

NOT TO BE CITED WITHOUT PRIOR  
REFERENCE TO THE AUTHOR(S)

Northwest Atlantic



Fisheries Organization

Serial No. N4031

NAFO SCR Doc. 98/122

## SCIENTIFIC COUNCIL MEETING - NOVEMBER 1998

The Catch Statistics of the Shrimp Fishery (*Pandalus borealis*) in the  
Denmark Strait in the Years 1980-1998

by

U. Skúladóttir

Marine Research Institute, Skúlagata 4  
P. O. Box 1390, 121 Reykjavík, Iceland

### Abstract

In this paper detailed data on the catch, effort and CPUE from the shrimp fishery in the Denmark Strait for all countries in the years 1990 to 1997 are shown. Total effort and mean CPUE of all countries combined has been calculated using the figures for nominal catch for every country going as far back as 1980.

It is considered here that the shrimp stock is the same on both sides of the midline between Iceland and Greenland in the so-called northern area the Greenlandic or Icelandic zone (EEZ) respectively. The so-called southern area (in Greenland zone) may represent a different stock so the data coming from those will be kept separate from the north at present.

The catch rates in the traditional north and east area were low in the years 1989 through 1993, namely from 90 to 100 kg. The catch rate then increased to 158 kg in 1994 and has since decreased to 107 kg in 1996 to increase again to 175 and 211 kg in 1997 and 1998 respectively. This coincided with the effort being directed more to the new areas south of 65°N.

The nominal catch has in recent years decreased a great deal and was only some 2 900 tons in 1996 in the northern area. In 1997 nominal catch has increased in the northern area to some 4 200 tons and the preliminary figure for 1998 of 3 900 (January-October) indicates that the total catch will be no less than that of 1997. The nominal catch of 1997 in the southern area was high as before, namely some 7 400 tons making the total catch for both areas 11 600 tons in 1997. The preliminary catch in 1998 in the southern area of 2 700 tons indicates that the total catch will be similar to the 1997 value. The total catch (January-October) for both areas being 6 625 tons in 1998.

### Introduction

Shrimp in fishable concentrations in the Denmark Strait area was first found in September 1976 but a fishery was first commenced in 1978 by Iceland and a year later the Norwegians started fishing in the area as well, and by 1980, Greenland, Denmark, Faroe Islands and France joined in. From then on the fishery was carried out by all these 6 countries. However France has not been fishing since 1991. The fishery in the southern areas started in 1993 after the search of Lehmann (1990) and by the opening of the redfish box in 1993 which lies near the so-called middle area (Fig. 1).

In this paper all data available on the catch, effort and the CPUE, are gathered by month for all countries and strata within each area and then combined for the years 1989-1998. Similar proceedings have been carried out for the previous years 1980-1989 (Skúladóttir, 1991).

Throughout the paper the data are separated into north of 65°N and south of 65°N respectively.

### Material and Methods

For most of the catch there are logbook data which include catch and effort. The individual authors have also calculated the CPUE by dividing the catch per month (in kg) by the corresponding effort (in trawling hours). In order to assess the overall CPUE per every half year, all the effort in the period January to June was summed. Then only the catches that correspond to stated effort are summed by every half year. The subtotal sum of the catch is divided by the subtotal sum of effort to get the CPUE per every half year. In order to assess the total effort exerted by each country in the area, the nominal catch per month is summed by every half year. The nominal catch is often higher than the catch reported in logbooks. Therefore the effort was corrected by every half year by dividing the nominal total catch by the CPUE of the same half year. The effort that is proportional to the nominal catch is calculated by dividing the nominal catch by the CPUE of the same period. It has been assumed here that the gear and the efficiency of all vessels of a country is more like that of the ones not reporting of the same country than that of other countries. Therefore the effort was first corrected by individual countries.

### Results and Discussion

The effort, catch and nominal catch as well as the calculated CPUE are presented in tables 1 to 6 for the six countries for the north area, including the east area which is only fished by Iceland (Table 4) namely north of 65°N. The data for the middle and south areas combined, namely south of 65°N, are presented in tables 8 - 11.

For the first years the CPUE and effort was taken from the NAFO Scientific Council Reports 1980 and 1983 (Skúladóttir 1991). Later the CPUE and effort data were obtained from the scientists of the respective countries. For Norway, the data come from Smedstad and Torheim (1992) and after that from Godø (personal communication). For France the data come from Bertrand, Battaglia and Poulard (personal communication). The nominal catch data were obtained from Carlsson and Kanneworff (1992) and now from Hvingel et al (1998).

Table 7 which has data for the north area for all countries by half years goes back to 1978. From table 7 it is notable that there is considerable variation in the CPUE of the different countries. This could be due to different gear sizes and the difference in power of the respective vessels. For the Icelandic vessels it is known that gear size was about 2 400 meshes (circumference) for many years, but increased in 1993 to about 2 700 meshes. The mean size of trawl has gone down again for 1994 and 1995, being some 2 100 and 2 300 meshes respectively. In 1996 however the mean size of Icelandic trawls increased to 3120 meshes, to 3 200 meshes in 1997 and further to 3 400 meshes in 1998.

In most years catch rate is highest in the first 6 months of the year or more accurately in the period February through April. However a second peak in catch rates can occur late in the year. Twin trawls were accounted for by doubling the effort where twin trawls are being used.

The yearly catch rate is calculated in table 12 where the half years are added together. The CPUEs have been falling gradually since the years 1980 and 1981 or from 245 kg per hour to 90 kg in 1991. In spite of doubling the effort there was little gain in addition to the 11 thousand tons fished in 1986. However by 1993 the effort has decreased considerably or from 108 thous. hours in 1989 to some 40 thous. hours in 1993. In 1994 there is the most dramatic drop in effort or down to some 15 thous. hours. The catch in the traditional area has gone down drastically as well at the same time as the new southern areas came into use. The CPUE has now increased to 155 kg in 1994 in the traditional area, but has fallen to 106 kg in 1996 in spite of little effort in the past 3 years.

Table 13 contains the logbook data gathered together for the four countries for the socalled south area, marked middle and south area on Fig. 1. These are combined from 1993 through 1998. Apart from the huge CPUE that the Faroe Islands and Greenland report in the second half of 1993, 1895 and 1138 kg per trawling hour respectively with only little effort spent, the CPUEs are not much higher than they were in the beginning of the eighties in the traditional north area as average annual CPUE. The mean CPUE was 158 kg in 1993 increasing after that to 307 kg in 1996 to remain high or 293 kg in 1997 (table 14).

The total catch is listed in Table 15 as well as advised TAC by the Scientific Council of NAFO, by years. Through the years the effective TAC by Greenlandic authorities has usually been moderate and similar to the advised TAC. However from the year 1990 onwards the effective TACs have been far too high. Those unrealistic TACs of some 13 000 to 14 500 tons have never been reached in Denmark Strait not even counting the Icelandic catch east of the midline which is not included in the TAC set by Greenland. In later years the effective TAC has been 9 563 tons.

