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## **RAC MED OPINION ON A BASIC STANDARDISED REGULATION ON MARINE RECREATIONAL FISHERIES IN THE EUROPEAN MEDITERRANEAN COUNTRIES**

The Executive Committee unanimously adopted the opinion proposed by the Recreational Fisheries Working Group 4 (RF WG) which convened on 12 November 2013 in Rome.

### **PRESENTATION**

*During the RAC MED Executive Committee (ExCom) meeting that took place in Thessalonica, 20<sup>th</sup> September 2010, the Big Game Italy representative proposed the establishment of a recreational fisheries work group (RF WG), the proposal was accepted.*

*On 23<sup>rd</sup> March 2011, the members present when the RF WG was formed, chose the representative of the Spanish association “Confederación Española de Pesca Recreativa Responsable” (CEPRR) as coordinator, he took this opportunity to request contributions from the members of RAC MED RF WG with experience in recreational fisheries management in the Mediterranean, these contributions should be gathered together and put to the service of RAC MED.*

*The scientific institutions need to develop a common and harmonized scientific monitoring protocol for recreational fisheries, implementing basic indicators to be assessed for each sector and each fishing method. To obtain these data, a common normative framework is necessary, so as to proceed according to the same approach and to standardise data characteristics.*

*In order to take full advantage of the work already completed in previous years, during the General Assembly held on 29<sup>th</sup> February 2012 the coordinator proposed the following reference study of Mediterranean recreational fishing as the basis for the work to be carried out:*

**GFCM STUDIES AND REVIEWS. RECREATIONAL FISHERIES IN THE MEDITERRANEAN COUNTRIES: A REVIEW OF EXISTING LEGAL FRAMEWORKS, No. 81 2007 By Charline Gaudin, Legal Assistant, and Cassandra De**



*Young, Fishery Planning Analyst, Development and Planning Service, FAO Fisheries and Aquaculture Department.*

*The proposal was accepted by the members of the WG and of the ExCom RACMED, the RF WG was requested to set the study in the context of the significant evolution of recreational fishing evolution in these last years.*

*Given the quality of the original text, the study in question has been respected as far as possible, although the context has been reduced to include just the European Mediterranean area in developing the proposal: "A BASIC STANDARDISED REGULATION OF MARINE RECREATIONAL FISHING IN THE EUROPEAN MEDITERRANEAN".*

*The RF WG have been kept in mind the recommendations of the CODE OF CONDUCT FOR RESPONSIBLE FISHERIES, FAO 1995 and TECHNICAL GUIDELINES FOR RESPONSIBLE FISHERIES, No. 13, FAO. 2012.*

*The coordinator highlighted that all the components of the 1/3 group members had provided a significant contribution to the contents of the document.*

## **POSITION STATEMENTS**

### EAA (European Anglers Alliance) position statement:

EAA has worked on definitions for almost a decade. Our aim is to achieve fewer but very well-defined terms and terminology for recreational fisheries, which can find support in all European countries as well as globally. Our thinking is mainly directed by our own angling definition of 2004:

[www.eaa-europe.eu/fileadmin/templates/eaa/docs/DEFINITION-EAA\\_Angling\\_Def\\_long\\_FINAL\\_EN.pdf](http://www.eaa-europe.eu/fileadmin/templates/eaa/docs/DEFINITION-EAA_Angling_Def_long_FINAL_EN.pdf)

- the EIFAC Code of Practice for Recreational Fisheries

<http://www.fao.org/docrep/012/i0363e/i0363e00.htm>

We have delivered this more detailed response to this RAC MED work on definitions (June, 29 2012):  
[http://www.pescaricreativa.org/docs/racmed/81\\_definitions\\_EAA\\_final.pdf](http://www.pescaricreativa.org/docs/racmed/81_definitions_EAA_final.pdf)

### CEPRR and Big Game Italia (BGI) position statement:

CEPRR and BGI represent marine recreational fishing activities carried out from vessels, the positions expressed are conditioned by the opinion of the fishers represented. The CEPRR and BGI members have been working on the management of marine recreational fishing since the 1990s. In the context of the global recreational fisheries sector their members are a minority, but the socio-economic impact is significant, it is estimated that the European Mediterranean recreational fleet includes around 300 000 vessels.

Recreational fishing is not an isolated activity at sea. Marine recreational fishing carried out from vessels shares the same area and resources as the small-scale coastal commercial fishing fleet, this daily



coexistence should not be overlooked. Recreational fishing shares the same ports, fishing zones and some target species. In many cases retired commercial fishers also become recreational fishers for administrative purposes.

The recreational sector is not homogeneous, each sector and fishing method represents a sub-sector of global fisheries. Fishing from vessels, for example, has more in common with the artisanal fishing of the small-scale sector than with recreational underwater fishing.

The deep lack of knowledge that the commercial sector and fishery administrations has of the recreational sector is notorious, for this reason the RF WG members must make every effort to establish detailed definitions to ensure full comprehension of these fisheries.

IFSUA (International Forum for Sustainable Underwater Activities) position statement:

IFSUA represents hundreds of thousands of practitioners of underwater activities all around Europe as well as many of the most important underwater equipment industries and specialized magazines of the world. Some of its members have been involved in recreational fishing management for several decades. Moreover, IFSUA has started important international, Mediterranean based, scientific cooperation projects in order to improve the knowledge of our seas. This has been due to the scientists' understanding that underwater activities community is the only sector that is objectively seeing what is going on down there.

IFSUA members are a part of the recreational fishing sector through the spearfishing community, but its interests go far beyond, as also our scuba-divers and underwater photographers are affected by how other recreational fisheries and commercial fisheries are managed.

Taking this into account IFSUA has approached the document with passion and understanding it not as a set of regulations, which in our opinion is out of our scope, but as a normative framework under which the EU and Member States can get stakeholders' point of view about how recreational fisheries should be managed. In some cases, together with the rest of the working group members, we consider that we have reached our aim, in others clearly not. In those cases we have tried to give our opinion through minority statements.



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## 1 INTRODUCTION

Recreational fishing has been documented as one of the most popular activities along the coasts of numerous countries around the world, such as Canada, Italy, Spain and the United States of America (Sutinen and Johnston, 2003).

Moreover, it has been conceded that recreational fishing is a growing activity in the Mediterranean area. The development of tourism in various regions and the enhancement of tourism charter recreational fishing have contributed to the extension of recreational fishing to almost all EU Mediterranean countries.

This phenomenon has not come without raising concerns on the potential effects of such activities on fish stocks as well as interactions with commercial fishing activities. However, without proper analysis, it is not possible to identify the potential conflicts between recreational and commercial fisheries in the Mediterranean Sea.

The increasing importance of RF in Mediterranean waters in general and particularly in some areas, such as the Adriatic Sea, will oblige the countries (at national, sub regional, and basin-wide levels) to define sustainable policies and adopt adequate management measures, guaranteeing on one hand the benefits (e.g. economic, cultural, and social) generated by recreational fisheries while, on the other hand, protecting the marine resources from overfishing and other consequent negative impacts.

However, the importance of RF in the EU Mediterranean has been largely underestimated, whether it be from the point of view of its impact on marine resources or its socio-economic potential. This under-evaluation may stem, in part, from a lack of investigation into the values and impacts of RF.

As a result, at the time of this study, there was no concerted action for the sustainable development of RF at the Mediterranean level; neither were there clearly-defined national recreational fisheries policies within the EU Mediterranean countries. Spain and several other Mediterranean countries had, however, adopted comprehensive, or at least detailed, regulatory systems for recreational fisheries.

Although necessary, the existence of a legal framework alone is not sufficient to encourage the sustainable development of RF, particularly if the regulations are obsolete or irrelevant and enforcement is non-existent or inefficient. Mediterranean countries demonstrated a tendency to neglect the management of RF and particularly its monitoring and control for management purposes.

## 2. BACKGROUND

This chapter provides the context for recreational fisheries (RF) management in the EU Mediterranean countries, including international conventions and policy guidelines for RF, recommendations from the relevant regional fishery bodies (RFB), as well as regulations stemming from the European Commission, mandatory to a subset of the basin's countries and presents an overview of RF in the Mediterranean covering the following questions: what types of RF were practiced in the Mediterranean, which were the main RF-targeted species, what was known about the socioeconomic impacts of RF in the region, who were the primary stakeholders in RF management, what were the existing national policies guiding RF management and what RF legal frameworks were in place in the European Mediterranean countries.



## **2.1 INTERNATIONAL INITIATIVES GUIDING RECREATIONAL FISHERIES MANAGEMENT IN THE EUROPEAN MEDITERRANEAN**

Adopted on 10<sup>th</sup> December 1982 and in force from 16 November 1994, the United Nations Convention on the Law of the Sea (UNCLOS) provided a new framework for the management of marine resources; creating new rights and responsibilities for the coastal states. More specifically, Article 61 on exclusive economic zones (EEZ) stated that a coastal state may take the appropriate measures of conservation and management in order to avoid overexploitation of marine living resources.

Furthermore, the coastal states, as well as the relevant international organizations may cooperate to that purpose. Given the extractive nature of RF, States should include RF in their attempts to conserve and sustainably manage their marine resources.

In March 1991, during its nineteenth session, the FAO Committee on Fisheries (COFI) called for the development of new concepts which would lead to responsible and sustainable fisheries activities. Based on the request formulated by the International Conference on Responsible Fishing held in Cancun (Mexico) in 1992, FAO prepared an international Code of Conduct for Responsible Fisheries (FAO, 1995), which was unanimously adopted on 31 October 1995 by the FAO Conference and which provided general principles and international standards of behaviour ensuring sustainable exploitation of living marine resources.

