MINISTRY OF DEVELOPMENT - GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY

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HELLENIC CENTRE FOR MARINE RESEARCH
INSTITUTE OF MARINE BIOLOGICAL RESOURCES

# FINAL REPORT
# On the contribution of Hellenic Centre for Marine research to the project:

**"Valorisation du Patrimoine Culturel Transnational du Thon dans la Mediterranne Occidentale"**

# THON.DOC

# INTERREG III B ARCHIMED

**September 2008**

# Objectives

The main objective of the contribution of Hellenic Centre for Marine Research (HCMR) to the THON.DOC project was to provide scientific and technical support and expertise to the Authority of Prefecture of Iraklion.

The scientific and technical support is specified to the following topics:

- Creation of a catalog of the professional small-scale fishing vessels of the prefecture of Iraklion.
- Definition of the criteria and prerequisites for the vessels that could participate in a fishing tourism program.
- Creation of a list of the most abundant commercial species that are the main target of the local fishing fleet, including the protection status of the species.
- Selection of the fishing campaigns suitable for fishing tourism and proposal of fishing routes.
- Preparation of a hand book describing the life history data, fishing habits and trophic value of the most popular species of the small-scale fishery.
- Investigation of the legislation that manages the small-scale fishery in local and national level, including the spatio-temporal management rules applied to species.
- Scientific in the efforts towards the adaptation of the current legislation framework in order to make room for fishing tourism activities.
- Creation of a collection of local receipts for the most popular species.

## INTRODUCTION

The Hellenic Centre for Marine Research (HCMR) accepted with pleasure the invitation from the Authority of Prefecture of Iraklion to contribute to the implementation of THON.DOC. The large experience of the Institute in the support and implementation of marine related projects enabled the successful support of the current project.

The task of HCMR focuses on the 7 action as described in the objectives that are simultaneously the terms of reference of this work package. In this report is given a synoptic presentation of the results of HCMR's activities in this project. The exhausted presentation of the results is provided in the official report presented in the Greek language.

## Creation of a catalog of the professional small-scale fishing vessels of the prefecture of Iraklion

The professional fishing fleet of the area of the prefecture of Iraklion consists of 206 active vessels. The overwhelming majority of the vessels belong to the small-scale fishery. The narrow continental shelf and exposure of the coastal line to rough winds sets limitation to the development of mid-water fishery. On the other hand, the oligotrophic character of the Cretan waters makes industrial fishery a non sustainable activity. This is why 95% of the vessels population belongs to the small scale fishery. The overall vessel density is very low, 0,9 vessel per Km coastal line. The average length of the vessels is 7,6 m and the average age is 18,6 years. The size of the fleet remained practically unchanged the last 3 years as it clearly displayed in Table 1.

Πίνακας 1. Size of the fleet

| Gear | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| Trawlers | 1 | 1 | 1 | 1 |
| Purse seine | 5 | 3 | 3 | 3 |
| Artisanal | 192 | 206 | 197 | 215 |
| **Total** | **206** | **215** | **206** | **219** |

The average fishing effort varies per gear. In general this variable displays a lower value than the one of the Greek fishing fleet (Table 2). This is due to the restrictions of the fishing grounds of Crete as pointed out above.

Table 2. Average fishing effort per vessel (days at sea / month)

| Gear | 2004 | 2005 | 2006 |
|---|---|---|---|
| Trawlers | 19,3 | 17,4 | 21,4 |
| Purse seine | 17,7 | 17,5 | 11,8 |
| Artisanal | 16,7 | 17,5 | 16,6 |

The landings display a significant decrease between 2004 and 2005 (Table 3). The greatest change is displayed in the purse seine and to a lesser extent to the Artisanal fishery. The reduction of the purse seine landings is due to the reduction of the fleet (decommissioning) while the reduction of the landings of the Artisanal fleet is due to the stock. The target species for the Artisanal fishery are mainly demersal species having the sparides family as the main catch. The main species of the purse seine fishery is sardine and anchovy and to a lesser extent some other pelagic species like horse mackerel and chub mackerel. The trawlers are targeting demersal species having striped mullet (Mulus barbatus) and hake (Merluccius merluccius) as the main catch.

Table 3. Total landings per gear (tons)

| Gear | 2004 | 2005 | 2006 |
|---|---|---|---|
| Trawlers | 45.317 | 44.010 | 51.432 |
| Purse seine | 340.120 | 142.860 | 32.000 |
| Artisanal | 763.684 | 572.827 | 452.940 |

The total direct employment is between 300 and 350 persons. Most of the fishers are Greeks. A limited number (15 persons) are foreigners, most of them Egyptians.