In the northern area the yearly catch has been gradually falling as the new areas south of 65° N seemed more attractive. The total catch was 4 900-6 100 tons in the traditional area in 1993-1995 as compared to 7 500 tons in 1992. The catch in the northern area has decreased much in year 1996, namely to about 2 900 tons. In the southern area the catch increased from 1 500 in 1993 to 7 400 in 1997. In 1995 there appears to be a slightly increased fishery in the northern area as compared to 1994. The catch in the Icelandic zone in 1997 is the highest ever as availability in that year was good and Ice conditions were moderate.

The catch in the whole area (north and south) increased when the new areas in south were discovered and increased from the level of 7 500 and 7 600 of the years 1992 and 1993 to altogether 9 800 tons in 1994, 9 500 tons in 1995, 9 700 in 1996 and 11 600 tons in 1997. The provisional catch for 1998, the months January-October is 6 600 which if projected to the end of the year indicates a similar total catch as that of 1997.

### **Conclusion**

The stock in the traditional north area of Denmark Strait appears to have reached the stage in 1995 where stock level has reached a higher stable level than in the years 1989 to 1993 as judged by CPUE although not as high as that of the early eighties. The reduced annual removals of some 6 100 tons to 2 900 in 1993-1997 from the shrimp stock in the northern area of Denmark Strait appear to have had a beneficial influence on the state of stock when looking at the CPUE of 1998 in the northern area. It is not certain if a connection exists between the northern and the southern areas to allow for a migration of part of the stock to the south in recent years, but concentrations in the south do not seem to be diminishing at present.

### **References**

- Carlsson, D. M., and P. Kanneworff. 1992. The commercial shrimp fishery in Denmark Strait in 1991 and early 1992. NAFO SCR Doc. No. 64, Ser. No. N2118. 26p.
- Hvingel, C., and O. Folmer and. 1998. The Greenlandic Fishery for northern shrimp (*Pandalus borealis*) in Denmark Strait 1996 and January-October 1997. NAFO SCR Doc. 98/112, Ser. No. N4021. 21p
- Lehmann, K. 1990. Report on a commercial trial fishery for shrimp (*Pandalus borealis*) off southwest, south east and east Greenland. NAFO SCR Doc. 90/62, Ser. No. N1784. 6p.
- Skúladóttir, U. 1991. The catch statistics of the shrimp fishery (*Pandalus borealis*) in the Denmark Strait, in the years 1978-1990. NAFO SCR Doc. No 58. No N1942 16p.
1997. The catch statistics of the shrimp fishery (*Pandalus borealis*) in the Denmark Strait, in the years 1980-1997. NAFO SCR Doc. 97/102, Ser. No N2959 19p.

Table 1. North area. Catch rates (kg per hour) effort (hours trawling) and corresponding catch (tons) from the shrimp fishery in Denmark Strait, in the traditional north area, i.e. north of 65° N, by Greenland in two periods of the year.

Table 2. North area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in Denmark Strait, by France in two periods of the year.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1987	Apr	227	400	90.9	Sep			94.0
	May	250	578	144.7	Oct			59.0
	Subtotal	241	978	235.6	Nov			170.0
	Total	241	2599	626.0	Subtotal			323.0
					Total			405.0
1988	Apr	147	462	68.1	Aug			2.0
	May	136	473	64.2	Sept			48.0
	Subtotal	141	935	132.3				
	Total	141	3138	444.0	Total			50.0
1989	Mar	203	247	50.2	Jul	58	116	6.7
	Apr	192	907	174.2	Aug	59	409	24.0
	May	23	23	0.5	Subtotal	58	525	30.7
	Subtotal	191	1177	225	Total	58	1536	89.8
	Total	191	1525	291.3				
1990	Mar	126	172	23.3				
	Subtotal	126	172	23.3				
	Total	126	286	36.0	Total			15.0
1991	Feb	141	206	29.0				
	Mar	93	350	32.7				
	Apr	119	468	55.8				
	Subtotal	115	1024	117.5				
	Total	115	1024	117.5				

Table 3. North area. Catch rate (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in the north area of Denmark Strait, i.e. north of 65°N, by Norway.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1990	Jan	77	1584.4	122	July	38	368	14.0
	Feb	73	2424.7	177	Aug	37	2162	80.0
	Mar	70	3914.3	274	Sep	43	6465	278.0
	Apr	66	1848.5	122	Oct	52	6077	316.0
	May	237	1898.7	450	Nov	52	6981	363.0
	Subtotal	98	11671	1145	Dec	68	3500	238.0
	Total	98	11982	1175.6	Subtotal	50	25553	1289.0
1991	Jan	96	3197.9	307	Total	50	26247	1324.0
	Feb	70	4885.7	342	Aug	37	270	10.0
	Mar	58	4206.9	244	Sep	49	1469	72.0
	Apr	76	5631.6	428	Oct	45	4711	212.0
	May	48	5458.3	262	Nov	55	6473	356.0
	June	47	234.04	11	Dec	78	3218	251.0
	Subtotal	68	23614	1594	Subtotal	56	16141	901.0
1992	Total	68	23703	1600	Total	56	16195	904.0
	Jan	72	3500	252	Aug	50	820	41.0
	Feb	71	4309.9	306	Sep	50	3180	159.0
	Mar	69	5956.5	411	Oct	74	3878	287.0
	Apr	63	5381	339	Nov	87	2701	235.0
	May	43	4790.7	206	Subtotal	68	10580	722.0
	Subtotal	63	23938	1514	Total	68	14448	986.0
1993	Total	63	23938	1514	Aug	43	1033	44.7
	Jan	51	4366	223.2	Sep	39	2959	116.3
	Feb	77	4582	352.2	Oct	24	3116	75.8
	Mar	56	5189	292.2	Nov	78	1050	82.4
	Apr	51	3369	170.4	Dec	39	8158	319.2
	May	108	296	31.9	Subtotal	39	8644	338.2
	Subtotal	60	17802	1069.9	Total	39	8644	338.2
1994	Total	60	18874	1134.3	Aug	0	3	0.0
	Jan	176	311	54.8	Sep	74	2260	167.9
	Feb	232	1038	240.3	Oct	57	2230	128.0
	Mar	169	1776	299.6	Nov	86	2222	190.8
	Apr	102	4250	433.2	Dec	210	1012	212.5
	May	51	170	8.6	Subtotal	90	7727	699.2
	Subtotal	137	7545	1036.5	Total	90	7727	699.2
1995	Total	137	7545	1036.5	Aug	36	153	5.5
	Jan	130	2653	343.6	Sep	92	4553	416.7
	Feb	58	854.4	49.8	Oct	65	3919	256.2
	Mar	101	2663	267.7	Nov	59	5025	298.2
	Apr	65	1156	74.6	Dec	69	2653	184.0
	May	63	417	26.2	Subtotal	71	16303	1160.6
	Subtotal	98	7743	761.9	Total	71	16303	1160.6
1996*	Total	98	7743	761.9	Aug	97	507	49.4
	Jan	69	3170	218.9	Sep	81	1930	156.3
	Feb	74	771	57.0	Oct	70	2446	172.3
	Mar	199	1763	350.5	Nov	85	2233	190.1
	Apr	68	681	46.2	Subtotal	80	7116	568.1
	May	11	9	0.1	Total	80	7116	568.1
	Subtotal	105	6394	672.7	Aug	58	50	2.9
1997*	Total	105	6394	672.7	Sep	85	343	29.2
	Jan	115	574	66.0	Oct	94	2522	236.9
	Feb	336	137	46.0	Nov	49	1220	59.7
	Mar	1	42	0.0	Dec	109	382	41.8
	Apr	232	37	8.6	Subtotal	82	4517	370.5
	May	230	583	133.9	Total	82	4619	378.9
	Subtotal	185	1373	254.5	Aug			
1998*	Total	185	1404	260.2	Jul			
	Jan	166	959	159.6				
	Feb	287	997	286.0				
	Mar	204	257	52.4				
	Apr							
Subtotal	225	2213	498					
	Total	225	3595	809	Subtotal			
	Total	225	3595	809	Total			

