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FRENCH POLYNESIA

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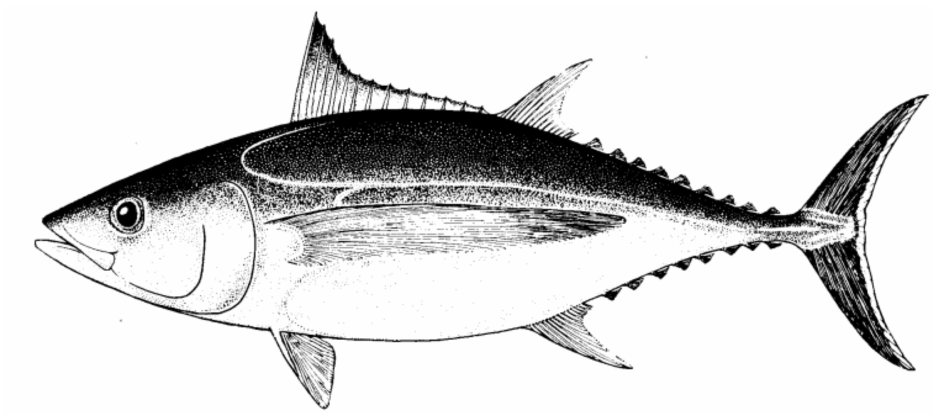
Tuna fisheries in French Polynesia in 2005



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Introduction

Tuna fishery is a major component of the developpement of French polynesia economy, either for economical and social aspects. Its tuna fisheries is divided into two components : a small scale coastal fishery and an offshore long line fishery. There is no longer agreement for foreign fleet since 2001.

Coastal fishery

The coastal fishery comprises two types of boat (Appendix 1): the *poti marara*, (literally 'flying-fish boats') 228 strong in 2005, 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, in both the lagoon and reef environments) and the *bonitiers* ('skipjack boats'), a 45 strong fleet in 2005, which are 10-to-12 m long boats made from wood or FRP, most of which target skipjack using pole-and-line gear (they are much less versatile than the *poti marara*). The statistical coverage of this fleet is very variable among the different islands.

The fishing effort for the *poti marara* fleet was 23,018 days at sea in 2005 (average of 99 days per boat) and 4,072 days at sea for the bonitiers fleet (average of 87 days per boat). The total 2005 catches were estimated around 1,857 mt (Appendix 2). The average CPUE of the poti marara was near 45 kg per fishing day and those for the bonitier fleet was near 120 kg per fishing day.

Table 1 – Catches estimates of the coastal fishery in 2005

Species	**Catches estimates (mt)**
Skipjack	749
Yellowfin	344
Dolphin Fish	308
Billfish	163
Other	117
Albacore	82
Wahoo	94
Nominal Catch	**1,857**

The catches show significant regional differences among the islands in relation with both the differences of oceanographic conditions and gears technics used.

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 heterogenous level of coverage, trends are difficult to highlight for these two fleets.

Offshore fishery

Fleet structure

After the steep increase of the fleet recorded in 2003 and 2004, the number of active boats slightly decreased during the year 2005 (72 units, -4 %). Statistical coverage for the fleet was 74 % (number of trips) in 2005. Almost the entire fleet is based in Papeete. It is divided into three kinds of vessel (Appendix 3 and 4). Since the end of the year 2004, no more longlinning bonitiers were active. They either stop their activity or reconvert into traditional bonitier:

- Fresh fish longliners, 40 strong which comprise boats 13-to-20 m in length made of aluminium or FRP. These boats go for a maximum of 10 days, partly due to the limited they can store the fish as it is kept on ice as well as their limited range. For those reasons, their scope of action is limited to about 350 NM.

- Mixed longliners, 6 strong which are 21 m steel boats. Mixed tuna boats are intermediate between freezer tuna and fresh tuna boats. They can stay at sea for one month and are capable of filleting and freezing their catches and/or putting them on ice. They operated in the same zones as the freezer vessels for one month trips or in fresh tuna boat areas for two week trips. Most of these boats choose to keep the fish on ice.

- Freezer longliners, 26 strong which are mostly 24-26 m steel vessels. These boats can remain at sea for 1 1/2 up to 3 months and have freezer capacity; however, the final sets often target fresh-fish that is kept on ice or in slurry. One advantage of this greater time at sea is the gain in the number of days at sea over the number of fishing days compared to the previous categories. Since 2003, several freezers boats often operated as fresh tuna boats since the price on the local market is often higher.

Fishing effort

Altough the fleet remain quite steady for several years, fishing effort (in hooks soaked) steadily increased consistent with the increase in mean vessel size and in the individual activity. The steep increase between 2003 and 2004 (+61 %) was mainly due to the increase of the size fleet. Fishing effort decreased by 8 % in 2005, partly due to the decrease of the number of boats active but also because of a decrease of the individual activity of the fleet. Thus, the number of trips fell by 17 %.

