



**SCIENTIFIC COMMITTEE  
SIXTH REGULAR SESSION**

10-19 August 2010  
Nuku'alofa, Tonga

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

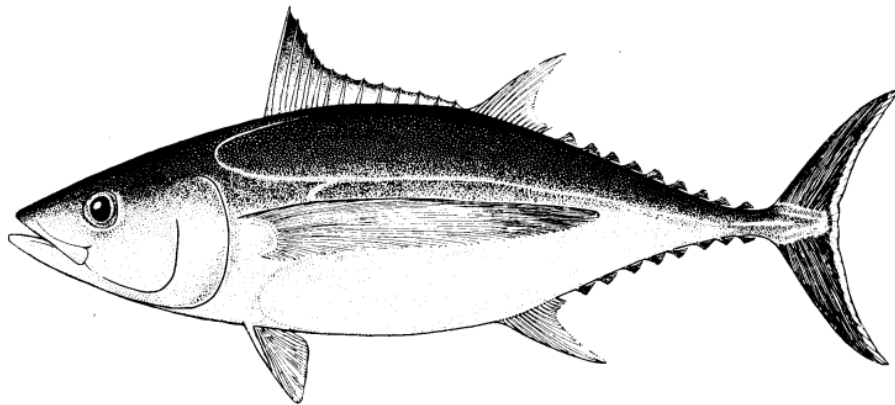
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**WCPFC-SC6-AR/CCM-08**

**FRENCH POLYNESIA**

# Tuna fisheries in French Polynesia in 2009

## National Report – Part 1



Fisheries Office (*Service de la Pêche*)  
Tahiti, French Polynesia

July 2010

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by the 30 april 2010.	YES
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## Introduction

Tuna fishery is a major component of the development of French Polynesia economy, either for economical and social aspects. Its professional tuna fishery is divided into two components : a small scale coastal fishery and an offshore long line fishery. There is no longer fishing agreement inside the EEZ for foreign fleet since December 2000 .

### 1 Annual Fisheries Information

#### Fleet structure

The coastal fishery comprises two types of boat: the *poti marara*, (literally ‘flying-fish boats’) which are small boats, 6-8 m in length, made from wood or FRP and suitable for many different fishing techniques (trolling, vertical longlining or harpooning) and the *bonitiers* (‘skipjack boats’), which are 10-to-12 m long boats made from wood or FRP, targeting skipjack using mainly pole-and-line. This fleet operates inside the territorial waters.

Figure 1 – Nominal catch by fishing gear for the small scale nearshore fishery

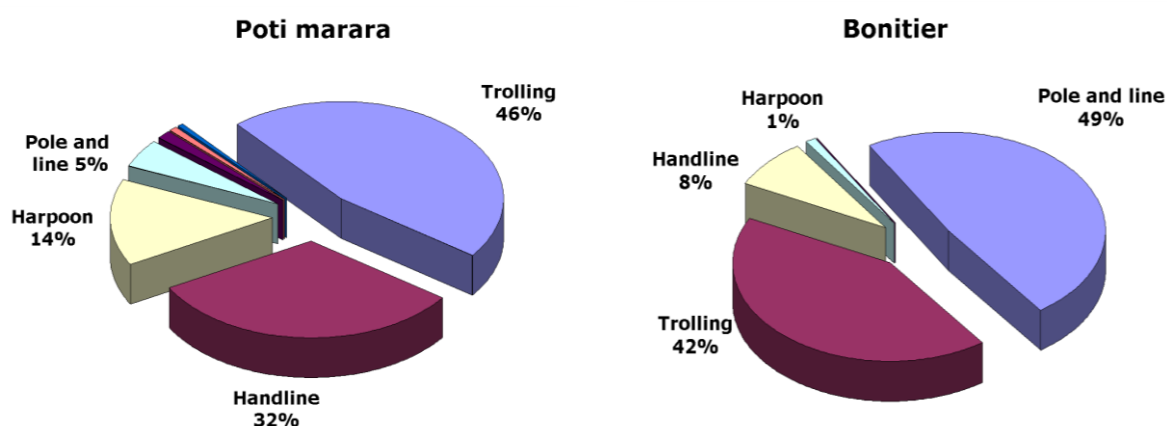


Table 1 – Fleet structure of the small scale nearshore fishery

Type of boats	2004	2005	2006	2007	2008	2009
Poti marara	247	234	275	280	291	313
Bonitier	55	49	52	50	47	47

Although the size of the *poti marara* fleet shows some fluctuations among years, this fleet seems to have reached a stable level and the individual fishing effort will probably remain quite steady in the future. It is noteworthy that there is also a large number of non professional *poti marara* whose fishing effort and catches are difficult to estimate. The *bonitiers*' fleet has steadily decreased and it is likely that this trend will continue in the future. Nevertheless, consistent with the low level of coverage, short term trends are difficult to highlight for these two fleets.

