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

1987 RESEARCH VESSEL PROGRAMME

REPORT: CHARTERED COMMERCIAL VESSELS AND PUSHNETTING (PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF: Team 1 C L Whiting G J Howlett

Team 2 T Watson
Dr R Millner (31 Aug-10 Sept)
R A Ayers (11 Sept-21 Sept)

Team 3 J D Riley S P Milligan

DURATION: 30 August-5 October 1987

LOCATION: The Wash-Swanage Bay

- AIMS: 1. All teams. To carry out an inshore beam trawl and pushnet survey of part of the North Sea and English Channel coasts, of young demersal fish in relation to the environment. To include collecting data for juvenile flatfish yearclass size estimation.
 - Teams 1 and 3. To continue studies of growth and mortality of young sole in the area off Lowestoft and in Rye Bay.

NARRATIVE: Team 1. Staff travelled to Dungeness on 30 August. FV JO'S BOYS of Dungeness was used for beam trawling on 30 August and 1 September in the area Dymchurch to Camber. FV ST RICHARD of Hastings was used to survey the area Rye Bay to Beachy Head, during the period 6-9 Sept. RV AVON VALLEY of Mudeford was used to survey the area Selsey Bill to Swanage Bay during 13-17 Sept inclusive and FV SHAROWNA of BRIGHTON was used to complete the survey in the area Newhaven to Worthing on 19 September. Push net sites were sampled throughout the period 2-18 September.

The cooling water intake screens at Dungeness 'A' power station were sampled on 4 and 18 September. Staff returned to Lowestoft on 20 September.

Team 2. Staff travelled to West Mersea on 31 August. FV OUR TRACEY of West Mersea was used for beam trawling in the North Thames estuary area during the period 1-3 September. FV CHALLENGER of Wainfleet Haven was used for beam trawling in the Wash and off the north Norfolk coast during the period 5-9 September. FV ALVIC of Whitstable was used to survey the river Thames and the south Thames estuary during 14-16 September.

Push net sites were sampled throughout the period 4-21 September. Staff returned to Lowestoft on 21 September.

Team 3. Staff used FV SUNDANCE of Lowestoft for beam trawling in the area between Haisborough and Sizewell in the period 1-4 September. Local push net sites were sampled during the period 7-15 Sept and 5 October.

RESULTS:

1. 303 valid hauls using the standard 2m beam trawl and 40 push net sites using the standard $1\frac{1}{2}m$ push net were sampled.

All fish caught were identified and measured. Surface salinity and sediment samples

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were collected and surface temperature and benthos observations were made at each station. Observations on shrimp by-catch were recorded at each station. Observations on dissolved oxygen levels were made at most stations in the Thames estuary and all stations in the river Thames.

Samples of plaice were obtained in each of the main areas fished for age determination studies.

All this data is now in the process of being analysed.

- Lowestoft and Rye Bay
- A detailed survey of the distribution and abundance of 0 group sole was completed in both areas in preparation for estimation of overwintering mortality of sole (0-1 group) during late 1987 and early 1988.
- Live O group sole were held in tanks for 24 hours then deep frozen for laboratory estimation of condition factors.

MISCELLANEOUS: Samples of O group sole were collected for Richard Feil of Queen Mary's College from all the main areas fished.

GENERAL: I would like to take this opportunity to thank the skippers and crews of all the vessels taking part in the survey for their friendly help, advice and cooperation.

> C L Whiting 19 October 1987

INITIALLED: D J G

DISTRIBUTION: Basic list+

C L Whiting G J Howlett T Watson Dr R Millner R A Ayers J D Riley S P Milligan

Sea Fisheries Committees - Eastern

- Kent and Essex Sussex Southern North Eastern

Skippers - I Martin

A Rodriguez

T Cook

J Martin

P Thomas

G Coglan

A Proctor

D Watts