

**INTERNATIONAL COUNCIL FOR THE
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Demersal Fish (Northern) Committee.**



RESULTS OF DUTCH COD EGG SURVEYS IN THE NORTH SEA IN 1974

by

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This paper not to be cited without prior reference to the author.

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Introduction.

For the 5th successive year (cf. DAAN, 1973) cod egg and larvae surveys have been carried out in the southern North Sea in 1974. Three surveys were performed in respectively January, February and March. The first was hampered by rough weather conditions and only few stations could be worked. The latter two adequately covered the Southern Bight spawning area and could even be extended to the Silverpit/Cleaverbank area.

Results.

Fig. 1, 2a and 3a present the numbers of cod eggs caught under 1 m² for each station during the subsequent surveys and fig. 2b and 3b give the corresponding information for larvae. During the January survey no larvae were caught. The total number of eggs and larvae present in the Southern Bight (table 1) were in the same order of magnitude as in 1973 (cf. DAAN, 1973), but by the end of March spawning had stopped here completely and small concentrations of eggs and larvae were only found to the north in the Silverpit/Cleaverbank area. The maturation of the strong 1969 and 1970 year-classes of cod apparently has not resulted in raising the spawning stock to the level observed before in 1970, which might be due to the very high fishing pressure in the Southern Bight and a corresponding low survival to the age of maturity. The total figures given for the rest of the southern North Sea (Table 1) cannot be taken too seriously, because only a relatively small area was covered during the surveys. The numbers caught at comparable stations in February during 1974 were generally higher than in 1973. Sea water temperatures in 1974 were even higher than in 1973, which was already a very mild winter and this might have shifted the distribution of spawning activity to the north, where the lowest temperatures relatively were recorded.

References

DAAN, N., 1973

Results of Dutch cod egg surveys in the North Sea in 1973.
I.C.E.S. C.M. 1973/F : 37 (mimeo).

TABLE I - Estimated numbers (in thousands of millions) of cod eggs and larvae present in the Southern Bight and in the rest of the southern North Sea during the plankton surveys in 1974.

SHIP	DATE	SOUTHERN BIGHT *)		REST SOUTHERN NORTH SEA *)	
		Eggs	Larvae	Eggs	Larvae
WILLEM BEUKELSZ	22-29 Jan.	11	0	--	--
WILLEM BEUKELSZ	18-28 Febr.	354	21	255	22
WILLEM BEUKELSZ	19-29 March	18	4	83	12

*) Area's defined as in DAAN, 1973.