Table 4. Total employment per gear (engaged persons)

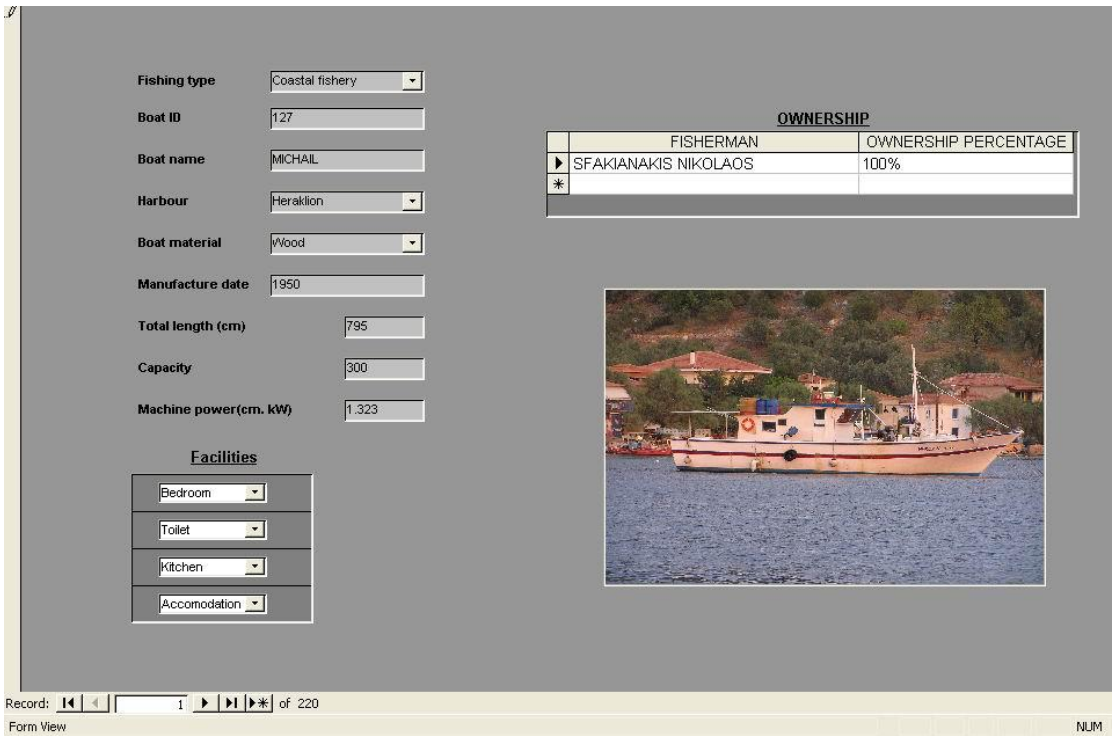
| Gear | 2004 | 2005 | 2006 |
|---|---|---|---|
| Trawlers | 6 | 6 | 4 |
| Purse seine | 21 | 23 | 7 |
| Artisanal | 270 | 301 | 272 |
| **Total** | **310** | **340** | **283** |

For the creation of the final list of the vessels of the prefecture of Iraklion, information has been searched in the national fleet register as well as in the fishers associations and direct observation. In this way we have clear view of the fleet in terms of registered vessels but also in terms of active vessels. The vessel's list has been provided in an excel spreadsheet having the form displayed in Table 5.

Table 5. Vessel's catalog

| European registration number | Name | Navigation category | Port number | Port of registration | Total Langth cm | Capacity | Main Gera | Motor power Kw | Year of Const. | Type of fishery |
|---|---|---|---|---|---|---|---|---|---|---|
| 34098 | St. George | Coastal | 1052 | Iraklion | 460 | 2,2 | Nets | 515 | 1982 | Artisanal |
| 34130 | Rena | Coastal | 451 | Iraklion | 650 | 15,2 | Set long lines | 882 | 1973 | Artisanal |
| 34128 | Harmony | Mid water | 88 | Iraklion | 758 | 20,8 | Nets | 2.205 | 1984 | Artisanal |

All the information with the technical and administrative data of the vessel collected has been entered in a database containing also information of the target species.
The following picture displays the form of the data base which contains the data of the fishing fleet. The information is available in three languages, Greek, English and French.