Table 4. East area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in Denmark Strait, north of 65°N, by Iceland.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1990	Jan	5	8	0.0	Jul	84	40	3.4
	Feb	44	11	0.5	Aug	69	168	11.7
	Apr	12	9	0.1	Sep	65	835	54.2
	Jun	81	2347	190.2	Oct	62	47	2.9
	Subtotal	80	2375	190.8	Subtotal	66	1090	72.2
	Total	80	2538	203.9	Total	66	1165	77.1
1991					Aug	24	9	0.2
	May	252	1536	387.7	Sep	68	64	4.4
	Jun	85	394	33.4	Oct	112	350	39.2
	Total	218	1930	421.1	Total	104	423	43.7
1992	Apr	326	2839	926.0	Jul	110	90	9.9
	May	127	3908	494.7	Sep	17	6	0.1
	Subtotal	211	6747	1421	Oct	78	13	1.0
	Total	211	8232	1733.3	Sub total	101	109	11
					Total	101	169	17.1
1993	Mar	329	688	226.4				
	Apr	193	7296	1405.9	Sep	220	15	3.3
	May	147	4381	644.3	Oct	200	4	0.8
	Jun	114	29	3.3	Subtotal	216	19	4.1
	Subtotal	184	12394	2279.9	Total	216	21	4.6
	Total	184	13854	2548.4				
1994	Feb	364	14	5.1				
	Mar	350	1533	536.2	Aug	179	14	2.5
	Apr	70	86	6.0	Sep	55	56	3.1
	May	265	2045	542.3	Oct	104	77	8
	Jun	149	263	39.2	Nov	90	20	1.8
	Subtotal	286	3941	1128.8	Subtotal	92	167	15.4
	Total	286	5233	1498.9	Total			
1995	Feb	383	1339	513.2				
	Mar	209	983	205.6	Sep	171	7	1.2
	May	10	4	0.0	Oct			
	Subtotal	309	2326	718.8	Subtotal	171	7	1.2
	Total	309	3721	1150.0	Total			
1996 *	Feb	198	1249	246.8				
	Mar	229	359	82.3	Jul	500	7	3.5
	Apr	341	618	210.9	Aug	164	14	2.3
	May	58	12	0.7	Sep	123	40	4.9
	Subtotal	242	2238	540.7	Subtotal	175	61	10.7
	Total	242	2297	555.0	Total	175	61	10.7
1997 *	Jan	29	7	0.2				
	Feb	245	785	192.5				
	Mar	262	4278	1120.4	Oct	71	236	16.8
	Apr	286	2700	772.1	Nov	14	7	0.1
	May	134	1189	159.5	Dec	108	931	100.1
	Jun	25	8	0.2	Subtotal	100	1174	117.0
	Subtotal	250	8967	2244.9	Total	100	1388	138.3
1998 *	Jan	58	66	3.8				
	Feb	182	314	57.2				
	Mar	176	59	10.4	Sep	45	11	0.5
	Apr	218	3503	764.2				
	May	130	3148	408.7				
	Jun	129	24	3.1	Subtotal	45	11	0.5
	Subtotal	175	7114	1247.4	Total	45	11	0.5
	Total	175	7999	1402.5				

Table 5. North area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in the Denmark Strait, north of 65°N, by Faroe Islands.

Year	January - June				July - December				
	Month	CPE	Effort	Catch	Month	CPE	Effort	Catch	
1990	Jan	93	1205	112.5		Nov	65	307	13.9
	Feb	109	1307	142.2		Dec	62	1357	122.7
	Mar	85	957	81.2		Subtotal	82	1664	136.6
	Apr	23	113	2.6		Total	82	1925	158.0
	May	269	660	177.5					
	Subtotal	122	4242	516.0					
	Total	122	5631	685.0					
1991	Jan	112	1980	221.6		Sep	83	262	21.7
	Feb	91	2922	266.7		Oct		274	13.2
	Mar	68	1790	122.5		Nov	60	1333	79.6
	Apr	129	330	42.5		Dec	88	2759	244.1
	Subtotal	93	7022	653.3		Subtotal	77	4628	358.6
	Total	93	8610	801.0		Total	77	2659	206.0
1992	Jan	69	2040	140.0					
	Feb	66	1536	101.2		Oct	25	290	9.1
	Mar	96	1135	108.6		Nov	81	2120	171.6
	Apr	52	356	18.4		Dec	112	3131	350.2
	May	50	1234	61.7		Subtotal	96	5541	530.9
	Subtotal	68	6301	429.9		Total	96	6095	584.0
1993	Jan	66	2634	175.0					
	Feb	70	2394	167.0					
	Mar	63	1674	105.0					
	Apr	57	721	41.0					
	May	43	23	1.0					
	Subtotal	66	7446	489.0					
	Total	66	8436	554.0					
1994	Jan	398	133	53.0					
	Feb	173	596	103.0					
	Mar	167	293	49.0		Nov	52	287	15.0
	Apr	64	235	15.0		Dec	178	381	68.0
	May	90	189	17.0		Subtotal	124	668	83.0
	Subtotal	164	1446	237.0		Total	124	668	83.0
	Total	164	1745	286.0					
1995	Jan	114	1569	179.0					
	Feb	82	1242	102.0		Sep	93	354	33.0
	Mar	99	1106	109.0		Oct	79	191	15.0
	Apr	46	259	12.0		Nov	38	158	6.0
		0	0	0.0		Dec	57	1815	104.0
	Subtotal	96	4176	402.0		Subtotal	63	2518	158.0
	Total	96	5558	535.0		Total	63	3347	210.0
1996*	Jan	58	2921	168.0					
	Feb	43	768	33.0		Nov	151	118	17.8
	Mar	182	461	84.0		Dec	125	3183	397.0
	Subtotal	69	4150	285.0		Subtotal	126	3301	414.8
	Total	69	4995	343.0		Total	126	3637	457.0
1997*	Jan	64	1041	67.0					
	Feb	242	264	64.0		Sep	122	9	1.1
	Mar	0	9	0.0		Oct	57	405	23.0
	Apr	198	131	26.0		Nov	119	388	46.0
	May			0.0		Dec	151	1369	207.0
	Subtotal	109	1445	157.0		Subtotal	128	2171	277.1
	Total	109	1691	183.7		Total	128	2549	325.3
1998*	Jan	169	1062	179.0					
	Feb	265	865	229.0		Sep			
	Mar	282	454	128.0		Oct			
	Apr					Nov			
	May					Dec			
	Subtotal	225	2381	536.0		Subtotal			
	Total	225	4469	1006.0		Total			

