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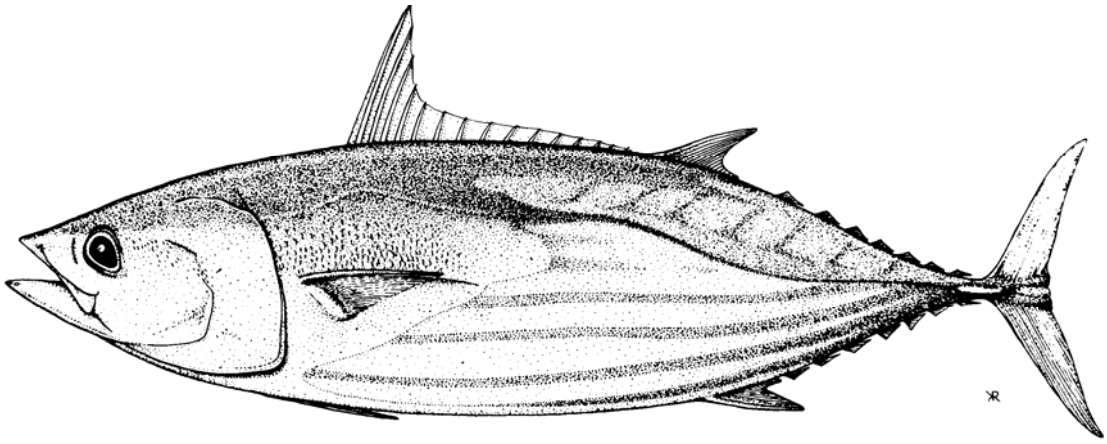
INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

WCPFC-SC4-AR PART 1/WP-16

REPUBLIC OF MARSHALL ISLANDS

Marshall Islands Tuna Fisheries



Oceanic and Industrial Affairs Division
Marshall Islands Marine Resources Authority
Republic of the Marshall Islands

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SUMMARY

In addition to the five RMI purse seine vessels that have been fishing throughout the WCPO for the past few years, four newly flagged longline vessels entered the fishery in late 2007 and fished primarily in the EEZ. Total catch by the national purse seine fleet was 59,489 mt and as expected, the majority of the catch comprised of skipjack tuna.

Though the overall number of foreign vessels licensed to fish within the RMI EEZ declined to 216 in 2007, purse seine vessels still constitute more than half the numbers. Available catch estimates in 2007 for foreign purse seine and longline vessels indicated a decline in the in-zone catch. Conversely, there was resurgence in the pole-and-line fleet with a significant increase in catch compared to previous years.

Recognizing the importance of monitoring activities for compliance purposes, the RMI Observer and Port Sampling Programs have endeavored to keep the programs active despite the loss of eight observers in 2007. In fact, observers completed a total of 1,881 days at sea, most of which were carried out on national trips due to ease of placements. The port sampling staff continued to increase numbers of fish measured from >52,000 (2006) to >71,000 (2007). The Observer Program is currently in the process of preparing for a new training and is optimistic that new recruits will assist the program in future collaborative efforts with the WCPFC Regional Observer Program.

1. INTRODUCTION

The Republic of the Marshall Islands (RMI) has an exclusive economic zone (EEZ) and territorial waters of around 2 million km^2. The tuna fishery is the most important fishery both in terms of scale and economics in the RMI.

The Marshall Islands Marine Resources Authority (MIMRA) is responsible for the management and development of the tuna fishery in the RMI. The fishery comprises of longline, purse seine, and pole-and-line vessels fishing under various access arrangements. The RMI is a party to a number of regional and international management arrangements such as the Parties to the Nauru Agreement (PNA) and the United Nations Fish Stocks Agreement (UNFSA). With the Western and Central Pacific Fisheries Commission in place, the RMI is also obliged to comply with the management measures of the Commission.

2. NATIONAL FLEET ACTIVITY IN THE WCPFC CONVENTION AREA

2.1 Fleet structure

Table 1 provides a list of RMI-flagged vessels active in the WCPFC Convention Area over the past five years. Of particular interest is the addition of four newly flagged longline vessels. As the relationship with respect to nationality of catch remains unresolved, a number of domestically-based foreign longline vessels are not included in this list, but may be included in the future. The national purse seine fleet is based out of Majuro and fishes throughout the region under the FSM Arrangement.

Coverage of data collected from both the national purse seine and longline fleets satisfy the coverage levels recommended by the WCPFC. Additionally, the coverage of unloadings data from the domestically-based foreign longline fleet is close to 100%.

Table 1. Number of RMI longline and purse-seine vessels active in the WCPFC Convention Area, 2003-2007.

Year	Longline (Size class: 51-200 GRT)	Purse seine (Size Class: 1001-1500 GRT)
2003	1	6
2004	1	6
2005	1	6
2006	0	5
2007	4	5

2.2 National purse seine catch/effort

Table 2 summarizes the estimated target tuna catch and effort for the RMI purse seine fleet throughout the Convention Area, and Figure 1 shows the distribution of effort for this fleet over the past two years. Catch in 2007 was by far the highest in the last five years. As Majuro is the preferred port of unloading, the effort is concentrated in Marshall Islands, Kiribati, Nauru and adjacent high seas areas and the fleet almost exclusively fishes on associated schools (drifting FADs, etc.).

Table 3 (and Figure 2) shows the estimated total catch of non-target species (by species groups) by Marshall Islands purse seine vessels, according to observer data collection. Rainbow runner is typically the main non-target species taken by the fleet, but the following species/species groups are also commonly caught – small baitfish, silky (and other) sharks, blue and black marlin, triggerfish and mahi mahi.

Tables 2. Annual catch and effort estimates for the Marshall Islands purse-seine fleet, by species in the WCPFC Convention Area, 2003-2007. (**Source**: Raised logsheet data; Data for 2006 are unraised and provisional, but coverage is "HIGH".

	Effort	Catch (metric tonnes)				
Year	Days Fishing & Searching	SKJ	YFT	BET	OTH	TOTAL
2003	1,508	35,233	2,129	513	0	37,875
2004	1,408	42,078	3,716	878	0	46,672
2005	1,233	47,565	7,628	971	0	56,164
2006	1,047	38,881	1,436	2,032	340	42,689
2007	1,258	53,916	3,370	2,118	81	59,485

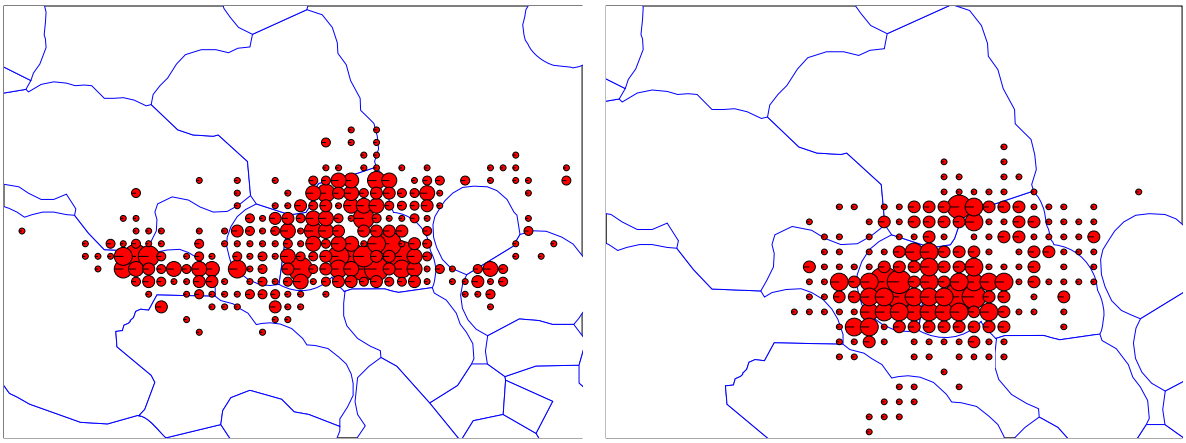

Figure 1. Annual distribution of effort (days fishing and searching) for the Marshall Islands purse seine fleet throughout the WCPFC Convention Area for 2006 (left) and 2007 (right)

