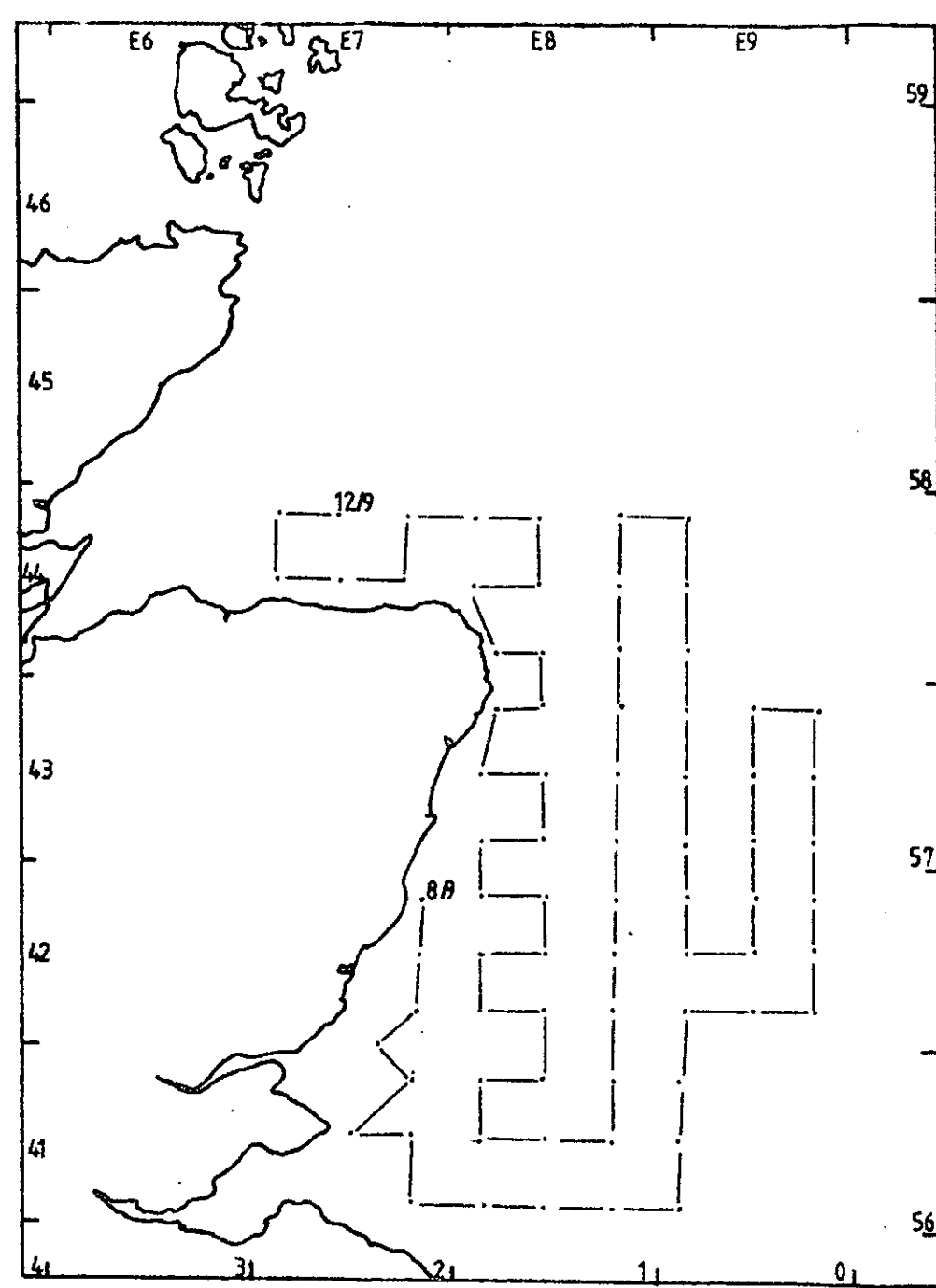


Fig 1 Track chart RRS Challenger Cruise 9/85  
a 3-8 Sep.



b 8-12 Sep.

