

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

1971 RESEARCH VESSEL PROGRAMME

REPORT: R V CORELLA: CRUISE 1

STAFF:

D Harding
D S Tungate
S J Lockwood
A Jones
G Howlett

DURATION:

Left Lowestoft 1530 hrs 4 January
Arrived Lowestoft 1000 hrs 13 January
All times are BST

LOCALITY:

Lyme Bay and eastern English Channel and the Southern Bight of the North Sea

AIMS:

1. To survey the Channel and Southern Bight spawning grounds of the plaice using the Lowestoft multipurpose sampler.
2. To monitor continuously chlorophyll A, temperature and transparency of the sea surface water.
3. To obtain temperature profiles with a bathythermograph.

NARRATIVE:

CORELLA sailed at 1530 hours 4 January in thick fog and steamed south to the English Channel. All instruments were tested en route and the plankton sampler calibrated as soon as the ship reached deep water in the Channel. The Turner fluorometer proved to have a defect during instrument tests, which caused the transformer to burn out, and chlorophyll A estimates could not be made on this cruise.

Sampling commenced at 1500 hours 6 January in Lyme Bay and continued until 1945 hours 7 January when CORELLA dodged in to shelter behind Cherbourg breakwater in gale force winds. Sampling recommenced at 1200 hours 8 January and continued until 0550 hours 9 January when the sampler and electric towing cable was damaged. The gear was repaired and transferred to the trawl warp and sampling continued at 0925 hours. Work continued uninterrupted in the Channel and Southern Bight until the grid of 110 stations was completed at 0500 hours 13 January.

CORELLA returned to Lowestoft the same day, docking at 1030 hours.

RESULTS:

All the main objectives of the cruise were carried out except the continuous monitoring of chlorophyll due to a defective instrument.

The spawning of plaice is well under way in all three areas and the centres of spawning were determined at approximately $49^{\circ}50'N$, $2^{\circ}50'W$, 40 miles south of Lyme Bay, $50^{\circ}15'N$, $0^{\circ}30'W$, 30 miles south of Rye Bay and $52^{\circ}20'N$, $4^{\circ}E$ near the Brown Ridges in the Southern Bight. The Lyme Bay spawning centre was further south than expected on a very rough bottom at a depth of 60 metres on the edge of the deep water channel.

D Harding
19 January 1971

SEEN IN DRAFT: W C (Master)
C N S (Fishing Skipper)

INITIALED: A J L

DISTRIBUTION:

Basic list
Mar Harding
Mr Tungate
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Mr Howlett