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

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**WCPFC-TCC18-2022-IP09<sup>1</sup>**  
**23 July 2022**

**Secretariat and SPC-OFP**

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

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**WCPFC-SC18-2022-MI-IP08  
23 July 2022**

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

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# 1. Purse seine fishery information

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

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

EEZ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Notified / Estimated EEZ Limits	See NOTE (s)	
AUSTRALIA	23	14	24	9	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	#	2, 9, 15
COOK ISLANDS	46	225	8	6	2	8	3	29	45	17	104	479	209	353	348	202	530	649	563	288	85	1,250	2, 15	
FIJI	12	5	10	26	36	6	6	23	12	29	27	27	32	0	50	43	31	3	12	1	0	300	2, 15	
FRENCH POLYNESIA	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2, 15
INDONESIA	485	443	496	672	933	767	572	373	410	274	567	1,347	2,930	1,676	1,174	2,362	3,175	839	1,255	1,302	1,427	*	2, 4, 16, 18	
JAPAN	172	223	344	146	92	133	152	791	503	866	204	302	465	198	653	641	670	349	414	607	270	1,500	2, 9, 10, 13, 15	
NEW ZEALAND	218	174	167	313	359	218	217	234	128	218	261	268	290	268	278	197	152	110	123	115	104	#	2, 9, 15	
NIUE	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	200	2, 15	
PHILIPPINES	918	969	1,347	1,421	1,311	1,352	1,520	1,792	1,252	808	491	491	1,012	1,389	1,052	1,143	1,518	989	1,120	1,517	1,107	*	2, 4, 6, 8, 17, 1	
REPUBLIC OF KOREA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18	
SAMOA	8	12	4	2	3	2	4	7	13	7	38	32	45	15	31	85	13	5	4	15	14	150	2, 15	
TOKELAU	100	374	25	67	126	30	47	132	210	190	875	721	380	622	1,321	189	729	885	208	403	153	1,000	2, 13, 15	
TONGA	2	0	0	1	1	0	0	0	0	0	0	0	2	0	2	18	11	0	0	0	0	250	2, 15	
CHINESE TAIPEI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18	
USA	339	482	223	294	136	186	100	63	122	35	49	209	189	261	90	111	134	104	79	143	134	558	2, 15	
VANUATU	2	2	0	19	1	0	0	14	1	0	5	5	1	0	4	0	1	0	0	7	0	200	2, 15	
WALLIS AND FUTUNA	5	9	6	1	4	2	0	7	8	2	3	2	0	3	2	2	0	0	0	0	0	*	2, 18	
<b>PNA EEZs (excl AWs)</b>	<b>24,974</b>	<b>27,040</b>	<b>29,265</b>	<b>30,330</b>	<b>32,453</b>	<b>32,230</b>	<b>31,732</b>	<b>34,772</b>	<b>33,111</b>	<b>44,267</b>	<b>47,382</b>	<b>41,883</b>	<b>44,331</b>	<b>42,572</b>	<b>30,991</b>	<b>35,665</b>	<b>37,004</b>	<b>34,840</b>	<b>32,987</b>	<b>33,340</b>	<b>32,975</b>	<b>44,033</b>	<b>5, 12, 15, 20</b>	
<b>PNA AWs only</b>	<b>2,426</b>	<b>2,215</b>	<b>3,553</b>	<b>3,093</b>	<b>4,656</b>	<b>3,918</b>	<b>5,710</b>	<b>6,320</b>	<b>7,289</b>	<b>6,255</b>	<b>8,663</b>	<b>8,826</b>	<b>7,996</b>	<b>6,711</b>	<b>3,812</b>	<b>3,806</b>	<b>5,384</b>	<b>3,937</b>	<b>2,823</b>	<b>5,369</b>	<b>4,028</b>		<b>5</b>	
<b>PNA EEZs + AWs = TOTAL PNA</b>	<b>27,400</b>	<b>29,255</b>	<b>32,818</b>	<b>33,423</b>	<b>37,109</b>	<b>36,148</b>	<b>37,442</b>	<b>41,092</b>	<b>40,400</b>	<b>50,522</b>	<b>56,045</b>	<b>50,709</b>	<b>52,327</b>	<b>49,283</b>	<b>34,803</b>	<b>39,471</b>	<b>42,388</b>	<b>38,777</b>	<b>35,810</b>	<b>38,709</b>	<b>37,003</b>		<b>5</b>	
<b>TOTAL EEZs - excl. PNA AWs</b>	<b>27,276</b>	<b>29,951</b>	<b>31,890</b>	<b>33,297</b>	<b>35,453</b>	<b>34,932</b>	<b>34,353</b>	<b>38,230</b>	<b>35,807</b>	<b>46,711</b>	<b>50,004</b>	<b>45,764</b>	<b>49,886</b>	<b>47,354</b>	<b>35,994</b>	<b>40,657</b>	<b>43,968</b>	<b>38,773</b>	<b>36,765</b>	<b>37,738</b>	<b>36,269</b>			
<b>TOTAL EEZs - excl. PNA AWs and ID/PH</b>	<b>25,873</b>	<b>28,539</b>	<b>30,047</b>	<b>31,204</b>	<b>33,209</b>	<b>32,813</b>	<b>32,261</b>	<b>36,065</b>	<b>34,145</b>	<b>45,629</b>	<b>48,946</b>	<b>43,926</b>	<b>45,944</b>	<b>44,289</b>	<b>33,768</b>	<b>37,152</b>	<b>39,275</b>	<b>36,945</b>	<b>34,390</b>	<b>34,919</b>	<b>33,735</b>			
<b>TOTAL EEZs + PNA AWs</b>	<b>29,730</b>	<b>32,189</b>	<b>35,473</b>	<b>36,400</b>	<b>40,113</b>	<b>38,854</b>	<b>40,063</b>	<b>44,558</b>	<b>43,105</b>	<b>52,968</b>	<b>58,670</b>	<b>54,592</b>	<b>57,882</b>	<b>54,068</b>	<b>39,808</b>	<b>44,465</b>	<b>49,352</b>	<b>42,710</b>	<b>39,588</b>	<b>43,107</b>	<b>40,297</b>	<b>45,705</b>		
<b>TOTAL INT. WATERS (20°N-20°S)</b>	<b>7,365</b>	<b>8,114</b>	<b>8,493</b>	<b>10,382</b>	<b>8,924</b>	<b>6,889</b>	<b>8,185</b>	<b>8,617</b>	<b>10,100</b>	<b>1,495</b>	<b>1,528</b>	<b>2,451</b>	<b>6,131</b>	<b>5,693</b>	<b>8,283</b>	<b>6,934</b>	<b>6,631</b>	<b>7,421</b>	<b>8,509</b>	<b>7,823</b>	<b>6,548</b>		<b>6, 8, 11</b>	
<b>TOTAL (EEZs + IW + PNA AWs)</b>	<b>37,095</b>	<b>40,303</b>	<b>43,966</b>	<b>46,782</b>	<b>49,037</b>	<b>45,743</b>	<b>48,248</b>	<b>53,175</b>	<b>53,205</b>	<b>54,463</b>	<b>60,198</b>	<b>57,043</b>	<b>64,013</b>	<b>59,761</b>	<b>48,091</b>	<b>51,399</b>	<b>55,983</b>	<b>50,131</b>	<b>48,097</b>	<b>50,930</b>	<b>46,845</b>	<b>52,253</b>		
<b>TOTAL minus ID/PH</b>	<b>35,192</b>	<b>38,391</b>	<b>41,623</b>	<b>44,189</b>	<b>46,293</b>	<b>43,124</b>	<b>45,656</b>	<b>50,510</b>	<b>51,043</b>	<b>53,381</b>	<b>59,140</b>	<b>55,205</b>	<b>60,071</b>	<b>56,696</b>	<b>45,865</b>	<b>47,894</b>	<b>51,290</b>	<b>48,303</b>	<b>45,722</b>	<b>48,111</b>	<b>44,311</b>	<b>49,719</b>		
VIETNAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	

## NOTES

1. Source: Raised logsheet data.
2. CMM 2014-01, CMM 2015-01, CMM 2016-01 -- Para. 23. for years 2015-2017; CMM 2017-01, CMM 2018-01, CMM 2020-01 for years 2018 - 2021
3. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in some cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
4. Purse-seine days for Indonesia and the Philippines in domestic waters have been estimated according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs). The estimates exclude archipelagic waters (AW) effort.
5. The definition of days effort in this table may differ from the definition of days used in the PNA Vessel Day Scheme (VDS)
6. The Total International waters effort prior to 2013 does not include estimates of effort for the Philippines domestic fleet at this stage.
7. Since 2011, some components of the tropical purse seine fleet have changed criteria for reporting days with searching (included as a fishing day) and transiting (not included as a fishing day) and this is reflected in the decline in fishing days since 2011.
8. Philippines effort in the high seas pocket 1 during 2013 was 1,352 sets with an estimated 1 set per three days to produce an estimate of 4,056 days effort.
9. Coastal States within the Convention Area either north of 20°N or south of 20°S. CMM 2014-01/CMM 2015-01 references: Para. 22 and footnote 6 on Page 7 -- relevant for 2014 onwards.
10. Operational data for Japan EEZ are not available. Japan effort in their EEZ for years 2001-2007 was determined as the best estimate from their aggregate data. Japan effort for 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 and CMM 2020-01).
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 and CMM 2020-01 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 and CMM 2020-01 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 and CMM 2020-01 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 and CMM 2020-01 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 and CMM 2020-01 Table 1 indicates that the limit is yet to be notified to the Commission (Republic of Korea, Chinese Taipei, Indonesia, Philippines, Wallis and Futuna).

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

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

PURSE SEINE DAYS FISHED INTERNATIONAL WATERS 20°N-20°S																									
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	CMM limits for 2020	CMM limits for 2021	Max. Annual days for 2010-2012	See Notes
CHINA	89	123	152	424	501	229	332	251	871	14	7	26	14	8	22	23	12	26	22	16	0	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	**	**		
ECUADOR	0	0	0	0	0	0	26	10	14	2	0	13	1	1	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	53	25	12	28	10	30	26	**	**	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	232	403	403	429	7
FSM	241	242	174	384	212	83	162	128	331	7	3	11	6	10	469	379	600	619	1,053	694	944	(0)	(0)		
INDONESIA	500	500	500	500	500	500	500	500	500	0	0	0	0	0	0	0	0	0	0	0	0	(0)	(0)		
JAPAN	1,350	1,260	1,752	1,854	1,757	1,473	1,334	1,067	1,592	6	3	1	14	8	102	22	0	6	29	21	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	571				11
MARSHALL ISLANDS	168	208	441	397	402	155	170	283	169	68	30	1	5	6	845	393	626	302	955	698	394				
NAURU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	188	398	118				
NEW ZEALAND	23	222	334	145	97	288	187	193	194	55	29	89	10	44	158	155	123	120	136	63	0	160	160		10
PAPUA NEW GUINEA	397	604	660	1,218	1,313	458	862	710	824	79	22	40	16	36	1,090	98	20	11	0	4	2				
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	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	105	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				
TUVALU	0	0	0	0	0	0	0	0	38	4	4	1	0	1	85	147	103	57	71	127	181				
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	53	95	95	83	7, 12
USA	984	1,315	887	1,007	765	531	793	1,534	1,734	397	569	1,237	1,016	1,152	1,664	917	831	1,551	1,485	1,658	731	1,270	1,270	1,237	7, 13
VANUATU	66	166	190	572	376	401	381	223	103	37	31	6	7	2	0	163	203	123	147	140	112				
TOTAL	7,153	7,978	8,237	10,132	8,644	6,365	8,082	8,323	9,994	1,421	1,420	2,318	5,864	5,454	8,080	6,295	6,452	7,037	8,275	7,614	6,194				

PURSE SEINE DAYS FISHED in WCPFC-IATTC OVERLAP AREA																									
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020				See Notes
ECUADOR	0	0	0	0	0	0	43	176	77	52	40	86	106	72	101	5	109	254	124	142	141				7
EL SALVADOR	22	35	3	0	0	0	27	130	25	19	22	4	127	155	43	72	37	26	24	21	27				7
EUROPEAN UNION	126	75	91	52	43	116	34	30	13	16	18	11	36	18	71	39	13	41	15	28	48				7
USA	1	0	0	0	2	0	0	0	3	0	2	4	0	1	0	528	11	36	58	20	75				7
TOTAL	149	110	94	52	45	116	104	336	118	87	82	105	269	246	215	644	170	357	221	211	291				

**Notes:**

1. Source: Raised logsheet data.
2. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting). Under CMM 2017-01 paragraph 8 Charter provisions are not applicable to high seas purse seine effort attribution.
3. Purse-seine days for Indonesia have been arbitrarily assigned 500 days for high seas according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs)
4. The measures that the Philippines will take are in Attachment C of CMM 2014-01 (or its replacement CMM) for years from 2014 onwards. Attachment C para 10 describes two limits: 1) total number of catcher vessels fishing in HSP-SMA is limited to 36, and 2) an effort limit in vessel days of 4,659 days (ref Table 2(b) WCPFC9-2012-IP09\_rev3)
5. The Total International waters effort prior to 2012 does not include estimates of effort for the Philippines domestic fleet at this stage. **Philippines effort in the high seas pocket 1 (HSP#1) during 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 its predecessor CMMs.
11. For China and Kiribati, the 2015–2016 effort estimates reflect their WCPFC charter notifications for these years. **For WCPFC charter notifications, the 2017–2021 high seas effort estimates have been attributed to the flag state for these years.**
12. CMM 2017-01 Att 1 Table 2 specifies a limit of 95 days for Chinese Taipei. However Chinese Taipei has advised they will apply a limit of 80 days in 2018, to take into account the amount the limit was exceeded in 2017. CMM 2018-01 Att 1 Table 2 specifies a limit of 95 days for Chinese Taipei for 2019.
13. A high seas purse seine effort limit may be adjusted in accordance with para 30 of CMM 2017-01, CMM 2018-01 and CMM 2020-01.

**Table 3. Estimated FAD sets undertaken in the tropical purse seine fishery, by flag, 2001-2021.**

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	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	CHINA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	63	COOK ISLANDS
0	0	0	0	0	0	74	365	163	221	439	443	284	342	140	50	235	411	327	258	270	ECUADOR
9	29	1	0	0	0	54	152	161	136	185	212	296	304	176	96	73	82	49	58	88	EL SALVADOR
71	34	59	81	46	126	242	412	328	363	488	460	515	430	327	94	151	190	160	211	298	EUROPEAN UNION
324	386	489	790	497	282	338	484	732	417	788	820	537	605	633	534	1,364	1,348	1,292	2,139	1,799	FSM
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	INDONESIA
2,320	2,021	2,266	3,162	2,379	2,617	2,437	2,607	2,403	833	1,320	1,619	1,038	1,027	663	887	635	560	297	623	813	JAPAN
71	61	62	96	103	66	61	99	288	243	552	488	667	822	1,075	430	1,905	2,998	3,019	2,784	3,231	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	MARSHALL ISLANDS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	256	1,075	1,601	NAURU
124	274	429	411	195	491	384	441	373	192	203	161	134	165	49	21	75	41	36	2	0	NEW ZEALAND
738	1,246	1,086	2,705	2,078	2,079	1,643	1,377	1,682	973	1,284	1,761	1,349	1,680	1,224	1,942	1,721	1,720	1,063	295	387	PAPUA NEW GUINEA
998	1,073	1,064	918	1,002	779	239	510	557	380	404	595	521	384	350	261	23	55	2	12	2	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	1,730	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	146	191	134	99	107	234	352	440	329	119	91	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	2,136	CHINESE TAIPEI
0	0	0	0	0	0	0	0	20	40	58	92	78	49	36	59	59	107	83	119	329	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	1,237	USA
36	143	182	655	528	467	632	230	388	169	391	261	260	229	123	37	123	95	136	331	410	VANUATU
9,436	11,715	10,877	18,282	13,675	15,713	13,988	15,450	18,123	10,549	18,260	17,394	15,320	16,202	12,040	10,584	14,745	17,170	13,931	14,181	16,042	



## Notes

1. Source: Raised logsheet data.
2. Covers Drifting FAD, Log and Anchored FAD sets in the tropical purse seine fishery of the WCPFC Convention Area (20°N-20°S), by flag
3. Excludes archipelagic waters. Fleets from Indonesia, Kiribati, Papua New Guinea, Philippines (DW), Philippines (domestic) and Solomon Islands in this list are normally the only fleets active in archipelagic waters.
4. Includes high seas
5. Excludes Vietnam domestic fleet
6. Complete information from Indonesia and Philippines domestic fisheries are not available.
7. CMM 2015-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2016 FAD set limits that applies to FSM, Japan, Kiribati, Korea and United States of America.
8. CMM 2016-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2017 FAD set limits that applies to Japan, Korea and United States of America.
9. CMM 2014-01 – Paras. 14 and 17, and ATTACHMENT A, provides information on the 2015 FAD set limits that applies to FSM, Japan, Kiribati and Korea.
10. CMM 2013-01, Para 16 (ii) annual limit of FAD sets for 2015 (as set out in Column 'A' of Attachment A of CMM 2014-01) applies to FSM, Japan, Kiribati and Korea
11. Annual FAD sets consider CMM 2014-01 (or its replacement CMM) footnote 3 notifications (vessels that are managed outside of FAD set limit). This exemption applied to certain Kiribati vessels for 2016-2017.
12. In 2016, FSM applied CMM 2014-01 footnote 3 notifications, but formally chose the 4<sup>th</sup> month FAD closure for 2017.
13. The 2016 and 2017 estimates of FAD sets for Kiribati and China reflect their respective WCPFC charter notifications.
14. 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 AND CMM 2020-01 (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.**

