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CHINA

Annual Report to the Commission

Part 1: Information on Fisheries, Research and Statistics

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Scientific data was provided to the Commission in accordance	
with the decision relating to the provision of scientific data to the	YES
Commission by 30 April 2018	

Summary

There are two types of tuna fisheries in the WCPFC Convention Areas: longline and purse seine fisheries. In 2017, 362 longliners and 16 purse seiners operated in the WCPFC Convention Areas. The total catch of tuna and tuna-like species by longline fishery and purse seine fishery was estimated to be 48,785 MT and 15,475 MT, respectively. The catch of bigeye tuna, yellowfin tuna, and albacore by the longline fishery was 7,023 MT, 8,526MT and 29,252 MT, respectively. The catch of skipjack, yellowfin tuna and bigeye tuna by the purse seine fishery were estimated 10,895 MT, 4,254 MT and 326 MT, respectively. Catch by Chinese deep-frozen longline fishery for bigeye is exported to Japan for sashimi and catch by fresh-tuna longline for albacore is sold for cannery products. Catch by the purse seine fishery for skipjack is also sold for cannery products. From September 2016 to April 2018, twenty-seven (27) scientific observers were trained and dispatched to the Chinese longline vessels in the Pacific Ocean. Fisheries and biological data were collected during the observer trips. Data coverage for catch and effort was 100%. The logbook coverage for the longline fishery has been improved, which greatly improves the quality of the data China has collected.

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 a historical record of 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 to 2011. In 2017, the catch of the four species rebounded to **60,276** MT in the 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 2000. Table 1 shows the number of Chinese LL vessels operating in the WCPFC Convention Area in 2011-2016. The number of LL vessels in 2011 was 275, 286 in 2012, 379 in 2013, 353 in 2014, 448 in 2015,418 in 2016. In 2017, the number of LL vessels was 362.

Size of the LL vessels ranged from 67 GT to742 GT. There are two types of tuna longline vessels, ice fresh tuna longline (IFLL), including those targeting albacore, and deep frozen tuna longline (DFLL). The number of IFLL and DFLL vessel was 182 and 93, respectively in 2011; 202 and 84, respectively in 2012; 272 and 107, respectively in 2013; 245 and 108, respectively in 2014; 357 and 91, respectively in 2015; 321 and 97, respectively in 2016;and 277 and 85, respectively in 2017. For the 277 IFLL vessels, 25 were targeting BET and the rest targeting ALB.

Most of the DFLL vessels targeted bigeye tuna on the high seas and the EEZs of PIC. The IFLL vessels mainly operated in the EEZs of PIC, especially of Solomon Islands, Marshall Islands etc., and on the high seas, targeting bigeye tuna and albacore.

2.2 PS

Chinese fleet entered the WCPFC tropical purse seine fishery in 2001, and it has become very important for the China tuna fishery. The number of PS vessels maintained in a steady level of 12-14 during 2009-2013. Several old purse seine vessels have been replaced by newly built vessels in the recent years. In 2017 there are 16 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 2013-2017.

3. Catch by species and fishery

3.1 LL

The total catch by Chinese LL in the WCPFC Convention area from 2013 to 2017 is shown in Table 2. The total catch of tuna and tuna-like species in the longline fishery was 48,785 MT in 2017. The catch mainly consists of ALB, BET and YFT. In 2017,

the percentages of ALB, BET and YFT by LL were 59.9%, 14.4% and 17.4%, respectively.

Table 3 shows the catch of non-target species caught by Chinese LL in the WCPFC Convention Area from 2013 to 2017, mainly including 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 2013 to 2017 was shown in Table 2. The catch was 53,716 MT in 2010, increased to 77,551 MT in 2011, then sharply decreased to 49,148 MT in 2012. In 2017, the main catch species by the PS fishery were SKJ, YFT, and BET. The catch of bigeye tuna (mainly juveniles) was estimated to 326 MT. The catch of yellowfin tuna was estimated to 4,254 MT. The catch of skipjack was estimated to 10,895 MT. The catch for the Chinese purse seine fleet are excluded those from the chartered vessels during the chartered period. The total catch of Chinese PS fleets in 2017 (15,475 MT) decreased by11.2% compared to the catch in 2016 (17,422 MT). Thirteen purse seiners flagged China were chartered to Pacific Islands countries in 2017. The chartering CCMs are responsible for reporting the catches for the thirteen fishing vessels. This is the main cause for the catch decrease of Chinese purse seine fleets.

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 was landed at Fiji for cannery. Catch in the PS fishery was mostly transhipped to Thailand for cannery as well.

5. Research and Statistics

5.1 Observer programme

In order to have a high standard of scientific observer program, scientific observers are rigorously trained for collecting the fishery data of tunas and other pelagic fish stocks, including size-frequency data of all pelagic fishes as well as sea turtle information. Four (4) observers were sent to the 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, eight (8) in 2015, fifteen (15) in 2016. During 2017, twenty-seven (27) scientific observers were dispatched for the Pacific Ocean (Figure 1). Table 4 presents observer trip information on areas, time periods, total hooks and hooks per basket etc.

More observers are expected to be available for a higher coverage with more budget

by the government in the future to implement observer coverage requirement. China has decided to select fishing days at sea for observers as metric of longline observer coverage preliminarily, and we will continue to evaluate the results of calculation by other metrics.

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 meetings on tuna data quality have been organized at least once a year in recent years. Participants included 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 the tuna fisheries of China

Since 2008, each LL vessel is required by the BOFFLE to use standard logbook which is modified frequently according to the latest applicable CMMs, and return it back to SHOU before the end of March the following year. The data containing in the logbook are evaluated and audited to ensure the good quality for the data collected.

