

NORTHERN COMMITTEE THIRTEENTH REGULAR SESSION

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Report on CMM 2016-04 (Pacific bluefin tuna)

WCPFC-NC13-2017/DP-05

JAPAN



FISHERIES AGENCY

MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, GOVERNMENT OF JAPAN 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo 100-8907, Japan

July 31, 2017

Feleti P. Teo
Executive Director
Western and Central Pacific Fisheries Commission
P.O. Box 2356, Kolonia,

Pohnpei, Federated States of Micronesia, 96941

Dear Mr. Teo,

In accordance with paragraph 12 of the conservation and management measure for Pacific bluefin tuna (CMM2016-04), Japan submits a report explaining measures and actions it has introduced and been implementing for Pacific bluefin tuna (PBF).

Sincerely yours,

Shingo OTA

Japanese Commissioner to WCPFC

I. Overview of Japanese PBF Fisheries

Japan caught 12,897t of PBF on an annual average basis between 2002 and 2004, which is the reference year of CMM 2016-04. Almost all PBF catches were made in the areas under the Japanese jurisdiction and primarily within the territorial waters and internal waters. Also, most of the fisheries activities targeting PBF are seasonal and those fishing vessels target other species outside the PBF fishing season.

The annual catches of PBF by major fisheries on average in 2002-2004 were as follows; purse seine: 7,644t, troll: 2,371t, set net: 945t, longline: 1,317t, and other fisheries: 622t.

The characteristics of these fisheries are as follows;

- (1) **Purse seine** is managed under the licensing system by the Minister for Agriculture, Forestry and Fisheries. The number of vessels has been decreasing year by year. The main target species of purse seine are jack mackerel and mackerel, and PBF is caught only during its migration season in the following three fishing grounds:
 - (i) Western Japan ground: 1 year-old fish are caught by 18 vessels.
 - (ii) Pacific ground: mainly adult fish are caught by 18 vessels.
 - (iii) Sea of Japan ground: mainly adult fish are caught by 9 vessels.
- (2) **Troll** is managed under the licensing system by Wide Sea-area Fisheries Adjustment Commissions. It is conducted by small artisanal vessels (smaller than 5 GRT) with one or two fishermen on board. This fishery is traditionally conducted along Japanese coast lines, frequently in isolated islands and remote peninsulas. Most of the fishing grounds are within the territorial waters. The fishing season is a few months and those vessels are engaged in other fisheries such as squid jigging or bottom longline when PBF does not migrate.
- (3) **Set net** (trap) is managed through the licensing system by the governors of prefectures. Since set net is a passive fishing method waiting for any fish to swim into the net, the amount of catch depends on fish migration and it is not easy for fishermen to control the catch. The catch of set nets fluctuates substantially year by year but has not increased in the long run. The number of set net licensed is approximately 1,800.

In January 2011, the Ministry of Agriculture, Forestry and Fisheries issued an administrative guidance that requested relevant prefectural governments with the authority to manage this fishery not to increase the number of licenses of set nets whose main catch include PBF.

(4) Longline is managed under the licensing system by the Minister for Agriculture, Forestry and

Fisheries. The main target species of longline are bigeye, yellowfin, and albacore. Longline catches only adult PBF. PBF catches by about 536 vessels are seasonal and require a different configuration of the fishing gear. The catch has decreased in recent years.

(5) Most of **other fisheries** are managed through the ministerial licensing systems, and their catch fluctuates but has not increased in the long run.

II. Measures taken by Japan for PBF Management

As stated above, most of the Japanese PBF catches are made within the territorial or internal waters of Japan, where WCPFC CMMs are not legally applicable. However, the government of Japan has a policy of implementing a PBF conservation program applicable to the entire PBF fishing activities, based upon the WCPFC decisions and ISC advice.

1. Regulation (Paragraph 3 and 4 of CMM 2016-04)

(1) Effort Limitation in terms of fishing vessel

a. Artisanal fisheries

Registration system (ended in March 31, 2011)

For artisanal fishery – mostly troll fishery – operating in the Sea of Japan and Eastern China Sea, a registration scheme was introduced as of April 1, 2011, under which all small scale fishing vessels fishing for PBF were required to register. Such registration was accompanied by mandatory reporting of their catch. This registration scheme was introduced to small scale fishing vessels operating in the Pacific side in April 1, 2012.