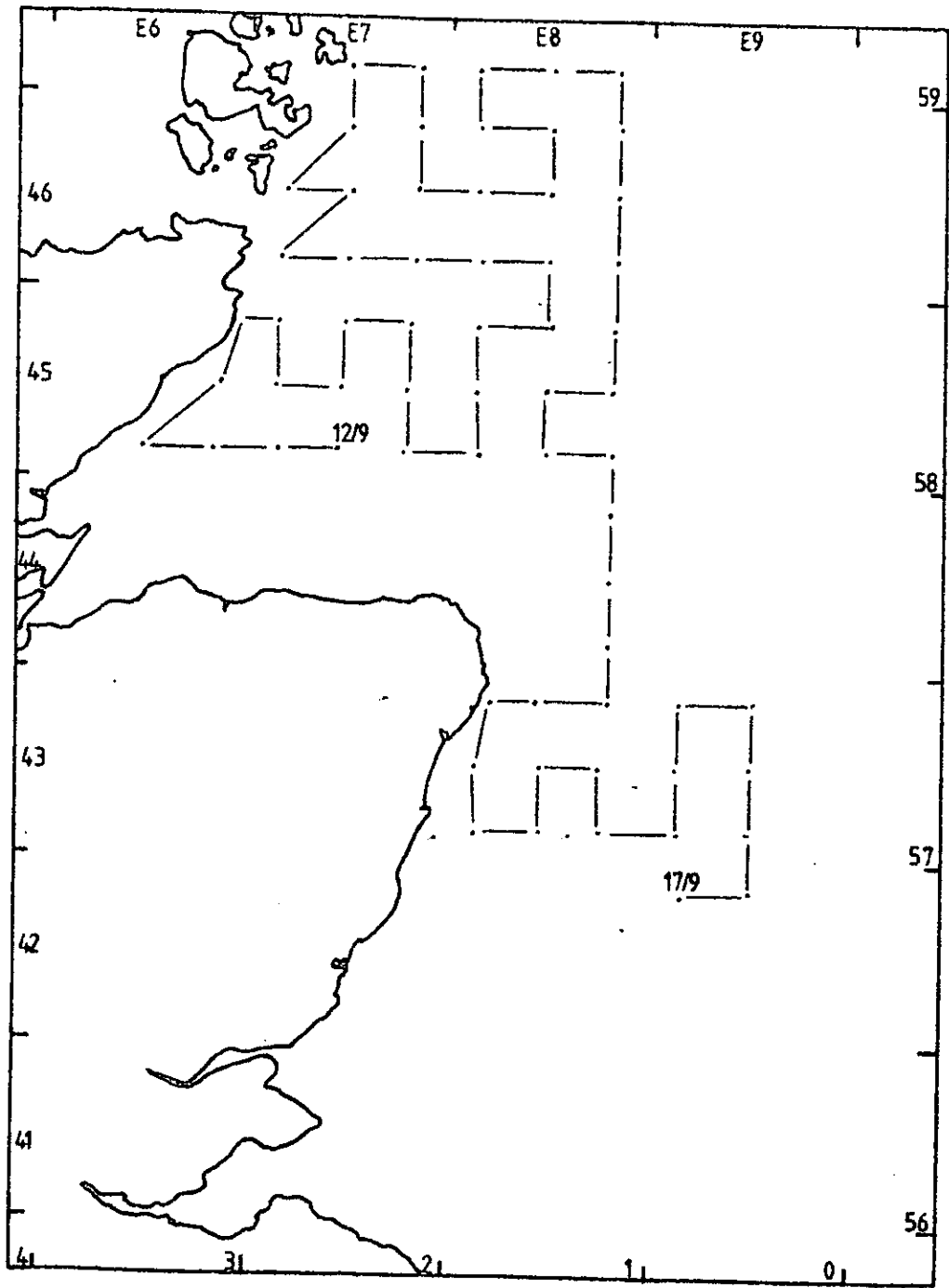


Fig 1c 12-17 Sep

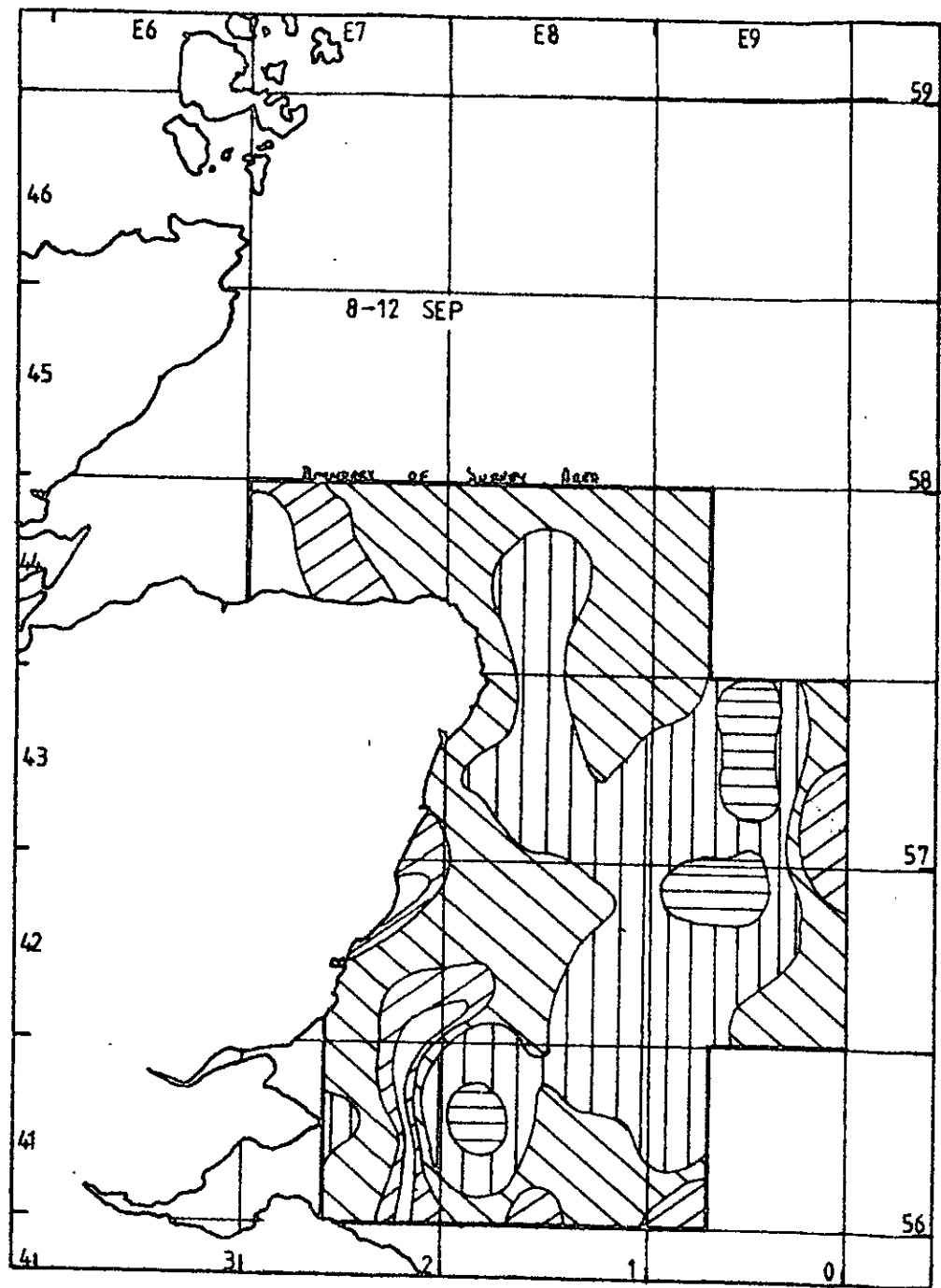
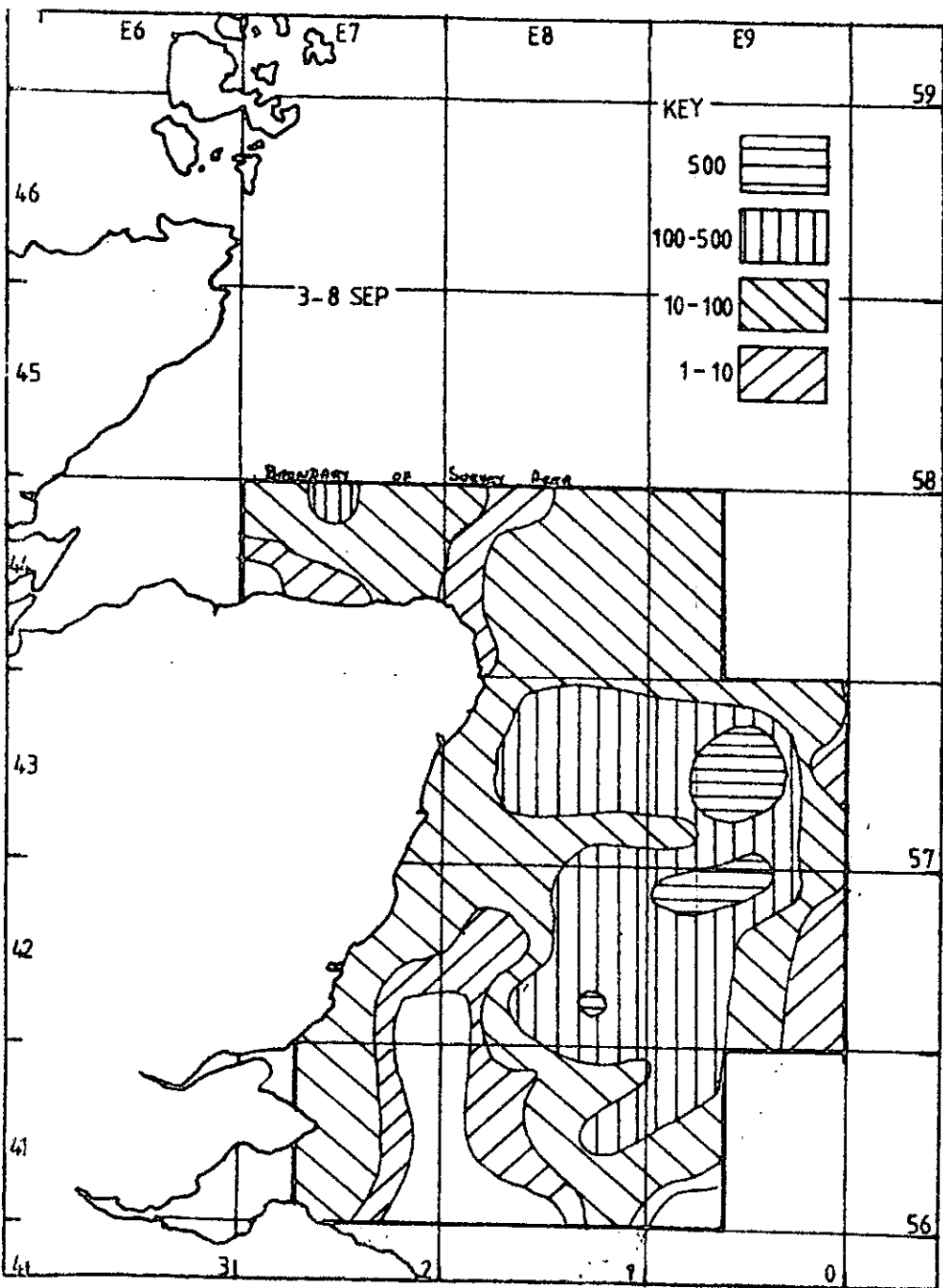