## Definition of the criteria and prerequisites for the vessels that could participate in a fishing tourism program

The minimum requirements, in terms of size, accommodation and other facilities, that are expected to have a vessel in order to be able to provide fishing tourism services are focusing on:

- The maximizing of the safety onboard
- The safeguarding of the maximum hygiene conditions
- The improvement of the comforts on board the vessel

Theoretically, the small scale fishery vessels, of the Prefecture of Heraklion, that could be engaged in fishing tourism services are 215. From this population, 126 (about 60%) are wooden boats with the typical Aegean Kaiki lines. The remaining 90 vessels are modern design polyester boats.

Table 1: Distribution of vessels by length class

| Category | Number |
|---|---|
| Wood: > 10 m | 17 |
| Wood: 8 - 10 m | 41 |
| Wood: 6 - 8 m | 53 |
| Wood: < 6 m | 15 |
| Polyester: > 10 m | 3 |
| Polyester: 8 - 10 m | 25 |
| Polyester: 6 - 8 m | 15 |
| Polyester: < 6 m | 47 |

Approximately 62 of them (29% of the vessel's population) are relatively big vessels (> 8m) while the majority of the vessels (70%) are small vessels. From the safety point of view, all vessels are safe because they have the capacity to navigate within the action radius for what they have been designed. The design and the capacity of each vessel define also the maximum number of people that could get on board and this is assigned by the vessel navigation license. Consequently all vessels can navigate safely having the people on board that is assigned by their license without any safety problem.

In case that a vessel is getting a tourist on board things are different because tourist are not familiar with the sometimes rough sea condition the are not familiar with the tools that they are going to use and nobody expects from them to display the self control of a professional fisherman. On top of that even the slightest accident has to be cooped immediately by the captain on board while a reliable communication channel has to be available. It is therefore essential to have trained people on board in first aid and rescue issues as well as very good navigation and communication devises. Of course the knowledge of at least on foreign language is indispensable.

Concerning the accommodation issues, we have to make discrimination between those having the capacity to host one or more people on board and those who does not. The people that are going to be engaged may have never been embarked on board

such small vessels. The small vessels behave less stable that the big ones having harder roll and pitch. Therefore, hosting non fishers on board puts additional requirements in terms of accommodation facilities. It necessary that the vessels have space enough to install beds or similar lie up facilities for people that could become sea sick, toilets, refrigerators and sun protected seats.

Taking into account all the previously described restrictions, it is obvious that only vessels above 8 m are in the position to provide minimum conformability for more than one visitor. Vessels between 6 and 8 m may host maximum one person and only for light weight fishing trips as they are described in the following chapter.

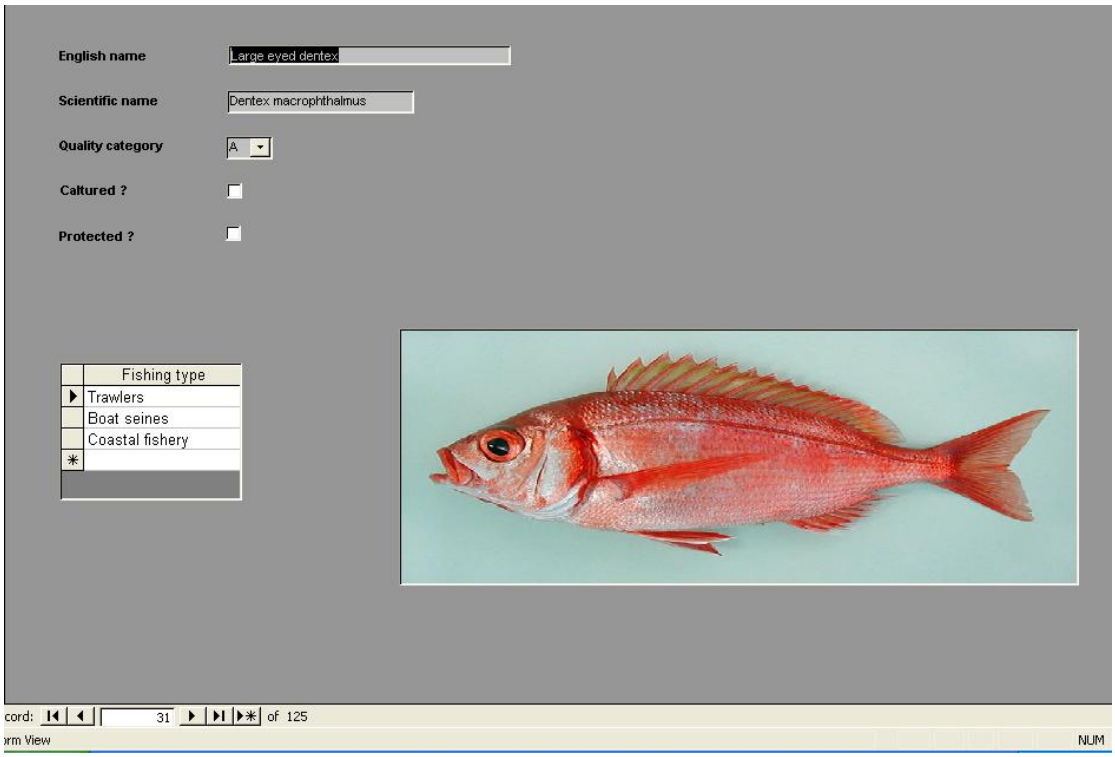
## Creation of a list of the most abundant commercial species that are the main target of the local fishing fleet, including the protection status of the species.

