

## SCIENTIFIC COMMITTEE NINETEENTH REGULAR SESSION

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# ANNUAL REPORT TO THE COMMISSION PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

WCPFC-SC19-AR/CCM-13

REPUBLIC OF MARSHALL ISLANDS

## Annual Report to the Western and Central Pacific Fisheries Commission Part 1: Information of fisheries, statistics and research

## Republic of the Marshall Islands



Oceanic and Industrial Affairs Division Marshall Islands Marine Resources Authority

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2023

Yes

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#### 1 SUMMARY

In 2022, there were eleven Marshall Islands-flagged purse seine vessels operating throughout the Western and Central Pacific Ocean (WCPO). The total catch estimates by the national purse seine fleet in 2022 was 85,984 metric tons. Additionally, retained catch estimates, from twenty-three chartered longline vessels associated with the domestically-based Marshall Islands Fishing Venture (MIFV), totaled 2,446 metric tons.

The commercial catches within the RMI EEZ are taken predominantly by the purse seine fishery but longline and pole-and-line operations also occur. In 2022, estimated total catch for all gears combined was 45,600 metric tons with purse seine accounting for 90% followed by longline 8% and pole-and-line 2%. Purse seine catch in the RMI EEZ decreased from 54,640 metric tons in 2021 to 41,123 metric tons in 2022.

The RMI Observer program's 33 active observers carried out 9 purse seine trips during 2022. RMI observers started embarking on purse seiners toward the end of the year when the borders opened after the COVID19 pandemic. Observers were also utilized to monitor transshipment and unloading activities in Majuro port.

#### 2 FLAG STATE REPORTING

Annual catch and effort estimates for the national purse seine fleet, fishing throughout the Western and Central Pacific Fisheries Commission Convention Area (WCPFC-CA) during the last five years are presented in Table 1 and Figure 1. In 2022, total catch estimates were 85,984 metric tons for the purse seine fleet. Skipjack is the prominent species caught comprising 95% of the total followed by yellowfin, 4% and bigeye tuna at less than 1%.

There were 23 foreign long-liners chartered in 2022 whose catch estimates are provided in Table 2. All chartered vessels are based locally and fish almost exclusively in the RMI EEZ. Vessel numbers for both purse seine and longline vessels are presented in Table 3 below.

Figures 2 and 3 illustrate catch distributions for the RMI flagged purse seine and charted longline fleets from 2021 to 2022. Purse seine catch and effort is primarily concentrated in the southern part of the RMI EEZ and the adjacent EEZs. As previously stated, longline vessels predominantly operate in the EEZ and effort is more widely distributed within the RMI zone.

Table 1. Annual catch and effort estimates for the Marshall Islands purse seine vessels, by species and year, in the WCPFC Convention Area

Cma ain a	Species 2018		2019		2020		2021		2022	
Species	Retain	D is c a rd	Retain	D is c ard	Retain	D is c ard	Retain	D is c ard	Retain	Discard
ALBACORE	0	0	0	0	0	0	0	0	0	0
BIGEYE TUNA	3,039	30	616	21	718	24	683	23	433	0
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	0	0
SKIPJACK TUNA	60,212	625	84,253	719	74,625	1,521	81,741	1,362	81,445	34
YELLOWFIN TUNA	9,429	72	10,654	98	6,564	245	7,005	213	4,088	5
BLACK MARLIN	1	1	2	4	2	7	2	6	0	20
BLUE MARLIN	6	6	7	14	1	9	1	10	6	1
STRIPED MARLIN	0	3	1	2	3	3	3	2	12	0
SWORDFISH	1	0	0	0	0	0	0	0	0	0
BLUE SHARK	0	0	0	0	0	0	0	0	0	0
SILKY SHARK	0	85	0	69	0	72	0	47	0	66
HAMMERHEAD SHARKS	0	0	0	0	0	1	0	1	0	0
MAKO SHARKS	0	0	0	0	0	0	0	0	0	0
OCEANIC WHITETIP SHARK	0	1	0	2	0	1	0	0	0	16
PORBEAGLE / SALMON SHARK	0	0	0	0	0	0	0	0	0	0
WHALE S HARK	0	0	0	9	0	12	0	0	0	0
THRES HER SHARKS	0	0	0	0	0	0	0	0	0	0
Total	72,688	823	95,533	939	81,913	1,893	89,434	1,664	85,984	143