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
CK	2019	1	1	73	18	453	100%	0	0%	0	0%	453	43	1,263	74%	121	7%	332	19%	1,716	61	1,716	121	332	2,169
CK	2020	1	1	29	0	0	0%	0	0%	0	0%	0	14	256	73%	39	11%	54	16%	349	14	256	39	54	349
CK	2021	1	1	185	34	949	90%	110	10%	0	0%	1,059	63	1,920	71%	244	9%	547	20%	2,711	97	2,869	354	547	3,770
CN	2010	12	10	2,784	2,095	20,845	72%	7,996	28%	190	1%	29,031	692	17,489	71%	5,545	23%	1,495	6%	24,529	2,788	38,405	13,620	1,690	53,714
CN	2011	12	10	4,019	1,396	10,974	72%	4,158	27%	186	1%	15,318	2,023	46,951	76%	10,966	18%	4,306	7%	62,223	3,419	57,926	15,124	4,491	77,541
CN	2012	13	12	2,205	706	10,670	77%	3,171	23%	61	0%	13,902	1,143	27,544	78%	5,210	15%	2,491	7%	35,245	1,849	38,214	8,381	2,552	49,147
CN	2013	14	13	3,617	2,329	28,210	92%	2,296	8%	234	1%	30,740	1,419	36,752	72%	10,642	21%	3,371	7%	50,765	3,750	65,169	13,026	3,633	81,828
CN	2014	19	18	3,012	1,351	16,629	87%	2,255	12%	181	1%	19,065	1,430	42,458	75%	10,521	19%	3,679	7%	56,659	2,781	59,087	12,777	3,860	75,724
CN	2015	20	16	2,007	897	11,202	71%	4,456	28%	233	2%	15,892	756	20,093	74%	5,030	18%	2,222	8%	27,344	1,653	31,295	9,486	2,455	43,236
CN	2016	2	6	504	401	6,294	76%	1,971	24%	16	0%	8,281	140	2,714	69%	1,042	27%	176	5%	3,932	544	9,072	3,045	194	12,311
CN	2017	3	2	761	84	450	85%	49	9%	30	6%	529	502	10,615	71%	3,492	23%	838	6%	14,945	586	11,066	3,541	868	15,474
CN	2018	3	2	608	336	4,793	86%	772	14%	35	1%	5,600	231	7,336	80%	1,302	14%	586	6%	9,224	567	12,129	2,073	621	14,824
CN	2019	0	0	18	5	154	96%	6	4%	0	0%	160	16	525	62%	166	20%	159	19%	850	21	679	172	159	1,010
EC	2010	14	6	319	21	50	29%	99	57%	27	15%	175	233	6,004	54%	2,702	24%	2,439	22%	11,145	254	6,054	2,800	2,466	11,320
EC	2011	8	7	556	41	241	28%	461	54%	149	18%	851	447	16,596	59%	4,754	17%	6,983	25%	28,333	488	16,837	5,214	7,132	29,184
EC	2012	8	7	605	17	475	83%	50	9%	51	9%	575	444	13,976	62%	3,047	14%	5,546	25%	22,570	461	14,451	3,097	5,597	23,145
EC	2013	7	7	480	70	1,802	81%	234	11%	201	9%	2,236	292	13,405	70%	2,105	11%	3,696	19%	19,206	362	15,207	2,338	3,897	21,442
EC	2014	7	7	477	57	1,155	89%	55	4%	87	7%	1,297	359	13,863	68%	2,852	14%	3,757	18%	20,472	416	15,017	2,907	3,845	21,769
EC	2015	7	4	162	1	0	0%	0	0%	0	0%	0	150	8,190	70%	1,536	13%	2,033	17%	11,759	151	8,190	1,536	2,033	11,759
EC	2016	2	3	42	0	0	0%	0	0%	0	0%	0	50	2,605	66%	623	16%	697	18%	3,925	50	2,605	623	697	3,925
EC	2017	4	4	237	2	66	65%	18	18%	18	18%	102	235	8,481	63%	1,531	11%	3,458	26%	13,469	237	8,547	1,548	3,476	13,571
EC	2018	4	4	441	12	104	80%	0	0%	26	20%	130	412	16,201	73%	1,585	7%	4,530	20%	22,315	424	16,304	1,585	4,556	22,445
EC	2019	8	5	374	9	107	19%	393	68%	77	13%	578	327	18,451	75%	2,324	10%	3,782	15%	24,557	336	18,559	2,717	3,859	25,135
EC	2020	4	4	279	3	47	98%	0	0%	1	2%	48	261	9,137	65%	1,928	14%	3,046	22%	14,111	264	9,184	1,928	3,047	14,159
EC	2021	5	5	304	5	118	86%	9	7%	10	7%	137	271	8,609	54%	3,173	20%	4,312	27%	16,094	276	8,727	3,183	4,321	16,231
ES	2010	4	4	720	26	625	76%	195	24%	0	0%	820	364	18,523	65%	5,388	19%	4,737	17%	28,648	390	19,147	5,583	4,738	29,468
ES	2011	4	4	753	30	672	50%	643	48%	19	1%	1,334	488	23,817	63%	6,872	18%	7,428	20%	38,117	518	24,489	7,515	7,446	39,451
ES	2012	4	4	787	57	2,373	86%	384	14%	10	0%	2,767	461	18,047	61%	4,735	16%	6,621	23%	29,403	517	20,419	5,119	6,631	32,170
ES	2013	4	4	837	56	1,984	66%	1,031	34%	10	0%	3,026	515	27,480	64%	7,439	17%	8,222	19%	43,141	571	29,464	8,471	8,232	46,167
ES	2014	4	4	753	89	3,365	80%	846	20%	2	0%	4,213	431	24,852	69%	4,256	12%	7,138	20%	36,247	520	28,217	5,102	7,141	40,460
ES	2015	4	4	529	28	1,330	97%	36	3%	1	0%	1,368	326	23,703	74%	4,551	14%	3,586	11%	31,840	355	25,033	4,587	3,588	33,208
ES	2016	2	2	130	1	0	0%	0	0%	0	0%	0	94	6,136	71%	556	6%	2,007	23%	8,699	95	6,136	556	2,007	8,699
ES	2017	2	2	210	0	0	0%	0	0%	0	0%	0	151	7,573	65%	693	6%	3,458	30%	11,723	151	7,573	693	3,458	11,723
ES	2018	2	2	266	4	96	100%	0	0%	0	0%	96	190	7,591	74%	930	9%	1,811	18%	10,332	194	7,687	930	1,811	10,428
ES	2019	2	2	221	0	0	0%	0	0%	0	0%	0	160	7,805	79%	1,136	11%	993	10%	9,934	160	7,805	1,136	993	9,934
ES	2020	2	2	264	3	1	100%	0	0%	0	0%	1	215	7,381	69%	1,759	16%	1,614	15%	10,754	218	7,382	1,759	1,614	10,755
ES	2021	3	3	292	9	394	69%	174	30%	5	1%	574	298	7,821	60%	2,362	18%	2,924	22%	13,106	307	8,215	2,536	2,929	13,680

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS										ASSOCIATED SCHOOLS										TOTAL				
		YB	LOG		SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL						
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT											
FM	2010	7	8	1,305	612	8,449	79%	2,124	20%	72	1%	10,645	419	10,809	77%	2,194	16%	1,076	8%	14,078	1,031	19,258	4,318	1,148	24,723				
FM	2011	7	7	1,641	483	5,963	78%	1,676	22%	22	0%	7,661	790	13,505	72%	3,894	21%	1,434	8%	18,832	1,276	19,475	5,572	1,457	26,505				
FM	2012	9	9	1,573	464	6,537	78%	1,776	21%	119	1%	8,432	826	21,590	78%	4,065	15%	1,879	7%	27,535	1,301	28,333	5,884	2,016	36,233				
FM	2013	10	10	1,384	450	9,012	87%	1,281	12%	127	1%	10,420	539	12,471	71%	3,525	20%	1,468	8%	17,464	989	21,483	4,806	1,595	27,884				
FM	2014	10	10	1,414	611	12,962	84%	2,168	14%	298	2%	15,429	614	16,381	72%	4,281	19%	1,983	9%	22,646	1,225	29,344	6,450	2,281	38,075				
FM	2015	12	13	1,924	1,212	26,463	84%	4,614	15%	396	1%	31,473	641	18,676	77%	3,765	16%	1,829	8%	24,270	1,852	45,139	8,379	2,225	55,743				
FM	2016	16	18	2,726	1,059	21,978	82%	4,600	17%	405	2%	26,983	1,142	34,661	78%	6,326	14%	3,741	8%	44,728	2,201	56,639	10,926	4,146	71,711				
FM	2017	19	20	3,527	1,919	34,694	79%	8,789	20%	291	1%	43,774	1,374	31,629	76%	7,103	17%	3,102	7%	41,834	3,300	66,447	15,915	3,404	85,766				
FM	2018	22	22	3,730	2,412	47,465	81%	10,365	18%	692	1%	58,522	1,432	49,988	83%	7,852	13%	2,641	4%	60,482	3,846	97,478	18,227	3,333	119,039				
FM	2019	23	25	4,436	3,764	84,290	81%	17,559	17%	1,686	2%	103,534	1,322	43,433	78%	8,665	16%	3,463	6%	55,564	5,093	127,864	26,250	5,156	159,269				
FM	2020	27	27	5,164	3,001	63,073	81%	14,117	18%	700	1%	77,890	2,146	74,883	75%	17,981	18%	7,145	7%	100,010	5,152	137,959	32,099	7,845	177,903				
FM	2021	28	28	4,919	2,761	51,585	77%	14,547	22%	720	1%	66,853	1,818	60,004	72%	16,555	20%	6,906	8%	83,465	4,580	111,590	31,102	7,626	150,318				
JP	2010	37	36	5,695	5,633	134,962	80%	31,199	19%	1,684	1%	167,845	833	25,428	70%	8,283	23%	2,622	7%	36,333	6,566	162,350	40,518	4,497	207,366				
JP	2011	40	37	6,524	5,956	92,402	78%	26,012	22%	643	1%	119,057	1,320	39,061	76%	7,593	15%	4,593	9%	51,248	7,306	131,981	33,683	5,271	170,935				
JP	2012	41	36	5,448	4,867	103,236	84%	18,110	15%	1,635	1%	122,980	1,619	58,498	80%	9,943	14%	4,981	7%	73,423	6,514	162,011	28,113	6,637	196,761				
JP	2013	41	33	5,501	4,759	104,097	87%	14,436	12%	1,695	1%	120,228	1,038	41,899	78%	7,438	14%	4,076	8%	53,413	5,834	146,694	22,076	5,825	174,595				
JP	2014	40	32	4,898	4,275	89,134	76%	25,641	22%	2,200	2%	116,975	1,027	37,902	79%	6,415	13%	3,672	8%	47,989	5,342	128,435	32,355	5,962	166,752				
JP	2015	40	31	4,195	3,380	86,691	74%	26,944	23%	3,392	3%	117,028	663	19,348	68%	6,140	22%	3,118	11%	28,606	4,169	109,204	34,393	7,153	150,750				
JP	2016	37	29	5,002	4,170	82,437	75%	25,012	23%	2,135	2%	109,584	887	24,335	69%	7,580	21%	3,633	10%	35,548	5,136	108,550	33,455	5,993	147,997				
JP	2017	38	29	4,693	3,892	76,188	69%	31,320	29%	2,267	2%	109,774	635	19,710	74%	4,899	19%	1,879	7%	26,488	4,650	98,609	37,458	4,443	140,510				
JP	2018	34	26	4,068	3,705	95,258	75%	28,115	22%	3,720	3%	127,093	560	20,871	73%	5,738	20%	1,963	7%	28,572	4,420	119,501	35,555	6,436	161,492				
JP	2019	36	28	4,193	4,438	104,022	77%	29,651	22%	1,967	2%	135,641	297	10,130	76%	2,443	18%	775	6%	13,348	4,927	118,569	34,143	3,220	155,932				
JP	2020	36	28	4,871	4,432	87,466	78%	24,276	22%	1,109	1%	112,851	626	18,199	68%	5,936	22%	2,734	10%	26,869	5,154	107,336	31,489	4,134	142,958				
JP	2021	33	31	3,488	2,791	59,731	82%	12,606	17%	808	1%	73,145	813	19,747	67%	7,105	24%	2,845	10%	29,698	3,615	79,927	19,902	3,669	103,498				
KI	2010	5	4	693	465	6,969	74%	2,364	25%	64	1%	9,396	245	10,968	70%	2,670	17%	2,052	13%	15,690	741	18,474	5,138	2,132	25,745				
KI	2011	7	7	1,429	785	9,597	73%	3,605	27%	30	0%	13,232	554	23,973	72%	4,317	13%	4,900	15%	33,190	1,347	33,619	7,950	4,946	46,514				
KI	2012	9	9	1,851	1,593	30,348	80%	7,643	20%	174	1%	38,164	492	19,513	81%	2,931	12%	1,598	7%	24,041	2,093	50,018	10,638	1,776	62,432				
KI	2013	12	12	2,007	1,443	27,768	84%	5,245	16%	246	1%	33,259	669	30,230	78%	5,656	15%	3,095	8%	38,982	2,113	57,998	10,901	3,342	72,241				
KI	2014	14	15	2,818	2,188	42,332	72%	16,218	28%	362	1%	58,912	830	40,294	80%	5,160	10%	4,809	10%	50,263	3,018	82,625	21,378	5,171	109,174				
KI	2015	21	20	2,884	2,482	60,934	86%	9,786	14%	584	1%	71,304	1,082	56,583	87%	6,170	9%	2,641	4%	65,393	3,564	117,517	15,956	3,225	136,698				
KI	2016	27	23	4,513	2,428	51,210	81%	11,613	18%	668	1%	63,490	1,871	81,182	80%	11,657	12%	8,651	9%	101,490	4,299	132,395	23,272	9,319	164,985				
KI	2017	19	21	4,653	1,815	29,542	72%	10,976	27%	261	1%	40,780	2,554	92,861	82%	12,712	11%	7,252	6%	112,824	4,369	122,431	23,690	7,514	153,634				
KI	2018	21	21	4,451	1,548	34,155	81%	7,973	19%	317	1%	42,444	3,004	118,950	81%	16,721	11%	11,164	8%	146,835	4,554	153,252	24,698	11,482	189,431				
KI	2019	22	25	5,158	2,625	61,081	89%	7,175	11%	285	0%	68,541	3,036	133,242	84%	19,043	12%	6,763	4%	159,049	5,668	194,485	26,242	7,054	227,781				
KI	2020	25	24	4,981	1,499	37,895	86%	5,594	13%	405	1%	43,893	2,792	123,148	79%	22,721	15%	10,612	7%	156,482	4,290	161,043	28,315	11,017	200,375				
KI	2021	26	27	5,453	1,537	33,641	79%	8,790	21%	342	1%	42,773	3,186	105,864	77%	22,135	16%	10,388	8%	138,387	4,723	139,504	30,925	10,731	181,160				