Another important way to collect size data is port sampling. Port-sampling program conducted in domestic ports aims at collecting length data of tunas and other species. Measurement is done when unloading from fishing vessels or in the processing plants.

6 Implementation of Conservation and Management Measures

6.1 CMM 2005-03

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 2017, the total catch of north Pacific albacore by the Chinese fishing fleet was 396.0 MT in the north Convention area, and 10 vessels targeted at albacore in the North Pacific Ocean.

6.2 CMM 2006-04

In accordance with CMM 2006-04, CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15°S.

The bycatch of striped marlin in the Convention area south of 15°s in 2017 is 23.5MT. None of China's fishing vessels targets at striped marlin.

6.3 CMM 2009-03

In accordance with CMM 2009-03, the number of the fishing vessels for swordfish in the Convention Area south of 20°S was limited to the number in any year during 2000-2005, and the catch of swordfish caught in the Convention Area south of 20°S is limited to the amount caught in any year during the period 2000-2006.

China has no vessels targeting swordfish. The total catch on the stock south of 20°S in 2017 in the Convention Area was 43.7MT, which was reported to the Commission April 30 2017.

6.4 CMM 2009-06

In accordance with CMM 2009-06, CCMs shall report on all transshipment activities (including transshipment activities that occur in ports or EEZs) in Part 1 of its Annual Report.

In 2017, 274 at-sea transshipments in total were made by Chinese flagged LSTLVs to WCPFC-registered carrier vessels, the total quantities of tuna and tuna-like species including by-catch transshipped are around 20972.215 metric ton offloaded and received with the presence of WCPFC observer. Among them, 273 at-sea transshipment happened beyond areas of national jurisdiction, the total catch was around 20832.693 metric ton.

6.4.1 Transshipment in port

One in-port transshipment took place in SUVA in 2017, and the catch transshipped was around 139.522 metric tons.

6.4.2 Transshipment at sea

We were informed that 1transshipments were made in EEZ of Kiribati in 2017, and the catch transshipment was around 42.611 metric tons.

In terms of the transshipment,11316.586 metric tons occurred in the WCPFC area,6479.904happened in the overlapping areaand 2993.592 metric tons occurred in the IATTC area.

In terms of the catch,8575.451 metric tons are from WCPFC area (excluding the overlapping area), 5214.624 metric tons are from IATTC area, 5289.519 metric tons are from Overlap area, and 1753.099metric ton come from EEZ. 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.

The number of transshipments offloaded and received were 274 in 2017. Among them, 1 transshipment happened in Port, 272 happened at sea beyond national jurisdiction, 1 happened at sea in areas of national jurisdiction.

Among all the at sea transshipments, 246 happened inside the Convention Area, including 78 happened at overlap area and 27 happened outside the convention area.

All the273 times of transshipments were transshipped the catch of longline vessels. All the catch of transshipment came from longline fishing.

The Chinese carrier vessel conduct high sea transshipment is Ping Tai Rong Leng No.1 with 100% observer coverage for the whole trip. All the fishing product come from longline vessels.

Please kindly note that the transshipment activity information submitted individually hereby is just for your reference and it is preliminary statistics and maybe subject to change. Meanwhile, we will also incorporate all the detailed information into the Annual Report Part 1 for the following years.

6.5 CMM 2010-07

In accordance with CMM 2010-07, each CCM shall include key shark species, as identified by the Scientific Committee, in their annual reporting to the Commission of annual catch and fishing effort statistics by gear type, including available historical data, in accordance with the WCPF Convention and agreed reporting procedures.

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 2017 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, oceanic whitetip shark is prohibited to be kept on board as bycatch, such species must be handled strictly in line with the measure.

Each tuna longline vessel, no matter of its fishing ground, is required to precisely record the shark as bycatch in the logbook. More than 20 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 an annual basis. Pictures of major shark species are printed

in the logbook to assist the fishermen to easily identify the shark caught in fishing operations.

Bycatch data, including those for shark, are collected on a monthly basis, though sometimes need to be verified, by the China Overseas Fisheries Association. Such data, together with other data on tuna species, are forwarded to the Consultant Team at Shanghai Ocean University for an evaluation of their quality. Fishing companies that fail to report accurate/reasonable data are reported to the fisheries authority of China by the Team for questioning and possible penalty, including suspension of fishing permits of the vessel in question.

Shark data are reported to the Commission before the deadline of data submission. In 2017, only two shark species were retained as bycatch in WCPFC by Chinese fishing fleet, most of which are blue sharks which constitutes almost 98% of the total retained bycatch of shark.

6.6 CMM 2011-03 and CMM 2012-04

In accordance with CMM 2011-03 and CMM 2012-04, CCMs shall advise in their Part 1 Annual Report of any instances in which cetaceans and whale sharks have been encircled by the purse seine nets of their flagged vessels, respectively.

In 2017, 7 events about cetaceans encircled by the purse seine nets reported to our official authority and the vessels involved were XIN SHI JI 112, SHUN FA 8, XIANG FA 8, JIN HUI 8 and JIN HUI 6.

In 2017, 10 events about whale sharks encircled by the purse seine nets reported to our official authority and the vessels involved were XIN SHI JI 111, XIN SHI JI 112, ZHONG TAI No.1, JIN HUI 6, JIN HUI 7 and JIN HUI 8.

The detailed event record regarding the two issues mentioned above can be found in the attachment Table 8 and Table 9.

6.7 CMM 2011-04

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 2017, our observers recorded 101 dead, 520 alive and 24 unknown status of released oceanic whitetip shark in the WCPFC Convention Area, and we used this information to estimate the status of released oceanic whitetip shark captured by our entire longline fleets which was 3299 (516 dead,2660 alive and 123unknown).

