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IN CONFIDENCE: NOT TO BE QUOTED LITHOUT REFERENCE TO THE LABORATORY

CRUISE REPORT

FRS "EXPLORER"

March 10-31, 1970

PART 1 - March 10-20

Narrative

Owing to a delay in the ending of her refit, it was March 12 before "Explorer" reached Aberdeen and Larch 13 before she left to begin the first part of the programme. A passage was made to Shetland and a haul was done in deep water to tighten the trawl warps on the winch barrels. Haddock fishing in Shetland waters, although reported to be very good, appeared to be mainly in deep water of 70 fm or more, and a day was spent in trying to obtain suitable catches of haddock in shallower water. Hauls in 40 fm were unsatisfactory, but on the 15th a reasonably good haul was obtained in 55 fm. On the 15th and 16th, hauls were done in that position with detachable codends and on the 16th work commenced at raising these slowly. Unfortunately, the weather deteriorated considerably on the 17th. One codend was taken on board on the 18th but, due to a further deterioration in the weather, it was not possible to take the other codend on board until the 19th. As bad weather made further work impossible, the ship then proceeded to an anchorage in Fetlar, and diving observations were made on a design for a wholly collapsible codend. On the 20th the ship proceeded to Lerwick where Messrs Jones and Darron disembarked.

PART 2 - Harch 20-31

Messrs Armstrong and Dirie joined "Deplorer" in Lervick at 1100 hours on 20 March. "Explorer" revained in Lervick for repairs to the boiler until 1630 on 23 March. The vessel then proceeded to a fishing ground north of Flugga. This yielded a reasonable quantity of haddock in good enough condition to be kept alive for use in the aquarium but no flatfish were caught on this ground.

On 24 harch "Thylorer" steamed to a position off Balta to avoid IK. gale force winds and to find grounds yielding flatfish. Six hauls were made at this position using the canvas bag codend. Moderate quantities of flatfish (mainly plaice) and cod were caught as well as some haddock which were kept alive.

On 25 March it was possible to make only one haul before gale force winds from the SK caused work to be ended for the day.

On 26 March it was possible to work off Dalta until 1955 hours when renewed gale force winds made further work impossible. On 27 March "Explorer" sheltered from the gale off Fetlar.

On 28 March "Explorer" again worked grounds off Balta, and houls were done using the canvas bag codend and also a conventional codend.

On 29 March "Explorer" steamed for Aberdeen, arriving at 0630 hours on the following day.

RISULTS - PART 1

Because of the bad weather and the poor fishing on the grounds worked only 44 haddock, 37 plaice and 1 cod were tagged during the programme,

all with orange flag tags. Of interest was the presence in one of the detachable codends of 2 live <u>T. esmarkii</u> and 1 live <u>Sebastes</u>, all apparently in good condition after 70 hours in the codend and having been caught in 55 fm. Also, in one of the preliminary hauls with the canvas codend several hundred live sandeels were obtained in good condition.

RESULTS - PART 2

Details of the fish tagged and the gear with which they were caught are as follows:

Tag type	Codend type	Species		
	•	Plaice	Cod	Lemon Sole
Peterson Disc	Canvas bag Conventional codend	104 . 67	\$+A	22
Orange Flag	Canvas bag Conventional codend	103 47	529 * ANN	1846 1948
Spaghetti	Canvas bag Conventional codend	,	77	gant gant bernamar
Total		321	77	22

It was noticeable that the plaice caught with the conventional codend were much less active than those caught with the canvas bag codend.

At the end of the cruise, about 40 live haddock were taken ashore for aquarium use.

R JONES D V ARISTRONG 13 April 1970