The Code has as its main objective to “establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development” [CoC Article 2b]). The Code is voluntary and not legally binding, except regarding the articles based on relevant rules of international law, including those reflected in UNCLOS. The Code aims to provide a framework for national and international efforts to ensure sustainable exploitation of living marine resources, including not only targeted species but also the ecosystems on which they depend.

Although RF were not explicitly mentioned in the Code, the principles and standards of the Code are equally applicable to the conservation, management and development of all RF as with any other extractive fishing activities. According to the Code: “States and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework adopt measures for the long-term conservation and sustainable use of fisheries resources” (CoC Article 7.1.1).

Therefore, according to the Code, States should adopt RF regulations/measures preventing or eliminating excess RF fishing capacity as well as establishing effective mechanisms for fisheries monitoring, control and enforcement to ensure compliance with their conservation and management measures.

## **2.2 RECREATIONAL FISHERIES IN THE EUROPEAN MEDITERRANEAN CONTEXT**

### **2.2.1. DEFINITIONS**

#### **Recreational Fishing:**

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*Fishing activities, exploiting living marine aquatic resources for leisure, tourism or sport purposes, from which it is prohibited to sell or trade the catches obtained.*

#### **2.2.1.1 SECTORS**

##### **Leisure fishing:**

*Recreational fishing activities carried out as a hobby.*

##### **Tourism charter recreational fishing**

*Recreational fishing activities carried with a rented boat and a skipper or fishing guide on board.*

##### **Sport fishing:**

*Recreational fishing activities carried out with competitive intentions, within an established institutional framework which sets clear rules.*

#### **2.2.1.2 MODALITIES**

##### **Shore-based:**

*A recreational fishing activity practiced from the coast: beach, cliffs, piers or other man-made installations or by wading out into the sea.*

##### **Vessel-based:**

*A recreational fishing activity practiced from a vessel.*

##### **Shellfish harvesting:**

*A recreational fishing activity involving the gathering of crustaceans and molluscs from rocks and on beaches.*

##### **Spearfishing:**

*A recreational fishing activity carried out using free-diving techniques, without mechanical or respiratory assistance.*

#### **2.2.1.3. GEARS IN USE**

##### **Angling:**



*A recreational fishing activity practiced by rod and line or hand-held lines.*

**Traditional gears:**

*A recreational fishing activity practiced by nets, long lines, traps, pots and hand-held tools, used in specific situations and properly authorized by the competent administration.*

**Spearfishing:**

*A recreational fishing activity practiced underwater by free-diving techniques, with harpoons or by hand.*

## **2.2.2 SPECIES IN MEDITERRANEAN RECREATIONAL FISHERIES**

### **2.2.2.1 TARGET SPECIES**

Recreational fisheries (RF) target species differ from one basin to another throughout the Mediterranean Sea. It is interesting to note that the species targeted by marine recreational fisheries do not always overlap with those species targeted by commercial fisheries in the area (i.e. sardines, anchovies, etc.).

The gastronomic culture in Mediterranean influences the choice of target species and therefore, in many cases, the species targeted by recreational fisheries coincide with those of commercial fisheries, especially those species which are historically recognized as part of the local culinary tradition and are thus highly valued from a gastronomic and consequently economic point of view.

In any case, we can state that the potential target species of marine recreational fisheries are those admitted by the GFCM for all fishing sectors.

**TABLE 1 GFCM FAO SPECIES**

### **2.2.2.2 PROTECTED SPECIES**

The EU Mediterranean countries have adopted a list of protected species, the fishery of which is strictly prohibited due to biological and ecosystemic considerations. In the event of involuntary capture the fish should be released alive under the best survival conditions possible.

At EU level, the European Council Regulation 1627/2006 states in Article 3 that “the deliberate catching, retention on board, transhipment or landing of marine species referred to in Annex IV of Directive 92/43/CEE shall be prohibited”.

**TABLE 2 PROTECTED MARINE SPECIES (BARCELONA CONVENTION)**

### **2.2.2.3 SPECIES SUBJECTED TO A REBUILDING PROGRAMME**



For species subject to rebuilding programmes, both nationally and/or internationally (e.g. Regional Fisheries Management Organizations – RFMOs – rebuilding programs, such as those set out by ICCAT), the rules must always be complied with. At international level, RFMOs (i.e. ICCAT) set rules that must be applied in all EU Member States.

#### **2.2.2.4 THREATENED SPECIES**

The marine recreational fishing of threatened species should be subject to specific regulations.

#### **2.2.2.5 NON TARGET SPECIES**

The capture of species that are not the target of the marine recreational fishing activity should be avoided. When these are accidentally captured, they should not be retained and they should be returned to the sea under the best survival conditions as possible in order to avoid a negative impact on the ecosystems.

#### **2.2.2.6 BAIT FOR RECREATIONAL FISHING**

In marine recreational fisheries, aquatic resources are often used as bait. These baits can be captured by the same recreational fisher or purchased in the markets supplied by the commercial sector. The use of exotic species as bait should be carefully avoided to limit the risks of allowing invasive species to spread.

### **2.2.3 SOCIO-ECONOMIC IMPACTS OF MEDITERRANEAN RECREATIONAL FISHERIES**

#### **2.2.3.1 AVAILABLE STUDIES:**

At the time this document was prepared, very few qualitative or quantitative studies attempting to evaluate the socio-economic impacts of the marine recreational fishing with full or partial information on the Mediterranean existed:

#### **BOX 1 SOCIO ECONOMIC STUDIES**

Studies from other regions have shown, however, that marine recreational fishing may be an important source of income for various services sectors, such as creating employment in the tourism sector, recreational charter fishing, general services in harbours, fishing gear stores, as well as direct revenue in those sectors providing the economical inputs for naval industry, etc.

The value of the sub-sector needs to be understood and placed within the context of the fishing sector as a whole, in order to assist fisheries managers in correct allocation of the limited resources available, and to develop the fisheries management frameworks in the most efficient way.

However, according to Ditton (1998), research into socio-economic or human dimensions of recreational fisheries [in Europe] has elicited limited interest at management level, and in the USA and Canada these topics have been mainly limited to academic interest. In contrast, northern European countries began early on (1970) to analyse the economic value of RF for use in management.



Standard Marine Recreational fishing inputs for scientific studies must be defined.

## **BOX 2 (AS AN EXAMPLE): ECONOMIC VALUATION TECHNIQUES FOR RECREATIONAL FISHERIES**

### **2.2.5 RECREATIONAL FISHERIES STAKEHOLDERS AND THEIR ROLE IN MANAGEMENT**

Marine recreational fishing stakeholders, could include *inter alia*, 1) the public authorities at local, national and European levels in charge of fisheries management; 2) the associations and federations of recreational fishers; 3) the environmental associations; 4) the research institutes; 5) the representatives from the nautical recreational industry and services; 6) other users of the aquatic marine resources.

This list is by no means exhaustive and other organisms/stakeholders, such as other users of the aquatic resources and representatives from the secondary industries could be included.

In terms of fisheries management, the benefits of stakeholder participation in policy and management development are becoming generally accepted within the Mediterranean. But it has been acknowledged that in the Mediterranean there was a lack of stakeholder involvement in fisheries management and poor communication and information. RACMED will increase the involvement of the marine recreational fishing stakeholders in fisheries management.

Financing support is required to develop activities such as children's education, recreational fishers' behavioural education, technical consultation, legal consultation, scientific collaboration in biological studies and in human dimensions.

There are examples in various regions of the world of formal and informal bodies that have been created to encourage recreational fishery stakeholder participation in fisheries management. These generally include representatives from various stakeholder groups within well-defined mandates, such as promoting cooperation in surveillance and law enforcement, advising on social and economic initiatives, prioritizing and implementing data collection for management, addressing specific issues and other management functions.

### **2.2.6 RECREATIONAL FISHERIES POLICIES**

According to the Article 7.1.1 of the FAO Code of Conduct for Responsible Fisheries (the Code), "states and all those engaged in fishery management should, through an appropriate policy, legal and institutional framework, adopt measures for the long-term conservation and sustainable use of fisheries resources" (FAO, 1995). The Code maintains that policies adopted by countries should have the objective of maintaining and restoring stocks by taking appropriate management measures based on the best scientific evidence available, as well as on relevant economic and environmental/ecosystem factors.

Measures taken should also provide for the conservation of the biodiversity of aquatic habitats and ecosystems, as well as the protection of endangered species. Such shifts away from production-based policies are equally valid for RF.



Furthermore, the European Commission, in a communication to the European Council and the European Parliament (COM (2002) 535 final), affirmed that “the large number of recreational fishermen, as well as the type and dimension of fishing gears used, justify the request to include this sector within fisheries management, both for reasons of conservation and fair application of management rules”.

### **Reference to the 2013 CFP Reform:**

This consists of document 10629/13: Proposal for a Regulation of the European Parliament and of the Council on the Common Fisheries Policy, 12514/11 PECHE 187 CODEC 1166. COM (2011) 425 and, presented and approved in COREPER of 14<sup>th</sup> June, the Council proposed the following deliberation:

*(2a), Recreational fisheries can have a significant impact on fish resources and Member States should ensure that they are conducted in a manner compatible with the objectives of the CFP*

In the session of the Committee on Fisheries of the European Parliament of 18<sup>th</sup> June, this was approved by electronic vote; we have not verified the final text, but the Council included this reference to recreational fisheries. As a consequence, this will be the only reference to recreational fisheries in the reform to the European COMMON FISHERIES POLICY.