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS										ASSOCIATED SCHOOLS										TOTAL				
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	MT	MT	BET	TOTAL				
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT				
KR	2010	29	28	7,178	6,308	143,527	70%	59,057	29%	2,444	1%	205,027	1,117	54,544	76%	10,885	15%	6,777	9%	72,206	7,433	198,125	69,961	9,227	277,313				
KR	2011	28	28	6,552	4,493	79,219	72%	29,311	27%	871	1%	109,401	2,128	73,911	75%	16,635	17%	7,560	8%	98,106	6,627	153,261	45,989	8,451	207,702				
KR	2012	28	28	5,836	6,099	137,046	74%	47,428	26%	1,391	1%	185,865	1,433	63,476	83%	9,832	13%	3,019	4%	76,326	7,534	200,521	57,260	4,410	262,191				
KR	2013	27	28	5,983	6,068	131,154	80%	29,807	18%	2,232	1%	163,192	1,171	47,440	76%	10,613	17%	4,386	7%	62,439	7,239	178,594	40,420	6,618	225,631				
KR	2014	28	29	5,437	5,820	156,212	78%	42,833	21%	1,177	1%	200,221	1,097	59,244	85%	6,803	10%	3,779	5%	69,827	6,917	215,456	49,636	4,956	270,048				
KR	2015	25	26	4,664	4,561	126,478	80%	28,894	18%	1,922	1%	157,294	1,534	97,737	88%	9,051	8%	4,166	4%	110,953	6,094	224,215	37,944	6,088	268,248				
KR	2016	25	25	4,755	4,260	132,150	78%	35,443	21%	1,723	1%	169,315	1,590	93,437	86%	9,527	9%	6,177	6%	109,140	5,851	225,586	44,969	7,899	278,455				
KR	2017	26	26	5,545	4,898	99,338	69%	44,857	31%	894	1%	145,090	1,881	84,805	83%	11,253	11%	5,681	6%	101,739	6,782	184,143	56,110	6,575	246,829				
KR	2018	27	25	5,645	4,383	104,687	78%	27,673	21%	1,657	1%	134,017	2,395	114,474	86%	10,653	8%	8,408	6%	133,535	6,778	219,161	38,326	10,065	267,552				
KR	2019	26	26	5,668	5,795	177,444	86%	27,988	14%	1,068	1%	206,500	1,811	96,607	89%	7,773	7%	3,940	4%	108,320	7,608	274,051	35,761	5,008	314,820				
KR	2020	27	27	5,882	5,331	131,517	79%	33,638	20%	936	1%	166,091	1,500	70,308	82%	10,014	12%	5,901	7%	86,224	6,833	201,825	43,653	6,837	252,314				
KR	2021	23	23	5,052	4,559	108,465	74%	36,056	25%	1,238	1%	145,759	1,720	64,719	77%	14,016	17%	5,757	7%	84,492	6,279	173,184	50,071	6,996	230,251				
MH	2010	10	10	1,670	1,228	18,058	73%	6,143	25%	702	3%	24,903	636	25,248	75%	5,171	15%	3,299	10%	33,718	1,881	43,513	11,633	4,015	59,162				
MH	2011	10	10	2,521	547	7,976	83%	1,510	16%	75	1%	9,561	1,550	58,980	73%	11,047	14%	10,595	13%	80,622	2,097	66,956	12,557	10,670	90,183				
MH	2012	10	10	1,989	748	12,028	74%	4,249	26%	98	1%	16,375	1,394	45,232	79%	6,912	12%	5,076	9%	57,220	2,142	57,260	11,161	5,174	73,595				
MH	2013	10	10	2,132	1,075	18,039	90%	1,987	10%	51	0%	20,078	1,167	42,412	74%	9,604	17%	5,480	10%	57,495	2,243	60,493	11,608	5,534	77,635				
MH	2014	12	11	2,131	1,127	18,825	87%	2,628	12%	143	1%	21,596	1,219	43,331	80%	6,797	13%	4,172	8%	54,300	2,346	62,156	9,425	4,315	75,896				
MH	2015	12	12	2,221	1,857	36,049	95%	1,881	5%	36	0%	37,965	1,061	41,433	85%	5,270	11%	2,202	5%	48,905	2,919	77,481	7,150	2,238	86,870				
MH	2016	10	10	1,970	1,305	23,204	83%	4,686	17%	137	1%	28,027	671	26,858	82%	4,012	12%	2,076	6%	32,946	1,976	50,062	8,698	2,214	60,973				
MH	2017	10	10	2,152	537	6,809	71%	2,663	28%	81	1%	9,553	1,319	41,543	75%	8,827	16%	4,860	9%	55,231	1,858	48,352	11,490	4,942	64,784				
MH	2018	13	13	1,941	787	12,355	87%	1,907	13%	16	0%	14,278	1,228	47,932	81%	7,627	13%	3,533	6%	59,092	2,016	60,308	9,544	3,553	73,406				
MH	2019	11	11	2,449	1,701	32,323	79%	8,714	21%	146	0%	41,182	1,108	44,475	82%	7,345	14%	2,563	5%	54,383	2,810	76,814	16,070	2,712	95,596				
MH	2020	11	11	2,107	1,069	20,499	90%	2,253	10%	93	0%	22,845	1,053	48,546	80%	8,602	14%	3,704	6%	60,852	2,123	69,044	10,855	3,797	83,697				
MH	2021	11	11	2,262	657	10,388	76%	3,092	23%	110	1%	13,589	1,559	60,703	78%	11,232	15%	5,504	7%	77,438	2,216	71,091	14,323	5,613	91,027				
NR	2018	2	2	166	123	1,413	45%	1,716	55%	1	0%	3,130	90	5,237	91%	364	6%	151	3%	5,752	213	6,649	2,080	152	8,882				
NR	2019	9	9	744	704	19,662	93%	1,443	7%	98	1%	21,203	258	10,247	86%	1,290	11%	323	3%	11,861	968	30,039	2,769	441	33,249				
NR	2020	15	14	2,416	1,817	35,199	83%	7,280	17%	161	0%	42,640	1,079	37,366	73%	10,749	21%	3,290	6%	51,405	2,908	73,064	18,306	3,549	94,919				
NR	2021	15	18	2,909	1,872	30,653	71%	12,322	28%	439	1%	43,414	1,603	51,419	67%	20,111	26%	5,148	7%	76,678	3,475	82,072	32,432	5,587	120,092				
NZ	2010	4	4	652	425	8,640	97%	195	2%	60	1%	8,895	191	7,083	75%	1,794	19%	533	6%	9,410	617	15,723	1,988	593	18,304				
NZ	2011	3	3	474	174	3,365	81%	728	18%	47	1%	4,140	197	5,613	73%	1,710	22%	367	5%	7,690	371	8,978	2,438	414	11,831				
NZ	2012	4	4	488	288	5,041	83%	894	15%	112	2%	6,047	165	3,559	76%	782	17%	344	7%	4,685	453	8,600	1,676	456	10,732				
NZ	2013	4	4	468	270	5,046	91%	454	8%	30	1%	5,531	134	4,394	73%	1,152	19%	441	7%	5,987	404	9,440	1,607	471	11,518				
NZ	2014	5	5	533	304	3,833	78%	910	19%	167	3%	4,911	161	3,939	71%	1,005	18%	619	11%	5,563	465	7,773	1,915	787	10,474				
NZ	2015	2	2	295	316	4,930	93%	261	5%	100	2%	5,291	43	1,831	82%	309	14%	104	5%	2,245	359	6,761	571	204	7,536				
NZ	2016	2	2	218	265	3,939	96%	118	3%	49	1%	4,106	21	1,241	79%	282	18%	49	3%	1,573	286	5,181	400	98	5,679				
NZ	2017	1	1	126	23	569	81%	134	19%	1	0%	704	75	2,791	85%	376	11%	134	4%	3,301	98	3,360	510	135	4,005				
NZ	2018	1	1	119	61	247	20%	967	80%	2	0%	1,216	41	1,541	87%	109	6%	121	7%	1,772	102	1,787	1,076	124	2,987				
NZ	2019	1	1	142	91	2,231	94%	131	6%	21	1%	2,384	38	1,423	76%	295	16%	161	9%	1,879	130	3,654	426	183	4,263				
NZ	2020	1	1	63	22	1,015	95%	44	4%	8	1%	1,068	2	96	84%	12	10%	7	6%	115	24	1,111	56	16	1,183				
NZ	2021	1	1	0	0	0	0%	0	0%	0	0%	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	0	0			

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL		
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
PG	2010	45	50	8,846	5,471	91,015	74%	31,490	26%	991	1%	123,496	2,620	55,414	68%	21,241	26%	4,850	6%	81,505	8,099	146,558	52,768	5,859	205,184
PG	2011	49	52	9,270	5,018	69,028	74%	23,077	25%	949	1%	93,055	3,145	56,495	68%	21,740	26%	4,644	6%	82,879	8,176	125,772	44,922	5,624	176,319
PG	2012	51	52	9,636	6,530	95,781	67%	45,835	32%	1,293	1%	142,910	2,978	62,550	68%	24,187	26%	5,782	6%	92,520	9,559	158,809	70,229	7,126	236,163
PG	2013	51	52	9,533	6,862	93,919	66%	45,779	32%	2,335	2%	142,034	2,453	49,782	65%	22,467	29%	4,953	6%	77,202	9,371	144,380	68,820	7,355	220,555
PG	2014	55	53	9,315	6,440	105,204	73%	36,480	25%	2,086	2%	143,770	2,307	67,580	75%	17,760	20%	5,206	6%	90,546	8,774	173,052	54,500	7,330	234,881
PG	2015	53	54	6,684	5,686	103,268	71%	39,821	28%	1,916	1%	145,005	1,602	50,412	73%	14,299	21%	4,767	7%	69,478	7,292	153,698	54,129	6,685	214,512
PG	2016	67	41	9,016	7,625	123,895	63%	68,738	35%	4,304	2%	196,937	2,221	75,304	73%	20,534	20%	7,255	7%	103,093	9,883	200,251	89,878	11,668	301,797
PG	2017	67	58	10,956	10,325	127,491	56%	96,629	42%	4,145	2%	228,266	2,147	51,674	69%	18,597	25%	4,644	6%	74,914	12,577	180,983	116,565	8,956	306,505
PG	2018	56	53	9,691	10,346	154,157	66%	75,320	32%	4,392	2%	233,869	1,974	57,022	74%	16,446	21%	3,396	4%	76,863	12,349	211,707	91,988	7,822	311,517
PG	2019	50	51	6,627	7,498	143,974	71%	56,826	28%	2,498	1%	203,298	1,201	49,064	82%	9,203	15%	1,674	3%	59,941	8,768	194,395	66,773	4,220	265,388
PG	2020	38	37	6,708	7,176	94,353	54%	77,405	45%	1,860	1%	173,618	566	15,091	65%	6,990	30%	982	4%	23,063	7,803	109,991	85,459	2,871	198,321
PG	2021	40	40	6,392	5,825	86,071	61%	53,953	38%	2,018	1%	142,042	805	14,499	54%	10,499	39%	1,836	7%	26,833	6,647	100,732	64,746	3,861	169,340
PH	2010	25	22	4,469	2,289	25,724	55%	20,160	43%	1,271	3%	47,155	795	16,506	65%	5,934	23%	2,880	11%	25,320	3,186	43,161	26,694	4,258	74,113
PH	2011	25	23	5,296	2,719	28,558	62%	17,187	37%	205	0%	45,950	1,381	22,790	68%	9,988	30%	968	3%	33,746	4,191	52,062	27,556	1,196	80,815
PH	2012	21	29	5,580	3,560	34,984	53%	29,156	44%	1,720	3%	65,860	1,649	27,328	62%	13,652	31%	2,795	6%	43,775	5,248	62,771	42,993	4,564	110,328
PH	2013	27	30	4,450	2,635	22,168	43%	28,019	55%	1,268	3%	51,454	1,440	21,165	57%	13,605	36%	2,676	7%	37,446	4,080	43,381	41,690	3,944	89,016
PH	2014	27	29	4,330	3,242	45,159	56%	32,469	41%	2,557	3%	80,184	995	14,644	55%	9,247	35%	2,570	10%	26,461	4,251	59,943	41,876	5,161	106,980
PH	2015	23	29	2,822	1,971	24,601	55%	19,337	43%	1,090	2%	45,028	812	16,139	55%	10,768	36%	2,644	9%	29,551	2,791	41,039	30,434	3,788	75,260
PH	2016	17	18	1,956	1,567	25,486	54%	20,717	44%	869	2%	47,073	521	13,883	63%	6,918	31%	1,423	6%	22,224	2,134	40,263	28,212	2,404	70,879
PH	2017	12	8	1,272	1,006	11,906	49%	12,014	49%	642	3%	24,562	155	2,715	59%	1,730	38%	171	4%	4,616	1,190	15,079	14,092	840	30,011
PH	2018	12	2	314	340	5,599	64%	3,095	35%	72	1%	8,766	73	1,363	57%	949	40%	70	3%	2,381	414	6,965	4,044	142	11,151
PH	2019	12	1	16	22	406	62%	243	37%	5	1%	653	0	0	0%	0	0%	0	0%	0	22	406	243	5	653
PH	2020	6	5	798	869	13,243	49%	13,423	50%	314	1%	26,980	23	721	61%	397	34%	65	6%	1,183	892	13,963	13,820	380	28,163
PH	2021	0	3	28	39	1,174	82%	247	17%	12	1%	1,433	3	183	67%	75	27%	15	6%	274	42	1,358	323	27	1,707
SB	2010	5	5	485	95	1,906	55%	1,551	45%	22	1%	3,480	353	5,683	58%	3,812	39%	242	3%	9,737	448	7,590	5,363	264	13,217
SB	2011	5	5	1,017	119	1,688	60%	1,140	40%	8	0%	2,836	742	12,941	57%	9,330	41%	454	2%	22,725	861	14,629	10,471	462	25,562
SB	2012	5	5	1,094	98	1,103	53%	985	47%	8	0%	2,096	833	14,042	58%	9,961	41%	401	2%	24,404	931	15,145	10,946	408	26,500
SB	2013	5	5	1,093	213	1,528	34%	2,956	66%	27	1%	4,511	664	11,216	55%	8,570	42%	474	2%	20,259	876	12,743	11,525	501	24,770
SB	2014	5	5	1,212	269	2,836	36%	5,006	64%	28	0%	7,869	786	11,102	49%	10,931	49%	521	2%	22,554	1,056	13,938	15,938	549	30,425
SB	2015	8	6	1,343	389	3,003	32%	6,323	67%	56	1%	9,382	787	10,294	53%	8,904	46%	212	1%	19,410	1,176	13,297	15,227	268	28,792
SB	2016	8	8	2,217	1,047	13,842	57%	10,340	42%	318	1%	24,501	1,072	17,333	56%	13,310	43%	548	2%	31,190	2,132	31,378	23,819	870	56,067
SB	2017	10	9	2,068	1,127	12,453	59%	8,517	41%	63	0%	21,034	873	14,583	59%	9,486	38%	605	3%	24,674	2,001	27,038	18,006	668	45,712
SB	2018	10	10	2,102	808	9,848	68%	4,554	32%	24	0%	14,425	1,169	24,553	64%	13,133	34%	766	2%	38,452	1,978	34,401	17,687	790	52,877
SB	2019	11	11	2,038	856	16,161	79%	4,275	21%	130	1%	20,566	1,110	24,190	67%	11,807	32%	403	1%	36,401	1,971	40,356	16,088	533	56,977
SB	2020	11	10	1,709	632	9,007	65%	4,900	35%	40	0%	13,947	857	11,147	57%	8,022	41%	268	1%	19,436	1,493	20,191	13,003	308	33,502
SB	2021	8	8	1,600	845	12,488	69%	5,476	30%	83	1%	18,048	734	12,477	58%	8,747	41%	167	1%	21,391	1,581	24,973	14,231	250	39,544

