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CHINA

Annual Report to the Commission

Part 1: Information on Fisheries, Research and Statistics

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Summary

There are two types of tuna fisheries in the WCPFC Convention Areas: longline and purse seine fishery. In 2015, 429 longliners and 20 purse seiners operated in the WCPFC Convention Areas. The total catch of tuna and tuna-like species by longline fishery and purse seine fishery were estimated to be 35, 135 MT and 43, 235 MT, respectively. The catch of bigeye tuna, yellowfin tuna, albacore by longline fishery amounted to 8, 210 MT, 6, 226 MT and 15, 122 MT respectively. The catch of skipjack, yellowfin tuna and bigeye tuna by purse seine fishery were estimated to 35, 960MT, 6, 969 MT and 307 MT respectively. Catch by Chinese deep-freezon longline fishery for bigeye are exported to Japan for sashimi and catch by fresh-tuna longline for albacore are sold for cannery products. Catch by purse seine fishery for skipjack are also sold for cannery products. From September, 2015 to April 2016, eight (8) scientific observers were trained and dispatched to Chinese longline vessels in the Pacific Ocean. Fishery data and biological data were collected during observer trips. Data coverage for catch and effort was 100%. The logbook coverage for longline fishery is being improved and this will promote the quality of China data collection.

1. Introduction

China began to develop its oceanic tuna fisheries in 1988 in the Pacific Ocean and this region is one of the earliest fishing grounds for China tuna fishery. There are currently two types of tuna fisheries in the WCPFC Convention area: longline (LL) fishery and purse seine (PS) fishery. The catch of four main tuna species (skipjack, yellowfin tuna, bigeye tuna and albacore) by China in 2004 was 40, 165 MT. Catch of the four species hit historical record 112, 260 MT in 2009, but decreased to 81, 938 MT in 2010. It should be noted that above-mentioned catch does not include the catch from overlapping areas (S04- S40, W130-W150). Catch of the four species was 91, 302 MT in 2012 (including the catch from overlapping areas), which sharply decreased comparing with 2011. In 2015, the catch of the four species rebounded to 72, 793 MT

in WCPFC Convention Areas.

2. Fleet structure

2.1 LL

All the Chinese LL vessels operated on the high seas and EEZs of Pacific Islands Countries (PIC). The number of LL fishing vessels has shown an increase trend since the year 2000 because of the new albacore vessels. Table 1 shows the number of Chinese LL vessels operating in the WCPFC Convention Area in 2010-2015. The number of LL vessels in 2010 was 244, 275 in 2011, 286 in 2012, 379 in 2013, 353 in 2014. In 2015, the number of LL vessels was 429.

Size of the LL vessels ranged from 67 GT to 742 GT. There are two types of tuna longline vessels, ice fresh tuna longline (IFLL), including those targeting albacore (albacore vessel), and deep frozen tuna longline (DFLL). The number of IFLL and DFLL vessel was 155 and 89 respectively in 2010, 182 and 93 respectively in 2011, 202 and 84 respectively in 2012, 272 and 107 respectively in 2013, 245 and 108 respectively in 2014, 338 and 91 respectively in 2015. The increase of IFLL vessels are due to the new albacore vessels built in consideration of the stock status of the species. IFLL vessels targeting BET remains stable.

Most of the DFLL vessels target bigeye tuna on the high seas and the EEZs of PIC. Some of the IFLL vessels exclusively operate in the EEZ of PIC targeting BET and YFT, and the major fishing grounds for such vessels are distributed among the EEZ of Solomon Islands, Marshall Islands etc.. Most of the IFLL vessels (albacore vessels) target albacore on the high seas.

2.2 PS

Chinese fleet entered the WCPFC tropical purse seine fishery in 2001, and it has become very important for China tuna fishery. The number of PS vessels maintained in a steady level of 12-14 during 2009-2013. Several old vessels were instead of new vessels in the recent years. At present there are 20 purse seiners flagged China fishing in the WCPFC Convention area. Table 1 shows the number of Chinese PS vessels operating in the WCPFC Convention area in 2010-2015.

3. Catch by species and fishery

3.1 LL

The total catch by Chinese LL in the WCPFC Convention area from 2010 to 2015 are shown in Table 2. The total catch of tuna and tuna-like species by longline fishery amounted to 35125 MT in 2015. The catch mainly consists of ALB, BET and YFT. In

2015, the percentage of ALB, BET and YFT by LL were 43.1%, 23.4% and 17.7%, respectively.

