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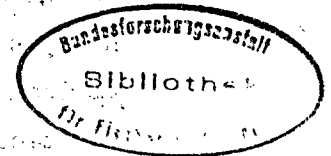
C.M. 1974/F:28
 Demersal Fish (N) Committee

Report on the English 0-group fish survey at Faroe, July 1974

by

R W Blacker

Fisheries Laboratory, Lowestoft



The third annual English 0-group fish survey at Faroe was made by RV CIROLANA during the period 6-15 July. The basic grid of stations was the same as that covered by the earlier surveys (ICES 1973, ICES 1974) and the same sampling gear (a Norwegian capelin trawl) was used; 83 stations were worked, and at each a trawl haul and temperature and salinity observations at 0 and 50 m depth were made.

Results

Hydrography: Surface temperatures over most of Faroe Bank and the eastern part of the Plateau were over 11°C (Figure 1) and even reached 12°C in places. Around the islands and over the northwestern part of the Plateau they were less than 10°C. At 50 m temperatures were warmer than 9°C, except in an area south of the islands and on the south-eastern and north-eastern slopes, Fig. 2. In general surface temperatures were higher than those recorded during the 1972 and 1973 surveys. At 50 m temperatures were similar to those found in 1972, but higher than those of the 1973 survey.

Echo intensity: The distribution of echo intensity was similar to that recorded in the earlier surveys. Highest levels were recorded on the Plateau in shallow water close to the islands, with the level decreasing towards the edge of the Plateau and over deep water. Echo intensity over Faroe Bank was generally lower than on the Plateau.

0-group fish distribution and abundance: In Table 1 catches of the major species are summarized and compared with those in the 1972 and 1973 surveys.

(a) Cod (Figure 3): Highest concentrations of 0-group cod were found in an area covering the stations close to the east of the islands and extending over the north-western part of the Plateau. The highest catch was 7000 in a tow north-east of Fuglø, but 1000 or more per tow were recorded at six other stations. Away from the main concentration on the Plateau and over the whole of Faroe Bank the catches were insignificant. The total number of cod caught in 1974 was less than in 1973 but the area of high concentration was more

extensive, and the average size of the fish was greater. The 1974 year-class of cod is probably as good as that of 1973 on the Plateau, but is very poor on Faroe Bank.

(b) Haddock (Figure 4): 0-group haddock were very widespread, occurring at 76 out of 83 stations. The highest catch on the Plateau was 2380, in the same haul as the highest number of cod. The area of highest concentration on the Plateau was closer to the east side of the islands than in the earlier surveys, and there was an extensive area of moderately high concentration over the western part of the Plateau. The total catch on the Plateau was much higher than that of 1973, but only just over half the 1972 catch, although the average length was 20 mm greater than in both the earlier surveys.

On Faroe Bank the highest catch was 2328 haddock in a 30 minutes tow. The total catch on the Bank was three times greater than in the earlier surveys and the average length was 8 mm greater.

The 1974 year-class of haddock may be a good one on both the Plateau and the Bank.

(c) Saithe: Very few saithe were caught, as in the previous surveys. This seems to confirm that the young of this species have moved inshore before July.

(d) Blue Whiting: Small numbers of blue whiting were caught on the Plateau and on the Bank. Lengths ranged from the 15-19 mm length group to the 130-134 mm length group, with the mode about 80 mm. The average lengths were 69 mm on the Bank and 61 mm on the Plateau, ie over 20 mm larger than in previous surveys, but it is possible that the largest fish were I-group.

(e) Redfish: Only 28 0-group redfish were caught during the survey.

(f) Other fish: The most abundant fish were Norway Pout (Trisopterus esmarki) and sandeels, which occurred in large numbers in the areas of highest echo intensity on the Plateau. Sandeels were also moderately abundant in hauls over the shallowest parts of Faroe Bank but few Norway Pout were caught there.

Small numbers of 0-group Clupeoids were caught at four stations close to the islands. Lengths ranged from 30 to 55 mm.

Anglers (Lophius piscatorius) were common on Faroe Bank; 445 were caught at stations on or around the bank, giving an average of nearly 18 per haul. Lengths ranged from 45 to 130 mm, with a mean size of 85 mm. Smaller numbers were caught on the Plateau, most of them along the western edge.

