# MINISTRY OF AGRICULTURE, FISHERIES AND FOOD FISHERIES LABORATORY, LOWESTOFT, SUFFOLK NR33 0HT

## 1996 RESEARCH VESSEL PROGRAMME

REPORT: CHARTER DOUBLE-BEAM TRAWLER

STAFF:

M R Vince

7 March - 14 March and 20 March - 25 March (SIC)

B F M Harley

7 March - 20 March

LE Woolner

16 March - 25 March

**DURATION:** 

6 March - 27 March 1996

LOCATION:

Irish Sea and Bristol Channel

#### AIMS:

1. To carry out beam trawl surveys of groundfish in the Irish Sea and Bristol Channel.

2. To determine the distribution and abundance of juvenile and adult sole and plaice.

#### NARRATIVE:

CARHELMAR sailed from the river Dart at 1400h on 6 March after loading on board the two MAFF 4 m survey beam trawls. A good passage was made to Milford Haven where laboratory staff and sampling gear were embarked prior to commencement of the survey in the Bristol Channel on the morning of 8 March. The work continued uninterrupted off the south coast of Wales until the morning of 11 March, when fish samples taken for AEP2 were landed at Milford Haven for dispatch by staff of SFI to the Burnham on Crouch laboratory. Despite two days of strong SE winds, the 33 stations of the Bristol Channel survey were successfully completed by the evening of 13 March. After taking fuel, water and stores at Milford Haven, CARHELMAR sailed for Fleetwood at 1300h on 14 March and arrived there at 1900h the next day.

The survey in the north east Irish Sea was begun on the morning of 16 March and continued uninterrupted until 1130h on 20 March when CARHELMAR returned to Fleetwood for fuel, provisions and staff changes. During the period 15 - 19 March Mr Harley took responsibility for the survey and sampling procedures. The survey in the south east Irish Sea was started at 0700h 21 March completed by the evening of 24 March, and CARHELMAR docked at Fleetwood at high water the following afternoon. Live plaice, samples and sampling gear were unloaded with the exception of the two 4m beam trawls. Laboratory staff returned to Lowestoft by road on 26 March.

### **RESULTS:**

All 68 of the planned survey stations were successfully completed. As CARHELMAR is a commercially rigged double beam trawler, both MAFF 4m beam trawls were deployed on each station, but only one was equipped with a 40 mm liner inside the normal 80 mm cod end

and this was the survey sampling gear. The catches taken from the other trawl were used for collecting samples for AEP2. All commercial fish species caught by the survey gear were collected, measured and length-stratified samples of otoliths were taken from selected species, as follows:

Species	VIIa	V∏f+g
Plaice	775	227
Sole	435	174
Lemon Sole	34	29
Brill	6	2
Turbot	0	3
Angler	6	15
Cod	33	19
Whiting	100	93

Other fish species and main benthic fauna and flora caught were recorded on every haul.

The survey data are not yet fully input on to the Fishing Survey System, and so an accurate comparison with previous years results cannot be made. In general the catches of sole, plaice, whiting and cod appeared to be low in the Bristol Channel compared with March 1994, (the last year that a full survey was carried out in March) whilst in the south east Irish Sea several hauls yielded higher catches of pre-recruit plaice and whiting than found on those same hauls in March 1994. Pre-recruit whiting appeared to be particularly widespread in the south east Irish Sea.

### ADDITIONAL AIMS:

Samples of flatfish from selected stations in the Bristol Channel were collected for AEP2 (J. Thain). Samples of dab, whiting, flounder, plaice and sole were collected and held in ice from various sites in the Bristol Channel and Irish Sea for AEP2 (A. Franklin). On the last day, live mature male plaice (160) were collected and held in tanks for AEP4 (J. Knowles).

This is the first time CARHELMAR has been used on this survey, which is normally completed by CORYSTES when a more extensive area is covered. It should be recorded that without the enthusiastic help from the crew on many hauls the sampling levels or time schedule would have been adversely affected. The staff wish to thank the skipper and crew for their enthusiasm and practical support.

M.R. Vince 2 April 1996

INITIALLED:

DISTRIBUTION:

Basic list+ M R Vince BFM Harley LE Woolner