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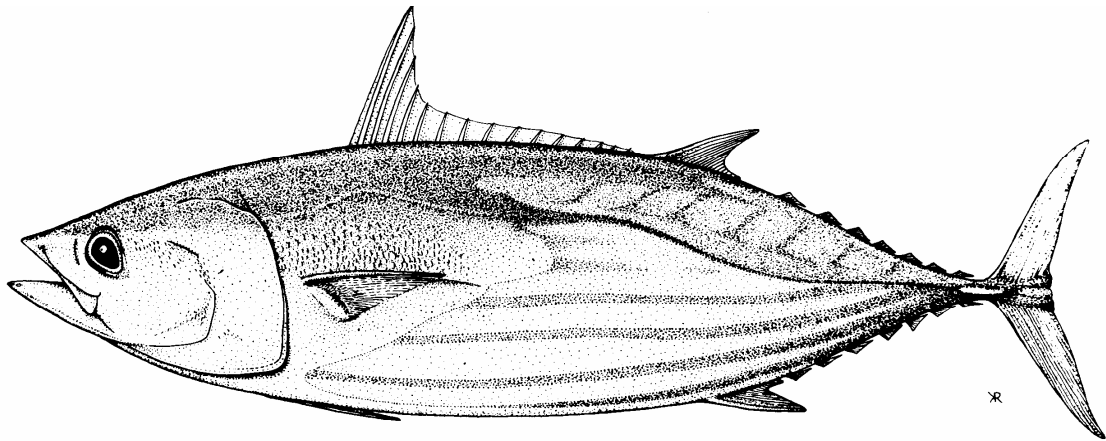
ANNUAL REPORT – PART 1  
INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

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**WCPFC-SC3-AR PART 1/WP-22**

**REPUBLIC OF PALAU**

# **Tuna fisheries in the waters of the Republic of Palau**



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**Fisheries Report – Palau**

## 1. Brief introduction

The Palau EEZ is relatively small (629,000 km<sup>2</sup>), bordering those of Indonesia, Philippines and FSM to the south, west and east, with high seas areas to the north and south-east (the Palau-FSM-PNG corridor). The tuna fishery primarily involves the activities of locally-based foreign longline fleets, Taiwanese and Japanese vessels (offshore longliners, purse seiners and pole-and-liners) licensed under access agreements. Title 27 of the Palau National Code is the primary fisheries legislation regulating harvest of tuna stocks and fishing vessels to fish in the fisheries jurisdiction of Republic of Palau. Subsection 123 mandates the Bureau of Oceanic Fishery Management to adopt fisheries regulations for the management, exploitation and conservation of all living resources in the extended and exclusive fishery zone of the Republic... negotiate and conclude foreign fishing agreements... issue foreign fishing permits... and perform such other duties and functions as may be necessary to carry out the purposes of 27 PNC. Subsequently, RPPL No. 7-13 mandates the ***Bureau of Marine Resources to assume the responsibilities and authority of the Bureau of Oceanic Fishery Management.*** The Bureau of Marine Resources has adjusted its organization chart and now creates the Oceanic Fisheries Management Section under its Fisheries Management. Republic of Palau Public Law No. 6-36 was approved on August 2003, to amend Chapter 1 of Title 27 to prohibit foreign fishing vessels from fishing within a 50 nautical mile radius to the east of the reef entrance to Malakal Harbor. Subsection 181 of RPPL 6-36 prohibit act to the use of any foreign fishing vessel to fish, as that term is defined in 27 PNC Chapter 12, for any shark, or any part of any such, or to remove the fins of or otherwise intentionally mutilate or injure any such shark. Bureau of Marine Resource, Oceanic Fisheries Management Section, is also responsible for research, fisheries statistics, and development of tuna fishing industries in Palau.

