Data revision report of Japan as of 2022

Mikihiko Kai and Hiroki Yokoi

Fisheries Resources Institute, Japan Fisheries Research and Education Agency

Introduction

ISC Statistic Working Group (STATWG) decided that it is required to submit data revision report to the STATWG when data revision is made, and the revision meets the specific condition (Anon. 2014). After July 1, 2021, Japan revised the catch in weight (mt) data "Category 1c" including catch for blue shark for 1994-2020 due to the update of benchmark stock assessment for blue shark (ISC, 2022).

Data revision

- 1. Category 1c
- 1.1. Blue shark

The gear-specific annual catches of blue shark caught by Japanese fleets between 1994 and 2020 were updated using the same catch estimation methods used in the previous benchmark stock assessment in 2017 (ISC, 2022). The overall calculation methods of gear-specific annual catches were described in the working document paper (Uosaki and Kai, 2019) presented at STATWG meeting in 2019. The large differences of the annual catch tables between two tables in 2021 and 2022 (**Table 1**) were caused by the different values of annual CPUEs for longline fleets (Kai, 2021a,b) and proportions of the catch for blue shark to all sharks in the estimation of catches for other gears. The estimates of annual catches (Kai, 2021c; Kai and Yano, 2021) were largely affected by the values of annual CPUE and the proportion of the catches.

Reference

- Anon. 2014. Report of the Statistics Working Group. International Scientific Committee for Tunas and Tuna-like Species in the North Pacific Ocean. July 10-11, 2014.
- ISC, 2022. Stock Assessment and Future Projections of Blue Sharks in the North Pacific Ocean Through 2020. ISC 22 Plenary Report and Documents, Annex 12.
- Kai, M., 2021a. Spatio-temporal model for CPUE standardization: Application to blue shark caught by Japanese offshore and distant water shallow-set longliner in the western North Pacific. ISC/21/SHARKWG-2/01.
- Kai, M., 2021b. Spatio-temporal model for CPUE standardization: Application to blue shark caught by longline of Japanese research and training vessels in the western and central North Pacific. ISC/21/SHARKWG-2/03.
- Kai. M., 2021c. Update of Japanese annual catches for blue shark caught by Japanese offshore and distant water longliner in the North Pacific Ocean from 1994 to 2020. ISC/21/SHARKWG-2/04.
- Kai, M., and Yano, T., 2021. Updated annual catches of blue shark caught by Japanese coastal fisheries in the North Pacific Ocean from 1994 to 2019. ISC/21/SHARKWG-2/05.
- Uosaki, K., and Kai, M., 2019. Data revision report of Japan as of 2019. ISC19/STATWG/WP-01.

Table 1. Category 1 blue shark catch by gear.

BEFORE (on July 1, 2021)

	Cc4	Drift			N-4	IDM
Year	Set- net	gill-	Longline	Others	Not specified	JPN Total
	Het	net			Specified	TOtal
1994	9	577	33,368	19	4	33,977
1995	7	483	37,567	11	4	38,072
1996	7	474	29,015	19	4	29,519
1997	9	598	32,457	8	6	33,078
1998	7	611	30,610	5	4	31,237
1999	8	828	27,270	7	2	28,114
2000	8	730	29,569	11	1	30,319
2001	8	731	30,615	9	2	31,365
2002	7	768	26,181	13	1	26,970
2003	7	1,350	26,780	12	2	28,151
2004	8	1,202	25,684	7	3	26,904
2005	-	1,321	29,482	13	2	30,818
2006	5	1,204	25,106	2	2	26,319
2007	5	1,323	23,725	19	2	25,074
2008	-	944	20,115	14	1	21,074
2009	-	1,208	19,330	4	1	20,543
2010	4	963	22,608	9	1	23,585
2011	7	765	20,231	1	3	21,007
2012	2	1,076	13,892	3	3	14,975
2013	6	1,103	17,203	4	2	18,319
2014	4	1,060	16,241	-	2	17,306
2015	21	1,080	12,470	-	2	13,573
2016	26	1,832	14,483	1	2	16,343
2017	4	1,366	14,787	-	1	16,158
2018	40	1,236	10,921	-	1	12,198
2019	28	1,052	5,793	-	1	6,874

