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Catch and effort data summaries to support discussions on TROPICAL TUNA CMMs

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

WCPFC-SC19-2023/MI-IP-06

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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

•																							/ Estimate	
EEZ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	d EEZ	See NOTE(s)
AUSTRALIA	23		2003	2004	2005	2006	2007	2008	2009	2010	2011	0	2013	2014	2015	2016	2017	2018	2019	0	0	2022	TIMITES	
COOK ISLANDS	46		24	9	2	8	3	29	45	17	104	479	209	353	348	202	530	696	587	306	83	85	1,250	2,9,15 2,15
FIJI	12	223	10	26	36	6	٥ -	23	12	29	27	27	32	222	50	43	31	3	12	1	0.3	0.0	300	2,15
FRENCH POLYNESIA	0	2		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2,15
INDONESIA	485	443	496	672	933	767	572	373	409	274	567	1.347	2,925	1,676	1,174	2,362	3,022	839	1,256	1,463	1,635	1,557	*	2, 4, 16,18
JAPAN	172	223	344	146		133	152	791	503	866	204	302	465	198	653	641	670	349	414	607	220	229	1,500	
NEW ZEALAND	218	174	167	313	359	218	217	234	128	218	261	268	290	268	278	197	152	110	123	115	104	0	#	2, 9, 15
NIUE	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	200	
PHILIPPINES	918	969	1.346	1.421	1.311	1.352	1.520	1.792	1.250	808	491	491	1,010	1.389	1,052	1.143	1.521	983	1,128	1.705	1.329	1,265	*	2,4,6,8,17,1
REPUBLIC OF KOREA	0	0	0	1,121	0	0	0	0	1,200	0	0	0	0.00	0	0	0	0	0	0	1,700	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	13	10	150	
TOKELAU	100	374	25	67	126	30	47	132	210	190	875	721	380	623	1,322	189	741	910	215	432	173	101	1,000	
TONGA	2	0	0	1	1	0	0	0	0	1.50	0	0	2	0.25	2	18	11	0	0	0	0	0	250	
CHINESE TAIPEI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18
USA	339	484	228	295	147	198	100	63	124	36	49	209	189	261	90	111	138	105	81	144	133	183	558	
VANUATU	2	2	0	19	1	0	0	14	1	0	5	5	1	0	4	0	1	0	0	7	0	0	200	
WALLIS AND FUTUNA	5	9	6	1	4	2	0	7	8	2	3	2	0	1	0	0	0	0	0	0	٥	0		2, 18
						-						-	-			-								27 10
PNA EEZs (excl AWs)	24,974	27,038	29,264	30,329	32,443	32,220	31,732	34,772	33,110	44,267	47,382	41,883	44,331	42,575	30,996	35,667	37,002	34,812	32,962	33,301	34,092	34,154	44,033	5, 12,15,20
PNA AWs only	2,426	2,215	3,554	3,093	4,654	3,917	5,710	6,320	7,289	6,255	8,663	8,826	7,996	6,711	3,812	3,806	5,384	3,937	2,823	5,369	4,031	4,754		5
PNA EEZs + AWs =																								
TOTAL PNA	27,400	29,253	32,818	33,422	37,097	36,137	37,442	41,092	40,399	50,522	56,045	50,709	52,327	49,286	34,808	39,473	42,386	38,749	35,785	38,670	38,123	38,908		5
TOTAL EEZs - excl.																								
PNA AWs	27,276	29,951	31,893	33,297	35,454	34,934	34,353	38,230	35,805	46,712	50,004	45,764	49,879	47,358	36,000	40,659	43,832	38,812	36,782	38,096	37,782	37,585		
TOTAL EEZs - excl.																								
PNA AWs and ID/PH	25.873	28.539	30.051	31.204	33,210	32.815	32,261	36.065	34.146	45.630	48.946	43.926	45.944	44.293	33.774	37.154	39.289	36.990	34.398	34.928	34.818	34.763		
	20,010	20,000	50,001	01/201	55,210	02,010	52,201	50,000	01/110	10,000	10,510	10,020	10,011	11,233	55,777	0.7101	33,203	50,550	51,550	01,020	01,010	51,705		
TOTAL EEZs + PNA AWs	29,730	32,189	35,477	36,400	40,112	38,855	40,063	44,558	43,103	52,969	58,670	54,592	57,875	54,070	39,812	44,465	49,216	42,749	39,605	43,465	41,813	42,339	47,747	
TOTAL INT. WATERS				·						•						•	•					•		
(20°N-20°S)	7,365	8,113	8,489	10,381	8,922	6,886	8,185	8,617	10,100	1,495	1,528	2,451	6,131	5,693	8,285	6,935	6,618	7,379	8,501	7,816	6,644	5,432		6,8,11
TOTAL (EEZs + IW +																								
PNA AWs)	37,095	40,302	43,966	46,781	49,034	45,741	48,248	53,175	53,203	54,464	60,198	57,043	64,006	59,763	48,097	51,400	55,834	50,128	48,106	51,281	48,457	47,771	53,179	
-																								
TOTAL minus ID/PH	35,192	38,390	41,624	44,188	46,290	43,122	45,656	50,510	51,044	53,382	59,140	55,205	60,071	56,698	45,871	47,895	51,291	48,306	45,722	48,113	45,493	44,949	50,357	
VIETNAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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, CMM 2020-01 for years 2018 2021, CMM 2021-01 for year 2022.
- 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 includes 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 since 2008 in their EEZ has been 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, CMM 2018-01, CMM 2020-01 and CMM 2021-01).
- 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, CMM 2020-01 and CMM 2021-01 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, CMM 2020-01 and CMM 2021-01 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, CMM 2020-01 and CMM 2021-01 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, CMM 2020-01 and CMM 2021-01 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, CMM 2020-01 and CMM 2021-01 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.

DIIDGE	SETME	DAVG	RICHED	TNTERNATIONAL.	WATEDS	20°N-20°C

																									Max.	
																							CMM	CMM	Annual	
																							limits	limits	days	
																							for	for	for	See
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2020	2021	2010-	Notes
CHINA	89	123	152	424	501	229	332	251	871	14	7	26	14	8	22	23	12	26	22	16	23	21	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	185	308				
ECUADOR	0	0	0	0	0	0	26	10	14	2	0	13	1	1	0	0	0	0	0	0	0	1	**	**	13	7,9,
EL SALVADOR	3	28	0	0	0	0	205	205	80	46	33	32	24	50	54	25	12	28	10	30	27	27	**	**	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	226	214	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	694	942	404				
INDONESIA	500	500	500	500	500	500	500	500	500	0	0	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	76	53	121	121	6	
KIRIBATI	42	56	41	39	51	52	23	41	172	97	243	183	186	858	645	927	687	795	950	654	566	273				11
MARSHALL ISLANDS	168	208	441	397	402	155	170	283	169	68	30	1	5	6	845	393	626	302	955	698	394	177				
NAURU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	182	397	115	125				
NEW ZEALAND	23	222	334	145	97	288	187	193	194	55	29	89	10	44	158	155	123	120	136	63	0	0	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	2	2				
PHILIPPINES	30	79	482	473	350	166	33	98	20	2	0	209	4,096	2,665	2,437	2,642	2,696	2,749	2,654	2,635	2,539	2,562	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	182	172	102	50	207	207	205	
SOLOMON ISLANDS	32	37	0	0	17	15	5	0	0	0	0	1	0	0	0	25	73	102	91	19	1	0				
TUVALU	0	0	0	0	0	0	0	0	38	4	4	1	0	1	85	147	103	57	71	127	209	61				
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	57	59	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	1,665	917	831	1,551	1,485	1,658	721	700	1,270	1,270	1,237	7, 13
VANUATU	66	165	186	571	374	398	381	223	103	37	31	6	7	2	0	163	190	107	145	132	133	121				
TOTAL	7,153	7,977	8,233	10,131	8,642	6,362	8,082	8,323	9,994	1,421	1,420	2,318	5,864	5,454	8,082	6,295	6,439	6,997	8,267	7,605	6,318	5,158			The state of the s	

									PURSE	SEINE D	AYS FISH	ED in W	CFPC-IAT	TC OVER	LAP AREA									
																								See
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020	2020		Notes
ECUADOR	0	0	0	0	0	0	43	176	77	52	40	86	106	72	101	5	109	254	124	142	141	153		7
EL SALVADOR	22	35	3	0	0	0	27	130	25	19	22	4	127	155	44	72	37	26	24	21	29	16		7
EUROPEAN UNION	126	75	91	52	43	116	34	30	13	16	18	11	36	18	71	39	13	41	15	28	47	61		7
USA	1	0	0	0	2	0	0	0	3	0	2	4	0	1	0	528	11	36	58	20	74	17		7
TOTAL	149	110	94	52	45	116	104	336	118	87	82	105	269	246	216	644	170	357	221	211	291	247		

- 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 2012 does not includes estimates of effort for the Philippines domestic fleet at this stage. Philippines effort in the high seas pocket 1 (HSP#1) during 2012 was 209 days for the period Oct-Dec based on observer data. 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 2021 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 it's 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 2017–2022 high seas effort estimates have been attributed to the flag state for these years, based on the best information available.
- 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, CMM 2018-01, CMM 2020-01 and CMM 2021-01.

Table 3. Estimated FAD sets undertaken in the tropical purse seine fishery, by flag, 2001-2022.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	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	16	0	0	258	CHINA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	63	70	COOK ISLANDS
0	0	0	0	0	0	74	365	163	221	439	443	284	342	140	50	235	411	327	258	270	321	ECUADOR
9	29	1	0	0	0	54	152	161	136	185	212	296	304	176	96	73	82	49	58	93	76	EL SALVADOR
71	34	59	81	46	126	242	412	328	363	488	460	515	430	327	94	151	190	160	211	290	293	EUROPEAN UNION
324	386	489	790	497	282	338	484	732	417	788	820	537	605	633	1,088	1,364	1,348	1,292	2,139	1,797	2,061	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	907	809	JAPAN
71	61	62	96	103	66	61	99	288	243	552	488	667	822	1,075	1,819	2,551	2,998	3,019	2,784	3,189	3,336	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	1,226	1,108	1,051	1,557	1,640	MARSHALL ISLANDS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	256	1,075	1,599	1,758	NAURU
124	274	429	411	195	491	384	441	373	192	203	161	134	165	49	21	75	41	36	2	0	0	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	394	225	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	12	0	0	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	1,498	1,697	1,557	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	146	191	134	99	107	234	352	440	329	119	100	324	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	2,177	2,471	CHINESE TAIPEI
0	0	0	0	0	0	0	0	20	40	58	92	78	49	36	59	59	107	83	119	325	476	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	1,220	1,032	USA
36	143	182	655	528	467	632	230	388	169	391	261	260	229	123	37	123	95	136	331	449	501	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	12,527	15,391	17,170	13,931	14,181	16,127	17,208	

- 1. Source: Raised logsheet data.
- 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 estimates of FAD sets for Kiribati and China reflect their respective WCPFC charter notifications since 2016.
- 14. This table does not include FAD sets for the exemptions under CMM 2014-01 (see Notes 11, 12 and 13)
- 15. "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.
- 16. Annual FAD sets count does include CMM 2017-01 (footnote 2) and CMM 2018-01, CMM 2020-01 AND CMM 2021-01 (footnote 1) FAD Sets of domestic purse seine vessels of PNA countries which are notified as being managed under the PNA 3IA while operating in that PNA CCMs national waters during the 3-month FAD closure period of July September of a particular notified year.
- 17. Figure 11 includes the respective exemptions described in Note 14 and 16.