Fig 2 Contour diagrams of numbers of clupeid larvae caught per haul

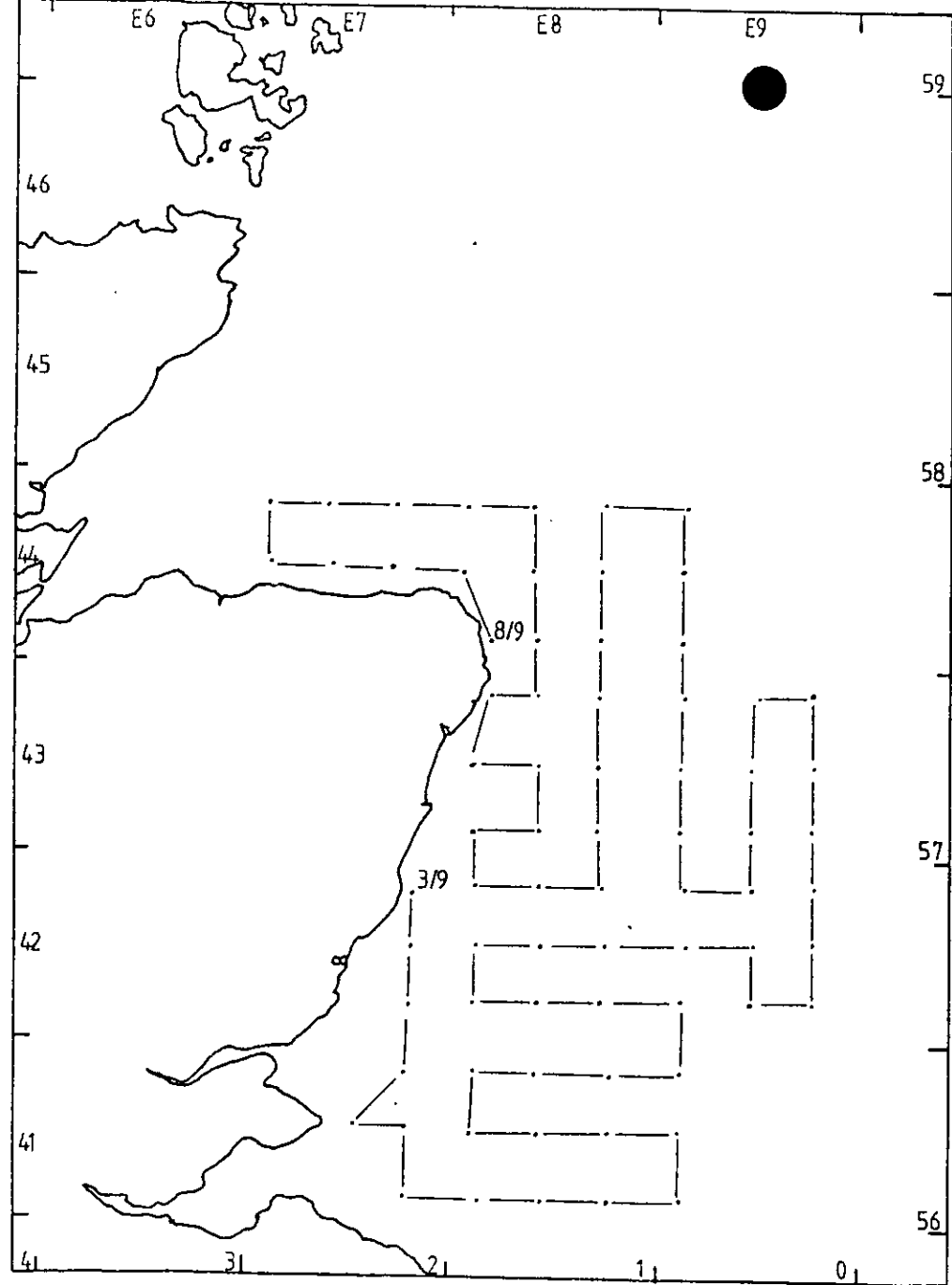
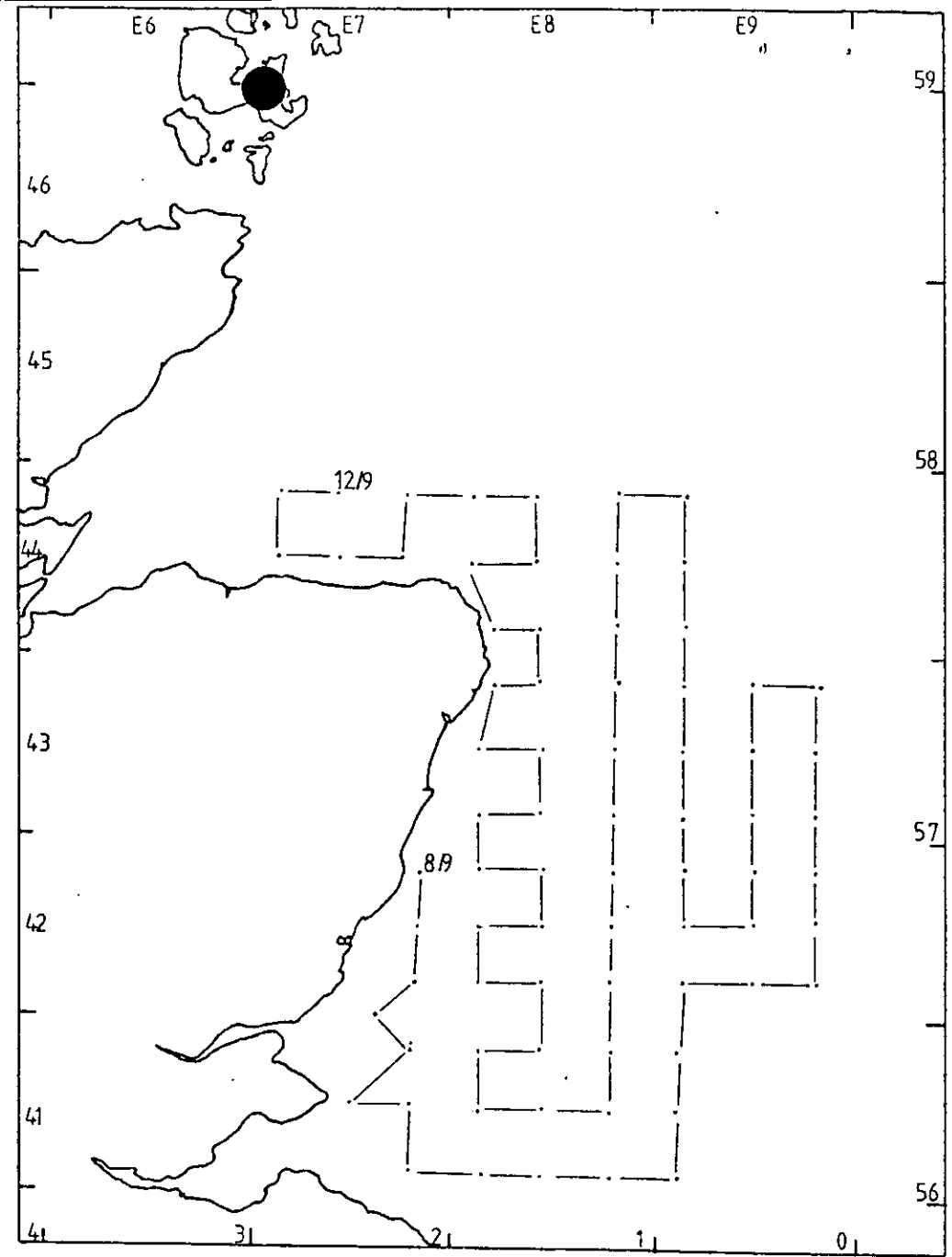