The longliners fleet could be sorted into two types of vessels : fresh fish longliners and freezer longliners. This fleet operates most exclusively inside the French Polynesia EEZ.

- Fresh fish longliners, comprise boats 11-to-20 m in length made of aluminium or FRP. These boats make 15 days trips, partly due to the limited time of conservation on ice as well as their limited range.
- Freezer longliners are mostly 21-26 m steel vessels. These boats have freezer capacity and can remain at sea for 1 1/2 up to 3 months. However, the last sets are often used to target fresh-fish that is kept on ice or in slurry. Since the drop of the catch rate in 2003, freezer boats tend to operate as fresh tuna boats as the price on the local market is generally higher for the fresh tunas.

**Table 2 – Fleet structure of the small scale nearshore fishery**

<b>Type of boats</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Fresh longliners	45	40	39	35	34	33
Freezer longliners	30	32	32	29	34	35

### **Annual catch by species**

The overall nominal catches for the professional tuna fisheries in 2009 is estimated around 8 790 metric tons, albacore accounting for 43 %, yellowfin tuna for 15 %, skipjack for 15 % and big eye tuna for 7 %.

**Table 3 – Annual catch estimates for the bonitier fleet**

<b>Metric tons</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Skipjack	520	391	585	359	543	676
Yellowfin tuna	142	104	126	152	82	77
Dolphin fish	22	27	36	19	41	31
Billfish	21	20	18	23	25	17
Wahoo	7	19	37	29	26	12
Albacore tuna	6	6	20	17	12	21
Other	18	13	79	67	43	22
<b>Total</b>	<b>737</b>	<b>580</b>	<b>901</b>	<b>666</b>	<b>772</b>	<b>855</b>

**Table 4 – Annual catch estimates for the poti marara fleet**

<b>Metric tons</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Skipjack	491	365	516	506	443	605
Yellowfin tuna	412	288	419	410	327	400
Dolphin fish	244	240	435	300	418	319
Billfish	112	148	161	148	151	178
Wahoo	46	67	79	88	59	69
Albacore tuna	72	86	138	10	160	211
Other	181	110	161	103	150	136
<b>Total</b>	<b>1 557</b>	<b>1 303</b>	<b>1 909</b>	<b>1 663</b>	<b>1 708</b>	<b>1 918</b>

**Table 5 – Annual catch estimates for the longline fleet**

<b>Metric tons</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Albacore tuna	2 218	2 426	2 918	3 957	3 068	3 560
Yellowfin tuna	1 066	793	690	527	447	716
Big eye tuna	502	606	498	478	490	587
Blue marlin	243	251	266	327	224	223
Striped marlin	109	91	122	138	142	104
Swordfish	86	79	83	67	80	71
Black marlin	1	0	0	1	0	0
Wahoo	196	243	201	267	180	162
Opah	150	118	108	122	120	99
Dolphin fish	129	90	113	109	68	81
Oilfish	37	26	27	28	23	42
Mako shark	37	25	26	18	10	14
Skipjack	72	24	28	30	18	25
Pomfret	25	21	15	14	17	17
Spearfish	12	10	9	10	13	15
Sailfish	5	4	2	2	1	4
Misc.	75	64	31	65	39	96
<i>Other sharks*</i>	<i>317</i>	<i>217</i>	<i>123</i>	<i>148</i>	<i>116</i>	<i>200</i>
<b>Total</b>	<b>5 278</b>	<b>5 087</b>	<b>5 258</b>	<b>6 308</b>	<b>5 057</b>	<b>6 017</b>

*\* Not retained*

Except the Mako shark, all sharks are prohibited to fishing. According to the logsheets collected and the observers data, there has been no incidental catch of turtle or bird in 2009.

Catches from the nearshore fishery are stored on ice and sold fresh within the island of production. Although, the freezer longliners represent half of the fleet, only 12 % of the nominal longliners catches are landed frozen (whole or loined). An equivalent of 18 % of the commercial longline catches are exported : almost all the frozen landings but only 12 % of the fresh landings.

### **Fishing patterns**

More than three fourth of the nearshore fishery is based in the Society archipelago. Although the individual fishing effort shows some vicissitude the global fishing effort is relatively stable among the year and no seasonal trends can be highlighted.

The longliners fleet, most entirely based in Tahiti, usually exploit half to two third of the EEZ but the core fishing ground remains historically in the north part of the EEZ (10°-20° S /140°-150°W). (Appendix 1)

## 2 Research and statistics

### Statistical data collection system

The data collection system for the longline fishery comprises six components.

- *Fishing license*

Fishing license for the domestic vessels is delivered for the life of the boat, presuming it does not change property and clears its annual visit for security. Any change of property or main modification on the vessel is subject to a re-licensing procedure. Currently, French Polynesia has not limited the number of domestic vessels authorised to operate in its EEZ.