### **2.2.7 LEGAL FRAMEWORKS**

Fisheries administrations consider that such frameworks exist to manage the interests in which they are directly competent: those involving the primary extractive sector, shipping companies, shipbuilders, trade unions, fishers' associations, etc.. Within this complex set of interests, marine recreational fisheries, with very few exceptions, are seen by the Mediterranean fisheries administrations as a marginal sector that does not create any concrete or quantifiable income.

Mediterranean recreational marine fishing is a sector that has historically been viewed with tolerance for social reasons, and which has contributed to the subsistence of many citizens, as well as several types of tolerated poaching.

When analysing the different regulations governing Mediterranean recreational marine fisheries, we emphasise that they have been established not so much to regulate the recreational sector, but to prevent interference with the commercial sector.

Fisheries policy is generally supported by a legal framework formalizing the processes to be followed to obtain the goals and objectives provided for in the policy. Legal frameworks often describe, *inter alia*, the rights and responsibilities of stakeholders, the institutional mechanisms related to the management of the fisheries resources, the management processes, the decision-making processes, the access regimes, and the monitoring and control mechanisms.

In some countries with comprehensive legal frameworks regulating marine recreational fisheries, several common elements were found, such as daily bag limits, gear restriction or sales bans.



In the cases where no legal framework existed for marine recreational fishing, some countries adopted specific decrees or executive orders, while others included the regulation within a general and comprehensive fisheries law; occasionally followed by subsequent orders or decrees specifying the application or execution of the recreational fisheries legislative provisions.

The Mediterranean offers a repertory of regulations that have to be simplified into one common set of rules that can be suitably adapted to each country or region.

### **3. MANAGEMENT MEASURES**

According to Article 7.1.8 of the FAO code of responsible fishing, “states should take measures to prevent or eliminate excess fishing capacity and should ensure that levels of fishing effort are commensurate with the sustainable use of fishery resources as a means of ensuring the effectiveness of conservation and management measures”.

As recreational fisheries represent a major activity within the Mediterranean basin, countries have adopted legislation in order to regulate and to control the fishing effort by adopting access regimes, conservation measures and monitoring provisions.

The discussion in this chapter is organized to describe typical elements/provisions of RF legal frameworks and their formal definition in legislation throughout the basin, it includes:

- 1) The regulation of access to the resources
- 2) Conservation measures
- 3) Sanctions employed in case of infractions
- 4) Special instructions

#### **3.1 ACCESS REGIMES**

Under UNCLOS, the coastal states are in charge of regulating access to the marine resources within the waters submitted to their jurisdiction. The decline in fishing resources in many oceans and seas, and particularly in the Mediterranean, oblige coastal states to control access to the resources under their sovereignty.

In this study, the term “licence” covers concepts such as permit, authorization, certificate, *récépissé*, etc.

##### **Definition of a Recreational Fishing License:**

“A recreational fishing license is an administrative document giving permission to fish; it is free of charge and allows fisheries managers to have a reliable, up-to-date register of recreational fishers. It is also a tool to support scientific research”.

Thus defined, licencing can also be used in sampling for further surveys on biological and socio-economic data, collected from Mediterranean recreational fisheries, data with which decision makers can make the best management choices in favour of fish stock sustainability and the development of the economies of coastal communities.



### **3.1.1 CATEGORIES OF LICENSES/AUTHORIZATIONS**

As marine recreational fisheries may be considered a growing activity in the Mediterranean, the application of a licensing systems is a necessary first step towards understanding the contribution of these fisheries to the region's economies, the impact on the resources and as a consequence the most appropriate management regimes. Vessel licensing is fundamental to acquire knowledge on the recreational fishing fleet of each basin, region and EU country.

#### **3.1.1.1 INDIVIDUAL RECREATIONAL FISHING LICENSES:**

##### **Shore-based**

This license should be required to practice any kind of fishery activity with methods that are shore-based.

##### **Shellfish harvesting**

This license should be required to practice any kind of shellfish harvesting.

##### **Spearfishing**

This license should be required to practice any kind of fishing activity that involves spear-fishing.

#### **3.1.1.2 VESSEL BASED RECREATIONAL FISHING LICENSE:**

This license should be required for any kind of recreational fishing that is practiced from a vessel.

#### **3.1.1.3 TOURISM CHARTER RECREATIONAL FISHING LICENSE**

From the point of view of fisheries administration, the recreational vessel-based license should be enough for the development of activities within the charter-tourism recreational fishing sector. Other such administrations, such as fiscal regulators, tourism, health, etc., may require further documentation in compliance with national legislation.

#### **3.1.1.4 SPORT FISHING LICENSE**

The fisheries administration should consider recreational fishing licenses sufficient for the development of activities within the sports fishing sector.

#### **3.1.2 SPECIAL AUTHORIZATION/LICENSE**

Under certain circumstances, special authorizations could be required, in addition to the generic RF licence, to fish species subject to specific conservation measures. The goal of such special authorizations is to increase controls by the relative administration.

##### **Authorization/licences for species subjected to a rebuilding programme**



Recreational fishers should be required to hold a special authorization to fish species subject to a rebuilding programme. (e.g. Regional Fisheries Management Organizations – RFMOs - rebuilding programmes such as those contemplated by ICCAT)

#### **Authorization/licences for threatened species**

Species-based licences could be appropriate for vulnerable species according to scientific advice.

#### **Authorization/licences for historical reasons**

In France, for historical reasons fishing for Bluefin tuna from an anchored boat requires special permission issued by the authority for Maritime Affairs.

#### **Authorization/licences for use of traditional and passive gears**

Recreational fishers should require special authorization for the use of traditional and passive gears.

#### **Authorization/licences to fish in MPAs**

Such licencing would be appropriate to manage fishing reserves.

### **3.1.3 DURATION OF LICENCES**

The duration of a licence is one of the basic elements related to the document issued to recreational fishers and should be set according the data collection requirements. Permanent licenses should not be issued because the owner, at any time and for any reason, could cease the activity without any information being forwarded to the issuing administration.

### **3.1.4 LICENSE FEES**

Recreational fishing licenses should be free of charge. When a fee is applied the revenue should be spent for RF management.

### **3.1.5 LICENCE TRANSFERABILITY**

Recreational fishing licenses should be non-transferable.

### **3.1.6 LICENCE ELIGIBILITY RESTRICTIONS**

Regarding the potential eligibility requirements surrounding a RF licence, few Mediterranean countries currently legislate on who can be issued such licences and under which conditions.

For spearfish activities, a sworn statement should be provided stating that the minimum health requirements are met to carry out this fisheries practice in secure way. For those under 16 years of age,



these statements, together with permission to practice this activity, should be signed by the parents or legal guardian.

The standardisation of licencing requirements, while taking local resource issues into account, should lead to the Mediterranean EU Member States devising a system of mutually-recognized RF licences together with a protocol to exchange relevant data among EU Member States issuing these licenses.

### **3.1.7 LICENCE ISSUING INSTITUTION**

In general, the relevant legislation should identify the level of involvement and therefore the competent institution to issue RF licences, whether falling within the mandate of national ministries or local level governments, and the relative department: fisheries, tourism, sport etc.

## **3.2 CONSERVATION MEASURES**

This section examines the various conservation measures to make recreational fisheries sustainable in accordance with basics principles of rational use of marine resources. They included traditional measures, such as limitation of fishing gears, implementation of catch size limits, prohibited species and specific measures for recreational fisheries, such as the adoption of harvest limits.

Under normal circumstances, marine recreational fishers should be able to make a reasonable catch for home consumption by means of a leisure activity which is sustainable for the environment and which provides, on the other hand, social and economic benefits for local communities. Recreational fishing can select targets or release the specimens caught alive when they are not the target of the fisheries (juveniles, specimens that do not meet the minimum landing size and, in general, those that cannot be landed, including protected species).

### **3.2.1 CATCH AND RELEASE**

Catch and Release can be defined as the release of live fish in the water after being caught.

The release of live fish in recreational fisheries is common practice, either due to legal obligations (undersized or protected fish species) or as a voluntary act. These releases are – and should continue to be – seen as a positive contribution to conservation. This practice is also commonly used to support scientific research (i.e. tagging projects).

Catch and release is not a fishing method or modality in itself but a management tool with the objective of selective harvesting. Studies should be implemented to assess survival rates for different species, fishing techniques and gears.

### **3.2.2 LIMITATIONS ON FISHING METHODS AND GEAR**

Restrictions on gears are common technical measures to avoid the increase of or to decrease fishing effort as well as to minimize the impact of fisheries activities on species or habitats. “Gear restrictions **have an**



important role to play in making optimal use of a stock or a resource” even if, when used alone, they do not ensure sustainability (FAO, 1997a).

### **3.2.2.1 HOOK LIMITATIONS**

The least damaging technology available at any time should be used. For example:

1. with natural bait, single hooks should always be used;
2. the use of circle hooks should be encouraged with live and dead bait because it reduces deep hooking;
3. artificial lures with double or treble hooks may be allowed;
4. barbless hooks should be utilized whenever possible (in particular when there might be a risk of catching juveniles or catch and release is planned to be carried out) as it simplifies release;
5. a maximum hooks number (single, double, treble) per gear should be set.

### **3.2.2.2 SHORE BASED FISHING LIMITATION**

At European level, Council Regulation (EC) No. 1967/2006 stated in Article 17 Paragraph 1 that “the use of towed nets, surrounding nets, purse seines, boat dredges, mechanised dredges, gillnets, trammel nets and combined bottom-set nets shall be prohibited for leisure fisheries”.

RAC MED would like to see this ban extended gradually to passive gears, incorporating in the meantime the clause that the Member States can authorize and regulate the use of traditional gears in specific situations.