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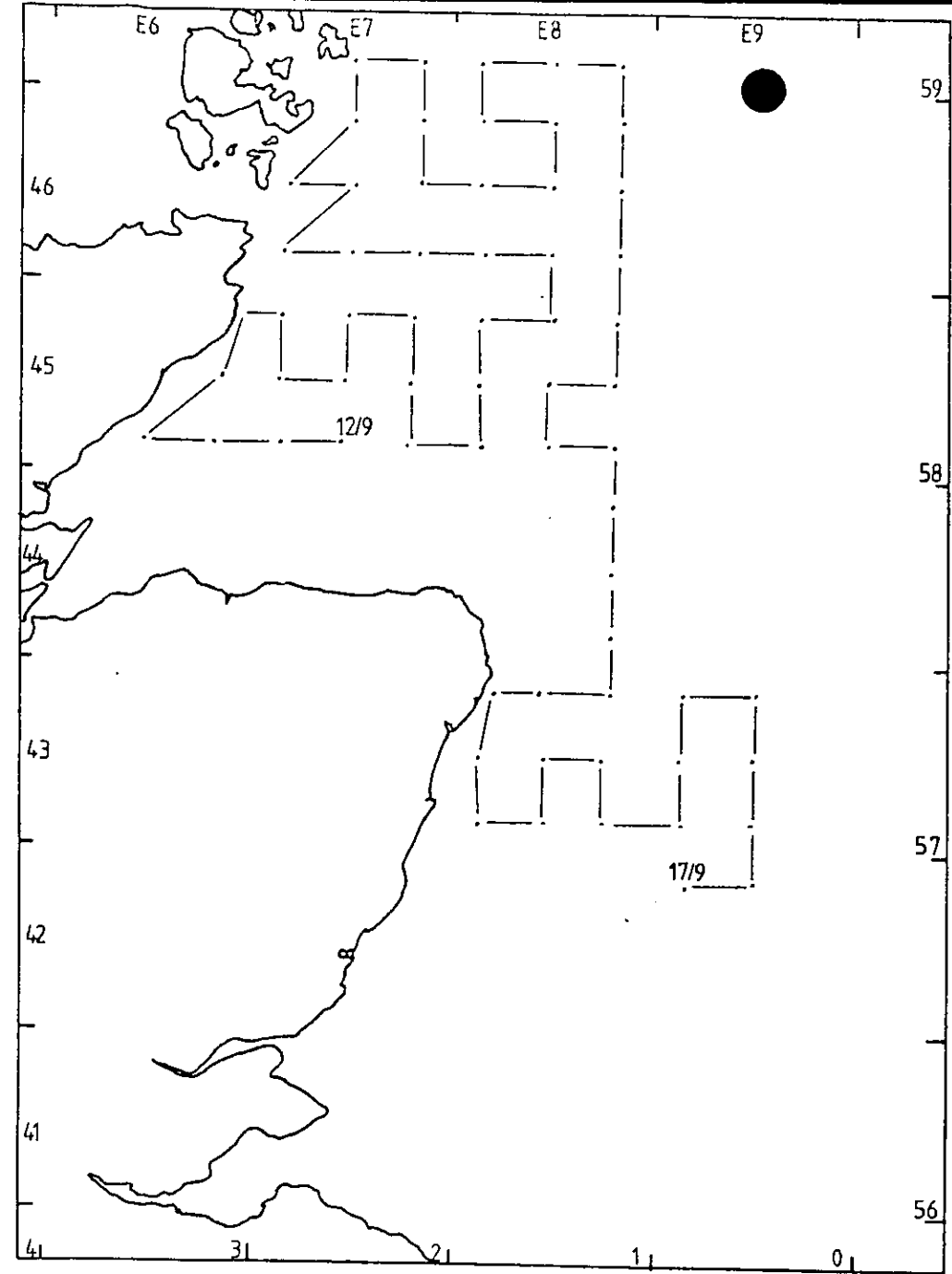


