



**DEVELOPMENT OF A NEW TROPICAL TUNA MEASURE
WORKSHOP 2 (TTMW2)
Electronic Meeting
6-10 September 2021**

**CATCH AND EFFORT DATA SUMMARIES TO SUPPORT DISCUSSIONS ON THE
TROPICAL TUNA CMMS**

**WCPFC-TTMW2-2021-IP04_rev1¹
3 September 2021**

Paper prepared by the Secretariat and SPC-OFP

¹ This paper is posted for TCC17 Meeting as **WCPFC-TCC17-2021-IP05**



TECHNICAL AND COMPLIANCE COMMITTEE
Seventeenth Regular Session
Electronic Meeting 22 – 28 September 2021

Catch and effort data summaries
to support discussions
on the TROPICAL TUNA CMMS

WCPFC-TCC17-2021-IP05¹
3 September 2021

Paper prepared by the Secretariat
and
Oceanic Fisheries Programme (OFP)
Pacific Community (SPC)

¹ This version updates and replaces the version that was posted to SC17 meeting as **SC17-MI-IP11**

Contents

1. Purse seine fishery information.....	1
Table 1. Purse seine days fished in waters under national jurisdiction and in the high seas (20°N-20°S)	1
Table 2. Purse seine days fished in the high seas in the WCPFC-CA between 20°N and 20°S, by flag.	3
Table 3. Estimated FAD sets undertaken in the tropical purse seine fishery, by flag, 2001-2020.....	5
Table 4. Tropical purse seine tuna catch and effort by set type and species in the WCPFC Convention Area.	7
Figure 1. Tuna catch estimates (mt) in the WCP-CA, by broad area, all gear types.	15
Figure 2. Cumulative tropical purse seine effort by month, 2009-2021, as measured by VMS	15
Figure 3. Annual trends in purse seine effort in the WCPFC Convention Area between 20°N and 20°S.....	16
Figure 4. Purse seine effort (days fishing and searching) in the WCPFC Convention Area between 20°N and 20°S.....	17
Figure 5. Sets by set type made in the WCPO tropical purse seine fishery, 2000 – 2020	17
Figure 6. Proportion of the total purse seine fishing activity comprising associated sets.	18
Figure 7. Monthly purse seine catch by species.....	19
Figure 8. Monthly average weight of bigeye, skipjack and yellowfin tuna.	20
Figure 9. Purse seine effort in waters under national jurisdiction (EEZs and AWs) and in high seas (20°N-20°S)	21
Figure 10. Purse seine effort in high seas (20°N-20°S), by fleet category.	22
Figure 11. Estimated FAD sets undertaken in the tropical purse seine fishery (20°N-20°S), by fleet category.....	23
Figure 12. Purse seine tuna catch (top) and effort (bottom) by set type and species	23
2. Longline fishery information	24
Table 5. Reported longline catches metric tonnes of bigeye tuna in the WCPFC-CA, by flag.	24
Table 6. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.....	26
Table 7. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), by fleet.	28
Figure 13. Estimates of effort, bigeye catch and nominal CPUE for the CORE tropical WCPFC longline fishery.....	29
Figure 14. Estimates of effort, bigeye catch and nominal CPUE for the EASTERN tropical WCPFC longline fishery	30
Figure 15. Cumulative South Pacific Albacore longline fishery effort by month, 2016-2021, as measured by VMS ...	Error! Bookmark not defined.
Figure 16. Cumulative Tropical longline fishery effort by month, 2016-2021, as measured by VMS ..	Error! Bookmark not defined.
Figure 17. Monthly WCPFC longline fishery effort (VMS fishing days and 100s of Hooks, 2015-2021	Error! Bookmark not defined.
Figure 18. Reported longline catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by fleet category.	31
Figure 19. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by fleet.....	31
Figure 20. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), 2010-2020.	32
Figure 21. Annual trends in nominal bigeye tuna CPUE in the tropical WCPFC LONGLINE fishery (20°N-10°S).....	33
3. Other Commercial fisheries information.....	34
Table 8. Tropical tuna catch estimates for OTHER FISHERIES relevant to the tropical tuna measure	34
Table 9. Tropical tuna catch estimates for OTHER FISHERIES deemed exempt from the tropical tuna measure	35
4. ANNEX	36
Table A1. Notes on major recent changes to tables/figures	36

1. Purse seine fishery information

Table 1. Purse seine days fished in waters under national jurisdiction and in the high seas (20°N-20°S)

Table 1. Purse seine days fished in waters under national jurisdiction and in International waters (20°N-20°S) in the WCPFC-CA

EEZ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Notified / Estimated EEZ Limits	See NOTE (s)	
AUSTRALIA	23	14	24	9	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	#	2,9,15
COOK ISLANDS	46	225	8	6	2	8	3	29	45	17	104	479	209	353	348	202	530	649	563	288	1,250	2,15	
FIJI	12	5	10	26	36	6	6	23	12	29	27	27	32	0	50	43	31	3	12	1	300	2,15	
FRENCH POLYNESIA	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2,15
INDONESIA	485	443	496	675	933	767	572	373	409	274	567	1,346	2,925	1,676	1,175	2,362	3,168	839	1,256	1,199	*	2, 4, 16,18	
JAPAN	172	223	344	146	92	133	152	791	503	866	204	302	465	198	653	641	670	349	414	493	1,500	2,9,10,13,15	
NEW ZEALAND	218	174	167	313	359	218	217	234	128	218	261	268	290	268	278	197	152	110	123	115	#	2, 9, 15	
NIUE	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	200	2,15	
PHILIPPINES	918	969	1,347	1,429	1,311	1,352	1,520	1,792	1,250	808	491	427	1,010	1,389	1,052	1,143	1,515	989	1,120	1,517	*	2,4,6,8,17,1	
REPUBLIC OF KOREA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18	
SAMOA	8	12	4	2	3	2	4	7	13	7	38	32	45	15	31	85	13	5	4	15	150	2,15	
TOKELAU	100	374	25	67	126	30	47	132	210	187	868	719	389	622	1,321	189	729	885	208	403	1,000	2,13,15	
TONGA	2	0	0	1	1	0	0	0	0	0	0	0	2	0	2	18	11	0	0	0	250	2,15	
CHINESE TAIPEI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18	
USA	339	482	223	294	136	186	100	63	122	35	49	209	189	261	90	111	134	104	79	143	558	2, 15	
VANUATU	2	2	0	19	1	0	0	14	1	0	5	5	1	0	4	0	1	0	0	7	200	2,15	
WALLIS AND FUTUNA	5	9	6	1	4	2	0	7	8	2	3	2	0	3	2	2	0	0	0	0	*	2, 18	
PNA EEZs (excl AWs)	24,974	27,040	29,265	30,330	32,453	32,230	31,732	34,772	33,111	44,233	47,380	41,861	44,315	42,568	31,020	35,675	37,014	34,855	33,034	33,338	44,033	5, 12,15,20	
PNA AWs only	2,426	2,215	3,553	3,093	4,656	3,918	5,710	6,320	7,289	6,255	8,663	8,826	7,996	6,710	3,812	3,806	5,384	3,937	2,823	5,455		5	
PNA EEZs + AWs = TOTAL PNA	27,400	29,255	32,818	33,423	37,109	36,148	37,442	41,092	40,400	50,488	56,043	50,687	52,311	49,278	34,832	39,481	42,398	38,792	35,857	38,793		5	
TOTAL EEZs - excl. PNA AWs	27,276	29,951	31,890	33,308	35,453	34,932	34,353	38,230	35,804	46,674	49,995	45,675	49,872	47,350	36,024	40,667	43,968	38,788	36,813	37,519			
TOTAL EEZs - excl. PNA AWs and ID/PH	25,873	28,539	30,047	31,204	33,209	32,813	32,261	36,065	34,145	45,592	48,937	43,902	45,937	44,285	33,797	37,162	39,285	36,960	34,437	34,803			
TOTAL EEZs + PNA AWs	29,730	32,189	35,473	36,411	40,113	38,854	40,063	44,558	43,102	52,931	58,661	54,503	57,868	54,063	39,838	44,475	49,352	42,725	39,636	42,974	48,382		
TOTAL INT. WATERS (20°N-20°S)	7,365	8,114	8,493	10,382	8,924	6,889	8,185	8,617	10,100	1,528	1,541	2,261	6,138	5,699	8,292	6,928	6,620	7,404	8,467	7,811		6,8,11	
TOTAL (EEZs + IW + PNA AWs)	37,095	40,303	43,966	46,793	49,037	45,743	48,248	53,175	53,202	54,459	60,202	56,764	64,006	59,762	48,130	51,403	55,972	50,129	48,103	50,785	56,193		
TOTAL minus ID/PH	35,192	38,391	41,623	44,189	46,293	43,124	45,656	50,510	51,043	53,377	59,144	54,991	60,071	56,697	45,903	47,898	51,289	48,301	45,727	48,069	53,477		
VIETNAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	

NOTES

1. Source: Raised logsheet data.
2. CMM 2014-01, CMM 2015-01, CMM 2016-01 -- Para. 23. for years 2015-2017; CMM 2017-01, CMM 2018-01 for years 2018 onwards
3. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in some cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
4. Purse-seine days for Indonesia and the Philippines in domestic waters have been estimated according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs). The estimates exclude archipelagic waters (AW) effort.
5. The definition of days effort in this table may differ from the definition of days used in the PNA Vessel Day Scheme (VDS)
6. The Total International waters effort prior to 2013 does not include estimates of effort for the Philippines domestic fleet at this stage.
7. Since 2011, some components of the tropical purse seine fleet have changed criteria for reporting days with searching (included as a fishing day) and transiting (not included as a fishing day) and this is reflected in the decline in fishing days since 2011.
8. Philippines effort in the high seas pocket 1 during 2013 was 1,352 sets with an estimated 1 set per three days to produce an estimate of 4,056 days effort.
9. Coastal States within the Convention Area either north of 20°N or south of 20°S. CMM 2014-01/CMM 2015-01 references: Para. 22 and footnote 6 on Page 7 -- relevant for 2014 onwards.
10. Operational data for Japan EEZ are not available. Japan effort in their EEZ for years 2001-2007 was determined as the best estimate from their aggregate data. Japan effort for 2008-2017 in their EEZ was provided by Japan in their submission of Annual effort by EEZ/high seas areas.
11. International waters covers high seas in the WCPFC Conventional Area covering the area 20°N-20°S (valid for CMM 2014-01, CMM 2015-01, CMM 2017-01 and CMM 2018-01).
12. CMM 2014-01 or its replacement CMM -- Para. 20. for 2014 -2018 "Coastal States within the Convention Area that are Parties to the Nauru Agreement (PNA) shall restrict the level of purse seine effort in their EEZs to 2010 levels through the PNA Vessel Days Scheme".
13. CMM 2018-01 Attachment 1 includes a comment that PNA + Tokelau effort limits are to be managed cooperatively through the PNA Vessel Day Scheme.
14. The Vietnam purse seine fleet are understood to fish outside the WCPFC Convention Area (South China Sea).
15. CMM 2018-01 Table 1 provide the EEZ purse seine effort limits (CMM 2018-01 *or its replacement measure* paragraph 25)
16. ESTIMATED EEZ LIMIT --2015: Scientific estimates of catches and effort in Indonesia EEZ were recently revised to reflect distribution of catches between AW vs EEZ. Indonesia is yet to nominate a limit for purse seine effort in their EEZ in accordance with para 23 of CMM 2015-01. SPC advice as at 20 July 2014 (Table 1) – average of estimated EEZ fishing days effort in 2001-2004 is 507 days. CMM 2018-01 Table 1 says Indonesia's limit is yet to be notified to the Commission.
17. ESTIMATED EEZ LIMIT --2015: Scientific estimates of catches and effort in Philippines EEZ were recently revised to reflect distribution of catches between AW vs EEZ. SPC advice as at 20 July 2014 (Table 1) – average of estimated EEZ fishing days effort in 2001-2004 is 925 days. CMM 2018-01 Table 1 says Philippines's limit is yet to be notified to the Commission. In December 2019, the Philippines advised its EEZ limit was set at 42,000 fishing vessel days in lieu of the original submission, based on the current capacities and conditions of the small purse seine fishing vessels operating in the Philippines Pacific seaboard EEZ. These include wooden hulled ring net/purse seine fishing vessels (WCPFC16-2019-DP25).
18. CMM 2018-01 Table 1 indicates that the limit is yet to be notified to the Commission (Republic of Korea, Chinese Taipei, Indonesia, Philippines, Wallis and Futuna).

Table 2. Purse seine days fished in the high seas in the WCPFC-CA between 20°N and 20°S, by flag.

Table 2. Purse seine days fished in international waters in the WCPFC-CA between 20°N and 20°S, by flag, based on available operational data.

PURSE SEINE DAYS FISHED INTERNATIONAL WATERS 20°N-20°S																						CMM limits for 2019	CMM limits for 2020	Max. Annual days for 2010-2012	See Notes
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020					
CHINA	88	123	152	424	501	229	332	251	871	14	7	26	14	8	22	23	12	26	22	16	26	26	26	11	
COOK ISLANDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	29					
ECUADOR	0	0	0	0	0	0	26	10	14	2	0	13	1	1	0	0	0	0	0	0	**	**	13	7,9	
EL SALVADOR	3	28	0	0	0	0	205	205	80	46	33	32	24	50	53	25	12	28	10	30	**	**	46	7,9	
EUROPEAN UNION	0	11	14	51	29	81	240	281	254	326	314	429	371	377	248	87	174	158	146	194	403	403	429	7	
FSM	241	242	174	384	212	83	162	128	331	7	3	11	6	10	469	379	600	619	1,053	710					
INDONESIA	500	500	500	500	500	500	500	500	500	0	0	0	0	0	0	0	0	0	0	0	(0)	(0)			
JAPAN	1,350	1,260	1,752	1,854	1,757	1,473	1,334	1,067	1,592	6	3	1	14	8	102	22	0	6	29	21	121	121	6		
KIRIBATI	42	56	41	39	51	52	23	41	172	97	243	183	186	858	645	927	687	795	950	653				11	
MARSHALL ISLANDS	168	208	441	397	402	155	170	283	169	68	30	1	5	6	845	393	626	302	955	698					
NAURU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	188	383					
NEW ZEALAND	23	222	334	145	97	288	187	193	194	88	42	108	17	50	167	149	112	103	95	57	160	160		10	
PAPUA NEW GUINEA	397	604	660	1,218	1,313	458	862	710	824	79	22	40	16	36	1,090	98	20	11	0	4					
PHILIPPINES	30	79	482	473	350	166	33	98	20	2	0	0	4,096	2,665	2,437	2,642	2,696	2,749	2,654	2,635	4,659	4,659		4,5	
REPUBLIC OF KOREA	1,267	1,278	1,144	1,222	1,048	708	1,352	1,474	1,677	205	49	19	23	192	169	197	184	198	181	170	207	207	205		
SOLOMON ISLANDS	32	37	0	0	17	15	5	0	0	0	0	1	0	0	0	25	73	102	91	18					
TUVALU	0	0	0	0	0	0	0	0	38	4	4	1	0	1	85	147	103	57	71	122					
CHINESE TAIPEI	1,961	1,849	1,466	1,846	1,226	1,225	1,477	1,325	1,421	76	83	20	75	44	93	95	108	62	84	62	95	95	83	7,12	
USA	984	1,315	887	1,007	765	531	793	1,534	1,734	397	569	1,237	1,016	1,152	1,664	917	831	1,551	1,485	1,658	1,270	1,270	1,237	7,13	
VANUATU	66	166	190	572	376	401	381	223	103	37	31	6	7	2	0	163	203	123	147	139					
TOTAL	7,152	7,978	8,237	10,132	8,644	6,365	8,082	8,323	9,994	1,454	1,433	2,128	5,871	5,460	8,089	6,289	6,441	7,020	8,233	7,599					

PURSE SEINE DAYS FISHED in WCPFC-IATTC OVERLAP AREA																						CMM limits for 2019	CMM limits for 2020	Max. Annual days for 2010-2012	See Notes
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020					
ECUADOR	0	0	0	0	0	0	43	176	77	52	40	86	106	72	101	5	109	254	124	142				7	
EL SALVADOR	22	35	3	0	0	0	27	130	25	19	22	4	127	155	43	72	37	26	24	21				7	
EUROPEAN UNION	126	75	91	52	43	116	34	30	13	16	18	11	36	18	71	39	13	41	15	28				7	
USA	1	0	0	0	2	0	0	0	3	0	2	4	0	1	0	528	11	36	58	20				7	
TOTAL	149	110	94	52	45	116	104	336	118	87	82	105	269	246	215	644	170	357	221	211					

Notes:

1. Source: Raised logsheet data.
2. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting). Under CMM 2017-01 paragraph 8 Charter provisions are not applicable to high seas purse seine effort attribution.
3. Purse-seine days for Indonesia have been arbitrarily assigned 500 days for high seas according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs)
4. The measures that the Philippines will take are in Attachment C of CMM 2014-01 (or its replacement CMM) for years from 2014 onwards. Attachment C para 10 describes two limits: 1) total number of catcher vessels fishing in HSP-SMA is limited to 36, and 2) an effort limit in vessel days of 4,659 days (ref Table 2(b) WCPFC9-2012-IP09_rev3)
5. The Total International waters effort prior to 2013 does not include estimates of effort for the Philippines domestic fleet at this stage. Philippines effort in the high seas pocket 1 (HSP#1) during 2013 was 1,352 sets with an estimated 1 set per three days to produce an estimate of 4,056 days effort. Philippines effort in the high seas pocket 1 during 2014 was listed as 2,667 days according to the Philippines Annual Report Part 1 produced for SC11. Estimates for HSP#1 since 2015 have been based on observer data with 100% coverage. Estimates include the Philippines ringnet fleet.
6. Since 2011, some components of the tropical purse seine fleet have changed criteria for reporting days with searching (included as a fishing day) and transiting (not included as a fishing day) and this is reflected in the decline in fishing days since 2011.
7. The days presented in Table 2 exclude effort in the overlap area because it takes into account the WCPFC9 decision on the application of measures in the part of the WCPF Convention Area that overlaps with the IATTC Convention Area (WCPFC9 Summary Report paragraph 80). European Union is a WCPFC member who is also an IATTC member, notified WCPFC in April 2013, of their choice of IATTC measures in the overlap area. Given that Ecuador and El Salvador are members of IATTC, the rules of the RFMO of which it is a member apply in the overlap area between WCPFC and IATTC, even if the CCM is a cooperating non-member of the other RFMO. The USA notified WCPFC in November 2020 of their choice of IATTC measures in the overlap area. Total days in Table 2 do not therefore reconcile with total high seas days in Table 1.
8. "CMM limits" are taken from CMM 2014-01 (or its replacement CMM) - Attachments D and apply from 2015 -2017. "CMM limits in 2018" are taken from Attachment 1 Table 2 of CMM 2017-01
9. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 (or its replacement CMM) for years from 2015 onwards
10. The basis of the CMM 2014-01 (or its replacement CMM) high seas days limit for New Zealand was the average of 2006-2008 effort with an agreed reduction in line with CMM 2013-01 and its predecessor CMMs.
11. For China and Kiribati, the 2015–2016 effort estimates reflect their WCPFC charter notifications for these years. For WCPFC charter notifications, the 2017–2020 high seas effort estimates have been attributed to the flag state for these years.
12. CMM 2017-01 Att 1 Table 2 specifies a limit of 95 days for Chinese Taipei. However Chinese Taipei has advised they will apply a limit of 80 days in 2018, to take into account the amount the limit was exceeded in 2017. CMM 2018-01 Att 1 Table 2 specifies a limit of 95 days for Chinese Taipei for 2019.
13. A high seas purse seine effort limit may be adjusted in accordance with para 30 of CMM 2017-01 and CMM 2018-01.