A maximum number of gears per fisher being implemented at any one time should be set. We suggest a maximum number of two gears in action per fisherman. Limitation on hooks number (we suggest four) per gear should also be established.

### **3.2.2.3 VESSEL BASED FISHING LIMITATION**

At European level, the Council Regulation (EC) No. 1967/2006 stated in Article 17 Paragraph 1 that “the use of towed nets, surrounding nets, purse seines, boat dredges, mechanised dredges, gillnets, trammel nest and combined bottom-set nets shall be prohibited for leisure fisheries”.

RAC MED would like to see this ban extended gradually to passive gears, incorporating in the meantime the clause that the Member States can authorize and regulate the use of traditional gears in specific situations.

A maximum number of gears per fisher being implemented at any one time should be set as well as a maximum number of gears per vessel. We suggest a maximum number of two gears in action per fisher with a maximum of six gears in action per vessel. Limitation on the number of hooks (we suggest four) per gear should also be established.

A limitation on the maximum power for electric reels should be set (we suggest 300W).



#### **3.2.2.4 SPEARFISHING LIMITATION**

The principal limitation of spearfishing is included its definition:

*Recreational fishing activity practiced by free-diving techniques, without mechanical or respiratory assistance.*

Spearfishing should be practiced with mechanically propelled spear guns (rubber/latex slings or compressed gas pneumatic powered spear guns) using only the fisher's own strength.

#### **3.2.2.5 SHELLFISH HARVEST LIMITATION**

The use of disruptive fishing gears such as shellfish dredges, rakes or trawls should be regulated and eventually banned to protect the benthic habitats.

#### **3.2.3 HARVEST REGULATION**

In order to protect juveniles, big spawners, threatened species and/or to achieve specific management goals, a harvest regulation should be set.

A minimum landing size should be set for all target species.

Taking into account the following FAO Technical Guidelines on Responsible Fisheries definitions, the RAC MED WG on Recreational Fisheries suggests:

(FAO) Harvest regulation: a fishing regulation that specifies what fish may be harvested (caught and kept) from a fishery, e.g. minimum size or daily bag limits

(FAO) Maximum size limit: a regulation in recreational fisheries where fish exceeding the size limit are to be released alive.

(FAO) Minimum size limit: a regulation in recreational fisheries where fish below the size limit are to be released alive.

(FAO) Slot limit: size-based fishing regulation in which only intermediate sized fish may be kept (open or protected slot) or must be released (closed or inverse slot)

(FAO) Bag limit: number of fish that may be retained by an individual over a specified time interval.

The minimum sizes adopted at EU level should not be set under the size of sexual maturity.

Harvest limits can be set both as a maximum number of specimens (i.e. bag limit) and/or as total weight (i.e. weight limit) allowed to be landed per person or per vessel, per day or per fishing trip, and always avoiding capture of juveniles, releasing them alive when incidentally caught.



A harvest limit could therefore include two or more species which could be retained legally respecting the total limit set in weight and/or number of specimens.

Generally in the Mediterranean the harvest limit is set in weight (e.g. 5 kg in Italy) to cover all retention allowed that day no matter what kind of species are landed. Such a global limit might be appropriate for control and enforcement but it is very rarely suitable for the protection of the resource or for optimal exploitation.

When operating with weight limitations as a harvest limit, it should always be considered that there may also be the need for a limitation in the number of specimens caught (for each or some species). A general weight limit alone, without number limitation, would not give appropriate protection to some of the smaller species (e.g. bream) or species with low or no minimum landing size (MLS).

In the same way, when operating with a limit measured in number of specimens (bag), the question should always be raised on the need to add a total weight limitation. A general number limit alone, without a maximum weight limit, would not give appropriate protection to some big spawners for which a size is not set. Furthermore, a regulation based on size (minimum, maximum, slot) should always be integrated with harvest limits. Moreover, in the case of spearfishing and to comply with a size limit (minimum, maximum, or slot), the fish, instead of being *released alive*, shall *not be caught*.

A “slot” limitation or a maximum catch weight per day (or trip) could be accompanied by an exemption for a “prize specimen” or “trophy specimen” (i.e. one single fish per day or trip), which exceeds the maximum length or the daily weight limit; bearing in mind that this makes good sense for some species but not always for others. It depends on a number of factors e.g. the overall management objectives and the risk status for that species.

#### **TABLE 3 MINIMUM LANDING SIZES, ADOPTED IN THE EU MEDITERRANEAN REGULATION**

#### **BOX 4 (AS A REAL EXAMPLE): BAG LIMIT IN THE BASIC RECREATIONAL SALTWATER FISHING REGULATIONS FOR THE STATE WATERS OF FLORIDA**

##### **3.2.4 SHELLFISH HARVEST REGULATION**

Shellfish should be regulated in a similar way as finfish (i.e. 3.2.3), therefore harvest limits set as bag limit and/or weight limit with minimum size, including season closures when needed, should be applied.

##### **3.2.5 MARINE RESERVES**

\* GFCM definition of MPA: A marine reserve, park or other area protected from uncontrolled human access and use by application of various restrictions and activities, development and exploitation. They are defined as Marine Reserves, Parks or with other appellations depending on their characteristics.

Recreational fisheries may play an important socio-economic role in coastal regions. As such, management measures within Marine Protected Areas\* (MPAs) always need to be taken in accordance with the specific



environmental impact on living aquatic resources and their habitats of each of the different fishing activities, having as main goal to keep or improve the conservation status of the marine ecosystems.

### **3.2.6 TEMPORAL RESTRICTIONS**

Temporal restrictions may be useful technical measures that may help to protect components of a stock or communities such as spawning adults or juvenile stages.

*Enough research programmes should be funded to comprehend the composition and state of target stocks.*

### **3.2.7 OTHER RECREATIONAL FISHING REQUIREMENTS AND RESTRICTIONS**

Some Mediterranean countries that have adopted RF regulations included measures providing for some general requirements or restrictions. They were practically the same in all the countries.

#### **3.2.7.1 REQUIREMENTS IN RELATION WITH ACTIVITIES AND PASSIVE COMMERCIAL FISHING GEARS**

Appropriate measures should be adopted to avoid conflicts among different fishing sectors during fishing activities in order to ensure the fishers safety. It is also advisable to respect a certain distance from fixed or floating professional gears and their signs, to ensure safe navigation.

#### **3.2.7.2 PROXIMITY TO AQUACULTURE FACILITIES AND FARMS**

This measure would minimize the interactions between aquaculture facilities, farms and recreational fisheries. It is also advisable to respect a certain distance from aquaculture facilities and farms, to ensure safe navigation and prevent non-authorised fishing.

#### **3.2.7.3 AGGRESSIVE SUBSTANCES**

Narcotics, chemicals, explosives, contaminants or poisonous substances should be forbidden for all fishing activities.

#### **3.2.7.4 LIGHT ATTRACTION**

In general, the use of lights to attract fishes may be restricted, but the use of one lamp may be authorized for squid fisheries. (e.g. we suggest a maximum power of 100 W)

#### **3.2.7.5 SPATIAL AND TEMPORAL LIMITS**

In some seasons, recreational fisheries may share the same zones with other marine and coastal users. In this context, spatial and temporal restrictions may be applied to avoid conflict and satisfy all users.

#### **3.2.7.6 SPECIFIC FOR SHORE-BASED FISHERIES**



Fishing is often prohibited in harbours and access channels. The regulation in such areas should be evaluated on a case-by-case basis by local authorities and not set at national or EU level.

### **3.2.7.7 SPECIFIC FOR VESSEL-BASED FISHERIES**

Vessel-based RF activities should be restricted to boats registered as recreational vessels only.

### **3.2.7.8 SPECIFIC FOR SPEARFISHING**

For security reasons, each fisher should mark his position with a clearly visible flagged buoy (red, orange, yellow...) or flagged board without going further away from it than a 25 m radius. This buoy or board can be substituted by a boat with the ALPHA flag clearly visible.

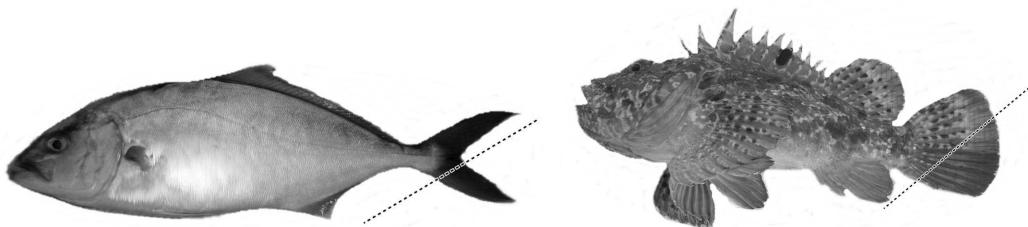
When fishing by this method it should be forbidden to have the spear gun loaded out of the water.

The following should also be forbidden:

- The use of light sources other than a torch;
- The use of capture instruments with explosive, electric or electronic tip;
- The use of hydro gliders (i. e. scooters) and similar vehicles;
- Carrying out this activity during the night, from sunset to sunrise.

## **3.3 TRACEABILITY**

The fight against IUU fishing is an important goal of any fishing regulation. In order to combat illegal sales of RF catches, fish species of high economic value caught by RF should be subject to an identification system such as cutting part of the caudal fin, as required by the French regulation.



## **3.4 SPECIAL RECREATIONAL FISHERIES REGULATIONS**

This section is dedicated to the RF activities which, by their particular nature, require separate regulation. The specific characteristics of sports fisheries (competitive fishing) and tourism-charter recreational fishing deserve a more detailed review of the regulations adopted for these particular sub-sectors.

