

LIBRARY.

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

1970 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 8

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

STAFF

P O Johnson
P D Wallace
W G Parnell
J C Francis
R V Bennett (Milford Haven)

DURATION

Left Lowestoft 1800 hours 30 June

Arrived Lowestoft 1300 hours 10 July

All times are British Standard Time

LOCALITY

English Channel - Bristol Channel

AIMS

1. To study by means of echo-sounding, mid-water trawling and feathering the distribution and density of pelagic fish shoals around the waters of Devon, Cornwall and the Bristol Channel.
2. To sample any pelagic fish caught for routine biological examination, with additional samples of sprat preserved for fat content analysis and muscle-esterase studies.
3. To take blood samples from mackerel for haemoglobin analysis.
4. To bring back some living samples of Pseudocalanus from the southern North Sea and English Channel for Mrs. Thompson.

NARRATIVE

After leaving Lowestoft CORELLA made an overnight passage in rough conditions to the English Channel and continued along the Channel the following day to reach Torbay early on 2 July.

Weather conditions were generally poor over this period, with strong south-westerly winds prevailing until 3 July.

A local fisherman (Mr Cunnington) and naval architect (Mr Sillitoe) were picked up off Brixham and accompanied the ship during its survey off the Torbay area to gain experience in the use and lay-out of stern trawling gear. They were taken off that evening by fishing boat after a successful day.

CORELLA remained in the area overnight and tried mackerel feathering between Start Point and Berry Head early on the morning of 3 July but results were poor and the survey continued to cover the area Start Point-Eddystone-Falmouth the remainder of that day. A successful mackerel feathering station was completed later that day off the Fal Estuary. Overnight passage was then made to the Bristol Channel and this region was surveyed over the next few days, with trawling and mackerel feathering stations. CORELLA then returned to the English Channel on 7 July and continued the survey eastwards off the Channel coast of England over the next two days. Weather conditions were generally very good except for fog patches over this period. An angling station was successfully made off Littlehampton (Sussex) on 8-9 July for the purpose of capturing live Black Bream. Plankton hauls were also carried out on the return journey in the vicinity of the Royal Sovereign and Galloper lightvessels. After overnight passage CORELLA berthed at Lowestoft on 10 July.

RESULTS

1. Patches of sprat shoals were located and successfully fished off the Torbay area, and the south Pembrokeshire coast, where catches of around $\frac{3}{4}$ ton per hour tow were achieved with the Engels trawl. Pelagic shoals were generally very scarce over most of the area surveyed and were often in rather localised patches. Mackerel seemed very abundant in the inner part of the Bristol Channel and off the south coast of Cornwall, whilst pilchards were also taken in the latter region. Very little pelagic trace was noted over the eastern half of the English Channel, although on the return journey some patches of good pelagic shoals were noted off the Thames estuary and Suffolk coast.

2. Samples of sprat, mackerel and pilchard were taken for routine biological sampling, whilst samples of sprat for fat and muscle esterase analysis and mackerel blood for haemoglobin studies were also preserved.

It was noted that many of the sprats taken off both Torbay and in the Bristol Channel were still in spawning condition.

3. Living samples of plankton were brought back for Mrs Thompson and a number of live Black Bream for Dr Purdom.

P O Johnson

10 July 1970

SEEN IN DRAFT: W Craig (Master)

C Snowling (Fishing Skipper)

INITIALLED AJL

DISTRIBUTION

Basic List

Dr Johnson

Mr Wallace

Mr Parnell

Mr Francis

Mr R V Bennett (Milford Haven)