In confidence: Not to be quoted without reference to the laboratory.

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CRUISE REPORT

F.R.V. "HARA"

May 26th - June 14th, 1969

Personnel:

J.R.G. Hislop W.S. Duncan L.A. Barron G.I. Sangster (May 29th - June 3rd) C. Steven (May 26th - 28th) A.R. Ritchie (June 9th - 12th) C.C. Hemmings (June 4th - 10th)

Objective: To tag gadoid fish a) at the surface in the conventional way; and b) by divers in midwater in order that the efficiencies of the two methods could be compared.

Narrative: The scientific staff joined 'Mara' at Buckie at 0930 hrs on 26th May and traviling began on the same day. Mr. Steven unfortunately broke a finger on May 27th and had to return to Aberdeen on the following day. Various fishing grounds in the Moray Firth were worked but catches of roundfish were very small. The commercial seine net fleet from Buckie was working on Smith Bank, fishing at night only. Accordingly, 'Mara' steamed to the Bank on June 2nd; a trawl haul was made that evening and another at 0530 hrs on the next day. Both hauls were unproductive. The night was spent at anchor on the Bank and fishing with handlines was carried out during this period, producing a catch of 65 whiting and about 15 haddock. The water depth here was 22 fothoms. The first fish were caught close to the bottom but as derkness fell, whiting were taken within 6 or 7 fathoms of the surface. One or two haddock were also taken at this depth. All undamaged fish were tagged and released.

Reports were received that inshors boots were cutching reasonable numbers of roundfish in Aberdeen Bay. 'Mara' therefore moved to Abardean during the night of June 4/5th and for the remainder of the cruise trawling was carried out on the inshore grounds between Stonehaven and Newburgh. Catches in this area were also very small but they were more productive than in the Moray Firth.

Results: During the trip 37 trawl hauls, each of 40 minutes duration, were made. On 27 occasions the conend was inspected by divers while it was at depths of from 65 to 95 feet. The numbers of fish tagged were:

Tagged at Surface

Tagged Underwater

Cod 46
Haddock 52 (including 11 caught by handline) 6
Whiting 45 (all caught by handline) Saithe - 4

143
51

As catches of fish were so small, the number of fish which could be tagged was much less than had been planned. However, the techniques of codend detachment and underwater bench assembly worked well and several trainee divers were familiarised with the underwater tagging operation. The most successful underwater tagging loul was on June 11th when 16 cod were tragged during a dive that lasted for 20 minutes.