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In Confidence - Not to be quoted without prior reference to the Laboratory

FRV "Scotia"
Cruise 3/86

3SR86 MB

Report

28 February - 20 March 1986

Personnel

K A Coull	HSO
J R G Hislop	PSO
D W McKay	HSO
A P Robb	HSO
P Kunzlik	SO
C P Whitworth	ASO
K J Peach	ASO
Miss J Staples	ASO
J T M Hunter	PTO (11-20 March)
C Burton	(NCC)

Objective

Demersal trawling survey of the grounds off the north and west coasts of Scotland.

Narrative

"Scotia" sailed from Aberdeen at 1530 on 28 February but was unable to proceed directly to the survey area as a temporary change of fishing mate had to be carried out at Buckie the next morning. Trawling then commenced on stations to the west of the Orkneys and 6 hauls were completed before "Scotia" had to land an injured seaman at Kirkwall on 3 March. Work recommenced the same evening off the north coast and continued until the morning of 5 March when "Scotia" called at Ullapool to exchange fishing mates. The opportunity was taken to send 2 badly damaged nets back to Aberdeen for repair.

The Minch stations were completed before proceeding to stations west of the Outer Hebrides where severe gales forced "Scotia" to seek shelter at St Kilda on 8 February. Of the 11 hauls carried out on this area, 6 resulted in severe net damage.

"Scotia" docked at Stornoway at 1100 on 11 March for the half landing and modifications were made to the gear in an attempt to eliminate the possible causes of the frequent damage encountered.

Having received 2 repaired nets, "Scotia" sailed on 12 March. Fishing operations started the same evening but once again severe damage to the gear occurred. The following day the fishing mates made further alterations to the gear and carried out 2 trial hauls on clear ground off the north coast. These seemed to be successful and 2 more stations were completed before heading for the southern part of the survey area where the 16 remaining stations were completed with 3 lost due to gear damage.

"Scotia" docked at Greenock at 1830 on 19 March.

Results

A total of 50 hauls were made. Thirty seven stations were completed successfully with 2 being repeated.

Heavy ground gear was used throughout the cruise with 97 metre sweeps being used for most of the stations north of 57°N and 47 metre sweeps used in the southern area. (This change was made in an attempt to eliminate gear problems).

Monitoring of the headline height was carried out using a Scanmar system.

Catch rates varied from 1-58 baskets per hour with the stations to the west of the Hebrides and at the Shiants producing the largest hauls.

Catches of I-group haddock were similar in numbers to those obtained during the 1984 survey. The presence of I-group haddock was generally restricted to stations in the North Minch, North Coast and West Shetland (fig. 1).

For I-group whiting the numbers caught were quite low except for the North Minch and Clyde areas where hauls averaged in the region of 400/hr (fig. 2).

Herring catches were variable with hauls in the Minch consisting mainly of juveniles and stations west of the Hebrides producing adult fish. The biggest hauls were at Shiants (5287 fish/hr), Tory Island (4859) and south of St Kilda (4357).

Sprats were widely distributed throughout the survey area. Numbers caught were generally higher than in recent years with stations off NW Ireland giving numbers not previously encountered there.

A total of 734 herring and 300 sprats were examined for stock separation studies.

Various samples were deep frozen and taken back for work in the Laboratory and for use by Royal Scottish Museum.

Otoliths taken

Cod	Haddock	Whiting	Saithe	Herring	Sprat	Pout
199	803	599	120	1592	393	488

All otoliths except for sprat and pout were read at sea.

Haul summary, length frequency and age/length data were punched at sea and stored on floppy disk using a Commodore micro-computer.

