

### **COMMISSION**

## **Twentieth Regular Session**

4-8 December 2023

Rarotonga, Cook Islands (Hybrid)

Catch and Effort Data Summaries to Support Discussions on the TROPICAL TUNA CMMs

WCPFC20-2023-IP07 16 November 2023

**SPC-OFP** 

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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)

MATHEMENT PARTIES  23 14 24 9 9 0 2 8 3 29 45 17 104 479 209 353 348 202 30 66 68 7 306 68 8 39 35 1,525 1,5	EEZ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Notified / Estimated	See NOTE(s)
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MARKINE   2,203   2,909   2,249   2,190   1,757   1,675   2,022   1,533   1,445   1,701   204   302   465   198   653   661   670   309   314   670   220   223   31,500   2,910,13			443	496	672	9.3.3	767	572	374	414	276	567	1.347	2.925	1.703	1.195	2.362	3.015	8.39	1.256		1.657	1.501	*	2, 4, 16,18
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TOTAL BEEZS - excl.  PMA Mes and ID/PH  27,945  33,165  34,165  34,165  35,165  36,167  37,265  37,165	TOKELAU	100		25	67	126	30	47	132		190								910	215					
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PAR EEZS (exc1 AWS) 24,974 27,038 29,264 30,329 32,443 32,220 31,732 34,771 33,110 44,267 47,382 41,883 44,313 42,575 30,996 35,667 37,002 34,812 32,989 33,415 34,588 34,345 44,033 5,12,15,280 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 2,833 5,513 4,384 5,007 5 PAR EEZS + AWS = TOTAL FNA 27,002 32,781 33,798 35,341 37,119 36,479 36,222 38,980 36,765 47,555 50,004 45,764 49,879 47,407 36,040 40,659 43,822 38,814 36,801 38,222 38,320 37,642    FOTAL EEZS - excl. FNA AWS and ID/PH 27,904 31,309 31,956 33,248 34,875 34,360 34,130 36,806 35,884 4,063 5,812 44,063 5,8	VANUATU	2	2	0	19	1	0	0	14	1	0	5	5	1	0	4	0	1	0	0	7	0	0	200	
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PNA MSW 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 2,833 5,513 4,384 5,007 5 5 PNA EEZS + AWS = 27,400 29,253 32,818 33,422 37,097 36,137 37,442 41,091 40,399 50,522 56,045 50,709 52,327 49,286 34,808 39,473 42,386 38,749 35,822 38,928 38,972 39,352 5 TOTAL EEZS - excl.  PNA AWS and ID/PH 27,904 31,309 31,956 33,248 44,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZS + PNA AWS and ID/PH 27,904 31,309 31,956 33,248 44,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZS + PNA AWS 31,761 34,959 37,382 38,444 41,777 40,400 41,932 45,308 44,063 53,812 58,670 54,592 57,875 54,119 39,852 44,465 49,206 42,751 39,634 43,735 42,704 42,649 48,057 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 8,489 7,941 6,696 5,386 6,8,11  TOTAL EEZS + IW + PNA AWS 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766																									
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TOTAL EZS - excl. FNA AWS and ID/FH 27,904 31,309 31,956 33,248 4,875 4,865 50,69 47,855 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766 50,766 50,769 52,327 49,286 43,878 39,487 42,386 38,749 35,822 38,928 38,928 38,922 39,352 50,766 50,766 50,769 52,327 49,286 34,888 39,473 42,386 38,749 35,822 38,814 36,801 38,222 38,320 37,642 50,766 50,769 50,7	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	2,833	5,513	4,384	5,007		5
TOTAL EEZs - excl. PNA AWS and ID/PH  27,904 31,309 31,956 33,248 34,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZs + PNA AWS 31,761 34,959 37,382 38,444 41,777 40,400 41,932 45,308 44,063 53,812 58,670 54,592 57,875 54,119 39,852 44,465 49,206 42,751 39,634 43,735 42,704 42,649 48,057  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 8,489 7,941 6,696 5,386  TOTAL (EEZs + IW + PNA AWS)  39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH  37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	PNA EEZs + AWs =																								
PNA AWS  29,307 32,721 33,798 35,341 37,119 36,479 36,222 38,980 36,765 47,555 50,004 45,764 49,879 47,407 36,040 40,659 43,822 38,814 36,801 38,222 38,320 37,642  TOTAL EEZS - excl.  PNA AWS and ID/PH  27,904 31,309 31,956 33,248 34,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZS + PNA AWS  31,761 34,959 37,382 38,444 41,777 40,400 41,932 45,308 44,063 53,812 58,670 54,592 57,875 54,119 39,852 44,465 49,206 42,751 39,634 43,735 42,704 42,649 48,057  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 8,489 7,941 6,696 5,386 6,8,11  TOTAL (EEZS + IW + PNA AWS)  39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH  37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	TOTAL PNA	27,400	29,253	32,818	33,422	37,097	36,137	37,442	41,091	40,399	50,522	56,045	50,709	52,327	49,286	34,808	39,473	42,386	38,749	35,822	38,928	38,972	39,352		5
PNA AWS  29,307 32,721 33,798 35,341 37,119 36,479 36,222 38,980 36,765 47,555 50,004 45,764 49,879 47,407 36,040 40,659 43,822 38,814 36,801 38,222 38,320 37,642  TOTAL EEZS - excl.  PNA AWS and ID/PH  27,904 31,309 31,956 33,248 34,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZS + PNA AWS  31,761 34,959 37,382 38,444 41,777 40,400 41,932 45,308 44,063 53,812 58,670 54,592 57,875 54,119 39,852 44,465 49,206 42,751 39,634 43,735 42,704 42,649 48,057  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 8,489 7,941 6,696 5,386 6,8,11  TOTAL (EEZS + IW + PNA AWS)  39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH  37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766																									
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PNA AWS and ID/PH 27,904 31,309 31,956 33,248 34,875 34,360 34,130 36,806 35,088 46,465 48,946 43,926 45,944 44,293 33,774 37,154 39,289 36,990 34,425 35,041 35,315 34,965  TOTAL EEZS + PNA AWS (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 8,489 7,941 6,696 5,386 6,8,11  TOTAL (EEZS + IW + PNA AWS) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766																									
TOTAL EEZs + PNA AWS 31,761 34,959 37,382 38,444 41,777 40,400 41,932 45,308 44,063 53,812 58,670 54,592 57,875 54,119 39,852 44,465 49,206 42,751 39,634 43,735 42,704 42,649 48,057 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 8,489 7,941 6,696 5,386 6,8,11 TOTAL (EEZs + IW + PNA AWS) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443 TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	TOTAL EEZs - excl.																								
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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 8,489 7,941 6,696 5,386  TOTAL (EEZS + IW + PNA AWS) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035  TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358																									
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TOTAL (EEZs + IW + PNA AWs) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443 TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	TOTAL INT. WATERS		, , , , , ,	, , , , ,			.,	,	.,	,	, .	,	,	, , , ,	,	,	,	.,		,			,		
TOTAL (EEZs + IW + PNA AWs)  39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH  37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	(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	8,489	7.941	6,696	5,386		6.8.11
PNA AWs) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766		.,	-,	-,	,	-,	-,	-,	-,	,	-,	-,	-,	-,	-,	-,	-,	-,	.,	-,	.,	-,	-,		-,-,
PNA AWs) 39,126 43,072 45,871 48,825 50,699 47,286 50,117 53,925 54,163 55,307 60,198 57,043 64,006 59,812 48,137 51,400 55,824 50,130 48,123 51,676 49,400 48,035 53,443  TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766	TOTAL (EEZs + IW +																								
TOTAL minus ID/PH 37,223 41,160 43,529 46,232 47,955 44,667 47,525 51,251 51,986 54,217 59,140 55,205 60,071 56,698 45,871 47,895 51,291 48,306 45,747 48,495 46,395 45,358 50,766		39.126	43.072	45.871	48.825	50.699	47.286	50.117	53,925	54.163	55.307	60.198	57.043	64.006	59.812	48.137	51,400	55.824	50.130	48.123	51.676	49.400	48.035	53,443	
	/	33,120	-0,072	-0,071	10,020	-0,000	,200	,	-0,020	,	20,007	30,130	2.,020	- 1, 000	7, 0 - 2	.0,107	-1,100	20,024	-0,100	-0,120	,	-5, 100	.0,000	00,140	
	TOTAL minus ID/PH	37 223	41 160	43 529	46 232	47 955	44 667	47 525	51 251	51 996	54 217	59 140	55 205	60 071	56 600	45 871	47 895	51 201	48 306	45 747	48 495	46 395	45 350	50 766	
		51,225	41,100	10,020	30,232	4,,333	11,007	41,020	51,251	51,300	J4,211	33,140	55,205	00,071	50,090	40,071	4/,090	J1,231	40,300	10,141	40,433	40,333	40,000	30,700	
	VIETNAM	0	0	0	0	n	Ω	n	0	^	0	0	n	0	0	Λ	0	0	0	n	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.

DIIDGE	SETME	DAVG	RICHED	INTERNATIONAL	WATEDS	200M-200G

																									Han.	
																							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	222				
ECUADOR	0	0	0	0	0	0	26	10	14	2	0	13	1	1	0	0	0	0	0	0	0	0	**	**	13	7,9,
EL SALVADOR	3	28	0	0	0	0	205	205	80	46	33	32	24	50	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	1,041	818	942	391		_		
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	1,068	1,592	6	3	1	14	8	102	22	0	6	27	21	76	0	121	121	6	_
KIRIBATI	42	56	41	39	51	52	23	41	172	97	243	183	186	858	645	927	687	795	950	654	565	296				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	114	156				
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	3	1	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	48	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	277	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	_	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	705	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	106				
TOTAL	7,153	7,977	8,233	10,131	8,642	6,362	8,082	8,324	9,994	1,421	1,420	2,318	5,864	5,454	8,082	6,295	6,439	6,997	8,253	7,728	6,383	5,047				

									PURSE	SEINE D	AYS FISH	ED in W	CFPC-IAT	TC OVERI	AP AREA									
	Flag 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2020 2020															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	214		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	9	1 52	43	116	34	30	13	16	18	11	36	18	71	39	13	41	15	28	47	60		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
moma r	1.40	110		4 50	4.5	116	104	226	110	0.7	0.0	105	260	246	016	C 4 4	170	257	0.01	211	0.01	207		

- 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	144	CHINA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	63	59	COOK ISLANDS
0	0	0	0	0	0	74	365	163	221	439	443	284	342	140	50	235	411	327	258	270	431	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	1,319	2,119	1,797	2,094	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	559	297	623	907	810	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	3,205	3,484	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	1,596	1,679	NAURU
124	274	429	411	195	491	384	441	373	193	202	163	134	164	39	21	76	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	1,053	330	479	268	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	11	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	1,692	1,531	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	146	191	134	99	107	234	352	440	329	119	100	349	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	2,183	2,471	CHINESE TAIPEI
0	0	0	0	0	0	0	0	20	40	58	92	78	49	36	59	59	107	83	119	359	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	1,030	USA
36	143	181	655	528	467	632	230	389	169	391	261	260	229	123	37	123	95	136	331	449	547	VANUATU
9,436	11,715	10,876	18,282	13,675	15,713	13,988	15,450	18,124	10,550	18,259	17,396	15,320	16,201	12,030	12,527	15,392	17,169	13,948	14,195	16,260	17,382	

- 1. Source: Raised logsheet data.
- 2. Covers Drifting FAD, Log and Anchored FAD sets in the tropical purse seine fishery of the WCPFC Convention Area (20°N-20°S), by flag
- 3. Excludes archipelagic waters. Fleets from Indonesia, Kiribati, Papua New Guinea, Philippines (DW), Philippines (domestic) and Solomon Islands in this list are normally the only fleets active in archipelagic waters.
- 4. Includes high seas
- 5. Excludes Vietnam domestic fleet
- 6. Complete information from Indonesia and Philippines domestic fisheries are not available.
- 7. CMM 2015-01- Paras. 14 and 17, and ATTACHMENT A, provides information on the 2016 FAD set limits that applies to FSM, Japan, Kiribati, Korea and United States of America.
- 8. CMM 2016-01 Paras. 14 and 17, and ATTACHMENT A, provides information on the 2017 FAD set limits that applies to Japan, Korea and United States of America.
- 9. CMM 2014-01 Paras. 14 and 17, and ATTACHMENT A, provides information on the 2015 FAD set limits that applies to FSM, Japan, Kiribati and Korea.
- 10. CMM 2013-01, Para 16 (ii) annual limit of FAD sets for 2015 (as set out in Column 'A' of Attachment A of CMM 2014-01) applies to FSM, Japan, Kiribati and Korea
- 11. Annual FAD sets consider CMM 2014-01 (or its replacement CMM) footnote 3 notifications (vessels that are managed outside of FAD set limit). This exemption applied to certain Kiribati vessels for 2016-2017.
- 12. In 2016, FSM applied CMM 2014-01 footnote 3 notifications, but formally chose the 4<sup>th</sup> 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.