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

		VES	SELS				ı	JNASSOCIAT	TED SCHOOLS	;						ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR			DAYS		SKIPJ			OWFIN	BIG	EYE	TOTAL		SKIPJ		YELLO'		BIG	EYE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
СК	2019	1	1	73	18	453	100%	0	0%	0	0%	453	43	1,293	75%	121	7%	302	18%	1,716	61	1,746	121	302	2,169
СК	2020	1	1	29	0	0	0%	0	0%	0	0%	0	14	261	75%	38	11%	49	14%	349	14	261	38	49	349
CK	2021	1	1	185	34	949	90%	110	10%	0	0%	1,059	63	2,061	76%	194	7%	457	17%	2,711	97	3,010	304	457	3,770
CK	2022	1	1	310	83	2,262	100%	0	0%	0	0%	2,262	70	1,552	65%	273	11%	560	24%	2,385	154	3,814	273	560	4,647
CN	2010	12	10	2,784	2,095	20,899	72%	7,958	27%	175	1%	29,031	692	17,655	72%	5,504	22%	1,370	6%	24,529	2,788	38,628	13,537	1,549	53,714
CN	2011	12	10	4,019	1,396	10,996	72%	4,145	27%	177	1%	15,318	2,023	47,348	76%	11,017	18%	3,858	6%	62,223	3,419	58,344	15,162	4,036	77,541
CN	2012	13	12	2,205	706	10,687	77%	3,161	23%	55	0%	13,902	1,143	27,758	79%	5,242	15%	2,245	6%	35,245	1,849	38,445	8,402	2,300	49,147
CN	2013	14	13	3,617	2,329	28,237	92%	2,287	7%	216	1%	30,740	1,419	37,115	73%	10,627	21%	3,023	6%	50,765	3,750	65,561	13,003	3,264	81,828
CN	2014	19	18	3,012	1,351	16,688	88%	2,214	12%	164	1%	19,065	1,430	42,752	76%	10,372	18%	3,535	6%	56,659	2,781	59,439	12,585	3,699	75,724
CN	2015 2016	20	16	2,007 504	897 401	11,237 6,284	71% 76%	4,441 1.987	28% 24%	213 11	1% 0%	15,892 8.283	756 140	20,300	74% 72%	4,970 948	18% 24%	2,073 150	8% 4%	27,344 3.931	1,653 544	31,538 9,182	9,411 2,967	2,287 162	43,236 12,311
CN	2016	2	2	761	84	452	85%	51	10%	26	5%	529	502	10.747	72%	3,440	23%	759	5%	14.945	586	11.199	3,490	785	15,474
CN	2017	3	2	608	336	4,803	86%	765	14%	31	1%	5,599	231	7,399	80%	1,305	14%	519	6%	9,224	567	12,202	2,070	550	14,823
CN	2019	0	0	18	5	154	96%	6	4%	0	0%	160	16	539	63%	165	19%	146	17%	850	21	694	170	146	1,010
CN	2020	0	0	0	0	0	0%	0	0%	0	0%	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	0
CN	2021	0	0	0	0	0	0%	0	0%	0	0%	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	0
CN	2022	0	3	489	138	2,838	94%	162	5%	7	0%	3,008	259	9,422	82%	1,528	13%	543	5%	11,493	397	12,260	1,690	551	14,501
EC	2010	14	6	319	21	50	29%	99	57%	25	14%	175	233	6,191	56%	2,706	24%	2,248	20%	11,145	254	6,241	2,806	2,273	11,320
EC	2011	8	7	556	41	242	28%	468	55%	141	17%	851	447	17,007	60%	4,810	17%	6,517	23%	28,333	488	17,249	5,277	6,658	29,184
EC	2012	8	7	605	17	477	83%	51	9%	47	8%	575	444	14,342	64%	3,103	14%	5,124	23%	22,570	461	14,820	3,154	5,172	23,145
EC	2013	7	7	480	70	1,813	81%	238	11%	186	8%	2,236	292	13,644	71%	2,113	11%	3,449	18%	19,206	362	15,457	2,351	3,635	21,442
EC	2014	7	7	477	57	1,160	89%	57	4%	81	6%	1,297	359	14,137	69%	2,868	14%	3,467	17%	20,472	416	15,296	2,925	3,548	21,769
EC	2015	7	4	162	1	0	0%	0	0%	0	0%	0	150	8,378	71%	1,548	13%	1,833	16%	11,759	151	8,378	1,548	1,833	11,759
EC	2016	2	3	42	0	0	0%	0	0%	0	0%	0	50	2,663	68%	633	16%	629	16%	3,925	50	2,663	633	629	3,925
EC	2017	4	4	237	2	68	67%	17		16	16%	102	235	8,708	65%	1,553	12%	3,208	24%	13,469	237	8,776	1,570	3,225	13,571
EC EC	2018	4	4	441 374	12	106 108	82% 19%	395	0% 68%	24 74	19% 13%	130 578	412 327	16,509 18,744	74% 76%	1,614 2,374	7% 10%	4,192 3,439	19% 14%	22,315 24,557	424 336	16,615 18,852	1,614 2,770	4,216 3,513	22,445
EC	2019	0	1	279	2	47	98%	393	0%	1	2%	48	261	9,294	66%	1.997	14%	2.820	20%	14.111	264	9.341	1.997	2,821	25,135 14,159
EC	2020	5	5	304	5	121	88%	9	7%	7	5%	137	271	9,649	60%	2,724	17%	3,721	23%	16,094	276	9,769	2,734	3,728	16,231
EC	2022	5	5	359	4	56	97%	0	0%	2	3%	58	323	8.925	55%	3,110	19%	4,138	26%	16,173	327	8,980	3,111	4,140	16,231
ES	2010	4	4	720	26	625	76%	195	24%	0	0%	820	364	18,916	66%	5,365	19%	4,367	15%	28,648	390	19,541	5,559	4,368	29,468
ES	2011	4	4	753	30	671	50%	646	48%	18	1%	1,334	488	24,314	64%	6,950	18%	6,853	18%	38,117	518	24,985	7,596	6,871	39,451
ES	2012	4	4	787	57	2,374	86%	384	14%	9	0%	2,767	461	18,594	63%	4,743	16%	6,066	21%	29,403	517	20,968	5,127	6,075	32,170
ES	2013	4	4	837	56	1,987	66%	1,029	34%	10	0%	3,026	515	28,081	65%	7,487	17%	7,573	18%	43,141	571	30,068	8,516	7,583	46,167
ES	2014	4	4	753	89	3,365	80%	845	20%	2	0%	4,213	431	25,324	70%	4,311	12%	6,613	18%	36,247	520	28,689	5,156	6,615	40,460
ES	2015	4	4	529	28	1,330	97%	37	3%	1	0%	1,368	326	23,989	75%	4,507	14%	3,345	11%	31,840	355	25,318	4,544	3,346	33,208
ES	2016	2	2	130	1	0	0%	0	0%	0	0%	0	94	6,282	72%	571	7%	1,845	21%	8,699	95	6,282	571	1,845	8,699
ES	2017	2	2	210	0	0	0%	0	0%	0	0%	0	151	7,782	66%	707	6%	3,235	28%	11,724	151	7,782	707	3,235	11,724
ES	2018	2	2	266	4	96	100%	0	0%	0	0%	96	190	7,746	75%	953	9%	1,633	16%	10,332	194	7,842	953	1,633	10,428
ES	2019	2	2	221	0	0	0%	0	0%	0	0%	0	160	7,904	80%	1,153	12%	876	9%	9,934	160	7,904	1,153	876	9,934
ES	2020	2	2	264	3	1	100%	0	0%	0	0%	1	215	7,469	70%	1,805	17%	1,480	14%	10,754	218	7,470	1,805	1,480	10,755
ES	2021	3	3	284	9	389	70%	167	30%	4	1%	560	290	8,323	65%	2,012	16%	2,451	19%	12,786	299	8,713	2,179	2,454	13,346
ES	2022	3	3	286	7	163	65%	86	34%	1	0%	250	293	10,495	61%	3,164	18%	3,668	21%	17,327	300	10,659	3,250	3,669	17,577

Table 4. (continued)

		VESS	SELS				U	INASSOCIATE	ED SCHOOLS	5						ASSOCIATED	SCHOOLS		_				TOTAL		
FLEET	YEAR			DAYS		SKIP	IACK	YELLO	WFIN	BIG	EYE	TOTAL		SKIP	JACK	YELLO	WFIN	BIG	EYE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
FM	2010	7	8	1,305	612	8,472	80%	2,107	20%	66	1%	10,645	419	10,905	78%	2,192	16%	981	7%	14,078	1,031	19,377	4,299	1,048	24,723
FM	2011	7	7	1,641	483	5,971	78%	1,670	22%	20	0%	7,661	790	13,615	72%	3,922	21%	1,296	7%	18,832	1,276	19,594	5,594	1,317	26,505
FM	2012	9	9	1,573	464	6,555	78%	1,768	21%	109	1%	8,432	826	21,777	79%	4,064	15%	1,693	6%	27,535	1,301	28,541	5,874	1,818	36,233
FM	2013	10	10	1,384	450	9,032	87%	1,272	12%	117	1%	10,420	539	12,582	72%	3,541	20%	1,341	8%	17,464	989	21,613	4,813	1,458	27,884
FM	2014	10	10	1,414	611	13,095	85%	2,022	13%	312	2%	15,429	614	16,429	73%	4,357	19%	1,860	8%	22,646	1,225	29,524	6,379	2,172	38,075
FM	2015	12	13	1,924	1,212	26,351	84%	4,694	15%	428	1%	31,473	641	18,645	77%	3,900	16%	1,724	7%	24,270	1,852	44,996	8,595	2,152	55,743
FM	2016	16	18	2,726	1,059	22,198	82%	4,469	17%	316	1%	26,983	1,142	34,953	78%	6,343	14%	3,433	8%	44,728	2,201	57,151	10,811	3,749	71,711
FM	2017	19	20	3,527	1,919	34,226	78%	9,248	21%	300	1%	43,774	1,374	31,639	76%	7,214	17%	2,981	7%	41,833	3,300	65,990	16,483	3,291	85,765
FM	2018	22	22	3,730	2,412	47,596	81%	10,288	18%	638	1%	58,522	1,432	50,257	83%	7,856	13%	2,369	4%	60,482	3,846	97,877	18,154	3,007	119,039
FM	2019	23	25	4,436	3,764	84,537	82%	17,443	17%	1,554	2%	103,534	1,322	43,702	79%	8,692	16%	3,170	6%	55,564	5,093	128,379	26,160	4,731	159,269
FM	2020	27	27	5,164	3,001	63,469	82%	13,797	18%	625	1%	77,891	2,146	75,227	75%	18,215	18%	6,568	7%	100,009	5,152	138,698	32,012	7,193	177,903
FM	2021	28	28	4,918	2,763	52,349	78%	14,133	21%	499	1%	66,982	1,815	63,592	76%	14,123	17%	5,622	7%	83,336	4,579	115,941	28,256	6,121	150,318
FM	2022	28	25	4,565	3,088	57,428	83%	11,079	16%	510	1%	69,017	2,071	70,718	76%	16,824	18%	5,853	6%	93,395	5,159	128,146	27,903	6,363	162,412
JP	2010	37	36	5,695	5,633	135,279	81%	31,036	19%	1,531	1%	167,845	833	25,656	71%	8,270	23%	2,407	7%	36,333	6,566	162,915	40,340	4,111	207,366
JP	2011	40	37	6,524	5,956	92,554	78%	25,911	22%	593	1%	119,057	1,320	39,425	77%	7,637	15%	4,185	8%	51,248	7,306	132,501	33,626	4,808	170,935
JP	2012	41	36	5,448	4,867	103,434	84%	18,042	15%	1,504	1%	122,980	1,619	58,904	80%	10,010	14%	4,509	6%	73,423	6,514	162,617	28,112	6,031	196,761
JP	2013	41	33	5,501	4,759	104,353	87%	14,338	12%	1,538	1%	120,228	1,038	42,262	79%	7,471	14%	3,680	7%	53,413	5,834	147,318	22,010	5,266	174,595
JP	2014	40	32	4,898	4,275	89,115	76%	25,737	22%	2,123	2%	116,975	1,027	38,041	79%	6,621	14%	3,327	7%	47,989	5,342	128,559	32,663	5,530	166,752
JP	2015	40	31	4,195	3,380	87,255	75%	26,485	23%	3,288	3%	117,028	663	19,550	68%	6,171	22%	2,885	10%	28,606	4,169	110,026	33,989	6,735	150,750
JP	2016	37	29	5,002	4,170	82,664	75%	25,094	23%	1,826	2%	109,585	887	24,652	69%	7,624	21%	3,272	9%	35,548	5,136	109,128	33,568	5,302	147,997
JP	2017	38	29	4,693	3,892	76,429	70%	31,233	29%	2,113	2%	109,774	635	19,857	75%	4,910	19%	1,721	7%	26,488	4,650	99,025	37,376	4,109	140,510
JP	2018	34	26	4,068	3,706	95,850	75%	27,781	22%	3,489	3%	127,120	559	20,990	74%	5,777	20%	1,778	6%	28,545	4,420	120,261	35,268	5,964	161,492
JP	2019	36	28	4,193	4,439	104,508	77%	29,367	22%	1,785	1%	135,660	297	10,161	76%	2,454	18%	725	5%	13,340	4,927	119,108	33,869	2,955	155,932
JP	2020	37	28	4,871	4,433	87,569	78%	24,264	22%	1,020	1%	112,853	626	18,391	69%	5,953	22%	2,523	9%	26,867	5,154	107,651	31,496	3,811	142,958
JP	2021	36	31	4,475	2,451	52,384	78%	13,899	21%	646	1%	66,929	907	24,560	71%	7,119	21%	2,717	8%	34,396	4,563	98,457	30,157	3,891	132,505
JP	2022	35	29	4,287	2,728	57,463	82%	12,003	17%	681	1%	70,146	809	25,680	74%	6,536	19%	2,383	7%	34,599	4,917	105,530	27,367	3,642	136,539
KI	2010	5	- 4	693	465	6,980	74%	2,358	25%	59	1%	9,396	245	11,193	71%	2,624	17%	1,873	12%	15,690	741	18,712	5,086	1,946	25,745
	2011	9		1,429 1.851	785	9,602	73%	3,602	27%	28	0%	13,232	554	24,394	74%	4,328	13%	4,468	14%	33,190	1,347	34,046	7,958	4,510	46,514
KI KI	2012	12	12	2.007	1,593 1.443	30,374 27,832	80% 84%	7,629 5,207	20% 16%	162 220	0% 1%	38,164 33.259	492 669	19,673 30.557	82% 78%	2,926 5.625	12% 14%	1,443 2.800	6% 7%	24,041 38.982	2,093 2.113	50,203 58.389	10,620 10.832	1,609 3.020	62,432 72,241
KI	2013	14	15	2.818	2.188	42,432	72%	16,160	27%	320	1%	58,912	830	40.677	81%	5,823	10%	4,356	9%	50,263	3.018	83.109	21.389	4,676	109,174
KI	2014	21	20	2,818	2,188	60,954	86%	9,818	14%	532	1%	71,304	1,082	57,074	81% 87%	5,229	9%	2,328	9% 4%	65,393	3,564	118,028	15,809	2,860	136,698
KI	2015	27	23	4,513	2,482	50,954	80%	11.892	14%	632	1%	63.491	1,082	81.342	80%	11.940	12%	8,207	4% 8%	101.490	4,299	132,311	23,835	8.840	164,985
KI	2016	19	23	4,653	1,815	29,633	73%	10,896	27%	250	1%	40.780	2,554	93,587	83%	12,738	11%	6,499	6%	112,824	4,299	123,248	23,636	6,750	153,634
KI	2017	21	21	4,451	1,548	34,205	81%	7,935	19%	304	1%	42,444	3,004	120,024	82%	16,704	11%	10,107	7%	146,835	4,559	154,376	24,643	10,412	189,431
KI	2018	22	25	5,158	2,625	61,113	89%	7,935	11%	263	0%	68,541	3,036	133,915	84%	19,068	12%	6,065	4%	159,049	5,668	195,190	26,257	6,334	227,781
KI	2019	25	23	4,981	1,499	37,941	86%	5,571	13%	381	1%	43.893	2,792	123,913	79%	22,887	15%	9.667	4% 6%	156,482	4,290	161,870	28,458	10,048	200,375
KI	2020	26	27	5.512	1,574	35,117	80%	8,717	20%	238	1%	44.072	3.192	111,212	81%	18,652	14%	8.346	6%	138,210	4,290	146,329	27,369	8,585	182,282
KI	2021	26	2/	5,451	1,276	30,114	84%	5,504	15%	175	1%	35,793	3,341	126,433	83%	17,654	12%	7,795	5%	151,882	4,766	156,547	23,158	7,970	187,675
NI	2022	20	24	3,431	1,2/6	30,114	04%	5,504	13%	1/5	1%	35,793	3,341	120,433	63%	17,004	12%	1,195	5%	131,082	4,017	130,347	23,138	7,970	10/,0/3