Table 6. North area. Catch rates, corresponding effort (trawling hours) and catch (tons) from the shrimp fishery in the Denmark Strait by Denmark, north of 65°N.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1990	Jan	100	243	24.3	Jul	46	316	14.5
	Feb	74	140	10.3	Aug	43	454	19.3
	Mar	93	338	31.3	Sep	38	373	14.2
					Oct	47	414	19.4
					Nov	46	406	18.7
					Dec	17	186	3.1
	Subtotal	91	721	65.9	Subtotal	42	2149	89.2
	Total	91	3304	302.0	Total	42	2120	88.0
1991	Mar	52	349	18.2	Sep	45	230	10.3
	Apr	81	424	34.4	Oct	69	521	35.7
	May	78	328	25.6	Nov	0	3	0.0
	Subtotal	71	1101	78.2	Dec	52	294	15.2
	Total	71	3295	234.0	Subtotal	58	1048	51.2
1992	Jan	59	70	4.1	Total	58	2123	124.0
	Mar	41	293	11.9	Nov	37	115	4.3
	Apr	42	212	9.0	Dec	53	217	11.4
	Subtotal	43	575	25.0	Subtotal	47	332	15.7
	Total	43	3013	131.0	Total	47	613	29.0
1993	Jan	34	451	15.5				
	Feb	46	566	25.9				
	Mar	44	477	21.2				
	Apr	33	222	7.3	Dec	72	167	12.0
	Subtotal	41	1716	69.9	Subtotal	72	167	12.0
	Total	41	2094	85.3	Total	72	353	25.4
1994	Jan	150	147	22.0				
	Feb	77	65	5.0	Sept	49	41	2.0
	Mar	102	283	29.0	Oct	72	125	9.0
	Apr	55	110	6.0	Nov	66	122	8.0
	May	51	59	3.0	Dec	178	557	99.0
	Subtotal	102	605	62.0	Subtotal	140	845	118.0
	Total	102	634	65.0		140	952	133.0
1995	Jan	203	659	134.0				
	Feb	108	721	78.0				
	Mar	228	127	29.0	Dec	15	34	1.0
	Subtotal	160	1507	241.0	Subtotal	15	34	1.0
	Total	160	1507	241.0	Total	15	34	1.0
1996*	Jan	103	148	15.2				
	Jun	53	15	0.8	Dec	78	59	4.6
	Subtotal	98	163	16.0	Subtotal	78	59	4.6
	Total	98	163	16.0	Total	78	59	4.6
1997*					Aug	22	9	0.2
					Sep	54	46	2.5
					Nov	148	27	4.0
	May	110	41	4.5	Dec	116	492	57.0
	Subtotal	110	41	4.5	Subtotal	111	574	63.7
	Total	110	41	4.5	Total	111	577	64.0
1998*	Jan	177	231	41.0				
	Feb	778	108	84.0	Nov			
	Mar	396	154	61.0	Dec			
	Subtotal	377	493	186.0	Subtotal			
	Total	377	912	344.0	Total			

Table 7. North area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (ton's) from the shrimp fishery in Denmark Strait north of 65° N, by all nations combined in two periods of the year.

Year	Country	January-June			July - December		
		CPUE	Effort	Catch	CPUE	Effort	Catch
1978	Iceland	215	298	64.2	314	952	299.2
1979	Iceland	186	166	30.9	229	1982	454.4
1980	Greenland, Denmark	350	1665	582.0	129	2483	320.0
	France			50.0			
	Norway	468	3108	1455.0	124	8106	1006.0
	Iceland	125	1760	219.3	101	5318	539.4
	Faroe Islands	427	9115	3892.0			341.0
	Subtotal	393	15648	6148.3	117	15907	1865.4
	Total	393	15775	6198.3	117	18815	2206.4
1981	Greenland, Denmark	395	4013	1585.0			
	France	246	1436	353.0			
	Norway	216	9296	2006.0	43	232	10.0
	Iceland	93	688	68.0	67	848	56.9
	Faroe Islands			686.0			27.0
	Subtotal	260	15433	4012.0	62	1080	66.9
	Total	260	18072	4698.0	62	1516	93.9
1982	Greenland, Denmark	220	8432	1855.0			
	France	226	1833	414.0			
	Norway	203	9337	1894.0			
	Faroe Islands			737.0			
	Subtotal	212	19602	4163.0			
	Total	212	23072	4900.0			
1983	Greenland	255	5752	1467.0			
	France	192	1516	291.0			
	Norway	163	6830	1114.0	101	6100	613.0
	Iceland	99	52	5.1	161	238	38.3
	Denmark			204.0			
	Faroe Islands			443.0			
	Subtotal	203	14150	2877.1	103	6338	651.3
	Total	203	17332	3524.1	103	6338	651.3
1984	Greenland	340	6627	2250.0			
	France	256	1951	500.0			
	Norway	191	11141	2128.0			
	Iceland	42	53	2.2	103	7164	739.6
	Denmark			443.0			
	Faroe Islands			576.0			92.0
	Subtotal	247	19772	4880.2	103	7164	739.6
	Total	247	23900	5899.2	103	8074	831.6
1985	Greenland	270	6469	1744.0	251	3389	852.0
	France	194	2594	504.0	170	814	138.0
	Norway	166	12355	2051.0			
	Iceland	88	4485	396.0	94	14944	1398.0
	Denmark			150.0	137	1482	203.0
	Faroe Islands			404.0			270.0
	Subtotal	181	25903	4695.0	126	20629	2591.0
	Total	181	28959	5249.0	126	22779	2861.0
1986	Greenland	288	14285	4114.0	437	3811	1667.0
	France	175	3415	597.0	218	841	183.0
	Norway	145	12845	1861.0	123	1340	165.0
	Iceland	73	3205	234.0	103	8893	916.0
	Denmark	226	1962	443.0	226	252	57.0
	Faroe Islands	93	5428	506.0	416	531	221.0
	Subtotal	189	41140	7755.0	205	15668	3209.0
	Total	189	41140	7755.0	205	15668	3209.0
1987	Greenland	314	17667	5547.0	144	7502	1080.0
	Norway	135	11353	1533.0	96	5261	507.0
	Iceland				79	16835	1330.0
	France	241	2599	626.0			405.0
	Denmark	144	2997	431.0	99	1250	124.0
	Faroe Islands	229	1635	375.0	106	2068	220.0
	Subtotal	235	36251	8512.0	99	32916	3261.0
	Total	235	36251	8512.0	99	37004	3666.0