### **3.4.1 SPORTS FISHING**

Fishing competitions can have positives values: they can be an opportunity to promote social activities among people sharing the same interests, to improve relationship among recreational fishermen and local authorities or other institutional bodies, to spread conservation principles, to improve knowledge on RF techniques.



Given the fact that during official competitions catches are made in a relatively small space-time boundary, authorization from relevant authorities is necessary prior to the event.

Fisheries managers should make sure that strict control of fishing competitions is carried out, requiring that the organizers complete reports of the activity, i.e., spatial coordinates, date, modality, number of participants, quantities of fish caught, and species. A properly managed competition could be a valid tool for data collection. (\*)

The fishing competition's organizer (individual or entity) should be responsible for compliance with the different authorizations required.

In sports fishery competitions, where target species subjected to a rebuilding programme are concerned, the practice of catch and release should be mandatory. Should this not be possible, those species should be banned.

In addition to the authorizations mentioned, the organizing entity has to establish an institutional framework which sets clear rules meeting ethical and sustainable fishery objectives. Occasionally some professional vessels are used for fishing competitions. In the context of fishing competitions, the sale or trade of the catches obtained should be prohibited.

### **3.4.2 TOURISM CHARTER RECREATIONAL FISHING**

Tourism-charter recreational fishing is a growing activity in Mediterranean basin often framed by a poor regulatory framework.

In order to fill the existing gap regarding tourism charter recreational fishing, complementary regulations for the commercial development of the activity should be established. These regulations should include issues such as authorizations, skipper requirements or vessel requirements that have to be applicable to and as close as possible to the Mediterranean EU legislation.

A properly managed tourism-charter recreational fishing sector could be a valid tool for data collection.

## **3.5 MONITORING AND CONTROL SYSTEMS (MCS)**

The adoption of a monitoring, control and surveillance (MCS) system is necessary to ensure that fisheries policy in general, and the conservation and management arrangements for any specific fishery, are implemented fully and promptly. MCS operations encompass various activities such as the collection of catch data, fishing effort and inspections. The MCS should be tailored to the fisheries concerned, in our case recreational fisheries.

Without the appropriate implementation of a MCS, a recreational fisheries management scheme and control measures would be incomplete.



### **3.5.1 MONITORING AND CONTROL BODIES**

Each Mediterranean EU Member State has a control body, potentially under a variety of ministries, in charge of maritime activities; therefore, the administrations responsible for the monitoring of RF vary across the basin. In some cases, several bodies were involved in the control of RF, such as port authorities and fisheries administrations.

In order to ensure a better monitoring and control, administrations involved in monitoring of RF could be helped by volunteers from recreational fishing associations or sport federations at national or local level, who should be properly trained.

Depending on the volume of fishing activity (including recreational), control bodies should implement a proportional control, being higher in those areas with greater activity.

### **3.5.2 MONITORING AND CONTROL MEASURES**

According to Flewwelling (1994), monitoring can be defined as the “continuous requirement for the measurement of fishing effort characteristics and resource yields”. So, monitoring measures include data collection, analysis and diffusion.

As catch declarations are not required by the relative authorities, few monitoring programmes have been developed, with the exception of Bluefin tuna and swordfish. Catch declaration and vessel authorization for Bluefin tuna and swordfish fisheries are mandatory the EU Members States with a quota.

It would be desirable to see standardized monitoring measures for recreational fishing activities established throughout the Mediterranean basin.

#### **3.5.2.1 INSPECTIONS**

Inspection is a diffused monitoring method, at sea and/or ports/or coast, it is implemented for the control of both commercial and recreational fishing activities in the EU Mediterranean. The role of inspection at sea by the control bodies is to verify the vessel's documentation, fishing gears and the catch retained on board. The role of the inspection in ports or on shore includes similar verifications.

In order to carry out stricter and more effective inspection, and to fight against IUU fishing, we would recommend that random inspections be carried out (in terms of place and time), including the trade chain (e.g. in restaurants).

#### **3.5.2.2 INFRACTIONS AND SANCTIONS**

Sanctions are often used as deterrents to law breaking and may take the form of the payment of fees/fines, disqualification from fishing activities (permanently or otherwise), seizure of products obtained illegally, confiscation of fishing gears, seizure of the vessel, cancellation or non-renewal of licences and so on.



It would be desirable to see all member States implementing a proper recreational fisheries sanction system, which includes a clear identification of all possible sanctions and infractions and proportionate fees/fines and deterrents for each of them.

### **3.6 REPORTING, SCIENTIFIC STUDIES**

According to the European Commission, “particular attention should be given to set up a control and reporting framework for recreational fisheries, either targeting shared and straddling stocks or competing with commercial fisheries which are subject to strict technical rules” (COM (2002) 535 final).

Data collection, both biological and socio-economic, regarding RF activities is an integral part of RF management. Such information would allow for a deeper understanding of the impact of RF on the main resources as well as its socio-economic value to the local and national economies. Equally important as the information itself are the ways in which the data are collected and how they are used in scientific studies and RF management.

Involving stakeholders in the collection and use of RF information will increase not only the transparency of management but will probably lead to more readily-available information as stakeholders will see the utility of providing information for management.

Since December 2006, EU “Members States shall take measures both to record and to ensure separate collection of data on catches resulting from leisure fisheries in respect of the highly migratory species listed in Annex I to Regulation (EC) 973/2001165 and occurring in the Mediterranean” (Council Regulation (EC) No. 1967/2006).

Species concerned are:

*Albacore: Thunnus alalunga, Bluefin tuna: Thunnus thynnus, Bigeye tuna: Thunnus obesus, Skipjack Katsuwonus pelamis, Atlantic bonito: Sarda sarda, Yellowfin tuna: Thunnus albacares, Blackfin tuna: Thunnus atlanticus, Little tuna: Euthynnus spp., Southern bluefin tuna: Thunnus maccoyii, Frigate tuna: Auxis spp., Oceanic sea breams: Bramidae, Marlins: Tetrapurus spp.; Makaira spp., Sailfish: Istiophorus spp., Swordfish: Xiphias gladius, Sauries: Scomberesox spp.; Cololabis spp., Dolphinfish; common dolphinfish: Coryphaena hippurus; Coryphaena equiselis, Sharks: Hexanchus griseus; Cetorhinus maximus; Alopiidae Rhincodon typus; Carcharhinidae; Sphyrnidae; Isuridae; Lamnidae.*

There is no general system in EU Mediterranean Members States obliging the recreational fishers to declare catch levels. An appropriate data collection system should be applied to each recreational segment (charter, sport and leisure), discussed and agreed by managers, stakeholders and scientists, and taking in account context-dependent issues.

### **BOX 5 (AS AN EXAMPLE). RECREATIONAL FISHING DATA COLLECTION SYSTEM**

### **3.7 EDUCATION, AWARENESS AND UNDERSTANDING**



Communication and outreach of rights, rules and regulations to all fishermen is an essential element for the success of any legislative framework as ignorance or lack of comprehension of such rules has been proven to be a major factor in fishing infractions, especially in a rapidly changing sector in which superseding rules and enforcement measures keep being applied.

Teaching aids may take many forms (web pages, meetings, pamphlets, courses, etc), depending on the local culture; however obligations regarding regulations (e.g. minimal sizes, prohibited species, daily bag limits, gears allowed) must be widespread with all methods and economic support by public administrations.

Education and awareness should be carried out preferably with the joint collaboration of managers, stakeholders and scientists.

## **4 TABLES**

**TABLE 1 POTENTIAL TARGET SPECIES IN MEDITERRANEAN RECREATIONAL FISHERIES INCLUDED IN THE FAO REFERENCES**

SCIENTIFIC NAME	FAO	ENGLISH	ESPAÑOL	ITALIANO	FRANÇAIS	FAMILY
<i>Alopias vulpinus</i>	ALV	Thresher	Pez zorro	Peze Volpe	Renard	Alopiidae
<i>Alosa alosa</i>	ASD	Allis shad	Sábalo común Alosa - Xagúeta - Arencon	Alosa	Alose vraie (=Grande alose)	Clupeidae
<i>Alosa fallax</i>	TSD	Twaite shad	Saboga - Alosa - Alacha	Cheppia	Alose feinte	Clupeidae
<i>Anguilla anguilla</i>	ELE	Eel	Anguila, Angula	Anguilla	Anguille	Anguillidae
<i>Anthias anthias</i>	AHN	Swallowtail seaperch	Tres colas	Monacella	Barbier hirondelle	Serranidae
<i>Apogon imberbis</i>	OGF	Cardinalfish	Alfonsito - Salmonete real - Funfurriña		Cardinal	Apogonidae
<i>Argyrosomus regius</i>	MGR	Meagre	Corvina	Bocca d'oro	Maigre	Sciaenidae
<i>Arnoglossus laterna</i>	MSF	Mediterranean scaldfish	Serradell - Peluda	Suacia	Fause limande - Arnoglosse imperial	Bothidae
<i>Atherina boyeri</i>	ATB	Big-scale sand smelt	Pejerrey	Latterino	Joël	Atherinidae
<i>Atherina hepsetus</i>	AHH	Mediterranean sand smelt	Chucleto	Latterino	Joël - Siouplet	Atherinidae



