

Results

Observations were restricted to flatfish species. As was noticed last year, these were found to swim perpendicular to an advancing rope. They appeared unable to detect rope movement in the direction of its axis. This seems to indicate that the most effective region of the ropes is between 2nd coil and net where most inward movement of the ropes occurs. From the 2nd coil to the ship, the ropes from the beginning of hauling have little ^{or no} inward movement. To test the overall efficiency of the gear, 100 flatfish (Dabs and Plaice) were fin-clipped and released on the bottom by divers (at point x in Fig. 1) immediately the gear had been shot. These were all adjudged to be healthy on release and responded to stimulation by the divers. 6% of these fish were subsequently re-captured.

During this particular experiment, divers also made observations from the headline of the net. From there, few fish were seen to escape under the groundrope, suggesting that a significant loss of fish may occur just before the dan leno where the ropes rise above the bottom.

2. Model Nets

Three days diving were possible during this week owing to very poor weather and water visibility conditions. Work was nevertheless attempted in Cullen Bay, Dornoch Firth and Burghead Bay. The procedure adopted was for "SISU" the Norwegian vessel, to shoot the instrumented gear and the divers to operate from "Mara" using the rubber boat. Owing to weather conditions the "Mobell" was used only once when it was found to be too difficult for "Mara" to maintain precise station with the "SISU" for observations of the model gear to be made from "Mobell". On subsequent dives, the divers used a towed line from "SISU".

A model Granton trawl and a pelagic trawl were worked and still photographs were taken of various parts of the gear. A number of modifications to the groundrope and fishing line of the Granton trawl were suggested as a result of diving observations.

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