

Provisional Programme for 1954

England

Comparative Fishing Mesh work to be carried out in 1954 will include determination of the selection points for soles and investigations into the mesh action in different types of cod-end. As it has not been possible to complete the measurement of stresses and strains on trawls in 1953, the remaining part of this programme will be done in 1954.

Experiments in electric fishing in sea water will be limited to tank work designed to establish the current equivalents for first reaction, electro-taxis, and narcosis in respect of certain species of flat and round fish.

Pilchard Since it has been established that pilchard shoals are present during the summer months in the eastern Channel, it is proposed to embark on a close study of the maturity stages and fecundity of this fish as well as to collect information on age and length. In connection with the relationship between the easterly fish and the more regularly exploited Cornish pilchard, tagging experiments are to be continued.

Plaice No full egg or larval census of the plaice spawning ground of the southern North Sea will be carried out in 1954 but two grids of Hensen egg net stations will be worked over the area in the second half of February and the first half of March. These will be made in order to secure a series of background observations on the phytoplankton available for the newly hatched plaice larvae at a time when most of them are thought to need it.

In readiness for an attempt to trace the drift of a population of plaice larvae from the spawning ground (which had to be deferred in 1953) experiments designed to measure water movements from a floating buoy will be undertaken off the north east coast in the spring and in the southern Bight in June and October.

To obtain a more exact determination of the time taken by the larvae to reach different stages in known environmental conditions and so to determine how long they have been drifting and the nature and incidence of mortality, tank experiments will be continued. These will deal with time of spawning and the main environmental variables met with in the sea.

Density estimates of I group plaice will be made in Bridlington Bay in June with the young plaice trawl in accordance with the internationally agreed plan of 1947; and in co-operation with Holland the age-census and density investigation of plaice along the Lemar-Texel line will be continued by quarterly surveys.

It is expected to conclude the benthos work of the Dogger Bank and Southern Bight plaice grounds by nine-day cruises in these areas in January, April, July and October. It is also hoped to arrange experiments to test the efficiency of different methods of transplanting plaice from European coastal grounds to the Dogger.

A start is expected to be made during the year on an investigation of the effect of weather, particularly winds, on catches and the catching of plaice by trawlers.

The usual market measurements and otolith samples will be collected at the ports.

Sole In the event of the continental coast not being cleared of mines, a survey of English sole nursery grounds will be made in order to find out if data from them can be rightly applied to the deep sea fishery. Regular observations on age and length will be made from fish landed at Lowestoft.

Plankton The regular Hensen net observations will be made each month from April to September along the Flamborough line and on the June cruise off the north east coast. In addition to this there will be a special investigation of factors governing plankton production and the related herring fishery in the area off the north east coast of England between March and May inclusive.

Hydrography As included in the English Provisional Programme submitted to the Hydrographic Committee.

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