Table 3 shows the catch of non-target species caught by Chinese LL in the WCPFC Convention Area from 2010 to 2015, including mainly three billfishes species (striped marlin, blue marlin, and black marlin) and two shark species (blue shark and shortfin mako).

3.2 PS

The total catch by Chinese PS in the WCPFC Convention area from 2010 to 2015 was shown in Table 2. The catch was 76, 649 MT in 2009 and decreased to 53, 716 MT in 2010, increased to 77, 551 MT in 2011, then sharply decreased to 49, 148 MT in 2012. In 2015, the main catch species by PS fishery were SKJ, YFT, and BET. The catch of bigeye tuna (mainly juveniles) was 307 MT. The catch of yellowfin tuna was 6, 969 MT. The catch of skipjack was 35, 960 MT. The catch for Chinese purse seine fleet are excluded those from the chartered vessels during the chartered period. The total catch of Chinese PS in 2015 (43, 236 MT) decrease 27.2% compared with the catch in 2014 (59, 407 MT). The rising cost and the lower fish price are the main causes for the catch loss.

4. Disposal of Catch

Bigeye tuna and yellowfin tuna caught by longline vessels operating in the Exclusive Economic Zone (EEZ) of Pacific Island Countries and on the high seas were exported to Japan sashimi market. Other species caught as by-catch are sold to local market of operating ports. Albacore catch were landed at Fiji for cannery. Catch by PS fishery were mostly transhipped to Thailand for cannery as well.

5. Research and Statistics

5.1 Observer programme

In order to carry out observer program, scientific observers are strictly trained for collecting fishery data of tunas and other pelagic fishes stocks, including size-frequency data of all pelagic fishes as well as sea turtle information. Four (4) observers were sent to Chinese longline vessels on the high seas in 2010, and then six (6) observers in 2011, eight (8) observers in 2012, nine (9) observers in 2013, six (6) in 2014. During 2015, eight (8) scientific observers were dispatched for the Pacific Ocean (Figure 1). The data collected by the eight observers will be submitted to the commission. Table 4 presents observer trip information on areas, periods, total hooks and hooks per basket etc. Table 5 shows the catch information during observer periods.

5.2 Data collection system

Bureau of Fisheries (BOF), Ministry of Agriculture of China, is leading and supervising the data collection of Chinese tuna fisheries. National-wide meeting on tuna data quality have been organized at least once a year in recent years. Participants are managers of tuna fishing companies and tuna-related fishery enterprises. Each vessel of every company engaged in tuna fishing is required to report fishery data (such as catch and effort by species, month, gear, area etc.) to China Overseas Fisheries Association (COFA). Data coverage of catch and effort is 100%. COFA and Shanghai Ocean University (SHOU) host and maintain the fishery and observer database for tuna fishery of China

Since 2008, each LL vessel is obliged by the BOF to use uniformed logbook and return it back to SHOU by the end of March the following year. The data contained in the logbook is evaluated to further promote data collection quality of China.

Logbooks are updated to cover more species as required by the latest conservation measures adopted by t-RFMOs.

5.3 Sea turtle and shark conservation measures

For the longline fishing by Chinese vessel, sea turtle is one of the by-catch species that have to be accurately recorded in the logbook. The fisheries authority of China officially issued Logbook for Tuna Fisheries in 2008, and each tuna longline vessel, no matter of its fishing ground, is required to precisely record the sea turtle bycatch. Failure to doing so will lead to sanctions by the government, as China implements performance review on each fishing company on annual basis.

Booklets/posters on some sea turtles are printed and distributed to each longline vessel. Mitigation devices, such as dehookers and cutters, and user manual are provided to each longline vessel since September 2009 free of charge by China Overseas Fisheries Association. In 2012 and 2013, 85 and 72 sets of such devices were dispatched respectively each year to longline vessels, including those operating in WCPFC area. Fishing companies are trained on proper treatment, including safe release, on sea turtle.

For purse seine fishery, only one event related to sea turtle was reported to our official authority and the vessel involved was Jin Hui no.1. In this event, one dead hawksbill turtle *Eretmochelys imbricato* (TTH) were found in the raft of FAD.

Observers are sent to longline vessel since 2002. Such observers are sent firstly to ICCAT area, then to other fishing grounds, including WCPFC. Observer reports are prepared after each trip. In 2015, China conducted eight longline observer trips in the Pacific Ocean.

