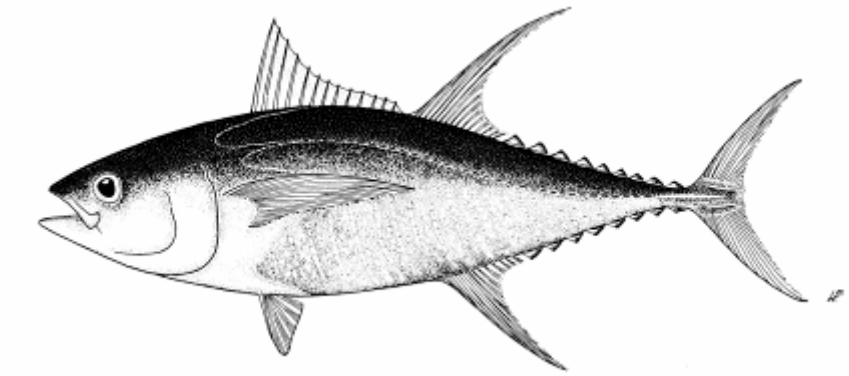
WCPFC–SC1 **FR WP–14**

1st Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission
WCPFC–SC1
Noumea, New Caledonia
8–19 August 2005

Tuna Fisheries Report for the Marshall Islands



Glen Joseph

Marshall Islands Marine Resources Authority (MIMRA). Marshall Islands.

August 2005

WCPFC – 1st Meeting of the Scientific Committee

Fisheries Report – Marshall Islands

1. Introduction

The tuna fishing operation in the RMI for 2004 experienced a comeback for the purse seine fleet, however, for the pole and line fleet, catching relatively the same species, flopped to nearly zero level of operation. The longline experienced a mix level of comeback for the year, with Bigeye as its dominant catch, with continued decline in the Japanese fleet (large ultra freezer vessels), and increasing number of locally based foreign fleet.

In short, 2004 represent a slow comeback for the fishery in the RMI. Although indicatively, the number represent about half of the total catch in zone for 2002 *(31,000 tons for purse seine)*, 2004 *(15,000 tons for purse seine)* can be viewed as a recovery from 2003 *(3,000 tons of total catch for purse seine fleets).*

Even the local purse seine vessels attribute an increase in catch overall, registering just over 42,000 tons of total catch for 2004, as appose to 35,000 tons for 2003.

The longline fleet catches drop slightly for 2004, however that is to be expected since the Japan fleet dropped from 28 licensed vessels in 2003 to just 15 licensed vessels in 2004. These are usually the ultra freezer vessels.

2. Fleet structure

The table below shows whose who in the fishing operation in the RMI for 2004.

Table 1: Access Agreements in RMI for 2004

Country/Party	Type	Administrator	Type
USA	**Multilateral**	**FFA**	**Regional Arrangement**
Japan	**Bilateral**	**MIMRA**	**Government to Government**
Taiwan	**Bilateral**	**MIMRA**	**Industry to Government**
Korea	**Bilateral**	**MIMRA**	**Industry to Government**
FSM Arrangement	**Multilateral**	**FFA**	**Sub-Regional**
Fong Seong Co.	**Bilateral**	**MIMRA**	**Industry to Government**
*Shandong Fishery Co.	**Bilateral**	**MIMRA**	**Industry to Government**
*Shangai Fishery Co.	**Bilateral**	**MIMRA**	**Industry to Government**
*MIFV	**Bilateral**	**MIMRA**	**Industry to Government**
New Zealand	**Bilateral**	**MIMRA**	**Industry to Government**
Hsiang Sheng Fishery Co	**Bilateral**	**MIMRA**	**Industry to Government**
Fair Well Fishery (PNG) Ltd.	Bilateral	**MIMRA**	**Industry to Government**
Pacific Food & Services,Inc	**Bilateral**	**MIMRA**	**Industry to Government**
Sanko Bussan (Guam) Co	**Bilateral**	**MIMRA**	**Industry to Government**
Clear Water Fishery**.**	**Bilateral**	**MIMRA**	**Industry to Government**

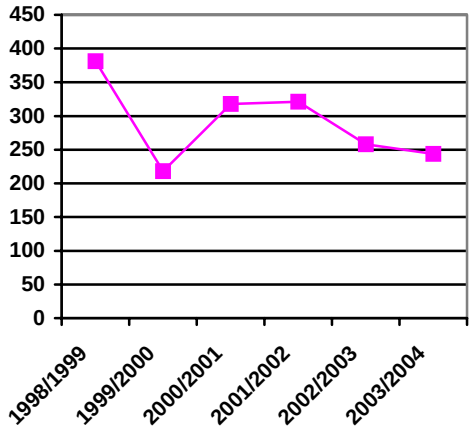
All of the parties in 2003 retained access in the RMI during 2004. The fleet component and the number of licensed vessels in 2004 is shown in table 2. It should be noted that for the new entrants, Sanko Busan and Pacific Food and Beverages, their catch reports will form the reporting for 2005.

Table 2: Access Agreements in RMI for 2004-gear types/flag/fleet/numbers

Country/Party	Gear/method	Number of Boats	Flag
USA	**Purse Seine**	**14**	**USA**
Japan	**Purse Seine**	**34**	**Japan**
Japan	**Longline**	**15**	**Japan**
Japan	**Pole and line**	**7**	**Japan**
Taiwan	**Purse Seine**	**34**	**Taiwan**
Korea	**Purse Seine**	**27**	**Korea**
!FSM Arrangement	**Purse Seine**	**31**	**FSM,RMI,KI, SI, PNG**
Fong Seong Co.	**Purse Seine**	**5**	**Vanuatu**
Shandong Fishery Co.	**Purse Seine**	**2**	**PROC**
Shangai Fishery Co.	**Purse Seine**	**1**	**PROC**
MIFV	**Longline**	**38**	**PROC, Taiwan**
New Zealand	**Purse Seine**	**3**	**NZ**
Hsiang Sheng Fishery Co	**Purse Seine**	**1**	**Taiwan**
Fair Well Fishery (PNG) Ltd	**Purse Seine**	**1**	**Vanuatu**
*Pacific Food & Services, Inc.	**Longline**	**11**	**Japan**
*Sanko Bussan (Guam), Inc.	**Longline**	**14**	**Japan**
Clear Water Fishery	**Longline**	**6**	**FSM**

**New Entrants*

Graph 1: Licensed vessels since 1998.



Graph 1 shows relatively the number of vessels licensed in the RMI for the periods since 98/99. It should be noted that the list does not include the carriers and bunker vessels, which are also by definition, fishing vessels. These vessels and numbers are covered in the transshipment part of this report. For the period 2003/2004 a huge drop in the number of Japanese longline and pole and line vessels resulted in 244 vessels (total) as appose to 258 vessels in 2003. Although the new entrants more or less marginalize the vessels numbers for the two years, their catch is not part of this years report.

3. Annual catches in the WCPFC Convention Area, 2000–2004 for the RMI flagged vessels:

There are 6 vessels flagged as RMI vessels operating in the region. At the outset, these vessels are part of the FSM Arrangement, a sub regional arrangement administered by the Forum Fisheries Agency (FFA).

