ECOREGION **Baltic Sea**
STOCK **Flounder in Subdivisions 22–32 (Baltic Sea)**

Advice for 2013

Based on the ICES approach for data-limited stocks, ICES advises that catches should be no more than 15 100 tonnes.

This is the first year that ICES is providing quantitative advice for data-limited stocks (see Quality considerations).

Stock status

F (Fishing Mortality)	2009–2011	
MSY (F_{MSY})	?	Unknown
Precautionary approach (F_{pa},F_{lim})	?	Unknown

SSB (Spawning-Stock Biomass)	2007–2011	
MSY ($B_{trigger}$)	?	Unknown
Precautionary approach (B_{pa},B_{lim})	?	Unknown
Qualitative evaluation	↘	Decreasing

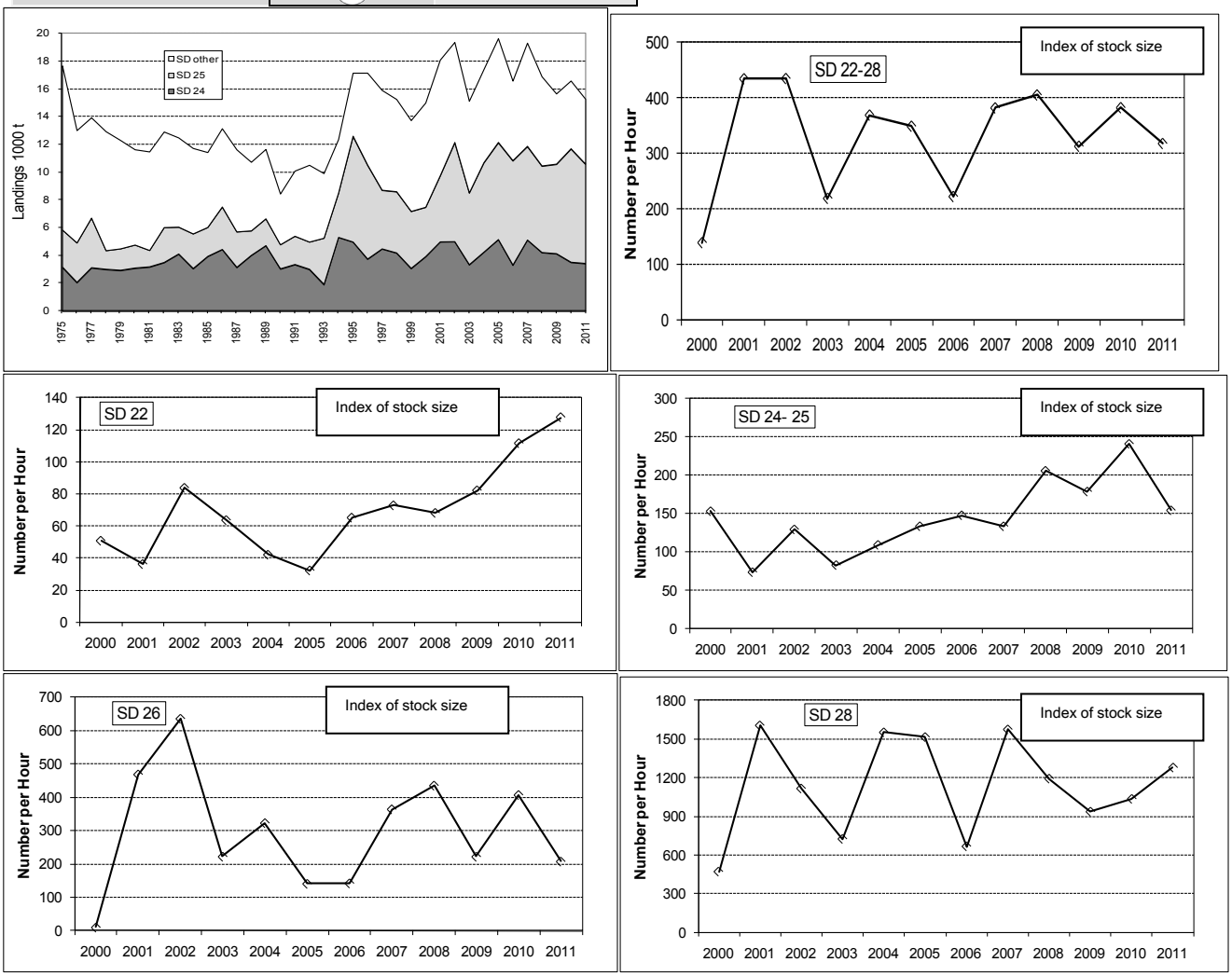

Figure 8.4.9.1 Flounder in Subdivisions 22–32 (Baltic Sea). Official landings in Subdivisions (SD) 24, 25, and the remaining subdivisions of the Baltic Sea (in tonnes, upper left panel). Combined 1st and 4th quarters cpue (no./hr) (weighted average per depth stratum area), of fish equal to or larger than 20 cm, from the BITS in SDs 22–28 (upper right), SD 22 (middle left), SD 24–25 (middle right), SD 26 (lower left), and SD 28 (lower right). Survey data from ICES DATRAS database.