Table 7 continued

Year	Country	January-June			July - December		
		CPUE	Effort	Catch	CPUE	Effort	Catch
1988	Greenland	219	24111	5285.0	157	13820	2165.0
	Norway	83	15314	1274.0	83	9332	778.0
	Iceland	107	1769	189.5	54	22735	1234.5
	France	141	3138	444.0			50.0
	Denmark	95	3479	329.0	98	1172	115.0
	Faroe Islands	166	4031	669.0			10.0
	Subtotal	158	51842	8190.5	91	47059	4292.5
	Total	158	51842	8190.5	91	47717	4352.5
1989	Greenland	192	23343	4471.0	75	20039	1510.0
	Norway	84	8354	704.0	52	27056	1394.0
	Iceland	108	7835	847.3	45	10722	478.7
	France	191	1525	291.3	58	1536	89.8
	Denmark	211	1336	282.0	58	1450	84.0
	Faroe Islands	145	3035	439.0	93	1672	156.0
	Total	155	45428	7034.6	59	62475	3712.5
1990	Greenland	189	28956	5478.0	71	10298	732.0
	Norway	98	11982	1176.0	50	26247	1324.0
	Iceland	80	2538	203.9	66	1165	77.1
	France	126	286	36.0			15.0
	Denmark	91	3304	302.0	42	2120	88.0
	Faroe Islands	122	5631	685.0	82	1925	158.0
	Subtotal	150	52697	7880.9	57	41740	2379.1
	Total	150	52697	7880.9	57	42003	2394.1
1991	Greenland	119	33582	3980.0	88	2560	225.0
	Norway	68	23703	1600.0	56	16195	904.0
	Iceland	218	1930	421.1	104	423	43.7
	France	115	1024	117.5			
	Denmark	71	3295	234.0	58	2123	124.0
	Faroe Islands	93	8610	801.0	77	2659	206.0
	Total	99	72144	7153.6	63	23960	1502.7
1992	Greenland	103	17612	1811.0	96	2087	201.0
	Norway	63	23938	1514.0	68	14448	986.0
	Iceland	211	8232	1733.3	101	169	17.1
	Denmark	43	3013	131.0	47	613	29.0
	Faroe Islands	68	7446	508.0	96	6095	584.0
	Total	95	60241	5697.3	78	23412	1817.1
1993	Greenland	93	15073	1408.0	175	97	17.0
	Norway	60	18874	1134.3	39	8644	338.2
	Iceland	184	13854	2548.4	219	21	4.6
	Denmark	41	2094	85.3	72	353	25.4
	Faroe Islands	66	8436	554.0			
	Total	98	58331	5730.0	42	9115	385.2
1994	Greenland	170	6197	1056.0			
	Norway	137	7545	1036.5	90	7727	699.2
	Iceland	286	5233	1498.9	92	167	15.4
	Denmark	104	634	65.8	140	952	133.0
	Faroe Islands	164	1745	286.0	124	660	82.0
	Total	185	21354	3943.2	98	9506	930

Table 7 continued

Year	Country	January-June			July - December		
		CPUE	Effort	Catch	CPUE	Effort	Catch
1995	Greenland	220	8468	1861.0	54	964	52.0
	Norway	98	7743	761.9	71	16303	1160.6
	Iceland	309	3721	1150.0	171	7	1.2
	Denmark	160	1507	241.0	29	34	1.0
	Faroe Islands	96	5558	535.0	63	3347	210.0
	Total	168	26997	4548.9	69	20655	1424.8
1996*	Greenland	87	1789	155.0	175	766	134.0
	Norway	105	6394	672.7	80	7116	568.1
	Iceland	242	2297	555.0	175	61	10.7
	Denmark	98	163	16.0	78	59	4.6
	Faroe Islands	69	4995	343.0	126	3637	457.0
	Total	111	15638	1741.7	101	11639	1174.4
1997*	Greenland	149	269	40.0	146	301	44.0
	Norway	185	1404	260.2	82	4619	378.9
	Iceland	250	10856	2717.8	100	1388	138.3
	Denmark	110	41	4.5	111	577	64.0
	Faroe Islands	109	1691	183.7	124	2549	325.3
	Total	225	14261	3206.2	101	9434	950.5
1998*	Greenland	231	1476	341.0			
	Norway	225	3595	809.0			
	Iceland	175	7999	1402.5	45	11	0.5
	Denmark	377	912	344.0			
	Faroe Islands	225	4469	1006.0			
	Total	212	18451	3902.5	45	11	0.5

Table 8. Middle and South area. Catch rates, corresponding effort and catch (tonnes) from the shrimp fishery in the middle area in the Denmark Strait, i.e. south of 65° N by Greenland in two periods of the year.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1993	Jan	149	74	11.0				
	Feb	69	350	24.0				
	Mar	162	802	130.0				
	Apr	181	2422	438.0				
	May	329	923	304.0		Dec	1138	80 91.0
	Subtotal	198	4571	907.0		Subtotal	1138	80 91.0
1994*	Total	198	4168	827.0		Total	1138	80 91.0
	Jan	439	2015	884.0		Jul	463	19 8.8
	Feb	322	1123	362.0		Aug	460	904 415.5
	Mar	191	642	122.8		Sept	383	92 35.2
	Apr	288	835	240.4		Oct	250	32 8.0
	May	239	493	117.7		Nov	512	813 416.0
1995	Subtotal	338	5108	1726.9		Dec	323	878 283.6
	Total	338	5037	1703.0		Subtotal	426	2738 1167.1
	Jan	362	785	284.2		Total	426	2738 1167.0
	Feb	163	452	73.9		Jul	439	31 13.6
	Mar	33	24	0.8		Aug	380	499 189.4
	May	481	405	194.7		Sept	126	109 13.7
1996*	Subtotal	332	1666	553.6		Oct	546	37 20.2
	Total	332	1679	558.0		Nov	393	1162 456.9
	Jan	286	1888	540.0		Dec	367	2368 869.5
	Feb	444	1259	559.0		Subtotal	372	4206 1563.3
	Mar	469	505	237.0		Total	372	4243 1577.0
	Apr	441	399	176.0		Jul	342	780 267.0
1997*	May	50	8	0.4		Aug	403	1166 470.0
	June	388	24	9.3		Sept	218	101 22.0
	Subtotal	373	4083	1521.7		Oct	444	1700 755.0
	Total	373	3942	1469.0		Nov	282	3418 965.0
	Jan	475	1964	933.0		Dec	247	1119 276.0
	Feb	303	781	237.0		Subtotal	333	8284 2755.0
1998*	Mar	275	40	11.0		Total	333	8383 2788.0
	Apr	517	29	15.0		Jul	405	237 96.0
	May	315	20	6.3		Aug	853	17 14.5
	Subtotal	424	2834	1202.3		Oct	254	226 57.4
	Total	424	3203	1359.0		Nov	320	2429 776.2
	Jan	338	290	98.0		Dec	748	1916 1432.4
1998*	Feb	504	714	360.0		Subtotal	493	4825 2376.5
	Mar	438	2158	944.3		Total	493	4889 2408.0
	Apr	486	119	57.8		Jul	405	237 96.0
	May	Subtotal	445	3281	1460.1	Aug	853	17 14.5
	Total	445	4025	1791.0	Oct	254	226 57.4	
	Jan	338	290	98.0	Nov	320	2429 776.2	

