

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

**1982 RESEARCH VESSEL PROGRAMME**

**REPORT: RV CORELLA, CRUISE 3**

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

**STAFF:**

**R G Houghton  
M R Vince  
R N Tucker  
P A Large  
D N Snowball (Hastings)**

**DURATION:**

**Left Lowestoft 1515 h 17 February  
Arrived Lowestoft 1130 h 1 March**

**All times are GMT**

**LOCALITY:**

**English Channel**

**AIMS:**

1. To carry out a TTN survey of the western English Channel.
2. To carry out a trawl survey of the eastern Channel.
3. To collect live sole for fecundity studies.
4. To collect samples of fish for the Fish Identification course (Dr Johnson).
5. To collect squid for fish feeding studies (Mr Stewart).
6. To collect sole ectoparasites (Mr Witthames).
7. To collect sole gonads for fecundity studies.
8. To collect mature thickback soles for egg identification purposes.

**NARRATIVE:**

The Tin townet (TTN) was calibrated at 3 stations south of the Isle of Wight during the morning of 18 February, the external flowmeter ceased to function and was replaced; the electrical connections to the sampler were remade several times with salad cream and silicon grease before full functioning was obtained.

The TTN grid commenced at 1617 h in Poole Bay and continued on the English side of the median line until 1045 h 22 February, with a short break due to bad weather on 21 February. Permission to sample in French waters had not been received (the plankton survey was an additional aim) and so CORELLA went into Bigbury Bay to change from the TTN to the Granton trawl.

A single trawl station was completed 12' SSN of Portland on 22 February in order to wet the gear and catch thickback soles (Aim 8). The trawl survey was begun at 0530 h 23 February off St Catherines Point, Isle of Wight, and continued in Poole Bay and mid-Channel (the only major net damage on the trip) before CORELLA went into Cherbourg for stores and water at 1730 h on the same day. The ship left Cherbourg at 1330 h on 24 February and continued with the survey grid in Baie de la Seine on 25 February (5 stations), in mid-Channel on 26 February (5 stations) and along the Sussex coast on 27 February (7 stations). A good haul of mature sole was obtained near the Royal Sovereign and this was repeated in the hope of catching more. The weather was calm on 27 February and the fishing skipper hauled the net with the ship going ahead at 1 knot (propeller pitch of 1) on most stations. The result was that the soles captured were in much better condition than is usual for CORELLA.