<i>Atherina presbyter</i>	ATP	Sand smelt	Abichón-Sugla - Xugla		Prête	Atherinidae
<i>Aulostomus strigosus</i>	AGQ	Trumpet fish	Pez trompeta		Poisson Trompette	Aulostomidae
<i>Auxis rochei = Auxis thazard</i>	BLT	Frigate tuna - Bullet tuna	Melva - Melvera	Tombarello	Bonitou - Auxide - Melva - Bise	Scombridae
<i>Balistes carolinensis</i>	TRG	Triggerfish	Pez ballesta- Pejepuerco blanco - Gallo cochino - Escopeta	Pesce Balestra	Baliste	Balistidae
<i>Belone belone</i>	GAR	Garfish	Aguja	Auguglia	Orphie - Aiguille	Belonidae
<b>Blenniidae</b>	BLE	Blennie	Babosa		Baveuse	Blenniidae
<i>Boops boops</i>	BOG	Bogue	Boga Torillo - Flora - Gallerbo - Moma - Fraile		Bogue	Sparidae
<i>Bothus podas</i>	OUN	Wide-eyed flounder	Podas Tapaculo		Rambou podas - Rhombou	Bothidae
<i>Brama brama</i>	POA	Atlantic pomfret	Japuta - Palometta - Pampano chico	Pesce castagna	Grande castagnole - Brème de mer	Bramidae
<i>Capros aper</i>	BOC	Boarfish	Ochavo		Sanglier	Caproidae
<i>Carcharhinus plumbeus</i>	CCP	Sandbar shark	Jaquetón		Requin gris	Carcharhinidae
<i>Carcharodon carcharias</i>	WSH	Great white shark	Tiburón blanco	Squalo bianco	Grand requin blanc	Lamnidae
<i>Cheilopogon heterurus</i>	ECE	Gray flying fish	Juriola	Rondinella	Poisson volant	Exocoetidae
<i>Chelidonichthys lastoviza</i>	CTZ	Streaked gurnard	Rubio		Grondin	Triglidae
<i>Chelon labrosus</i>	MLR	Thicklip grey mullet	Lisa - Corcón - Lisote - Muil - Tabaga	Bosega	Mulet lippu	Mugilidae
<i>Chromis chromis</i>	CMK	Damselfish	Castañuela - Fula		Castagnole - Demoiselle	Pomacentridae
<i>Citharus linguatula</i>	CIL	Spotted flounder	Solleta - Palaya -	Linguattola	Feuille - Fausse limande	Citharidae
<i>Conger conger</i>	COE	Conger eel	Congrio	Congro	Congre	Congridae
<i>Coris julis</i>	COU	Rainbow wrasse	Doncella - Julia	Donzella	Girelle	Labridae
<i>Coryphaena hippurus</i>	DOL	Common dolphinfish	Lampuga - Dorado	Lampuga	Coryphène	Coryphaenidae



<i>Ctenolabrus rupestris</i>	TBR	Goldsinny-wrasse	Tabernero		Rouquié	Labridae
<i>Dactylopterus volitans</i>	DYL	Flying gurnard	Golondrina Chicharra		Grandin volant	Dactylopteridae
<i>Dasyatis pastinaca</i>	JDP	Common stingray	Chucho Pastinaca		Pastenague commune	Dasyatidae
<i>Dentex dentex</i>	DEC	Dentex - Toothead bream	Dento- Sama de rey - Machote	Dentice	Denté	Sparidae
<i>Dentex gibbosus</i>	DEP	Pink dentex	Pargo - Sama de pluma	Dentice corassiere	Gros denté rose - Pagre royal	Sparidae
<i>Dentex macrophthalmus</i>	DEL	Large-eye dentex	Cachucho		Denté à gros yeux	Sparidae
<i>Dicentrarchus labrax</i>	BSS	Sea bass	Lubina - Róbalo - Roballiza - Furagaña - Chova	Branzino	Bar - Loup	Moronidae
<i>Dicentrarchus punctatus</i>	SPU	Spotted seabass	Baila - Rayela	Spigola macchiata	Bar tacheté	Moronidae
<i>Diplodus annularis</i>	ANN	Annular bream - Sabaris	Raspallón - Amarillo - Esparrallón - Tena - Chapa	Sparaglione	Sparailon - Pataclat - Petit sargue	Sparidae
<i>Diplodus cervinus</i>	SBZ	Zebra seabream	Sargo real - Sargo soldado - Bizcuervu Sargo breado -		Sar à grosses lèvres - Tambour	Sparidae
<i>Diplodus puntazzo</i>	SHR	Sharpsnout seabream	Sargo picudo - Morruda	Sarago pizzuto	Sar à museau pointu	Sparidae
<i>Diplodus sargus</i>	SWA	White seabream	Sargo Jargo - Xapeta - Xargu	Sarago maggiore	Sar commun - Sargue	Sparidae
<i>Diplodus vulgaris</i>	CTB	Two-banded seabream	Mojarra Vidriada - Seifía - Sargo burdo - Xargu	Sarago fasciato	Sar à tête noire - Varade - Sar doré	Sparidae
<i>Epinephelus alexandrinus</i>			Falso abadejo			
<i>Epinephelus marginatus</i>	GPD	Dusky grouper	Mero	Cernia	Mérou	Serranidae
<i>Euthynnus alletteratus</i>	LTA	Little tunny	Bacoreta - Bonito zurdo - Albacoreta	Tonnetto	Thonine	Scombridae
<i>Gaidropsarus mediterraneus</i>	GGD	Shore rockling	Bertorella	Motella	Motelle de Méditerranée	Gadidae
<i>Galeorhinus galeus</i>	GAG	Tope shark	Cazón	Bistinu	Requin-hâ	Triakidae



<b>Galeus melastomus</b>	SHO	Blackmouth catshark	Pintarroja bocanegra Olayo - Bocanegra - Baquia - Golay		Chien espagnol	Scyliorhinidae
<b>Gobius cobitis</b>	GBC	Giant goby	Cabote - Gobio Cabot de roca		Gobie a grosse tête	Gobiidae
<b>Gobius niger</b>	GBN	Black goby	Chaparrudo - Caboso		Gobie noir	Gobiidae
<b>Gobius paganellus</b>	GON	Rock goby	Bobi		Gobie	Gobiidae
<b>Helicolenus dactylopterus</b>	BRF	Blackbelly rockfish - Blue mouth	Gallineta Boca negra - Pollico - Cabrallocha	Scorfano di fondale	Rascasse du nord - Chèvre - Badasco	Scorpaenidae
<b>Heptranchias perlo</b>	HXT	Sharpnose sevengill shark	Cañabota bocadulce Boquidulce - Alcatriña		Requin perlon	Hexanchidae
<b>Hexanchus griseus</b>	SBL	Bluntnose sixgill shark	Cañabota gris - Albajar		Requin griset	Hexanchidae
<b>Istiophorus albicans</b>	SAI	Atlantic sailfish	Pez vela		Voilier de l'Atlantique	Istiophoridae
<b>Isurus oxyrinchus</b>	SMA	Shortfin mako	Marrajo - Mako	Squalo mako	Taupe bleue	Lamnidae
<b>Katsuwonus pelamis=Euthynnus pelamis</b>	SKJ	Skipjack tuna	Listado - Bonito vientre rallado - Sierra - Futbolista - Alistado	Tonnetto listato	Bonite ventre rayé	Scombridae
<b>Labrus bergylta</b>	USB	Ballan wrasse	Maragota Zapatero - Botona - Pinto - Romero - Durdo		Vieille commune	Labridae
<b>Labrus bimaculatus</b>	USI	Cuckoo wrasse	Gallano	Tordo fischietto	Vieille coquette	Labridae
<b>Labrus merula</b>	WRM	Brown wrasse	Merlo - Tordo negro - Bodión	Tordo nero	Merle	Labridae
<b>Lamna nasus</b>	POR	Porbeagle	Marrajo sardinero	Smeriglio	Requin-taupe commun	Lamnidae
<b>Lepadogaster lepadogaster</b>	GLP	Shore clingfish	Chafarrocas		Barbier	Gobiesocidae
<b>Lepidopus caudatus</b>	SFS	Degenfish	Pez cinto Sable - Pejesable	Pesce sciabola	Sabre argenté	Trichiuridae



<i>Lepidorhombus boscii</i>	LDB	Megrim	Gallo	Rombo quattrochi	Cardine - Fausse limande	Scophthalmidae
<i>Lichia amia</i>	LEE	Leerfish - Vadigo	Palometón - Lirio	Leccia	Liche	Carangidae
<i>Lithognathus mormyrus</i>	SSB	Stripped sea bream	Herrera - Mabre - Mabra - Perla - Magre	Marmorata	Marbré - Mourme	Sparidae
<i>Liza aurata</i>	MGA	Golden grey mullet	Galupe Lisa - Lisa amarilla - Tabaga	Cefalo dorato	Mulet doré	Mugilidae
<i>Liza ramada</i>	MGC	Thinlip grey mullet	Morraguete Lisa - Capitón - Mogarrete - Albur - Mule	Botolo	Mulet porc	Mugilidae
<i>Liza saliens</i>	LZS	Leaping mullet	Galúa - Lisa		Mulet sauteur	Mugilidae
<i>Lophius piscatorius</i>	MON	Anglerfish	Rape Pixin - Sapo - Aguaron	Rombo quattrochi Rospo	Baudroie	Lophiidae
<i>Macroramphosus scolopax</i>	SNS	Longspine snipefish	Trompetero Trompeteru - Filudo - Piquillo		Bécasse de mer	Macroramphosidae
<i>Manta birostris</i>	RMB	Manta	Manta		Raie manta	Mobulidae
<i>Melanogrammus aeglefinus</i>	HAD	Haddock	Eglefino Fañeca - Ferreta - Jodion		Eglefin	Gadidae
<i>Merluccius merluccius</i>	HKE	European hake	Merluza Pescadilla - Pescada - Carioca	Nasello-Merluzzo	Merlu blanc	Merlucciidae
<i>Micromesistius poutassou</i>	WHB	Blue whiting	Bacaladilla Lirio - Bacaladillo - Abril - Bacalada	Merlú	Merlan bleu - Poutassou	Gadidae
<i>Molva molva</i>	LIN	Ling	Maruca Gallapota - Congria - Guitarra - Barruendia		Lingue	Gadidae
<i>Mugil cephalus</i>	MUF	Flathead grey mullet	Pardete - Mugil - Capitán - Muil - Cabesote	Cefalo dorato	Mulet à grosse tête - Mulet cabot	Mugilidae