Fishing permit for foreign vessels is delivered on an annual basis; no permit has been authorised since the end of the fishing agreement on December 2000.

- *Boat activity*

Every week day, the Fisheries office census the activity of the fleet at the fishing port. The main purpose is to monitor (in real time) the gross activity of the fleet. These data are also used as the main input for estimating the production of the vessels which do not report their catches.

- *Logbook*

Licensed operators are required to record and submit daily records of fishing activities at an operational level to the Fisheries Office.

**Table 6 – Logsheets coverage rate of the longline fleet in 2009**

Parameter	Coverage rate (%)
Boats	80
Trips	72
Days at sea	73
Sets	74
Hooks	77

- *Unloadings*

Most of the licensed long line boats have an obligation to unload catches within the fishing port of Papeete. The port manager has to monitor the amount of fish unloaded in order to collect unloading fees. Coverage rate for the overall landings is estimated around 50 % of the commercial catches : coverage rate for the fresh products is estimated around 45 % since coverage rate for frozen products is higher, 85 %, although the information is often less detailed.

- *Observer programme*

The French polynesia's Observer Programme began in September 2002 with EU funding by the PROCFISH projet (2002-2007) : first with 1 full time observer and 1 mixed observer-coordinator. Then two port samplers and three more observers were hired in June 2006. Due to a delay in the availability of funding source, the programme broke off in July 2007 and resumed in April 2008 (funded by the SCIFISH project), with one coordinator, two observers and two port samplers. Three more observers have been hired during the end of 2008 and three more in 2009 while one left the programme.

In 2009, 17 observers trips were conducted on board of domestic longliners (800 days at sea, 488 sets and more than 1,000,000 hooks observed). Observers trips represent a coverage of 6.5% of the total effort (fishing days).

**Table 7 – Observers trips in French Polynesia since 2005.**

<u>Year</u>	<u>No observers</u>	<u>No trips</u>	<u>No days at sea</u>	<u>No sets</u>	<u>No hooks</u>	<u>% coverage</u>	<u>Comments</u>
2005	3	18	422	255	635,114	2.9 %	Experimental fishing trip: 2 vessels, 90 sets (35% of total observed sets)
2006	6	20	487	312	723,149	5.9 %	Experimental fishing trip: 4 vessels, 112 sets (40% of total observed sets)
2007	2	17	217	138	305,977	1.8%	End of EU founding (End of PROCFISH)
2008	4	17	300	206	510,115	2.5 %	Beginning of SCIFISH in April
<b>2009</b>	<b>6</b>	<b>51</b>	<b>800</b>	<b>488</b>	<b>1,130,574</b>	<b>6.5%</b>	

- *Port sampling*

There has been regular but low coverage sampling in Papeete for several years and very limited in recent year due to logistical difficulties. However, these difficulties were partly overcome by the completion of a centralised unloading facility in Papeete and since 2005 a team of two port samplers carried out port-sampling operations.

**Table 9 – Port sampling operations since 2005**

<u>Year</u>	<u>No boats unloaded *</u>	<u>No boats sampled</u>	<u>Sampling coverage</u>
2005	319	232	73%
2006	377	210	56%
2007	500	335	67%
2008	610	439	72%
<b>2009</b>	<b>619</b>	<b>477</b>	<b>77%</b>

\* during the sampling period

In 2009, 477 port sampling operations were conducted during fish unloading processes. Sampling coverage was 72%.

## **Research**

The observers collected 166 biological samples of albacore tuna (gonads and otoliths) during the year. Those samples were all sent to the Oceanic Fisheries Program of the SPC. This sampling will continue in 2010.