Based on trends from the Baltic International Trawl Survey (BITS), the stock has fluctuated without trend, although there is an increasing trend in SDs 22 and 24–25. The average stock size indicator (number/hour) for the whole distribution area of the survey (SDs 22–28) in the last two years (2010–2011) is 5% lower than the abundance indices in the three previous years (2007–2009). Preliminary model results suggest increasing stock size and decreasing fishing mortality for the most important components.

Management plans

No specific management objectives are known to ICES.

Biology

Flounder (*Platichthys flesus*) is the most widely distributed among all flatfish species in the Baltic Sea. Flounder occurs in all parts of the Baltic except for the eastern part of Gulf of Finland (Subdivision 32) and the Bothnian Bay (Subdivision 31).

Based on egg buoyancy, there are two spawning groups of flounder in the Baltic: Shallow water spawners with the eggs developing in contact to the bottom, and deep-water spawners with eggs floating freely and developing in the water column. In total, there are indications of eleven flounder populations in the Baltic Sea. Deep-sea spawners (five populations) are located in the western and central parts of the Baltic Sea, while shallow water spawners (six populations) are found in the central and northern parts of the Baltic Sea.

Flounder spawning takes place from March to June. Nursery areas are located in shallow coastal waters where juveniles spend their first 2–3 years.

The fisheries

Flounder is taken as bycatch in demersal fisheries and, to a minor extent, in a directed fishery. Discard data were not available for all fleets, but preliminary analyses of Swedish bycatch and discard data shows that the amount discarded in the demersal trawling for cod can be very high and variable. Estimated discards of flounder may be five to ten times greater than the amounts of landed bycatches of flounder in the cod trawl fishery.

Catch distribution	No information on total catch (2011): 15 kt landings (mainly trawl fishery), high percentage of discards, mainly bycatch, no information on unaccounted removals.

Quality considerations

The uncertainty of the discard estimates is of concern. Discarding practices are controlled by factors such as market price and cod catches. The high variability in the discard ratios makes it extremely expensive and difficult to provide an accurate estimate of discards.

The advice is based on a combined abundance index from two surveys, used as an indicator of stock size. The uncertainty associated with the index values is not available.

The methods applied to derive quantitative advice for data-limited stocks are expected to evolve as they are further developed and validated. The harvest control rules are expected to stabilize stock size, but they may not be suitable if the stock size is low and/or overfished.

Scientific basis

Assessment type	Survey trends and preliminary XSA and difference models.
Input data	Commercial landings and survey data from the Baltic International Trawl Survey (BITS-Q1+Q4).
Discards and bycatch	Information incomplete and not used in assessment.
Indicators	None.
Other information	None.
Working group report	WGBFAS

ECOREGION Baltic
STOCK Flounder in Subdivisions 22–32 (Baltic Sea)

Reference points

No reference points are defined for this stock.

Outlook for 2013

No analytical assessment can be presented for this stock. Therefore, detailed management options cannot be presented. ICES is in the process of compiling existing data and testing assessment models.

ICES approach to data-limited stocks

For data-limited stocks for which an abundance index is available, ICES uses as harvest control rule an index-adjusted *status quo* catch. The advice is based on a comparison of the two most recent index values with the three preceding values, combined with recent catch or landings data. Knowledge about the exploitation status also influences the advised catch.

The stock has fluctuated without trend, although for the whole distribution area of the survey (SDs 22–28), the abundance is estimated to have decreased by 5% in 2007–2009 (average of the three years) and 2010–2011 (average of the two years). This implies a decrease of catches of at most 5% in relation to the last three years' average landings, corresponding to catches of no more than 15 100 tonnes in 2013.

Additional considerations

The assessment models for this stock are under development. Two approaches have been attempted so far: the XSA partly using information on catch and survey age structure derived with the recommended ageing method, and the difference model with F treated as a random walk. Both methods indicate relatively high stock size, decreasing fishing mortality in recent years (Figure 8.4.9.4), and increasing recruitment (Figure 8.4.9.5). However, assessments are uncertain and show a scattered retrospective pattern. Note that the ICES' advice has not applied the precautionary buffer because effort in the demersal cod fishery has recently reduced under the cod management plan, consistent with the indicated decline in fishing mortality.

There are indications of eleven flounder populations in the Baltic Sea. Deep-sea spawners (five populations) are located in the western and central parts of the Baltic Sea (Figure 8.4.9.2), while shallow water spawners (six populations) are found in the central and northern parts of the Baltic Sea (Figure 8.4.9.3).

The advice is based on the entire stock complex that might consist of eleven potentially separate population units. The analysis of the survey data was not yet based on a finer scale than subdivision. The stocks most important for the fishery and best congruent with one or more subdivisions are presented here.

The management of this stock does not include the setting of a TAC and although only incomplete information on discards is available, discarding is of concern.

Data requirements

Discard estimates must be provided from all countries and included into any assessment based on catch data. Fisheries-independent data from areas north of Subdivision 28 are very limited.

