

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

1970 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 12A

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

STAFF

P O Johnson
P D Wallace
G Howlett
A M Watson
D Wright (Fleetwood)

DURATION

Left Lowestoft 1100 hours 30 November

Arrived Dover 1900 hours 6 December

All times are British Standard Time

LOCALITY

Wash, Southern Bight, English Channel

AIMS

1. To carry out an echo-survey for pelagic fish shoals in the Wash, Southern Bight and eastern end of the English Channel using 30 kHz and 100 kHz echo-sounding equipment, the latter with cycle counting and recording unit attached.
2. To attempt shoal identification using an Engel mid-water trawl, and obtain samples for routine biological studies.
3. To make contact with CLIONE on 4 December to co-ordinate CORELLA's fishing activities with sector-scanning work.
4. To deep freeze any small gadoids caught (less than 20 cm long) for Mr A Jones.

NARRATIVE

After leaving Lowestoft on 30 November CORELLA proceeded to the Wash area to carry out an echo and fishing survey for sprat shoals. This was completed later on 1 December.

The vessel then steamed overnight to the Southern Bight where the survey for herring shoals commenced on 2 December to cover the Galloper Deep Water, Hinder-Sandettie region. A severe SW'ly gale on the night of 2/3 December resulted in very slow progress through the Straits of Dover and it wasn't until later on 3 December the vessel was able to effectively

continue, having by then reached the Dieppe region. Conditions improved on 4 December, when the survey covered the Bay of the Seine and offshore from there. The region between Beachy Head and the Straits of Dover was surveyed on 5 December, but work was terminated on 6 December due to a SW'ly gale which caused CORELLA to seek anchorage in Deal Roads, where she remained until proceeding to Dover later that day, berthing at 1900 hours. The scientific staff left the following morning to return home by train.

RESULTS

1. The Wash survey showed shoals commencing to aggregate into economically exploitable patches within the main estuary, particularly in the vicinity of the Burnham Ridges. The sprats caught were small, showing a strong modal length at 9.0 cm. This information was passed by radio-telephone to the office of the District Inspector, Grimsby.
2. The Southern Bight and eastern end of the English Channel showed very little echo-trace over the usual herring spawning grounds, a few pelagic shoals were located between the West Hinder and Fairy Banks, but the Sandettie, Vergoyer and Ailly grounds showed very little. The only patch of spawning herring located were in an area some 16-17 nautical miles WNW from Cape D'Antifer, off the Bay of the Seine. These were being intensely fished by a fleet of about 40 Dutch and French bottom and a few mid-water trawlers. A sample of these herring were caught and this showed they were ripe running fish mainly 25-28 cm length range. Over this period of the survey radio contact was maintained with the Lowestoft pair-fishing trawlers VALIANT STAR and BOSTON HORNET.
3. A very large concentration of horse mackerel shoals was located extending over a distance of some 10 nautical miles south from Beachy Head in 27-30 fathoms of water and 7-10 miles offshore. Fishing on these shoals resulted in a badly torn net due to the weight of fish caught, estimated at about 15 tons for a 40 minute tow. It was clear from the size and number of these shoals that there were probably many thousands of tons of fish concentrated into quite a restricted area, representing a very promising potential resource for an industrial fishery. These fish fell mainly within the 27-29 cm length range.
4. Aims 3 and 4 on the original programme were not achieved due respectively to cancellation of the CLIONE voyage and the deep freezer in CORELLA being out of action.

P O Johnson
14 December 1970

SEEN IN DRAFT

W Craig

INITIALLED

AJL

DISTRIBUTION

Basic list - P O Johnson, P D Wallace, G Howlett, A M Watson
D Wright (Fleetwood)