For the creation of the list of target species, information has been searched in the database of the National fishery monitoring system operated by the Hellenic Centre for marine Research. Information has been also gained from the data base of the company operating the Greek auctions (ETANAL). The list of the species provided contains the common name of the species in three languages, Greek, English and French as well as the scientific one. Further it contains some additional information about the species such as, the natural habitat, the quality category, the protection status and the aquaculture ability of the species. An example of the species catalog is provided in Table 6.

Table 6. Species catalog

| Greek name | English name | French name | Scientific name | Habitat | Quality categ, | Culture | Protection status |
|---|---|---|---|---|---|---|---|
| Κεντρόνι | Piked dogfish | Aiguillat | Squallus acanthias | Demersal | C | No | No |
| Φρίσσα | Round sardinella | Allache | Sardinella aurita | Pelagic | C | No | No |
| Σαρδελο-μάνα, | Twaite shad | Alosa feinte | Alosa fallax | Pelagic | C | No | No |

The species list has been embedded in the database. In the data base there is additional information about the species like the way of fishing the gears used and an image of the species. The information in the data base is also available in three languages, Greek, English and French. An example of the database information is provided in the following image.




## Selection of the fishing campaigns suitable for fishing tourism and proposal of fishing routes.

Independent of the restrictions established by the legislation, there are other restriction established by the biology and the natural behavior of the species. The horizontal and vertical migration of the species is experienced by the fishers as appearance of the species in some areas in a certain period and disappearance after that. The fishers organize then fishing campaigns targeting those species. In other words, fishing effort is intensified during those periods. In many cases, large groups of fishers are migrating to the places where fish appears. A typical example of this fishing practice is the fishery of large pelagic species (tuna and swordfish).

The application of fishing tourism programs has to take into consideration the behavior of the species. Having in mind the fishing practices of the fishers of Iraklion but also the specific conditions of the local environment we make some proposal concerning fisheries that could be associated with fishing tourism.

1) Pelagic line trawling

In this type of fishery, the main gear is the surface trawl line. The target species are several species of the tuna family, some small pelagic species like mackerel and horse mackerel. All those species can be fished in the northern side of Crete (Cretan sea) as well as in the southern side (Libyan Sea) and not so far from the coastal line. The main fishing period is the autumn months but also the late spring months for some of them. An advantage of this fishery is that it takes place during day time especially in the afternoon. It is the most spectacular fishery because the most of the species caught are big in size and they remain alive for long time after hooking. That means fight with the fish until it has been exhausted and taken on board. The promotion of this

fishery for fishing tourism is strongly recommended because it helps to boost tourism activity in the period when tourism is in the declining phase.

2) Bottom trawl line

This kind of fishery is more complicated than the surface trawling. The main gear is the bottom trawl line. It is a complex kind of fishery because it uses several equipments like fish finders winches and downriggers. The bottom trawling is spectacular fishery because apart of the gears and equipment that are used, the fishes that are usually caught are big in size. Bottom trawling is a fishery that can be exercised through the entire year and during day time. The most spectacular catches are reported in the autumn months.

The best fishing routes are the areas with rough bottom. Such area we can find along the entire continental shelf in the southern coast of Iraklion prefecture in the northwest continental shelf of Iraklion prefecture. There are also some fishing routes around the Island of Dia.

3) Lines

Fishing with lines is the simplest of fishing practice and can be exercised in almost all shallow areas. It not a spectacular fishery but it is appreciated by people loving static fishing instead of the adventure of trawling in the open seas. Also this kind of fishery in practiced during day light especially in the afternoon or early in the morning.

