

# SCIENTIFIC COMMITTEE ELEVENTH REGULAR SESSION

Pohnpei, Federated States of Micronesia 5-13 August 2015

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

WCPFC-SC11-AR/CCM-15

**NEW CALEDONIA** 

## WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

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NEW CALEDONIA - ANNUAL REPORT 2014 Part 1

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Scientific data was provided to the	
Commission in accordance with the decision	YES
relating to the provision of scientific data to	
the Commission by 30 April 2015	

#### Summary:

Fishing for tuna and associated species by New Caledonian vessels started in 1981 with poleand-line (less than 3 vessels) which stopped very rapidly (1981: 228 mt; 1982: 998 mt; 1983: 492 mt).

Some domestic longliners started operating at the same time and it took almost 20 years before this domestic fleet had a significant activity.

This fleet operates in the New Caledonian EEZ, and very rarely fishes in the adjacent high seas.

In 2014, all of the 17 licensed domestic longliners were active. Similarly to past years there were no foreign vessels licensed or chartered to operate in the New Caledonian EEZ.

There was a 1% decrease of the total catch reported last year compared to 2013. The annual catch of 2,875 mt was mainly composed of albacore which is the target species of all the vessels and accounted for 58% of the total (1,630 mt). Yellowfin was second with 741 mt (26%). Striped marlin and swordfish are bycatch of the fishery (60 mt and 14 tonnes respectively).

Catches of sharks have been decreasing since 2006, due to an increasing use of monofilament branchlines and the adoption of a regulation in April 2013 prohibiting the retention of any shark or ray on-board. Until then, makes were the only sharks species kept on-board to be sold on the local market (trunks).

In 2013, observer activities carried out under the New Caledonia programme reached a 6.3% coverage rate of the longline sets. The objectives of this activity are to collect information to be checked with the other sources of data, and to provide accurate data for stock assessments (biological samples, size composition, estimates of incidental catch, ...).

During all the trips observed in 2014, 2 sea turtle interactions and 2 seabird interactions (unidentified species of petrels or shearwaters) were reported.

The incidental catch of shark and ray species was reported by the observer programme at 608 individuals in 2014.

### **Catch statistics**

As a counterpart to their licenses the New Caledonian fishing companies must provide logsheets which are collected by the New Caledonia fisheries authority at the end of the trips. The coverage rate of collected logsheets is 100%.

In accordance with the provision of scientific data to the Commission all the logsheets data are made available to the SPC/OFP dropbox by batches.

In parallel, the fisheries department started to develop a new statistical system in 2014 using TUFMAN as the central software to manage the tuna fisheries data. The development process is under way as some data are still entered in Excel sheet.

One of the major objectives of this process is to avoid multiple data entries as well as to cross-check information and generate statistics more easily and more accurately.

In any case, effort and catch estimates statistics in table 1 are extracted from logsheets and observer program data. The estimated total catch represents 2,875 mt in 2014 (2,675 mt in 2013).

As the target species of the New Caledonian tuna fisheries, the South Pacific albacore is the predominant species in the catch with 1,630 mt (57%) in 2014. Albacore annual catch south of 20° South for the years 2006-2014 were 793 mt, 837 mt, 1,096 mt, 1,061 mt, 1,396 mt, 1,039 mt, 880 mt, 895 mt and 1,211 mt respectively.

In 2014 the average weight of albacore was 17 kg, which is very similar to the weights recorded in the previous years. The average weight of yellowfin was 26 kg.

No New Caledonian vessel targets bigeye, sharks, marlins or swordfish. Therefore, all the catch reported for these species are bycatch. In particular, only 60 mt of striped marlin (south of 15° South) and 14 mt of swordfish were landed in 2014, of which 9 mt were caught south of 20° South.

Since the adoption of the new regulation for the conservation of shark in April 2013 which prohibits the retention of any shark and ray, all the sharks must be released by the vessels as soon as possible. The incidental catch of shark and ray species was reported by the observer programme at 608 individuals in 2014. The corresponding estimated tonnage for the species of interest (blue shark, silky shark, oceanic white tip shark, mako shark, thresher sharks, porbeagle shark south of 20° South and hammerhead sharks) is nearing 180 mt (see table 1bis).

Many species show seasonal patterns in their abundance around New Caledonia which induces similar fluctuations in the catch levels reported (see table 3 and figure 3).

No New Caledonian vessel takes part in transshipment activities in the WCPFC area.

### Fleet structure and fishing activity

In 2014 17 domestic tuna longliners were licensed to fish and all were active. Similarly to past years there were no foreign vessels licensed or chartered to operate in the New Caledonian EEZ.