Sources

ICES. 2010. Report of the ICES/HELCOM Workshop on Flatfish in the Baltic Sea (WKFLABA), 8–11 November 2010, Öregrund, Sweden. ICES CM 2010/ACOM:68.

ICES. 2012. Report of the Baltic Fisheries Assessment Working Group, ICES Headquarters, 12–19 April 2012. ICES CM 2012/ACOM:10.

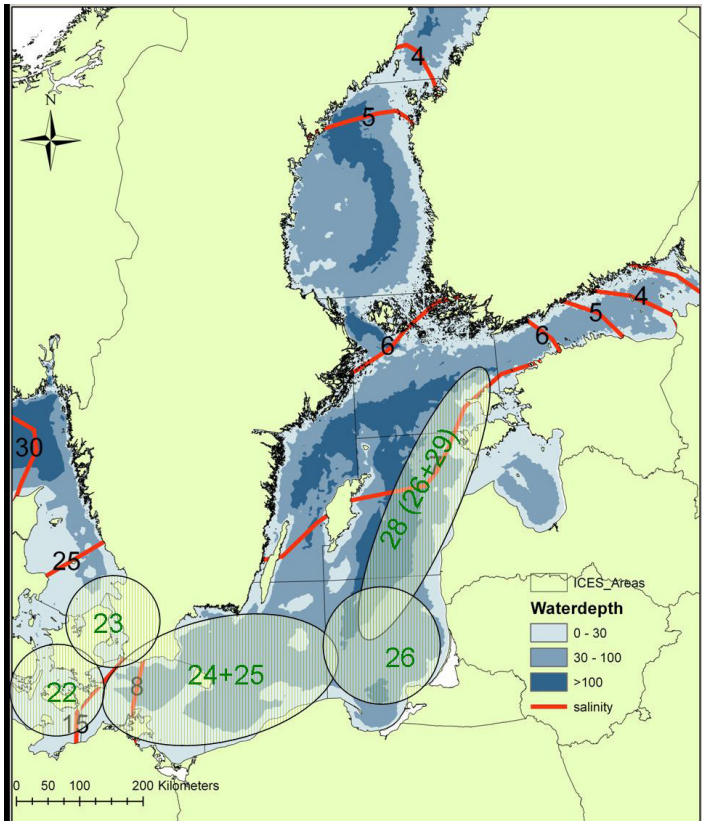

Figure 8.4.9.2 Flounder in Subdivisions 22–32 (Baltic Sea). Approximate location of five identified population units of "pelagic egg"–flounder in the Baltic Sea. Numbers within circles refer to ICES subdivisions.

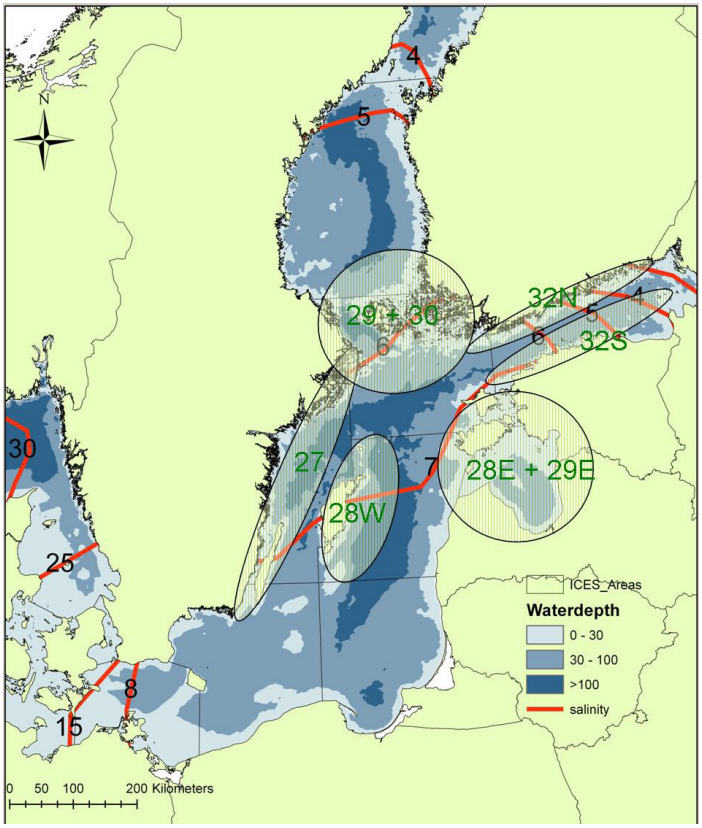

Figure 8.4.9.3 Flounder in Subdivisions 22–32 (Baltic Sea). Approximate location of six identified population units of "demersal egg"–flounder in the Baltic Sea. Numbers within circles refer to ICES subdivision.

