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Report of larval herring catches from the cruises of R/V *Walther Herwig*
and R/V *Anton Dohrn* in March 1973 - 1976.¹

by

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During the ICNAF Juvenile Herring Surveys, in March 1973 - 1976, the night time was used for plankton sampling in the Georges Bank area. The herring larvae have been sorted out of these catches. This report shows the distribution and abundance of larval herring at that time in the years 1973 - 1976, and the length frequency distribution in 1974 - 1976.

Methods

Except the first cruise (R. V. Walther Herwig, 1973), where a 60 cm "Hydrobios Bongo" without a cylindrical net section and .300/.500 mm mesh size was used, the gear was an ICNAF standard Bongo net (.333/.505 mm). The tow procedure in all 4 years was according to the ICNAF larval herring programmes (see circular letters). In 1973 - 1975 the station grids mostly covered the Georges Bank and the Nantucket Shoals areas at 50 - 60 stations, while 1976, because of engine trouble on R. V. Anton Dohrn, only 31 plankton stations could be done.

Results

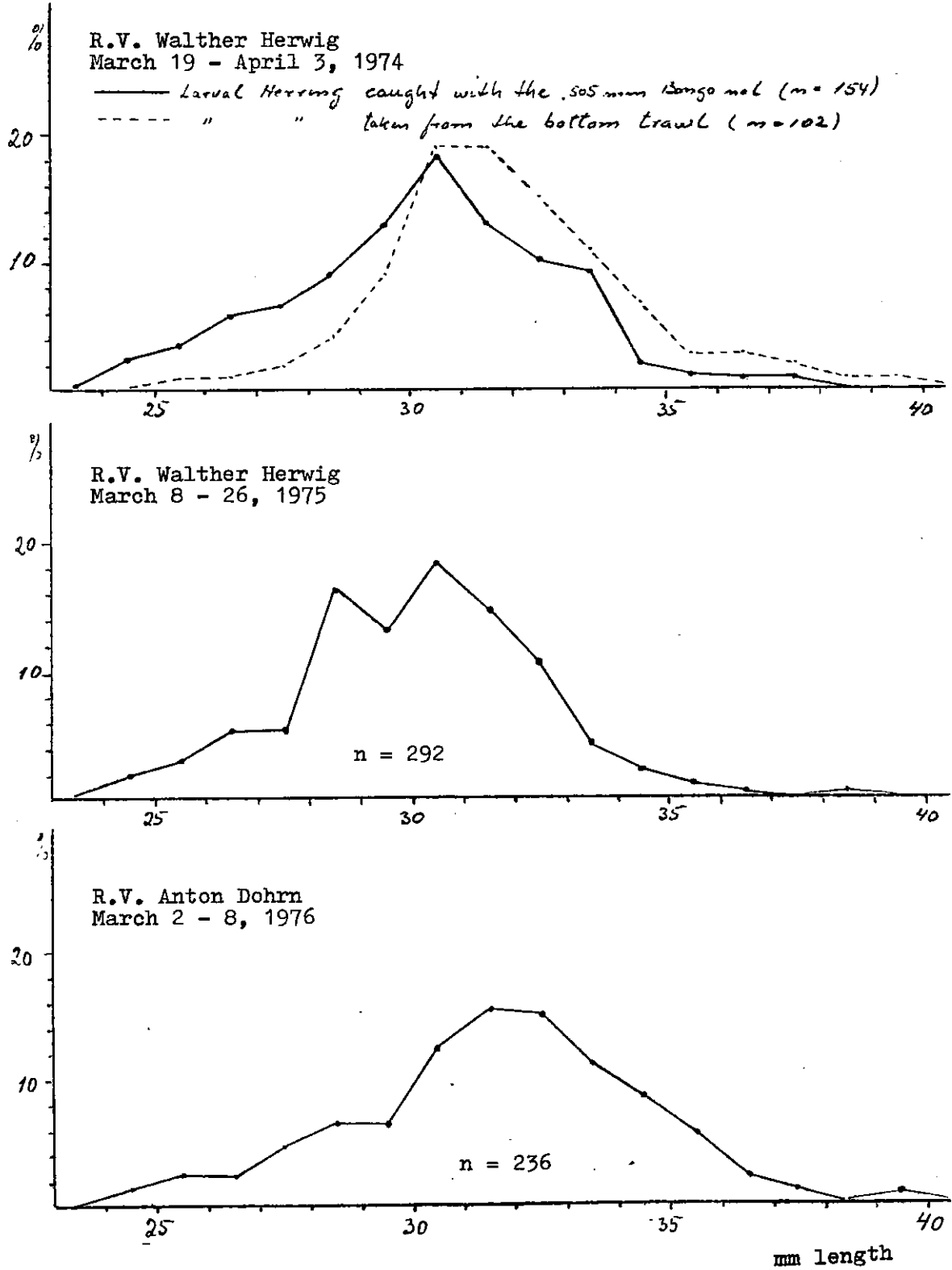
In 1973 only on few stations larval herring were found (Fig. 2). Unfortunately no samples could be

