

LA PECHE AU « KANNIZZATI »

THE " KANNIZZATI " FISHERY

by J. A. GALEA
Fisheries Department, Malta

ABSTRACT

The " Kannizzati " Fishery, which is unique to Malta, deserves particular notice. The main fish taken, Dorado (*Coryphaena hippurus*) and Pilot fish (*Naucretes ductor*) are surface swimming fishes. Little is known of their migratory and spawning habits but they appear in Maltese waters from August to December, when they suddenly disappear. Both these species seek shelter under any object floating in the sea and it is this behaviour which the Maltese fishermen exploit by laying anchored cork floats seawards from the Island up to eighty miles at intervals of one mile from float to float. This is very remarkable in that the depth in which these floats are anchored varies from 150 to 800 metres and may be greater in some areas.

RÉSUMÉ

La Pêche au Kannizzati, unique à Malte, mérite une mention particulière. Les principaux poissons pêchés, le Coryphène equiset (*Coryphaena hippurus*) et le Pilote (*Naucretes ductor*) sont des poissons nageant en surface. Leur migration et reproduction sont peu connues. Ils viennent dans les eaux Maltaises d'août à décembre puis disparaissent subitement. Ces deux espèces cherchent un abri sous tout objet flottant et ce comportement particulier est à l'origine du Kannizzati des pêcheurs maltais. La technique consiste à mouiller de mille en mille et jusqu'à 80 milles en mer à partir du rivage, des flotteurs en liège par des floats variant entre 150 et 800 m, parfois plus en certains endroits.

FLOATS

The gear consists of a heavy piece of limestone which is used to anchor the float known locally as the " Kannizzati " by means of a length of tectal treated sisal rope of 4 mm. diameter. The float itself consists of two large tabular masses of cork-slabs several layers thick; a loop passed through a hole bored at the end of each cork mass connects them loosely at a distance of approximately 60 centimetres apart. The floats are marked by a marker flag. A kerosene flare lamp, supported on a flat cork slab, is sometimes used at night to mark the float. Recently monofilament of ϕ 1.40 mm. was introduced to fishermen in place of sisal rope to anchor the " Kannizzati " floats. This has the advantages of not being absorbent and is less affected by currents, which may drag the floats under the surface. Another advantage is that the monofilament, unlike sisal rope, can be recovered and used again in subsequent seasons. Each year over 2,000,000 m. of tectal-treated sisal rope are used, together with 32,000 kg. of cork-slabs, in the making of " Kannizzati " floats, the value of these

Proc. gen. Fish. Coun. Medit., 6: 85-91, 1961.

Reprint from: General Fisheries Council for the Mediterranean,
Proceedings and Technical Papers, No. 6, published by FAO, Rome, 1961.



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being about L6,500. There are fifty fishing boats engaged in this fishery and the sites are allocated by the Department of Fisheries, thus preventing disputes in the siting of the floats. The laying of the float is the most difficult part of the whole operation. The setting of the "Kannizzati" is illustrated in figure 1.

DIAGRAM OF "KANNIZZATI" FLOAT

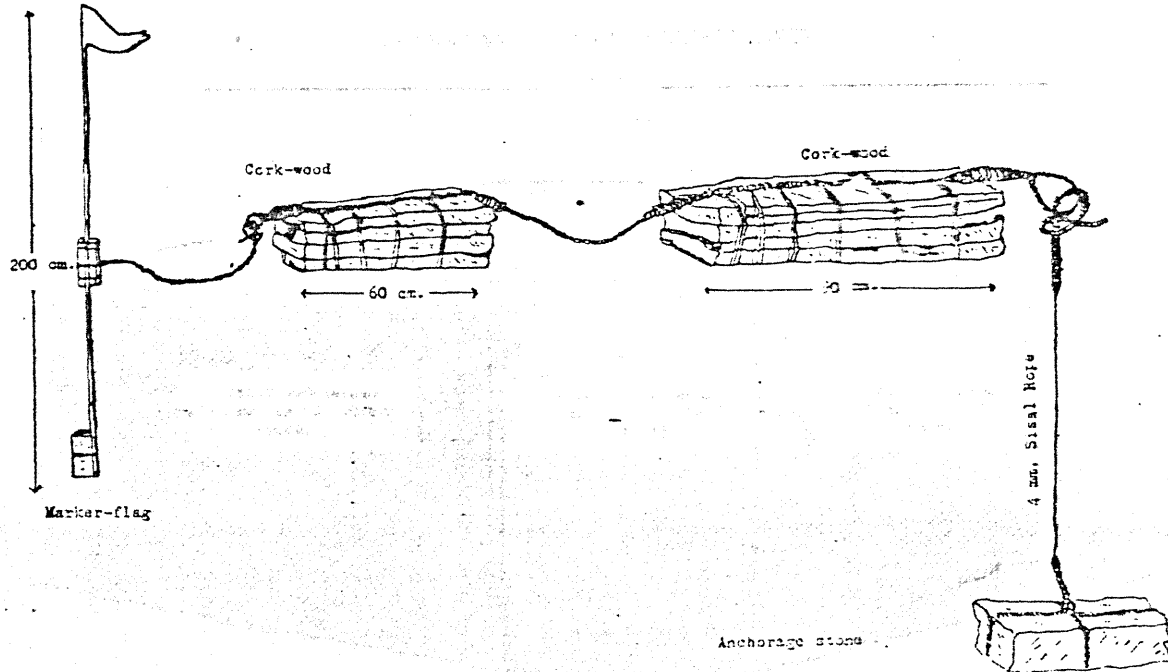


FIGURE 1.

