MINISTRY OF AGRICULTURE FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1992 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES CRUISE 5/92

STAFF :

D Bucke (SIC)
S W Feist
D Lees (from 25 April)
K Way
W Dore
J Dann
K Henshilwood (to 25 April)

DURATION: 14 April to 30 April

AIMS :

(1) To sample and examine dab and other demersal fish for diseases in support of the National Monitoring Plan (NMP) and North Sea Task Forces (NSTF) programmes.

(2) To sample dab livers for analytical chemistry and histology from selected stations in the North Sea and Liverpool Bay.

(3) To collect samples of demersal fish in support of NMP and Environmental Quality Objectives Programmes.

(4) To collect samples of herring for Ichthyophonus examination.

(5) To collect samples of whiting for the presence of *Diclidophora merlangi*.

(6) To collect sediment and water samples for bacterial and chemical analysis in support of NMP and NSTF programmes.

Additional aim: To collect serum samples from Dab and Flounder for antibody testing.

NARRATIVE:

Corystes left Lowestoft at 1940 h on 14 April and travelled to Smiths Knoll for the first NMP station to take samples of sediment and water.

A southwards track into the channel, taking more sediment and water samples at the NMP stations was made overnight.

On 15 April a number of Granton trawl tows were worked in Rye Bay for the fish samples. These procedures of grab and trawl stations, (some with a 4 m Beam trawl) were worked along the Channel to the NMP reference station in the Southwest Approaches and continuing northwards, taking in the NMP stations in the Bristol channel, Cardigan Bay, Liverpool Bay and Morecambe Bay. Included in this sampling procedure was a transect of grab stations in Liverpool Bay.

When the Morecambe Bay stations were completed on 22 April, Corystes made passage to the North Sea, taking the shorter northern route around Scotland for the Tyne sampling stations, arriving, despite losing some time because of strong headwinds, for trawl tows off Amble on 25 April.

Following the fishing a rendezvous was made off South Shields at midday with the Tyne pilot boat to exchange a Scientific staff member of the staff.

Sediment and water samples were taken along a transect from the inner Tyne NMP to the outer Tyne NMP station. This work was followed by a further period of trawling.

On 26 April trawl tows were made on the West Dogger, until winds forced the ship to dodge for several hours during the day. This pattern of trawl tow work continued on the 27 April on the Flamborough Off Ground and when completed, Corystes steamed to the inshore Humber NMP station for sediment and water samples.

Trawl tows were made on the Humber Off Ground on 28 April and on the 29 April, at Sole Pits before the steam home to Lowestoft for arrival at 0726 h on 30 April.

RESULTS:

All aims, 1-6, were successfully achieved and very little time was lost to bad weather. OF NOTE.

For aim 1, sufficient samples of dab for disease identification were taken from Rye Bay, Cardigan Bay, Liverpool Bay, Morecambe Bay and all North Sea fishing stations. Cod samples were examined from stations off the Tyne and Flamborough-Off Ground. Other demersal fish were examined on all fishing stations. Stratified length samples were recorded for dab and a total of 4697 fish were examined. Otoliths were taken from 643 fish. All unusual lesions were photographed and sampled for histological examination. For aim 2, livers from dabs were sampled for histopathology and analytical chemistry from Rye Bay, Liverpool Bay and from 4 areas between the Tyne and Humber. For aim 4, herring hearts for Ichthyophonus examination were preserved from most areas. For aim 6, water samples were taken and filtered from all NMP sites visited. Sediment samples were taken from 40% of these stations. Microbiological analysis was performed at sea on these samples. Working up will be done in the laboratory.

Additional aims included the collection of serum from dab for immunological testing; urine samples from several *Lophius piscatorius* for protozoan identification; samples of Lymphocystis and epidermal papillomas were taken for viral analysis; Microbiological samples were taken

from deformed haddock and cod. Samples of normal and abnormal tissues were preserved from unusual fish species (including electric ray, *Torpedo nobiliana*) for the FDL Registry of Pathology.