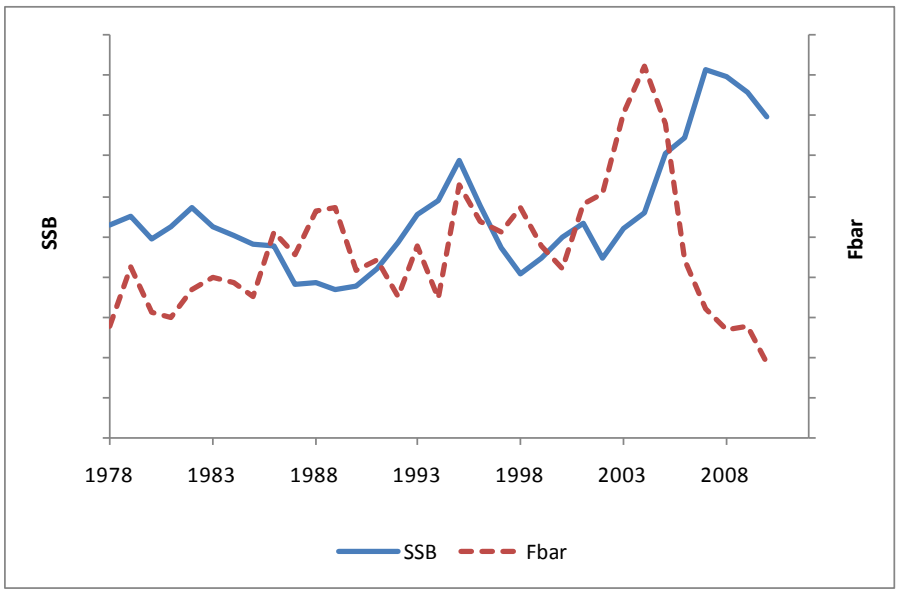

Figure 8.4.9.4 Flounder in Subdivisions 22–32 (Baltic Sea). SSB and fishing mortality (Fbar) trends from a preliminary assessment of flounder in Subdivisions 24–25 using XSA.

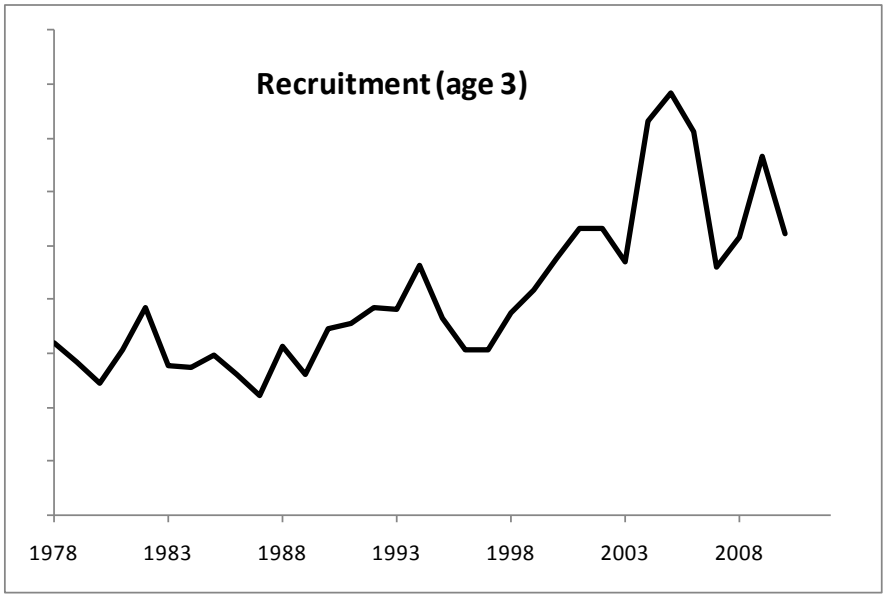

Figure 8.4.9.5 Flounder in Subdivisions 22–32 (Baltic Sea). Recruitment trend from a preliminary assessment of flounder in Subdivisions 24–25 using XSA.

Table 8.4.9.1 Flounder in Subdivisions 22–32 (Baltic Sea). ICES advice, management, and official landings.

Year	ICES Advice	Predicted catch corresp. to advice	Agreed TAC	Official landings
2000	No advice	-	-	15.0
2001	No advice	-	-	18.1
2002	No advice	-	-	19.4
2003	No advice	-	-	15.1
2004	No advice	-	-	17.4
2005	No advice	-	-	19.6
2006	No advice	-	-	16.6
2007	No advice	-	-	19.3
2008	No advice	-	-	16.9
2009	No advice	-	-	15.7
2010	No advice	-	-	16.6
2011	No advice	-	-	15.3
2012	Reduce catches	-		
2013	Catches should be reduced by 5%	<15.1		

Weights in thousand tonnes.

Table 8.4.9.2 Flounder in Subdivisions 22–32 (Baltic Sea). Total landings (tonnes) by subdivision and country.