		VESS	ELS				U	JNASSOCIATE	ED SCHOOLS							ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR			DAYS		SKIPJ	ACK	YELLO	WFIN	BIGE	YE	TOTAL		SKIPJ	ACK	YELLO	WFIN	BIGE	YE	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
CK	2020	1	1	29	0	0	0%	0	0%	0	0%	0	14	261	75%	38	11%	50	14%	349	14	261	38	50	349
CK	2021	1	1	185	34	949	90%	110	10%	0	0%	1,059	63	2,066	76%	186	7%	460	17%	2,712	97	3,015	296	460	3,771
CK	2022	1	1	227	66	1,814	99%	0	0%	16	1%	1,830	59	1,985	71%	213	8%	620	22%	2,817	125	3,799	213	636	4,647
CN	2010	12	10	2,784	2,095	20,898	72%	7,958	27%	174	1%	29,031	692	17,655	72%	5,502	22%	1,371	6%	24,529	2,788	38,627	13,537	1,550	53,714
CN	2011	12	10	4,019	1,396	10,994	72%	4,147	27%	177	1%	15,318	2,023	47,352	76%	11,013	18%	3,859	6%	62,223	3,419	58,346	15,160	4,036	77,541
CN	2012	13	12	2,205	706	10,685	77%	3,162	23%	55	0%	13,902	1,143	27,760	79%	5,240	15%	2,245	6%	35,245	1,849	38,445	8,402	2,300	49,147
CN	2013	14	13	3,617	2,329	28,238	92%	2,286	7%	216	1%	30,740	1,419	37,121	73%	10,622	21%	3,022	6%	50,765	3,750	65,567	12,997	3,263	81,828
CN	2014	19 20	18	3,012 2,007	1,351	16,687	88%	2,215	12%	164	1% 1%	19,065	1,430	42,761	76% 74%	10,364	18%	3,533	6%	56,659	2,781	59,448	12,579	3,697	75,724 43,236
CN	2015	20	16	504	897 401	11,235 6,285	71% 76%	4,444 1,986	28% 24%	213	0%	15,892 8,283	756 140	20,311	74%	4,963 946	18% 24%	2,071 149	8% 4%	27,344 3.931	1,653 544	31,545 9.185	9,407 2.964	2,283 162	12,311
CN	2010	3	2	761	84	452	85%	51	10%	26	5%	529	502	10.761	72%	3.429	23%	755	5%	14.945	586	11.213	3,480	781	15,474
CN	2018	3	2	608	336	4.803	86%	765	14%	31	1%	5,599	231	7,400	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	1	1	240	68	1,401	93%	110	7%	4	0%	1,515	145	5,910	82%	919	13%	348	5%	7,177	213	7,311	1,029	352	8,692
EC	2010	14	6	319	21	50	29%	100	57%	25	14%	175	233	6,188	56%	2,715	24%	2,242	20%	11,145	254	6,238	2,815	2,267	11,320
EC	2011	8	7	556	41	239	28%	473	56%	139	16%	851	447	16,942	60%	5,038	18%	6,353	22%	28,333	488	17,181	5,511	6,493	29,184
EC	2012	8	7	605	17	477	83%	51	9%	47	8%	575	444	14,338	64%	3,119	14%	5,113	23%	22,570	461	14,815	3,170	5,159	23,145
EC	2013	7	7	480	70	1,812	81%	241	11%	183	8%	2,236	292	13,643	71%	2,117	11%	3,446	18%	19,206	362	15,455	2,358	3,630	21,442
EC	2014	7	7	477	57	1,160	89%	57	4%	80	6%	1,297	359	14,134	69%	2,871	14%	3,467	17%	20,472	416	15,294	2,928	3,547	21,769
EC	2015	7	4	162	1	0	0%	0	0%	0	0%	0	150	8,379	71%	1,547	13%	1,833	16%	11,759	151	8,379	1,547	1,833	11,759
EC	2016	2	3	42	0	0	0%	0	0%	0	0%	0	50	2,664	68%	632	16%	630	16%	3,925	50	2,664	632	630	3,925
EC	2017	4	4	237	2	68	67%	17	17%	16	16%	102	235	8,710	65%	1,553	12%	3,207	24%	13,469	237	8,778	1,570	3,223	13,571
EC EC	2018 2019	4	4	441 374	12 9	106 107	82% 19%	398	0% 69%	24 73	19% 13%	130 578	412 327	16,509 18,745	74% 76%	1,614 2,370	7% 10%	4,192 3,442	19% 14%	22,315 24,557	424 336	16,615 18,852	1,614 2,767	4,216 3,516	22,445 25,135
EC	2019	4	э 4	279	3	47	98%	398	0%	1	2%	48	261	9,300	66%	1.976	10%	2.834	20%	14,111	264	9.347	1.977	2.835	14,159
EC	2021	5	5	304	5	121	88%	9	7%	7	5%	137	271	9,701	60%	2,634	16%	3,759	23%	16,094	276	9,822	2,643	3,766	16,231
EC	2022	5	5	479	6	72	96%	1	1%	2	3%	75	431	11,816	56%	3,837	18%	5,507	26%	21,160	436	11,888	3,837	5,510	21,235
ES	2010	4	4	720	26	625	76%	195	24%	0	0%	820	364	18,908	66%	5,377	19%	4,363	15%	28,648	390	19,533	5,572	4,363	29,468
ES	2011	4	4	753	30	667	50%	650	49%	17	1%	1,334	488	24,297	64%	6,984	18%	6,836	18%	38,117	518	24,964	7,634	6,853	39,451
ES	2012	4	4	787	57	2,372	86%	386	14%	9	0%	2,767	461	18,583	63%	4,758	16%	6,062	21%	29,403	517	20,956	5,143	6,071	32,170
ES	2013	4	4	837	56	1,987	66%	1,030	34%	10	0%	3,026	515	28,105	65%	7,475	17%	7,561	18%	43,141	571	30,092	8,505	7,571	46,167
ES	2014	4	4	753	89	3,365	80%	846	20%	2	0%	4,213	431	25,319	70%	4,313	12%	6,615	18%	36,247	520	28,685	5,158	6,617	40,460
ES	2015	4	4	529	28	1,329	97%	37	3%	1	0%	1,368	326	23,983	75%	4,511	14%	3,346	11%	31,840	355	25,313	4,548	3,348	33,208
ES	2016	2	2	130	1	0	0%	0	0%	0	0%	0	94	6,282	72%	573	7%	1,845	21%	8,699	95	6,282	573	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	7,748	75%	951	9%	1,633	16%	10,332	194	7,844	951	1,633	10,428
ES	2019	2	2	221	0	0	0%	0	0%	0	0%	0	160	7,905	80%	1,153	12%	876	9%	9,934	160	7,905	1,153	876	9,934
ES	2020	2	2	264	3	1	100%	0	0%	0	0%	1	215	7,475	70%	1,792	17%	1,487	14%	10,754	218	7,476	1,792	1,487	10,755
ES	2021	3	3	284	9	388	69%	169	30%	3	1%	560	290	8,355	65%	1,956	15%	2,475	19%	12,786	299	8,743	2,125	2,478	13,346
ES	2022	3	3	286	7	162	65%	87	35%	1	0%	250	293	10,617	61%	2,987	17%	3,724	22%	17,328	300	10,780	3,073	3,725	17,578

Table 4. (continued)

