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French Research Report for 1999

by

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1. The fishery

a - Greenland Halibut in Divisions 2+3

A trawl fishery directed to Greenland Halibut took place in 1999. Tables 1 and 2 give the detailed catches, effort and raw cpue concerning that fishery. The fishery was carried by one stern trawler in the Div. 2J, 3L and 3M. Most of the effort (72 % in days of fishing) took place in Div. 3L.

The total catches for the Subareas 2+3 was of 1204 t, almost all of it was taken in the first half of the year in Div. 3L (March to May) and 2J (June), only 83 t was taken in the second half of the year in October in Div. 3L and 3M. In Subarea 3, the fishery took place in depth ranging from 600 to 1200 m.

The cpue per month is presented in Fig. 1. The figure shows an increasing trend for the March to May period in Div. 3L and a higher value in Div. 2J for June. The cpue in October in Div. 3M and 3L are about half lower. The raw cpue values all areas combined are higher in 99 than in previous years (Fig. 2 and Table 3). The annual value averages close to 700 Kg/hr compared to 200 Kg/hr (97) and 500 Kg/hr (98). While the 97 to 98 increase might reflect an increase of fishing power due to an adaptation to a new fishery, the increase from 98 to 99 is more related to the availability or abundance of the species.

b - Cod in Subdivision 3Ps

The fishery for cod in Subdiv. 3Ps was reopened in 1997 with a TAC of 10 000 t and this TAC was set at 20 000 t for 1998 and 30 000 t in 1999. In view of the 1994 Canada-France agreement, France has been allocated a share of 15.6 % of the TAC corresponding to 4680 t but covering a period from 1st of April 1999 to 31st March 2000. 70 % of this quota would be allocated to Canadian fishing companies to be landed in St-Pierre and Miquelon.

Table 4 gives the total reported French cod catches (provisional) per month and gear. In 1999 the gillnet fishery involved 13 boats of sizes of around 12 meters mostly fishing in an area located between 40 to 50 miles in the Southwest of the island of St-Pierre. 9 boats of less than 10 m fished with handline by Dantzig and Fairbanks. The trawler catches was made by 2 Canadian boats and landed in Saint-Pierre as part of the Canada-France agreement.

c - Iceland scallop in Subdivision 3Ps

There was no directed fishery for Iceland scallop by France in 1999.

2. Biological sampling data

a - Greenland Halibut in Subdivision 2+3

Length samples have been collected by French observer on board the vessels in Div. 3K and 3L. The level of sampling is given in Table 5. The length composition of catches per month and Division are given in Tables 7 and 8 and Fig. 3 and 4. The bulk of the catch in Div. 3L is made mostly of individuals of sizes between 34 and 46 cm. Somewhat larger individuals were caught in Div. 3M as the fishery typically takes place in deeper waters.

b - Cod in Subdivision 3Ps

All the different components of the fishery has been sampled for length monthly except where the low level of catches could not provide sufficient sampling. The ageing material was collected for all gears. The level of sampling is given in Tables 5 and 6.

Catches (t)	Greenland Halibut				Witch Flounder				Redfish				Roundnose Grenadier				Catfish				Total						
	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL			
Jan.																											
Feb.																											
Mar.			216	39	255																		217	39	256		
Apr.			265	10	275																			267	10	277	
May			309	15	324		2		2															312	15	327	
June	246		21		267																		246	21	267		
July																											
Aug.																											
Sept.																											
Oct.			58	25	83																				58	25	83
Nov.																											
Dec.																											
TOTAL	246	869	89	1204		2		2		4		4										246	875	89	1210		

Table 1 - French Greenland halibut trawl catches by species and division for 1999.

	Effort (days)				Effort (Hrs)				GHL c.p.u.e. (t/hr)			
	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL	2J	3L	3M	TOTAL
Jan.												
Feb.												
Mar.			24	8	32		299	80	379	0.722	0.488	0.673
Apr.			24	1	25		348	15	363	0.761	0.667	0.758
May			27	1	28		373	20	393	0.828	0.750	0.824
June	17		2		19	255	32		287	0.965	0.656	0.930
July												
Aug.												
Sept.												
Oct.			18	10	28		183	108	291	0.317	0.231	0.285
Nov.												
Dec.												
TOTAL	17	95	20	132	255	1235	223	1713	0.965	0.704	0.399	0.703

Table 2 - French Greenland halibut trawl effort and catch rates in 1999.

