



**NORTHERN COMMITTEE  
ELEVENTH REGULAR SESSION**

31 August - 3 September 2015  
Sapporo, Hokkaido, Japan

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**Report on CMM 2014-04 (Pacific bluefin tuna)**

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**WCPFC-NC11-2015/DP-09**

**JAPAN**



**FISHERIES AGENCY**

**MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, GOVERNMENT OF JAPAN**

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July 31, 2015

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 11 of the conservation and management measure for Pacific bluefin tuna (CMM2014-04), Japan submits a report explaining measures and actions it has introduced and been implementing for Pacific bluefin tuna (PBF).

Sincerely yours,

Takashi KOYA

Alternative Japanese Commissioner to WCPFC

## Overview of Japanese PBF Fisheries

Japan caught 12,897 tons of PBF on annual average basis between 2002 and 2004, which is the reference year of CMM 2014-04. Almost all PBF catch 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 fishing gears on average in 2002-2004 were as follows; purse seine: 7,644 tons, troll: 2,371 tons, set net: 945 tons, longline: 1,317 tons, and other fisheries: 622 tons.

Management framework and catch trends of those fisheries before the strengthening of the PBF management were as follows;

(1) **Purse seine fisheries** are 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 are caught only during its migration season in the following three fishing grounds:

- (i) Western Japan ground: 0-1 year old fish are caught by 22 vessels.
- (ii) Sea of Japan ground: mainly adult fish are caught by 19 vessels.
- (iii) Pacific ground: mainly adult fish are caught by 26 vessels.

(2) **Troll** is conducted by small artisanal vessels (smaller than 5 GRT) with one or two fishermen on board. This fishing is traditionally conducted throughout Japan, 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. Because of those circumstances, no management measures for PBF fishing was established before 2011 by neither the national nor prefectural governments and therefore, it was impossible to identify even how many vessels were engaged in PBF fishery annually. On the other hand, since the PBF catch by troll calculated through sales slips from fish markets had been stable, the priority for the management of troll fishery was to understand the current situation for future effort management.

(3) **Set nets** are managed through the licensing system by the governors of prefectures. The catch of set nets fluctuates substantially year by year but has not increased in the long run. The number of set net licensed was approximately 1,800.

(4) **Longline** vessels are managed through ministerial licensing system. The main target species of longline are bigeye, yellowfin, and albacore, and PBF catch by about 567 vessels is seasonal and requires different configuration of fishing gear. The catch has also decreased.

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

## **Measures Japan Introduced for PBF Management**

As stated above, most of the Japanese PBF catch 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 WCPFC decisions and ISC advice.

### **1. Regulation (Paragraph 3 and 4)**

In accordance with 50% small fish catch reduction commencing on 2015, Japan is responsible to reduce annual small fish catch from 8,015t (Average 02-04) to 4,007t without exemption. Among 4,007t, 2,000t is allocated to purse seine fisheries and remaining 2,007t is to coastal fisheries including artisanal fisheries. Those catch limits are regulated based on the concept shown in attachment A.

#### **(1) Purse seine fishery: Set catch limits**

##### **Catch limit for small fish**

An annual catch limit of small PBF – smaller than 30kg – has been in place since 2011. The catch limit for 2015 is 2,000 mt- 60% reduction from 2002-2004 average catch (5,000t).

#### **(2) Artisanal fisheries**

##### **a. Registration system (ended in March 31, 2014)**

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<sup>st</sup>, 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 has been introduced to small scale fishing vessels operating in the Pacific side in April 1<sup>st</sup>, 2012.

##### **b. Licensing system (commencing on April 1, 2014)**

While registration system has provided useful information on artisanal fisheries for PBF, the system itself cannot effort. Therefore, from April 2014, the management scheme has strengthened control to the licensing system which enable the national government regulate

effort. All the vessels fishing for PBF are obligated to get license from national government prior to fishing. As of April 2014, 24,086 vessels were licensed.