		VESS	SELS				l	JNASSOCIAT	ED SCHOOLS							ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR	\ <b>/</b> D	100	DAYS		SKIP.	JACK	YELLO	WFIN	BIG	EYE	TOTAL		SKIP.	JACK	YELLO	WFIN	BIGE	YE	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	8,471	80%	2,108	20%	66	1%	10,645	419	10,897	77%	2,197	16%	985	7%	14,078	1,031	19,368	4,305	1,050	24,723
FM	2011	7	7	1,641	483	5,971	78%	1,669	22%	20	0%	7,661	790	13,605	72%	3,929	21%	1,299	7%	18,832	1,276	19,584	5,600	1,320	26,505
FM	2012	9	9	1,573	464	6,555	78%	1,768	21%	109	1%	8,432	826	21,763	79%	4,074	15%	1,697	6%	27,535	1,301	28,527	5,885	1,821	36,233
FM	2013	10	10	1,384	450	9,033	87%	1,271	12%	116	1%	10,420	539	12,564	72%	3,554	20%	1,346	8%	17,464	989	21,598	4,824	1,462	27,884
FM	2014	10	10	1,414	611	13,097	85%	2,020	13%	312	2%	15,429	614	16,423	73%	4,361	19%	1,862	8%	22,646	1,225	29,520	6,381	2,174	38,075
FM	2015	12	13	1,924	1,212	26,352	84%	4,692	15%	428	1%	31,473	641	18,645	77%	3,900	16%	1,725	7%	24,270	1,852	44,997	8,593	2,153	55,743
FM	2016	16	18	2,726	1,059	22,200	82%	4,467	17%	317	1%	26,983	1,142	34,955	78%	6,340	14%	3,433	8%	44,728	2,201	57,155	10,807	3,749	71,711
FM	2017	19	20	3,527	1,919	34,226	78%	9,247	21%	300	1%	43,774	1,374	31,640	76%	7,212	17%	2,981	7%	41,833	3,300	65,993	16,481	3,292	85,765
FM	2018	22	22	3,730	2,412	47,596	81%	10,290	18%	636	1%	58,522	1,432	50,259	83%	7,854	13%	2,369	4%	60,482	3,846	97,879	18,153	3,006	119,039
FM	2019	23	25	4,464	3,749	83,865	82%	17,244	17%	1,532	2%	102,641	1,348	44,288	78%	8,953	16%	3,218	6%	56,460	5,104	128,291	26,221	4,757	159,269
FM	2020	27	27	5,239	3,029	64,390	81%	14,381	18%	609	1%	79,380	2,126	74,270	75%	17,858	18%	6,394	7%	98,522	5,160	138,663	32,240	7,002	177,905
FM	2021	28	28	4,918	2,763	52,249	78%	14,265	21%	471	1%	66,985	1,815	63,981	77%	13,750	17%	5,603	7%	83,333	4,579	116,230	28,015	6,074	150,318
FM	2022	25	25	4,541	3,038	56,503	83%	10,995	16%	448	1%	67,946	2,103	72,349	77%	16,251	17%	5,866	6%	94,466	5,141	128,852	27,246	6,315	162,412
JP	2010	37	36	5,695	5,633	134,713	80%	31,583	19%	1,549	1%	167,845	833	25,647	71%	8,311	23%	2,376	7%	36,333	6,566	162,431	40,822	4,113	207,366
JP	2011	40	37	6,524	5,956	92,521	78%	25,943	22%	593	1%	119,057	1,320	39,181	77%	7,796	15%	4,271	8%	51,248	7,306	132,223	33,817	4,895	170,935
JP	2012	41	36	5,448	4,867	103,260	84%	18,208	15%	1,512	1%	122,980	1,619	58,957	80%	10,000	14%	4,466	6%	73,423	6,514	162,498	28,266	5,997	196,761
JP	2013	41	33	5,501	4,759	104,247	87%	14,439	12%	1,542	1%	120,228	1,038	42,278	79%	7,461	14%	3,674	7%	53,413	5,834	147,227	22,102	5,266	174,595
JP	2014	40	32	4,898	4,275	89,016	76%	25,843	22%	2,117	2%	116,975	1,027	37,966	79%	6,680	14%	3,343	7%	47,989	5,342	128,365	32,828	5,558	166,752
JP	2015	40	31	4,195	3,380	87,506	75%	26,249	22%	3,273	3%	117,028	663	19,277	67%	6,394	22%	2,935	10%	28,606	4,169	109,973	33,972	6,804	150,750
JP	2016	37	29	5,002	4,170	82,431	75%	25,316	23%	1,838	2%	109,585	887	24,620	69%	7,656	22%	3,272	9%	35,548	5,136	108,867	33,809	5,322	147,997
JP	2017	38	29	4,693	3,892	76,361	70%	31,298	29%	2,116	2%	109,774	635	19,872	75%	4,904	19%	1,712	7%	26,488	4,650	98,948	37,433	4,128	140,510
JP	2018	34	26	4,068	3,706	95,855	75%	27,776	22%	3,489	3%	127,120	559	20,984	74%	5,786	20%	1,775	6%	28,545	4,420	120,245	35,284	5,963	161,492
JP	2019	36	28	4,193	4,439	104,390	77%	29,476	22%	1,794	1%	135,660	297	10,153	76%	2,465	19%	722	5%	13,340	4,927	118,925	34,041	2,967	155,932
JP	2020	37	28	4,871	4,433	87,671	78%	24,233	22%	949	1%	112,853	626	18,328	68%	6,050	23%	2,488	9%	26,867	5,154	107,687	31,555	3,716	142,958
JP	2021	36	31	4,475	2,451	51,438	77%	14,948	22%	544	1%	66,930	907	25,122	73%	6,984	20%	2,289	7%	34,394	4,563	97,361	30,972	4,173	132,505
JP	2022	38	29	4,287	2,727	57,755	82%	11,875	17%	516	1%	70,147	810	26,125	76%	6,511	19%	1,963	6%	34,599	4,917	105,873	26,724	3,942	136,539
KI	2010	5	4	693	465	7,320	78%	2,022	22%	54	1%	9,396	245	10,921	70%	3,005	19%	1,764	11%	15,690	741	18,594	5,257	1,894	25,745
KI	2011	7	7	1,429	785	9,308	70%	3,887	29%	37	0%	13,232	554	24,415	74%	4,394	13%	4,381	13%	33,190	1,347	33,773	8,309	4,432	46,514
KI	2012	9	9	1,851	1,593	30,100	79%	7,868	21%	197	1%	38,164	492	19,826	83%	2,921	12%	1,294	5%	24,041	2,093	50,050	10,861	1,521	62,432
KI	2013	12	12	2,007	1,443	27,818	84%	5,212	16%	228	1%	33,259	669	30,566	78%	5,720	15%	2,696	7%	38,982	2,113	58,384	10,933	2,924	72,241
KI	2014	14	15	2,818	2,188	42,707	73%	15,885	27%	319	1%	58,912	830	40,320	80%	5,555	11%	4,388	9%	50,263	3,018	83,028	21,440	4,707	109,174
KI	2015	21	20	2,884	2,482	60,689	85%	10,065	14%	550	1%	71,304	1,082	57,112	87%	5,975	9%	2,306	4%	65,393	3,564	117,801	16,040	2,856	136,698
KI	2016	27	23	4,513	2,428	51,285	81%	11,585	18%	621	1%	63,491	1,871	81,230	80%	12,072	12%	8,187	8%	101,490	4,299	132,518	23,660	8,808	164,985
KI	2017	19	21	4,653	1,815	29,625	73%	10,910	27%	245	1%	40,780	2,554	93,555	83%	12,816	11%	6,453	6%	112,824	4,369	123,207	23,728	6,699	153,634
KI	2018	21	21	4,451	1,548	34,066	80%	8,068	19%	310	1%	42,444	3,004	120,053	82%	16,707	11%	10,075	7%	146,835	4,554	154,266	24,778	10,387	189,431
KI	2019	22	25	5,158	2,625	61,114	89%	7,163	11%	264	0%	68,541	3,036	133,958	84%	19,053	12%	6,037	4%	159,049	5,668	195,235	26,239	6,307	227,781
KI	2020	25	24	4,981	1,499	39,274	90%	4,281	10%	338	1%	43,893	2,792	123,284	79%	23,210	15%	9,988	6%	156,482	4,290	162,558	27,491	10,326	200,375
KI	2021	26	27	5,547	1,586	35,585	81%	8,356	19%	196	0%	44,137	3,208	113,320	82%	17,646	13%	8,129	6%	139,095	4,794	148,905	26,002	8,325	183,232
KI	2022	24	29	5,713	1,349	31,494	86%	5,007	14%	141	0%	36,642	3,489	130,352	84%	17,168	11%	8,009	5%	155,528	4,838	161,845	22,175	8,150	192,170

Table 4. (continued)

		VESS	SELS					JNASSOCIATE	ED SCHOOLS							ASSOCIATED	O SCHOOLS						TOTAL		
FLEET	YEAR			DAYS		SKIP.	JACK	YELLO'	WFIN	BIGI	EYE	TOTAL		SKIP.	IACK	YELLO	WFIN	BIGI	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	143,417	70%	59,314	29%	2,296	1%	205,027	1,117	55,278	77%	10,752	15%	6,175	9%	72,206	7,433	198,752	70,084	8,477	277,313
KR	2011	28	28	6,552	4,493	78,998	72%	29,576	27%	827	1%	109,401	2,128	74,846	76%	16,428	17%	6,832	7%	98,106	6,627	153,976	46,047	7,678	207,702
KR	2012	28	28	5,836	6,099	138,369	74%	46,214	25%	1,281	1%	185,865	1,433	63,342	83%	10,247	13%	2,737	4%	76,326	7,534	201,712	56,462	4,018	262,191
KR	2013	27	28	5,983	6,068	131,592	81%	29,535	18%	2,066	1%	163,192	1,171	47,755	77%	10,693	17%	3,991	6%	62,439	7,239	179,346	40,228	6,057	225,631
KR	2014	28	29	5,437	5,820	155,875	78%	43,263	22%	1,083	1%	200,221	1,097	59,423	85%	6,942	10%	3,461	5%	69,827	6,917	215,298	50,205	4,544	270,048
KR	2015	25	26	4,664	4,561	127,068	81%	28,557	18%	1,669	1%	157,294	1,534	97,853	88%	9,281	8%	3,820	3%	110,953	6,094	224,921	37,838	5,489	268,248
KR	2016	25	25	4,755	4,260	132,601	78%	35,133	21%	1,579	1%	169,313	1,590	93,802	86%	9,667	9%	5,670	5%	109,139	5,851	226,403	44,800	7,249	278,452
KR	2017	26	26	5,545	4,898	100,027	69%	44,173	30%	889	1%	145,090	1,881	85,130	84%	11,450	11%	5,158	5%	101,739	6,782	185,158	55,623	6,048	246,829
KR	2018	27	25	5,645	4,383	105,054	78%	27,425	21%	1,536	1%	134,016	2,395	115,582	87%	10,574	8%	7,377	6%	133,533	6,777	220,636	38,000	8,913	267,549
KR	2019	26	26	5,668	5,795	177,543	86%	27,975	14%	982	1%	206,500	1,811	96,617	89%	8,080	8%	3,623	3%	108,320	7,608	274,160	36,055	4,605	314,820
KR	2020	27	27	5,882	5,331	133,474	80%	31,810	19%	806	1%	166,091	1,500	69,913	81%	10,730	12%	5,581	7%	86,224	6,833	203,387	42,540	6,387	252,314
KR	2021	23	23	5,115	4,619	109,865	75%	36,182	25%	731	1%	146,779	1,697	66,785	80%	11,920	14%	4,769	6%	83,474	6,316	176,650	48,102	5,500	230,253
KR	2022	22	21 10	5,006	4,750	116,501	80%	27,754	19%	766	1%	145,021	1,534	67,104	81%	11,789	14%	3,904 2,995	5% 9%	82,797	6,284	183,605	39,543	4,670	227,818
MH	2010	10	10	1,670 2.521	1,228 547	18,586 7,583	75% 79%	5,688 1.901	23% 20%	629 77	3% 1%	24,903 9,561	636 1,550	25,571 59,807	76% 74%	5,151 10.973	15% 14%	9,842	12%	33,718 80,622	1,881 2,097	44,367 67,390	11,157 12.875	3,638 9.919	59,162 90,183
MH	2011	10	10	1,989	748	11,962	73%	4,328	26%	85	1%	16,375	1,394	45,458	74%	7,138	13%	4,623	8%	57,220	2,097	57,420	11,466	4,709	73,595
MH	2012	10	10	2.132	1.075	18.212	91%	1.826	9%	40	0%	20.078	1,394	42,834	75%	9,646	17%	5.015	9%	57,220	2,142	61.088	11,488	5.059	77,635
MH	2013	12	11	2,132	1,073	18,935	88%	2.548	12%	113	1%	21,596	1,107	43,465	80%	7.070	13%	3,766	7%	54.300	2,243	62.399	9,618	3,879	75,896
MH	2014	12	12	2,221	1,857	36,143	95%	1.788	5%	34	0%	37,965	1,061	41,762	85%	5,033	10%	2,109	4%	48,905	2,919	77,905	6,822	2,144	86,870
MH	2016	10	10	1,970	1,305	22,840	82%	5,071	18%	116	0%	28,027	671	26,634	81%	4,312	13%	2,000	6%	32,946	1,976	49,474	9,383	2,117	60,973
MH	2017	10	10	2,152	537	6,766	71%	2,709	28%	78	1%	9,553	1,319	42,103	76%	8,826	16%	4,302	8%	55,231	1,858	48,869	11,535	4,380	64,784
MH	2018	13	13	1,941	787	12,374	87%	1,889	13%	15	0%	14,278	1,228	48,312	82%	7,618	13%	3,163	5%	59,092	2,016	60,708	9,516	3,182	73,406
МН	2019	11	11	2,449	1,701	32,372	79%	8,673	21%	136	0%	41,182	1,108	44,727	82%	7,366	14%	2,289	4%	54,382	2,810	77,124	16,045	2,426	95,595
MH	2020	11	11	2,107	1,070	21,014	92%	1,758	8%	74	0%	22,845	1,053	48,187	79%	9,151	15%	3,514	6%	60,852	2,123	69,201	10,909	3,587	83,697
MH	2021	11	11	2,262	657	9,620	71%	3,891	29%	78	1%	13,589	1,559	63,055	81%	9,780	13%	4,602	6%	77,437	2,216	72,676	13,671	4,680	91,026
MH	2022	11	11	2,119	622	10,897	90%	1,200	10%	39	0%	12,135	1,641	61,057	83%	8,701	12%	4,112	6%	73,869	2,263	71,954	9,901	4,150	86,005
NR	2018	2	2	166	123	1,414	45%	1,715	55%	1	0%	3,130	90	5,266	92%	353	6%	132	2%	5,751	213	6,680	2,069	133	8,881
NR	2019	9	9	744	704	19,693	93%	1,423	7%	87	0%	21,203	258	10,277	87%	1,292	11%	291	3%	11,861	968	30,101	2,751	397	33,249
NR	2020	15	14	2,416	1,817	35,954	84%	6,566	15%	120	0%	42,640	1,079	37,390	73%	10,931	21%	3,083	6%	51,405	2,908	73,851	17,775	3,294	94,919
NR	2021	15	18	2,902	1,863	31,870	73%	11,603	27%	236	1%	43,708	1,596	55,411	73%	16,854	22%	4,118	5%	76,384	3,460	87,281	28,457	4,354	120,092
NR	2022	15	16	2,532	1,519	26,223	83%	5,233	17%	137	0%	31,593	1,687	58,367	77%	14,066	19%	3,671	5%	76,104	3,206	84,590	19,299	3,808	107,697
NZ	2010	4	4	652	425	8,644	97%	187	2%	64	1%	8,895	191	6,881	73%	1,963	21%	566	6%	9,410	617	15,525	2,149	630	18,304
NZ	2011	3	3	474	174	3,529	85%	574	14%	37	1%	4,140	197	5,627	73%	1,729	23%	334	4%	7,690	371	9,156	2,303	371	11,831
NZ	2012	4	4	488	288	5,216	86%	727	12%	104	2%	6,047	165	3,636	78%	757	16%	293	6%	4,685	453	8,852	1,484	397	10,732
NZ	2013	4	4	468	270	5,039	91%	462	8%	30	1%	5,531	134	4,192	70%	1,348	23%	448	8%	5,987	404	9,231	1,809	478	11,518
NZ	2014	5	5	533	304	3,745	76%	1,006	21%	160	3%	4,911	161	4,175	75%	845	15%	543	10%	5,563	465	7,921	1,851	702	10,474
NZ	2015	2	2	295	316	5,023	95%	197	4%	71	1%	5,291	43	1,778	79%	355	16%	112	5%	2,245	359	6,801	552	183	7,536
NZ	2016	2	2	218	265	3,946	96%	115	3%	45	1%	4,106	21	1,175	75%	347	22%	51	3%	1,573	286	5,121	462	96 126	5,679
NZ NZ	2017	1	1	126 119	23 61	569 225	81% 19%	134 988	19%	1	0% 0%	704 1.216	75 41	2,803 1.544	85%	372 114	11% 6%	126 114	4% 6%	3,301 1,772	98 102	3,372 1.769	507 1.101	126	4,005
		1	1					988	81%	3	1%		38	-,	87% 74%	114 344	18%	114	6% 7%	-,		-,	1,101 426	117	2,987
NZ NZ	2019	1	1	142 63	91	2,284 967	96% 91%	90	3% 8%	18 11	1%	2,384 1,068	38	1,397 71	74% 62%	344	31%	138	7% 7%	1,879 115	130	3,681 1,038	126	156	4,263 1,183
NZ	2020	U T	0	0.0	0	967	91%	90	0%	11	0%	1,068	2	71	0%	36 0	0%	0	0%	0	24	1,038	126	19	1,183
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	
INZ	2022	U	U	U	U	U	0%	U	υ%	U	0%	U	U	U	0%	U	υ%	U	υ%	U	U	U	U	U	U

