IN CONFIDENCE: Not to be quoted without reference to the Laboratory

CRUISE REPORT

FRV "GOLDSEEKER"

22 April - 14 May 1970

OBJECTIVES:

The objectives were to:

- 1. determine the catch composition and abundance of lobsters around the Hebrides;
- 2. investigate the spawning frequency of lobsters;
- 3. investigate the crab stocks;
- 4. undertake comparative creel fishing for lobsters and crabs;
- 5. take plankton samples and temperature recordings and undertake trawling for <u>Nephrops</u> and white fish, as far as is compatible with the above main objectives.

NARRATIVE:

The scientific staff joined "Goldseeker", which had made passage from Buckie to Kyle of Lochalsh, on 26 April 1970. Creel fishing for lobsters and crabs was severely handicapped by persistent bad weather so that fishing had necessarily to be undertaken on sheltered and more offshore grounds in preference to areas chosen for the prolific stocks. In addition a programme of trawling (6 hauls) and plankton sampling (7 hauls using a 1 metre 26 oblique net), with recording of surface temperatures, was completed. The cruise terminated at Ardrishaig on 14 May 1970.

RESULTS:

Creeling

Three hundred crabs and 12 lobsters were caught in 576 trap hauls. The number of marketable sized lobsters and crabs taken by the Scottish creel and the parlour trap and their mean sizes were not significantly different. The overall mean size of marketable lobsters was 90 mm carapace length and of orabs 145 mm carapace width.

Trawling

Of the commercially valuable species of white fish of marketable size in the trawl, the commonest were: whiting (average 51 per 1 hour haul); haddock (16) and cod (4). Few Nephrops (12 per 1 hour haul) were taken.

Plankton

In general the zooplankton samples consisted of <u>Calanus</u>, euphausid furcilia, small medusee and <u>Sagitta elegans</u>, with a variety of other organisms present in small numbers. <u>Calanus</u> was most abundant in the hauls taken at the entrance to Loch Carron and in the Sound of Sleat, while the largest numbers of euphausid furcilia were obtained east of North Uist. <u>Nephrops</u> larvae were found off Dunvegan Head and east of Rona and Raasay. Fish larvae and eggs occurred in small numbers throughout the survey.