

SCIENTIFIC COMMITTEE SECOND REGULAR SESSION

7-18 August 2006 Manila, Philippines

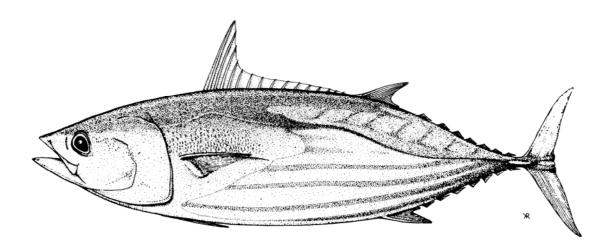
NATIONAL FISHERY REPORT

WCPFC-SC2-2006

Paper prepared by

PALAU

Tuna fisheries in the waters of the Republic of Palau



Kathy Sisior

Oceanic Fisheries Management Section Bureau of Marine Resource Palau

July 2006

Fisheries Report – Palau

1. Brief introduction

The Palau EEZ is relatively small (629,000 km²), 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 longline fleets (Chinese and Taiwanese vessels) 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 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 (2001–2005).

		LONGLINE								
YEAR	CN	KOR	SRV	BLZ	JP	TW	TOTAL	JAPAN		
2001	45	1	0	0	23	45	114	19		
2002	29	0	0	0	19	47	95	18		
2003	6	0	0	0	14	70	90	31		
2004	2	0	2	9	12	77	102	26		
2005	2			6	12	107	127	27		

Chinese fishing fleet was first licensed to fish in the exclusive economic zones of the Federated States of Micronesia and Marshall Islands.

Chinese fishing vessels are latest entrants into fisheries/jurisdiction of Palau after Japanese and Taiwanese fleets. Domestic tuna companies began licensing Chinese vessels in late 1980s when they moved their fleet from the east to Palau. However, Chinese vessels are decreasing in numbers due primarily to the inability of the fleet to compete with Taiwanese fleet and make profits.

Taiwanese fishing vessels began fishing in Palau waters when Van Camp Company closed its transshipping operation to the Samoan cannery. Between 1975 and 1985, three tans-shipping companies had been established in Koror to air-freight fresh sashimi tuna to Japan and Asia. These Companies licensed exclusively Taiwanese fishing vessels at the early operation of the companies. Taiwan vessel owners provided the bulk of the fleet to catch and offload tuna in Palau and air-freighted to the sashimi markets.

Japanese purse seine, long-line and pole-and-line vessels are licensed to fish in Palau waters under a separate bilateral access fisheries agreement. These licensed fishing vessels are authorized to transport and offload their catch in homeports, Japan.

As fishing ground moves westward to Palau, Japanese are now increasing their fleet in Palau waters.

During the period of VMS implementation, the number of Taiwanese fishing vessels dropped in the years of 2000-2001, then start picking up during year 2003 and has been increasing thru out the years.

2.2 Longline effort

Figure 1 shows the distribution of fishing effort for the Chinese and Taiwanese longline fleets during 2005. The Chinese fleet effort was concentrated in the south-east of the EEZ usually within 120 miles from Koror. The Taiwanese fleet also concentrated their effort to the south-east of Koror but activity was more widespread throughout the zone.

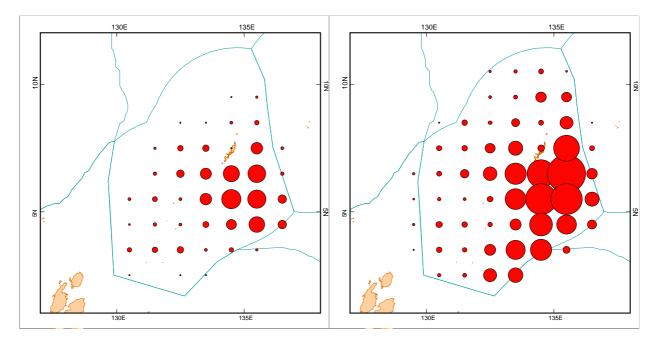


Figure 1. Distribution of Chinese (left),) and Taiwanese (right) longline effort for 2005

2.3 Longline catch

The provision of logsheets is a requirement for fleets fishing in the Palau EEZ. Logsheets are provided by the fishing companies (PMIC, PITI, KFC and JP companies) on a regular basis. Port sampling officers monitor the unloadings of the Chinese and Taiwanese fleets landing their catch in the only port in Palau (Koror). Logsheet coverage is expected to be high since port samplers monitor all unloadings and these are crosschecked with logsheets provided by the fishing companies.

Table 1 shows the annual estimated catches for the Taiwanese offshore fleet for the period 2001-2005. Catches in recent years have dropped and are mainly attributable to the move of many vessels into the FSM fishery. In the middle of year 2003 new vessels began fishing in Palau water while some return from the FSM in relation to the increase in catch. Still, yellowfin is the predominant species for this fleet (usually more than 50%), followed by big-eye (20%), blue marlin and swordfish. Sharks are expected to be taken by these vessels but they are rarely recorded on the logsheets.

