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TWELFTH REGULAR SESSION**

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

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**WCPFC-SC12-AR/CCM-18**

**PALAU**

# Annual Report to the Western and Central Fisheries Commission

## PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS 2015, PALAU

Bureau of Oceanic Fishery Management  
Ministry of Natural Resources, Environment and Tourism

August 2016

Scientific Data was provided to the commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2016	YES
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## **Abstract**

**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 in the waters of the Republic of Palau. Bureau of Oceanic Fishery Management is also responsible for research, fisheries statistics, and development of its own domestic tuna fishery. Palau is a shark sanctuary. 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. Tuna fishing in the Palau Exclusive Economic Zone is dominated by the locally based foreign longline fleet of Chinese Taipei and the offshore based longline and purse seine fleet of Japan.**

**Total provisional longline catch in 2015 in Palau waters was 1,215mt. A total of seventy (79) vessels were active in the waters of Palau in 2015. Fifty-two (52) longline vessels and twenty-seven (27) were purse seiners.**

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

**Palau observers have been deployed on the locally based foreign fleet since the 1980's to conduct general observer duties, such as the collection of data on fishing gear and the size and species composition of catches. Because of a relatively small observer program in Palau, personnel training through regional programs are ongoing. At the moment Palau has one (1) permanent observer and two (2) seasonal observers. Dedicated fisheries port samplers are present at all times during offloading of longline vessels at respected port to collect data and information.**

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

**In 2012 Palau passed into law an Open Ship Registry. This Open Ship Registry enable Palau to develop its' own domestic tuna fishery.**

**Revenues derived from off-shore fishing, still is the second highest income generating mechanism for Palau besides tourism.**

## 1. Introductions

Title 27 of the Palau National Code is the primary fisheries legislation regulating harvest of highly migratory fish stocks, such as the valuable tuna stocks, and fishing vessels to fish 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 Harbour. 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. This law is a basis for Palau's declaration of 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 locally based foreign longline fleet from Chinese Taipei and the offshore based longline, pole & line and purse seine fleet from Japan. Still, Chinese Taipei fleet has been and is still dominant. Table 1 shows the break-down of active vessels in Palau's EEZ by flag, by gear and by size category, 2012-2015.

**Table 1.** Number of foreign fishing vessels, by year, by flag, by gear and size category, active in the WCPFC Convention Area, for 2012 to 2015. Gross Registered Tonnes (GRT) is the unit for vessel size.

Year	Flag	Gear	No. of Vessels	0-500	501-1000	1001-1500	1500+
2012	Belize	Longliner	2	2	0	0	0
	Japan	Longliner	25	25	0	0	0
	Japan	Pole and line	1	1	0	0	0
	Japan	Purse Seiner	36	1	0	31	4
	Taiwan	Longliner	50	50	0	0	0
2013	Belize	Longliner	1	1	0	0	0
	Japan	Longliner	28	28	0	0	0
	Japan	Purse Seiner	5	5	0	0	0
	Taiwan	Longliner	54	54	0	0	0
2014	Belize	Longliner	1	1	0	0	0
	Japan	Longliner	28	28	0	0	0
	Japan	Purse Seiner	21	21	0	0	0
	Taiwan	Longliner	41	41	0	0	0
	Vanuatu	Longliner	1	1	0	0	0
2015	Japan	Longliner	19	19	0	0	0
	Japan	Purse Seiner	27	1	0	26	0
	Taiwan	Longliner	31	31	0	0	0
	Vanuatu	Longliner	2	2	0	0	0

## 2.1 Longline & Purse Seine Effort

Longline effort and catch are focused on the central-eastern area of Palau's EEZ. Chinese Taipei fleet seems to operate mainly in the central eastern area all year round, catching more bigeye tuna in the north-east and more yellowfin tuna in the south-east of the Palau EEZ.