4) Long lines

Fishing with long lines is a spectacular operation because it is a complex gear. It requires a long preparation while deployment and towing of the gear is an operation that requires skill and quick reactions. Long lines are used mainly in the coastal areas. In the shallow areas the species that are targeted are sparides while in the deeper areas the targets are red breams or seranides. The typical time for deployment of the long line is either late in the afternoon after unset or early in the morning two hours before sunrise. The gear is usually set for 2 or three hours. The inclusion of this fishery in a fishing tourism program is recommended. It is also recommended to combine this fishery with line fishery. This is actually what most fishers do. After deployment of the long line they go farther fishing with lines for two or three hours until it is time to tow the gear.

There are no specific fishing routes for long line fishing. The gear can be deployed everywhere. The fishes that are going to be caught are depended on the area, the size of the hooks and the kind of the bait.

5) Nets

Fishing with nets is the least spectacular way of all fishing techniques of the small scale fishery. This is due to the mechanized way of deployment and towing. The fishers usually deploy the gear in the afternoon and then they return home. The next day early in the morning they go back to tow the gear. The fishing method is highly appreciated by the fishers because it does not disturb their life imposing them to stay at sea during the night. The use of powerful mechanical winches allows them to raise the net on their own without any assistance. The fishing with nets can be included in a fishing tourism program. There are not specific fishing routes to select since the gear can be used everywhere depending on the target species.

## Preparation of a hand book describing the life history data, fishing habits and trophic value of the most popular species of the small-scale fishery

The aim of the hand book is to provide synoptic but essential information on the life history of the species. The language and the description style are simple and easy to understand by non biologists or highly educated people. The species that are described are the main target species of the small-scale fishery. An example of the species description is given below with the description of Grouper (Epinephelus marginatus).

**Grouper (Epinephelus marginatus)**

The grouper is one of the most beloved species of the artisanal fishery and the top target of the sport fishery. The species belongs to the Seranidae family. The most abundant species in the Greek Seas is Epinephelus marginatus, well known with the common name rofos. It is a benthic species using to live in holes and caves. It is abundant in the range of depths between the shore line and 80 m. Below that depth there are rarely abundance reports of large species with the deepest reported in the range of 250 m. The preferable habitat is the rocky one, especially when there are caves and ravines with outlook posts where out he is observing the area of his hunting space. The grouper as well as the other species of the Epinephelindae family are bisexual species displaying a protogynous behaviour (grow first as female). The process of changing sex is taking place in a later age.

The grouper is a long living species that can reach the age of 70 years. His growth rate is low. The female fishes change sex when they reach the weight of 5 Kg. Fishes below 3 Kg are considered as juveniles. In the population segment above 9 Kg the proportion of females is lower relative to the males. The average length of the fish around the maturity is approximately 44 cm for the females and 82 for the males. In the Mediterranean the spawning period is between July and September.

The main food of grouper is octopus and reef fishes. As a top predator plays an important role in the ecological balance of the reef environments. The sustainability of the stock is threatened by the human intervention. The main problem of this species is the protogynous character and the late spawning maturity. This two features result in a low reproduction rate. On top of that, the fishing of the grouper is very intensive because of his high market value and the associated high demand. Especially in the Mediterranean, the fishing pressure is so high that the species population is near to collapse. For this reason, in the Barcelona convention the grouper is considered as protected species. The grouper is not considered as a competitive species for the aquaculture but his culture is important as it the best method to strengthen the natural populations in the framework of restocking programs.

Source: Doxa et al. Cretaquarium, FishBase.

## Investigation of the legislation that manages the small-scale fishery in local and national level, including the spatio-temporal management rules applied to species.

A) Effort restriction

In Greece the fishery policy is strictly related to the general applied common fishery policy in European Union. Because of the multi-species environment of the Mediterranean Sea, management measures are focusing on the effort and not on the landings, like in the North Atlantic (quota management). The effort management in Greece is implemented in the form of time zone restriction related to the gears. In this way, the legislation dictates which species will be protected, having as general rule that the species should be protected during the reproduction period. The general effort restrictions applied in Greece are the following:

Trawl: Closed period, from the 1st of June to the end of September. The species that are protected with this measure are: striped mullet, hake, shrimp, red mullet, red Pandora and red bream.

Purse seine: Closed period, from the 15th December to the end of February next year. The species that are protected with this measure are: sardine, anchovy, horse mackerel and chump mackerel.

Boat seine: Closed period, from the 1st April to the end of September. The species that are protected with this measure are: picarel, bogue and ink fish.