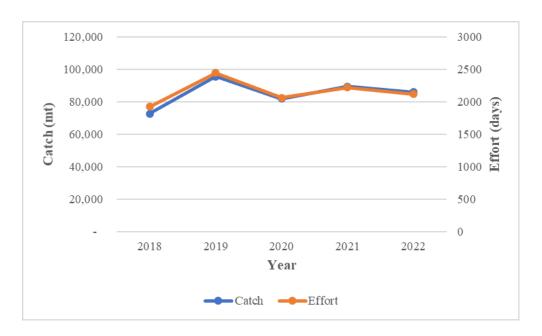


Figure 1. Annual catch and effort for the Marshall Islands purse seine vessels in the WCPFC Convention Area

Table 2. Annual catch estimates for the Marshall Islands-chartered longline vessels, by species and year, for the WCPFC Convention Area

g :	20	18	20	19	202	20	202	21	202	22
Species	Retain	D is c a rd								
ALBACORE	30	3	97	2	9	0	53	1	149	1
BIGEYE TUNA	1,122	24	1,428	30	751	13	915	13	1,151	22
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	1	0
SKIPJACK TUNA	0	14	0	10	1	0	0	1	2	1
YELLOWFIN TUNA	639	68	1,152	23	730	13	620	14	940	24
BLACK MARLIN	0	1	0	0	0	0	0	0	0	1
BLUE MARLIN	115	2	189	3	98	0	130	0	188	0
STRIPED MARLIN	2	1	0	0	0	1	0	0	0	0
SWORDFISH	14	11	24	16	10	7	15	8	15	0
BLUE SHARK	0	11	0	94	0	13	0	114	0	245
SILKYSHARK	0	46	0	20	0	10	0	68	0	47
HAMMERHEAD SHARKS	0	0	0	0	0	0	0	0	0	1
MAKO SHARKS	0	7	0	2	0	1	0	4	0	2
OCEANIC WHITETIP SHARK	0	8	0	44	0	1	0	13	0	4
PORBEABLE / SALMON SHARK	0	0	0	0	0	0	0	0	0	0
WHALE S HARK	0	0	0	0	0	0	0	0	0	0
THRES HER SHARKS	0	9	0	0	0	0	0	0	0	0
Total	1,922	205	2,890	244	1,599	59	1,733	236	2,446	349

 $Table\ 3.\ Number\ of\ Marshall\ Islands\text{-}chartered\ and\ flagged\ vessels,\ by\ size\ category,\ active\ in\ the\ WCPFC\ Convention\ Area,\ 2018\text{-}2022$ 

		Purse	Seine					
Year GRT	0-50	51-200	201-500	500+	0-500	501-1000	1001-1500	1500+
2018	0	26	0	0	0	0	7	3
2019	0	22	0	0	0	0	7	4
2020	0	23	0	0	0	0	7	4
2021	0	27	0	0	0	0	7	4
2022	0	23	0	0	0	0	7	4



Figure 2. Annual distribution of catch by the Marshall Islands-chartered longline vessels in the WCPFC Convention Area in 2022 and 2021 (Red - BET, Yellow - YFT, Green - ALB)

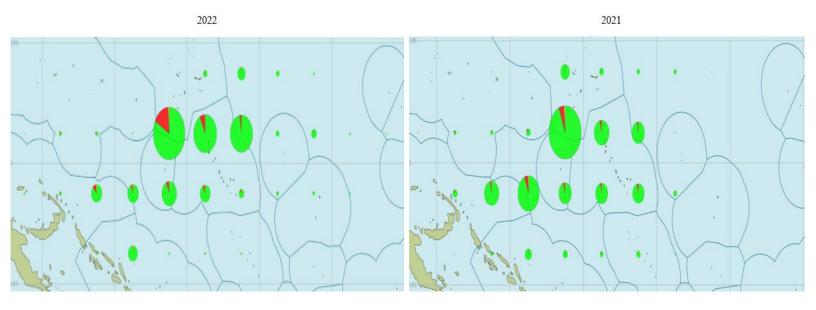


Figure 3. Annual distribution of catch by the Marshall Islands purse seine vessels in the WCPFC Convention Area in 2022 and 2021 (Green – SKJ, Red – YFT, Yellow – BET)

#### 3 COASTAL STATE REPORTING

Table 4 provides a description of foreign-flagged vessels licensed to fish in the Marshall Islands waters over the past five years. A total of 232 foreign vessels were licensed however, not all were actively fishing in the RMI EEZ during the period. Domestically-based foreign longline vessels affiliated with the Marshall Islands Fishing Venture (MIFV) have been operating under charter with the RMI since 2016, hence the inclusion of the charter component of the catches in the flag state reporting above.

