

S.16 Confidential: Not to be quoted without
reference to the Laboratory.

3 SR 60

CRUISE REPORT

F.R.S. "SCOTIA"

26th April - 14th May, 1960.

"Scotia" sailed from Aberdeen at midday on the 27th April and made a direct passage to the Clyde. Work started there on the 29th, and continued uninterruptedly until the 4th May. A call was then made at Campbeltown for water and stores, the ship sailing on the following day to continue the programme. The work scheduled for the Clyde was completed by the afternoon of the 10th May, when Messrs. Saville and Nicoll were landed at Largs. Scotia then sailed directly to the Forth to carry out the Nephrops trawling. This was carried out in deteriorating weather conditions which made it necessary to omit the innermost trawl station. Scotia docked in Leith on the afternoon of the 13th May.

Hydrography:

Temperatures and salinity samples were taken at all stations south of Bute. Surface temperatures ranged from 9.9°C East of Arran to 8.2°C off the east coast of Northorn Ireland. In the latter area and in the North Channel temperatures showed very little variation with depth. Within the Clyde estuary the bottom temperatures were in general about 1.5° lower than those at the surface. Additional chemical and hydrographic sampling was carried out between Kintyre and Rathlin Island and from Kintyre to Corsowall Point for the Port Erin laboratory. Temperatures at close depth intervals were also taken at three positions on the Arran measured mile for Vickers-Armstrongs.

Plankton:

In all, about 150 plankton samples were taken in the Clyde estuary and the North Channel. Only a very tentative assessment of these has yet been made. This suggests a rich crustacean plankton over most of the area, with small copepods predominating in practically all the samples. In these samples from the sea-lochs, however, Cladocera were very abundant, whilst in the western entrance to the Firth, and the eastern part of the North Channel Calanus was fairly prominent. Sagitta was prominent only in the latter area, whilst the scarcity of medusae and ctenophores was very marked in contrast with comparable cruises in previous years.

Clupeoid larvae were noticeably of two size groups - very small specimens which were present in fair abundance from the Mull of Kintyre to Belfast Lough, in Kilbrannan Sound, and west of Ballantrae Bank, and a larger component in the Sanda area, south of Pladda, and in Lower Loch Fyne, East Kyle and off Cumbrac.

Trial hauls were made in enclosed and shallow waters with the Icelandic High Speed Sampler towed from the dinghy, powered with an outboard engine. The technique seems quite feasible and might prove valuable in sampling areas which cannot be worked by a research vessel.

Trawling:

Four trawls were carried out in the Clyde area. The white fish catches were very poor, consisting chiefly of small whiting, witches, hake and G. esmarkii. The best haul of all of these species was taken west of Irvine. This haul also yielded about a basket of herring with a mode at 18 cms and 7 baskets of Nephrops. A haul south-east of Pladda gave three baskets of herring of the same size group, and about two baskets of small sprats.

Echo-soundings:

A number of good plume traces were observed in Loch Long and in the Inchmarnock area. Hauls with the Young Fish trawl on these yielded only sprats.

Firth of Forth Nephrops Survey:

Stress of weather resulted in only the three easterly stations being done. At these the largest haul was 18 individuals, the other two giving only single specimens. The white fish catches in these hauls were also very poor.

ALAN SAVILLE

24th May, 1960.

Circulation:

Mr. B.C. Engholm
Dr. H.W. Graham
Dr. H.A. Cole
Dr. J.N. Carruthers
Mr. J.R. Gordon
Capt. D.T. MacCallum
Mr. R.S. Glover
Mr. F.S. Russell
Dr. C.H. Mortimer
Mr. G. Rollefson
Mr. D.W. Le Mare
Mr. G.S. Gault, W.F.A.
Mr. W. B. Hall
F.O's Leith
Campbeltown
Ayr

Capt. Bruce
Capt. Finlayson
Mr. Taylor
Mr. Jappy
Dr. Lucas
Dr. Tait
Dr. Fraser
Dr. Rae
Mr. Parrish
Mr. Gordon (2)
Mr. Saville
Mr. Nicoll
Mr. Murison
Mr. Jermyn
Library (2)
File
Spare (4)