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**SCIENTIFIC COUNCIL MEETING - JUNE 2023****ESTONIAN RESEARCH REPORT FOR 2022**

by

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This Report contains information for Estonian fishing vessels which operated in NAFO RA in 2022. Fishery took place only in SA 3. Catch, effort and length distribution information by sub-areas is from onboard NAFO observers. In Estonia, NAFO observers are employed by the Estonian Marine Institute, and they are also specially trained to collect basic scientific data.

**Sub-area 3****A. Status of the Fishery**

In 2022 two vessels were all year-round fishing in SA3, both targeting only finfish and skates. One trip started in mid-December 2021 and was completed in 2022. In 2022, two more trips took place.

Vessels spent most of the fishing time in zone 3N (Table 1), with an official landed total catch of 1297 tons, followed by 3M and 3O with a total catch of 1031 and 419 tons respectively. The vessels spent the least time in Area 3L, where a very significant total catch of 300 tons was caught.

**Table 1.** Fishing effort (hours) of Estonian fleet targeting finfish in NAFO area by division and month.

2022	Division				Grand Total
	3L	3M	3N	3O	
Month					
1		239			239
2		132	62		194
3	12	168	56		236
4	325	3			328
7		152			152
8		133	378		511
9	46		480	76	602
10			87	307	394
11			19	18	37
Total effort, hrs	383	827	1082	401	2693

The fishing effort which in 2015-2018 was on an upward trend, has continuously decreased in recent years and was the lowest in the last ten years in 2022 (Table 2).



**Table 2.** Fishing effort (hours) of Estonian fleet targeting finfish in NAFO area in 2013-2022 by division.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
3L	1413	1425	980	985	1022	1581	1772	1379	801	383
3M	2534	1260	816	486	2702	2922	2590	725	1032	827
3N	937	856	999	1483	1130	702	833	534	790	1082
3O	92	423	578	736	560	229	63	290	598	401
Total effort, hrs	4976	3965	3373	3690	5414	5434	5258	2928	3221	2693

Observers from the Estonian Maritime Institute of the University of Tartu were on board on all three of the trips. According to observer estimated catch and discard data, main target species were RED, YEL, GHL and HKS, followed by PLA and COD (Table 3).

**Table 3.** Observer estimated retained catch and discard (tons) of Estonian fleet in NAFO area by division.

2022	Latin name	3L			3M			3N			3O			total
		kept	disc	total	kept	disc	total	kept	disc	total	kept	disc	total	
ANG	<i>American angler</i>										0.390		0.390	0.390
BSK	<i>Basking shark</i>											0.350	0.350	0.350
CAB	<i>Anarhichas dentulatus</i>					0.235	0.235							0.235
CAP	<i>Mallotus villosus</i>							0.395	0.395					0.395
CAS	<i>Anarhichas minor</i>					0.220	0.220							0.220
CAT	<i>Anarhichas sp.</i>					0.025	0.025		0.025	0.025				0.050
COD	<i>Gadus morhua</i>		0.005	0.005	29.352	1.165	30.517	30.003	0.795	30.798	3.183	0.025	3.208	64.528
ELZ	<i>Lycodes spp</i>					0.005	0.005							0.005
GHL	<i>Reinhardtius hippoglossoides</i>	211.689	0.010	211.699	19.710		19.710		0.137	0.137		0.110	0.110	231.656
GSK	<i>Somnousus microcephalus</i>		0.300	0.300		0.815	0.815							1.115
HAL	<i>Hippoglossus hippoglossus</i>	0.997		0.997	7.005		7.005	15.587	0.020	15.607	6.631		6.631	30.241
HKS	<i>Silver hake</i>							0.031		0.031	101.987	1.055	103.042	103.073
HKW	<i>Urophycis tenuis</i>											1.355	1.355	1.355
MZZ	<i>Osteichthyes</i>		0.370	0.370		1.035	1.035		4.045	4.045		1.225	1.225	6.675
PLA	<i>Hippoglossoides platessoides</i>		0.005	0.005	21.239	0.050	21.289	63.547	1.420	64.967	6.901	0.035	6.936	93.197
POR	<i>Lamna nasus</i>					0.150	0.150		0.170	0.170		0.250	0.250	0.570
RED	<i>Sebastes spp</i>	23.109	0.110	23.219	968.838	0.445	969.283	983.580	3.505	987.085	249.141	0.555	249.696	2229.282
RHG	<i>Macrourus berglax</i>	2.361	0.180	2.541	0.218	0.020	0.238							2.779
RNG	<i>Roundnose grenadier</i>								0.875	0.875		0.385	0.385	1.260
SKA	<i>Raja spp</i>	1.078		1.078	6.240	0.030	6.270	16.002	0.815	16.817	1.851	0.145	1.996	26.161
SWO	<i>Xiphias gladius</i>											3.120	3.120	3.120
WIT	<i>Glyptocephalus cynoglossus</i>		0.005	0.005	0.983		0.983	2.200	0.175	2.375	0.086	0.040	0.126	3.489
YEL	<i>Limanda ferruginea</i>							305.548	0.820	306.368				306.368
<b>Grand Total</b>		<b>239.234</b>	<b>0.985</b>	<b>240.219</b>	<b>1053.585</b>	<b>4.195</b>	<b>1057.780</b>	<b>1416.498</b>	<b>13.197</b>	<b>1429.695</b>	<b>370.171</b>	<b>8.650</b>	<b>378.821</b>	<b>3106.516</b>

