

The distribution of cod-haddock in the Central and South-Eastern
Barents Sea, September - October 1958.

by

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When working her Norwegian IGY program of September - October 1958, the research vessel "G.O.Sars" at the same time made an echo-survey of the major part of the Barents Sea. Such echo-surveys are regularly undertaken in order to study the distribution of cod-haddock in relation to hydrographical conditions.

The result of the echo-survey of September - October 1958 is given in the enclosed figure, showing the distribution of cod-haddock in the polar front area of the Central and South-Eastern Barents Sea. The fish concentration is illustrated by three degrees of hatching, and the heavy lines are isotherms representing water temperature at 150 metres (or at bottom when more shallow) which was the depth of the major part of the fish. The thin lines indicate the different courses sailed by the "G.O.Sars".

Also in the Svalbard area concentrations of cod-haddock were registered, but in these localities we have too little experience about the fish behavior to trust the validity of our echo-surveying technique, and registrations made in these waters are not included in the chart.

As seen from the figure the best concentrations were found within the two warmer water tongues bending eastward, one close to the Finnmark-Murmansk coast and the other at some distance outside. The fish occurrences are easterly roughly limited by the 2° isotherm. During the later year fishing in the eastern Barents Sea has been poor. This may have relation to the temperature conditions. Both Soviet-Russian and Norwegian observations have shown that the temperature of the South-Eastern Barents Sea has generally been low since 1956.

The chart further indicates recordings in the front area above the Central Ridge and on the Hopen Banks, but in these localities the fish concentrations were low.