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SKIPJACK		YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL		
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT							
SV	2010	2	2	210	3	28	100%	0	0%	0	0%	28	136	4,640	63%	1,569	21%	1,134	15%	7,344	139	4,668	1,569	1,134	7,372
SV	2011	2	2	268	3	16	19%	69	81%	0	0%	85	185	8,244	68%	1,613	13%	2,284	19%	12,141	188	8,260	1,682	2,285	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	8,253	61%	2,820	21%	2,559	19%	13,632	217	8,268	2,821	2,559	13,647
SV	2013	4	4	398	13	269	65%	141	34%	1	0%	412	296	11,590	69%	2,779	17%	2,436	15%	16,805	309	11,859	2,920	2,437	17,217
SV	2014	4	4	485	92	2,007	100%	11	1%	0	0%	2,018	303	10,082	65%	2,959	19%	2,419	16%	15,461	394	12,089	2,970	2,419	17,479
SV	2015	2	2	180	7	0	0%	0	0%	0	0%	0	177	11,048	72%	2,363	15%	1,890	12%	15,301	184	11,048	2,363	1,890	15,301
SV	2016	3	2	112	6	668	99%	9	1%	0	0%	677	95	4,894	74%	725	11%	1,007	15%	6,626	101	5,562	734	1,007	7,303
SV	2017	1	2	76	2	0	0%	31	100%	0	0%	31	73	2,920	68%	560	13%	807	19%	4,287	75	2,920	591	807	4,318
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,294	75%	421	10%	700	16%	4,415	88	3,569	421	700	4,690
SV	2019	2	2	42	2	0	0%	0	0%	0	0%	0	50	2,191	75%	331	11%	417	14%	2,939	52	2,191	331	417	2,939
SV	2020	2	2	62	5	246	91%	24	9%	0	0%	270	58	2,619	64%	587	14%	913	22%	4,120	63	2,865	611	914	4,390
SV	2021	2	2	90	0	0	0%	0	0%	0	0%	0	88	3,135	57%	1,252	23%	1,121	20%	5,508	88	3,135	1,252	1,121	5,508
TV	2010	1	1	271	319	6,724	75%	2,234	25%	39	0%	8,997	40	1,006	65%	332	21%	220	14%	1,557	359	7,729	2,566	259	10,554
TV	2011	1	1	311	283	3,824	72%	1,512	28%	14	0%	5,350	58	1,641	79%	292	14%	133	6%	2,066	341	5,465	1,804	147	7,416
TV	2012	1	1	271	301	3,124	57%	2,340	43%	35	1%	5,500	92	4,432	80%	819	15%	303	6%	5,554	393	7,556	3,160	338	11,054
TV	2013	1	1	273	353	7,193	93%	435	6%	93	1%	7,721	79	2,924	79%	632	17%	139	4%	3,695	432	10,116	1,068	232	11,416
TV	2014	1	1	159	146	3,386	92%	253	7%	36	1%	3,675	49	1,941	86%	257	11%	70	3%	2,268	195	5,327	510	106	5,943
TV	2015	1	1	186	174	3,562	97%	127	3%	1	0%	3,690	36	1,656	93%	102	6%	23	1%	1,780	210	5,217	229	24	5,470
TV	2016	1	1	234	93	2,444	97%	75	3%	1	0%	2,520	59	2,675	75%	635	18%	279	8%	3,590	152	5,119	711	280	6,110
TV	2017	2	2	161	84	1,815	59%	1,179	39%	61	2%	3,056	59	1,736	67%	682	26%	167	7%	2,585	143	3,551	1,862	228	5,641
TV	2018	1	1	208	160	3,189	74%	1,069	25%	47	1%	4,305	108	5,466	80%	494	7%	872	13%	6,831	268	8,655	1,563	919	11,136
TV	2019	1	1	212	106	2,695	86%	420	13%	13	0%	3,127	83	3,380	93%	168	5%	100	3%	3,648	189	6,075	587	113	6,775
TV	2020	3	3	308	96	2,200	89%	255	10%	4	0%	2,460	119	6,297	84%	560	8%	618	8%	7,475	215	8,497	816	622	9,935
TV	2021	6	6	965	645	13,273	80%	3,326	20%	99	1%	16,697	329	9,974	77%	1,997	15%	971	8%	12,941	975	23,246	5,322	1,069	29,638
TW	2010	34	30	7,865	6,413	98,888	81%	22,934	19%	786	1%	122,609	1,709	54,404	71%	15,395	20%	6,442	8%	76,241	8,122	153,292	38,329	7,228	198,850
TW	2011	34	31	8,801	4,763	56,207	81%	12,224	18%	606	1%	69,037	2,955	78,625	74%	19,151	18%	9,120	9%	106,897	7,718	134,833	31,376	9,726	175,935
TW	2012	34	33	7,146	4,660	60,796	71%	24,349	28%	927	1%	86,073	2,940	88,960	78%	17,017	15%	8,601	8%	114,578	7,600	149,756	41,366	9,529	200,651
TW	2013	34	34	7,706	6,171	83,301	83%	16,135	16%	1,127	1%	100,562	2,638	80,210	72%	21,532	19%	10,177	9%	111,919	8,809	163,511	37,666	11,304	212,481
TW	2014	34	36	6,845	5,749	103,755	88%	13,025	11%	1,425	1%	118,205	2,654	89,848	76%	20,208	17%	8,896	8%	118,952	8,404	193,603	33,233	10,321	237,157
TW	2015	34	34	5,141	4,639	78,734	75%	24,534	23%	1,482	1%	104,751	1,785	70,924	79%	12,326	14%	6,248	7%	89,498	6,424	149,658	36,861	7,730	194,249
TW	2016	34	31	5,273	4,785	80,545	70%	32,367	28%	1,432	1%	114,345	1,511	54,528	74%	12,692	17%	6,823	9%	74,043	6,298	135,074	45,059	8,255	188,388
TW	2017	31	30	5,461	5,167	63,886	67%	31,036	32%	1,027	1%	95,948	1,904	55,708	76%	12,787	18%	4,473	6%	72,967	7,072	119,630	43,826	5,501	168,957
TW	2018	27	29	5,185	4,634	82,476	85%	13,761	14%	728	1%	96,966	2,292	77,659	78%	15,865	16%	5,946	6%	99,470	6,927	160,135	29,627	6,675	196,436
TW	2019	30	30	5,231	5,659	119,509	82%	24,621	17%	1,048	1%	145,179	2,042	76,535	80%	14,114	15%	4,759	5%	95,408	7,708	196,110	38,743	5,813	240,665
TW	2020	29	28	4,501	4,100	75,898	84%	14,463	16%	575	1%	90,935	1,878	58,483	68%	18,777	22%	8,324	10%	85,583	5,978	134,380	33,240	8,898	176,519
TW	2021	29	29	5,078	4,479	79,406	73%	28,535	26%	1,118	1%	109,059	2,187	75,186	71%	22,504	21%	8,931	8%	106,620	6,666	154,592	51,039	10,049	215,680

Table 4. (continued)

FLEET	YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
		YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	SKJ	YFT	BET	TOTAL
					SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT					
US	2010	37	37	8,220	6,331	109,802	83%	21,943	17%	1,064	1%	132,809	2,397	90,287	80%	15,053	13%	6,996	6%	112,336	8,738	200,338	37,096	8,090	245,524
US	2011	37	36	8,048	3,008	48,929	82%	10,886	18%	128	0%	59,943	3,401	110,990	78%	19,860	14%	12,447	9%	143,297	6,409	159,919	30,745	12,575	203,240
US	2012	39	40	8,789	5,622	98,431	80%	24,098	20%	1,261	1%	123,790	3,464	108,518	80%	17,928	13%	9,465	7%	135,911	9,088	206,994	42,035	10,730	259,759
US	2013	40	42	8,380	5,028	96,983	91%	8,244	8%	859	1%	106,085	3,152	112,469	76%	23,264	16%	12,339	8%	148,072	8,183	209,546	31,514	13,211	254,270
US	2014	40	40	9,069	6,268	117,213	84%	22,230	16%	454	0%	139,896	3,717	146,261	85%	17,255	10%	9,593	6%	173,109	9,987	263,474	39,485	10,047	313,005
US	2015	39	39	6,988	5,904	111,918	89%	13,272	11%	664	1%	125,853	2,052	95,825	85%	10,777	10%	5,624	5%	112,226	7,956	207,742	24,049	6,288	238,079
US	2016	37	34	5,571	3,333	75,603	87%	10,493	12%	419	1%	86,515	2,177	87,857	77%	17,275	15%	9,490	8%	114,621	5,511	163,470	27,771	9,911	201,152
US	2017	34	34	5,623	2,652	43,753	74%	15,257	26%	318	1%	59,328	2,442	83,303	78%	15,874	15%	7,943	7%	107,121	5,095	127,056	31,131	8,262	166,449
US	2018	34	35	5,758	2,828	54,025	78%	15,072	22%	228	0%	69,326	2,910	100,720	79%	16,095	13%	11,310	9%	128,126	5,738	154,746	31,167	11,538	197,451
US	2019	31	30	4,323	3,119	69,162	85%	12,345	15%	320	0%	81,827	1,894	68,898	81%	10,327	12%	5,472	7%	84,696	5,015	138,095	22,683	5,801	166,580
US	2020	23	23	3,699	1,578	38,146	95%	1,826	5%	219	1%	40,192	1,727	72,941	75%	12,994	13%	11,079	11%	97,014	3,305	111,087	14,820	11,299	137,205
US	2021	21	17	1,431	81	1,824	93%	126	6%	6	0%	1,957	1,220	33,451	69%	8,645	18%	6,419	13%	48,515	1,301	35,274	8,771	6,425	50,471
VU	2010	5	5	872	469	10,466	79%	2,724	21%	86	1%	13,276	198	8,491	81%	1,345	13%	603	6%	10,440	668	18,959	4,070	689	23,719
VU	2011	6	4	1,142	287	5,838	87%	834	13%	22	0%	6,695	391	13,927	84%	2,312	14%	448	3%	16,688	678	19,766	3,146	470	23,382
VU	2012	6	3	775	472	9,061	61%	5,535	37%	231	2%	14,827	268	9,705	80%	1,533	13%	937	8%	12,175	740	18,766	7,068	1,169	27,002
VU	2013	6	4	974	607	11,330	84%	2,107	16%	53	0%	13,490	263	10,201	80%	1,789	14%	722	6%	12,712	870	21,531	3,895	775	26,202
VU	2014	3	3	685	362	8,469	86%	1,392	14%	45	1%	9,906	230	8,988	83%	1,182	11%	686	6%	10,855	592	17,457	2,573	731	20,761
VU	2015	3	3	286	105	1,643	95%	77	5%	1	0%	1,722	125	5,905	89%	559	8%	159	2%	6,623	230	7,548	636	160	8,345
VU	2016	3	3	165	40	1,250	90%	121	9%	11	1%	1,382	37	2,559	85%	69	2%	385	13%	3,013	78	3,808	190	396	4,395
VU	2017	3	3	249	119	1,447	65%	788	35%	7	0%	2,242	122	2,923	64%	647	14%	1,033	22%	4,603	241	4,370	1,434	1,041	6,845
VU	2018	2	2	313	337	6,388	81%	1,470	19%	54	1%	7,912	96	3,910	85%	410	9%	293	6%	4,613	433	10,298	1,880	347	12,525
VU	2019	5	6	573	739	22,913	89%	2,582	10%	345	1%	25,840	138	7,148	84%	627	7%	783	9%	8,558	878	30,061	3,209	1,128	34,398
VU	2020	6	6	915	965	23,134	81%	5,099	18%	252	1%	28,485	334	13,455	73%	2,686	15%	2,258	12%	18,400	1,299	36,590	7,785	2,511	46,885
VU	2021	7	7	967	917	19,106	76%	5,830	23%	189	1%	25,125	410	14,692	73%	3,804	19%	1,625	8%	20,121	1,327	33,798	9,633	1,814	45,245

Table 4. (continued)

YEAR	VESSELS		DAYS	UNASSOCIATED SCHOOLS									ASSOCIATED SCHOOLS									TOTAL				
	YB	LOG		SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SKIPJACK			YELLOWFIN		BIGEYE		TOTAL	SETS	MT	MT	MT	TOTAL		
				SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%								
2010	276	262	52,253	38,203	686,678	76%	212,408	23%	9,502	1%	908,587	12,978	412,527	72%	109,313	19%	48,397	8%	570,237	51,459	1,103,347	324,015	58,287	1,485,648		
2011	278	267	58,622	30,105	424,497	75%	135,033	24%	3,974	1%	563,506	21,755	608,060	72%	152,074	18%	78,664	9%	838,800	52,012	1,034,229	287,744	82,766	1,404,739		
2012	285	284	54,373	36,086	611,049	73%	216,003	26%	9,126	1%	836,178	20,414	595,223	75%	135,374	17%	62,398	8%	792,997	56,639	1,207,893	351,947	71,672	1,631,512		
2013	297	293	55,214	38,402	643,803	79%	160,587	20%	10,589	1%	814,979	17,929	556,040	72%	152,812	20%	68,151	9%	777,002	56,436	1,201,610	314,352	78,905	1,594,868		
2014	308	306	53,572	38,390	732,476	77%	204,420	22%	11,248	1%	948,142	18,209	632,710	77%	127,889	16%	63,569	8%	824,172	56,683	1,366,993	333,030	74,980	1,775,003		
2015	306	303	42,512	33,609	680,806	78%	180,363	21%	11,874	1%	873,046	13,632	549,797	79%	101,920	15%	43,468	6%	695,182	47,379	1,234,084	283,930	56,041	1,574,055		
2016	293	278	44,404	32,385	644,945	73%	226,303	26%	12,487	1%	883,736	14,159	532,202	76%	113,763	16%	54,417	8%	700,381	46,727	1,181,150	342,319	67,359	1,590,828		
2017	282	279	47,770	33,652	510,407	65%	264,257	34%	10,106	1%	784,773	16,501	515,570	76%	111,249	16%	50,505	7%	677,321	50,426	1,031,154	378,462	61,117	1,470,734		
2018	272	269	45,088	32,830	616,530	75%	193,829	24%	12,011	1%	822,370	18,287	664,108	79%	116,694	14%	58,261	7%	839,062	51,308	1,284,732	312,471	71,066	1,668,269		
2019	281	274	42,539	37,151	856,587	81%	194,372	18%	9,707	1%	1,060,666	14,934	599,009	82%	97,178	13%	36,862	5%	733,052	52,385	1,461,924	294,464	47,146	1,803,534		
2020	267	257	44,756	32,598	632,939	75%	204,597	24%	6,677	1%	844,214	15,250	570,074	75%	130,754	17%	62,614	8%	763,445	48,028	1,205,768	338,052	69,712	1,613,533		
2021	259	257	41,414	27,056	509,266	73%	185,199	26%	7,197	1%	701,664	17,107	544,403	71%	154,456	20%	65,416	9%	764,272	44,194	1,054,287	340,146	72,636	1,467,070		

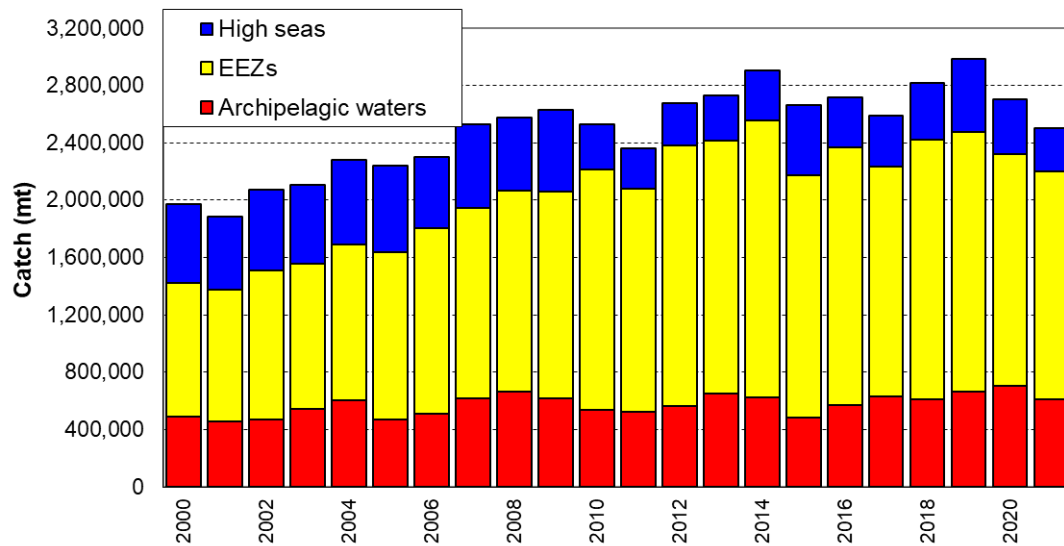


**Notes:**

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

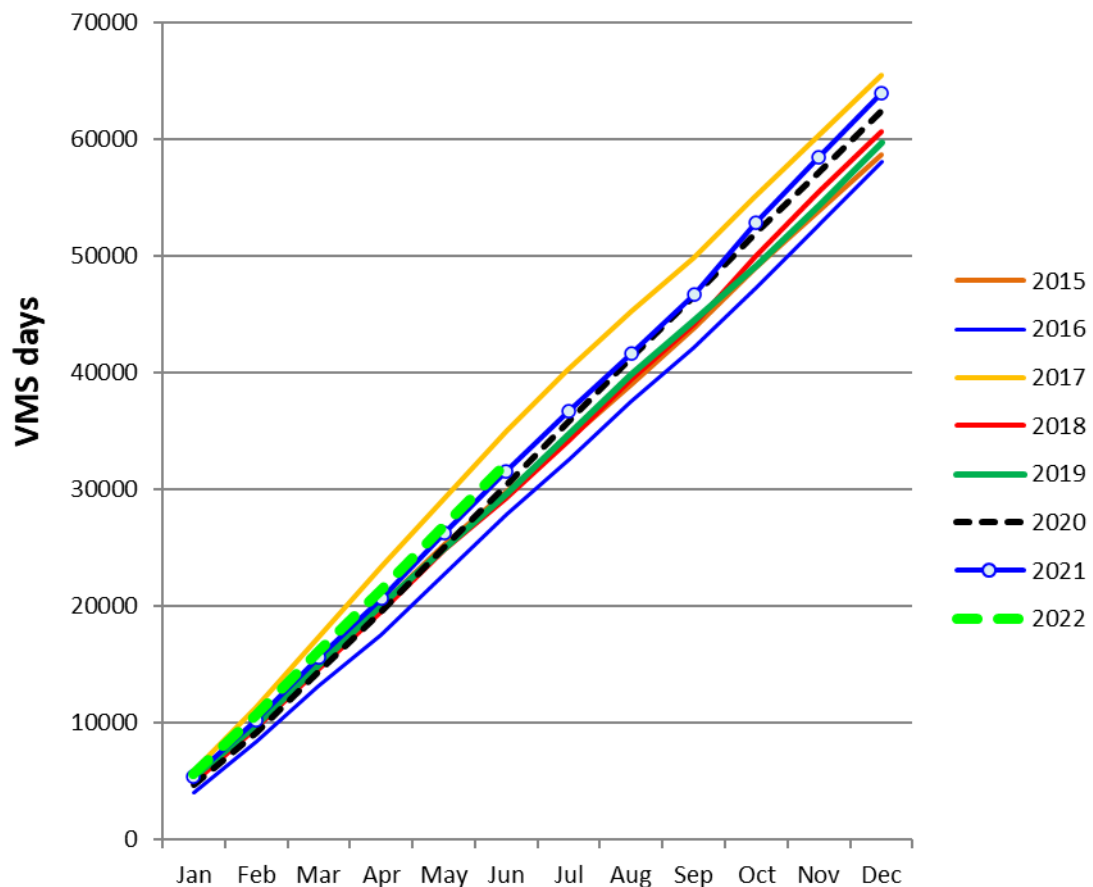
**Fleet Codes**

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



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

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



**Figure 2. Cumulative tropical purse seine effort by month, 2009-2022, as measured by VMS**

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

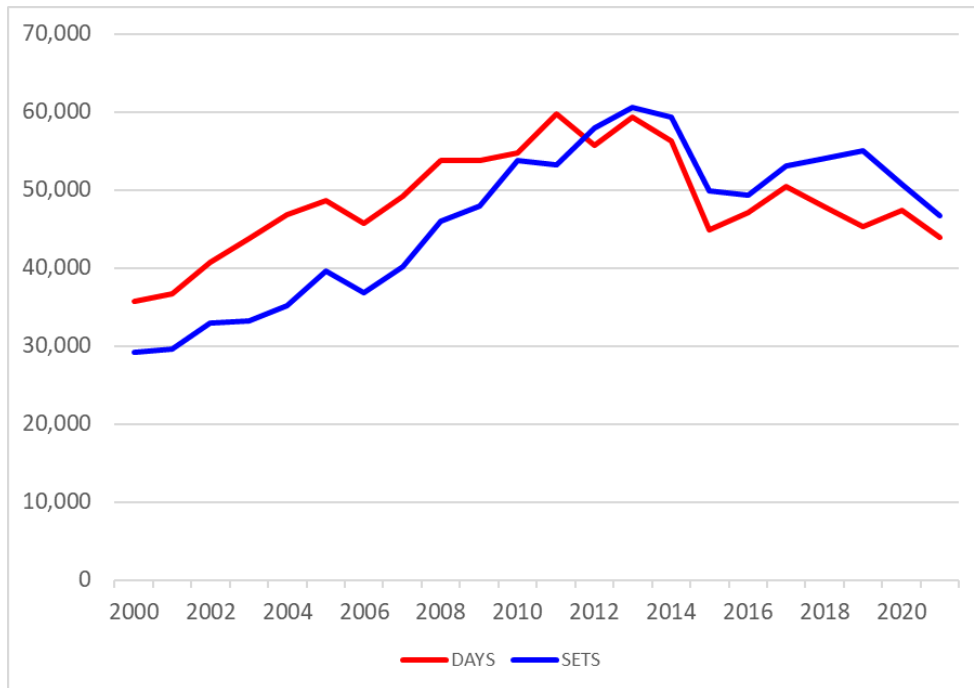


Figure 3. Annual trends in purse seine effort in the WCPFC Convention Area between 20°N and 20°S. “DAYS” – days fishing and searching. Excludes domestic purse seine effort in Philippines and Indonesia, but includes Philippine domestic-based effort in HSP#1. Estimates are based on raised logsheet data.

