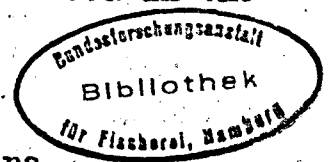


Distribution and Age of Young Redfish *S.mentella*
Travin and *S.marinus* L. in the Barents Sea in the
Autumn-Winter Period 1972-1973

by

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Data on distribution and length-age composition of young redfish were gathered on board the R/V "Tunets" in the Bear Island-Spitsbergen area in September-October 1972 and in the southern Barents Sea in January-March 1973.

Young *S.mentella* distributed mainly along the Spitsbergen and Northern Branches of the North Cape Current (Fig.1). Dense concentrations were found to the south-west of Bear Island, where 8250 young redfish 11-20 cm long were registered per trawling hour. Maximal number of specimens, 29401, was caught off West Spitsbergen. Specimens 14-20 cm long predominated there.

21658 specimens of young redfish 15 to 28 cm long were caught per trawling hour off the Prince Karl Island. 2730 to 3550 young redfish 6-15 cm long were caught per trawling hour in the South Cape Deep area and to the south-west of the Hope Island.

In 1972 the maximal quantity of young *S.mentella*, with predominance of specimens of the 1969 year class, was registered in the Bear Island-Spitsbergen area. We should consider the 1966, 1967 and 1968 year classes to be abundant. 1964 and 1965 year classes are apparently rich as well (Table 1).

Young *S.marinus* were registered in small quantities off West Spitsbergen, where the size of their catches was 50 times less than that of *S.mentella*. The greatest quantity of the young of this species, 797 specimens per trawling hour, were caught on

the western and southern slopes of the Bear Island Bank. It were mainly small specimens 6 to 15 cm long; larger specimens encountered singly (Fig.2).

Specimens of the 1969, 1966 and 1965 year classes predominated both among young *S. marinus* and *S. mentella*.

In the southern Barents Sea young *S. mentella* were observed in great quantities, as in 1971-72. The bulk of the young distributed in the areas along the Northern Branch of the North Cape Current. 4216 specimens per hour trawling were caught in the Western Deep, 871 specimens on the Demidov Bank, 471 specimens on the Central Ellevation, 696 specimens on the North Cape Bank and 2037 specimens on the Murmansk Tongue. A great quantity of the young was caught along the Main Branch of the Murmansk Current (1182 specimens on slopes of the Murmansk Bank and 300 specimens in Central areas), and they were registered as far as Novaya Zemlya Shallows (Fig.1). *S. mentella* were met with singly in trawl catches in coastal areas.

Specimens 5 to 10 cm long of the 1967, 1968 and 1969 year classes predominated in catches on the Central Ellevation and Demidov Bank.

Older redfish 21 to 30 cm long of the 1964, 1965 and 1966 year classes made up the bulk of the catches in the Western Deep, on the Nordkin and Finnmarken Banks, on the Murmansk Tongue (Table 2).

In January-March 1973 young *S. marinus* mainly distributed in the Western and Coastal areas of the southern Barents Sea. The greatest quantity was caught on the Demidov Bank (1175 speci-

mens), Rybachya (548 specimens) and Kildin (514 specimens) Banks (Fig.2). Catches mainly consisted of specimens 16 to 30 cm long of the 1964, 1965 and 1966 year classes.

Judging by the size of the catch the 1968 and 1969 year classes should be considered to be abundant (Table 2).

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Headings for Figures

to the paper by T.S.Berger and R.A.Cherevina "Distribution and Age of Young Redfish *S.mentella* Travin and *S.marinus* L. in the Barents Sea in the Autumn-Winter Period 1972-1973".

Fig.1. Distribution of young *S.mentella* in 1972-1973.

Fig.2. Distribution of young *S.marinus* in 1972-1973.

Table 1

Average quantity (spec.) of young redfish of different age per hour trawling in the Bear Island-Spitsbergen area.

Year	No. of trawling hours	Average catch per trawling hour 1)	Age											n
			0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	10+	
<u>S. mantella</u>														
1964	130	2445	6	282	305	75	365	534	216	222	214	135	91	3179
1965	155	6310	84	3097	746	727	463	212	641	150	123	50	16	9780
1966	115	5858	-	62	2974	1382	430	294	248	201	145	68	50	6737
1967	123	6480	11	567	297	3152	1556	348	183	102	197	48	18	7971
1968	123	2030	-	97	910	57	276	355	158	58	59	37	21	2498
1969	161	3315	173	80	148	1257	297	640	477	150	36	22	34	5338
1970	143	10840	-	2632	303	143	1365	2097	1595	1695	809	63	138	15505
1971	155	44067	9	2020	12729	6265	9876	2366	4961	2251	2128	919	343	68304
1972	168	46623	21	728	4092	18139	3633	5691	6532	4012	2950	930	118	78328
<u>S. marinus</u>														
1964	130	278	2	14	19	5	14	82	12	48	24	18	39	362
1965	155	709	10	113	44	26	26	162	288	39	-	-	-	1097
1966	115	657	-	15	153	56	53	25	75	168	52	36	21	756
1967	123	1556	22	567	149	241	76	64	37	69	233	83	16	1914
1968	123	1026	-	11	471	42	67	45	53	89	82	90	74	1263
1969	161	1367	-	21	218	532	48	138	48	59	53	137	112	2202
1970	143	11013	-	5634	947	700	1351	977	718	350	221	39	73	15749
1971	155	697	6	98	155	57	17	80	79	33	55	37	80	1080
1972	168	930	24	83	123	189	20	50	111	120	78	98	52	1563

1) x 100

Table 2

Average quantity (spec.) of young redfish of different age
per hour trawling in the southern Barents Sea

Year	No. of trawling hours	Average catch per trawling hour 1)	Age										n
			1	2	3	4	5	6	7	8	9	10	
<u>S. mentella</u>													
1966	170	478	26	276	126	8	4	1	5	10	16	5	814
1967	147	-	-	-	-	-	-	-	-	-	-	-	-
1968	61	969	290	433	121	125	-	-	-	-	-	-	591
1969	264	293	6	26	52	54	36	38	43	19	9	9	775
1970	279	760	151	12	34	43	107	82	154	80	82	14	2123
1971	250	11178	1983	1065	366	17	338	235	1302	2426	1056	1172	27946
1972	139	23084	2702	424	1878	415	717	3311	4364	5353	2348	1566	32087
1973	124	8691	1299	169	303	410	709	627	1143	1969	1600	460	10777
<u>S. marinus</u>													
1965	59	10735	8706	610	76	20	441	288	225	139	88	134	6335
1966	170	278	3	145	28	10	-	4	9	14	25	39	473
1967	147	1834	1545	175	73	38	3	-	-	-	-	-	2696
1968	61	1393	61	1393	570	518	149	156	-	-	-	-	850
1969	264	1098	70	116	188	159	76	104	158	112	72	42	2899
1970	279	2997	1971	92	42	155	131	146	128	196	90	41	8363
1971	250	1158	188	199	54	34	82	125	205	124	84	45	2895
1972	139	2234	478	286	476	68	105	205	211	209	108	65	3106
1973	124	3537	161	83	154	405	482	434	747	524	310	215	4386

1) x 100