Table 3. Estimated FAD sets undertaken in the tropical purse seine fishery, by flag, 2001-2020.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CCM
15	139	159	511	861	923	826	1,218	1,603	688	2,013	1,127	1,415	1,428	754	63	502	230	17	0	CHINA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	COOK ISLANDS
0	0	0	0	0	0	74	365	163	221	439	443	284	342	140	50	235	411	327	258	ECUADOR
9	29	1	0	0	0	54	152	161	136	185	212	296	304	176	96	73	82	49	58	EL SALVADOR
71	34	59	81	46	126	242	412	328	363	488	460	515	430	327	94	151	190	160	211	EUROPEAN UNION
324	386	489	790	497	282	338	484	732	417	788	820	537	605	633	534	1,364	1,260	1,220	1,820	FSM
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	INDONESIA
2,320	2,021	2,266	3,162	2,379	2,617	2,437	2,607	2,403	833	1,320	1,619	1,038	1,027	663	887	635	560	297	623	JAPAN
71	61	62	96	103	66	61	99	288	243	552	488	667	822	1,075	430	1,905	2,510	2,415	2,269	KIRIBATI
392	578	876	1,064	934	741	854	469	596	630	1,544	1,386	1,165	1,212	1,048	670	1,317	1,192	1,079	1,014	MARSHALL ISLANDS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	243	911	NAURU
124	274	429	411	195	491	384	441	373	192	203	161	134	165	49	21	75	40	37	2	NEW ZEALAND
738	1,246	1,086	2,705	2,078	2,079	1,643	1,377	1,682	973	1,284	1,761	1,349	1,680	1,224	1,942	1,721	1,720	1,063	295	PAPUA NEW GUINEA
998	1,073	1,064	918	1,002	779	239	510	557	380	404	595	521	384	350	261	23	55	2	17	PHILIPPINES (distant-water)
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	PHILIPPINES (domestic)
551	1,220	708	2,519	891	2,297	1,868	1,959	2,133	1,097	2,116	1,421	1,167	1,091	1,529	1,582	1,878	2,390	1,801	1,503	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	146	191	134	99	107	234	352	427	323	116	SOLOMON ISLANDS
1,616	2,621	1,839	3,215	2,737	3,050	2,813	2,285	2,723	1,703	2,941	2,925	2,628	2,639	1,780	1,499	1,895	2,277	2,024	1,867	CHINESE TAIPEI
0	0	0	0	0	0	0	0	20	40	58	92	78	49	36	59	59	107	83	116	TUVALU
2,021	1,772	1,557	2,067	1,315	1,543	1,393	2,756	3,800	2,384	3,388	3,432	3,132	3,696	2,026	2,125	2,437	2,910	1,890	1,725	USA
36	143	182	655	528	467	632	230	388	169	391	261	260	229	123	37	123	95	136	330	VANUATU
9,436	11,715	10,877	18,282	13,675	15,713	13,988	15,450	18,123	10,549	18,260	17,394	15,320	16,202	12,040	10,584	14,745	16,546	13,209	13,149	

Notes

1. Source: Raised logsheet data.
2. Covers Drifting FAD, Log and Anchored FAD sets in the tropical purse seine fishery of the WCPFC Convention Area (20°N-20°S), by flag
3. Excludes archipelagic waters. Fleets from Indonesia, Kiribati, Papua New Guinea, Philippines (DW), Philippines (domestic) and Solomon Islands in this list are normally the only fleets active in archipelagic waters.
4. Includes high seas
5. Excludes Vietnam domestic fleet
6. Complete information from Indonesia and Philippines domestic fisheries are not available.
7. CMM 2015-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2016 FAD set limits that applies to FSM, Japan, Kiribati, Korea and United States of America.
8. CMM 2016-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2017 FAD set limits that applies to Japan, Korea and United States of America.
9. CMM 2014-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2015 FAD set limits that applies to FSM, Japan, Kiribati and Korea.
10. CMM 2013-01, Para 16 (ii) annual limit of FAD sets for 2015 (as set out in Column 'A' of Attachment A of CMM 2014-01) applies to FSM, Japan, Kiribati and Korea
11. Annual FAD sets consider CMM 2014-01 (or its replacement CMM) footnote 3 notifications (vessels that are managed outside of FAD set limit). This exemption applied to certain Kiribati vessels for 2016-2017.
12. In 2016, FSM applied CMM 2014-01 footnote 3 notifications, but formally chose the 4th month FAD closure for 2017.
13. The 2016 and 2017 estimates of FAD sets for Kiribati and China reflect their respective WCPFC charter notifications.
14. "CMM 2016-01 – Adjusted Baseline", applies to Kiribati in 2017. The adjusted baseline includes average annual FAD sets for Kiribati vessels that were previously exempt prior to 2017 (due to being newly-introduced since 2012) that had operated for three years prior to 2017.
15. Annual FAD sets consider CMM 2017-01 (footnote 2) and CMM 2018-01 (footnote 1) relevant to PNA country flagged vessels notified to the WCPFC that are managed outside of FAD set limit.

Table 4. Tropical purse seine tuna catch and effort by set type and species in the WCPFC Convention Area.

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS							ASSOCIATED SCHOOLS							TOTAL						
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
CK	2019	1	1	73	18	453	100%	0	0%	0	0%	453	43	1,266	74%	120	7%	329	19%	1,716	61	1,719	120	329	2,169
CK	2020	1	1	29	0	0	0%	0	0%	0	0%	0	14	256	74%	39	11%	54	16%	348	14	256	39	54	348
CN	2010	12	10	2,784	2,095	20,843	72%	7,995	28%	193	1%	29,031	692	17,512	71%	5,503	22%	1,515	6%	24,529	2,788	38,425	13,578	1,712	53,715
CN	2011	12	10	4,019	1,396	10,980	72%	4,151	27%	187	1%	15,318	2,023	46,971	76%	10,937	18%	4,314	7%	62,222	3,419	57,952	15,088	4,501	77,541
CN	2012	13	12	2,205	706	10,675	77%	3,165	23%	62	0%	13,902	1,143	27,571	78%	5,191	15%	2,484	7%	35,246	1,849	38,246	8,356	2,545	49,148
CN	2013	14	13	3,617	2,329	28,229	92%	2,279	7%	232	1%	30,740	1,419	36,819	73%	10,581	21%	3,365	7%	50,765	3,750	65,255	12,948	3,625	81,828
CN	2014	19	18	3,012	1,351	16,649	87%	2,238	12%	179	1%	19,065	1,430	42,500	75%	10,473	19%	3,685	7%	56,659	2,781	59,149	12,711	3,864	75,724
CN	2015	20	16	2,007	897	11,195	70%	4,462	28%	235	2%	15,892	756	20,111	74%	5,019	18%	2,214	8%	27,344	1,653	31,306	9,481	2,449	43,236
CN	2016	2	6	504	401	6,300	76%	1,964	24%	17	0%	8,281	140	2,708	69%	1,042	27%	182	5%	3,932	544	9,072	3,038	200	12,311
CN	2017	3	2	761	84	451	85%	49	9%	29	6%	529	502	10,634	71%	3,298	22%	1,013	7%	14,945	586	11,085	3,347	1,042	15,474
CN	2018	3	2	608	336	4,798	86%	767	14%	35	1%	5,600	231	7,343	80%	1,296	14%	586	6%	9,225	567	12,141	2,063	620	14,825
CN	2019	0	0	0	0	0	0%	0	0%	0	0%	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	0
EC	2010	14	6	319	21	48	27%	99	57%	28	16%	175	233	5,954	53%	2,708	24%	2,484	22%	11,145	254	6,002	2,806	2,512	11,320
EC	2011	8	7	556	41	238	28%	465	55%	149	18%	851	447	16,675	59%	4,726	17%	6,931	25%	28,332	488	16,913	5,191	7,080	29,183
EC	2012	8	7	605	17	476	83%	49	9%	50	9%	575	444	14,047	62%	3,041	14%	5,482	24%	22,570	461	14,523	3,090	5,532	23,145
EC	2013	7	7	480	70	1,813	81%	236	11%	188	8%	2,236	292	13,444	70%	2,086	11%	3,675	19%	19,206	362	15,257	2,322	3,863	21,442
EC	2014	7	7	477	57	1,160	89%	54	4%	83	6%	1,297	359	13,906	68%	2,832	14%	3,733	18%	20,472	416	15,067	2,886	3,816	21,769
EC	2015	7	4	162	1	0	0%	0	0%	0	0%	0	150	8,203	70%	1,527	13%	2,029	17%	11,759	151	8,203	1,527	2,029	11,759
EC	2016	2	3	42	0	0	0%	0	0%	0	0%	0	50	2,605	66%	620	16%	700	18%	3,925	50	2,605	620	700	3,925
EC	2017	4	4	237	2	70	69%	16	16%	16	16%	102	235	8,528	63%	1,505	11%	3,437	26%	13,469	237	8,598	1,521	3,452	13,571
EC	2018	4	4	441	12	104	80%	0	0%	26	20%	130	412	16,319	73%	1,917	9%	4,079	18%	22,316	424	16,423	1,917	4,105	22,446
EC	2019	8	5	374	9	108	19%	391	68%	79	14%	578	327	18,370	75%	2,422	10%	3,766	15%	24,558	336	18,478	2,813	3,844	25,136
EC	2020	4	4	279	3	47	98%	0	0%	1	2%	48	261	9,097	65%	1,937	14%	3,076	22%	14,111	264	9,144	1,938	3,077	14,159
ES	2010	4	4	720	26	624	76%	195	24%	0	0%	820	364	18,345	64%	5,435	19%	4,869	17%	28,648	390	18,970	5,630	4,869	29,468
ES	2011	4	4	753	30	652	49%	662	50%	20	2%	1,334	488	23,693	62%	6,941	18%	7,484	20%	38,117	518	24,345	7,603	7,503	39,451
ES	2012	4	4	787	57	2,372	86%	385	14%	10	0%	2,767	461	18,057	61%	4,765	16%	6,582	22%	29,404	517	20,428	5,150	6,592	32,171
ES	2013	4	4	837	56	1,987	66%	1,029	34%	10	0%	3,026	515	27,508	64%	7,411	17%	8,222	19%	43,141	571	29,496	8,439	8,232	46,167
ES	2014	4	4	753	89	3,366	80%	844	20%	2	0%	4,213	431	24,854	69%	4,253	12%	7,140	20%	36,247	520	28,220	5,098	7,142	40,460
ES	2015	4	4	529	28	1,330	97%	37	3%	2	0%	1,368	326	23,672	74%	4,566	14%	3,603	11%	31,840	355	25,001	4,602	3,605	33,208
ES	2016	2	2	130	1	0	0%	0	0%	0	0%	0	94	6,115	70%	558	6%	2,026	23%	8,699	95	6,115	558	2,026	8,699
ES	2017	2	2	210	0	0	0%	0	0%	0	0%	0	151	7,570	65%	691	6%	3,462	30%	11,723	151	7,570	691	3,462	11,723
ES	2018	2	2	266	4	96	100%	0	0%	0	0%	96	190	7,590	74%	933	9%	1,809	18%	10,331	194	7,686	933	1,809	10,427
ES	2019	2	2	221	0	0	0%	0	0%	0	0%	0	160	7,808	79%	1,135	11%	991	10%	9,934	160	7,808	1,135	991	9,934
ES	2020	2	2	264	3	1	100%	0	0%	0	0%	1	215	7,318	68%	1,778	17%	1,658	15%	10,754	218	7,319	1,778	1,658	10,755

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS							ASSOCIATED SCHOOLS							TOTAL						
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
FM	2010	7	8	1,305	612	8,422	79%	2,150	20%	73	1%	10,645	419	10,793	77%	2,184	16%	1,101	8%	14,078	1,031	19,215	4,335	1,173	24,723
FM	2011	7	7	1,641	483	5,956	78%	1,682	22%	22	0%	7,661	790	13,515	72%	3,878	21%	1,440	8%	18,832	1,276	19,479	5,562	1,463	26,505
FM	2012	9	9	1,573	464	6,538	78%	1,777	21%	117	1%	8,432	826	21,683	79%	3,993	15%	1,858	7%	27,535	1,301	28,428	5,812	1,993	36,233
FM	2013	10	10	1,384	450	9,021	87%	1,284	12%	115	1%	10,420	539	12,517	72%	3,503	20%	1,444	8%	17,464	989	21,538	4,787	1,559	27,884
FM	2014	10	10	1,414	611	12,980	84%	2,156	14%	293	2%	15,429	614	16,391	72%	4,267	19%	1,988	9%	22,646	1,225	29,372	6,422	2,281	38,075
FM	2015	12	13	1,924	1,212	26,484	84%	4,597	15%	392	1%	31,473	641	18,708	77%	3,744	15%	1,818	8%	24,270	1,852	45,192	8,341	2,210	55,743
FM	2016	16	18	2,726	1,059	22,001	82%	4,577	17%	405	2%	26,983	1,142	34,697	78%	6,286	14%	3,744	8%	44,728	2,201	56,699	10,863	4,149	71,711
FM	2017	19	20	3,527	1,919	34,661	79%	8,746	20%	367	1%	43,774	1,374	32,460	78%	6,188	15%	3,185	8%	41,833	3,300	67,244	14,954	3,568	85,765
FM	2018	22	22	3,730	2,412	47,728	82%	10,070	17%	723	1%	58,521	1,432	49,941	83%	7,805	13%	2,735	5%	60,481	3,846	97,694	17,885	3,458	119,038
FM	2019	23	25	4,436	3,764	83,915	81%	17,959	17%	1,661	2%	103,534	1,322	43,626	79%	8,523	15%	3,415	6%	55,564	5,093	127,680	26,506	5,083	159,269
FM	2020	27	27	5,166	2,999	65,274	83%	12,522	16%	593	1%	78,388	2,138	73,605	74%	18,388	19%	7,520	8%	99,513	5,142	138,881	30,910	8,113	177,904
JP	2010	37	36	5,695	5,633	135,089	81%	31,080	19%	1,676	1%	167,845	833	25,394	70%	8,275	23%	2,664	7%	36,333	6,566	162,415	40,415	4,537	207,366
JP	2011	40	37	6,524	5,956	92,483	78%	25,931	22%	643	1%	119,057	1,320	39,120	76%	7,542	15%	4,586	9%	51,248	7,306	132,122	33,551	5,263	170,935
JP	2012	41	36	5,448	4,867	103,326	84%	18,023	15%	1,632	1%	122,980	1,619	58,543	80%	9,907	14%	4,973	7%	73,423	6,514	162,146	27,990	6,625	196,761
JP	2013	41	33	5,501	4,759	104,213	87%	14,330	12%	1,685	1%	120,228	1,038	41,954	79%	7,398	14%	4,061	8%	53,413	5,834	146,864	21,932	5,799	174,595
JP	2014	40	32	4,898	4,275	89,284	76%	25,506	22%	2,186	2%	116,975	1,027	37,938	79%	6,385	13%	3,666	8%	47,989	5,342	128,623	32,188	5,941	166,752
JP	2015	40	31	4,195	3,380	86,951	74%	26,704	23%	3,373	3%	117,028	663	19,399	68%	6,099	21%	3,108	11%	28,606	4,169	109,521	34,109	7,120	150,750
JP	2016	37	29	5,002	4,170	82,607	75%	24,838	23%	2,139	2%	109,584	887	24,382	69%	7,537	21%	3,629	10%	35,548	5,136	108,767	33,238	5,992	147,997
JP	2017	38	29	4,693	3,892	78,295	71%	29,330	27%	2,149	2%	109,774	635	19,922	75%	5,031	19%	1,534	6%	26,488	4,650	101,066	35,568	3,876	140,510
JP	2018	34	26	4,068	3,705	97,210	77%	26,397	21%	3,485	3%	127,093	560	20,976	73%	5,652	20%	1,945	7%	28,572	4,420	121,587	33,728	6,177	161,492
JP	2019	36	28	4,193	4,438	104,547	77%	29,320	22%	1,773	1%	135,641	297	10,151	76%	2,335	18%	862	7%	13,348	4,927	119,172	33,657	3,103	155,932
JP	2020	36	28	4,871	4,432	89,648	79%	22,328	20%	872	1%	112,849	626	19,118	71%	5,149	19%	2,602	10%	26,869	5,154	110,703	28,517	3,739	142,958
KI	2010	5	4	693	465	6,942	74%	2,385	25%	68	1%	9,396	245	10,875	69%	2,709	17%	2,107	13%	15,691	741	18,347	5,205	2,193	25,746
KI	2011	7	7	1,429	785	9,587	73%	3,614	27%	31	0%	13,232	554	24,026	72%	4,284	13%	4,880	15%	33,190	1,347	33,662	7,925	4,927	46,514
KI	2012	9	9	1,851	1,593	30,345	80%	7,646	20%	173	1%	38,164	492	19,539	81%	2,940	12%	1,562	7%	24,041	2,093	50,047	10,645	1,740	62,432
KI	2013	12	12	2,007	1,443	27,814	84%	5,200	16%	245	1%	33,259	669	30,304	78%	5,649	15%	3,029	8%	38,982	2,113	58,118	10,849	3,274	72,421
KI	2014	14	15	2,818	2,188	42,386	72%	16,167	27%	359	1%	58,912	830	40,318	80%	5,147	10%	4,797	10%	50,263	3,018	82,704	21,314	5,156	109,174
KI	2015	21	20	2,884	2,482	60,975	86%	9,748	14%	581	1%	71,304	1,082	56,639	87%	6,126	9%	2,628	4%	65,393	3,564	117,614	15,874	3,209	136,698
KI	2016	27	23	4,513	2,428	51,275	81%	11,550	18%	665	1%	63,490	1,871	81,336	80%	11,518	11%	8,636	9%	101,490	4,299	132,614	23,071	9,301	164,985
KI	2017	19	21	4,653	1,815	29,570	73%	10,902	27%	309	1%	40,780	2,554	93,307	83%	12,554	11%	6,963	6%	112,824	4,369	122,904	23,458	7,272	153,635
KI	2018	21	21	4,451	1,548	34,483	81%	7,603	18%	359	1%	42,444	3,004	120,323	82%	15,538	11%	10,974	8%	146,835	4,554	154,954	23,144	11,333	189,431
KI	2019	22	25	5,158	2,625	60,998	89%	7,259	11%	283	0%	68,540	3,036	133,357	84%	18,908	12%	6,781	4%	159,046	5,668	194,516	26,190	7,071	227,777
KI	2020	25	23	4,987	1,507	38,613	87%	5,247	12%	310	1%	44,170	2,790	122,301	78%	22,830	15%	11,075	7%	156,206	4,298	160,914	28,077	11,385	200,376

