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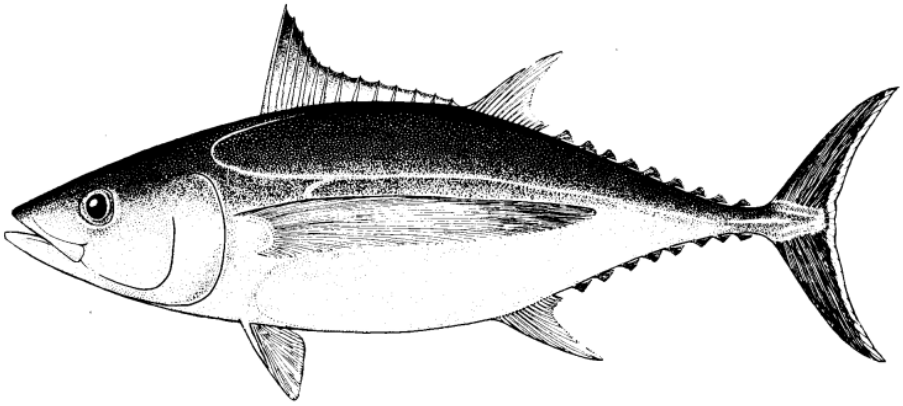
ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

WCPFC-SC5-AR/CCM-08

FRENCH POLYNESIA

Tuna fisheries in French Polynesia in 2008



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

August 2009

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 2009.	YES

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

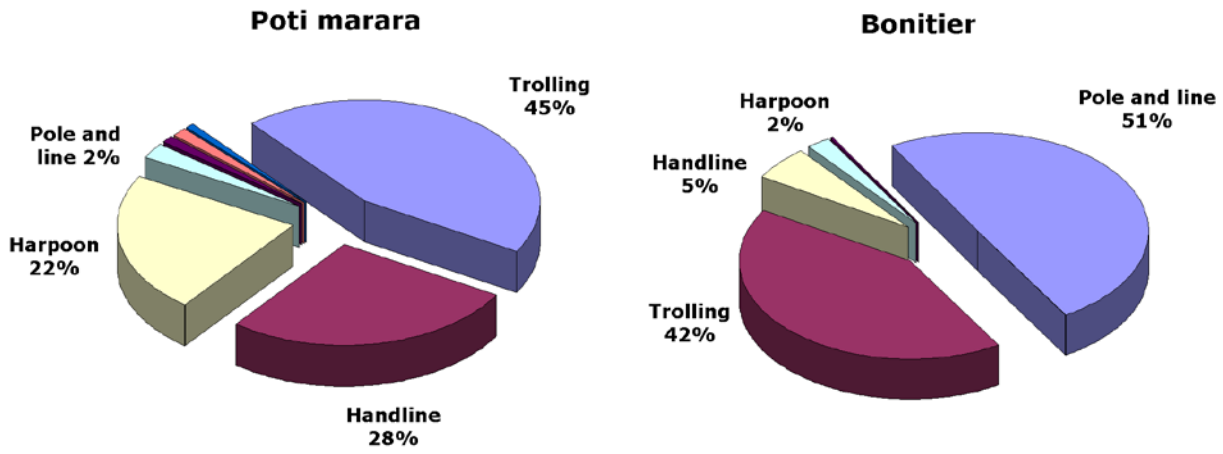


Table 1 – Fleet structure of the small scale nearshore fishery

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

Type of boats	2004	2005	2006	2007	2008
Fresh longliners	45	40	39	35	34
Freezer longliners	30	32	32	29	34

Annual catch by species

The overall nominal catches for the professional tuna fisheries in 2008 is estimated around 6 765 metric tons, albacore accounting for 43 %, yellowfin tuna for 11 %, skipjack for 13 % and big eye tuna for 7 %.

Table 3 – Annual catch estimates for the bonitier fleet

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

Table 4 – Annual catch estimates for the poti marara fleet

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

Table 5 – Annua catch estimates for the longline fleet

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

** 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 2008.

Catches from the nearshore fishery are stored on ice and sold fresh within the island of production. Although, the freezer longliners represent 50 % of the fleet, only 5 % of the nominal longliners catches are landed frozen (whole or loined). An equivalent of 14 % of the commercial longline catches are exported : almost all the frozen landings but only 8 % 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 – Coverage rate of the longline fleet activity in 2008

Parameter	Coverage rate (%)
Boats	84
Trips	75
Days at sea	75
Sets	72
Hooks	74

- *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 45 % of the commercial catches. Coverage rate for the fresh products is estimated at 43 %. Coverage rate for frozen products is higher, 80 %, but 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.