Table 4. Number of foreign longline, pole-and-line and purse seine vessels licensed to fish in the RMI EEZ, by year and flag

FLAG	GEAR	2018	2019	2020	2021	2022
CHINA	LL	0	22	20	18	22
	PS	8	9	9	9	10
FSM	LL	9	9	10	12	11
FSMA	PS	49	54	70	83	79
JAPAN	LL	6	9	2	2	1
	PL	11	20	21	25	3
	PS	25	26	28	29	22
KIRIBATI	PS	5	7	3	4	2
KOREA	PS	24	25	25	21	20
PHILIPPINES	PS	13	10	15	15	15
CH-TAIPEI	LL	0	1	0	0	0
	PS	23	24	18	21	23
TUVALU	PS	1	1	0	1	1
USA	PS	31	6	25	0	0
TOTAL	LL	15	41	32	32	34
	PL	11	20	21	25	3
	PS	179	162	190	183	195

Available logsheet data indicate that total catch by purse seine fleets operating in the RMI EEZ decreased from 54,640 metric tons in 2021 to 41,123 mt in 2022 with 44% taken by the RMI fleet (Table 5). The catch rates in the RMI EEZ are usually influenced by the prevailing environmental conditions, with higher catches recorded during or immediately following strong El Nino periods. Skipjack tuna continues to be the dominant catch, accounting for 94% of the total catch in 2022.

The domestically-based foreign longline fleet comprises vessels from China, FSM and previously Chinese Taipei are managed and operated under Marshall Islands Fishing Venture, Ltd., which is a subsidiary of Luen Thai. Japanese longline vessels offload their catch in ports in Japan. In-zone longline catch estimates are provided in Table 6. Bigeye and yellowfin catches continue to account for the major part of the target catch composition. As with the purse seine fishery, most of the longline fishing effort occurs in the southern areas of the RMI EEZ however in the longline fishery, effort is more widely distributed throughout the zone.

In 2022, provisional catches from the pole-and-line fleet increased to 893 metric tons from 777 mt in the previous year (Table 7). Skipjack is the main species making up the catch composition for this fleet and nearly accounts for the entire catch total each year. The RMI has yet to place observers on board these vessels and as a result observer coverage for validation purposes has not been achieved.

Table 5. Annual catches of purse seine fleets operating in the RMI EEZ, by flag and species, 2018-2022