Fewer oceanic pelagic species, such as Maurolicus, Myctophids and Gadiculus, were caught than in the previous surveys.

Adult Lumpuckers (Cyclopterus lumpus) were taken frequently, and small quantities of adult mackerel were caught occasionally.

References

- ICES, 1973. Preliminary report on the international O-group fish survey in Faroe, Iceland and East Greenland in July-August 1973.
- ICES, CM 1973/F:9, 1-6.
- ICES, 1974. Report on the international O-group fish survey in Faroe, Iceland and Greenland waters in July-August 1972.
- Annls biol., Copenh., 29: 193-205.

Table 1. Summary of catches of major species in Faroe O-group surveys 1972-1974

	Cod		Haddock		Redfish		Blue Whiting	
	Total number	Mean length mm	Total number	Mean length mm	Total number	Mean length mm	Total number	Mean length mm
Faroe Plateau								
1972	15 560	40.5	12 910	34.4	7 188	-	-	-
1973	44 074	35.8	1 539	31.7	2 673	-	122	33.8
1974	27 222	40.6	7 262	54.7	15	-	133	61.1
Faroe Bank								
1972	429	38.2	800	48.0	9	-	606	43.5
1973	744	37.2	905	47.6	253	17.2	341	38.2
1974	82	43.5	3 008	56.0	13	-	125	69.1

