

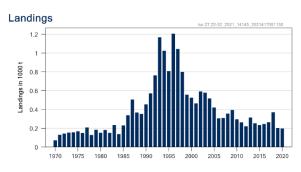
Turbot (Scophthalmus maximus) in subdivisions 22-32 (Baltic Sea)

ICES advice on fishing opportunities

ICES has not been requested to provide advice on fishing opportunities for this stock.

Stock development over time

ICES cannot assess the stock status relative to MSY and precautionary approach (PA) reference points because information to define reference points is not available. The stock size indicator is stable over time.



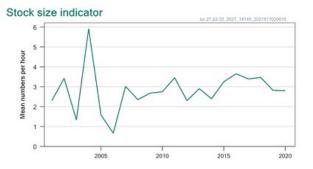


Figure 1 Turbot in subdivisions 22–32. Left: ICES estimates of landings (in thousand tonnes). Right: combined abundance index (number per hour) of turbot ≥ 20 cm, from the Baltic International Trawl Survey (BITS-Q1 and Q4) in subdivisions 22–28.

Catch scenarios

ICES has not been requested to provide advice on fishing opportunities for this stock.

Basis of the advice

ICES has not been requested to provide advice on fishing opportunities for this stock.

Table 1Turbot in subdivisions 22–32. The basis of the advice.									
Advice basis	No advice requested								
Management plan	The EU multiannual plan for the Baltic Sea (EU, 2016, 2019) applies to bycatches of this stock taken when fishing for the target stocks described in the plan								

Quality of the assessment

The stock size indicator is considered uncertain due to the low catch rate in the surveys.

Issues relevant for the advice

A considerable increase in small turbot (< 25 cm) was recorded in catches of both BITS-Q1 2020 and 2021 (> 20%) and BITS-Q4 2020 (> 20%) as well as in commercial fisheries discards (> 200%) compared to previous years. These small turbot are only partially reflected in the survey index and fisheries data as these only take larger individuals in account (> 20cm TL for the index and >30cm for commercial landings). Discarding is known to occur in this fishery, and in 2020 the discard estimate was the highest in the time-series since 2012; however, sampling for discards is insufficient and needs to be increased in order for the catch to be accurately estimated.

There is no TAC for turbot and therefore it is not covered by the EU landing obligation.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 2 Turbot in s	ubdivisions 22–32. Basis of the assessment and advice.
ICES stock data category	3 (ICES, 2021a).
Assessment type	Survey trends (ICES, 2021b)
Input data	Commercial landings and survey data from Baltic International Trawl Survey (BITS-Q1 G2916, and BITS-Q4 G8863).
Discards and bycatch	Discarding is known to take place but numbers cannot be quantified
Indicators	None
Other information	None
Working group	Baltic Fisheries Assessment Working Group (WGBFAS)

History of the advice, catch, and management

Year	ICES advice	Catches corresp. to	Landings corresp. to	Agreed TAC	Landings (ICES
Tear	ICLS duvice	advice	advice	Agreeu TAC	estimates)
2000	No advice	-		-	53
2001	No advice	-		-	46
2002	No advice	-		-	59
2003	No advice	-		-	57
2004	No advice	-		-	52
2005	No advice	-		-	42
2006	No advice	-		-	30
2007	No advice	-		-	30
2008	No advice	-		-	35
2009	No advice	-		-	39
2010	No advice	-		-	29
2011	No advice	-		-	20
2012	Reduce catch	-		-	2
	Reduce catches by				
2013	17% (and an	< 220		-	3
	additional 20%)				
2014	Same advice as in	< 220			2
2014	2013	< 220		-	Ζ.
2015	Same advice as last	< 220			2
2015	year	< 220		-	2
	Precautionary				
2016	approach (10%		≤ 198		2
2010	decrease in advised		2 1 5 0		2
	landings)				
	Precautionary				
2017	approach (2%		≤ 194	_	2
/	decrease in advised				2
	landings)				
	Precautionary				
2018	approach (4%		≤ 186	-	3
2010	decrease in advised		_ 100		5
	landings)				
2019	No catch advice	-	_	-	2
-0-0	requested				-
2020	No catch advice	-	_	-	1
2020	requested		1		1