K A Coull

Seen in draft

N E McInnes

15 April 1986

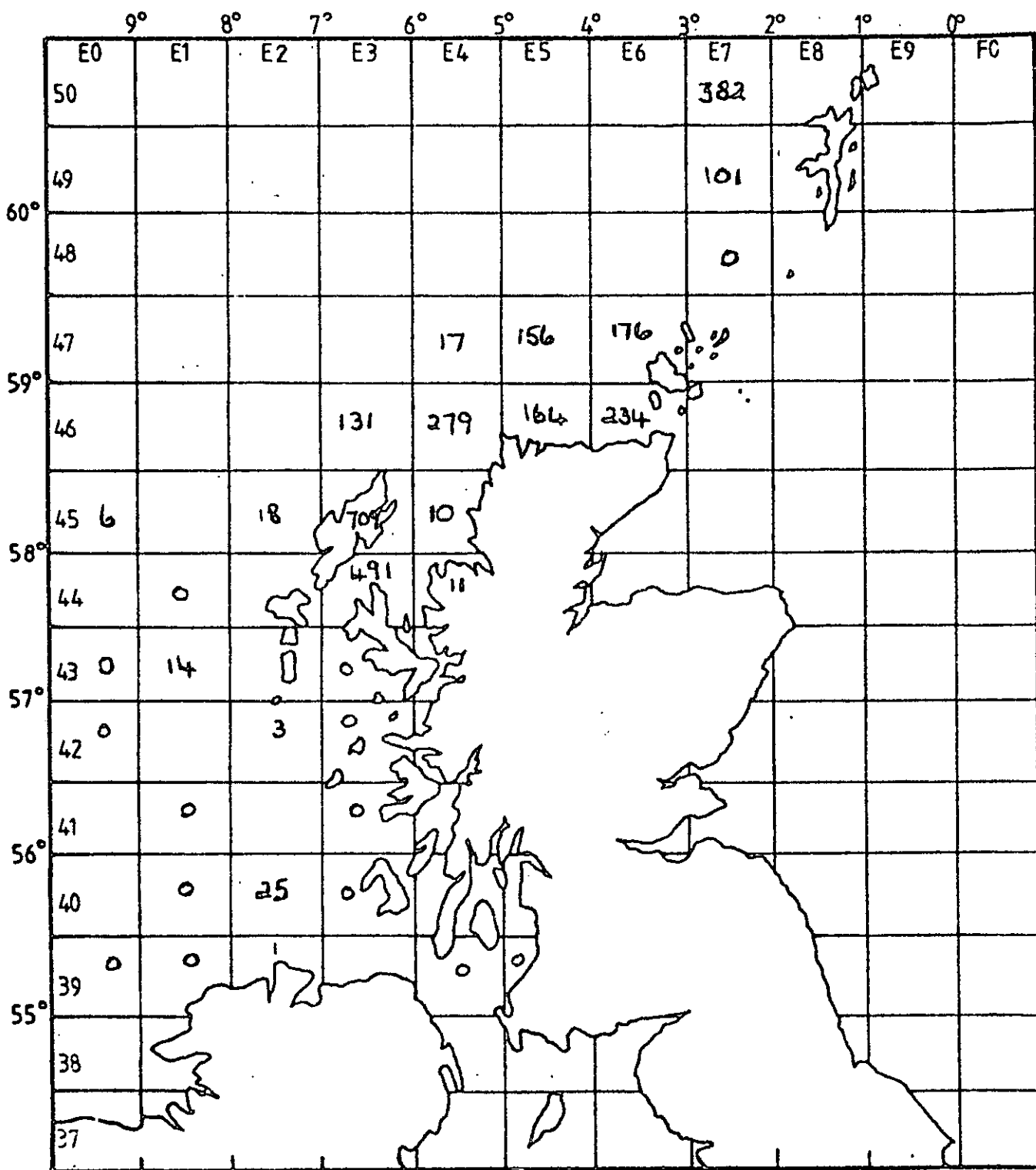


FIG 1

Haddock I-group

ave nos/hr

(provisional)