Table 4. (continued)

		VESS	SELS				·	JNASSOCIATI	ED SCHOOLS						_	ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR	\ <b>/</b> D	100	DAYS		SKIPJ	JACK	YELLO	WFIN	BIGI	EYE	TOTAL		SKIP.	ACK	YELLO	WFIN	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	90,756	74%	32,046	26%	694	1%	123,496	2,620	56,575	69%	20,579	25%	4,351	5%	81,505	8,099	147,463	52,661	5,060	205,184
PG	2011	49	52	9,270	5,018	70,519	76%	21,630	23%	906	1%	93,055	3,145	57,418	69%	21,083	25%	4,379	5%	82,879	8,176	128,191	42,814	5,314	176,319
PG	2012	51	52	9,636	6,530	98,637	69%	42,768	30%	1,505	1%	142,910	2,978	62,611	68%	24,195	26%	5,713	6%	92,520	9,559	161,729	67,166	7,268	236,163
PG	2013	51	52	9,533	6,862	93,903	66%	45,953	32%	2,177	2%	142,034	2,453	50,020	65%	22,750	30%	4,432	6%	77,202	9,371	144,615	69,269	6,671	220,555
PG	2014	55	53	9,315	6,440	104,315	73%	37,543	26%	1,912	1%	143,770	2,307	68,145	75%	18,243	20%	4,158	5%	90,546	8,774	172,721	56,050	6,110	234,881
PG	2015	53	54	6,684	5,686	103,466	71%	39,945	28%	1,594	1%	145,005	1,602	50,106	72%	14,805	21%	4,568	7%	69,478	7,292	153,590	54,758	6,163	214,512
PG	2016	67	41	9,016	7,625	126,428	64%	66,819	34%	3,691	2%	196,937	2,221	76,496	74%	20,114	20%	6,484	6%	103,093	9,883	204,025	87,508	10,265	301,797
PG	2017	67	58	10,956	10,325	128,513	56%	95,900	42%	3,853	2%	228,266	2,147	51,697	69%	18,848	25%	4,370	6%	74,914	12,577	182,048	116,083	8,373	306,505
PG	2018	56	53	9,691	10,346	154,952	66%	74,885	32%	4,033	2%	233,869	1,974	57,345	75%	16,442	21%	3,077	4%	76,863	12,349	212,826	91,551	7,140	311,517
PG	2019	50	52	6,623	7,489	144,323	71%	57,202	28%	2,295	1%	203,820	1,193	48,825	82%	9,100	15%	1,461	3%	59,386	8,751	194,525	67,066	3,800	265,391
PG	2020	38	40	7,016	7,603	100,564	54%	83,853	45%	1,771	1%	186,189	608	17,248	66%	7,834	30%	1,007	4%	26,089	8,268	118,306	92,657	2,802	213,765
PG	2021	40	42	7,094	6,499	96,548	60%	61,965	39%	2,056	1%	160,569	900	16,440	55%	11,724	39%	1,784	6%	29,947	7,412	113,151	73,864	3,857	190,872
PG	2022	37	43	6,794	8,505	120,895	64%	68,031	36%	1,219	1%	190,146	658	14,869	59%	9,419	37%	1,039	4%	25,328	9,173	135,894	77,544	2,260	215,698
PH	2010	25	22	4,469	2,289	25,315	54%	20,653	44%	1,186	3%	47,155	795	16,630	66%	6,151	24%	2,540	10%	25,320	3,186	42,900	27,386	3,827	74,113
PH	2011	25	23	5,296	2,719	28,331	62%	17,434	38%	185	0%	45,950	1,381	22,618	67%	10,229	30%	899	3%	33,746	4,191	51,662	28,048	1,104	80,815
PH	2012	21	29	5,580	3,560	34,759	53%	29,536	45%	1,565	2%	65,860	1,649	27,382	63%	14,141	32%	2,252	5%	43,775	5,248	62,603	43,880	3,846	110,328
PH	2013	27	30	4,450	2,635	22,491	44%	27,815	54%	1,149	2%	51,454	1,440	21,389	57%	13,952	37%	2,105	6%	37,446	4,080	43,930	41,833	3,254	89,016
PH	2014	27	29	4,330	3,242	47,850	60%	30,227	38%	2,108	3%	80,184	995	15,530	59%	8,946	34%	1,986	8%	26,461	4,251	63,531	39,316	4,132	106,980
PH	2015	23	29	2,822	1,971	24,779	55%	19,283	43%	966	2%	45,028	812	16,886	57%	10,664	36%	2,001	7%	29,551	2,791	41,951	30,258	3,052	75,260
PH	2016	17	18	1,956	1,567	26,218	56%	20,115	43%	740	2%	47,073	521	13,935	63%	6,916	31%	1,374	6%	22,224	2,134	41,055	27,614	2,210	70,879
PH	2017	12	8	1,272	1,006	11,801	48%	12,193	50%	568	2%	24,562	155	2,724	59%	1,733	38%	159	3%	4,616	1,190	15,009	14,251	751	30,011
PH	2018	12	2	314	340	5,794	66%	2,915	33%	56	1%	8,766	73	1,364	57%	953	40%	65	3%	2,381	414	7,161	3,869	121	11,151
PH	2019	12	1	16	22	292	45%	352	54%	10	2%	653	0	0	0%	0	0%	0	0%	0	22	292	352	10	653
PH	2020	6	5	798	869	13,243	49%	13,492	50%	244	1%	26,980	23	572	48%	543	46%	68	6%	1,183	892	13,815	14,035	313	28,163
PH	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
SB	2010	5	5	485	95	2,243	65%	1,224	35%	13	0%	3,480	353	5,505	57%	3,984	41%	249	3%	9,737	448	7,747	5,208	262	13,217
SB	2011	- 5	- 5	1,017	119	1,586	56%	1,242	44%	8	0%	2,836	742	12,998	57%	9,274	41%	454	2%	22,725	861	14,584	10,516	462	25,562
SB	2012	5	5	1,094	98	958	46%	1,127	54%	11	1%	2,096	833	13,849	57%	10,182	42%	373	2%	24,404	931	14,807	11,309	385	26,500
SB	2013	5	5	1,093	213	1,982	44%	2,504	56%	25	1%	4,510	664	11,303	56%	8,537	42%	420	2%	20,259	876	13,285	11,040	444	24,770
SB	2014	5	5	1,212	269	2,855	36%	4,991	63%	23	0%	7,869	786	11,205	50%	10,878	48%	471	2%	22,554	1,056	14,060	15,870	495 264	30,425
SB	2015	8	6	1,343	389	3,074	33%	6,251	67%	57	1%	9,382	787	10,421	54%	8,781	45%	207	1%	19,410	1,176	13,496	15,033		28,792
SB	2016	8	8	2,217	1,047	14,832	61%	9,346	38%	323	1%	24,501	1,072	18,354	59%	12,380	40%	456	2%	31,190	2,132	33,417	21,868	782	56,067
SB	2017	10	10	2,068	1,127	13,289	63%	7,700	37%	45	0%	21,034	873	14,641	59%	9,409	38%	623	3%	24,674	2,001	27,932	17,111	668	45,712
SB	2018	10	10 11	2,102	808	9,447	66%	4,954 4,223	34%	25 124	0% 1%	14,426	1,169	24,769	64%	12,996	34% 33%	687 364	2% 1%	38,452	1,978	34,216	17,950	712 487	52,878
SB SB	2019	11	10	,	856	16,220	79% 63%	5.127	21% 37%	33	1% 0%	20,566	1,110 857	24,129	66% 57%	11,908	42%	236	1%	36,401	1,971 1,493	40,354	16,136	269	56,977 33,502
SB	2020	11	10	1,709	632 943	8,788		/		-	0%	13,948		11,045		8,155			1%	19,436		19,871	13,362	269	
		10	10	1,730		11,678	58%	8,352	42%	89		20,118	763	12,767	57%	9,315	42%	151		22,233	1,707	24,452	17,674		42,366
SB	2022	10	10	1,764	548	6,692	68%	3,177	32%	17	0%	9,887	964	19,289	67%	9,157	32%	389	1%	28,836	1,512	25,982	12,335	406	38,722