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS							ASSOCIATED SCHOOLS							TOTAL						
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
KR	2010	29	28	7,178	6,308	143,727	70%	58,858	29%	2,443	1%	205,027	1,117	54,601	76%	10,802	15%	6,803	9%	72,206	7,433	198,382	69,680	9,252	277,313
KR	2011	28	28	6,552	4,493	79,311	73%	29,214	27%	876	1%	109,401	2,128	74,124	76%	16,470	17%	7,512	8%	98,106	6,627	153,566	45,727	8,409	207,702
KR	2012	28	28	5,836	6,099	137,118	74%	47,353	26%	1,394	1%	185,865	1,433	63,571	83%	9,771	13%	2,983	4%	76,326	7,533	200,689	57,124	4,378	262,191
KR	2013	27	28	5,983	6,068	131,343	81%	29,623	18%	2,226	1%	163,192	1,171	47,536	76%	10,531	17%	4,372	7%	62,439	7,239	178,879	40,154	6,598	225,631
KR	2014	28	29	5,437	5,820	156,359	78%	42,690	21%	1,172	1%	200,221	1,097	59,281	85%	6,779	10%	3,767	5%	69,827	6,917	215,640	49,469	4,939	270,048
KR	2015	25	26	4,664	4,561	126,576	81%	28,807	18%	1,910	1%	157,294	1,534	97,815	88%	8,995	8%	4,143	4%	110,953	6,094	224,392	37,802	6,054	268,248
KR	2016	25	25	4,755	4,260	132,361	78%	35,237	21%	1,718	1%	169,315	1,590	93,529	86%	9,454	9%	6,157	6%	109,140	5,851	225,889	44,690	7,875	278,455
KR	2017	26	26	5,545	4,898	99,370	69%	44,832	31%	890	1%	145,091	1,881	84,940	84%	10,950	11%	5,851	6%	101,740	6,782	184,310	55,781	6,740	246,832
KR	2018	27	25	5,645	4,383	106,032	79%	26,373	20%	1,611	1%	134,017	2,395	117,383	88%	8,967	7%	7,185	5%	133,535	6,777	223,415	35,340	8,797	267,552
KR	2019	26	26	5,667	5,795	177,751	86%	27,687	13%	1,062	1%	206,500	1,811	96,387	89%	7,807	7%	4,126	4%	108,320	7,608	274,138	35,494	5,188	314,820
KR	2020	27	27	5,921	5,407	132,559	80%	32,933	20%	828	1%	166,320	1,505	69,972	81%	10,051	12%	5,971	7%	85,994	6,914	202,530	42,985	6,799	252,314
MH	2010	10	10	1,670	1,228	18,070	73%	6,135	25%	698	3%	24,903	636	25,234	75%	5,136	15%	3,347	10%	33,718	1,881	43,512	11,590	4,060	59,162
MH	2011	10	10	2,521	547	7,972	83%	1,513	16%	76	1%	9,561	1,550	59,126	73%	10,954	14%	10,542	13%	80,622	2,097	67,098	12,466	10,618	90,183
MH	2012	10	10	1,989	748	12,032	74%	4,244	26%	99	1%	16,375	1,394	45,282	79%	6,876	12%	5,062	9%	57,220	2,142	57,314	11,120	5,161	73,595
MH	2013	10	10	2,132	1,075	18,055	90%	1,972	10%	50	0%	20,077	1,167	42,511	74%	9,520	17%	5,464	10%	57,494	2,243	60,608	11,509	5,518	77,634
MH	2014	12	11	2,131	1,127	18,847	87%	2,606	12%	142	1%	21,596	1,219	43,400	80%	6,739	12%	4,161	8%	54,300	2,346	62,248	9,345	4,304	75,896
MH	2015	12	12	2,221	1,857	36,064	95%	1,865	5%	36	0%	37,965	1,061	41,472	85%	5,237	11%	2,195	5%	48,904	2,919	77,536	7,103	2,231	86,869
MH	2016	10	10	1,970	1,305	23,225	83%	4,664	17%	138	1%	28,027	671	26,895	82%	3,976	12%	2,075	6%	32,946	1,976	50,121	8,640	2,213	60,973
MH	2017	10	10	2,152	537	6,926	73%	2,540	27%	87	1%	9,553	1,319	41,490	75%	9,062	16%	4,679	9%	55,231	1,858	48,416	11,602	4,766	64,784
MH	2018	13	13	1,941	787	12,317	86%	1,945	14%	16	0%	14,278	1,228	48,418	82%	7,240	12%	3,434	6%	59,092	2,016	60,757	9,195	3,454	73,406
MH	2019	11	11	2,449	1,701	32,069	78%	8,941	22%	172	0%	41,182	1,108	45,451	84%	6,628	12%	2,304	4%	54,383	2,810	77,535	15,581	2,480	95,596
MH	2020	11	11	2,107	1,069	20,625	90%	2,141	9%	80	0%	22,845	1,053	48,618	80%	8,518	14%	3,715	6%	60,852	2,123	69,243	10,659	3,795	83,697
NR	2018	2	2	166	123	1,413	45%	1,716	55%	1	0%	3,130	90	5,242	91%	360	6%	150	3%	5,752	213	6,655	2,076	151	8,882
NR	2019	9	9	744	704	19,803	93%	1,336	6%	63	0%	21,202	258	10,316	87%	1,279	11%	266	2%	11,860	968	30,235	2,680	332	33,248
NR	2020	15	14	2,336	1,777	34,994	84%	6,366	15%	119	0%	41,480	1,050	35,872	72%	10,568	21%	3,305	7%	49,745	2,839	71,367	17,210	3,522	92,099
NZ	2010	4	4	652	426	8,620	97%	206	2%	68	1%	8,894	191	6,976	74%	1,902	20%	532	6%	9,410	617	15,596	2,108	601	18,304
NZ	2011	3	3	474	175	3,364	81%	729	18%	48	1%	4,141	196	5,672	74%	1,636	21%	382	5%	7,690	371	9,036	2,365	430	11,831
NZ	2012	4	4	488	288	5,055	84%	877	15%	116	2%	6,047	165	3,569	76%	777	17%	339	7%	4,685	453	8,623	1,654	455	10,732
NZ	2013	4	4	468	271	5,051	91%	453	8%	30	1%	5,534	133	4,392	73%	1,160	19%	432	7%	5,984	404	9,443	1,613	462	11,518
NZ	2014	5	5	533	303	3,802	79%	872	18%	161	3%	4,835	162	4,027	71%	983	17%	630	11%	5,639	465	7,830	1,854	791	10,474
NZ	2015	2	2	314	313	4,974	94%	250	5%	96	2%	5,320	50	2,122	79%	434	16%	145	5%	2,701	363	7,096	683	241	8,021
NZ	2016	2	2	218	265	3,926	96%	127	3%	53	1%	4,106	21	1,204	77%	272	17%	97	6%	1,573	286	5,129	399	150	5,679
NZ	2017	1	1	126	23	569	81%	134	19%	1	0%	704	75	2,795	85%	373	11%	134	4%	3,301	98	3,364	507	135	4,005
NZ	2018	1	1	119	61	294	24%	918	76%	4	0%	1,216	41	1,550	88%	163	9%	59	3%	1,772	102	1,844	1,082	62	2,987
NZ	2019	1	1	142	91	2,237	94%	126	5%	20	1%	2,383	38	1,417	75%	294	16%	168	9%	1,879	130	3,654	420	189	4,262
NZ	2020	1	1	63	22	1,019	95%	42	4%	7	1%	1,068	2	96	84%	11	10%	8	7%	115	24	1,115	53	15	1,183

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS							ASSOCIATED SCHOOLS							TOTAL						
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
PG	2010	45	50	8,846	5,471	90,655	73%	31,771	26%	1,070	1%	123,496	2,620	55,497	68%	21,045	26%	4,964	6%	81,505	8,099	146,281	52,852	6,052	205,184
PG	2011	49	52	9,270	5,018	69,019	74%	23,075	25%	961	1%	93,055	3,145	56,636	68%	21,630	26%	4,614	6%	82,879	8,176	125,905	44,808	5,605	176,319
PG	2012	51	52	9,636	6,530	95,914	67%	45,691	32%	1,304	1%	142,910	2,978	62,598	68%	24,184	26%	5,737	6%	92,520	9,559	158,989	70,083	7,092	236,163
PG	2013	51	52	9,533	6,862	94,157	66%	45,552	32%	2,325	2%	142,034	2,453	49,816	65%	22,377	29%	5,009	7%	77,202	9,371	144,649	68,502	7,404	220,555
PG	2014	55	53	9,314	6,440	105,388	73%	36,308	25%	2,072	1%	143,768	2,307	67,535	75%	17,773	20%	5,237	6%	90,545	8,773	173,191	54,341	7,347	234,879
PG	2015	53	54	6,684	5,686	103,484	71%	39,613	27%	1,909	1%	145,005	1,602	50,462	73%	14,253	21%	4,763	7%	69,478	7,292	153,964	53,875	6,674	214,512
PG	2016	67	41	9,016	7,625	124,050	63%	68,580	35%	4,308	2%	196,937	2,221	75,409	73%	20,425	20%	7,259	7%	103,093	9,883	200,512	89,610	11,675	301,797
PG	2017	67	58	10,956	10,325	129,407	57%	94,369	41%	4,490	2%	228,266	2,147	50,197	67%	19,353	26%	5,364	7%	74,914	12,578	181,414	115,129	9,962	306,505
PG	2018	56	53	9,691	10,346	153,249	66%	75,980	33%	4,639	2%	233,869	1,974	56,835	74%	16,591	22%	3,437	5%	76,863	12,349	210,601	92,802	8,114	311,517
PG	2019	50	51	6,627	7,498	145,694	72%	55,263	27%	2,340	1%	203,298	1,201	49,242	82%	8,995	15%	1,705	3%	59,941	8,768	196,318	64,979	4,091	265,388
PG	2020	38	37	6,686	7,178	92,417	53%	79,576	46%	1,694	1%	173,687	564	15,287	67%	6,714	29%	994	4%	22,994	7,804	108,286	87,326	2,711	198,323
PH	2010	25	22	4,469	2,289	25,763	55%	20,115	43%	1,277	3%	47,155	795	16,530	65%	5,915	23%	2,876	11%	25,320	3,186	43,219	26,633	4,261	74,113
PH	2011	25	23	5,296	2,719	28,615	62%	17,130	37%	204	0%	45,949	1,381	22,842	68%	9,924	29%	980	3%	33,746	4,191	52,172	27,434	1,207	80,813
PH	2012	21	29	5,580	3,560	35,106	53%	29,040	44%	1,713	3%	65,859	1,649	27,394	63%	13,539	31%	2,842	7%	43,775	5,248	62,960	42,763	4,605	110,327
PH	2013	27	30	4,450	2,635	22,282	43%	27,910	54%	1,263	3%	51,455	1,440	21,274	57%	13,531	36%	2,641	7%	37,446	4,080	43,606	41,506	3,904	89,016
PH	2014	27	29	4,330	3,242	45,249	56%	32,401	40%	2,535	3%	80,185	996	14,533	55%	9,244	35%	2,684	10%	26,462	4,251	59,921	41,804	5,256	106,981
PH	2015	23	29	2,822	1,971	24,591	55%	19,347	43%	1,090	2%	45,028	812	16,094	55%	10,761	36%	2,696	9%	29,551	2,791	40,976	30,446	3,838	75,260
PH	2016	17	18	1,956	1,567	25,592	54%	20,617	44%	863	2%	47,073	521	13,895	63%	6,900	31%	1,429	6%	22,224	2,134	40,367	28,098	2,414	70,879
PH	2017	12	8	1,272	1,006	11,289	46%	12,525	51%	748	3%	24,562	155	2,735	59%	1,707	37%	174	4%	4,616	1,190	14,489	14,574	948	30,011
PH	2018	12	2	314	340	5,627	64%	3,067	35%	70	1%	8,765	73	1,363	57%	949	40%	69	3%	2,381	414	6,993	4,018	140	11,150
PH	2019	12	1	16	22	407	62%	241	37%	5	1%	653	0	0	0%	0	0%	0	0%	0	22	407	241	5	653
PH	2020	6	4	958	988	14,861	56%	11,319	43%	226	1%	26,405	35	1,132	65%	533	30%	87	5%	1,753	1,022	15,994	11,852	313	28,158
SB	2010	5	5	485	95	1,872	54%	1,586	46%	22	1%	3,480	353	5,609	58%	3,845	40%	283	3%	9,737	448	7,482	5,430	305	13,217
SB	2011	5	5	1,017	119	1,674	59%	1,156	41%	7	0%	2,836	742	12,811	56%	9,431	42%	484	2%	22,725	861	14,485	10,587	490	25,562
SB	2012	5	5	1,094	98	1,104	53%	985	47%	6	0%	2,096	833	13,976	57%	10,028	41%	401	2%	24,404	931	15,080	11,013	407	26,500
SB	2013	5	5	1,093	213	1,519	34%	2,969	66%	22	1%	4,510	664	11,099	55%	8,691	43%	469	2%	20,259	876	12,618	11,660	492	24,770
SB	2014	5	5	1,212	269	2,850	36%	4,994	64%	25	0%	7,869	786	11,011	49%	11,018	49%	525	2%	22,554	1,056	13,861	16,013	551	30,425
SB	2015	8	6	1,343	389	2,960	32%	6,367	68%	55	1%	9,382	787	10,241	53%	8,948	46%	220	1%	19,410	1,176	13,202	15,315	275	28,792
SB	2016	8	8	2,217	1,047	14,021	57%	10,164	42%	316	1%	24,501	1,072	17,370	56%	13,266	43%	554	2%	31,190	2,132	31,595	23,599	874	56,067
SB	2017	10	9	2,068	1,127	12,625	60%	8,352	40%	57	0%	21,034	873	14,269	58%	9,932	40%	474	2%	24,675	2,001	26,896	18,286	530	45,713
SB	2018	10	10	2,102	808	9,789	68%	4,615	32%	21	0%	14,425	1,169	24,508	64%	13,288	35%	656	2%	38,452	1,978	34,297	17,903	677	52,877
SB	2019	11	11	2,038	856	16,401	80%	4,099	20%	66	0%	20,566	1,110	24,316	67%	11,662	32%	422	1%	36,401	1,971	40,722	15,767	489	56,977
SB	2020	11	10	1,693	630	9,061	65%	4,814	35%	35	0%	13,910	860	11,211	58%	7,993	41%	269	1%	19,473	1,494	20,311	12,887	304	33,502