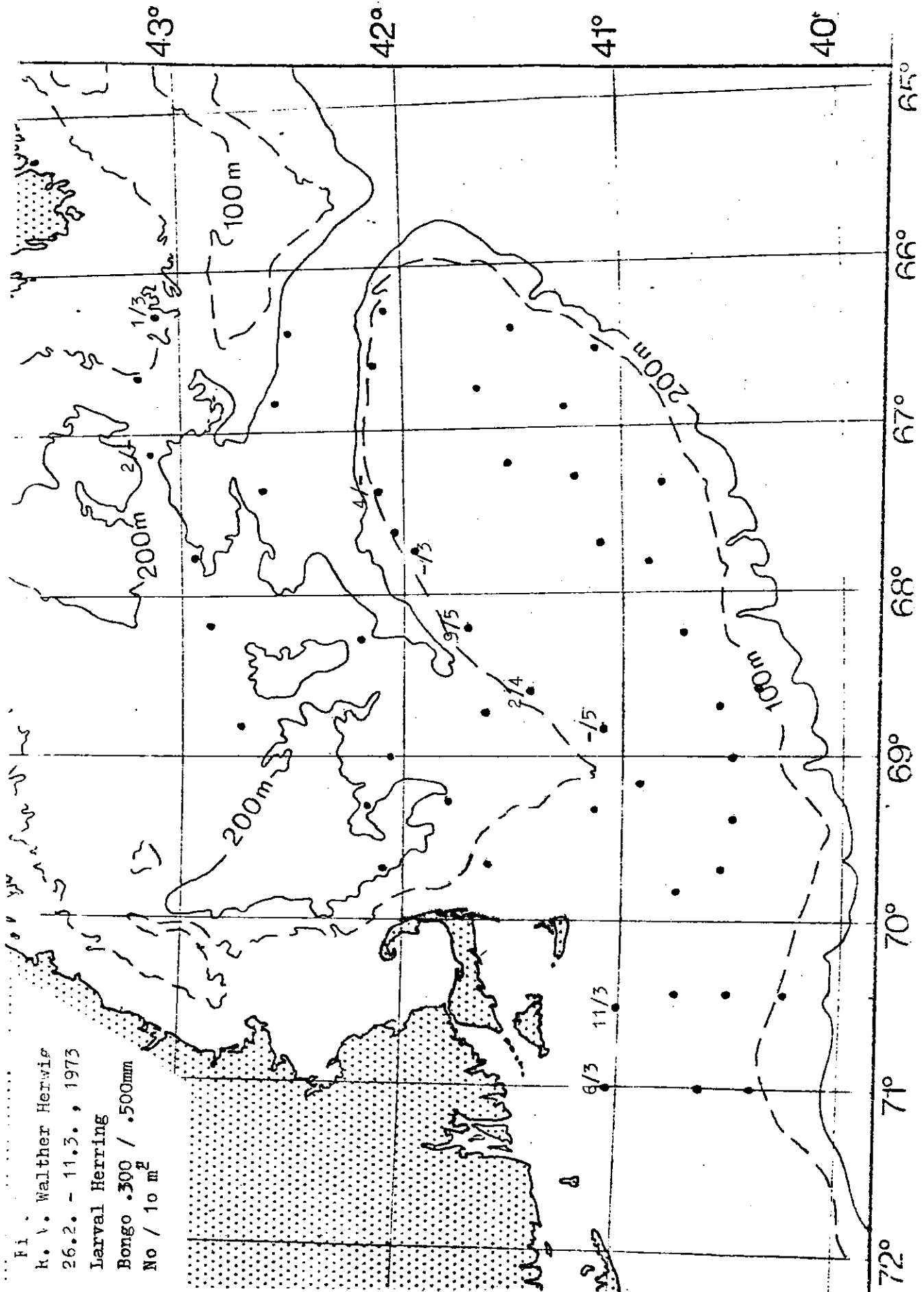
¹ Presented as Working Paper 76/IV/105 at Environmental Working Group meeting, Szczecin, Poland, April 1976.

