

REVISION OF ATLANTIC BLUEFIN TUNA TASK I NOMINAL CATCHES FROM SPAIN

D. Macias¹, C. Palma² and E. Rodriguez-Marin³

SUMMARY

This document presents a revision of Spanish bluefin tuna nominal annual catches over the period 1950 to 2015. The revision has not affected the total catches. Changes are mainly related to gap completion, errors correction, time series improvement and reduction of unclassified gears

RÉSUMÉ

Ce document présente une révision des captures annuelles nominales de thon rouge de UE-Espagne pendant la période 1950-2015. La révision n'a pas affecté les captures totales. Les changements ont principalement consisté à combler les lacunes, corriger les erreurs, améliorer les séries temporelles et réduire les engins non classifiés.

RESUMEN

En el documento se presenta una revisión de las capturas españolas nominales anuales de atún rojo durante el período comprendido entre 1950 y 2015. La revisión no ha afectado a las capturas totales. Los cambios se relacionan principalmente con el relleno de años en blanco, corrección de errores, mejora de las series temporales y la reducción de los artes sin clasificar.

KEYWORDS

Catch, bluefin tuna fisheries, Thunnus thynnus

¹ Spanish Institute of Oceanography. Málaga Oceanographic Centre, PO Box 28, 29640, Fuengirola, Spain.

² International Commission for the Conservation of Atlantic Tunas, Secretariat, Madrid, Spain.

³ Spanish Institute of Oceanography. Santander Oceanographic Centre, PO Box 240. 39080, Santander. Spain.

1. Introduction

At the 2016 Atlantic bluefin tuna (*Thunnus thynnus*) data preparatory meeting (Anon, 2017), the Group recognized the need for a revision of nominal annual catches (T1NC). This revision required the participation of the ICCAT Secretariat, fishing countries scientists and data mining from the Atlantic Wide Research Program for Bluefin tuna (GBYP). The aims were to eliminate as much as possible catches from unclassified gears, improve the internal consistency of each one of the series in T1NC, eliminate duplicates, complete as much as possible data gaps identified in the past.

2. Material and methods

The revision, was split into two periods (1950 to 1989 and 1990 to 2015), and was made for the East Atlantic stock (BFT-E) by Ocean/Sea (East Atlantic, ATE; and Mediterranean Sea, MED). Unclassified gears included in the revision were: UNCL, SURF and SPOR.

3. Results and Discussion

Period 1950 to 1989. Atlantic

Unclassified (SURF) catches in 1963 allocated to Canary BB fleet (gap); remainder unclassified (SURF) catches (1982-1984, 1986) merged with HAND artisanal fleet (gaps); TRAP fisheries updated (1950-1989) with GBYP information using a two criteria approach (T1NC total (ATE+MED) < GBYP total (ATE+MED) AND GBYP(ATE) > T1NC(ATE)) in order to account for the T1NC joint (ATE+MED) reports (affected years: 1950, 1955-1956, 1958-1959, 1968, 1978, 1980-1981) (**Table 1**).

Period 1950 to 1989. Mediterranean

Unification of LL (LLHB) catches (Mediterranean fleet) (1963-1979); unclassified SURF catch in 1983 (383 t) reclassified as BB (can have some PS catch); unclassified (SPOR) catches (1975-1982) moved to Spanish Mediterranean recreational/sport fishery; unclassified (UNCL) catches (1984-1989) identified as two longline Spanish fisheries (LLJAP and LLALB) and temporary reclassified as LL (until a better gear differentiation is obtained); allocated to GILL (1989) a portion (3 t) of the UNCL catches (714 + 3); TRAP fisheries updated (1950-1989) with GBYP information using a two criteria approach (T1NC total (ATE+MED) < GBYP total (ATE+MED) AND GBYP(MED) > T1NC(MED)) in order to account for the T1NC joint (ATE+MED) reports (affected years: 1963, 1967-1968, 1979, 1980) (**Table 2**).