Table 3. Estimates of the catch by species for the Marshall Islands purse seine fleet in the WCPFC Convention Area, 2000–2004 *(Source : logsheet data)*

		Catch (metric tonnes)					
Year	Boats	Skipjack	Yellowfin	Bigeye	Other	Total	% cov. (logs)
2000	5	6,625	900	35	0	7,560	100%
2001	5	32,583	3,052	139	0	35,774	100%
2002	5	37,732	1,132	88	0	38,952	100%
2003	6	35,272	2,267	336	0	37,875	100%
2004	6	42,078	2,102	2,492	0	46,672	100%

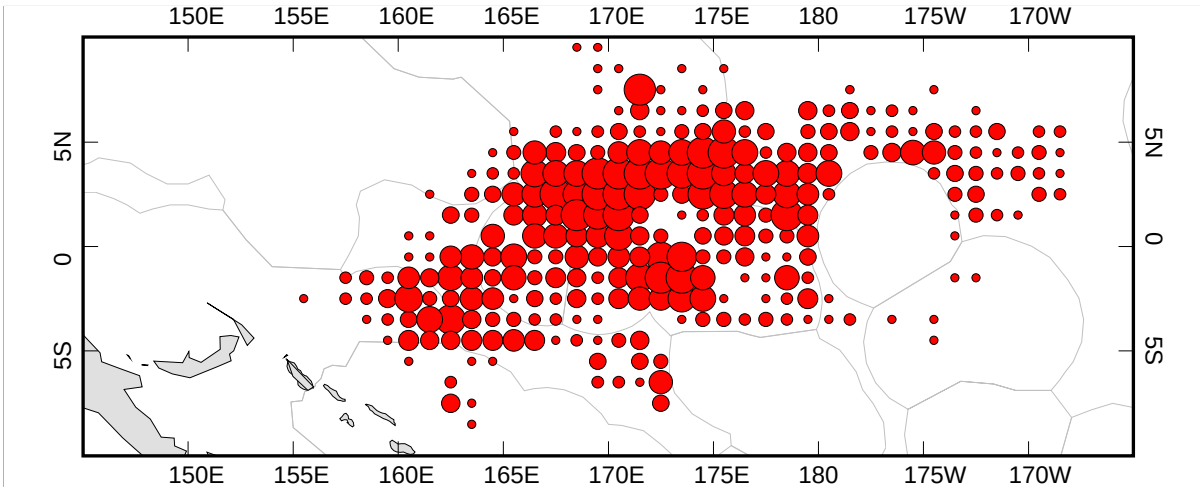


Figure 1: Distribution of effort by Marshall Islands purse-seine vessels during 2004

4. Annual catches in the RMI EEZ, 2000–2004

Graph 2 shows the catch inzone by the three major gears licensed or authorized (longline, purse seine, and pole and line). Purse seine catch dominated the take in zone for 2004 (15,700 tons), while the long line experienced a decrease in catch inzone (44 tons). Table 4 shows the annual purse catch in the RMI zone since 2002 through to 2004.

Graph 2: Catch by three main gears in the RMI EEZ since 1998-2004.

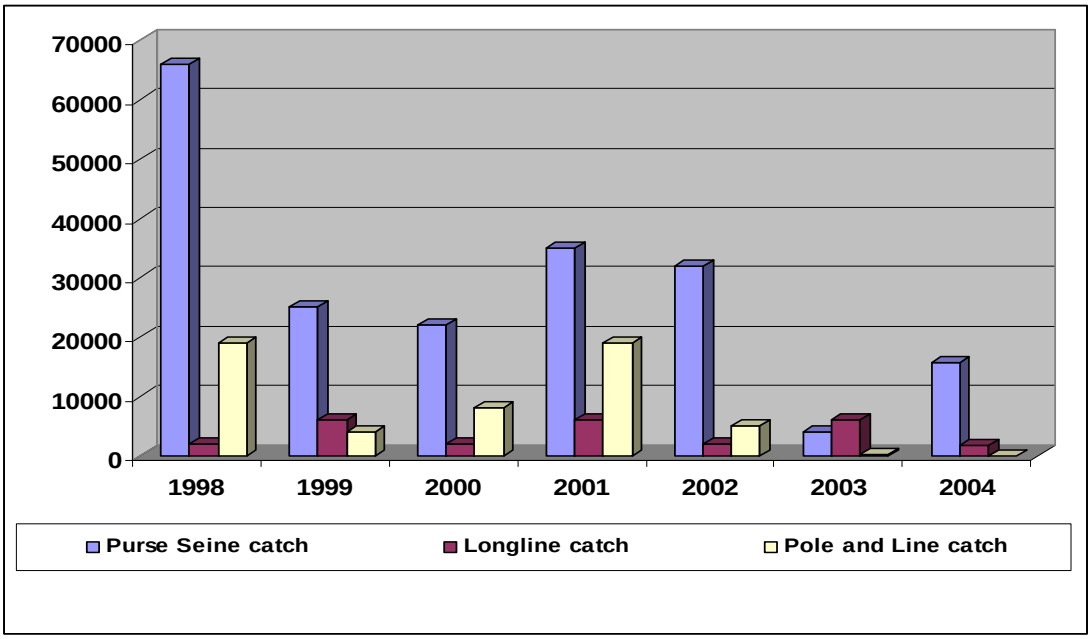


Table 4. Annual purse seine catch by fleet and species in the Marshall Islands EEZ, 2002–2004

				SKIPJACK		YELLOWFIN		BIGEYE		OTHER	TOTAL	
YEAR	FLAG	Days	Boats	MT	CPUE	MT	CPUE	MT	CPUE	MT	MT	CPUE
2002	CN	12	3	25	2.1	0	0.0	0	0.0	0	25	2.1
2002	FM	17	3	237	13.9	73	4.3	0	0.0	0	310	18.2
2002	JP	480	34	8,010	16.7	865	1.8	5	0.0	248	9,128	19.0
2002	KI	2	1	0	0.0	0	0.0	0	0.0	0	0	0.0
2002	KR	453	27	10,630	23.5	305	0.7	5	0.0	0	10,940	24.2
2002	MH	115	5	2,620	22.8	35	0.3	35	0.3	0	2,690	23.4
2002	PG	75	7	1,960	26.1	225	3.0	0	0.0	0	2,185	29.1
2002	SB	3	1	49	16.3	1	0.3	0	0.0	0	50	16.7
2002	TW	401	39	5,401	13.5	300	0.7	21	0.1	0	5,722	14.3
2002	US	6	4	27	4.5	5	0.8	0	0.0	0	32	5.3
2002	VU	33	2	495	15.0	45	1.4	0	0.0	0	540	16.4
		1,597		**29,454**	**18.4**	**1,853**	**1.2**	**66**	**0.0**	**248**	**31,621**	**19.8**
2003	CN	2	1	0	0.0	0	0.0	0	0.0	0	0	0.0
2003	FM	2	2	0	0.0	0	0.0	0	0.0	0	0	0.0
2003	JP	63	20	476	7.6	76	1.2	0	0.0	23	575	9.1
2003	KR	25	13	50	2.0	75	3.0	0	0.0	0	125	5.0
2003	MH	89	5	1,205	13.5	245	2.8	0	0.0	0	1,450	16.3
2003	NZ	15	4	184	12.2	63	4.2	0	0.0	0	246	16.4
2003	PG	17	7	58	3.4	0	0.0	0	0.0	0	58	3.4
2003	TW	46	16	782	17.0	50	1.1	11	0.2	1	844	18.4
2003	US	37	9	366	9.9	22	0.6	21	0.6	0	408	11.0
2003	VU	10	3	30	3.0	0	0.0	0	0.0	0	30	3.0
		306		**3,151**	**10.3**	**530**	**1.7**	**32**	**0.1**	**24**	**3,737**	**12.2**
2004	CN	8	2	345	43.1	0	0.0	0	0.0	0	345	43.1
2004	FM	4	2	45	11.3	0	0.0	0	0.0	0	45	11.3
2004	JP	147	17	2,256	15.3	263	1.8	6	0.0	38	2,563	17.4
2004	KR	70	20	1,450	20.7	115	1.6	0	0.0	0	1,565	22.4
2004	MH	213	6	4,792	22.5	235	1.1	275	1.3	0	5,302	24.9
2004	NZ	3	1	0	0.0	15	5.1	0	0.0	0	15	5.1
2004	PG	116	10	2,881	24.8	109	0.9	5	0.0	1	2,996	25.8
2004	TW	139	18	1,335	9.6	20	0.1	0	0.0	1	1,356	9.8
2004	US	20	6	133	6.7	13	0.6	0	0.0	0	146	7.3
2004	VU	49	6	1,417	28.9	0	0.0	0	0.0	0	1,417	28.9
		769		**14,654**	**19.1**	**770**	**1.0**	**286**	**0.4**	**39**	**15,750**	**20.5**

The local purse seine fleet dominated the effort inzone with just over 5,000 tons of fish caught inzone for 2004. The purse seine fleet mostly concerts their fishing efforts down south of the RMI bordering with Kiribati, Nauru and the FSM.

The long line effort in the RMI continues to decline by the Japanese fleet, however picked up with the Marshall Islands Fishing Venture (MIFV) fleet through the locally based foreign longline operation. As shown in Table 5, the Japanese fleet dominated the sector since 2002, when in 2004, catches by the Chinese fleet over took the Japanese fleet by a margin.