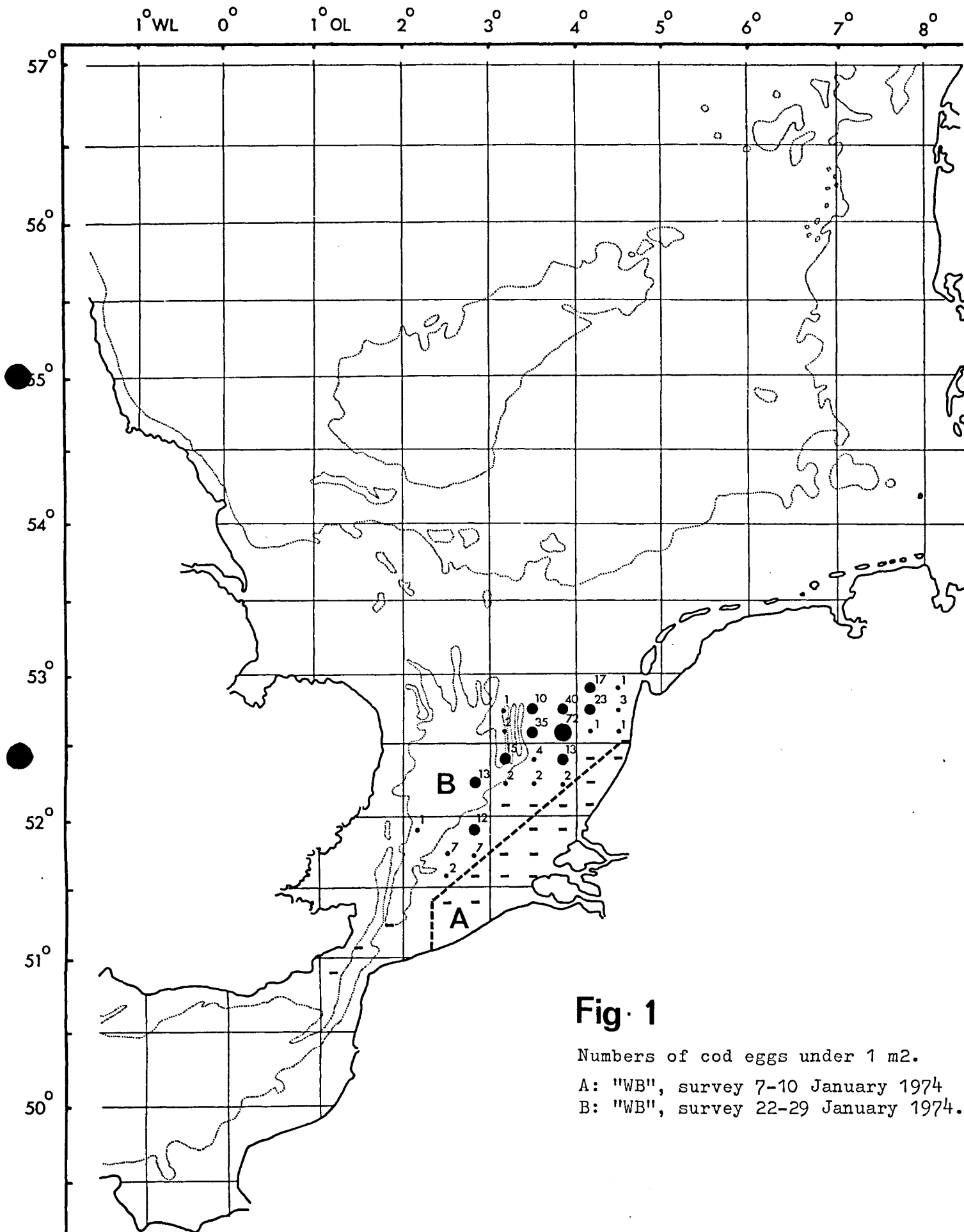
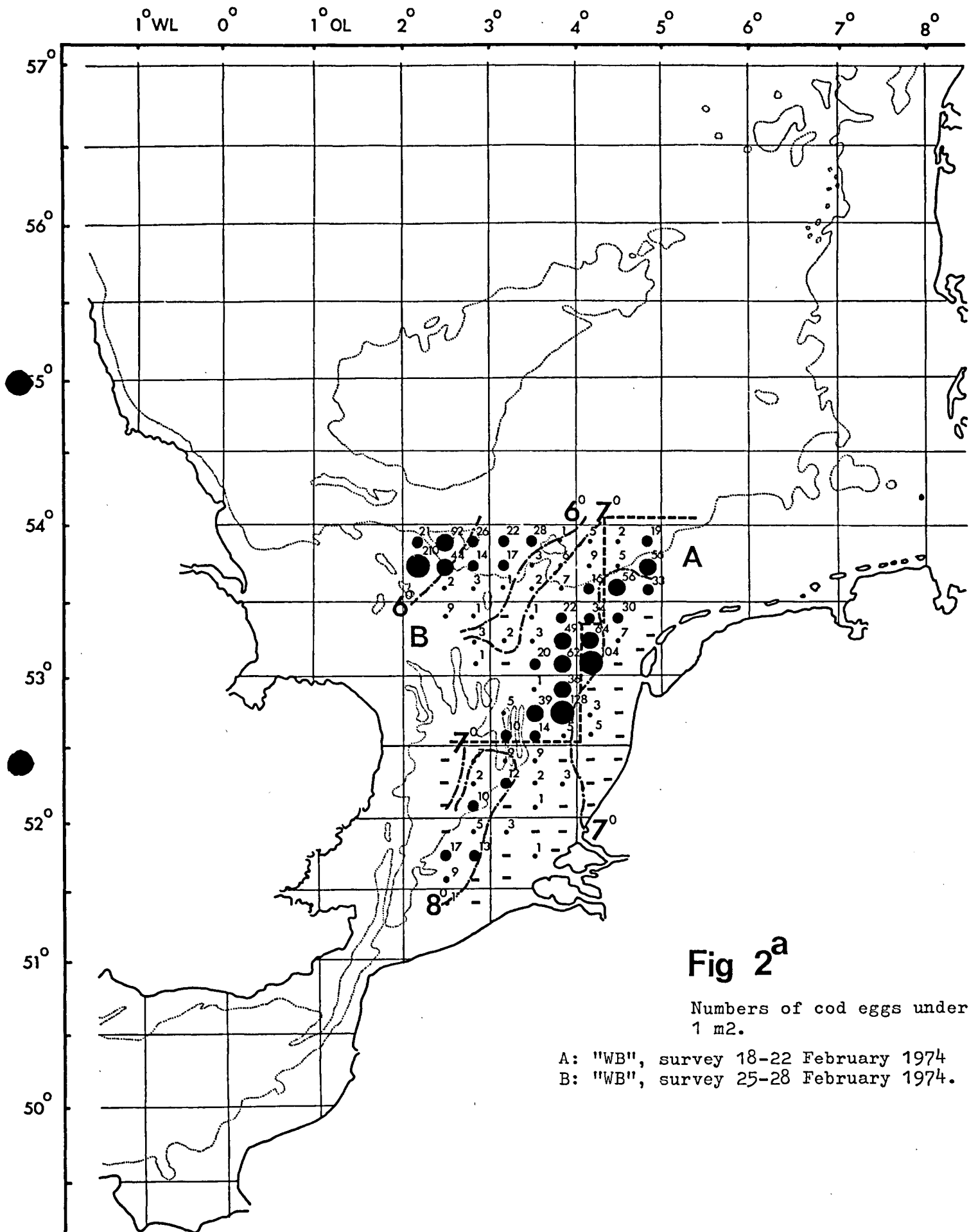
