

R1/10

IN CONFIDENCE: not to be quoted without reference to the Laboratory.

CRUISE REPORT

FRV GOLDSEEKER

26 June - 19 July 1974.

OBJECTIVES:

1. To investigate the distribution, abundance and biology of Pandalus borealis in the Farn Deeps.
2. To undertake mesh selectivity experiments using a 45mm mesh shrimp trawl and a 35mm mesh shrimp trawl.
3. To investigate the possible diurnal migrations of Pandalus borealis.
4. To investigate the possible relationship between tidal flow water temperatures and salinities, and the movement of Pandalus borealis.

NARRATIVE:

"Goldseeker" sailed from Buckie on 26 June.

Trawl and sonar equipment was loaded at Aberdeen, and she arrived at North Shields on 29 June.

A series of half hour trawls with the 45mm and 35mm nets, and four hour trawls with the midwater shrimp trawl were carried out on the Farn Deeps.

"Goldseeker" left Blyth on 17 July and arrived in Aberdeen on 18 July.

RESULTS:

Otter trawling.

Shrimp catches with both the 45mm and the 35mm nets were average to good. The weight of pandalids caught ranged from 1.1kg to 9.2kg/half hour tow. The total weight of shrimp caught was 50.7kg, 22 hauls being made. The predominant species present was Pandalus borealis, but P. montagui was also present in some quantity.

Further results of the shrimp catches are in the process of being analysed.

Nephrops catches were poor, a total of 451 individuals were examined. The mean carapace length of all Nephrops caught was 31.8mm: males 33.6mm and females 27.8mm. The m.c.l. of those taken in the 35mm mesh trawl was slightly lower (2.3mm) than those in the 45mm trawl.

White fish catches were generally good with the predominant species being cod and whiting. Large numbers of undersized whiting and Norway pout were also present.

Pelagic trawling.

Three hauls of four hours each were made with the Universal shrimp trawl, and echo recordings were made using cableless Simrad netzonde equipment.

Catches were small, consisting primarily of jellyfish, and sprat with herring. Pandalus borealis was present in all hauls but in very small quantities.

F G Howard
3 October 1974