In addition to effort and discard information, specifically trained NAFO observers collected length, weight, sex data and otoliths for age reading. Compared to the previous year, the number of samples has decreased. The list of collected data is in Table 4. All lengths are TL and length groups (LG) on figures 2-4 are rounded to the nearest half centimeter. Mesh sizes of used OTB trawls in finfish fishery in codend were between 138-146 mm and for skates 285 mm. Length distributions are presented by species as sampled number of fish by subareas (Tables 5-9, figures 1-4).

**Table 4.** Biological sampling list for Estonia in 2022. Gear OTB, Type of Sample OC. \*Number of sexed fish; \*\*Only age structures collected, fish are not aged yet.

Country	Species Code	NAFO Division	Month	Retained/ Discarded	No. of samples	No. Measured	No. Sexed*	No. Aged**	No. Weighed
EST	COD	3M	1	Retained	7	175	95	95	95
EST	COD	3M	2	Retained	6	110	80	80	80
EST	COD	3M	2	Discarded	1	9	9	9	9
EST	COD	3M	3	Retained	3	35	35	35	35
EST	COD	3M	3	Discarded	3	45	31	31	31
EST	COD	3M	7	Retained	3	143	98	63	98
EST	COD	3M	7	Discarded	2	111	111	84	111
EST	COD	3M	8	Retained	9	458	7	6	274
EST	COD	3N	8	Retained	1	16	16	-	16
EST	COD	3N	9	Retained	2	36	23	-	36
EST	COD	3N	9	Discarded	1	9	-	-	9
EST	COD	3N	10	Retained	4	126	-	-	116
EST	COD	3N	10	Discarded	1	8	-	-	8
EST	COD	3O	10	Discarded	1	19	-	-	19
EST	GHL	3L	4	Retained	6	688	350	292	395
EST	GHL	3N	9	Discarded	5	74	74	74	74
EST	GHL	3N	10	Discarded	1	3	3	3	3
EST	GHL	3N	11	Discarded	1	1	1	1	1
EST	GHL	3O	10	Discarded	3	32	32	32	32
EST	GHL	3O	11	Discarded	2	12	12	12	12
EST	RED	3M	1	Retained	6	214	214	-	214
EST	RED	3M	1	Discarded	1	1	1	-	1
EST	RED	3M	2	Retained	7	645	288	-	288
EST	RED	3M	3	Retained	5	299	99	-	99
EST	RED	3M	7	Retained	8	1511	518	1	518
EST	RED	3N	3	Retained	2	192	-	-	-
EST	RED	3N	8	Retained	1	144	144	-	144
EST	RED	3N	9	Retained	6	613	71	-	146
EST	RED	3N	10	Retained	2	82	-	-	-
EST	RED	3M	10	Discarded	1	60	-	-	60
EST	RED	3O	9	Retained	4	695	72	-	72
EST	RED	3O	10	Retained	7	455	48	-	48
EST	YEL	3N	8	Retained	6	731	220	-	220
EST	YEL	3N	9	Discarded	2	290	-	-	-
EST	HAL	3N	9	Retained	2	9	-	-	9
EST	HKS	3O	10	Retained	3	306	104	-	306
Country	Species Code	NAFO Division	Month	Retained/ Discarded	No. of samples	No. Measured	No. Sexed*	No. Aged**	No. Weighed

EST	HKS	30	10	Discarded	1	33	-	-	33
EST	PLA	3M	1	Retained	1	22	-	-	22
EST	PLA	3N	8	Retained	3	131	131	-	131
EST	PLA	3N	8	Discarded	1	1	1	-	1
EST	PLA	3N	9	Discarded	3	275	-	-	19
EST	PLA	3N	10	Retained	1	42	-	-	42
EST	PLA	3N	10	Discarded	1	38	-	-	38
EST	PLA	30	10	Discarded	1	11	-	-	11
EST	WIT	3N	9	Discarded	1	22	-	-	22
EST	WIT	3N	10	Retained	1	7	-	-	7
EST	WIT	3N	10	Discarded	1	35	-	-	35
EST	WIT	30	10	Discarded	1	13	-	-	13
<b>Total</b>						<b>8987</b>	<b>2888</b>	<b>818</b>	<b>3953</b>