Table 4. (continued)

		VES	SELS					UNASSOCIAT	ED SCHOOLS						•	ASSOCIATED	O SCHOOLS						TOTAL		
FLEET	YEAR			DAYS		SKIPJ	ACK	YELLO	WFIN	BIGI	EYE	TOTAL		SKIP		YELLO		BIG	EYE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
KR	2010	29	28	7,178	6,308	143,976	70%	58,773	29%	2,279	1%	205,027	1,117	55,161	76%	10,855	15%	6,190	9%	72,206	7,433	199,192	69,647	8,474	277,313
KR	2011	28	28	6,552	4,493	79,418	73%	29,166	27%	817	1%	109,401	2,128	74,701	76%	16,498	17%	6,906	7%	98,106	6,627	154,252	45,707	7,743	207,702
KR	2012	28	28	5,836	6,099	137,264	74%	47,307	26%	1,294	1%	185,865	1,433	63,810	84%	9,817	13%	2,699	4%	76,326	7,534	201,074	57,124	3,993	262,191
KR	2013	27	28	5,983	6,068	131,527	81%	29,592	18%	2,073	1%	163,192	1,171	47,865	77%	10,590	17%	3,984	6%	62,439	7,239	179,392	40,182	6,057	225,631
KR	2014	28	29	5,437	5,820	156,866	78%	42,272	21%	1,083	1%	200,221	1,097	59,661	85%	6,757	10%	3,409	5%	69,827	6,917	216,528	49,029	4,491	270,048
KR	2015	25	26	4,664	4,561	126,558	81%	29,045	19%	1,692	1%	157,294	1,534	97,890	88%	9,270	8%	3,794	3%	110,953	6,094	224,447	38,314	5,486	268,248
KR	2016	25	25	4,755	4,260	132,427	78%	35,295	21%	1,592	1%	169,313	1,590	93,954	86%	9,546	9%	5,638	5%	109,139	5,851	226,381	44,841	7,230	278,452
KR	2017	26	26	5,545	4,898	100,118	69%	44,085	30%	887	1%	145,090	1,881	85,276	84%	11,320	11%	5,143	5%	101,739	6,782	185,394	55,405	6,030	246,829
KR	2018	27	25	5,645	4,383	105,161	79%	27,325	20%	1,530	1%	134,016	2,395	115,529	87%	10,598	8%	7,407	6%	133,534	6,777	220,690	37,922	8,937	267,549
KR	2019	26	26	5,668	5,795	177,657	86%	27,860	14%	983	1%	206,500	1,811	96,615	89%	8,082	8%	3,623	3%	108,320	7,608	274,273	35,942	4,605	314,820
KR	2020	27	27	5,882	5,331	131,741	79%	33,485	20%	864	1%	166,091	1,500	70,734	82%	10,107	12%	5,382	6%	86,224	6,833	202,476	43,592	6,246	252,314
KR	2021	23	23	5,111	4,606	110,496	75%	35,111	24%	858	1%	146,465	1,700	67,466	81%	11,734	14%	4,588	6%	83,788	6,307	177,962	46,845	5,446	230,253
KR	2022	22	21	5,003	4,723	116,067	80%	28,148	19%	1,043	1%	145,258	1,561	69,498	82%	11,728	14%	3,769	4%	84,994	6,284	185,564	39,876	4,812	230,252
MH	2010	10 10	10 10	1,670	1,228 547	18,123	73% 84%	6,139	25%	641 69	3%	24,903	636	25,515	76% 74%	5,183 11.111	15% 14%	3,020	9% 12%	33,718	1,881	43,847	11,640	3,675	59,162
MH	2011	10	10	2,521 1,989	748	7,988 12,054	74%	1,504 4,233	16% 26%	87	1% 1%	9,561 16,375	1,550 1,394	59,677 45,668	80%	7,005	14%	9,834 4,547	12% 8%	80,622 57,220	2,097 2,142	67,665 57,722	12,616 11,239	9,902 4,634	90,183 73,595
MH	2012	10	10	2,132	1,075	18,063	90%	1,969	10%	45	0%	20,078	1,394	42,921	75%	9,594	17%	4,980	9%	57,495	2,142	61,028	11,239	5,029	77,635
MH	2013	12	11	2,132	1,127	18,934	88%	2.549	12%	113	1%	21,596	1,219	43,465	80%	7,071	13%	3,764	7%	54,300	2,346	62.399	9,620	3,877	75,896
MH	2015	12	12	2,221	1.857	36.174	95%	1.759	5%	33	0%	37.965	1.061	41.758	85%	5.037	10%	2.110	4%	48.905	2,919	77.932	6.795	2.142	86,870
MH	2016	10	10	1,970	1,305	22,904	82%	5,009	18%	114	0%	28,027	671	26,622	81%	4,321	13%	2,003	6%	32,946	1,976	49,526	9,330	2,118	60,973
MH	2017	10	10	2.152	537	6,822	71%	2,654	28%	78	1%	9,553	1,319	42,097	76%	8,834	16%	4,300	8%	55,231	1,858	48,918	11.488	4,377	64,784
MH	2018	13	13	1.941	787	12,373	87%	1,890	13%	15	0%	14,278	1,228	48,310	82%	7,615	13%	3,167	5%	59,092	2,016	60,705	9,515	3,185	73,406
МН	2019	11	11	2,449	1,701	32,371	79%	8,675	21%	136	0%	41,182	1,108	44,729	82%	7,365	14%	2,288	4%	54,382	2,810	77,116	16,051	2,428	95,595
МН	2020	11	11	2,107	1,070	20,532	90%	2,230	10%	83	0%	22,845	1,053	48,742	80%	8,745	14%	3,365	6%	60,852	2,123	69,274	10,975	3,448	83,697
МН	2021	11	11	2,262	657	10,506	77%	3,010	22%	72	1%	13,589	1,559	63,498	82%	9,542	12%	4,397	6%	77,437	2,216	74,005	12,552	4,470	91,026
МН	2022	11	11	2,119	622	10,668	88%	1,417	12%	50	0%	12,135	1,641	60,653	82%	9,131	12%	4,086	6%	73,869	2,263	71,321	10,548	4,136	86,005
NR	2018	2	2	166	123	1,415	45%	1,713	55%	1	0%	3,130	90	5,258	91%	360	6%	133	2%	5,751	213	6,673	2,073	134	8,881
NR	2019	9	9	744	704	19,684	93%	1,431	7%	88	0%	21,203	258	10,277	87%	1,293	11%	291	3%	11,861	968	30,093	2,759	397	33,249
NR	2020	15	14	2,416	1,817	35,336	83%	7,167	17%	137	0%	42,640	1,079	37,745	73%	10,657	21%	3,002	6%	51,405	2,908	73,588	18,101	3,230	94,919
NR	2021	15	18	2,906	1,869	31,307	72%	11,845	27%	277	1%	43,428	1,599	55,666	73%	16,893	22%	4,105	5%	76,663	3,468	86,973	28,737	4,381	120,091
NR	2022	15	17	2,810	1,724	28,250	80%	6,902	20%	184	1%	35,336	1,779	61,435	77%	14,503	18%	3,525	4%	79,463	3,504	89,692	21,414	3,709	114,815
NZ	2010	4	4	652	425	8,641	97%	196	2%	57	1%	8,895	191	7,153	76%	1,780	19%	478	5%	9,410	617	15,794	1,976	535	18,304
NZ	2011	3	3	474	174	3,370	81%	728	18%	42	1%	4,140	197	5,676	74%	1,686	22%	328	4%	7,690	371	9,047	2,413	371	11,831
NZ	2012	4	4	488	288	5,044	83%	894	15%	109	2%	6,047	165	3,599	77%	781	17%	305	7%	4,685	453	8,643	1,675	414	10,732
NZ	2013	4	4	468	270	5,049	91%	454	8%	29	1%	5,531	134	4,447	74%	1,139	19%	401	7%	5,987	404	9,496	1,592	430	11,518
NZ	2014	5	5	533	304	3,786	77%	960	20%	165	3%	4,911	161	4,297	77%	757	14%	509	9%	5,563	465	8,084	1,717	674	10,474
NZ	2015	2	2	295	316	4,930	93%	267	5%	95	2%	5,291	43	1,838	82%	310	14%	97	4%	2,245	359	6,768	576	191	7,536
NZ	2016	2	2	218	265	3,943	96%	117	3%	46	1%	4,106	21	1,247	79%	281	18%	45	3%	1,573	286	5,190	398	91	5,679
NZ	2017	1	1	126 119	23 61	569 247	81% 20%	134 967	19% 80%	2	0%	704 1,216	75 41	2,803 1,554	85% 88%	373 108	11%	126 109	4% 6%	3,301 1,772	98 102	3,372 1,801	507 1,075	126 111	4,005
NZ NZ	2018	1	1	119	91	2,230	94%	132	80% 6%	21	0% 1%	2,384	38	1,554	76%	304	6% 16%	109	6% 8%	1,772	102	3,659	1,075 436	111	2,987 4,263
NZ NZ	2019	1	1	63	22	1,015	94%	45	4%	8	1%	1.068	2	1,429	84%	12	10%	147	8% 5%	1,879	24	1.112	436 57	168	1,183
NZ	2020	U	0	03	22	1,015	0%	0	0%	0	0%	1,008	0	0	0%	0	0%	0	0%	113	0	1,112	0	0	0
NZ	2021	0	0	0	0	0	0%	0	0%	0	0%	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	0
INZ	2022	U	U	U	U	U	0%	U	0%	U	U%	U	U	U	070	U	0%	U	U%	U	U	U	U	U	U