Table 2 shows Chinese fishing vessels that tend to fish and catch more fish around full moon. So the Chinese fleet actively fish during the bright lunar period and become dormant or remain in anchorage when it is moon-less period. In addition most of the Chinese fleet moved to FSM early 2003. This tends to contribute to low catch average for the Chinese vessels.

Taiwanese fishing vessels, on the other hand, fish during most phases of the moon and with their historical experiences in the region their vessels catch more fish in less time on fishing grounds.

Figures 3 and 4 show the nominal CPUE for bigeye and yellowfin, respectively for fleets operating in the Palau EEZ. Figure 5 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 6 shows the size composition of the longline catch in recent years. The size range of yellowfin in particular can vary from year to year.

Table 1: Estimates of the catch by species for the Taiwanese domestic longline fleet, 2001–2005 in Palau waters. (Source: Best estimate of logsheet and unloadings data)

				Catch (metric tonnes)										
		_			Black	Blue	Striped	Sword-			% Cov.			
Year	Boats	Trips	Bigeye	Yellowfin	Marlin	Marlin	Marlin	fish	Others	Total	(Logs)			
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	119	1,289	1,666	1,997	3	64	1	8	38	3,778	81%			

Table 2: Estimates of the catch by species for the Chinese offshore longline fleet, 2001–2005 in Palau waters. (Source : Best estimate of logsheet and unloadings data)

			_		Catch (metric tonnes)									
			_			Black	Blue	Striped	Sword-			% Cov.		
	Year	Boats	Trips	Bigeye	Yellowfin	Marlin	Marlin	Marlin	fish	Others	Total	(Logs)		
•	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	298	282	144	8	37	1	17	4	492	78%		

Table 3: Estimates of the catch by species for the Japanese domestic longline fleet, 2001–2005 in Palau waters. (Source : Logsheet data)

		_	Catch (metric tonnes)							
		-			Black	Blue	Striped	Sword-		
Year	Boats	Trips	Bigeye	Yellowfin	Marlin	Marlin	Marlin	fish	Others	Total
2001	10	20	99	95	0	13	0	2	3	212
2002	6	9	40	8	0	2	0	1	6	58
2003	4	8	29	13	0	1	0	1	3	49
2004	3	18	45	31	0	3	1	3	1	83
2005	2	12	49	28	0	3	1	3	5	90

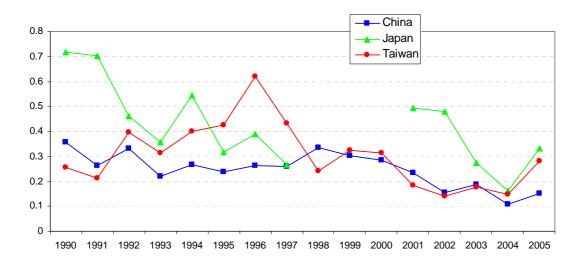


Figure 3. Annual trends in bigeye nominal CPUE (number per 100 hooks) for longline fleets operating in the Palau EEZ, 1990–2005

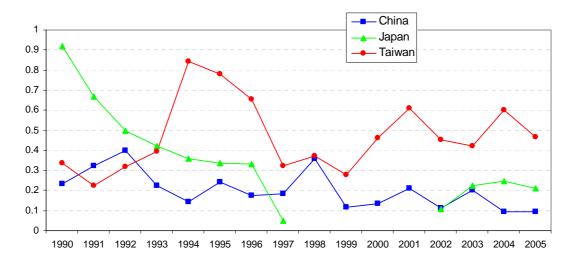


Figure 4. Annual trends in yellowfin nominal CPUE (number per 100 hooks) for longline fleets operating in the Palau EEZ, 1990–2005

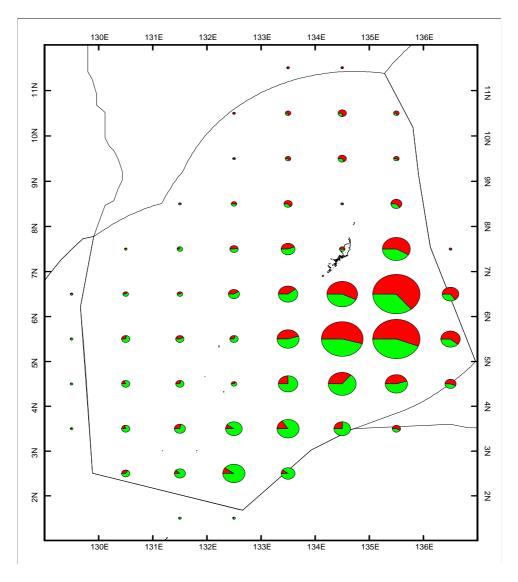


Figure 5. Distribution of longline catch (metric tonnes) by species in the Palau EEZ, 2001-2005. (Red – Bigeye; Green – Yellowfin)