In 2017, 8 events about oceanic whitetip shark encircled by the Chinese purse seine

fleets reported to our official authority our official authority, the detailed event record can be found in the attachment Table 10.

6.8 CMM 2012-07 and CMM 2015-03

In accordance with CMM 2012-07andCMM 2015-03, 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, although China fishing vessels almost operate in the areas between N23° and S30°.

On August 01 of 2017, China Overseas Fisheries Association organized a training meeting especially for seabirds and sharks in Zhoushan. Experts from ISSF presented mitigation information to the captains and managers from the industries.

The information regarding interactions with seabirds reported by observers is shown in Table11 -12.

6.9 CMM 2013-08

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 2017, there were 98 dead, 371 alive and 77status unknown of silky shark recorded in our observer data in the WCPFC Convention Area. We estimated that there were 906(162 dead, 616 alive and 128 unknown) for the entire longline fleet based on the information by our observer data. All the alive silky sharks were released and the dead ones were discarded.

In 2017, 238 events about silky shark encircled by the Chinese purse seine fleets reported to our official authority our official authority, the detailed event record can be found in the attachment Table 13.

6.10 CMM 2015-02

In accordance with CMM 2015-02, CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that has taken South Pacific albacore, as well as the number 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 2017 by China fishery fleet was 6676 MT.

6.11 CMM 2010-10

According to the CMM 2010-10, Para 5c of the Measure stipulates that: 2013 and beyond: [20%] reduction of the highest catch between 2000 and 2003. Measures taken by China on the stock include:

(1)The fisheries authority of China made an 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 are submitted to the fishery authority on a 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 29.9MT in 2017. None of our fishing vessel targets for striped marlin.

6.12 Sea turtle information

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, there are only one reports related to sea turtles to our official authority in 2017 and the detailed event record can be found in the attachment Table 14. Sixty-two sea turtles were captured by China longline vessels according to the report of observers in 2017, and the specific information was reported in the China observer report.

Year	LL	PS	Total
2013	379	14	393
2014	353	19	372
2015	448	20	468
2016	418	16	434
2017	362	16	378

Table 1 Number of Chinese tuna fishing vessels operating in the WCPFCConvention area in 2013-2017

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 2013-2017

Year	Gear	ALB	BET	YET	SKJ	SWO	BIL	OTH	Total
2013	LL	24162	10671	4638	0	1840	2102	1321	44734
	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
	LL	15122	8210	6226	0	2364	2268	935	35125
2015	PS	0	307	6969	35960	0	0	0	43236
	Total	15122	8517	13194	35960	2364	2268	935	78361

(Unit of catch: MT in round weight)

-		1							
2016	LL	16175	8195	6559	0	1806	2095	895	35725
	PS	0	325	3805	13292	0	0	0	17422
	Total	16175	8520	10364	13292	1806	2095	895	53147
2017	LL	29252	7023	8526	0	1656	1714	614	48785
	PS	0	326	4254	10895	0	0	0	15475
	Total	29252	7349	12780	10895	1656	1714	614	64260

Note: BIL includes striped marlin, blue marlin and black marlin; 9999OTH includes sharks and other species.

Table 3 Catch of non-target species by the Chinese LL tuna fishery in the
WCPFC Convention Area
from 2013 to 2016(Unit of catch: MT)

Species		Billfish			Sharks			
	Striped	triped Blue Black Blue		Blue	Shortfin	Oceanic		
	marlin	marlin	marlin	shark	mako	Whitetip		
2013	165	1926	11	453	25	0		
2014	214	1826	73	206	19	0		
2015	194	2025	49	372	50	33		
2016	128	1892	75	261	23	/		
2017	124	1571	19	/	/	/		



Figure 1 Position of Chinese scientific observer trip during 2017 in Pacific

Table 4 Trip information of Chinese scientific observer deployed
in the Pacific Ocean during 2017

Trip	Fishing areas	Period	Set	Total hooks	HPB	Туре
J-1	\$03°30′ -\$15°49′ ,E163°49′ -E178°38′	Dec.27,2016-Jul.06,2017	130	416233	36	Ι
J-2	\$15°37′ -\$0°59′ ,E163°16′ -E176°55′	Sep.02,2016-Jun.09,2017	67	196838	29	Ι
J-3	\$7°56′-\$24°48′,₩156°48′-₩156°54′	Mar.31,2017-Sep.10,2017	100	372833	29	Ι
J-4	\$7°25′ -\$21°43′ ,W135°35′ -W108°10′	Sep.12,2017-Jan.21,2018	62	208310	27	Ι
J-5	\$02°44′ -\$15°20′ ,E164°45′ -W178°00′	Aug.30,2017-Jan.10,2018	53	156005	27	Ι
J-6	\$15°32′ -\$32°20′ ,W110°02′ -W122°58′	Sep.17,2017-Mar.01,2018	85	326676	26	Ι