**Table 5.** Length distribution (sampled number of fish) of cod in NAFO area. 0-female, 1-male and un-unsexed.

COD LG, mm	3M				3N				30		Grand Total
	0	1	un	Total	0	1	un	Total	un	Total	
340							1	1			1
345									1	1	1
350							1	1			1
355									1	1	1
360									6	6	6
365							1	1	2	2	3
375									1	1	1
385							1	1	4	4	5
390							4	4	1	1	5
395									2	2	2
400							2	2			2
405							4	4	1	1	5
415							2	2			2
420							6	6			6
425			1	1			4	4			5
430			3	3		1	2	3			6
435	1		1	2			3	3			5
440		1	1	2			6	6			8
445		2		2	1		1	2			4
450	1		2	3			9	9			12
455	1	3	4	8			2	2			10
<b>COD</b>	<b>3M</b>				<b>3N</b>				<b>30</b>		<b>Grand Total</b>
<b>LG, mm</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>Total</b>	

460	2	3	12	17			3	3			20
465	1	2	8	11			7	7			18
470	2	2	11	15			7	7			22
475	1	5	5	11			2	2			13
480	6	4	10	20			8	8			28
485	5	5	7	17			5	5			22
490	3	1	5	9			8	8			17
495	1	2	11	14		1	6	7			21
500	8	5	13	26	1		4	5			31
505	5	2	13	20			8	8			28
510	3	4	16	23			2	2			25
515	4	2	8	14			3	3			17
520	5	3	6	14			2	2			16
525	4	2	7	13			2	2			15
530	6	4	14	24	1			1			25
535	2	2	6	10		1	4	5			15
540	2	3	18	23			5	5			28
545	4		7	11			2	2			13
550	4	1	8	13			2	2			15
555		1	3	4			1	1			5
560	2	1	6	9	1		5	6			15
565		2	5	7							7
570	2	2	8	12	1		2	3			15
575	1	2	7	10			2	2			12
580	1	1	8	10			1	1			11
585	5	1	3	9			1	1			10
590	3	2	13	18			2	2			20
595		1	6	7			2	2			9
600	4	2	19	25							25
605	3	3	3	9			1	1			10
610	3	4	17	24			1	1			25
615	4	2	13	19		1	2	3			22
620	5	1	15	21		1		1			22
625		1	3	4			1	1			5
630	1	2	15	18	1			1			19
635	2	1	6	9							9
640	5	1	18	24							24
645			6	6			1	1			7
650	5	4	12	21			1	1			22
655	2	1	5	8		1		1			9
<b>COD</b>	<b>3M</b>				<b>3N</b>				<b>30</b>		<b>Grand Total</b>
<b>LG, mm</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>Total</b>	

660	3	5	16	24							24
665	1	3	10	14	1			1			15
670	5	4	21	30	1	1		2			32
675	1		7	8							8
680	2	2	19	23			1	1			24
685	2	2	2	6							6
690	6	2	23	31	1			1			32
695	3		2	5		2		2			7
700	6	4	11	21	2		1	3			24
705	2		6	8			1	1			9
710	5	4	13	22							22
715	2	2	7	11	1	1		2			13
720	9	2	13	24							24
725	1	2	5	8	1	1		2			10
730	4	3	8	15							15
735	1	1	3	5		1		1			6
740	3	2	7	12							12
745	1	1	3	5	1	1		2			7
750	7	1	4	12							12
755		1	5	6	1			1			7
760	2	2	3	7	2			2			9
765	3		2	5	1			1			6
770	2	3	5	10		2		2			12
775			2	2							2
780	3		3	6							6
785	2		2	4							4
790	2	2	3	7		1		1			8
795			2	2							2
800	4	5	3	12							12
805			2	2							2
810	4		4	8							8
815			1	1							1
820	3	2	1	6	1		1	2			8
825			1	1							1
830	5	3	3	11		1		1			12
835		1	1	2							2
840	7	3		10							10
845			1	1							1
850	8	1	1	10	1			1			11
855			1	1		1		1			2
<b>COD</b>	<b>3M</b>				<b>3N</b>				<b>30</b>		<b>Grand Total</b>
<b>LG, mm</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>un</b>	<b>Total</b>	

860	4	4		8							8
865			1	1							1
870	4	3	1	8							8
880	3	1	1	5							5
885			1	1							1
890	7	2	1	10							10
895			1	1	1			1			2
900	7	2		9							9
905	2			2							2
910	4	2		6							6
920	7			7							7
930	4	2		6							6
935	1			1							1
940	4			4							4
945		1		1							1
950	2			2							2
960	1			1							1
970	5			5							5
990	1	1		2							2
1000	3			3							3
1030	1			1							1
1050	1			1							1
1080	1			1							1
1130	1			1							1
1160	1			1							1
<b>Grand Total</b>	<b>292</b>	<b>174</b>	<b>620</b>	<b>1086</b>	<b>21</b>	<b>18</b>	<b>156</b>	<b>195</b>	<b>19</b>	<b>19</b>	<b>1300</b>

**Table 6.** Length distribution (sampled number of fish) of Greenland halibut in NAFO area. 0-female, 1-male and un-unsexed.