**(3) Set-net Fishery: Issued a guidance not to increase set-nets for PBF**

In January 2011, the Ministry of Agriculture, Forestry and Fisheries issued an administrative guidance not to increase the number of licenses of set-nets for PBF to relevant prefectural governments which have the authority to manage this fishery.

**(4) Small PBF catch limit for coastal fisheries: artisanal fisheries, set-nets and others.**

Catch limit of 2,007t has been further divided into 6 areas and monitored. In each area, local governments established a management scheme respectively.

**(5) Aquaculture**

**a. Introduced a registration system and mandatory reporting.**

The fry used for PBF farming in Japan is mainly caught by troll fishery. Because of the stricter management of Atlantic bluefin tuna at ICCAT, it is concerned that PBF farming in Japan may increase further. Therefore, in order to collect necessary information, starting in April 2011, all PBF aquaculture sites has been required to register and to report their farming activities, including information on caging and harvest. As of December 2014, 150 aquaculture sites were on the registration.

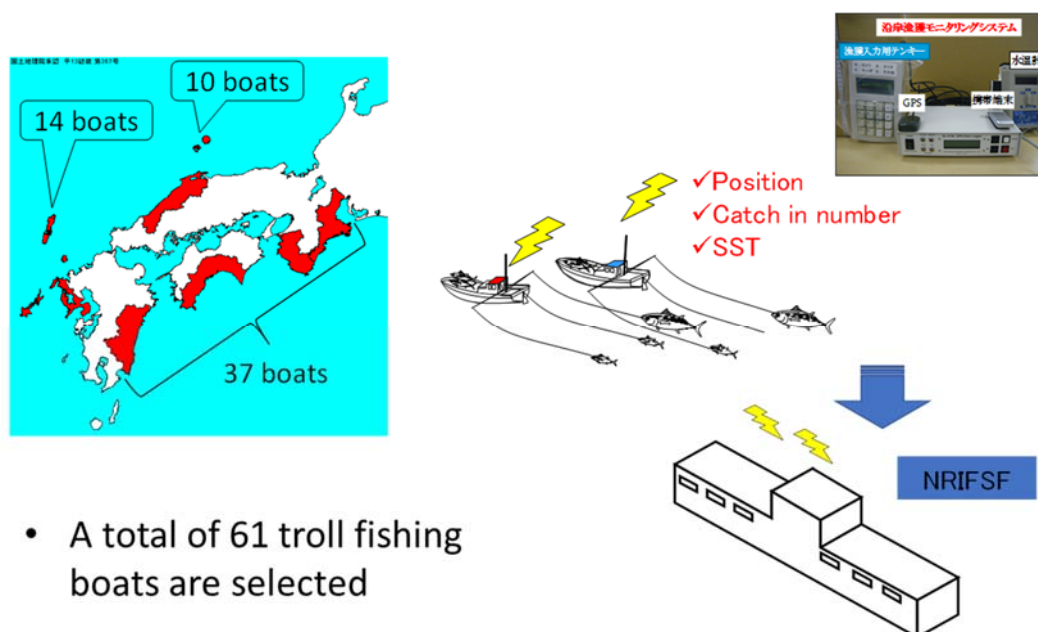
**b. Administrative instruction not to expand PBF aquaculture**

As stated above, most of wild seeds for aquaculture are caught by troll fisheries. To prevent an increase in fry catches of troll fisheries, the Minister of Agriculture, Forestry and Fisheries instructed prefectural governments not to increase the capacity of PBF aquacultures and cages which farm wild seeds in October 2012.

**2. Monitoring recruitment of juveniles (Paragraph 7)**

In order to monitor recruitment abundance of age-0 fish in a timely manner, a monitoring survey of troll fishing boats has been conducted since 2011 by National Research Institute of Far Seas Fisheries (NRIFSF). Data loggers with communication functions, which can collect information on location, sea temperature and number of fish caught during operation, were equipped on the fishing boats. In 2015, there are 61 troll fishing boats with the data loggers in 6 monitoring sites of Mie, Wakayama, Kochi, Miyazaki, Nagasaki and Shimane Prefectures. This survey can provide the preliminary recruitment abundance originated 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. NRIFSF

published CPUE time series for each of age-0 fish derived from two spawning grounds obtained through this survey as the preliminary estimations on recruitment abundance on the website of Fishery Agency.