Table 2 shows that all active vessels in 2014 are less than 200 tons GRT. These vessels have limited cruising range. Although the larger longliners nearing 150 tons can stay at sea for two or more weeks the average trip length for the whole fleet is only 11 days, 7 of which are fished.

There was no fishing activity by the fleet neither north of the equator, nor south of 30° South.

Globally, 324 fishing trips were reported in 2014, totaling 3,359 days at sea and 2,259 days fished.

## **Monitoring activities**

Observer activity has been carried out in New Caledonia for more than 20 years. After being operated under EU-funded programmes, this activity is now funded by the New Caledonia government.

#### Observer activity

In 2014, 22 trips were observed by 3 observers on-board 11 vessels of the domestic companies, representing 233 days at sea and almost 13,455 fish observed. Over this period of time the observer activity covered about 6.3 % of the fishing activity (in number of hooks observed). The detailed data from this activity are provided in table 4 in annex.

During the trips observed in 2014, 2 turtles interaction was reported and 2 seabirds (unidentified species of petrels or shearwaters) were incidentally captured.

The accidental catch of shark and ray species was reported by the observer program at 608 individuals in 2014. The corresponding estimated tonnage for the species of interest is nearing 183 mt.

#### Port sampling activity

In 2014, due to funding limitation no port sampling was carried out. However, length frequency data are still collected by observers on-board the vessels.

No unloading or transhipment involving foreign vessels, carriers and bunkers, took place in the domestic ports.

#### Vessel Monitoring System

New Caledonia has been operating a Vessel Monitoring System in its EEZ since early 2005.

All licensed vessels must have transmitters on board. Due to safety regulations all of them are equipped with Inmarsat-C terminals but some vessels also have a dedicated Argos beacon on board.

The monitoring is carried out by the New Caledonia fisheries department, so as to help:

- a. check the VMS data with the number of logsheets provided by the fishing companies
- b. the French Navy survey the EEZ.

Since 2010 all the location data have been managed under a dedicated software which can accept various sources of VMS data and provide related statistics.

<u>Table 1</u>: estimates of days fished and catch by species from New Caledonian longliners in the WCPFC area

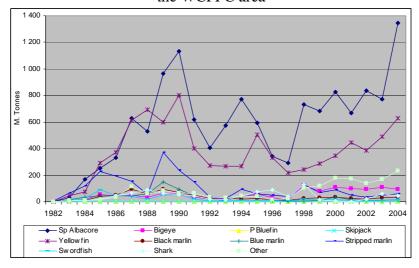
Metric tonnes of	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
South Pacific Albacore	1590	1 358	1 324	1 506	1 649	1 939	1736	1715	1732	1630
Yellowfin	448	414	393	424	487	505	585	573	531	741
Bigeye	76	35	53	62	51	44	41	49	51	58
Striped Marlin	74	54	63	103	71	65	76	57	51	60
Black Marlin	28	24	35	39	34	42	55	66	53	40
Blue Marlin	21	13	12	8	9	10	23	00	33	23
Swordfish	12	10	19	15	7	8	10	10	9	14
Mako shark	26	14	13	14	10	10	10	13	2	0
Others	197	187	210	216	228	236	260	228	246	310
TOTAL	2472	2 109	2 122	2 387	2 546	2 859	2796	2710	2675	2875
Days fished	2836	2 134	2 531	2 751	2 674	2 541	2536	2612	2439	2259

<sup>\*:</sup> preliminary data

<u>Table 1bis</u>: estimated catch for shark species of interest from New Caledonian longliners in the WCPFC area

	in the Well Culed						
2014	Observed catch (mt)	Estimated catch (mt)	Estimated number of releases	Released alive %			
Blue shark	9.06	144	4 687	96%			
Mako shark	1.75	28	400	93%			
Oceanic whitetip shark	0.59	9	183	99%			
Silky shark	0.08	1	63	100%			
Thresher sharks	0.08	1	112	100%			
Hammerhead sharks	0	-	-	-			
Porbeagle shark	0	-	-	-			

<u>Figure 1</u>: historical annual catch by the New Caledonia longliners (from logsheets / CES) in the WCPFC area



<u>Table 2</u>: number of domestic longliners active by GRT class

	0-50	51-200
2006	8	13
2007	8	15
2008	7	16
2009	6	15
2010	3	14
2011	2	17
2012	0	19
2013	0	17
2014	0	17

