

The Feeding Grounds of the Lofoten Cod

by

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In 1947 we started a series of annual tagging experiments on the mature cod occurring on the Lofoten banks during the spawning season (February-March). This type of cod is known to the Norwegians under the name of "skrei", and this term will also be used in the following. These experiments have given further evidence as to the migrations and feeding grounds of the "skrei". The results obtained until 1950 have previously been dealt with in Annales Biologiques, Vol. VIII (1951). The present note gives a short review on the basis of the total material now at hand.

The experiments have been carried out during the main fishing season in Lofoten. Generally the fish disappears from these banks during the first weeks of April. From the middle of the month until the end of May a considerable number of cod has been recaptured in the coastal waters to the north of Lofoten. Accordingly the "skrei" migrates northwards after spawning. The cod disappears very quickly from Norwegian waters. After the end of May tagged fish have only on rare occasions been taken in our waters before next winter. These specimens may belong to the "coastal cod" which constitutes a small percentage of the stock occurring on the Lofoten banks during the spawning season.

During the summer and autumn we get nearly all our recaptures from the Barents Sea (fig.1). A study of their distribution as to locality and time of capture gives some indications as to the migrations of the "skrei" within this area.

Some of the fish have been caught on the Bear Island banks during May and June. One group of the "skrei" migrates, therefore, directly towards these banks after having left the coastal waters. The fact that no tagged fish have been taken near Bear Island in the period July-December indicates that the "skrei" migrates to other feeding grounds during that part of the year.

Another group of the "skrei" evidently migrates in easterly direction when leaving the coastal waters of Norway. A number of the tagged cod has been captured in the south-eastern parts of the Barents Sea (to the south of Lat. 73° N.), especially in May, June and July. Later in the summer the "skrei" seems to leave these banks as very few tags have been returned during the period August-October. The tagged fish generally reappear here in November and December.

Some of the Lofoten "skrei" have been caught on the banks to the east of the Hopen Island. It is interesting to note that all specimens recaptured to the north of Lat. 75° N. have been taken in August, September and October, in which months the tagged fish are so sparsely caught on the banks to the north of the Soviet-Russian coast. This fact may indicate that some of the "skrei" occurring in the south-eastern parts of the Barents Sea during early summer, later migrates northwards towards very high latitudes. When on their next spawning migration they will again pass the banks to the north of the Soviet-Russian coast.

It is evident that the population of "skrei" spawning on the Lofoten banks, has important feeding grounds in the Barents Sea, including the Bear Island banks. The results hitherto obtained indicate that the "skrei", when feeding, undertake long and definite migrations within this area. Our results may, however, be influenced by the fact that the intensity of fishing varies during the year, and from one part of the Barents Sea to another. Future investigations may give a better knowledge as to the migrations of the "skrei" within these vast areas.

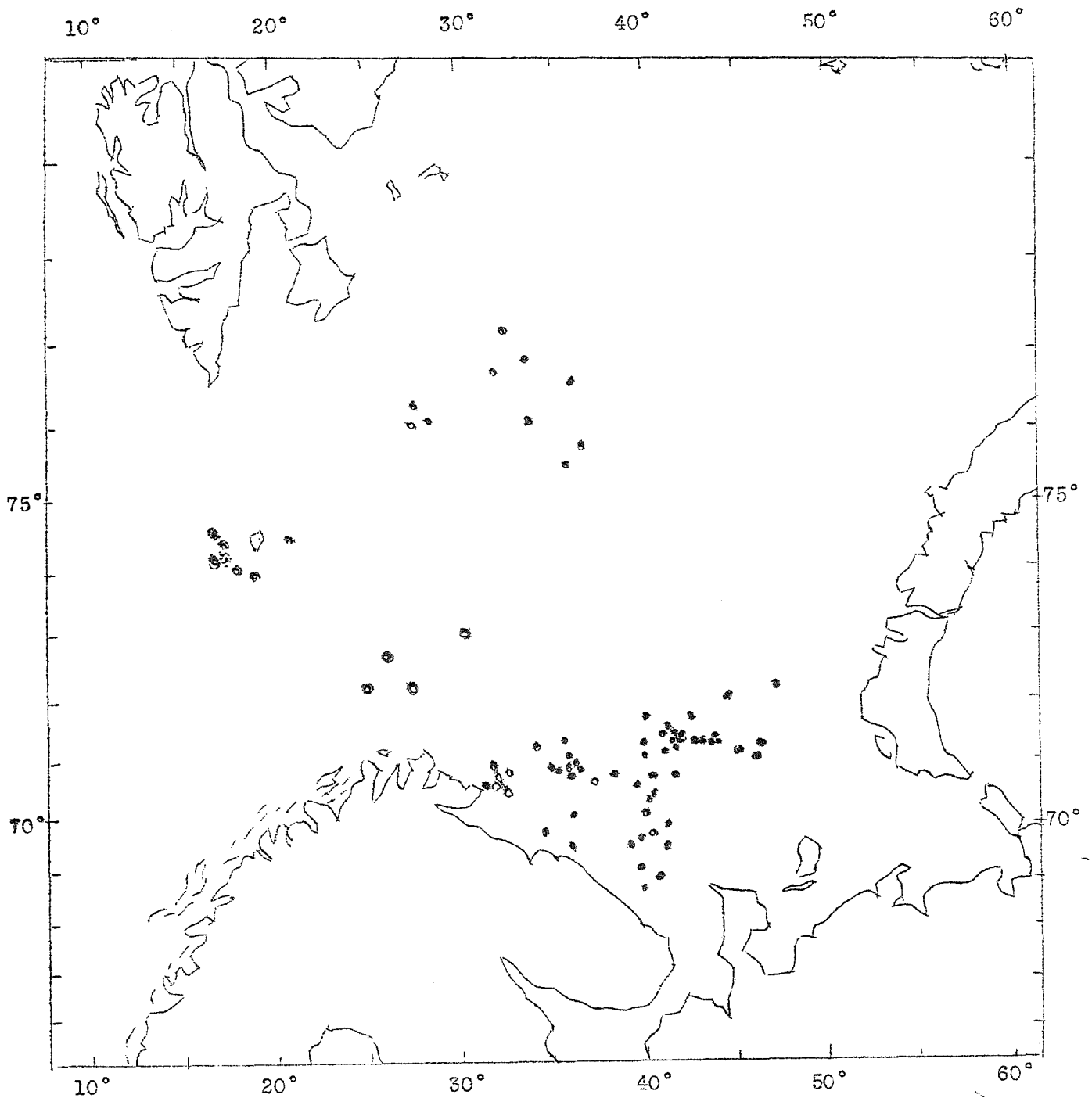


Fig. 1. Chart showing the positions ( • ) where Lofoten "skrei" have been recaptured.