It should be noted that there are different types of longlines, with different methods of catch storage as well as vessel size. The MIFV fleet, or the fleet that form the Locally Based Foreign Vessels currently operating through the Longline fishbase, has a maximum fishing days of about 20 per boat. They carry flake ice for storage of tuna and therefore, cannot afford to stay out longer than when the ice start to melt. Thus, this affects the quality of the tuna produced by MIFV to its various markets. The MIFV fleet comprise of Mainland China and Taiwan, as well as FSM and Belize longline vessels with a maximum capacity of between 5-10 tons. Their effort is more concerted during lunar (full moon) cycles, at the end of the months with sets deeper than usual (over 200 meters deep). There were just over 30 vessels registered during the 2004 period under the locally based foreign fishing fleet, with the number expected to drop without the Belize flag vessels, as a commission rule (WCPFC). The Japanese fleet registered 15 vessels during the period, however, with more hooks (effort) deployed than the other longline fleet because of the nature of its

operation, *as depicted in the nominal CPUE graphs (3 and 4) for the different target species (yellowfin and bigeye) for the longline efforts.*

Table 5. Annual longline catch by fleet and species in the Marshall Islands EEZ, 2000–2004 ***(Source : logsheet data)***

YEAR	FLAG	BOATS	ALB MT	BET MT	YFT MT	BLM MT	BUM MT	MLS MT	SWO MT	OTH MT	TOTAL MT
2002	CN	36	3	390	89	23	11	1	13	42	572
2002	FM	7	0	105	21	5	2	0	4	2	139
2002	JP	24	13	1,151	322	0	56	2	14	0	1,558
2002	TW	10	1	12	4	0	6	0	1	3	26
			17	1,657	435	29	75	2	32	48	2,295
2003	CN	36	3	708	298	46	17	2	25	160	1,259
2003	FM	6	0	135	51	5	5	0	3	6	205
2003	JP	24	17	1,314	510	2	97	1	24	19	1,983
2003	TW	7	0	4	1	1	3	0	1	2	12
			20	2,161	860	53	123	3	53	186	3,459
2004	CN	42	3	651	187	6	56	0	13	77	994
2004	FM	4	0	180	52	0	20	0	3	14	269
2004	JP	8	4	341	67	0	16	0	4	3	437
2004	MH	1	0	0	1	0	1	0	0	4	6
2004	TW	1	1	25	9	0	6	0	1	2	44
			8	1,197	316	6	100	1	21	100	1,750

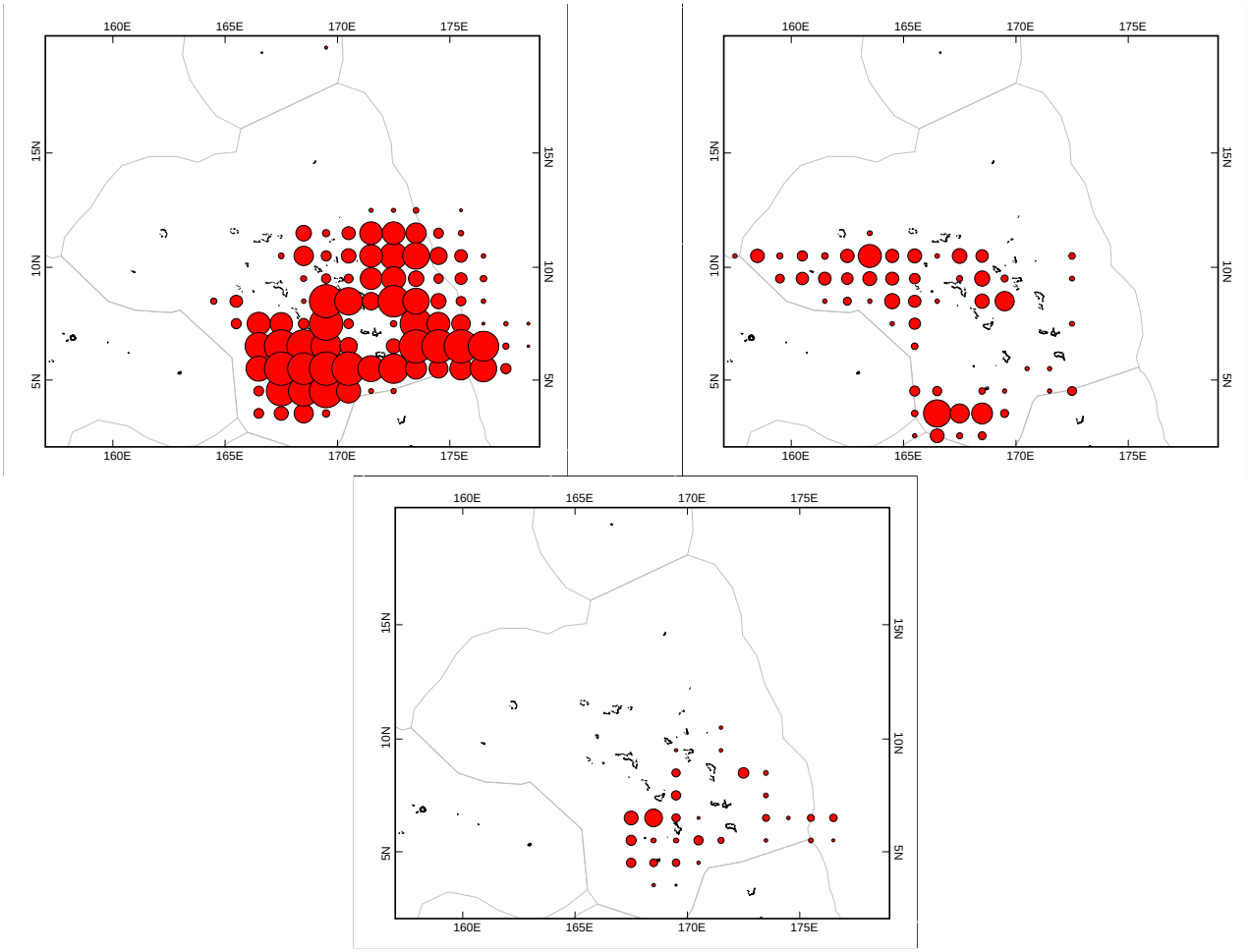
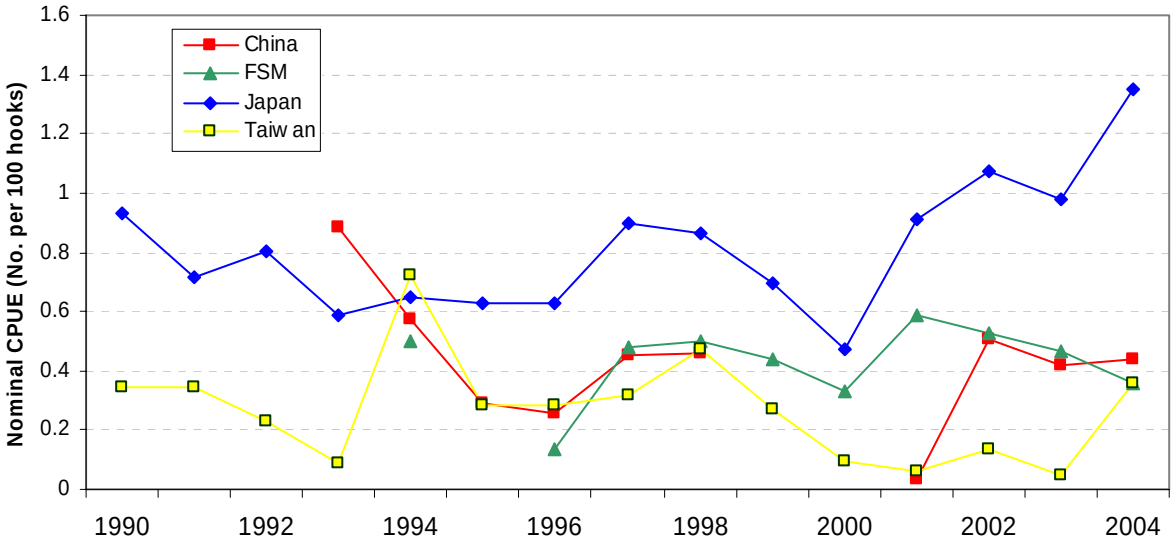
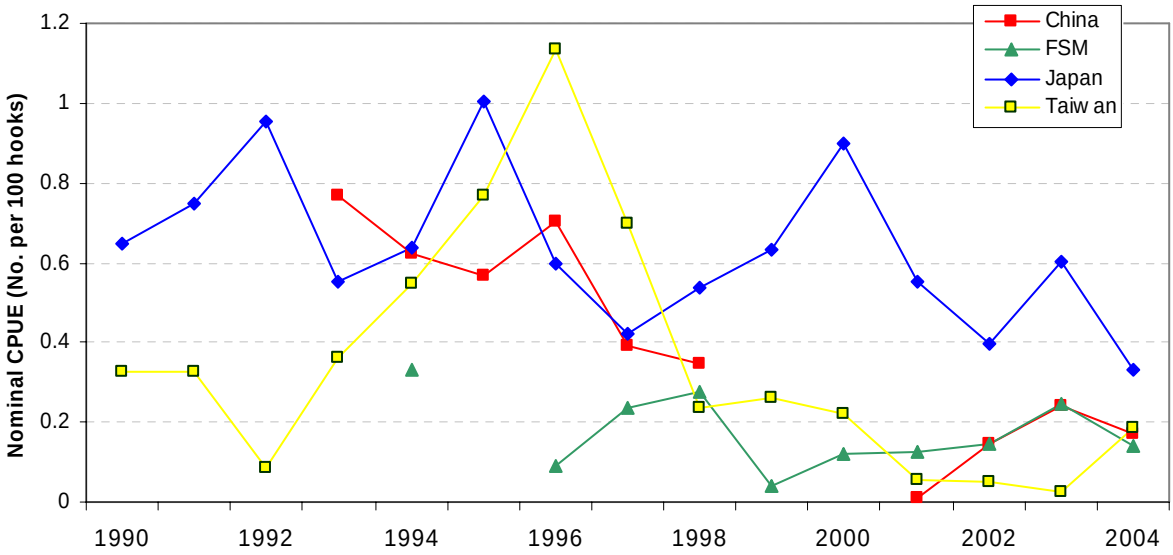