Year	Country*	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
1973	Denmark	1.983		386									2.369
	Finland												0
	Gem. Dem. Rep.	181		1.624	1.516								3.321
	Gem. Fed. Rep.	349		4									353
	Poland				1.580	2.070							3.650
	Sweden				502								502
	USSR							2.610					2.610
	Total	2.513	0	2.014	3.598	2.070	0	2.610	0	0	0	0	12.805
1974	Denmark	2.097		2.578									4.675
	Finland												0
	Gem. Dem. Rep.	165		1.482	654								2.301
	Gem. Fed. Rep.	304		3									307
	Poland				1.635	2.473							4.108
	Sweden				470								470
	USSR							2.510					2.510
	Total	2.566	0	4.063	2.759	2.473	0	2.510	0	0	0	0	14.371
1975	Denmark	1.992		1.678									3.670
	Finland								113	22		47	182
	Gem. Dem. Rep.	163		1.469	406								2.038
	Gem. Fed. Rep.	469		1									470
	Poland				1.871	2.585							4.456
	Sweden				400								400
	USSR							6.455					6.455
	Total	2.624	0	3.148	2.677	2.585	0	6.455	113	22	0	47	17.671
1976	Denmark	2.038		482									2.520
	Finland								118	23		59	200
	Gem. Dem. Rep.	174		1.556	901								2.631
	Gem. Fed. Rep.	392		2									394
	Poland				1.549	2.289							3.838
	Sweden				400								400
	USSR					471		1.779	409			359	3.018
	Total	2.604	0	2.040	2.850	2.760	0	1.779	527	23	0	418	13.001
1977	Denmark	1.974		389									2.363
	Finland								115	32		56	203
	Gem. Dem. Rep.	555		2.708	1.096								4.359
	Gem. Fed. Rep.	393		4									397
	Poland				2.071	2.089							4.160
	Sweden				416								416
	USSR					210		1.081	321			414	2.026
	Total	2.922	0	3.101	3.583	2.299	0	1.081	436	32	0	470	13.924
1978	Denmark	2.965		415									3.380
	Finland								174	61		155	390
	Gem. Dem. Rep.	348		2.572									2.920
	Gem. Fed. Rep.	477		1									478
	Poland				996	2.106							3.102
	Sweden				346								346
	USSR					288		1.290	334			395	2.307
	Total	3.790	0	2.988	1.342	2.394	0	1.290	508	61	0	550	12.923
1979	Denmark	2.451		405									2.856
	Finland								192	54		153	399
	Gem. Dem. Rep.	189		2.509									2.698
	Gem. Fed. Rep.	259		3									262
	Poland				1.230	1.860							3.090
	Sweden				315								315
	USSR					158		1.170	330			1.012	2.670
	Total	2.899	0	2.917	1.545	2.018	0	1.170	522	54	0	1.165	12.290
1980	Denmark	2.185		286									2.471
	Finland								194	69		165	428
	Gem. Dem. Rep.	138		2.775									2.913
	Gem. Fed. Rep.	212		1									213
	Poland				1.613	1.380							2.993
	Sweden			16	46		20	181	32				295
	USSR					93		798	334			1.080	2.305
	Total	2.535	0	3.078	1.659	1.473	20	979	560	69	0	1.245	11.618

* Denmark: Catches of SD 23 are included in SD 22 & catches of SDs 28&29 are included in SD 27
Sweden: Catches of SDs 24-29 of the years 1973-1979 are included in SD 25
Finland: Catches of SDs 27&28 are included in SD 29 & catches of SD 31 are included in SD 30
Gem. Dem. Rep. Catches of SD 26 are included in SD 25
Gem. Fed. Rep. Catches of SD 25 are included in SD 24
Poland Catches of SD 24 are included in SD 25

