

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

1979 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 1

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

STAFF

R C A Bannister  
G Howlett  
D Eaton (until 16 January)  
D Wright (Fleetwood) (until 16 January)  
S R Jones (from 16 January)  
K J Medler (From 16 January)  
P Brown (from 16 January) (Sandwich Course student)

DURATION

Left Lowestoft 1400 h, 5 January  
Arrived Lowestoft 1400 h, 21 January

LOCALITY

Eastern English Channel and North Sea

AIMS

1. To collect North Sea plaice gonads.
2. To service the current meter rigs on the JONSIS stations.
3. To carry out a T.T.N. survey for plaice eggs in the Southern Bight.
4. To bring back live fish.
5. To collect cod and haddock otoliths to supplement market samples.

NARRATIVE

After a 24 hour delay because of easterly gales, CORELLA left Lowestoft at 1400 h, 5 January. Fishing and plaice gonad collection commenced early on 6 January south of Brighton and progressed through into the southern North Sea to reach grounds near West Mud Hole by the evening of 9 January. Prolonged bad weather then set in. CORELLA dodged throughout 10 January and then, with no sign of a change, made for Den Helder to repair radars and to take on fresh water, arriving at 0900 h, 11 January and leaving at 0900 h, 12 January. The ship immediately encountered the same northerly storm conditions as before and dodged slowly north east in very heavy weather for two more days, before fishing could recommence at 0730 h, 14 January. In the two working days remaining on this part of the cruise, grounds were fished between the White Bank and Botney. CORELLA then steamed to Lowestoft to land live fish, exchange staff and pick up JONSIS gear, arriving at 0930 h, 16 January and leaving again at 1300 h, the same day.

CORELLA was in position to service JONSIS 1 early on 17 January, and located the surface buoy. However, the fresh north east wind and heavy swell ruled out any attempt at recovery and CORELLA sought shelter in Bridlington Bay. On station again early on 18 January, conditions had worsened and by afternoon easterly storms were developing rapidly. It was obvious that aims 2 and 3 would have to be abandoned and CORELLA dodged south east in very heavy weather for two more days. Conditions did not moderate until late on 20 January and CORELLA then made passage home, to secure alongside at 1400 h, 21 January, 24 hours late.

## RESULTS

1. Bottom trawl hauls were completed as follows:

<u>Date</u>	<u>Station</u>	<u>Locality</u>
6 January	1-6	Eastern English Channel
7 January	7-13	North Falls
8 January	13-17	North Falls, Gabbard, Schouwen Ground
9 January	18-20	Brown Ridges
	21-24	East of West Mud Hole
14 January	25-30	N W of White Bank
	31-33	Clay Deepes
15 January	34-40	Cleaver to Botney

In the English Channel and Southern Bight excellent catches of sole, ray and roundfish showed CORELLA to be fishing well, but except at Botney plaice, and particularly females, were scarce. The table shows the length distribution of the 160 stage IV plaice gonads painstakingly accumulated during part 1 of the cruise. Only in Botney Gut were running female plaice much in evidence. Unfortunately the egg distribution in the Southern Bight could not be investigated because of the bad weather. Otoliths were taken from all females sampled for gonads, and in addition 600 plaice otoliths were collected for age length key studies.

In the central Southern Bight the usual centre of the plaice egg distribution is found where, in modern times, the sand ridges have been considered to make otter trawling impossible. Some speculative hauls were made here in an area being worked by beam trawlers, but although these were successful in avoiding gear damage, disappointingly few plaice were caught.

- 2, 3. Aims abandoned because of bad weather and loss of time.
4. 20 plaice and 2 turbot landed live.
5. A sole age length key was taken in the eastern English Channel, 20 Southern Bight sole gonads collected, and cod and haddock age length keys collected from North Sea cod sub area 6.

## GEAR

Three fish tanks and one thermometer to write off as a result of bad weather.

R C A Bannister  
S R Jones  
30 January 1979

SEEN IN DRAFT: G Sinclair  
R C Newrick - Fishing Skipper

INITIALLED: AJL

Plaice length Distributions - Gonad fish

<u>Length (cm)</u>	<u>Southern Bight</u>	<u>Botney</u>	<u>Clay Deepes</u>	<u>All areas</u>
25	1			1
26				
27	1	1		2
28		1		1
29	1	1		2
30	1	3		4
31	2	1		3
32	3	2		5
33	2	2		4
34	5			5
35	4	3	1	8
36	4	5	5	14
37	6	4	4	14
38	2	3	5	10
39	2	5	3	10
40	4	5	3	12
41	4	6	3	13
42	1	5	6	12
43	2	2	1	5
44	1	5	1	7
45	2	1	1	4
46	1	3	1	5
47	1		1	2
48	2	2		4
49	1	1	1	3
50			1	1
51	2			2
52		2		2
53	1			1
54				
55	1			1
56				
57	1			1
58				
59	1	1		2
Total	59	64	37	160