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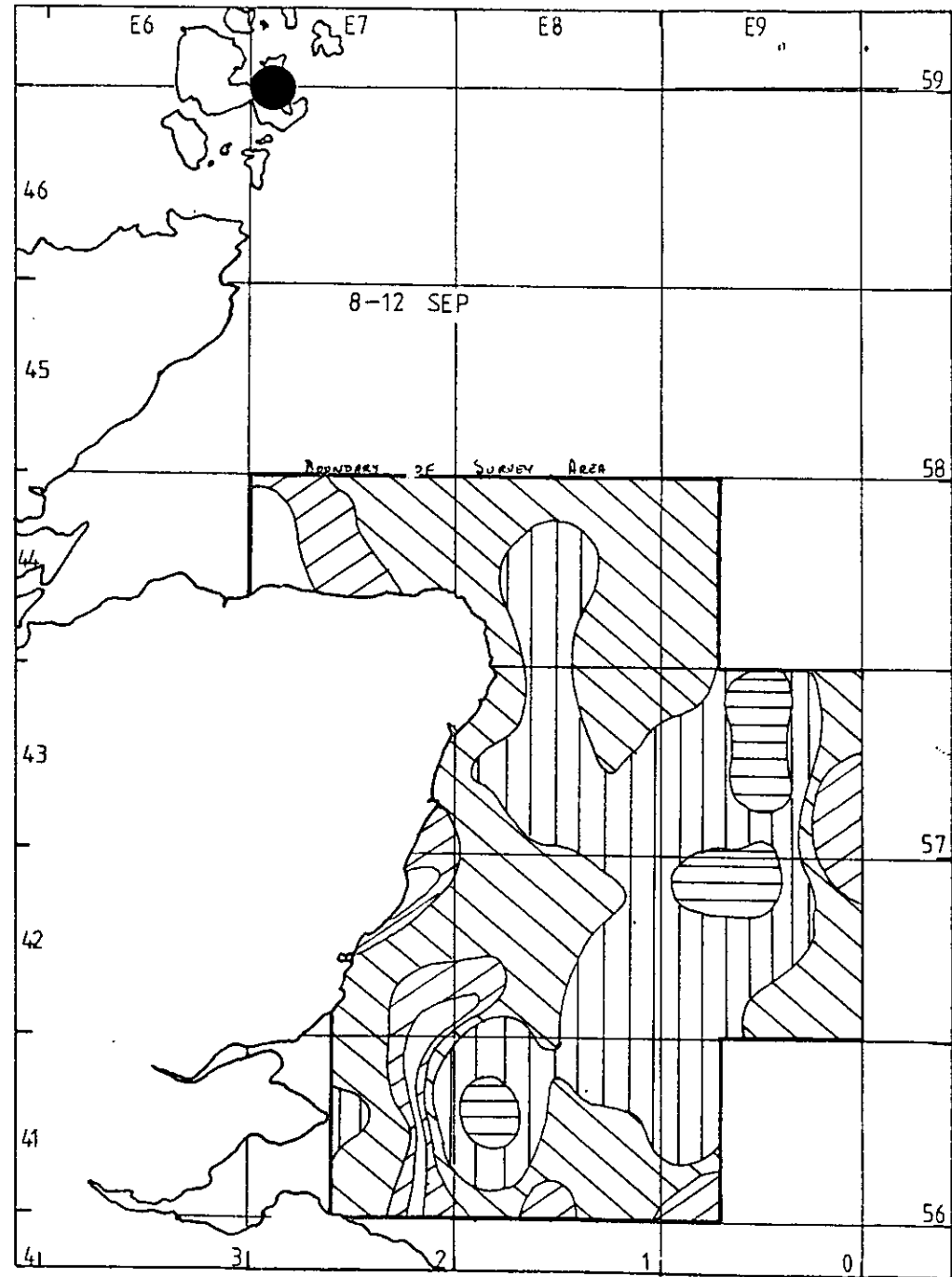
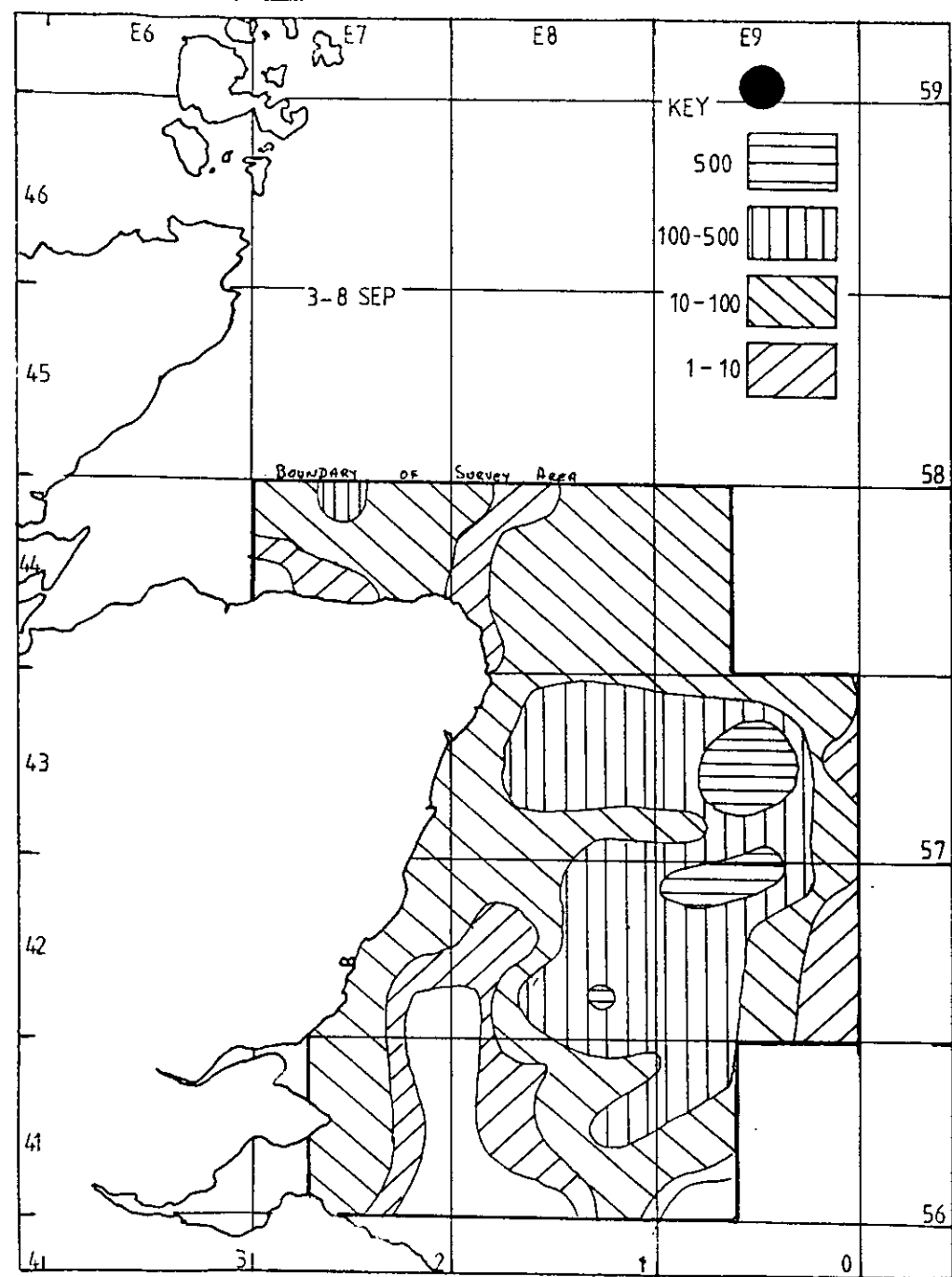