### 3. Commercial Transaction (Paragraph 8)

#### (1) Strengthened data collection for import

##### a. Korea

Starting in January 2010, mandatory reporting for each import transaction has been tasked to importers in case they intend to 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 precise 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

Korean exemption for catch limit has removed at the WCPFC 10, and its catch limit for 2015 is 718t. Japan's PBF import volume less than 30kg from Korea has reached 558.3t (about 77.8%)

##### b. Mexico

Starting in February 2011, mandatory reporting has been tasked to importers in case they intend to import PBF from Mexico.

**(2) International Trade of Products derived from Pacific Bluefin tuna**

● PBF Import in 2014

According to the trade statistics of Japan, Japan imported 6,385 t of PBF; 5,399t (85%) of products imported from Mexico followed by Korea (973t, 15%), NZ (8t), Canada (2.6t). (Table1 and Figure1)

● PBF Export in 2014

42.6 t of PBF were exported from Japan in 2014; 60% of product was exported to China and 20% of product was exported to Thailand. (Table2 and Figure3)

Table1 and Figure1: The amount of import of PBF (Jan.-Dec. 2014) (unit :t)

|              | Fresh          | Frozen         | Total          |
|--------------|----------------|----------------|----------------|
| Mexico       | 2,000.7        | 3,398.7        | 5,399.4        |
| Korea        | 887.1          | 86.0           | 973.1          |
| New Zealand  | 8.0            | 0.0            | 8.0            |
| Canada       | 2.6            | 0.0            | 2.6            |
| Australia    | 0.5            | 0.0            | 0.5            |
| USA          | 0.4            | 0.0            | 0.4            |
| Tonga        | 0.2            | 0.0            | 0.2            |
| Cook         | 0.2            | 0.0            | 0.2            |
| Marshall     | 0.2            | 0.0            | 0.2            |
| <b>Total</b> | <b>2,899.9</b> | <b>3,484.6</b> | <b>6,384.5</b> |

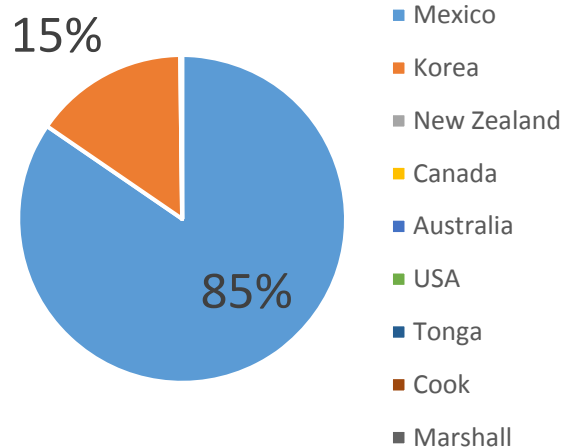
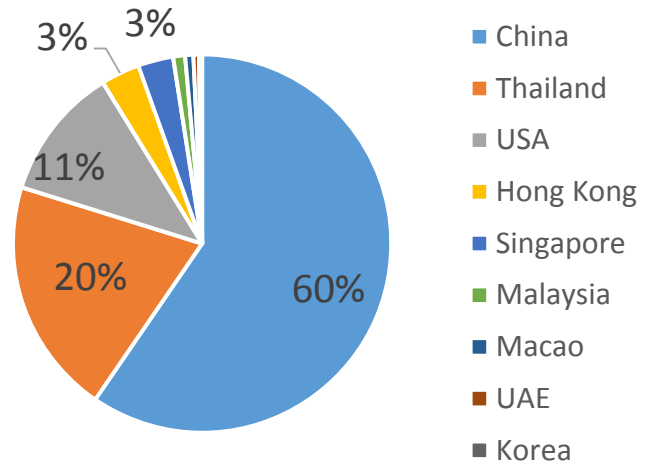


