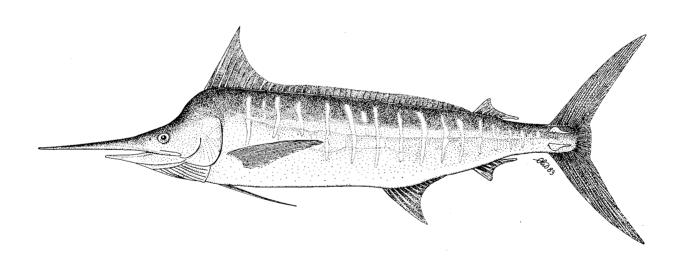


Working Paper

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Gathering Useful and Consistent Data From Gamefishing Tournaments and Clubs

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12TH STANDING COMMITTEE ON TUNA AND BILLFISH

Gathering Useful and Consistent Data From Gamefishing Tournaments and Clubs

by Alban Ellacott, TIBA President and IGFA Representative

I enjoy reminding people that the waters of French Polynesia are relatively rich in blue marlin and that in the 1930s Zane Grey revealed to the world that fine specimens lived in our Polynesian waters. In fact, the first blue marlin over 1000 lbs. was caught by Zane Grey in 1930 in Tahiti, a few miles south of Mataiea. He recounted his exploits in his book "Tales of Tahiti Waters".

Fishing clubs and catches:

Gamefishing began to develop in the 1960s with the creation of the Haura Club in Tahiti in 1962. During the 1970s and 80s, other gamefishing clubs were started. We now have seven gamefishing clubs in the Society Islands which, on average, organise 20 tournaments in the Windward Islands and 15 in the Leeward Islands.

The average number of marlin caught is shown in the appended table.

This table only covers blue marlin as few black marlin, striped marlin or sailfish are caught (about 5 annually for both black and striped marlin, but usually weighing more than 200 kg for black marlin and more than 100 kg for striped marlin, and about 15 annually for sailfish, usually weighing more than 60 kg.).

The estimated mean weight of landed marlin is about 125 kg for gamefishing clubs and bonitiers, 60 kg for Tag and Release (T/R) and 70 kg for poti marara, the total weight of marlin caught is about 82 tonnes in the Windward Islands and about 26 tonnes in the Leeward Islands. When the marlin caught in the Austral, Marquesas and Tuamotu-Gambier Islands are included, the total weight of marlin caught in French Polynesia by gamefishing clubs and the artisanal coastal fishing fleet is about 130 tonnes annually.

The fishing method employed is troll fishing with artificial Kona Head-type lures made of mother-of-pearl enclosed in plastic.

Boat speed and the type and size of lure used makes it possible to target marlin catches quite well (i.e. few small-sized marlins, few yellowfin tuna or sharks, etc.).

Our fishermen's long practical experience ensures that we do not have any real problems in identifying the species of fish caught and we get a very good estimate of the weight of the fish.

During our tournaments, we use catch plotting maps with each box representing a five square-mile area. Radio round-ups are made every two hours, and the number of strikes, fish lost off the hook, broken lines, tag/releases, fish gaffed and brought on board as well as the type and estimated weight of fish are noted and marked on the map. All this information is also recorded on the strike map which fishermen hand over to organisers upon their arrival at the landing dock.

Tag and Release:

The tag and release technique was introduced in the 1980s when the Tahitian International Billfish Association (TIBA) was established in 1984.

The TIBA's objectives are to:

- Promote gamefishing;
- Organise international gamefishing tournaments and meetings;
- Encourage gamefishing as a leisure sport, a potential source of scientific information and a means to develop tourism and cultural exchanges.

In spite of the low number of tagged marlin which are eventually recaptured, tagging and releasing remains a means for learning more about marlin stocks and migrations. It is a way for gamefishing to contribute to the management of the marlin stocks in our maritime zone.

It is not easy getting fishermen to tag and release as French Polynesians like marlin meat, particularly for the preparation of traditional raw fish dishes. However, in spite of this, tagging and releasing has been developing steadily over the years at the many gamefishing tournaments organised in the waters of the Society Islands.

French Polynesian fishermen have mastered the tag and release technique. This can easily be determined by tag photos. In our various tournaments, tag and release catches only qualify after the photo taken before release has been examined, since the position of the tag must be clearly shown on the photo.

