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PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

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COOK ISLANDS

WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

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Port Villa, VANUATU

COOK ISLANDS

National Fisheries Report

1.1 Annual Fisheries Information

The Cook Islands pelagic longline fisheries are characterized by four sub-fleets. The first two sub-fleets operate within the vicinity of the Cook Islands EEZ. Vessels in the southern Cook Islands fishery, based out of Rarotonga are small scale vessels (below 20m LOA and 80 GRT), carrying out fresh fish operations to cater for domestic and international markets (NZ, Japan, USA). These vessels set shallow and target species are tuna and swordfish, however all bycatch species are also valuable for sale on the local market. Vessels operating in the northern fishery are based out of Pago Pago, American Samoa and concentrate fishing activities in the northern zone of the Cook Islands EEZ, targeting albacore for canning. The other two sub-fleets operate within the WCPFC either in both areas of other national jurisdictions and high seas, or just the high seas.

The Cook Islands troll fleet has slowly diminished over the years (see table 2b), and since 2007 has only had one remaining troll vessel actively fishing within the WCPFC-CA.

In the year 2000 the Cook Islands Government enforced a policy which discontinued the licensing of foreign fishing vessels, designed to promote the development of local commercial fishing operations. This saw rapid growth in the industry of the southern fishery in the years 2002 to 2004. In mid-2008 this policy was reverted to again allow foreign fishing vessels access to fish within the Cook Islands EEZ. During this interim period where the new policy was implemented, all fishing license applications (for the northern fishery) were on hold and contribute to the lower total catches for 2008, seen in table 1.

Table 1. Annual Target Species Catch in the WCPFC-CA 2004-2008

Year	ALB	BET	YFT	SKJ	PBF	BUM	BLM	MLS	SWO	OTH	Totals
2004	1889.6	408.1	520.2	80.2	1.4	136.7	10.3	39.0	151.9	264.1	3501.5
2005	2368.8	216.0	409.8	32.5	1.4	138.9	8.1	42.0	89.5	218.0	3525.2
2006	2657.2	188.8	301.3	71.2	0.0	28.3	9.1	14.9	89.9	186.9	3547.5
2007	2630.4	233.6	277.5	34.3	0.0	41.1	16.8	13.3	43.6	109.2	3399.7
2008	1904.9	244.0	228.5	39.2	0.0	23.5	15.8	11.1	19.6	115.3	2601.9

The *Marine Resources Longline Fishery Regulations 2008* stipulates an effort limit of 40 fishing licenses for the Cook Islands EEZ, with a total catch limit of 4,000mt in any consecutive four quarter period. The *Marine Resources Longline Fishery Regulations 2008* will be reviewed biennially with input from other Government agencies and fishery stakeholders.

Fleet composition fluctuates from year to year, especially in the southern fishery. Due to its geography and the influence of climatic conditions on catch rates, the southern fishery has been characterized as a boom-bust fishery. The fleet in the northern fishery has remained relatively stable with a few vessels venturing south, experimenting with fishing activities in the north and unloading in Rarotonga. However, these exercises have not been fruitful due to the high costs associated with obtaining fuel and supplies from Rarotonga.

Table 2a Active Longline Fishing Fleet, 2004-2008

Size class (GRT)	2004	2005	2006	2007	2008
0-10			2	2	2
10-50	31	24	5	2	3
50-200			18	22	15
200-500			5	9	3
500+					

Table 2b Active Troll Fishing Fleet, 2004-2008

Size class (GRT)	2004	2005	2006	2007	2008
0-10					
10-50					
50-200					
200-500	2	1	2	1	1
500+					

The majority of the Cook Islands fishing vessels concentrate operations in the northern part of the Cook Islands EEZ. However, a few vessels based out of Suva fish in other areas of the WCPO beyond Cook Islands waters as seen in figure 1.

