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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 15

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

### STAFF

- P Warren
- S Lovewell
- P Davidson
- B Spencer (Conwy)

# DURATION

Left Lowestoft 1240 h, 18 October Arrived Lowestoft 0730 h 28 October

## LCCALITY

NE Coast, Farn Deeps

## AIMS

- 1. To survey Nephrops distribution and abundance in the fishery off the north-east coast, and record by catch fish species.
- 2. To trawl for survivors of the 1975 tagging experiment.
- 3. To tag and release offshore a further 5 000 large Nephrops.
- 4. Using patch covers, to check <u>Nephrops</u> escape through various parts of the trawl.
- 5. To complete two diel series of hauls, at springs and neaps.
- 6. To compare size frequency of Nephrops taken in  $\frac{1}{2}$ , 1, 2, 3 hour tows.
- 7. To examine all cod stomachs for Nephrops.
- 8. To trawl for Nephrops around Lat 54N: Long 3E.

## NARRATIVE

CORELLA sailed from Lowestoft on the midday tide, 18 October. On arrival at the Farn Deeps, work began at dawn on the 19th with a trawl search for survivors of the previous tag release. None was found, and one trawl was damaged.

In excellent weather conditions aim 1 was completed to satisfaction at a cost of damage to a second trawl. From a total of 29 half-hour trawl stations, 20 090 Nephrops were brought aboard; of these approximately 40% were measured and sexed.

At each station, fish bycatch was measured by volume and converted to weight.

Total bycatch weight was approximately 7.5 metric tonnes; whiting were the major bycatch species.

Cod were not prominent in the bycatch but individuals of all sizes were examined for stomach contents. When Nephrops were noted, predator and prey length were recorded; 26% of cod examined contained Nephrops.

On a day of strong winds (24 October) the ship put into the Tyne at midday for repair to a damaged warp guiding roller and left again at midnight to trawl Nephrops for tagging. 825 large individuals were claw tagged and released offshore.

Excellent weather continued until the 27th when the dawn weather and weathercast were poor so the final two tows were abandoned and CORELLA returned to Lowestoft, docking at 0730 h, 28 October.

Peter Warren 24 November 1977

SEEN IN DRAFT: JEMB, RCN

INITIALLED: AJL

DISTRIBUTION:

Basic list+ P Warren S Lovewell P Davidson

B Spencer