<b>Mullus barbatus</b>	MUT	Striped mullet	Salmonete de fango - Mijareo	Triglia di fango	Rouget de vase - Rouget barbet	Mullidae
<b>Mullus surmuletus</b>	MUR	Striped red mullet	Salmonete de roca	Triglia di scoglio	Rouget de roche	Mullidae
<b>Muraena helena</b>	MMH	Moray	Morena - Murión	Murena	Murène	Muraenidae
<b>Mustelus mustelus</b>	SMD	Smooth-hound	Musola - Mustela - Cazón - Tollo - Mozola	Palombo	Emissole lisse	Triakidae
<b>Mycteroperca rubra</b>	MKU	Comb grouper	Gitano	Cernia cirenga	Badèche rouge	Serranidae
<b>Myliobatis aquila</b>	MYL	Common eagle ray	Aguila marina - Milano - Pez obispo - Ratón - Chucho		Aigle commun	Myliobatidae
<b>Naucrates ductor</b>	NAU	Pilotfish	Pez piloto		Poisson pilote	Carangidae
<b>Oblada melanura</b>	SBS	Saddled seabream	Oblada Doblada - Galana - Negrita - Chopeta - Pintalacola	Occhiata	Oblade	Sparidae
<b>Oxynotus centrina</b>	OXY	Angular roughshark	Cerdo marino		Centrine commune	Oxynotidae
<b>Pagellus acarne</b>	SBA	Spanish bream	Aligote - Besugo blanco - Besuguito - Pancho	Pagello bastardo	Pageot acarne	Sparidae
<b>Pagellus bogaraveo</b>	SBR	Red seabream	Besugo - Voraz - Pancho	Occhialone	Dorade rose - Rousseau	Sparidae
<b>Pagellus erythrinus</b>	PAC	Pandora	Breca - Pagel	Fragolino	Pageot	Sparidae
<b>Pagrus auriga</b>	REA	Redbanded seabream	Urta - Hurta - Pargo - Sama roquera	Pagro reale	Pagre rayé	Sparidae
<b>Pagrus caeruleostictus</b>	BSC	Bluespotted seabream	Pargo - Zapata		Pagre à points bleus	Sparidae
<b>Pagrus pagrus=Sparus pagrus</b>	RPG	Red porgy - Common bream	Pargo - Bocinegro - Rubiel - Prao	Pagro-Praio	Pagre rouge	Sparidae
<b>Parapristipoma octolineatum</b>	GRA	Striped grunt	Burro listado		Grondeur rayé	Haemulidae
<b>Phycis blennoides</b>	GFB	Greater forkbeard	Brótola de fango	Musdea bianca	Phycis de fond - Mostelle	Gadidae



<b>Phycis phycis</b>	FOR	Forkbeard	Brótola de roca	Mustella-Pasteluna	Phycis de roche - Mostelle	Gadidae
<b>Pleuronectes platessa</b>	PLE	European plaice - Flounder	Solla - Xuella - Platija - Patusa		Plie d'Europe	Pleuronectidae
<b>Pollachius pollachius</b>	POL	Pollack	Abadejo - Ferrete - Barriaو	Merluzzo giallo	Lieu jaune	Gadidae
<b>Pollachius virens</b>	POK	Saithe(=Pollock)	Carbonero - Fogonero - Colin - Carbanera - Palera		Lieu noir	Gadidae
<b>Polypriion americanus</b>	WRF	Wreckfish	Cherna	Chernia	Cernier - Chernier	Polypriionidae
<b>Pomadasys incisus</b>	BGR	Bastard grunt	Roncador		Grondeur métis	Haemulidae
<b>Pomatomus saltatrix</b>	BLU	Bluefish	Anjova - Golfar	Pesce serra	Tassergal	Pomatomidae
<b>Prionace glauca</b>	BSH	Blue shark	Tintorera - Tiburón azul - Aquella - Lija - Cailón - Canea - Quella	Cagna-Verdesca	Peau bleue	Carcharhinidae
<b>Psetta maxima = Scophthalmus maximus</b>	TUR	Turbot	Rodaballo - Clavudo	Rombo	Turbot	Scophthalmidae
<b>Pteromylaeus bovinus</b>	MPO	Duckbill ray	Obispo		Raie vachette	Myliobatidae
<b>Raja alba</b>	RJA	White skate	Raya bramante	Razza bianca	Raie blanche	Rajidae
<b>Raja asterias</b>	JRS	Mediterranean starry ray	Raya estrellada		Raie étoilée	Rajidae
<b>Raja batis</b>	RJB	Blue skate	Noriega		Pocheteau gris	Rajidae
<b>Raja clavata</b>	RJC	Thornback ray	Raya de clavos	Razza chiodata	Raie bouclée	Rajidae
<b>Raja fullonica</b>	RJF	Shagreen ray	Raya cardadora		Raie chardon	Rajidae
<b>Raja miraletus</b>	JAI	Brown ray	Raya de espejos	Razza quattrochi	Raie miroir	Rajidae
<b>Raja montagui</b>	RJM	Spotted ray	Raya pintada		Raie douce	Rajidae
<b>Raja naevus</b>	RJN	Cuckoo ray	Raya santiguesa		Raie fleurie	Rajidae
<b>Raja oxyrinchus</b>	RJO	Longnosed skate	Raya picuda - Picón	Razza muso longo	Pocheteau noir	Rajidae



<b>Rhinobatos rhinobatos</b>	RBX	Common guitarfish	Guitarra	Violino	Guitare	Rhinobatidae
<b>Sarda sarda</b>	BON	Atlantic bonito	Bonito	Palamita	Bonite à dos rayé - Pélamide	Scombridae
<b>Sardina pilchardus</b>	PIL	European pilchard	Sardina	Sardina	Sardine	Clupeidae
<b>Sardinella aurita</b>	SAA	Round sardinella	Alacha	Alaccia	Allache	Clupeidae
<b>Sarpa salpa</b>	SLM	Salema - Saupe	Salema - Salpa - Sarpa -- Zarpa - Panchona	Salpa	Saupe	Sparidae
<b>Sciaena umbra</b>	CBM	Brown meagre	Corvallo - Corvinata - Corva - Corballo - Curvina	Corvo	Corb - Corbeau	Sciaenidae
<b>Scomber japonicus</b>	MAS	Chub mackerel	Estornino - Verdel - Visol - Violet	Lanzado	Maquereau espagnol	Scombridae
<b>Scomber scombrus</b>	MAC	Atlantic mackerel	Caballa - Xarda - Verdel	Sgombro	Maquereau	Scombridae
<b>Scomberesox saurus</b>	SAU	Atlantic saury	Paparda - Relanzón		Balaou atlantique	Scomberesocidae
<b>Scophthalmus rhombus</b>	BLL	Brill	Rémol- Rombo - Xuella	Rombo liscio	Barbue	Scophthalmidae
<b>Scorpaena notata</b>	SNQ	Small red scorpionfish	Escórpora - Gallineta - Gabriela - Tiñosu - Rascancio	Cappone- Scarfanotto	Petite rascasse	Scorpaenidae
<b>Scorpaena porcus</b>	BBS	Black scorpionfish	Rascacio - Rascasa - Cabra roquera - Tiñosu - Cabriella	Scorfano nero	Rascasse brune	Scorpaenidae
<b>Scorpaena scrofa</b>	RSE	Red scorpionfish	Cabracho - Cantarero	Scorfano rosso	Rascasse rouge	Scorpaenidae
<b>Scyliorhinus canicula</b>	SYC	Small-spotted catshark	Pintarroja bocanegra Olayo - Bocanegra - Baquia - Golaya	Gattuccio	Petite roussette	Scyliorhinidae
<b>Scyliorhinus stellaris</b>	SYT	Nursehound	Alitán - Gatilla	Gatopardo	Grande roussette - Gat	Scyliorhinidae



<b>Seriola dumerili</b>	AMB	Amberjack	Seriola - Pez limón - Lecha - Lechola - Blanquiña - Verderol	Ricciola-Leccia	Sérieole couronnée	Carangidae
<b>Seriola fasciata</b>	RLF	Lesser amberjack	Medregal - Loquillo - Blanquilla		Sérieole babiane	Carangidae
<b>Serranus cabrilla</b>	CBR	Comber	Cabrilla - Serrano - Cabra		Serran-chèvre	Serranidae
<b>Serranus hepatus</b>	SRJ	Brown comber	Merillo		Serran hépate	Serranidae
<b>Serranus scriba</b>	SRK	Painted comber	Serrano - Serrano - Cabrilla pintada - Vaquita	Bocaccia	Serran	Serranidae
<b>Solea solea</b>	SOL	Sole	Lenguado - Sueña - Sortija - Rapapelo - Lenguao	Sfogio	Sole	Soleidae
<b>Sparisoma cretense</b>	PRR	Parrotfish	Vieja - Loro viejo		Perroquet vieillard	Scaridae
<b>Sparus aurata</b>	SBG	Gilthead seabream	Dorada	Orata	Daurade - Aurade - Dorade	Sparidae
<b>Sphyraena sphyraena=Viridensis</b>	YRS	Barracuda	Espetón - Barracuda - Picudo - Bicuda	Luccio marino	Brochet de mer - Spet - Bécune	Sphyraenidae
<b>Sphyrna zygaena</b>	SPZ	Smooth hammerhead	Pez martillo - Cornuda	Martello	Requin-marteau	Sphyrnidae
<b>Spicara maena</b>	BPI	Blotched picarel	Chucla	Mennola	Mendole	Centracanthidae
<b>Spicara smaris</b>	SPC	Picarel	Caramel	Zerro	Picarel	Centracanthidae
<b>Spondylisoma cantharus</b>	BRB	Black seabream	Chopa	Tanuta	Dorade grise - Canthare - Griset	Sparidae
<b>Sprattus sprattus</b>	SPR	Sprat	Espadín	Papalina	Sprat	Clupeidae
<b>Squalus acanthias</b>	DGS	Picked dogfish - Spur dog	Mielga	Spinarolo	Aiguillat commun	Squalidae
<b>Squatina squatina</b>	AGN	Angelshark	Angelote - Pez ángel - Villán	Squadro	Ange de mer commun	Squatinidae
<b>Symphodus mediterraneus</b>	YFC	Axillary wrasse	Vaqueta		Crenilabre rouquière	Labridae
<b>Symphodus melops</b>	YFM	Corkwing wrasse	Porredana - Tordo-Sarriano		Crenilabre mélops	Labridae