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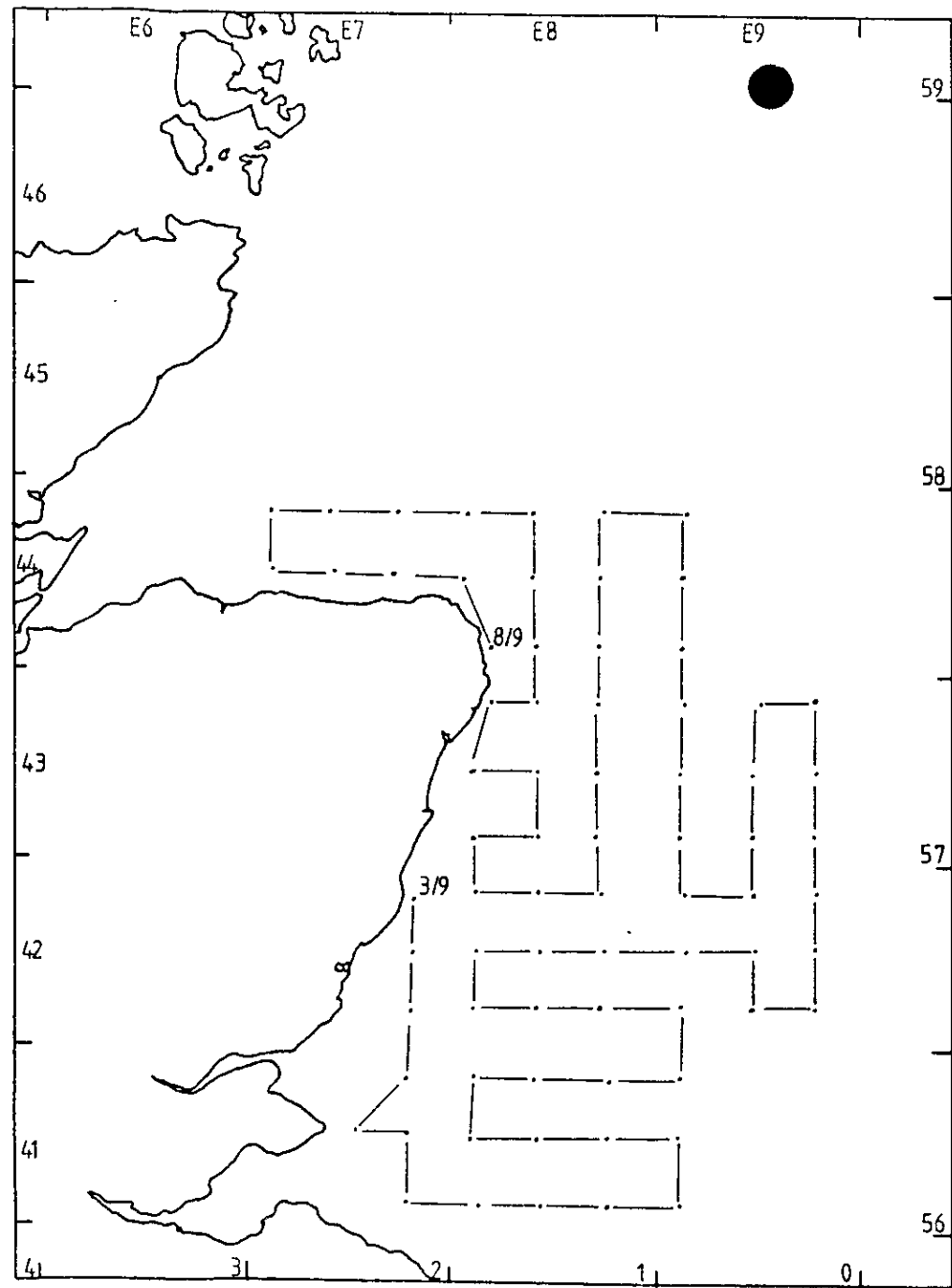
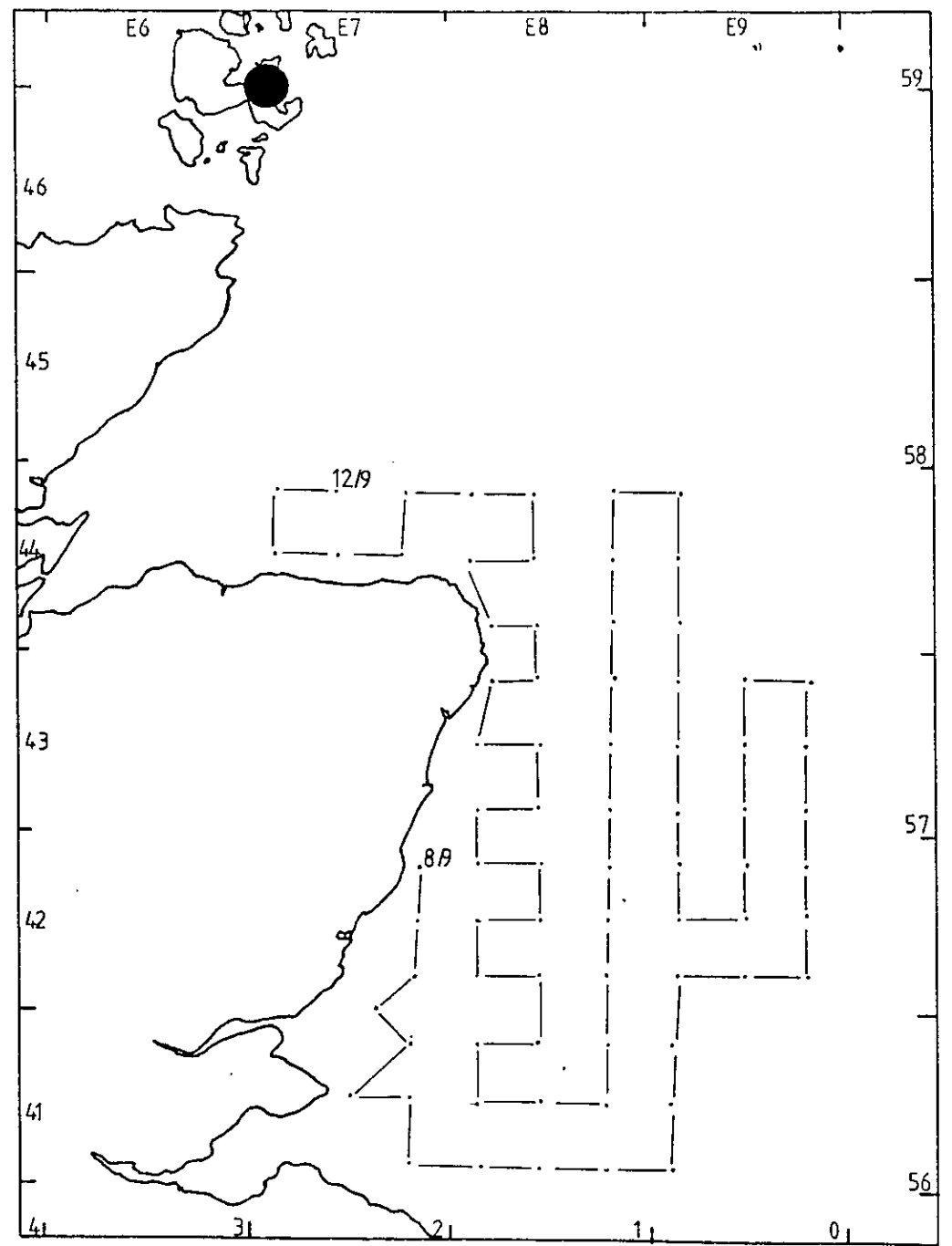


