

# SCIENTIFIC COMMITTEE SEVENTEENTH REGULAR SESSION

#### **ELECTRONIC MEETING**

11-19 August 2021

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

WCPFC-SC17-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

August 2021

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 2021

Yes

#### **SUMMARY**

In 2020, 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 2020 was 81,913 metric tons. Additionally, retained catch estimates, from twenty-five chartered longline vessels associated with the domestically-based Marshall Islands Fishing Venture (MIFV), totaled 1,599 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 2020, estimated total catch for all gears combined was 42,270 metric tons with purse seine accounting for 87% followed by longline 8% and pole-and-line 5%. Purse seine catch in the RMI EEZ increased from 5,394 metric tons in 2019 to 36,841 metric tons in 2020.

The RMI Observer program's 43 active observers carried out 20 purse seiner and 12 longline trips during 2020. Observers were also utilized to monitor transshipment and unloading activities in Majuro port since the initiative started in late 2015. All observer duties were halted in February 2020 due to the COVID19 pandemic. Available observer data for the RMI purse seine fleet indicated no seabird interactions; but 2 whale sharks, 1 turtle and 12 marine mammal interactions were recorded during the year.

#### 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 2018, total catch estimates were 81,913 metric tons for the purse seine fleet. Skipjack is the prominent species caught comprising 91% of the total followed by yellowfin, 8% and bigeye tuna, 1%.

There were 25 foreign long-liners chartered in 2020 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 2019 to 2020. 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 (Source: Raised logsheet data collected by MIMRA)

	2016	201	7	2018	8	201	9	2020	
Species	Retain	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard
ALBACORE	0	0	0	0	0	0	0	0	0
BIGEYE TUNA	2,313	4,971	31	3,039	30	616	21	718	24
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	0
SKIPJACK TUNA	49,858	50,936	195	60,212	625	84,253	719	74,625	1,521
YELLOWFIN TUNA	8,309	8,612	40	9,429	72	10,654	98	6,564	245
BLACK MARLIN	4	1	10	1	1	2	4	2	7
BLUE MARLIN	4	7	14	6	6	7	14	1	9
STRIPED MARLIN	1	0	2	0	3	1	2	3	3
SWORDFISH	1	0	0	1	0	0	0	0	0
BLUE SHARK	0	0	0	0	0	0	0	0	0
SILKY SHARK	0	0	190	0	85	0	69	0	72
HAMMERHEAD SHARKS	0	0	0	0	0	0	0	0	1
MAKO SHARKS	0	0	0	0	0	0	0	0	0
OCEANIC WHITETIP SHARK	0	0	1	0	1	0	2	0	1
PORBEAGLE / SALMON SHARK	0	0	0	0	0	0	0	0	0
WHALE SHARK	0	0	22	0	0	0	9	0	12
THRESHER SHARKS	0	0	0	0	0	0	0	0	0
Total	60,490	64,527	505	72,688	823	95,533	939	81,913	1,893

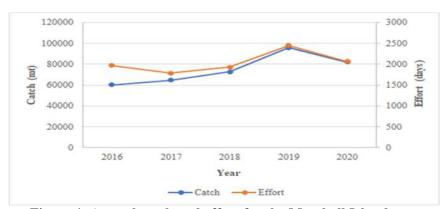


Figure 1. Annual catch and effort for the Marshall Islands purse seine vessels for the WCPFC Convention Area

Table 2. Annual catch estimates for the Marshall Islands-chartered longline vessels, by species and year, for the WCPFC Convention Area (Source: Raised logsheet data collected by MIMRA)

	2016	20	17	20	18	20	19	202	20
Species	Retain	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard
ALBACORE	25	45	2	30	3	101	46	9	0
BIGEYE TUNA	692	1,208	21	1,122	24	1,402	3	751	13
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	0
SKIPJACK TUNA	0	1	0	0	14	1	10	1	0
YELLOWFIN TUNA	555	933	15	639	68	1,140	14	730	13
BLACK MARLIN	0	75	3	0	1	0	0	0	0
BLUE MARLIN	127	208	2	115	2	183	3	98	0
STRIPED MARLIN	0	125	1	2	1	0	0	0	1
SWORDFISH	13	80	3	14	11	24	16	10	7
BLUE SHARK	0	0	16	0	11	1	94	0	13
SILKY SHARK	0	0	16	0	46	0	20	0	10
HAMMERHEAD SHARKS	0	0	0	0	0	0	0	0	0
MAKO SHARKS	0	1	10	0	7	0	2	0	1
OCEANIC WHITETIP SHARK	0	0	5	0	8	0	44	0	1
PORBEABLE / SALMON SHARK	0	0	0	0	0	0	0	0	0
WHALE SHARK	0	0	0	0	0	0	0	0	0
THRESHER SHARKS	0	0	8	0	9	0	0	0	0
Total	1,412	2,676	102	1,922	205	2,852	252	1,599	59