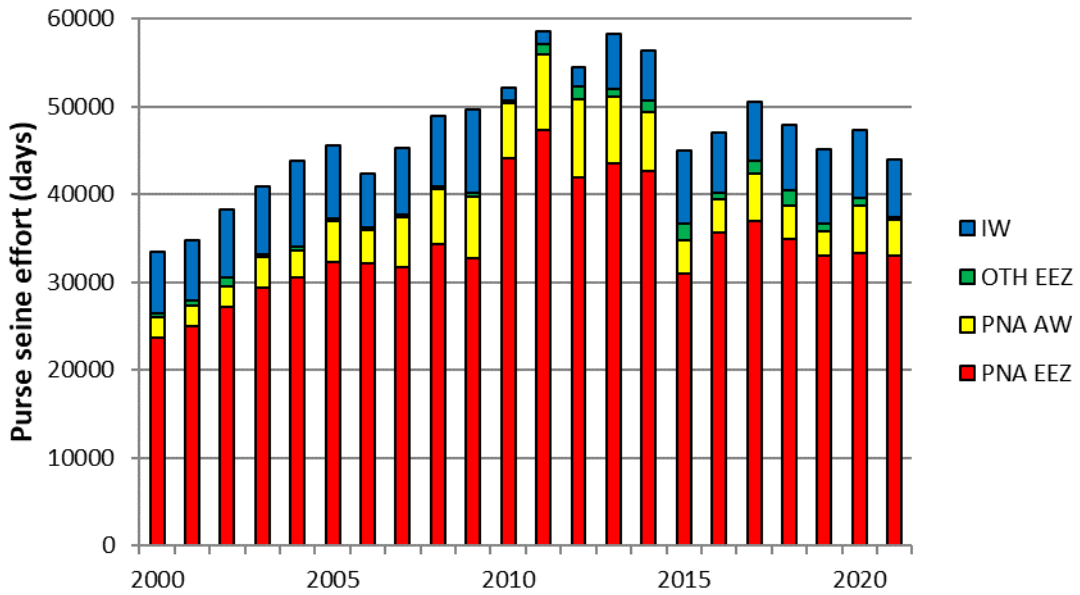


Figure 4. Purse seine effort (days fishing and searching) in the WCPFC Convention Area between 20°N and 20°S. Excludes domestic purse seine effort in Philippines and Indonesia. Estimates are based on raised logsheet data.

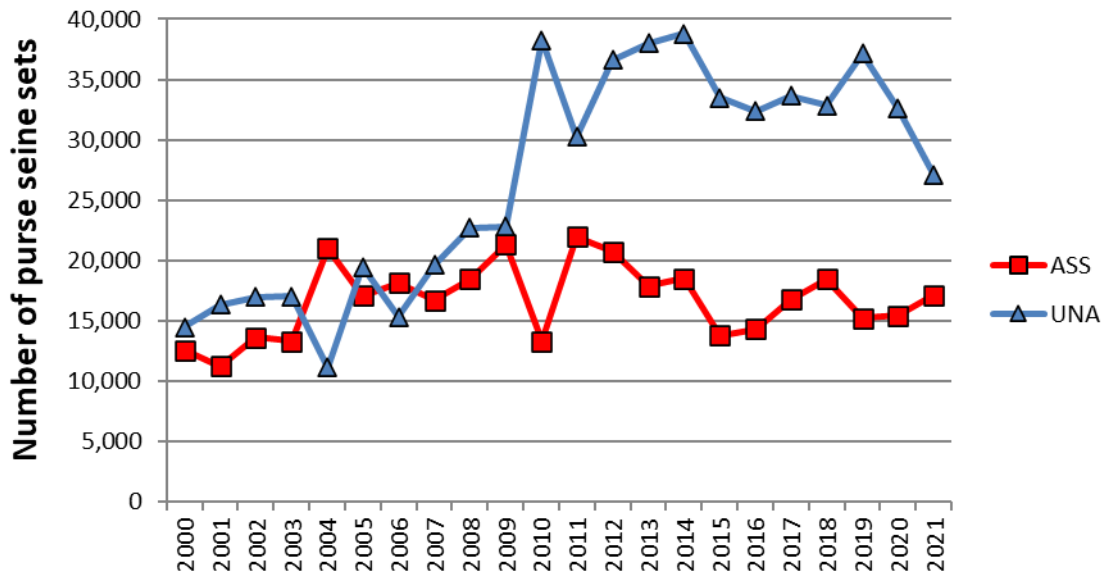


Figure 5. Sets by set type made in the WCPO tropical purse seine fishery, 2000 – 2021. Associated (ASS) and Unassociated (UNA) sets. Activities in the domestic purse seine fisheries of Indonesia and Philippines are excluded. Associated sets include animal-associated sets.

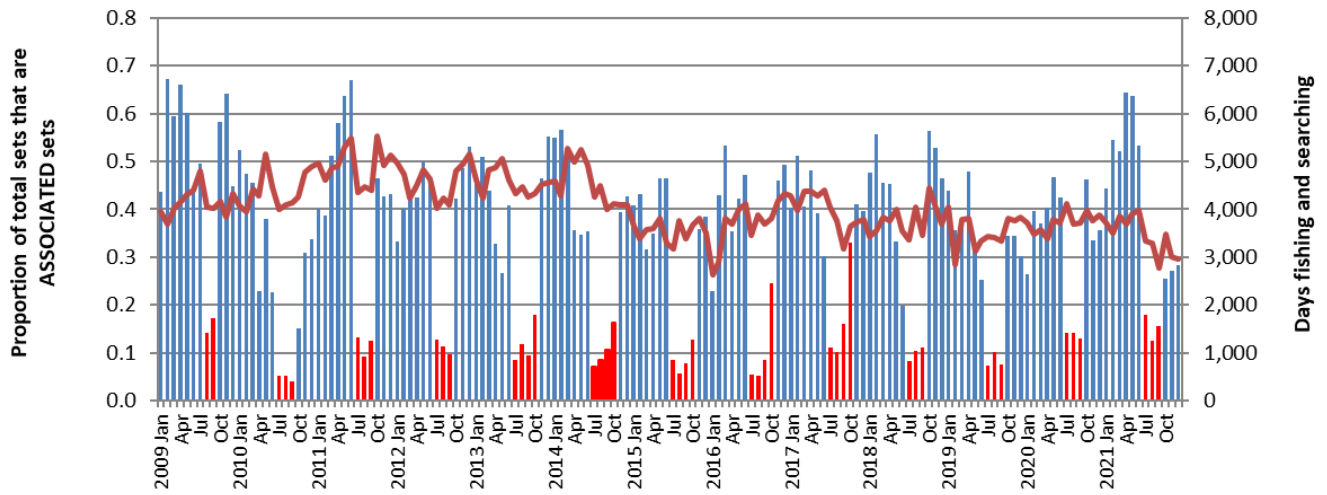


Figure 6. Proportion of the total purse seine fishing activity comprising associated sets.

As indicated by logsheet data.

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

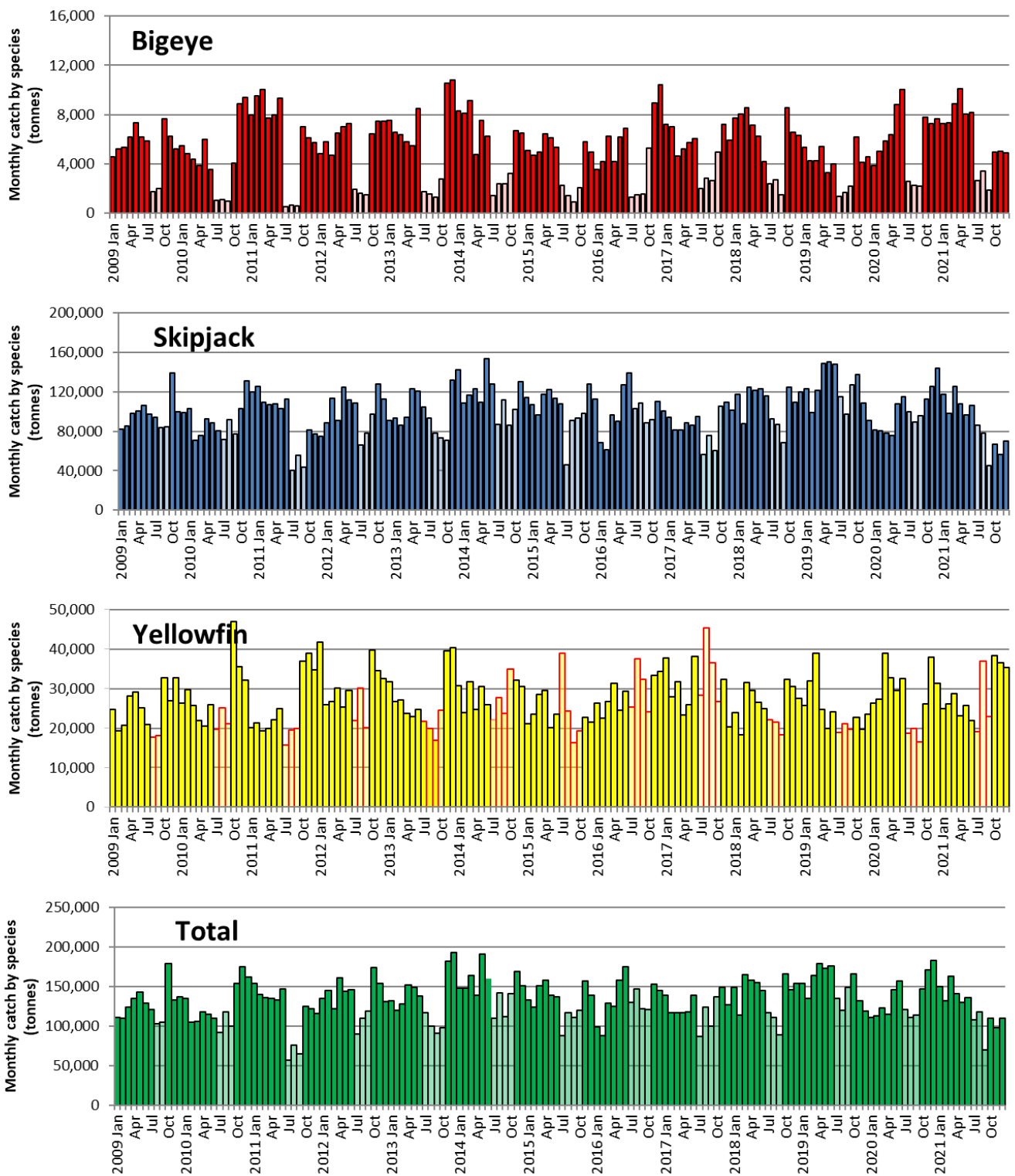


Figure 7. Monthly purse seine catch by species

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

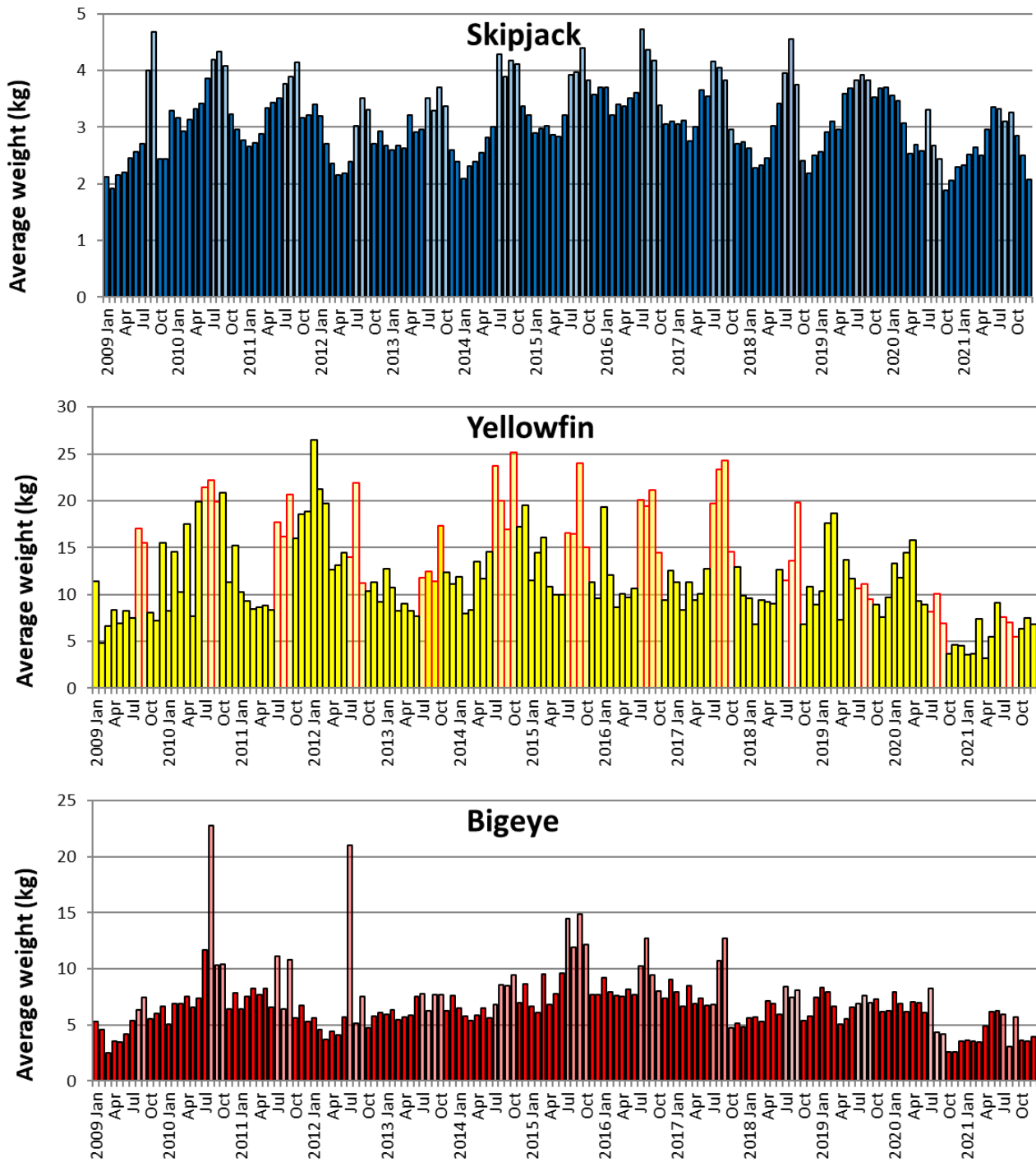
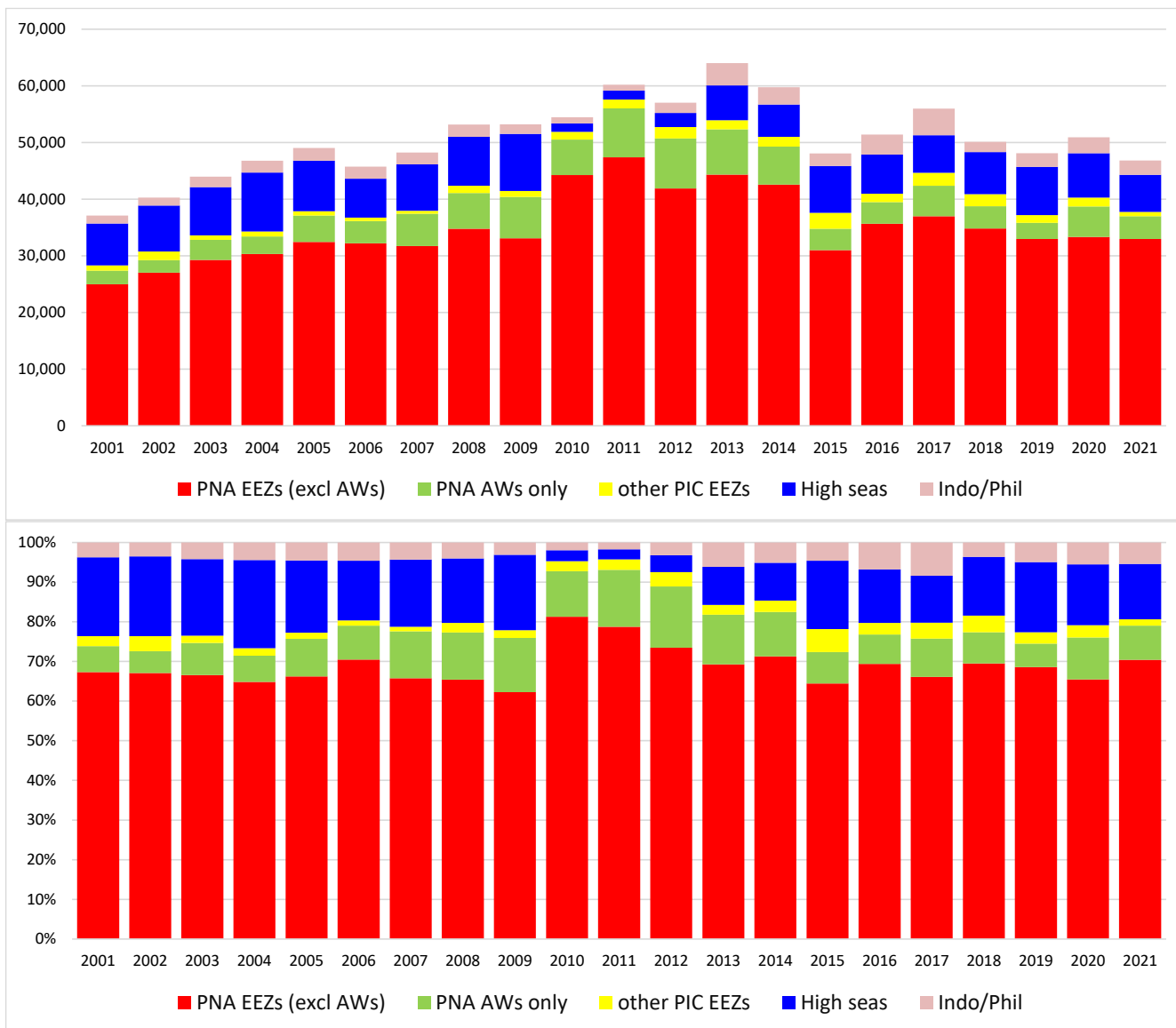