Table2 and Figure2: The amount of export of PBF (Jan.-Dec. 2014) (unit : t)

|              | Fresh       | Frozen     | Total       |
|--------------|-------------|------------|-------------|
| China        | 25.4        | 0.0        | 25.4        |
| Thailand     | 8.5         | 0.1        | 8.6         |
| USA          | 4.9         | 0.0        | 4.9         |
| Hong Kong    | 1.4         | 0.0        | 1.4         |
| Singapore    | 1.3         | 0.0        | 1.3         |
| Malaysia     | 0.4         | 0.0        | 0.4         |
| Macao        | 0.3         | 0.0        | 0.3         |
| UAE          | 0.2         | 0.0        | 0.2         |
| Korea        | 0.1         | 0.0        | 0.1         |
| <b>Total</b> | <b>42.4</b> | <b>0.1</b> | <b>42.6</b> |



● PBF Import in 2015 (As of 30, June)

In addition to the trade statistics in 2015, import data from Korea and Mexico as of 30 June are available in accordance with article 10, the Special Law for Conservation Measure of Tuna Resources. The amount of import PBF from Mexico was 1,517 t\*, and 558t from Korea. (Figure3).

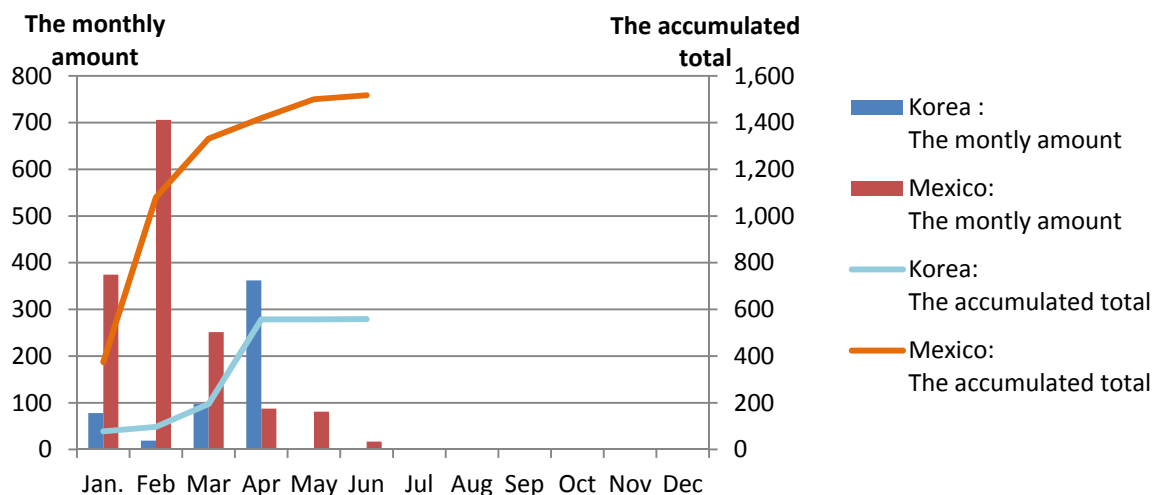
Difference of imported fish between Mexico and Korea are;

Mexico: Age 2 fish caught and exported after 1 year farming

Korea: Age 1 fish exported immediately after caught.

\*The amount of PBF was underestimated because some importers do not submit the information about their import.

Figure4: The monthly amount of import of PBF (Jan.-June. 2015) (unit: t)





#### **4. Data collecting system (Paragraph 10)**

##### **(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) every month and submit the data to Japan Fisheries Information Service Center (JAFIC). JFA (Japanese Fisheries Agency) monitors the data.

##### **(2) Purse Seine**

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

##### **(3) Other fisheries**

Other fisheries report Ministry of Agriculture, Forestry and Fishery or JFA directly the catch data.

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 13)**

(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 annual meeting held in July 2011 at La Jolla, the Director General of Fisheries Agency of Japan 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 annual meeting held in June 2012 at La Jolla, 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 annual meeting held in June 2013 at Veracruz (Mexico), Japanese delegation cooperated with IATTC member countries so that Conservation and Management Measures for PBF during 2014 was adopted.