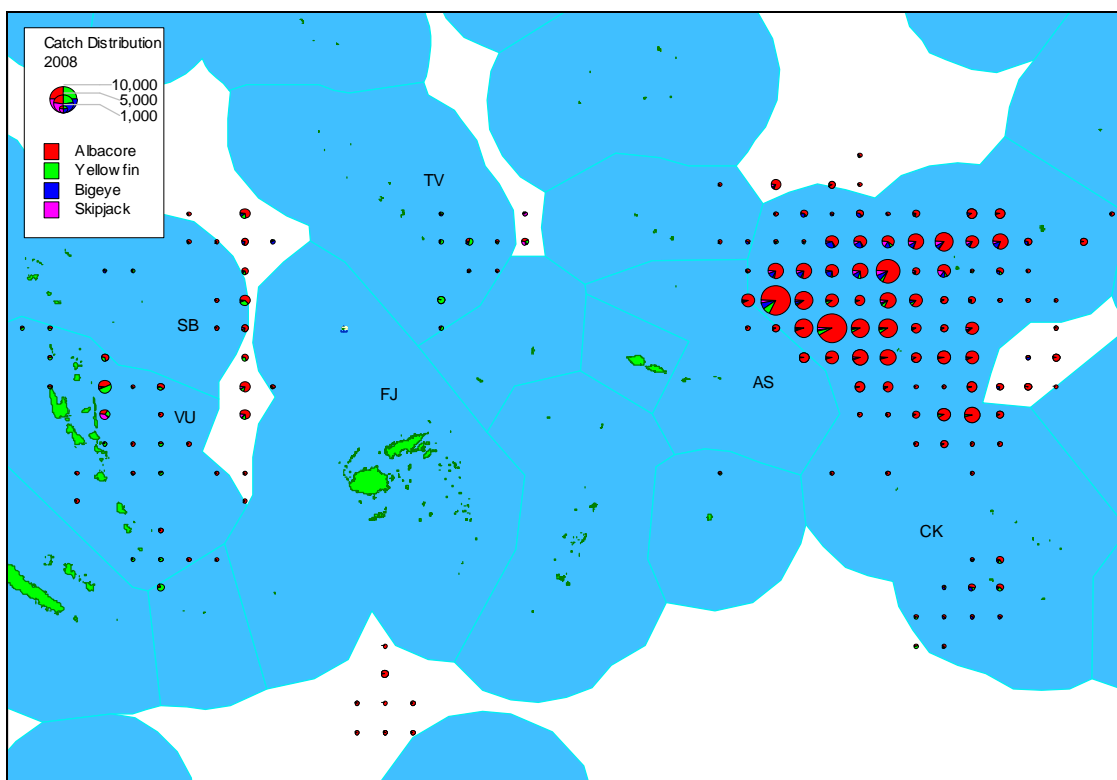


Figure 1. Catch Distribution for the Cook Islands National Fleet, 2008.

Wahoo makes up almost 46% of reported non-target species catches, whilst mahi-mahi contributes to 11.5% of this catch. The shark group contributes to 30.7% and moonfish contributes 5.4% of total non-target species catches.

Table 3. Estimated total catches of non-target, associated and dependant species

Species	2004	2005	2006	2007	2008
BAR JACK (C. FERDAU)	0.1				
BARRACUDAS	1.0	0.2	0.3	0.6	0.4
BIG-SCALED POMFRET	0.1	0.1	0.2	0.05	
BLUE COD	0.4				
BLUE SHARK	0.6				
DRIFT FISHES (FAMILY)	0.02				
ESCOLAR	0.6	0.02	0.1	0.1	
GREAT BARRACUDA	0.1	0.05			
MAHI MAHI	32.2	28.0	20.5	13.3	8.0
OCEAN SUNFISH				0.2	
OCEANIC WHITE-TIP SHARK		0.04			
OILFISH	4.6	1.6	1.9	0.9	0.9
OPAH / MOONFISH	20.8	7.9	7.5	5.7	6.3
PACIFIC POMFRET				0.03	
POMFRETS AND OCEAN BREAMS	0.03	0.1	0.1	0.03	
SAILFISH	3.5	1.7	0.9	1.4	1.3
SHARKS (UNIDENTIFIED)	84.3	80.6	41.6	18.0	47.6
SHORT-BILLED SPEARFISH	8.2	2.7	3.0	1.8	2.5
SKATE	0.01				
SUNFISH (R. TRUNCATA)	0.2				
WAHOO	102.2	89.7	108.4	61.2	44.9
OTHER FISH	0.6	3.0	1.3	4.6	2.8
Total (mt)	263.9	215.8	185.8	109.0	114.9