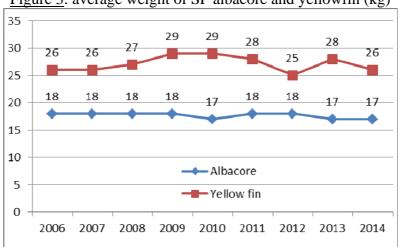
Figure 2: New Caledonian longline vessels licensed



Table 3: number of fish caught per month in 2014

-	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SP Albacore	10598	9068	6994	4936	6319	8365	9035	9547	5918	6312	8767	9621
Yellowfin	853	1990	2566	2873	3438	2329	4005	2914	3172	1040	1084	598
Bigeye	58	74	111	164	214	218	269	175	96	146	63	71
Striped marlin	27	26	27	26	46	33	50	56	61	109	135	111
Other marlins	69	69	100	89	53	55	48	35	45	85	138	144
Swordfish	12	17	10	17	15	10	18	12	10	9	13	21
Makos	0	0	0	0	0	0	0	0	0	0	0	0
Others	2198	1732	1214	1840	2111	2007	1519	1155	1150	2812	1861	4689
Total	13815	12976	11022	9945	12196	13017	14944	13894	10452	10513	12061	15255

Figure 3: average weight of SP albacore and yellowfin (kg)



<u>Table 4</u>: number of observed species in 2014

		<u>rable 1</u> : hamber of deserved species in 2	7011	
FAO code	Species Group	Species Name	Number	% observed
ALB	TUN	ALBACORE	7592	56.43%
YFT	TUN	YELLOWFIN	1699	12.63%
DOL	OTHER FISH	MAHI MAHI / DOLPHINFISH / DORADO	1083	8.05%
ALX	OTHER FISH	LONGSNOUTED LANCETFISH	809	6.01%
SKJ	TUN	SKIPJACK	649	4.82%
BSH	SHK	BLUE SHARK	295	2.19%
LAG	OTHER FISH	OPAH / MOONFISH	205	1.52%
PLS	SHK	PELAGIC STING-RAY	175	1.30%
WAH	OTHER FISH	WAHOO	174	1.29%
BET	TUN	BIGEYE	134	1.00%
GBA	OTHER FISH	GREAT BARRACUDA	120	0.89%
SHK	SHK	SHARKS (UNIDENTIFIED)	79	0.59%
SSP	BIL	SHORT-BILLED SPEARFISH	79	0.59%
LEC	OTHER FISH	ESCOLAR	68	0.51%
MLS	BIL	STRIPED MARLIN	58	0.43%
GES	OTHER FISH	SNAKE MACKEREL	52	0.39%
BLM	BIL	BLACK MARLIN	42	0.31%
SMA	SHK	SHORT FINNED MAKO SHARK	25	0.19%
BUM	BIL	BLUE MARLIN	20	0.15%
SWO	BIL	SWORDFISH	16	0.12%
OCS	SHK	OCEANIC WHITE-TIP SHARK	12	0.09%
SFA	BIL	SAILFISH (INDO-PACIFIC)	8	0.06%
AML	SHK	GREY REEF SHARK	6	0.04%
PUX	OTHER FISH	PELAGIC PUFFER	6	0.04%
PTH	SHK	PELAGIC THRESHER SHARK	6	0.04%
FAL	SHK	SILKY SHARK	5	0.04%
LOP	OTHER FISH	CRESTFISH/UNICORNFISH	4	0.03%
BRZ	OTHER FISH	POMFRETS AND OCEAN BREAMS	4	0.03%
TST	OTHER FISH	SICKLE POMFRET	4	0.03%
	OTHER FISH	UNSPECIFIED	4	0.03%
GEM	OTHER FISH	GEMFISH (SOUTHERN OR SILVER KINGFISH)	3	0.02%
BTH	SHK	BIGEYE THRESHER SHARK	2	0.01%
PRX	BRD	PETRELS AND SHEARWATERS	2	0.01%
RRU	OTHER FISH	RAINBOW RUNNER	2	0.01%
RDR	OTHER FISH	SHORT-TAILED BLACK RAY	2	0.01%
LEC	OTHER FISH	BLACK MACKEREL	1	0.01%
LLL	OTHER FISH	CRESTFISH	1	0.01%
PSK	SHK	CROCODILE SHARK	1	0.01%
AMB	OTHER FISH	GREATER AMBERJACK	1	0.01%
TUG	TTX	GREEN TURTLE	1	0.01%
LKV	TTX	OLIVE RIDLEY TURTLE	1	0.01%
LXE	OTHER FISH	ORANGE-SPOTTED EMPEROR	1	0.01%
ABU	OTHER FISH	SARGENT MAJOR	1	0.01%
GFF	OTHER FISH	SILVER BIDDY	1	0.01%
ALV	SHK	THRESHER SHARK	1	0.01%
TIG	SHK	TIGER SHARK	1	0.01%