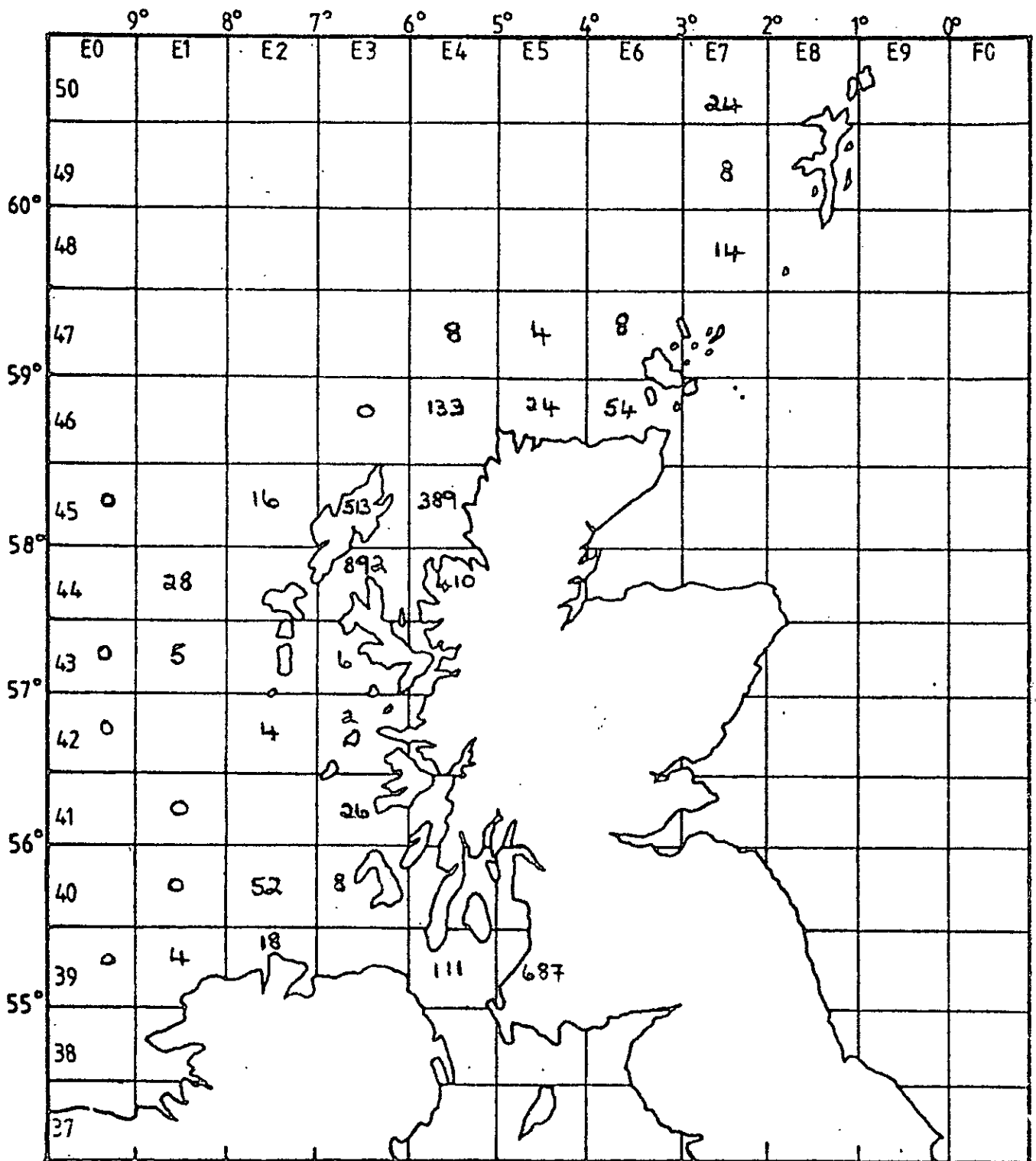


FIG 2

Whiting I-group

ave nos/hr

(provisional)

Scotia 28 Feb - 20 Mar Cruise 3/86