(5) At 87th Meeting of the IATTC (Resumed) in October 2014 at La Jolla California (USA), Japanese delegation consulted with major stakeholders, Mexico and US, so that Conservation and Management Measure for PBF between 2015 and 2016 was adopted.

(6) At 89<sup>th</sup> Meeting of IATTC held in Guayaquil (Ecuador) in 2015, Japanese delegation discussed PBF measure with stakeholders in IATTC.

## PBF Management Scheme in Japan(1)

|                             | No. of Vessel | Catch (05-09) | Main target (age) | 2015 Management Scheme    |  |
|-----------------------------|---------------|---------------|-------------------|---------------------------|--|
|                             |               |               |                   | Effort Limit              | Catch limit                                    |
| Purse Seine (Western Japan) | 22            | 6,207 t       | 0-1               | Licensing (Limited entry) | <i>Small fish catch limit</i><br><b>2,000t</b> |
| Purse Seine (Pacific side)  | 26            | 729 t         | 2,3~              | Licensing (Limited entry) |  |
| Purse Seine (Sea of Japan)  | 19            | 2,431 t       | 3~                | Licensing (Limited entry) |  |

## PBF Management Scheme in Japan (2)

|                   | No. of Vessel             | Catch (05-09)   | Main target (age) | 2015 Management Scheme                              |   |  |
|-------------------|---------------------------|---|-------------------|---|---|--|
|                   |                           |   |                   | Effort Limit  | Catch limit   |  |
| Artisanal Fishery | 24,086                    | 2,539 t<br>(internal water and territorial sea) (Troll) | 0-1               | Licensing   | Licensing system and mandatory reporting (since April 2014)   | <i>Small fish catch limit</i><br><b>2,007t</b> |
| Set Net           | 1,800<br>(No. of license) | 1,940 t<br>(internal water and territorial sea)         | All               | Licensing by prefectural government (Limited entry) | Administrative instruction by Minister <b>not to increase the number of licenses</b> (since Jan. 2010)  |  |
| Longline          | 567<br>(No. of license)   | 1,465 t<br>(EEZ)  | 4~                | Licensing (Limited entry)                           | -   |  |
| Others            |                           | 867t  |                   |   |   |  |
| Aquaculture       | 150<br>(No. of sites)     | -   |                   | Licensing by prefectural government (Limited entry) | Registration system and mandatory reporting (since Jan. 2011) Ministerial order <b>to prohibit increase of farming cages</b> (since October 2012) | -  |

## Concept for small fish catch reduction in Japan (4)

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

- **PS:** Catch limit is allocated to the PS 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 area respectively.
  2. Monitoring is conducted on area basis.
  3. When catch volume in an area is reaching catch limit allocated, JFA will announce "Alarm" and/or "Stop fishing" not only to fishermen but also buyers, processors and consumers.

