

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

1978 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 9
(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

M Greer Walker
G Arnold
J McCleave } University of Maine, Orono
J Power }
D Hughes } 4 July only
B Rivett }
C Hood
T Lee

DURATION

Left Lowestoft 0930 h 4 July)
Arrived Lowestoft 1830 h 16 July) All times Greenwich Mean Time

LOCALITY

Southern North Sea

AIMS

1. To track acoustically tagged eels with the sector scanner.
2. To track plaice fitted with telemetry tags.

NARRATIVE

CLIONE sailed from Lowestoft at 0930 h 4 July and the first current meter rig was laid at $52^{\circ}22.1'N$, $2^{\circ}01.7'E$ by 1215h. The first release cage containing an acoustically tagged eel was positioned at $51^{\circ}12.4'N$, $1^{\circ}58.7'E$ by 1430 h. The second current meter rig at $52^{\circ}01.5'N$, $01^{\circ}52.7'E$ was laid by 1700 h and CLIONE then steamed to Harwich to fit the dome. Messrs Sinclair, Hughes and Rivett disembarked and the ship left at 0015h 5 July to steam to the first release cage. This cage was not found and was presumed run down by a passing ship. A second eel cage was then set at $52^{\circ}13.3'N$, $01^{\circ}57.0'E$ at 0900 h before steaming to the Yarmouth Roads where Mr Taylor was taken aboard as replacement Navigator and repairs were carried out to the steering gear. CLIONE left at 1745 h and the second eel cage was sighted at 2018 h in the original position. However, the tag signal which was poor when the cage was laid was not seen when the cage was raised. Eel cage 3 was laid at $52^{\circ}13.1'N$, $01^{\circ}55.9'E$ at 2200 h 5 July. This fish was kept under sonar observation and was seen to escape at 2300 h. It was tracked until 2300 h 7 July when the track was terminated as sufficient information had been obtained. Eel cage 4 ($52^{\circ}18.1'N$, $2^{\circ}03.4'E$) was laid at 0900 h 8 July, the eel released after 10 h adaptation and tracked until 2115 h 9 July. Cage 5 was set in the same position at 0815 h 10 July and during the adaptation period CLIONE steamed to Lowestoft to exchange Mr Taylor for Mr Graham. The eel was released at 2056 h 10 July and tracked until 1620 h 12 July. Shortly afterwards the Decca Navigator broke down and leaks were detected in both the main feed and return hydraulic pipes to the scanner. The latter were repaired during the evening and cage 6 was set in the same position as the two previous cages, south of the

northerly current meter rig. CLIONE then steamed overnight to Corton Roads and a Decca engineer was taken aboard at 0830 h 13 July from NUCELLA. Repairs completed, CLIONE returned to the adaptation cage at 1322 h where tests were carried out with the spectroradiometer. The eel was released at 1745 h and tracked until 0130 h 16 July. During the course of this track cage 7 was set close to the Aldeburgh napes. However it was not needed and was retrieved at 0830 h the eel having escaped. The dome was removed off Aldeburgh at 0930 h and during the morning tests were carried out on the stabilisation system and it was found that there was a 3° error on the roll axis. The southerly current meter rig was inboard by 1330 h and the northerly one by 1700 h. CLIONE docked at Lowestoft at 1830 h.

RESULTS

1. Track 1 (cage 3). The eel escaped from the cage shortly after release at 2300 h 5 July and was tracked for 48 h. During this period it moved both north and south with the tides at varying depths. As with the other tracks change in depth was noticeable around slack water.

Track 2 (cage 4). The second eel was adapted in the cage for 10 h prior to release at 0900 h 8 July and tracked for 26 h. This fish moved westwards spending long periods in midwater. It escaped by 5m from a small trawler and was eventually lost on Covehithe beach.

Track 3 (cage 5). The third eel was adapted in the cage for 10 hours but was released on the surface in error at 2100 h 10 July and tracked for 45 h. The fish moved in a south westerly direction moving southwards on southerly tides but showing little movement on northerly tides. It was eventually lost close to the Shipwash.

Track 4 (Cage 6). The fourth eel was adapted in the cage for 18 h and released at 1800 h July 13 and tracked for 55 h. This fish moved westwards reaching the coast at Sizewell. It was then followed over two tidal cycles as it moved between Sizewell and the Aldeburgh ridge.

2. The second aim was not attempted.

M Greer Walker
24 July 1978

SEEN IN DRAFT: J R French - Master
R Graham

INITIALLED: AJL

DISTRIBUTION:

Basic List
M Greer Walker
G Arnold
J McCleave } University of Maine, Orono
J Power }
D Hughes
B Rivett
C Hood
T Lee