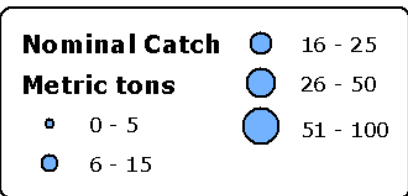
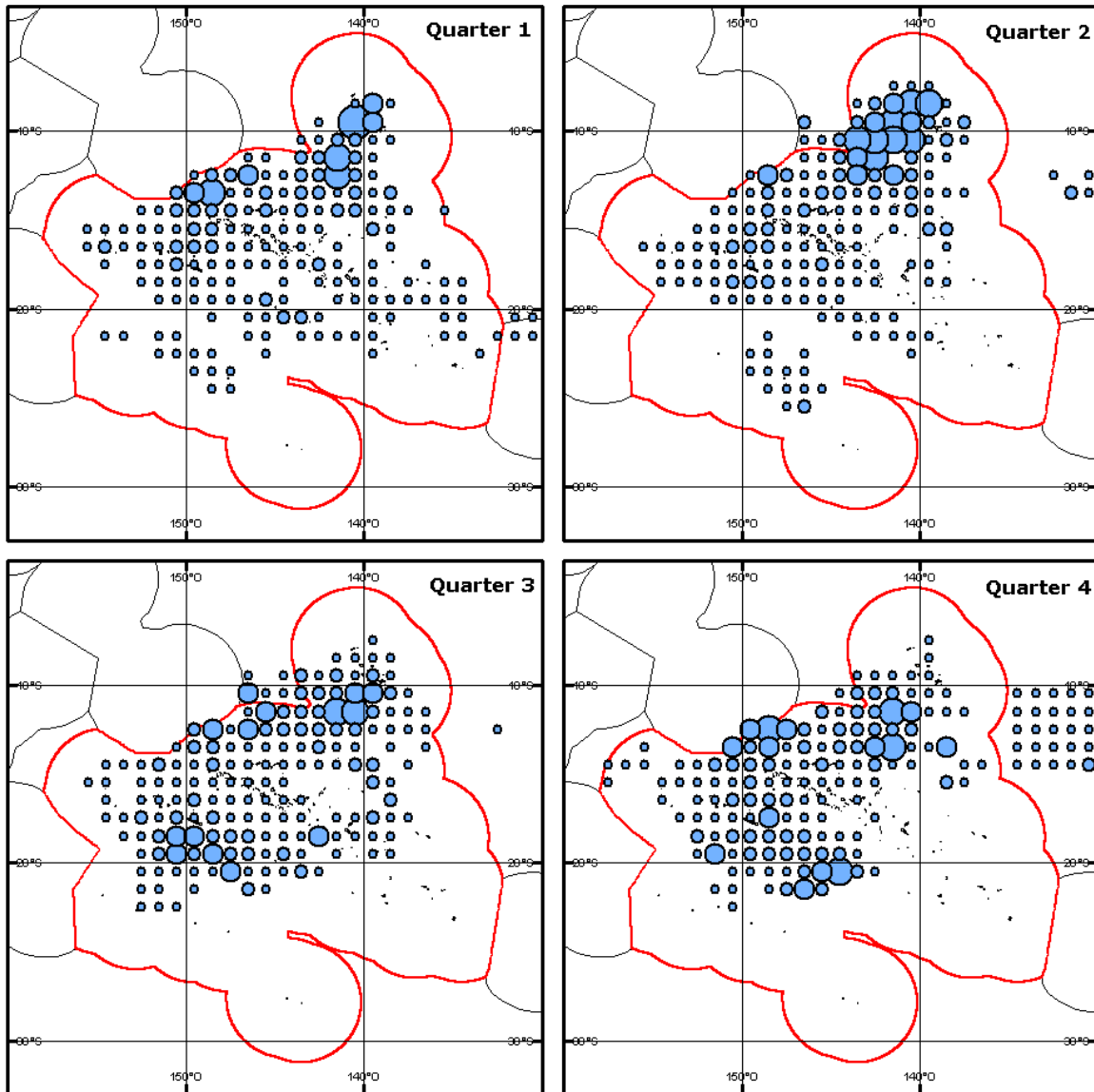
During the year, observers were trained by staff from CSIRO to tag swordfish with pop up mark. The first specimen was tagged in December 2009. Eight more specimen should be tagged during 2010.



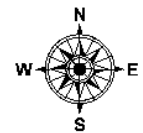
Appendix 1 : Catches per quarter for the longline fleet between 2005 and 2009