				Catch	nes (metri	ic tonnes)					Catche	es (metri	c tonnes)
Flag	Year	SKJ	YFT	BET	OTH	TOTAL	Flag	Year	SKJ	YFT	BET	OTH	TOTAL
China	2018	274	128	13	1	416	RMI	2018	5,769	419	36	25	6,249
	2019	280	30	20	1	331		2019	1,587	19	51	5	1,662
	2020	0	0	0	0	0		2020	9,027	482	154	7	9,670
	2021	0	0	0	0	0		2021	12,083	2,220	123	1	14,427
	2022	295	10	0	0	305		2022	17,531	505	144	14	18,194
FSM	2018	2,602	230	57	7	2,896	Solomon Is	2018	415	0	0	0	415
	2019	220	49	13	6	289		2019	0	0	0	0	0
	2020	5,197	1,064	108	12	6,380		2020	251	129	25	1	406
	2021	6,959	2,947	89	4	9,999		2021	20	495	35		550
	2022	3,750	224	78	4	4,056		2022	0	0	0	0	0
Japan	2018	472	12	0	1	485	Chinese Taipei	2018	5,729	436	50	7	6,222
	2019	0	0	0	0	0		2019	1,237	133	7	3	1,380
	2020	40	30	0	0	70		2020	2,798	711	256	7	3,772
	2021	1,384	2,096	10	3	3,493		2021	7,167	4,463	143	2	11,775
	2022	318	2	0	0	320		2022	8,118	380	204	6	8,707
Kiribati	2018	754	125	31	1	911	Tuvalu	2018	0	0	0	0	0
	2019	186	28	1	0	215		2019	0	0	0	0	0
	2020	2,899	1,343	40	3	4,284		2020	0	0	0	0	0
	2021	2,345	665	5	1	3,016		2021	680	497	6	1	1,184
	2022	4,591	196	30	1	4,818		2022	756	89	5	1	851
Korea	2018	3,955	430	20	0	4,405	Vanuatu	2018	0	0	0	0	0
	2019	460	15	0	0	475		2019	0	0	0	0	0
	2020	3,963	1,860	118	7	5,949		2020	0	0	0	0	0
	2021	2,077	2,898	23	0	4,998		2021	80	75	0	0	155
	2022	251	19	0	0	270		2022	0	0	0	0	0
Nauru	2018	0	0	0	0	0	USA	2018	2,814	62	22	3	2,901
	2019	171	25	0	0	196		2019	353	80	17	1	451
	2020	3,400	1,059	95	15	4,569		2020	1,340	323	75	3	1,741
	2021	3,047	1,914	80	2	5,043		2021	0	0	0	0	0
	2022	3,044	493	62	2	3,601		2022	0	0	0	0	0
PNG	2018	3,604	313	24	13	3,954	TOTAL EEZ	2018	26,424	2,168	253	58	28,903
	2019	379	16	0	0	395		2019	4,874	395	109	16	5,394
	2020	0	0	0	0	0		2020	28,915	7,000	871	55	36,841
	2021	0	0	0	0	0		2021	35,842	18,270	514	14	54,640
	2022	0	0	0	0	0		2022	38,655	1,918	523	28	41,123
Philippines	2018	36	13	0	0	49							
	2019	0	0	0	0	0							
	2020	0	0	0	0	0							
	2021	0	0	0	0	0							
	2022	0	0	0	0	0							

Table 6. Annual catches of longline fleets operating in the RMI EEZ, by flag and species, 2018-2022

		Catch (metric tonnes)					
Flag	Year	ALB	BET	YFT	OTH	Total	
China	2018	1	169	129	28	327	
	2019	0	16	17	5	38	
	2020	1	66	45	9	121	
	2021	1	32	25	6	63	
	2022	0	0	0	0	0	
FSM	2018	17	705	373	104	1,199	
	2019	41	695	594	140	1,470	
	2020	10	686	533	111	1,340	
	2021	36	637	392	125	1,189	
	2022	71	438	373	107	989	
Japan	2018	3	49	47	10	109	
	2019	2	66	46	12	126	
	2020	1	180	25	17	223	
	2021	32	109	108	21	270	
	2022	24	96	88	30	238	
RMI-Chartered	2018	31	1,287	713	174	2,205	
	2019	91	1,219	1,045	241	2,596	
	2020	9	708	679	119	1,515	
	2021	53	899	610	179	1,741	
	2022	138	1,101	886	232	2,357	
CH-Taipei	2018	0	0	0	0	0	
	2019	0	4	17	18	40	
	2020	0	0	0	0	0	
	2021	0	0	0	0	0	
	2022	0	0	0	0	0	
TOTAL EEZ	2018	52	2,210	1,262	316	3,840	
	2019	134	2,000	1,719	417	4,269	
	2020	21	1,640	1,282	256	3,199	
	2021	122	1,677	1,136	331	3,265	
	2022	233	1,636	1,347	368	3,584	

Table 7. Annual catches of pole-and-line fleet operating in the RMI EEZ, by flag and species, 2018-2022

		Catch (metric tonnes)				
Flag	Year	BET	SKJ	YFT	TOTAL	
	2018	0	1,017	1	1,018	
	2019	0	1,022	2	1,024	
Japan	2020	0	2,609	10	2,619	
	2021	2	761	14	777	
	2022	0	880	13	893	

