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

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PALAU

Annual Report to the Western and Central Fisheries Commission

PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS 2011, PALAU

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Scientific Data was provided to the	
commission in accordance with the decision	YES
relating to the provision of scientific data to	
the Commission by 30 April 2012	

1. Introductions

Title of the Palau National Code is the primary fisheries legislation regulating harvest of tuna stocks and fishing vessels to fish in the fisheries in the waters of the Republic of Palau. Sub-sections 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 27PNC. Republic of Palau Public Law No.6-36 amended 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. Subsection 181 of RPPL 6-36 prohibit act to the use of any licensed foreign fishing vessel to fish, as that term is defined in 27PNC 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. Palau is a shark sanctuary.

Bureau of Oceanic Fishery Management is also responsible for research, fisheries statistics, and development of its own domestic tuna fishery.

2. Fisheries Characteristics

Tuna fishing in the Palau Exclusive Economic Zone is dominated by the offshore based longline and purse seine fleet of Japan and the locally based foreign longline fleet of Chinese Taipei. Still, Chinese Taipei fleet has been dominant. Table 1 shows the break-down of active vessels in Palau's EEZ by flag, by gear and size category, 2007-2011.

Year	Flag	Gear	No. of Vessel	0-500	501-1000	1001-1500	1500+
	Japan	Longliner	41	41	0	0	0
2007	Japan	Purse seiner	33	3	0	29	1
	Taiwan	Longliner	143	143	0	0	0
	TOTAL		217	187	0	29	1
	Belize	Longliner	1	1	0	0	0
	Japan	Longliner	49	43	0	0	0
	Japan	Pole and liner	6	6	0	0	0
2008	Japan	Purse seiner	29	2	0	26	1
	Kingdom of Tonga	Longliner	3	3	0	0	0
	Kiribati	Longliner	2	2	0	0	0
	Chinese Taipei	Longliner	104	104	0	0	0
	TOTAL		194	161	0	26	1
	Japan	Longliner	41	41	0	0	0
	Japan	Pole and liner	2	2	0	0	0
2009	Japan	Purse seiner	25	1	0	23	1
	Kingdom of Tonga	Longliner	2	2	0	0	0
	Chinese Taipei	Longliner	71	71	0	0	0
	TOTAL		141	117	0	23	1
	Japan	Longliner	37	37	0	0	0
2010	Japan	Purse seiner	18	0	0	18	0
	Chinese Taipei	Longliner	59	59	0	0	0
	TOTAL		114	96	0	18	0
	Japan	Longliner	24	24	0	0	0
2011	Japan	Purse seiner	9	0	0	9	0
	Chinese Taipei	Longliner	55	55	0	0	0
	TOTAL		88	79	0	9	0

Table1. Number of foreign fishing vessels, by year, by flag, by gear and size category, active in the WCPFC Convention Area, for 2007 to 2011. Gross Registered Tonnes (GRT) is the unit for vessel size.

2.1 Longline Effort

Longline effort and catch are focused on the central-eastern area of Palau's EEZ. Still Chinese Taipei fleet seems to operate mainly in the central eastern area all year round while the Japanese fleet to the south.



Figure 2. Distribution of Chinese Taipei (left) and Japan (right)) longline catch by species for 2011

2.2 Longline Catch

The provision of logsheets are requirement for all foreign fishing vessels licensed to fish in Palau EEZ. Logsheets are provided by fishing industries on a monthly basis. The catches continue to decline each year ever since 2006 when Palau catch reached its record of 5,000metic tonnes. Table 2 shows the annual catch estimates, 2007-2011.

		Catch (metric tonnes)					
Flag	Year	ALB BET		YET	TOTAL		
	2007	61	1,107	1,203	2,371		
	2008	58	1,290	593	1,941		
Chinese Taipei	2009	4	367	240	611		
	2010	2	400	1,214	1,616		
	2011	5	765	724	1,494		
	2007	16	518	452	986		
	2008	48	1,406	268	1,722		
Japan	2009	5	497	117	619		
	2010	4	445	244	693		
	2011	4	693	242	939		
	2007	77	1,625	1,655	3,357		
	2008	106	2,696	861	3,663		
TOTAL	2009	9	864	357	1,230		
	2010	6	845	1,458	2,309		
	2011	9	1,458	966	2,433		

Table2. Estimates of the catch by species for locally based foreign longline fleet in Palau waters, 2007-2011.

2.3 Catch Rates



Figure 2 shows the annual trends for in nominal CPUE (number per hundred hooks) for longline.

fleets fishing in Palau waters

3. Status of data collection systems

Palau at the moment is implementing all latest versions of SPC's regional data forms. SPC Tufman Database System is fully utilized to streamline and collate all data, while ongoing work continues in linking TUFMAN Database with the PNA VDS which would allow accurate timely correlation of fishing effort in Palau's EEZ. Further enhancement in this work is by the FFA VMS that provides an MCS component to fisheries management process.

Palau observer has been deployed on the locally based foreign fleet since the 80's with more general duties, such as the collection of data on fishing gear and the size and species composition of catches. Because of the small observer program in place, Palau continues to hire and train thru regional training more personnel.

Table 3, shows observers report on species of special interest catch composition and Table 4, shows species composition for the longline fishery in Palau.