Our fishermen are also very familiar with the technique used to reoxygenate marlin before the tagged fish are released.

Up to the present time, marlin weighing under 65 kg have either been disqualified or had to be tagged. From the year 2000, all marlin weighing under 100 kg will have to be tagged.

Observations on catch figures:

All French Polynesian gamefishermen agree that, in spite of a continual increase in the number of fishing days, the number of fish caught has been decreasing every year for the past 15 years, particularly with regard to large fish. Twenty years ago, about a dozen marlins weighing over 1000 lbs. were caught each year in Tahiti and Moorea, whereas for the past three years, there has been only an average of three marlins weighing over 1000 lbs. each year. The same is true for marlins weighing more than 500 lbs., the number of which has decreased at approximately the same rate, since the total number observed over the past few years is about 35 per year. It should be understood that blue marlin size is important to gamefishing as a major "value-adding" factor in this sport.

These observations are particularly disquieting because, although marlin, like certain other species (e.g. skipjack, tuna, etc.), are migratory in nature, we believe that part of our fish stocks tend to remain within our EEZ. In fact, our islands seem to endow our EEZ with the same attraction as FADs , thereby reducing the migratory cycle of these species.

This sedentary aspect of our stocks has been verified each year by the fact that marlin are caught regularly all year long, although a period of greater concentration of these species during the spawning season of the Southern Hemisphere summer, i.e. from November to March, has been observed. Moreover, a regional north-south migration can be observed, with aggregations from November to March in the Society Islands and from May to September in the Marquesas.

During the four years of the 1983 El Nino event (i.e. from 1981 to 1985), a very large increase in catches of practically all species of fish was observed in our waters. For the moment, there have not been any observations of this type linked with the 1998 El Nino.

The impact of commercial fishing:

The overall decrease in catch figures seems to correspond to the development of commercial fishing in French Polynesian waters by both local and foreign fishing boats. Even if a cause-to-effect relationship has not been clearly established, the fact remains that, more and more often gamefishermen bring in marlin with longline hooks in their jaws or bearing unmistakable signs of their struggle to free themselves from longlines. There have also been reports of catches taken by longliners carrying tags from French Polynesian gamefishermen or fishermen from neighbouring countries.

There is not yet any real conflict between the commercial fleet and artisinal or gamefishing fleets in French Polynesia. However:

- in order to avoid future conflicts and better share of the surface fish resources of interest for gamefishing, which itself helps develop tourism, and for artisinal fisheries, supplying food to families, it is highly recommended that commercial vessels from foreign or local fleets soak their lines only beyond the 100 nautical mile zone around each island, while awaiting a better understanding of the behaviour of the fish stocks around our islands:
- for better management of so-called surface fish stocks and in order to limit the amount of by-catch, it is highly recommended that commercial vessels better target their catches to make optimum use of the circumstances prevailing in the export market.

This involves improving the fishing strategy of local and foreign fishing fleets by ensuring better training for personnel in fishing techniques and cutting-edge technology.

This requires both:

Know-how and Willingness

In any event, the future of commercial fishing and artisinal or gamefishing depends on programmes to protect the environment and share ocean resources.

Coastal sports and artisinal fisheries in French Polynesia waters

1. <u>Windward Islands</u>

		Number of	Number of	Number of	Number of
		tournaments	boat-days fishing	marlin caught:	marlin released:
				annual average	annual average
	In tournaments	15	200	80	45
ing Ss					
Fishing Clubs	Outside tournaments	_	500	100	10
田口					
	Poti marara	_	14 000	400	_
<u> </u>					
Other	Skipjack boats	_	12 000	150	_
0					
	TOTAL	15	26 700	730	55

2. <u>Leeward Islands</u>

		Number of	Number of	Number of	Number of
		tournaments	boat-days fishing	marlin caught:	marlin released:
				annual average	annual average
	In tournament	15	115	45	15
ing					
Fishing Clubs	Outisde tournament	_	200	40	5
	Poti marara	_	4 500	130	_
Other	Skipjack boats	-	4 000	40	_
	TOTAL	15	8 815	255	20

NB. We were only interested by the gamefishing lord, the marlin!