Drifting long line: Closed period from the 1st of October to the end of February. The species that are protected with this measure are: swordfish and tunas.

Artisanal fishery: In the small scale fishery there is no effort restriction. There are some technical measures managing the mesh size of the nets or the maximum number of traps. The first measure is aiming to protect the undersized fish.

Sport fishery: Sport fishery is not allowed during the month May. There are also additional restriction concerning the size of the species and the total allowed catch.

Specific fishing restrictions are applied to the following species:

Lobster and king prawns: Time of closed period, from the 1st September to the end of December.

Sword fish: Closed period, from the 1st October to the end of January.

Red tuna: The tuna fishery is regulated by quota. The quota assigned to each country is agreed in the International Commission for the Conservation of Atlantic Tuna (ICCAT).

A) Species protection concerning the maturity of the species.

The restriction concerning the size of the species is aiming to protect undersized species that have not reached maturity and at least one reproduction. Despite the fact that maturity is not influenced only by the size of the fish, the legislation is aiming to protect the immature species applying general and easy understandable rules such as minimum length or minimum weight. A general rule is to apply a minimum size to all species and it is 8 cm. In the following table, the specific restrictions concerning specifically each species are displayed.

| Minimum size (cm) | Common Name | Scientific Name | Legislation | | | |
|---|---|---|---|---|---|---|
| | | | QD 26/1/54 | RD 10/95 | E.K. *AP 1626/94* | Other lows |
| 45 | ΡΟΦΟΕΙΔΗ | EPINEPHELUS Spp. | | | * | |
| 15 | ΣΑΡΓΟΕΙΔΗ | DIPLODUS Spp. | | | * | |
| 12 | ΛΥΘΡΙΝΟΕΙΔΗ | PAGELLUS Spp. | | | * | |
| 11 | ΜΠΑΡΜΠΟΥ-ΝΟΕΙΔΗ | MULLUS Spp. | | | * | |
| 12 | ΣΑΦΡΙΔΙΑ | TRACHURUS Spp. | | | * | |
| 30 | ΠΕΣΚΑΝ-ΔΡΙΤΣΕΣ | LOPHIUS Spp. | | | * | |
| 16 | ΚΕΦΑΛΟΙ | MUGIL Spp. | | | * | |
| 24 | ΑΣΤΑΚΟΕΙΔΗ | PALINURIDAE | | | * <24 cm | |
| 45 | ΒΛΑΧΟΣ | POLYPRION AMERICANUS | | | * | |
| 9 | ΓΑΥΡΟΣ | ENGRAULIS ENGRASIOLUS | | * | * | |
| 20 | ΓΛΩΣΣΑ | SOLEA SOLEA (VULGARIS) | | * | * | P.D. 986/80 |
| 10 | ΓΟΠΑ | BOOBS BOOBS | * | * | | |
| 15 | ΚΑΡΑΓΚΙΟΖΗΣ | DIPLODUS VULGARIS | | * | * | |
| 16 | ΚΕΦΑΛΟΣ | MUGIL CEPHALUS | | * | * | |
| 12 | ΚΟΛΙΟΣ | SCOMBER JAPONICUS | * | * | | |
| 11 | ΚΟΥΤΣΟ-ΜΟΥΡΑ | MULLUS BARBATUS | | * | * | |
| 23 | ΛΑΥΡΑΚΙ | DICENTRARCHUS LABRAX | | * | * | |
| 14 | ΛΙΤΣΑ | TRACHINOTUS OVATUS | * | * | | |
| 14 | ΛΙΤΣΑ | LICHIA AMIA | * | * | | |
| 14 | ΛΙΤΣΑ | AMPOGRAMMA GLAYCOS | * | * | | |
| 12 | ΛΥΘΡΙΝΙ ΚΟΙΝΟ | PAGELLUS ERYTHRINUS | | * | * | |
| 12 | ΛΥΘΡΙΝΙ ΠΕΛΑΓΙΣΙΟ | PAGELLUS BOGARAVEO | | * | * | |
| 12 | ΜΟΥΣΜΟΥΛΙ | PAGELLUS ACARNE | | | * | |
| 20 | ΜΠΑΚΑΛΙΑ-ΡΟΣ | MERLUCCIUS MERLUCCIUS | | * | * | |
| 11 | ΜΠΑΡΜΠΟΥΝΙ | MULLUS SURMULLETUS | | * | * | |