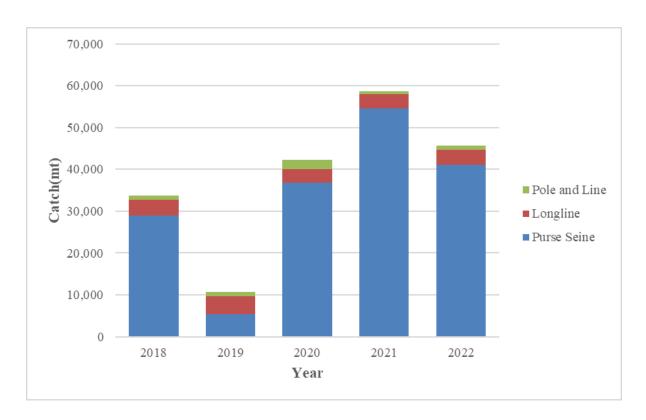


Figure 4. Total catch by the different gears operating in the RMI EEZ

#### 4 DISPOSAL OF CATCH

As mentioned earlier, the Marshall Islands Fishing Venture, Ltd. (MIFV) operates the Longline Fish base with domestically-based foreign longline vessels. In 2022, there was a provisional total of 3,582 metric tons of fish unloaded by the longline fleet and most of it was bound for export markets (Table 8). The MIFV exports mainly fresh chilled tuna species to markets in the US, China and Canada. Frozen fish (rejects and bycatch) are shipped to Asia via transport containers and/or sold locally.

Majuro port is the only designated port for transshipment in the RMI. There were an estimated 257 purse seine transshipments undertaken in Majuro in 2022 with a provisional total of 218,758 metric tons transshipped (Table 9). Port restrictions due to COVID19 and purse seine fishing concentrated in the western regions of the ocean resulted in a significant decrease in the number of vessel entries. Additionally, most transshipments by the national purse seine fleet are usually carried out in Majuro, however, foreign ports in the region are occasionally utilized (Table 10).

Table 8. Total unloaded catch (mt) for domestically-based longline vessels in 2022

Species	Unloaded Catch (mt)
Albacore Tuna	208
Big Eye Tuna	1,675
Blue Marlin	253
Mahi Mahi	4
Moon Fish	3
Sailfish	9
Striped Marlin	14
Swordfish	17
Wahoo	35
Yellowfin Tuna	1,364
TOTAL	3,582

Table 9. Provisional purse seine transshipments in Majuro port in 2022

Flag	Number of PS Transshipments	SKJ	YFT	ВЕТ
China	8	5,682	459	10
El Salvador	1	819	176	275
Federated States of Micronesia	39	30,237	3,655	493
Kiribati	1	850	225	5
Korea, Republic of	1	380	335	715
Marshall Islands	65	50,190	3,081	443
Nauru	46	34,815	4,558	562
Papua New Guinea	9	6,010	1,527	133
Solomon Islands	3	1,943	146	126
Spain	3	4,512	588	1,475
Taiwan	74	50,215	6,580	1,038
Tuvalu	7	5,471	1,008	24
TOTAL	257	191,123	22,337	5,299

Table 10. Purse seine transshipments by RMI-flagged vessels in 2022

Annex II(1)					
Species	Quantity Transshipped (mt)	Transshipped in port	Transshipped in WCP-CA	Caught in WCP-CA	Product Form
SKJ	79,541	Yes	Yes	Yes	Frozen Whole
YFT	4,011	Yes	Yes	Yes	Frozen Whole
BET	421	Yes	Yes	Yes	Frozen Whole
Annex II(2)	Number of	Transshipped	Transshipped in	Caught in	Product
Port	Transshipments	in port	WCP-CA	WCP-CA	Form
Kosrae	1	Yes	Yes	Yes	Frozen Whole
Majuro	65	Yes	Yes	Yes	Frozen Whole
Pohnpei	7	Yes	Yes	Yes	Frozen Whole
Rabaul	4	Yes	Yes	Yes	Frozen Whole
Tarawa	25	Yes	Yes	Yes	Frozen Whole

#### 5 ONSHORE DEVELOPMENTS AND SOCIO-ECONOMIC FACTORS

MIMRA, on behalf of the Government, still maintains a joint venture partnership with Koo's Fishing Company, Ltd. (KFC). This venture continues to provide an additional revenue stream as well as a catalyst for further on-shore developments.

The Pan Pacific Foods (PPF) loining plant continued operations in 2022 however was limited to cold storage and containerization of fish. As has been reported before, the company also operates six RMI-flagged purse seine vessels which supply the plant with raw materials. The plant did not produce any processed fish during 2022 due in part to COVID19 restrictions and staff storages.

