

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CLICNE: Cruise 7

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

STAFF

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DURATION

Left Lowestoft 1300 h, 24 May

Arrived Lowestoft 0730 h, 4 June

All times are Greenwich Mean Time.

LOCALITY

Southern North Sea

AIM

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

NARRATIVE

CLICNE sailed at 1300 h 24 May and set two cages containing acoustically tagged cod for depth adaptation 23 nm SE Smith's Knoll ($52^{\circ}25'N$ $02^{\circ}34'E$ and $52^{\circ}25'N$ $02^{\circ}36.5'E$). The sonar dome was fitted in Ijmuiden the following day between 0400 and 0730 h. As adaptation was incomplete CLICNE steamed to the East Dudgeon Shoal ($53^{\circ}20.4'N$ $0054.4'E$) to collect crab larvae. Sampling with the 2 m ring net began at 0700 h, 26 May and was completed by 1000 h. CLICNE then steamed through the Banks to a position ($53^{\circ}15'N$ $2^{\circ}31.8'E$) south of the Indefatigable Field and set a third cod cage. The first cod (from cage 2) was released at 0820 h 27 May and tracked until 0700 h 28 May. Two further cages (4 and 5) were then set in shallower water ($52^{\circ}57'N$ $02^{\circ}58'E$ and $53^{\circ}005'N$ $03^{\circ}01.5'E$). The second cod (cage 1) was released at 2230 h 28 May and tracked until 1800 h 29 May. CLICNE steamed overnight to cod cage 3 and following a search found the cage 2 miles south of the original position and the fish had escaped. Cod 3 was released from cage 5 at 1900 h 30 May and was lost at 2245 h 1 June. Following a search for cod 3 a course was set for Ijmuiden arriving at 1630 h. The dome was removed and CLICNE sailed at 1800 h. The first current meter rig in the Silver Pits ($54^{\circ}04'N$ $02^{\circ}10'E$) was retrieved by 0920h and the second, further south ($53^{\circ}47'N$ $02^{\circ}44'E$) by 1430 h. CLICNE then steamed southwards to cage 4 and the fish was released at 1852 h and tracked until 2359 h, when the exercise was terminated. CLICNE docked at Lowestoft at 0730 h 4 June.

RESULTS

1. Four cod were tracked for periods of 23, 20, 51 and 4 h respectively. It was found that under the circumstances the swimbladder adaptation times to depth were approximately twice as long as had been previously supposed. However, the penultimate fish was fully adapted and showed positive selective tidal stream transport moving northwards on both northerly and southerly tides but was lost after reaching a wreck south of Botney Gut.
2. Live crab larvae were collected (Mr. Burfitt) and frozen fish samples (Mr. Houghton) and seabed drifters (Mr. Ramster) were returned from the Ijmuiden Laboratory.

M. Greer Walker
4 June 1977

SEEN IN DRAFT: JRF, RCN

INITIALLED: AJL

DISTRIBUTION:

Basic list
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