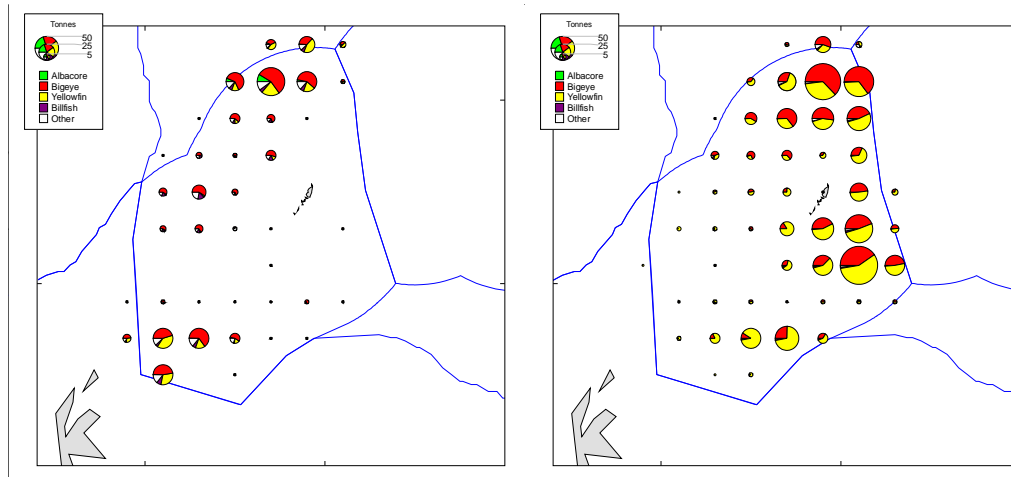


Figure1. Distribution of catch by species for Japan (left) and Chinese Taipei (right) longline fleet, 2015

Purse Seine fishing in the Palau EEZ was minimal during 2015 and is mainly for the extreme south of the EEZ (Figure2). The area of highest purse-seine effort does not generally overlap the areas of highest longline effort (east of Koror, Figure1); suggesting the spatial interaction between the longline and purse-seine fleets is relatively low. Japan has been the dominant purse-seine fleet operating in the Palau EEZ, with the fleet of the United States of America and vessels operating under the FSM Arrangement active in some years.

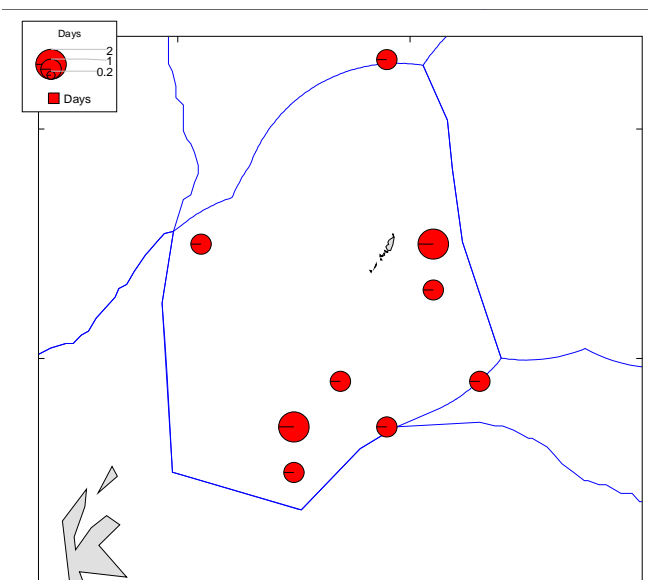


Figure2. Distribution of purse seine effort by days in the Palau EEZ, Japan\_2015

## 2.2 Longline Catch

The provisions of logsheets are requirements for all foreign fishing vessels licensed to fish in Palau's EEZ pursuant to the Access Agreements negotiated between the Government and the Fishing Companies. Logsheets and

other reporting requirements are submitted to the Bureau of Oceanic Fishery Management by the fishing companies on a monthly basis. These reports once collected are then manually entered into the Bureaus' database to be analyzed.

