

In confidence - Not to be quoted without reference to the Laboratory

Cruise Report

FRV "Goldseeker"

5 - 28 July 1977

Objectives

1. To study the abundance and distribution of Nephrops larvae over the Nephrops grounds in the Firth of Forth.
2. To investigate the selectivity of a shrimp trawl particularly of the parts of the trawl other than the cod-end.

Narrative

"Goldseeker" left Buckie on 6 July and sailed for Blyth where the scientific staff joined on 10 July. Persistent northerly winds and a northerly swell hampered operations for the first week, but during the second week a series of trawl experiments were undertaken off Blyth.

On 21 July "Goldseeker" sailed for Leith and loaded plankton gear. A survey of the Nephrops grounds west of the Isle of May was then undertaken for Nephrops larvae.

The scientific staff left the vessel at Granton on 26 July, and "Goldseeker" proceeded to Buckie.

Results

Trawling

A 45 mm shrimp trawl with a 35 mm cod-end and small mesh whole cover was used. Six small mesh patches, each one metre square were fitted to selected points on the belly and square of the net.

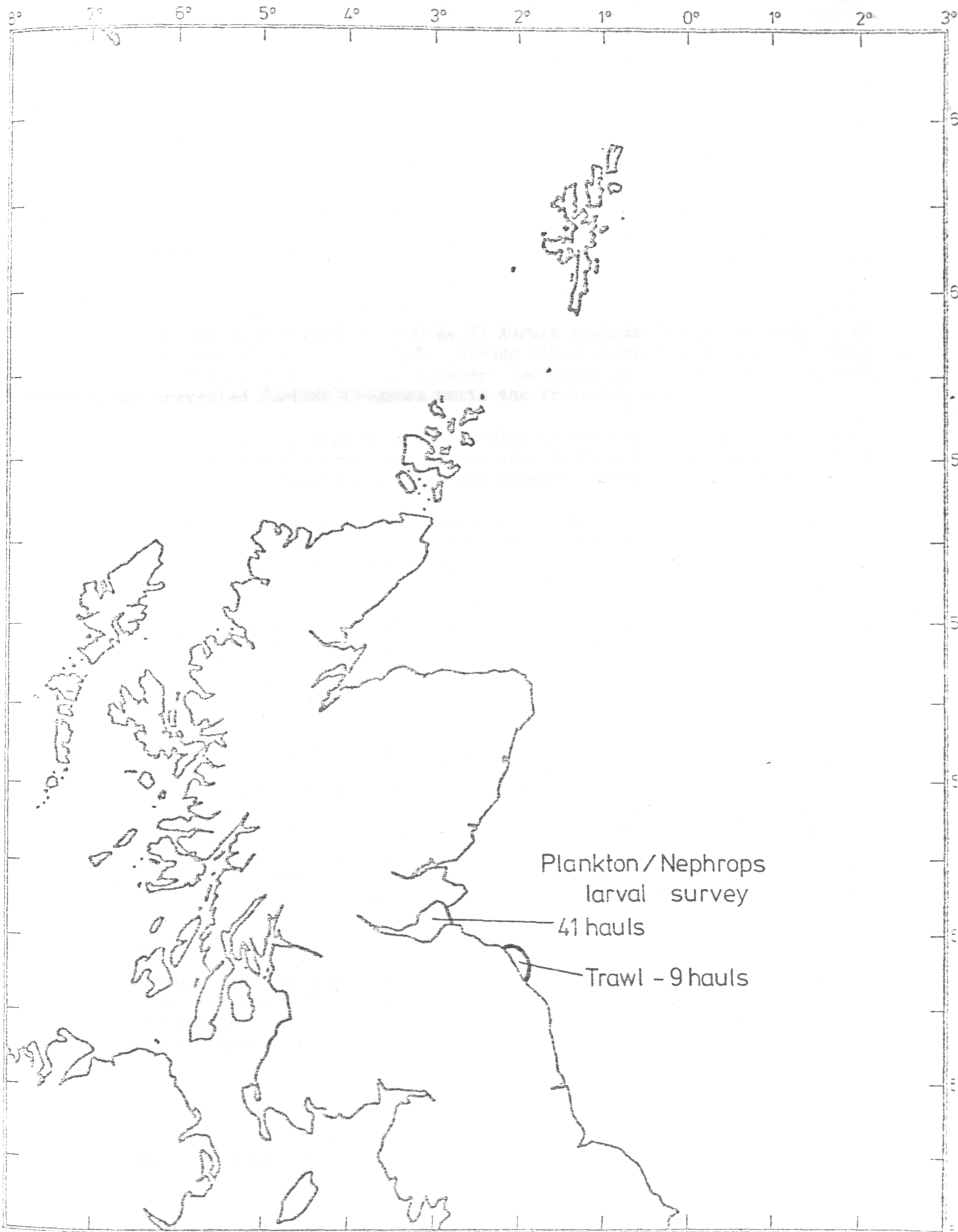
A total of nine half hour hauls were made and 24 kg of shrimp, mainly Pandalus borealis, were caught. In eight hauls small quantities of shrimp were found in some of the small mesh patches, but the small number of hauls was insufficient to allow a quantitative analysis of selectivity to be made.

Nephrops were more plentiful than in previous cruises at this time of year. A total of 442 were taken, 344 male and 98 female. Of the females, four were berried.

Cod, haddock and whiting constituted most of the commercial sized fish catch. Large quantities of undersized whiting and Norway pout were also taken.

Nephrops larval survey

Forty one hauls each of 5 min duration were made at set stations west of the Isle of May. Four stations were examined in detail, 8 hauls being made at each station at different depths.



FR.V. Goldseeker 5—28/7/77

7GP77