Table 3. Estimated annual total catches of non-target species and species groups, by Marshall Islands purse seine fleets, 2005-2007. (**Source of data**: Data collected under the FSM Arrangement Observer Programme, managed by FFA; Coverage has been estimated by comparing observer-recorded target species catch to annual catch estimates for this fleet; '%' represents percentage of total catch which includes target tuna species catch)

		Catch estimates					
		2005		2006		2007	
Category	Species	MT	%	MT	%	MT	%
Billfish	Blue marlin	19.5	0.0345%	28.9	0.0663%	18.9	0.0314%
	Black marlin	3.3	0.0059%	5.3	0.0121%	3.6	0.0060%
	Other Billfish	6.9	0.0123%	3.1	0.0071%	0.0	0.0000%
Sharks and Rays	Blue shark	5.7	0.0101%	0.0	0.0000%	0.0	0.0000%
	Mako sharks	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Oceanic whitetip shark	1.0	0.0018%	0.0	0.0001%	0.3	0.0006%
	Silky shark	9.2	0.0162%	59.0	0.1354%	20.9	0.0348%
	Other sharks and rays	6.7	0.0118%	0.5	0.0012%	0.0	0.0000%
Other finfish	Bullet/Frigate tunas	0.1	0.0001%	3.9	0.0089%	0.6	0.0009%
	Kawakawa	0.3	0.0005%	0.2	0.0005%	0.0	0.0000%
	Rainbow Runner	132.2	0.2343%	542.9	1.2458%	314.2	0.5229%
	Wahoo	0.9	0.0016%	4.8	0.0110%	5.7	0.0095%
	Common dolphinfish	12.9	0.0228%	48.9	0.1123%	70.6	0.1175%
	Triggerfish	11.9	0.0211%	61.7	0.1415%	67.1	0.1116%
	Barracudas	0.3	0.0005%	0.2	0.0005%	0.0	0.0000%
	Escolars	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Lancetfishes	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Ocean sunfish	1.8	0.0031%	0.0	0.0000%	0.0	0.0000%
	Oilfish	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Opah	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Pomfrets	0.1	0.0001%	0.0	0.0001%	0.0	0.0000%
	Small baitfish	27.3	0.0483%	114.9	0.2636%	94.6	0.1574%
	Other fish	40.1	0.0711%	14.2	0.0326%	16.3	0.0271%
	Total billfish	30	0.0526%	37	0.0855%	23	0.0374%
	Total sharks and rays	23	0.0400%	60	0.1367%	21	0.0354%
	Total finfish	228	0.4035%	792	1.8168%	569	0.9471%
	Total non-target	280	0.4962%	889	2.0391%	613	1.0199%

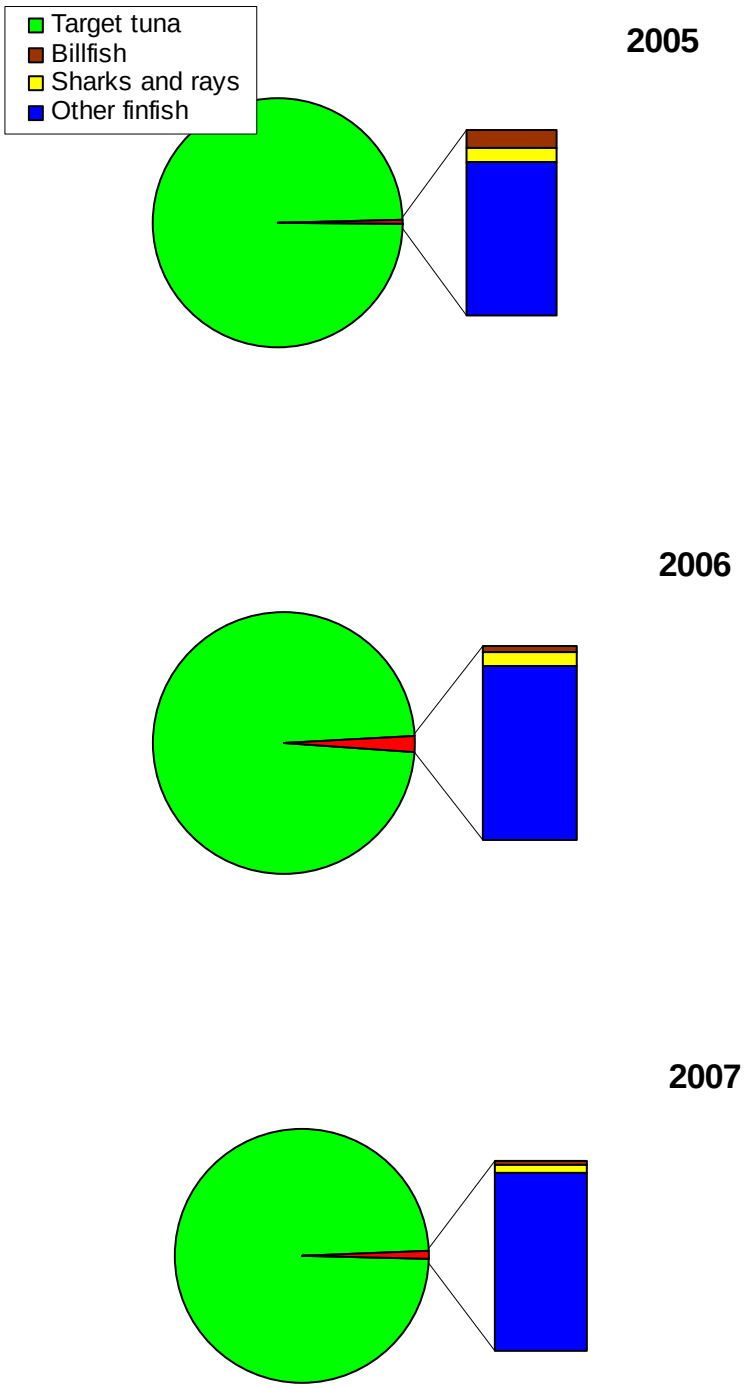

Figure 2. Proportion of non-target species groups in the catch of Marshall Islands purse seine vessels, by year, 2005-2007. (Source of data: Data collected by FSM Arrangement Observer Programme, managed by FFA)

2.3 National longline catch/effort

Table 4 shows the catch estimates for the Marshall Islands longline fleet and Figure 3 shows the distribution of effort for these newly flagged vessels. The fleet fishes primarily in the EEZ and as they only entered the fishey in late 2007, catch was minimal for the year. The sole vessel fishing in 2004 was owned and operated by MIMRA as part of a feasibility study to develop the domestic longline fishery. The vessel is no longer operational.

Tables 4. Annual catch and effort estimates for the Marshall Islands longline fleet, by species in the WCPFC Convention Area, 2003-2007 (Source: Best combination of logsheet and unloadings data)

	Effort	Catch (metric tonnes)							
	100s of hooks	BET	YFT	BLM	BUM	MLS	SWO	OTH	TOTAL
2003	0	0	0	0	0	0	0	0	0
2004	383	1	3	2	1			1	8
2005	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	0
2007	177	3	2	0	1	0	0	0	6

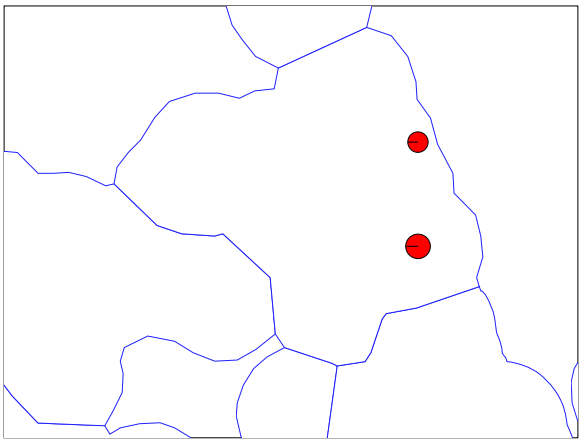

Figure 3. Annual distribution of effort (100s of hooks) for the Marshall Islands longline fleet throughout the WCPFC Convention Area for 2007

3. FOREIGN FLEETS FISHING IN MARSHALL ISLANDS WATERS

3.1 Fleet structure

Tables 5-7 provide a description of foreign-flagged vessels licensed to fish in the Marshall Islands waters over the past five years and Table 8 lists the various foreign access arrangements. Overall number of vessels continued to decline in 2007. Domestically-based foreign longline vessels operating under the Marshall Islands Fishing Venture fly foreign flags of registration and not necessarily the flag of the countries operating and managing these vessels, which is essentially the Marshall Islands.