## 2. TUNA AND BILLFISH FISHERIES

### 2.1 Fleet Structure

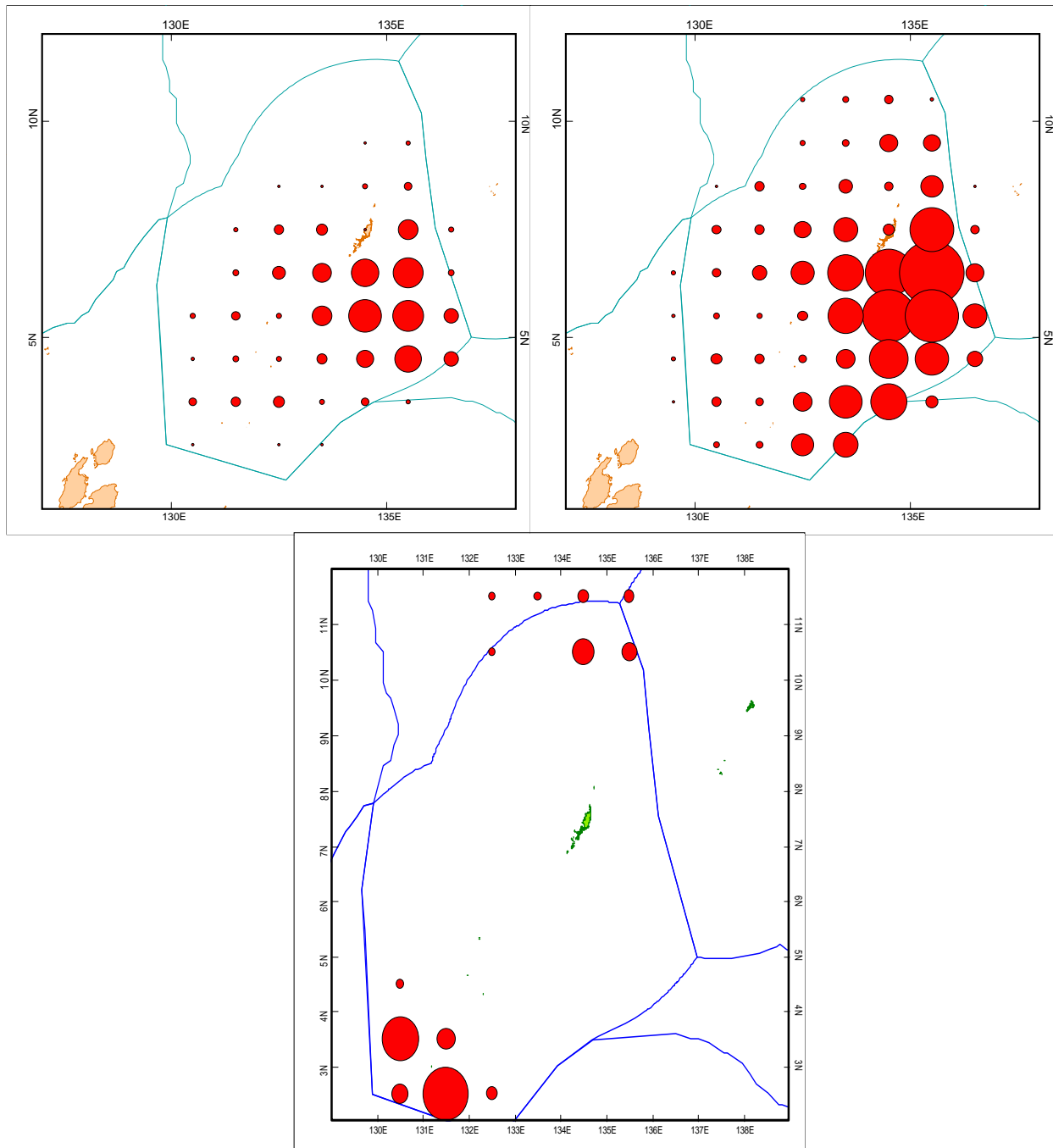
Table 1 shows the breakdown of domestic based foreign vessels licensed to fish in Palau waters over the last five years.

**Table 1. The number of vessels licensed to fish in Palau waters by fleet (2002–2006).**

YEAR	<i>LONGLINE</i>						<i>Purse Seine</i>	
	CN	SRV	IN	BLZ	JP	TW	TOTAL	JAPAN
2002	29	0	0	0	19	47	113	18
2003	6	0	0	0	14	70	121	31
2004	2	0	0	9	12	77	126	26
2005	2	2	0	6	12	107	156	27
2006	0	0	7	8	24	198	266	29

## 2.2 Longline Effort

Figure 1 shows the distribution of fishing effort for the Chinese, Taiwanese and the Japanese longline fleets during 2006. The Chinese fleet effort was concentrated in the south-east of the EEZ, usually within 120 miles from Koror. The Taiwanese fleet effort also was concentrated in the south-east of Koror though activity is more widespread throughout the zone. As for the Japanese, fleet effort was concentrated more to the north and south of Palau.