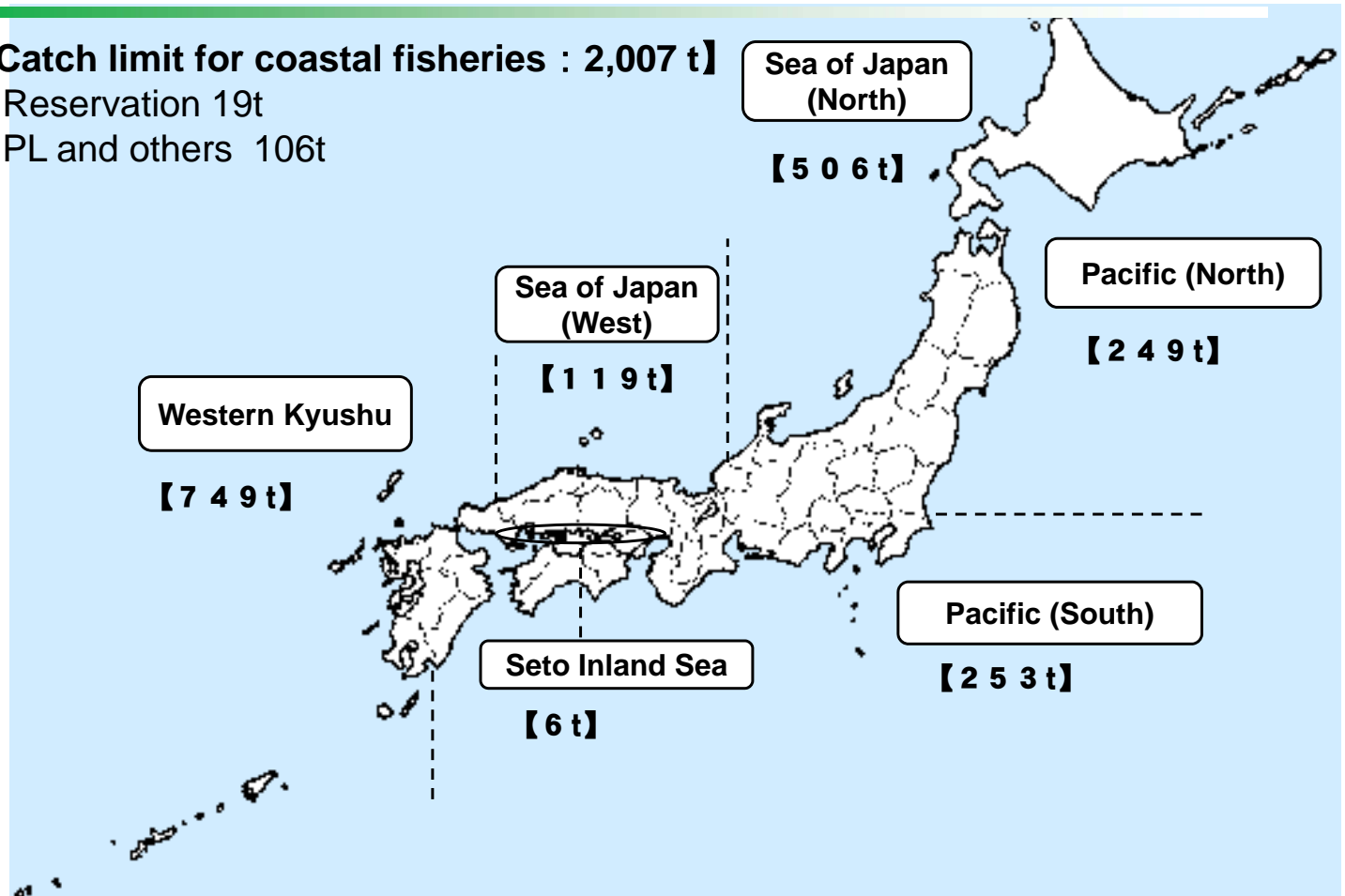
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## Location of 6 Areas