Table 5. Number of foreign longline vessels licensed to fish in the Marshall Islands EEZ, by year and flag.

	Longline						
	CHINA	FSM	JAPAN	KOREA	CH-TAIPEI	BELIZE	TOTAL
2003	33	4	24	1	10	1	73
2004	40	4	17	1	3	6	71
2005	43	6	25	2	5	7	88
2006	40	9	34	1	6	0	90
2007	36	6	21	0	1	0	64

Table 6. Number of foreign pole-and-line vessels licensed to fish in the Marshall Islands EEZ, by year and flag.

	Pole-and-line
	JAPAN
2003	20
2004	23
2005	35
2006	23
2007	22

Table 7. Number of foreign purse seine vessels licensed to fish in the Marshall Islands EEZ, by year and flag.

	YEAR				
	2003	2004	2005	2006	2007
CHINA	6	4	5	8	12
FSM	7	6	6	1	3
JAPAN	33	32	34	33	35
KIRIBATI	1	1	1	1	1
KOREA	26	28	27	20	20
NZ	4	4	3	3	0
PNG	16	17	17	16	17
CH-TAIPEI	37	34	34	19	13
VANUATU	2	7	8	8	7
SOLOMON	0	0	3	0	0
USA	25	21	15	12	22
TOTAL	157	154	153	121	130

Table 8. Access agreements with the RMI in 2007.

Country/Party	Arrangement	Type	Administrator
USA	Regional	Multilateral	FFA
Japan	Government to Government	Bilateral	MIMRA
Chinese Taipei	Industry to Government	Bilateral	MIMRA
Korea	Industry to Government	Bilateral	MIMRA
FSM Arrangement	Sub-regional	Multilateral	FFA
Fong Seong Fisheries Group	Industry to Government	Bilateral	MIMRA
Fair Well Fisheries (PNG) Ltd.	Industry to Government	Bilateral	MIMRA
Hsiang Sheng Fishery Co.	Industry to Government	Bilateral	MIMRA
Pacific Food & Services Inc.	Industry to Government	Bilateral	MIMRA
Tuna Committee of China Fisheries Association	Industry to Government	Bilateral	MIMRA
Zhandong Zhonglu Oceanic Fisheries Co., Ltd.	Industry to Government	Bilateral	MIMRA

3.2 Purse seine fleet catch/effort

Available data indicate that total catch by purse seine fleets operating in the RMI EEZ declined from 14, 618 mt in 2006 to 9, 580 in 2007 (Table 9). Skipjack tuna continues to be the dominant catch, accounting for ~88% of the total catch.

Most of the purse seine fishing in-zone is restricted to southern areas of the EEZ (Figure 6). Overall trends in CPUE indicate variable catch rates among fleets and years with Pacific Island fleets having highest catch rates of skipjack in recent years (Figures 4 & 5).

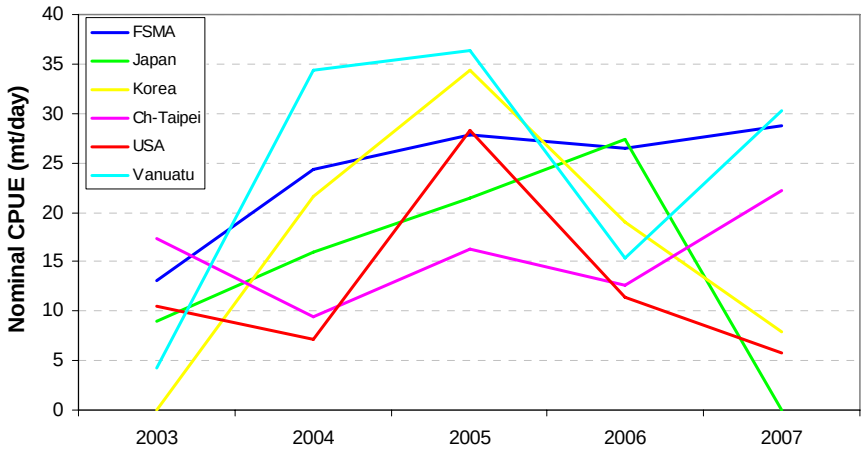

Figure 4. Trends in nominal catch rates of SKIPJACK TUNA taken by purse-seine fleets operating in the Marshall Islands EEZ, 1990-2006

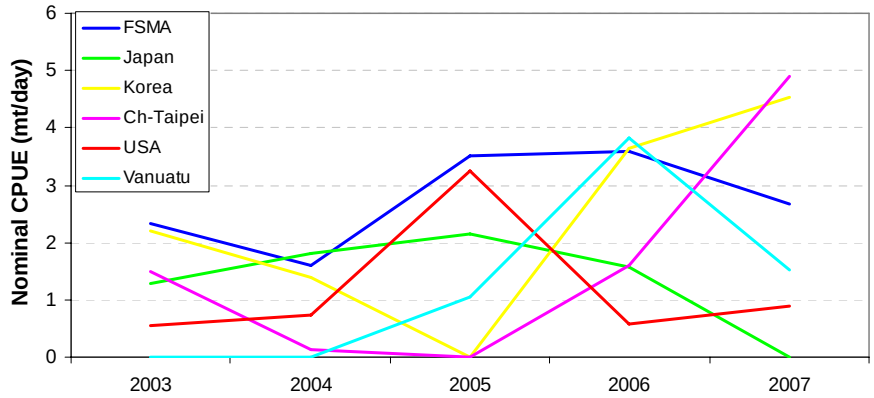

Figure 5. Trends in nominal catch rates of YELLOWFIN TUNA taken by purse-seine fleets operating in the Marshall Islands EEZ, 1990-2006

Table 9. Annual catches by purse seine fleets in the Marshall Islands EEZ, by flag and species, 2003-2007 (**Source** : Unraised logsheet data collected by MIMRA)

		CATCH (metric tonnes)				
Fleet	**Year**	**SKJ**	**YFT**	**BET**	**OTH**	**TOTAL**
China	2003	0	0	0	0	0
	2004	663	0	0	0	663
	2005	0	0	0	0	0
	2006	526	217	6	0	749
	2007	0	0	0	0	0
FSM Arrangement	2003	1,127	200	48	0	1,376
	2004	7,773	507	110	0	8,391
	2005	6,662	838	93	0	7,593
	2006	5,253	710	22	0	5,985
	2007	3,280	305	150	10	3,745
Japan	2003	562	82	0	0	644
	2004	2,417	272	5	0	2,693
	2005	1,311	131	23	0	1,466
	2006	3,148	181	0	0	3,329
	2007	0	0	0	0	0
Korea	2003	0	73	1	0	74
	2004	1,621	104	7	0	1,732
	2005	2,231	0	0	0	2,231
	2006	1,231	235	21	0	1,488
	2007	175	100	0	0	275
Chinese Taipei	2003	678	58	5	0	741
	2004	1,271	16	1	0	1,287
	2005	1,488	0	0	0	1,488
	2006	1,705	218	11	0	1,933
	2007	1,664	367	0	2	2,033
USA	2003	377	20	4	0	402
	2004	144	14	5	0	163
	2005	2,932	336	116	0	3,384
	2006	163	8	4	0	175
	2007	110	17	0	0	126
Vanuatu	2003	38	0	0	0	38
	2004	1,496	0	0	0	1,496
	2005	3,376	97	3	0	3,475
	2006	767	192	1	0	959
	2007	3,233	164	3	1	3,401
TOTAL EEZ	2003	2,784	433	59	0	3,276
	2004	15,384	913	128	0	16,425
	2005	18,000	1,402	235	0	19,637
	2006	12,793	1,761	65	0	14,618
	2007	8,462	953	153	13	9,580