Useful Information

Operating fishing activities out of Rarotonga has always been a costly exercise. Rarotonga's location, accessibility to markets, necessary supplies and services has always proved expensive for fishing companies.

In recent months the local fleet (based in Rarotonga) has diminished, with companies selling off fishing boats, and other components of their companies i.e. processing facilities. Catch rates have not been high enough to sustain local companies operating out of Rarotonga; this coupled with the increase in fuel costs in recent years has played a big role in the demise of small scale fishing vessel operations.

Since the implementation of the new licensing policy in 2008 and the introduction of the Marine Resources Longline Fishery Regulations, some vessels operating in the northern fishery have kept some catch to unload in Rarotonga to either sell on the local market or to export. Species such as small yellowfin and bigeye, wahoo, mahi-mahi and marlins have been unloaded.

With the threat of closure for the canneries in Pago Pago, the Cook Islands are looking for alternative operation strategies for the vessels operating in the northern fishery.

1.2 Research and Statistics

National Observer Programme

The national observer programme was re-established in 2008, using an observer recruited from the Solomon Islands. Seven observer trips were carried out, all on vessels operating in the southern fishery. From reported data, effort from vessels based in Rarotonga makes up 10% of total zone effort. Seven trips were carried out in 2008, with factors such as fishery economics and break downs taken in to account when considering placement. Of the total effort within the Cook Islands waters, 1% of total hooks and 4.7% of total trips was observed. Of the effort from vessels based in Rarotonga, 9.6% of the effort (hooks) was observed.

Although all trips were carried out on longline vessels, two trips were carried out on vessels that practiced deep setting for albacore, with the remaining five trips on vessels that carry out shallow set operations.

From the observer data collected albacore makes up 22.5% of total catches, followed by mahi-mahi with 10.6%. Bigeye tuna accounts for 5.9% of total observed catches with yellowfin and skipjack accounting for 8% and 3.7%, respectively. Swordfish made up 4.6% of total observed catches.

Undesirable species such as snake mackerel (7.6%), lancet fish (2.2%) and oilfish (4%) are discarded or consumed by the crew.

No interactions with sea turtles, sea birds or cetaceans were observed. Six shark species were observed making up 2.7% of total observed catches. The observed shark species are blue, silky, shortfin mako, longfin mako, oceanic whitetip and Galapagos.

Hook standardization Project

The Cook Islands hook standardization Project began in July 2009 and is expected to run for one year. The project aims at testing the standardized use of 16/0 circle hooks in the Rarotonga based pelagic shallow-set longline fishery, to determine the efficacy of target species catch rates of circle hooks compared to hooks currently used by the Rarotonga based vessels, and to identify any economic impacts the industry may encounter if this fleet were to standardize hooks to the 16/0 circle hook.

Swordfish Tagging

A collaborative swordfish tagging project between CSIRO (Australia) and the Cook Islands Ministry of Marine Resources should see tagging begin at the beginning of September. At the end of the project an information paper will be written up and will hopefully be available at SC6.

Data Collection

Currently the Cook Islands collect logsheets from all its fishing vessels, with improvements on the coverage of regional unloading forms and port visit / trip logs also. Observer data coverage is expected to improve in 2009 with the hook standardization project, and with plans to implement the use of observers from other national programmes.