Table 2 – Overall characteristics of the fishing activity of the longline fleets in 2005

	Fresh tuna boats	**Mixed and freezers tuna boats**	**Total**
Trips	688	238	926
Days at sea	8 120	5 744	13 864
Lines set	5 339	3 860	9 199
Hooks	11 178 952	10 275 174	21 454 126

Catches and CPUE

The overall CPUE slightly improve during 2005 (+ 5 %) but still remained two times lower than the 1993-2003 mean. This slight increase in partly the consequence of the increase of the albacore CPUE (+28 %) but this level is still more than two time lower than the 1993-2003 mean and variability among boats was high. The yellowfin and big eye tuna CPUE also recorded a slight increase but no really significant on the overall catches. In consequence, the overall longline catches remain steady (- 1 %) with an estimates of 5,082 mt caught in 2005.

Table 3 - Catch estimates of the long line fleet in 2005

Species	**Catch estimates (mt)**
Albacore	2,425
Yellow Fin Tuna	793
Big Eye Tuna	606
Blue Marlin	251
Wahoo	243
Others Sharks	217
Opah	118
Dolphin Fish	90
Striped Marlin	88
Swordfish	78
Other	64
Oil Fish	27
Mako Shark	25
Skipjack	24
Pomfret	21
Spearfish	10
Sailfish	4
Nominal Catches	5,082

Export

In 2004, exports amounted to 904 mt w.w.e., i.e. a 12% drop from 2005. Limited by the low production and handicapped by a very lucrative domestic market and a low dollar, the export of fresh fish dropped by 39 %. Exports of frozen fish remained steady, the decrease in exports of whole fish (-90 %) being compensated by the slight increase of exports of frozen loins (+ 12 %) which remained the main product exported (65 % of the overall exports). It is noteworthy to highlight the rising of smoked products (×4) although the total amount remains low.

Table 5: export volumes in 2005 (in t ‘whole-weight equivalent’)

Product		**Volume (mt)**
Fresh	Loins	17.0
	Whole	155.2
Frozen	Loins	710.4
	Whole	11.8
Other	Smoked	3.7
	Dried	5.9
Total		**904.0**

Appendices

Appendix 1: 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	54	235	289
2004	52	241	293
2005	45	228	273

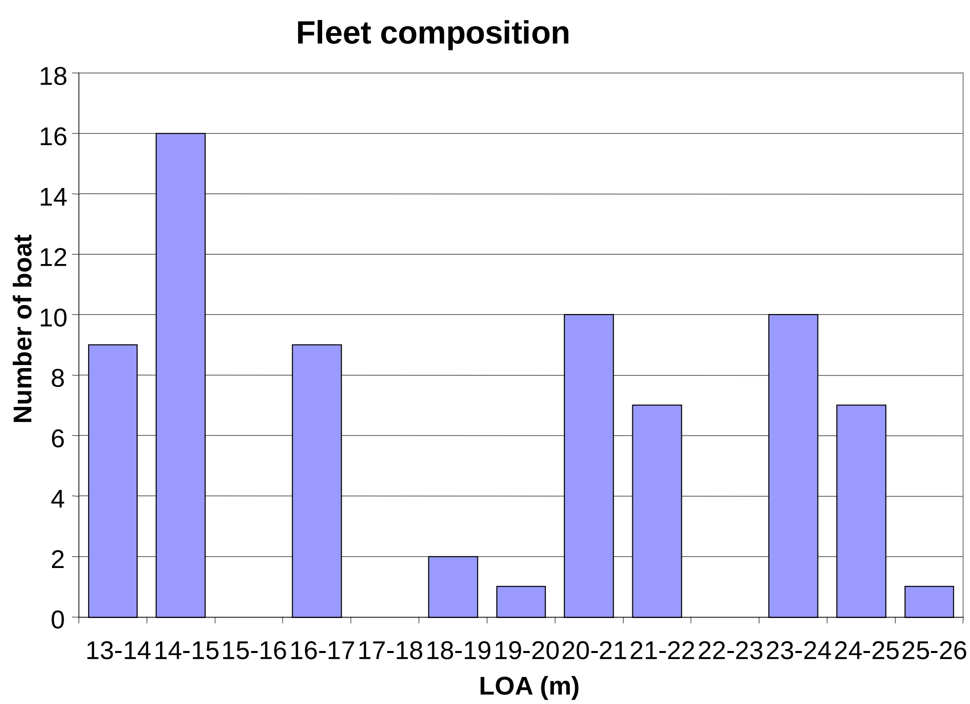
Appendix 2 : Evolution of the catches of the coastal fleet

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	1,879
2004	2,140
2005	1,857