Catches (t)	Cod			3Ps	TOTAL	
	GN	HL	OTB5			
Jan.				313	313	
Feb.				3	3	
Mar.				295	295	
Apr.				129	129	
May				2	2	
June				31	34	
July				142	155	
Aug.				237	242	
Sept.				108	253	
Oct.				10	621	633
Nov.				72	667	739
Dec.				371	371	
TOTAL	602	19	2548	3169		

Table 4 - French cod catches in Subdivision 3Ps in 1999.

GHL c.p.u.e. (t/hr)			
Year	3L	3M	3M+3L
1997	0.211	0.228	0.215
1998	0.528	0.385	0.481
1999	0.704	0.399	0.657

Table 3 - French Greenland Halibut c.p.u.e. in divisions 3L and 3M from 1997 to 1999

Quarter	GHL	GHL	GHL	COD	TOTAL
	2J	3L	3M	3Ps	
I		3716	973	871	5560
II		13548	523	1544	15615
III				2416	2416
IV		1565	786	7697	10048
TOTAL		18829	2282	12528	33639

Table 5 - Length sampling by France (SPM) in 1999 (Number of fishes measured).

Quarter	GHL	GHL	GHL	COD	TOTAL
	2J	3L	3M	3Ps	
I				269	269
II				185	185
III				157	157
IV				398	398
TOTAL				1009	1009

Table 6 - Age sampling by France (SPM) in 1999. (Number of fish aged).

3L Month	Greenland Halibut Numbers caught ('000s)												TOTAL
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Lt (cm)													
24			0.09										0.09
26					0.09								0.09
28			0.35	0.16	1.65								2.16
30			4.86	1.47	12.30	1.03			0.07				19.73
32			15.70	5.14	39.08	3.88			0.29				64.07
34			36.25	18.75	83.19	8.70			0.64				147.52
36			54.20	36.44	125.21	11.20			2.00				229.04
38			41.71	54.70	115.07	8.18			2.72				222.38
40			50.29	71.33	87.52	6.72			5.72				221.58
42			33.99	75.32	63.43	4.13			6.90				183.78
44			24.54	63.83	39.25	1.81			7.47				136.90
46			16.30	40.84	23.66	0.86			7.58				89.24
48			12.83	33.83	14.99	0.35			5.26				67.26
50			11.79	26.25	8.58	0.26			4.90				51.78
52			5.29	16.95	4.25	0.26			2.75				29.50
54			4.42	11.74	3.29	0.17			3.04				22.67
56			2.77	7.74	1.04				1.39				12.95
58			2.08	3.42	0.87				1.25				7.62
60			1.39	2.77	0.17				1.04				5.37
62			0.95	0.81	0.26				0.64				2.67
64			1.04	0.41	0.09				0.43				1.96
66			0.43	0.33	0.09				0.57				1.42
68									0.29				0.29
70			0.43	0.08					0.46				0.98
72			0.09						0.14				0.23
74									0.11				0.11
76			0.17						0.04				0.21
78			0.09										0.09
80			0.09							0.07			0.16
82										0.07			0.07
84										0.07			0.07
86													
88													
90										0.04			0.04
92			0.09										0.09
94													
96													
98													
100													
Total			322.22	472.30	624.06	47.54			55.96				1522.09
N meas.			3716	5794	7202	552			1565				18829
Catch (t)			216	265	309	21			58				869

Table 7 - Length composition of French Greenland Halibut catches in Division 3L in 1999.