Table 4. (continued)

		VESS	SELS					JNASSOCIAT	ED SCHOOLS							ASSOCIATED	O SCHOOLS		_				TOTAL		
FLEET	YEAR			DAYS		SKIP.		YELLO		BIG	EYE	TOTAL		SKIP.	JACK	YELLO		BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
PG	2010	45	50	8,846	5,471	91,430	74%	31,322	25%	744	1%	123,496	2,620	56,272	69%	20,890	26%	4,343	5%	81,505	8,099	147,834	52,248	5,102	205,184
PG	2011	49	52	9,270	5,018	70,033	75%	22,099	24%	923	1%	93,055	3,145	57,585	70%	20,845	25%	4,449	5%	82,879	8,176	127,873	43,046	5,400	176,319
PG	2012	51	52	9,636	6,530	96,999	68%	44,352	31%	1,559	1%	142,910	2,978	62,983	68%	23,923	26%	5,614	6%	92,520	9,559	160,463	68,478	7,222	236,163
PG	2013	51	52	9,533	6,862	94,910	67%	44,971	32%	2,153	2%	142,034	2,453	50,492	65%	22,248	29%	4,462	6%	77,202	9,371	146,087	67,790	6,678	220,555
PG	2014	55	53	9,315	6,440	105,495	73%	36,380	25%	1,894	1%	143,770	2,307	68,450	76%	17,904	20%	4,192	5%	90,546	8,774	174,206	54,548	6,127	234,881
PG	2015	53	54	6,684	5,686	103,417	71%	39,987	28%	1,601	1%	145,005	1,602	50,497	73%	14,468	21%	4,513	7%	69,478	7,292	153,933	54,463	6,116	214,512
PG	2016	67	41	9,016	7,625	127,121	65%	66,143	34%	3,674	2%	196,937	2,221	76,878	75%	19,739	19%	6,477	6%	103,093	9,883	205,100	86,457	10,241	301,797
PG	2017	67	58	10,956	10,325	128,177	56%	96,256	42%	3,833	2%	228,266	2,147	52,015	69%	18,568	25%	4,331	6%	74,914	12,577	182,030	116,160	8,315	306,505
PG	2018	56	53	9,691	10,346	154,773	66%	75,046	32%	4,050	2%	233,869	1,974	57,332	75%	16,441	21%	3,090	4%	76,863	12,349	212,635	91,711	7,171	311,517
PG	2019	50	51	6,627	7,498	144,474	71%	56,518	28%	2,307	1%	203,298	1,201	49,225	82%	9,212	15%	1,504	3%	59,941	8,768	195,062	66,473	3,854	265,388
PG	2020	38	37	6,708	7,176	94,691	55%	77,233	45%	1,694	1%	173,618	566	15,163	66%	7,002	30%	898	4%	23,063	7,803	110,404	85,298	2,619	198,321
PG	2021	40	40	6,319	5,802	87,049	61%	53,267	38%	1,849	1%	142,166	796	15,171	57%	9,969	37%	1,593	6%	26,733	6,614	102,393	63,500	3,447	169,340
PG	2022	40	41	6,028	7,523	103,431	62%	62,224	37%	1,132	1%	166,786	605	13,092	57%	8,950	39%	832	4%	22,874	8,137	116,648	71,267	1,964	189,879
PH	2010	25	22	4,469	2,289	25,892	55%	20,064	43%	1,199	3%	47,155	795	16,672	66%	5,977	24%	2,671	11%	25,320	3,186	43,505	26,639	3,969	74,113
PH	2011	25	23	5,296	2,719	28,560	62%	17,211	38%	179	0%	45,950	1,381	22,886	68%	9,991	30%	870	3%	33,746	4,191	52,163	27,583	1,069	80,815
PH	2012	21	29	5,580	3,560	35,080	53%	29,224	44%	1,556	2%	65,860	1,649	27,550	63%	13,888	32%	2,337	5%	43,775	5,248	63,084	43,326	3,918	110,328
PH	2013	27	30	4,450	2,635	22,376	44%	27,892	54%	1,186	2%	51,455	1,440	21,330	57%	13,654	37%	2,462	7%	37,446	4,080	43,756	41,611	3,649	89,016
PH	2014	27	29	4,330	3,242	46,304	58%	31,683	40%	2,198	3%	80,184	995	15,071	57%	9,128	35%	2,262	9%	26,461	4,251	61,522	40,964	4,494	106,980
PH	2015	23	29	2,822	1,971	25,395	56%	18,649	41%	984	2%	45,028	812	16,689	57%	10,617	36%	2,245	8%	29,551	2,791	42,386	29,596	3,278	75,260
PH	2016	17	18	1,956	1,567	26,137	56%	20,196	43%	740	2%	47,073	521	14,073	63%	6,780	31%	1,371	6%	22,224	2,134	41,106	27,557	2,216	70,879
PH	2017	12	8	1,272	1,006	12,011	49%	11,953	49%	598	2%	24,562	155	2,727	59%	1,731	38%	158	3%	4,616	1,190	15,199	14,032	780	30,011
PH	2018	12	2	314	340	5,607	64%	3,095	35%	63	1%	8,766	73	1,365	57%	953	40%	63	3%	2,381	414	6,975	4,049	127	11,151
PH	2019	12	1	16	22	408	63%	241	37%	4	1%	653	0	0	0%	0	0%	0	0%	0	22	408	241	4	653
PH	2020	6	0	798 0	869	13,266	49%	13,432	50%	281	1%	26,980	23	720 0	61%	403	34% 0%	60	5% 0%	1,183	892 0	13,986	13,835	341	28,163
PH	2021	0	0	266	328	4.153	0% 62%	2,489	0% 37%	65	0% 1%	6.708	11	324	0% 58%	0 211	38%	24	4%	0 559	339	4.478	2.701	89	7,267
SB	2022	-		485	95	1,924	55%	1,535	44%	21	1%	3,480	353	5,729	59%	3,791	39%	218	2%	9.737	448	7.652	5.326	239	13,217
SB	2010		5	1.017	119	1,700	60%	1,333	40%	7	0%	2,836	742	12.983	57%	9.333	41%	409	2%	22.725	861	14,683	10.462	416	25,562
SB	2011	5	5	1.094	98	1,111	53%	978	47%	7	0%	2,096	833	14,039	58%	10.003	41%	362	2%	24,404	931	15,150	10,402	369	26,500
SB	2012	5	5	1.093	213	1.555	35%	2.930	65%	26	1%	4.511	664	11.227	55%	8.603	43%	429	2%	20.259	876	12,782	11.533	455	24,770
SB	2013	5	5	1.212	269	2.878	37%	4.965	63%	26	0%	7.869	786	11,155	50%	10.927	48%	473	2%	22,554	1.056	14.033	15.893	499	30,425
SB	2014	8	6	1,343	389	3,047	33%	6,282	67%	54	1%	9.382	787	10,340	53%	8.872	46%	198	1%	19,410	1,036	13,386	15,154	252	28,792
SB	2016	8	8	2.217	1.047	14,804	60%	9.374	38%	323	1%	24.501	1,072	18,450	59%	12.290	39%	450	1%	31,191	2.132	33,485	21.806	775	56,067
SB	2017	10	9	2.068	1,127	12,689	60%	8,294	39%	50	0%	21.034	873	14,709	60%	9.342	38%	623	3%	24.674	2,001	27.400	17.639	673	45,712
SB	2018	10	10	2,102	808	9,805	68%	4,598	32%	22	0%	14,426	1,169	24,674	64%	13,092	34%	687	2%	38,452	1,978	34,479	17,690	709	52,878
SB	2019	11	11	2,038	856	16,197	79%	4,245	21%	124	1%	20,566	1,110	24,224	67%	11,815	33%	362	1%	36,401	1,971	40,426	16,065	486	56,977
SB	2020	11	10	1.709	632	9,062	65%	4.848	35%	37	0%	13.948	857	11.186	58%	8.005	41%	245	1%	19,436	1,493	20.287	12.934	282	33,502
SB	2021	8	8	1.731	943	13,066	65%	6.962	35%	91	1%	20,119	763	13,069	59%	9,005	41%	159	1%	22,233	1.707	26,143	15.974	250	42,367
SB	2022	8	10	1.685	502	6,491	69%	2.843	30%	15	0%	9.349	947	19,187	69%	8.193	30%	347	1%	27,728	1,449	25,679	11,037	362	37,077
_ 55	2022	- 0	10	1,003	302	0,431	0370	2,043	3070	13	370	3,343	547	13,107	0370	0,133	3070	347	1/0	21,120	1,773	23,073	11,007	332	31,011

Table 4. (continued)

		VESS	SELS					JNASSOCIATI	ED SCHOOLS							ASSOCIATED	O SCHOOLS					_	TOTAL	_	
FLEET	YEAR			DAYS		SKIPJ		YELLO			EYE	TOTAL		SKIP.	JACK	YELLO		BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
SV	2010	2	2	210	3	28	100%	0	0%	0	0%	28	136	4,758	65%	1,557	21%	1,028	14%	7,344	139	4,786	1,558	1,028	7,372
SV	2011	2	2	268	3	15	18%	69	81%	0	0%	85	185	8,393	69%	1,624	13%	2,125	18%	12,141	188	8,409	1,693	2,125	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	8,531	63%	2,783	20%	2,318	17%	13,632	217	8,546	2,783	2,318	13,647
SV	2013	4	4	398	13	270	66%	141	34%	1	0%	412	296	11,842	71%	2,748	16%	2,215	13%	16,805	309	12,112	2,889	2,216	17,217
SV	2014	4	4	485	92	2,007	100%	11	1%	0	0%	2,018	303	10,278	67%	2,960	19%	2,222	14%	15,461	394	12,285	2,971	2,222	17,479
SV	2015	2	2	185	7	0	0%	0	0%	0	0%	0	177	11,929	78%	1,980	13%	1,392	9%	15,301	184	11,929	1,980	1,392	15,301
SV	2016	3	2	112	6	668	99%	9	1%	0	0%	677	95	4,957	75%	741	11%	929	14%	6,626	101	5,624	750	929	7,303
SV	2017	1	2	76	2	0	0%	31	100%	0	0%	31	73	2,996	70%	560	13%	731	17%	4,287	75	2,996	591	731	4,318
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,336	76%	432	10%	647	15%	4,415	88	3,611	432	647	4,690
SV	2019	2	2	42	2	0	0%	0	0%	0	0%	0	50	2,220	76%	338	12%	381	13%	2,939	52	2,220	338	381	2,939
SV	2020	2	2	62	5	246	91%	24	9%	0	0%	270	58	2,688	65%	595	14%	837	20%	4,120	63	2,934	618	838	4,390
SV	2021	2	2	94	0	0	0%	0	0%	0	0%	0	93	3,720	64%	1,133	19%	1,005	17%	5,858	93	3,720	1,133	1,005	5,858
SV	2022	2	2	70	0	0	0%	0	0%	0	0%	0	76	2,592	59%	938	21%	850	19%	4,380	76	2,592	938	850	4,380
TV	2010	1	1	271	319	6,736	75%	2,225	25%	35	0%	8,997	40	1,025	66%	335	22%	197	13%	1,557	359	7,762	2,560	232	10,554
TV	2011	1	1	311	283	3,827	72%	1,509	28%	13	0%	5,350	58	1,657	80%	293	14%	116	6%	2,066	341	5,484	1,802	130	7,416
TV	2012	1	1	271	301	3,135	57%	2,332	42%	32	1%	5,500	92	4,475	81%	815	15%	264	5%	5,554	393	7,610	3,148	296	11,054
TV	2013	1	1	273	353	7,195	93%	438	6%	88	1%	7,721	79	2,949	80%	626	17%	121	3%	3,695	432	10,144	1,063	209	11,416
TV	2014	1	1	159	146	3,391	92% 97%	251 124	7% 3%	33	1%	3,675	49	1,951	86%	255	11% 6%	61	3% 1%	2,268	195	5,342	506	94	5,943
TV	2015	1	1	186	174	3,565				1	0%	3,690	36	1,658	93%	102	• , .	20	-,-	1,780	210	5,223	227	21 252	5,470
TV	2016	1	1	234	93 84	2,445	97%	74 1.177	3% 39%	60	0% 2%	2,520	59 59	2,689	75%	649 695	18% 27%	252 129	7% 5%	3,590	152 143	5,134	723	188	6,110
TV	2017			161 208	160	1,819 3.193	60% 74%	1,177	25%	44	1%	3,056 4,305	108	1,761 5.548	68% 81%	494	7%	790	12%	2,585 6.831	268	3,580 8,741	1,872 1.561	834	5,641 11,136
TV	2018	1	1	208	106	2,705	74% 87%	411	13%	11	0%	3.127	83	3,385	93%	494 171	7% 5%	92	3%	3.648	189	6.090	582	103	6,775
TV	2019	3 T	3 T	308	96	2,703	89%	256	10%	11	0%	2,460	119	6,361	85%	563	8%	550	3% 7%	7,475	215	8,561	819	554	9,935
TV	2021	6	6	985	653	13,558	80%	3,290	19%	69	0%	16,917	325	10,339	81%	1,641	13%	740	6%	12,720	978	23,897	4,931	809	29,637
TV	2022	6	6	1.247	954	16,053	81%	3,601	18%	111	1%	19.765	478	17,745	82%	2,920	14%	991	5%	21,656	1.432	33,798	6.521	1.102	41,421
TW	2010	34	30	7.865	6,413	99,099	81%	22,792	19%	718	1%	122,609	1.709	55,000	72%	15,370	20%	5,871	8%	76,241	8,122	154,098	38.163	6,588	198,850
TW	2011	34	31	8,801	4,763	56,191	81%	12.276	18%	571	1%	69.037	2,955	78.921	74%	19.508	18%	8,468	8%	106,897	7.718	135,112	31.784	9.039	175,935
TW	2012	34	33	7,146	4,660	61,048	71%	24,130	28%	895	1%	86,073	2,940	89,478	78%	17,216	15%	7,885	7%	114,578	7,600	150,526	41,345	8,779	200,651
TW	2013	34	34	7.706	6.171	83,516	83%	16.012	16%	1.033	1%	100.562	2,638	81,200	73%	21,530	19%	9,190	8%	111.919	8.809	164,716	37.542	10,223	212,481
TW	2014	34	36	6,845	5,749	104,008	88%	12,903	11%	1,294	1%	118,205	2,654	90,655	76%	20,248	17%	8,049	7%	118,952	8,404	194,663	33,151	9,342	237,157
TW	2015	34	34	5,141	4,639	79,535	76%	23,865	23%	1,351	1%	104,751	1,785	71,689	80%	12,249	14%	5,560	6%	89,498	6,424	151,224	36,113	6,911	194,249
TW	2016	34	31	5,273	4,785	80,905	71%	32,128	28%	1,312	1%	114,345	1,511	54,977	74%	12,904	17%	6,161	8%	74,043	6,298	135,883	45,032	7,473	188,388
TW	2017	31	30	5,461	5,167	64,057	67%	30,911	32%	982	1%	95,949	1,904	56,140	77%	12,716	17%	4,113	6%	72,968	7,072	120,233	43,629	5,096	168,958
TW	2018	27	29	5,185	4,634	82,338	85%	13,974	14%	654	1%	96,966	2,292	78,475	79%	15,754	16%	5,242	5%	99,470	6,927	160,812	29,728	5,896	196,436
TW	2019	30	30	5,231	5,659	119,796	83%	24,427	17%	955	1%	145,178	2,042	76,958	81%	14,155	15%	4,294	5%	95,408	7,708	196,821	38,590	5,254	240,665
TW	2020	29	28	4,501	4,100	76,032	84%	14,381	16%	522	1%	90,935	1,878	59,051	69%	18,905	22%	7,628	9%	85,583	5,978	135,083	33,286	8,150	176,519
TW	2021	29	29	5,078	4,479	80,549	74%	27,747	25%	763	1%	109,059	2,187	80,242	75%	19,163	18%	7,216	7%	106,620	6,666	160,791	46,910	7,979	215,680
TW	2022	29	26	4,657	4,135	74,453	83%	14,416	16%	576	1%	89,445	2,477	92,636	76%	21,285	18%	7,840	6%	121,760	6,612	167,088	35,701	8,416	211,205