1 1		I	I	1		
J-7	N28°58′ -N37°20′ ,W150°58′ -W169°06′	Sep.17,2017-Mar.01,2018	67	266006	26	Ι
J-8	S09°22′ -S16°08′ ,E158°04′ -E173°03′	Jul.19,2017-Oct.31,2017	77	240856	28	Ι
J-9	S09°22′ -S16°08′ ,E158°04′ -E173°03′	Jul.19,2017-Oct.31,2017	64	211200	27	Ι
J-10	\$10°20' -\$18°30' ,E161°28' -E172°58'	Jul.02,2017-Nov.14,2017	67	214956	28	Ι
J-11	\$13°47′ -\$21°12′ ,E162°37′ -E174°21′	Oct.17,2017-Oct.27,2017	11	42000	25	Ι
J-12	\$13°47′ -\$21°12′ ,E162°37′ -E174°21′	Sep.10,2017-Nov.16,2017	40	109975	25	Ι
J-13	$\rm S05^{\circ}57'$ -N06^{\circ}09' ,W176^{\circ}17' -W164^{\circ}30'	Jul.26,2017-Nov.30,2017	94	227200	16	D
J-14	N13°59′ -S07°07′ ,E174°59′ -W166°50′	Jul.30,2017-Dec.11,2017	90	242080	16	D
J-15	\$5°27′ -\$18°52′ ,E165°57′ -E175°00′	Sep.05,2017-Jan.10,2018	90	352505	35	Ι
J-16	S14°46′ -N12°08′ ,E177°33′ -W179°53′	Apr.27,2017-Mar.18,2018	254	651457	17	D
J-17	\$12°42′ -\$32°31′ ,W109°42′ -W135°10′	Jun.23,2017-Apr.05,2018	173	644146	27	Ι
J-18	\$12°42′ -\$33°59′ ,W135°10′ -W109°53′	Jun.23,2017-Apr.05,2018	161	580205	27	Ι
J-19	S6°47′ —S20°7′ ,W114°51′ -W168°29′	Jun.12,2017-Dec.10,2017	169	690396	30	Ι
J-20	N14°01′ -N34°27′ ,W107°58′ -W144°14′	Apr.26,2017-Nov.10,2017	99	409734	26	Ι
J-21	\$13°21' -N12°30' ,E150°28' -W119°58'	May04,2017-Nov.03,2017	116	299360	16	D
J-22	S21°30′ -S14°04′ ,W132°24′ -W114°34′	Nov.03,2017-Feb.15,2018	80	198768	28	Ι
J-23	N00°07′ -N13°00′ ,W132°45′ -W152°29′	May20,2017-Nov.27,2017	102	238980	15	Ι
J-24	N11°00 S4°56 W145°43 W120°58	Sep.08,2017-Mar.06,2018	62	166236	12	Ι
J-25	N2°-S9°, E165°-W145°	Jul.05,2017-Mar.04,2018	179	477376	16	D
J-26	N15°N56-S07°S55/E163°E06-W145°W09	Jun.23,2017-Mar.05,2018	195	504800	16	D
J-27	N28°15′ -N39°34′ , E176°47′ -W153°49′	Sep.26,2017-Jan.02,2018	75	256218	22	Ι

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

Table 5 The catch amount of each species when transshipment happened

beyond areas of national	jurisdiction	(Unit o	f catch: MT)
	J	· - · ·	, , , , , , , , , , , , , , , , , , , ,

	SPECIES									
Total BET YFT SWO Striped Blue Shark Albacore Oil Black Others Marlin Marlin Marlin Marlin Marlin Marlin Marlin										
20832.693	7767.236	2010.057	997.155	111.36	596.506	46.575	7878.051	0	110.612	1315.141

Table 6 The catch amount of each product type when transshipment happened beyond

Product Type												
TOTAL	Whole	Gutted	Gutted	headed	Gutted	Not	FILLET	Gilled	Gilled	Gutted	Shark	Others
		and Headed		and Tailed	only	gilled		and Gutted		and tailed	Fins	
20832.693	8873.386	28.234	277.742	935.661	49.974	0.000	0.000	9011.122	0.000	258.416	0.000	1398.158

f national jurisdiction(Unit of catch: MT)

$\textbf{Table 7} \ \textbf{The catch area when transshipment happened beyond areas of national}$

jurisdiction									
PRODUCT COME FROM									
TOTAL	WCPFC ABNJ	IATTC	OVERLAP	EEZ					
	(HIGH SEAS)	ABNJ(HIGH	AREA						
		SEAS)							
20832.693	8575.451	5214.624	5289.519	1753.099					

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Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
SHUN FA 8	False kill whale(FAW)	2017/6/29	02°32 N	176°02 E	KIRIBATI	Al	1
XIANG FA 8	False kill whale(FAW)	2017/11/7	00°58 S	165°59 E	NAURU	Al	2
Jin Hui No.8	False kill whale(FAW)	2017/6/21	00°34'N	176°43'E	KIRIBATI	D	3
XIN SHI JI 112	False kill whale(FAW)	17/10/6	00°22'S	176°07'E	KIRIBATI	Al	1
SHUN FA 8	False kill whale(FAW)	17/10/16	06°57'S	161°46'E	SOLOMON	Al	1
Jin Hui No.6	Melon-headed whale	2017/7/28	00°39'S	171°50'E	KIRIBATI	Al	1
JIN HUI 8	Rough-toothed dolphin	2017/3/15	02°51'S	161°34'E	PNG	Al	3

 Table 8 Cetacean interactions in purse seine fishery for national fleet

flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
CN	PS	XIN SHI Л 111	Whale Shark(RHN)	2017/1/10	03°19'S	160°01'E	PNG	Al	1
CN	PS	JIN HUI 8	Whale Shark(RHN)	2017/10/20	03°54'S	177°25'W	KIRIBATI	Al	1
CN	PS	JIN HUI NO.6	Whale Shark(RHN)	2017/11/2	02°43'S	169°15'W	KIRIBATI	Al	1
CN	PS	XIN SHI JI 112	Whale Shark(RHN)	2017/12/17	04°00'N	176°02'E	KIRIBATI	Al	1
CN	PS	XIN SHI JI 111	Whale Shark(RHN)	2017/9/8	00°02'S	179°27'E	KIRIBATI	Al	1
CN	PS	JIN HUI 8	Whale Shark(RHN)	2017/8/24	09°14'N	173°52'E	MARASHALL	Al	1
CN	PS	Jin Hui No.7	Whale Shark(RHN)	2017/7/17	04°22'N	175°12'E	KIRIBATI	Al	1
CN	PS	XIN SHI JI 112	Whale Shark(RHN)	2017/2/25	02°38'S	160°32'E	PNG	Al	1
CN	PS	Zhong Tai No.1	Whale Shark(RHN)	2017/3/1	01°26'S	144°51'E	PNG	Al	1
CN	PS	XIN SHI JI 112	Whale Shark(RHN)	2017/12/17	04°00'N	176°02'E	KIRIBATI	Al	1