Table 8.4.9.2 continued

Year	Country*	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
1981	Denmark	1.964		548									2.512
	Finland								227	56		135	418
	Gem. Dem. Rep.	271		2.595									2.866
	Gem. Fed. Rep.	351		1									352
	Poland				1.151	1.541							2.692
	Sweden			21	30		21	194	34				300
	USSR					58		742	445			1.078	2.323
	Total	2.586	0	3.165	1.181	1.599	21	936	706	56	0	1.213	11.463
1982	Denmark	1.563	104	257									1.924
	Finland								219	58		144	421
	Gem. Dem. Rep.	263		3.202									3.465
	Gem. Fed. Rep.	248		1									249
	Poland				2.484	1.623							4.107
	Sweden			22	33		65	16	3				139
	USSR					195		665	615			1.121	2.596
	Total	2.074	104	3.482	2.517	1.818	65	681	837	58	0	1.265	12.901
1983	Denmark	1.714	115	450									2.279
	Finland								181	67		120	368
	Gem. Dem. Rep.	280		3.572									3.852
	Gem. Fed. Rep.	418		1									419
	Poland				1.828	905							2.733
	Sweden			72	108		212	52	9				453
	USSR					209		551	497			1.114	2.371
	Total	2.412	115	4.095	1.936	1.114	212	603	687	67	0	1.234	12.475
1984	Denmark	1.733	85	306									2.124
	Finland								174	108		135	417
	Gem. Dem. Rep.	349		2.719									3.068
	Gem. Fed. Rep.	371		1									372
	Poland				2.471	1.288							3.759
	Sweden			18	27		53	13	2				113
	USSR					145		202	286			1.226	1.859
	Total	2.453	85	3.044	2.498	1.433	53	215	462	108	0	1.361	11.712
1985	Denmark	1.561	130	649									2.340
	Finland								157	97		137	391
	Gem. Dem. Rep.	236		3.253									3.489
	Gem. Fed. Rep.	199		4									203
	Poland				2.063	1.302							3.365
	Sweden			16	24		47	12	2				101
	USSR					268		189	265			806	1.528
	Total	1.996	130	3.922	2.087	1.570	47	201	424	97	0	943	11.417
1986	Denmark	1.525	65	1.558									3.148
	Finland								199	128		181	508
	Gem. Dem. Rep.	127		2.838									2.965
	Gem. Fed. Rep.	125		10									135
	Poland				3.030	1.784							4.814
	Sweden			20	31		60	15	3				129
	USSR					442		159	281			556	1.438
	Total	1.777	65	4.426	3.061	2.226	60	174	483	128	0	737	13.137
1987	Denmark	1.208	122	1.007									2.337
	Finland								159	106		143	408
	Gem. Dem. Rep.	71		2.096									2.167
	Gem. Fed. Rep.	114		11									125
	Poland				2.530	1.745							4.275
	Sweden			17	26		51	13	2				109
	USSR					1.315		203	279			397	2.194
	Total	1.393	122	3.131	2.556	3.060	51	216	440	106	0	540	11.615
1988	Denmark	1.162	125	990									2.277
	Finland								177	118		159	454
	Gem. Dem. Rep.	92		2.981									3.073
	Gem. Fed. Rep.	133		5									138
	Poland				1.728	1.292							3.020
	Sweden			23	35		68	17	3				146
	USSR					578		439	257			331	1.605
	Total	1.387	125	3.999	1.763	1.870	68	456	437	118	0	490	10.713

* Denmark: Catches 1981 of SD 23 are included in SD 22 & catches of SDs 28&29 are included in SD 27
Finland: Catches of SDs 27&28 are included in SD 29 & catches of SD 31 are included in SD 30
Gem. Dem. Rep. Catches of SD 26 are included in SD 25
Gem. Fed. Rep. Catches of SD 25 are included in SD 24
Poland Catches of SD 24 are included in SD 25

Table 8.4.9.2 continued

Year	Country*	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
1989	Denmark	1.321	83	1.062									2.466
	Finland								175	122		163	460
	Gem. Dem. Rep.	126		3.616									3.742
	Gem. Fed. Rep.	122		2									124
	Poland				1.896	1.089							2.985
	Sweden			22	34		66	16	3				141
	USSR					783		512	214			214	1.723
	Total	1.569	83	4.702	1.930	1.872	66	528	392	122	0	377	11.641
1990	Denmark	941		1.389									2.330
	Finland								219	81		161	461
	Gem. Dem. Rep.	52		1.622									1.674
	Gem. Fed. Rep.	183		10									193
	Poland				1.617	599							2.216
	Sweden				120								120
	USSR					752		390	144			141	1.427
	Total	1.176	0	3.021	1.737	1.351	0	390	363	81	0	302	8.421
1991	Denmark	925		1.497									2.422
	Finland								236	81		167	484
	Germany	246		1.814									2.060
	Poland				2.008	1.905							3.913
	Sweden			24	31		88	20					163
	Estonia					49		1	135			51	236
	Latvia					123		323					446
	Lithuania					125							125
	Russia					216		10					226
	Total	1.171	0	3.335	2.039	2.418	88	354	371	81	0	218	10.075
1992	Denmark	713	185	975									1.873
	Finland								405	40		627	1.072
	Germany	227		1.972									2.199
	Poland				1.877	1.869							3.746
	Sweden			41	88	3	86	11	3				232
	Estonia							47	47			46	140
	Latvia					26		664					690
	Lithuania					399							399
	Russia					146							146
	Total	940	185	2.988	1.965	2.443	86	722	455	40	0	673	10.497
1993	Denmark	649	194	635									1.478
	Finland								438	57		683	1.178
	Germany	235		1.230									1.465
	Poland				3.276	1.229							4.505
	Sweden		26	27	63	1	83	10					210
	Estonia							52	86			55	193
	Latvia					99		389					488
	Lithuania					155							155
	Russia					225							225
	Total	884	220	1.892	3.339	1.709	83	451	524	57	0	738	9.897
1994	Denmark	882	181	1.016									2.079
	Finland								445	33		87	565
	Germany	44		4.262		2		3					4.311
	Poland				3.177	1.266							4.443
	Sweden		84	20	18	37	33	55	10				257
	Estonia								3			4	7
	Latvia					31		276					307
	Lithuania					218							218
	Russia					167							167
	Total	926	265	5.298	3.195	1.721	33	334	458	33	0	91	12.354
1995	Denmark	859	231	2.110									3.200
	Finland								398	28		131	557
	Germany	286		2.825		4		40					3.155
	Poland				7.437	1.482							8.919
	Sweden		58	28	186	7	81	18					378
	Estonia				8			16	52			35	111
	Latvia					39		322					361
	Lithuania				8	187							195
	Russia					271							271
	Total	1.145	289	4.963	7.639	1.990	81	396	450	28	0	166	17.147