D Bucke
14 July 1992

SEEN IN DRAFT: MW, RG

INITIALLED: CEP

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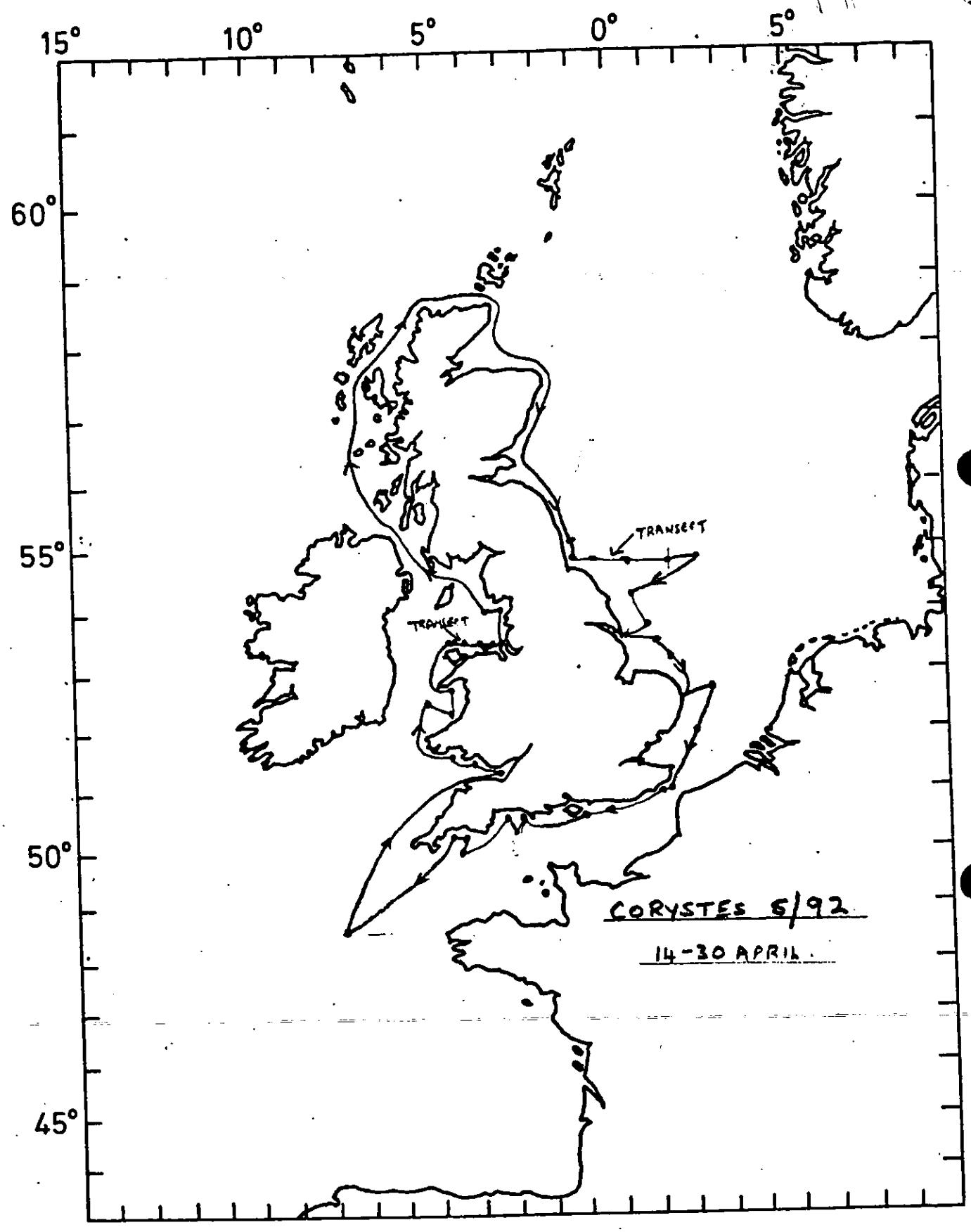
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