**Figure1. Distribution of Chinese (left), Taiwanese (right) and Japanese (middle) longline effort for 2006**

### 2.3 Longline Catch

The provision of logsheets is a requirement for all fleets fishing in the Palau Exclusive Economic Zone (EEZ). Logsheets are provided by the fishing companies on a regular basis. Port sampling officers monitor all landed catch from each licensed fishing vessels when off-loading catch. Logsheets coverage is expected to be high and this are crossed checked with unloading forms provided on a monthly basis by the fishing companies.

Table 1 shows the annual estimated catches for the Taiwanese offshore fleet for the period of 2002-2006. Catches have been increasing due to increasing number of vessels joining the fleet. Still yellowfin is the predominant species for this fleet; followed by big-eye, blue marline and swordfish. Though yellowfin is the predominant catch, bigeye interestingly has been increasing since year 2005. This is presumably related to changes in targeting by some of the fleet. Sharks are expected to be taken by these vessels but they are rarely recorded on the logsheets. Logsheets data received from the Taiwanese offshore longline fleet coverage is estimated to be high. Table 2 shows the annual estimated catch for the Chinese longline fleet. Table 3 shows Japanese fishing vessels which do fishing in Palau's EEZ and off-load its catch at their home port in Japan. Logsheets data are received from Japanese longline vessel operating out of Japan ports. Coverage of data provided is at 100% for the Palau EEZ, but is expected to be poor for the international waters bordering the Palau EEZ as this fleet is not obliged to provide high seas data under bilateral agreement.

Figure 2 and 3 shows the nominal CPUE for bigeye and yellowfin, respectively for fleets operating in the Palau EEZ. Figure 4 shows the species composition of the longline catch in the Palau EEZ suggesting that bigeye are more predominant in the catch closer to Koror, although this may be more related to the distribution of fleet effort. Figure 5 shows size composition of the longline catch in recent years. The size range of yellowfin in particular can vary from year to year.

**Table1: Estimates of the catch by species for the Taiwanese offshore longline fleet, 2002-2006 in Palau waters:** (Source: Best estimate of logsheet and unloading data)

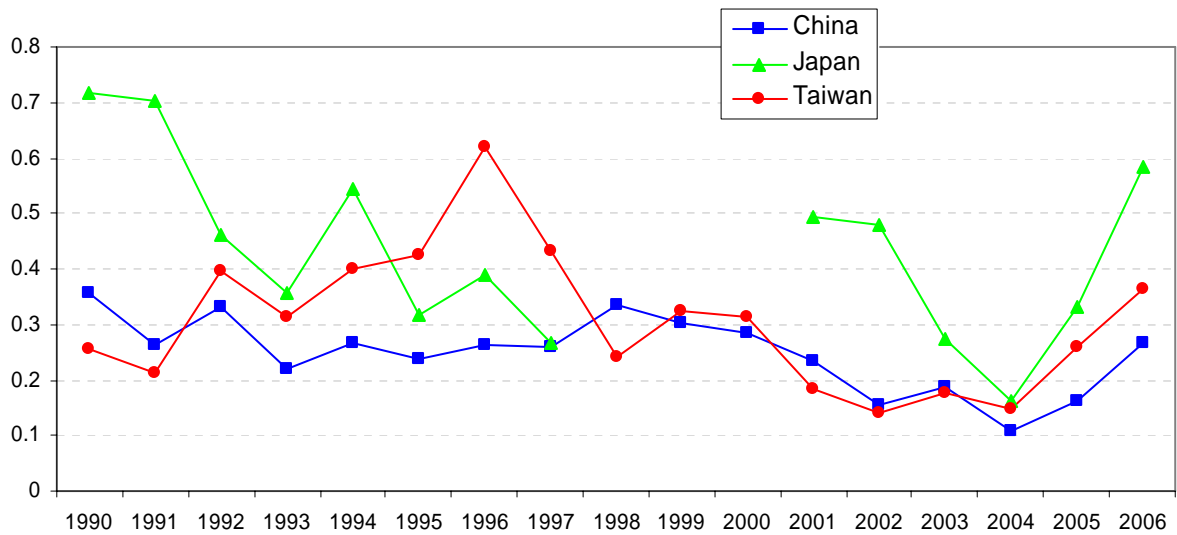
Year	Boats	Trips	Catch (metric tonnes)							Total	% Cov. (Logs)
			Bigeye	Yellowfin	Black Marlin	Blue Marlin	Striped Marlin	Sword-fish	Others		
2001	41	464	394	872	2	25	0	19	32	1,345	66%
2002	46	404	250	688	1	12	0	6	11	968	78%
2003	64	625	533	1,043	1	51	1	9	28	1,666	82%
2004	82	879	669	1,734	7	64	1	18	13	2,507	78%
2005	118	1,553	2,008	2,408	4	77	1	9	46	4,553	67%
2006	129	1,719	2,844	1,946	2	37	0	10	48	4,888	78%