Table 9. Middle and South area. Catch rates, corresponding effort and catch (tons) from the shrimp fishery south of 65° N by Norway in two periods of the year.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1993	March	41	270	11.1	Oct	19	10	0.1
	April	69	2253	156.2				
	May	77	2011	154.4				
	June				Nov		21	0.4
	Subtotal	71	4534	321.7	Dec			
	Total	71	4806	341.0	Subtotal	15	31	0.5
1994	Jan Feb Mar April May Subtotal	401	220	88.3	Aug	255	311	79.3
		138	179	24.7	Sep	210	239	50.1
		128	60	7.7	Oct	174	188	32.8
		165	747	123.1	Nov	200	989	198.2
		118	1705	200.8	Dec	152	81	12.3
		153	2911	444.6	Subtotal	209	1727	360.4
1995*	Jan Feb Mar April May Subtotal	153	2911	444.6	Total	209	1727	360.4
		153	2911	444.6	Aug Sep Oct Nov Dec Subtotal	260	470	122.2
		79	593	46.9		157	84	13.2
		159	383	60.9		157	1861	292.9
						82	76	6.2
		122	1148	139.8		70	20	1.4
1996*	Jan Feb March April May Subtotal	122	1148	139.8	Total	174	2511	435.9
		122	1148	139.8	Jul Aug Sep Oct Nov Subtotal	174	2511	435.9
		196	164	32.2		196	220	43.2
		108	1553	167.8		146	584	85.4
		108	1513	163.9		133	78	10.4
		255	1758	447.7		89	143	12.7
1997*	Jan Feb March April May Subtotal	153	1529	233.3	Nov Dec Subtotal	121	670	81.2
		160	6517	1044.9		137	1695	232.9
		160	6517	1044.9		Total	137	1695
		160	6517	1044.9		1695	232.9	
		137	1686	230.3		224	335	75.0
		158	2453	387.5		193	233	45.0
1998*	Feb March Subtotal	194	1763	342.9	Aug	165	394	65.0
		128	2886	369.7	Sep	161	1085	175.0
		108	592	63.8	Nov	135	297	40.1
		149	9380	1394.2	Dec	171	2344	400.1
		149	9473	1408.0	Subtotal	171	2367	404.0
		369	417	154.0	Total	171	2367	404.0

Table 10. Middle and South area. Catch rates, corresponding effort and catch (tons) from the shrimp fishery south of 65° N by Faroe Islands in two periods of the year.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1993	Feb	39	153	6.0		Dec	1895	38
	Mar	73	875	64.0				
	Apr	65	1332	87.0				
	May	32	180	5.7		Subtotal	1895	38
	Subtotal	64	2540	162.7		Total	1895	72.0
	Total	64	2389	153.0		Total	1895	72.0
1994	Jan	326	500	163.0		Oct	130	254
	Feb	183	556	102.0				
	Mar	168	161	27.0				
	Apr	229	380	87.0		Nov	236	554
	May	106	310	33.0		Dec	288	472
	Subtotal	216	1907	412.0		Subtotal	234	1280
1995	Total	216	2106	455.0		Total	234	300.0
	Feb	91	527	48.0		Total	234	1370
	Mar	77	261	20.0				
	Apr	71	268	19.0				
	Subtotal	82	1056	87.0				
	Total	82	1408	116.0				
1996*	Feb	153	227	34.8		Sep	127	71
	Mar	142	952	135.0				
	Apr	261	306	80.0				
	Subtotal	168	1485	249.8		Dec	890	91
	Total	168	1659	279.0		Subtotal	556	162
						Total	556	90.0
1997*	Nov	104	415	43.0		Total	104	425
	Feb	232	743	172.7				
	Mar	115	247	28.5				
	Apr	140	321	45.0		Oct	105	92
	Subtotal	169	2040	345.2		Nov	186	503
	Total	169	2390	404.4		Subtotal	174	103.5
	Total	174	697	121.2		Total	174	93.8

Table 11. Middle and south area. Catch rates, corresponding effort and catch (tons) from the shrimp fishery in the Denmark Strait, i.e. south of 65° N, by Denmark.

Year	January - June				July - December			
	Month	CPUE	Effort	Catch	Month	CPUE	Effort	Catch
1993	Apr	65	361	23.4				
	May	120	183	21.9				
	Subtotal	83	544	45.3				
	Total	83	572	47.6				
1994	Jan	100	10	1.0	Aug	268	473	127.0
	Feb	0	8	0.0	Sep	184	331	61.0
	Apr	158	303	48.0	Oct	175	744	130.0
	May	90	120	10.8	Nov	231	432	100.0
				Dec	211	57	12.0	
	Subtotal	136	441	60	Subtotal	211	2037	430.0
	Total	136	391	53.0	Total	211	2061	435.0
1995	Feb	205	22	4.5	Jul	579	247	143.0
				Aug	326	427	139.0	
	May	418	39	16.3	Sep	276	257	71.0
				Oct	221	408	90.0	
				Nov	194	376	73.0	
				Dec	157	338	53.0	
	Subtotal	341	61	20.8	Subtotal	277	2053	569.0
1996*	Total	341	62	21.0	Total	277	2035	564.0
1996*	Jan	452	176	79.6	Jul	449	348	156.2
	Feb	169	160	27.0	Aug			
	Mar	419	319	133.8	Sep			
	Apr	414	387	160.1	Oct			
	May	279	340	95.0	Nov	232	411	95.5
	Jun	323	369	119.1	Dec	217	292	63.5
	Subtotal	351	1751	614.6	Subtotal	300	1051	315.2
1997*	Total	351	1775	623.0	Total	300	1051	315.2
1997*	Feb	73	30	2.2	Jul	376	540	203.0
	Mar	84	25	2.1	Aug	299	646	193.0
	April	968	174	168.4	Sep	275	212	58.2
	May	624	367	229.0	Oct	192	582	112.0
	Jun	493	537	265.0	Nov	199	478	95.0
	Subtotal	588	1133	666.7	Subtotal	269	2458	661.2
	Total	588	1141	671.2	Total	269	2475	665.7
1998*	Jan	280	288	80.7	Jul			
	Feb	197	349	68.7	Aug			
	Mar	689	286	197.0	Sep			
	Apr	463	159	73.6	Oct			
	Subtotal	388	1082	420.0	Nov			
	Total	388	2002	777.0	Subtotal			
					Total			

Table 12. North area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in Denmark Strait north of 65° N, by years.