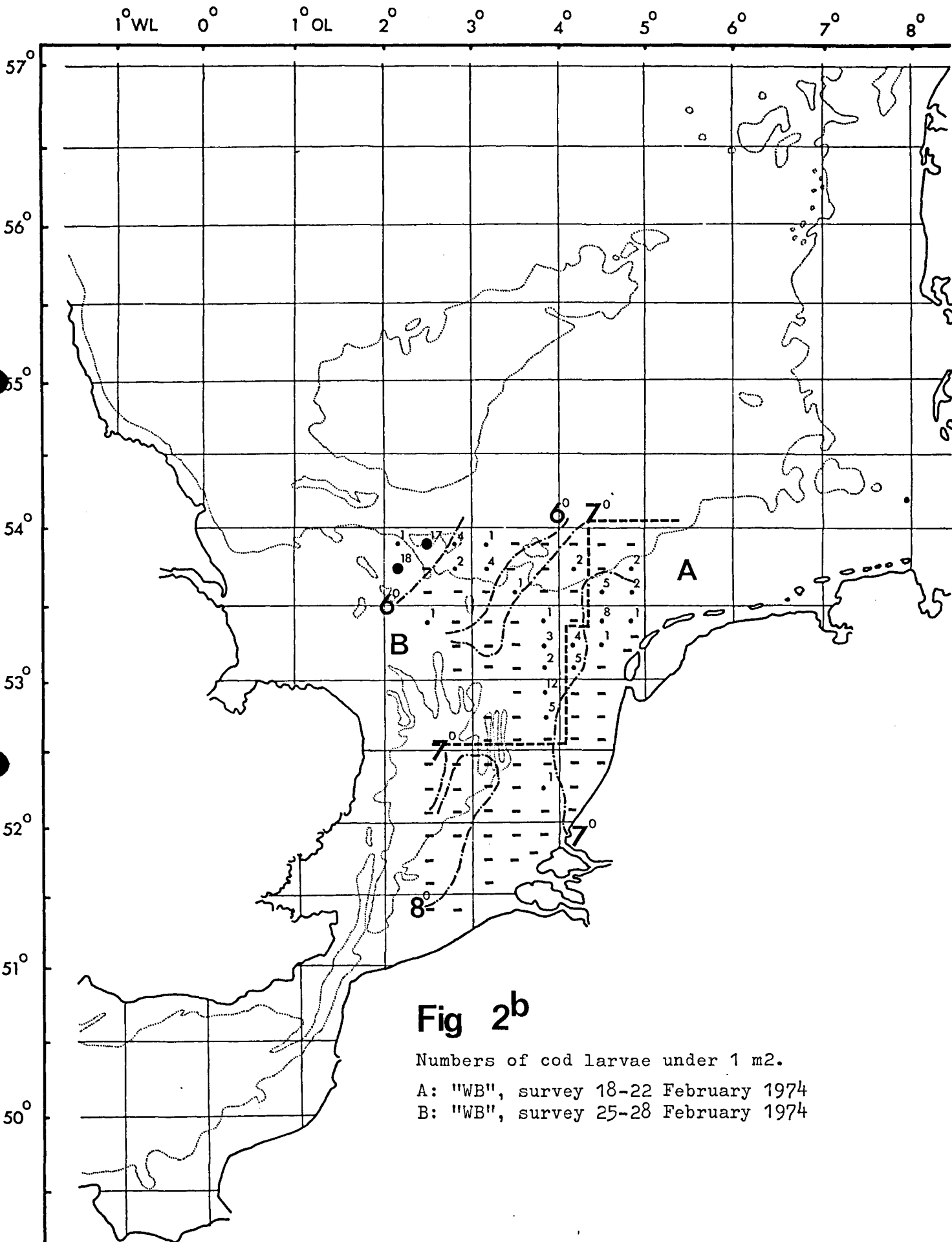