Table 4. (continued)

		VESS	SELS				·	JNASSOCIATE	D SCHOOLS				•	•		ASSOCIATED	SCHOOLS	•					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	IACK	YELLO'	WFIN	BIGI	EYE	TOTAL		SKIPJ	ACK	YELLO	WFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		1D	LUG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
US	2010	37	37	8,220	6,331	109,954	83%	21,843	16%	1,011	1%	132,808	2,397	90,944	81%	15,059	13%	6,333	6%	112,336	8,738	201,150	37,002	7,372	245,524
US	2011	37	36	8,048	3,008	48,985	82%	10,837	18%	122	0%	59,943	3,401	112,189	78%	19,841	14%	11,267	8%	143,297	6,409	161,173	30,678	11,389	203,240
US	2012	39	40	8,789	5,622	98,546	80%	24,048	19%	1,195	1%	123,790	3,464	109,484	81%	17,955	13%	8,472	6%	135,911	9,088	208,076	42,012	9,671	259,759
US	2013	40	42	8,380	5,028	97,078	92%	8,210	8%	796	1%	106,085	3,152	113,599	77%	23,223	16%	11,249	8%	148,072	8,183	210,774	31,439	12,057	254,270
US	2014	40	40	9,069	6,268	117,317	84%	22,155	16%	424	0%	139,896	3,717	147,230	85%	17,209	10%	8,670	5%	173,109	9,987	264,547	39,364	9,094	313,005
US	2015	39	39	6,988	5,904	112,034	89%	13,201	11%	617	1%	125,853	2,052	96,111	86%	10,976	10%	5,139	5%	112,226	7,956	208,146	24,177	5,756	238,079
US	2016	37	34	5,571	3,333	75,685	88%	10,432	12%	399	1%	86,515	2,177	88,673	77%	17,215	15%	8,733	8%	114,621	5,511	164,368	27,650	9,134	201,152
US	2017	34	34	5,623	2,652	43,827	74%	15,205	26%	296	1%	59,328	2,442	84,031	78%	15,896	15%	7,194	7%	107,121	5,095	127,858	31,101	7,489	166,449
US	2018	34	35	5,758	2,828	54,078	78%	15,037	22%	211	0%	69,326	2,910	101,686	79%	16,155	13%	10,285	8%	128,125	5,738	155,764	31,192	10,495	197,451
US	2019	31	30	4,323	3,119	69,221	85%	12,309	15%	297	0%	81,827	1,894	69,377	82%	10,364	12%	4,954	6%	84,696	5,015	138,635	22,684	5,261	166,580
US	2020	23	23	3,699	1,578	38,159	95%	1,828	5%	205	1%	40,192	1,727	73,680	76%	13,074	14%	10,259	11%	97,014	3,305	111,839	14,902	10,464	137,205
US	2021	21	17	1,431	81	1,832	94%	120	6%	4	0%	1,957	1,220	35,898	74%	7,316	15%	5,301	11%	48,515	1,301	37,730	7,436	5,305	50,471
US	2022	14	12	1,324	198	4,914	81%	1,170	19%	20	0%	6,103	1,033	35,467	72%	7,774	16%	6,355	13%	49,596	1,231	40,381	8,944	6,375	55,699
VU	2010	5	5	872	469	10,444	79%	2,747	21%	85	1%	13,276	198	8,455	81%	1,408	14%	577	6%	10,440	668	18,900	4,157	663	23,719
VU	2011	6	4	1,142	287	5,795	87%	879	13%	21	0%	6,695	391	13,927	84%	2,351	14%	409	3%	16,688	678	19,722	3,230	430	23,382
VU	2012	6	3	775	472	8,827	60%	5,876	40%	124	1%	14,827	268	9,876	81%	1,569	13%	730	6%	12,175	740	18,702	7,445	854	27,002
VU	2013	6	4	974	607	11,459	85%	1,989	15%	42	0%	13,490	263	10,251	81%	1,791	14%	669	5%	12,712	870	21,710	3,780	711	26,202
VU	2014	3	3	685	362	8,536	86%	1,331	13%	39	0%	9,906	230	9,036	83%	1,189	11%	630	6%	10,855	592	17,572	2,521	669	20,761
VU	2015	3	3	286	105	1,644	96%	77	5%	1	0%	1,722	125	5,922	89%	555	8%	146	2%	6,623	230	7,566	632	147	8,345
VU	2016	3	3	165	40	1,250	90%	122	9%	11	1%	1,382	37	2,586	86%	69	2%	357	12%	3,012	78	3,836	191	367	4,394
VU	2017	3	3	249	119	1,449	65%	786	35%	7	0%	2,242	122	2,997	65%	649	14%	958	21%	4,603	241	4,446	1,435	964	6,845
VU	2018	2	2	313	337	6,394	81%	1,465	19%	53	1%	7,912	96	3,932	85%	412	9%	269	6%	4,613	433	10,326	1,877	322	12,525
VU	2019	5	6	573	739	22,953	89%	2,567	10%	320	1%	25,840	138	7,223	84%	629	7%	706	8%	8,558	878	30,176	3,196	1,027	34,398
VU	2020	6	6	915	965	23,086	81%	5,168	18%	230	1%	28,485	334	13,618	74%	2,721	15%	2,060	11%	18,400	1,299	36,705	7,890	2,291	46,885
VU	2021	7	7	1,027	947	20,545	77%	5,997	23%	135	1%	26,676	449	16,628	77%	3,550	16%	1,435	7%	21,613	1,396	37,173	9,546	1,570	48,289
VU	2022	7	8	1,317	1,514	33,914	79%	8,630	20%	249	1%	42,794	506	19,591	76%	4,675	18%	1,436	6%	25,702	2,021	53,505	13,305	1,686	68,496

Table 4. (continued)

	VE	ESSE	ELS				UNAS	SOCIATE	D SCHO	OLS					ASS	OCIATED	SCHO	OOLS					TOTAL		
YEA		В	.og	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	EYE	TOTAL		SKIPJA	СК	YELLOV	VFIN	BIGE	ſΕ	TOTAL		SKJ	YFT	BET	TOTAL
	'''		.00		SETS	МТ	%	МТ	%	МТ	%	МТ	SETS	МТ	%	МТ	%	МТ	%	МТ	SETS	МТ	МТ	МТ	МТ
20	010 27	76	262	52,843	38,227	688,315	76%	211,052	23%	8,632	1%	907,999	13,416	428,089	73%	114,475	19%	45,460	8%	588,022	51,922	1,120,589	327,814	54,444	1,502,847
2	011 27	78	267	58,730	30,085	425,329	76%	133,629	24%	3,741	1%	562,696	21,874	615,892	73%	153,574	18%	72,504	9%	841,970	52,111	1,042,905	287,835	76,359	1,407,098
20	012 28	87	286	54,470	36,210	613,723	73%	216,502	26%	8,764	1%	838,990	20,328	601,040	76%	134,408	17%	56,577	7%	792,025	56,676	1,216,388	351,504	65,459	1,633,351
20	013 29	97	293	55,420	38,537	649,312	79%	160,874	20%	9,758	1%	819,944	18,058	560,728	72%	155,146	20%	62,079	8%	777,953	56,701	1,211,828	316,968	71,990	1,600,785
20	014 30	09	306	53,404	38,425	733,539	77%	203,801	22%	10,299	1%	947,637	18,084	639,445	78%	125,128	15%	56,294	7%	820,868	56,593	1,374,794	329,651	66,748	1,771,193
20	015 30	07	303	43,319	34,266	695,851	78%	181,832	20%	11,160	1%	888,842	13,835	555,395	80%	103,702	15%	39,191	6%	698,288	48,253	1,255,019	287,347	50,966	1,593,332
20	016 29	93	278	44,218	32,461	647,618	74%	221,283	25%	10,724	1%	879,625	13,938	532,129	77%	109,465	16%	49,927	7%	691,523	46,569	1,183,636	332,794	61,054	1,577,484
20	017 28	82	279	47,810	33,337	509,737	65%	259,204	33%	9,469	1%	778,410	16,806	530,177	77%	114,868	17%	46,189	7%	691,228	50,416	1,045,142	377,014	56,117	1,478,274
20	018 27	74	269	44,985	32,875	624,432	75%	192,594	23%	11,233	1%	828,261	18,195	668,358	80%	115,252	14%	51,896	6%	835,505	51,265	1,296,942	309,809	63,863	1,670,613
20	019 2	281	265	42,539	37,152	858,569	81%	193,192	18%	8,922	1%	1,060,684	14,934	601,920	82%	97,755	13%	33,365	5%	733,043	52,385	1,466,850	293,857	42,826	1,803,533
20	20 26	68	253	44,756	32,600	634,393	75%	203,729	24%	6,092	1%	844,218	15,250	574,355	75%	131,684	17%	57,399	8%	763,442	48,028	1,211,539	338,115	63,879	1,613,533
20	021 2	261	256	42,621	26,873	510,217	73%	184,384	26%	5,512	1%	700,115	17,229	581,094	75%	134,770	18%	53,853	7%	769,713	45,326	1,113,004	328,564	59,898	1,501,466
20	22 25	52	244	42,271	29,547	548,718	77%	160,674	22%	4,821	1%	714,213	18,280	645,445	77%	139,397	17%	54,995	7%	839,835	49,218	1,216,683	309,003	60,394	1,586,080

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

Table 5. Annual high seas FAD sets, by fleet, 2015–2022.