Year	Periods	CPUE	Effort	Catch	Year	Periods	CPUE	Effort	Catch
1980	Jan-Jun	393	15775	6198.3	1990	Jan-Jun	150	52697	7880.9
	Jul-Dec	117	18815	2206.4		Jul-Dec	57	42003	2394.1
	Mean/Total	243	34590	8404.7		Mean/Total	109	94700	10275.0
1981	Jan-Jun	260	18072	4698.0	1991	Jan-Jun	99	72144	7153.6
	Jul-Dec	62	1516	93.9		Jul-Dec	63	23960	1502.7
	Mean/Total	245	19588	4791.9		Mean/Total	90	96104	8656.3
1982	Jan-Jun	212	23072	4900.0	1992	Jan-Jun	95	60241	5697.3
	Jul-Dec	-	-	-		Jul-Dec	78	23412	1817.1
	Mean/Total	212	23072	4900.0		Mean/Total	90	83653	7514.4
1983	Jan-Jun	203	17332	3524.1	1993	Jan-Jun	98	58331	5730
	Jul-Dec	103	6338	651.3		Jul-Dec	42	9115	385.2
	Mean/Total	176	23670	4175.4		Mean/Total	91	67446	6115.2
1984	Jan-Jun	247	23900	5899.2	1994	Jan-Jun	185	21354	3943.2
	Jul-Dec	103	8074	831.6		Jul-Dec	98	9506	930.0
	Mean/Total	211	31974	6730.8		Mean/Total	158	30860	4873.2
1985	Jan-Jun	181	28959	5249.0	1995	Jan-Jun	168	26997	4548.9
	Jul-Dec	126	22779	2861.0		Jul-Dec	69	20655	1424.8
	Mean/Total	157	51738	8110.0		Mean/Total	125	47652	5973.7
1986	Jan-Jun	189	41140	7755.0	1996*	Jan-Jun	111	15638	1741.7
	Jul-Dec	205	15668	3209.0		Jul-Dec	101	11639	1174.4
	Mean/Total	193	56808	10964.0		Mean/Total	107	27277	2916.1
1987	Jan-Jun	235	36251	8512.0	1997*	Jan-Jun	225	14261	3206.2
	Jul-Dec	99	37004	3666.0		Jul-Dec	101	9434	950.5
	Mean/Total	166	73255	12178.0		Mean/Total	175	23695	4156.7
1988	Jan-Jun	158	51842	8190.5	1998*	Jan-Jun	212	18451	3902.5
	Jul-Dec	91	47717	4352.5		Jul-Dec	45	11	0.5
	Mean/Total	126	99559	12543.0		Mean/Total	211	18462	3903.0
1989	Jan-Jun	155	45428	7034.6					
	Jul-Dec	59	62475	3712.5					
	Mean/Total	100	107903	10747.1					

Table 13. Middle and south area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in the middle area of Denmark Strait, i.e. south of 65°, by all nations combined in two periods of the year.

Year	Country	January-June			July - December		
		CPUE	Effort	Catch	CPUE	Effort	Catch
1993	Greenland	198	4168	827.0	1138	80	91.0
	Norway	71	4806	341.0	15	34	0.5
	Denmark	83	572	47.6			
	Faroe Islands	64	2389	153.0	1895	38	72.0
	Total	115	11935	1368.6	1076	152	163.5
1994	Greenland	338	5037	1703.0	426	2738	1167.0
	Norway	153	2911	444.6	209	1727	360.4
	Denmark	136	391	53.0	211	2061	435.0
	Faroe Islands	216	2106	455.0	234	1370	321.0
	Total	254	10445	2655.6	289	7896	2283.4
1995	Greenland	332	1679	558.0	372	4243	1577.0
	Norway	122	1148	139.8	174	2511	435.9
	Denmark	339	62	21.0	277	2035	564.0
	Faroe Islands	82	1408	116.0	556	216	120.0
	Total	194	4297	834.8	299	9005	2696.9
1996*	Greenland	373	3942	1469.0	333	8383	2788.0
	Norway	160	6517	1044.9	137	1695	232.9
	Denmark	351	1775	623.0	300	1051	315.2
	Faroe Islands	168	1659	279.0	104	425	44.0
	Total	246	13893	3415.9	293	11554	3380.1
1997*	Greenland	424	3203	1359.0	493	4889	2408.0
	Norway	149	9473	1408.0	171	2367	404.0
	Denmark	588	1141	671.2	269	2475	665.7
	Faroe Islands	169	2390	404.4	174	697	121.2
	Total	237	16207	3842.6	345	10428	3598.9
1998	Greenland	445	4025	1791.0			
	Norway	369	417	154.0			
	Denmark	388	2002	777.0			
	Faroe Islands						
	Total	422	6444	2722.0			

Table 14. Middle and south area. Catch rates (kg per hour trawling) and corresponding effort (hours trawling) and catch (tons) from the shrimp fishery in the area south of 65° N in the Denmark Strait.

Year	Periods	CPUE	Effort	Catch
1993	Jan-Jun	115	11935	1368.6
	Jul-Dec	1076	152	163.5
	Mean/Total	127	12087	1532.1
1994	Jan-Jun	254	10445	2655.6
	Jul-Dec	289	7896	2283.4
	Mean/Total	269	18341	4939.0
1995	Jan-Jun	194	4297	834.8
	Jul-Dec	299	9005	2696.9
	Mean/Total	266	13302	3531.7
1996*	Jan-Jun	246	13893	3415.9
	Jul-Dec	293	11554	3380.1
	Mean/Total	267	25447	6796.0
1997*	Jan-Jun	237	16207	3842.6
	Jul-Dec	345	10428	3598.9
	Mean/Total	279	26635	7441.5
1998*	Jan-Jun	422	6444	2722.0
	Jul-Dec	422	6444	2722.0
	Mean/Total	422	6444	2722.0

Table 15. Nominal catch (tons) of shrimp in the Denmark Strait.