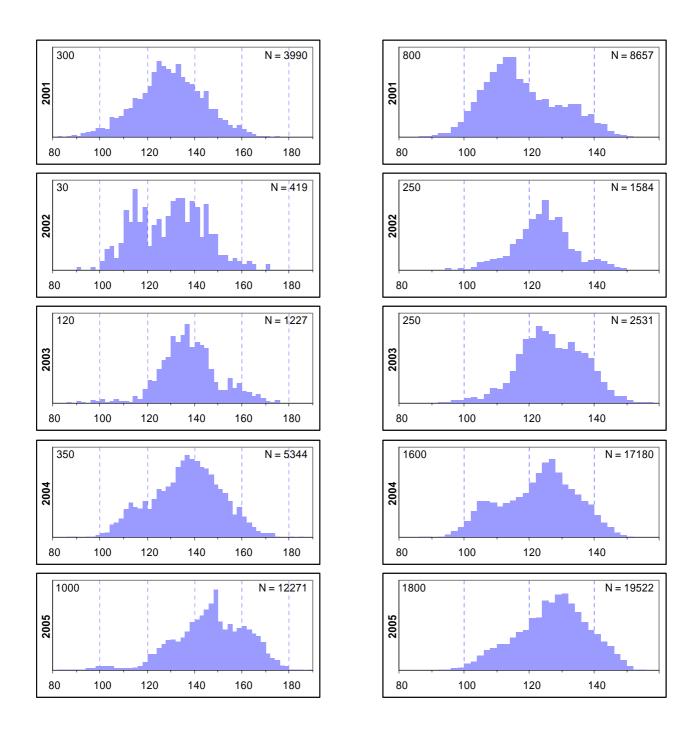


Figure 6. Annual size composition of longline-caught bigeye (left) and yellowfin (right) taken in Palau waters, 2001-2005

3. Final market destinations of catches

Tuna trans-shipping companies in Palau are closely link to international tuna business. 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 to canneries in the Philippines and Chinese Taipei.

Tables 4 and 5 show the exports by species for the Taiwanese and Chinese longline fleets. Comparison with logsheet-derived catches (Tables 1 and 2) 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 domestic long-line fleet, 2001-2005

	Catch (metric tones)										
				Black	Blue	Striped					
YEA	1R	BET	YFT	Marlin	Marlin	Marlin	Swordfish	Total			
200)1	73.56	152.27	0.428			1.062	227.32			
200)2	195.243	475.728		0.058		4.054	675.083			
200)3	523.57	1064.952	1.538		1.897	2.741	1594.698			
200)4	693.102	1679.037	1.364		0.636	6.705	2380.844			
200)5	1630.289	1825.313	2.435	21.647		2.187	3481.871			

Table 5: Export by species for the Chinese domestic long-line fleet, 2001-2005

Catch (metric tones)											
			Black	Blue	Striped						
YEAR	BET	YFT	Marlin	Marlin	Marlin	Swordfish	Total				
2001	177.698	127.449	37.261			42.369	384.777				
2002	170.53	86.384				32.477	289.391				
2003	50.204	34.587			0.794	1.614	87.199				
2004	21.486	10.474				1.868	33.828				
2005	280.765	145.085	0.02	41.639		18.963	486.472				

4. Onshore developments

There are three (3) locally-based fishing companies currently operating in Palau namely, Palau International Traders Inc., ("PITI"), Palau Marine Industries Corporation ("PMIC") and Kuniyoshi Fishing Company ("KFC"). Pursuant to 27 PNC and the Palau Constitution, these 3 fishing companies have negotiated and concluded a uniform fishing access agreement between them and the Repubic of Palau Government through its Ministry of Resources & Development. These existing access agreements will lapse on December 31, 2006. Besides the three (3) foreign domestically-based fishing companies, two (2) Palauan owned fishing companies now have obtained approval of their fishing agreements by the Olbiil Era Kelulau (Congress). In addition, a loining plant has just been recently utilized for export.

5. Developments concerning tuna fisheries research and statistics, such as port sampling and observer programmes

Fisheries Port Samplers are dedicated personnel who are present at all times during offloading of tuna at the three (3) fishing ports namely, PITI, PMIC, and KFC to collect fisheries data and information. They also monitor compliances to fisheries regulations.

SPC and FFA recently concluded a 3-week Regional Observers Training Course held in Palau in June 2006. A total of 15 (including 3 from FSM) received their certificates as qualified Observers to board longline and purse seine vessels in the region. The Palau Observers Program is delegated under the Ministry of Resource & Development/Bureau of Marine Resource and Ministry of Justice/Division of Marine Law Enforcement pursuant to access agreements between the Republic of Palau and the three (3) locally-based fishing companies.

Custom officers are present to ensure proper documentations of fisheries products, weights, taxes, and destination during preparation before shipping.