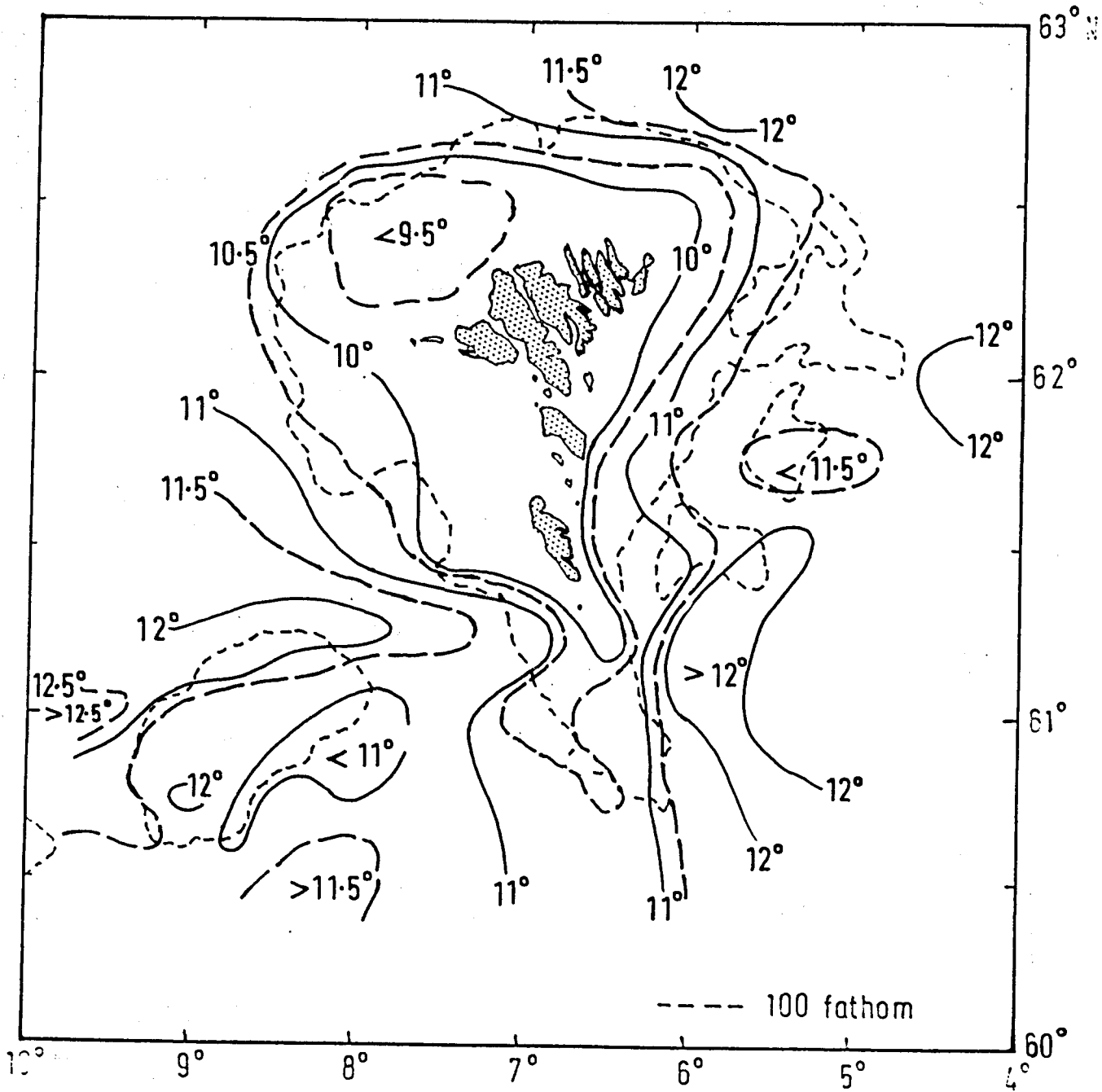


Fig. 1. Temperature °C at 0m.

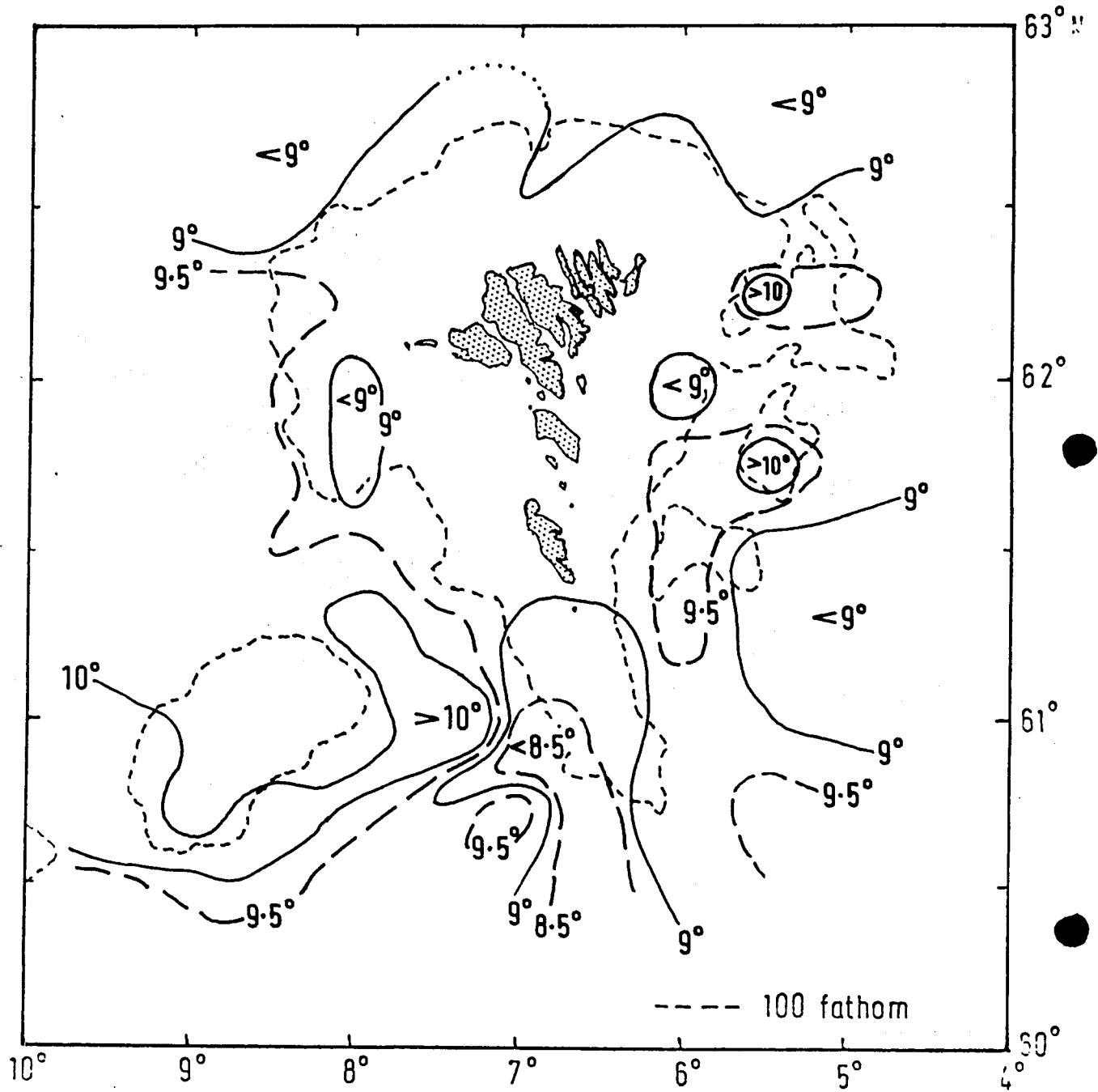


Fig.2. Temperature (°C) at 50m.