Licensing system (commencing on April 1, 2014)

While the registration system provided useful information on artisanal fisheries for PBF, the system itself could not control the fishing effort of those fisheries. Therefore, from April 2014, the licensing system has been introduced to regulate the effort. Before commencement of fishing, all the vessels fishing for PBF are now obliged to obtain a license issued by the Wide Sea-area Fisheries Adjustment Commission which is responsible for rational use of fishing grounds. The Wide Sea-area Fisheries Adjustment Commission can regulate the fishing effort under the supervision of the national government. This revision also corresponds to WCPFC 10's agreement on elimination of the exemption for those fisheries on the fishing effort control. In 2016, 24,044 vessels were licensed with a reduction of 42 from the previous year.

b. Other fisheries

As stated above, fishing efforts of purse seine fisheries, longline fisheries and most of other fisheries are managed to be below the target level through the licensing system.

(2) Catch limit for small fish

In accordance with 50% small fish (fish less than 30kg) catch reduction commencing in 2015, Japan has been managing its annual small fish catch so as not to exceed 4,007t without exemption since 2015. Among 4,007t, 2,000t was allocated to purse seine fisheries and remaining 2,007t was to coastal fisheries, mainly artisanal fisheries. Those catch limits are managed based on the concept shown in attachment A.

Despite every effort of the Fisheries Agency, local governments and fishermen, the total catch of small fish was 4,341t, exceeding the catch limit of 4,007 t in 2016. The overage, 334t, will be deducted from the catch limit in 2017.

(3) Causes for the overage and actions taken

The total catch of small fish exceeded the catch limit in 2016, even though Japan took a variety of management efforts to comply with the catch limit as explained in the attachment A. The main reason for this overage is drastic improvement of fish availability in the fishing grounds in the second management period (July 2016 – June 2017 for coastal fisheries) due to the 2016 recruitment which is much higher than those of 2014 and 2015. As a result fishers who usually did not catch PBF and fishers targeting other fish species harvested a significant amount of PBF. Also, the catch of small fish by coastal fisheries targeting PBF in the second management period was accumulating so fast that the management system in place could not properly address such changes. The problem was more serious for set nets since more PBF came into the nets and the catch increased despite efforts of fishermen to reduce the catch such as reducing the number of net retrievals and even closing the entrance of set nets, which sacrificed other species for conservation of PBF.

The sudden increase of fish availability also triggered unauthorized and unreported PBF catches by coastal fishermen in the 2016 fishing season. The total amount of the catch in such cases is 132.1t (13.6t of unauthorized catches and 118.5t of unreported catches). Almost all of the catch were small fish. The causes for unauthorized catches are: lack of understanding on licensing system and fishing before a license authorized. The causes for unreported catches are: landings at ports usually not used; direct sales by fishermen not through fisheries cooperative; bycatch not reported; misunderstanding of reporting deadline; and reporting errors.

The Japan Fisheries Agency (JFA) continues to make every possible step to prevent such incidents and control the catch in a timely manner. First, PBF will be managed under the Total Allowable Catch (TAC) systems. Currently, although the total catch limit of Japan is internationally binding, the domestic catches are controlled by non-binding measures. This scheme worked well in the first management period and JFA was planning to gradually tighten the control measures from non-binding to binding nature. Considering what happened in the second management period, FAJ has decided to introduce the TAC system which is binding with penalties from 2018. In addition, several measures have been established including: more accurate and faster reporting systems; better monitoring of

landings; better coordination between JFA and local governments about management plan in each region; better communication with buyers and wholesalers; education of fishermen; and more reserve to respond to contingencies.

(4) Catch limit for large fish

In accordance with paragraph 4 of the CMM2016-04, Japan ordered its fishermen not to increase catches of large fish – fish 30kg or larger – from 4,882t. The total catch of large fish was 4,368 t against the limit of 4,882 t.

b. Aquaculture

A registration system and mandatory reporting

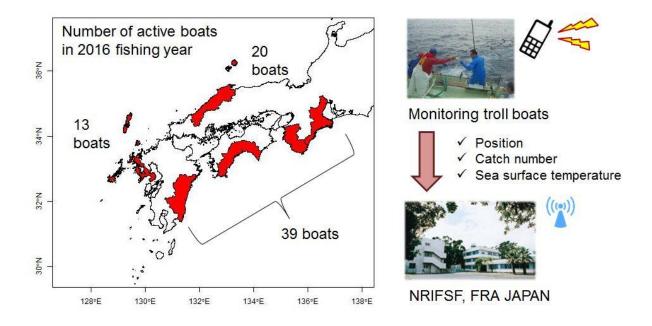
The fries used for PBF farming in Japan are mainly caught by the troll fishery and purse seine fishery. Because of the stricter management of Atlantic bluefin tuna at ICCAT, there was a concern that PBF farming in Japan might increase further. As a first step towards better management of PBF farming, starting in April 2011, all PBF aquaculture sites are required to register and report their farming activities, including information on caging and harvest. As of December 2016, 175 aquaculture sites were on the registration.