CCM	2015	2016	2017	2018	2019	2020	2021	2022	Notes
CHINA	0	3	1	2	0	0	0	16	
COOK ISLANDS	0	0	0	0	42	14	63	27	4, 5
ECUADOR	0	0	0	0	0	0	0	0	4, 5
EL SALVADOR	50	22	10	29	8	30	28	30	4
EU-SPAIN	149	64	128	110	101	151	238	219	4
FSM	59	164	48	135	196	182	230	84	
JAPAN	1	3	0	0	1	11	2	0	
KIRIBATI	209	374	417	471	463	334	317	170	7
MARSHALL ISLANDS	168	65	423	143	265	277	281	141	4
NAURU	0	0	0	51	55	211	55	54	4
NEW ZEALAND	31	5	75	40	36	2	0	0	4
PAPUA NEW GUINEA	139	14	0	0	0	0	0	0	
PHILIPPINES	1	0	0	3	29	0	0	0	6
REPUBLIC OF KOREA	51	103	3	114	87	74	76	17	
SOLOMON ISLANDS	0	0	22	16	15	2	0	0	4
CHINESE TAIPEI	23	55	0	6	23	17	26	35	
TUVALU	4	34	41	27	19	77	113	31	4
USA	526	296	0	480	425	710	579	393	_
VANUATU	0	37	100	24	17	90	101	44	3

- 1. This table has been prepared considering the language of CMM 2016-01 paragraph 18 footnote 5 that states "The high seas FAD closure in paragraph 18 does not apply in 2017 to a CCM that has achieved a verifiable reduction in bigeye catches by its purse seine vessels to 55% from current levels (2010-2012), to be reviewed on the basis of the advice of the Scientific Committee. A CCM that has qualified for the above mentioned exemption shall maintain a verifiable reduction in bigeye catches by its purse seine vessels to 55% from the reference levels (2010-2012) also in the course of 2017."
- 2. High seas FAD sets are sourced from operational logbook data noting that some data are provisional at this stage.
- 3. The sets presented in this Table 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.
- 4. At WCPFC13, the discussions confirmed that paragraph 18 measures would be implemented in 2017 and that the following fleets would have qualified for and would apply footnote 5 of CMM 2016-01: El Salvador, Ecuador, European Union, Republic of Marshall Islands, New Zealand, Solomon Islands, Tuvalu and Vanuatu.
- 5. Despite Note 4, WCPFC13 determined Ecuador's participatory rights were zero days in the high seas of the Convention Area in 2017.
- 6. The measures that the Philippines will take are in Attachment C of CMM 2016-01. In 2017, the Philippines expended 2,696 days in the HSP1 during 2017 and no reported purse seine effort in any other high seas areas. These values do not include fishing in the HSP #1.
- 7. In addition to the FAD measures 2015 and 2016, except for those Kiribati flagged vessels fishing in the adjacent high seas, it shall be prohibited to set on FADs in the high seas, unless the Commission decides on other alternative measures at its 2014 or 2015 or 2016 annual meeting.

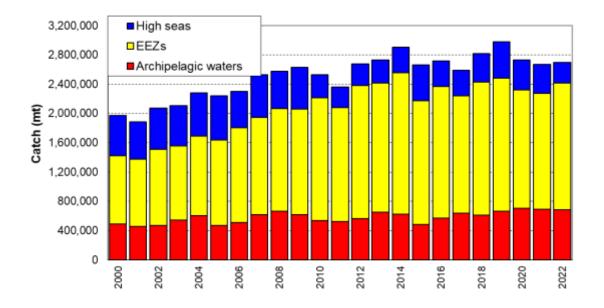


Figure 1. Tuna catch estimates (mt) in the WCP–CA, by broad area, all gear types.

Tuna species are (albacore, bigeye, skipjack and yellowfin. Areas are: Archipelagic waters (AWs), national waters (EEZs,

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.

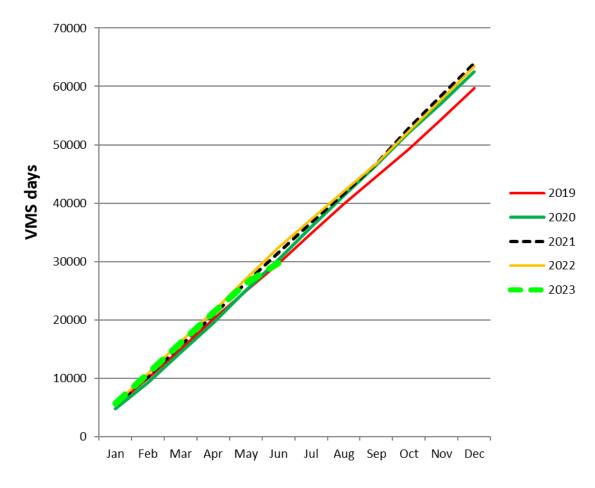


Figure 2. Cumulative tropical purse seine days at sea by month, 2009-2023, as measured by VMS (excludes days in port)

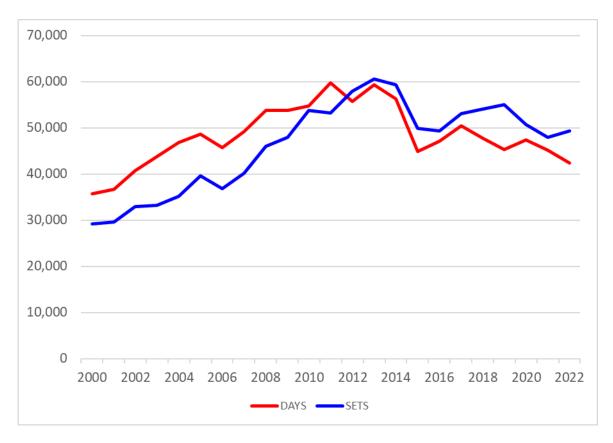


Figure 3. Annual trends in purse seine effort in the WCPFC Convention Area between 20°N and 20°S.

"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.

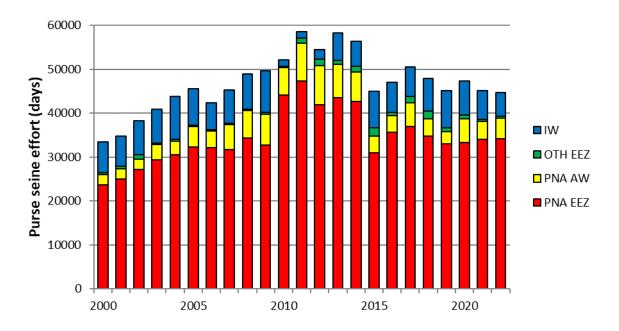


Figure 4. Purse seine effort (days fishing and searching) in the WCPFC Convention Area between 20°N and 20°S. Excludes domestic purse seine effort in Philippines and Indonesia. Estimates are based on raised logsheet data.

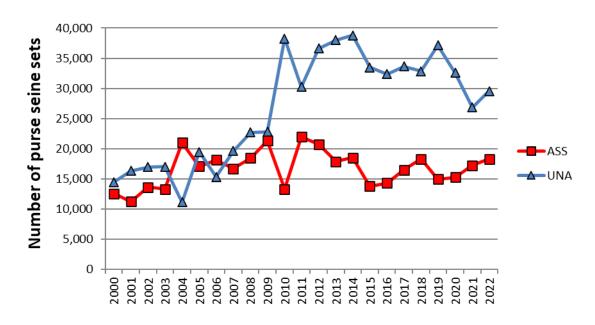
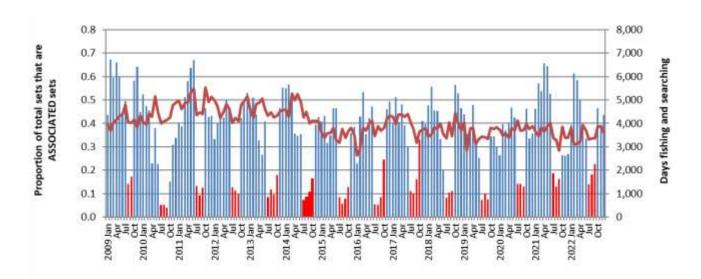


Figure 5. Sets by set type made in the WCPO tropical purse seine fishery, 2000 - 2022. Associated (ASS) and Unassociated (UNA) sets. Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded. Associated sets include animal-associated sets.



<u>Figure 6. Proportion of the total purse seine fishing activity comprising associated sets.</u>
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.

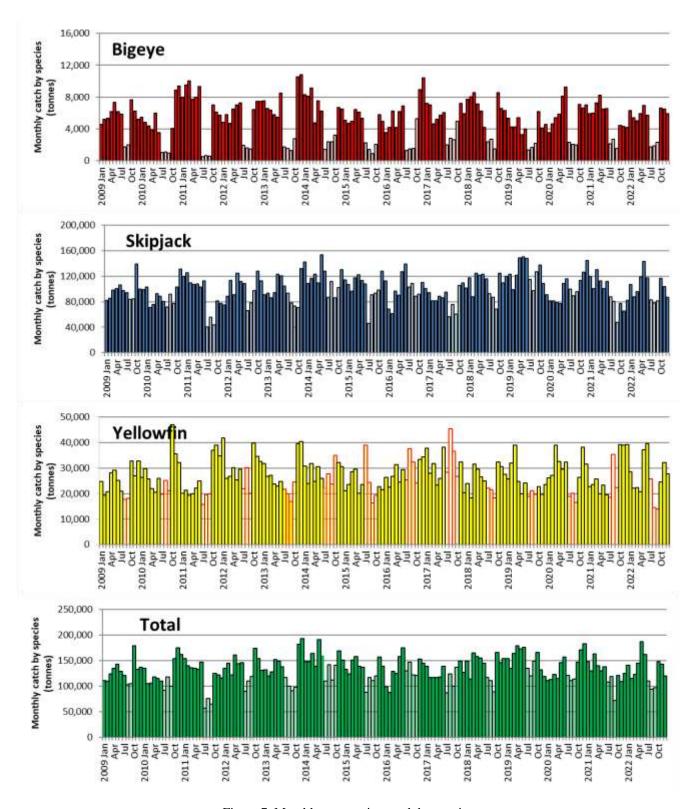


Figure 7. Monthly purse seine catch by species

(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.

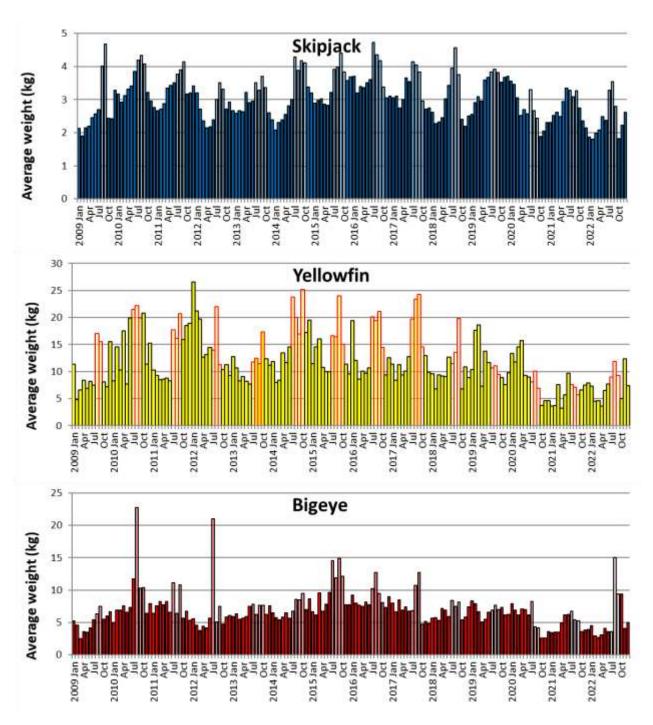


Figure 8. Monthly average weight of bigeye, skipjack and yellowfin tuna.

Estimated from observer sampling data, 2009-2022. FAD closure months are shaded in lighter colour. Data excludes the domestic fisheries of Indonesia and Philippines. Coverage of observer data in years 2020-2022 was approximately 50%, 20% and 15% respectively, due to the impacts of COVID-19 and biased to certain fleets only.