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
SV	2010	2	2	210	3	28	100%	0	0%	0	0%	28	136	4,614	63%	1,571	21%	1,159	16%	7,344	139	4,642	1,571	1,159	7,372
SV	2011	2	2	268	3	15	18%	70	82%	0	0%	85	185	8,255	68%	1,605	13%	2,282	19%	12,141	188	8,270	1,675	2,282	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	8,263	61%	2,873	21%	2,496	18%	13,632	217	8,278	2,873	2,496	13,647
SV	2013	4	4	398	13	270	66%	141	34%	1	0%	412	296	11,597	69%	2,795	17%	2,412	14%	16,805	309	11,867	2,937	2,413	17,217
SV	2014	4	4	485	92	2,007	99%	11	1%	0	0%	2,019	303	10,067	65%	2,978	19%	2,416	16%	15,461	394	12,074	2,989	2,416	17,480
SV	2015	2	2	180	7	0	0%	0	0%	0	0%	0	177	11,065	72%	2,360	15%	1,876	12%	15,300	184	11,065	2,360	1,876	15,300
SV	2016	3	2	112	6	667	99%	9	1%	0	0%	677	95	4,881	74%	725	11%	1,021	15%	6,626	101	5,548	734	1,021	7,303
SV	2017	1	2	76	2	0	0%	31	100%	0	0%	31	73	2,918	68%	564	13%	805	19%	4,288	75	2,918	595	805	4,319
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,296	75%	420	10%	699	16%	4,415	88	3,571	420	699	4,690
SV	2019	2	2	42	2	0	0%	0	0%	0	0%	0	50	2,187	74%	334	11%	418	14%	2,939	52	2,187	334	418	2,939
SV	2020	2	2	62	5	248	92%	22	8%	0	0%	270	58	2,606	63%	590	14%	923	22%	4,120	63	2,854	612	923	4,390
TV	2010	1	1	271	319	6,721	75%	2,236	25%	39	0%	8,997	40	987	63%	346	22%	224	14%	1,557	359	7,708	2,583	263	10,554
TV	2011	1	1	311	283	3,820	71%	1,516	28%	15	0%	5,351	58	1,613	78%	316	15%	138	7%	2,066	341	5,433	1,831	152	7,417
TV	2012	1	1	271	301	3,128	57%	2,337	43%	34	1%	5,500	92	4,423	80%	829	15%	302	5%	5,554	393	7,552	3,166	336	11,054
TV	2013	1	1	273	353	7,203	93%	426	6%	91	1%	7,721	79	2,911	79%	646	18%	138	4%	3,695	432	10,114	1,072	230	11,416
TV	2014	1	1	159	146	3,391	92%	249	7%	35	1%	3,675	49	1,929	85%	269	12%	70	3%	2,268	195	5,320	518	105	5,943
TV	2015	1	1	186	174	3,563	97%	125	3%	1	0%	3,690	36	1,649	93%	108	6%	23	1%	1,780	210	5,213	233	24	5,470
TV	2016	1	1	234	93	2,445	97%	75	3%	1	0%	2,520	59	2,681	75%	630	18%	279	8%	3,590	152	5,126	705	279	6,110
TV	2017	2	2	161	84	1,840	60%	1,175	38%	41	1%	3,056	59	1,733	67%	685	27%	167	7%	2,585	143	3,573	1,859	209	5,641
TV	2018	1	1	208	160	3,190	74%	1,068	25%	47	1%	4,305	108	5,531	81%	551	8%	749	11%	6,831	268	8,721	1,619	796	11,136
TV	2019	1	1	212	106	2,996	96%	108	4%	23	1%	3,127	83	3,367	92%	196	5%	84	2%	3,648	189	6,364	304	107	6,775
TV	2020	3	3	300	94	2,158	90%	241	10%	5	0%	2,404	117	6,002	81%	854	12%	542	7%	7,397	211	8,160	1,095	547	9,801
TW	2010	34	30	7,865	6,413	98,719	81%	23,076	19%	814	1%	122,609	1,709	54,370	71%	15,293	20%	6,578	9%	76,241	8,122	153,089	38,369	7,392	198,850
TW	2011	34	31	8,801	4,763	56,201	81%	12,221	18%	616	1%	69,037	2,955	78,772	74%	19,010	18%	9,115	9%	106,897	7,718	134,973	31,231	9,731	175,935
TW	2012	34	33	7,146	4,660	60,836	71%	24,299	28%	938	1%	86,073	2,940	89,092	78%	16,902	15%	8,585	8%	114,579	7,600	149,928	41,201	9,523	200,652
TW	2013	34	34	7,706	6,171	83,426	83%	16,015	16%	1,121	1%	100,562	2,638	80,360	72%	21,391	19%	10,169	9%	111,919	8,809	163,787	37,405	11,289	212,481
TW	2014	34	36	6,845	5,749	103,867	88%	12,923	11%	1,415	1%	118,205	2,654	89,987	76%	20,083	17%	8,881	8%	118,952	8,404	193,854	33,006	10,296	237,157
TW	2015	34	34	5,141	4,639	78,850	75%	24,412	23%	1,488	1%	104,751	1,785	71,015	79%	12,254	14%	6,229	7%	89,498	6,424	149,865	36,667	7,717	194,249
TW	2016	34	31	5,273	4,785	80,770	71%	32,151	28%	1,424	1%	114,345	1,511	54,653	74%	12,594	17%	6,796	9%	74,043	6,297	135,423	44,745	8,221	188,388
TW	2017	31	30	5,461	5,167	64,620	67%	30,384	32%	945	1%	95,948	1,904	54,957	75%	13,367	18%	4,643	6%	72,967	7,072	119,612	43,755	5,590	168,957
TW	2018	27	29	5,185	4,634	81,551	84%	14,176	15%	1,239	1%	96,966	2,292	77,091	78%	15,696	16%	6,683	7%	99,470	6,927	158,642	29,872	7,922	196,436
TW	2019	30	30	5,231	5,659	119,442	82%	24,643	17%	1,094	1%	145,179	2,042	76,650	80%	13,975	15%	4,783	5%	95,408	7,708	196,158	38,626	5,882	240,665
TW	2020	29	28	4,501	4,100	76,636	84%	13,784	15%	515	1%	90,935	1,878	58,053	68%	18,994	22%	8,536	10%	85,584	5,978	134,690	32,778	9,051	176,519

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
US	2010	37	37	8,220	6,331	109,883	83%	21,863	17%	1,062	1%	132,809	2,397	90,392	81%	14,952	13%	6,991	6%	112,336	8,738	200,524	36,915	8,085	245,524
US	2011	37	36	8,048	3,008	48,965	82%	10,850	18%	128	0%	59,943	3,401	111,178	78%	19,696	14%	12,423	9%	143,297	6,409	160,142	30,547	12,551	203,240
US	2012	39	40	8,789	5,622	98,473	80%	24,056	19%	1,261	1%	123,790	3,464	108,673	80%	17,795	13%	9,443	7%	135,911	9,088	207,191	41,860	10,708	259,759
US	2013	40	42	8,380	5,028	97,088	92%	8,155	8%	843	1%	106,086	3,152	112,439	76%	23,433	16%	12,202	8%	148,074	8,183	209,621	31,593	13,058	254,273
US	2014	40	40	9,069	6,268	117,283	84%	22,163	16%	449	0%	139,896	3,717	146,417	85%	17,138	10%	9,555	6%	173,109	9,987	263,700	39,301	10,004	313,005
US	2015	39	39	6,988	5,904	111,972	89%	13,220	11%	662	1%	125,853	2,052	95,941	86%	10,682	10%	5,603	5%	112,226	7,956	207,913	23,902	6,265	238,079
US	2016	37	34	5,571	3,333	75,650	87%	10,447	12%	418	1%	86,515	2,177	87,981	77%	17,163	15%	9,478	8%	114,621	5,511	163,640	27,614	9,898	201,152
US	2017	34	34	5,623	2,652	43,535	73%	15,502	26%	291	1%	59,328	2,442	83,208	78%	16,016	15%	7,897	7%	107,121	5,095	126,744	31,519	8,187	166,449
US	2018	34	35	5,758	2,828	54,087	78%	15,010	22%	228	0%	69,326	2,910	100,820	79%	15,944	12%	11,362	9%	128,126	5,738	154,907	30,954	11,590	197,451
US	2019	31	30	4,323	3,119	69,196	85%	12,312	15%	319	0%	81,827	1,894	68,952	81%	10,275	12%	5,470	7%	84,696	5,015	138,184	22,597	5,799	166,580
US	2020	23	23	3,699	1,578	38,236	95%	1,747	4%	209	1%	40,192	1,727	72,857	75%	12,988	13%	11,169	12%	97,014	3,305	111,093	14,735	11,378	137,205
VU	2010	5	5	872	469	10,472	79%	2,719	21%	86	1%	13,277	198	8,495	81%	1,339	13%	606	6%	10,440	668	18,969	4,058	692	23,720
VU	2011	6	4	1,142	287	5,844	87%	829	12%	22	0%	6,695	391	13,939	84%	2,295	14%	453	3%	16,688	678	19,783	3,124	475	23,382
VU	2012	6	3	775	472	9,075	61%	5,522	37%	230	2%	14,827	268	9,711	80%	1,528	13%	935	8%	12,175	740	18,786	7,051	1,165	27,002
VU	2013	6	4	974	607	11,342	84%	2,095	16%	53	0%	13,490	263	10,222	80%	1,773	14%	717	6%	12,712	870	21,564	3,868	770	26,202
VU	2014	3	3	685	362	8,479	86%	1,383	14%	44	0%	9,906	230	8,993	83%	1,179	11%	683	6%	10,855	592	17,471	2,562	728	20,761
VU	2015	3	3	286	105	1,643	96%	77	5%	1	0%	1,721	125	5,910	89%	556	8%	156	2%	6,623	230	7,553	634	158	8,344
VU	2016	3	3	165	40	1,250	90%	121	9%	11	1%	1,382	37	2,560	85%	68	2%	383	13%	3,012	78	3,810	190	395	4,394
VU	2017	3	3	249	119	1,449	65%	786	35%	7	0%	2,242	122	2,902	63%	718	16%	983	21%	4,603	241	4,350	1,505	990	6,845
VU	2018	2	2	313	337	6,479	82%	1,416	18%	18	0%	7,912	96	3,874	84%	582	13%	157	3%	4,613	433	10,353	1,998	174	12,525
VU	2019	5	6	573	739	22,875	89%	2,559	10%	406	2%	25,840	138	7,106	83%	631	7%	821	10%	8,558	878	29,980	3,190	1,227	34,398
VU	2020	6	6	909	956	23,844	85%	4,183	15%	108	0%	28,135	332	13,192	72%	2,720	15%	2,325	13%	18,237	1,288	37,037	6,903	2,433	46,372

Table 4. (continued)

YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
	YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
				SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
2010	276	262	52,253	38,204	686,498	76%	212,469	23%	9,617	1%	908,587	12,978	412,178	72%	108,960	19%	49,103	9%	570,238	51,460	1,102,777	323,757	59,117	1,485,651
2011	278	267	58,622	30,106	424,696	75%	134,808	24%	4,005	1%	563,507	21,754	608,968	73%	151,275	18%	78,560	9%	838,798	52,012	1,035,336	286,714	82,687	1,404,737
2012	285	284	54,373	36,086	611,588	73%	215,449	26%	9,139	1%	836,177	20,414	595,992	75%	134,939	17%	62,066	8%	793,000	56,639	1,209,209	350,953	71,353	1,631,514
2013	297	293	55,214	38,403	644,813	79%	159,669	20%	10,500	1%	814,982	17,928	556,703	72%	152,476	20%	67,821	9%	777,000	56,436	1,203,283	313,095	78,492	1,594,870
2014	308	306	53,572	38,389	733,347	77%	203,565	21%	11,152	1%	948,066	18,211	633,087	77%	127,540	15%	63,618	8%	824,248	56,683	1,368,244	331,823	74,936	1,775,003
2015	306	303	42,531	33,606	681,612	78%	179,631	21%	11,831	1%	873,074	13,639	550,518	79%	101,669	15%	43,449	6%	695,636	47,383	1,235,610	282,954	55,973	1,574,537
2016	293	278	44,404	32,385	646,140	73%	225,121	25%	12,476	1%	883,736	14,159	532,901	76%	113,034	16%	54,445	8%	700,380	46,726	1,183,032	340,411	67,384	1,590,827
2017	282	279	47,770	33,652	514,677	66%	259,673	33%	10,427	1%	784,774	16,501	514,565	76%	111,994	17%	50,765	7%	677,323	50,426	1,034,552	374,651	61,534	1,470,737
2018	272	269	45,088	32,830	618,722	75%	191,121	23%	12,522	2%	822,368	18,287	668,403	80%	113,892	14%	56,768	7%	839,062	51,308	1,291,241	306,948	70,079	1,668,268
2019	281	274	42,520	37,146	858,892	81%	192,244	18%	9,366	1%	1,060,503	14,918	599,969	82%	95,519	13%	36,711	5%	732,199	52,364	1,465,256	290,636	46,627	1,802,519
2020	267	257	44,830	32,748	640,241	14	197,265	3	5,602	0	843,107	15,225	566,593	13	130,655	3	63,829	2	761,079	48,153	1,209,896	330,352	69,816	1,610,064

Notes:

1. Estimates are based on aggregate data and raised logsheet data with species composition adjusted using observer sampling with grab sample bias correction. Note that these estimates may differ from the annual catch estimates provided by CCMs.
2. Tropical WCPFC Area (20°N–20°S). Estimates exclude domestic purse seine catch/effort in Philippines, Indonesia and Vietnam. [we hope to include estimates of domestic-based Philippines catch/effort in their home EEZ and HSP #1 in future versions of this table].
3. Two sources of estimates of vessel numbers are provided (i) those provided by CCMs with their annual catch estimates (and therefore appear in the WCPFC Yearbook) and (ii) estimates of vessel numbers from unraised operational data available to SPC.
4. The estimate of Japanese purse seine vessels fishing in the tropical fishery (20°N-20°S) has been determined by only considering vessel numbers in the categories >200 GRT.
5. There are several instances where vessel numbers from unraised logbook data are higher than the vessel numbers provided by the CCM. The reasons for these occurrences include: (i) situations where one vessel became inactive during the calendar year and was replaced by a new vessel – the vessel number from the operational data is based on a count of the total distinct vessels fishing throughout the year; (ii) instances where there are inconsistencies in the charter/flag assignment between the vessel numbers provided by CCMs and the operational logsheet data (e.g. Philippine-flagged vessels chartered to PNG – this will require follow-up and clarification with relevant CCMs).
6. ASSOCIATED covers sets on Drifting FAD, Log and Anchored FAD. Catch/effort for sets on ANIMALS is not shown separately but are included in the TOTAL.
7. Includes Catch and Effort in Archipelagic Waters.
8. Total Associated sets may differ from values provided in Table 3. The reasons for the differences include, (i) sets in archipelagic waters are included in this table but not in Table 3, (ii) the raising process in Table 3 is undertaken at the EEZ/AW level while the raising in this Table is undertaken at the WCPFC Area level; this will be an issue in cases where logbook coverage is not 100%. Future versions of Tables 3 and 7 will be reconciled.

Fleet Codes

CK	- Cook Islands	CN	- China	ES	- EU-Spain	FM	- FSM
JP	- Japan	KI	- Kiribati	KR	- Republic of Korea		
MH	- Marshall Islands	NZ	- New Zealand	PG	- PNG		
PH	- Philippines (DW)	SB	- Solomon Is.	SV	- El Salvador	NR	- Nauru
TV	- Tuvalu	TW	- Chinese Taipei	US	- USA	VU	- Vanuatu

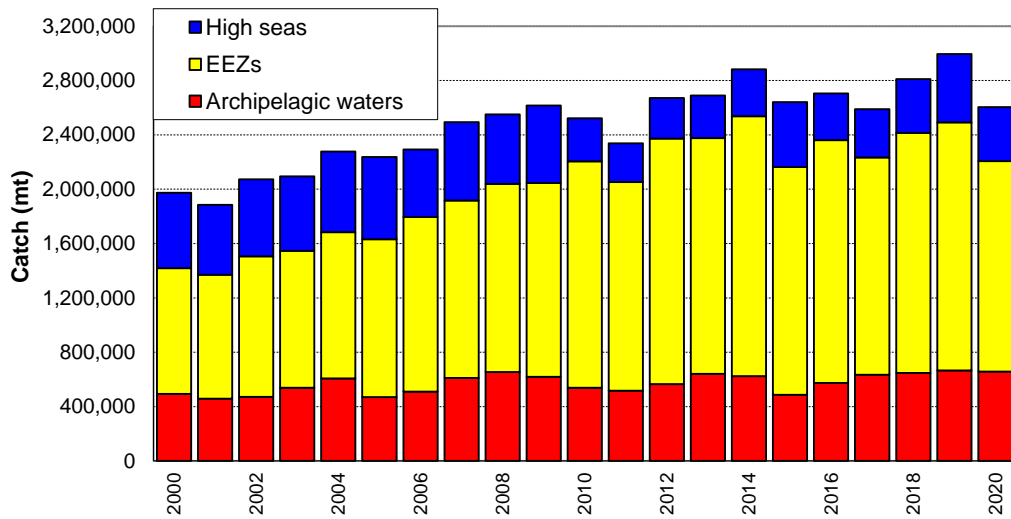


Figure 1. Tuna catch estimates (mt) in the WCP-CA, by broad area, all gear types.

Tuna species are (albacore, bigeye, skipjack and yellowfin. Areas are: Archipelagic waters (AWs), national waters (EEZs, excluded AWs) and the high seas for all gear types combined.

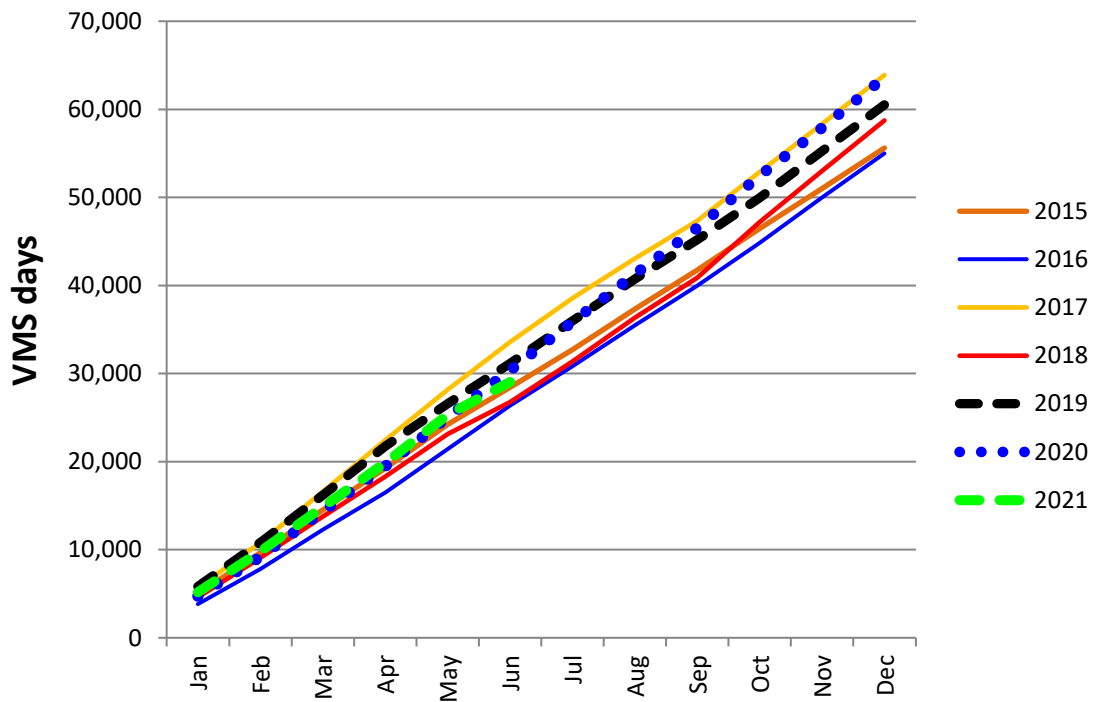


Figure 2. Cumulative tropical purse seine effort by month, 2009-2021, as measured by VMS

(excludes days in port and an estimation of days in transit)

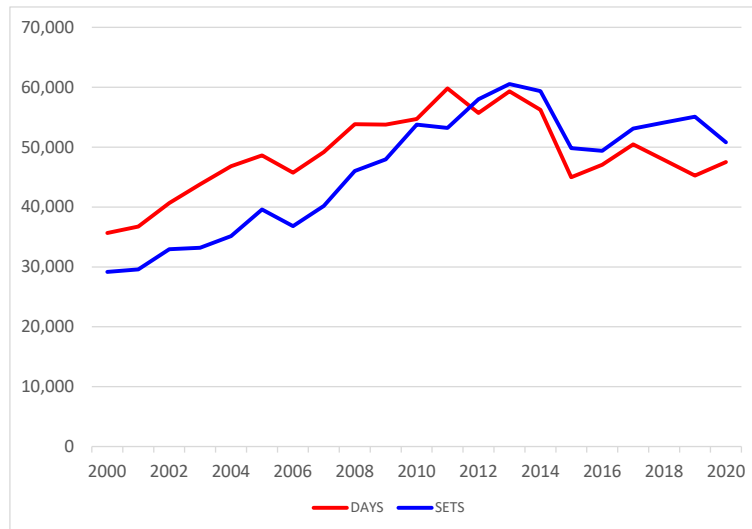


Figure 3. Annual trends in purse seine effort in the WCPFC Convention Area between 20°N and 20°S. “DAYS” – days fishing and searching. Excludes domestic purse seine effort in Philippines and Indonesia, but includes Philippine domestic-based effort in HSP#1. Estimates are based on raised logsheet data.