* Finland: Catches of SDs 27&28 are included in SD 29 & catches of SD 31 are included in SD 30
Denmark: Catches of SDs 28&29 are included in SD 27
Gem. Dem. Rep. Catches of SD 26 are included in SD 25
Gem. Fed. Rep. Catches of SD 25 are included in SD 24
Germany Catches of SD 25 are included in SD 24
Poland/Latvia Catches of SD 24 are included in SD 25

Table 8.4.9.2 continued

Year	Country*	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
1996	Denmark	1.041	227	2.306									3.574
	Finland				1				365	78		271	715
	Germany	189		1.322		10		9					1.530
	Poland				6.069	2.556							8.625
	Sweden	2	58	101	718	48	114	31					1.072
	Estonia							44	99			145	288
	Latvia					74		215					289
	Lithuania					316							316
	Russia					740							740
	Total	1.232	285	3.729	6.788	3.744	114	299	464	78	0	416	17.149
1997	Denmark	1.356		2.421	31	10							3.818
	Finland				1				283	69		299	652
	Germany	655		1.982		12		4					2.653
	Poland				3.877	1.730							5.607
	Sweden		42	62	308	31	105	370					918
	Estonia				15			101	96			125	337
	Latvia					78		284					362
	Lithuania					554							554
	Russia					1.001							1.001
	Total	2.011	42	4.465	4.232	3.416	105	759	379	69	0	424	15.902
1998	Denmark	1.372		2.393									3.765
	Finland				4				284	59		297	644
	Germany	411		1.729		2							2.142
	Poland				4.215	1.370							5.585
	Sweden		61	49	187	18	70	117					502
	Estonia				10			146	79			87	322
	Latvia				2	88		274					364
	Lithuania					737							737
	Russia					1.188							1.188
	Total	1.783	61	4.171	4.418	3.403	70	537	363	59	0	384	15.249
1999	Denmark	1.473		1.206									2.679
	Finland				1				286	57		276	620
	Germany	510		1.825									2.335
	Poland				4.015	1.435							5.450
	Sweden		37	24	87	47	15						210
	Estonia				8			92	150			164	414
	Latvia					140		365					505
	Lithuania					547							547
	Russia					964							964
	Total	1.983	37	3.055	4.111	3.133	15	457	436	57	0	440	13.724
2000	Denmark	1.896		1.757									3.653
	Finland			15	6				276	43		275	615
	Germany	660		2.089									2.749
	Poland				3.423	1.668							5.091
	Sweden		41	49	122	0	73	28					313
	Estonia				2	1		65	150			126	344
	Latvia				3	113		302					418
	Lithuania					575							575
	Russia					1.236							1.236
	Total	2.556	41	3.910	3.556	3.593	73	395	426	43	0	401	14.994
2001	Denmark	2.030		3.048									5.078
	Finland			9	69				224	28		267	597
	Germany	458		1.886									2.344
	Poland				4.608	1.433							6.041
	Sweden		52	31	96	3	90	178			3		453
	Estonia							100	161			221	482
	Latvia					201		412					613
	Lithuania					1.127							1.127
	Russia					1.355							1.355
	Total	2.488	52	4.974	4.773	4.119	90	690	385	28	3	488	18.090

* Finland: Catches of SDs 27&28 are included in SD 29 & catches of SD 31 are included in SD 30
Poland/Latvia Catches of SD 24 are included in SD 25
Germany Catches of SD 25 are included in SD 24

Table 8.4.9.2 continued

Year	Country*	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
2002	Denmark	1.490		2.883	2								4.375
	Finland			9	69				109	77		21	285
	Germany	317		2.066									2.383
	Poland				6.979	1.512							8.491
	Sweden		42	30	111	4	90	48		5			330
	Estonia							91	199			226	516
	Latvia					221		375					596
	Lithuania					1.077							1.077
	Russia					1.314							1.314
	Total	1.807	42	4.988	7.161	4.128	90	514	308	82	0	247	19.367
2003	Denmark	1.063		1.786	1	1							2.851
	Finland			2	7				103	69		22	203
	Germany	241		1.490									1.731
	Poland				5.068	1.425							6.493
	Sweden		33	45	105		57	17					257
	Estonia							122	192			128	442
	Latvia					281		392					673
	Lithuania					1.066							1.066
	Russia					1.402							1.402
	Total	1.304	33	3.323	5.181	4.175	57	531	295	69	0	150	15.118
2004	Denmark	952		2.615									3.567
	Finland				1				85	65		24	175
	Germany	315		1.591									1.906
	Poland				6.364	1.900							8.264
	Sweden		31	19	86		45	18					199
	Estonia							89	144			167	400
	Latvia				7	169		600					776
	Lithuania					834							834
	Russia					1.277							1.277
	Total	1.267	31	4.225	6.458	4.180	45	707	229	65	0	191	17.398
2005	Denmark	725	184	2.159	144								3.212
	Finland								59	40	0	13	112
	Germany	94		883	43								1.020
	Poland			2.072	6.762	1.714							10.548
	Sweden	+	38	26	58	+	47	124	2	+			296
	Estonia							133	144			114	391
	Latvia			2		383		1.333					1.718
	Lithuania					949							949
	Russia					1.393							1.393
	Total	819	223	5.142	7.007	4.439	47	1.590	206	40	0	127	19.639
2006	Denmark	620	182	517	1.517	4							2.840
	Finland			2	2				12	4	1	2	23
	Germany	34		974	7								1.015
	Poland			1.779	5.950	1.681							9.410
	Sweden		30	23	61	1	33	20					168
	Estonia							83	165			129	377
	Latvia					317		838					1.155
	Lithuania					355							355
	Russia					1.231							1.231
	Total	654	212	3.295	7.537	3.589	33	941	177	4	1	131	16.574
2007	Denmark	585	233	623	622	2							2.065
	Finland			2	8	1			5	1	0	2	19
	Germany	406		1.432	217	0							2.055
	Poland			3.016	5.837	1.836							10.690
	Sweden		26	27	59	1	39	18	0	0	0		171
	Estonia							92	125			111	328
	Latvia			8	7	166		877					1.058
	Lithuania				11	268							279
	Russia					2.650							2.650
	Total	991	259	5.109	6.761	4.925	39	987	130	1	0	113	19.315