Appendix 3: Composition of offshore longline fleet since 1990

Year	Longline bonitiers	Fresh tuna boats	Mixed 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	2	13	57	14,109
2002	6	30	2	16	54	13,964
2003	6	37	4	18	64	17,873
2004	3	42	4	26	75	22,515
2005	0	40	6	26	72	21,454

Appendix 4 : Offshore fleet length structure in 2005



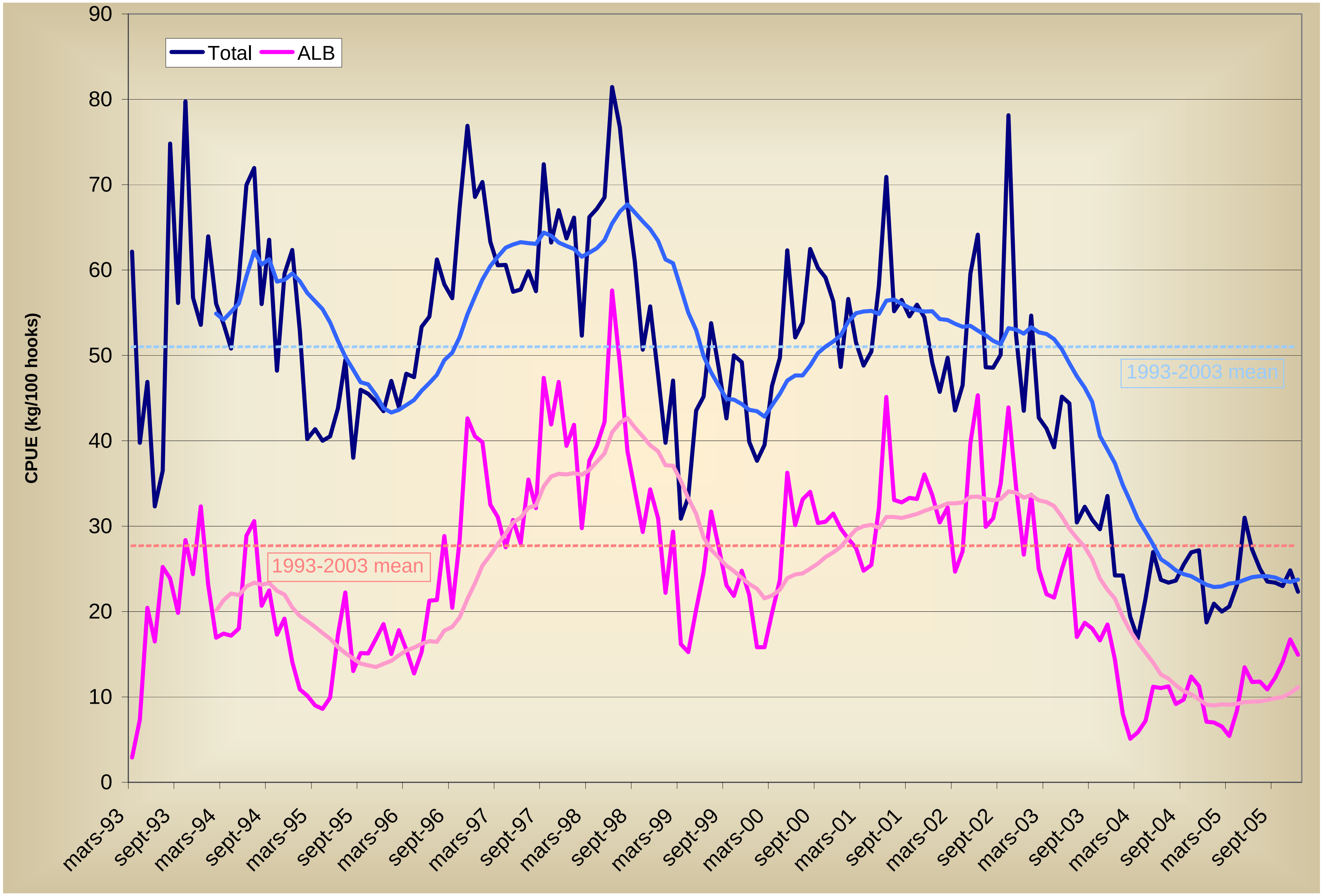
Appendix 5 – Evolution of the catches of the off shore fleet

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

Appendix 6 – Evolution of the export volumes of pelagic fish (in t 'whole-weight equivalent')

Year	Fresh	Frozen	TOTAL (mt)
1997	346	956	1,302
1998	186	1,101	1,287
1999	52	1,256	1,308
2000	296	2,197	2,493
2001	803	2,625	3,428
2002	944	1,881	2,825
2003	495	1,271	1,766
2004	280	742	1,023
2005	182	722	904

Appendix 7 – Trends in the nominal and albacore CPUE between 1993 – 2005



Appendix 8 – Trends in the big eye and yellowfin tuna CPUE between 1993-2005