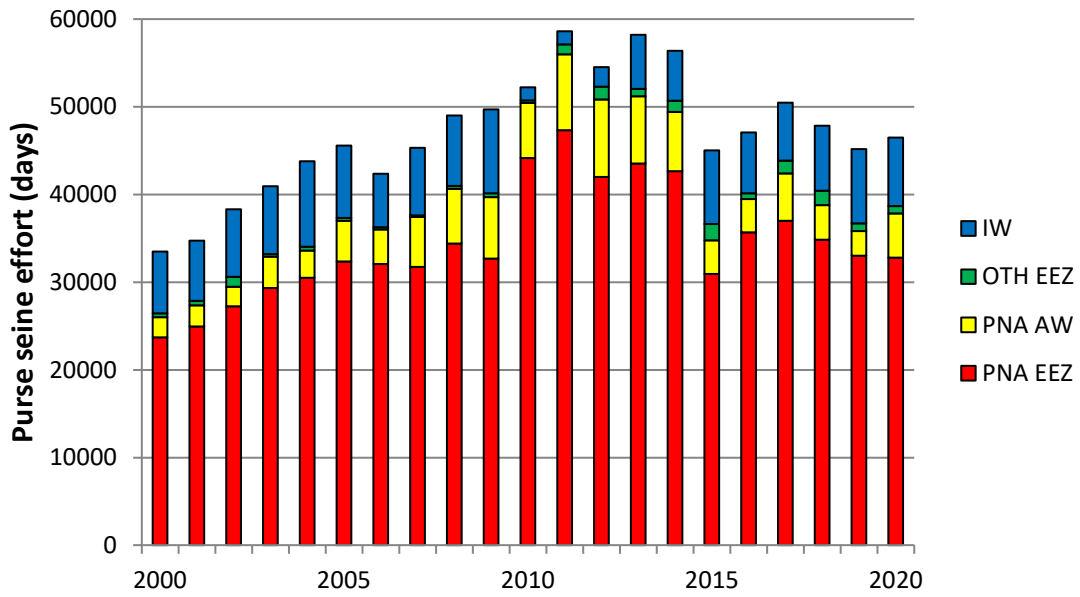


Figure 4. Purse seine effort (days fishing and searching) in the WCPFC Convention Area between 20°N and 20°S. Excludes domestic purse seine effort in Philippines and Indonesia. Estimates are based on raised logsheet data.

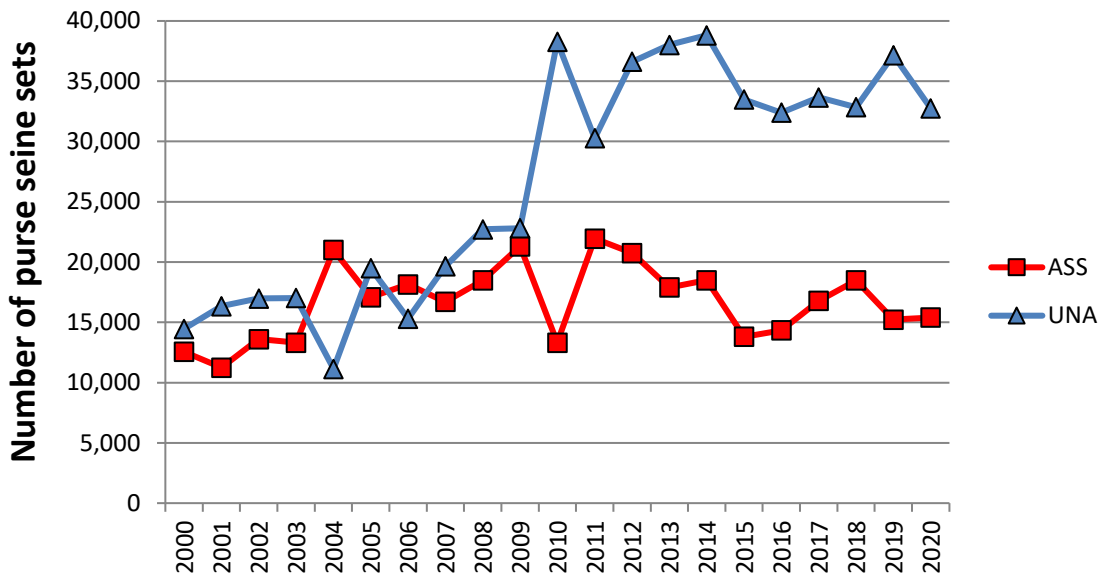


Figure 5. Sets by set type made in the WCPO tropical purse seine fishery, 2000 – 2020. Associated (ASS) and Unassociated (UNA) sets. Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded. Associated sets include animal-associated sets.

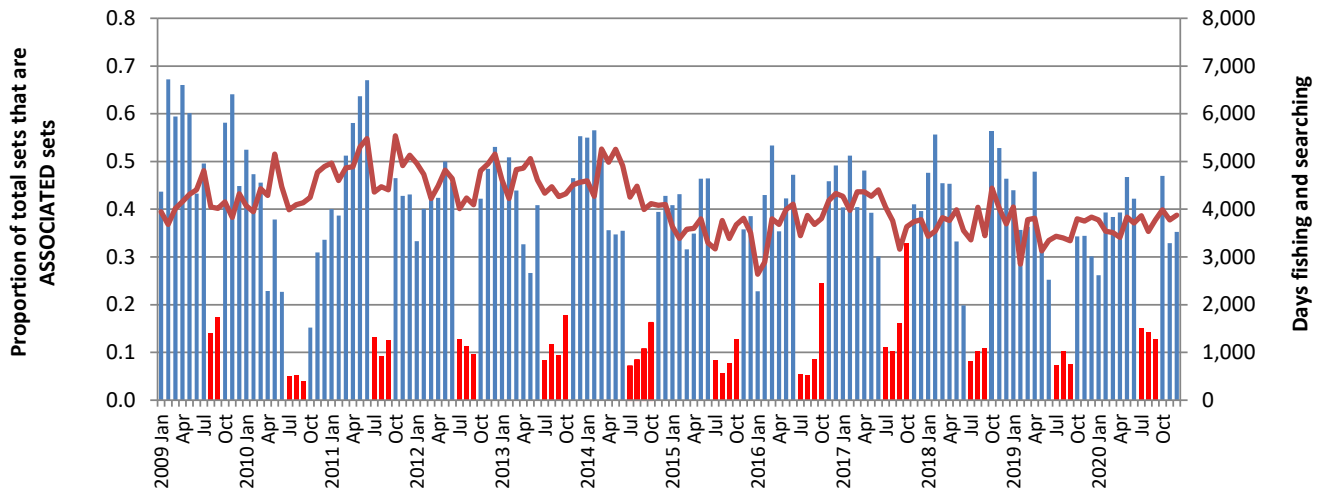


Figure 6. Proportion of the total purse seine fishing activity comprising associated sets.

As indicated by logsheet data.

Red bars indicate the FAD closure months. Total effort in days is shown by the plotted line. Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded.

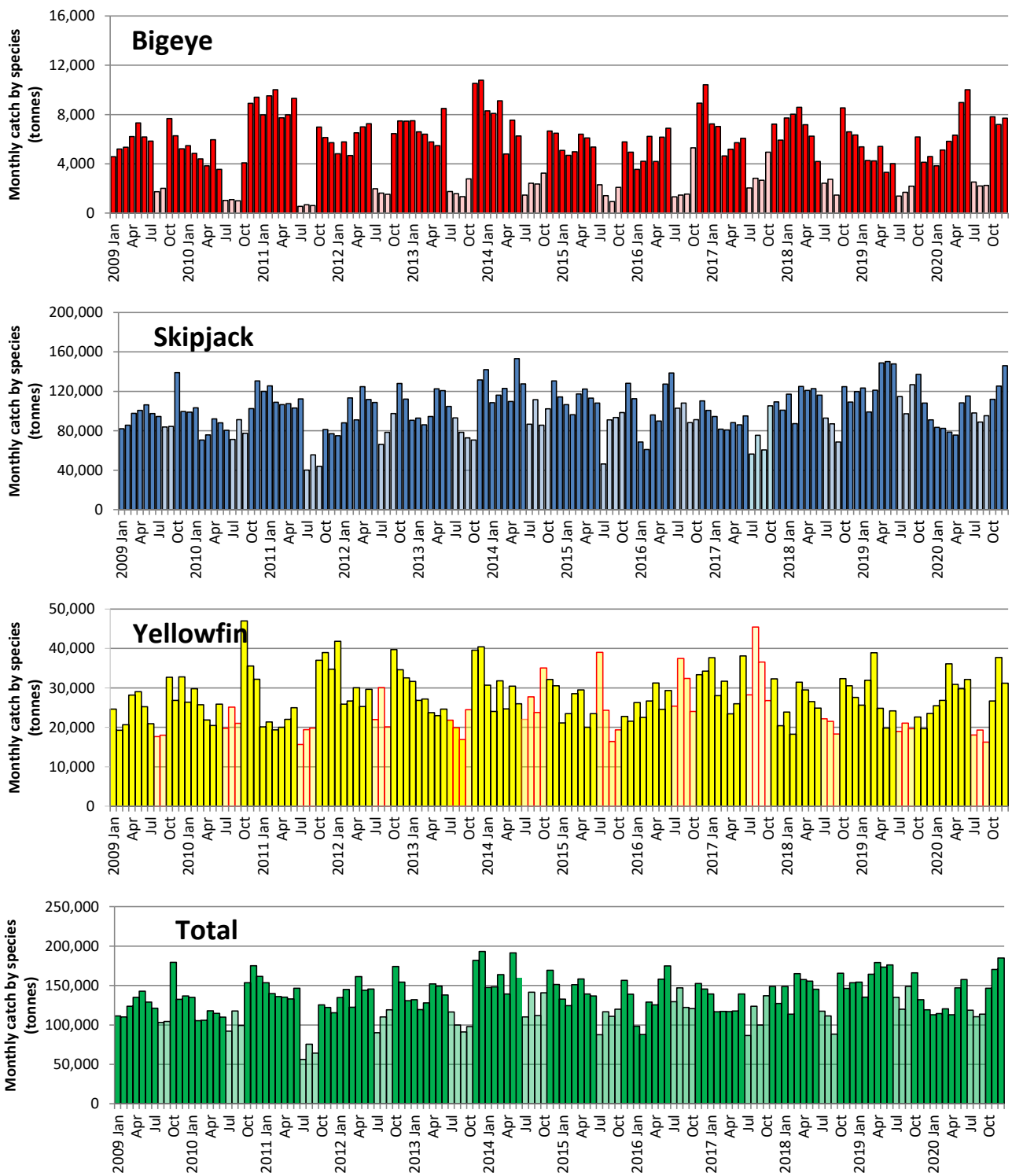


Figure 7. Monthly purse seine catch by species

(raised logsheet data with species composition adjusted using observer sampling with grab sample bias correction). FAD closure months are shaded in lighter colour. Data excludes the domestic fisheries of Indonesia and Philippines.

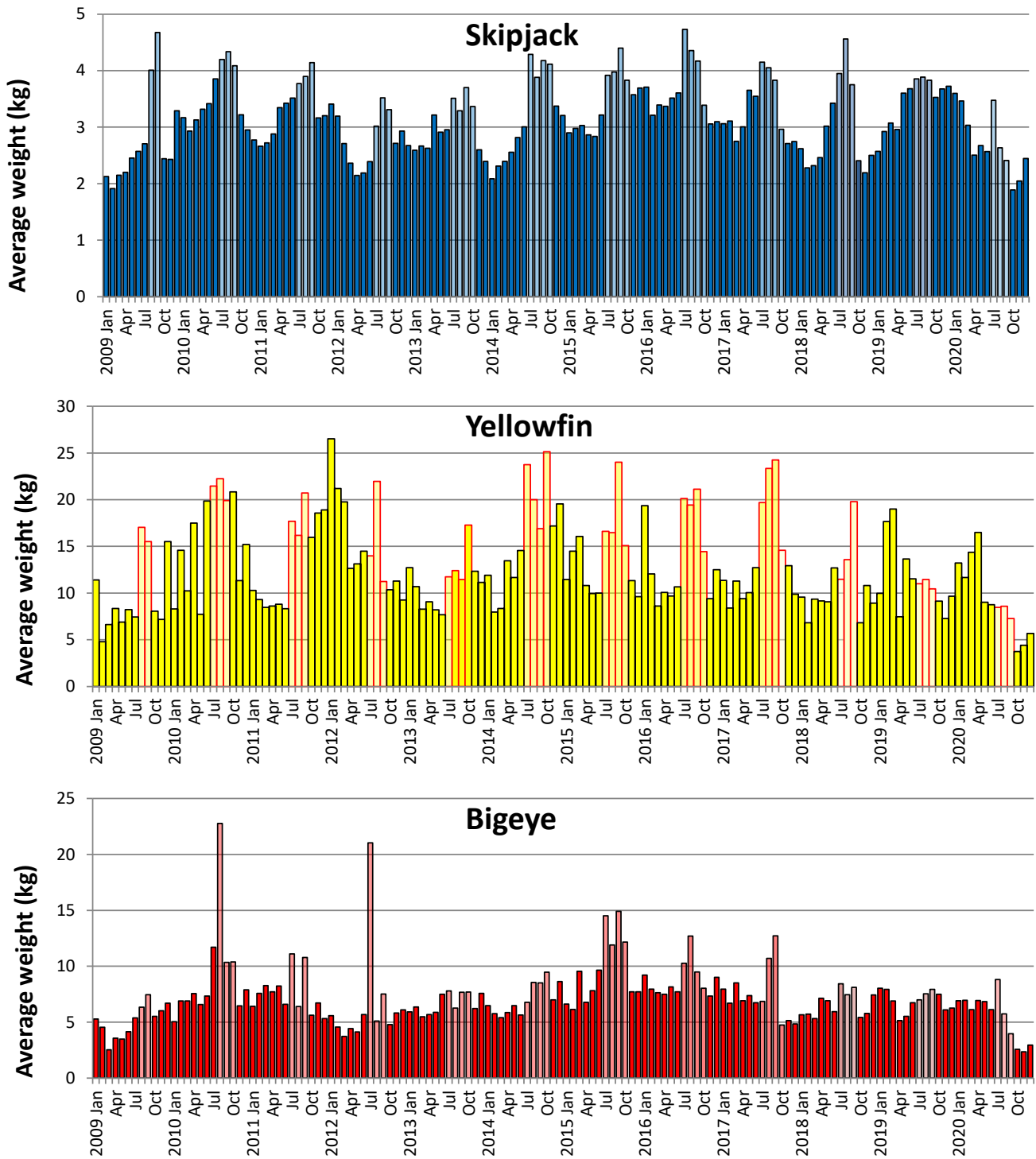


Figure 8. Monthly average weight of bigeye, skipjack and yellowfin tuna.

Estimated from observer sampling data, 2009-2020. FAD closure months are shaded in lighter colour. Data excludes the domestic fisheries of Indonesia and Philippines.