3M Month	Greenland Halibut Numbers caught ('000s)											TOTAL	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.		Dec.
Li (cm)													
24													
26													
28													
30			0.14										1.25
32			0.42	0.05	0.43				0.05				8.43
34			2.52	0.05	1.07								32.41
36			3.97	0.40	3.09				0.27				68.84
38			4.53	0.96	4.16				0.60				91.28
40			8.27	1.92	4.80				1.11				143.30
42			5.98	1.62	3.63				1.95				117.28
44			5.38	2.07	2.03				2.96				110.67
46			3.69	2.53	1.81				2.74				95.92
48			2.34	1.52	1.17				2.05				62.95
50			2.80	1.87	0.75				1.30				59.82
52			1.45	0.61	0.32				1.35				33.14
54			1.22	0.61	0.21				0.79				25.18
56			0.61	0.35	0.43				0.65				18.15
58			0.65	0.05	0.11				0.60				12.58
60			0.65	0.25	0.11				0.58				14.17
62			0.28	0.05					0.48				7.23
64			0.14	0.05					0.27				4.06
66			0.23	0.05					0.29				5.11
68			0.05						0.17				1.91
70									0.10				0.85
72									0.05				0.43
74									0.12				1.07
76									0.17				1.50
78									0.10				0.85
80			0.09						0.07				1.47
82									0.02				0.21
84									0.02				0.21
86			0.05						0.02				0.63
88									0.02				0.21
90									0.02				0.21
92													
94													
96													
98													
100													
Total			45.48	15.02	24.11				18.92				921.32
N meas.			973	297	226				786				2282
Catch (t)			39	10	15				25				89

Table 8 - Length composition of French Greenland Halibut catches in Division 3M in 1999.

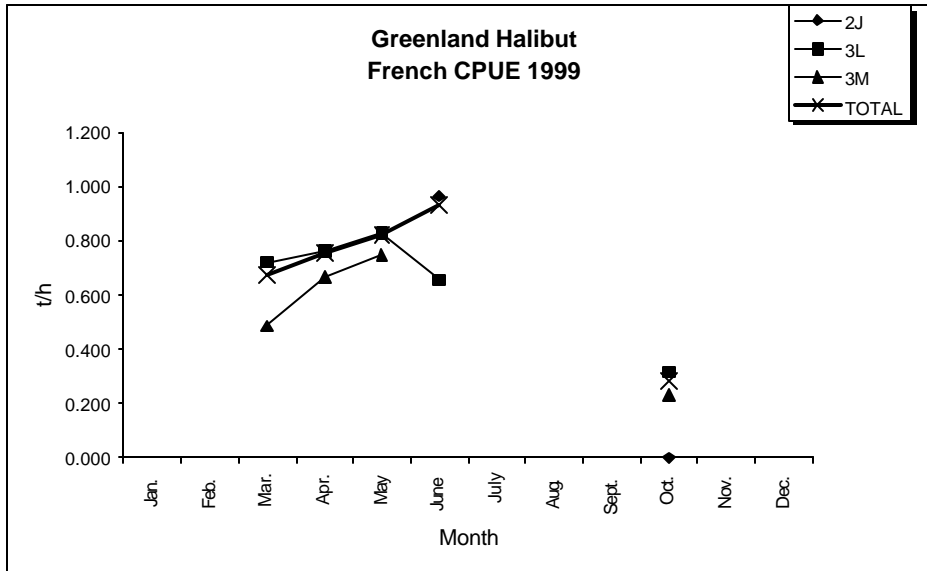


Figure 1 - French Greenland Halibut cpue per month and division in 1999.

