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

1976 RESEARCH VESSEL PROGRAMME

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REPORT: RV CLIONE: Cruise 8

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

STAFF

M. Greer Walker

G P Arnold

I L Davies

Mrs B Thompson

Mrs b Inc... P Griffiths G Baxter 11 & 12 May only

DURATION

Left Lowestoft 0645 h 11 May Arrived Lowestoft 2230 h 17 May All times are Greenwich Mean Time

LOCALITY

Southern North Sea

AIMS

To track large cod using the sector scanner and transponding acoustic tags in deeper water between Smith's Knoll and the Silver Pits.

MARRATIVE

RV CLIONE sailed at 0645 h and cod cages 1 and 2 were laid by 1308 h at 52° 56.2' Lat. 02° 32.0' Long. and 52° 57.3' Lat. 02° 31.6 Long. respectively. The first current meter rig was laid a few miles to the North by 1400 h at 53° 004' Lat., 2° 32.5' Long. The second rig was laid south of the Silver Pits by 2100 at 53 49.9 Lat.. 2° 29.4' Long. Mr Baxter was disembarked at Lowestoft at 0900 h 12 May. CLIONE then steamed to IJmuiden arriving at 1910 h that evening. Frozen fish samples and sea bed drifters were taken aboard but the hydrographic buoy was unavailable. CLIONE sailed at 2010 h. The two cod cages east of Smith's Knoll were sighted by 0833 h 13 May. At 1437 h the first cod was released after the requisite adaptation period. At 1900 h the scanner receiver failed and while this fault was being investigated the low pressure alarm sounded indicating a hydraulic failure. It was not possible to raise the package on the winch due to a total oil loss. However, 15 gallons of oil were added and while the transducer remained in the vertical mode it was possible to winch it by hand into the tube. It was found that the hydraulic supply to the after pitch ram was severed. At 2200 h course was set for Lowestoft to effect repairs and collect oil CLIONE arrived at Lowestoft at 0930 h 14 May. Repairs to the receiver

and the hydraulic supply were completed during the day and CLIONE sailed at 2045 h that day. Following a report from the coastguards Data Buoy 1 was inspected in a position east of Benacre. The light was found to be working satisfactorily. A course was then set for the Silver Pits and cod cages 3 and 4 were laid a few miles south of the second current meter rig by 0900 h 15 May at 53° 46.5' Lat., 2° 31.5' Long and 53° 45.7' Lat., 2° 31.6' Long. respectively and the operation of the tags whecked with the scanner. CLIONE then steamed southwards to cod cage 1; arriving at 1620 h. Shortly afterwards the pitch valve on the scanner failed, this was replaced by 2300 h the same night and the scanner was then functioning satisfactorily. On attempting to lower the scanner at 0700 h the following morning further faults occurred. Pitch and roll control became inoperable and azimuth response was very slow; during repairs a further pipe fracture occurred in the roll system. After consultation it was decided to return to Lowestoft. Cod cages 3 and 4 were retrieved by 1900 h 16 May but the northerly current meter rig was missing. Dragging with a grapnel continued until the night Decca error made accurate position fixing impossible at 2100 h. Dragging resumed at 0600 h 17 May but after a further 3 h no sigm of the rig could be found. CLIONE steamed southwards and cod cage 1 and the southern current meter rig were successfully retrieved by 1400 h. The remaining cod were tagged and released and a course was set for Lowestoft at 1530 h. The cruise was terminated at 2230 h 17 May.

RESULTS

- A single cod was adapted and tracked for a short period. 111 1.
- The cod cages with new rigging were deployed for periods of up to 2. one week for some of the time in heavy weather. They were all located without difficulty and retrieved. In addition, the acoustically tagged cod appeared to be in perfect condition on retrieval.
- The southerly current meter rig was deployed and recovered 3. successfully, the northern one was lost - probably trawled up.

M Greer Walker 24 May 1976

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DISTRIBUTION

Basic List

M Greer Walker G P Arnold I L Davies Mrs B Thompson P Griffiths

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G Baxter