taken at the central part of the Georges Bank, where in 1974 the highest proportion of larvae (28/10m²) was found.(Fig. 3). On the cruise of Walther Herwig 1974, 102 herring larvae were taken out of the meshes of the bottom trawl for measurements of standard length. The length frequency distribution of these larvae compared to those caught with the Bongo net is shown in figure 1. In 1975 the highest concentration of herring larvae (150/10m²) was found on the southern part of the Georges Bank.

The station grid 1976 did not cover the total area of larval distribution. The number of herring larvae in the sampling area do not differ greatly from 1975 and 1976.

Fig. 1: Length frequency distribution in Georges Bank area in March 1974 - 1976.





Fi.
 K. V. Walther Herwig
 26.2. - 11.3., 1973
 Larval Herring
 Bongo .300 / .500mm
 No / 10 m²

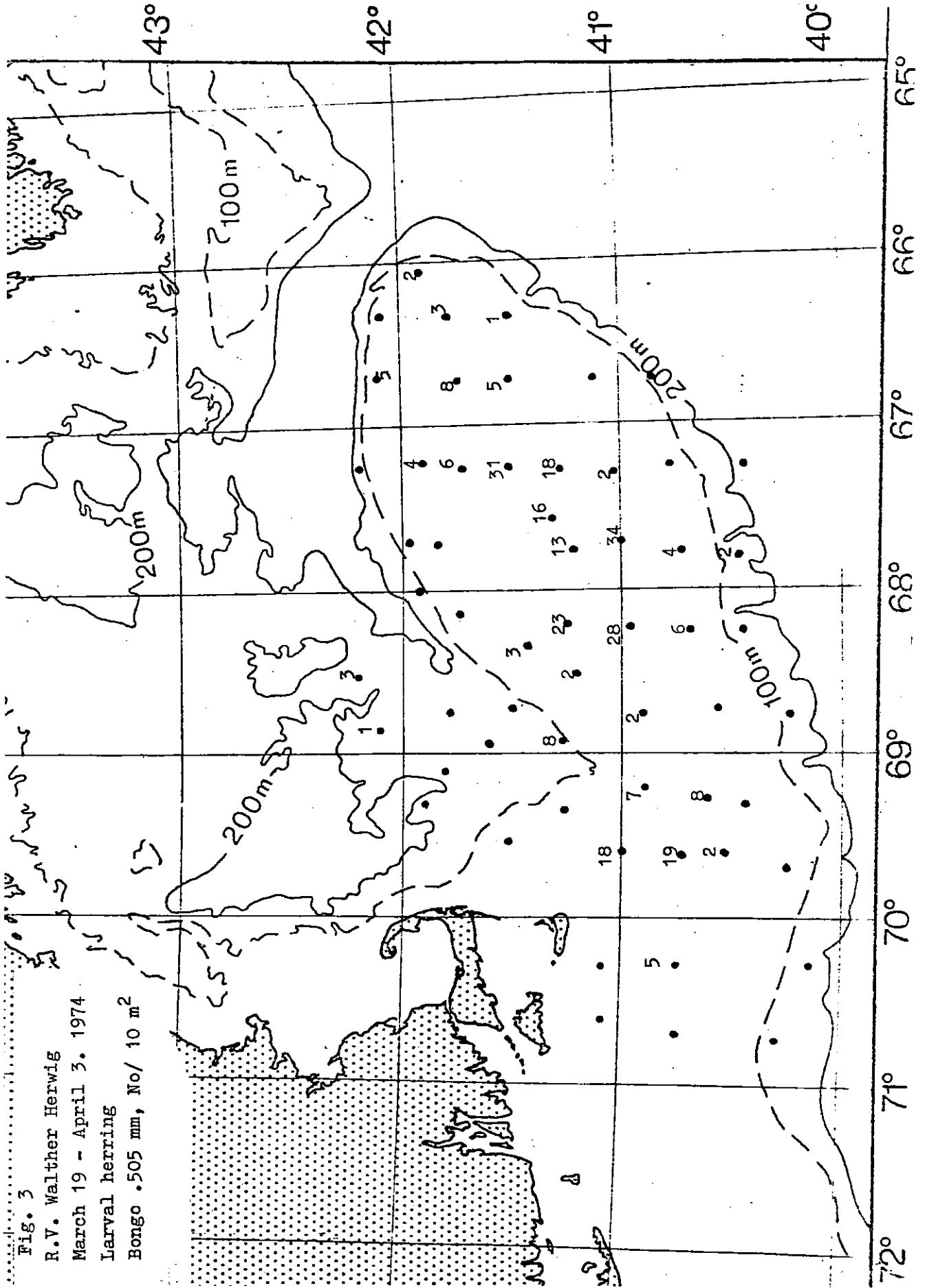


Fig. 3

R.V. Walther Herwig

March 19 - April 3, 1974

Larval herring

Bongo .505 mm, No/ 10 m²

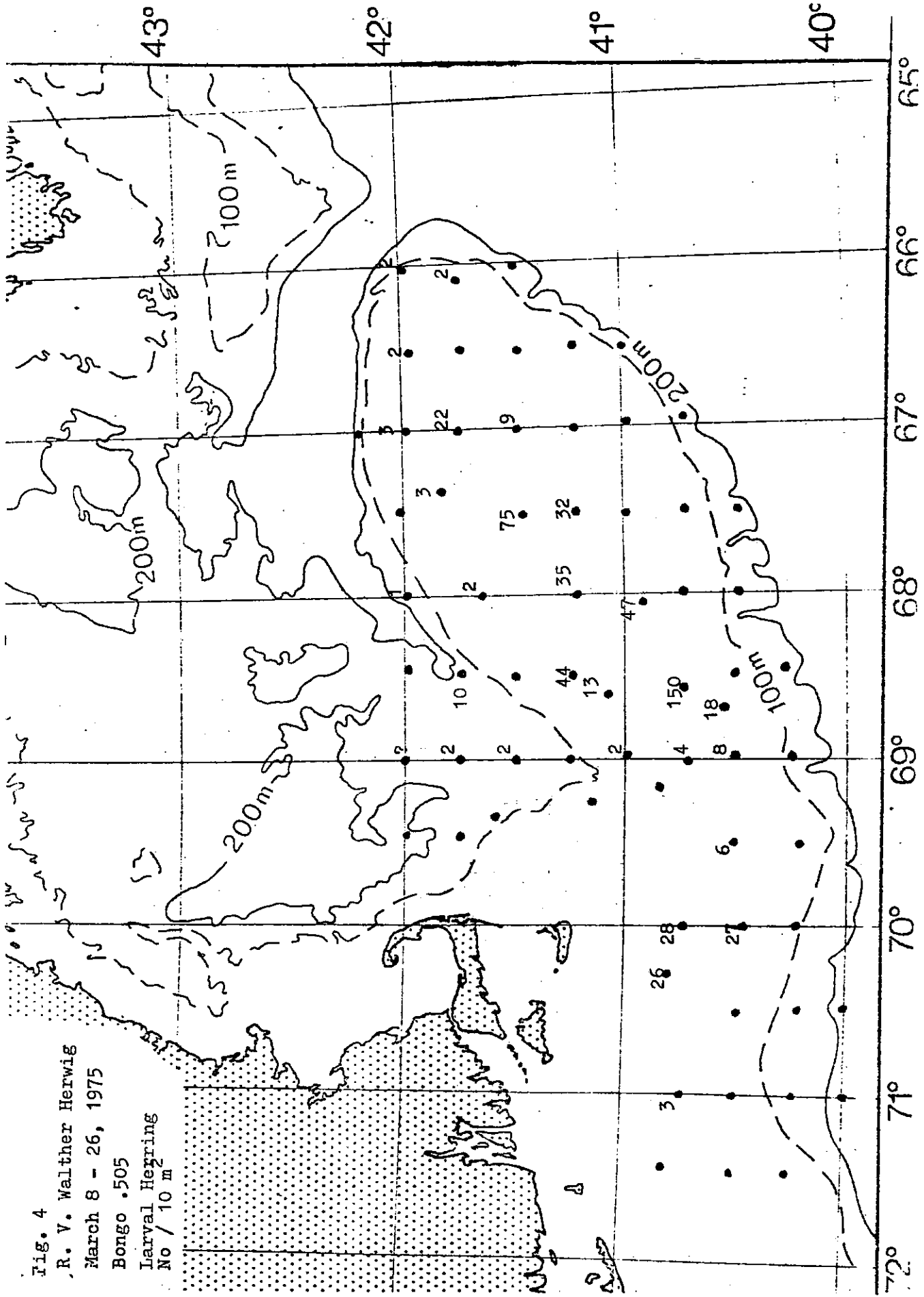


Fig. 4
R. V. Walther Herwig
March 8 - 26, 1975
Bongo .505
Larval Herring
No / 10 m