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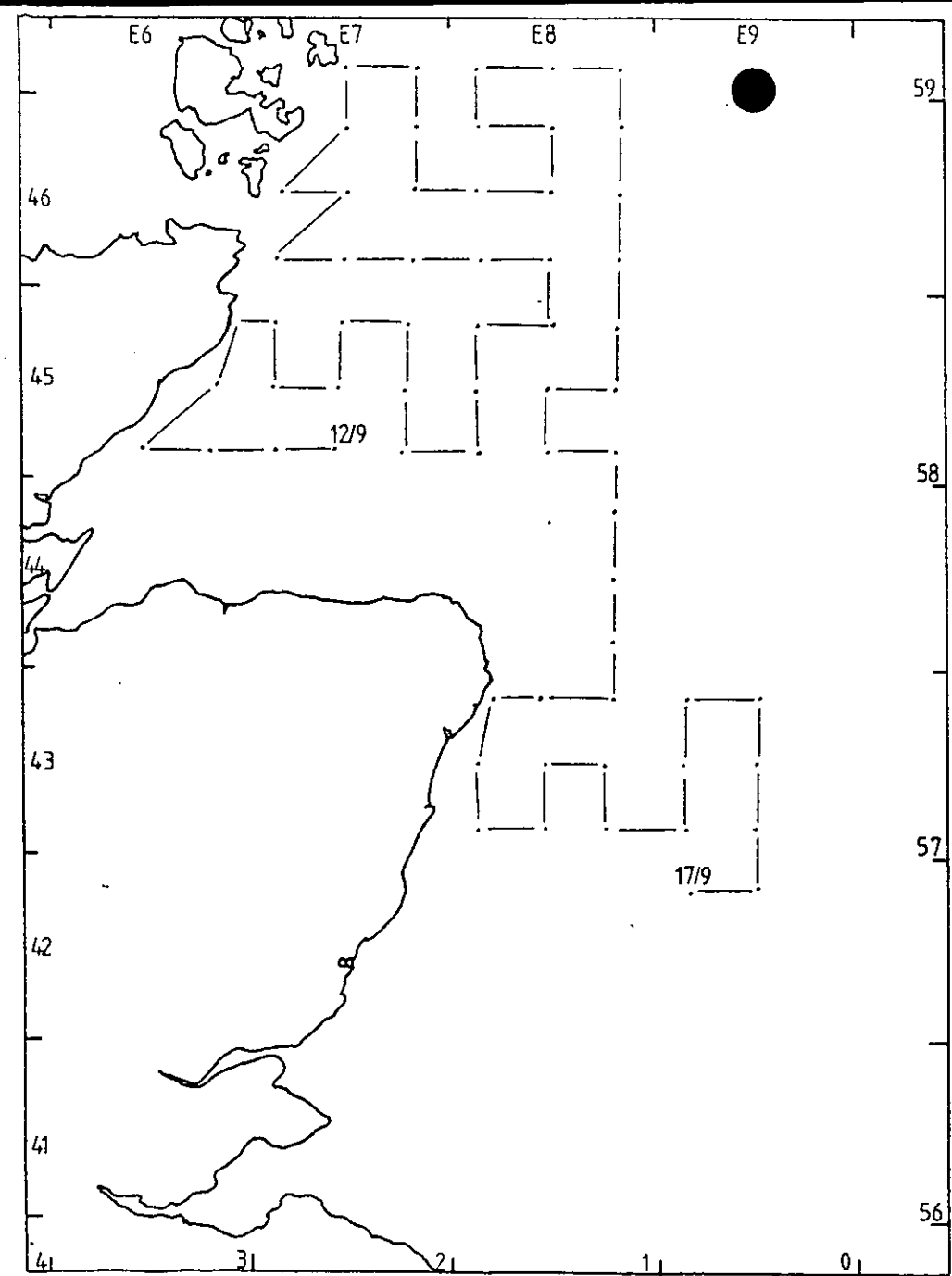


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