 Table 9 Whale shark interactions in purse seine for national fleet

flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
CN	PS	JIN HUI NO.6	Oceanic whitetip shark(OCS)	2017/1/6	01°02'S	172°54'E	KIRIBATI	Al	1
CN	PS	XIN SHI JI 112	Oceanic whitetip shark(OCS)	2017/9/26	00°16'N	168°24'E	KIRIBATI	D	1
CN	PS	JIN LIAO YU 77	Oceanic whitetip shark(OCS)	2017/8/29	00°24'N	177°29'E	KIRIBATI	Al	1
CN	PS	JIN HUI NO.6	Oceanic whitetip shark(OCS)	2017/1/6	01°02'S	172°54'E	KIRIBATI	Al	1
CN	PS	JIN HUI 8	Oceanic whitetip shark(OCS)	2017/5/22	04°51'N	172°28'E	KIRIBATI	Al	1
CN	PS	Zhong Tai No.3	Oceanic whitetip shark(OCS)	2017/5/3	01°43'S	172°51'E	KIRIBATI	Al	1
CN	PS	JIN HUI 8	Oceanic whitetip shark(OCS)	2017/5/21	04°51'N	173°28'E	KIRIBATI	Al	1
CN	PS	JIN HUI 6	Oceanic whitetip shark(OCS)	2017/1/6	01°02'S	172°54'E	KIRIBATI	Al	1

Table 10 Oceanic White tip shark in purse seine for national fleet

Table 11 Effort, observed and estimated seabird captures by fishing year for China

a) South of 30°S

		Fi	shing effort(1000 hool	Observed	d seabird captures	
Year	Number	Number				-
I Cal	of vessels	of hooks	Observed hooks	% hooks observed	Number	Rate
2013	24	2888	0	0	0	0
2014	18	1889	0	0	0	0
2015	25	7218	0	0	0	0
2016	27	5334	58	1.08	5	0.086
2017	35	5484	537	9.79	4	0.007

b) North of 23°N

			Fishing effort	Observed seabird captures		
Year	Number	Number				
i cai	of vessels	of hooks	Observed hooks	% hooks observed	Number	Rate ²
2013	6	245	0	0	0	0
2014	9	402	0	0	0	0
2015	8	1971	0	0	0	0
2016	7	950	61	6.4	9	0.14
2017	7	1915	522	27.2	0	0

c)	$23^{\circ}N$	-	$30^{\circ}S$	

			Fishing effort	Observed	d seabird captures	
Year	Number	Number				
	of vessels	of hooks	Observed hooks	% hooks observed	Number	Rate ²
2013	349	158088	2335	1.47	0	0
2014	326	115509	1335	1.15	1	0.0007
2015	415	127668	1279	1.0	0	0
2016	384	103412	4268	4.1	0	0
2017	320	129971	7641	5.8	0	0

 Table 12 The number of observed seabird bycatch of longline fishery by species and by area in 2017

Year	Species	South of 30°S	North of 23°N	23°N - 30°S
2017	Southern royal albatross	1	0	0
2017	Southern royal albatross	1	0	0
2017	Shy Mollymawk	1	0	0
2017	Sooty albatross	1	0	0
	Total	4	0	0

flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
CN	PS	ZHONG TAI NO.3	Silky Shark(FAL)	2017/6/6	03°29'S	178°43'E			14
CN	PS	ZHONG TAI NO.3	Silky Shark(FAL)	2017/6/7	02°31'S	175°01'E	KIRIBATI		14
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/20	01°09'S	165°10'E	NAURU	D	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/5	03°06'N	155°45'E	FSM	Al	4
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/9	01°25'S	152°32'E	PNG	Al	15
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/23	04°40'N	174°16'E	TUVALU	Al	1
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/5	02°19'N	153°59'E	FSM	Al	7
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/7	02°27'S	156°30'E	PNG	Al	13
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/8	02°28'S	156°52'E	PNG	Al	7
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/10	01°23'S	156°18'E	PNG	Al	6
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/11	00°07'N	155°13'E	FSM	Al	15

 Table 13 Silky shark in purse seine for national fleet

CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/12	03°18'N	154°27'E	FSM	Al	6
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/17	02°51'S	159°29'E	PNG	Al	5
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/4/25	05°03'S	174°12'E	TUVALU	Al	5
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/5/21	02°48'S	167°06'E	NAURU	Al	2
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/6/10	04°04'S	177°56'E	KIRIBATI	Al	1
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/6/12	02°59'S	177°52'E	KIRIBATI	Al	2
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/7/9	01°49'S	171°34'E	KIRIBATI	Al	15
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/12/20	06°58'S	153°19'E	PNG	Al	21
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/7/9	01°51'S	171°33'E	KIRIBATI	Al	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/10/24	04°04'S	173°58'E	KIRIBATI	8-Al,5-D	13
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/11/3	04°06'S	159°07'E	PNG	Al	21
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/11/4	03°34'S	158°00'E	PNG	Al	8
CN	PS	ZHONGT TAI	Silky	2017/11/6	01°01'S	154°20'E	PNG	Al	6

