

CRUISE REPORT CR/15/89 R V Lough Foyle Cruise LF/5/88
26-30 June 1989

PERSONNEL

D J Agnew	HSO (SIC)
R P Briggs	PSO (26-27 June)
W J McCurdy	SSO
B Hart	ASO
J Peel	TASO
G Murray	Student

OBJECTIVES

1. To carry out a Young fish survey of the North Irish Sea.
2. To sample Hake for studies of growth and distribution.
3. To trial oceanographic equipment.

NARRATIVE

Lough Foyle sailed 0800 Monday 26 June and completed trawling of the Northern stations by Tuesday evening. R Briggs disembarked in Belfast at 0900 together with the Chef who for medical reasons was unable to complete the cruise. The rest of the week was spent completing the tows and, apart from a torn net on Thursday (tow 23, station 43) this was completed successfully. Moderate to good weather was encountered throughout the week, the worst being a force 6-7 on Wednesday. The Lough Foyle docked at 1300 Friday 30 June in Belfast.

RESULTS

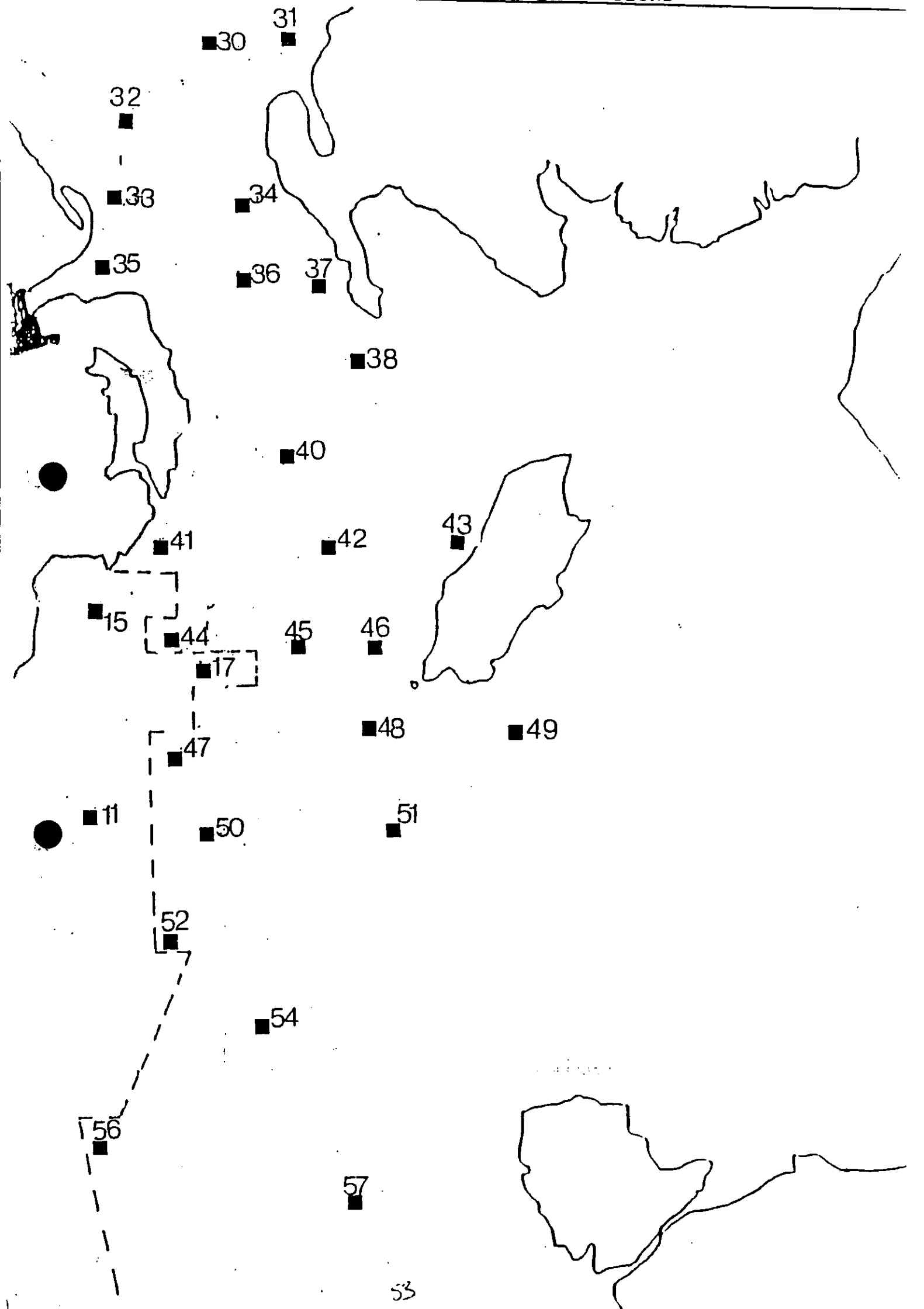
A total of 28 tows were completed using a Rockhopper net with sprat liner (table 1 & fig 1). Tow duration was 1 hour for tows 1-11 incl. and 0.5 hour for the remainder.

Full analysis of the results to produce an index of 0+ to 2+ fish has not yet been completed. Initial analyses of the data suggest the following :

Whiting 0-12cm length most numerous at stations 11, 17, 30, 31, 35, 40, 41, 44, 52; ie. north of the Mull of Galloway, Belfast Lough, off Dundrum bay and in mid-sea between IOM and Dublin. Those of >12cm length were most numerous in similar places to the young, with more uniform distribution in mid-sea.

Cod Very few young cod were found at all, those of (assumed) 1+ group found most abundantly at stations 15, 17, 41, 44, 51, 56; ie off Dundrum bay and off Dublin. 0+ were very rare, though in greatest numbers at site 52 (mid-sea).

Plaice Young plaice were found in greatest quantity off Dundrum bay (stations 15, 41, 44) and off Dublin (station 56).



DEPARTMENT OF AGRICULTURE (NI)

CRUISE REPORT - RV LOUGH FOYLE - LF/19/89

CELTIC SEA HERRING ACOUSTIC ASSESSMENT 4th-19 October 1989

PERSONNEL:

R. Briggs	DANI (12th-19th Oct)
D. James	DANI (12th-19th Oct)
W. McCurdy	DANI (4th-11th Oct)
J. Peel	DANI (4th-11th Oct)
D. Minchin	DOM
D. Kennedy	DOM
R. Nash	PEML (Acoustics Consultant)
P. Fernandes	PEML

OBJECTIVES:

To perform a hydroacoustic survey of the Celtic Sea autumn spawning herring stocks.

METHODS:

A survey strategy based upon a restricted randomised design was adopted, covering the area from the Tuskar Rock ($52^{\circ}10'N$ $06^{\circ}10'W$) to Loop Head ($52^{\circ}05'N$, $10^{\circ}30'W$) around the Irish coast (Figure 1). A 38kHz echosounder with a transducer located in a towed body was employed throughout the survey. Raw analogue data were stored on VHS video cassettes and the transformed digital data were transferred to magnetic computer tapes during the cruise for future analysis. Ground truth data were collected using midwater trawl gear. Fish species in catches were quantified and samples of the herring component were individually weighed, measured, otoliths removed for ageing and vertebrae counted to distinguish the autumn and winter spawning proportions. All scientific work was performed over 24hrs of each day, where conditions allowed, with personnel operating a shift system.

NARRATIVE:

Messrs. McCurdy, Peel, Kennedy and Dr Minchin joined the Lough Foyle in Belfast on 3rd October. The vessel left Belfast on 4th October at 08:00h and arrived in Douglas,