Figure 1. Distribution of Chinese (top left), Japanese (top right) and Taiwanese (bottom) longline effort in the Marhall Islands EEZ for 2004



Graph 3. Annual trends in nominal bigeye CPUE (number of fish per 100 hooks) for longline fleets operating in the Marhall Islands EEZ



Graph 4. Annual trends in nominal yellowfin CPUE (number of fish per 100 hooks) for longline fleets operating in the Marhall Islands EEZ

Figure 1 shows fishing area within the RMI EEZ by the flag fleets, longline efforts, for the period 2004. The most effort as depicted, shows the China fleet. The Chinese fleet recently made a comeback in the RMI zone from 2000, with the re-establishment of the locally based longline fishbase. Fgure 2, below, shows the relative distribution of species as caught by the longline operation. As indicated, bigeye formed large part of the longline catch inzone as compared to yellowfin (over 50% BET). Most of this is attributed to the locally based fishing fleet

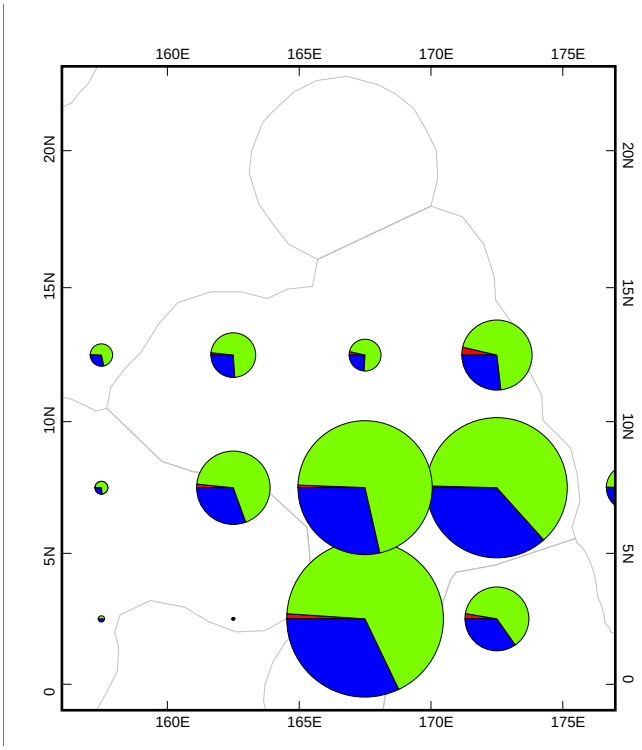
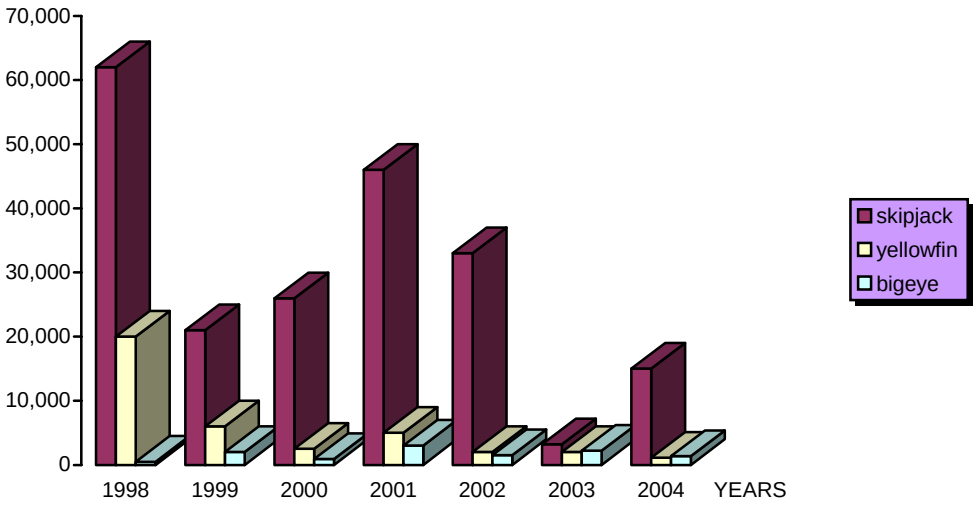


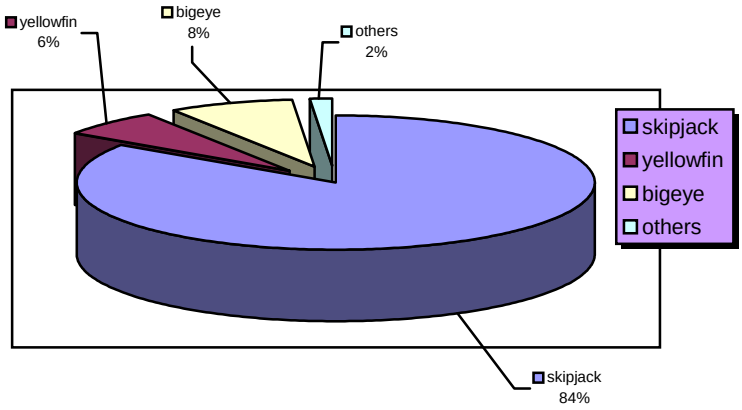
Figure 2. Distribution of the longline catch (metric tones) by species in the Marhall Islands EEZ, 2000–2004 (Red–Albacore; Green–Bigeye; Blue–Yellowfin)

Graph 5. Catch by 3 major species in the RMI EEZ from period 1998-2004.

