

Not to be quoted without reference to the writer

R. V. CORELLA

Report for Cruise 2/1969

Staff

Duration

P. G. W. Jones
A. R. Folkard
D. J. Ellett
J. W. Woollorton
L. Emerson

24 January - 7 February

Aims

To measure diffusion rates and associated hydrographic features with particular reference to the plaice larval distribution in the southern North Sea by means of:-

- a) measuring rates of diffusion following a release of Rhodamine-B dye;
- b) surveying the distribution of plaice ova and larvae in the area just before and at the end of the diffusion measurements;
- c) measuring the distribution of salinity and temperature.

The above survey to be made in collaboration with R. V. CLIONE.

Narrative

CORELLA departed from Lowestoft at 1500 hours, 24 January, and proceeded to the northeast corner of the tin tow net grid when the plaice egg survey was commenced at 0100 hours, 25 January. CLIONE worked the grid from the south, which was completed by both ships at 0800 hours, 27 January. CORELLA released the Rhodamine-B dye the same day at 51°53'N 02°36'E. Between 1000 hours, 27 January, and 0430 hours, 31 January, both vessels made a number of surveys of the surface distribution of the dye patch. CORELLA also measured the vertical distribution of the dye on various occasions. Between 1740 hours and 2230 hours, 29 January, CORELLA worked a hydrographic section sampling temperature and salinity across CLIONE's current meter network between 52°09'N 02°21'E and 51°52'N 03°06'E. Winds of up to force 9 halted work at 0430 hours, 31 January. Both ships proceeded to Ostend, arriving at 1100 hours, when CORELLA took water and had repairs made to the automatic steering. After departing at 0900 hours the following day, both ships made a surface survey of the dye patch between 1400 and 1900 hours. Renewed gales then halted further work and both ships sought shelter off the Suffolk coast. CORELLA lay in the vicinity of Sizewell between 2330 hours, 1 February and 1330 hours, 3 February, during which period northwest winds of up to force 9 were experienced.

On the morning of 3 February CORELLA attempted an inshore Rhodamine survey with the remains of the dye still in the tank. However, the dye patch was soon lost inside the Sizewell Bank. During the afternoon of 3 February both ships departed for the main area of dye and a joint surface survey of the

patch was made between 1800 hours and midnight of the same day. At 1100 hours, 4 February, CORELLA commenced the second plaice egg survey at the northeast corner of the grid. Work proceeded until the evening of 6 February, when with only a few stations remaining, the survey was stopped owing to force 9 winds. CORELLA sheltered off Southwold for the night and docked at Lowestoft at 1230 hours the following day.

P. G. W. Jones
14 February, 1969

Seen in draft: A.J.L.
W.C.

Distribution

Basic list, plus the following:-

Scientific staff on cruise