

IN CONFIDENCE : NOT TO BE QUOTED WITHOUT PRIOR REFERENCE TO THE LABORATORY

FRV "GOLDSEEKER"

CRUISE 7/83

7GB83

JR

REPORT

21 June - 22 July 1983

OBJECTIVES:

1. To exercise by means of cameras mounted on a towed sledge the Nephrops populations in the Firth of Clyde.
2. To study the reactions of Nephrops to chains and footropes by means of cameras mounted on a specially designed towed sledge.
3. To examine trawl caught samples of Nephrops populations from the same areas as those examined by photography.
4. To study the association between the pink shrimp, Dichelopandalus bonnieri and the sea anemone Bolocera taediae using cameras on a towed sledge.

NARRATIVE:

Equipment was loaded at Buckie from where "Goldseeker" sailed on 21 June proceeding to the Clyde. Photographic survey work commenced immediately on her arrival in the area. "Goldseeker" was based at Troon. The crew and scientific staff returned to Aberdeen on 30 June for the boat's long weekend.

The scientific staff returned to Troon on 3 July in order to rig the sledge to be used for Objective 2. The crew returned on 5 July and photographic work recommenced on 6 July.

Three areas were examined photographically, (a) south of the Cumbræes, (b) east of Holy Island, Arran and (c) north of Ailsa Craig.

On completion of the photographic work, trawl hauls were made in each of the three areas with a standard 70mm Nephrops trawl.

"Goldseeker" left the Clyde on 19 July and returned to Buckie.

RESULTS

Photographic work : Objectives 1 and 4.

A series of transects with the towed camera sledge were made in each of the three areas described above. Water clarity was very poor, large quantities of sediment being carried by the currents, and consequently the quality of both still photographs and video pictures was very mixed. However sufficient numbers of pictures were obtained of both Nephrops and Pandalus sp for analysis to be made.

Objective 2

One transect was made in the Cumbrae area with the towed camera sledge designed for this experiment. The sledge proved to be insufficiently rigid and was unable to sustain the forces involved. However the small amount of video film obtained during the trial indicated that the method was valid.

Trawl work: Objective 3

Two trawl hauls were made in each of the three areas. Nephrops catches were good, very few fish were caught.

The size composition on sex ratio of the Nephrops catches are shown in Table 1.

F G Howard
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Seen in draft: W B Reid, OIC

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