Table 3. Number of Marshall Islands-chartered and flagged vessels, by size category, active in the WCPFC Convention Area, 2016-2020

	L	ongline				Purse	Seine	
Year GRT	0-50	51-200	201-500	500+	0-500	501-1000	1001-1500	1500+
2016	0	24	0	0	0	0	7	3
2017	0	31	0	0	0	0	7	3
2018	0	26	0	0	0	0	7	3
2019	0	22	0	0	0	0	7	4
2020	0	25	0	0	0	0	7	4

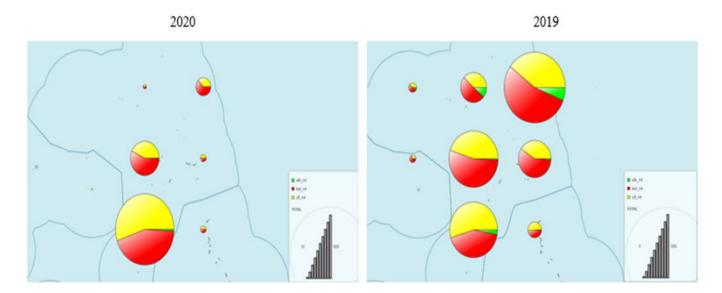


Figure 2. Annual distribution of catch (metric tons) by the Marshall Islands-chartered longline vessels in the WCPFC Convention Area in 2020 and 2019

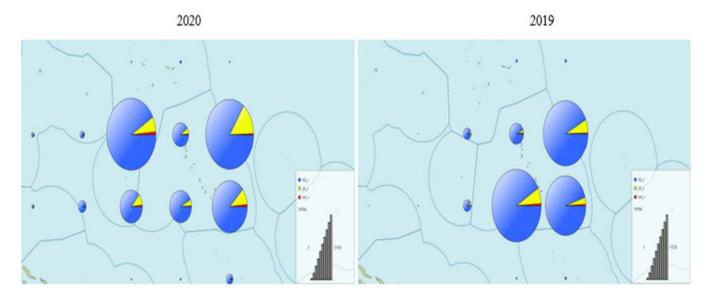


Figure 3. Annual distribution of catch (metric tons) by the Marshall Islands purse seine vessels in the WCPFC Convention Area in 2020 and 2019

Preliminary data for observed interactions with species of special interest by the RMI purse seine fleet are shown in Table 4. During 2020, there was 1 sea turtle interaction reported where the turtle was released alive. A total of 12 individual mammals were involved in 3 interactions; 1 of which was released alive, 10 dead, and 1 in an unknown condition. There were 2 interactions with whale sharks in which 1 was released alive and one in an unknown condition. No seabird interactions were observed during the period.

Table 4. Observed interactions with species of special interest (seabird, turtle and marine mammals) on Marshall Islands purse seine vessels, in 2020.

		Number of			
	Species	incidents	No. Alive	No. Dead	Unknown
	False Killer Whale	1	0	1	0
Marine Mammals	Sei Whale	1	0	0	1
	Spinner Dolphin	3	1	9	0
Marine Reptiles	Olive Ridley Turtle	1	1	0	0
Whale Sharks	Whale Shark	2	1	0	1

#### **COASTAL STATE REPORTING**

Table 5 provides a description of foreign-flagged vessels licensed to fish in the Marshall Islands waters over the past five years. A total of 223 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 5. Number of foreign longline, pole-and-line and purse seine vessels licensed to fish in the RMI EEZ, by year and flag.