| Minimum size (cm) | Common Greek Name | Scientific Name | Legislation | | | |
|---|---|---|---|---|---|---|
| | | | QD 26/1/54 | RD 10/95 | E.K. *AP 1626/94* | Other lows |
| 120 | ΞΙΦΙΑΣ | XIPHIAS GLADIUS | | * | | P.D. 87/87 R.D. 36/90 |
| 15 | ΟΥΓΓΑΙΝΑ | DIPLODUS PUNTAZZO | | | * | |
| 30 | ΠΕΣΚΑΝ-ΔΡΙΤΣΑ | LOPHIUS PISCATORIUS | | * | * | |
| 45 | ΡΟΦΟΣ | EPINEPHELUS MARGINATUS | | * | * | |
| 15 | ΣΑΡΓΟΣ | DIPLODUS CERVINUS CERVINUS | | * | * | |
| 15 | ΣΑΡΓΟΣ ΚΟΙΝΟΣ | DIPLODUS SARGUS SARGUS | | * | * | |
| 12 | ΣΑΦΡΙΔΙ | TRACHURUS TRACHURUS | | * | * | |
| 18 | ΣΚΟΥΜΠΡΙ | SCOMBER SCOMBRUS | | * | * | |
| 15 | ΣΠΑΡΟΣ | DIPLODUS ANNULARIS | | * | * | |
| 45 | ΣΤΗΡΑ | EPINEPHELUS FASCIATUS | | * | * | |
| 45 | ΣΦΥΡΙΔ ΑΣΠΡΟΚΗ-ΛΙΔΩΤΗ | EPINEPHELUS AENEUS | | * | * | |
| 45 | ΣΦΥΡΙΔΑ ΓΚΡΙΖΑ | EPINEPHELUS CANINUS | | * | * | |
| 80 cm or 10 Kg | ΤΟΝΝΟΣ ΕΡΥΘΡΟΣ (ΚΟΙΝΟΣ) | THUNNUS THYNNUS | | * | * | Reg. 51/06 |
| 3,2 Kg ± 15% | ΤΟΝΝΟΣ ΚΙΤΡΙΝΟ-ΠΤΕΡΟΣ | THUNNUS ALBACORES | | | | Reg. 973/01 |
| 20 | ΤΣΙΠΟΥΡΑ | SPARUS AURATA | * | * | * | |
| 18 | ΦΑΓΚΡΙ ΚΟΙΝΟ | PAGRUS PAGRUS | | * | * | |
| 10 | ΦΡΙΣΣΑ | SARDINELLA AURITA | * | * | | |
| 10 | ΦΡΙΣΣΑ | SARDINELLA MADERENSIS | * | * | | |
| 120 | ΑΚΙΠΗΣΙΟΙ, ΜΟΥΡΟΥΝΕΣ, ΟΞΥΡΥΓΧΟΙ | ACIPENSERIDAE | | | | Q.D. 168/62 |

| Minimum size (cm) | Common Greek Name | Scientific Name | Legislation | | | |
|---|---|---|---|---|---|---|
| | | | QD 26/1/54 | RD 10/95 | E.K. *AP 1626/94* | Other lows |
| (<24 cm) or (<420 gr ± 10%) | ΑΣΤΑΚΟΣ | PALINURUS ELEPHAS | **26-1-54** ***(ΦΕΚ 25A/54)*** | **ΑΔ 10/95** ***(ΦΕΚ 1012 Β΄ 11-12-95)*** | **E.K.** ***AP 1626/94*** | P.D. 237/96 <420gr ανοχή 10% |
| <24 cm or <8,5cm Chephal othorax. or (<420 gr ±10%) | ΑΣΤΑΚΟ-ΚΑΡΑΒΙΔΑ | HOMARUS GAMMARUS | * | * | | P.D. 237/96 <420gr ανοχή 10% |
| 500 gr | ΧΤΑΠΟΔΙ | OCTOPUS VULGARIS | - | * | | P.D. 144/86 |
| 1/7-31/7 In Amvra-kikos | ΖΑΒΟΓΑΡΙΔΑ ή ΓΑΜΠΑΡΗ | PENAEUS CARAMOTA PENAEUS KERATHURUS | * | | | Q.D. 3-12-52 |
| 7cm Total or 2cm Chephal othorax | ΚΑΡΑΒΙΔΑ | NEPHROPS NORVEGICUS | - | * | * | |

## Scientific support in the efforts towards the adaptation of the current legislation frame work in order to make room for fishing tourism activities

In the framework of this consultancy, the current legislation has been analyzed and tabulated and the lows that affect the access to the fishing vessels have been identified. Staff for the Hellenic Centre for Marine Research in collaboration with the fishery inspectors from the fishery directorate of the prefecture of Iraklion, studied the current legislation and identified the laws and the clauses that form obstacle for the provision of fishing tourism services.