ICES Advice on fishing opportunities, catch, and effort tur.27.22–32

Year	ICES advice	Catches corresp. to advice	Landings corresp. to advice	Agreed TAC	Landings (ICES estimates)
2021	No catch advice requested	-	-	-	
2022	No catch advice requested	-	-	-	
2023	No catch advice requested	-	-	-	
2024	No catch advice requested	-	-	-	

History of the catch and landings

Tal	ble 4 Turbot in subdivision	Turbot in subdivisions 22–32. Catch distribution by fleet in 2020 as estimated by ICES.											
	Catch (2020)	Lar	ndings	Discards									
		Active gears 37.5%	Passive gears 62.5%	Discarding is known to take place and is									
	Unknown	107	toppos	considered substantial but could not be									
		197	tonnes	quantified									

Year			Denmark			Ger	many, iDR bef 1990)		Polan	d*	Sweden**												Estonia	Total
								25-				Subdivison(s)												lotar
	22	23	24(+25)	25	26+27	22	24	27	25(+24)	26	22	23	24	25	26	27	28(+29)	26	28	26	26	24-32	29-30	
1965					ĺ	3	39																	42
1966	16		21			5	53																	95
1967	14		20			7	10																	51
1968	14		18			3	67																	102
1969	13		13			4	57																	87
1970	11		13			5	40						2	-	-	-	-							71
1971	11		26			4	86						2	-	-	-	-							129
1972	10		26			3	100						3	-	-	-	-							142
1973	11		30			3	33		58	13			5	-	-	-	-							153
1974	14		40			2	23		34	36			6	-	-	-	-							155
1975	27		48			11	38		23	6			7	-	-	-	-							167
1976	29		24			11	52		14	12			7	-	-	-	-							149
1977	32		37			9	55		12	55			8	-	-	-	-							208
1978	33		37			11	27		7	3			10	-	-	-	-							128
1979	23		38			9	39		29	34			12	-	-	-	-							184
1980	28		38			9	30		12	20			15	-	-	-	-							152
1981	28		62			9	46		10	19			7	-	-	1	-							181
1982	31		51			8	27		2	17			3	4		4	3							150
1983	33		40			11	9		5	4			31	41		35	24							233
1984	41		45			16	8		13	2			3	4		3	2							137
1985	56		34			20	22		67	15			4	5		4	3							230
1986	99		81			31	32		32	37			6	8		7	5							338
1987	134		93			34	34		155	21			8	11		9	6							505
1988	117		117			41	28		7	10			12	16		14	9							367
1989	135		109			27	22			11			11	15		13	9							352
1990	178		181			30	2		24	25			14	-	-	-	-							454
1991	228		137			44	39		73	20			2	12		16								571
1992	267		127			55	68		80	55			12	12		21	36				30			763
1993	159	29	152			74	56		520	72		2	4	14		13	38				34			1167
1994	211	18	166			52	57	10	380	30		2	3	18	1	17	44				15			1024
1995	257	11	94			65	53	4	30	15		2	3	54	9	31	83	34	27	15	20			807
1996	207	12	95			36	47	5	288	92	1	3	15	100	5	54	104	42	3	72	25			1206
1997	151		68			60	52	3	290	70		2	6	70	1	53	86	33	14	59	25			1043
1998	138		80			44	55	1	66	68		2	4	58	1	18	69	12	24	62	96			798

Table 5 Turbot in subdivisions 22–32. History of commercial landings; both the official and ICES estimated values are presented by area for each country participating in the fishery. All weights are in tonnes.