Nation	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	***1997	***1998
<b>Northern area</b>																					
Denmark	-	702	581	740	204	443	363	500	555	444	366	390	368	160	111	199	242	21	69	344	
Faroe Islands	-	4233	713	737	443	668	674	727	595	679	595	843	1007	1092	554	368	745	800	509	1006	
France	-	50	353	414	291	500	642	780	1030	494	381	51	118	-	-	-	-	-	-	-	
Greenland	-	200	1004	1115	1467	2250	2596	5781	6627	7456	5976	6210	4205	2012	1425	1056	1913	289	84	341	
Iceland	363	486	759	125	0	43	742	1794	1150	1330	1431	1326	281	465	1750	2553	1514	1151	566	2856	
Norway	-	800	2461	2016	1896	1727	2128	2051	2026	2041	2052	2098	2500	2504	2500	1473	1736	1923	1241	639	809
<b>Subtotal</b>	<b>363</b>	<b>1285</b>	<b>8405</b>	<b>4792</b>	<b>4902</b>	<b>4175</b>	<b>6731</b>	<b>8110</b>	<b>10964</b>	<b>12178</b>	<b>12556</b>	<b>10742</b>	<b>10275</b>	<b>8657</b>	<b>7514</b>	<b>6116</b>	<b>4873</b>	<b>5974</b>	<b>2917</b>	<b>4157</b>	<b>3903</b>
<b>Southern area</b>																					
Denmark	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	488	585	938
Faroe Islands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225	776	236	323
Greenland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	918	2870	2135	4257
Norway	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	341	805	576	1278
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1532</b>	<b>4939</b>	<b>3532</b>	<b>6796</b>
<b>Σ Iceland EEZ</b>	<b>363</b>	<b>485</b>	<b>759</b>	<b>125</b>	<b>0</b>	<b>43</b>	<b>742</b>	<b>1794</b>	<b>1150</b>	<b>1330</b>	<b>1431</b>	<b>1326</b>	<b>281</b>	<b>465</b>	<b>1750</b>	<b>2653</b>	<b>1514</b>	<b>1151</b>	<b>566</b>	<b>2856</b>	<b>1403</b>
<b>Σ northern area Greenland EEZ</b>	<b>0</b>	<b>800</b>	<b>7646</b>	<b>4667</b>	<b>4902</b>	<b>4132</b>	<b>5989</b>	<b>6316</b>	<b>9814</b>	<b>10848</b>	<b>11125</b>	<b>9416</b>	<b>9994</b>	<b>8192</b>	<b>5764</b>	<b>3563</b>	<b>3359</b>	<b>4823</b>	<b>2351</b>	<b>1301</b>	<b>2500</b>
<b>Σ Southern area Greenland EEZ</b>	<b>363</b>	<b>1285</b>	<b>8405</b>	<b>4792</b>	<b>4902</b>	<b>4175</b>	<b>6731</b>	<b>8110</b>	<b>10964</b>	<b>12178</b>	<b>12556</b>	<b>10742</b>	<b>10275</b>	<b>8657</b>	<b>7514</b>	<b>6116</b>	<b>4873</b>	<b>5974</b>	<b>2917</b>	<b>4157</b>	<b>3903</b>
<b>Σ Greenland EEZ</b>	<b>0</b>	<b>800</b>	<b>7646</b>	<b>4667</b>	<b>4902</b>	<b>4132</b>	<b>5989</b>	<b>6316</b>	<b>9814</b>	<b>10848</b>	<b>11125</b>	<b>9416</b>	<b>9994</b>	<b>8192</b>	<b>5764</b>	<b>3563</b>	<b>3359</b>	<b>4823</b>	<b>2351</b>	<b>1301</b>	<b>2500</b>
<b>ΣΣ all areas</b>	<b>363</b>	<b>1285</b>	<b>8405</b>	<b>4792</b>	<b>4902</b>	<b>4175</b>	<b>6731</b>	<b>8110</b>	<b>10964</b>	<b>12178</b>	<b>12556</b>	<b>10742</b>	<b>10275</b>	<b>8657</b>	<b>7514</b>	<b>6116</b>	<b>4873</b>	<b>5974</b>	<b>2917</b>	<b>4157</b>	<b>3903</b>
<b>Advised TAC</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8000	5000	5000	5000
<b>Effective TAC Greenland EEZ</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8000	5000	5000	5000

\* ADVISED for a few years as a precautionary measure.

\*\* not including Greenland fishery north of 66°30' N.

\*\*\* Provisional

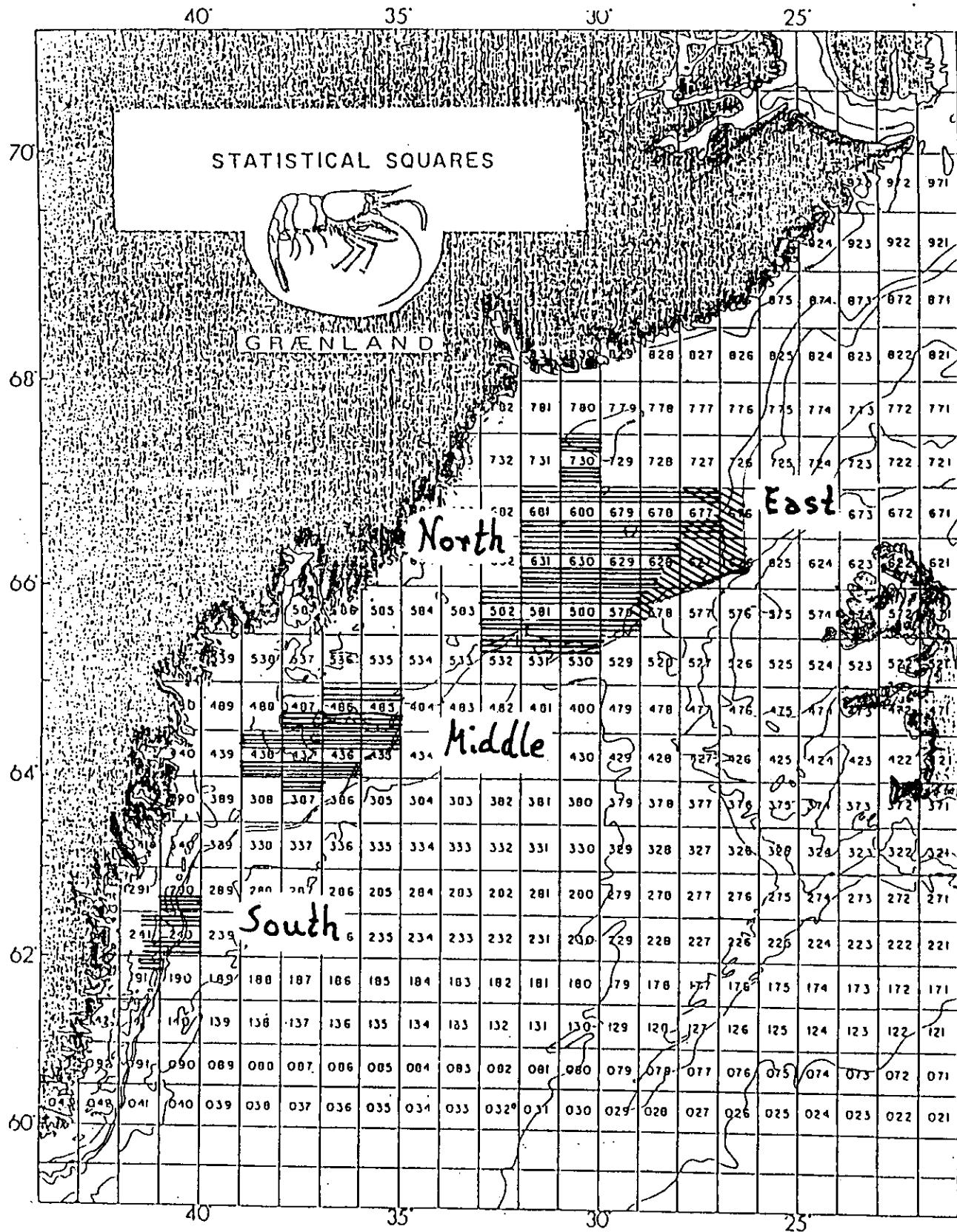


Fig. 1. The strata numbers in the Denmark strait.