

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, CONWY, GWYNEDD, N WALES

1987 RESEARCH VESSEL PROGRAMME

REPORT: CHARTERED COMMERCIAL VESSELS

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

STAFF:

Survey 1: S I Rogers
S J Lockwood
B E Spencer
A R Child
D B Edwards

Survey 2: S I Rogers
S J Lockwood
B E Spencer
A R Child

Survey 3: S I Rogers
S J Lockwood
B R Howell
B E Spencer
T W Beard
S M Baynes
G C Shacklady

DURATION:

20 July-3 October 1987

LOCATION:

Ribble estuary area, Great Orme to Dee estuary,
Conwy Bay area and Tremadoc Bay.

AIMS:

1. To carry out three inshore beam trawl surveys of parts of the Irish Sea and west Wales coasts.
2. To sample juvenile fish and identify sole nursery grounds.

NARRATIVE:

Survey 1.

Staff (SIR, SJL) travelled to Rhos-on-Sea on 20 July. FV ROSE was chartered and was used for beam trawling along the north Wales coast from the Great Orme to the Dee estuary, and this survey was completed 23 July. Between 27 and 29 July staff (SIR, DBE) travelled to Pwllheli and surveyed Tremadoc Bay using FV MARY 'K'. Beam trawling continued in the Ribble estuary area between Blackpool and Formby Point using FV ARCTIC RANGER for a 3 day period (4-6 August) with staff (SIR, ARC) based in Lytham St. Annes. FV HARMIL from Conwy was chartered between 17-18 August and concluded the first survey by beam trawling in the Conwy Bay area (staff: SIR, BES).

Survey 2.

The beam trawl stations between the Great Orme and the Dee estuary were repeated by staff (SIR, ARC) between 11 and 14 August. Tremadoc Bay beam trawl stations were repeated between 24-26 August (SIR, BES). Those in the Ribble estuary area were repeated by SIR and SJL on 1 and 2 September, and those in the Conwy Bay area on 7 September.

Survey 3.

Staff (SIR, BRH, BES, TWB and GCS) completed the north Wales coast survey between the Great Orme and the Dee estuary between 15-18 September. Beam trawl stations in the Conwy Bay area were fished between 21-22 September (SIR, SMB). Selected stations in Tremadoc Bay were completed between 28-29 September (SIR, SJL), and the final survey of the Ribble estuary area was completed between 1-3 October (SIR, BRH).

The same charter boats were used for both the second and third repeat surveys.

RESULTS:

1. A total of 146 2m beam trawl stations were fished during the first survey, and these were equally distributed in three depth bands, 0-5m, 5-10m and 10-15m. All flatfish were identified, measured and counted, other species were identified to at least Genus and counted. 0-group soles and solenettes were preserved in formalin for gut content analysis. Surface salinity and temperature were recorded at all stations. During the second and third surveys most fishing stations were revisited and the catch analysed as before. 0-group soles were collected from selected stations for electrophoretic studies and frozen on board using liquid nitrogen. 30 1-group soles were returned live to the Laboratory and will be used for tag-retention trials during winter.

The data is being analysed to indicate areas of greatest concentration of 0-group soles, and also to highlight any migration between areas and/or depth bands over the summer period.

S I Rogers
30 November 1987

INITIALLED:

D J G

DISTRIBUTION:

Basic List+

S I Rogers
B R Howell
B E Spencer
A R Child
S M Baynes
T W Beard
D B Edwards
G C Shacklady
The Clerk NWNW SFC

Skippers - J Povah
R Roberts
K Threlfall
A Wright