Library (1)

NOT TO BE QUOTED WITHOUT PRIOR REFERENCE TO THE LABORATORY
R1/10 3GR75

CRUISE REPORT

FRV "GOLDSEEKER"

18 Mar - 11 Apr 1975

PERSONNEL		
	C J Chapman	PSO (in charge)
	J A M Kinnear	SO
	C W Shand	SO
	I S Evans	ASO
	K A Ballantyne	ASO

OBJECTIVES

1. To make underwater television and photographic observations on the density of Nephrops and their burrows in different depths in Loch Torridon.
2. To make observations on the day and night activity of Nephrops in relation to depth, light and tidal cycles.

GENERAL

"Goldseeker" left Corpach on 18 March and arrived in Torridon on the 19 where she developed a fault with her variable pitch propeller and had to return to Kyle. Repairs were carried out at Kyle and "Goldseeker" resumed work in Loch Torridon on 28 March. Television and photographic work was carried out in Upper Loch Torridon during the following week but bad weather curtailed the last part of the cruise, and "Goldseeker" left Kyle on 9 April and made passage to Buckie, arriving at 14.25 hours on 11 April.

Whilst "Goldseeker" was being repaired in Kyle the TV equipment was taken off and used from the shore laboratories at Loch Torridon.

RESULTS

Because of the restriction in time available observations were confined to two areas at depths of 30 and 60 m. In the deeper water the television camera was used in conjunction with the Nikon stereo cameras suspended beneath the anchored ship. The timing of Nephrops foraging activity was recorded and the stereo cameras were used to obtain estimates of burrow density. Some technical problems with the triggering of the cameras were overcome and about 200 stereo photographs of the sea bed were obtained for later analysis. At 30 m depth, the activity of the Nephrops population was recorded by operating the TV camera from the shore laboratories at Aird Mhor. A preliminary analysis of the results suggests a nocturnal pattern of foraging activity at both 30 and 60 m. A self-contained time-lapse camera was used to record the activity of Nephrops over a 3 week period during the cruise. Subsequent analysis of these films should indicate to what extent the behaviour of Nephrops is influenced by the tidal cycle. The time-lapse camera was also set up to record the activity of an acoustically tagged lobster (Homarus) in its crevice. In all, the movements of 2 lobsters and 6 crabs were studied by tracking ultrasonic transmitters attached to the animals.

C J Chapman
13 May 1975

Seen in draft by W Gatt