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

CRUISE REPORT

# FRV GOLDSEEKER

16 August - 2 September 1971

Objectives: 1. To investigate the stocks of Nephrops and Pandalus in the South Minch and Sound of Jura.

- 2. To study the distribution and abundance of scallops in the same area.
- 3. To take daily surface temperature readings.

## Narrative:

"Goldseeker" sailed from Corpach on 18 August, and returned there on 2 September. Trawling was prosecuted at stations in the Sound of Jura, Firth of Lorne, Loch Linnhe and the Sound of Mull, and scallops dredging in the Sound of Mull.

All trawl hauls were made with a standard 70mm Nephrops trawl and small mesh whole cover; dredge hauls were made with a standard 4ft dredge.

#### Results:

### Trawling

In 15 half hour hauls a total of 1097 male and 756 female Nephrops were examined, 123 of the females being berried. The size ranges, sex composition and mean carapace lengths are given in the following tables.

Size range	5-9	20-4	25-9	30-4	35-9	40-4	45-9	50 <b>-</b> 4	55-9	60-4	Total	Mean carapace length
Loch Linnhe Total Male Total Female Berried Female		5 8 -	20 16	28 28 28 5	51 23 5	45 23 7	26 1 -	8 - -	2 -	edia.	185 99 17	38.8mm 34.2 38.5
Sound of Mull Total Male Total Female Berried Female	3 5 -	16 19 2	64 107 33	133 101 30	104 36 15	50 9 7	26 1	7	2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	405 278 87	35.0 30.6 31.9
Sound of Jura Total Male Total Female Berried Female	4 14 -	107 153 6	110 123 8	56 13 1	33 1 -	30	17	9 -	-	1	367 305 15	30•4 24•9 26•0
Firth of Lorne Total Male Total Female Berried Female	2	10 16 1	15 20 2	36 24 -	26 9 1	22 2 -	17	13	1 -		140 74 4	37.5 29.5 28.3

Pandalus bonnieri was caught in all areas, but the numbers taken were small. The best catches were made in the Sound of Jura, where 123 specimens were taken in one half-hour haul. The mean carapace length of the males was 17.4mm and of the females 17.8mm.

Catches of white fish were fair in all areas except Loch Linnhe, the total numbers of the main species caught are given below.

	Lemon	sole Plaice	e Megrim	Witch	LRD	Cod	Haddock	Whiting	Hake	T. esmarkij
Small mesh	-	-	1	4	152		114	305	¥.ma	346
Large mesh	12	7	9	18	23	13	148	194	13	~

	T. min	utus Argentine	Herring	Sprat	Caranx	Scyllium	Acanthias	Skate
Small mesh	507	10	214	59	<b>÷</b>	17	pers	_
Large mesh	16	qual	-	prod	11	83	37	9

Loligo was present in catches in the Sound of Jura: 18 individuals were taken, with an average mantle length of 15.9cm.

# Dredging

Fourteen quarter hour dredge hauls were made and a total of 50 Pecten maximus and 56 Chlamys opercularis taken in the Sound of Mull, their overall condition was very poor.

## H: drography

The average surface temperature during the cruise was 14.0°C.

F G HOWARD
11 October 1971