FLAG	GEAR	2016	2017	2018	2019	2020
CHINA	LL	27	30	0	22	20
	PS	0	6	8	9	9
FSM	LL	12	13	9	9	10
FSMA	PS	76	76	49	54	70
JAPAN	LL	2	6	6	9	2
	PL	11	16	11	20	1
	PS	30	25	25	26	28
KIRIBATI	PS	0	0	5	7	3
KOREA	PS	25	26	24	25	25
NZ	PS	0	0	0	0	0
PHILIPPINES	PS	0	0	13	10	15
CH-TAIPEI	LL	0	0	0	1	0
	PS	26	27	23	24	18
TUVALU	PS	0	1	1	1	0
USA	PS	33	31	31	6	25
TOTAL	LL	41	49	15	41	32
	PL	11	16	11	20	1
	PS	190	192	179	162	190

Available logsheet data indicate that total catch by purse seine fleets operating in the RMI EEZ increased from 5,394 metric tons in 2019 to 36,841 mt in 2020 with 26% taken by the RMI fleet (Table 6). 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 87% of the total catch in 2020.

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 7. 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 2020, catches from the pole-and-line fleet increased to 2,232 metric tons from 1,024 mt in the previous year (Table 8). The short-term trend showed a catch decrease until the most recent 3 years. Skipjack is the main species making up the catch composition for this fleet and nearly accounts for the entire catch total in 2020. 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 6. Annual catches of purse seine fleets operating in the RMI EEZ, by flag and species, 2016-2020 (Source: Unraised logsheet data collected by MIMRA)

				Catch	es (metr	ic tomes)					Catche	es (me tri	c tonnes
Flag	Year	SKJ	YFT	BET	OTH		Flag	Year	SKJ	YFT	BET	OTH	TOTAL
China	2016	0	0	0	0	0	Philipp ines	2016	1,850	248	10	0	2,108
	2017	0	0	0	0	0		2017	0	0	0	0	0
	2018	274	128	13	1	416		2018	36	13	0	0	49
	2019	280	30	20	1	331		2019	0	0	0	0	0
	2020	0	0	0	0	0		2020	0	0	0	0	0
FSM	2016	1,665	142	56	0	1,863	RMI	2016	8,737	170	114	0	9,021
	2017	1,458	175	60	8	1,701		2017	6,995	708	221	11	7,935
	2018	2,602	230	57	7	2,896		2018	5,769	419	36	25	6,249
	2019	220	49	13	6	289		2019	1,587	19	51	5	1,662
	2020	5,197	1.064	108	12	6380		2020	9,027	482	154	7	9,670
Japan	2016	0	0	0	0	0	Solomon Is	2016	1,040	120	10	0	1,170
	2017	112	60	2	1	175		2017	0	0	0	0	0
	2018	472	12	0	1	485		2018	415	0	0	0	415
	2019	0	0	0	0	0		2019	0	0	0	0	0
	2020	40	30	0	0	70	:	2020	251	129	25	1	406
Kiribati	2016	4,078	632	31	0	4,741	Chinese Taipei	2016	11,725	1,200	163	0	13,088
	2017	709	158	14	4	885		2017	6,045	779	143	21	6,988
	2018	754	125	31	1	911		2018	5,729	436	50	7	6,222
	2019	186	28	1	0	215		2019	1,237	133	7	3	1,380
	2020	2,899	1,343	40	3	4.284		2020	2,798	711	256	7	3,772
Korea	2016	18,745	1,296	103	0	20,144	USA	2016	13,257	823	119	0	14,199
	2017	779	180	27	1	987	11.50	2017	3,252	297	90	4	3,643
	2018	3,955	430	20	0	4,405		2018	2,814	62	22	3	2,901
	2019	460	15	0	0	475		2019	3.53	80	17	1	451
	2020	3,963	1,860	118	7	5,949		2020	1,340	323	75	3	1,741
Nauru	2016	0	0	0	0	0	TO TAL EEZ	2016	72,329	5,790	648	0	78,767
	2017	0	0	0	0	0		2017	22,765	2,901	788	65	26,519
	2018	0	0	0	0	0		2018	25,424	2,168	253	58	28,903
	2019	171	25	0	0	196		2019	4,874	395	109	16	5,394
	2020	3,400	1.059	95	15	4.569		2020	28.915	7,000	871	55	36,841
PNG	2016	11,232	1,159	42	0	12,433							
	2017	3,415	544	231	15	4,205							
	2018	3,604	313	24	13	3,954							
	2019	379	16	0	0	395							
	2020	0	0	0	0	0							