AFTER (on July 1, 2022)

Year	Set- net	Drift		Others	NI.	IDNI
		gill-	Longline		Not	JPN
		net			specified	Total
1994	15	582	35,437	18	4	36,055
1995	12	487	34,246	10	4	34,759
1996	11	478	28,054	18	4	28,564
1997	14	603	29,582	7	6	30,212
1998	12	616	29,863	5	4	30,499
1999	12	834	32,816	6	2	33,671
2000	12	736	30,497	10	1	31,257
2001	12	737	32,380	9	2	33,140
2002	11	768	28,465	13	1	29,258
2003	11	1,350	25,631	12	2	27,006
2004	12	1,202	23,910	7	3	25,135
2005	-	1,321	24,307	13	2	25,643
2006	5	1,204	21,363	2	2	22,576
2007	5	1,323	18,655	19	2	20,004
2008	-	944	15,374	14	1	16,333
2009	-	1,208	15,889	4	1	17,102
2010	4	962	16,504	9	1	17,481
2011	12	771	8,566	1	3	9,353
2012	2	1,085	10,463	3	3	11,555
2013	6	1,103	11,860	4	2	12,976
2014	4	1,060	12,361	-	2	13,426
2015	21	697	10,500	-	2	11,220
2016	26	1,832	9,507	1	2	11,367
2017	4	1,366	9,795	-	1	11,166
2018	40	1,236	9,111	-	1	10,388
2019	35	1,149	8,448	-	1	9,634
2020	59	1,198	7,072	1	2	8,331

Difference

_	Set-	Drift			Not	JPN
Year	net	gill-	Longline	Others	specified	Total
		net			•	
1994	5.3	4.8	2069.1	-1.3	0.0	2077.9
1995	4.2	4.0	-3320.7	-0.8	0.0	-3313.2
1996	4.0	4.0	-961.6	-1.3	0.0	-954.9
1997	5.1	5.0	-2875.4	-0.5	0.0	-2865.8
1998	4.2	5.0	-746.9	-0.4	0.0	-738.0
1999	4.4	6.9	5546.5	-0.5	0.0	5557.4
2000	4.4	6.0	928.0	-0.8	0.0	937.7
2001	4.5	6.1	1765.1	-0.7	0.0	1775.1
2002	3.9	0.0	2283.4	0.0	0.0	2287.3
2003	4.2	0.0	-1148.6	0.0	0.0	-1144.5
2004	4.4	0.0	-1773.8	0.0	0.0	-1769.4
2005	0.0	0.0	-5174.8	0.0	0.0	-5174.7
2006	0.0	0.0	-3743.2	0.0	0.0	-3743.2
2007	0.0	0.0	-5070.1	0.0	0.0	-5070.0
2008	0.0	0.0	-4740.7	0.0	0.0	-4740.7
2009	0.0	0.0	-3440.7	0.0	0.0	-3440.7
2010	0.0	0.0	-6104.2	0.0	0.0	-6104.2
2011	4.3	6.3	-11664.2	0.0	0.0	- 11653.6
2012	0.0	9.0	-3429.4	0.0	0.0	-3420.4
2013	0.0	0.0	-5343.5	0.0	0.0	-5343.5
2014	0.0	0.0	-3880.3	0.0	0.0	-3880.3
2015	0.0	382.4	-1970.2	0.0	0.0	-2352.6
2016	0.0	0.0	-4975.8	0.0	0.0	-4975.8
2017	0.0	0.0	-4991.4	0.0	0.0	-4991.4
2018	0.0	0.0	-1809.6	0.0	0.0	-1809.6
2019	7.1	97.3	2655.7	0.0	0.2	2760.2