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CRUISE REPORT

FRV "GOLDSEEKER"

25 January - 11 February 1971

OBJECTIVES

- 1. To test the performance of a specially-designed fine mesh shrimp trawl.
- 2. To investigate the distribution, abundance and biology of <u>Pandalus</u> spp in the Moray Firth.
- 3. To obtain data on the stock composition of Nephrops and of the associated white fish species.
- 4. To take temperature readings and plankton hauls.

NARRATIVE

Owing to delays in the completion of "Goldseeker's" refit the cruise did not commence until 3 February, with the result that the programme was severely curtailed.

During the cruise "Goldseeker" was based at Buckie.

RESULTS

(a) Mid-water trawling tests

The mid-water shrimp trawl with 30 mm codend, and used with Süberkrüb type trawl boards was specially designed for mid-water trawling from a vessel of "Goldseeker's" size. Three hauls of 1 hr, 3 hrs and 2 hrs duration respectively were made with the net, on all of which it worked satisfactorily. In the first two hauls the net was used in conjunction with Netzonde equipment and the correlation between engine speed, warp length and net depth established. In the last haul the Netzonde was removed, a check on the fishing depth was kept using tables showing the relationship between warp length and warp angle of declination. The angle of declination was measured with an inclinometer. The results of this haul showed that the depth of the net could be ascertained with a fair degree of accuracy without using the Netzonde.

(b) Otter trawling

A 70 mm prawn trawl with small mesh whole cover was used in the limited time available for this part of the programme. Two, 1 hour hauls were made at stations about 5 miles north of Buckie.

No Nephrops were caught but a good haul of Pandalus montagui was made. The majority (68%) were mature males; berried females constituted 28% of the total. The mean carapace length of all specimens was 12.0 mm.

White fish were fairly plentiful in the catches, the dominant species being common dab. cod. whiting, haddock, herring and sprat.

HYDROGRAPHY

Surface temperature readings were made daily. The sea temperature was fairly constant at 7.25° C.

F G HOWARD 22 April, 1971