

R1/6

In Confidence - Not to be quoted without ref to Laboratory

FRV CLUPEA

Cruise 10/80

10CR80

JLM

Report

6 - 30 October 1980

Objectives:

1. To survey grounds in the North and South Minches and in the Sound of Jura and Clyde on which populations of Nephrops and Dichelopandalus bonnieri are found.
2. To study the biometrics of Nephrops in the different areas.
3. To make photographic observations on the Nephrops populations and mud dwelling communities in Loch Torridon, and elsewhere if time permits.

Narrative:

The scientific staff joined 'Clupea' at Kyle of Lochalsh on 6 October. The vessel steamed to Loch Torridon where the photographic work was carried out.

On 9 October the vessel steamed to Stornoway, and a trawl survey carried out on grounds between the Shiantis and Stornoway. Biometric measurements on Nephrops from this area were made, facilities for measuring and weighing the specimens were made available by the Fishery Officer at Stornoway.

On 14 October trawling was carried out off Gairloch, and two further transects were made in Loch Torridon with the TV sledge.

'Clupea' proceeded to Kyle where the scientific staff left, and then to Corpach for the long weekend.

The crew and scientists rejoined at Corpach on 21 October and the TV was used in Loch Linnhe.

Trawling was carried out in Tìree Passage and in the Sound of Jura, and on 24 October 'Clupea' proceeded to Troon for the weekend. The TV equipment was off loaded. A further series of trawl hauls were made in the Clyde, and the trip ended at Troon on 30 October.

Results:

Trawling. Trawl catches were generally poor in all areas, 18 one hour hauls were made.

Catches of pink shrimps were very small, and only in the area off Gairloch were quantities of 1 - 2 kg per hour obtained. Nephrops catches ranged in weight from 2.0 kg to 30 kg. The composition of the Nephrops catch from different areas is summarised in Table 1. Biometric measurements were made of Nephrops from the North Minch and the Sound of Jura.

Fiver percent of the female Nephrops were berried.

In the North Minch, scad, mackerel and dogfish predominated in the fish catches, and in both the Minch and Tiree Passage small monk were common (size range 10 - 20 cm). In the Clyde, quantities of hake (range 24 - 45 cm) and saithe were taken.

Photography

Several transects using the towed sledge with TV and still cameras were made in inner and outer Loch Torridon, and in Loch Linnhe. Video tapes were made and some photographs taken of the mud communities.

F G Howard
8 December 1980

Seen in draft A Mair

COMPOSITION OF NEPHROPS CATCHES TABLE I

SIZE RANGE (MM)	15-9	20-4	25-9	30-4	35-9	40-4	45-9	50-4	55-9	60-4	65-9	Total	NCL
NORTH MINCH													
Males	2	39	91	181	113	52	26	17	6	2		529	34.7
Females	2	41	96	86	37	18	3					283	30.7
Berried		4	3	7	11	3						28	
Total	4	80	187	267	150	70	29	17	6	2		812	33.3
%	0.5	9.9	23.0	32.9	18.5	8.6	3.6	2.1	0.7	0.2			
THREE PASSAGE													
Males		23	46	102	65	14	1					251	32.6
Females	1	19	23	6	3	2						54	27.2
Berried			2	1	1							4	
Total	1	42	69	108	68	16	1					306	31.5
%	0.3	13.7	22.5	35.3	22.2	5.2	0.3						
SOUND OF JURA													
Males	3	30	154	191	80	52	18	9	4	1		542	33.2
Females	1	31	49	32	12	2						127	28.6
Berried				2	1							3	
Total	4	61	203	223	92	54	18	9	4	1		669	32.3
%	0.6	9.1	30.3	33.3	13.8	8.1	2.7	1.3	0.6	0.1			
CLYDE													
Males		19	164	324	140	79	61	27	7	4	4	829	35.3
Females		23	218	229	72	65	38	19	3			667	33.6
Berried				10	8	2	2					22	
Total		42	382	553	212	144	99	46	10	4	4	1496	34.5
%		2.8	25.5	37.0	14.2	9.6	6.6	3.1	0.7	0.3	0.3		