**【Catch limit for coastal fisheries : 2,007 t】**

\* Reservation 19t

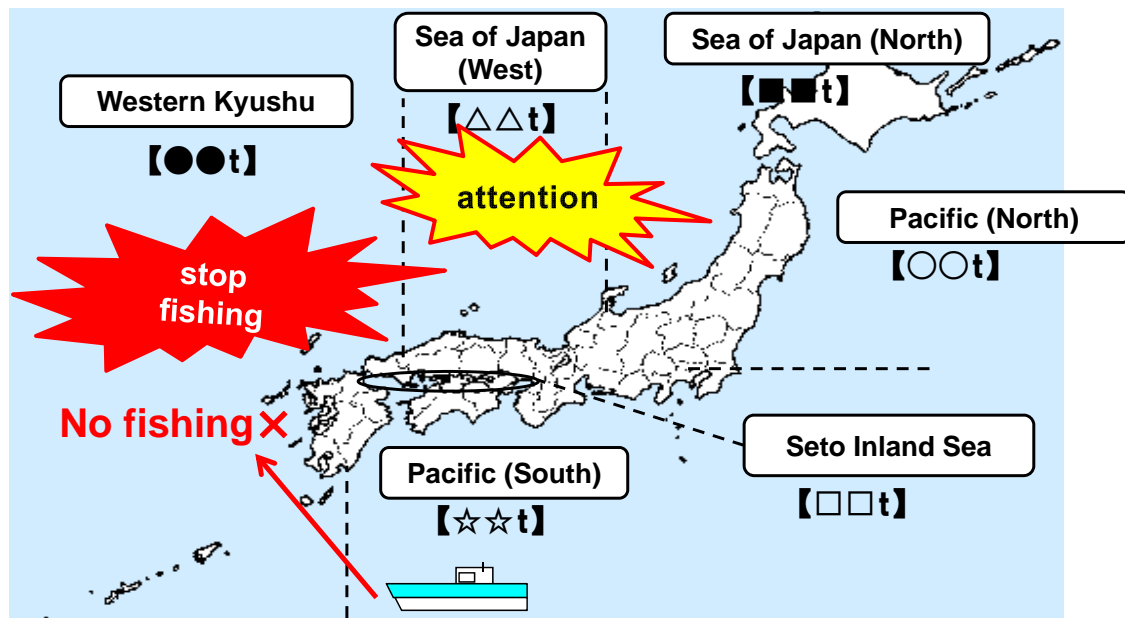
\* PL and others 106t



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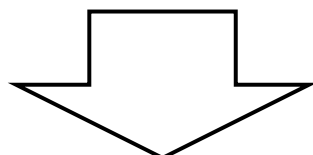
# Alarming by catch degree

- FAJ will announce “alarm” based on the following criteria:
- When catch exceeds **70%** of the limit: “attention” ;  
when catch exceeds **80%** of the limit: “alarm” ;  
when catch exceeds **90%** of the limit: “urgent alarm” ;  
when catch reaches **95%** of the limit: “stop fishing”

