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Trawl Selectivity of Cod at Faroe

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Introduction

The trawl fishery for cod at Faroe is exploited by English and Scottish vessels, and in recent years it has accounted for about 80% of the total landings of cod from the Faroe Region. There is no Faroese trawl fishery and the Faroese use only long-lines and hand-lines to fish cod in their home waters. Fishing for cod at Faroe by other nations is negligible, accounting for no more than 4% of the landings.

No selectivity data have been published for cod at Faroe. The present data are a by-product of routine demersal fish surveys by English and Scottish research vessels.

Material

The material used was obtained on routine trawl surveys by the research ships EXPLORER (Marine Laboratory, Aberdeen) and ERNEST HOLT in the years 1959-62. In all cases, double manilla cod-ends were used with fine mesh covers. The present data cover a range of mesh sizes of 73 mm to 112 mm. Meshes were measured with either Lowestoft or Scottish pattern mesh gauges. The area covered by the surveys included Faroe Plateau and Faroe Bank, but in the present work no distinction has been made between the stock of cod of these two areas.

Results

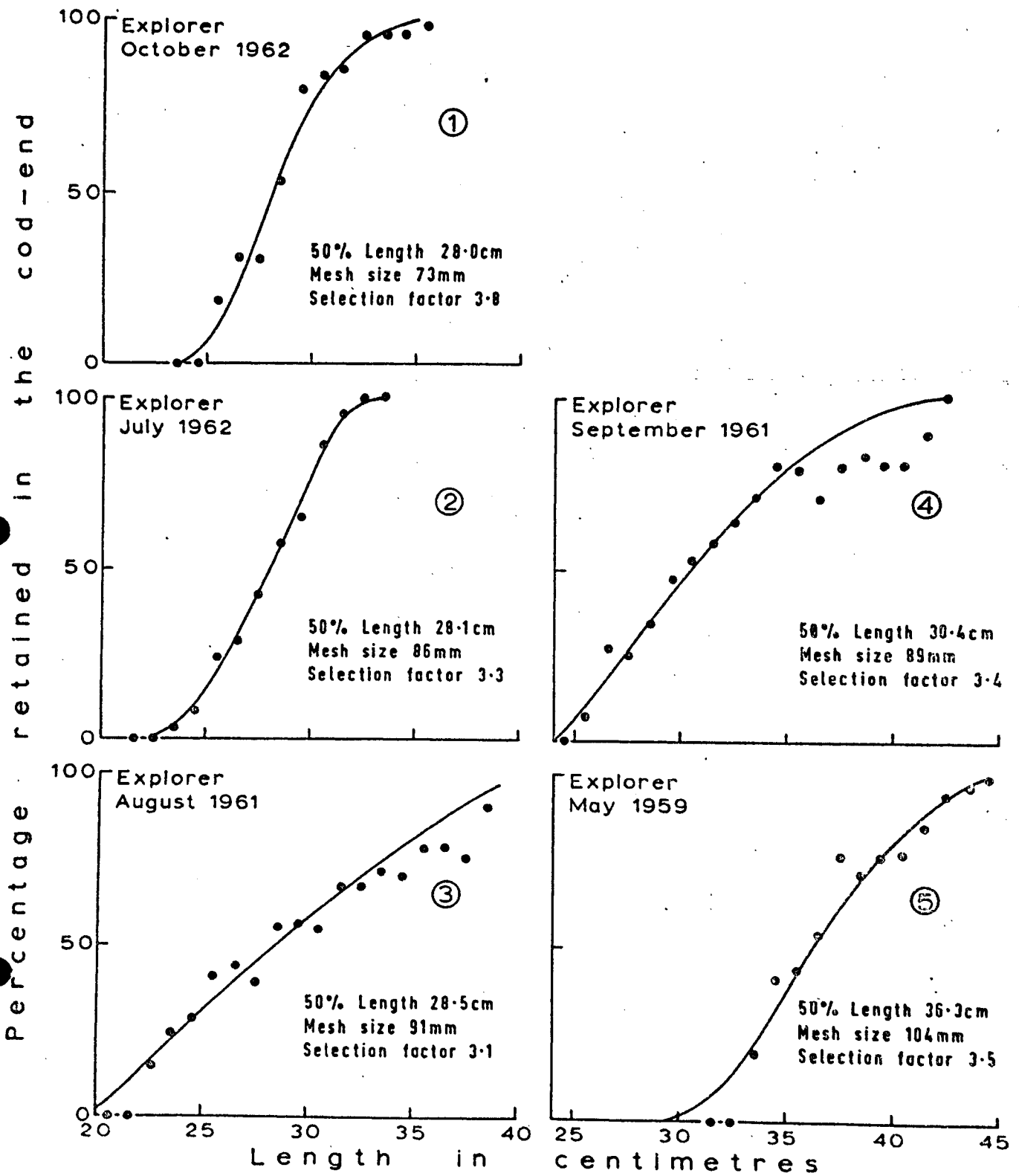
The results of eight cruises are summarised in Table 1, and the selection ogives for each mesh are shown in Figs. 1-8. The points shown in the figures have been smoothed by a running average of two 1 cm length groups. The numbers of fish involved are rather small, but the results provide an estimate of a selection factor which can be used until better data are available. The selection factors obtained range from 3.1 to 3.8 with a mean value of 3.4. There is no apparent trend in the selection factor with increasing mesh size, nor is there any significant difference in the selection factors obtained by the two ships.

