

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES

Serial No. 2918  
(D.c. 9)

ICNAF Res.Doc. 73/16

ANNUAL MEETING - JUNE 1973

Preliminary results of Georges Bank - Gulf of Maine larval herring  
cruise by RV *Wieczno*, 2-28 October 1972<sup>1</sup>

by

Stefan Grimm  
Sea Fisheries Institute  
Gdynia, Poland

Introduction

In conjunction with the ICNAF Larval Herring Survey Program, the Polish research vessel *Wieczno* carried out a survey of the Georges Bank - Gulf of Maine areas during 2-28 October 1972 as part of the co-operative survey undertaken by USA, USSR, Fed. Rep. Germany, Canada and Poland. This is a preliminary report of the *Wieczno* cruise on the distribution, abundance and dispersal of larval herring. The detailed results (not listed in this report) will be pooled with those of other countries to form the basis of a comprehensive report to be presented at the 1973 Annual Meeting.

Materials and Methods

Collections were made at 130 stations (Fig. 1). At each station a double oblique plankton tow, using paired 61 cm Bongo nets (port net with 505 micron mesh, starboard net with 333 micron mesh), was made from a maximum depth of 100 m or from near bottom (10-15 m off bottom) when the station depths was shallower, at a towing speed of 3.5 knots. The nets were deployed at 50 m/min and retrieved at 10 m/min to the surface. A flow-meter was placed in the net to determine the distance towed in meters and the volume of water strained was calculated by multiplying this distance by the mouth area of the Bongo which had a diameter of 61 cm. The number of larva per cubic meter of water strained was used as a measure of the catch rate. Samples were preserved in 5% buffered formalin. Only the results of the 505 micron net are given in this report; those for the 333 micron net will be presented later for the comprehensive report.

Results

A total of 5,379 larval herring were captured in the 505 micron mesh net during the cruise. The distribution and abundance are shown in Fig. 2.

Georges Bank: Spawning is concentrated on the northern part of the bank. Significant numbers were detected at stations 83 and 90. This was apparently an additional spawning site on the western part of the Bank (stations 62 and 63) just east of the Channel.

Nantucket Shoals: Larvae were detected in significant numbers at station 26 in early October 1972, but in 1971 they appeared later in November.

Nova Scotia: In this area the larvae taken were larger than in the other areas, indicating that they may have hatched in early summer.

<sup>1</sup> Revision of Sp.Mtg.Res.Doc. 73/16 presented to Special Commission Meeting, FAO, Rome, January 1973.