GHL LG, mm	3L				3N			3O			Grand Total
	0	1	un	Total	0	1	Total	0	1	Total	
230								1		1	1
255								1		1	1
260									1	1	1
275								1		1	1
280						1	1	1		1	2
285								1	1	2	2
300								2		2	2
305								2		2	2
310	1	1		2					1	1	3
315					1		1				1
320	1	3	1	5							5
330	1	1	2	4							4
335								1	1	2	2
340	6		9	15				1		1	16
345					1		1	1		1	2
350			4	4							4
355								2		2	2
360	5	1	3	9							9
370	6	7	8	21				1		1	22
375					1		1	1		1	2
380	6	11	12	29							29
385								1		1	1
390	4	6	10	20	1		1	2	1	3	24
395					1	1	2	1		1	3
400	6	5	9	20							20
410	11	13	11	35					1	1	36
415					4		4				4
420	11	8	18	37	2		2	1	1	2	41
425								2		2	2
430	21	11	25	57	2		2	1		1	60
435					3	1	4				4
440	19	11	27	57	1		1				58
445					1		1	1		1	2
450	17	12	30	59	1		1	1		1	61
455					1	1	2	1		1	3
460	16	9	20	45	2	1	3				48
470	19	5	29	53	3		3	1		1	57



GHL LG, mm	3L				3N			30			Grand Total
	0	1	un	Total	0	1	Total	0	1	Total	
475					1		1				1
480	9	7	24	40	1		1				41
485						1	1				1
490	8	11	21	40							40
495					1		1	1		1	2
500	7	4	11	22	1	1	2				24
505					3	1	4				4
510	11	1	11	23	3		3				26
520	4	4	13	21	2		2				23
530	2		16	18	1		1				19
540	8	2	8	18							18
550	6	1	7	14	2		2				16
555									1	1	1
560	1	1	4	6	2		2				8
565					1		1				1
570	1		1	2				2		2	4
580			1	1				1		1	2
590	1	1	1	3	1		1				4
600	2		1	3	3		3	1		1	7
605					1		1				1
610					2		2				2
615					1		1				1
620	2			2	2		2				4
630	1			1	1	1	2				3
635					1		1				1
640			1	1	1		1				2
645					2		2				2
650	1			1				1		1	2
655					1		1				1
660					1		1				1
695								1		1	1
705					1		1				1
710					1		1				1
715					1		1				1
720								1		1	1
760					1		1				1
770					1		1				1
780					1		1				1
790					1		1				1
795					1		1				1
840					1		1				1
<b>Grand Total</b>	<b>214</b>	<b>136</b>	<b>338</b>	<b>688</b>	<b>69</b>	<b>9</b>	<b>78</b>	<b>36</b>	<b>8</b>	<b>44</b>	<b>810</b>

**Table 7.** Length distribution (sampled number of fish) of redfish in NAFO area. 0-female, 1-male and un-unsexed.

RED LG, mm	3M				3N				3O				Grand Total
	0	1	un	Total	0	1	un	Total	0	1	un	Total	
165											1	1	1
180							2	2	1		2	3	5
185							4	4					4
190							7	7			2	2	9
195			2	2			8	8			3	3	13
200		1		1			11	11			7	7	19
205		1	4	5			10	10			8	8	23
210	1	4	4	9			19	19		1	13	14	42
215		6	10	16		1	22	23			8	8	47
220		14	23	37			30	30	1		15	16	83
225		8	58	66		4	28	32		2	20	22	120
230		16	66	82		7	39	46	1	8	32	41	169
235	1	10	126	137	1	14	31	46	1	2	71	74	257
240		7	89	96	2	9	32	43	2	4	72	78	217
245	1	1	191	193		20	56	76	1	8	88	97	366
250	1		104	105	3	10	65	78	3	2	75	80	263
255		2	140	142	5	8	52	65	3	4	86	93	300
260		1	47	48	3	2	40	45	5	2	50	57	150
265		2	93	95	15	6	43	64	7	1	70	78	237
270		2	39	41	8		47	55	5	2	58	65	161
275	4	3	42	49	31	1	73	105	14	2	69	85	239
280	5	5	31	41	12		67	79	7		42	49	169
285	3	7	54	64	17	1	65	83	8		54	62	209
290	8	11	23	42	13	1	37	51	3		41	44	137
295	6	15	52	73	9	1	28	38	5		29	34	145
300	9	16	28	53	2		21	23	4		22	26	102
305	5	17	26	48	3		17	20	2		29	31	99
310	5	24	24	53	3		10	13	1		14	15	81
315	6	30	30	66			7	7	3		9	12	85
320	9	40	11	60	1		2	3	2		11	13	76
325	4	41	31	76			1	1	1		11	12	89
330	10	37	17	64			1	1			3	3	68