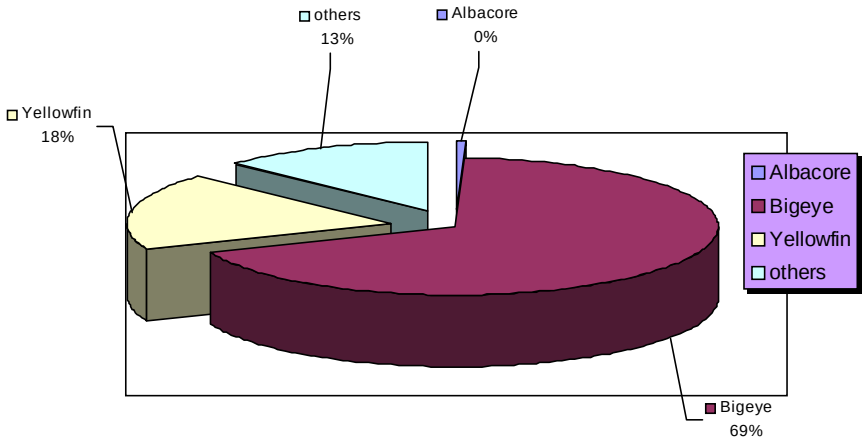


Skipjack continues to be the major species caught in the RMI. For this period, a total of 17,500 tons of mixed fish were caught inzone by all gears. About 15,000 tons were skipjack, 1,100 tons were yellowfin, and just over 1,300 tons were bigeye tuna. Graph 6 shows the proportion of catch by all species of which 80% is skipjack caught inzone.

Graph 6: Proportional catch of species by ALL GEARS in RMI in 2004.



Graph 7: Proportional catch of species by LONGLINE (all fleet) for RMI in 2004.



Graph 8: Proportional catch of species by PURSE SEINE (all fleet) for RMI in 2004.

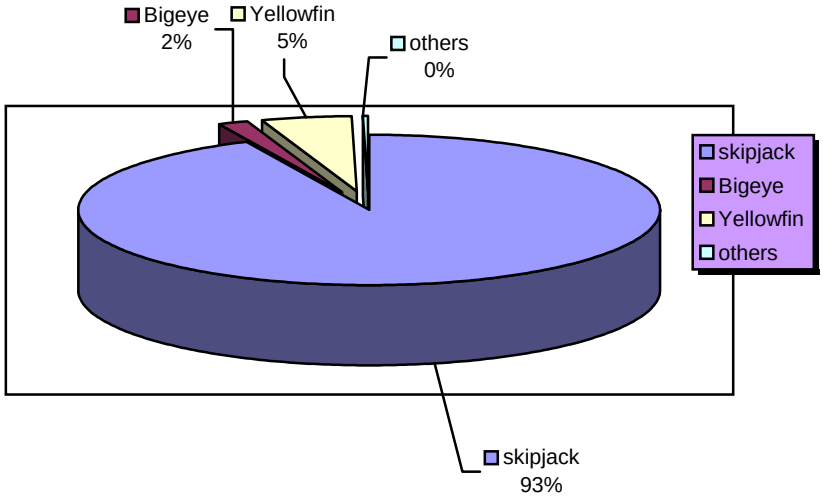


Table 6: Annual pole-and-line catch for the Japanese fleet by species in the Marshall Islands EEZ, 2000–2004 *(Source : logsheet data)*

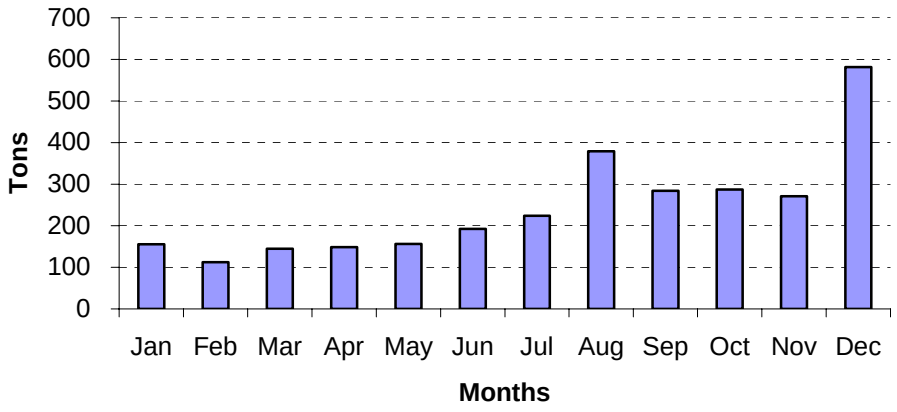
			SKIPJACK		YELLOWFIN		OTHER	TOTAL	
YEAR	FLAG	Days	MT	CPUE	MT	CPUE	MT	MT	CPUE
2001	JP	37	16,207	10.1	29	0.0	7	16,243	10.1
2002	JP	35	7,312	11.0	4	0.0	0	7,316	11.0
2003	JP	2	83	5.2	0	0.0	0	83	5.2
2004	JP	1	23	2.5	0	0.0	0	23	2.5

The pole and line fishery operation in the RMI continues to decline in 2004 (graph 2). The second most dominant fleet since 1998, the effort started to stumble in 2003, resulting in 7 vessels licensed with one fishing day registered at 23 tons total catch in 2004 (table 7). Japan operates the only pole and line effort in the RMI, and accordingly, economic hardship and a shift in free school movements, resulted in the reduced effort for 2004.

5. Markets and details of local industry

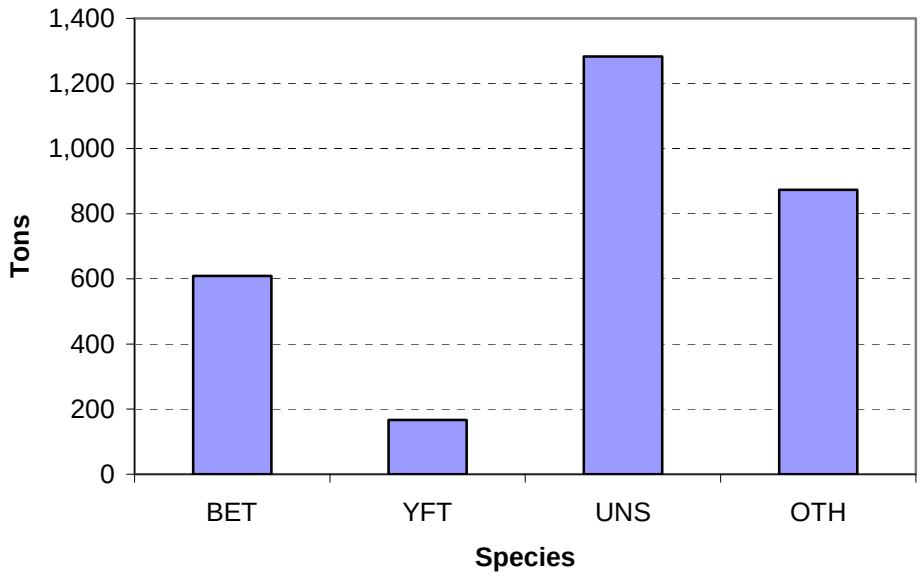
The Marshall Islands Fishing Venture (MIFV) operates the Longline Fishbase with locally based foreign longline vessels. 2004 records revealed a low export for the first few months with monthly total exports below 500 tons. August saw a rise in exports with a total of 379 tons. It declined for the next three months but shot up towards the end of the year, with 581 tons of fish exported from the RMI in December, bringing the total exports to 2,933 tons. Details of unloading by species are covered below in details in the transshipment report, in particular, table 8.