Shark is one of the bycatch species for the longline fishing by Chinese vessel. Official document on tuna fishery was issued and distributed to each tuna fishing company in 2013 by the Ministry of Agriculture, where detailed requirements are clearly specified to the vessel owner. Such requirements include, for example, VMS, data collecting and reporting, observer, statistical document, seabird and sea turtle mitigation, and bycatch such as shark. With respect of sharks, it is required in the official document that sharks have to be fully utilized, the 5% ratio on sharkfin and weight of sharks up to the first landing point must be strictly observed. In accordance with CMM 2011-04 and CMM 2013-08, oceanic whitetip shark and silky shark are prohibited to be kept on board as bycatch, such species must be handled strictly in line with the measures.

Each tuna longline vessel, no matter of its fishing ground, is required to precisely record the shark as bycatch in the logbook. 24 species, including 9 shark species, are required to be recorded in the logbook. Failure to record accurately will lead to sanctions by the government, as China implements performance review on each fishing company on annual basis. Pictures of major shark species are printed in the logbook to assist the fishermen easily identify the shark caught in fishing operation..

Bycatch data, including those on shark, is collected on monthly basis, though sometimes needs to be verified, by China Overseas Fisheries Association. Such data, together with other data on tuna species, are forwarded to Consultant Team at Shanghai Ocean University to verify the accuracy of the data. Fishing companies that fail to report accurate/reasonable data are reported to the fisheries authority of China by the Team for punishment, including suspension fishing permit of the vessel in question.

Shark data is reported to the Commission before the deadline of data submission. In 2015, 489 tons of shark are caught as bycatch in WCPFC by Chinese fishing fleet, most of which are blue sharks which constitutes almost 76% of the total bycatch of shark.

Eight observers are sent to longline vessel operating in the Pacific in 2015. Every observer on fishing vessels observed the composition and disposition of the catch and by-catch. The data of target species and by-catch species (sharks, marlin etc), size frequency data, and disposition status were collected during the observation in detail. Fishing operation information was also available to the observers. Observers are strictly selected from undergraduate students and graduate students in Shanghai Ocean University. They are obliged to attend two-week training sessions for fish identification and catch form filling before they are dispatched on board for at least six month. Catch data and biological data (shark size, sex ration, etc.) are collected. Observer reports are prepared after each trip.

CMMs on sea turtles and sharks adopted by WCPFC and other t-RFMOs are translated into Chinese and distributed to each longline company for their compliance. National-wide annual conference on tuna fishing is held each year, where major conservation measures are explained to the meeting participants. Cases on violation punishment are another major issue during the meeting to call the attention of each company on compliance.

6. Transshipment information

6.1 Transshipment at-sea

In 2015, 234 at-sea transshipments in total were made by Chinese flagged LSTLVs to WCPFC-registered carrier vessels, the total amount of tuna and tuna-like species including by-catch transshipped are around 18451.12 metric ton with the presence of WCPFC observer.

In terms of the transshipment, most of them occurred in the WCPFC area (excluding the overlapping area), around 32.4% of them occurred in the overlapping area, and 14.5% of them occurred in the IATTC area.

In terms of the catch, most of the them are from WCPFC area (excluding the overlapping area), but there are quite a few catches from overlapping area and IATTC area, according to para 2 of CMM 2009-06, if the transshipment occurred in WCPFC area, even the catches come from IATTC area, it is also required to report to WCPFC secretariat such transshipment, and if the transshipment occurred in overlapping area, usually two observers assigned by both WCPFC and IATTC on board the carrier vessel would issue two transshipment declaration reports.

Transshipment pre-notifications/application were submitted to China Overseas Fisheries Association, an organization under the supervision of Ministry of Agriculture of China, by the vessel master and/or owner prior to its transshipment, and such request was communicated to the WCPFC Secretariat after being reviewed by that Association and Chinese fishery authority and we usually do our best to notify such request to WCPFC as far in advance as possible and at least no later than 36 hours before each transshipment according to para 35 of CMM 2009-06, but in practice, although we notify such transshipment request to WCPFC far in advance, we found that sometimes due to operation arrangement of carrier vessel, the actual transshipment time is shorter than 36 hours or the time period we notified. The transshipment was consequently made after approval by the Secretariat.

6.2 Transshipment in port and EEZ

We were informed that two in-port transshipments were made in SUVA in 2015, and the catch transshipped was around 98.68 metric tons.

Thirty-four in-EEZ transshipments were made in 2015 and the total amount of tuna and tuna-like species are around 2806.46 metric tons.

Transshipment declarations were normally submitted to the Secretariat after completion of transshipment within 15 days.