**Table 2: Estimates of the catch by species for the Chinese offshore longline fleet, 2002–2006 in Palau waters.** (Source: Best estimate of logsheet and unloadings data)

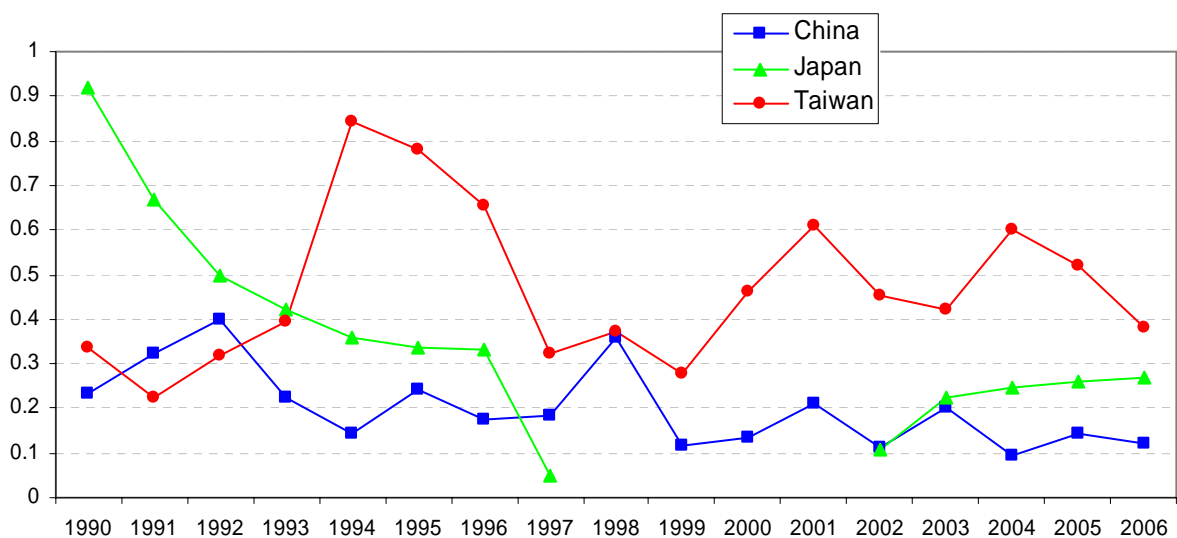
Year	Boats	Trips	Catch (metric tonnes)							Total	% Cov. (Logs)
			Bigeye	Yellowfin	Black Marlin	Blue Marlin	Striped Marlin	Sword-fish	Others		
2001	64	1,529	703	407	6	101	4	95	16	1,332	66%
2002	34	581	196	92	3	17	3	28	45	384	94%
2003	16	106	49	35	0	7	1	3	1	97	81%
2004	12	95	45	24	0	6	1	4	0	80	74%
2005	13	300	284	145	8	37	1	17	4	496	78%
2006	11	194	319	91	10	35	1	22	4	482	96%

**Table 3: Estimates of the catch by species for the Japanese domestic longline fleet, 2002–2006 in Palau waters. (Source : Logsheet data)**