Longline - Speci	es of Special Interest Catch	Compos	ition a	Summary					
Date extracted	05.07.2012 03:33:56 PM	2009	9: 8	trips	2010:	17 tr	ips	2011:	3 trips
Country	'PW'								
Flags									
Target	Tuna Target								
Year	2009								
	Individuals encountered								
		20	09	201	0	20	11		
Category	Species	No.	Dead	No.	Dead	No.	Dead		
Marine Turtles	Green Turtle	3	2	0	0	0	0		
	Loggerhead Turtle	0	0	1	0	0	0		
	Hawksbill turtle	0	0	3	2	0	0		
	Leatherback turtle	0	0	0	0	0	0		
	Olive Ridley Turtle	14	2	27	8	0	0		
	Turtles (unidentifed)	0	0	1	0	0	0		
Marine Mammals	Dolphins and Porpoises	0	0	0	0	0	0		
	Toothed Whales	1	0	0	0	0	0		
	Non-toothed Whales	0	0	0	0	0	0		
	Marine Mammals (unident.)	0	0	0	0	0	0		
Whale Shark	Whale Shark	0	0	0	0	0	0		
Birds	Birds	0	0	2	0	0	0		
	Total Turtles	17	4	32	10	0	0		
	Total Marine Mammals	1	0	0	0	0	0		

Table3. Observer-reported species of special interest catch composition for the Longline fishery in Palau

Date extracted	05.07.2012 03:54:09 PM	2008: 13	trips 200	9: 8 trips	2010
Country	'PW'	2008. 15	crips 200	J. S CIIPS	201
Flags	FW				
riags	Thurse The second				
	Tuna Target				
		Species Composition			
		2008	2009	2010	
Category	Species	8	8	8	
Target Tuna	Albacore	0.0000%	0.1053%	0.0000%	
	Yellowfin	20.2644%	17.2494%	39.5305%	
	Bigeye	35.3942%	39.3288%	7.3628%	
Billfish	Blue marlin	11.2192%	9.3583%	13.9968%	
	Black marlin	3.5515%	1.2216%	0.4133%	
	Striped marlin	3.0880%	3.4049%	2.7289%	
	Swordfish	5.9964%	3.7911%	4.4724%	
	Other Billfish	1.2861%	0.8705%	6.0301%	
Sharks and Rays	Blue shark	1.7888%	4.3176%	4.1692%	
	Mako sharks	1.5766%	1.2356%	1.2911%	
	Oceanic whitetip shark	0.3199%	0.000%	0.2396%	
	Silky shark	7.8113%	9.6321%	10.5270%	
	Other sharks and rays	6.2314%	4.5352%	4.4089%	
Other finfish	Bullet/Frigate tunas	0.0000%	0.0000%	0.0000%	
other rimrish	Kawakawa	0.0065%	0.0000%	0.0000%	
	Rainbow Runner	0.0000%	0.0000%	0.0000%	
	Wahoo	0.0653%	0.4493%	0.1223%	
	Common dolphinfish	0.2154%	0.9407%	0.6822%	
	Triggerfish	0.0000%	0.0000%	0.0000%	
	Barracudas	0.2644%	0.5336%	0.4304%	
	Escolars	0.4537%	2.5133%	1.0808%	
	Lanctfishes	0.0098%	0.0140%	0.0098%	
	Ocean sunfish	0.0000%	0.0000%	0.0000%	
	Oilfish	0.0947%	0.0491%	0.0000%	
	Opah	0.0000%	0.0000%	0.3521%	
	Pomfrets	0.0392%	0.000%	0.0269%	
	Small baitfish	0.0000%	0.0000%	0.0000%	
	Other fish	0.3232%	0.4493%	2.1250%	
	Tuna	55.6586%	56.6835%	46.8933%	
		55.05000	50.00550	10102000	
	Billfish	25.1412%	18.6464%	27.6415%	
	Sharks and rays	17.7281%	19.7206%	20.6358%	
	Other finfish	1.4722%	4.9495%	4.8294%	
	Total non-target	44.3414%	43.3165%	53.1067%	
	Billfish (non-Swordfish)	19.1448%	14.8554%	23.1691%	

Table4. Observer-reported species composition for the Longline fishery in Palau



Port Sampling Program

Dedicated personnel of fisheries port samplers are present at all times during offloading at fisheries port to collect data and information. Table 5, shows number of fish sampled, 2000-2011.

	Fish Sampled						
YEAR	ALB	BET	YFT	ОТН	TOTAL		
2000	2	29,776	26,956	6,752	63,486		
2001	17	18,525	35,104	4,307	57 <i>,</i> 953		
2002	4	9,579	24,255	2,160	35 <i>,</i> 998		
2003	3	10,738	34,786	1,018	46,545		
2004	55	12,003	50,577	948	63 <i>,</i> 583		
2005	31	24,126	44,603	1,208	69,968		
2006	24	44,600	50 <i>,</i> 653	1,723	97,000		
2007	10	26,428	51,824	464	78,726		
2008	24	30,710	26,701	299	57,734		
2009	47	16,982	29,425	745	47,199		
2010	5	7,990	35,846	67	43,908		
2011	1	13,929	23,590	30	37,550		

Table5. Port sampling summary – number of fish sampled by year

4. Future Developments

In addition to the Fishing Agreements between Palau and the Japan Fishing Association, Locally Based Foreign Fleet of Chinese Taipei, US Multilateral Fisheries Treaties, and FSM Arrangement Palau now has an agreement with a Palau wholly owned fishing entity though at the moment does not have active fishing vessel.

Revenues derived from off-shore fishery, is the second generating for Palau. Because tourism industry has risen to dominate most industries in Palau, there has been a downturn in developments for new fishing industry. This trend may remain as long as Palau enjoy infusion of tourism related investments and benefits.