* Finland: Where not given separately,catches of SDs 27&28 are included in SD 29 and catches of SD 31 are included in SD 30

Poland/Latvia Where not given separately,catches of SD 24 are included in SD 25

Germany Where not given separately,catches of SD 25 are included in SD 24

Table 8.4.9.2 continued

Year	Country	SD 22	SD 23	SD 24	SD 25	SD 26	SD 27	SD 28	SD 29	SD 30	SD 31	SD 32	Total
2008	Denmark	554	199	427	313								1.492
	Finland				0				5	1	0	3	9
	Germany	627		1.608	238								2.473
	Poland*			2.094	5.569	1.456							9.119
	Sweden	0	47	29	66	0	47	18	0	0			207
	Estonia							91	125			103	319
	Latvia			44	29	203		374					651
	Lithuania				31	601		27					660
	Russia					1.960							1.960
	Total	1.180	246	4.202	6.247	4.221	47	511	130	1	0	105	16.891
2009	Denmark	505	113	326	199								1.142
	Finland			44	0				6	1	0	4	56
	Germany	521		1.181	29	1							1.731
	Poland			2.540	5.985	1.671							10.195
	Sweden		37	27	65	0	43	17	0	0			189
	Estonia				0			79	119			121	319
	Latvia				154	52		312					518
	Lithuania				31	472		27					530
	Russia					969							969
	Total	1.026	149	4.118	6.464	3.164	43	435	124	1	0	125	15.650
2010	Denmark	557	91	332	385	0							1.364
	Finland			14	2		0		5	0	0	2	23
	Germany	376		957	31								1.364
	Poland			2.173	7.665	1.731							11.569
	Sweden	0	29	21	64	0	36	15	0	0			165
	Estonia							93	94			117	305
	Latvia				31	25		225					281
	Lithuania				19	407		55					481
	Russia					1.030							1.030
	Total	933	120	3.497	8.196	3.193	36	388	100	0	0	119	16.582
2011**	Denmark	441	78	311	224	1							1.055
	Finland			3	2	1	0	0	4	1	0	2	13
	Germany	497	0	1.504	147								2.147
	Poland			1.567	6.666	1.437							9.670
	Sweden	0	28	26	60	1	34	20	0	0	1		170
	Estonia				20	15	0	74	116	0	0	105	331
	Latvia				39	114	0	156					309
	Lithuania				15	418	0	0					434
	Russia					1.139							1.139
	Total	938	106	3.410	7.174	3.127	34	250	121	1	1	107	15.269

* Poland 2008 corrected

** provisional

Table 8.4.9.3 Flounder in Subdivisions 22–32 (Baltic Sea). Combined 1st and 4th quarters cpue (no./hr) (weighted average per depth stratum area) from the Baltic International Trawl Survey (BITS-Q1+Q4) of fish equal to or larger than 20 cm in Subdivisions 22–28 (from ICES DATRAS database).

Year	SD 22-28	SD 22	SD 24- 25	SD 26	SD 28
2000	138.6	50.9	153.0	10.4	468.6
2001	434.8	36.3	73.1	468.4	1605.5
2002	435.2	83.7	129.2	635.2	1114.9
2003	218.7	63.6	82.3	222.4	722.6
2004	369.1	42.1	108.9	322.9	1551.7
2005	349.0	32.4	133.3	141.2	1515.0
2006	222.0	65.2	147.7	142.6	665.0
2007	382.2	72.8	133.2	364.1	1574.3
2008	405.5	68.1	206.1	435.2	1191.4
2009	312.8	82.1	178.8	222.2	934.9
2010	382.6	111.4	241.5	407.0	1034.2
2011	317.8	127.6	154.2	207.8	1277.8