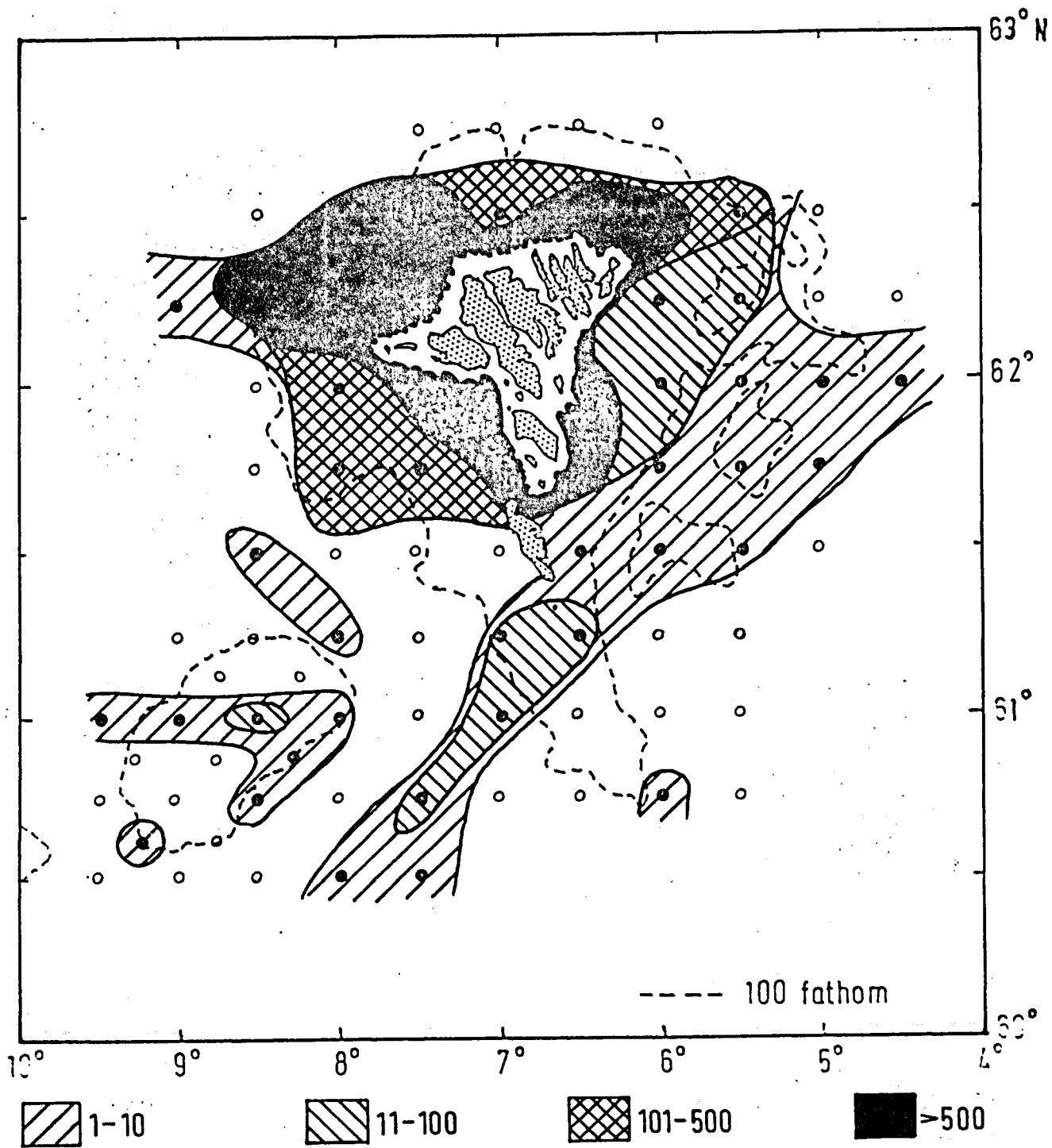


Fig. 3. Distribution of 0-group cod. (Numbers per half hour tow)