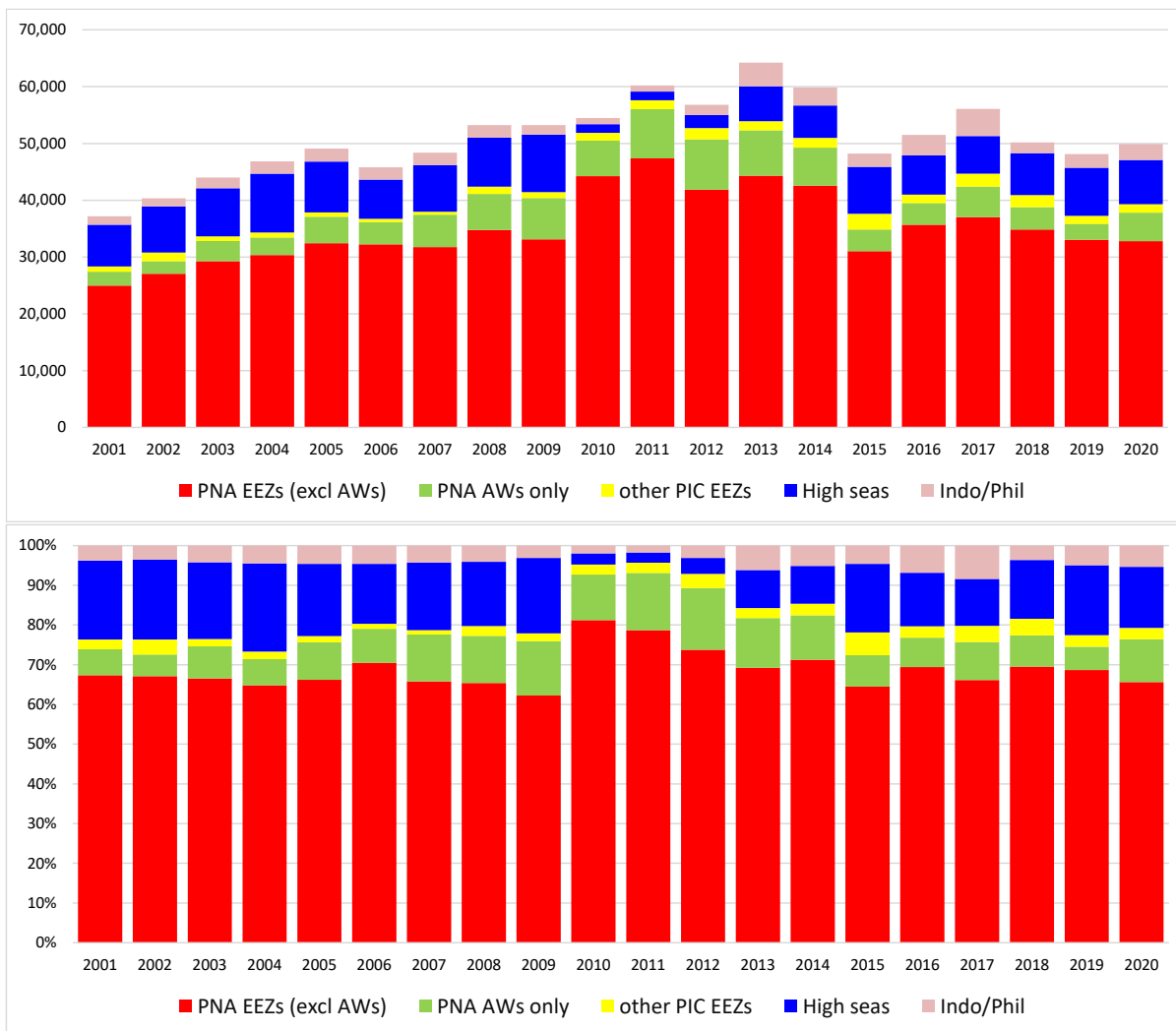


Figure 9. Purse seine effort in waters under national jurisdiction (EEZs and AWs) and in high seas (20°N-20°S)
 (days fished–top and percentage days fished–bottom)
 (Refer to NOTES under TABLE 1 above)

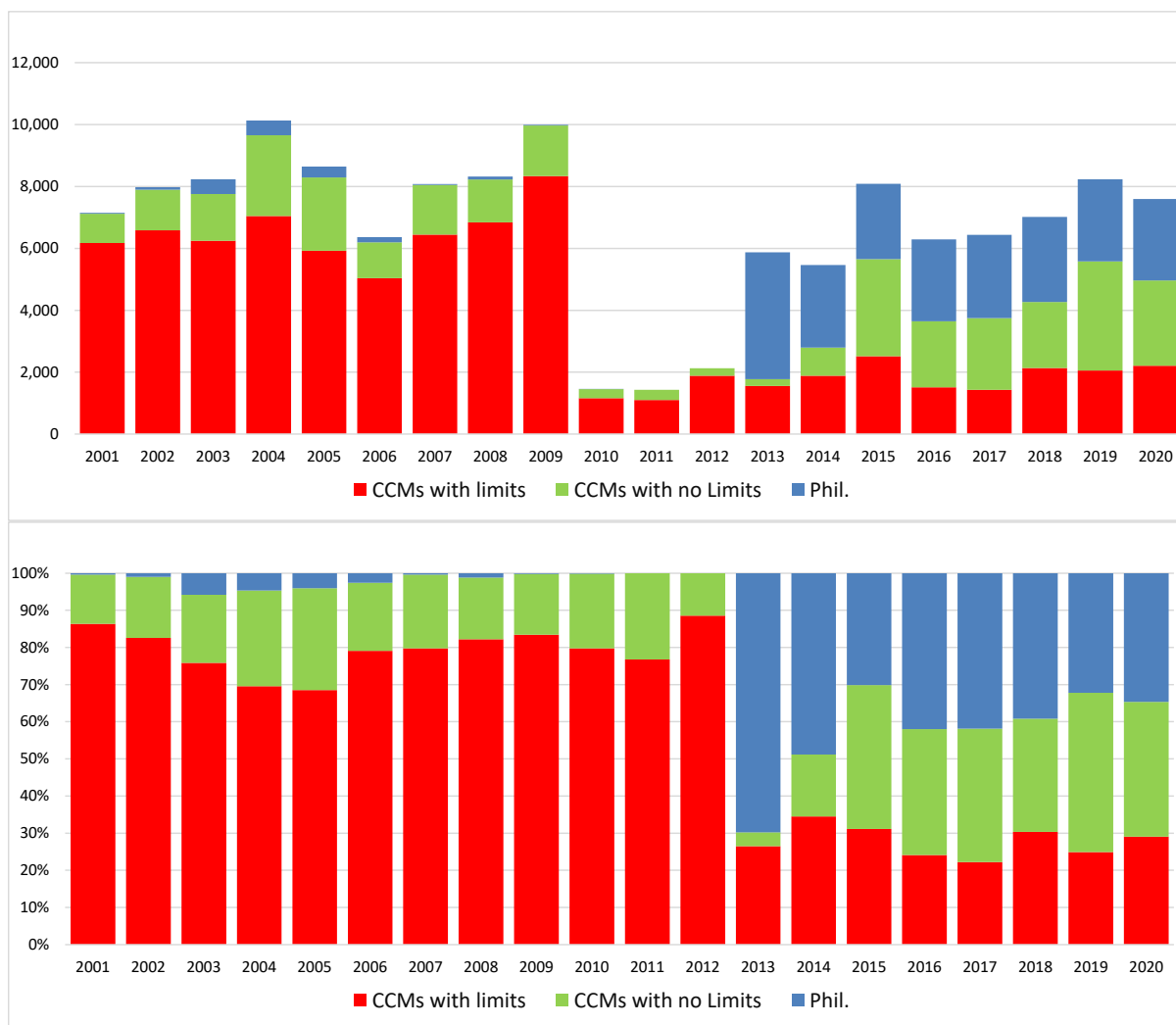


Figure 10. Purse seine effort in high seas (20°N–20°S), by fleet category.

(days fished–top and percentage days fished–bottom)

(Refer to NOTES under TABLE 2 above

*“CCMs with no limits” are Pacific Island fleets fishing in high seas adjacent to their home waters;
Philippines effort data prior to 2013 are not available or underreported)*

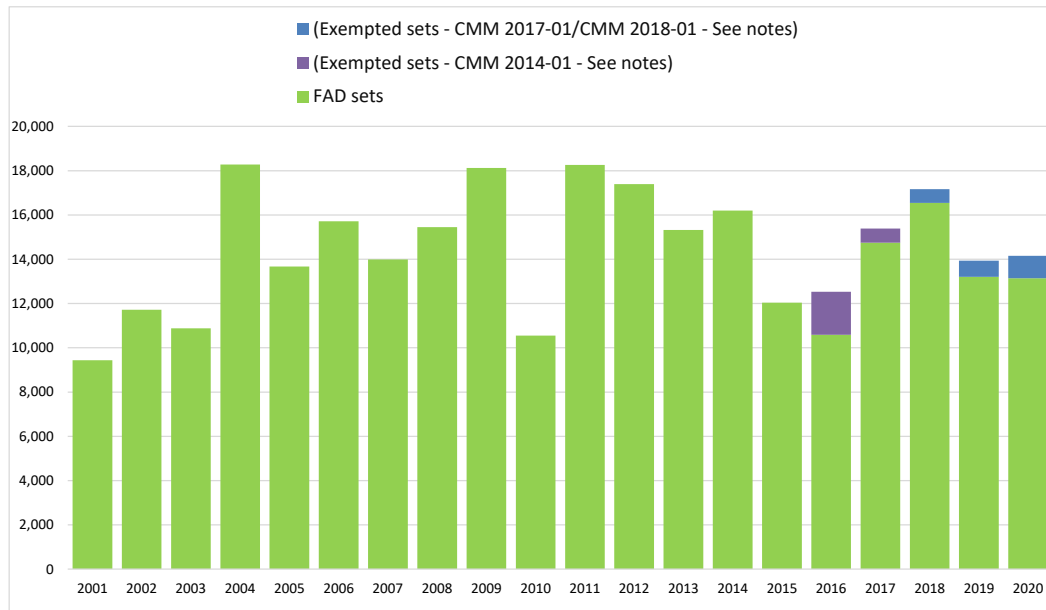


Figure 11. Estimated FAD sets undertaken in the tropical purse seine fishery (20°N-20°S), by fleet category.

(Refer to NOTES under TABLE 3 above

“Exempted Sets” refers to the footnote 3 exemption of CMM 2014-01; refer to Notes 11, 12 and 15 of Table 3)

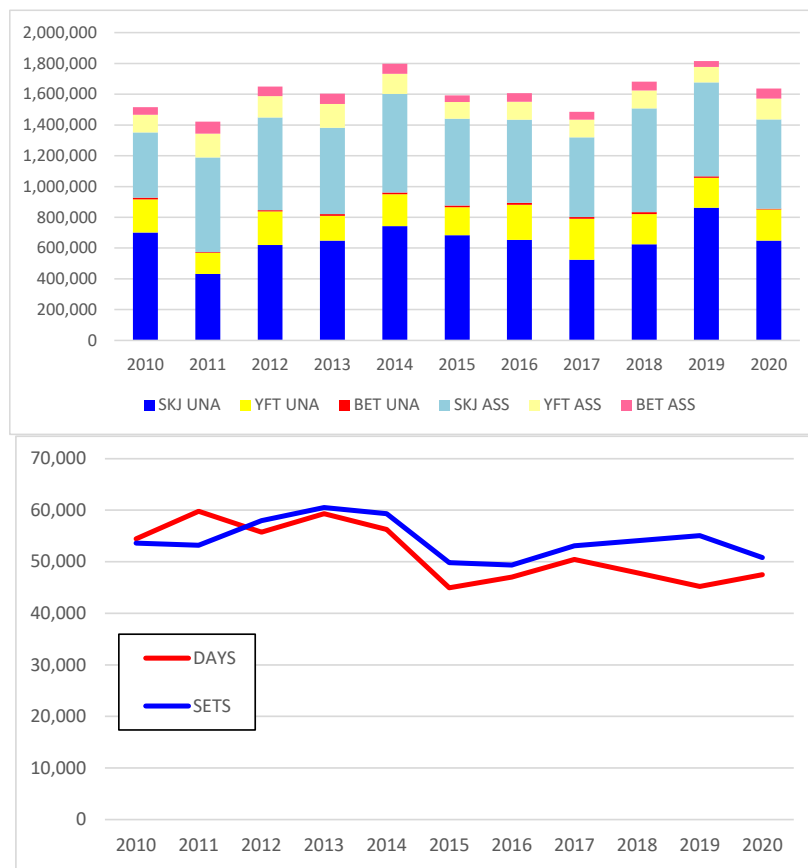


Figure 12. Purse seine tuna catch (top) and effort (bottom) by set type and species

WCPFC Convention Area between 20°N and 20°S, 2010–2020, excluding domestic purse seine catch/effort in Philippines, Indonesia and Vietnam. Includes domestic-based Philippines catch/effort in the HSP#1.

(Refer to NOTES under TABLE 4 above)

2. Longline fishery information

Table 5. Reported longline catches metric tonnes of bigeye tuna in the WCPFC-CA, by flag.

Table 5. Reported longline catches metric tonnes of bigeye tuna in the WCPFC-CA, by flag.

CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CMM limits for 2019	CMM limits for 2020	See Notes
AMERICAN SAMOA	75	196	242	227	134	181	218	132	249	487	1,263	1,502	389	318	557	658	1,409	851	1,545	1,584			4
AUSTRALIA	1,307	1,002	1,024	892	791	499	1,008	1,027	726	458	379	553	489	490	785	825	418	325	258	290			7
BELIZE	1,322	812	782	297	425	254	158	89	43	89	102	132	217	0	0	0	0	0	0	0			8
CHINA	2,227	2,312	8,965	11,748	7,520	13,378	10,535	10,798	15,289	13,924	11,139	11,324	10,671	9,370	8,210	8,195	7,023	8,695	8,644	7,403	8,724	8,724	10,11,16
COOK ISLANDS	1	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	197	124	97			4
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	3	17	106	71	17	10	0	0	0	0			
EU-SPAIN	0	0	0	42	17	62	62	77	46	15	10	23	23	65	53	53	21	39	30	40			7
FSM	651	759	656	542	182	172	1,395	970	1,395	1,113	1,500	1,700	1,270	2,488	2,296	1,869	2,134	3,107	3,559	2,158			4
FIJI	662	853	889	1,254	721	771	556	671	768	539	1,718	1,588	1,018	1,698	1,184	1,396	1,108	891	1,182	736			4
FRENCH POLYNESIA	745	649	439	502	606	498	478	490	587	436	607	654	787	741	813	563	896	1,063	954	874			4
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	831	932	0	0	0	0			
INDONESIA	942	1,470	2,168	2,192	2,285	2,750	2,155	3,395	4,067	1,937	2,325	3,399	2,118	3,380	3,606	1,183	71	2,168	2,372	638	5,889	5,889	12
JAPAN	27,466	29,574	26,110	29,248	23,021	25,685	26,076	20,942	17,653	16,619	17,722	16,917	12,991	15,564	14,316	11,467	11,471	12,005	11,827	11,320	17,765	17,765	16
KIRIBATI	0	0	1	0	0	0	0	44	0	3	155	800	582	268	556	603	287	423	1,292	1,570			4
MARSHALL ISLANDS	0	0	0	1	0	0	3	375	381	257	259	335	80	0	700	1,229	1,146	1,458	764				4
NAURU	6	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4
NEW CALEDONIA	128	189	142	90	76	35	53	63	51	44	41	49	51	58	63	74	48	46	40	51			4
NEW ZEALAND	481	201	204	177	175	177	213	133	253	132	174	154	109	122	122	177	97	135	50	67			7
NIUE	0	0	0	0	10	22	35	51	10	4	0	0	0	0	0	0	0	0	0	0			4
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	492	1,000	1,000	879	999	993	999	925			4
PALAU	21	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1,106	1,011	855	1			4
PAPUA NEW GUINEA	240	318	390	399	237	216	111	201	128	39	59	119	32	52	15	86	47	87	162	17			4
PHILIPPINES	59	59	59	59	59	59	59	59	59	59	777	248	167	63	0	0	0	0	0	0			6,7
REPUBLIC OF KOREA	22,172	28,533	17,151	17,941	15,622	12,489	10,054	17,001	15,231	13,914	15,282	18,823	12,818	12,779	10,689	11,018	10,220	13,828	13,711	13,011	13,942	13,942	
SAMOA	185	137	110	104	64	128	101	106	117	108	71	54	36	48	48	62	150	62	161	156			4
SENEGAL	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
SOLOMON ISLANDS	187	401	385	294	3	0	0	0	0	806	213	0	0	3,054	4,390	384	0	1,235	1,398	623			4,11
TONGA	191	215	94	40	125	117	129	81	38	24	18	10	7	22	25	27	24	34	16	10			4
TUVALU	0	0	0	0	0	0	0	0	0	0	105	1,408	120	76	187	103	111	64	53	9			4
CHINESE TAIPEI	12,435	16,645	14,429	20,992	15,498	14,295	14,760	15,229	13,319	11,874	11,275	10,994	10,600	10,018	9,434	9,488	9,672	9,069	8,876	7,152	10,481	10,481	11
USA	2,418	4,396	3,618	4,181	4,462	4,381	5,381	4,649	3,741	3,577	3,565	3,660	3,612	3,823	3,427	3,747	2,968	3,393	3,460	3,548	3,554	3,554	13, 15
VANUATU	37	396	841	2,045	2,045	1,815	1,885	1,143	1,398	2,060	2,061	2,151	1,989	3,518	7,366	3,509	3,940	3,132	2,241	2,838			4
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			4
Total	73,958	89,177	78,914	93,668	74,298	78,153	75,665	78,018	75,766	68,837	71,754	78,238	60,982	69,270	70,141	58,191	55,747	63,999	65,267	55,882	60,355	60,355	
VIETNAM	1,450	614	2,129	2,781	3,527	3,538	3,648	3,358	2,992	2,441	3,424	3,761	2,260	2,350	3,100	1,115	1,004	902	1,554	2,678			9

Notes:

1. Source: WCPFC Annual catch estimates as at 2nd July 2020.
2. Catch estimates in **red** have been carried over from previous years.
3. Indonesia and Philippines have recently revised their estimates in recent years. (see the respective Annual Catch Estimate Workshop reports at (<http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project>))
4. The limits in the columns labelled “CMM limits for 2017” and “CMM limits for 2018” do not apply to small island developing State members and participating Territories according to paragraph 7 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM).
5. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 5 of CMM 2012-01 and paragraph 5 CMM 2013-01 using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
6. Estimates include archipelagic water catches which for some countries cannot be separated at this stage.
7. The catch limits established at 2,000t prior to 2010, remain at the level of 2,000t for relevant WCPFC members. (according to CMM 2008-01 Para. 32, CMM 2012-01 para 26 and CMM 2013-01 para 41 and its replacement CMM, including CMM 2017-01). Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.
8. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM) for years from 2015 onwards.
9. The Vietnam longline fleet are understood to fish outside the WCPFC Convention Area (South China Sea).
10. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
11. Catches by chartered Chinese, Fijian and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands according to the respective WCPFC Charter notifications.
12. Indonesia bigeye tuna catch excludes catches in Archipelagic waters.
13. USA revised limit for 2015 was 3504 t., to take into account the overage in bigeye catch from 2014
14. "CMM limits for 2017" is according ATTACHMENT F in CMM 2016-01, and refer to catch limits for 2017 only, and “CMM limits for 2018” is according to Table 3 in CMM 2017-01 or its replacement measure.
15. USA advised by letter to the WCPFC Secretariat that they reduced their 2017 bigeye catch limit (of 3,345 Mt in Att F of CMM 2016-01) to 3,138Mt to offset the overage in 2016.
16. CMM 2017-01 Table 3 and CMM 2018-01, includes this note: Japan will make an annual one-off transfer of 500 metric tonnes of its bigeye tuna catch limit to China.

Table 6. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.