Under the current legislation, (law 666/1966, clause 1 and 2) the activities onboard of a fishing vessel could have either professional fishing character or recreational fishing character. If a vessel is strictly recreational then no fishery of any kind is allowed. Each vessel is obliged to have next to the navigation license a separate fishing license. In fact this license defines the gears that are allowed to be used on board of this vessel. Additionally, all persons embarking a fishing vessel are obliged to have a personal fishing license. This restriction makes impossible the engagement of a fishing vessel to any other activity like the embarkation of tourists to participate in a fishing trip.

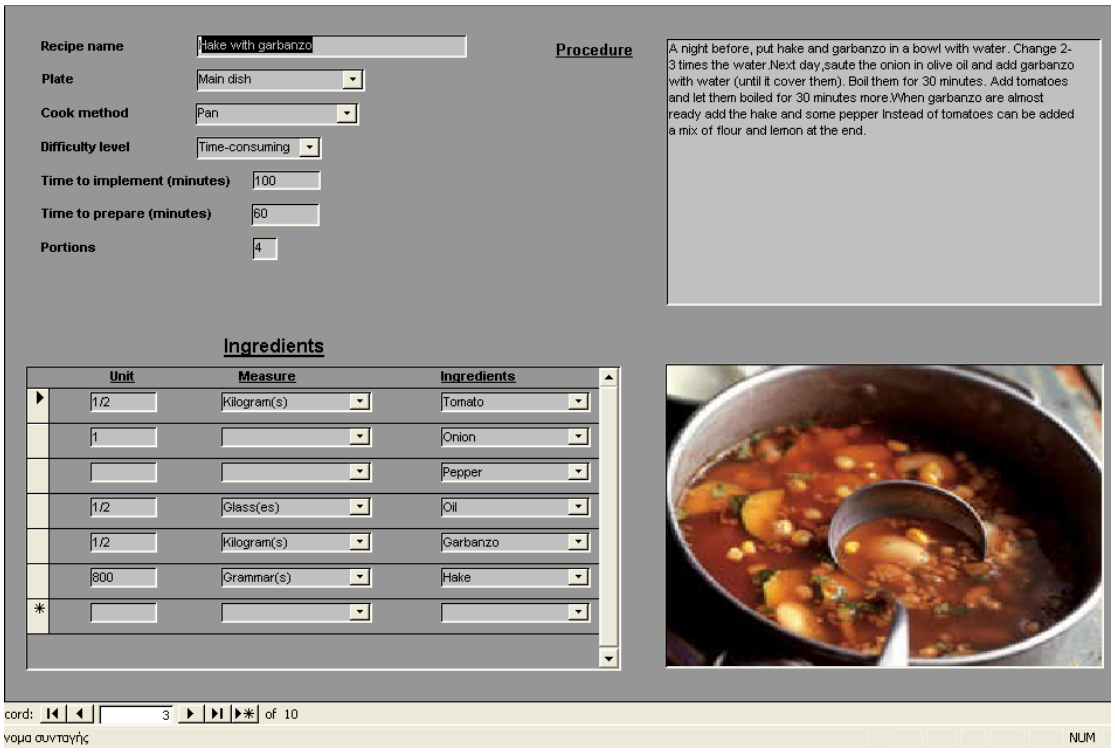
The proposal to bypass this problem sounds easy but it is very difficult to be implemented. A simple away to resolve the issue is to create tree types of fishing licenses:

- The professional license that allows exclusive fishing activity.
- The Semi-professional license that allows fishery and other activities.
- The recreational license that allows exclusive sport fishing activity.

The semi-professional license could then facilitate next to the professional fishing activities other kind of activities like the provision of fishing tourism services.

## Contribution to the creation of a collection of local receipts for the most popular species

The creation of a collection of local fish receipts has been considered as a trigger to create a tool that should allow easy storage and search in a computer. For this reason, a database has been created, that allow any user to enter a new receipt but also to search existing receipts in an easy way. The database that has been finally created contains not only the receipts but also all other components of the project like the fishing fleet, the fishing gears and the specie. The information is provided in three languages: Greek, English and French. In the following pictures, two screen shots are presented showing the main receipt form in the English and French language.





The database can be used as a stand alone application in any computer but can also be easily adapted to a web server to provide information through the Internet. The full application with the setup procedure is attached in a CD in this report.