Table 7. Annual catches of longline fleets operating in the RMI EEZ, by flag and species, 2016-2020 (Source: logsheet data collected by MIMRA)

		Catch (metric tonnes)							
Flag	Year	ALB	BET	YFT	OTH	Total			
China	2016	16	280	185	75	556			
	2017	0	4	3	0	7			
	2018	1	169	129	28	326			
	2019	0	16	17	5	37			
	2020	1	66	45	9	120			
FSM	2016	26	475	338	150	989			
	2017	16	440	350	116	921			
	2018	17	705	373	104	1,199			
	2019	41	695	594	140	1,470			
	2020	10	686	533	111	1,340			
Japan	2016	2	89	89	21	201			
	2017	12	108	148	29	297			
	2018	3	49	47	10	109			
	2019	2	66	46	12	126			
	2020	1	180	25	17	223			
RMI-Chartered	2016	23	678	515	174	1,390			
	2017	43	1,147	888	299	2,379			
	2018	31	1,287	713	174	2,204			
	2019	91	1,219	1,045	241	2,596			
	2020	9	708	679	119	1,514			
CH-Taipei	2016	0	0	0	0	0			
	2017	0	0	0	0	0			
	2018	0	0	0	0	0			
	2019	0	4	17	18	40			
	2020	0	0	0	0	0			
TOTAL EEZ	2016	67	1,522	1,127	420	3,136			
	2017	71	1,698	1,389	445	3,604			
	2018	52	2,210	1,262	316	3,838			
	2019	134	2,000	1,719	417	4,268			
	2020	21	1,640	1,282	256	3,197			

Table 8. Annual catches of pole-and-line fleet operating in the RMI EEZ, by flag and species, 2016-2020 (Source: Unraised logsheet data collected by MIMRA)

		Catch (metric tonnes)					
Flag	Year	ВЕТ	SKJ	YFT	TOTAL		
	2016	0	429	1	430		
	2017	0	72	0	72		
JAPAN	2018	0	1,017	1	1,018		
	2019	0	1,022	2	1,024		
	2020	0	2,223	9	2,232		

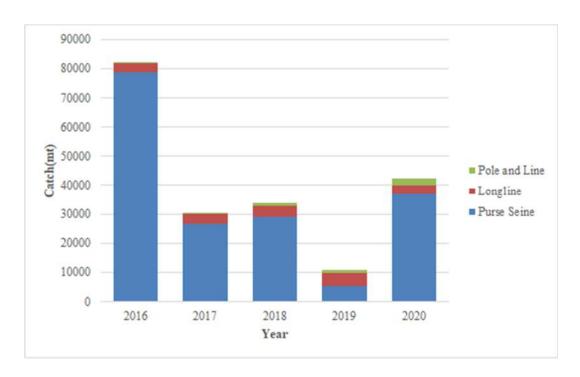


Figure 4. Total catch by the different gears operating in the RMI EEZ

#### 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 2020, there was a provisional total of 2,756 metric tons of fish unloaded by the longline fleet and most of it was bound for export markets (Table 9). Ongoing work on improving direct importation of unloadings data into the TUFMAN II database continues to progress with assistance from SPC. The MIFV exports mainly fresh chilled tuna species to markets in the US, China and Canada. Frozen fish (rejects and bycatch), designated as Local, 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 175 purse seine transshipments undertaken in Majuro in 2020 with a provisional total of 118,743 metric tons transshipped (Table 10). Port restrictions due to COVID19 resulted in a significant decrease in the number of vessel entries compared to previous years. 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 11).