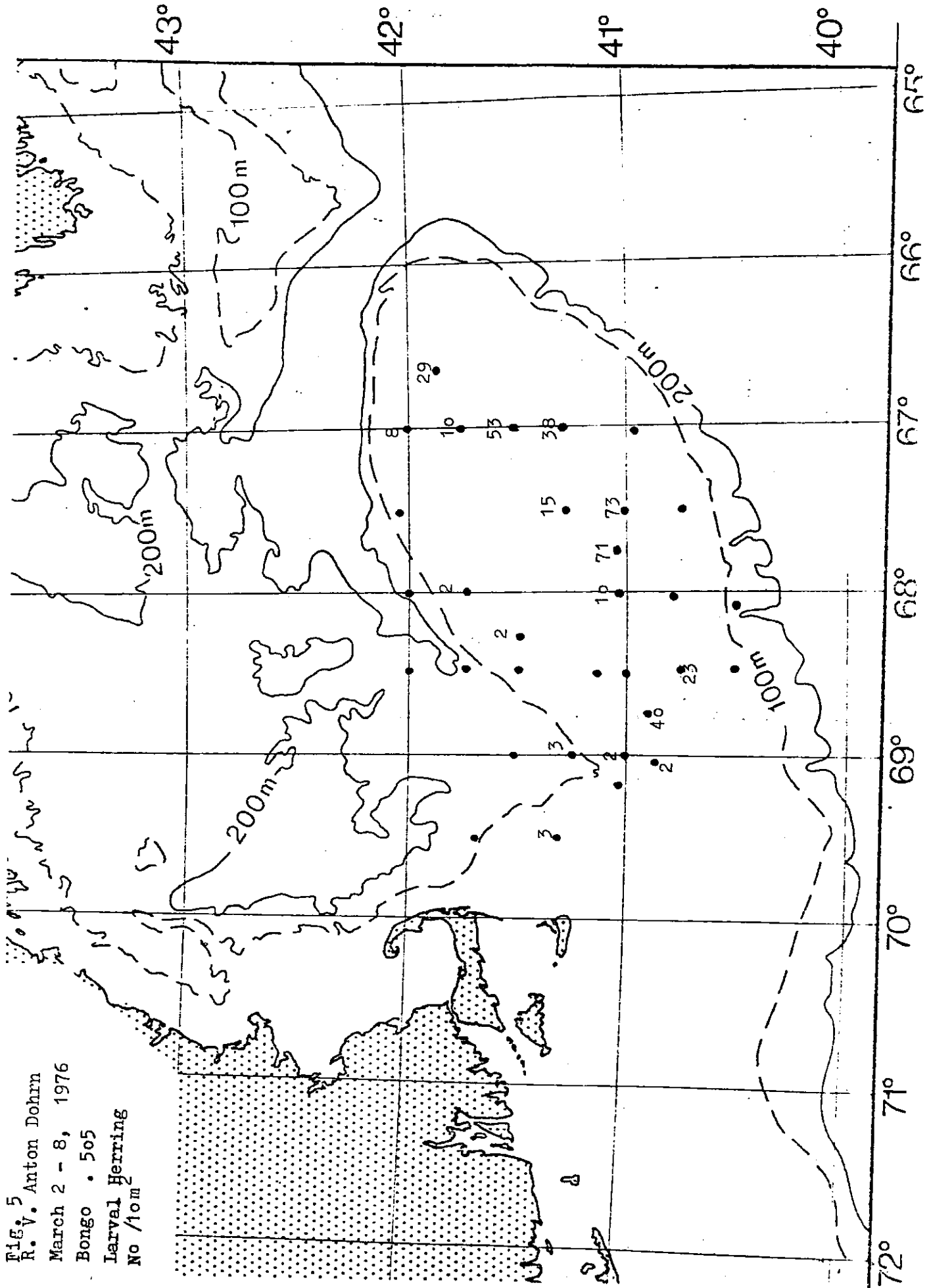


Fig. 5
R. V. Anton Dohrn
March 2 - 8, 1976
Bongo . 505
Larval Herring
No / 10m²