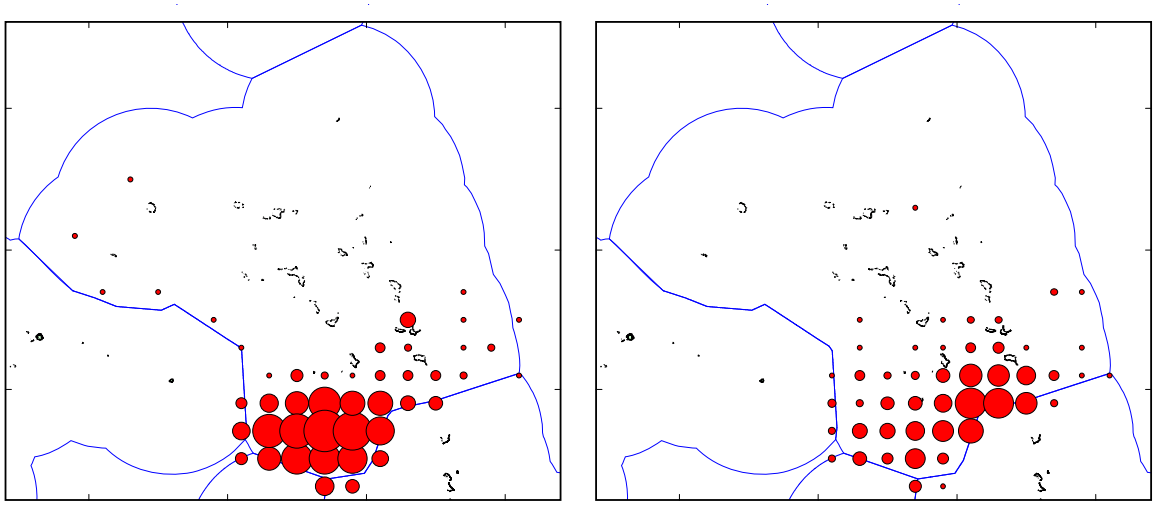

Figure 6. Annual distribution of combined effort (days fishing and searching) by the main foreign purse seine fleets active in the Marshall Islands EEZ for 2006 (left) and 2007 (right)

3.3 Foreign longline fleet catch/effort

The domestically-based foreign longline fleet comprises of vessels from China and FSM which are managed and operated through a local joint-venture fishing company. Japanese longline vessels offload their catch in ports in Japan. Catch estimates for 2006-2007 for the domestically-based vessels have been raised using unloadings data. The overall catch estimates by foreign longline fleets in 2007 indicate decline from the previous year (Table 10). Bigeye catch continues 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 in the zone (Figure 7). Variability in catch rates of bigeye and yellowfin is evident among fleets and years with Japanese fleets consistently having the highest CPUE in the last ten years (Figures 8 & 9).

Table 11 (and Figure 10) shows the estimated total catch of non-target species (and species groups) by Marshall Islands-based longline vessels, according to observer data collection. As in the purse seine fishery, the target tuna species comprise most of the catch, but the proportion of non-target species catch is higher in the longline fishery (~42% in 2007). Observer data suggest that, for locally-based longline vessels the most predominant species in each category are: Blue marlin (billfish), Blue shark (sharks and rays), wahoo ("other" finfish).

Tables 10. Annual catches by foreign longline fleets in the Marshall Islands EEZ, by flag and species, 2003-2007 (**Source** : 2006-2007 catch estimates of locally-based fleet derived from best combination of logsheet and unloadings data, others are unraised logsheet data collected by MIMRA)

Flag	Year	ALB	BET	YFT	OTH	Total
China	2003	3	709	300	3	1,016
	2004	6	953	328	1	1,288
	2005	20	1,030	600	2	1,651
	2006	39	1,908	1,478	388	3,811
	2007	14	2,028	727	348	3,116
FSM	2003	0	135	51	0	186
	2004	0	218	74	0	292
	2005	0	136	74	2	211
	2006	4	417	235	76	732
	2007	3	359	133	66	561
Japan	2003	17	1,351	544	5	1,917
	2004	6	491	96	7	599
	2005	12	106	45	0	163
	2006	23	120	70	0	212
	2007	5	114	40	0	159
Ch-Taipei	2003	0	4	1	0	5
	2004	1	37	16	0	53
	2005	0	35	21	0	56
	2006	0	5	7	0	12
	2007	0	0	0	0	0
TOTAL EEZ	2003	20	2,199	897	8	3,124
	2004	12	1,698	514	8	2,232
	2005	33	1,307	738	3	2,081
	2006	65	2,449	1,790	463	4,768
	2007	21	2,501	899	415	3,836

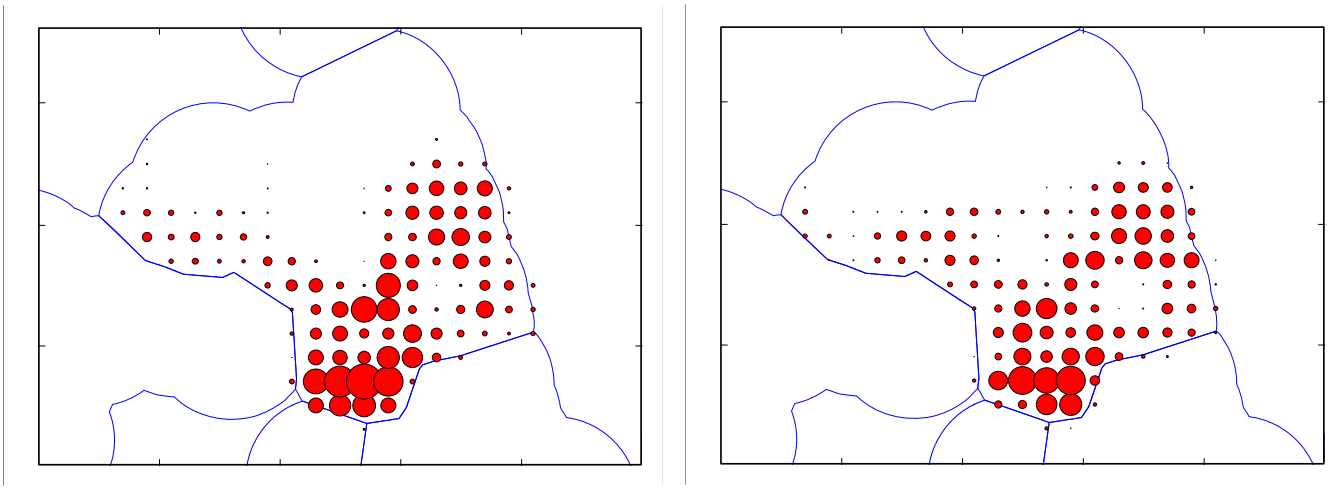

Figure 7. Annual distribution of combined effort (100s of hooks) by the main foreign longline fleets active in the Marshall Islands EEZ for 2006 (left) and 2007 (right)

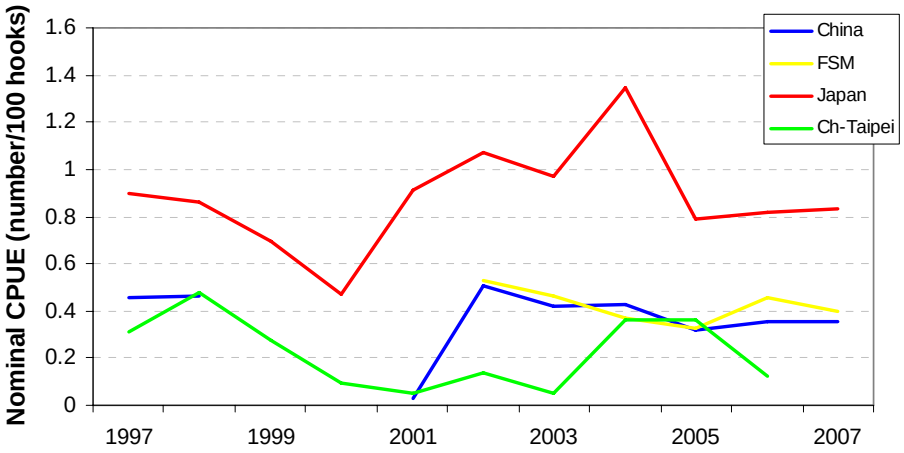

Figure 8. Trends in nominal catch rates of BIGEYE TUNA taken by longline fleets operating in the Marshall Islands EEZ, 1997-2007