Period 1990 to 2015. Atlantic

Recovered GILL catch series (1990-1996, ongoing recovery process) and removal of UNCL (identified as GILL) catches in 1992 (2 t) and 1994 (2 t); catches from BB Cantabrian fleet targeting BFT (25 t) moved to BB fishery in Gulf of Cadiz (correction); TROL Cantabrian catches catching BFT as by-catch (2001-2015) reclassified as BB (with two corrections in 2007 and 2008, where data were wrongly reported as kilograms but were in fact tones: 2007 changed to 404 t, 2008 changed to 599 t); 2010 all gear catches were updated because were mistakenly replaced by 2011 catches; TRAP fisheries updated (1990-2007 only) with GBYP information using a two criteria approach (T1NC total (ATE+MED) < GBYP total (ATE+MED) AND GBYP(ATE) > T1NC(ATE)) in order to account for the T1NC joint (ATE+MED) reports (changed years: 1990, 1998-1999, 2003, 2006) (**Table 1**).

Period 1990 to 2015. Mediterranean

Unclassified (UNCL) gear catches (1990-1996) split (using average ratios of 97-98) into LLALB (17%, 1990-1996) and LLJAP (83%, 1990-1993) series being the remainder of the 1994-1996 catches (discounted 17%) allocated to other gears (GILL, SURF, HAND, etc.); unclassified (SURF) catches (2000-2001) allocated to BB series; 2010 all gear catches were updated because were mistakenly replaced by 2011 catches; TRAP fisheries updated (1990-2007, with no changes afterwards) with GBYP information using a two criteria approach (T1NC total (ATE+MED) < GBYP total (ATE+MED) AND GBYP(MED) > T1NC(MED)) in order to account for the T1NC joint (ATE+MED) reports (changed years: 1990, 2006) (**Table 2**).

The revision of bluefin Task I catches has not affected the total catches. Changes are mainly related to gap completion, errors correction, time series improvement and reduction of unclassified gears.

References

Anon. 2017. Report of the 2016 ICCAT Bluefin Data Preparatory Meeting. Collect. Vol. Sci. Pap. ICCAT, 73(6): 1861-1956.

Table 1. Revision of Atlantic bluefin tuna task I nominal catches (t) from Spain in the east Atlantic by fishing gear and year.