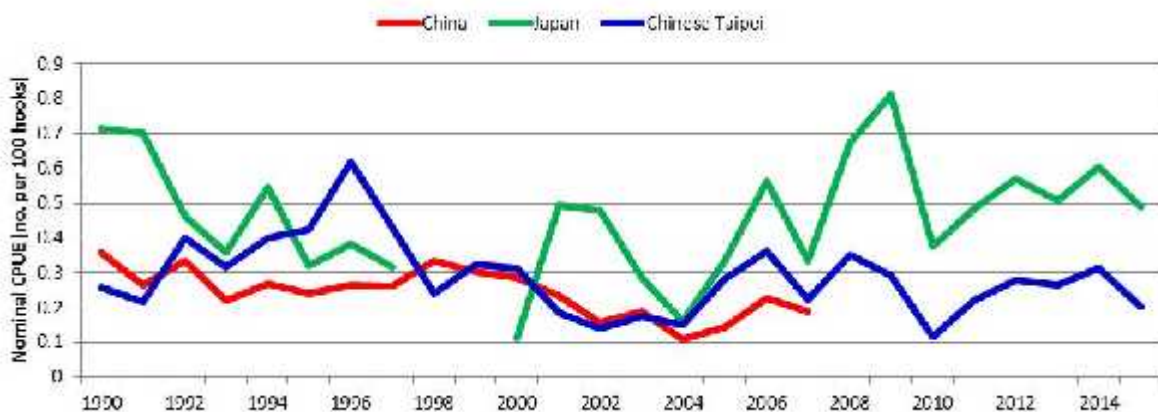
The catch for the last five years has been stable ever since its peak record of 5,000 metric tonnes in 2006. Table 2 shows the annual catch estimates, 2011-2015.

**Table2. Estimates of the catch by species for the locally based foreign longline fleet of Belize, Chinese Taipei and the off-shore based fleet (Japan) in Palau waters, 2011-2015.**

FLAG	Year	Catch (metric tons)			
		ALBACORE	BIGEYE	YELLOWFIN	Total
BELIZE	2011				
	2012	0	6	1	7
	2013	0	217	20	237
	2014	14	217	21	252
	2015				
JAPAN	2011	4	693	237	934
	2012	11	890	133	1,034
	2013	73	796	152	1,022
	2014	1	497	153	651
	2015	11	212	84	307
CHINESE TAIPEI	2011	3	1,061	903	1,966
	2012	1	1,239	883	2,124
	2013	0	1,232	614	1,846
	2014	7	1,031	502	1,540
	2015	0	414	496	910
TOTAL	2011	7	1,754	1,140	2,900
	2012	12	2,136	1,016	3,165
	2013	73	2,245	786	3,104
	2014	22	1,745	675	2,442
	2015	11	626	580	1,217

### 2.3 Catch Rates

The CPUE for the Japan fleet has been gradually increasing after dropping in 2004 while Chinese Taipei fleet has been stable ever since its' high in the 1990.



