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Document No. 19UK Research Report, 1962.C. E. Lucas and
R. J. H. Beverton1. Commercial Fishing

Catches from the ICNAF area increased in 1962, to nearly 25,000 tons, compared with just over 15,000 tons in 1961. This was mainly due to a big increase in the catches from Subarea 1 (16,000 tons compared with 7,400 tons). Catches from Subarea 2 increased, but those from Subarea 3 decreased slightly.

The increased catches of conventional trawlers fishing at West Greenland was due to an increased amount of fishing rather than an increased stock, as the catch per hour's fishing in fact fell from 0.98 to 0.94 tons.

2. Sampling

Routine length sampling was continued at Hull and Grimsby markets, where 1,500 and 2,800 cod respectively were measured, and on board factory ships, where 33,000 cod and a few haddock, redfish and pollack were measured. Details will be given in the Sampling Yearbook.

3. Research Vessels

R. V. ERNEST HOLT made a cruise to Labrador waters in late November. Seven groups of trawl hauls were made between 52°20' N and 55°30' N, most of them around the Hamilton Inlet Bank.

The best catches of cod were about 3,500 lb per hour. 372 cod were marked with yellow plastic flag tags. The Canadian hydrographic section north-east from Seal Islands was worked on 26th and 27th November.

On the homeward passage the section from St. John's to Flemish Cap was worked between 4th and 6th December. (An account of this cruise with details of the hydrographic sections will be presented at the 1963 Annual Meeting. Cod age and lengths will be published in the Sampling Yearbook).

Although she did not operate west of Cape Farewell, R. V. EXPLORER spent part of a cruise in waters to the S.W. of Iceland, investigating the distribution of redfish larvae. Results were in close agreement with those found by the Continuous Plankton Recorder (see below).

4. Environmental Studies

Continuous Plankton Recorders were towed at monthly intervals throughout the North Atlantic. In the ICNAF area, Danish, Icelandic and British ships provided over 18,000 miles of sampling (compared with 7,500 miles in the previous year).

One new route was introduced, through the co-operation of the Royal Greenland Department of Trade and the officers and crew of M.S. UMANAK. The route provides sampling between Scotland and Cape Farewell and, as far as the ice allows, northwards along the west coast of Greenland.

A special attempt was made to sample the adults of the Sebastes young stages which appear every year in large numbers in the Plankton Recorder samples from the south and south-west of Iceland. The crews of British and Dutch weather ships were asked to use a rod and line whilst the ships were on duty at weather station 'ALFA' (62°N: 33°W). A total of 120 adults were taken, mostly from a depth of 120 metres. Most of the fish were females and they yielded valuable information about food, parasites and the morphology of the young. All the fish were of the mentella type but their young were without the caudal melanophores and would previously have been described as S. marinus.

Among other topics studies from material collected in the ICNAF area have been the distribution of cold-and warm-water plankton off the Grand Banks of Newfoundland, the distribution of Ophiopluteus ramosus (of which the adult is unknown) and the distribution and morphology of Calanus finmarchicus and Calanus glacialis. As material from this area accumulates, it will be incorporated into a general study of variation in the plankton of the North Atlantic .

The survey was supported by a grant from Her Majesty's Treasury and by contract N62558-2834 from the Office of Naval Research of the United States Navy. Two Research Fellows from the United States joined the staff of the Edinburgh laboratory in 1962. The management of the survey was eased by the collaboration of members of the staff of the Icelandic Fisheries Research Institute and the Woods Hole laboratory of the U.S. Bureau of Commercial Fisheries.

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