Table 4. (continued)

		VESS	SELS		_		·	JNASSOCIATE	ED SCHOOLS							ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR			DAYS		SKIPJ	IACK	YELLO'	WFIN	BIG	EYE	TOTAL		SKIP.	IACK	YELLO	WFIN	BIGE	ΥE	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	4,859	66%	1,540	21%	944	13%	7,344	139	4,887	1,541	944	7,372
SV	2011	2	2	268	3	11	13%	73	86%	0	0%	85	185	8,229	68%	1,699	14%	2,214	18%	12,141	188	8,241	1,772	2,214	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	8,221	60%	2,932	22%	2,480	18%	13,632	217	8,235	2,932	2,480	13,647
SV	2013	4	4	398	13	202	49%	209	51%	1	0%	412	296	11,949	71%	2,720	16%	2,136	13%	16,805	309	12,151	2,929	2,137	17,217
SV	2014	4	4	485	92	2,008	100%	10	1%	0	0%	2,018	303	10,202	66%	3,034	20%	2,224	14%	15,461	394	12,211	3,043	2,225	17,479
SV	2015	2	2	185	7	0	0%	0	0%	0	0%	0	177	11,928	78%	1,975	13%	1,398	9%	15,301	184	11,928	1,975	1,398	15,301
SV	2016	3	2	112	6	539	80%	136	20%	1	0%	677	95	4,852	73%	793	12%	981	15%	6,626	101	5,391	930	982	7,303
SV	2017	1	2	76	2	0	0%	31	100%	0	0%	31	73	3,003	70%	534	13%	750	18%	4,287	75	3,003	566	750	4,318
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,363	76%	419	10%	633	14%	4,415	88	3,638	419	633	4,690
SV	2019	2	2	42	2	0	0%	0	0%	0	0%	0	50	2,158	73%	370	13%	411	14%	2,939	52	2,158	370	411	2,939
SV	2020	2	2	62	5	233	86%	36	13%	1	0%	270	58	2,589	63%	659	16%	872	21%	4,120	63	2,822	695	873	4,390
SV	2021	2	2	94	0	0	0%	0	0%	0	0%	0	93	3,658	62%	1,115	19%	1,085	19%	5,858	93	3,658	1,115	1,085	5,858
SV	2022	2	2	70	0	0	0%	0	0%	0	0%	0	76	2,794	64%	817	19%	769	18%	4,380	76	2,794	817	769	4,380
TV	2010	1	1	271	319	6,924	77%	2,039	23%	33	0%	8,997	40	1,019	65%	331	21%	207	13%	1,557	359	7,944	2,370	241	10,554
TV	2011	1	1	311 271	283 301	3,658	68% 56%	1,674	31% 44%	17 36	0% 1%	5,350	58 92	1,655	80%	293	14% 15%	118 279	6% 5%	2,066	341 393	5,313	1,968	135 314	7,416 11,054
TV	2012	1	1	271	353	3,063 7,008	91%	2,401 622	8%	91	1%	5,500 7,721	79	4,442 2,974	80% 81%	833 621	17%	100	3%	5,554 3,695	432	7,506 9,982	3,234 1,243	191	11,054
TV	2013	1	1	159	146	3,428	93%	213	6%	34	1%	3,675	49	1.947	86%	264	12%	57	3%	2,268	195	5.374	477	91	5,943
TV	2014	1	1	186	174	3,555	96%	133	4%	2	0%	3,690	36	1,663	93%	97	5%	20	1%	1.780	210	5,374	230	21	5,470
TV	2015	1	1	234	93	2,446	97%	73	3%	1	0%	2,520	59	2.689	75%	649	18%	252	7%	3.590	152	5,216	722	252	6,110
TV	2017	2	2	161	84	1.803	59%	1.193	39%	60	2%	3.056	59	1.761	68%	695	27%	129	5%	2.585	143	3,565	1.888	189	5,641
TV	2018	1	1	208	160	3,187	74%	1.072	25%	45	1%	4,305	108	5,529	81%	513	8%	789	12%	6,831	268	8,717	1,585	834	11,136
TV	2019	1	1	212	106	2,722	87%	393	13%	11	0%	3.127	83	3,392	93%	167	5%	88	2%	3,648	189	6,115	561	100	6,775
TV	2020	3	3	308	96	2,178	89%	277	11%	5	0%	2,460	119	6,294	84%	616	8%	565	8%	7,475	215	8,472	893	569	9,935
TV	2021	6	6	1,060	677	14,157	79%	3,732	21%	70	0%	17,960	359	11,497	79%	2,069	14%	969	7%	14,535	1,036	25,654	5,801	1,040	32,495
TV	2022	6	6	1,247	954	16,136	82%	3,536	18%	93	1%	19,765	478	17,734	82%	2,939	14%	983	5%	21,656	1,432	33,870	6,475	1,075	41,421
TW	2010	34	30	7,865	6,413	99,606	81%	22,335	18%	668	1%	122,609	1,709	54,625	72%	15,458	20%	6,158	8%	76,241	8,122	154,231	37,793	6,826	198,850
TW	2011	34	31	8,801	4,763	55,964	81%	12,500	18%	574	1%	69,037	2,955	78,359	73%	19,947	19%	8,591	8%	106,897	7,718	134,323	32,447	9,165	175,935
TW	2012	34	33	7,146	4,660	60,107	70%	25,064	29%	902	1%	86,073	2,940	89,518	78%	17,129	15%	7,932	7%	114,578	7,600	149,624	42,193	8,834	200,651
TW	2013	34	34	7,706	6,171	83,592	83%	15,927	16%	1,043	1%	100,562	2,638	80,909	72%	21,837	20%	9,173	8%	111,919	8,809	164,500	37,765	10,216	212,481
TW	2014	34	36	6,845	5,749	104,423	88%	12,492	11%	1,290	1%	118,205	2,654	90,337	76%	20,549	17%	8,066	7%	118,952	8,404	194,760	33,040	9,356	237,157
TW	2015	34	34	5,141	4,639	79,496	76%	23,896	23%	1,358	1%	104,750	1,785	71,429	80%	12,447	14%	5,622	6%	89,498	6,424	150,926	36,343	6,980	194,249
TW	2016	34	31	5,273	4,785	80,552	70%	32,466	28%	1,327	1%	114,345	1,511	54,921	74%	12,947	18%	6,174	8%	74,043	6,298	135,473	45,414	7,501	188,388
TW	2017	31	30	5,461	5,167	64,092	67%	30,877	32%	980	1%	95,949	1,904	56,130	77%	12,726	17%	4,112	6%	72,968	7,072	120,259	43,606	5,093	168,958
TW	2018	27	29	5,185	4,634	82,338	85%	13,974	14%	654	1%	96,966	2,292	78,436	79%	15,778	16%	5,257	5%	99,470	6,927	160,774	29,752	5,910	196,436
TW	2019	30	30	5,231	5,659	119,659	82%	24,553	17%	966	1%	145,178	2,042	76,919	81%	14,169	15%	4,320	5%	95,408	7,708	196,644	38,730	5,291	240,665
TW	2020	29	28	4,501	4,100	77,459	85%	13,029	14%	448	1%	90,935	1,878	59,189	69%	19,015	22%	7,380	9%	85,584	5,978	136,647	32,044	7,827	176,519
TW	2021	29	29	5,095	4,486	79,350	73%	28,826	27%	679	1%	108,855	2,191	80,130	75%	19,333	18%	7,361	7%	106,824	6,678	159,480	48,159	8,040	215,679
TW	2022	26	26	4,657	4,135	77,632	87%	11,402	13%	411	1%	89,446	2,477	93,385	77%	20,242	17%	8,135	7%	121,762	6,612	171,017	31,644	8,546	211,208

Table 4. (continued)

		VESS	SELS				l	JNASSOCIATE	D SCHOOLS							ASSOCIATED	SCHOOLS						TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	IACK	YELLO'	WFIN	BIGI	EYE	TOTAL		SKIP.	ACK	YELLO	WFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		10	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
US	2010	37	37	8,220	6,331	110,016	83%	21,782	16%	1,010	1%	132,808	2,397	90,889	81%	15,090	13%	6,356	6%	112,336	8,738	201,159	36,970	7,396	245,524
US	2011	37	36	8,048	3,008	48,359	81%	11,446	19%	138	0%	59,943	3,401	112,293	78%	19,797	14%	11,206	8%	143,297	6,409	160,652	31,243	11,345	203,240
US	2012	39	40	8,789	5,622	99,395	80%	23,210	19%	1,184	1%	123,790	3,464	109,121	80%	18,205	13%	8,585	6%	135,911	9,088	208,562	41,424	9,773	259,759
US	2013	40	42	8,380	5,028	96,955	91%	8,336	8%	794	1%	106,085	3,152	113,384	77%	23,039	16%	11,649	8%	148,072	8,183	210,435	31,381	12,454	254,270
US	2014	40	40	9,069	6,268	117,174	84%	22,293	16%	430	0%	139,896	3,717	147,704	85%	16,914	10%	8,491	5%	173,109	9,987	264,877	39,207	8,921	313,005
US	2015	39	39	6,988	5,904	112,149	89%	13,087	10%	617	1%	125,853	2,052	96,065	86%	11,009	10%	5,152	5%	112,226	7,956	208,214	24,096	5,769	238,079
US	2016	37	34	5,571	3,333	75,688	88%	10,428	12%	399	1%	86,515	2,177	88,435	77%	17,485	15%	8,701	8%	114,621	5,511	164,134	27,917	9,101	201,152
US	2017	34	34	5,623	2,652	43,791	74%	15,242	26%	296	1%	59,328	2,442	84,038	79%	15,904	15%	7,178	7%	107,121	5,095	127,830	31,146	7,474	166,449
US	2018	34	35	5,758	2,828	54,061	78%	15,053	22%	212	0%	69,326	2,910	101,708	79%	16,118	13%	10,299	8%	128,125	5,738	155,769	31,172	10,511	197,451
US	2019	31	30	4,323	3,119	69,208	85%	12,322	15%	297	0%	81,827	1,894	69,245	82%	10,471	12%	4,980	6%	84,696	5,015	138,490	22,804	5,287	166,580
US	2020	23	23	3,699	1,578	38,368	96%	1,619	4%	204	1%	40,192	1,727	73,319	76%	13,300	14%	10,395	11%	97,014	3,305	111,687	14,919	10,599	137,205
US	2021	21	17	1,431	81	1,894	97%	60	3%	3	0%	1,957	1,220	35,629	73%	7,364	15%	5,522	11%	48,515	1,301	37,522	7,424	5,524	50,471
US	2022	14	12	1,335	210	5,988	95%	302	5%	10	0%	6,300	1,031	35,639	72%	7,326	15%	6,434	13%	49,400	1,241	41,627	7,629	6,444	55,700
VU	2010	5	5	872	469	10,325	78%	2,864	22%	87	1%	13,276	198	8,266	79%	1,617	16%	556	5%	10,440	668	18,593	4,482	644	23,719
VU	2011	6	4	1,142	287	5,344	80%	1,321	20%	30	0%	6,695	391	13,765	83%	2,457	15%	466	3%	16,688	678	19,109	3,778	495	23,382
VU	2012	6	3	775	472	8,990	61%	5,719	39%	118	1%	14,827	268	9,891	81%	1,565	13%	719	6%	12,175	740	18,881	7,284	837	27,002
VU	2013	6	4	974	607	11,377	84%	2,070	15%	44	0%	13,490	263	10,116	80%	1,909	15%	688	5%	12,712	870	21,492	3,979	731	26,202
VU	2014	3	3	685	362	8,637	87%	1,231	12%	38	0%	9,906	230	9,046	83%	1,181	11%	629	6%	10,855	592	17,683	2,412	666	20,761
VU	2015	3	3	286	105	1,643	95%	78	5%	1	0%	1,722	125	5,937	90%	545	8%	142	2%	6,623	230	7,580	623	143	8,345
VU	2016	3	3	165	40	1,191	86%	179	13%	12	1%	1,382	37	2,610	87%	52	2%	351	12%	3,012	78	3,801	230	363	4,394
VU	2017	3	3	249	119	1,407	63%	827	37%	8	0%	2,242	122	2,997	65%	648	14%	958	21%	4,603	241	4,404	1,476	965	6,845
VU	2018	2	2	313	337	6,396	81%	1,464	19%	53	1%	7,912	96	3,933	85%	411	9%	269	6%	4,613	433	10,329	1,875	322	12,525
VU	2019	5	6	573	739	22,822	88%	2,698	10%	320	1%	25,840	138	7,225	84%	626	7%	708	8%	8,558	878	30,047	3,324	1,027	34,398
VU	2020	6	6	915	965	23,308	82%	4,961	17%	216	1%	28,485	334	13,557	74%	2,769	15%	2,074	11%	18,400	1,299	36,866	7,730	2,290	46,885
VU	2021	7	7	1,027	947	19,908	75%	6,647	25%	121	1%	26,676	449	16,556	77%	3,564	17%	1,493	7%	21,613	1,396	36,464	10,211	1,614	48,289
VU	2022	8	8	1,255	1,433	32,201	79%	8,194	20%	242	1%	40,637	552	21,410	77%	4,680	17%	1,769	6%	27,859	1,985	53,612	12,874	2,010	68,496