Administrative instruction on PBF aquaculture

As stated above, wild seeds for aquaculture are mainly caught by troll and purse seine. To prevent an increase in fry catches, the Minister of Agriculture, Forestry and Fisheries instructed prefectural governments in October 2012 not to increase the capacity of PBF farms which use wild seeds.

2. Monitoring of recruitment of juveniles (Paragraph 8 of CMM 2016-04)

In order to monitor recruitment abundance of 0 year-old fish in a timely manner, a monitoring survey using troll fishing boats has been conducted since 2011 by the National Research Institute of Far Seas Fisheries (NRIFSF). In the 2016 survey, the data logger and transmitter were installed on 76 troll fishing boats in six prefectures (Mie, Wakayama, Kochi, Miyazaki, Nagasaki and Shimane) and data from 72 boats were available. Once the fishermen input their catch number of 0 year-old fish into the data logger during the fishing operation, the catch information with geographic position data is sent to the NRIFSF via a cellular network on a real-time basis. This survey can provide the preliminary recruitment abundance originating from each of two spawning periods and grounds such as May-June in the waters of Nansei Archipelago and July-August in the Sea of Japan before the main fishing season of winter to spring. Based on the recruitment information, including that obtained through this survey, the NRIFSF has published CPUE time series for age-0 fish as preliminary estimations on recruitment abundance on the website of the JFA. The preliminary results indicate that the recruitment in 2016 is much better than those of 2014 and 2015.



3. Commercial Transaction (Paragraph 9 of CMM 2016-04)

(1) International Trade of Products derived from Pacific Bluefin tuna

• PBF Import in 2016

According to the trade statistics of Japan, Japan imported 5,420 t of PBF; 4,587t (85%) of products imported from Mexico followed by Korea (821t, 15%), NZ (11t), Cook Islands (0.7t) and Australia (0.4t). (Table1 and Figure1)

• PBF Export in 2016

101 t of PBF were exported from Japan in 2016; 57% of product was exported to China and 17% of product was exported to USA. (Table2 and Figure2)

Table 1 and Figure 1: The amount of import of PBF (Jan.-Dec. 2016) (unit :t)

	Fresh	Frozen	Total
Mexico	4,188.2	399.0	4,587.3
Korea	807.9	13.0	820.8
New Zealand	10.6	0.0	10.6
Cook	0.7	0.0	0.7
Australia	0.4	0.0	0.4
Spain	0.4	0.0	0.4
Total	5,007.9	412.0	5,419.9

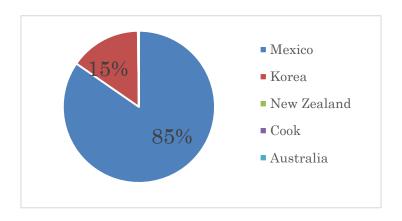
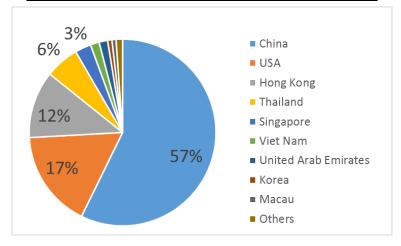


Table 2 and Figure 2: The amount of export of PBF (Jan.-Dec. 2016) (unit:t)

	Fresh	Frozen	Total
China	57.8	0.0	57.8
USA	17.1	0.0	17.1
Hong Kong	11.7	0.1	11.8
Thailand	5.6	0.3	5.9
Singapore	2.7	0.2	2.8
Viet Nam	1.5	0.0	1.5
United Arab Emirates	1.5	0.0	1.5
Korea	0.1	0.7	0.8
Macau	0.7	0.0	0.7
Others	1.1	0.0	1.1
Total	99.8	1.2	101.0



• PBF Import in 2017 (As of May 31)

As of May 31, a total of 1,661 t of PBF was imported in 2017; 983t (59%) of products imported

from Mexico followed by Korea (674t, 41%).