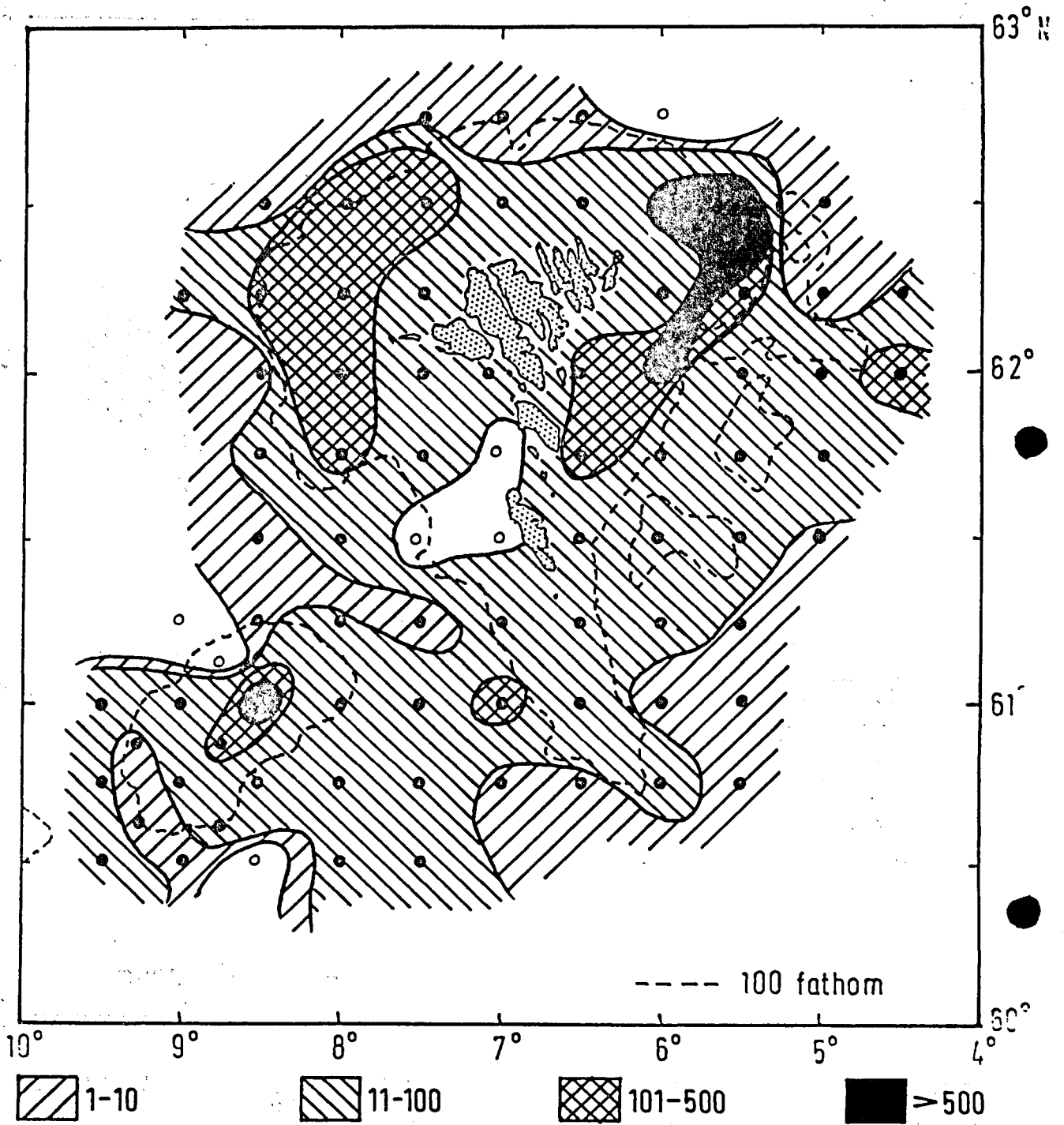


Fig. 4. Distribution of 0-group haddock. (Numbers per half hour tow).