Catch per quarter

French Polynesia domestic longline fleet in 2005

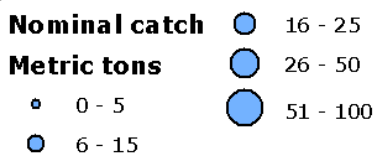
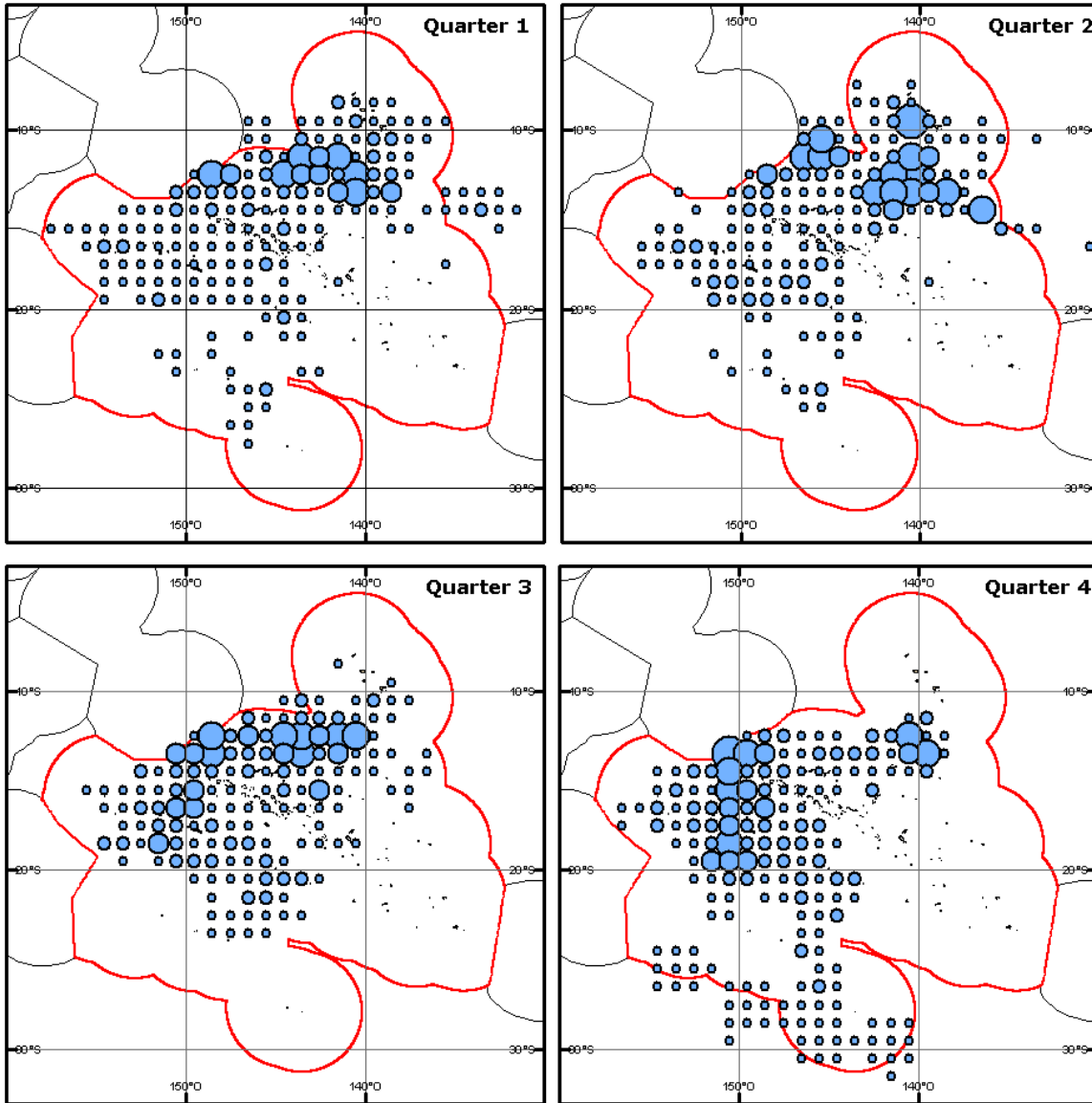