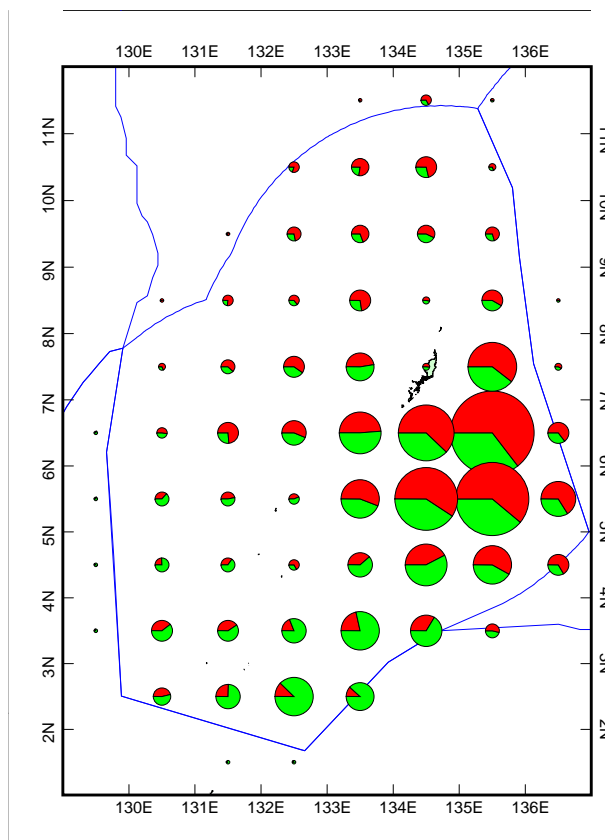
Year	Boats	Trips	Catch (metric tonnes)							Total	% Cov. (Logs)
			Bigeye	Yellowfin	Black Marlin	Blue Marlin	Striped Marlin	Sword-fish	Others		
2001	10	20	99	95	0	13	0	2	3	212	100%
2002	6	9	40	8	0	2	0	1	6	58	100%
2003	4	8	29	13	0	1	0	1	3	49	100%
2004	3	18	45	31	0	3	1	3	1	83	100%
2005	2	14	59	34	0	3	1	5	5	108	100%
2006	24	81	566	166	1	38	0	59	18	848	100%



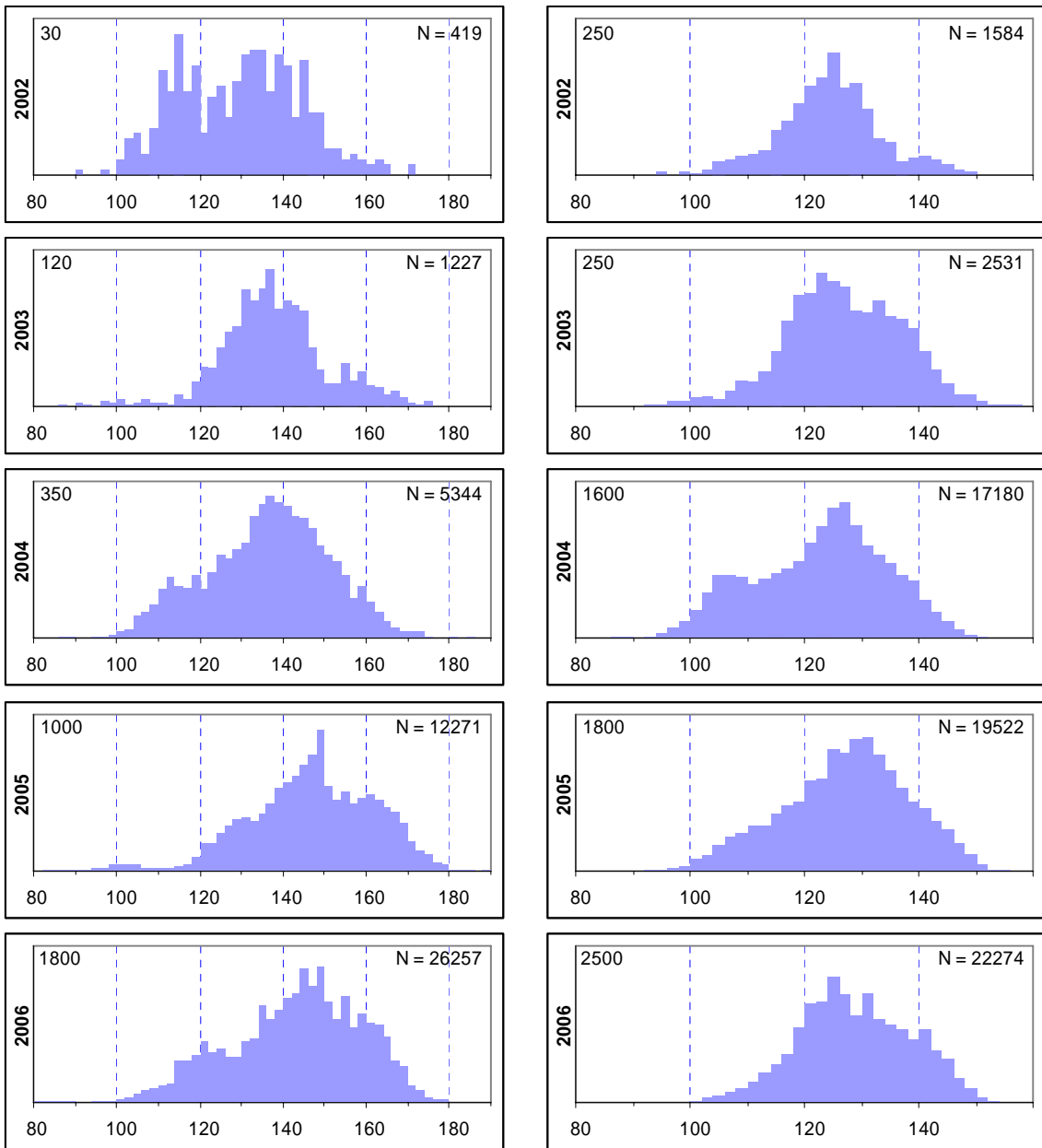
**Figure 2. Annual trends in bigeye nominal CPUE (number per 100 hooks) for longline fleets operating in the Palau EEZ, 1990–2006**