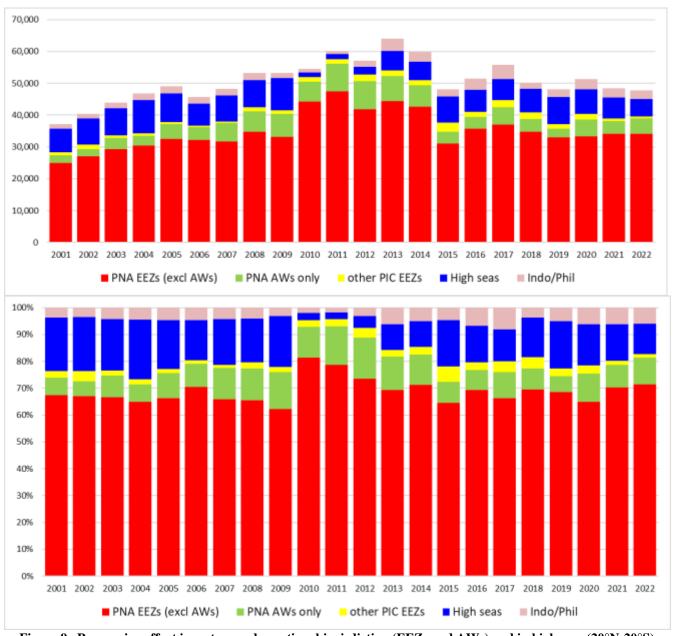


Figure 9. Purse seine effort in waters under national jurisdiction (EEZs and AWs) and in high seas (20°N-20°S) (days fished–top and percentage days fished–bottom)

(Refer to NOTES under TABLE 1 above)

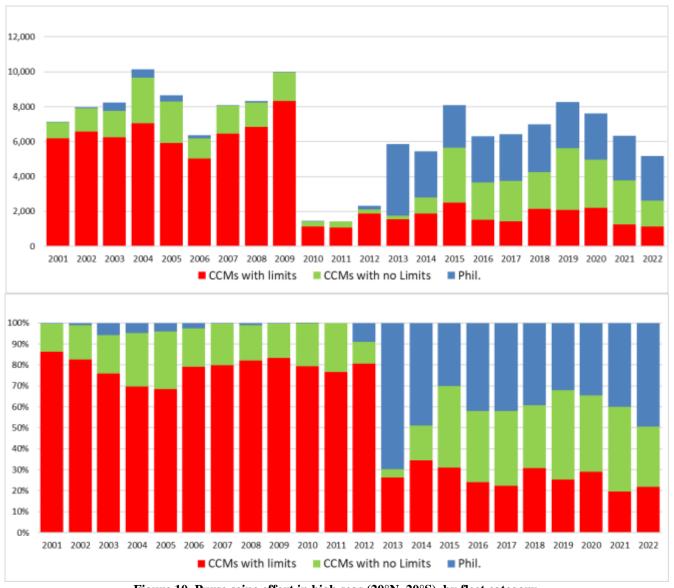


Figure 10. Purse seine effort in high seas (20°N–20°S), by fleet category.

(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)

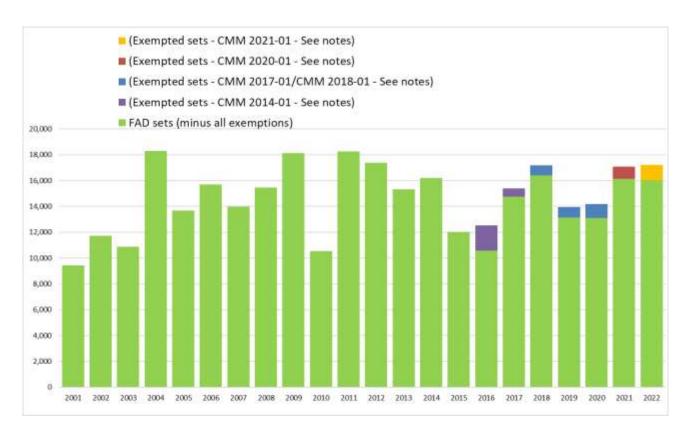


Figure 11. Estimated FAD sets undertaken in the tropical purse seine fishery (20°N-20°S), by fleet category.

(Refer to NOTES under TABLE 3 above

"<u>Exempted Sets</u>" refers to the footnote 3 exemption of CMM 2014-01; refer to Notes 11, 12, 13 and 14, and CMM 2017-01 (footnote 2) and CMM 2018-01, CMM 2020-01 CMM 2021-01 (footnote 1) refer to Notes 15 of Table 3)

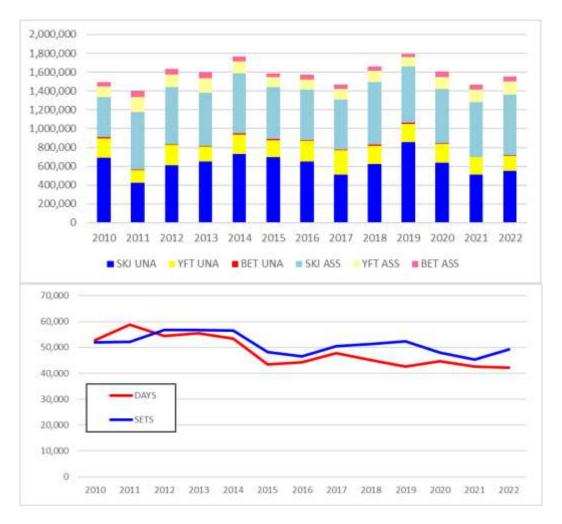


Figure 12. Purse seine tuna catch (top) and effort (bottom) by set type and species

WCPFC Convention Area between 20°N and 20°S, 2010–2022, 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 6. Reported longline catches metric tonnes of bigeye tuna in the WCPFC-CA, by flag.

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

ag.	2001	2000	2002	2004	2005	2006	2007	2000	2000	2010	0011	2012	0012	2014	2015	2016	0017	2010	2010	2020	2021	2022	CMM limits	CMM limits	C W-+-
CCM AMERICAN SAMOA	2001	2002	2003	2004	2005	2006 181	2007	2008	2009	2010	1,263	2012 1,502	2013 389	2014 318	2015 557	2016 658	2017 1,409	2018 851	2019 1,545	1,586	2021 428	2022 1,565	161 2020	for 2021	A NOTE
MUSTRALIA	1,307	1,002	1,024	892	791	499	1,008	1,027	726	457	379	553	489	490	785	825	418	325	258	290	361	342		9	7 7
ELIZE	1,322	812	782	297	425	254	158	89	43	89	102	132	217	0 490	, 00	023	410	0	230	2 3 0	0	0		9	8
HINA	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	5,493	5,667	8,724	8,724	0
OOK ISLANDS	1	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	197	124	97	83	75		0,724	4
U-PORTUGAL	0	0	0	0	0	100	250	0	0	0	323	17	106	71	17	103	2.50	137	124	0	0	, 5			-2
U-SPAIN	0	0	0	42	17	62	62	77	46	15	10	23	23	65	53	53	21	39	30	40	105	112		9	7
SM	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	1,606	1,375		9	,
IJI	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	482	426		9	4
													•		•									9	4
RENCH POLYNESIA	745	649	439	502 0	606	498	478	490	587	436 0	607	654	787 0	741	813 831	563	896	1,063	954 0	874 0	1,045	1,388			4
JAM	Ů	-	-	-		0 750	0 155	2 225	-	-	0 205	2 200	-			932 8	0					1 040			- 10
NDONESIA	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	0	1,255	2,190	1,129	1,243	1,243	5,889		12
APAN	27,466	29,574	26,110	29,248	23,021	25,685	26,076	20,942	17,653	16,619			12,991	15,564	14,316	11,467		12,005	10,639	8,862	8,415	6,068	17,765	17,765	16
RIBATI	0	0	1	0	0	0	0	44	0	3	155	800	582	268	556	603	287	423	1,292	1,570	625	2,707			4
RSHALL ISLANDS	0	0	0	1	0	0	3	375	381	257	259	335	80	0	0	700	1,229	1,146	1,458	764	928	1,173			4
AURU	6	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4
EW CALEDONIA	128	189	142	90	76	35	53	63	51	44	41	49	51	58	63	74	48	46	40	51	59	67			4
EW ZEALAND	481	201	204	177	175	177	213	133	253	132	174	154	109	122	122	177	97	135	50	67	85	50			7
IUE	0	0	0	0	10	22	35	51	10	4	0	0	0	0	0	0	0	0	0	0	0	0			4
ORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	492	1,000	1,000	879	999	993	999	926	1,500	544			4
ALAU	21	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1,106	1,011	855	1	0	1			4
APUA NEW GUINEA	240	318	390	399	237	216	111	201	128	39	59	119	32	52	15	86	47	87	162	17	0	179			4
HILIPPINES	59	59	59	59	59	59	59	59	59	59	777	248	167	63	0	0	0	0	0	0	0	0			6,7
PUBLIC 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	13,685	12,986	13,942	13,942	
MOA	185	137	110	104	64	128	101	106	117	108	71	54	36	48	48	62	150	62	161	156	108	127			4
NEGAL	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
LOMON 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	635	874			4,11
NGA	191	215	94	40	125	117	129	81	38	24	18	10	7	22	25	27	24	34	16	10	15	24		1	4
VALU	0	0	0	0	0	0	0	0	0	0	105	1,408	120	76	187	103	111	64	53	9	23	3		9	4
INESE 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	7,330	9,560	10,481	10,481	11
A	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	3,550	3,750	3,238	3,554	3,554	13, 15
NUATU	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	2,216	3,039	2,068		1	4
ALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0		1	4
tal	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	57,016	55,676	63,086	63,897	53,298	51,043	51,862	60,355	60,355	
ETNAM	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	2,275	1526			9

- 1. Source: WCPFC Annual catch estimates as at 2nd July 2023.
- 2. Catch estimates in **red** have been carried over from previous years.
- 3. Indonesia and Philippines may revise estimates for previous 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 to 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 7. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.

Table 7. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.

																							Av.	
CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2001- 2004	See Notes
AMERICAN SAMOA	188	485	497	888	526	513	640	333	398	473	699	620	422	454	360	561	871	470	409	383	521	332	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	1,449	1,454	3,097	
BELIZE	957	720	943	208	298	106	273	129	121	28	13	30	21	0	0	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	9,530	9,560	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	309	209	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	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	40	42	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	1,729	1,915	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	2,662	2,127	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	2,350	1,373	790	(4)
GUAM	0	0	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	5,632	120	7,707	4,382	427	682	682	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	10,940	6,070	7,907	7,060	16,480	
KIRIBATI	20,030	0.010	2	0	0	0	0	7	0.000	4	140	300	175	108	405	610	359	220	862	1,279	904	2,535		(4)
MARSHALL ISLANDS	0	0	0	3	0	0	2	91	120	117	99	113	47	0	0	578	948	707	1,175	743	634	964	1	(4)
NAURU	5	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,1	4	(4)
NEW CALEDONIA	570	572	754	631	448	414	393	424	487	505	585	573	531	741	852	482	559	467	678	512	624	588	632	(4)
NEW ZEALAND	131	27	39	36	36	3	25	11	3	6	3	1	1	2	2	55	10	20	5	10	22	7 5	58	(- /
NIUE	0	0	0	0	34	42	43	40	20	8	0	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	0.5	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	0	5	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	0	1,779		(4)
PHILIPPINES	484	484	484	484	484	484	484	484	484	484	146	61	27	153	0	0	0	0	0	0	0	0,1	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	10,340	11,516	12,864	
SAMOA	470	369	293	444	199	264	305	317	412	386	395	234	330	231	252	244	644	401	547	642	384	370	394	(4)
SENEGAL	0	0	0	0	6	3	4	0	0	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	3,288	5,470	315	(4),(10
TONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	325	373	201	186	156	208	215	237	(4)
TUVALU	0	0	0	0	0	0	0	0	0	0	286	453	114	41	166	124	164	106	76	16	9	0	0	(4)
CHINESE TAIPEI	22,326	21,993	22,149	22,975	19,571	18,654	16,668	16,411		22,225	21,320	16,948	14,999	12,257	14,118	17,816	22,956	16,050	17,724			15,469		(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	1,197	2,029	1,969	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	849	901	570		• ` '
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	4	0	0	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	66,420	68,544	71,857	84,202	56,260	57,828	66,211	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	13,822	14,102		(8)

- 1. Source: WCPFC Annual catch estimates as at 2nd July 2023.
- 2. Catch estimates in **red** have been carried over from previous years.
- 3. Indonesia and Philippines may revise their estimates for recent years through their annual catch estimates review processes. (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 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 8. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), by fleet.