RED LG, mm	3M				3N				30				Grand Total
	0	1	un	Total	0	1	un	Total	0	1	un	Total	
335	18	46	19	83	2		1	3	1		3	4	90
340	16	51	11	78					1		4	5	83
345	23	67	19	109							3	3	112
350	29	36	24	89							3	3	92
355	32	31	21	84									84
360	29	26	9	64									64
365	26	8	19	53							2	2	55
370	33	4	9	46									46
375	33	5	17	55									55
380	29	5	10	44									44
385	40	3	7	50									50
390	23	1	3	27									27
395	35		3	38									38
400	15		3	18									18
405	19		1	20									20
410	9		3	12									12
415	10		2	12									12
420	5		1	6									6
425	3			3									3
430	1			1									1
435			1	1									1
440		1		1									1
445	4		1	5									5
450			1	1									1
460			1	1									1
490	1			1									1
510	1			1									1
520	1			1									1
560	1			1									1
670	1			1									1
<b>Grand Total</b>	<b>515</b>	<b>605</b>	<b>1550</b>	<b>2670</b>	<b>130</b>	<b>85</b>	<b>876</b>	<b>1091</b>	<b>82</b>	<b>38</b>	<b>1030</b>	<b>1150</b>	<b>4911</b>

**Table 8.** Length distribution (sampled number of fish) of yellowtail flounder in NAFO area. 0-female, 1-male and un-unsexed.

YEL LG, mm	3N				Grand Total
	0	1	un	Total	
145			2	2	2
150			2	2	2
155			2	2	2
160			3	3	3
165			8	8	8
170			4	4	4
175			8	8	8
180			6	6	6
185			15	15	15
190			15	15	15
195			17	17	17
200			14	14	14
205			18	18	18
210			10	10	10
215			18	18	18
220			16	16	16
225			14	14	14
230			10	10	10
235			24	24	24
240			14	14	14
245			17	17	17
250	1		12	13	13
255			9	9	9
260			3	3	3
265			7	7	7
270			2	2	2
275			5	5	5
280	1	1	2	4	4
285		1	6	7	7
290			4	4	4
295	1		6	7	7
300	1	4	6	11	11
305	1	2	5	8	8
310	2	2	6	10	10
315	3	5	7	15	15
320	4		9	13	13
325	12	4	22	38	38

YEL LG, mm	3N				Grand Total
	0	1	un	Total	
330	7	2	9	18	18
335	10	1	9	20	20
340	4	3	24	31	31
345	8	3	23	34	34
350	9	3	11	23	23
355	14		20	34	34
360	7	2	13	22	22
365	9		35	44	44
370	6	2	27	35	35
375	16		32	48	48
380	7		22	29	29
385	15	1	43	59	59
390	8		24	32	32
395	9		31	40	40
400	9		24	33	33
405	5		19	24	24
410	1		16	17	17
415	5		21	26	26
420	1		8	9	9
425	1		10	11	11
430	1		10	11	11
435	4		4	8	8
440	1		6	7	7
445			2	2	2
450			2	2	2
455			4	4	4
470			4	4	4
500	1			1	1
<b>Grand Total</b>	<b>184</b>	<b>36</b>	<b>801</b>	<b>1021</b>	<b>1021</b>

**Table 9.** Length distribution (sampled number of fish) of other catch and by-catch species in Estonian fisheries in NAFO area. 0-female, 1-male and un-unsexed.

Species	3M		3N				30				Grand Total
	un	Total	0	1	un	Total	0	1	un	Total	
<b>HAL</b>					9	9					9
810					1	1					1
830					1	1					1
840					1	1					1
850					1	1					1
880					1	1					1
910					1	1					1
940					1	1					1
1010					1	1					1
1030					1	1					1
<b>HKS</b>							52	52	235	339	339
220								1	1	2	2
230									1	1	1
255									6	6	6
260								1	4	5	5
265								2	5	7	7
270								4	9	13	13
275							1	5	10	16	16
280							1	2	21	24	24
285							3	6	21	30	30
290							3	8	23	34	34
295							8	2	9	19	19
300							6	4	26	36	36
305							5	8	13	26	26
310							4	1	15	20	20
315							5	4	14	23	23
320							3	2	6	11	11
325							2	1	8	11	11
330							1	1	12	14	14
335							2		2	4	4
340							2		3	5	5
345							2		4	6	6
350									7	7	7
355									5	5	5
360							2		3	5	5
365									2	2	2
375							1		1	2	2

Species	3M		3N				30				Grand Total
	un	Total	0	1	un	Total	0	1	un	Total	
380									1	1	1
385									2	2	2
405							1			1	1
420									1	1	1
<b>PLA</b>	<b>22</b>	<b>22</b>	<b>85</b>	<b>47</b>	<b>355</b>	<b>487</b>			<b>11</b>	<b>11</b>	<b>520</b>
115					1	1					1
125					3	3					3
130					5	5					5
135					4	4					4
140					8	8					8
145					16	16					16
150					7	7					7
155					9	9					9
160					5	5					5
165					3	3					3
170					2	2					2
175					3	3					3
185					2	2					2
195					3	3					3
205					4	4					4
210					3	3					3
215					7	7					7
220					7	7					7
225					9	9					9
230					5	5					5
235				1	15	16					16
240					15	15					15
245					19	19					19
250			1		17	18					18
255					20	20					20
260					11	11					11
265					21	21					21
270				1	6	7					7
275					12	12					12
280					2	2					2
285				1	4	5					5
290					6	6					6
295			1		1	2					2
300					1	1					1
305					1	1					1