7. Information of cetaceans and whale sharks

According to the CMM 2011-03, CCMs shall include in their Part 1 Report any instances in which cetaceans have been encircled by the purse seine nets of their flagged vessels. In 2015, 4 events reported to fisheries authority of China and the vessels involved were Zhong Tai no.1, Zhong Tai no.3 and Jin Hui no.6.

According to the CMM 2012-04, CCM shall report in their Part 1 annual report of any instances in which whale sharks have been encircled by the purse seine nets. In 2015, 6 events reported to our official authority and the vessels involved were Zhong Tai no.1, JinLiao Yu no.57, Jin Hui no.8 and Jin Hui no.18.

The detailed event record regarding the two issues mentioned above can be found in the attachment Table 6 and Table 7.

8. Information of North striped marlin

According to Para 5c of CMM 2010-01, which stipulates that 2013 and beyond: [20%] reduction of the highest catch between 2000 and 2003, we have taken following measures on the stock:

(1)The fisheries authority of China made arrangement to observe the catch limit as decided by the CMM, and accordingly, we set catch limit of 137.6 MT in 2014;

(2) the stock is included in the logbook for China longline fishery, and vessel master has to record the catch in the logbook correctly;

(3) catch data by longline vessel is submitted to the fishery authority on monthly basis;

(4) fishing gear modification: vessels operating in the area applicable to the Measure are encouraged to use monofilament instead of wire leader to reduce the catch of such stock; and

(5)vessels are encouraged not to operate in fishing grounds where a large amount of such stock may be harvested.

The catch by China for North Striped Marlin in the area applicable to the CMM is 40.35MT in 2015. None of Chinese fishing vessels targets on striped marlin.

9. Sea birds information

In accordance with CMM 2012-07, CCMs shall annually provide to the Commission, in part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers, including mitigation used, observed and reported species specific seabird bycatch rates and numbers, to enable the Scientific Committee to estimate seabird mortality in all fisheries to which the WCPFC Convention applies.

The fisheries authority of China required fishing vessels to take appropriate measures to mitigate incidental catch of seabirds. On another hand, China fishing vessels almost operated in the north of south of 30° . Based on the trips information from the observers, there were no by-catch of sea birds in 2015.

On April 17 of 2015, China Overseas Fisheries Association organized a sea birds training meeting in Shanghai Ocean University. Experts from Birdlife International and ACAP presented the seabirds identification and mitigation of sea birds to the captains from the industries and observers.

10. Oceanic whitetip shark information

In accordance with CMM 2011-04, each CCM shall estimate, through data collected from observer programs and other means, the number of releases of oceanic whitetip shark, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports. In 2015, our observers recorded 58 individuals of oceanic whitetip shark in the WCPFC Convention Area. There were 33 discards (dead) and 25 releases (alive) respectively. For purse seine fishery, 2 events related to oceanic whitetip shark reported to our official authority and the vessels involved were Zhong Tai no.2 and Jin Hui no.8. In these events, three individuals were released alive.

It is estimated that total number of oceanic whitetip shark captured by Chinese tuna fishery was approximately 1041 individuals in 2015. Nearly 70 oceanic whitetip sharks were encircled and released by Chinese purse seine fleet and 971 oceanic whitetip sharks were from longline vessels.

11. Silky shark information

In accordance with CMM 2013-08, CCMs shall estimate, through data collected from observer programs and other means, the number of releases of silky shark caught in

the Convention Area, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports. In 2015, our observers recorded 327 discards (dead) and 416 releases (alive) of silky shark in the WCPFC Convention Area.

12. North Albacore and South Albacore information

In accordance with CMM 2005-03, all CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. In 2015, the total catch of north Pacific albacore by China fishing vessels was 773 MT in the north Convention area. No new fishing permit for the species was issued in 2015.

In accordance with CMM 2010-05, CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken South Pacific Albacore as a bycatch as well as the number and catch levels of vessels actively fishing for South Pacific albacore in the Convention area south of 20°S. The catch of South Pacific albacore in the convention area south of 20°S in 2015 by China fishery fleet was 6503MT.