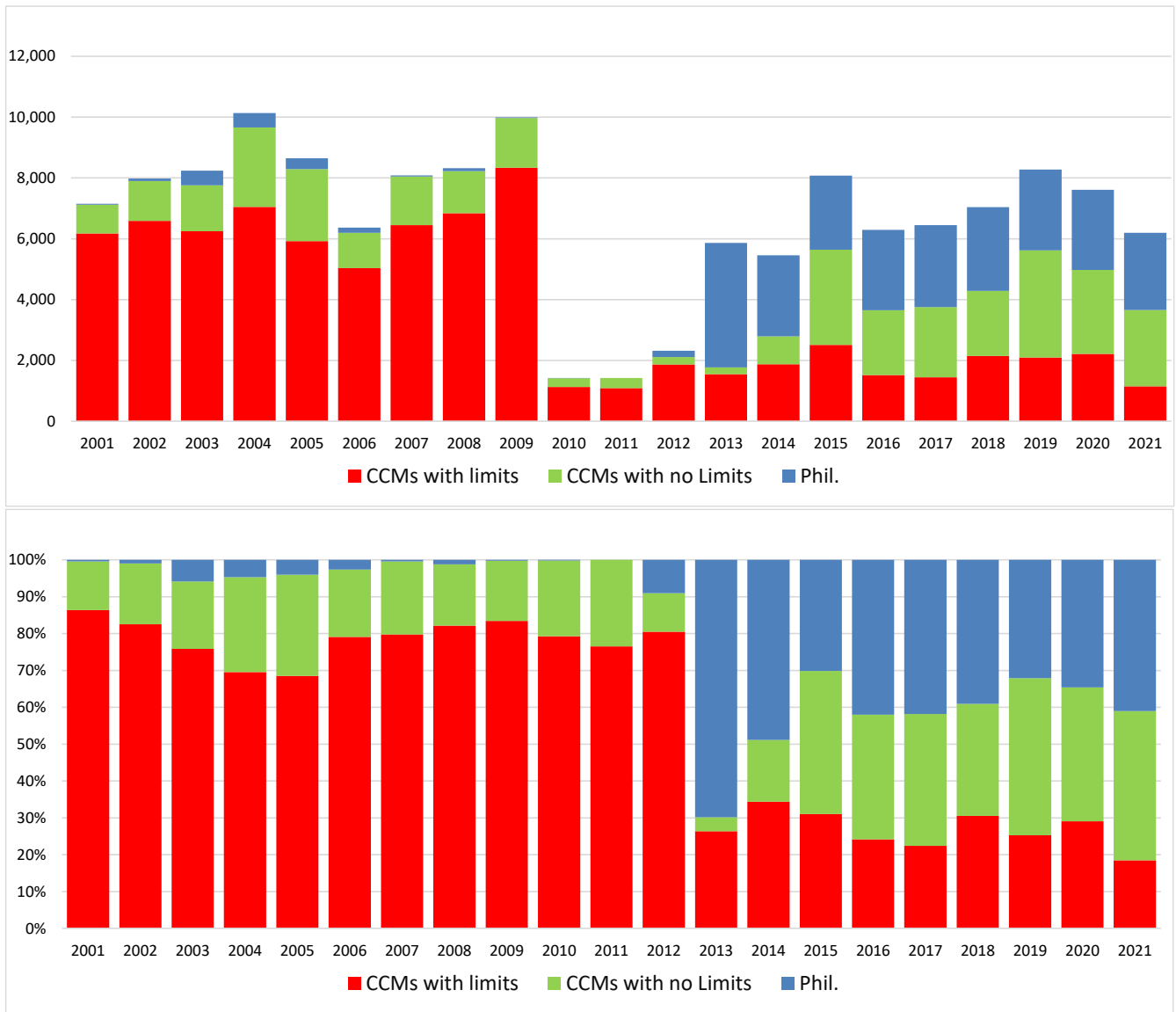
Figure 8. Monthly average weight of bigeye, skipjack and yellowfin tuna.

Estimated from observer sampling data, 2009-2021. FAD closure months are shaded in lighter colour. Data excludes the domestic fisheries of Indonesia and Philippines. Coverage of observer data in 2021 was only 50% due to the impacts of COVID-19.



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

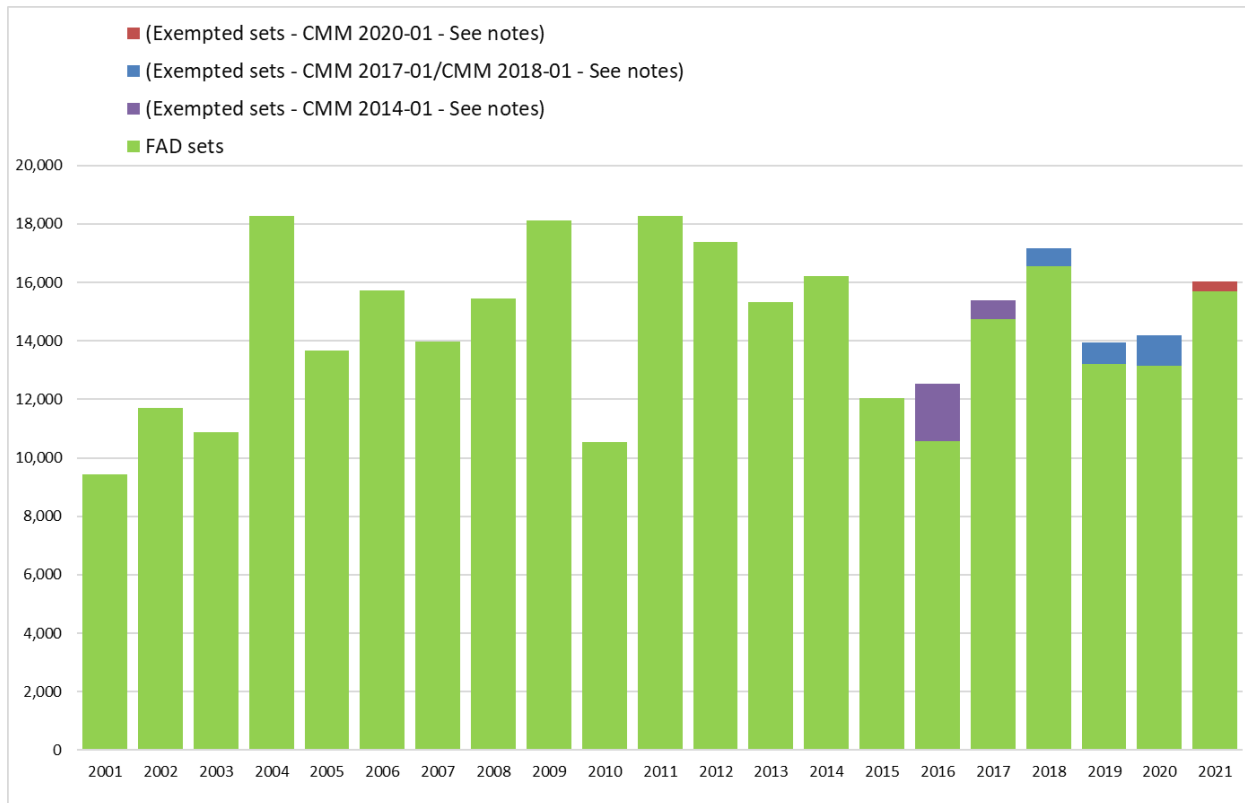




**Figure 10. Purse seine effort in high seas (20°N–20°S), by fleet category.**  
(days fished–top and percentage days fished–bottom)

*(Refer to NOTES under TABLE 2 above*

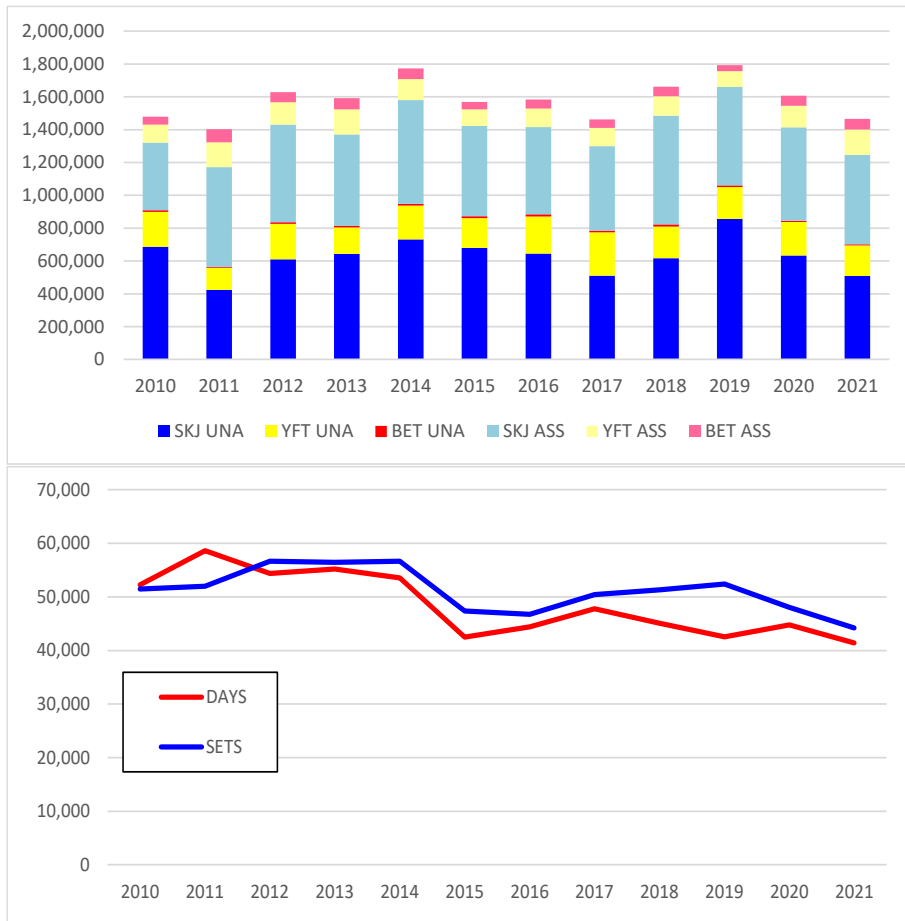
*“CCMs with no limits” are Pacific Island fleets fishing in high seas adjacent to their home waters;  
Philippines effort data prior to 2013 are not available or underreported)*



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

*(Refer to NOTES under TABLE 3 above)*

*“Exempted Sets” refers to the footnote 3 exemption of CMM 2014-01; refer to Notes 11, 12, 13 and 14, and CMM 2017-01 (footnote 2) and CMM 2018-01 and CMM 2020-01 (footnote 1) refer to Notes 15 of Table 3)*



**Figure 12. Purse seine tuna catch (top) and effort (bottom) by set type and species**  
 WCPFC Convention Area between 20°N and 20°S, 2010–2021, excluding domestic purse seine catch/effort in Philippines, Indonesia and Vietnam. Includes domestic-based Philippines catch/effort in the HSP#1.  
*(Refer to NOTES under TABLE 4 above)*

## 2. Longline fishery information

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

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

CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	CMM limits for 2020	CMM limits for 2021	See Notes
AMERICAN SAMOA	75	196	242	227	134	181	218	132	249	487	1,263	1,502	389	318	557	658	1,409	851	1,545	1,586	428			4
AUSTRALIA	1,307	1,002	1,024	892	791	499	1,008	1,027	726	458	379	553	489	490	785	825	418	325	258	290	361			7
BELIZE	1,322	812	782	297	425	254	158	89	43	89	102	132	217	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	8,724	8,724	10,11,16
COOK ISLANDS	1	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	197	124	97	83			4
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	3	17	106	71	17	10	0	0	0	0	0			7
EU-SPAIN	0	0	0	42	17	62	62	77	46	15	10	23	23	65	53	53	21	39	30	40	105			7
FSM	651	759	656	542	182	172	1,395	970	1,395	1,113	1,500	1,700	1,270	2,488	2,296	1,869	2,134	3,107	3,559	2,158	1,606			4
FIJI	662	853	889	1,254	721	771	556	671	768	539	1,718	1,588	1,018	1,698	1,184	1,396	1,108	891	1,182	736	482			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			4
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	831	932	0	0	0	0	0			4
INDONESIA	942	1,470	2,168	2,192	2,285	2,750	2,155	3,395	4,067	1,937	2,325	3,399	2,118	3,380	3,606	1,183	71	2,168	2,372	618	497	5,889	5,889	12
JAPAN	27,466	29,574	26,110	29,248	23,021	25,685	26,076	20,942	17,653	16,619	17,722	16,917	12,991	15,564	14,316	11,467	11,471	12,005	11,827	9,734	3,113	17,765	17,765	16
KIRIBATI	0	0	1	0	0	0	0	44	0	3	155	800	582	268	556	603	287	423	1,292	1,570	625			4
MARSHALL 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			4
NAURU	6	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4
NEW CALEDONIA	128	189	142	90	76	35	53	63	51	44	41	49	51	58	63	74	48	46	40	51	59			4
NEW ZEALAND	481	201	204	177	175	177	213	133	253	132	174	154	109	122	122	177	97	135	50	67	85			7
NIUE	0	0	0	0	10	22	35	51	10	4	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	492	1,000	1,000	879	999	993	999	926	1,500			4
PALAU	21	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1,106	1,011	855	1	0			4
PAPUA NEW GUINEA	240	318	390	399	237	216	111	201	128	39	59	119	32	52	15	86	47	87	162	17	0			4
PHILIPPINES	59	59	59	59	59	59	59	59	59	59	777	248	167	63	0	0	0	0	0	0	0			6,7
REPUBLIC OF KOREA	22,172	28,533	17,151	17,941	15,622	12,489	10,054	17,001	15,231	13,914	15,282	18,823	12,818	12,779	10,689	11,018	10,220	13,828	13,711	13,011	13,685	13,942	13,942	4
SAMOA	185	137	110	104	64	128	101	106	117	108	71	54	36	48	48	62	150	62	161	156	52			4
SENEGAL	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4
SOLOMON ISLANDS	187	401	385	294	3	0	0	0	0	806	213	0	0	3,054	4,390	384	0	1,235	1,398	623	603			4,11
TONGA	191	215	94	40	125	117	129	81	38	24	18	10	7	22	25	27	24	34	16	10	15			4
TUVALU	0	0	0	0	0	0	0	0	0	0	105	1,408	120	76	187	103	111	64	53	9	23			4
CHINESE TAIPEI	12,435	16,645	14,429	20,992	15,498	14,295	14,760	15,229	13,319	11,874	11,275	10,994	10,600	10,018	9,434	9,488	9,672	9,069	8,876	7,152	7,330	10,481	10,481	11
USA	2,418	4,396	3,618	4,181	4,462	4,381	5,381	4,649	3,741	3,577	3,565	3,660	3,612	3,823	3,427	3,747	2,968	3,393	3,460	3,550	3,750	3,554	3,554	13, 15
VANUATU	37	396	841	2,045	2,045	1,815	1,885	1,143	1,398	2,060	2,061	2,151	1,989	3,518	7,366	3,509	3,940	3,132	2,241	2,216	3,039			4
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0			4
<b>Total</b>	<b>73,958</b>	<b>89,177</b>	<b>78,914</b>	<b>93,668</b>	<b>74,298</b>	<b>78,153</b>	<b>75,665</b>	<b>78,018</b>	<b>75,766</b>	<b>68,837</b>	<b>71,754</b>	<b>78,238</b>	<b>60,982</b>	<b>69,270</b>	<b>70,141</b>	<b>58,191</b>	<b>55,747</b>	<b>63,999</b>	<b>65,267</b>	<b>53,659</b>	<b>44,907</b>	<b>60,355</b>	<b>60,355</b>	
VIETNAM	1,450	614	2,129	2,781	3,527	3,538	3,648	3,358	2,992	2,441	3,424	3,761	2,260	2,350	3,100	1,115	1,004	902	1,554	2,678	2,275			9