**Figure 3. Annual trends in yellowfin nominal CPUE (number per 100 hooks) for longline fleets operating in the Palau EEZ, 1990–2006**



**Figure 4. Distribution of longline catch (metric tonnes) by species in the Palau EEZ, 2002-2006. (Red – Bigeye; Green – Yellowfin)**



**Figure5. Annual Size composition of longline-caught bigeye (left) and yellowfin (right) taken in Palau waters, 2002-2006**



### 3. Final market destinations of catches

Tuna trans-shipping companies in Palau are closely link to international tuna market. All fresh chilled sashimi-grade tuna, once offloaded and packed, are air-freighted within 48 hours to sashimi markets in Japan (95%), U.S mainland and Chinese Taipei.

By-catch, including billfish, are stored in port facilities until being shipped by commercial carriers to canneries in the Philippines, Chinese Taipei and Singapore.

Table 4 and 5 show the exports by species for the Taiwanese and Chinese longline fleets. Comparison with logsheet-derived catches (Table 1) suggest that (i) there may be either some instances of under-reporting on logsheets, and/or (ii) the estimates of average weight used to determine catch for the logsheet data need review.

**Table 4: Export by species for the Taiwanese longline fleet, 2002-2006**

Year	Catch (in metric tonnes)														Total
	MAR	ALB	BET	BLM	BUM	DOL	LAG	MLS	OTH	PBF	SFA	SWO	WAH	YFT	
2002			231.49	1.21	8.23			0.06		1.23		4.85		634.06	881.13
2003		0.00	523.57	1.54	26.85		0.18	1.90	0.06	3.01		2.74		1064.95	1624.80
2004	0.07	0.09	678.25	1.36	42.59			0.64				6.50		1671.70	2401.20
2005		0.53	1630.29	2.44	26.39					10.16	0.23	2.19		1825.31	3497.53
2006		0.50	748.32	3.11	4.99			0.04	1.38	2.92		0.56		753.04	1514.85

**Table 5: Export by species for the Chinese longline fleet, 2002 – 2006**

Year	Catch (in metric tonnes)														Total
	MAR	ALB	BET	BLM	BUM	DOL	LAG	MLS	OTH	PBF	SFA	SWO	WAH	YFT	
2002		0.20	225.94	13.35	33.24					0.30		43.33		111.70	428.05
2003		0.02	50.20		13.74			0.79				1.61		34.59	100.95
2004			36.34		8.94							2.07		17.81	65.16
2005			280.77	0.02	48.42					2.06		18.96		145.09	495.31
2006		0.08	105.58		23.89	0.04			0.48		1.55	12.99	0.01	51.08	195.69

### 4. Onshore Development

There are a total of 7 fishing companies that have valid Access Agreements with the Republic of Palau to fish in Palau waters; 3 are locally-based foreign fishing companies that are currently operating, and 1 company in the process of building and investing in a designated port. The rest of the companies, which are local, have yet to begin their fishing operations.

### 5. Developments concerning tuna fisheries research and statistics, such as port sampling and observers programs.

Fisheries Port Samplers are dedicated personnel who are present at all time during offloading of tuna to collect fisheries data and information. They also monitor compliance of the fishing conditions under the access agreements. In addition to fisheries Port Samplers, Customs Officers (Bureau Tax & Revenue) are also present to ensure proper documentations of fisheries products, weights, taxes and destination during preparation before shipping.

SPC and FFA concluded a 3-week Regional Observers Training Course which was held in Palau last year, 2006. A total of twelve (12) observers were certified and are now doing active boarding.