Total volume of exports was 9,196 metric tons with whole containerized tuna exports making up the majority (Table 11). MIFV and Pacific International Inc. (PII) have steadily increased their numbers of containerized whole tuna exports in recent years. PPF exported the highest volume of whole tuna at 3,954 metric tons in 2022.

Table 11. Total Purse Seine whole tuna exports (mt) in 2022, by destination and species

Destination	SKJ	YFT	BET
Vietnam	10	2,334	1
Thailand	4,291	1,191	267
Philippines	1,077	0	0
Japan	0	24	0
TOTAL	5,379	3,549	268

#### **6 FUTURE PROSPECTS OF THE FISHERY**

The RMI continues to support domestic fisheries development aspirations in the region so long as it goes hand in hand with sustainable management measures that do not put a disproportionate burden on SIDS, in accordance with Article 30 of the Convention.

Other notable future prospects for the RMI tuna fishery involve further observer and debriefer capacity development as MIMRA continues to progressively train and recruit additional fisheries observers. Since the latter half of 2015, MIMRA has also utilized observers (when in port) to carry out port monitoring duties on transshipments taking place in Majuro port. Due to COVID19 restrictions, port monitoring was not fully implemented until September of 2022 but coverage for portside unloadings had been in place since the year prior.

#### 7 DATA COLLECTION SYSTEM AND RESEARCH ACTIVITIES

Data management and handling capacity continues to be a vital tool for MIMRA. The SPC-OFP has been very instrumental in the RMI's data efforts. MIMRA continues to employ a dedicated port sampler covering almost 100% of longline unloadings at the MIFV fish base. The port sampler along with other staff collate the data and enter into the TUFMAN II database. In 2019 SPC introduced Onshore, an electronic port sampling app that would improve data flow and eliminate the use of paper sampling forms. The trialing of Onshore showed great potential but further improvements are being taken into consideration.

MIMRA intends to shift its focus towards the PNAO FIMS as the standard by which it will manage and handle its data complemented by existing databases such as the TUFMAN II currently in use. Further development of e-Reporting (ER) and EM initiatives continue to be a priority for MIMRA.

In 2022, there were 33 active RMI observers employed under the MIMRA Observer Program. This is a decrease from previous years due to COVID19 travel restrictions effecting operations and resulting in observers seeking employment elsewhere. Deploying of observers on purse seine vessels halted in February of 2020 due to the restrictions but was recommenced in September of 2022. A total of 9 purse seiner vessel trips were observed but no observer longliner trips were made during the year (Table 12).

Table 12. Observer purse seiner trips by flag in 2022

Arrangement	Flag	Sea days	Trips	
FSMA	NR	53		1
	FM	105		2
Bilateral	TW	252		6
TOTAL		410		9

### 8 APPENDIX 1 – CMM REPORTING



#### ADDENDUM TO ANNUAL REPORT PART 1

## Specific information to be provided in Part 1 as required by CMMs<sup>1</sup>

CMM 2019-03 [North Pacific Albacore], Para 3	This is not a target catch for RMI vessels however, 149mt of NP ALB were caught as bycatch by the chartered longline fleet operating in the RMI EEZ.
CMM 2006-04 [South West striped Marlin], Para 4	Not applicable. No RMI vessels fishing south of 15°S.
CMM 2009-03 [Swordfish], Para 8	Not applicable. No RMI vessels fish south 20°S.
CMM 2009-06 [Transshipment], Para 11 (ANNEX II)	102 in-port transshipments (Kosrae 1; Majuro 65; Pohnpei 7; Rabaul 4; Tarawa 25) = 83,973 mt ( <i>prov.</i> ). See table 10.
CMM 2011-03 [Impact of PS fishing on cetaceans], Para 5	There were no reports of instances in which cetaceans were encircled by purse seine nets in 2022.
Observer coverage (WCPFC 11 decision – para 484(b)	This does not apply to RMI. There were no RMI flagged longline fishing vessels in 2022.
CMM 2015-02 [South Pacific Albacore] Para 4	Not applicable. No RMI vessels fish south 20°S
CMM 2018-03 [Seabirds] Para 13	There were no RMI flagged longline fishing vessels in 2022.

 $<sup>^{1}</sup>$  Reporting requirements requested by CMMs and decisions by the Commission, as of WCPFC16 (Dec 2019). First issued on 13 March 2020