THE NET

The net used for the "Kannizzati" Fishery is what may be called a purseseine, but without the pursing rings. The size of the net depends on the size of the operating boat. The following specifications are of a net operated by a 70 footer. The setting wing of the net is 75 m. long by 400 meshes deep. Each mesh is 25 mm. bar and made from nylon (Polyamide) continuous filament denier 210/6, the second wing being 85 m. long by 400 meshes deep. Each mesh is 25 mm. bar and made from nylon (polyamide) continuous filament denier 210/6. The centre of the net or 'Fonte' is 50 m. long by 500 meshes deep. Each mesh is 22 mm. bar and made from nylon (Polyamide) continuous filament denier 210/9. The landing bag is 15 m. long by 400 meshes deep. Each mesh is of 16 mm. bar and made from nylon (Polyamide) continuous filament denier 210/27. The cork-line is longer than the leadline, it is of nylon cordage of 6 mm. diameter and carries approximately 500 synthetic floats of 85 x 45 mm. The cost of such a net is in the region of £200 this also includes the cost of fitting.

The structure of the "Kannizzati," net is illustrated in figure 2.

OPERATION

The fishermen visit these anchored floats and if fish are present, the boats slowly circle the float trailing a towing line to which is attached a piece of cork-wood attached to the wing of the net, this is done to gather momentum in order that the setting wing of the net is quickly paid out with the current. The boat makes a complete circle around the float, laying the net as it proceeds. When the circle is complete the piece of cork-wood attached to the setting wing is hauled in the boat

DIAGRAM OF "KANNIZZATI" NET

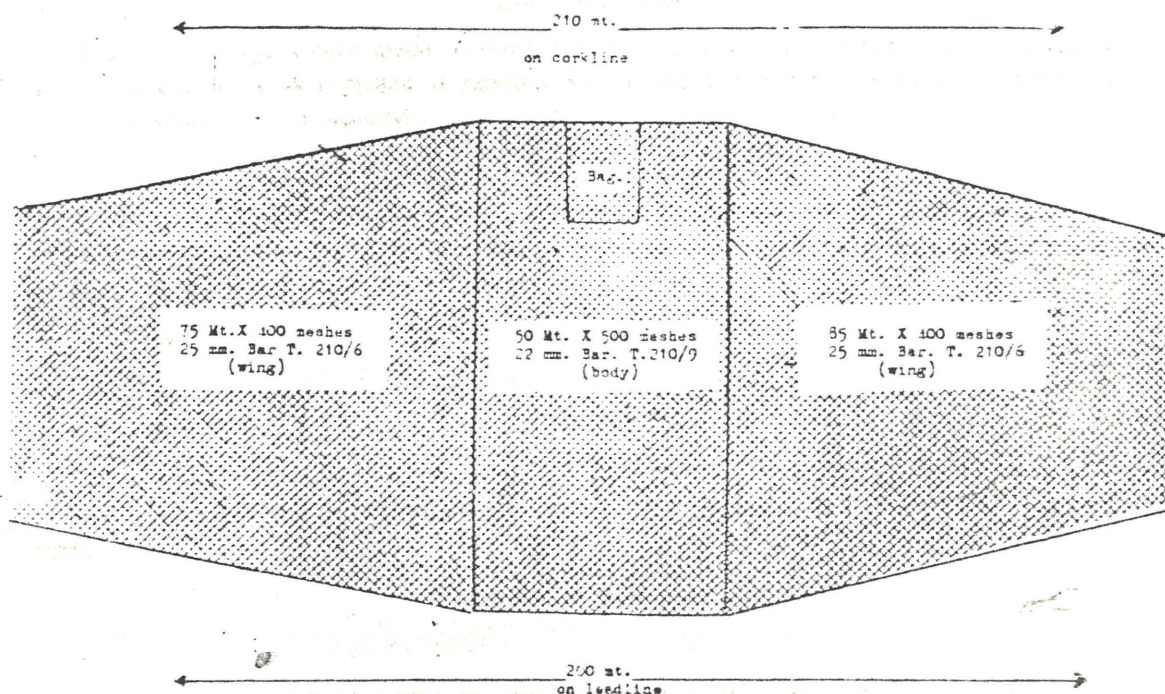


FIGURE 2.

by means of a grapnel. The two wings are quickly hauled in the boat until the circle of the net is reduced. The "Kannizzati" float is slipped between the bottom of the net which is now closed but for a narrow slit between the lead-line. The foot-ropes are then hauled on board thus confining the fish in a saucer of netting of the landing bag.

This operation takes barely 10 minutes when the net is handled by an experienced crew.