**Notes:**

1. Source: WCPFC Annual catch estimates as at 2<sup>nd</sup> July 2021.
2. Catch estimates in **red** have been carried over from previous years.
3. Indonesia and Philippines have recently revised their estimates in recent years. (see the respective Annual Catch Estimate Workshop reports at (<http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project>))
4. The limits in the columns labelled “CMM limits for 2017” and “CMM limits for 2018” do not apply to small island developing State members and participating Territories according to paragraph 7 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM).
5. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 5 of CMM 2012-01 and paragraph 5 CMM 2013-01 using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
6. Estimates include archipelagic water catches which for some countries cannot be separated at this stage.
7. The catch limits established at 2,000t prior to 2010, remain at the level of 2,000t for relevant WCPFC members. (according to CMM 2008-01 Para. 32, CMM 2012-01 para 26 and CMM 2013-01 para 41 and its replacement CMM, including CMM 2017-01). Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.
8. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM) for years from 2015 onwards.
9. The Vietnam longline fleet are understood to fish outside the WCPFC Convention Area (South China Sea).
10. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
11. Catches by chartered Chinese, Fijian and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands according to the respective WCPFC Charter notifications.
12. Indonesia bigeye tuna catch excludes catches in Archipelagic waters.
13. USA revised limit for 2015 was 3504 t., to take into account the overage in bigeye catch from 2014
14. "CMM limits for 2017" is according 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 6. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.**

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

CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Av. 2001- 2004	See Notes	
AMERICAN SAMOA	188	485	497	888	526	513	640	333	398	473	699	620	422	454	360	561	871	470	409	383	521	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	3,097	(6)	
BELIZE	957	720	943	208	298	106	273	129	121	28	13	30	21	0	0	0	0	0	0	0	0	707	(6)	
CHINA	1,919	1,844	3,358	4,048	2,446	4,055	2,768	5,007	7,958	2,576	4,598	6,004	4,638	5,949	6,226	6,559	8,526	9,031	10,010	10,115	9,530	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	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	(13)	
EU-SPAIN	0	0	0	23	1	127	127	10	7	3	0	2	2	11	10	28	7	13	20	33	40	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	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	2,689	(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	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	(4)	
INDONESIA	4,001	6,243	9,209	9,313	10,679	9,743	10,209	12,873	18,154	13,325	13,124	11,938	9,012	13,353	18,604	3,502	105	5,991	4,744	922	510	7,192	(12)	
JAPAN	18,096	15,810	16,803	15,209	14,792	13,462	13,725	12,365	14,039	17,466	11,427	10,621	8,268	6,494	8,683	10,166	10,099	10,109	12,793	6,903	6,078	16,480	(4)	
KIRIBATI	2	0	2	0	0	0	0	7	0	4	140	300	175	108	405	610	359	220	862	1,279	904	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	1	(4)	
NAURU	5	2	6	1	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	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	58	(4)	
NIUE	0	0	0	0	34	42	43	40	20	8	0	0	0	0	0	0	0	0	0	0	0	0	(4)	
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	0	(4)	
PALAU	41	3	19	28	0	0	0	0	0	0	0	0	0	0	0	0	1,352	1,887	1,644	0	0	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	1,904	(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	12,864	(4)	
SAMOA	470	369	293	444	199	264	305	317	412	386	395	234	330	231	252	244	644	401	547	642	259	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	(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	3,228	315	(4), (10)	
TONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	325	373	201	186	156	208	237	(4)	
TUVALU	0	0	0	0	0	0	0	0	0	0	286	453	114	41	166	124	164	106	76	16	9	0	(4)	
CHINESE TAIPEI	22,326	21,993	22,149	22,975	19,571	18,654	16,668	16,411	19,693	22,225	21,320	16,948	14,999	12,257	14,118	17,816	22,956	16,050	17,724	10,212	11,306	22,361	(10)	
USA	1,016	572	809	694	698	937	833	836	429	462	738	576	546	567	681	1,093	1,750	1,868	1,556	1,197	2,029	773	(4)	
VANUATU	78	778	1,315	1,762	1,147	1,368	1,049	878	817	939	1,601	2,230	1,768	1,695	2,700	1,740	1,437	1,269	1,325	849	901	983	(4)	
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	(4)	
<b>Total</b>	<b>72,489</b>	<b>74,072</b>	<b>78,320</b>	<b>78,003</b>	<b>71,536</b>	<b>67,353</b>	<b>62,721</b>	<b>66,047</b>	<b>82,320</b>	<b>79,090</b>	<b>73,720</b>	<b>68,285</b>	<b>53,234</b>	<b>73,702</b>	<b>88,473</b>	<b>64,290</b>	<b>68,529</b>	<b>70,141</b>	<b>86,417</b>	<b>57,588</b>	<b>55,634</b>	<b>75,721</b>		
VIETNAM	8,292	9,756	8,179	11,122	10,895	10,930	11,270	10,375	9,244	9,513	10,576	12,456	13,917	11,603	15,097	16,423	15,677	16,500	14,653	14,118	13,822		(8)	

**Notes:**

1. Source: WCPFC Annual catch estimates as at 2<sup>nd</sup> July 2022.
2. Catch estimates in **red** have been carried over from previous years.
3. Indonesia and Philippines have recently revised their estimates (see the respective Annual Catch Estimate Workshop reports at <http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project>)
4. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
5. Estimates include archipelagic water catches which for some countries cannot be separated at this stage.
6. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 (or its replacement CMM) for years from 2015 onwards. Belize is not presently a CNM.
7. Senegal committed to limiting its fishing activities in the WCPF Convention Area to one longline vessel - WCPFC5 Report (Para. 44). Senegal is not presently a CNM.
8. The Vietnam longline fleet are understood to fish outside the WCPFC Convention Area (South China Sea).
9. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
10. Catches by chartered Chinese and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands according to the respective WCPFC Charter notifications.
11. Does not yet cover development of new fisheries in the waters of small-island developing states (e.g. Tokelau)
12. Indonesia yellowfin tuna catch excludes catches in Archipelagic waters.
13. Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.

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

FLEET	LONGLINE EFFORT (100s of Hooks)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
CK	13,422	16,809	32,818	16,880	10,880	11,761	25,750	20,672	21,581	19,474	18,852	14,283
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
FJ	27,971	91,025	167,297	135,836	128,960	83,827	85,898	45,608	30,099	73,637	43,301	16,730
FM	84,884	94,564	110,591	85,598	123,995	149,576	165,600	167,500	361,852	327,119	247,747	182,344
JP	591,056	544,105	513,557	453,786	393,618	347,416	279,927	286,586	306,207	303,051	187,791	54,386
KI	0	19,487	50,227	27,577	23,868	38,218	55,215	45,625	40,604	73,402	110,146	64,107
KR	728,939	803,720	771,103	626,874	603,157	506,797	586,401	473,107	567,738	591,151	547,351	542,088
MH	16,828	16,763	20,679	6,286	0	585	63,220	138,797	104,151	95,894	79,962	72,224
PF	0	242	147	246	437	18	1,138	13,321	5,179	3,656	1,456	11,407
PG	24,589	51,692	40,188	14,849	19,232	7,883	4,492	2,789	35,323	30,864	2,473	0
PW	0	0	0	0	0	0	626	86,598	107,145	92,140	57	0
SB	65,235	12,757	5,497	3,942	421,448	370,855	24,030	18,036	209,644	204,151	89,701	94,617
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
TW	1,116,368	1,542,611	1,710,738	1,237,662	1,031,881	1,207,708	1,291,770	1,385,543	1,054,992	1,111,503	755,975	884,948
US	127,121	135,232	152,740	128,813	147,964	181,519	240,469	217,903	165,374	323,727	285,557	373,439
VU	78,908	92,148	134,225	196,387	138,961	313,642	213,255	138,818	120,477	112,208	75,431	45,440
	3,436,764	4,189,554	4,617,707	3,604,082	3,615,413	4,094,672	3,694,610	3,546,955	3,950,867	3,964,745	2,998,047	2,846,710

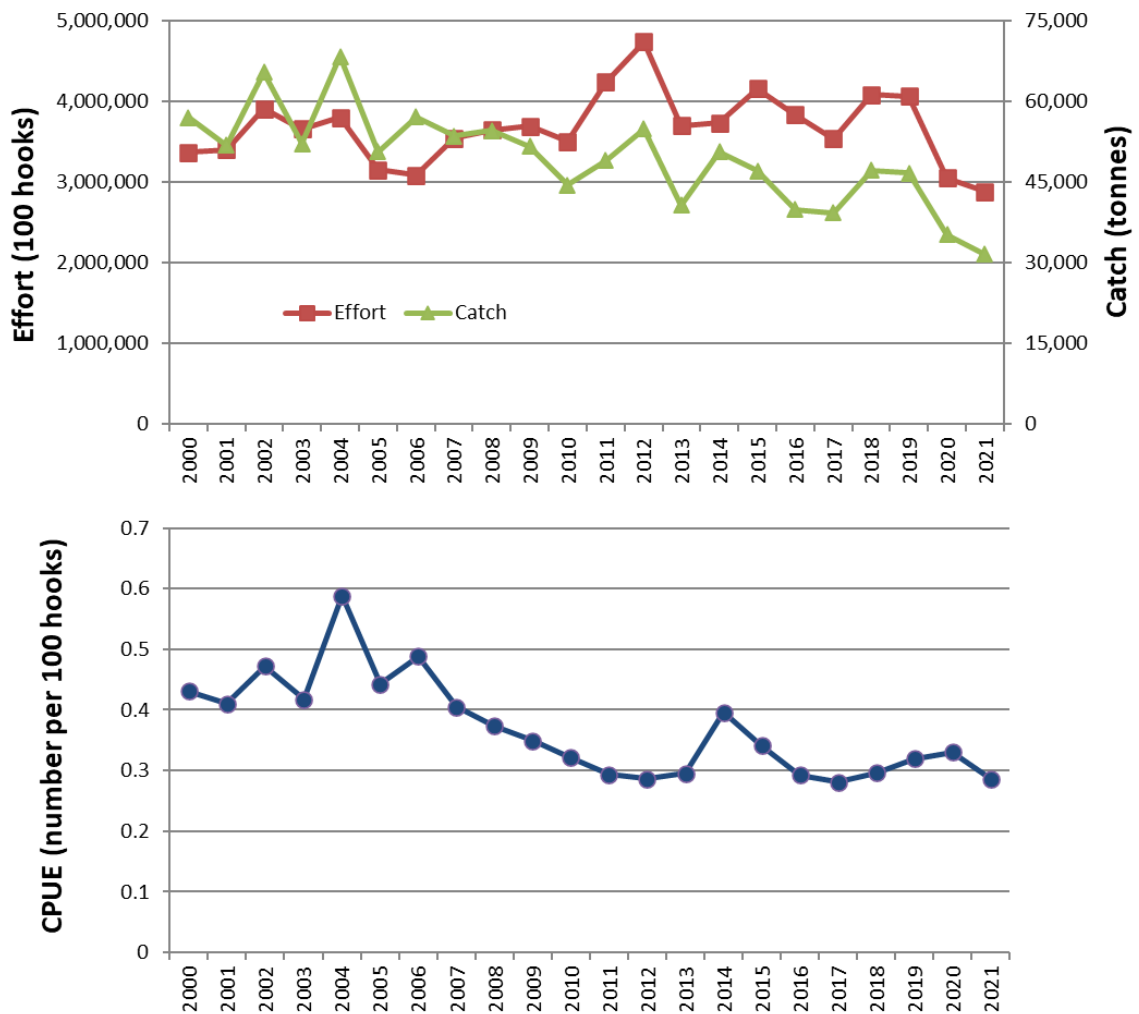
**Notes:**

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

**Fleet Codes**

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

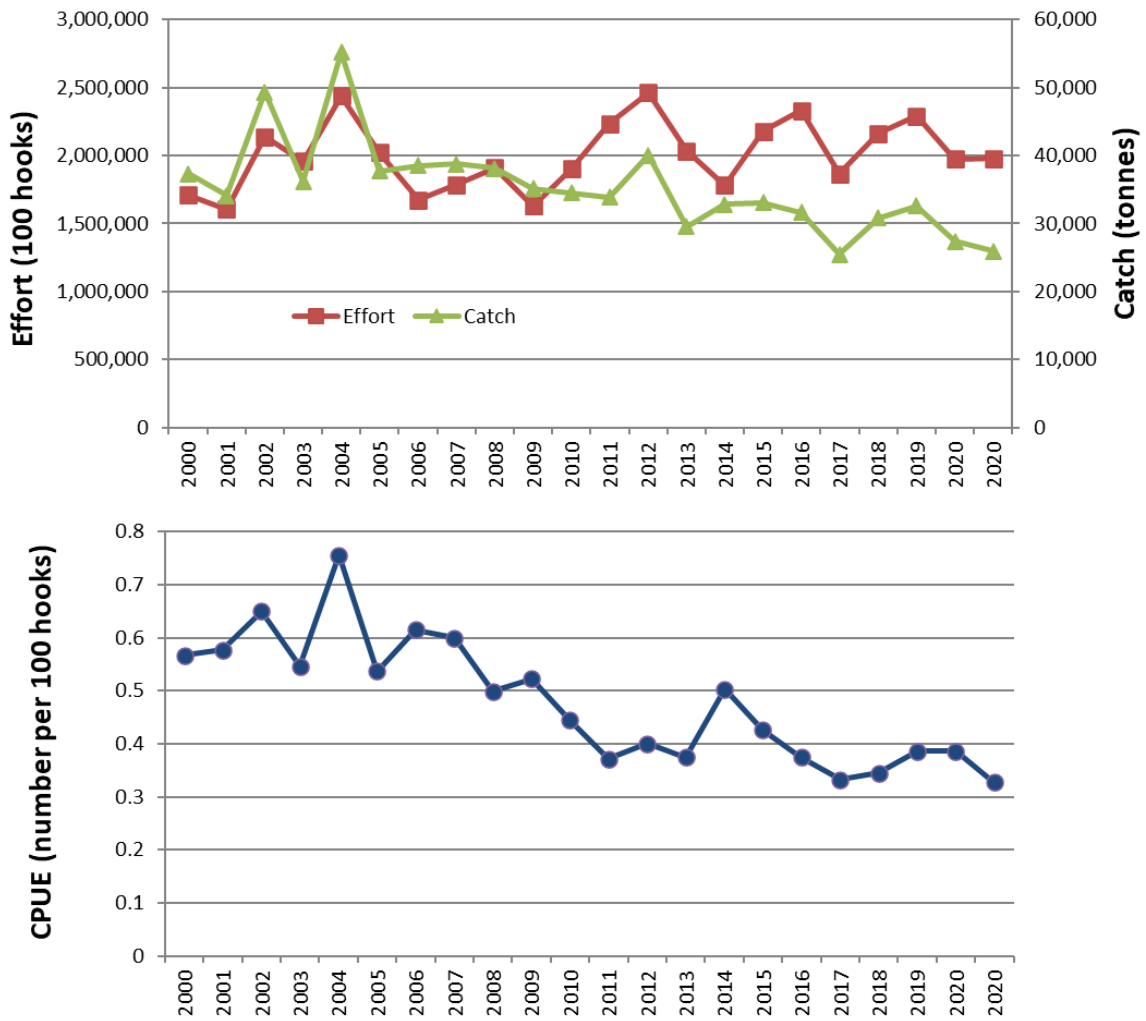




**Figure 13. Estimates of effort, bigeye catch and nominal CPUE for the CORE tropical WCPFC longline fishery**

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

2021 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).**  
 2021 data are provisional.

