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MINISTRY OF AGRICULTURE FISHERIES AND FOOD
FISHERIES LABORATORY LOWESTOFT SUFFOLK ENGLAND

1973 RESEARCH VESSEL PROGRAMME

REPORT R V CLIONE: CRUISE 17
(Provisional: Not to be quoted without prior reference to the author)

STAFF

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DURATION

Left Lowestoft 1000 h 26 November
 Arrived Lowestoft 1630 h 5 December
 All times are Greenwich Mean Time

LOCALITY

Southern North Sea

AIMS

To continue the work of estimating the efficiency of CORELLA'S Granton trawl.

NARRATIVE

CLIONE sailed at 1000 h 26 November for Den Helder and after dodging overnight docked at 1245 h the following day. The sonar dome was then fitted. Following a moderating forecast CLIONE left Den Helder at 0730 h 28 November. Two fish were released and successfully attacked near the Texel light vessel during a lull in the weather. Passage was made overnight to the Black Bank. The next day was spent dodging but between 30 November and 3 December 15 fish were released and trawled for by CORELLA. The Seabed Height Indicating Telemeter and the Long Life Acoustic Tag were tested on the evenings of 30 November and 1 December respectively. In response to a request from the Laboratory and as the supply of live plaice was exhausted CLIONE steamed overnight to the NE Bawdsey Buoy (close to Orford Ness) to undertake a gravel survey. A grid was worked within the area 52° 1.8' 52° 3.8' N and 1° 36' 1° 39' E. This survey commenced at 1020 h and was completed by 1500 h 4 December. The sonar dome was removed in Harwich at 1800 h and CLIONE sailed at 2230 h arriving at current meter rig XC at 0730 h 5 December. Recovery was complete by 1130 h and CLIONE reached Lowestoft at 1630 h 5 December.

RESULTS

(1) Granton Trawl Efficiency

17 fish were released and 28 attacks of which 21 were valid were made resulting in 12 captures. No movements of the fish in response to the gear were seen. The increased efficiency due to CORELLA'S new radar enabled up to 4 fish per day to be attacked.

SUMMARY TABLE

ORIGINAL POSITION

		<u>NOT</u> <u>CAUGHT</u>	<u>CAUGHT</u>
Outside doors	> 5M	3	
	5M + < 5M	4	
	TOTALS	<u>7</u>	
Inside doors	DOORS	2	
	BRIDLE		1
	WINGEND	2	
	NET	4	11
	TOTALS	<u>8</u>	<u>12</u>
	GRAND TOTALS	<u>15</u>	<u>12</u>

RESULTS

(2) The Long Life Acoustic Tag was tested satisfactorily out to 400m. Some oscillation was noted at very close range and it is suggested that a longer pulse length would aid recognition.

(3) The Seabed Height Indicating Telemeter. The transducer was tested both on CORELLA'S trawl and over her side. The signal was monitored from CLIONE. This equipment does not yet perform satisfactorily.

(4) The Gravel Survey The area already described North of the NE Bawdsey Buoy and the Shipwash was surveyed for evidence of dredging activity. Extensive evidence of trailer dredging was observed in the NW half of the survey box extending 1 mile outside the box towards the North and ending 200m short of the Post Office cable. Information was recorded on Videotape, film and polaroid.

(5) Recovery of Current Meter Array XC The rig was quickly identified by the Subsurface float and the position of the ground rope established. With the array on the bow CORELLA, towing a grapnel, was directed with the ARL scanner on to the ground wire. This exercise was successful on the first attack and CORELLA recovered the array.

THE EQUIPMENT

- (1) All acoustic tags functioned satisfactorily. 8 were ~~lost~~ (including one during the current meter array recovery).
- (2) There were no major faults with the ARL Scanner although the change of mode of the transducer caused a certain amount of 'hydraulic noise'.
- (3) The dome cover was destroyed after 196 miles. Its renewal is in hand.

SEEN IN DRAFT A H B

INITIALLED A J L

Basic List +

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12 December 1973

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