Table 6. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.

CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Av. 2001- 2020	See Notes
AMERICAN SAMOA	188	485	497	888	526	513	640	333	398	473	699	620	422	454	360	561	871	470	409	377	515	(4)
AUSTRALIA	2,819	3,531	3,681	2,356	1,499	1,830	1,390	1,650	1,387	1,359	1,858	1,259	1,341	1,685	2,177	1,734	1,666	1,312	1,951	1,749	3,097	
BELIZE	957	720	943	208	298	106	273	129	121	28	13	30	21	0	0	0	0	0	0	0	707	(6)
CHINA	1,919	1,844	3,358	4,048	2,446	4,055	2,768	5,007	7,958	2,576	4,598	6,004	4,638	5,949	6,226	6,559	8,526	9,031	10,010	10,115	2,792	(9), (10)
COOK ISLANDS	1	42	178	506	413	262	290	247	197	192	394	693	346	504	339	315	610	532	403	362	182	(4)
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	0	0	2	22	4	6	0	0	0	0	0	(13)
EU-SPAIN	0	0	0	23	1	127	127	10	7	3	0	2	2	11	10	28	7	13	20	33	6	(13)
FSM	338	164	276	185	99	270	548	328	583	515	750	750	850	1,639	1,691	1,771	1,416	2,395	4,692	2,010	241	(4)
FIJI	2,082	2,027	2,482	4,164	2,591	2,231	1,721	2,763	3,440	2,602	4,051	3,188	2,203	4,343	3,647	4,701	4,986	2,738	3,833	4,564	2,689	(4)
FRENCH POLYNESIA	967	507	621	1,066	793	690	527	447	716	418	491	758	615	783	1,093	968	1,434	1,314	1,364	1,135	790	(4)
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(4)
INDONESIA	4,001	6,243	9,209	9,313	10,679	9,743	10,209	12,873	18,154	13,325	13,124	11,938	9,012	13,353	18,604	3,502	105	5,991	4,744	801	7,192	(12)
JAPAN	18,096	15,810	16,803	15,209	14,792	13,462	13,725	12,365	14,039	17,466	11,427	10,621	8,268	6,494	8,683	10,166	10,099	10,109	12,793	7,168	16,480	
KIRIBATI	2	0	2	0	0	0	0	7	0	4	140	300	175	108	405	610	359	220	862	1,279	1	(4)
MARSHALL ISLANDS	0	0	0	3	0	0	2	91	120	117	99	113	47	0	0	578	948	707	1,175	743	1	(4)
NAURU	5	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	(4)
NEW CALEDONIA	570	572	754	631	448	414	393	424	487	505	585	573	531	741	852	482	559	467	678	512	632	(4)
NEW ZEALAND	131	27	39	36	36	3	25	11	3	6	3	1	1	2	2	55	10	20	5	10	58	
NIUE	0	0	0	0	34	42	43	40	20	8	0	0	0	0	0	0	0	0	0	0	0	(4)
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	(4)
PALAU	41	3	19	28	0	0	0	0	0	0	0	0	0	0	0	0	1,352	1,887	1,644	0	23	(4)
PAPUA NEW GUINEA	1,812	1,738	1,747	2,318	1,222	2,139	1,539	2,259	2,714	2,147	2,303	2,961	1,041	1,568	891	728	1,249	2,070	1,479	116	1,904	(4)
PHILIPPINES	484	484	484	484	484	484	484	484	484	484	146	61	27	153	0	0	0	0	0	0	484	(5)
REPUBLIC OF KOREA	13,768	15,497	12,134	10,058	13,329	9,529	8,817	7,846	10,032	7,644	7,881	7,832	5,716	8,371	9,352	8,054	7,008	6,519	13,847	10,948	12,864	
SAMOA	470	369	293	444	199	264	305	317	412	386	395	234	330	231	252	244	401	547	642	394	394	(4)
SENEGAL	0	0	0	0	6	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(7)
SOLOMON ISLANDS	159	401	258	440	6	0	0	0	0	5,159	643	0	0	12,536	15,923	2,130	0	4,451	5,094	2,732	315	(4), (10)
TONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	325	373	201	186	156	237	(4)
TUVALU	0	0	0	0	0	0	0	0	0	0	286	453	114	41	166	124	164	106	76	16	0	(4)
CHINESE TAIPEI	22,326	21,993	22,149	22,975	19,571	18,654	16,668	16,411	19,693	22,225	21,320	16,948	14,999	12,257	14,118	17,816	22,956	16,050	17,724	10,212	22,361	(10)
USA	1,016	572	809	694	698	937	833	836	429	462	738	576	546	567	681	1,093	1,750	1,868	1,556	1,198	773	
VANUATU	78	778	1,315	1,762	1,147	1,368	1,049	878	817	939	1,601	2,230	1,768	1,695	2,700	1,740	1,437	1,269	1,325	1,361	983	(4)
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	(4)
Total	72,489	74,072	78,320	78,003	71,536	67,353	62,721	66,047	82,320	79,090	73,720	68,285	53,234	73,702	88,473	64,290	68,529	70,141	86,417	58,239	75,721	
VIETNAM	8,292	9,756	8,179	11,122	10,895	10,930	11,270	10,375	9,244	9,513	10,576	12,456	13,917	11,603	15,097	16,423	15,677	16,500	14,653	14,118		(8)

Notes:

1. Source: WCPFC Annual catch estimates as at 2nd July 2020.
2. Catch estimates in **red** have been carried over from previous years.
3. Indonesia and Philippines have recently revised their estimates (see the respective Annual Catch Estimate Workshop reports at (<http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project>))
4. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
5. Estimates include archipelagic water catches which for some countries cannot be separated at this stage.
6. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 (or its replacement CMM) for years from 2015 onwards. Belize is not presently a CNM.
7. Senegal committed to limiting its fishing activities in the WCPF Convention Area to one longline vessel - WCPFC5 Report (Para. 44). Senegal is not presently a CNM.
8. The Vietnam longline fleet are understood to fish outside the WCPFC Convention Area (South China Sea).
9. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
10. Catches by chartered Chinese, Fijian and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands according to the respective WCPFC Charter notifications.
11. Does not yet cover development of new fisheries in the waters of small-island developing states (e.g. Tokelau)
12. Indonesia yellowfin tuna catch excludes catches in Archipelagic waters.
13. Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.

Table 7. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), by fleet.

FLEET	LONGLINE EFFORT (100s of Hooks)										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CK	13,422	16,809	32,818	16,880	10,880	11,761	25,750	20,672	21,581	19,474	18,958
CN	558,006	741,473	838,710	653,128	554,203	856,023	643,894	490,233	808,126	594,763	550,941
FJ	27,971	91,025	167,297	135,836	128,960	83,827	85,898	45,608	30,099	73,637	45,488
FM	84,884	94,564	110,591	85,598	123,995	149,576	165,600	167,500	361,852	325,452	231,076
JP	591,056	544,105	513,557	453,786	393,618	347,416	279,927	286,586	306,207	303,051	84,146
KI	0	19,487	50,227	27,577	23,868	38,218	55,215	45,625	40,604	73,402	102,851
KR	728,939	803,720	771,103	626,874	603,157	506,797	586,401	473,133	567,738	588,118	547,351
MH	16,828	16,763	20,679	6,286	0	585	63,220	138,797	104,151	95,894	79,565
PF	0	242	147	246	437	18	1,138	13,321	5,179	3,656	1,456
PG	24,589	51,692	40,188	14,849	19,232	7,883	4,492	2,789	35,323	27,589	2,557
PW	0	0	0	0	0	0	626	86,598	107,145	92,140	57
SB	66,213	12,757	5,497	3,942	421,448	370,855	24,030	18,036	209,644	203,669	95,190
TV	3,436	26,925	69,189	16,219	16,809	18,844	12,927	15,818	12,376	8,007	1,305
TW	1,116,743	1,542,707	1,710,738	1,237,662	1,031,881	1,207,708	1,291,770	1,385,543	1,054,992	1,111,503	755,975
US	127,121	135,232	152,740	128,813	147,964	181,519	240,469	217,903	165,374	323,727	284,753
VU	78,908	92,148	134,225	196,387	138,961	313,642	213,255	138,818	120,477	124,297	57,589
	3,438,116	4,189,650	4,617,707	3,604,082	3,615,413	4,094,672	3,694,610	3,546,980	3,950,867	3,968,376	2,859,258

Notes:

1. Estimates are based on available aggregate data for the WCPFC Area, 20°N-10°S.
2. Estimates exclude domestic longline effort for Philippines, Indonesia and Vietnam fleets.
3. Excluding vessels targeting South Pacific Albacore is not possible at this stage for a number of reasons – the main reason being the lack of operational data. In the absence of complete operational data (which would include targeting information), the area 20°N-10°S has been selected as the area which best minimises both South and North Pacific albacore targeting.

Fleet Codes

CK	- Cook Islands
CN	- China
FJ	- Fiji
FM	- FSM
JP	- Japan
KI	- Kiribati
KR	- Korea
MH	- Marshall Is.
PF	- French Polynesia
PG	- PNG
PW	- Palau
SB	- Solomon Is.
TV	- Tuvalu
TW	- Chinese Taipei
US	- USA
VU	- Vanuatu

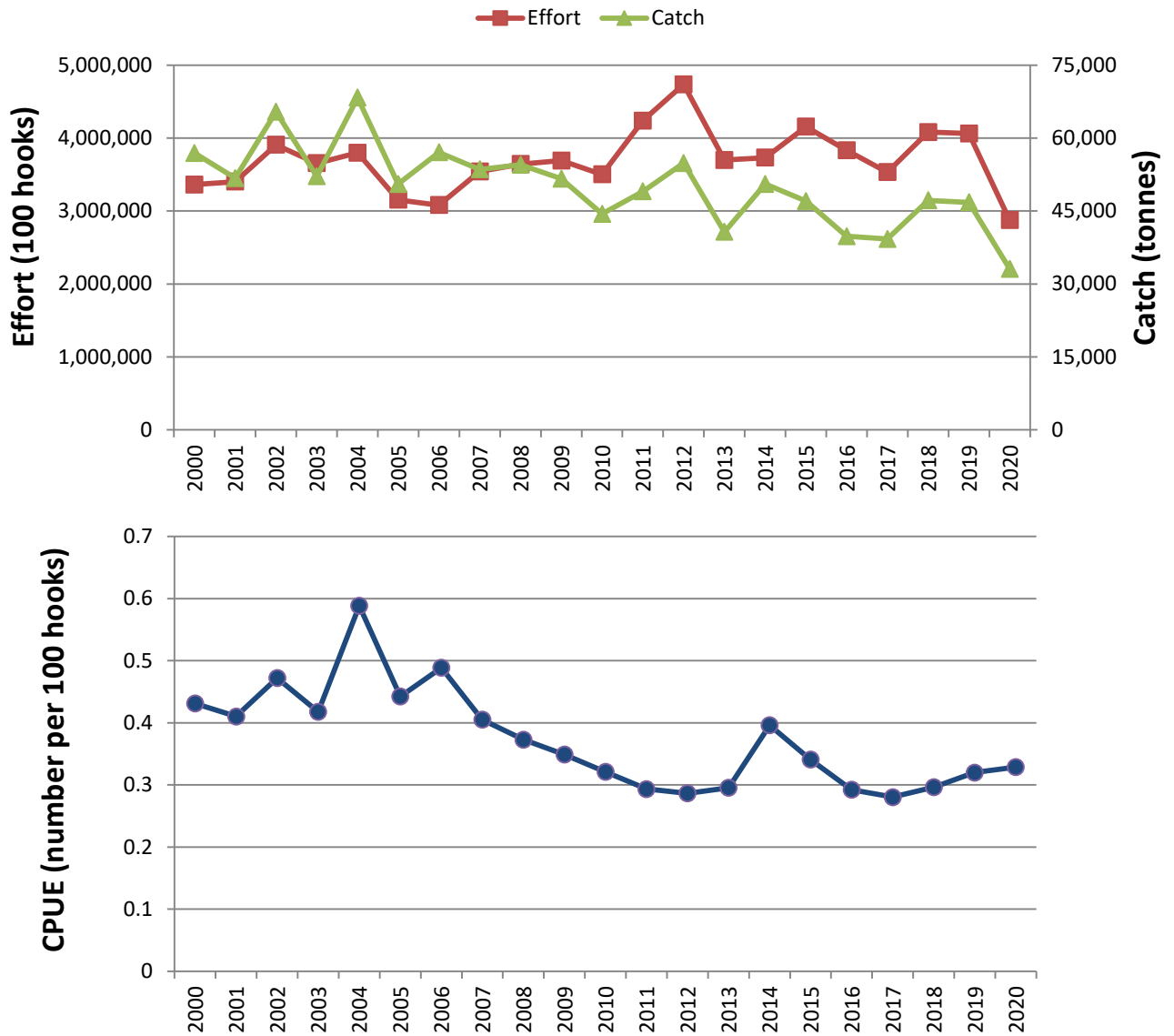


Figure 13. Estimates of effort, bigeye catch and nominal CPUE for the CORE tropical WCPFC longline fishery

CORE Area is (130°E - 150°W, 20°N - 10°S).
 2020 data are provisional.

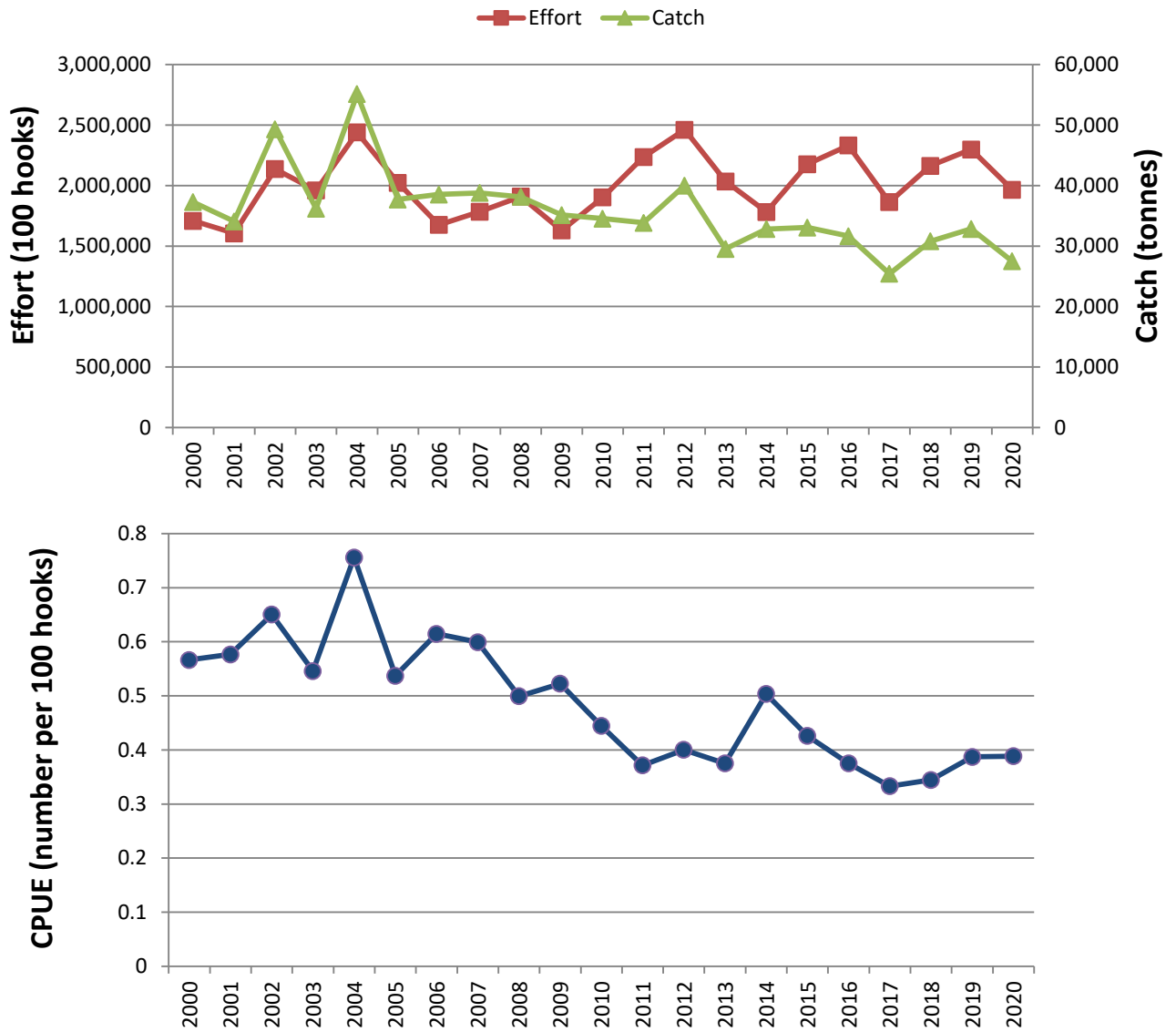


Figure 14. Estimates of effort, bigeye catch and nominal CPUE for the EASTERN tropical WCPFC longline fishery

Eastern Area is (170°E - 150°W, 20°N - 10°S).
 2020 data are provisional.

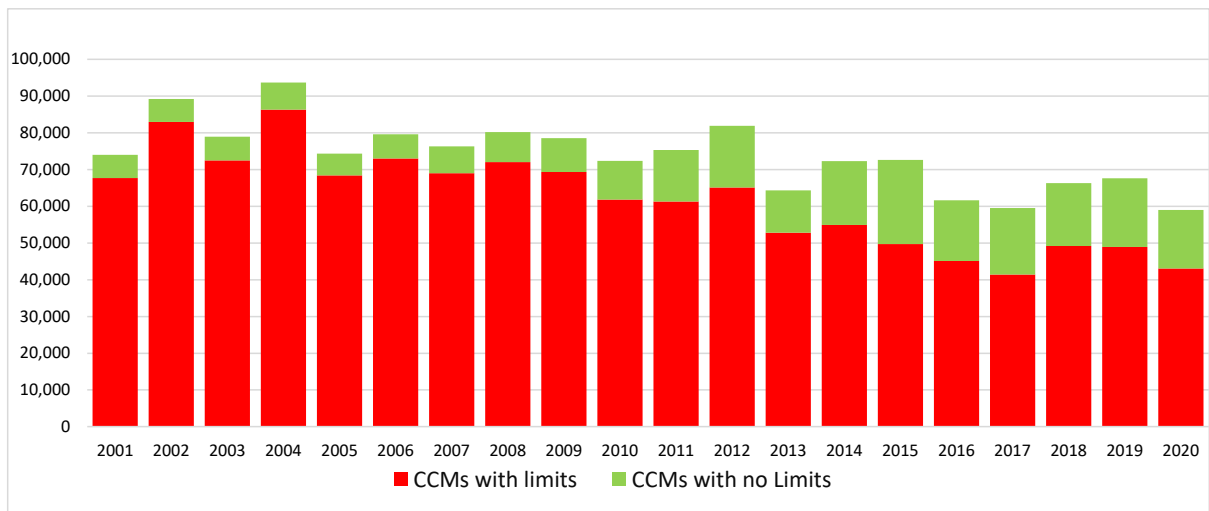


Figure 15. Reported longline catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by fleet category.