Convention area in 2010-2015								
Year	LL	PS	Total					
2010	244	12	256					
2011	275	12	287					
2012	286	13	299					
2013	379	14	393					
2014	353	19	372					
2015	429	20	449					

Table 1 Number of Chinese tuna fishing vessels operating in the WCPFCConvention area in 2010-2015

Note: LL vessels include chartered vessels

Table 2 Nominal catch of tuna and tuna-like species by the Chinese tuna fishery in the WCPFC Convention area in 2010-2015 (Unit of catch: MT in round weight)

Year	Gear	ALB	BET	YET	SKJ	SWO	BIL	OTH	Total	
2010	LL	16970	8895	2356	0	929	1255	896	31806	
	PS	0	1536	9925	42255	0	0	0	53716	
	Total	16970	10431	12281	42255	929	1255	896	85017	
	LL	11996	11139	4598	0	1971	1768	1891	33363	
2011	PS	0	843	8514	68194	0	0	0	77551	
	Total	11996	11982	13112	68194	1971	1768	1891	110914	
2012	LL	24826	11324	6004	0	2201	2574	2547	49476	
	PS	0	222	4623	44303	0	0	0	49148	
	Total	24826	11546	10627	44303	2201	2574	2547	98624	

	LL	24162	10671	4638	0	1840	2102	1321	44734
2013	PS	0	170	8051	73607	0	0	2	81830
	Total	24162	10841	12689	73607	1840	2102	1323	126564
	LL	14643	9370	5949	0	2200	2113	810	35085
2014	PS	0	828	5551	53028	0	0	0	59407
	Total	14643	10197	11500	53028	2200	2113	810	94492
2015	LL	15122	8210	6226	0	2364	2268	935	35125
	PS	0	307	6969	35960	0	0	0	43236
	Total	15122	8517	13194	35960	2364	2268	935	78361

Note: BIL includes striped marlin, blue marlin and black marlin; OTH includes sharks and other species.

Table 3 Catch of non-target species by the Chinese LL tuna fishery in the
WCPFC Convention Area from 2010 to 2015(Unit of catch: MT)

Species		Billfish		Sharks			
	Striped	Blue	Black	Blue	Shortfin	Oceanic	
	marlin	marlin	marlin	shark	mako	Whitetip	
2010	132	1094	29	506	133	532	
2011	370	1226	172	726	408	0	
2012	524	1795	255	1126	516	0	
2013	165	1926	11	453	25	0	
2014	214	1826	73	206	19	0	
2015	194	2025	49	372	50	33	



Figure 1 Position of Chinese scientific observer trip during 2015 in Pacific Ocean

Trip	Fishing Areas	Period	SET	Total Hook	НРВ	LL Type
T-1	S25°40′ -S27°24′ , E170°34′ -E178°18′	Sep06, 2015-Nov.05, 2015	31	80757	27	Ι
T-2	S15°06′ -S21°13′ , E10756′ -E134°50′	Sep30, 2015-Dec.31, 2015	79	288171	27	Ι
T-3	S10°42′ -S19°40′ , E178°31′ -E165°46′	Oct19, 2015-Dec.12, 2015	46	128232	26	Ι
T-4	S09°22′ -S03°55′ ,W166°07′ -W176°09′ ; N00°20′ -N04°10′ ,W168°02′ -W174°31′	Sep18, 2015-Dec.30, 2015	83	246506	26	Ι
T-5	S06°10′ -N05°00′ ,W162°53′ -W179°47′ ; S08°14′ -S09°37′ , E173°17′ -E173°55′	Oct06, 2015-Jan31, 2016	92	176625	25	Ι
T-6	S20°09′ -S10°16′ ,E164°49′ -E179°45′	Oct19, 2015-Dec.20, 2015	51	65104	25	Ι
T-7	S05°13′ -N07°25′ ,W150°33′ -W176°32′	Nov17, 2015-Jan.22, 2016	59	96640	16	D
T-8	N5°43′ -S12°44′ ;E157°22′ -W179°12′	Nov10, 2015-Apr.01, 2016	106	130300	25	Ι

Table 4 Trip information of Chinese scientific observer deployedin the Pacific Ocean during 2015

Note: HPB-Hook Per Basket .I - ice fresh tuna longline; D- deep frozen tuna longline