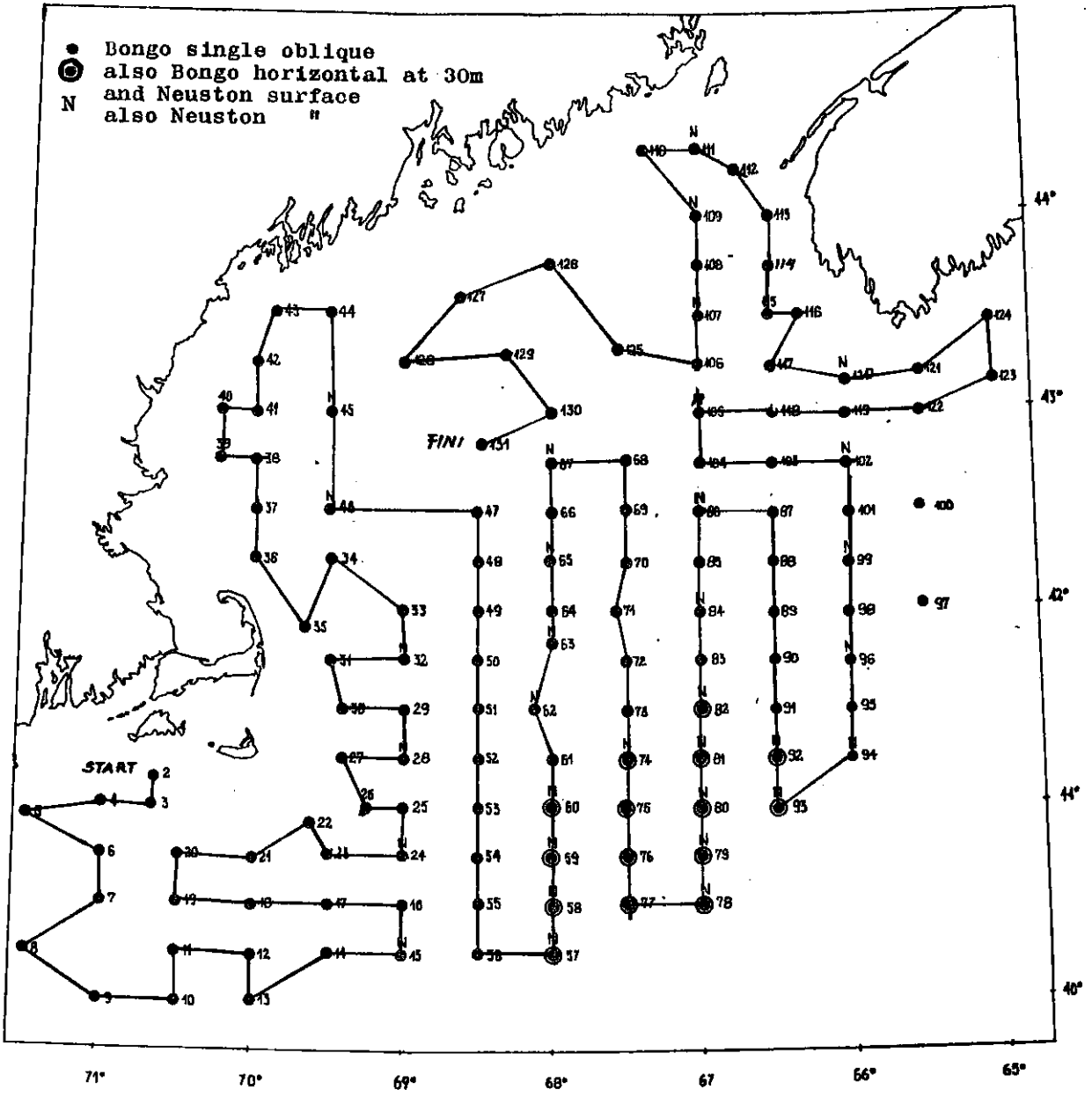


Fig. 1. Cruise track and ichthyoplankton stations, RV *Wieczno*, 2-28 October 1972.

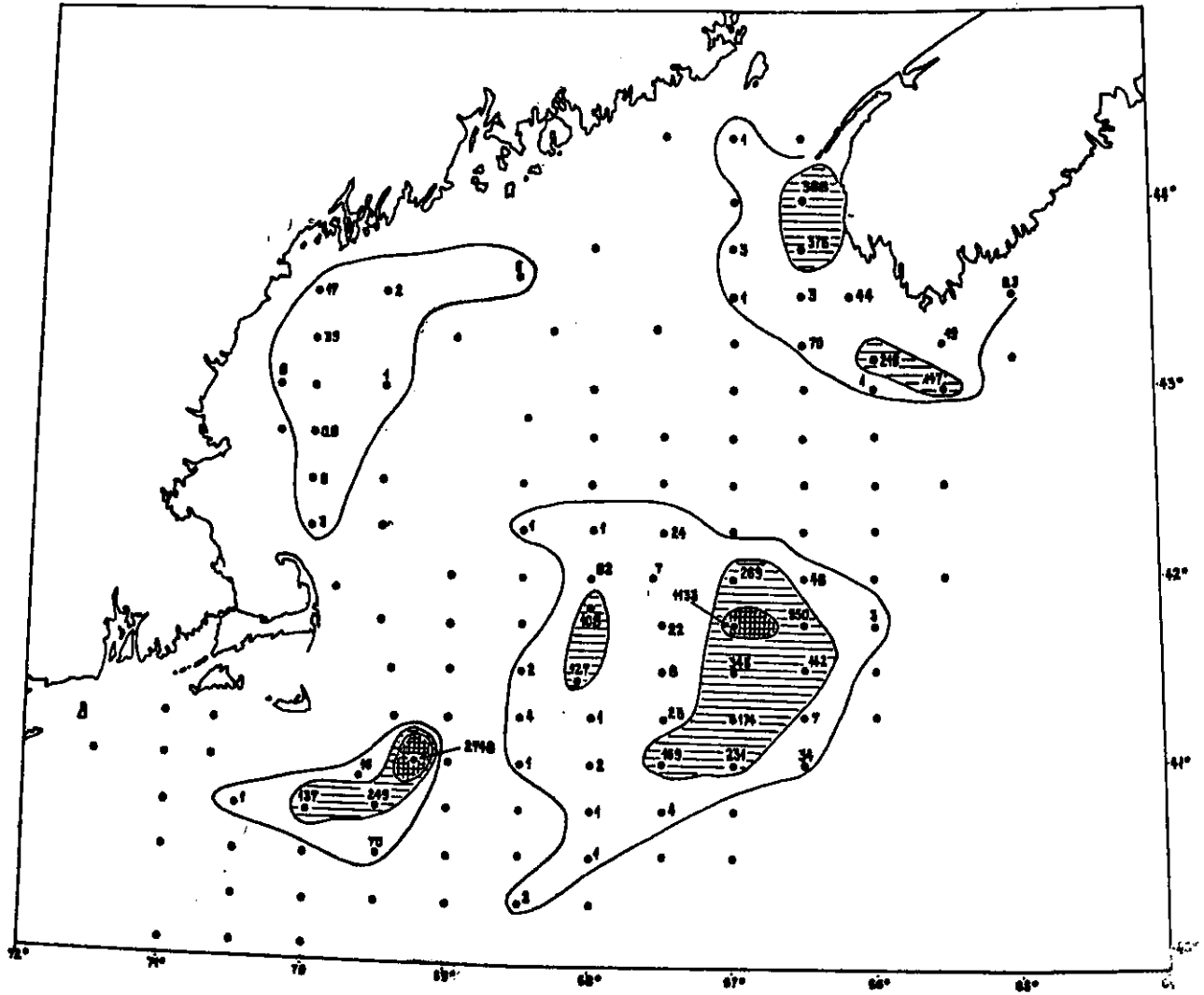


Fig. 2. Distribution and abundance of larval herring (number per 10 m<sup>2</sup>) in *RV Wicczno* survey, 2-28 October 1972.