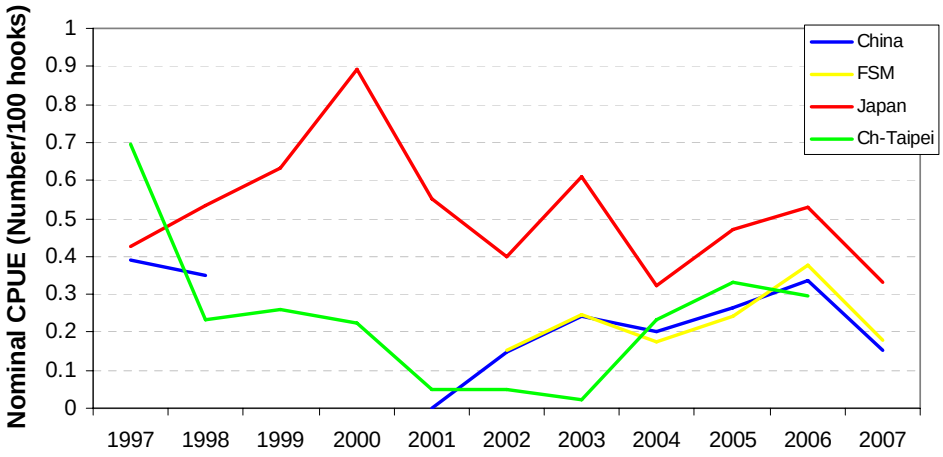

Figure 9. Trends in nominal catch rates of YELLOWFIN TUNA taken by longline fleets operating in the Marshall Islands EEZ, 1997-2007

Table 11. Estimated annual total catches of non-target species and species groups, by Marshall Islands-based longline fleets, 2005-2007. (**Source of data** : Data collected under the Marshall Islands Observer Programme, managed by MIMRA; Coverage has been estimated by comparing observer-recorded target species catch to annual catch estimates for the locally-based fleets; '%' represents percentage of total catch which includes target tuna species catch)

		Catch estimates					
		2005		2006		2007	
Category	Species	MT	%	MT	%	MT	%
Billfish	Blue marlin	405.5	8.7782%	236.1	3.8321%	336.2	5.9161%
	Black marlin	15.0	0.3237%	44.2	0.7167%	23.3	0.4109%
	Striped marlin	115.6	2.5026%	85.3	1.3838%	82.2	1.4466%
	Swordfish	74.0	1.6027%	78.8	1.2791%	65.7	1.1566%
	Other Billfish	22.3	0.4838%	39.4	0.6399%	18.3	0.3226%
Sharks and Rays	Blue shark	289.1	6.2587%	534.8	8.6804%	759.2	13.3616%
	Mako sharks	21.6	0.4669%	88.2	1.4312%	107.9	1.8989%
	Oceanic whitetip shark	56.8	1.2300%	90.1	1.4628%	123.3	2.1706%
	Silky shark	137.0	2.9669%	257.8	4.1844%	392.9	6.9144%
	Other sharks and rays	77.8	1.6834%	254.9	4.1372%	160.7	2.8280%
Other finfish	Bullet/Frigate tunas	0.8	0.0174%	1.0	0.0166%	0.0	0.0000%
	Kawakawa	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Rainbow Runner	1.1	0.0247%	0.2	0.0031%	0.0	0.0000%
	Wahoo	80.2	1.7368%	136.6	2.2165%	220.5	3.8807%
	Common dolphinfish	29.3	0.6348%	73.4	1.1905%	50.2	0.8829%
	Triggerfish	0.3	0.0065%	0.1	0.0022%	0.0	0.0000%
	Barracudas	5.4	0.1158%	12.3	0.1993%	3.7	0.0645%
	Escolars	6.0	0.1297%	11.9	0.1924%	7.9	0.1385%
	Lanctfishes	9.8	0.2130%	12.4	0.2006%	6.1	0.1080%
	Ocean sunfish	3.2	0.0703%	4.8	0.0773%	12.7	0.2234%
	Oilfish	7.5	0.1623%	3.0	0.0492%	1.2	0.0204%
	Opah	10.1	0.2195%	43.4	0.7043%	11.5	0.2024%
	Pomfrets	3.3	0.0725%	11.0	0.1793%	14.1	0.2479%
	Small baitfish	0.0	0.0000%	0.0	0.0000%	0.0	0.0000%
	Other fish	72.2	1.5633%	57.8	0.9377%	21.6	0.3810%
	Total billfish	632	13.6910%	484	7.8515%	526	9.2527%
	Total sharks and rays	582	12.6059%	1,226	19.8960%	1,544	27.1734%
	Total finfish	229	4.9666%	368	5.9689%	349	6.1497%
	Total non-target	1,444	31.2634%	2,077	33.7164%	2,419	42.5759%

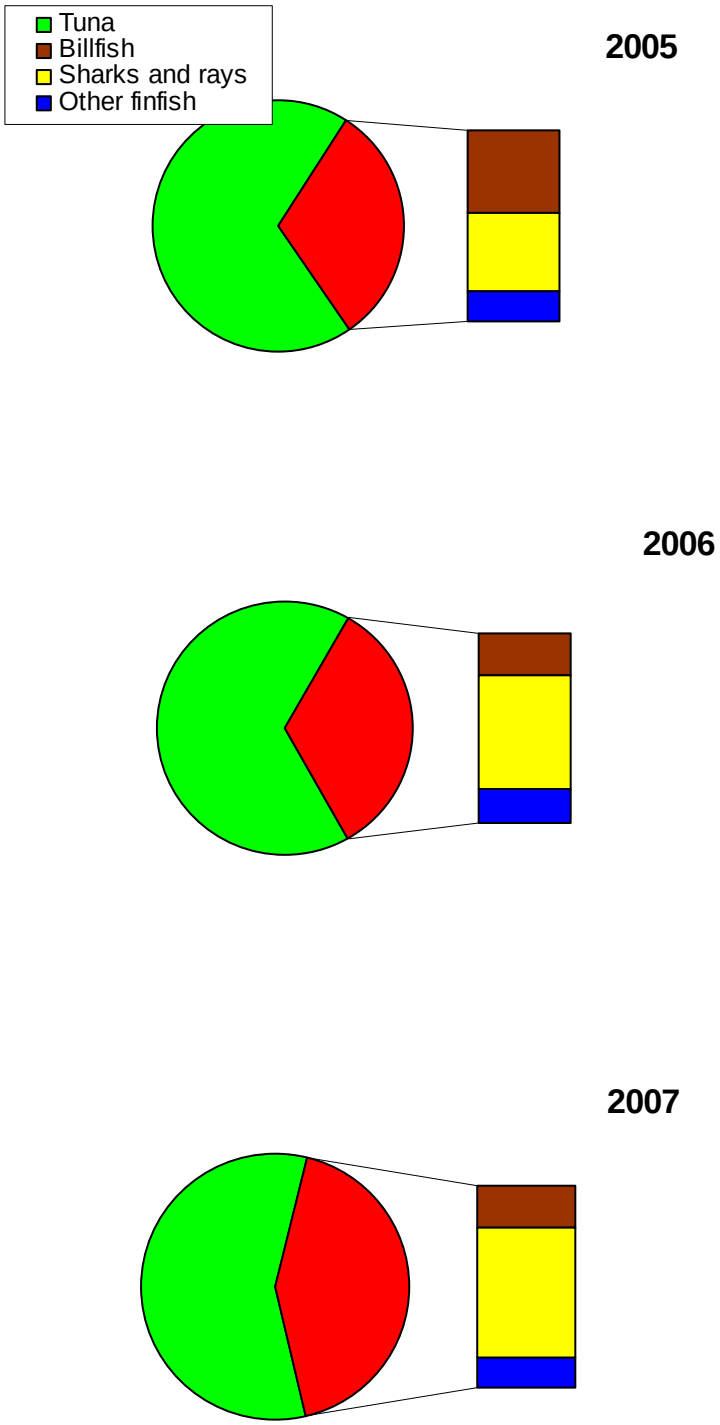

Figure 10. Proportion of non-target species groups in the catch of Marshall Islands-based longline vessels, by year, 2005–2007. (Source of data : Data collected under the Marshall Islands Observer Programme, managed by MIMRA)

3.4 Foreign pole-and-line fleet catch/effort

In 2007, there was a marked increased in pole-and-line catch estimates from previous years (Table 12) corresponding to higher than average catch rates (Figure 11). Skipjack is the main species making up the catch composition for this fleet with yellowfin representing a very minor component. There is variability in distribution of effort for the fleet as evident in Figure 12.