Table 4. (continued)

	VES	SELS				UI	NASSOCIATI	ED SCHOOL	S						ASSOCIATE	D SCHOOLS						TOTAL		
YEAR	YB	LOG	DAYS		SKIP	JACK	YELLO	WFIN	BIGI	EYE	TOTAL		SKIP	JACK	YELLO	WFIN	BIG	EYE	TOTAL		SKJ	YFT	BET	TOTAL
	10	LOG		SETS	MT	%	МТ	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
2010	276	262	52,843	38,227	687,263	76%	212,189	23%	8,543	1%	907,999	13,416	427,177	73%	115,172	20%	45,673	8%	588,022	51,922	1,118,549	329,647	54,651	1,502,847
201	278	267	58,730	30,085	422,958	75%	135,952	24%	3,785	1%	562,696	21,874	614,250	73%	155,204	18%	72,519	9%	841,970	52,111	1,038,886	291,794	76,419	1,407,099
2012	287	286	54,470	36,210	616,131	73%	214,123	26%	8,735	1%	838,989	20,328	599,880	76%	135,579	17%	56,566	7%	792,025	56,676	1,217,616	350,289	65,447	1,633,351
2013	297	293	55,420	38,537	648,167	79%	162,026	20%	9,752	1%	819,943	18,058	559,257	72%	156,656	20%	62,041	8%	777,953	56,701	1,209,213	319,627	71,945	1,600,785
2014	309	306	53,404	38,425	733,488	77%	203,933	22%	10,219	1%	947,637	18,084	639,044	78%	125,854	15%	55,970	7%	820,868	56,593	1,374,328	330,501	66,364	1,771,193
2015	307	303	43,319	34,266	695,804	78%	181,933	20%	11,101	1%	888,841	13,835	554,392	79%	104,699	15%	39,199	6%	698,287	48,253	1,253,922	288,424	50,986	1,593,332
2016	293	278	44,218	32,461	647,400	74%	221,484	25%	10,742	1%	879,625	13,938	530,928	77%	110,651	16%	49,946	7%	691,523	46,569	1,182,226	334,171	61,087	1,577,484
2017	282	279	47,810	33,337	509,223	65%	259,725	33%	9,461	1%	778,410	16,806	529,835	77%	115,238	17%	46,155	7%	691,228	50,416	1,044,289	377,883	56,101	1,478,274
2018	274	269	44,985	32,875	624,537	75%	192,502	23%	11,222	1%	828,261	18,195	668,259	80%	115,369	14%	51,880	6%	835,504	51,265	1,296,931	309,845	63,837	1,670,613
2019	281	266	42,563	37,128	857,221	81%	194,183	18%	8,909	1%	1,060,313	14,952	601,792	82%	98,173	13%	33,416	5%	733,384	52,379	1,465,337	295,331	42,868	1,803,536
2020	268	256	45,138	33,055	646,933	75%	205,513	24%	5,830	1%	858,278	15,272	572,292	75%	134,663	18%	58,024	8%	764,982	48,501	1,221,954	342,779	64,246	1,628,979
202	261	258	43,524	27,620	515,620	72%	199,115	28%	5,284	1%	720,019	17,381	584,473	75%	136,194	18%	54,569	7%	775,234	46,222	1,121,065	344,532	61,208	1,526,805
2022	248	248	42,553	29,937	562,366	78%	156,904	22%	4,062	1%	723,335	18,428	650,802	77%	137,022	16%	57,242	7%	845,066	49,755	1,235,292	302,357	62,769	1,600,418

- 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) 'YB' those provided by CCMs with their annual catch estimates (and therefore appear in the WCPFC Yearbook) and (ii) 'LOG' 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	- Cook Islands - Japan	CN KI	- China - Kiribati	ES KR	- EU-Spain - Republic of Korea	FM	- FSM
MH	- Marshall Islands	NZ	- New Zealand	PG	- PNG		
PH	- Philippines (DW)	SB	- Solomon Is.	SV	- El Salvador	NR	- Nauru
TV	- Tuvalu	TW	- Chinese Taipei	US	- USA	VU	- Vanuatu

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

ССМ	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	59	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	222	230	84	
JAPAN	1	3	0	0	2	11	2	0	
KIRIBATI	209	374	417	471	463	334	315	222	7
MARSHALL ISLANDS	168	65	423	143	265	277	281	141	4
NAURU	0	0	0	51	55	211	55	56	4
NEW ZEALAND	31	5	75	40	36	2	0	0	4
PAPUA NEW GUINEA	139	14	0	0	0	1	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	145	31	4
USA	526	296	0	480	425	710	579	393	
VANUATU	0	37	100	24	17	90	101	63	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.

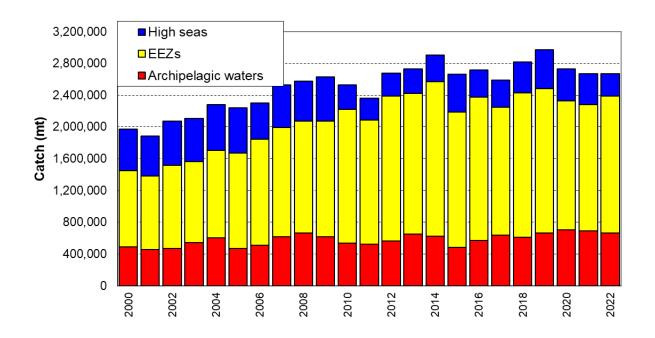


Figure 1. Tuna catch estimates (mt) in the WCP–CA, by broad area, all gear types.

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

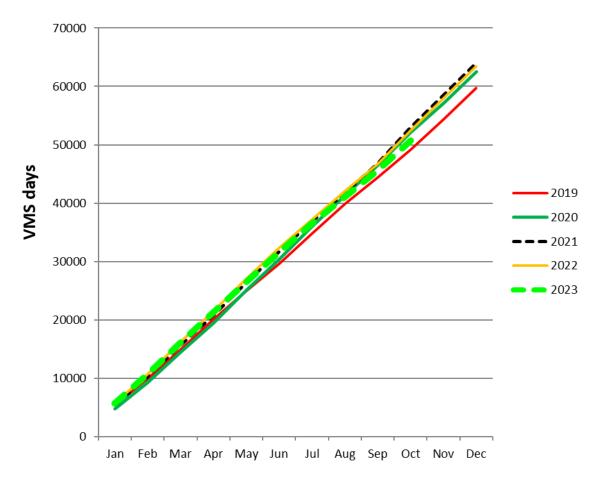


Figure 2. Cumulative tropical purse seine days at sea by month, 2009-2023, as measured by VMS (excludes days in port)

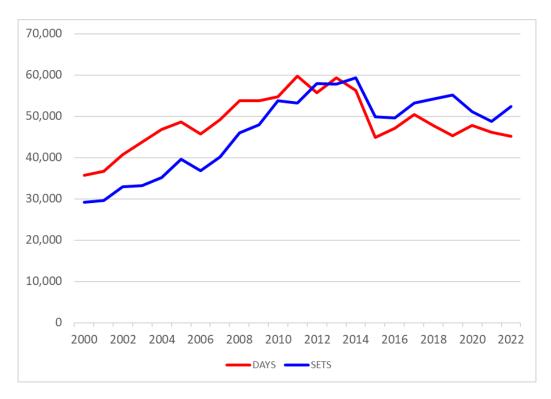


Figure 3. Annual trends in purse seine effort in the WCPFC Convention Area between 20°N and 20°S. "DAYS" – days fishing and searching. Excludes domestic purse seine effort in Philippines and Indonesia, but includes Philippine domestic-based effort in HSP#1. Estimates are based on raised logsheet data.

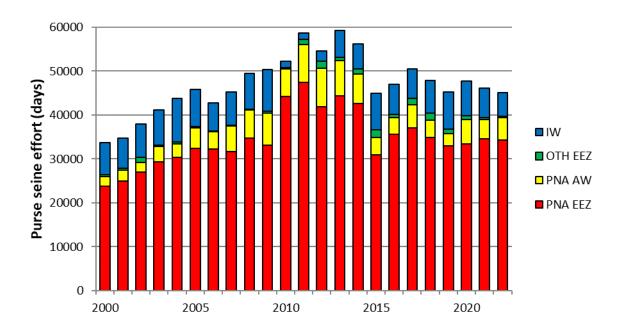


Figure 4. Purse seine effort (days fishing and searching) in the WCPFC Convention Area between 20°N and 20°S. Excludes domestic purse seine effort in Philippines and Indonesia. Estimates are based on raised logsheet data.

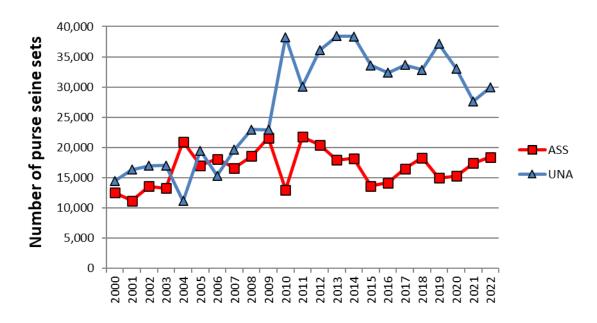
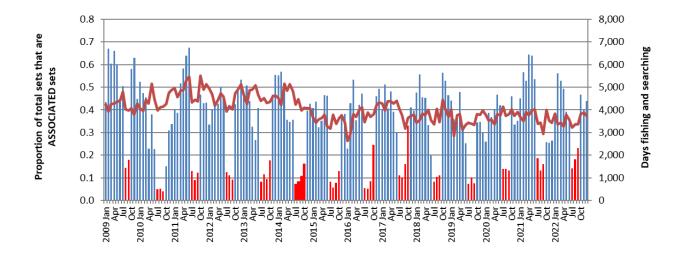


Figure 5. Sets by set type made in the WCPO tropical purse seine fishery, 2000-2022. Associated (ASS) and Unassociated (UNA) sets. Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded. Associated sets include animal-associated sets.



<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 (secondary/right-hand Y-axis).

Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded.

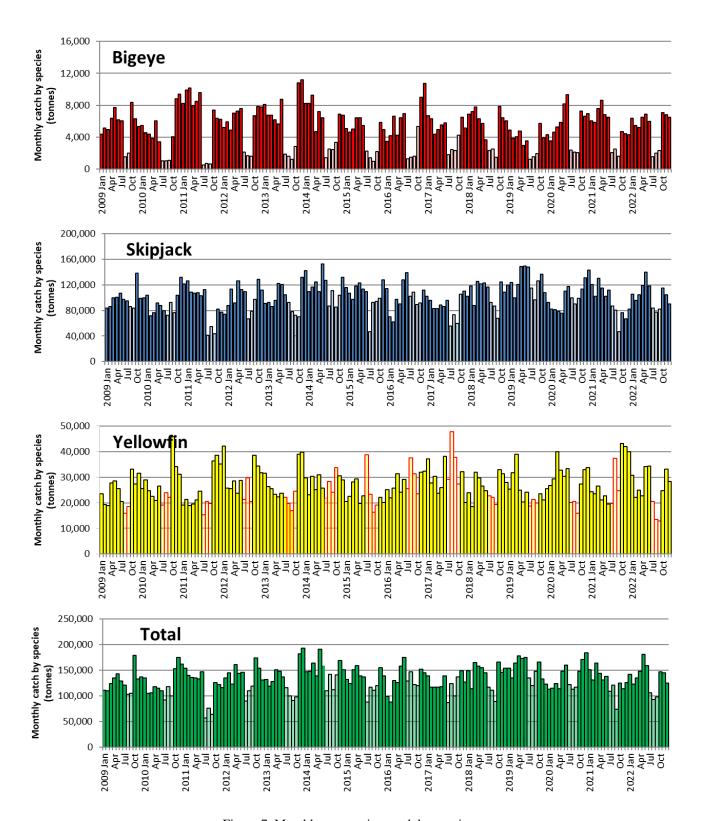


Figure 7. Monthly purse seine catch by species

Data reflect 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.

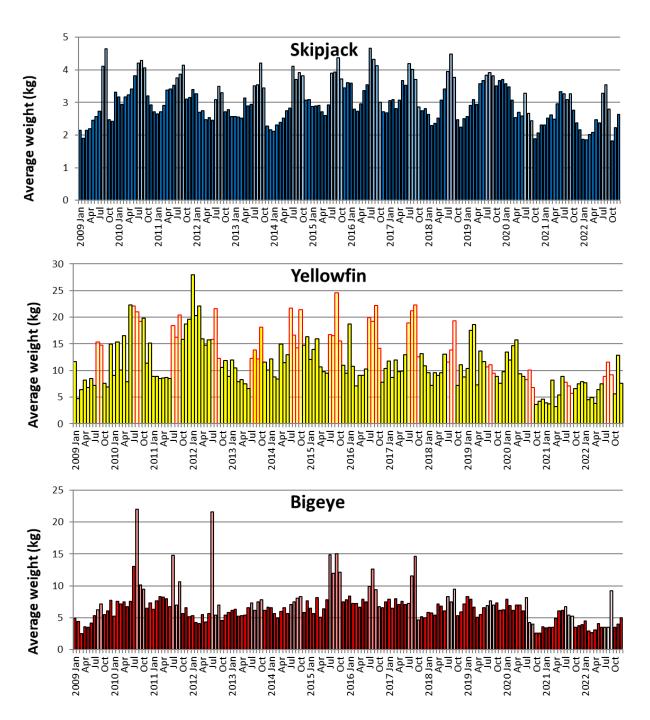


Figure 8. Monthly average weight of bigeye, skipjack and yellowfin tuna.

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.

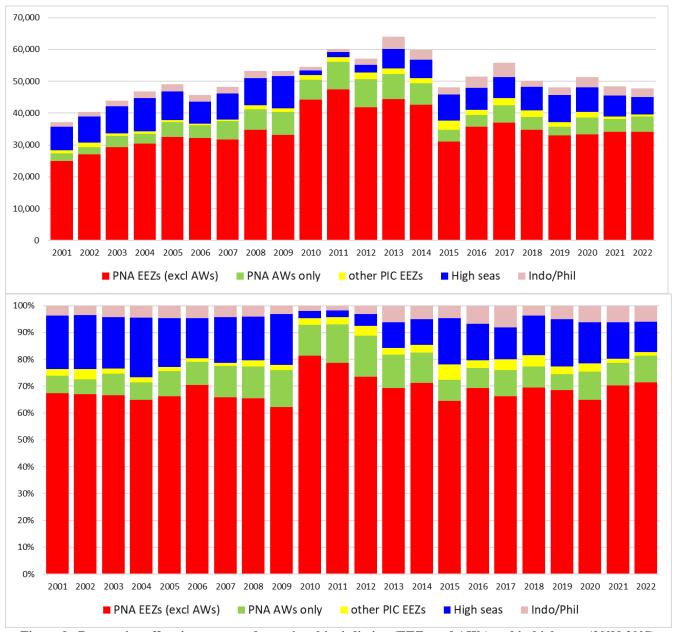


Figure 9. Purse seine effort in waters under national jurisdiction (EEZs and AWs) and in high seas (20°N-20°S)

(Top: days fished; Bottom: percentage days fished)

(Refer to NOTES under TABLE 1 above)

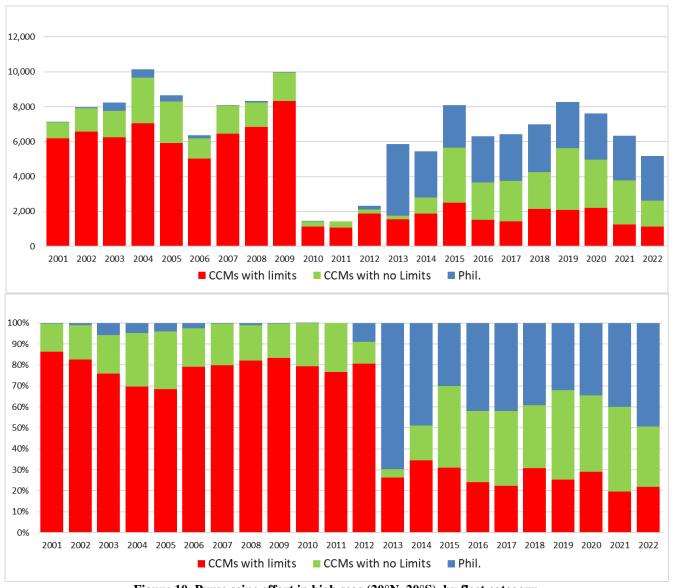


Figure 10. Purse seine effort in high seas (20°N–20°S), by fleet category.

(Top: days fished; Bottom: percentage days fished)

(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)

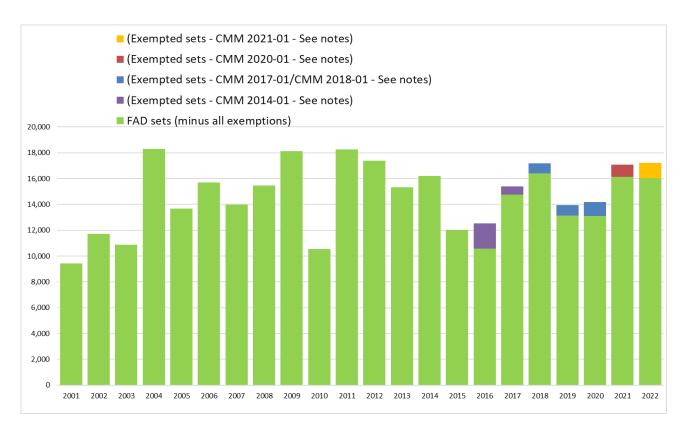


Figure 11. Estimated FAD sets undertaken in the tropical purse seine fishery (20°N-20°S), by fleet category.

(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)

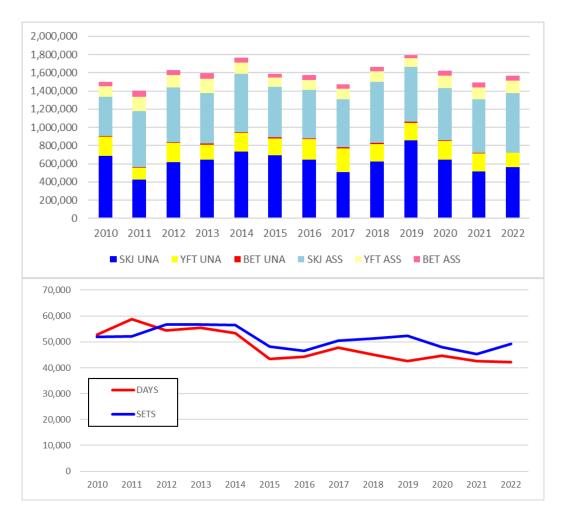


Figure 12. Purse seine tuna catch, by set type and species (top) and effort (bottom)

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.

ССМ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	CMM limits for 2020	CMM limits for 2021	See Note
AMERICAN SAMOA	75	196	242	227	134	181	218	132	249	487	1,263	1,502	389	318	557	658	1,409	851	1,545	1,586	428	1,565			4
USTRALIA	1,307	1,002	1,024	892	791	499	1,008	1,027	726	458	379	553	489	490	785	825	418	325	258	290	361	342			7
BELIZE	1,322	812	782	297	425	254	158	89	43	89	102	132	217	0	0	0	0	0	0	0	0	0			8
CHINA	2,227	2,312	8,965	11,748	7,520	13,378	10,535	10,798	15,289	13,924	11,139	11,324	10,671	9,370	8,210	8,195	7,023	8,695	8,644	7,403	5,493	5,667	8,724	8,724	10,11,1
COOK ISLANDS	1	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	197	124	97	83	75			4
U-PORTUGAL	0	0	0	0	0	0	0	0	0	0	3	17	106	71	17	10	0	0	0	0	0	0			
U-SPAIN	0	0	0	42	17	62	62	77	46	15	10	23	23	65	53	53	21	39	30	40	105	112			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			4
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			4
FRENCH POLYNESIA	745	649	439	502	606	498	478	490	587	436	607	654	787	741	813	563	896	1,063	954	874	1,045	1,388			4
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	831	932	0	. 0	0	0	0	. 0			
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	8	0	1,255	2,190	1,129	1,243	1,185	5,889	5,889	12
JAPAN	27,466	29,574	26,110	29,248	23,021	25,685	26,076	20,942	17,653		17,722	16,917	12,991	15,564		11,467	11,471	12,005	10,639	8,862	8,409	6,082	17,765	17,765	16
IRIBATI	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
ARSHALL 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
IAURU	6	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4
IEW CALEDONIA	128	189	142	90	76	35	53	63	51	44	41	49	51	58	63	74	48	46	40	51	59	67			4
JEW ZEALAND	481	201	204	177	175	177	213	133	253	132	174	154	109	122	122	177	97	135	50	67	85	50			7
IIUE	0	0	0	0	10	22	35	51	10	4	0	0	0	0	0	0	0	0	0	0	0	0			4
IORTHERN 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	17	10			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
EPUBLIC OF KOREA	22,172	28,533	17,151	17,941	15,622		10,054	17,001	15,231	13,914	15,282			12,779	10,689	11,018	10,220	13,828	13,711	13,011	13,685	12,986	13,942	13,942	-, -
AMOA	185	137	110	104	64	128	101	106	117	108	71	54	36	48	48	62	150	62	161	156	108	127	,	,	4
ENEGAL	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			-
OLOMON 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
ONGA	191	215	94	40	125	117	129	81	38	24	18	10	7	22	25	27	24	34	16	10	15	24			4
UVALU	0	0	0	0	0	0	0	0	0	0	105	1,408	120	76	187	103	111	64	53	9	23	0			4
HINESE 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
SA	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
ANUATU	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	2,117			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			4
otal	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	51,054	51,873	60,355	60,355	
IETNAM	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	1522			9

- 1. Source: WCPFC Annual catch estimates as at 2<sup>nd</sup> 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; paragraph 5 of CMM 2021-01 (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.