		NO.1	Shark(FAL)						
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/11/7	01°14'S	153°12'E	PNG	Al	6
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/11/10	03°00'S	155°51'E	PNG	Al	7
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/11/12	03°04'S	156°20'E	PNG	Al	4
CN	PS	ZHONGT TAI NO.1	Silky Shark(FAL)	2017/10/23	01°40'S	172°04'E	KIRIBATI	Al	2
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	3-Al,2-D	5
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/8/5	01°27'S	167°32'E	NAURU	D	1
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/8/29	00°24'N	177°29'E	KIRIBATI	D	2
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/9/28	04°30'S	176°38'W	KIRIBATI	D	5
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/10/16	02°29'S	179°12'E	KIRIBATI	2-Al,1-D	3
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/10/21	02°26'N	171°37'E	KIRIBATI	D	2
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	3-Al,2-D	5
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/8/5	01°27'S	167°32'E	NAURU	D	1

CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/8/29	00°24'N	177°29'E	KIRIBATI	D	2
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/9/28	04°30'S	176°38'W	KIRIBATI	D	5
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/10/16	02°29'S	179°12'E	KIRIBATI	2-Al,1-D	3
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/10/21	02°26'N	171°37'E	KIRIBATI	D	2
CN	PS	JIN LIAO YU 77	Silky Shark(FAL)	2017/11/8	03°13'S	178°28'E	KIRIBATI	D	2
CN	PS	XIN SHI Л 111	Silky Shark(FAL)	2017/3/9	02°32'N	155°41'E	FSM	7-Al,2-D	9
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/10/16	07°45'S	153°19'E	PNG	D	20
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/7	00°58'S	165°59'E	NAURU	D	6
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/8	02°04'N	166°55'E	NAURU	D	16
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/9	03°46'N	167°15'E	MARSHALL	D	8
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/12	04°22'S	162°43'E	SOLOMON	D	1
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/13	04°37'S	161°57'E	SOLOMON	D	1
CN	PS	XIANG FA 8	Silky	2017/11/14	03°50'S	160°00'E	PNG	D	20

			Shark(FAL)						
CN	PS	XIANG FA 8	Silky Shark(FAL)	201711/16	01°48'S	157°47'E	PNG	D	15
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/19	04°04'S	158°40'E	PNG	D	25
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/22	05°12'S	162°48'E	SOLOMON	D	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/4/18	05°06'S	161°41'E	SOLOMON	Al	5
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/5/9	00°10'N	154°34'E	FSM	Al	5
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/9	03°17'N	173°49'E	KIRIBATI	Al	15
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/10	02°56'N	174°47'E	KIRIBATI	Al	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/14	02°11'N	174°24'E	KIRIBATI	Al	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/17	01°50'N	176°00'E	KIRIBATI	D	20
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/18	02°02'N	176°02'E	KIRIBATI		20
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/19	01°36'N	176°08'E	KIRIBATI		3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/6/29	02°32'N	176°02'E	KIRIBATI	D	5

CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/11/8	03°08'S	160°40'E	PNG	D	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/11/9	04°13'S	161°05'E	PNG	D	15
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/11/11	04°54'S	161°52'E	SOLOMON	D	10
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/11/13	04°38'S	162°04'E	SOLOMON	D	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/3	01°35'N	168°14'E	Nauru	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/4	01°53'N	167°50'E	Nauru	2-Al,25-D	27
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/5	02°10'N	169°04'E	MARSHALL	3-Al,1-D	4
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/8	02°19'N	163°35'	FSM	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/13	01°00'N	165°12'E	Nauru	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/14	01°50'N	166°32'E	Nauru	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/15	01°37'N	167°03'E	Nauru	Al	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/31	01°15'N	175°05'E	Kiribati	D	1
CN	PS	XIN SHI JI 112	Silky	2017/3/29	05°05'S	157°10'E	PNG	Al	1

			Shark(FAL)						
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/31	04°18'S	156°14'E	PNG	3-Al,1-D	4
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/1	04°16'S	155°42'E	PNG	Al	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/2	04°17'S	155°49'E	PNG	8-Al,2-D	10
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/3	03°46'S	156°41'E	PNG	Al	20
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/4	02°32'S	158°15'E	PNG	9-Al,1-D	10
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/12	02°21'S	170°11'E	Kiribati	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/4/13	00°58'S	171°04'E	Kiribati	D	1
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/4/31	02°41'N	155°16'E	FSM	Al	21
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/4/1	03°05'N	155°02'E	FSM	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/4/2	02°48'N	154°29'E	FSM	Al	13
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/4/3	02°33'N	154°15'E	FSM	Al	3
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/4/4	02°17'N	154°49'E	FSM	Al	11

CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/16	04°37'S	179°56'E	Tuvalu	Al	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/16	04°37'S	179°59'E	Tuvalu	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/19	04°09'S	173°23'E	Kiribati	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/22	03°56'S	168°38'E	Kiribati	Al	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/28	03°41'S	174°31'E	Kiribati	4-Al,2-D	6
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/3	03°22'S	155°23'E	PNG	Al	4
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/2	02°26'S	155°23'E	PNG	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/5/30	01°29'S	157°03'E	PNG	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/5/29	02°36'S	157°41'E	PNG	Al	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/6/6	04°06'S	177°43'E	Kiribati	Al	3
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/3/26	03°23'S	157°49'E	PNG	D	3
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/4/1	00°39'S	157°04'E	FSM	1-Al,1-D	2
CN	PS	JIN LIAO YU	Silky	2017/4/19	02°03'S	165°15'E	NR	3-Al,2-D	5