(2) Strengthened data collection for import

a. Korea

In January 2010, a data collection system was established to require importers to make mandatory reporting for each import transaction when they import PBF from Korea. From March 2011, the number of size categories in the reporting format has been expanded from 5 categories to 7 categories in order to acquire more detailed data on import of juvenile fish:

Before February 2011:

smaller than 2kg, 2 - 3kg, 3 - 5kg, 5 - 50kg, over 50kg

After March 2011:

smaller than 2kg, 2 - 3kg, 3 - 5kg, 5 - 10kg, 10 - 30kg, 30 - 50kg, over 50kg

According to the data collection system Japan's import of PBF less than 30kg from Korea has reached 678.1t (about 94% of its catch limit (718t)), as of July 7. According to the WCPFC circular No.:2016/71, Korea voluntarily sets its 2017 catch limit at 671t, by deducting its overage in 2016. After Japan's data collection system confirmed that the import amount of PBF smaller than 30kg from Korea exceeded its voluntary catch limit in March 2017, Japan requested the government of Korea, via diplomatic channel, not to issue catch documentation for PBF harvested beyond its voluntary catch limit. Korea answered that it prohibited harvesting and selling PBF since March 6. In accordance with the paragraph 9 of CMM 2016-04, Japan requested its importers and buyers to refrain voluntarily commercial transactions of PBF harvested in Korea after March 7.

b. Mexico

Starting in February 2011, the same mandatory reporting has been applied to importers that import PBF from Mexico.

4. Data collecting system (Paragraph 11 of CMM 2016-04)

(1) Artisanal fisheries, set nets and other local fisheries

Prefectural governments collect the catch information from regional fisheries (including artisanal fisheries, set nets and other small fisheries) at least every month (more frequently depending on the catch accumulation status) and submit the data to the Japan Fisheries Information Service Center (JAFIC). JFA monitors the data.

(2) Purse Seine

Fisheries associations collect the fishing report from purse seines every time of landing and report the information to JAFIC.

(3) Aquaculture

The JFA collects the data about PBF aquaculture, including size and number of cages, the number of fries to be input, the sources of fries, the date of input and the amount of final products. The data about fries are treated separately divided into wild seeds and seeds artificially obtained in hatchery. The JFA annually publishes the compiled data about PBF aquaculture.

Fries from wild are harvested by purse seine and troll fishery. In accordance with instruction by the JFA, the number of fries put into aquaculture pond from purse seine fishery is monitored by stereo video camera. Regarding fries from troll fishery, troll fishermen directly sell them to aquaculture farmers, and sometimes brokers involve in the transaction. In any cases, the number of fries to be sold is reported to the fishery cooperative association.

(4) Other fisheries

Other fisheries report the catch data directly to the Ministry of Agriculture, Forestry and Fishery or JFA. JFA checks the data and the aggregated catch volume is posted on the JFA's web-site and updated monthly.

5. Work with other IATTC members (Paragraph 14 of CMM 2016-04)

- (1) In May 2011, the NC chair held a meeting with IATTC members who have fisheries for PBF in the eastern Pacific. Japan assisted the NC Chair's work and joined the meeting.
- (2) During the 82nd IATTC meeting held in July 2011 at La Jolla, the Director General of JFA sent a letter to the Commissioner of Mexican Fisheries Agency (CONAPESCA) calling on Mexico to cooperate in establishing sound conservation and management measures for PBF in the eastern Pacific.
- (3) During the 83rd IATTC meeting held in June 2012 at La Jolla, the Japanese delegation cooperated with IATTC member countries so that Conservation and Management Measures for PBF during 2012 and 2013 was adopted.
- (4) During the 85th IATTC meeting held in June 2013 at Veracruz (Mexico), the Japanese delegation cooperated with IATTC member countries so that Conservation and Management Measures for PBF during 2014 was adopted.
- (5) During the 87th IATTC meeting (Resumed) in October 2014 at La Jolla California (USA), the Japanese delegation consulted with major stakeholders, Mexico and US, so that Conservation and Management Measure for PBF between 2015 and 2016 was adopted.
- (6) During the 90th IATTC meeting Japanese delegation cooperated with IATTC member countries so that IATTC agreed to hold the joint meeting with NC on Pacific Bluefin Tuna management during NC12.
- (7) During the 90th IATTC meeting (Resumed) in October 2016 at La Jolla California (USA), the Japanese delegation consulted with major stakeholders, Mexico and the US, so that Conservation and Management Measure for PBF between 2017 and 2018 was adopted.

Management Scheme for small fish in Japan(1)

Among 4,007t of catch limit for small fish (less than 30kg), 2,000t was allocated to purse seine fisheries and remaining 2,007t was allocated to coastal fisheries including artisanal fisheries.