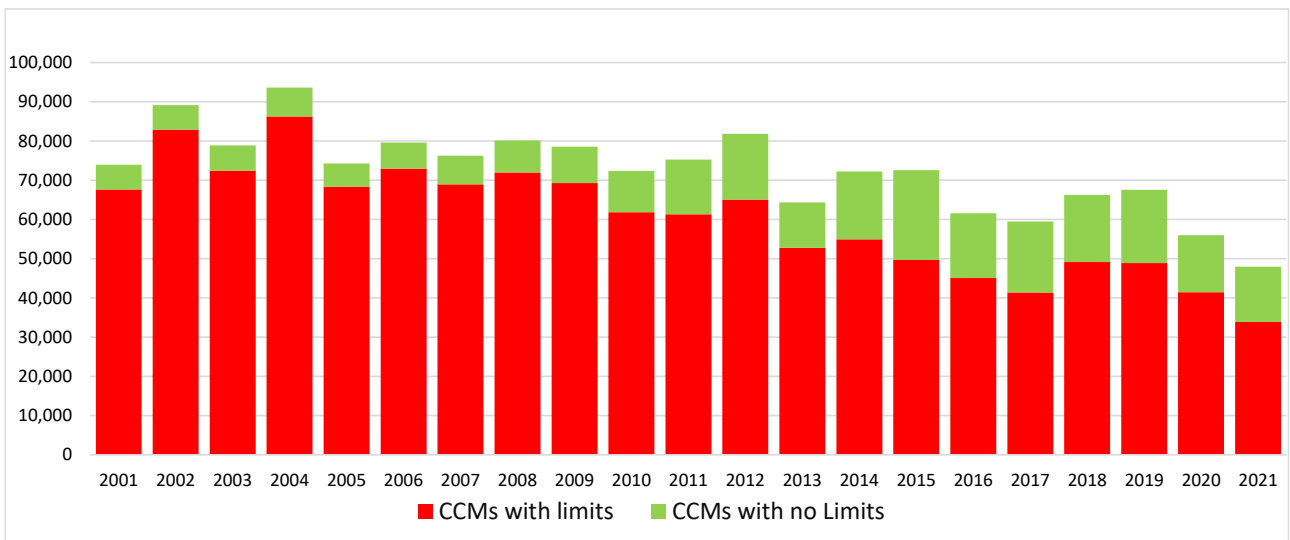


Figure 15. Reported longline catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by fleet category.  
*(Refer to NOTES under TABLE 4 above;  
 Vietnam catch is included in "CCMs with no limits")*

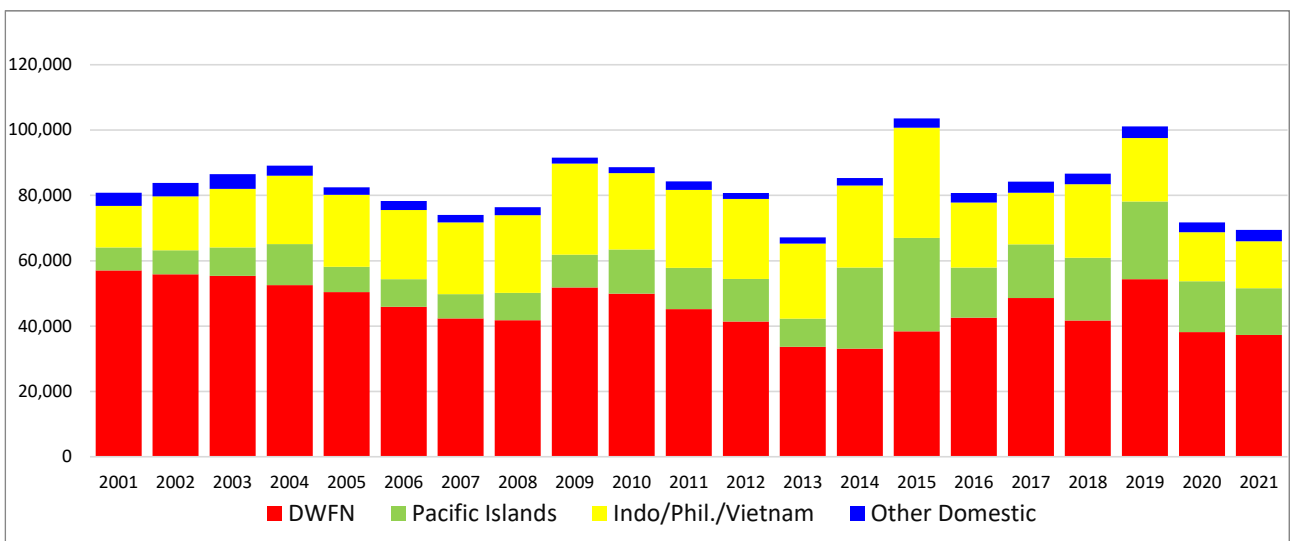
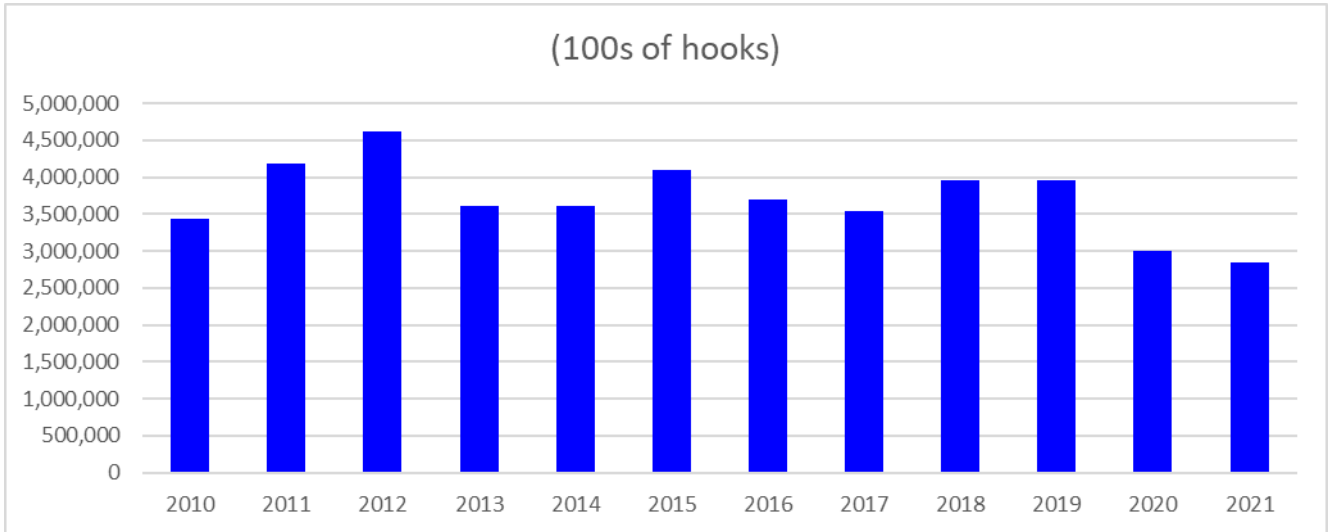
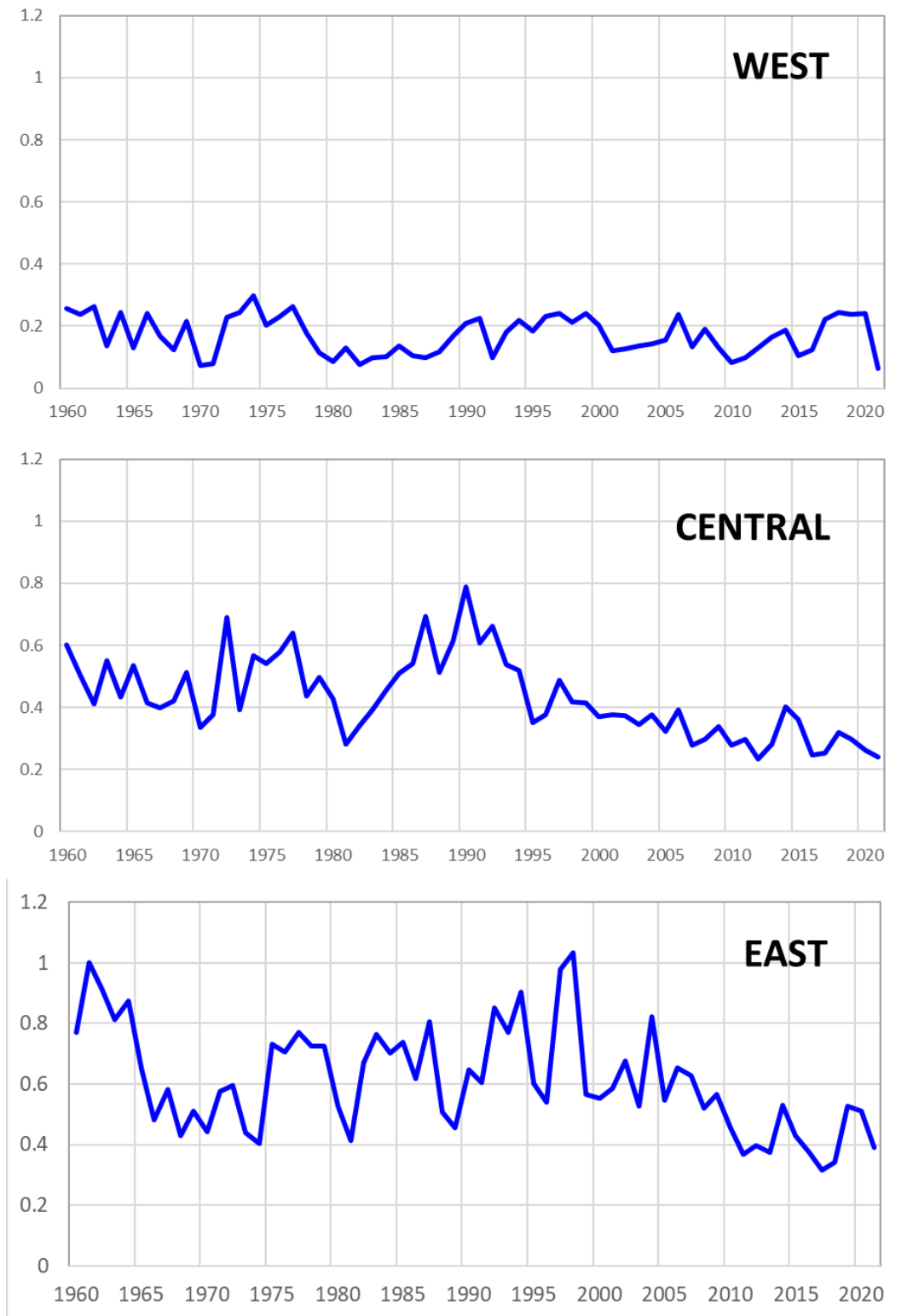


Figure 16. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by fleet category.  
*(Refer to NOTES under TABLE 5 above;  
 Vietnam catch is included)*



**Figure 17. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), 2010-2021.**

*(Refer to NOTES under TABLE 8 above)*



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

**CPUE in number per 100 hooks**

**By assessment region**

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

### 3. Other Commercial fisheries information

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

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

GEAR	FLAG	Total Catch (MT)			Area Note	Availability of EFFORT data	See NOTE
		CMM 2020-01 limit	2021	Evaluation			
HANDLINE	INDONESIA	...	...	...	<i>Within EEZ only, excluding AWs</i>	NO	5
HANDLINE (LARGE-FISH)	PHILIPPINES	13,343	2,893	Within Limit	<i>Within EEZ only, excluding AWs</i>	NO	6
POLE-AND-LINE	INDONESIA	41,025	12,734	Within Limit	<i>Within EEZ only, excluding AWs</i>	NO	
POLE-AND-LINE	JAPAN	114,573	59,377	Within Limit		YES	2, 4

**Notes:**

1. Source: Annual catch estimates; Philippines National Stock Assessment Project (NSAP data); Aggregate logsheet data. 2021 data are provisional.
2. The column labeled "CMM 2020-01" is the maximum value of either (i) the average total skipjack, yellowfin and bigeye tuna catch for 2001-2004, or (ii) 2004.
3. The definition for "Commercial" fisheries, at this stage, includes all fisheries other than purse seine and longline fisheries, until otherwise advised. (Refer to Table 6b.).
4. Advice from Japan -- "Paragraph 9 of CMM 2012-01 provides that this measure applies to all areas of high seas and EEZs in the Convention Area. Therefore this paragraph does not apply to troll fishery, which operate within territorial sea.
  - Regarding pole-and-line fishery and purse seine north of 20N fishery JFA ensure that the total effort and capacity of these tuna fisheries shall not exceed the average level for the period 2001-2004 or 2004 under its licensing system.
  - Therefore JFA consider fulfilling this requirement.
  - JFA submits following information of pole-and-line fishery and purse seine north of 20N fishery as attached. On the other hand JFA does not agree with the Secretariat view to consider non provision of these data as a potential compliance issue because it is not required under this paragraph.  
Effort data (2001-2004 average, 2004 and 2013)  
Catch data (2001-2004 average, 2004 and 2013)"
5. Indonesia has advised that HANDLINE (hook-and-line) vessels that target small-fish at the surface should not be considered in the "Commercial" category since they are artisanal/subsistence fisheries. However, Indonesia can only provide a catch estimate for the combined small-fish (artisanal) and large fish handline fishery and it is not yet possible to differentiate the large-fish handline catch estimate from this combined total. Also, it is not yet possible to separate out the catches of what might be considered the 'commercial component' of the Handline fishery that are relevant to the tropical tuna measure - that is Indonesian waters outside Archipelagic waters (AWs) and Territorial Seas (TS).
6. The large-fish handline catch for the Philippines outside of archipelagic waters and territorial seas has been determined from the proportion of annual tuna catch outside AWs/TS from data collected from Philippines National Stock Assessment Project (NSAP data : 1997-2021), and specifically based on landings by Philippines Fisheries Management Area (FMAs) and Fishing Ground. There is often considerable inter-annual variation in the activity of this fleet inside and outside archipelagic waters, mainly depending on weather and sea conditions.

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

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

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

GEAR	FLAG	Tuna catch (MT)		Reason for exemption
		2021	Average 2016-2021	
GILLNET	JAPAN	101	101	Less than 2,000 t.
GILLNET	VIETNAM	18,059	32,787	Outside of the WCPFC Convention Area
HANDLINE (LARGE-FISH)	UNITED STATES OF AMERICA	403	453	Less than 2,000 t.
HOOK-AND-LINE (SMALL-FISH)	PHILIPPINES	0	0	Within territorial seas and/or archipelagic waters only
POLE-AND-LINE	AUSTRALIA	0	0	Less than 2,000 t.
POLE-AND-LINE	FIJI	0	0	Less than 2,000 t.
POLE-AND-LINE	FRENCH POLYNESIA	199	251	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	51	61	Less than 2,000 t.
POLE-AND-LINE	UNITED STATES OF AMERICA	0	0	Less than 2,000 t.
Small scale/artisanal/recreati	AUSTRALIA	0	0	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	FRENCH POLYNESIA	1,065	1,116	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	INDONESIA	46,445	37,599	Within territorial seas and/or archipelagic waters only
Small scale/artisanal/recreati	JAPAN	1,455	1,351	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	3	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	157	123	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	FIJI	0	0	Less than 2,000 t.
TROLL	JAPAN	3,567	3,446	Within territorial seas and/or archipelagic waters only
TROLL	NAURU	20	15	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	51	78	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	912	936	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	VANUATU	115	63	Less than 2,000 t. and within territorial seas and/or archipelagic waters only
TROLL	WALLIS AND FUTUNA	13	11	Less than 2,000 t. and within territorial seas and/or archipelagic waters only

**Notes:**

1. Source: Annual Catch estimates. 2021 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 and CMM 2020-01 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 WCPFC18 and SC18	Notes on major revisions between SC18 and TCC18
<b>ALL TABLES</b>			
<b>Table 1</b>	PURSE SEINE days fished in waters under national jurisdiction and in International waters in the WCPFC-CA.	– Updated to include 2021 data	–
<b>Table 2</b>	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 2021 data	-
<b>Table 3</b>	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 2021 data	
<b>Table 4</b>	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 2021 data	
<b>Table 5</b>	Reported LONGLINE catches (metric tonnes) of bigeye tuna in the WCPFC-CA, by flag.	– Updated to include 2021 data	
<b>Table 6</b>	Reported LONGLINE catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.	– Updated to include 2021 data	
<b>Table 7</b>	Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery.	– Updated to include 2021 data	–
<b>Table 8</b>	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 2021 data	–
<b>Table 9</b>	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 2021 data	–
<b>FIGURES</b>	[Figures corresponding to relevant tables above	– Updated to include 2021 data	