Fig. 1

Numbers of cod eggs under 1 m2.
 A: "WB", survey 7-10 January 1974
 B: "WB", survey 22-29 January 1974.





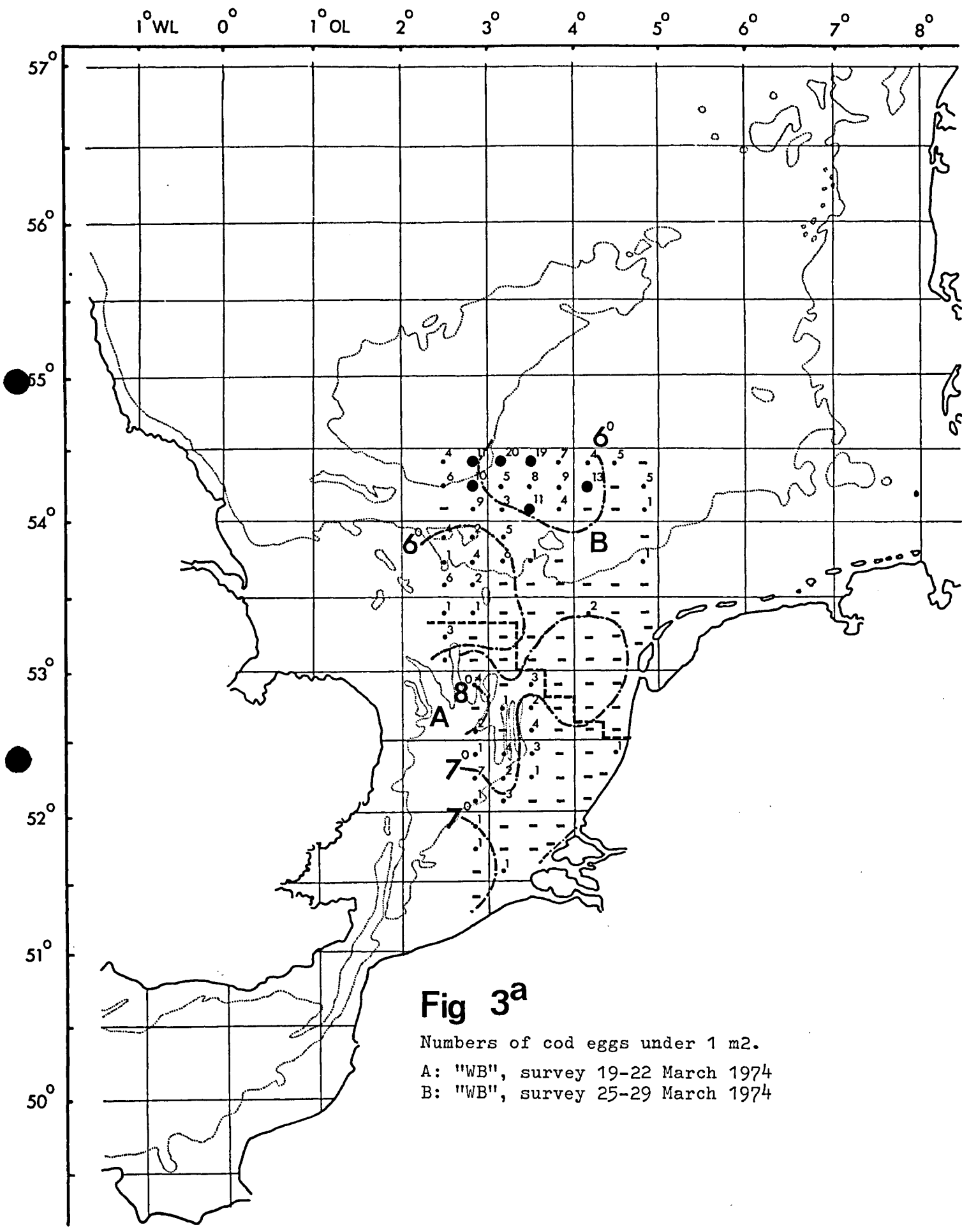


Fig 3^a

Numbers of cod eggs under 1 m².