Veer			Denmark	<			many, l DR bef 1990)		Polan	d*	Sweden**				Lat	via	Lithuania	Russia*	Finland	Estonia				
Year											Su	bdivis	on(s)											Total
	22	23	24(+25)	25	26+27	22	24	25- 27	25(+24)	26	22	23	24	25	26	27	28(+29)	26	28	26	26	24-32	29-30	
1999	106		59			23	48		18	15		2	4	41	3	17	60	20	34	58	48			556
2000**	97		58			23	54		90	12		2	3	39		16	39	7	9	23	53			525
2001	76		53			19	31		121	10		2	5	16		9	29	5	1	18	69			464
2002	73		22	4	0	20	32	2	245	65		5	2	15		7	21	2	8	18	50			591
2003	48		28	5	0	10	39	1	184	178		1	2	18		3	14	7	2	13	28			579
2004	61		27	7		12	27	1	225	96		1	1	8		3	14	3	8	7	15			516
2005	57	5	36	12		14	35	1	123	57		1	3	6		5	21	1	6	18	19			420
2006	30	5	16	33		19	45	1	87	11		1	2	5	0	4	19	3	3	9	12			305
2007	60	5	26	5	0	22	34	0	83	8		0	5	5		2	15	0	1	12	24			309
2008	79	5	33	6		24	30	0	95	15		1	7	11		8	17			10	14			356
2009***	111	6	35	7	< 1	33	50	1	92	11	0	1	6	10	< 1	5	6	< 1	< 1	11	8	1	< 1	394
2010	102	6	31	4	< 1	24	35	< 1	38	1	0	1	4	16	< 1	4	8	3	7	9	2	< 1	< 1	295
2011	84	3	24	3	< 1	26	31	< 1	66	11	< 1	< 1	0	0	< 1	1	0	3	6	0	5	< 1	< 1	262
2012	43	3	16	1	< 1	16	27	< 1	55	11	0	< 1	0	0	< 1	1	0	5	5	14	15	< 1	< 1	211
2013	66	5	21	1	< 1	23	40	< 1	61	12	0	1	6	16	< 1	1	3	5	4	13	20	< 1	< 1	313
2014	84	5	27	1	0	35	30	< 1	25	5	0	1	3	13	<1	2	4	2	5	7	6	< 1	< 1	253
2015	84	5	22	1	< 1	27	19	< 1	41	8	0	< 1	4	9	0	1	1	< 1	4	4	3	< 1	0	233
2016	68	4	34	3	< 1	25	23	1	43	13	0	2	5	9	<1	1	1	1	5	7	6	< 1	< 1	252
2017	76	5	18	3	< 1	41	33	< 1	55	8	0	1	2	4	< 1	1	1	< 1	1	7	7	< 1	1	264
2018	103	9	41	3	0	37	55	< 1	72	4	< 1	1	14	11	0	1	2	1	5	< 1	7	< 1	1	370
2019	53	2	25	1	0	20	26	0	50	5	0	1	3	2	0	1	2	1	4	5	1	< 1	0	201
2020	57	3	26	< 1	0	28	19	< 1	42	3	0	1	3	5	0	2	2	< 1	2	2	<1	< 1	< 1	197

* Landings were corrected by Russia for 2000–2009 and by Poland for 2012 and 2013.

** For the years 1970–1981 and 1990 catches of subdivisions 25–28 are included in Subdivision 24.

*** From 2009 onwards landings below 0.5 tonnes are given as < 1, landings ≥0.5 tonnes are given as 1. Zeros (0) represent true zero landings. Before 2009, a distinction between "true zero landings" and rounded zero landings (< 0. tonnes) is not possible.

Summary of the assessment

Table 6

Turbot in subdivisions 22–32. Assessment summary. The stock size indicator is a combined abundance index of turbot ≥20 cm, from the Baltic International Trawl Survey (BITS-Q1 and Q4) in subdivisions 22–28. The individual indices are weighted averages per depth stratum area and the two indices are combined using the geometric mean.

	Stock size indicator	Landings
Year	(numbers h ⁻¹)	(tonnes)
2001	2.3	464
2002	3.4	591
2003	1.33	579
2004	5.9	516
2005	1.59	420
2006	0.67	305
2007	3.02	309
2008	2.6	356
2009	2.7	394
2010	2.8	295
2011	3.5	263
2012	2.3	221
2013	2.9	313
2014	2.4	253
2015	3.3	233
2016	3.7	246
2017	3.4	264
2018	3.5	370
2019	2.8	201
2020	2.8	197

Sources and references

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Download the stock assessment data and figures.

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