

REVISION OF HISTORICAL CATCHES OF BLUEFIN TUNA (*THYNNUS THUNNUS*) MADE BY MALTESE LONGLINERS

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SUMMARY

This paper describes the revision of historical catches of bluefin tuna made by Maltese longliners.

RÉSUMÉ

Le présent document décrit la révision des captures historiques de thon rouge réalisées par les palangriers maltais.

RESUMEN

Este documento describe la revisión de las capturas históricas de atún rojo realizadas por los palangreros de Malta.

1. INTRODUCTION

Maltese fishermen have fished for bluefin tuna for the past century. Records kept at the Department of Fisheries and Aquaculture indicate that as early as 1920 a substantial amount of tuna was already landed regularly during the season. Although this trend continued for some time, the limitations of the Maltese market and the lack of facilities to store tuna for eventual preservation, made it uneconomical for fishermen to keep targeting this fish. Attempts were made on a number of occasions to set up tuna processing plants and in fact the Tunny Fishery (Shares) Act was enacted in February 1950. For a period of time tuna was imported from Italy and North Africa in order to supplement the tuna catches landed in Malta, in an attempt to make the processing industry viable. Tuna catches in Malta derived solely from set nets (Tunnara) situated in the North of Malta. This activity proved to be uneconomical and was wound up during the 1960s owing to financial difficulties. An added complication was the British military base operating in Malta at the time that hampered this type of fishing activity.

Although tuna landings remained relatively substantial until the 1980s, these occurred as a by-product of swordfish longline fishery. The tapping of the Japanese market from 1989 onwards resulted in renewed interest and consequent targeting of bluefin tuna by Maltese fishermen. Bluefin tuna are now fished by surface longlines. This type of fishing was the only method available to the Maltese fishermen owing to the precautionary approach adopted by the Department of Fisheries in implementing sections 13 to 17 of the Fishing Regulations (LN205/34) and through which no purse seining licences for large pelagics have ever been issued. The estimated total bluefin tuna catches for the years 1990-2000 are shown in **Table 1**.

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2. METHODOLOGICAL NOTE

Total fish catches are being estimated by using three independent sources of data:

the volume of locally caught fish going through the organised markets;

- a) the census of Fisheries held since 1997; and
- b) the volume of tuna exports which, according to information, normally bypass the central fish market completely for all the years from Japanese sources.

In 1997, the Central Office of Statistics carried out a Census of Fisheries. Total fish catches as reported by both the full time and the part time fishermen in respect of benchmarker year 1996 were considerably in excess of the volume of fish going through the organised markets even though it is understood that the reported catch in the census might itself be somewhat understated. Notwithstanding, the data in respect of 1996 was utilised to compute a grossing-up coefficient for each species in order to derive an estimate of total fish catches. Such a coefficient is being applied for all previous and subsequent years up to 1999.

Prior to the year 2000, the volume of tuna going through the organised market was almost certainly exclusive of the amount of tuna going to the export markets. In view, of this, the amount being exported was added to that going through the organised markets in order to derive a more reliable estimate of total tuna catches. The relevant grossing-up coefficient ensures an evening out of fluctuations over the years. Moreover the results are consistent with the total tuna catch for 2000 that Department of Fisheries officials reckon to be inclusive of and thereby a more exhaustive estimate of all tuna catches for that year.

The bluefin tuna brought in by the fishermen are gilled and gutted out at sea. Therefore the conversion factor currently used by ICCAT (Miyake Makoto, 1990) needs to be applied to all landings in order to get an estimate of the round weight since this is the recorded weight by ICCAT.

Table 1. Final Estimate of Total Bluefin Tuna Catch

<i>Year</i>	<i>Total Estimated Catch (Kg)</i>
1990	80958
1991	105314
1992	80213
1993	250903
1994	571676
1995	587218
1996	399004
1997	393024
1998	407059
1999	447465
2000	376029