A: "WB", survey 19-22 March 1974

B: "WB", survey 25-29 March 1974

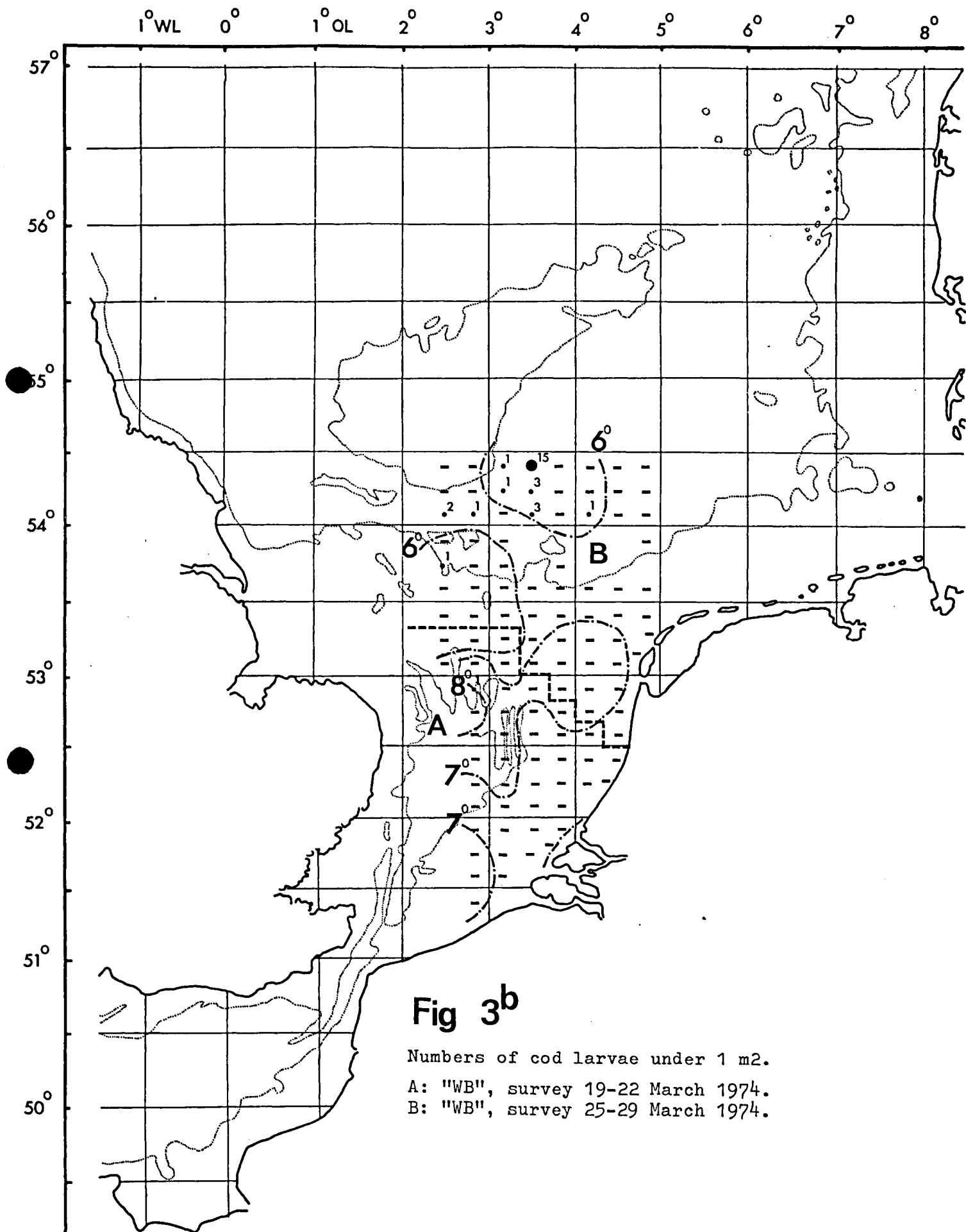


Fig 3^b

Numbers of cod larvae under 1 m².

A: "WB", survey 19-22 March 1974.

B: "WB", survey 25-29 March 1974.