Summary

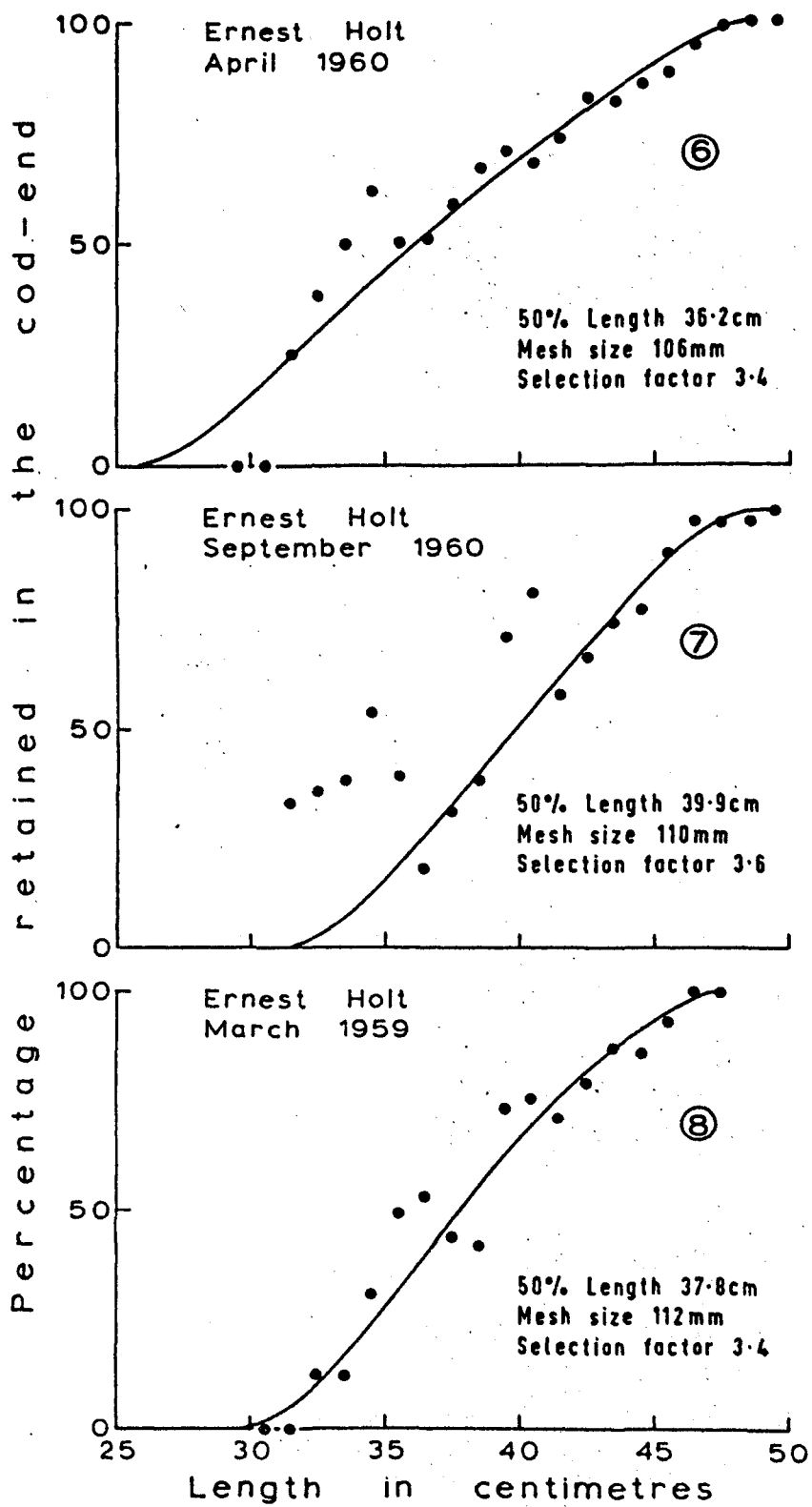
Selectivity data are presented for cod at Faroe. A mean selection factor of 3.4 was obtained from the results of eight cruises. An 80 mm double manilla cod-end with a selection factor of 3.4 would have a 50% retention length for cod of 27.2 cm.

Cruise	Mesh Size (mm)	50% Retention Length (cm)	Selection Factor	Selection Range 25%-75%	Number of hauls	Total No. of fish (a) in cod-end (b) in cover	No. of fish in Selection Range (a) in cod-end (b) in cover
ERNEST HOLT, March 1959	112	37.8	3.4	6.5	27	(a) 656 (b) 92	(a) 41 (b) 33
ERNEST HOLT, September 1960	110	39.9	3.6	7.1	28	(a) 727 (b) 186	(a) 68 (b) 78
ERNEST HOLT, April 1960	106	36.2	3.4	9.5	52	(a) 1657 (b) 140	(a) 111 (b) 75
EXPLORER, May 1959	104	36.3	3.5	5.3	24	(a) 886 (b) 57	(a) 45 (b) 34
EXPLORER, August 1961	91	28.5	3.1	9.7	19	(a) 780 (b) 166	(a) 85 (b) 94
EXPLORER, September 1961	89	30.4	3.4	6.7	21	(a) 1003 (b) 165	(a) 111 (b) 92
EXPLORER, July 1962	86	28.1	3.3	3.8	16	(a) 682 (b) 88	(a) 27 (b) 31
EXPLORER, October 1962	73	28.0	3.8	3.2	22	(a) 856 (b) 92	(a) 34 (b) 38

TABLE I



Figures 1 - 5. Selection ogives for cod at Faroe.



Figures 6 - 8. Selection ogives for cod at Faroe.