#### R1/6

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FRV Clupea

13CR89

Cruise 13/89

# Report

30 October - 14 November 1989

## <u>Personnel</u>

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### **Objectives**

- 1. To determine the abundance and depth distribution of Norway pout (Trispterus esmarkii) and other fish species in selected areas west of Scotland.
- 2. To determine potential bycatch rates of protected species.

# **Narrative**

Scientific personnel joined Clupea at 1500 at Kyle on 30 October. The vessel proceeded directly to the Barra Head area where trawling commenced at 0900 on 31 October. Fishing was carried out over 31 October-13 November with Clupea putting into Stornoway for a mid-cruise break on 6 November. The cruise finished at Troon on 14 November.

During the cruise work was greatly interrupted by gales and the area surveyed was consequently restricted to fishing grounds relatively close to Barra (Fig. 1). A total of 16 trawl hauls were made, using a GOV trawl, at depths ranging from 123-200 m.

### Results

Overall the catch rates were low, ranging from 1-11 baskets per 60 minutes trawl haul. A total of 51 fish species were caught, the majority of which were present only in small numbers. Catch composition varied between hauls and did not appear to be related to the depth fished. The catch, in numbers caught per hour fishing, for the most abundant species is given in Table 1. For selected species from which otoliths were collected the percentage composition by age group for all hauls combined is given in Table 2.

Table 1

Numbers caught per hour fishing for the most abundant species

Haul number	Depth (m)	Norway pout	Poor cod	Blue whiting	Silver smelt	Hake	Haddock	Whiting	Scad
1	133	193	24	0	0	74	0	36	8
2	200	3545	639	27	186	- 76	8	22	182
3	170	10256	484	6	457	485	5	124	666
4	135	7514	188	0	18	1771	185	567	412
5	125	3553	303	0	37	1385	29	711	179
6	160	10496	311	12	5	93	13	228	213
7	150	1944	825	25	0	29	35	13	242
8	165	1272	413	4256	72	3	31	15	12
9	168	483	641	274	430	17	18	2	512
10	160	1754	457	53	210	100	7	19	238
11	190	5741	568	7	12	184	8	898	62
12	137	6684	589	4	21	102	42	132	240
13	153	3549	297	25	19	426	42	135	257
14	155	259	16	1	2	2	2	24	36
15	156	3542	160	1764	42	36	0	20	1008
16	123	7111	51	0	28	26	1214	525	10
Mean nu	Mean number		373	403	94	301	102	217	267

Table 2

Percentago-composition by age group

Species	% composition by age group						
	0-group	1-group	2-group	>2-group			
Norway pout	97.2	2.6	0.2	+			
Blue whiting	100.0	-	-	-			
Haddock	97.0	1.7	0.4	0.9			
Whiting	73.3	14.3	3.7	8.8			

J A Gauld

4 April 1990

Seen in draft: George B Calder