		57	Shark(FAL)						
CN	PS	JIN LIAO YU 58	Silky Shark(FAL)	2017/3/17	03°56'S	165°16'E	NR	D	6
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/7/2	01°30'S	155°43'E	PNG	Al	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/7/10	02°08'S	171°28'E	KIRIBATI	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/7/11	00°01'S	172°21'E	KIRIBATI	1-Al,1-D	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/11	00°07'S	178°12'E	KIRIBATI	Al	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/12	02°59'S	178°02'E	KIRIBATI	D	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/16	03°29'S	177°18'E	KIRIBATI	D	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/19	03°27'S	176°27'E	KIRIBATI	Al	4
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/20	03°35'S	175°45'E	KIRIBATI	Al	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/21	03°38'S	175°40'E	KIRIBATI	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/22	03°45'S	175°19'E	KIRIBATI	D	1
CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/7/10	00°23'N	171°39'E	KIRIBATI	Al	3

CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/7/12	00°23'N	171°56'E	KIRIBATI	Al	5
CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/7/14	00°55'N	175°58'E	KIRIBATI	Al	6
CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/7/14	00°53'N	176°09'E	KIRIBATI	Al	3
CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/7/29	01°18'S	166°36'E	NAURU	Al	37
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/7/3	02°42'S	169°08'E	KIRIBATI	Al	1
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/7/7	01°51'S	170°15'E	KIRIBATI	Al	2
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/7/15	00°02'S	179°25'E	KIRIBATI	Al	9
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/7/22	00°02'S	165°38'E	KIRIBATI	Al	2
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/7/23	00°35'S	164°27'E	NAURU	Al	1
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/8	03°29'S	178°43'E	KIRIBATI	2-Al,2-D	4
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/14	01°39'S	169°53'E	KIRIBATI	Al	1
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/15	01°44'S	170°24'E	KIRIBATI	Al	3
CN	PS	Zhong Tai NO.3	Silky	2017/6/20	00°29'N	175°01'E	KIRIBATI	3-Al,1-D	4

			Shark(FAL)						
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/21	00°29'N	175°01'E	KIRIBATI	3-Al,4-D	7
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/22	02°31'N	175°01'E	KIRIBATI	2-Al,1-D	3
CN	PS	Zhong Tai NO.3	Silky Shark(FAL)	2017/6/23	02°52'N	174°40'E	KIRIBATI	Al	1
CN	PS	Zhong Tai NO.1	Silky Shark(FAL)	2017/8/27	02°55'S	168°33'E	KIRIBATI	Al	6
CN	PS	JINLIAOYU NO.77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	3-Al,2-D	5
CN	PS	JINLIAOYU No.77	Silky Shark(FAL)	2017/8/5	01°27'S	167°32'E	NAURU	D	1
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/3/12	01°21'S	156°21'E	PNG	Al	15
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/3/5	02°31'S	159°52'E	PNG	Al	5
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/3/8	00°41'S	153°42'E	FSM	Al	5
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/26	00°47'N	169°10'E	KIRIBATI	D	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/10/18	00°11'S	172°43'E	KIRIBATI	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/30	05°03'S	156°27'E	PNG	Al	6

CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/3/30	05°03'S	156°27'E	PNG	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/8/31	01°36'N	175°06'E	KIRIBATI	D	7
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/7	00°02'S	179°30'E	KIRIBATI	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/10	00°28'S	173°02'E	KIRIBATI	D	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/12	00°54'N	170°38'E	KIRIBATI	D	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/13	01°32'N	170°32'E	KIRIBATI	D	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/20	00°27'N	169°12'E	KIRIBATI	D	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2016/12/31	00°40'S	177°15'E	KIRIBATI	Al	2
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/1	01°35'S	178°07'E	KIRIBATI	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/2	00°53'S	177°27'E	KIRIBATI	Al	1
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/4	03°49'N	174°22'E	KIRIBATI	Al	10
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	201/3/4	01°17'S	151°02'E	KIRIBATI	Al	47
CN	PS	Zhong Tai No.3	Silky	2017/4/29	03°46'S	174°05'E	KIRIBATI	Al	1

			Shark(FAL)						
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/1/1	01°20'S	178°15'E	KIRIBATI	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/2/16	01°16'S	165°18'E	NAURU	D	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/3/5	00°21'S	154°18'E	FSM	Al	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/5/24	02°38'S	166°12'E	NR	D	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/5/25	03°09'S	166°17'E	NAURU	Al	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/4/28	03°41'S	174°31'E	KIRIBATI		1
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	Al	3
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/8/5	01°27'S	167°32'E	NAURU	D	1
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/8/29	00°24'N	177°29'E	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/9/28	04°30'S	176°38'W	KIRIBATI	D	5
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/10/16	02°29'S	179°12'E	KIRIBATI	Al	2

CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/10/16	02°29'S	179°12'E	KIRIBATI	D	1
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/9/20	00°27'N	169°12'E	KIRIBATI	D	5
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/3/31	03°17'S	155°30'E	PNG	Al	3
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/3/31	03°17'S	155°30'E	PNG	D	1
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/4/2	00°36'S	156°31'E	FSM	Al	2
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/4/2	00°36'S	156°31'E	FSM	D	1
CN	PS	JIN LIAO YU 57	Silky Shark(FAL)	2017/3/3	04°16'N	170°18'E	MHI	Al	3
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/12/31	05°53'S	164°11'E	SOLOMON	D	2
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/1/16	05°43'S	160°43'E	SOLOMON	3-Al,3-D	6
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/2/14	01°14'S	156°14'E	PNG	Al	10
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/2/17	01°49'S	157°20'E	PNG	Al	5
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/3/7	00°41'S	154°08'E	FSM	15-Al,5-D	20
CN	PS	SHUN FA 8	Silky	2017/3/18	01°13'S	149°54'E	PNG	15-Al,5-D	20