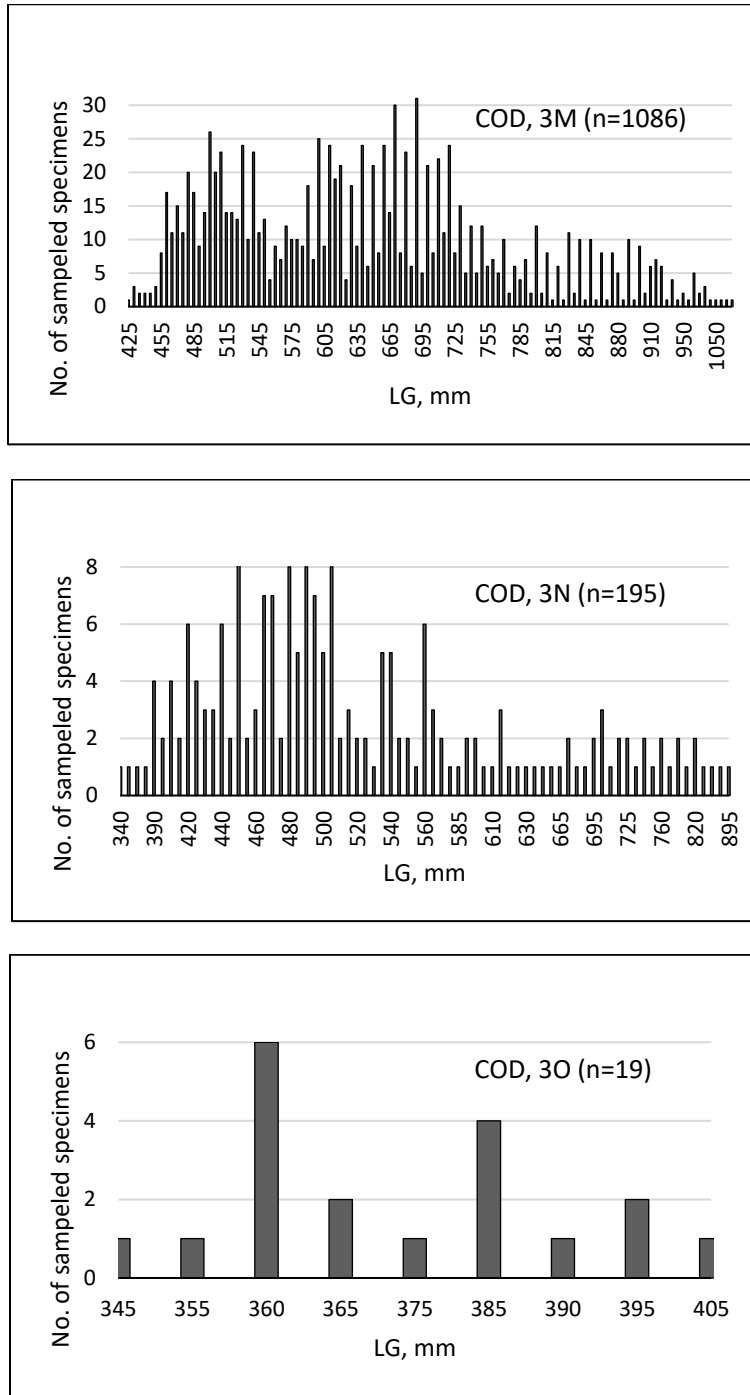
Species LG, mm	3M		3N				30				Grand Total
	un	Total	0	1	un	Total	0	1	un	Total	
310			1	1	2	4					4
315				2	2	4					4
320			3		1	4					4
325			1	2	1	4					4
330				4		4					4
335			1	4	1	6			1	1	7
340			2	1	1	4					4
345				5		5					5
350			1	1	4	6					6
355			2	4		6					6
360				4	2	6			1	1	7
365			2	3	1	6					6
370			1	2	2	5					5
375			1	3	2	6					6
380				2	7	9			1	1	10
385			5	2	1	8					8
390			5	2	2	9			2	2	11
395			3	1	2	6					6
400			2		5	7					7
405	1	1	2		3	5					6
410	3	3	3		2	5			1	1	9
415			5	1	4	10					10
420	2	2	3		2	5					7
425	1	1	4		1	5					6
430			2		3	5					5
435	1	1	4		3	7					8
440	2	2	3		2	5			1	1	8
445	2	2	1		2	3			1	1	6
450			4		3	7					7
455	2	2	2			2			1	1	5
460			3		4	7			1	1	8
465			3		2	5					5
470	1	1	5		5	10					11
475	1	1	1		2	3					4
485			4		1	5					5
490			1			1					1
495	1	1	3			3					4
500	1	1			4	4					5
505					3	3					3
510					3	3			1	1	4