Table 12. Annual catches by foreign pole-and-line fleets in the Marshall Islands EEZ, by flag and species, 2003-2007 (Source: Unraised logsheet data collected by MIMRA)

		Catch (metric tonnes)				
Fleet	Year	BET	SKJ	YFT	OTH	TOTAL
JAPAN	2003	0	92	2	0	94
	2004	0	1,152	9	11	1,171
	2005	0	653	1	1	655
	2006	0	978	8	1	987
	2007	0	4,400	1	0	4,400

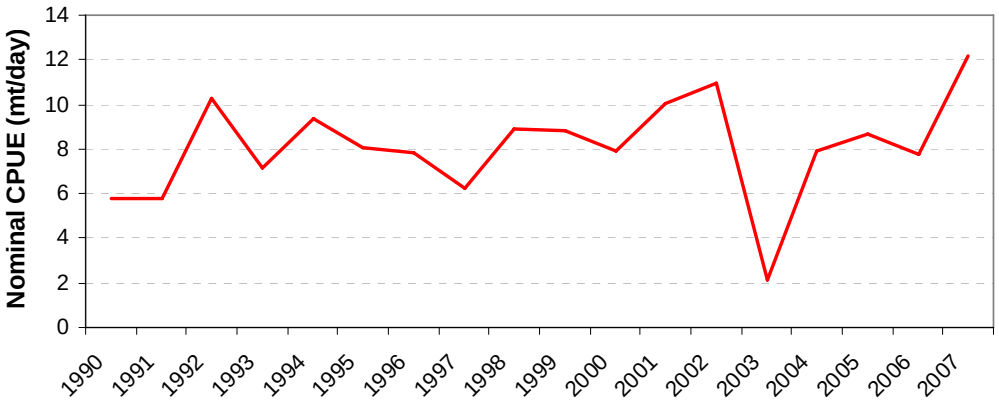

Figure 11. Trends in nominal catch rates of SKIPJACK TUNA taken by the Japanese pole-and-line fleet operating in the Marshall Islands EEZ, 1990-2007.

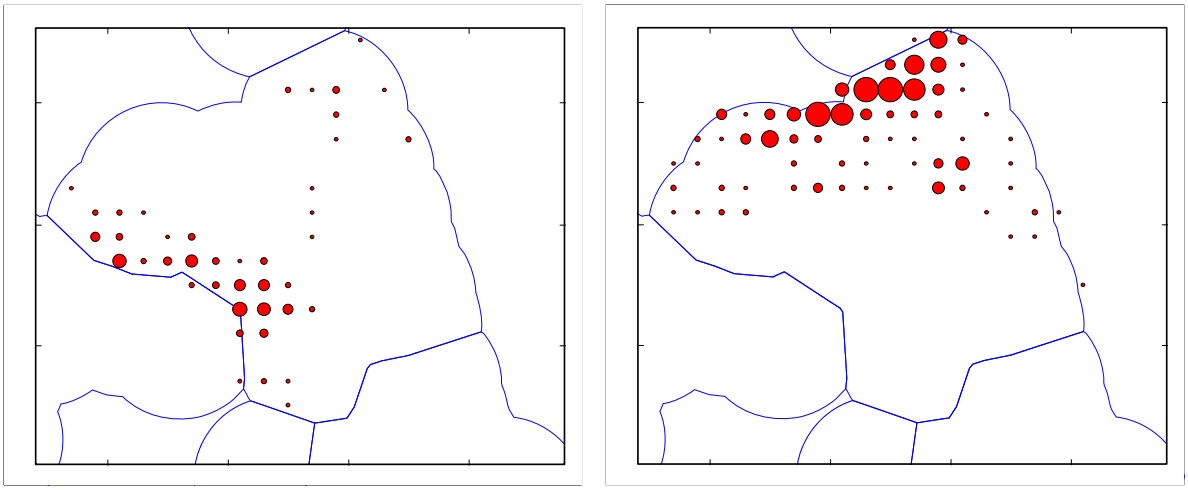

Figure 12. Annual distribution of effort (days fishing and searching) by the Japanese pole-and-line fleets active in the Marshall Islands EEZ for 2006 (left) and 2007 (right)

4. FINAL MARKET DESTINATIONS OF CATCHES

The Marshall Islands Fishing Venture (MIFV) operates the Longline Fishbase with domestically-based foreign longline vessels as well as the new national longline fleet. Total unloadings in 2007 experienced a slight decrease from the previous year but as before, most of the unloaded catch was bound for export markets (Tables 13 & 14). The MIFV exports mainly fresh chilled tuna species to markets in the US, China and Canada. Frozen fish (rejects and bycatch), designated as OTHER, are shipped to China via transport containers and/or sold locally.

Table 13. Total unloaded catch (mt) for domestically-based longline vessels, 2006

SPECIES	EXP	OTH	TOTAL
ALBACORE	0	31	31
BIGEYE	1,713	365	2,078
YELLOWFIN	908	586	1,494
BLACK MARLIN	59	243	302
BLUE MARLIN	0	0	0
MAHI MAHI / DOLPHINFISH	19	37	56
OPAH / MOONFISH	8	11	18
SAILFISH (INDO-PACIFIC)	0	5	5
SHARKS (UNIDENTIFIED)	0	113	113
SHORT-BILLED SPEARFISH	0	13	13
SWORDFISH	12	16	28
WAHOO	45	58	103
	2,764	**1,478**	**4,242**

Table 14. Total unloaded catch (mt) for domestically-based longline vessels, 2007

SPECIES	EXP	OTH	TOTAL
ALBACORE	0	15	15
BIGEYE	2,000	170	2,170
YELLOWFIN	587	178	765
BLUE MARLIN	64	312	377
MAHI MAHI / DOLPHINFISH	10	15	25
OPAH / MOONFISH	9	11	20
SAILFISH (INDO-PACIFIC)	0	2	2
SHARKS (UNIDENTIFIED)	0	256	256
SHORT-BILLED SPEARFISH	0	12	12
SWORDFISH	15	24	39
WAHOO	34	55	88
	2,718	**1,051**	**3,769**

5. ONSHORE DEVELOPMENTS

The Joint Venture between MIMRA and Koo's Fishing Company, Ltd. (KFC) continues with the vessel, Marshalls 201, operating under the auspices of the FSM Arrangement for Regional Fisheries Access. In May 2008, the company, Marshall Islands Fishing Company (MIFCO), formally opened its permanent offices within KFC's new office building adjacent to MIMRA. Adjoining space behind the office building has been set aside for the establishment of a fish processing facility.

The long-awaited completion of the revitalized loining plant, under new management by Pan Pacific Foods (RMI), Inc. has finally been achieved with the initial hiring of more than 200 local Marshallese, most of whom were employed by the previous plant. A routine albeit successful trial run took place in mid-April 2008 whereby the company bought raw materials from KFC. Currently, the plant produces approximately 20mt per day; at best, the company aims to produce 80mt daily once production is in full swing and operations progress with no hindrances.