	No. of Vessel	Catch (05-09)	Main target	2016 Management Scheme				
		(00 00)	(age)	Effort Limit	Catch limit			
Purse Seine Fishery (Western Japan)	18	6,207 t	1	Licensing (Limited entry)				
Purse Seine Fishery (Pacific side)	18	729 t	2,3~	Licensing (Limited entry)	Small fish catch limit 2,000t			
Purse Seine Fishery (Sea of Japan)	9	2,431 t	3 ~	Licensing (Limited entry)				

PBF Management Scheme for small fish in Japan (2)

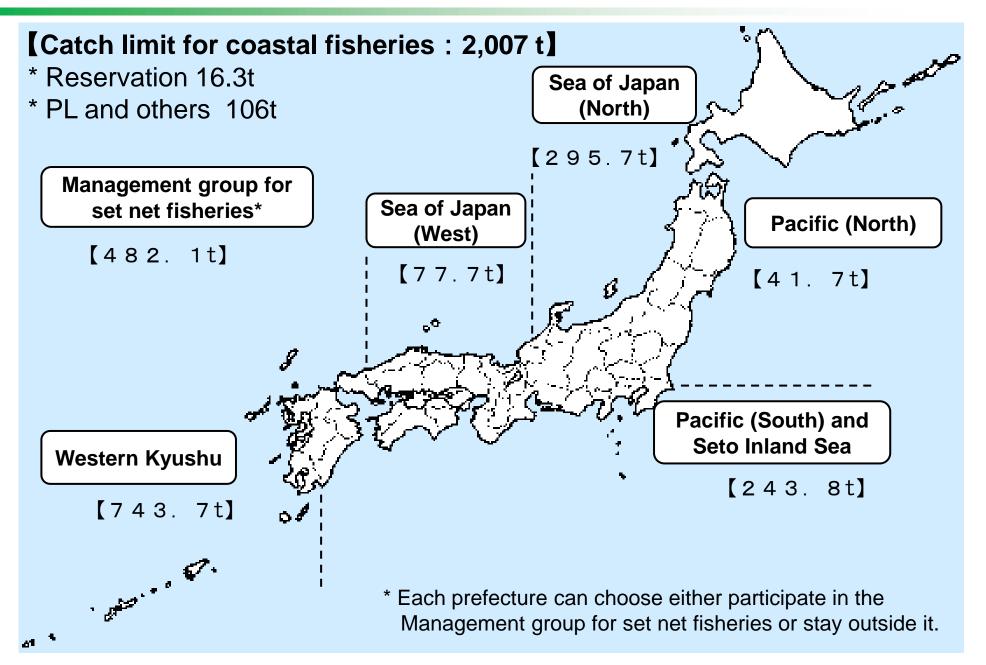
	No. of	Catch	Main	2016 Management Scheme					
	Vessel	(05-09)	target (age)	E	Catch limit				
Artisanal Fishery	24,044 (No. of license)	2,539 t (in internal water and territorial sea : Troll)	0-1	Licensing (Limited entry)	Licensing system and mandatory reporting (since Apr. 2014)	Small fish			
Set Net	1,800 (No. of license)	1,940 t (internal water and territorial sea)	All	Licensing (Limited entry)	Administrative instruction by Minister not to increase the number of licenses (since Jan. 2010)	catch limit 2,007t			
Longline	485 (No. of license)	1,465 t (EEZ)	4~	Licensing (Limited entry)	-				
Others		867t							
Aquaculture	175 (No. of sites)			Licensing by prefectural government (Limited entry)	 Registration system and mandatory reporting (since Jan. 2011) Ministerial order not to increase the capacity of PBF aquacultures which farm wild seeds (since Oct. 2012) 	-			

Concept for management of small fish catch limit in 2nd management year

For the compliance purpose, JFA has introduced measures as follows:

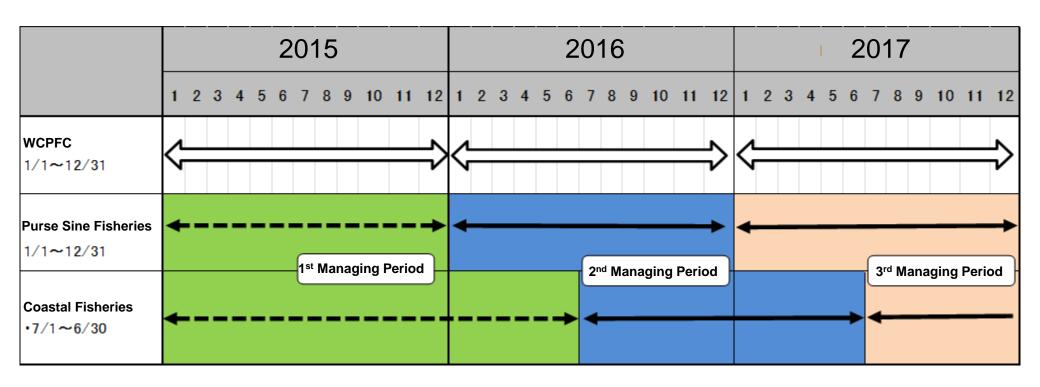
- Purse seine fishery:
 Catch limit is allocated to the purse seine association and all catch is landed at designated ports subject to monitoring.
- Others:
 - 1. Japan's coast is divided into 6 areas and catch limit is allocated to each area. A separate category was created for set net fishery in addition to the 6 areas.
 - 2. Monitoring and management of catches are conducted on area/gear basis.
 - 3. Depending on how close the catch volume is approaching the catch limit in one area, JFA issues "Attention", "Alarm", "Urgent Alarm" and "Stop fishing".

Management of coastal fisheries in 2nd management year



Management Period of Japan

Catch Limit for purse seine fishery is managed in calendar year basis, while that for coastal fisheries is on a fishing year basis (July1 to June 30).



Reporting template for the CMM 2015-04 (Pacific bluefin tuna)

Paragraph 6 of the CMM 2016-04 requires CCMs to report as follows:

6. CCMs shall report their 2002–2004 baseline fishing effort and <30 kg and >=30 kg catch levels for 2013 and 2014, by fishery, as referred to in paragraphs 3 and 4, to the Executive Director by 31 July 2015. CCMs shall also report to the Executive Director by 31 July each year their fishing effort and <30 kg and >=30 kg catch levels, by fishery, for the previous 3 year, accounting for all catches, including discards. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.

It is suggested that CCMs provide these reports in the following format:

Table 1. Fishing effort by vessels fishing for Pacific bluefin tuna in the area north of 20° N in the Convention Area

Fishery	Unit of fishing effort (e.g., sets, fishing days, vessels)	2002	2003	2004	2014	2015	2016
Purse Seine	Number of vessels	69	60	59	26	35	37
Longline Dist.&Off.	Number of vessels	654	632	613	595	567	536
Longline Coastal	Number of vessels	399	422	386	337	317	316
Pole & Line	Number of vessels	146	140	137	93	91	89
Artisanal fisheries	Number of vessels	Unknown	Unknown	Unknown	24,086	24,086	24,044
Set Net	Number of licenses	1,876	1,956	1,956	1,816	1,816	1,816
Others	Number of vessels	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Table 2. Catches (mt), including discards, of Pacific bluefin tuna *in the Convention Area* (include all the fisheries in the previous table, plus all other fisheries that catch any Pacific bluefin tuna)

F: 1	2002		2003		2004		2014		2015		2016	
Fishery	<30kg	≥30kg										
Purse Seine	5,174	3,730	4,995	774	3,466	4,792	3,409	2,047	931	2,714	2,069	3,027
Longline Dist.&Off.	0	52	0	97	0	240	0	15	0	15	1	16
Longline Coastal	0	794	0	152	0	1,616	122	550	188	418	181	461
Pole & Line	99	0	44	0	132	0	5	0	7	0	45	0
Artisanal fisheries	2,607	0	2,060	0	2,445	0	1,023	0	394	19	756	23
Set Net	1,008	92	648	191	660	235	1,375	532	843	424	654	573
Others	422	210	205	241	82	432	155	344	127	280	238	269
Total	9,310	4,878	7,952	2,455	6,785	7,315	6,089	3,488	2,490	3,870	3,944	4,369

As explained in the last page of Attachment, catch limit for purse seine fishery is managed on a calendar year basis, while that for coastal fisheries is managed on a fishing year basis (1 July - 30 June). Catches on a fishing year basis is as follows.

- 1st management period (January 2015 – December 2015 for purse seine fishery, January 2015 – June 2016 for coastal fisheries) <30kg: 3,096t ≥30kg: 3,871t

- 2nd management period (January 2016 – December 2016 for purse seine fishery, July 2016 – June 2017 for coastal fisheries) <30kg: 4,341t

≥30kg: 4,368t