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STANDARD TRAWL STATIONS FOR CONTROLLING
PRE-RECRUIT WEST GREENLAND COD
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It is a well known fact in West Greenland inshore and offshore waters that the cod descends to deep, warm water in the winter months, when it is often fished in considerable quantities by the prawn trawlers at depths about 250-400 m.

When Greenland Fisheries Investigations in 1967 got a new research vessel (167 GRT) its working program included trawling with fine meshed (36 mm stretched) prawn trawl. In order to study prawn stocks and pre-recruit cod. For the last purpose three standard stations near Godthåb were selected (one coastal station and two offshore stations), all of which can normally be fished throughout the year, when not extraordinary ice conditions prohibit the activity. It was planned that they should be fished regularly in the winter and spring time, and that at least three hauls (one hour each) should be made each time. The total catch of cod should be measured in cm, and otolith samples for determining year-class strengths should be taken from stratified materials.

Trawling at the three stations has been carried out in 1968-70. The results are presented in Tables 1-4 (hauls technically unsuccessful excluded) but unfortunately with poor results. Only one station (the Godthåb Deep station) rendered sufficiently good catches of cod, but many trawling experiments failed because of technical troubles (gear spoiled or not operating well, bad weather etc.).

To sum up the results from the Godthåb Deep station, the following figures can be given:

In April-May 1968 age-group V (year-class 1963) was dominating (41.1%, average number per hour 295).

In January-March 1969 age-group IV (year-class 1965) dominated (47.6%, average number per hour 185).

In May 1969 age-group III (year-class 1966) had become dominant (64.1%, average number per hour 272).

In 1970 trawling failed in winter and spring.

Discussion. From these sparse results it seems reasonable to continue regular trawling in the Godthåb Deep and try to find some more trawl grounds, where sufficient catches of cod can be made, and which can be fished regularly. Possibly also other grounds should be included in the pre-recruit studies, even if they cannot be fished regularly because of long distances from Godthåb, ice conditions or other causes.

Table 1. No. of cod in prawn trawl catches. Offshore from the Godth&b Deep (abt. 63°58'N, 52°22'W.).

St.no.	Year	Date	Depth in m	Minutes trawled	Cod per hour
3941	1968	IV 1	300	60	1088
3965 I	1968	V 1	275-300	45	134
II	"	V 2	280-300	50	143
4142 I	1969	I 8	300	60	353
II	"	I 9	300	60	418
III	"	I 9	300	60	430
4168 I	1969	III 4	290-300	60	338
II	"	III 5	290-300	60	407
4213 I	1969	V 7	300	60	407
II	"	V 7	300	60	565
III	"	V 8	300	60	300
4276 I	1969	VIII 15	280-300	30	78
II	"	VIII 16	300	60	9
4376 I	1970	VI 4	300	60	67
II	"	VI 4	300	54	73
III	"	VI 5	300	57	30
4422	1970	VII 24	300	38	15

Table 2. No. of cod in prawn trawl catches. Offshore from the Sukkertoppen Deep (abt. 64°20'N, 52°55'W.).

St.no.	Year	Date	Depth in m	Minutes trawled	Cod per hour
4058	1968	VIII 7	480-510	60	5
4144 I	1969	I 16		60	2
II	"	I 16	465-	60	2
III	"	I 16	495	30	0
4188 I	1969	IV 15	460-	60	0
II	"	IV 15	540	60	1
4375	1970	VI 1	460-510	60	1
4420 I	1970	VII 22		60	3
II	"	VII 22	500-	60	36
III	"	VII 22	540	60	11

Table 3. No. of cod in prawn trawl catches from the inshore Narssaq Ground (abt. 63°52'N.51°27'W.).

St.no.	Year	Date	Depth in m	Minutes trawled	Cod per hour
3907	1968	I 2	260	45	129
3918	1968	I 29	220-260	45	10
3928	1968	II 27	260	45	1
3978	1968	V 9	230-250	50	0
4137 I	1968	XII 4	210-	30	4
II	"	XII 4	255	30	12
III	"	XII 5		45	0
4149 I	1969	I 24	222-	45	25
II	"	I 24	240	45	12
III	"	I 24		45	8
4206 I	1969	IV 30	210-250	40	0
II	"	V 1	220-230	40	0
4277	1969	VIII 18	220-240	45	0
4314 I	1969	XI 20	220-	25	28
II	"	XI 20	240	50	8
III	"	XI 21		40	7
4360 I	1970	V 21	240-250	45	0
II	"	V 21	250	60	0

Table 4. Year-class strengths in cod from prawn trawl catches from January to May. Godthåb Deep (abt. 63°58'N.52°22'W., depths 280-300 m).

Year	Date	Minutes trawled	No. of hauls	No. of cod (age-groups I-IX+) per hour trawled									
				I	II	III	IV	V	VI	VII	VIII	IX+	Total
1968	IV 1	60	1	-	2.2	129.5	287.2	530.9	104.4	29.4	4.3	-	1088
"	V 1-2	95	2	-	-	32.5	33.9	59.6	11.5	1.4	-	-	139
1969	I 8-9	180	3	-	-	71.0	211.5	69.4	27.4	8.0	6.0	6.6	400
"	III 4-5	120	2	-	-	64.5	157.5	89.0	47.0	9.0	4.5	1.5	373
"	V 7-8	180	3	-	2.2	271.7	130.0	11.6	7.6	-	0.7	0.3	424