FLEET						LONGLINE	EFFORT (10	00s of Hooks	;)				
I LLL I	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CK	13,422	16,809	32,818	16,880	10,880	11,761	25,750	20,672	21,581	19,474	18,852	14,270	11,726
CN	558,006	741,473	838,710	653,128	554,203	856,023	643,894	490,233	808,126	594,763	550,941	489,006	390,152
FJ	27,971	91,025	167,297	135,836	128,960	83,827	85,898	45,608	30,099	73,637	43,301	17,898	17,326
FM	84,884	94,564	110,591	85,598	123,995	149,576	165,600	167,500	361,852	327,119	247,747	179,475	129,957
JP	591,056	544,105	513,557	453,786	393,618	347,416	279,927	286,586	306,046	298,314	187,536	196,509	186,408
KI	0	19,487	50,227	27,577	23,868	38,218	55,215	45,625	40,604	73,402	110,146	69,499	195,144
KR	728,939	803,720	771,103	626,874	603,157	506,797	586,401	473,107	568,295	591,485	547,711	542,246	562,991
MH	16,828	16,763	20,679	6,286	0	585	63,220	138,797	104,151	95,894	79,962	72,424	100,071
PF	0	242	147	246	437	18	1,138	13,321	5,179	3,656	1,456	11,407	11,598
PG	24,589	51,692	40,188	14,849	19,232	7,883	4,492	2,789	35,323	30,864	2,473	0	0
PW	0	0	0	0	0	0	626	86,598	107,145	92,140	57	0	208
SB	65,235	12,757	5,497	3,942	421,448	370,855	24,030	18,036	209,644	204,151	90,786	112,387	150,250
TV	3,436	26,925	69,189	16,219	16,809	18,844	12,927	15,818	12,376	8,007	1,305	1,692	30
TW	1,116,368	1,542,611	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	884,948	1,095,264
US	127,121	135,232	152,740	128,813	147,964	181,519	240,469	217,903	165,374	323,727	285,557	371,621	422,322
VU	78,908	92,148	134,225	196,387	138,961	313,642	213,255	138,818	120,477	112,208	75,431	44,806	67,285
	3,436,764	4,189,554	4,617,707	3,604,082	3,615,413	4,094,672	3,694,610	3,546,955	3,951,263	3,960,342	2,999,237	3,008,190	3,340,730

- 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 $20^{\circ}\text{N-}10^{\circ}\text{S}$ has been selected as the area which best minimises both South and North Pacific albacore targeting.

Fleet Codes

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

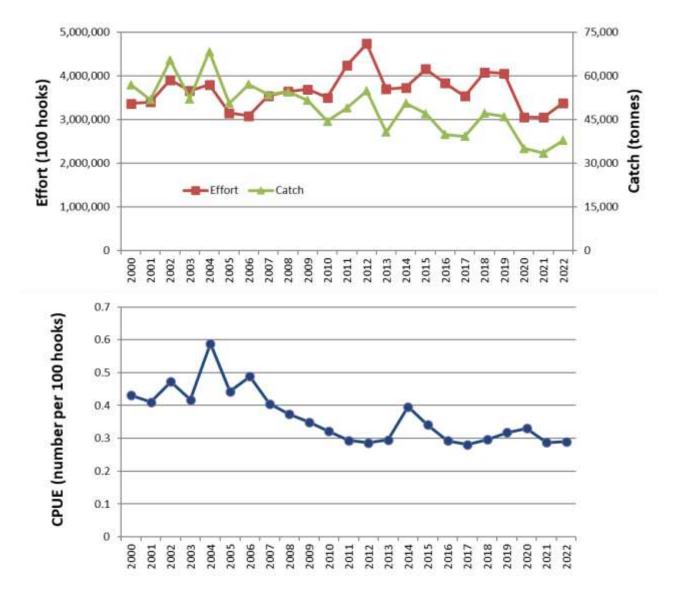


Figure 13. Estimates of effort, bigeye catch and nominal CPUE for the CORE tropical WCPFC longline fishery

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

2022 data are provisional.

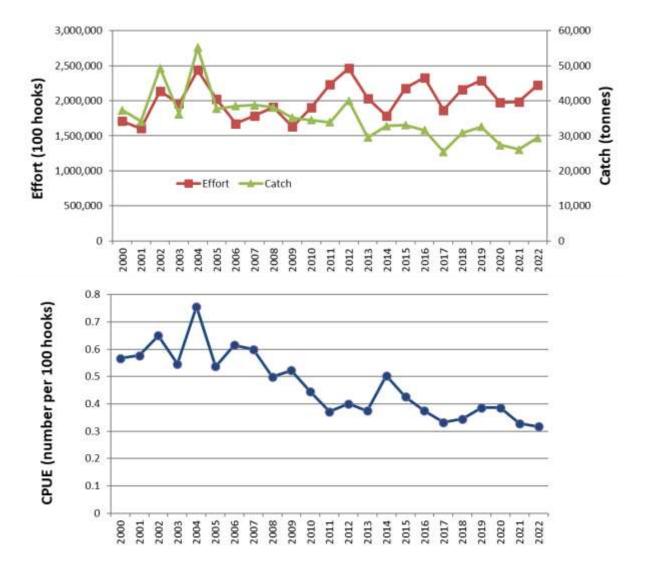


Figure 14. Estimates of effort, bigeye catch and nominal CPUE for the EASTERN tropical WCPFC longline fishery

Eastern Area is (170°E - 150°W, 20°N - 10°S). 2022 data are provisional.

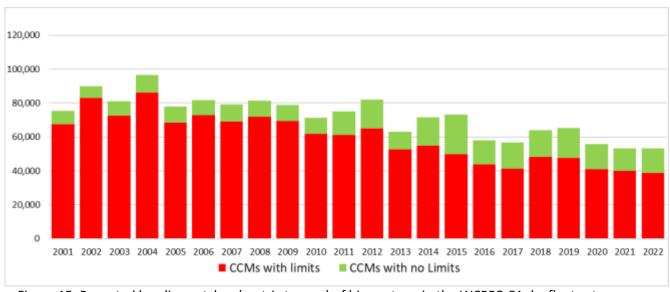


Figure 15. Reported longline catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by fleet category.

(Refer to NOTES under TABLE 6 above;

Vietnam catch is included in "CCMs with no limits")

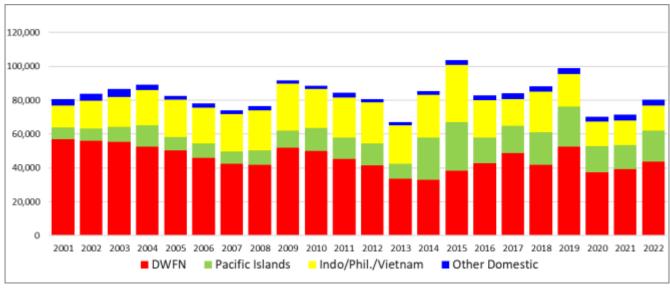


Figure 16. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by fleet category.

(Refer to NOTES under TABLE 7 above;

Vietnam catch is included)

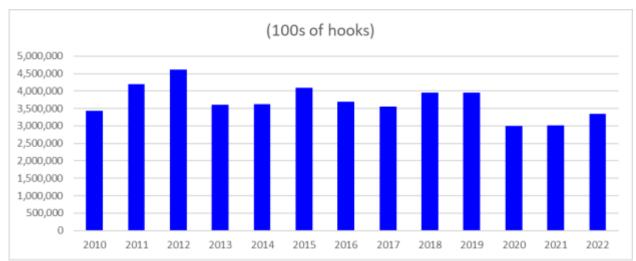


Figure 17. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), 2010-2022.

(Refer to NOTES under TABLE 8 above)

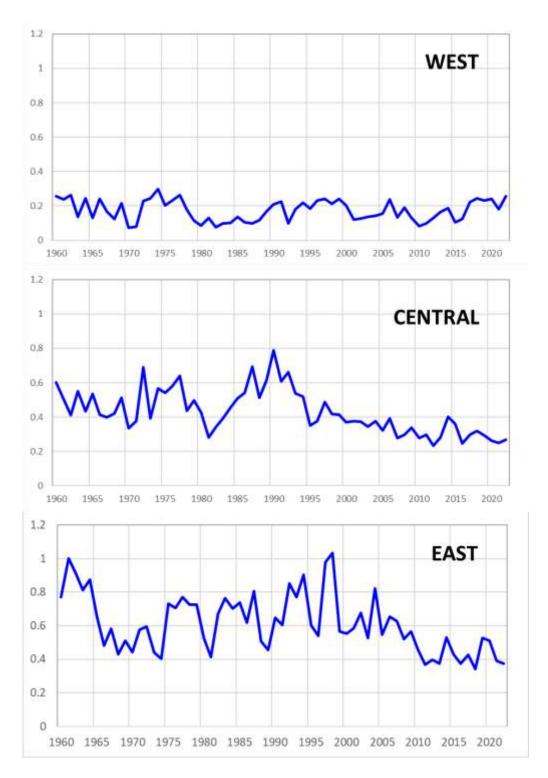


Figure 18. Annual trends in nominal bigeye tuna CPUE in the tropical WCPFC LONGLINE fishery ($20^{\circ}N-10^{\circ}S$)

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

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

		To	otal Catch (I	MT)			6
GEAR	FLAG	CMM 2021-01 limit	2022	Evaluation	Area Note	Availability of EFFORT data	See NOTE
HANDLINE	INDONESIA				Within EEZ only, excluding AWs	NO	5
HANDLINE (LARGE-FISH)	PHILIPPINES	13,343	856	Within Limit	Within EEZ only, excluding AWs	NO	6
POLE-AND-LINE	INDONESIA	41,025	8,125	Within Limit	Within EEZ only, excluding AWs	NO	7
POLE-AND-LINE	JAPAN	114,573	60,288	Within Limit		YES	2, 4

Notes:

- 1. Source: Annual catch estimates; Philippines National Stock Assessment Project (NSAP data); Aggregate logsheet data. 2022 data are provisional.
- 2. The column labeled "CMM 2020-01" 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: 1997-2022), 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.
- 7. The 2022 catch estimate for the Indonesia pole-and-line fishery is provisional.

$\underline{\textbf{Table 10. Tropical tuna catch estimates for OTHER FISHERIES deemed exempt from the tropical tuna}\\$

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

		Tuna cat	ch (MT)	
GEAR	FLAG	2022	Average 2017-2022	Reason for exemption
GILLNET	JAPAN	113	96	Less than 2,000 t.
GILLNET	VIETNAM	18,059	27,891	Outside of the WCPFC Convention Area
HANDLINE (LARGE-FISH)	UNITED STATES OF AMERICA	611	478	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	236	Less than 2,000 t.
POLE-AND-LINE	KIRIBATI	0	0	Less than 2,000 t.
POLE-AND-LINE	NEW ZEALAND	0	0	Less than 2,000 t.
POLE-AND-LINE	SOLOMON ISLANDS	131	78	Less than 2,000 t.
POLE-AND-LINE	UNITED STATES OF AMERICA	0	0	Less than 2,000 t.
Small scale/artisanal/recreati	AUSTRALIA	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	FRENCH POLYNESIA	1,065	1,104	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	INDONESIA	37,991	34,289	Within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	JAPAN	1,455	1,432	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	KIRIBATI	4,359	4,359	Within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	NEW ZEALAND	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	NIUE	2	1	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	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	200	156	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	4,500	3,696	Within territorial seas and/or archipelagic waters only
TROLL	NAURU	38	19	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	NEW ZEALAND	3	7	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	TOKELAU	19	52	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	TONGA	92	15	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	TUVALU	348	348	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	UNITED STATES OF AMERICA	732	896	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	VANUATU	339	119	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	WALLIS AND FUTUNA	13	12	Less than 2,000 t. and within territorial seas and/or archipelagic waters only

Notes:

- 1. Source: Annual Catch estimates. 2022 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, CMM 2020-01 and CMM 2021-01 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 WCPFC19 and SC19	Notes on major revisions between SC19 and WCPFC20
	ALL TABLES		
Table 1	PURSE SEINE days fished in waters under national jurisdiction and in International waters in the WCPFC-CA.	Updated to include provisional 2022 data	_
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.	Updated to include provisional 2022 data	_
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	Updated to include provisional 2022 data	_
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.	Updated to include provisional 2022 data	_
Table 5	Annual high seas FAD sets, by fleet, 2015–2022		_
Table 6	Reported LONGLINE catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by flag.	Updated to include provisional 2022 data	_
Table 7	Reported LONGLINE catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.	Updated to include provisional 2022 data	_
Table 8	Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery.	Updated to include provisional 2022 data	_
Table 9	Total tropical tuna catch estimates for OTHER COMMERCIAL FISHERIES (excl. Purse seine and Longline) in the WCPFC Statistical Area, relevant to CMM 2018-01.	Updated to include provisional 2022 data	_
Table 10	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.	Updated to include provisional 2022 data	_
FIGURES	[Figures corresponding to relevant tables above	 Updated to include provisional 2022 data 	_