

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

CRUISE REPORT

F.R.S. "Scotia"

7th February - 7th March, 1968.

Objectives

- (1) To take part in an international survey of the distribution and abundance of adolescent herring in the North Sea.
- (2) Hydrographic buoy work.

Narrative

"Scotia's" refit time had to be extended and the beginning of the cruise was delayed. "Scotia" sailed from Aberdeen on the afternoon of 18th February and completed thirty-three stations, in good weather, before returning to Aberdeen on the afternoon of 4th March to change scientific staff for the hydrographic buoy work. The weather broke down while "Scotia" was in Aberdeen and no more work was possible.

Hydrography

Temperatures ranged between 4.2° and 4.7°C in the southerly group of stations and between 5.0° and 6.2°C in the northerly groups. There was little difference between surface and bottom temperatures.

Trawling

(a) Herring

The catches of herring taken in each statistical rectangle sampled during the survey were as follows:

Statistical Square	B12	C12	C11	C10	D11	D10	D9	E11
No. of hauls (1 hr. duration)	1	1	2	2	2	2	2	2
No. of herring caught per haul	936	5	450	28	212	1,354	16	239
		G12	G11	G10	H12	H11	H10	
		2	2	2	2	2	2	
		215	3,230	152	159	442	2,451	
			G7	G6	H7	H6		
			1	2	2	2		
			19	720	892	40		

The majority of the herring caught were less than 20 cm long.

(b) Other Species

The catches of species other than herring were large in the northern areas ranging from $5\frac{1}{2}$ to 64 baskets per haul with an average of 17 baskets. In the southern area catches were small averaging 3-4 baskets per haul with a range from $\frac{1}{6}$ to 10 baskets. The dominant species were haddock (mostly less than 23 cm in length) which made up over half the catch at most stations, whiting, mostly under 20 cm long and cod up to 60 cm in length. Many of the cod were in a lively condition and 239 were tagged. A further 273 were examined for nematodes in the flesh.

Trisopterus esmarkii and other industrial fish species were very scarce in almost all the hauls.

G. MCPHERSON
20th March, 1968