In 2008, 17 observers trips were conducted on board of domestic longliners (300 days at sea, 206 sets and more than 500.000 hooks observed). Observers trips represent a coverage of 2.5% (percentage of fishing days).

Table 7 – Observers trips in French Polynesia since 2005.

Year	No observers	No trips	No days at sea	No sets	No hooks	% covergage	Comments
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**

- *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

Year	No boats unloaded *	No boats sampled	Sampling coverage
2005	319	232	73%
2006	377	210	56%
2007	500	335	67%
2008	**610**	**439**	**72%**

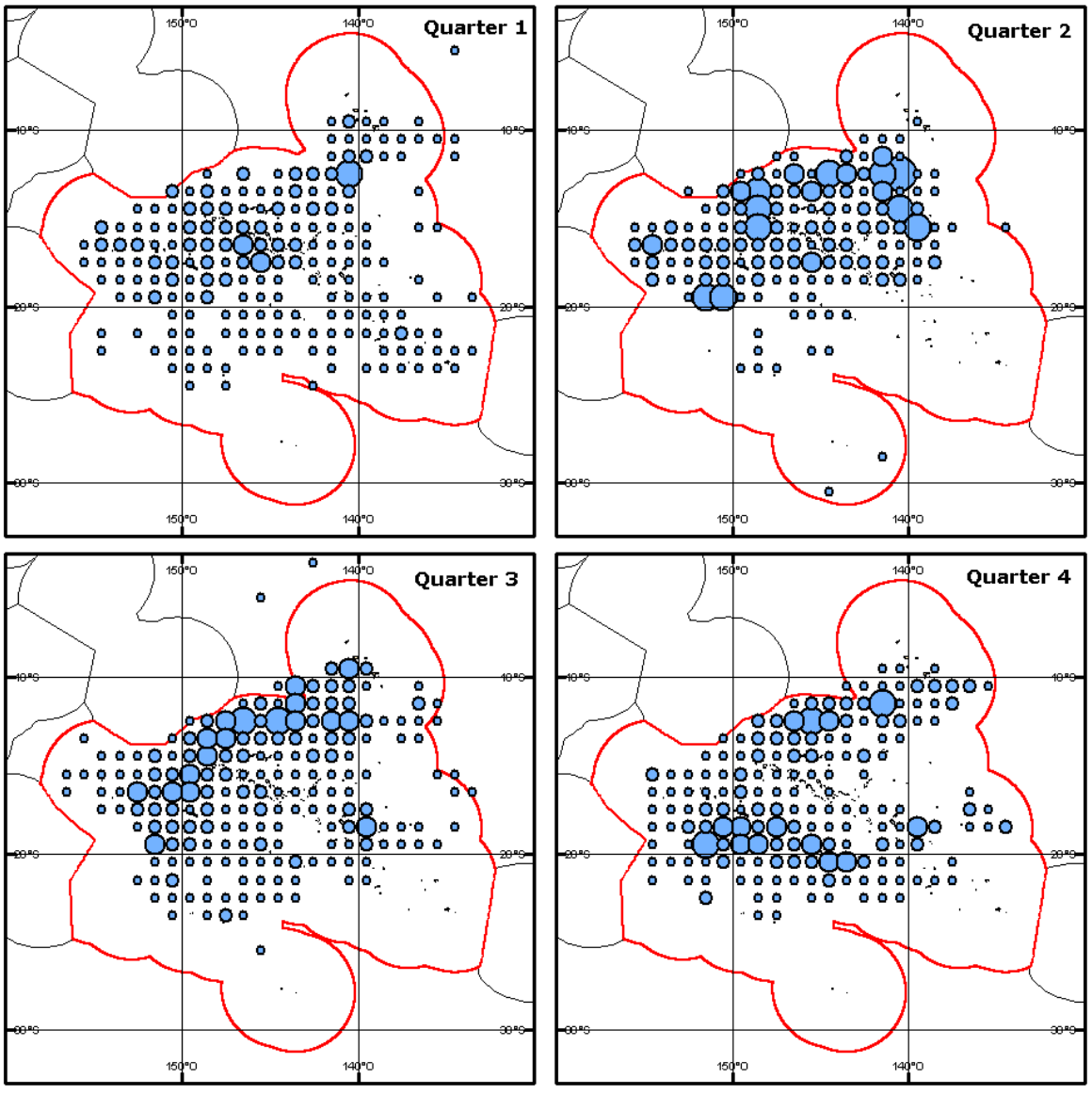
* during the sampling period

In 2008, 610 port sampling operations were conducted during fish unloading processes. Sampling coverage was 72%.