Apart from this method described above, the same fish is taken by the following methods:

Drifting long-lines

When bad weather disperses the fish from around the "Kannizzati" floats, extensive use is made of a specific type of drifting surface long-line. These consist basically of a main hemp line on which a number of snooded hooks (350) are set at an interval of 12 m. Monofilament No. 60 mm. is used together with hooks No. 12 which are baited with squid. The long-line is kept

on the surface by cork-floats, of a diamond shape at the same interval as the snoods and is allowed to drift with the current. The cost of such a surface long-line is approximately £22 and a fishing boat usually carries from four to six baskets.

Trolling

Trolling-lures of white feathers of approximately 1/2 ounce are used for the capture of Dorado.

Costs and Returns

A careful study has been made of three different types of boats engaged on the "Kannizzati" fishery. These boats were picked at random out of about fifty fishing vessels so engaged and the results are shown in the Appendix.

Conclusion

There is evidence that the Dorado may be widely distributed in the Mediterranean. The fish is caught in appreciable quantities from August to November and may form the basis of a worthwhile development in other Mediterranean Countries.

BIBLIOGRAPHY

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RELATIVE IMPORTANCE OF THE "KANNIZZATI" AND OTHER FISHERIES

Records for the last nine years of "Kannizzati Fishery" as compared with the remaining other fishing methods (See also Fig. 3)

Year	Landings from "Kannizzati" Sept./Nov. kg.	Landings from all other fisheries for the whole year kg.	Total Landings kg.
1951	297,993	498,297	796,290
1952	536,855	594,207	1,131,062
1953	357,327	641,858	999,185
1954	267,868	608,076	875,944
1955	235,306	646,328	881,634
1956	236,728	605,442	842,170
1957	148,488	766,674	915,162
1958	317,114	750,163	1,067,307
1959	288,036	768,146	1,056,182
	<u>2,685,745</u>	<u>5,879,191</u>	<u>8,564,936</u>

N. B. The "Kannizzati" contributed in three months, 31.4 % of the total annual landings.

APPENDIX

The "San Giuseppe" is a converted ex-admiralty MFV which was built in 1944. It is 30.5 m. overall length and 9 m. beam. The engine is Glennifer of 120 hp.

CATCH			OPERATING COSTS	
Month	kg.	Value		
Sept.	10,629	£ 1,977	1,120 kg. cork-wood	£ 56
Oct.	6,988	2,026	109,000 m. ½ rope	181
Nov.	3,731	954	120 anchorage stones	18
			ice	35
			17,974 litres fuel	280
Total	<u>23,448</u>	<u>£ 4,957</u>	Total	<u>£ 570</u>

Gross proceeds from catch during Sept./Nov. £ 4,957

OPERATING COSTS	
"Kannizzati" Equipment	£ 255
Fuel	280
Ice	35
	<u>570</u>
	<u>£ 4,387</u>

SHARES	
Vessel gets	4 shares
Equipment	4 "
One share for a crew of	12 "
	<u>20 shares</u>
	<u>£ 4,387</u>
	= £ 219.3
	20 shares

The "Mastafio" is an Italian type trawler. It is 22 m. overall length and 7.7 m. beam. The engine is an Ansaldo of 150 hp.

CATCH			OPERATING COSTS	
Month	kg.	Value		
Sept.	1,863	£ 545	960 kg. cork-wood	£ 48
Oct.	5,079	1,496	91,400 m. ½ rope	151
Nov.	6,684	1,376	100 anchorage stones	15
			8,827 litres fuel	137
			ice	25
Total	<u>13,626</u>	<u>£ 3,417</u>	Total	<u>£ 376</u>

Gross proceeds from catch during Sept./Nov. £ 3,417

OPERATING COSTS	
"Kannizzati" Equipment	£ 214
Fuel	137
Ice	25
	<u>376</u>
	<u>£ 3,041</u>

£ = livre sterling

SHARES

Vessel gets	4	shares	
Equipment	4	"	
One share for a crew of	10	"	
	<hr/>	18	shares
	£ 3,041		
	<hr/>	18	shares
			= £ 168.9

Motor Luzzu F. 595. It is a double ended, carvel built boat with vertical stem and post. This is a typical Maltese undecked boat which has negligible draught. It is 12.7 m. overall length and 4.5 m. beam. Its engine is an Ailsa Craig of 26 hp.

Month	CATCH		OPERATING COSTS	
	kg.	Value		£
Sept.	1,449	£ 339	400 kg. cork-wood	20
Oct.	375	113	36,560 m. 1/2 rope	60
Nov.	274	84	40 anchorage stones	6
			2,255 litres fuel	25
Total	<hr/> 2,098	<hr/> £ 536	ice	15
			Total	<hr/> £ 126

Gross proceeds from catch during Sept./Nov. £ 536

OPERATING COSTS

"Kannizzati" Equipment	£ 86	
Fuel	25	
Ice	15	
		<hr/> 126
		<hr/> £ 410

SHARES

Vessel gets	2	shares	
Equipment	2	"	
One share for a crew of	4	"	
	<hr/>	8	shares
	£ 410		
	<hr/>	8	shares
			= £ 51.2

£ = livre sterling