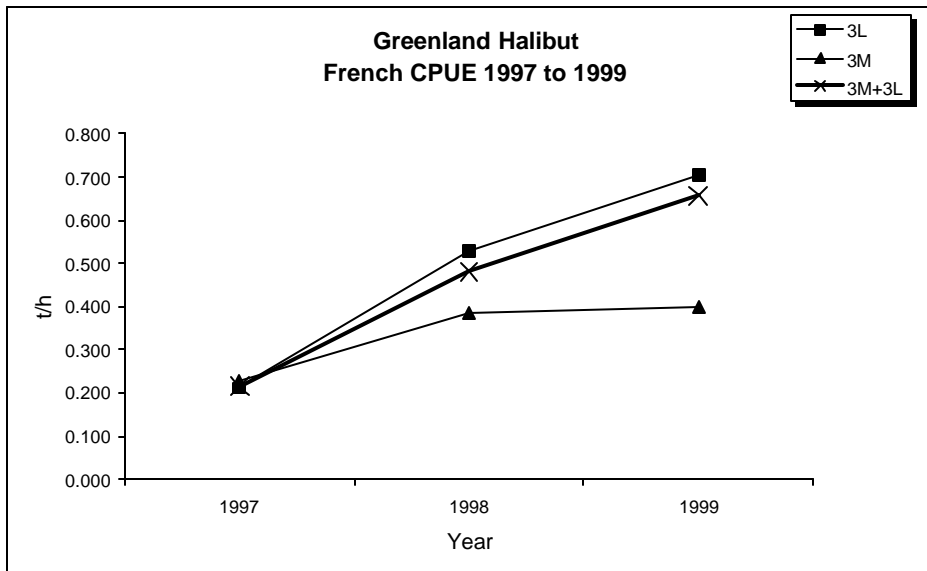


Fig. 2 - Raw French Greenland Halibut cpue per year and division from 1997 to 1999.

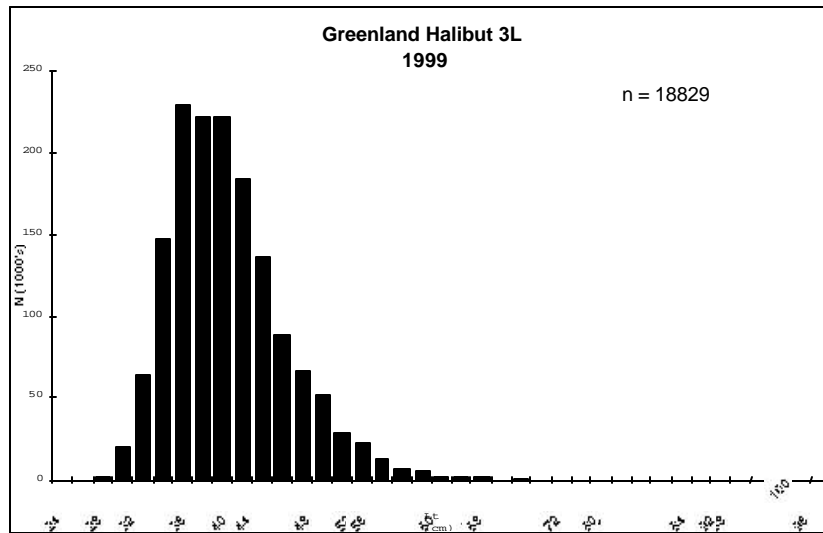


Figure 3 - Length distribution of Greenland Halibut catches by the French trawl fishery in 3L for 1999.

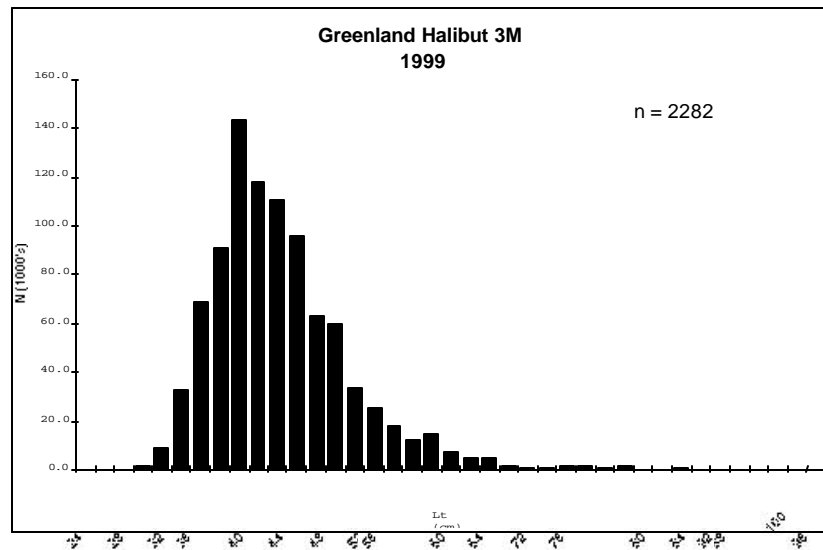


Figure 4 - Length distribution of Greenland Halibut catches by the French trawl fishery in 3M for 1999.