Table 5 Catch information of Chinese scientific observer collected by LL

Species	Trip-1	Trip -2	Trip -3	Trip -4	Trip -5	Trip -6	Trip -7	Trip -8
Bigeye tuna(BET)	21	548	60	1614	917	63	813	505
Yellowfin tuna(YFT)	38	171	312	2558	677	283	154	884
Albacore(ALB)	1361	4325	1410	161	130	1394	14	74
Skipjack(SKJ)	6	164	109	432	288	150	4	0
Blue marlin(BUM)	0	13	20	6	0	20	131	2
Striped marlin(MLS)	5	9	3	16	4	4	7	25
Black marlin(BLM)	0	0	11	19	46	3	0	0
Swordfish(SWO)	3	59	9	20	11	13	59	2
Indo-Pacific sailfish(SFA)	0	0	11	25	0	0	2	53
Shortbill spearfish(SSP)	19	188	10	5	0	11	2	12
Oceanic whitetip shark(OCS)	0	1	3	18	2	4	2	28
Silky shark(FAL)	0	1	10	626	3	0	99	4
Blue shark(BSH)	9	18	14	61	1	3	11	0
Shortfin mako(SMA)	8	8	0	1	0	0	1	0
Longfin mako(LMA)	0	1	0	0	0	0	2	0
Bigeye thresher(BTH)	0	0	1	2	0	0	19	0
Crocodile shark(PSK)	0	0	0	14	3	0	0	0
Velvet dogfish(SSQ)	0	0	0	10	0	0	3	0
Scalloped hammerhead(SPL)	0	0	1	1	0	0	0	0
Smooth hammerhead (SPZ)	0	0	0	0	0	0	0	0
Longnose lancetfish(ALX)	420	507	66	54	8	22	25	36
shortnose lancetfish(ALO)	0	0	1		0	0	0	0
Sickle pomfret(TST)	3	0	1	62	0	5	15	0
Bigscale pomfret(TAL)	42	0	0	0	0	0	0	8
Dagger pomfret(TCR)	0	0	0	0	26	0	2	0
Atlantic pomfret(POA)	6	0	0	0	0	0	0	0
Common dolphinfish(DOL)	43	13	80	99	45	85	5	0
Wahoo(WAH)	3	131	131	78	54	149	1	28
Escolar(LEC)	54	170	51	68	37	48	0	11
Snake mackerel(GES)	1	23	7	84	0	3	2	0
Oilfish(OIL)	0	1	0	1	0	3	2	0
Roudi escolar(PRP)	2	1	0	0	0	2	0	0
Black gemfish(NEN)	10	1	0	0	1	0	0	0
Opah(LAG)	90	56	6	3	4	7	3	3
Spinetail mobula(RMJ)	0	0	0	0	0	0	0	0
Pelagic stingray(PLS)	31	74	36	949	14	22	33	122
Ocean sunfish(MOX)	0	0	0	0	0	0	4	0
Slender sunfish(RZV)	0	7	0	0	2	0	1	0

in the Pacific Ocean during 2015-2016

Great barracuda(GBA)	0	0	18	1	0	20	6	50
Rainbow runner(RRU)	0	0	0	1	0	0	3	0
Driftfish(CGB)	0	0	0	0	0	0	0	0
Green turtle(TUG)	0	0	1	0	0	2	0	0
Leatherback turtle(DKK)	0	0	0	0	0	0	0	0

Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
Zhong Tai NO.3	DOLPHIN	2015/02/11	03°14′ S	168°20′ E	KIRIBATI	Al	4
Zhong Tai NO.3	DOLPHIN	2015/02/11	03°17′S	168°18′ E	KIRIBATI	D	7
Jinhui NO.6	ROUGH-TOOTHED DOLPHIN	2015/06/04	02°02′S	178°55′ E	KIRIBATI	7-Al, 5-D	12
Zhong Tai NO.1	BOTTLENOSE DOLPHIN	2015/6/20	01°01′S	172°40′ E	KIRIBATI	1-Al, 10-D	11

 Table 6 Cetacean interactions in purse seine fishery for national fleet

flag	Gea r	Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals		
CN	PS	Zhong Tai NO.1	WHALE SHARK	2015/03/21	00°51′ N	151°22′ E	PNG	Al	1		
CN	PS	JinLiaoYu No.57	WHALE	2015/07/23	02°52′ N	164°51′ E	FSM	Al	1		
CN	PS	Zhong Tai NO.1	WHALE	2015/07/27	01°44′ S	170°11′ E	KIRIBATI	Al	1		
CN	PS	JinLiaoYu No.57	WHALE	2015/08/14	03°06′S	171°39′ E	KIRIBATI	Al	1		
CN	DC	I'H 'N O	SHARK WHALE	2015/10/5	05014/ 5	167020/ W			-		
CN	PS	JinHui No. 8	SHARK WHALE	2015/10/5	05°14° S	16/°38° W	HIGH SEA	AI	Ι		
CN	PS	JinHui No.18	SHARK	2015/11/5	06°18′ S	162°17′E	HIGH SEA	Al	1		

Table 7 Whale shark interactions in purse seine for national fleet