Graph 9: MIFV Exports for period 2004

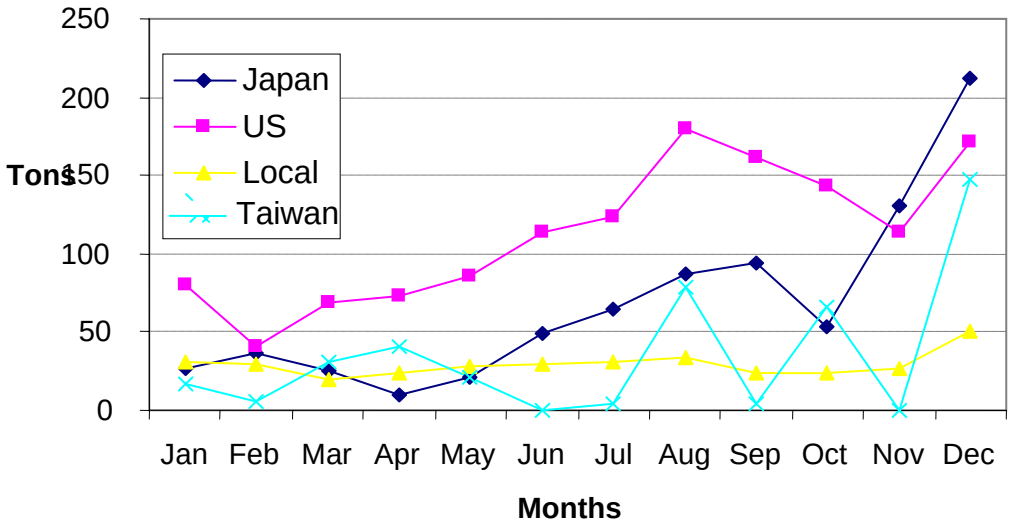


The MIFV exports mainly fresh chilled tuna species to markets in Japan, the US, and Canada. Frozen fish (rejects and bycatches) are shipped to Taiwan by carriers and sold locally. Fish are also sold to the local market but as ndicated in graph 11, total fish sold locally remained below 50 tons for most of the year, with over 2,000 tons of mixed tuna registered as exports. Japan data are recorded by species therefore; the total BET and YFT in graph 10 represent the amounts send to Japan. Graph 11, shows the US has the dominant market overall, 1356 tons, from the MIFV. Most of these are the second grade, lower quality tuna that would not have made it to the Japanese market, a very particular market based on quality. Most of the quality fish produced at the MIFV are aimed for the higher end market in Japan. The company admits that producing quality tuna for the Japanese market is a problem, hence, the high volume of second grade and loins exports to the U.S.

Graph 10: Total export by species 2004 (MIFV).



Graph 11: Monthly exports to major markets 2004 (MIFV)



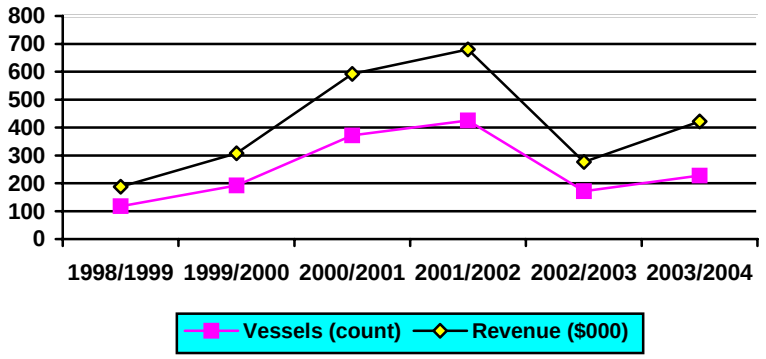
6. Transshipment/port unloading activities

The transshipment activity in Majuro lagoon for purse seine fleet also increased from 2003. As usual, the Taiwan fleet (PS) dominated the activity, with 63 port calls registered for 2004. Graph 12 is an indicative of transshipment activity, relative to the revenue (MIMRA only) collected from 2001 through to 2004 (PS and support vessels). There are also costs to having such transshipments conducted in the lagoon; environmental costs due to the threat of spillage of fuel, rubbish or waste water; and social costs due to the vessel crews coming ashore seeking entertainment after weeks at sea. Some costs may be reduced by strict enforcement of environmental legislation while the social costs may be addressed through education and control of vessel crews ashore.

Table 7: Annual purse-seine unloadings in Majuro port, 2002–2004 (source : Logsheet data – regional tuna database, SPC)

			METRIC TONNES				
YEAR	FLAG	UNLOADINGS	SKJ	YFT	BET	OTH	TOTAL
2002	CN	11	4,570	520	0	0	5,090
2002	FM	8	3,868	617	0	0	4,484
2002	JP	4	1,361	126	0	4	1,491
2002	KI	1	613	50	7	0	670
2002	KR	44	19,435	1,830	50	0	21,315
2002	MH	62	35,032	942	128	0	36,102
2002	NZ	10	4,624	608	5	0	5,237
2002	PG	37	23,849	1,144	5	0	24,998
2002	PH	3	1,187	88	3	9	1,287
2002	TW	217	121,640	6,965	586	0	129,191
2002	VU	12	9,835	665	0	0	10,500
		409	226,013	13,555	784	13	240,366
2003	FM	1	154	32	0	0	186
2003	KR	1	930	30	0	0	960
2003	MH	67	34,472	2,563	0	0	37,035
2003	NZ	6	3,154	616	0	0	3,770
2003	PG	11	3,172	1,866	0	0	5,038
2003	TW	63	18,921	5,092	435	3	24,451
2003	US	4	2,527	876	22	0	3,425
2003	VU	19	13,206	2,185	0	0	15,391
		172	76,537	13,259	457	3	90,255
2004	CN	1	336	0	0	0	336
2004	FM	1	610	35	0	0	645
2004	KR	2	705	25	0	0	730
2004	MH	70	42,078	2,102	2,492	0	46,672
2004	NZ	7	2,299	296	0	0	2,595
2004	PG	39	28,330	1,533	14	7	29,884
2004	TW	63	36,343	2,694	39	8	39,084
2004	US	1	731	476	0	0	1,207
2004	VU	43	38,714	3,121	60	4	41,899
		227	150,146	10,282	2,605	19	163,052

Graph 12: Transhippment in Majuro port by Purse Seine



A significant source of revenue for the RMI, the transshipment activity is a positive indicator for economic spin offs in private sector areas dealing directly and indirectly with the vessels in port (fuel sales with Marshalls Energy Company, etc).

Table 8: Locally Based Foreign Longline Monthly offloadings for 2004.

2004	Number of Unloading	Tuna BET/YFT Kg	Swordfish Kg	Blue/Black Marlin Kg	Logsheet %
Jan	45	12341	2483	8393	100
Feb	27	10405	2819	6619	100
Mar	29	10219	3010	8516	89
Apr	54	10645	2240	12922	100
May	35	7780	1991	10598	100
Jun	40	19222	4393	23423	100
Jul	49	31608	5755	31891	100
Aug	49	49369	5289	31953	100
Sep	48	54314	5133	29695	100
Oct	34	30025	2640	20135	100
Nov	40	31436	341	25283	100
Dec	66	53379	2529	50527	100
Total	516	320743	38623	259955	1197
Average	43	26729	3219	21663	99

7. 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. There are just over twenty (20) trained observers on staff providing a minimal level of coverage of fishing activity. The number of observers needs to be increased to 30 in order to maintain coverage at the target of 20%. The MIMRA observer program can also expect to be called upon to support the observer program of the Commission in the area of the Convention outside the EEZ. This implies increased workload in training, deployments, communications, briefing, debriefing, analysis, and data entry. It also implies 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 taskings 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.

The program aims to provide coverage and collect data for purse seine transhipment, port sampling, and actual trips on fishing vessels. Table 10 provides a summary of port samplings by Observers in 2004 for the locally based foreign longline fleet. Table 11 provides a summary of samplings as Observed on the transhipping purse seine vessels in Majuro lagoon for 2004. Other expansion lies in the area of validating data, to qualify and quantify data production with the SPC, through logsheets, observer reports, de-briefing and briefings, etc.

The Observer program began deploying and observing the longline fleet, as well as purse seine as a strong basis to form national coverage on foreign fleets. At the same time, the program contributes towards the regional U.S Treaty program and the sub-regional FSM Arrangement program (FSMA). Table 12 shows the coverage in terms of trips under national and regional arrangements. 2004 saw an expansion for the program in placement, registering a total of 45 trips, 21 on 24 on purse seine vessels. Of that total, 28 of those were on national trips, 26 on the FSMA, and 1 on the U.S Treaty. 1006 sea days were expended by the program covering the 45 vessels undertaken for 2004.