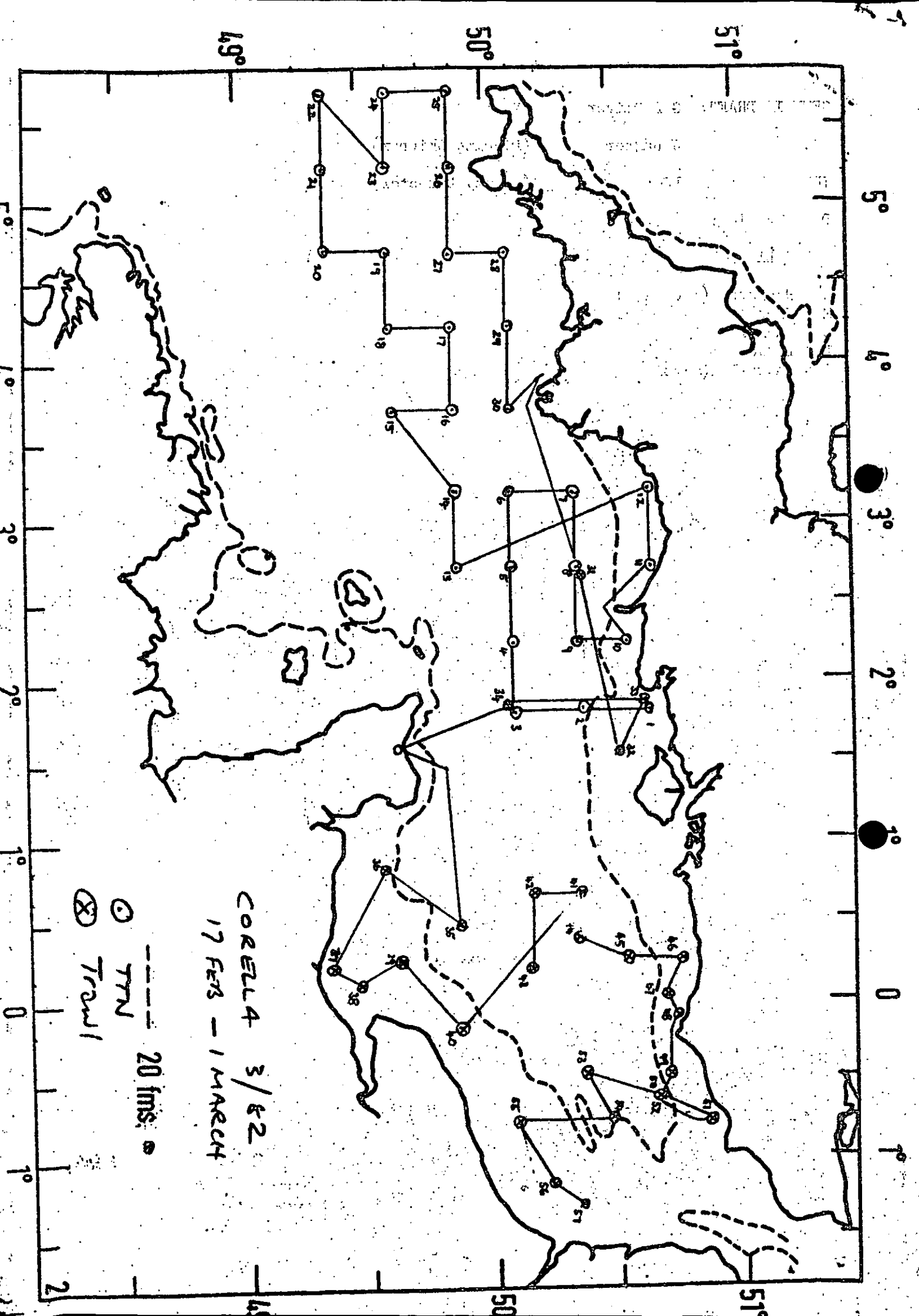
The reduced trawl grid was completed at 1800 h 28 February on the French coast off the River Somme ('Battur') and, because there was insufficient time to complete the TTN survey in the western Channel even though permission had by then been received, CORELLA sailed for Lowestoft and docked at 1130 h on 1 March.

#### RESULTS:

1. 30 plankton stations were completed in the western Channel on the northern side of the median line.
2. 24 trawl survey stations were completed in the eastern Channel (the normal 30 were reduced to 24 by omitting 2 in each depth band). The gear was a 120 foot-rope Granton, with a shrimp net blinder, wing tickler, 6" rubber beads in the bosom and short legs. All fish were sorted into species, weighed and counted; length distributions of plaice, sole, whiting and pout whiting were obtained; otolith samples were taken from plaice and sole. The dominant species were, as usual, pout whiting and poor cod (Trisopterus luscus and minutus). Good catches of plaice were obtained on a spawning ground north of Baie de la Seine (10:1 male to female ratio, males and females were ripe and running). Good sole catches were obtained in Poole Bay and along the Sussex coast. Cod, large dabs, and plaice were fairly plentiful along the French coast.
3. 39 live mature sole were returned to the Laboratory; they were of variable condition but this was improved markedly by hauling the net at the lowest ship speed possible (1 knot) and by the inclusion of Laminaria in the cod-end. The female fish were in half full and full condition, none had started spawning and none of the males were running.
4. Samples of a wide variety of species were frozen for the Fish Identification Course (sprats, herring, sole, plaice, dabs, flounders, gurnards, solenettes, thickback sole, whiting, poor-cod, cod, pout whiting, scaldfish, various rays, brill; to name but a few).
5. 10 x 0.5 kg bags of squid (Loligo) were frozen for Mr Stewart.
6. Ectoparasites were collected from 1 sole caught in Poole Bay.
7. 20 sole ovaries were preserved in Gilson's Fluid for fecundity studies.
8. 11 thickback soles were returned to the Laboratory but only 1 survived more than 24 h.

(Also: a sprat sample from Baie de la Seine was frozen for Dr Johnson and a herring sample from near Brighton was frozen for Mr Wood).

R G Houghton  
(S-I-C)



(Master)

(Fishing Skipper)

(Deputy Director)

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