			Shark(FAL)						
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/29	03°43'S	162°07'E	PNG	D	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/30	04°40'S	161°50'E	SB	Al	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/2/23	06°17'S	159°46'E	SOLOMON	Al	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/1/10	05°32'S	152°02'E	SOLOMON	D	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/1/9	02°48'S	165°06'E	NAURU	15-Al,9-D	24
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/2/1	01°20'S	168°44'E	KIRIBATI	2-Al,4-D	6
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/16	00°38'S	171°43'E	KIRIBATI	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/17	00°56'S	171°18'E	KIRIBATI	Al	3
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/1/20	02°21'S	173°28'E	KIRIBATI	Al	2
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/3	01°55'S	169°16'E	KIRIBATI	Al	9
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/4	01°44'S	169°25'E	KIRIBATI	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/5	02°16'S	169°02'E	MARSHALL	Al	15

CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/8	02°20'S	163°41'E	FSM	Al	7
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/14	01°08'S	167°12'E	NAURU	Al	11
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/15	03°40'S	167°20'E	NAURU	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/16	02°49'S	168°03'E	NAURU	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/20	01°47'S	166°22'E	NAURU	Al	13
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/24	06°05'S	152°44'E	PNG	Al	10
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/2/25	06°48'S	151°26'E	PNG	Al	7
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/1/22	03°04'S	177°34'E	KIRIBATI	D	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/2/15	01°15'S	165°25'E	NAURU	1-Al,1-D	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/2/16	01°16'S	165°18'E	NAURU	D	1
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/3/9	01°34'S	154°37'E	FSM	Al	2
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/3/23	03°44'S	160°33'E	FSM	Al	2
CN	PS	SHUN FA 8	Silky	2017/3/18	01°13'S	149°54'E	PNG	15-Al,5-D	20

			Shark(FAL)						
CN	PS	JIN LIAO YU57	Silky Shark(FAL)	2017/3/18	04°46'S	168°14'E	MHI	D	3
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/23	05°07'S	163°02'E	SOLOMON	D	15
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/24	04°47'S	162°43'E	SOLOMON	D	4
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/26	03°16'S	03°16'S	PNG	D	25
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/27	03°44'S	158°49'E	PNG	D	10
CN	PS	XIANG FA 8	Silky Shark(FAL)	2017/11/28	03°58'S	158°48'E	PNG	D	3
CN	PS	XIANG FA 9	Silky Shark(FAL)	2017/11/30	05°26'S	162°01'E	SOLOMON	D	3
CN	PS	XIANG FA 10	Silky Shark(FAL)	2017/12/1	05°39'S	162°19'E	SOLOMON	D	30
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/11/20	04°13' S	162°29'E	SOLOMON	D	2
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/6	04°28'S	160°48'E	PNG	D	3
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/7	04°56'S	162°45'E	SOLOMON	D	5
CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/14	05°38'S	161°18'E	SOLOMON	D	3

CN	PS	SHUN FA 8	Silky Shark(FAL)	2017/12/28	04°18'S	161°53'E	PNG	D	5
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/11/21	03°41'N	174°58'E	KIRIBATI	Al	3
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/11/24	00°13'S	172°38'E	KIRIBATI	4-Al,4-D	8
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/11/25	00°24'S	172°42'E	KIRIBATI	Al	4
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/11/22	02°01'N	175°15'E	KIRIBATI	6-Al,4-D	10
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/11/31	03°27'S	177°45'E	KIRIBATI	Al	2
CN	PS	XIN SHI JI 112	Silky Shark(FAL)	2017/12/17	04°01'N	176°03'E	KIRIBATI	1-Al,3-D	4
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/11/1	09°36'S	154°30'E	PNG	Al	4
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/11/13	02°55'S	155°32'E	PNG	Al	17
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/11/14	01°21'S	154°04'E	PNG	Al	13
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/11/15	03°16'S	155°01'E	PNG	Al	5
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/11/17	03°11'S	156°42'E	PNG	Al	7
CN	PS	Zhong Tai	Silky	2017/11/19	02°45'S	157°37'E	PNG	Al	7

		No.1	Shark(FAL)						
CN	PS	Zhong Tai No.1	Silky Shark(FAL)	2017/12/6	01°51'N	171°35'E	KIRIBATI	Al	2
CN	PS	Jin Liao Yu no.57	Silky Shark(FAL)	2017/10/31	03°39'S	176°24'E	KIRIBATI	Al	1
CN	PS	Jin Liao Yu no.57	Silky Shark(FAL)	2017/10/31	03°39'S	176°24'E	KIRIBATI	Al	1
CN	PS	Jin Liao Yu no.57	Silky Shark(FAL)	2017/11/14	03°12'S	176°51'W	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/3/23	03°25'S	169°05'E	KIRIBATI	3-Al,2-D	5
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/8/5	01°27'S	167°32'E	NR	D	1
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/8/29	00°24'N	177°29'E	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/9/28	04°30'S	176°38'W	KIRIBATI	D	5
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/10/16	02°29'S	179°12'E	KIRIBATI	2-Al,1-D	3
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/10/21	02°26'N	171°37'E	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/11/8	03°13'S	178°28'E	KIRIBATI	D	2
CN	PS	JINLIAOYU77	Silky Shark(FAL)	2017/11/9	04°08'S	177°39'E	KIRIBATI	D	2

CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/7/25	00°58'N	165°52'E	Majuro		
CN	PS	Zhong Tai No.3	Silky Shark(FAL)	2017/6/26	00°59'N	165°53'E	Majuro	Al	14

 Table 14 Sea turtle interactions in purse seine for national fleet

flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status(Dead/Alive)	Number of Individuals
CN	PS	JIN HUI 6	Leatherback turtle	17/8/24	00°22'N	176°02'E	KIRIBATI	Al	1