Table 10: Annual port sampling summary, 2004 (Source : Port Sampling data collected by MIMRA)

2004	LL Port Sampling Summary, 2004				
	Unloadings	Sampled	Sampled (%)	Fish sampled	Cover Logsheet
Jan	45	15	33	946	100
Feb	27	3	11	235	100
Mar	29	2	7	87	90
Apr	54	0	0	0	100
May	35	0	0	0	100
Jun	40	0	0	0	100
Jul	49	41	84	2588	100
Aug	49	33	67	2884	100
Sep	48	14	29	1496	100
Oct	54	32	59	2008	100
Nov	48	6	13	270	100
Dec	91	8	9	752	100
Total	569	154	312	10320	1190
Average	47	13	26	860	99

Long Line (MIFV fleets)

Table 11: Purse seine unloadings and sampling 2004

2004	Unloadings	Sampled	Sampled (%)	Sampled	of all vessels %	Logsheet (%)
Jan	8	5	63	20	16	100
Feb	12	10	83	52	21	100
Mar	14	5	36	22	9	100
Apr	20	5	25	16	5	100
May	13	2	15	7	4	100
Jun	16	0	0	0	0	100
Jul	11	0	0	0	0	100
Aug	12	0	0	0	0	100
Sep	22	0	0	0	0	100
Oct	23	7	30	27	8	100
Nov	22	9	41	31	8	100
Dec	16	4	25	15	7	100
Total	189	47	318	170	78	1200
Average	16	4	27	14	7	100

The program also monitors the transshipping activity in Majuro lagoon, table 11, and is expected to expand to provide compliance duties as well. The program was fortunate to get assistance from the U.S NOAA, in developing a turtle mitigation program, as well as shark identifying work in late 2003.

Table 12: Annual observer summary, 2004 (Source : Observer data collected by MIMRA)
Trips by month by MIMRA observer on certain observer programmes in 2004

2004	Trips			Programme			Sea Days			
	Numbers	Gear		NATIONAL	FFA		Gear	National	FFA	
					FSMA	US Treaty			FSMA	US Treaty
Jan	2	LL	1	1	0	0	LL	12		
		PS	1	0	1	0	PS	0	54	
Feb	6	LL	2	2	0	0	LL	27		
		PS	4	2	2	0	PS	57	70	
Mar	4	LL	2	2	0	0	LL	26		
		PS	2	0	2	0	PS	0	47	
Apr	7	LL	4	4	0	0	LL	54		
		PS	3	0	3	0	PS	0	46	
May	7	LL	6	6	0	0	LL	71		
		PS	1	0	1	0	PS	0	23	
Jun	9	LL	3	3	0	0	LL	42		
		PS	6	2	3	1	PS	119	145	68
Jul	0	LL	0	0	0	0	LL	0		
		PS	0	0	0	0	PS	0	0	
Aug	0	LL	0	0	0	0	LL	0		
		PS	0	0	0	0	PS	0	0	
Sep	8	LL	5	5	0	0	LL	57		
		PS	3	0	3	0	PS	0	69	
Oct	1	LL	0	0	0	0	LL	0		
		PS	1	0	1	0	PS	0	7	
Nov	0	LL	0	0	0	0	LL	0		
		PS	0	0	0	0	PS	0	0	
Dec	1	LL	1	1	0	0	LL	12		
		PS	0	0	0	0	PS	0	0	
	45	LL	24	28	16	1	LL	301	461	68
		PS	21				PS	176		
Sub Total Sea Days								477	461	68
GRAND TOTAL							1006	Sea Days		

So far for the upcoming period (2005) the observer program has achieved 36 trips, to date, with 16 longline trips and 20 purse seine trips. So far, some of the results data collected are shown in figure 6 and 7, observed size composition yellowfin and bigeye tuna.

Most of the Observer data are stored at the SPC, therefore, other analysis can be requested. Information such as observed by-catch, turtles, and gear interactions are also available. While it is noteworthy of the expanded effort for the period, placement of observers on all fleet operating in the RMI for all gears, are targeted for the period 2005, with efforts to increase, expand coverage level to improve catch estimates from the main method of fisheries.

Table 13: 2004 –Purse seine trips by MIMRA observers

	Observer Name	*Vessel name*	*Gear*	*Observer Program*	*Departure date*	*Departure port*	*Arrival date*	*Arrive Port*	*Sea Days*
1	Jerry Tuisue	Castel Braz	PS	FSM Arrangement	7-Jan	Majuro	1-Mar	Pohnpei	54
2	James Elio	Miss Luen	LL	MIMRA	28-Jan	Majuro	9-Feb	Majuro	12
3	Aniba Jabkoj	Koos 103	PS	FSM Arrangement	4-Feb	Majuro	9-Mar	Majuro	34
4	Joran Joran	Yue Yuan Yu 613	LL	MIMRA	12-Feb	Majuro	25-Feb	Majuro	13
5	Jacob Keju	Fong Seong 666	PS	MIMRA	15-Feb	Majuro	14-Mar	Majuro	28
6	Makbi Bwisko Richard	Da Lian Yu 809	LL	MIMRA	19-Feb	Majuro	4-Mar	Majuro	14
7	Carland	Fong Seong 696	PS	MIMRA	23-Feb	Majuro	23-Mar	Majuro	29
8	James S Elio Lomodro	Koos 101	PS	FSM Arrangement	21-Feb	Majuro	28-Mar	Majuro	36
9	Jibas Dike	Clear Water 05	LL	MIMRA	11-Mar	Majuro	24-Mar	Majuro	13
10	Poznanski	Clear Water 03	LL	MIMRA	13-Mar	Majuro	26-Mar	Majuro	13
11	Jacob Keju	Koos 107	PS	FSM Arrangement	27-Mar	Majuro	25-Apr	Majuro	29
12	Jerry Tuisue Dike	Koos 102	PS	FSM Arrangement	29-Mar	Majuro	16-Apr	Majuro	18
13	Poznanski	Yue Yuan Yu 028	LL	MIMRA	1-Apr	Majuro	15-Apr	Majuro	14
14	Makbi Bwisko	Clear Water 06	LL	MIMRA	1-Apr	Majuro	16-Apr	Majuro	15
15	Joran Joran Lomodro	Hu Yuan Yu 11	LL	MIMRA	1-Apr	Majuro	10-Apr	Majuro	9
16	Jibas	Da Lian Yu 810	`	MIMRA	3-Apr	Majuro	19-Apr	Majuro	16
17	Aniba Jabkoj	Koos 101	PS	FSM Arrangement	4-Apr	Majuro	20-Apr	Majuro	16
18	James Elio	Koos 103	PS	FSM Arrangement	5-Apr	Majuro	28-Apr	Majuro	23
19	Jerry Tuisue Dike	Koos 102	PS	FSM Arrangement	20-Apr	Majuro	27-Apr	Majuro	7
20	Poznanski Lomodro	Yue Yuan Yu 037	LL	MIMRA	6-May	Majuro	12-May	Majuro	6
21	Jibas	Fu Yuan Yu 039	LL	MIMRA	8-May	Majuro	24-May	Majuro	16
22	James Elio	Koos 108	PS	FSM Arrangement	8-May	Majuro	31-May	Majuro	23
23	Makbi Bwisko	Fu Yuan Yu 032	LL	MIMRA	11-May	Majuro	24-May	Majuro	13
24	Joran Joran	Hu Yuan Yu 12	LL	MIMRA	19-May	Majuro	1-Jun	Majuro	13
25	Jacob Keju Richard	Yue Yuan 154	LL	MIMRA	21-May	Majuro	29-May	Majuro	8
26	Carland	Clear Water 02	LL	MIMRA	27-May	Majuro	11-Jun	Majuro	15
27	Makbi Bwisko	CFA 06	LL	MIMRA	3-Jun	Majuro	16-Jun	Majuro	13
28	Jacob Keju	Chi Tai 866	PS	MIMRA	8-Jun	Majuro	10-Jul	Wewak	32
29	Jerry Tuisue	Koos 107	PS	FSM Arrangement	14-Jun	Majuro	30-Jul	Majuro	46
30	James Elio Lomodro	Yue Yuan Yu 618	LL	MIMRA	15-Jun	Majuro	29-Jun	Majuro	14
31	Jibas	Yue Yuan Yu 617	LL	MIMRA	15-Jun	Majuro	30-Jun	Majuro	15
32	Aniba Jabkoj Dike	Fong Seong 767	PS	MIMRA	17-Jun	Majuro	12-Sep	Majuro	87
33	Poznanski Richard	Lone Wolf	PS	FFA/US Treaty	28-Jun	Pago	4-Sep	Pago	68
34	Carland	Eastern Marine	PS	FSM Arrangement	25-Jun	Majuro	16-Aug	Pohnpei	52
35	Makbi Bwisko	Mathawmarfach	PS	FSM Arrangement	27-Jun	Majuro	13-Aug	Pohnpei	47
36	Jerry Tuisue	Tuna Queen	PS	FSM Arrangement	4-Sep	Majuro	19-Sep	Majuro	15
37	Joran Joran	Yue Yuan Yu 198	LL	MIMRA	14-Sep	Majuro	19-Sep	Majuro	5
38	Joran Joran	Yue Yuan Yu 198	LL	MIMRA	23-Sep	Majuro	6-Oct	Majuro	13
39	James Elio Lomodro	Shen Lian Chen 701	LL	MIMRA	14-Sep	Majuro	26-Sep	Majuro	12
40	Jibas	Yue Yuan Yu 668	LL	MIMRA	16-Sep	Majuro	29-Sep	Majuro	13
41	Jacob Keju	Koos 108	PS	FSM Arrangement	21-Sep	Majuro	11-Oct	Majuro	20
42	Makbi Bwisko	Yue Yuan Yu 667	LL	MIMRA	24-Sep	Majuro	8-Oct	Majuro	14
43	Jerry Tuisue	Tuna Queen	PS	FSM Arrangement	25-Sep	Majuro	29-Oct	Majuro	34
44	Jacob Keju	Koos 108	PS	FSM Arrangement	13-Oct	Majuro	20-Oct	Majuro	7
45	Makbi Bwisko	Fu Yuan Yu 033	LL	MIMRA	30-Dec	Majuro	11-Jan	Majuro	12