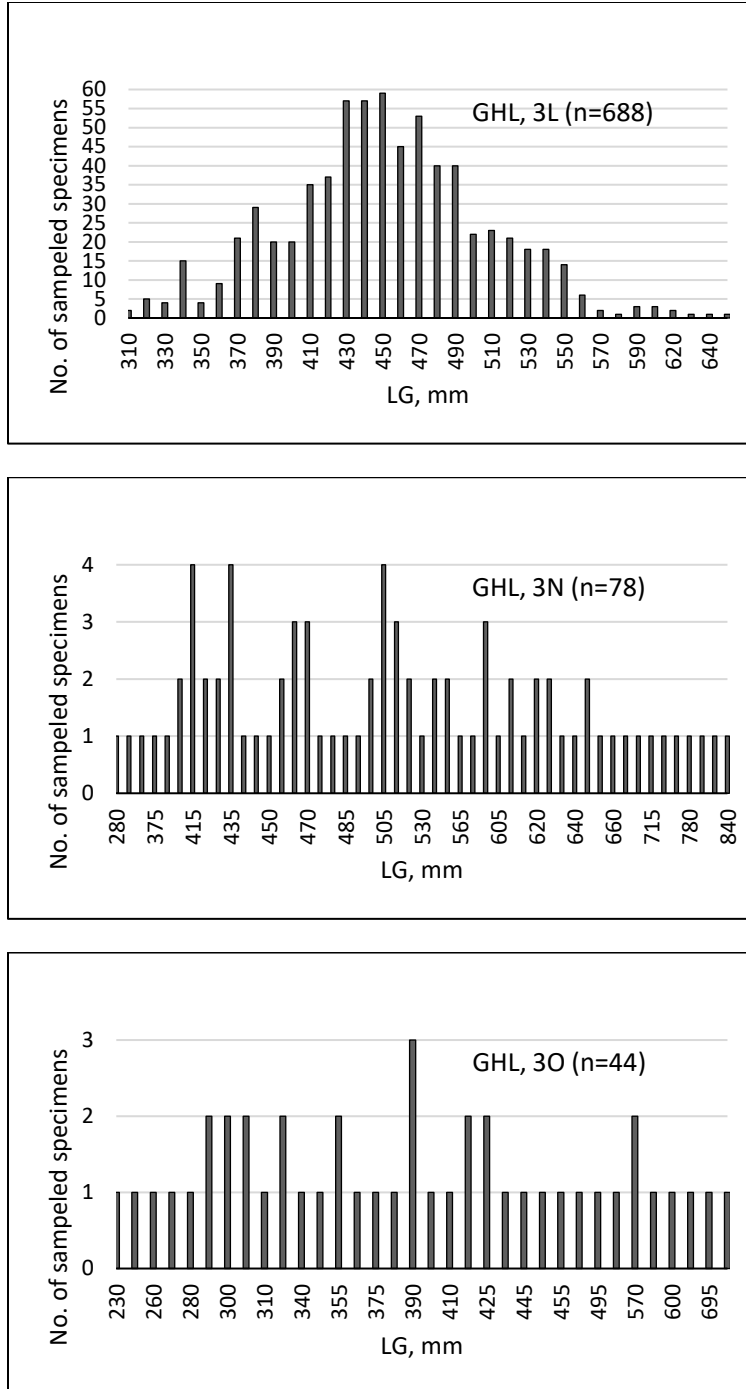
Species LG, mm	3M		3N				30				Grand Total
	un	Total	0	1	un	Total	0	1	un	Total	
515	1	1									1
520	3	3			3	3					6
530					2	2					2
535					2	2					2
540					1	1					1
545					1	1					1
550					1	1					1
555					1	1					1
560					2	2					2
<b>WIT</b>					<b>64</b>	<b>64</b>			<b>13</b>	<b>13</b>	<b>77</b>
285					1	1					1
320					1	1					1
325					1	1					1
345					2	2					2
350					1	1					1
355					2	2					2
365					1	1			1	1	2
370					3	3			1	1	4
375					5	5					5
380					3	3			3	3	6
385					3	3					3
390					2	2					2
395									1	1	1
405					2	2					2
410					2	2					2
415					2	2			3	3	5
425					1	1					1
430					3	3					3
435					1	1					1
440					4	4			1	1	5
445					3	3					3
450					2	2					2
455					1	1					1
460					3	3					3
470					2	2			1	1	3
480					3	3					3
485					1	1			1	1	2
490					2	2			1	1	3
495					2	2					2
500					2	2					2

<b>Species</b>	<b>3M</b>		<b>3N</b>				<b>30</b>				<b>Grand Total</b>
<b>LG, mm</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	<b>0</b>	<b>1</b>	<b>un</b>	<b>Total</b>	
505					1	1					1
510					1	1					1
515					1	1					1
<b>Grand Total</b>	<b>22</b>	<b>22</b>	<b>85</b>	<b>47</b>	<b>428</b>	<b>560</b>	<b>52</b>	<b>52</b>	<b>259</b>	<b>363</b>	<b>945</b>