Table 9. Total unloaded catch (mt) for domestically-based longline vessels in 2020

Species	Unloaded Catch (mt)
Big Eye Tuna	1,348
Yellowfin Tuna	1,109
Blue Marlin	212
Albacore	21
Wahoo	28
Mahi Mahi	3
Swordfish	25
Sailfish	8
Moon Fish	2
TOTAL	2,756

Table 10. Provisional purse seine transshipments in Majuro port in 2020

Flag	Number of PS Transshipments	SKJ	YFT	ВЕТ
China	2	988	22	0
FSM	42	24,469	3,609	999
Marshall Islands	47	32,569	2,167	465
Nauru	17	10,775	1,388	522
Papua New Guinea	9	4,423	1,134	145
Solomon Islands	2	782	436	92
Taiwan	48	24,434	3,910	809
United States of America	8	3,750	586	269
TOTAL	175	102,190	13,252	3,301

Table 11. Purse seine transshipments by RMI-flagged vessels in 2020

Annex II(1)		88			
Species	Quantity Transshipped (mt)	Transshipped in port	Transshipped in WCP-CA	Caught in WCP-CA	Product Form
SKJ	73,180	Yes	Yes	Yes	Frozen Whole
YFT	6,437	Yes	Yes	Yes	Frozen Whole
BET	724	Yes	Yes	Yes	Frozen Whole
		I			
Annex II(2)					
Port	Number of Transshipments	Transshipped in port	Transshipped in WCP-CA	Caught in WCP-CA	Product Form
Majuro	47	Yes	Yes	Yes	Frozen Whole
Honiara	1	Yes	Yes	Yes	Frozen Whole

Pohnpei	2	Yes	Yes	Yes	Frozen Whole
Tarawa	41	Yes	Yes	Yes	Frozen Whole
Zhoushan	2	Yes	Yes	Yes	Frozen Whole

#### 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 2020 with viable production outputs supported by ongoing hiring and recruitment of local Marshallese employees. As has been reported before, the company also operates six RMI-flagged purse seine vessels which supply the plant with raw materials.

Total volume of exports was 17,232 metric tons with whole containerized tuna exports making up the majority (Table 12). MIFV and Pacific International Inc. (PII) have steadily increased their numbers of containerized whole tuna exports in recent years. PII exported the highest volume of whole tuna at 7,908 metric tons in 2020.

Table 12. Total Purse Seine exports (mt) in 2020, by product and destination

	Product (mt)				
Destination	Processed Loin (SKJ)	Whole (SKJ/YFT)	Fishmeal		
China	0	2,314	0		
CH-Taipei	0	659	0		
Thailand	372	7,782	0		
Vietnam	0	1,667	0		
Indonesia	0	2,142	0		
Japan	0	26	101		
Philippines	0	2,142	0		
Fiji	0	27	0		
TOTAL	372	16,759	101		

#### 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 suspended in 2020 but coverage for portside unloadings continued.

#### 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 and continuing work through 2020.

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 2018, there were 6 longline vessels equipped with EM cameras. There were no EM trips analyzed in 2020 mainly due to COVID19 restrictions.

In 2020, there were 43 active RMI observers employed under the MIMRA Observer Program. A total of 20 purse seine trips and 12 longline trips were observed (Table 13). Deploying of observers on fishing vessels halted in February due to COVID19 travel restrictions.

Table 13. Observer trips by flag and gear in 2020

	Number of trips			
Flag	Purse Seiner	Longliner		
CN	0	6		
FM	11	6		
KI	1	0		
NR	1	0		
TW	2	0		
US	5	0		
Total	20	12		

### **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		catch for RMI vessels howe fleet operating in the RMI E		ALB wer	e caught as	bycatch by the
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)	93 in-port transship ( <i>prov.</i> ). See table 3	oments (Majuro 47; Tarawa 11.	41; Pohnpei 2; I	Honiara 1	; Zhoushan	2) = 80,341 mt
CMM 2011-03 [Impact of PS fishing on	Observed interactions with cetaceans on RMI-flagged purse seine vessels in 2020. Ongoing world progress to update logsheets to include information on safe release.					
cetaceans], Para		Species	Number of incidents	No. Alive	No. Dead	Unknown
5	1 1				-	
5	Marine	False Killer Whale Sei Whale	1	0	0	0

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

Observer	This does not apply to RMI. There were no RMI flagged longline fishing vessels in 2020.
coverage	
(WCPFC 11	
decision – para	
484(b)	
CMM 2015-02	Not applicable. No RMI vessels fish south 20°S
[South Pacific	
Albacore  Para 4	
-	
CMM 2018-03	There were no RMI flagged longline fishing vessels in 2020.
[Seabirds] Para	
13	