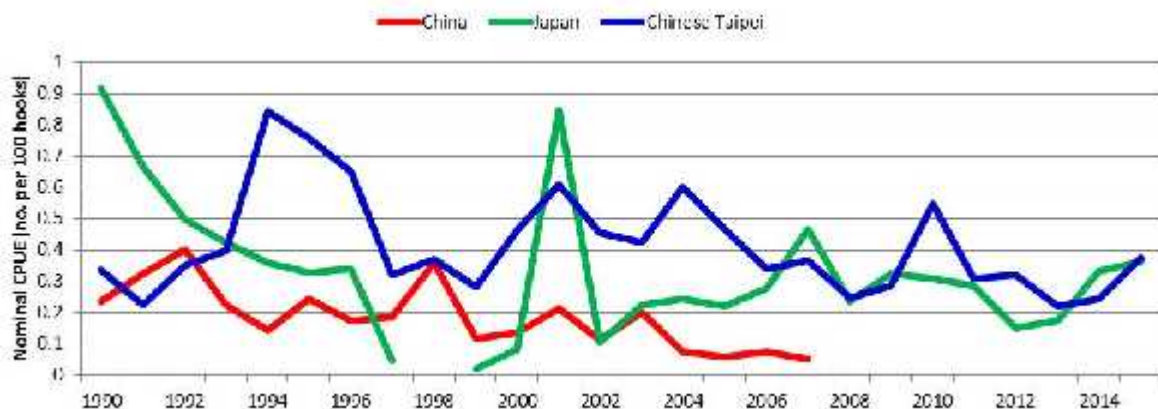


Figure3. Annual trends in nominal CPUE (number per hundred 100 hooks) for longline fleets operating in the Palau EEZ, 1990-2015 (Bigeye tuna CPUE – TOP; Yellowfin tuna CPUE – BOTTOM)

### 3. Conservation and Management Measures Reporting

Table5. Report on conservation and management measures, 2015

CMM Reference	Description	Response
CMM 05-03	North Pacific Albacore	Not Applicable; No National Fleet
CMM-06-04	SW Striped Marlin	Not Applicable; No National Fleet
CMM-07-04	Seabirds interaction by National Fleet	Not Applicable; No National Fleet
CMM 09-03	SW Sword Fish	Not Applicable; No National Fleet
CMM-09-06	Transshipment	Not Applicable; No National Fleet
CMM 10-05	South Pacific Albacore	Not Applicable; No National Fleet
CMM 10-07	Sharks	Not Applicable; No National Fleet
CMM 11-03	Cetaceans	Not Applicable; No National Fleet
CMM 11-04	Oceanic White-Tip Shark	Not Applicable; No National Fleet
CMM-12-04	Whale Shark	Not Applicable; No National Fleet
CMM-13-08	Silky Sharks	Not Applicable; No National Fleet
Observer Coverage (WCPFC 11 decision-para 484 (b))	Longline Observer Coverage_2015	Not Applicable; No National Fleet

### 4. Status of data collection systems

Palau has implemented all latest versions of SPC's regional data forms. The new Tufman 2 Database System is now fully utilized to streamline and collate all data, while ongoing work continues in linking TUFMAN, Tuna Fisheries Database Management System, 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. At the moment Palau has one (1) permanent observer and one (1) seasonal observers.