Transshipment activities continue despite the current economic crisis affecting the region. The RMI Government recently declared a "State of Economic Emergency" as a result of the continuing rise of fuel and food costs. An implementation directive from the National Disaster Committee spearheaded by the Chief Secretary specifically calls upon MIMRA, through the Minister and Secretary of Resources & Development, to work closely with other relevant agencies, such as the Marshalls Energy Company (MEC), to explore ways to improve and maximize revenue generation and associated economic benefits from fishing vessels transshipping in Majuro. Part of this entails the possibility of revising current fishing agreements.

6. TUNA RESEARCH AND STATISTICS

6.1 Port sampling

In 2007, port sampling activities continue to improve compared to 2006 (Tables 15 & 16). With the increased focus on these activities at the MIFV fish base, a total of 71, 890 fish were measured by the lone port sampler stationed at MIFV. Collated data are sent directly to SPC on a bi-weekly basis for analysis.

Length frequency data for yellowfin and bigeye longline catches are available from the port sampling and observer programs (Figures 13-14). In 2006, the yellowfin data indicate a normal distribution with mean lengths around 120 cm fork length. The bigeye data displays bimodal distribution with more of the slightly smaller fish being observed, especially in the latter quarters of 2006. Size data from the latter half of 2007 is still being processed at SPC and will be duly analyzed.

Tables 15. Port sampling 2006

		Number (Measured)					Number (Not Measured)				
Month	Port	ALB	BET	YFT	OTH	TOTAL	ALB	BET	YFT	OTH	TOTAL
January	Majuro	0	908	2,540	0	3,448	0	2	0	2	4
February	Majuro	0	1,004	2,766	137	3,907	44	0	0	1,941	1,985
March	Majuro	0	476	649	43	1,168	70	0	0	1,207	1,277
April	Majuro	0	1,195	2,629	158	3,982	36	0	0	2,811	2,847
May	Majuro	0	2,678	1,742	169	4,589	104	0	0	2,290	2,394
June	Majuro	0	3,052	2,486	135	5,673	258	85	119	1,753	2,215
July	Majuro	0	2,876	3,962	134	6,972	4	0	0	963	967
August	Majuro	0	1,823	1,966	50	3,839	0	0	0	231	231
September	Majuro	0	927	152	104	1,183	13	0	1	70	84
October	Majuro	0	4,771	986	302	6,059	5	0	0	129	134
November	Majuro	0	3,830	1,188	209	5,227	14	5	0	615	634
December	Majuro	0	4,847	1,318	141	6,306	69	15	13	1,587	1,684
		0	**28,387**	**22,384**	**1,582**	**52,353**	**617**	**107**	**133**	**13,599**	**14,456**

Tables 16. Port sampling 2007

		Number (Measured)					**Number (Not Measured)**				
Month	**Port**	**ALB**	**BET**	**YFT**	**OTH**	**TOTAL**	**ALB**	**BET**	**YFT**	**OTH**	**TOTAL**
January	Majuro	0	3,430	1,518	90	5,038	34	0	52	3,309	3,395
February	Majuro	0	1,790	937	94	2,821	11	25	77	5,084	5,197
March	Majuro	0	2,766	1,821	4,587	9,174	86	12	98	3,656	3,852
April	Majuro	0	4,751	1,021	171	5,943	80	2	68	2,654	2,804
May	Majuro	0	5,090	2,712	142	7,944	9	20	33	2,629	2,691
June	Majuro	0	1,713	902	62	2,677	3	18	17	1,094	1,132
July	Majuro	0	2,583	746	121	3,450	1	35	8	727	771
August	Majuro	0	3,479	1,440	153	5,072	5	21	32	1,757	1,815
September	Majuro	0	6,001	1,905	245	8,151	18	7	7	2,601	2,633
October	Majuro	0	4,622	2,198	191	7,011	12	14	7	2,194	2,227
November	Majuro	0	2,806	1,800	95	4,701	24	8	42	2,162	2,236
December	Majuro	1	5,841	3,959	107	9,908	268	10	58	2,808	3,144
		1	**44,872**	**20,959**	**6,058**	**71,890**	**551**	**172**	**499**	**30,675**	**31,897**

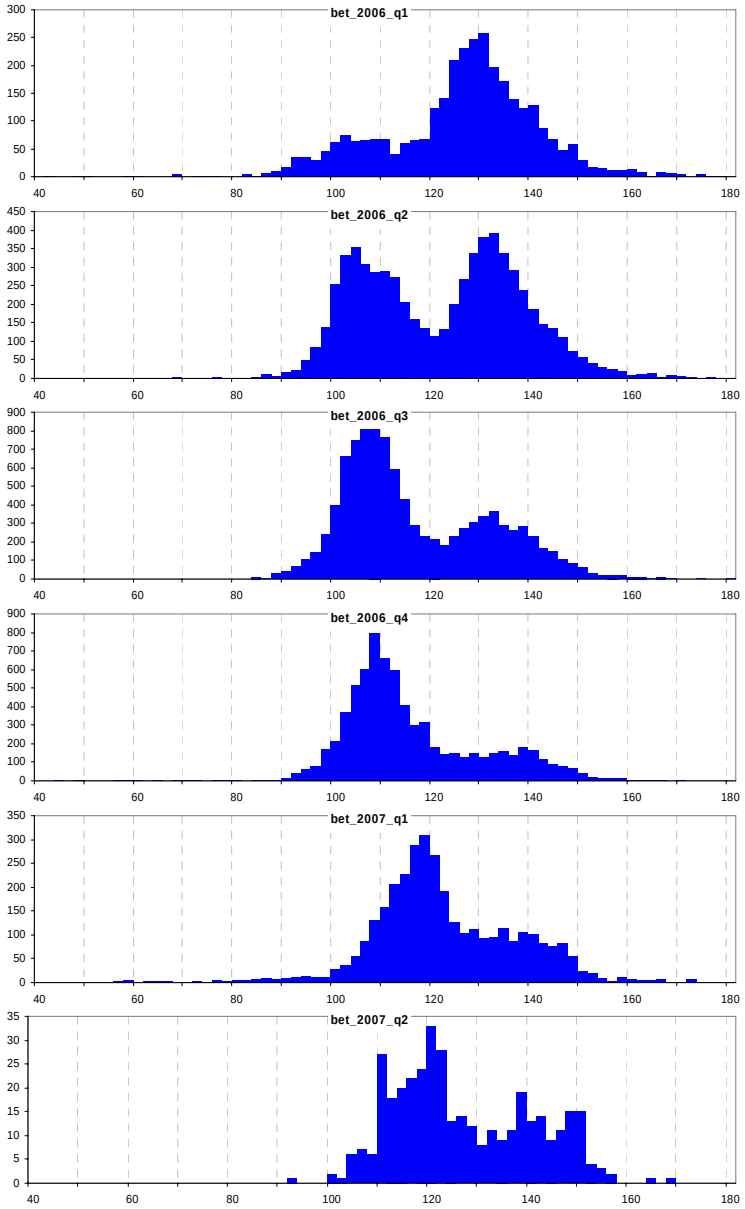

Figure 13. Quarterly Bigeye length frequencies for the Longline fishery in Marshall Islands waters, 2006–2007. (Samples collected by the MIMRA Port Sampling and Observer Programmes; 2007 data have yet to be processed by SPC)

