

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

1982 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA : CRUISE 9

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF:

K Brander, SIC

J Shepherd

D Bennett

C Humphreys

I Davies

S Flatman

T Doddington

T Benford

J Hunton

R Briggs (DANI)

DURATION:

Left Grimsby 0430 h, 2 November

Arrive Grimsby 0500 h, 15 November

LOCALITY:

Irish Sea

AIMS:

1. To carry out a groundfish survey of the Irish Sea, trawling at standard stations using a Granton trawl with small mesh liner.
2. To obtain fish and shellfish samples from eight ICES rectangles for measurement of radioactive levels.
3. Sample gadoid species in midwater using a pelagic trawl, for investigation of feeding and population distribution.
4. Carry out trawl stations off the south coast of Ireland to complete coverage of the area begun on CLIONE 10/82.
5. Take a series of photographs of benthos in the region of the NW Irish Sea front, using the headline camera.

NARRATIVE:

The ship sailed on the early morning tide on 2 November and made a good passage to Larne around the North of Scotland. Dr Briggs boarded the ship via the Larne pilot cutter at 1330 h on 4 November and the first standard bottom trawl station was worked off the mouth of Strangford Lough that evening. Eight standard hauls were carried out over the next two days in the area between Co Down and the Isle of Man until increasing southerly gales forced a move to off the N Wales coast. Fishing continued there and in Caernarvon and Cardigan Bays for the next two days. On 9 November CIROLANA carried out one standard haul on the edge of the Lambay Deep and then two three hour tows running NW-SE, to cover a 20 mile transect across the position of the NW Irish Sea front. SW gales made fishing impossible on 10 November, but two midwater hauls were worked with the Engel trawl on 11 November until increasing southerly winds forced a move. CIROLANA steamed to Holyhead, where Dr Briggs was put ashore by pilot cutter at 2000 h on 11 November. Most of 12 November was spent sheltering from severe SW gales. On 13 November four standard tows were carried out off Arklow and Tuskar. With poor weather prospects and no possibility of completing Aim 4 in the Celtic Sea, fishing ceased at 1545 h on

13 November and the ship steamed for Grimsby, docking at 0500 h on 15 November.

RESULTS:

1. Twenty valid one hour trawl hauls were carried out at standard station positions, yielding an average catch of all fish of 162.1 kg. The same twenty stations yielded an average catch of 94.5 kg during this year's young fish survey. (CLIONE 12/82).

59 fish species were recorded and all were measured to give a total length composition of all species combined. Lesser spotted dogfish, whiting and cod were the three most abundant species and accounted between them for 40% of the total catch weight.

2. Fish, shellfish and water samples were obtained from all eight ICES rectangles for measurement of radioactive levels.

3. Only two midwater trawl hauls were carried out and these yielded mainly spurdogs and whiting, which had been feeding on ghost shrimps and *T. esmarkii*.

4. No trawling was done off the south coast of Ireland.

5. The underwater camera, mounted on the headline, was used successfully at ten stations, including the two three hour trawl hauls across the region of the NW Irish Sea front. Black and white test film developed on board indicated that visibility at shallow stations was probably too low to obtain useful results. Eighty-four species of invertebrate were identified during the cruise and, where necessary, deck photos were taken or specimens frozen for full identification later.

6. 613 otoliths were taken from nine species and stomach contents were recorded from 1737 fish of 30 species. Once again it was remarkable how little predation appeared to take place on commercial fish species.

7. Samples of small gadoids and flatfish were frozen for fish identification courses.

8. The opportunity of Dr Briggs' participation on the cruise was used to discuss the sampling and assessment of Nephrops stocks and to carry out some preliminary analyses on the ship's computer.

Keith Brander
8 December 1982

SEEN IN DRAFT:

D J G

INITIALLED:

E W P

F B A C

DISTRIBUTION:

Basic List +

K Brander (5) S Flatman
J Shepherd T Doddington
D Bennett T Benford
O C Humphreys J Hunton
I Davies R Briggs

