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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 14

(PROVISIONAL; Not to be quoted without prior reference to the Author)

STAFF:

P O Johnson (NIC)
J Dann
M W Easey
K Medlar
B Hampson

DURATION:

Departed Lowestoft 0930 h 30 September
Docked Lowestoft 0700 h 12 October

All times are Greenwich Mean Time.

LOCALITY:

West Central North Sea (Humber-Berwick)

AIMS:

1. To continue the survey commenced on Cruise 13 for herring larvae in the western half of the Central North Sea as part of an international survey of the abundance and distribution of autumn-spawned herring larvae in the North Sea and adjacent waters.
2. To collect samples of spawning herring from the Longstone, Whitby and Dowsing areas in order to obtain information on recruitment to the Bank herring stock in the absence of a directed fishery.
3. To collect 20 plaice greater than 30 cms and bring ashore alive for use in tickler chain experiments later in the year.

NARRATIVE:

CORELLA left Lowestoft at 1030 h 30 September and made passage towards the beginning of the survey grid. A severe westerly gale developed during the day and forced anchorage in the Humber at 2100 h that night. The severe gales moderated during 2 October and CORELLA left the Humber anchorage at 1430 h to commence townet calibrations in the Inner Silver Pit at 1730 h. These were successfully completed and the first station of the survey grid was reached at 2040 h, although sea conditions were still marginal for working, due to a heavy residual swell. The survey continued over the next four days in difficult weather conditions until 1800 h 6 October, when operations were temporarily abandoned due to a major fault in the electric towing cable caused by wear and tear. This necessitated steaming to Sunderland for repairs, the vessel docking there around midnight in dense fog. A repair team was rapidly despatched from Lowestoft the following day, and repairs were successfully completed by mid-day on 8 October. CORELLA then sailed from Sunderland and had recommenced the survey by 1300 h. Stations were then worked in improving weather until

their completion at 2000 h 10 October. The vessel was then prepared for fishing and in view of the limited time remaining and poor immediate weather prospects, it was decided to concentrate on Granton trawling for live plaice the following day. Five 1-hour tows were then made on 11 October in the Skate Hole - Inner Silver Pit area and these produced adequate viable fish of the size needed. CORELLA then set course for Lowestoft at 1700 h with a southerly gale imminent. The vessel docked at Lowestoft at 0700 h 12 October after a rough return passage.

RESULTS:

1. 105 stations were successfully carried out with the 20" high speed plankton sampler, making double oblique hauls from the surface to near bottom at a speed of 5 knots.

A temperature/depth recorder unit was used with the net. Low numbers of small clupeid larvae (possibly herring) were noted on a few stations within a sector NE/SE from Flamborough Head and off Whitby. Larger clupeid larvae and post-larvae (possibly mainly sprat) were evident in small numbers over a wide area. Phytoplankton was mainly confined to stations 40-60 miles off the coast.

Surface temperatures fell mainly within the range 13-15°C to the south of Flamborough Head and 11.5-13.5°C to the north over deeper water. A marked thermocline (usually within the 40-60m depth zone) was still present in the deeper water more than 30 miles off the coast over the northern half of the survey area.

2. About 36 large plaice were transported in a deck tank to Lowestoft for Mr Scholes.

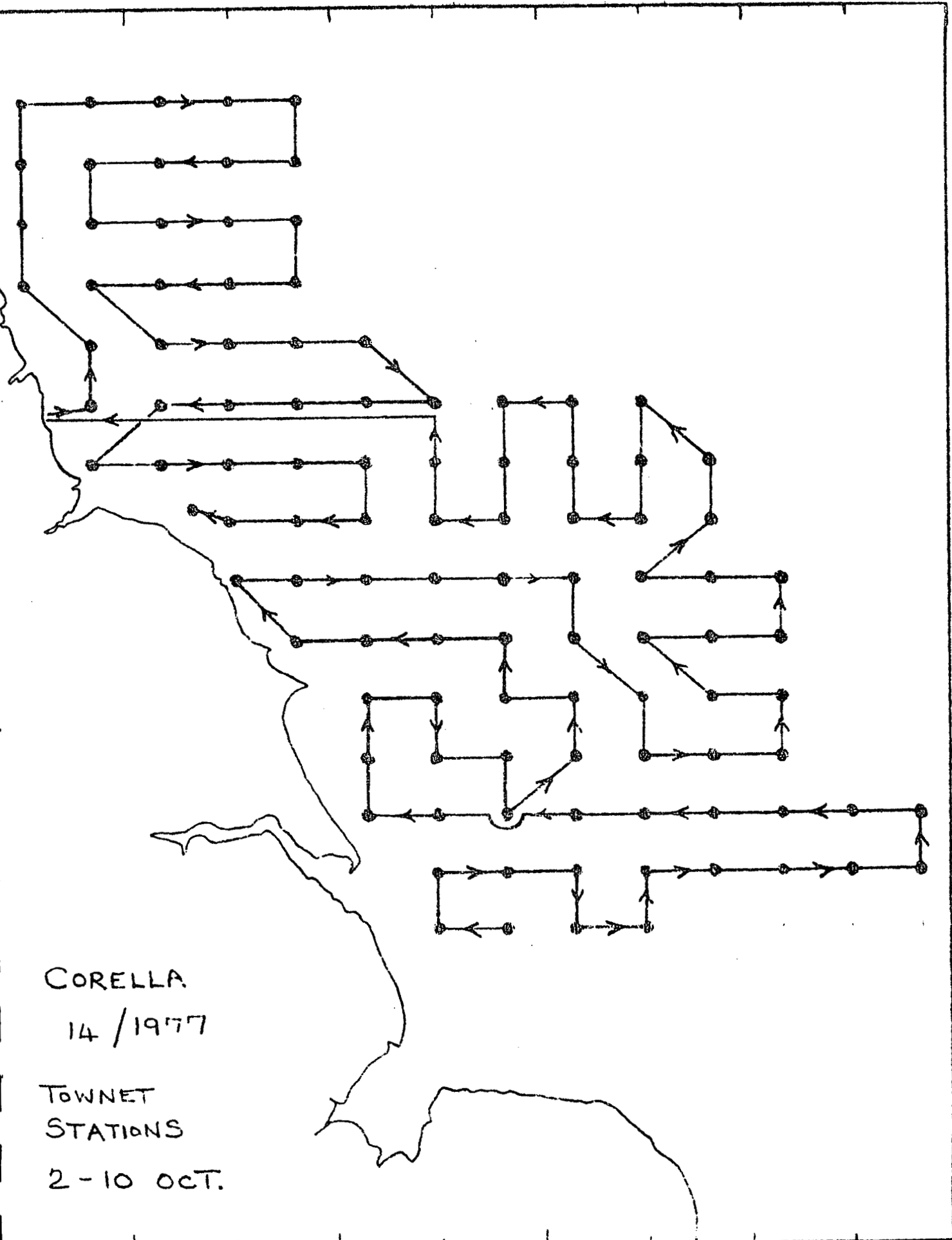
P O Johnson
13 October 1977

INITIALED: AJL

SEEN IN DRAFT: JB (Captain)
RCN (Skipper)

DISTRIBUTION:

Basic list +
P O Johnson (NIC)
J Dann
M W Easey
K Medlar
B Hampson



CORELLA.

14 / 1977

TOWNET
STATIONS

2-10 OCT.