*(Refer to NOTES under TABLE 4 above;
Vietnam catch is included in "CCMs with no limits")*

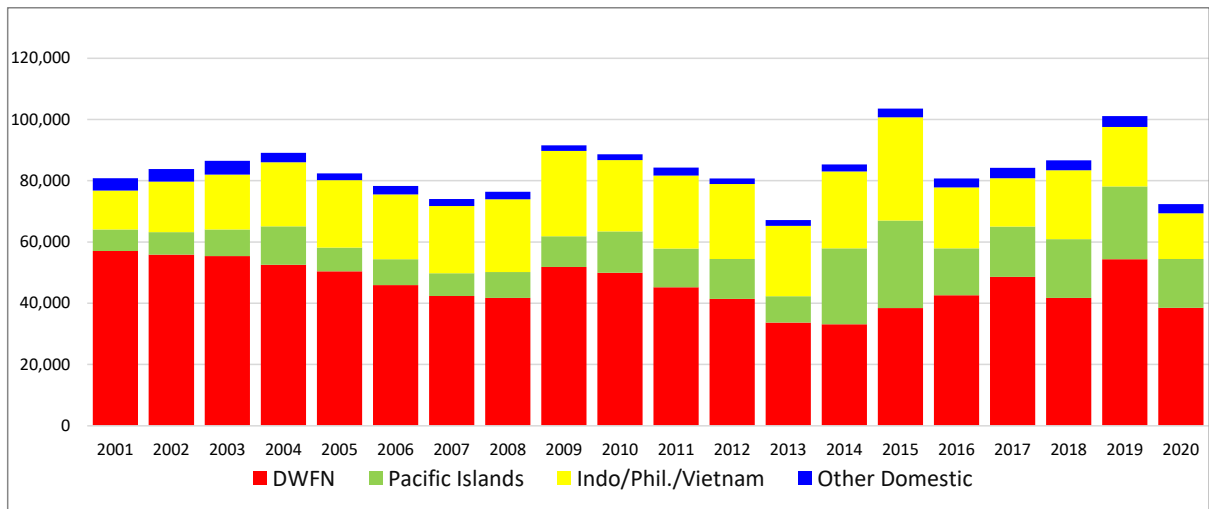


Figure 16. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by fleet category.

*(Refer to NOTES under TABLE 5 above;
Vietnam catch is included)*

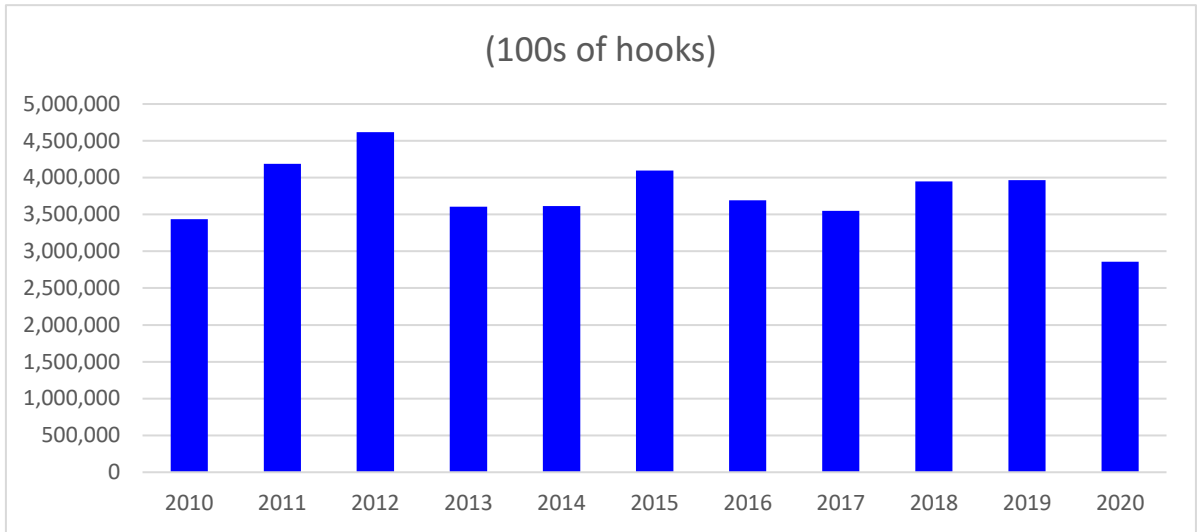


Figure 17. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), 2010-2020.

(Refer to NOTES under TABLE 8 above)

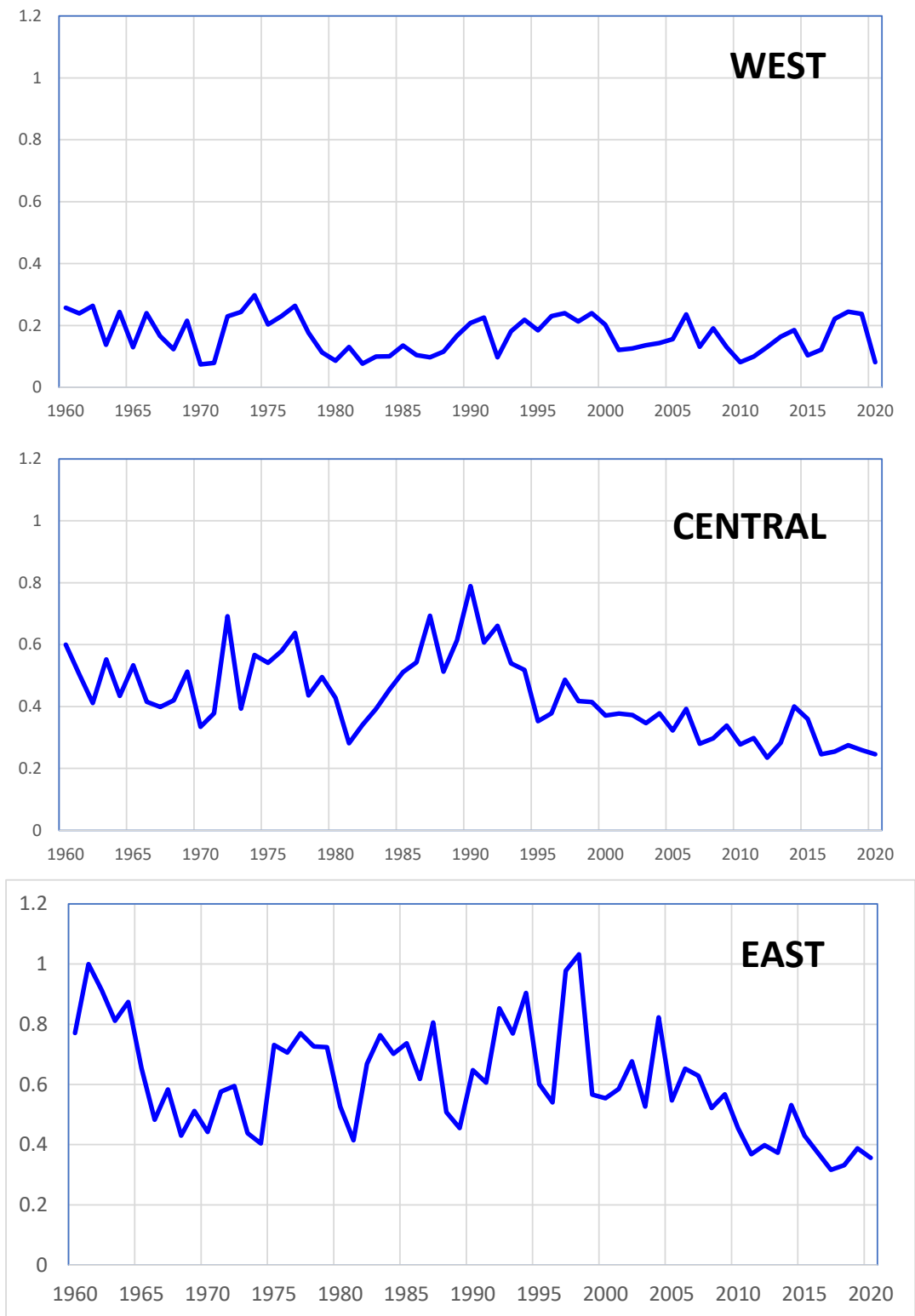


Figure 18. Annual trends in nominal bigeye tuna CPUE in the tropical WCPFC LONGLINE fishery (20°N-10°S)

CPUE in number per 100 hooks

By assessment region

- “WEST” – Assessment Region 7: 10°S–20°N, 110°–140°E
- “CENTRAL” – Assessment Region 3: 10°S–10°N, 130°–170°E
- “EAST” – Assessment Region 4: 10°S–10°N, 170°E–150°W

3. Other Commercial fisheries information

Table 8. Tropical tuna catch estimates for OTHER FISHERIES relevant to the tropical tuna measure

Table 8. Total tropical tuna catch estimates for OTHER COMMERCIAL FISHERIES (excl. Purse seine and Longline) in the WCPFC Statistical Area, relevant to CMM 2018-01.

GEAR	FLAG	Total Catch (MT)			Area Note	Availability of EFFORT data	See NOTE
		CMM 2018-01 limit	2020	Evaluation			
HANDLINE	INDONESIA	<i>Within EEZ only, excluding AWs</i>	NO	5
HANDLINE (LARGE-FISH)	PHILIPPINES	13,343	764	Within Limit	<i>Within EEZ only, excluding AWs</i>	NO	6
POLE-AND-LINE	INDONESIA	41,025	1,501	Within Limit	<i>Within EEZ only, excluding AWs</i>	NO	
POLE-AND-LINE	JAPAN	114,573	79,795	Within Limit		YES	2, 4

Notes:

1. Source: Annual catch estimates; Philippines National Stock Assessment Project (NSAP data); Aggregate logsheet data. 2020 data are provisional.
2. The column labeled "CMM 2018-01" is the maximum value of either (i) the average total skipjack, yellowfin and bigeye tuna catch for 2001-2004, or (ii) 2004.
3. The definition for "Commercial" fisheries, at this stage, includes all fisheries other than purse seine and longline fisheries, until otherwise advised. (Refer to Table 6b.).
4. Advice from Japan -- "Paragraph 9 of CMM 2012-01 provides that this measure applies to all areas of high seas and EEZs in the Convention Area. Therefore this paragraph does not apply to troll fishery, which operate within territorial sea.
 - Regarding pole-and-line fishery and purse seine north of 20N fishery JFA ensure that the total effort and capacity of these tuna fisheries shall not exceed the average level for the period 2001-2004 or 2004 under its licensing system.
 - Therefore JFA consider fulfilling this requirement.
 - JFA submits following information of pole-and-line fishery and purse seine north of 20N fishery as attached. On the other hand JFA does not agree with the Secretariat view to consider non provision of these data as a potential compliance issue because it is not required under this paragraph.
Effort data (2001-2004 average, 2004 and 2013)
Catch data (2001-2004 average, 2004 and 2013)"
5. Indonesia has advised that HANDLINE (hook-and-line) vessels that target small-fish at the surface should not be considered in the "Commercial" category since they are artisanal/subsistence fisheries. However, Indonesia can only provide a catch estimate for the combined small-fish (artisanal) and large fish handline fishery and it is not yet possible to differentiate the large-fish handline catch estimate from this combined total. Also, it is not yet possible to separate out the catches of what might be considered the 'commercial component' of the Handline fishery that are relevant to the tropical tuna measure - that is Indonesian waters outside Archipelagic waters (AWs) and Territorial Seas (TS).
6. The large-fish handline catch for the Philippines outside of archipelagic waters and territorial seas has been determined from the proportion of annual tuna catch outside AWs/TS from data collected from Philippines National Stock Assessment Project (NSAP data : 1997-2020), and specifically based on landings by Philippines Fisheries Management Area (FMAs) and Fishing Ground. There is often considerable inter-annual variation in the activity of this fleet inside and outside archipelagic waters, mainly depending on weather and sea conditions.

Table 9. Tropical tuna catch estimates for OTHER FISHERIES deemed exempt from the tropical tuna measure

(excl. Purse seine and Longline in the WCPFC Statistical Area)

Table 9. Total tropical tuna catch estimates for OTHER FISHERIES (excl. Purse seine and Longline) in the WCPFC Statistical Area, which are exempt from CMM 2018-01 OTHER COMMERCIAL FISHERIES.

GEAR	FLAG	Tuna catch (MT)		Reason for exemption
		2020	Average 2015-2020	
GILLNET	JAPAN	101	107	Less than 2,000 t.
GILLNET	VIETNAM	22,143	35,105	Outside of the WCPFC Convention Area
HANDLINE (LARGE-FISH)	USA	390	486	Less than 2,000 t.
HOOK-AND-LINE (SMALL-FISH)	PHILIPPINES	0	0	Within territorial seas and/or archipelagic waters only
POLE-AND-LINE	AUSTRALIA	0	0	Less than 2,000 t.
POLE-AND-LINE	FIJI	0	0	Less than 2,000 t.
POLE-AND-LINE	FRENCH POLYNESIA	199	275	Less than 2,000 t.
POLE-AND-LINE	KIRIBATI	0	40	Less than 2,000 t.
POLE-AND-LINE	NEW ZEALAND	0	0	Less than 2,000 t.
POLE-AND-LINE	SOLOMON ISLANDS	89	53	Less than 2,000 t.
POLE-AND-LINE	UNITED STATES OF AMERICA	0	0	Less than 2,000 t.
Small scale/Artisanal/Recreational	AUSTRALIA	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	FRENCH POLYNESIA	1,065	1,168	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	INDONESIA	18,965	38,655	Within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	JAPAN	1,455	1,271	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	KIRIBATI	4,359	4,359	Within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	NEW ZEALAND	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	NIUE	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/Artisanal/Recreational	PHILIPPINES	0	0	Within territorial seas and/or archipelagic waters only
TROLL	AUSTRALIA	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	CANADA	0	0	Less than 2,000 t.
TROLL	COOK ISLANDS	177	96	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	FIJI	0	0	Less than 2,000 t.
TROLL	JAPAN	3,567	3,417	Within territorial seas and/or archipelagic waters only
TROLL	NAURU	10	15	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	NEW ZEALAND	7	8	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	TOKELAU	51	100	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	TUVALU	348	305	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	UNITED STATES OF AMERICA	843	979	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	WALLIS AND FUTUNA	13	10	Less than 2,000 t. and within territorial seas and/or archipelagic waters only

Notes:

1. Source: Annual Catch estimates. 2019 data are provisional.
2. Fisheries with average catches less than 2,000 t of bigeye, yellowfin and skipjack tuna, have been excluded as per CMM 2018-01 para 51.
3. The definition for "Commercial" fisheries, at this stage, includes all fisheries other than purse seine and longline fisheries, until otherwise advised.
4. Indonesia has advised a range of their small scale/Artisanal fisheries (e.g. troll, small-fish hook-and-line, gillnet) should not be considered in the category "Commercial" Fisheries.
5. The Philippines has advised a range of their small scale/Artisanal fisheries (e.g. troll, small-fish hook-and-line, gillnet, beach seine) operate wholly in their archipelagic waters and/or territorial seas and should not be considered in the category "Commercial" Fisheries.
6. The Indonesia and Philippines catch estimates exclude catches in archipelagic waters. Catches for some other fleets listed here are acknowledged to be in their archipelagic waters and/or territorial seas and will be confirmed with respective member countries (e.g. Kiribati).

4. ANNEX

Table A1. Notes on major recent changes to tables/figures

No.	Table Caption	Notes on major revisions between WCPFC17 and SC17	Notes on major revisions between SC17 and TCC17
ALL TABLES			
Table 1	PURSE SEINE days fished in waters under national jurisdiction and in International waters in the WCPFC-CA.	– Added 2020 data and updates to recent years	–
Table 2	PURSE SEINE days fished in international waters in the WCPFC-CA between 20°N and 20°S, by flag, based on available operational data.	– Added 2020 data and updates to recent years	-
Table 3	Estimated PURSE SEINE FAD sets undertaken in the tropical fishery of the WCPFC Convention Area (20°N-20°S), by flag, 2001-2016	– Added 2020 data and updates to recent years	
Table 4	Purse seine tuna catch and effort by set type and species in the WCPFC Convention Area between 20°N and 20°S, excluding domestic purse seine effort in Philippines, Indonesia and Vietnam.	– Added 2020 data and updates to recent years – .	
Table 5	Reported LONGLINE catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by flag.	– Added 2020 data and updates to recent years	- Minor update to notes
Table 6	Reported LONGLINE catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.	– Added 2020 data and updates to recent years	- Minor update to notes
Table 7	Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery.	– Added 2020 data and updates to recent years	–
Table 8	Total tropical tuna catch estimates for OTHER COMMERCIAL FISHERIES (excl. Purse seine and Longline) in the WCPFC Statistical Area, relevant to CMM 2018-01.	– Added 2020 data and updates to recent years	–
Table 9	Total tropical tuna catch estimates for OTHER FISHERIES (excl. Purse seine and Longline) in the WCPFC Statistical Area, which are exempt from CMM 2018-01 OTHER COMMERCIAL FISHERIES.	– Added 2020 data and updates to recent years	–
FIGURES	Figures corresponding to relevant tables above	– Added 2020 data and updates to recent years – Updates to Figures 1, 2 and 3 and additional of new figures based on CCMs requests. – Figures transferred from the ANNEX in the SC16 GN-1 Fishery overview paper into this paper where they are more relevant.	