

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

1991 RESEARCH VESSEL PROGRAMME

REPORT: CHARTER DOUBLE-BEAM TRAWLER (BRIXHAM)
(Provisional: not to be cited without prior reference to the author)

STAFF: M R Vince
B F M Harley

DURATION: 29 September-6 October

LOCALITY: Western English Channel

AIMS:

1. To carry out a trawl survey for sole, by repeating the standard grid of station positions.
2. To collect length distributions and otolith samples of sole, monk, plaice and lemon sole.
3. To collect samples of *Bryozoa* and *Hydrozoa* from all hauls on which they occur for later examination by the shellfish group for scallop spat.
4. To collect details of all crab (*Cancer pagurus*), lobster and crawfish.

NARRATIVE:

Staff travelled to Brixham by road on 28 September. The following day (Sunday) sampling gear was put aboard and in the afternoon the MAFF-owned 4 m beam-trawls were taken from RV CORYSTES in Tor Bay. After taking fuel, water and provisions, CARHELMAR sailed at 1100 h on Monday 30 September to commence the usual grid of trawl stations. On the morning of 3 October, Brian Spencer (Conwy) was collected from Brixham so that he could carry out a detailed examination of the benthos catch taken on hauls made that day. The survey was completed by mid-day Sunday 6 when CARHELMAR docked in the River Dart so that gear and beam-trawls could be unloaded. Staff returned to Lowestoft the same day.

RESULTS:

1. The survey grid, of 48 half-hour tows, was completed in addition to eight other tows of the same duration. The mean cpue (numbers per hour) for sole was approximately double the 1990 catch rate and is now at a similar level to the recent 7-year mean for this survey. This change is almost entirely due to the relative strength of the 2-year-

old fish (1989 year class), although at present 20% of these are under the minimum landing size.

2. All commercial species of fish were measured and many of the others were also measured when possible. Stratified samples of otoliths were taken for sole (323), plaice (209), lemon sole (60), and 'monk' (20). Catch rates for plaice (cpue) were down compared to last year; 35% by number and 40% by weight. This decline is the third year running but is mainly due to the lower numbers of recruiting fish (1-3 year olds) compared to the very high numbers in 1987 and 1988. Catch rates for 'monk' continue to be very low at about 33% of the 1985-88 mean for this survey. The cpue (numbers/hour) for lemon sole is little changed from 1985-88.
3. A total of four samples of *Bryozoa/Hydrozoa* was collected. The only example that featured regularly was the hydroid *Nemertesia antennina*.
4. A total of 46 crabs (*Cancer pagurus*) was measured, sexed and examined for damage, and 28 scallops (*Pecten maximus*) were measured.
5. A quantitative examination of the benthos catch was made on 6 hauls.

Our thanks go once again to the skipper and crew for making CARHELMAR available and for their continuing support for this survey.

M R Vince
15 October 1991

SEEN IN DRAFT:

INITIALLED: JWH

DISTRIBUTION:

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