Figure 4: breakdown of shark and ray species recorded by observers in 2014 Less 1% each = AML + PTH + FAL + BTH + PSK + ALV + TIG

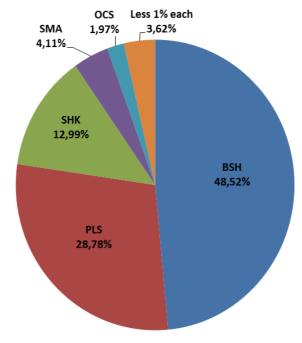


Table 5: number of commercial fish species observed in 2014

		Tuna				Billfishes		
Species	ALB	BET	YFT	BLM	BUM	MLS	SFA	SSP
Number of fish observed	7592	134	1699	42	20	58	8	79

	Other commercial species					
Species	SWO	DOL	LAG	SMA	WAH	
Number of fish observed	16	1083	205	25	174	

Table 6: Longline observer coverage of the New Caledonian tuna fleet

Year	No. of hooks observed	No. of hooks fished	Rate %
2009	405 844	4 920 450	8.2
2010	424 327	4 677 009	9.1
2011	316 337	4 768 281	6.6
2012	316 755	4 938 562	6.4
2013	298 344	4 560 826	6.5
2014	271 208	4 312 484	6.3

Table 7: effort, observed and estimated seabird captures by year for New Caledonian vessels  $-\,23^\circ$  N  $-\,30^\circ$  S

Year		Fishing	Observed seabird captures			
rear	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate (per thousand hooks)
2009	27	4 920 450	405 844	8.2	0	0.000
2010	20	4 677 009	424 327	9.1	4	0.009
2011	19	4 768 281	316 337	6.6	5	0.016
2012	19	4 938 562	316 755	6.4	3	0.009
2013	18	4 560 826	298 344	6.5	13	0.044
2014	17	4 312 484	271 208	6.3	2	0.007

 $\underline{\text{Table 7bis}}$ : Number of observed seabird captures in the New Caledonia longline fishery in 2014

Species	South of 30°S	North of 23°N	23°N – 30°S	Total
Unidentified petrels or shearwaters	0	0	2	2

## ADDENDUM TO ANNUAL REPORT PART 1

CMM 2005-03 North Pacific Albacore		Nothing to report						
CMM 2006-04 South West Striped Marlin	No vess	No vessel fishing for striped marlin south of 15°S in 2014 60 mt						
CMM 2007-04	2 seab	ird interaction	· <u>·</u>		n 2014			
Seabirds	NI		rea 23°N – 30°		- 2014			
CMM 2009-03 Swordfish	NO VE	essel fishing fo	r sworansn so 9 mt	uth of 20°S if	1 2014			
CMM 2009-06			9 1111					
Transhipment		N	othing to repor	rt				
CMM 2010-05	All vessels (17	) fishing for So	outh Pacific all	bacore south	of 20°S in 2014			
South Pacific albacore			1,211 mt					
CMM 2010-07		Al	l sharks releas	ed				
Sharks	2014	Observed catch (mt)	Estimated catch (mt)	Estimated number of releases	Released alive %			
	Blue shark	9.06	144	4 687	96%			
	Mako shark	1.75	28	400	93%			
	Oceanic whitetip shark	0.59	9	183	99%			
	Silky shark	0.08	1	63	100%			
	Thresher sharks	0.08	1	112	100%			
	Hammerhead sharks	0	-	-	-			
	Porbeagle shark	0	-	-	-			
CMM 2011-03 Impact of PS fishing on cetaceans		N	othing to repo	rt				
CMM 2011-04		All oceanic	whitetip sharl	ks released				
Oceanic whitetip sharks	2014 Observed Estimated number of releases Released alive %							
	Oceanic whitetip shark	0.59	9	183	99%			
CMM 2012-04 Whale sharks		N	othing to repor	rt				

CMM 2012-07 Seabirds	Year	Fishing effort				Observed seabird captures	
		Number of vessels	Number of hooks	Observed hooks	% hooks observed	Numb er	Rate (per thousand hooks)
	2014	17	4 312 484	271 208	6.3	2	0.007
CMM 2013-08 Silky sharks	All silky sharks released						
	2014		Observed catch (mt)	Estimate catch (n	ed num	mated lber of eases	Released alive %
	Silky shark		0.08	1		63	100%
Observer coverage (WCPFC 11 decision – para 484(b))	6.3% (number of hooks observed)						