\* Catch : nominal catches unraised.  
Coverage rate for 2005 is 74 %

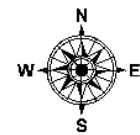


# Catch per quarter

## French Polynesia domestic longline fleet in 2006

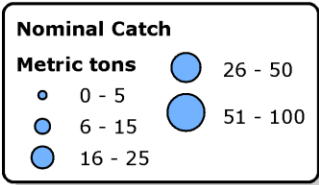
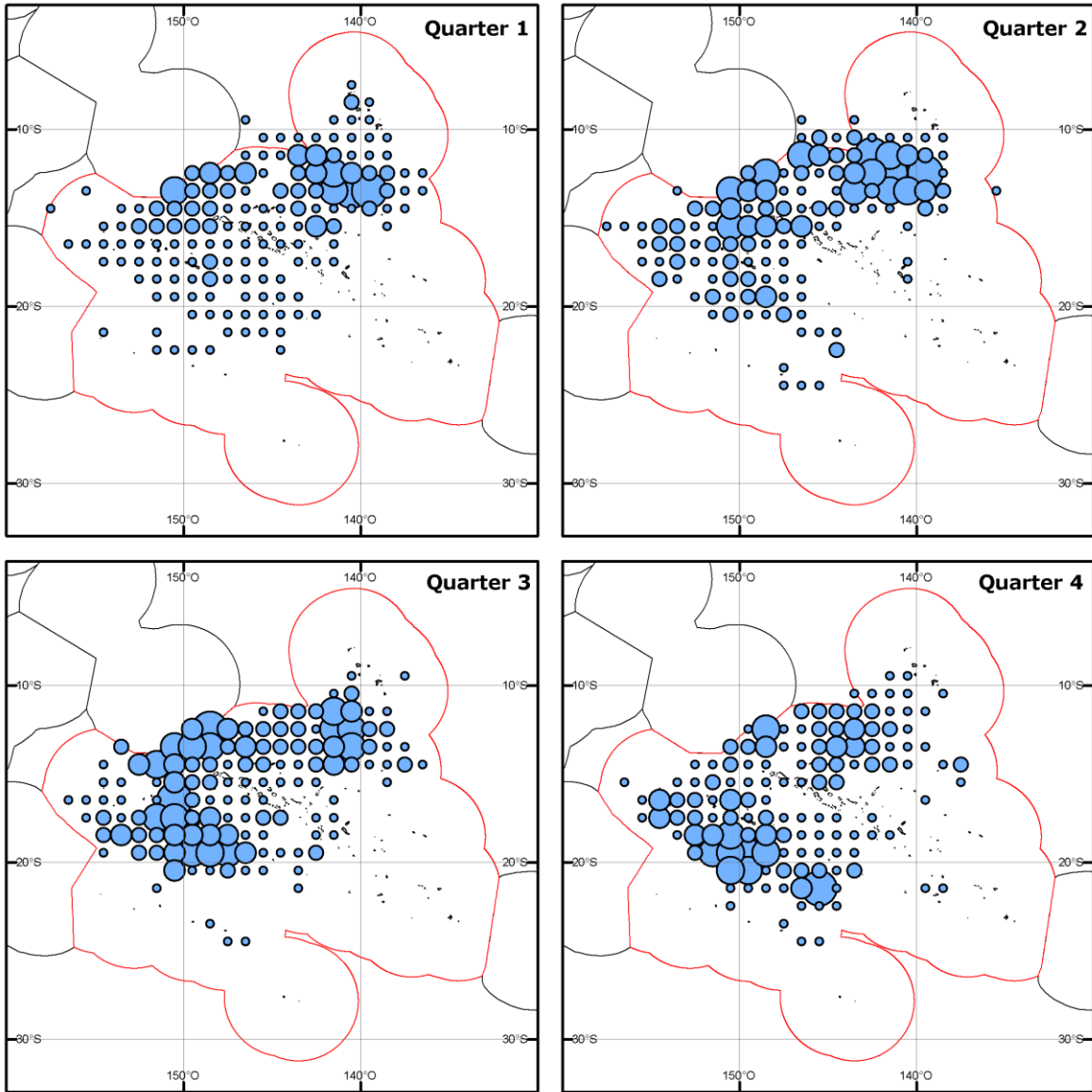


\* Catch : nominal catches unraised.  
Coverage rate for 2006 is 79 %

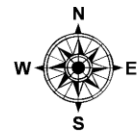


# Catch per quarter

## French Polynesia domestic longline fleet in 2007

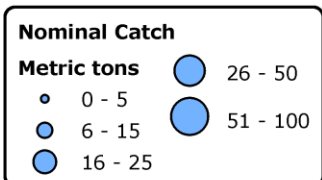
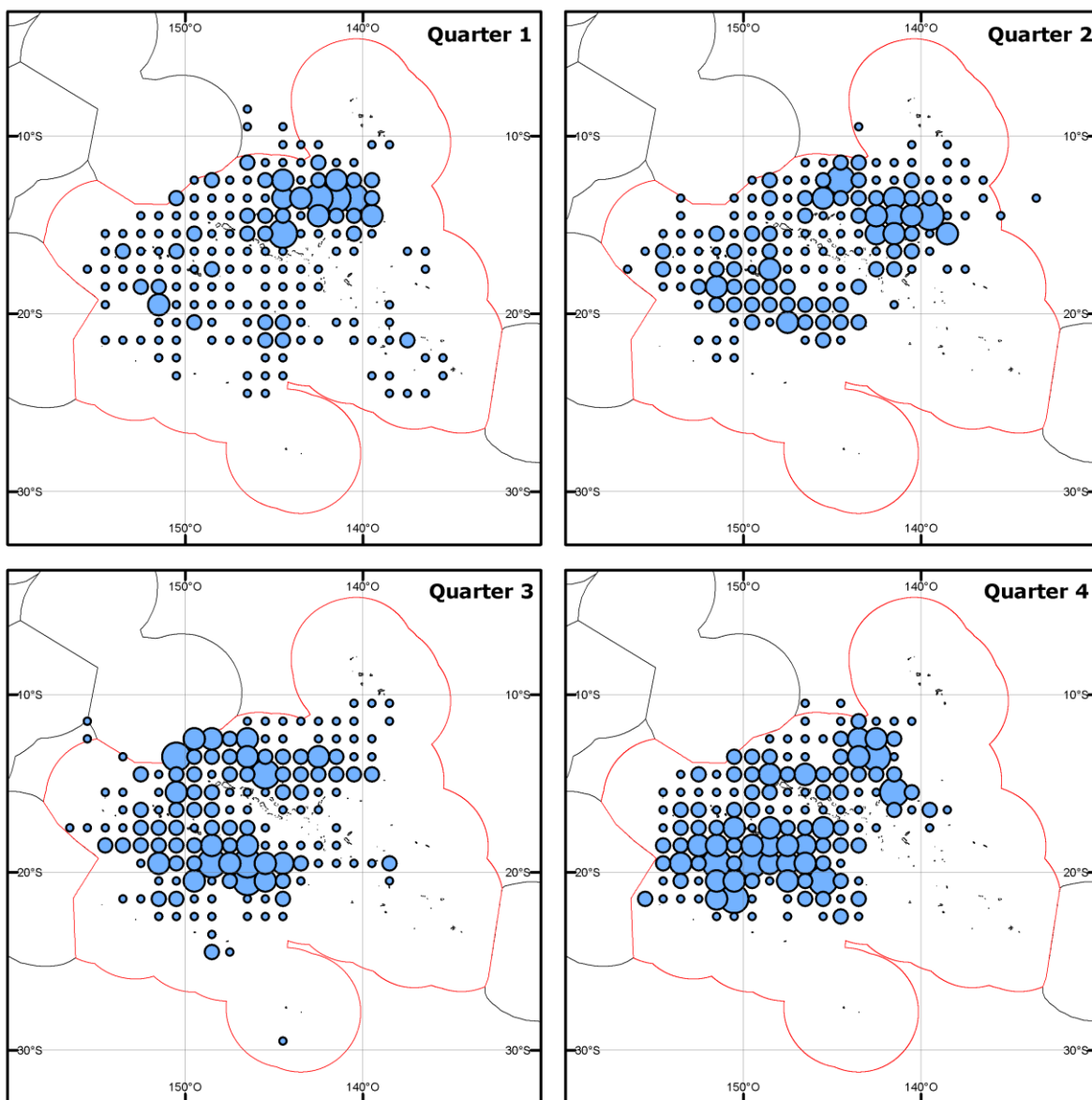


