without Ref. to the Lab.

CRUISE REPORT

F.R.V. "GOLDSEEKER"

## 26th Nov. - 21st Dec. 1968

## Narrative

The cruise began at Troon on Nov. 26th and ended at Corpach on Dec. 17th. During the period 2nd - 6th Dec. Sr. Henriques from Chile participated in the cruise.

Trawling was carried out at various stations in the Clyde, Loch Fyne and Loch Linnhe; plankton samples were taken from the same areas and in addition from the Firth of Lorne. Most trawling was carried out during the hours of daylight, but on one occasion some hauls were made between 1700 and 2300 hrs.

One day was spent scallop dredging off Bute in St. Ninians Bay and in Etterich Bay.

Live Nephrops with carapace lengths ranging from 17-25mm were sent back to the laboratory aquarium.

## Results

Good hauls of <u>Mephrops</u> were made in three different areas, West of Ayr, in Upper and Lower Loch Fyne and in Loch Linnhe.

The best catch was made west of Ayr, when 936 Nephrops were taken in a half hour haul. In all some 2862 males and 1329 females were examined.

The mean carapace lengths are given in the table below.

į	Area	West of Ayr	Loch Fyne	Loch Linnhe
	M.C.L. male female Berried	28.9mm 25.1mm 26.3mm	41.0mm 32.9mm	33.0mm 27.9mm 28.3mm

Pandalus bonnieri was taken in most hauls, but catches were generally poor, The best being to the west of Ayr where 201 weighting 1000g (2000cc) were caught in a half hour tow.

The size range was fairly consistent between 16 and 21 mm carapace length, but sex composition varied markedly between hauls. The majority of females were berried, with eggs at an early stage of development.

The mean carapace lengths for the different areas was:-

aera	West of Ayr	Lower Loch Fyne	Upper Loch Fyne	Loch Linnhe
M.C.L. male	17.2mm	20.6mm	16.8mm	16.6mm
female	17.6mm	18.9mm	17.0mm	17.1mm
Berried	18.5mm	19.2ma	17.3mm	17.3mm

The by-catch consisted principally of small whiting, gadoids and common dabs, but in some hauls up to 160 hake with size range 6-14cm were taken.

The Loch Linnhe Acanthias vulgaris was plentiful

Examination of the plankton samples showed that the standing crop of zooplankton was reasonably high in all areas apart from the Firth of Lorne. Calanus helgolandia, Meganyctiphanes norvegica, Thysanoessa raschii and Sagitta elegans were all well represented. Samples from the Firth of Lorne were very poor, Sagitta setoma, being the main component.