

In Confidence - Not to be quoted without reference to the Laboratory. 5ER82

FRV "Explorer" Cruise 5/82

REPORT

28 May - 10 June 1982

Objectives

To carry out a bottom trawling survey in the northern North Sea and to the north of Scotland to:-

- 1 determine the effect and distribution of infection of the fungal parasite Ichthyophonus in haddock and plaice
- 2 determine the effect and distribution of infection of the copepod parasite Lernaeocera
- 3 determine the prevalence and distribution of skin and fin lesions in gadoids and flatfish.

Narrative

"Explorer" left Aberdeen at 1600 hours on 28 May and commenced fishing on the sludge dumping grounds off St Abbs Head on 29/5. Four stations were worked in the Forth-Tay area until ship mechanical problems forced the suspension of the programme, and "Explorer" returned to Aberdeen docking at 1400 on 30/5/82. Resumption of the programme was delayed until 4/6/82 when engine problems were rectified, "Explorer" sailing at 0930 hours. Because of the time lost, a considerably restricted programme was adopted with the following stations being sampled: six out to and in the vicinity of the Forties oilfield, one close to the Beryl oilfield, one SE Fair Isle, eight off the north coast of Scotland and four in the Moray Firth (including one close to the Beatrice oilfield). "Explorer" docked at Aberdeen at 0130 on 10/6/82.

In spite of the mechanical problems 24 stations were worked, a total made possible by the excellent cooperation of the officers and crew of "Explorer".

Results

1 A total of 1184 haddock ≥ 26 cm from 24 hauls were sampled for Ichthyophonus, samples of kidney being removed from all for microscopic examination. Gel diffusion antibody tests were carried out on blood serum of 50 haddock from a heavily infected area. Kidneys of 345 plaice from 21 hauls were similarly sampled and serum of 131 tested for antibody.

2 Gills of 1184 haddock > 26 cm from 24 hauls and 750 < 26 cm from 15 hauls were examined for Lernaeocera infection.

3 Dorsal and ventral surfaces of 2562 common dab, 451 lemon sole and 345 plaice were examined for lymphocystis, skin papillomas, ulcerations and fin rot, 330 cod and 1184 haddock for pseudobranchial tumours and skin lesions and over 12,000 haddock for evidence of vertebral abnormality.

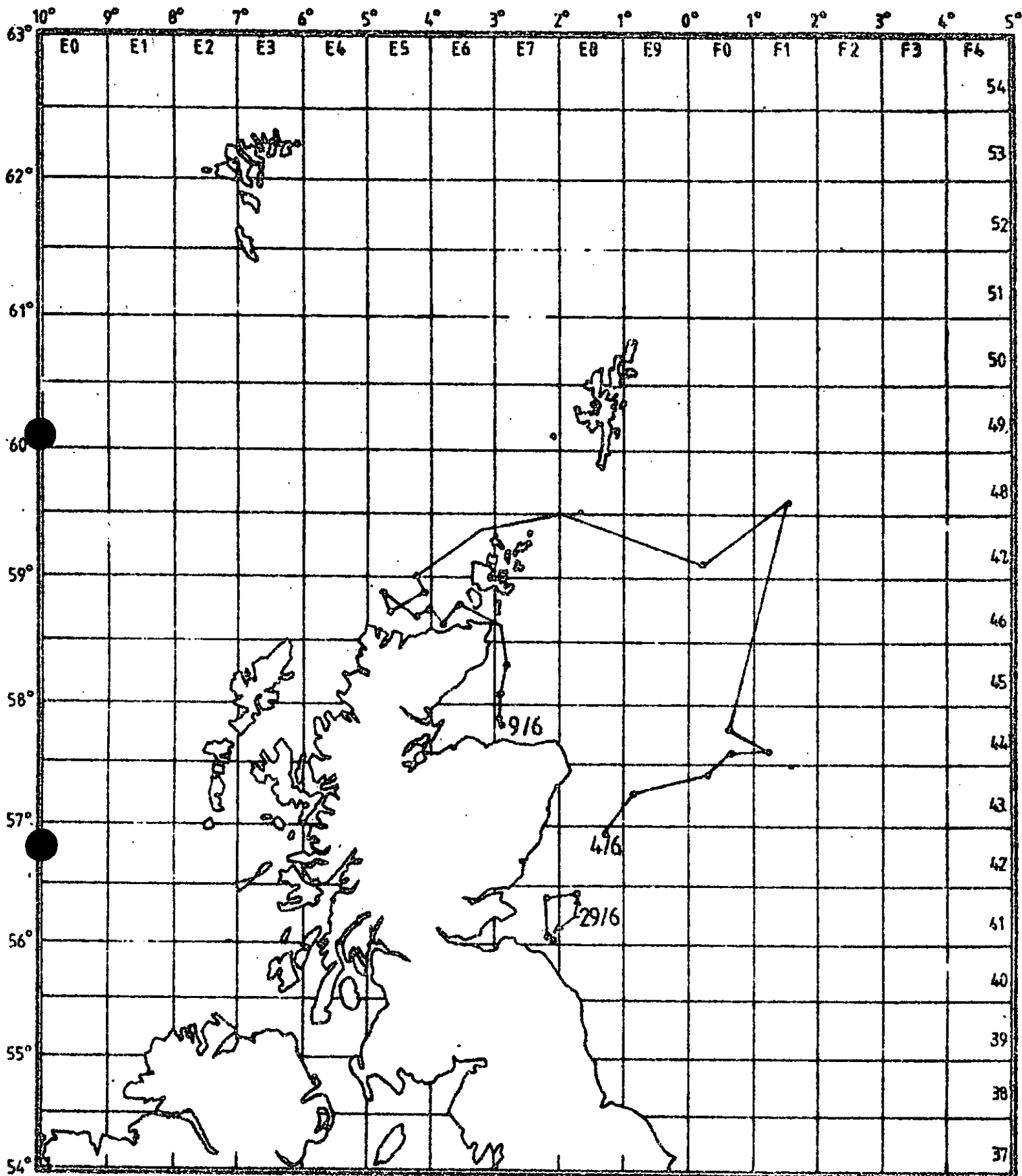
General

A visiting scientist from the British Museum (Natural History) London collected parasite and other samples from various species of fish taken from all hauls for ecological and taxonomic studies. A water sample for radio-caesium monitoring was collected near Fair Isle on 7/6/82.

A H McVicar

21 July 1982

Seen in draft W Findlay



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