\* Catch : nominal catches unraised.  
Coverage rate for 2007 is 71 %

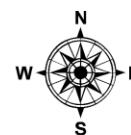


# Catch per quarter

## French Polynesia domestic longline fleet in 2008

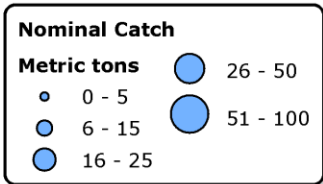
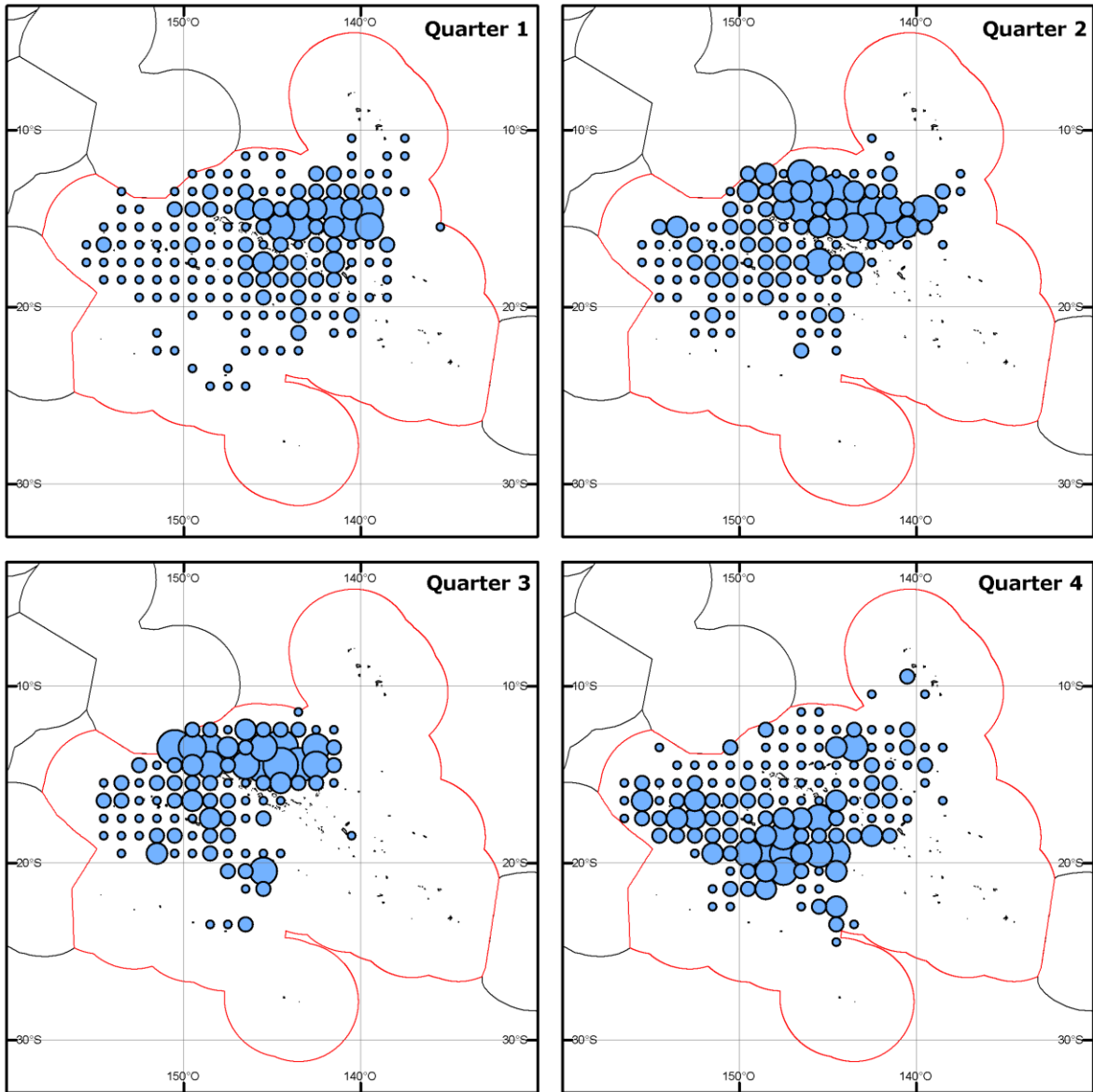