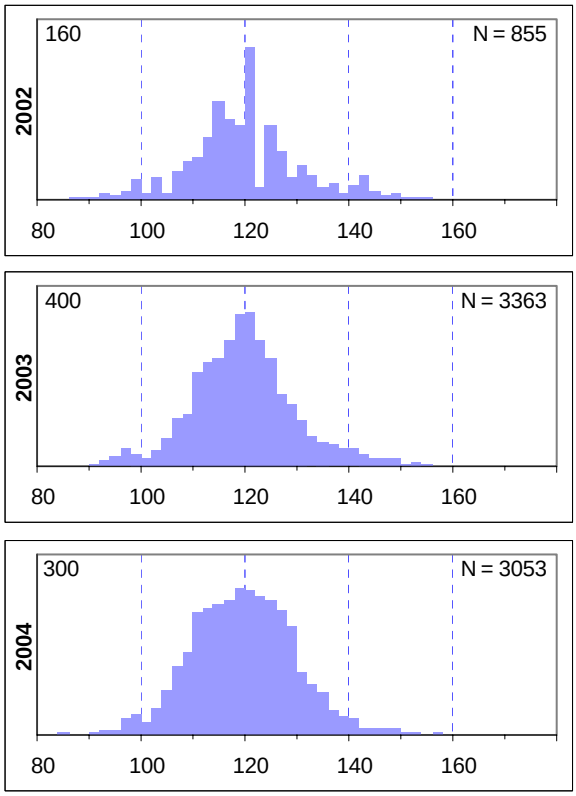


Figure 6. Annual size composition of longline-caught bigeye (left) and yellowfin (right) taken in Marshall Islands waters, 2002–2004 (Source : Port sampling data collected by MIMRA)

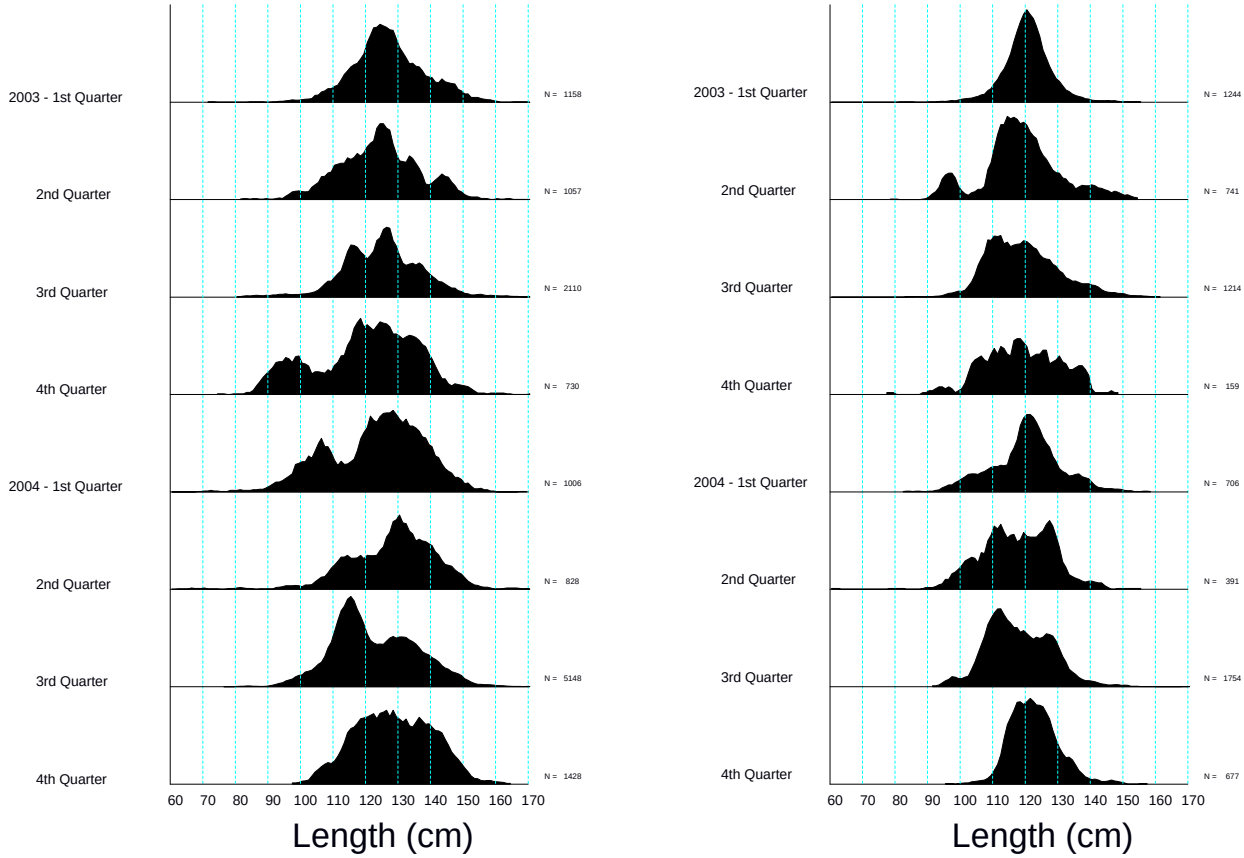


Figure 7. Quarterly size composition of longline-caught bigeye (left) and yellowfin (right) taken in Marshall Islands waters, 2003–2004 (Source : Port sampling and observer data collected by MIMRA)

8. Recent development(s)

The Marshall Islands Marine Resources Authority (MIMRA) is under going institutional changes as part of the proposed national tuna management plan (TMP). The plan itself has been formally adopted in mid 2005. This plan for management of tuna species in the RMI is prepared pursuant to Section 25 of the Marine Resources Act 1997. As a designated fishery under the Marine Resource Act, the Marshall Islands Marine Resource Authority MIMRA is fulfilling its responsibility to prepare a fisheries management plan with measures for effective conservation and optimum utilization of the tuna species.

While implementation of the specific provisions will be in 2005, and subsequently be reported next year, it noteworthy some of the key issues and highlights:

i. Status of stock
ii. National, regional, international instruments for management of highly migratory fish stock
iii. Social, economic and environmental issues
iv. Institutional review
v. Conservation and sustainable management measures
vi. National fisheries development issues
vii. Monitoring, control and surveillance issues
viii. Etc.

The TMP, as much as it's a development option for the RMI, it is also a challenge in terms of the objectives of which some of the issues represents, i.e., in pursuing infrastructure development to support the fishery sector, the size and availability of land can be a limiting factor. The tuna fishery provides the Marshall Islands with national income through licensing fees and trans-shipment, refueling and other activities are a major benefit to the country, employment opportunities, economic spin offs, value adding of products (processing), and income opportunity through industry growth.

The tuna industry can also open up opportunities for investment and partnerships for the local population. This could include opportunities for further development of small-scale tuna fishing activities for local fishermen, which is a major part of the current tuna management and development plan.

While the TMP is brief, it certainly captures the development and management aspects of the tuna fishery from the national perspective, and further, specific scope and implementation details will form part of next years report.