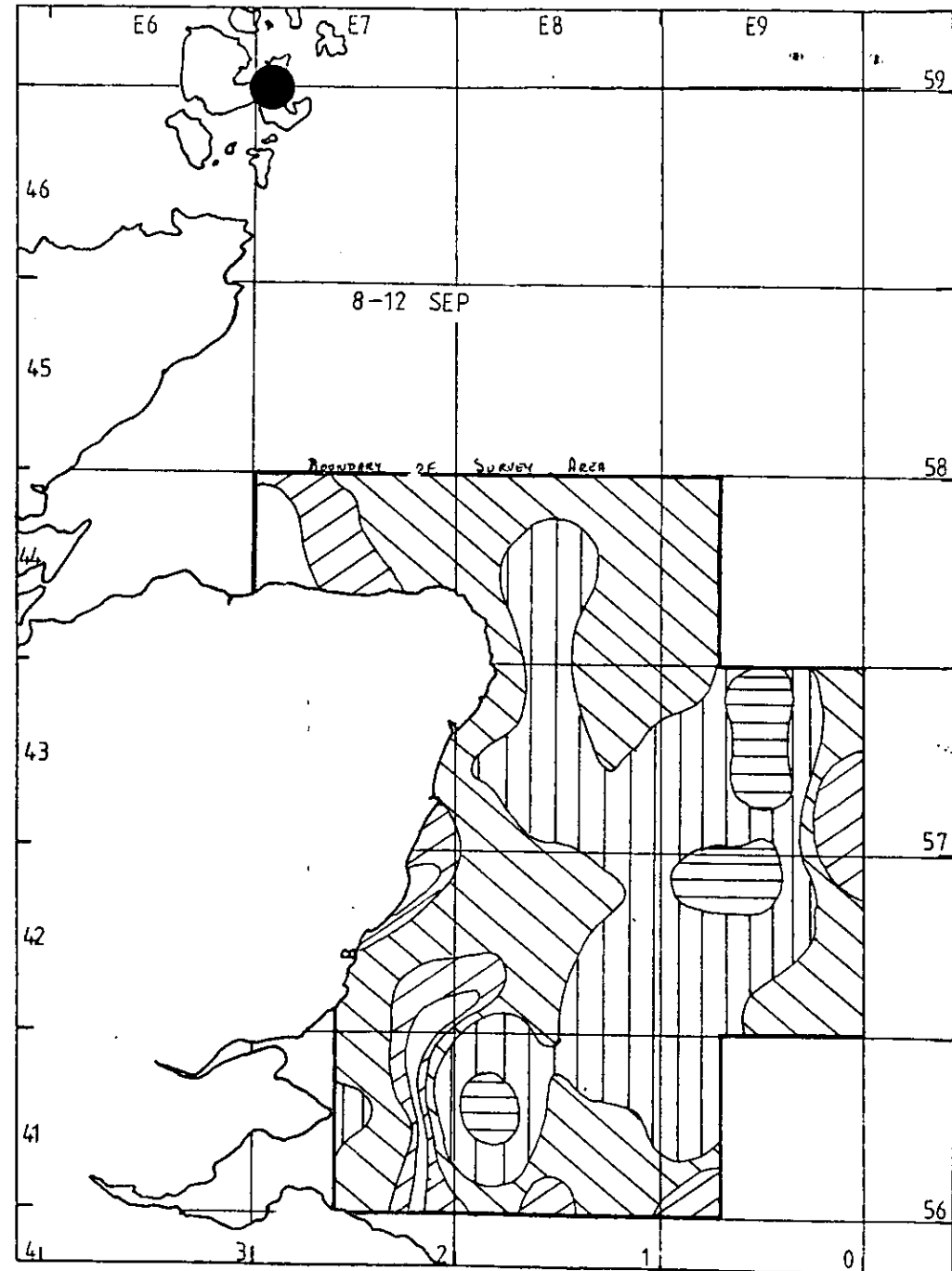
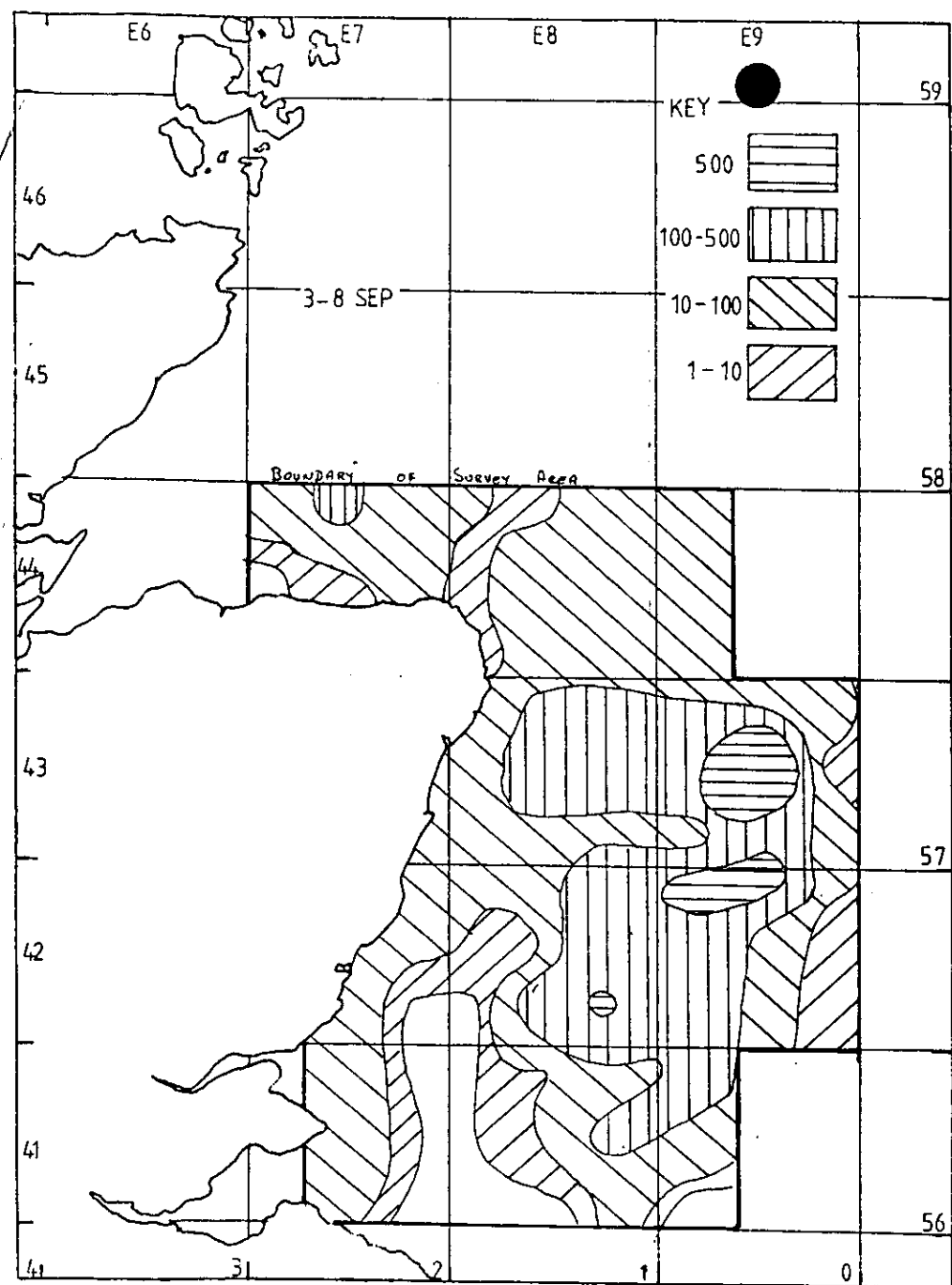


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