\* Catch : nominal catches unraised.  
Coverage rate for 2008 is 75 %

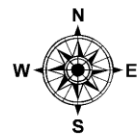


# Catch per quarter

## French Polynesia domestic longline fleet in 2009



\* Catch : nominal catches unraised.  
Coverage rate for 2009 is 77 %



**Appendix 2 : Composition of coastal fleets since 1990**

<b>Year</b>	<b>Bonitiers</b>	<b>Poti marara</b>	<b>Total</b>
1990	118	100	218
1991	108	104	212
1992	115	106	221
1993	98	152	250
1994	96	155	251
1995	100	159	259
1996	96	160	256
1997	70	166	236
1998	72	207	279
1999	74	242	316
2000	63	280	343
2001	60	250	310
2002	55	237	292
2003	55	245	300
2004	55	247	302
2005	49	234	283
2006	52	275	327
2007	50	280	330
2008	47	291	338
2009	47	313	360

**Appendix 3 : Evolution of the catches of the coastal fleet**

<b>Year</b>	<b>Catch estimates (mt)</b>
1990	1 567
1991	2 048
1992	1 822
1993	1 341
1994	1 681
1995	2 110
1996	1 703
1997	1 612
1998	2 192
1999	2 033
2000	2 028
2001	2 506
2002	2 301
2003	2 035
2004	2 294
2005	1 883
2006	2 810
2007	2 332
2008	2 480
2009	2 773

**Appendix 4 : Composition of the offshore longline fleet since 1990**

<b>Year</b>	<b>Longline bonitiers</b>	<b>Fresh tuna boats</b>	<b>Freezer tuna boats</b>	<b>Total</b>	<b>Hooks (*1000)</b>
1990	1	-	4	5	49
1991	2	2	6	10	414
1992	15	6	4	25	662
1993	25	15	7	47	3 650
1994	25	29	9	63	5 026
1995	23	31	11	65	5 898
1996	21	26	12	59	6 601
1997	15	30	15	60	7 549
1998	14	28	12	54	8 247
1999	14	24	19	57	11 760
2000	11	30	16	57	12 453
2001	10	34	17	57	14 109
2002	6	30	18	54	13 964
2003	6	37	22	64	17 873
2004	3	42	30	75	22 515
2005	0	40	32	72	21 454
2006	0	39	32	71	19 652
2007	0	35	29	64	18 789
2008	0	34	34	68	19 212
2009	0	33	35	68	17 191

**Appendix 5 : Evolution of the catches of the off shore fleet**

<b>Year</b>	<b>Long line fleet</b>	<b>Trollers (40°S)</b>	<b>Total</b>
<b>1990</b>	55	299	354
<b>1991</b>	370	326	696
<b>1992</b>	820	72	892
<b>1993</b>	2 400	45	2 445
<b>1994</b>	2 653	0	2 653
<b>1995</b>	2 455	183	2 638
<b>1996</b>	3 373	69	3 442
<b>1997</b>	4 636	24	4 660
<b>1998</b>	5 282	0	5 282
<b>1999</b>	5 303	0	5 303
<b>2000</b>	6 891	0	6 891
<b>2001</b>	7 811	0	7 811
<b>2002</b>	7 401	0	7 401
<b>2003</b>	6 530	0	6 530
<b>2004</b>	5 159	0	5 159
<b>2005</b>	5 082	0	5 082
<b>2006</b>	5 258	0	5 258
<b>2007</b>	6 309	0	6 309
<b>2008</b>	5 057	0	5 057
<b>2009</b>	6 017	0	6 017