Appendix 1 : Catches per quarter for the longline fleet between 2004 and 2008

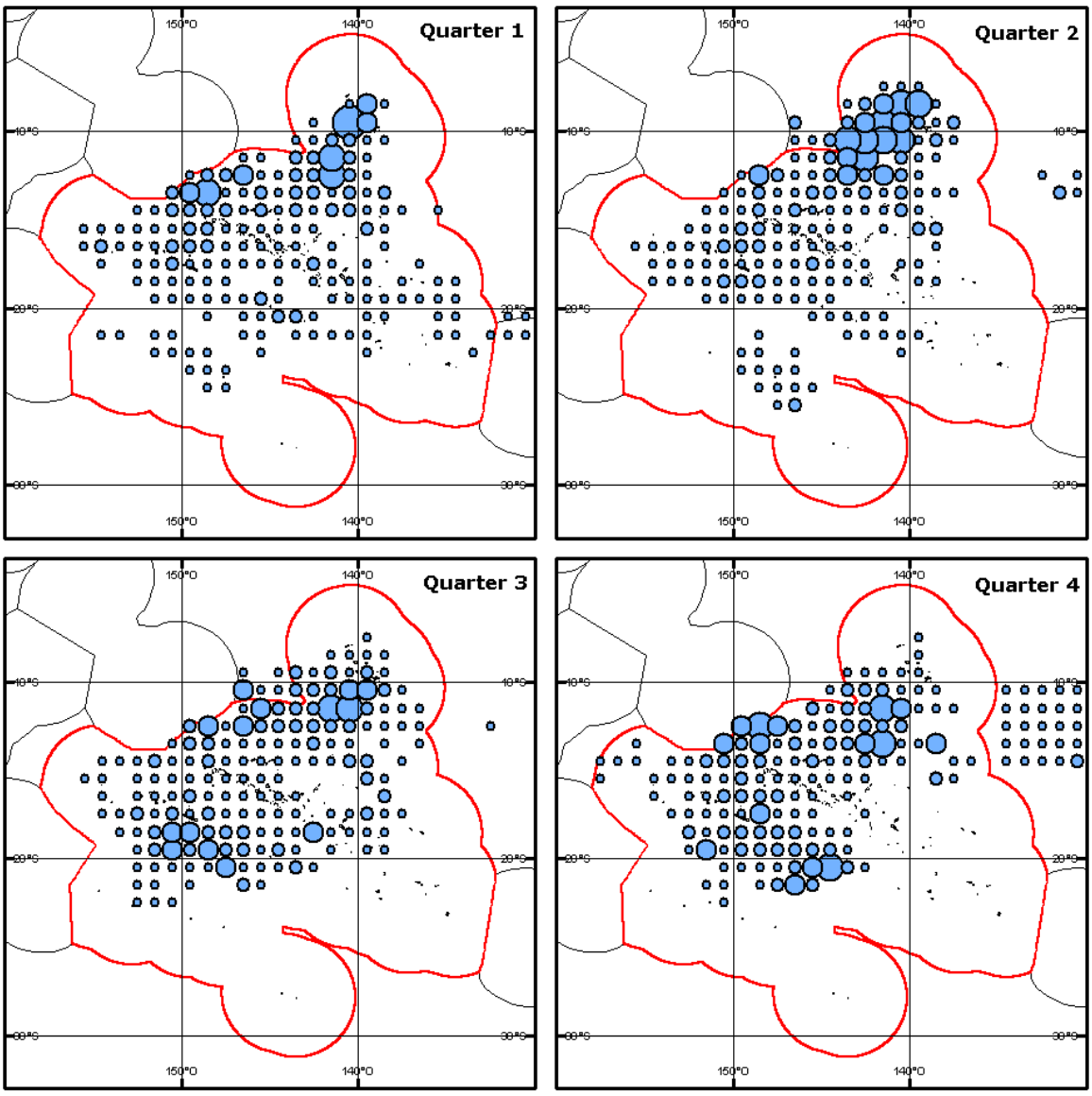
Catch per quarter

French Polynesia domestic longline fleet in 2004



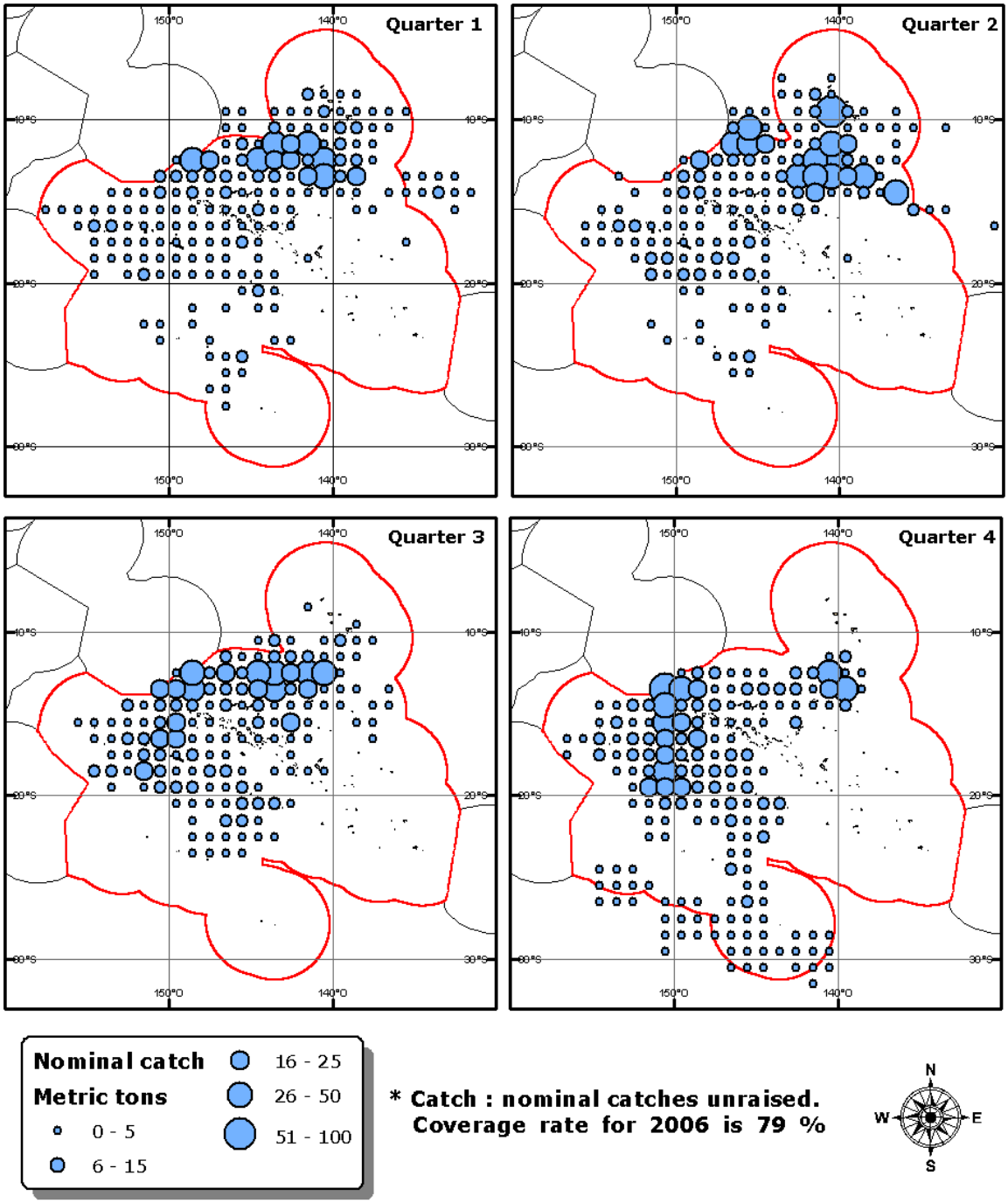
Catch per quarter

French Polynesia domestic longline fleet in 2005