BFT-E (AE)			1950-1989																																													
current TINC																																																
Flag	GrSta	GearG Fleet	GearCod	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989					
EU.España	ok	BB	EU.ESP-ES-CANARY	BB										271	176	432	318	378	584	642	368	340	325	327	125	153	399	117	275	158	164	533	173	208	357	156	1245	687	360	839	311	746	714					
			EU.ESP-ES-CANT_ALB	BB	0	0	0	0	0	0	0	0	0	0	271	176	432	318	378	584	642	368	340	325	327	125	153	399	117	275	158	164	533	173	208	357	156	1245	687	360	839	311	746	714				
			EU.ESP-ES-CANT_BFT	BB	1106	979	2323	1771	2049	3528	1956	2467	2938	1769	550	514	305	520	482	582	1069	543	584	901	1308	1450	1209	1471	1009	945	587	1035	1266	1000	818	428	608	1114	1678	1488	1036	1202	1336	1399				
		GN	EU.ESP	GILL																																								4				
		HL	EU.ESP	HAND																														300	450	998	38	70	12					4				
		LL	EU.ESP-ES-SWO	LLHB																													3					100		6	104	12	7	16	20	15		
		TP	EU.ESP	TRAP	6764	4508	4858	7750	6397	7242	7744	9200	8000	4800	5700	4700	4700	1800	2500	3200	1400	3000	1100	1900	1500	600	250	504	13	448	490	339	450	600	700	787	1916	1862	2271	1630	891	939	2389	1174				
	UN	UN	EU.ESP	SURF													173																								15	2	158		12			
revised TINC																																																
Flag	GrSta	GearG Fleet	GearCod	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989					
EU.España	ok	BB	EU.ESP-ES-CANARY	BB										271	176	432	318	378	584	642	368	340	325	327	125	153	399	117	275	158	164	533	173	208	357	156	1245	687	360	839	311	746	714					
			EU.ESP-ES-CANT_ALB	BB	0	0	0	0	0	0	0	0	0	0	271	176	432	318	378	584	642	368	340	325	327	125	153	399	117	275	158	164	533	173	208	357	156	1245	687	360	839	311	746	714				
			EU.ESP-ES-CANT_BFT	BB	1106	979	2323	1771	2049	3528	1956	2467	2938	1769	550	514	305	520	482	582	1069	543	584	901	1308	1450	1209	1471	1009	945	587	1035	1266	1000	818	428	608	1114	1678	1488	1036	1202	1336	1399				
		GN	EU.ESP	GILL																																										4		
		HL	EU.ESP	HAND																																										4		
		LL	EU.ESP-ES-SWO	LLHB																																										15		
		TP	EU.ESP	TRAP	6764	4508	4858	7750	6397	7242	7744	9200	8000	4800	5700	4700	4700	1800	2500	3200	1400	3000	1100	1900	1500	600	250	504	13	448	490	339	450	600	700	787	1916	1862	2271	1630	891	939	2389	1174				
	UN	UN	EU.ESP	SURF													173																															
diff (totals)					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
BFT-E (AE)			1990-2015																																													
current TINC																																																
Flag	GrSta	GearG Fleet	GearCode	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015																			
EU.España	ok	BB	EU.ESP	BB			147	649	103	99	214	54	53		307	487	824	374	93	242	218	285	264	40	40	25	24	10																				
			EU.ESP-CANT_CDZ_ALB	BB			147	649	103	99	214	54	53	694																																		
			EU.ESP-ES-CANARY	BB	121	59	29	31	56	4	157	360	39	32	26	55	5	2	5	35	73	113	9	2	53	53	38	139	67	120																		
			EU.ESP-ES-CANT_ALB	BB	300	203	277	321	260	375	624	921	507	82	278																																	
			EU.ESP-ES-CANT_BFT	BB	1193	938	740	3219	1034	2397	4099	5139	2005	1112	941	1806	1918	413	1357	1884	750	1572	1434	931	470	470	134	0	25	0																		
		GN	EU.ESP	GILL																																												
		HL	EU.ESP	HAND																																												
		LL	EU.ESP-ES-SWO	LLHB	32	32																																										
		TP	EU.ESP	TRAP	1911	1040	1271	1244	1136	941	1207	2723	1525	2005	1416	1240	1548	750	862	880	820	1348	1194	1209	902	902	1106	1370	1173	1466																		
		TR	EU.ESP-ES-CANT_ALB	TROL																																												
	UN	UN	EU.ESP	UNCL			2		2						3		8		9																													
revised TINC																																																
Flag	UN1	GearG Fleet	GearCode	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015																			
EU.España	ok	BB	EU.ESP	BB			147	649	103	99	214	54	53	694	307	487	824	374	93	242	218	285	264	97.4	40	25	24	10																				
			EU.ESP-CANT_CDZ_ALB	BB			147	649	103	99	214	54	53	694																																		
			EU.ESP-ES-CANARY	BB	121	59	29	31	56	4	157	360	39	32	26	55	5	2	5	35	73	113	9	2	14.3	53	38	139	67	120																		
			EU.ESP-ES-CANT_ALB	BB	300	203	277	321	260	375	624	921	507	82	278	151	68	39	112	195	125	404	599	0	0	0	0	0																				
			EU.ESP-ES-CANT_BFT	BB	1193	938	740	3219	1034	2397	4099	5139	2005	1112	941	1806	1918	413	1357	1884	750	1572	1434	931	529.8	470	134	0	0																			
		GN	EU.ESP	GILL																																												
		HL	EU.ESP	HAND																																												
		LL	EU.ESP-ES-SWO	LLHB	32	32																																										
		TP	EU.ESP	TRAP	1911	1040	1271	1244	1136	941	1207	2723	1525	2005	1416	1240	1548	750	862	880	820	1348	1194	1209	887.4	902	902	1106	1370	1173	1466																	
		TR	EU.ESP-ES-CANT_ALB	TROL																																												
diff (totals)					4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

