

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 4  
(Provisional: Not to be quoted without prior reference to the author)

STAFF

M Greer Walker - Pts A, B & C  
G Baxter - Pt A  
R Overy - Pts A & C  
A Pratt (Loughborough) - Pt B  
D Mummery - Pt B  
G Mummery - Pt B  
L Cox - Pts B & C  
T Lee - Pt B  
C Dennis - Pt B  
E Shreeve - Pt C  
Mrs B Thompson - Pt C  
C Garrod - Pt C

DURATION

Part A Left Lowestoft 1100h 21 March  
Arrived Lowestoft 0945h 22 March  
Part B Left Lowestoft 1145h 25 March  
Arrived Lowestoft 2358h 25 March  
Part C Left Lowestoft 0030h 26 March  
Arrived Lowestoft 0830h 5 April

LOCALITY

Southern North Sea

AIMS

To continue locomotory studies of cod (Gadus Morhua) and dogfish (Scyliorhinus caniculus) by tracking acoustically tagged fish with the sector scanner to the east of the Norfolk Banks and between two current meter rigs.

NARRATIVE

Part A

CLIONE sailed at 1100h 21 March and the first current meter rig was laid by 1830h 20 miles NE of Smith's Knoll at 2°45'E and 52°57.5'N. The second rig was laid 30 miles to the north (2°44'0E and 53°27.0'N) by 2340h. CLIONE then returned to Lowestoft docking at 0945h 22 March.

Part B

CLIONE sailed at 1145h 25 March for the Dunwich Bank. During the day tests and calibrations were successfully carried out on the scanner. The prototype micro-circuit tag was tested out to 560m without fault. The work was terminated at 2300h and during the return to Lowestoft it was seen that two

of the long-life tags on Data Buoy 1 were still functioning. CLIONE moored at Lowestoft at 2358h for the interchange of personnel.

#### Part C

CLIONE sailed at 0030h 26 March and two cages (A & B) containing acoustically tagged cod were laid for adaptation purposes 5 miles north of the southerly current meter rig by 0930h that morning. CLIONE then steamed for Ijmuiden to fit the dome arriving at 1900h and leaving at 2100h. By 0800h 27 March the two cod cages were seen to be in place and as adaptation (45h at 7.5°C) was not complete an acoustically tagged dogfish was released at 0800h 27 March and tracked until gale force winds terminated the exercise at 0800h the following morning. CLIONE was forced to dodge until the following day.

The first cod (cage B) was released at 0900h 29 March but was soon abandoned due to a poor signal and a further cod cage (c) was laid. The second cod (cage A) was released at 1050h and was tracked until 1530h 30 March. CLIONE then steamed northwards and laid two cod cages (D & E) 5 miles south of the northerly current meter rig that evening returning to the southerly rig to lay a further cod cage (F) and release the third cod (cage C) at 0915h 31 March. This fish was tracked until 1530h when storm force winds terminated the exercise. CLIONE dodged until 1700h 1 April when the fourth cod was released in the northern part of the working area (cage E); however worsening weather terminated this track at 1912h and CLIONE dodged overnight. In the morning there was little improvement and so CLIONE steamed to Ijmuiden removing the dome between 1930h-2130h. On return to the working area the weather had improved and after inspecting both current meter rigs cod 5 was released (cage D) close to the northern current meter rig at 1200h 3 April. This fish was lost during a temporary scanner failure and could not be found. The northerly current meter rig was retrieved by 1730h the remaining southerly cage (F) and current meter rig by 1930h. CLIONE steamed overnight to Lowestoft and docked at 0830h 5 April.

#### RESULTS

1. Five cod were tracked between the two current meter stations for periods of 1, 29, 6, 2 and 24h respectively.
2. A single dogfish was tracked for 23h in the same area. The micro-circuit tag was used and functioned perfectly.
3. Two current meter rigs were successfully deployed and recovered. However, the southerly rig was extensively damaged.

M Greer Walker  
19 April 1977

SEEN IN DRAFT: J R French - Master  
G F Lee - Fishing Skipper

INITIALLED: AJL

#### DISTRIBUTION:

Basic List	
M Greer Walker	L Cox
G Baxter	T Lee
R Overy	C Dennis
A Pratt (Loughborough)	E Shreeve
D Mummery	Mrs B Thompson
G Mummery	C Garrod