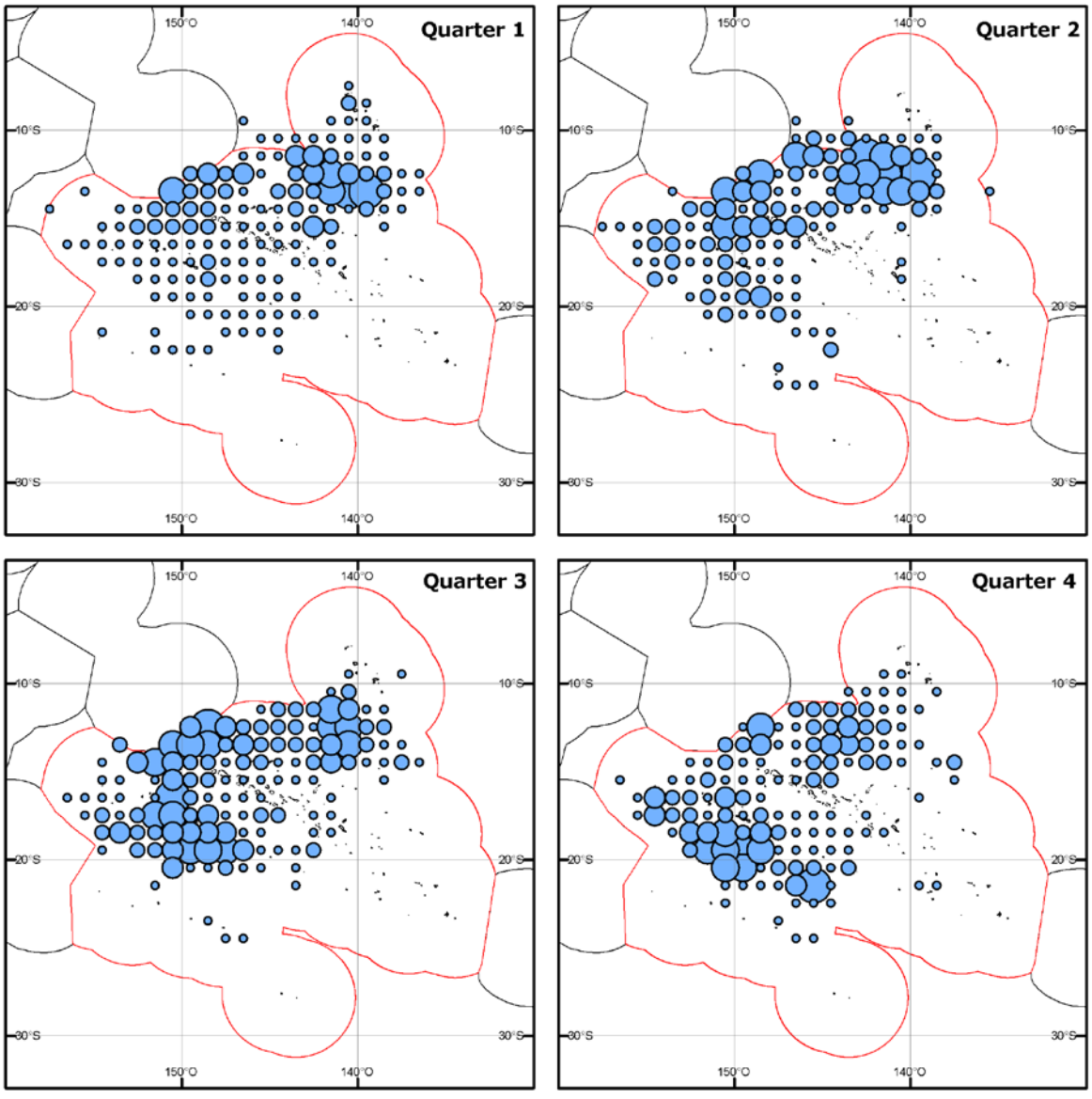
Catch per quarter

French Polynesia domestic longline fleet in 2006



Catch per quarter

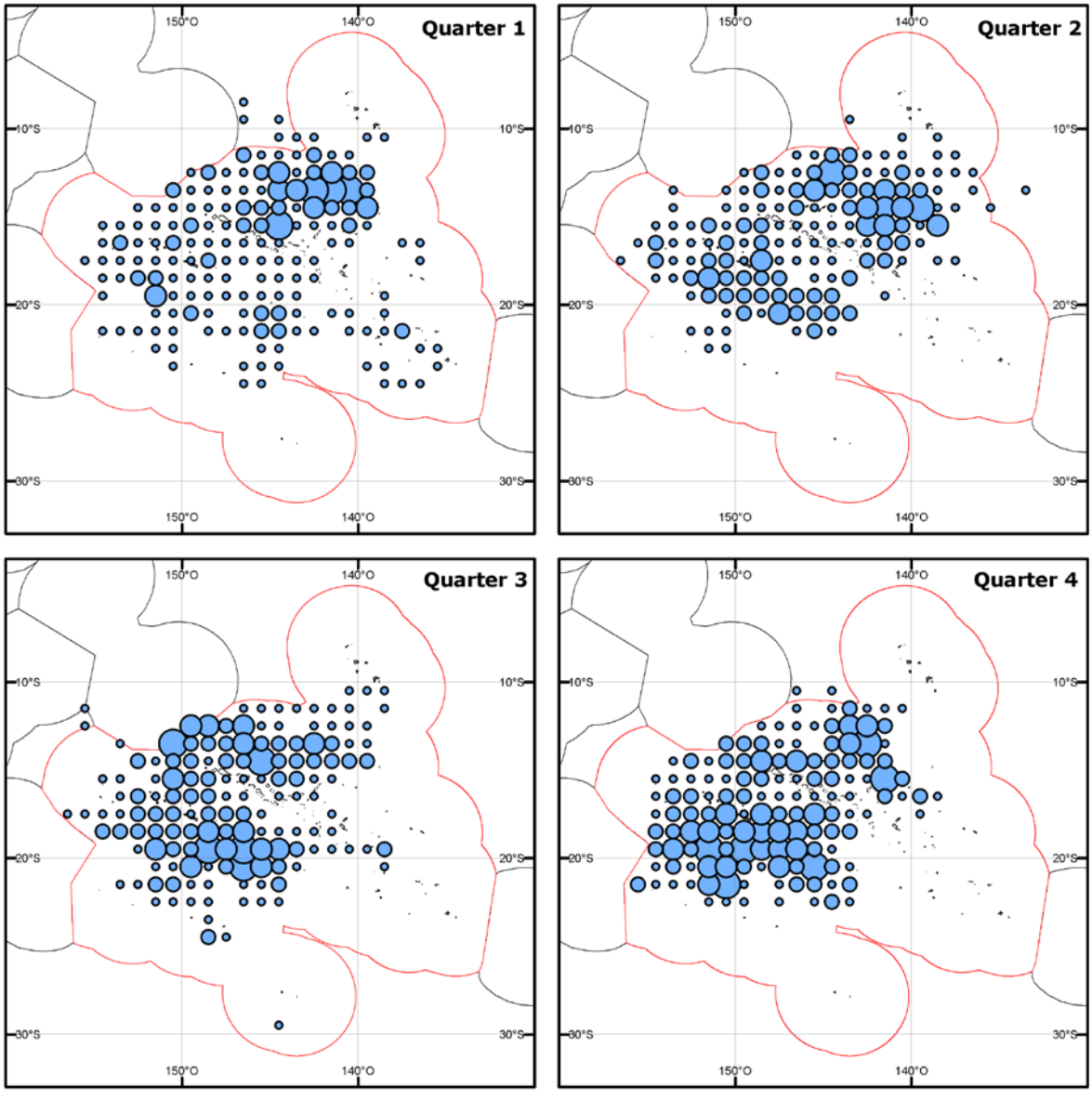
French Polynesia domestic longline fleet in 2007



* 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 %

Appendix 2 : Composition of coastal fleets since 1990

Year	Bonitiers	Poti marara	Total
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

Appendix 3 : Evolution of the catches of the coastal fleet

Year	Catch estimates (mt)
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

Appendix 4 : Composition of offshore longline fleet since 1990

Year	Longline bonitiers	Fresh tuna boats	Freezer tuna boats	Total	Hooks (*1000)
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

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

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