																							Av. 2001-	
CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2004	See Note
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	_	(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	4,706	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	7,899	7,065	16,480	
KIRIBATI	2	0	2	0	0	0	0	7	0	4	140	300	175	108	405	610	359	220	862	1,279	904	2,535	1	(4)
MARSHALL ISLANDS	0	0	0	3	0	0	2	91	120	117	99	113	47	0	0	578	948	707	1,175	743	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	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	58	
NIUE	0	0	0	0	34	42	43	40	20	8	0	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	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	16	14	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	1,904	(4)
PHILIPPINES	484	484	484	484	484	484	484	484	484	484	146	61	27	153	0	0	0	0	0	0	0	0	484	(5)
REPUBLIC OF KOREA	13,768	15,497	12,134	10,058	13,329	9,529	8,817	7,846	10,032	7,644	7,881	7,832	5,716	8,371	9,352	8,054	7,008	6,519	13,847	10,948	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	
PONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	325	373	201	186	156	208	215	237	(4)
UVALU	0	0	0	0	0	0	0	0	0	0	286	453	114	41	166	124	164	106	76	16	9	0	0	(4)
WCHINESE TAIPEI	22,326	21,993	22,149	22,975	19,571	18,654	16,668	16,411	19,693	22,225	21,320	16,948	14,999	12,257	14,118	17,816	22,956	16,050	17,724	10,212		15,469	22,361	(10)
JSA	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	_
/ANUATU	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	578		
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)
otal	72,489	74,072	78,320	78,003	71,536	67 <b>,</b> 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	57,836	70,257	75,721	
	0.000	0.750	0 150	11 100	10 00=	10 000	11 070	10 275	0.044	0 510	10 576	10 455	12 015	11 663	15 005	16 400	15 675	16 500	14 650	14 110	10.000	10 051		F (0)
IETNAM	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	13,051		(8)

- 1. Source: WCPFC Annual catch estimates as at 2<sup>nd</sup> 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 <u>are</u> 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	Os of Hooks	5)				
FLEET	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	12,099
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	18,072
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	128,119
JP	591,056	544,105	513,557	453,786	393,618	347,416	279,822	287,191	306,046	298,314	187,536	196,509	186,490
KI	0	19,487	50,227	27,577	23,868	38,218	55,215	45,625	40,604	73,402	110,146	69,499	232,167
KR	728,939	803,720	771,103	626,874	599,179	506,797	587,646	473,333	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	11,776
PG	24,589	51,692	40,188	14,849	19,232	7,883	4,492	2,789	35,323	30,864	2,473	0	39,290
PW	0	0	0	0	0	0	626	86,598	107,145	92,140	57	0	830
SB	64,836	12,757	5,497	3,942	421,448	370,855	24,030	18,036	209,644	204,151	90,786	112,387	160,180
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	1,047,106	1,207,708	1,306,156	1,399,939	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	66,955
	3,436,365	4,189,554	4,617,707	3,604,082	3,626,659	4,094,672	3,710,137	3,562,180	3,951,263	3,960,342	2,999,237	3,008,190	3,426,807

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

#### Fleet Codes

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

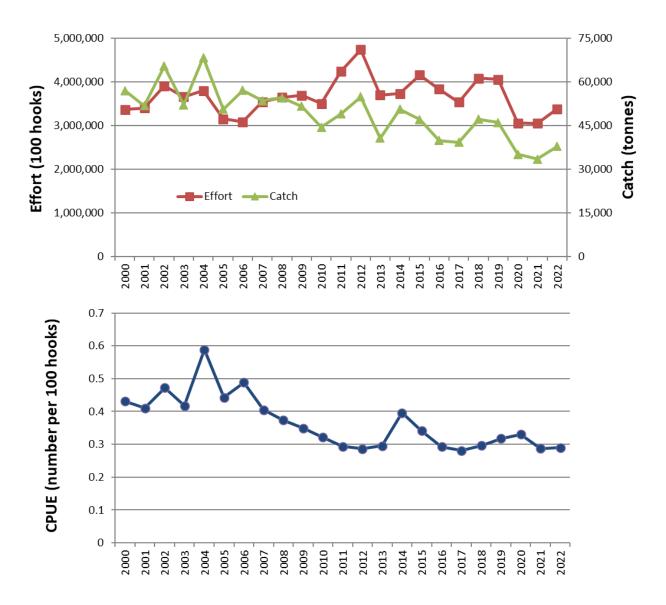


Figure 13. Estimates of effort, bigeye catch and nominal CPUE for the CORE tropical WCPFC longline fishery

CORE Area is  $(130^{\circ}\text{E} - 150^{\circ}\text{W}, 20^{\circ}\text{N} - 10^{\circ}\text{S})$ .

2022 data are provisional.

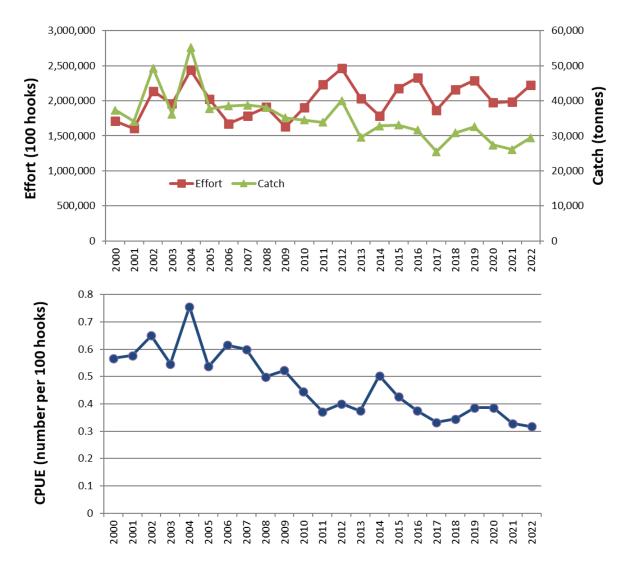


Figure 14. Estimates of effort, bigeye catch and nominal CPUE for the EASTERN tropical WCPFC longline fishery

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

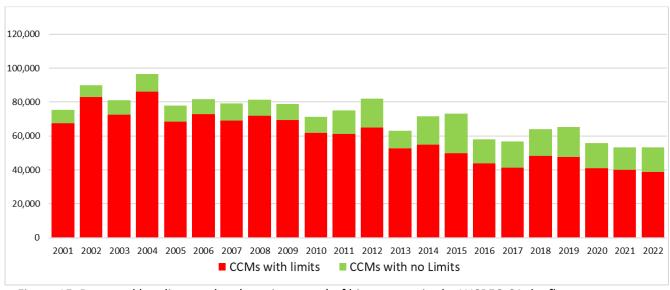
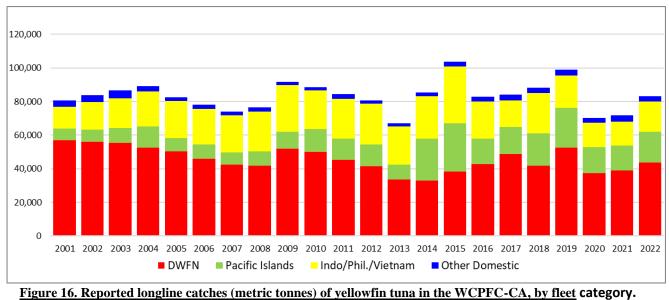


Figure 15. Reported longline catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by fleet category.

(Refer to NOTES under TABLE 6 above;

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



(Refer to NOTES under TABLE 7 above;

Vietnam catch is included)

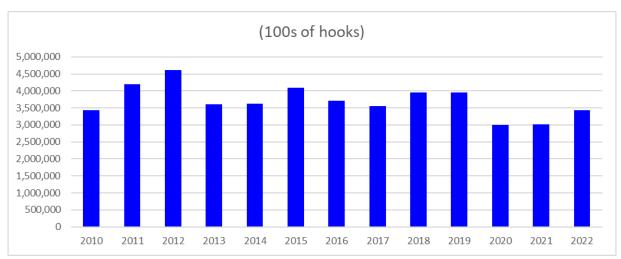


Figure 17. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), 2010-2022.

(Refer to NOTES under TABLE 8 above)

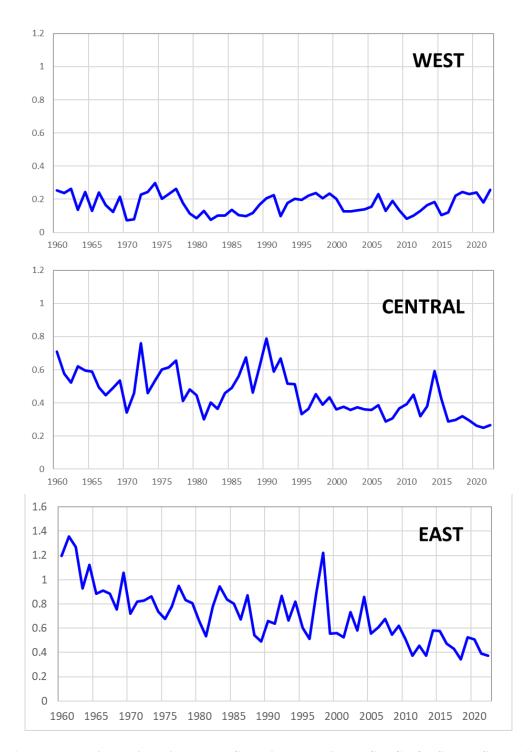


Figure 18. Annual trends in nominal bigeye tuna CPUE in the tropical WCPFC LONGLINE fishery ( $20^{\circ}N-10^{\circ}S$ )

# **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)			
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	1,990	Within Limit	Within EEZ only, excluding AWs	NO	6
POLE-AND-LINE	INDONESIA	41,025	6,392	Within Limit	Within EEZ only, excluding AWs	NO	7
POLE-AND-LINE	JAPAN	114,573	62,668	Within Limit		YES	2,4

- 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 Japan Fisheries Agency (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.

# <u>Table 10. Tropical tuna catch estimates for OTHER FISHERIES deemed exempt from the tropical tuna measure</u>

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

	CEAD ELAC		ch (MT)	
GEAR	FLAG	2022 Average 2017-2022		Reason for exemption
GILLNET	JAPAN	151	109	Less than 2,000 t.
GILLNET	VIETNAM	10,702	26,664	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	209	238	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	1,119	1,113	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	INDONESIA	51,824	36,595	Within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	JAPAN	1,785	1,542	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	4,399	3,662	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	4	11	Less than 2,000 t. and within territorial seas and/or archipelagic waters only

- 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	Updated to include latest 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	Updated to include latest 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	Updated to include latest 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	Updated to include latest data
Table 5	Annual high seas FAD sets, by fleet, 2015–2022		Updated to include latest data
Table 6	Reported LONGLINE catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by flag.	Updated to include provisional 2022 data	Updated to include latest data
Table 7	Reported LONGLINE catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.	Updated to include provisional 2022 data	Updated to include latest data
Table 8	Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery.	Updated to include provisional 2022 data	Updated to include latest 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	Updated to include latest 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	Updated to include latest data
FIGURES	[Figures corresponding to relevant tables above	Updated to include provisional 2022 data	Updated to include latest data