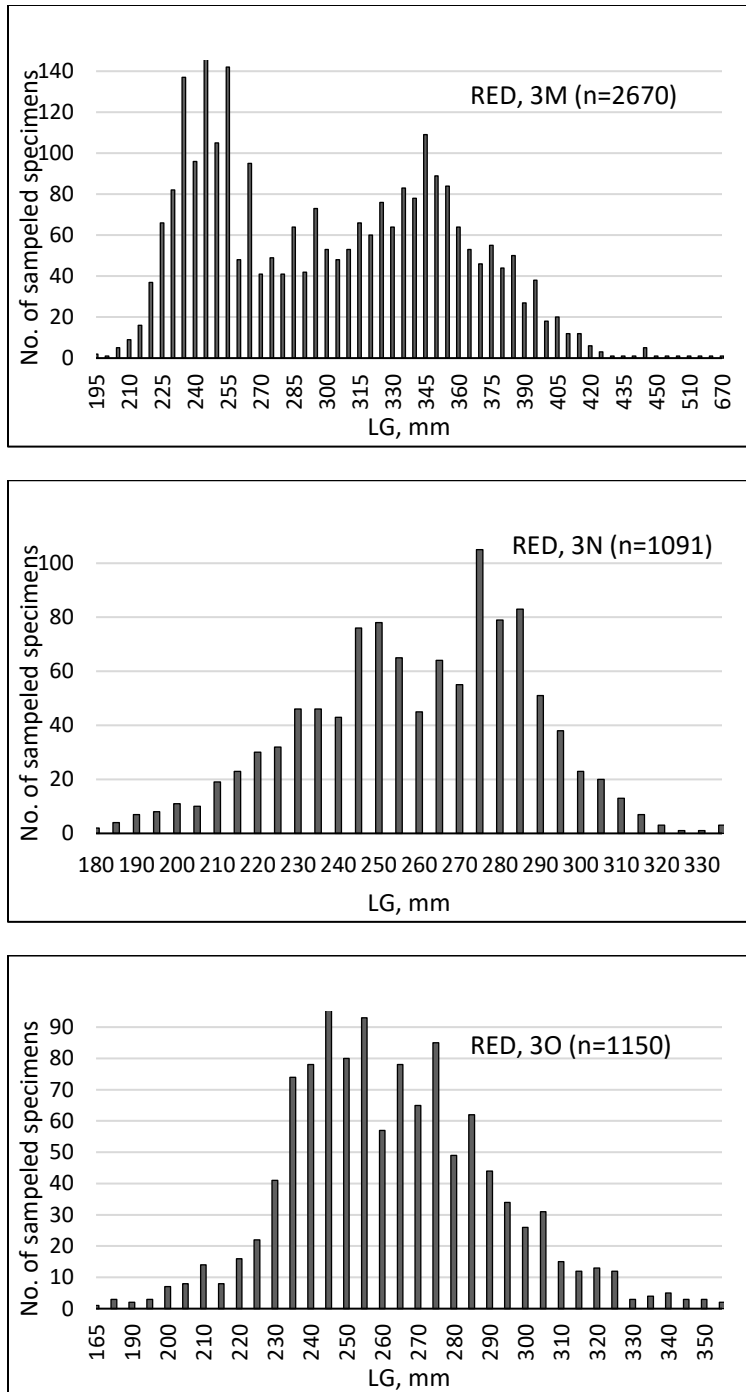




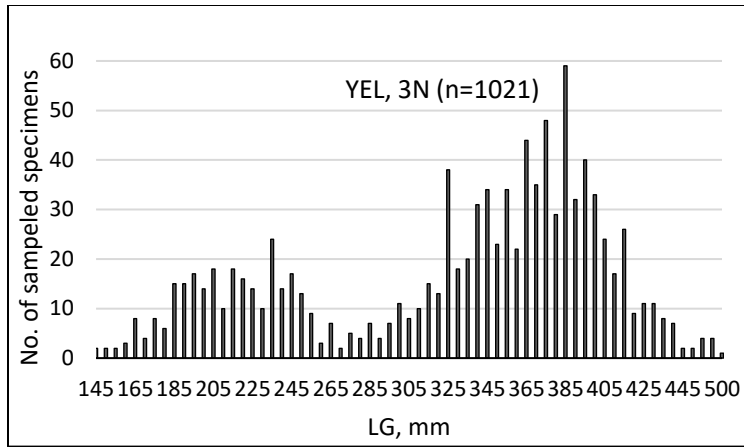
**Figure 1.** Estonian fisheries length distribution (number of sampled specimens) of cod in Div. 3M, 3N and 3O.



**Figure 2.** Estonian fisheries length distribution of Greenland halibut in Div. 3L, 3M and 3N.



**Figure 3.** Estonian fisheries length distribution of redfish in Div. 3M, 3N and 3O.



**Figure 4.** Estonian fisheries length distribution of yellowtail flounder in Div. 3N.