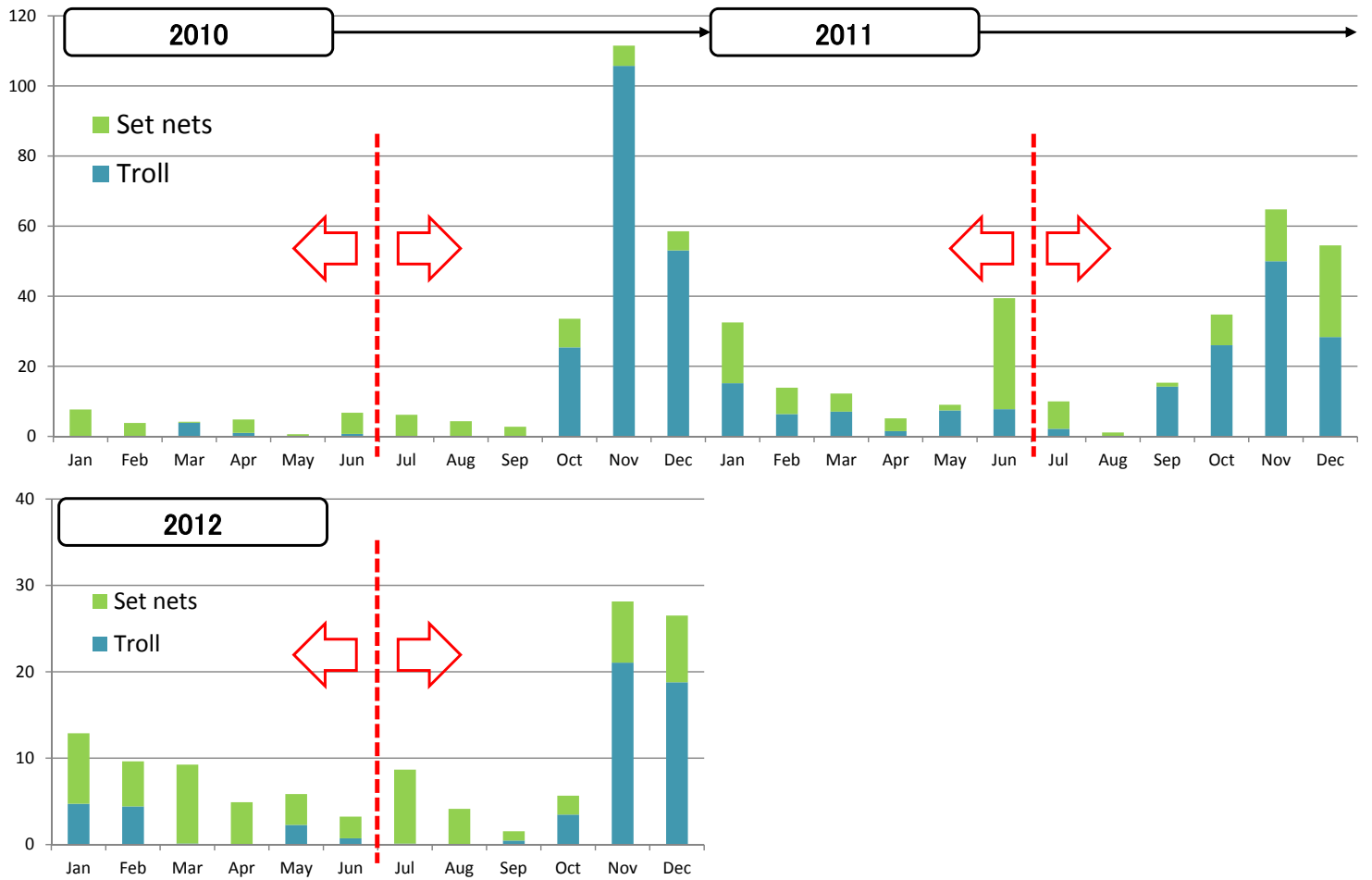


## Catch limit is monitored in fishing year July 1 to June 30

- Practical difficulties for managing in calendar year.
  - Winter (October to February) is main fishing season for Troll.
- Based on the past catch pattern, it is practical that catch limit is monitored in fishing year - 1 July to 30 June – which is corresponding to fish year adopted by ISC.



# Catch Pattern





### Reporting template for the CMM 2014-04 (Pacific bluefin tuna)

Paragraph 5 of the CMM 2014-04 requires CCMs to report as follows:

5. 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 the preceding two paragraphs, 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 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.

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    | 2013 | 2014 |
|---------------------|--|---------|---------|---------|------|------|
| Purse Seine         | Number of vessels  | 69      | 60      | 59      |      |      |
| Longline Dist.&Off. | Number of vessels  | 654     | 632     | 613     |      |      |
| Longline Coastal    | Number of vessels  | 399     | 422     | 386     |      |      |
| Pole & Line         | Number of vessels  | 146     | 140     | 137     |      |      |
| Artisanal fisheries | Number of vessels  | Unknown | Unknown | Unknown |      |      |
| Set Net             | Number of licenses   | 1,876   | 1,956   | 1,956   |      |      |
| Others              | Number of vessels  | 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)

| Fishery             | 2002  |       | 2003  |       | 2004  |       | 2013  |       | 2014  |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                     | <30kg | ≥30kg | <30kg | ≥30kg | <30kg | ≥30kg | <30kg | ≥30kg | <30kg | ≥30kg |
| Purse Seine         |       |       |       |       |       |       | 989   | 1,781 | 3,409 | 2,047 |
| Longline Dist.&Off. |       |       |       |       |       |       | 0     | 14    | -     | -     |
| Longline Coastal    |       |       |       |       |       |       | 235   | 543   | 111   | 603   |
| Pole & Line         |       |       |       |       |       |       | 8     | 0     | 5     | 0     |
| Artisanal fisheries |       |       |       |       |       |       | 904   | 0     | 1,023 | 0     |
| Set Net             |       |       |       |       |       |       | 1,020 | 395   | 1,375 | 532   |
| Others              |       |       |       |       |       |       | 142   | 387   | 155   | 344   |