#### 4.1 Longline observed species of special interest for the longline fishery in Palau EEZ, 2009 – 2015.

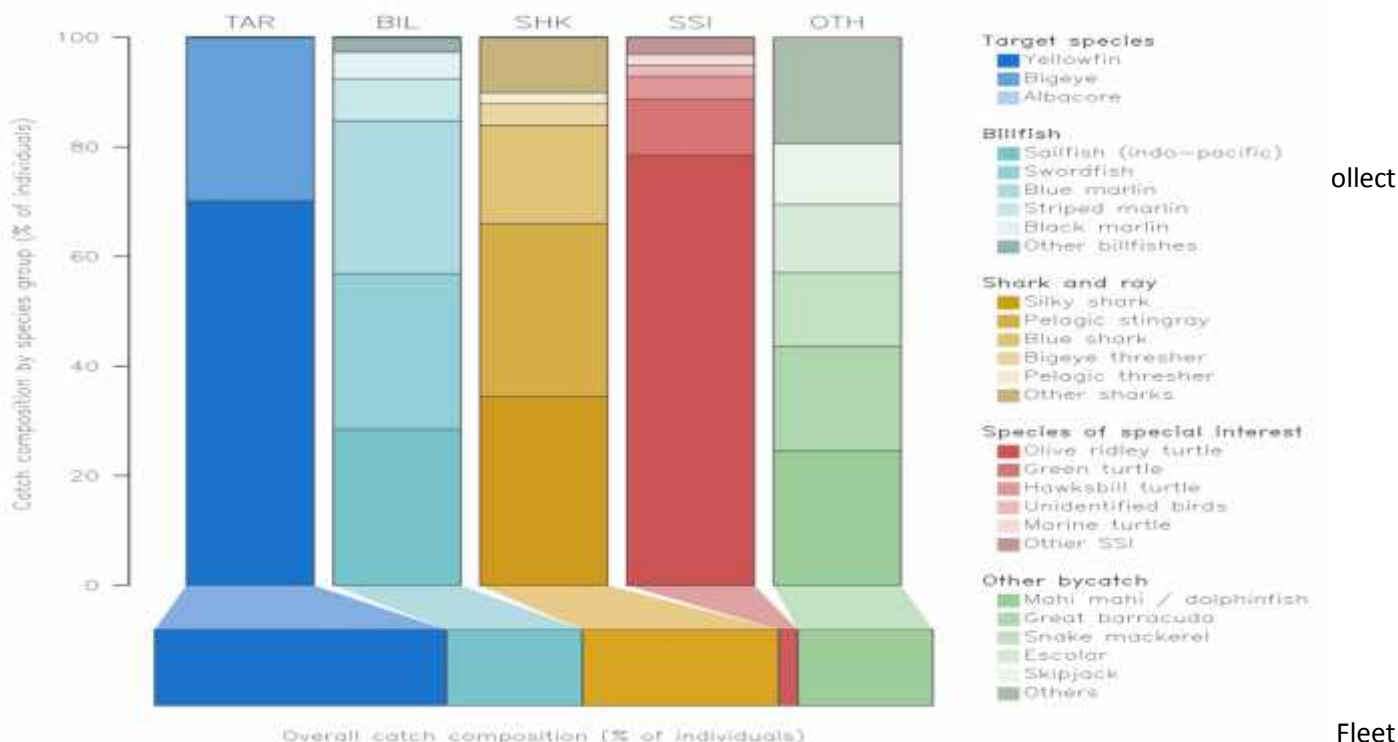
Table 4. Observer-reported species of special interest catch composition for the Longline fishery in Palau

		2009: 8 trips		2010: 17 trips		2011: 3 trips		2012: trips		2013: 1 trip	
		Individuals encountered									
		2009		2010		2011		2012		2013	
Category	Species	No.	Dead	No.	Dead	No.	Dead	No.	Dead	No.	Dead
Marine Turtles	Green Turtle	3	2	0	0	0	0	0	0	0	0
	Loggerhead Turtle	0	0	1	0	0	0	0	0	0	0
	Hawksbill Turtle	0	0	3	2	0	0	0	0	0	0
	Leatherback Turtle	0	0	0	0	0	0	0	0	0	0
	Olive Ridley Turtle	14	2	27	8	0	0	0	0	2	1
	Turtles (unidentified)	0	0	1	0	0	0	0	0	0	0
Marine Mammals	Dolphins and Porpoises	0	0	0	0	0	0	0	0	0	0
	Toothed Whales	1	0	0	0	0	0	0	0	0	0
	Non-toothed Whales	0	0	0	0	0	0	0	0	0	0
	Marine Mammals (unident.)	0	0	0	0	0	0	0	0	0	0
Whale Shark	Whale Shark	0	0	0	0	0	0	0	0	0	0
Birds	Birds	0	0	2	0	0	0	0	0	0	0
<b>Total Turtles</b>		17	4	32	10	0	0	0	0	2	1
<b>Total Marine Mammals</b>		1	0	2	0	0	0	0	0	0	0

There were no species of special interest reported by observers during 2014 and 2015 activities, so these years have been omitted from the Table 4.

#### 4.2 Longline observed catch composition by species group for the longline fishery in Palau EEZ, 2000-2015

Overall composition (in percentage of number of individuals) by species group of observed catch recorded by observers for longliners operating in Palau EEZ for the years 2000 to 2015 (lower horizontal bar) and the five dominant species in each species group as a proportion of the number of individuals (upper vertical bars). Non – dominant species are grouped in the “Other” category for each species group.



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.



Toward the end of 2012 Palau passed into law an Open Ship Registry. With these and Palau's aspiration to domesticate its own fishery, Palau is now in the process of obtaining its own purse seine vessel.

Revenues derived from off-shore fishery, is the second generating revenue for Palau.