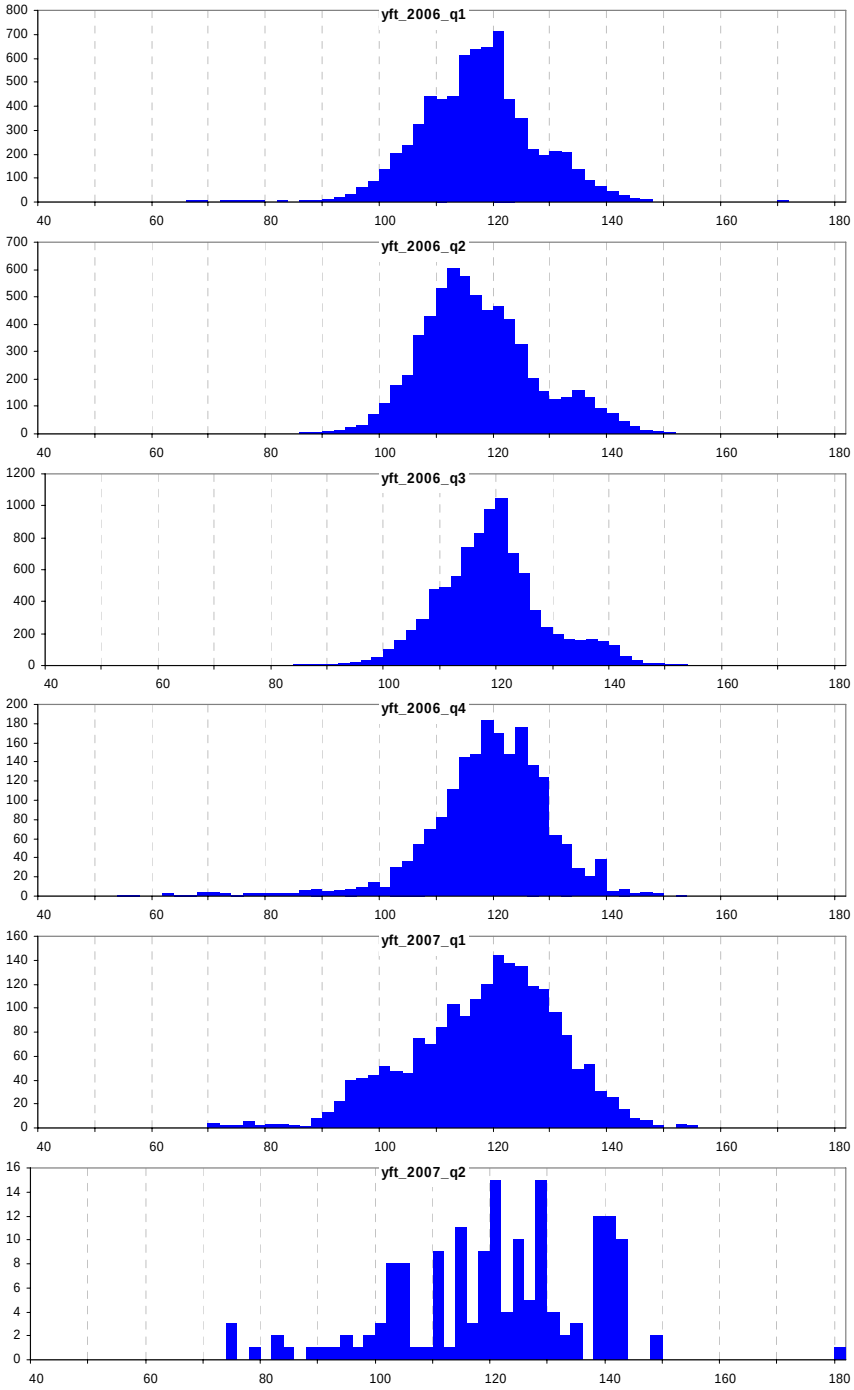

Figure 14. Quarterly Yellowfin length frequencies for the Longline fishery in Marshall Islands waters, 2006–2007. (Samples collected by the MIMRA Port Sampling and Observer Programmes; 2007 data have yet to be processed by SPC)

6.2 Observer Program

MIMRA continues to build on the revised Observer Program, initiated with the assistance of the SPC-OFP. The program is still in its infancy and needs increased support to improve its effectiveness as more demands are placed upon it. The reduction in number of active observers from 20 (2006) to 12 (2007) resulted in the decrease in observed sea days (Tables 17 & 18). Despite this setback, observers still managed to complete 789 and 1,092 sea days on longline and purse seine vessels, respectively.

The MIMRA observer program can also expect to be called upon to support the observer program of the Commission throughout the Convention area. This implies increased workload in training, deployments, communications, briefing, debriefing, analysis, and data entry. It also implies that the observer program needs an expanded base to work from, a base that includes adequate working space and environment for carrying out the observer program tasks and the anticipated expansion.

The mandate of the program needs to be expanded to include making enforcement observations and collecting information for follow up by Sea Patrol, the authorized fisheries enforcement agency. This may be accomplished with some coordination with Sea Patrol and an additional training module for observers to incorporate basic enforcement observations in their inspection routine.

Table 17. Observer trips 2006

	Number of Trips			Number of Days		
Month	LL	PS	Total	LL	PS	Total
January	1	0	1	19	0	19
February	2	1	3	27	19	46
March	15	3	18	216	62	278
April	10	4	14	152	98	250
May	9	7	16	132	152	284
June	5	3	8	69	88	157
July	5	2	7	74	53	127
August	7	4	11	102	131	233
September	3	3	6	42	100	142
October	6	5	11	90	183	273
November	7	4	11	98	157	255
December	3	4	7	42	117	159
	73	**40**	**113**	**1,063**	**1,160**	**2,223**

Table 18. Observer trips 2007

	Number of Trips			**Number of Days**		
Month	**LL**	**PS**	**Total**	**LL**	**PS**	**Total**
January	3	3	6	41	90	131
February	2	1	3	32	12	44
March	13	3	16	202	33	235
April	7	1	8	101	17	118
May	3	10	13	35	321	356
June	3	4	7	42	115	157
July	3	3	6	44	90	134
August	3	5	8	45	136	181
September	5	1	6	69	31	100
October	7	7	14	91	145	236
November	4	4	8	55	79	134
December	3	1	4	32	23	55
	56	**43**	**99**	**789**	**1,092**	**1,881**

7. TUNA MANAGEMENT PLAN

The MIMRA adopted its (revised) Tuna Management Plan (TMP) in late 2004. Since then, MIMRA has undergone significant changes, particularly in its implementation. A timely consultancy aimed at reviewing the TMP was successfully undertaken in March 2008. The current revised draft is still pending consultation between MIMRA and the consultant. It is envisaged that once approved, the TMP will further enhance the management and organization of the Authority in its ongoing efforts to fulfill its national, regional, and international obligations.

The development of its data and statistical capability continues to be a vital tool for MIMRA. The SPC-OFP has been very instrumental in the Oceanic Division's data efforts, as evidenced by the successful integration of the TUFMAN database at MIMRA.

8. FUTURE PROSPECTS

Without a doubt, the Commission has already altered the dynamics of fisheries management and operation in the region. With this in mind, the RMI will need to develop additional capacity, including internal organizational structure, to cope and take advantage of the opportunities that will continue to transpire from important developments directly stemming from the deliberations of the Commission and its subsidiary bodies.

The RMI, as a party to the Nauru Agreement, through which the Vessel Day Scheme (VDS) has commenced full implementation starting 01 December 2007, continues to grapple with the related challenges and hindrances brought on by associated developments for the improvement and ultimate achievement of long-term goals both at the national and regional levels. Of equal importance is the recent signing of the Third Implementing Arrangement of the Nauru Agreement signed by PNA Ministers in Koror, Palau in May 2008. The RMI is looking to sign off on the Arrangement at the earliest opportunity pending coordination with FFA on a suitable schedule acknowledging the already congested meetings schedule in the latter half of 2008. The RMI appreciates the direct implications of the Arrangement as it relates to the Commission and looks forward to fully participating in the discussions at this year's Commission meeting in Korea.

MIMRA continues to explore the possibility of a charter arrangement scheme with the Domestic Based Foreign longline fleet. While this work is still at large, the outcome will take into account the procedures and adherence to the Commissions rules and requirements.

All told, the RMI, through MIMRA, will continue to push for the recognition of sovereign rights of Small Islands Developing States (SIDS) in the WCPFC arena to further develop their domestic fisheries sector. As part of the changes need to be put in place with regards to the revised TMP, MIMRA intends to phase out foreign fishing licenses in order to allow for RMI domestic fleets to enter the fishery and rightfully maximize economic benefits from its tuna resources.

While the RMI admits to constraints in the overall development of national fishery including, but not limited to the Commissions rules and requirements, the RMI remains hopeful that it can further take advantage of the opportunities and related benefits that the Commission can provide in the long-term viability of our fisheries management and operations into the future and beyond.