<i>Syphodus ocellatus</i>	YFO		Tordo			Labridae
<i>Syphorichthys rostratus</i>	YJS	Long-snouted wrasse	Tordo picudo		Sublet	Labridae
<i>Synodus saurus</i>	SDR	Lizardfish	Pez de San Francisco - Pez lagarto - Salta barca	Pesce lucertola	Lezard	Synodontidae
<i>Tetrapturus albidus</i>	WHM	Atlantic white marlin	Marlin blanco		Makaire blanc de l'Atlantique	Istiophoridae
<i>Thalassoma pavo</i>	TMP	Ornate wrasse	Pez verde - Fadrí - Pejeverde		Girelle paon	Labridae
<i>Thunnus alalunga</i>	ALB	Albacore	Albacora - Bonito del norte - Mono - Barrilote - Atún blanco	Alalonga	Germon - Thon blanc	Scombridae
<i>Thunnus obesus</i>	BET	Bigeye tunna	Patudo - Ojos grandes - Bonita - Obeso - Monja		Thon obèse	Scombridae
<i>Thunnus thynnus</i>	BFT	Bluefin tuna	Atún rojo - Cimarrón - Atuarro - Zurdo	Tonno	Thon rouge	Scombridae
<i>Torpedo marmorata</i>	TTR	Marbled electric ray	Tremielga - Tembladera - Torpedo		Torpille marbrée	Torpedinidae
<i>Trachinotus ovatus</i>	POP	Derbio - Pompano	Palometa blanca - Pámpano - Palomida	Leccia stella	Palomine - Trachinote	Carangidae
<i>Trachinus araneus</i>	WEX	Spotted weever	Araña	Tracina ragno	Vive araignée	Trachinidae
<i>Trachinus draco</i>	WEG	Greater weever	Escorpión - Araña - Pexegapu - Salvareo	Dragone	Grande vive	Trachinidae
<i>Trachinus radiatus</i>	TOZ	Streaked weever	Víbora - Araña negra	Tracina raggiata	Vive rayée	Trachinidae
<i>Trachurus trachurus</i>	HOM	Horse mackerel - Scad	Jurel Chicharro	Suro	Chinchard d'Europe - Saurel - Séveran	Carangidae
<i>Trigla lucerna</i>	GUY	Gunard	Bejel Colorado - Rubio - Garneo - Cabete	Capone gallinella	Grondin - Galinette	Triglidae



<i>Trigla lyra</i>	GUN	Piper gurnard	Garneo -Rafel	Capone lira	Grondin lyre	Triglidae
<i>Trisopterus luscus</i>	BIB	Pouting - Bib	Faneca - Niña		Tacaud commun	Gadidae
<i>Trisopterus minutus</i>	POD	Capelan - Poor cod	Capellán	Merluzzo cappellano	Capelan	Gadidae
<i>Umbrina cirrosa</i>	COB	Shi drum - Umbrine	Verrugato - Corvinato	Ombrina	Corb - Ombrine	Sciaenidae
<i>Uranoscopus scaber</i>	UUC	Stargazer	Miraciolo Rata - Peje sapo	Pesce prete - Bocca in celo	Rat - Uranoscope - Boeuf	Uranoscopidae
<i>Xiphias gladius</i>	SWO	Swordfish	Emperador - Aguja palá	Pesce spada	Espadon - Empereur	Xiphiidae
<i>Xyrichtys novacula</i>	XYN	Pearly razorfish - Cleaver wrasse	Raor - Galán - Pejepaine	Pettini	Rason	Labridae
<i>Zeus faber</i>	JOD	John dory	Pez de San Pedro - Gallo de mar - Gallopedro - Sanmartin	Pesce San Pietro	Saint Pierre - Poule de mer	Zeidae

### CEFALOPODOS - Cephalopoda

Scientific name	FAO	common name
<i>Sepia officinalis</i>	CTC	Sépia
<i>Sepia elegans</i>	EJE	Choquito
<i>Eledone cirrosa</i>	EOI	Pulpo blanco
<i>Sepia orbignyana</i>	IAR	Choquito Picudo
<i>Octopus spp</i>	OCZ	Pulpo
<i>Loligo spp</i>	SQC	Calamares
<i>Todarodes sagittatus</i>	SQE	Pota europea
<i>Illex coindetii</i>	SQM	Volador
<i>Todaropsis eblanae</i>	TDQ	Pota costera

### TABLE 2 PROTECTED MARINE SPECIES (BARCELONA CONVENTION)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:322:0003:0017:EN:PDF>, pag 13 and pag 15

[http://www.rac-spa.org/sites/default/files/doc\\_cop/decision\\_ig\\_19\\_12\\_en.pdf](http://www.rac-spa.org/sites/default/files/doc_cop/decision_ig_19_12_en.pdf),

Amendments 2009

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:256:0001:01:EN:HTML> Amendments 2012

### TABLE 3 MINIMUM LANDING SIZES, ADOPTED IN THE EU MEDITERRANEAN



## REGULATION

SCIENTIFIC NAME	COMMON NAME	Minimum size
<b>1. Fishes</b>		
Dicentrarchus labrax	Sea-bass	25 cm
Diplodus annularis	Annular sea-bream	12 cm
Diplodus puntazzo	Sharpsnout sea-bream	18 cm
Diplodus sargus	White sea-bream	23 cm
Diplodus vulgaris	Two-banded sea-bream	18 cm
Engraulis encrasiculus	* European anchovy	9 cm
Epinephelus spp.	Groupers	45 cm
Lithognathus mormyrus	Stripped sea-bream	20 cm
Merluccius merluccius	*** Hake	20 cm
Mullus spp.	Red mullets	11 cm
Pagellus acarne	Spanish sea-bream	17 cm
Pagellus bogaraveo	Red sea-bream	33 cm
Pagellus erythrinus	Common pandora	15 cm
Pagrus pagrus	Common sea-bream	18 cm
Polyprion americanus	Wreckfish	45 cm
Sardina pilchardus	** European sardine	11 cm
Scomber spp.	Mackerel	18 cm
Solea vulgaris	Common sole	20 cm
Sparus aurata	Gilt-head sea-bream	20 cm
Trachurus spp.	Horse mackerel, Scad	15 cm

(\*) Anchovy: Member States may convert the minimum size into 110 specimens per kg;

(\*\*) Sardine: Member States may convert the minimum size into 55 specimens per kg;

(\*\*\*) Hake: Nevertheless, until 31 December 2008 a margin of tolerance of 15 % of weight will be permitted for hake between 15 and 20 cm. This tolerance limit shall be complied with by both individual vessels, at sea or at the place of landing, and at the markets of first sale after landing. This limit shall also be complied with in any subsequent commercial transaction at national and international level

FISH - Name and Size				Daily bag limit
Scientific name	Common name	Minimum landing size	Maximum landing size, when appropriate	Number of fish/day (fisherman/boat)



## **5 BOXES**

### **BOX 1 SOCIO ECONOMIC STUDIES**

1. Sport fisheries in Eastern Mediterranean (Greece & Italy) EU Project 1.996  
A.P.C. Ltd- I.R.PE.M.
2. Estudio sobre la incidencia de la pesca deportiva de altura en el total de capturas de la pesquería española mediterránea, Club de Pesca Costa Brava. 1998.
3. The recreational fishing in the Central and Western European Mediterranean frame 2003  
Ramon Franquesa\*, Ana Gordoa\*\*, T. Mina\*\*, S. Nuss\*\*, Juan Ramón Borrego\*
4. EU contract FISH/2004/011 on Sport Fisheries (or Marine Recreational Fisheries) in the EU Prepared for The European Commission Directorate-General for Fisheries              Prepared by M. G. Pawson1, D. Tingley2, G. Padda1, and H. Glenn 2
5. Sport Fishing: an informative and economic alternative for tuna fishing in the Mediterranean (SFITUM). 2.004 Framework of innovative actions in community structural assistance in the Fisheries Sector Funded by the Directorate-General Fisheries Contract nº: 02/C 132/11/41  
CEAB-Consejo Superior de Investigaciones Científicas (Dr. A. Gordoa)
6. Estudio del impacto socioeconómico de la pesca recreativa en el Mediterráneo  
Español. MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN DE ESPAÑA,  
  
Prepared by TRAGSA  
Revised by Dr. Ramón Franquesa Artés. Gabinete de Economía del Mar,  
Universidad de Barcelona
7. Enquête relative à la pêche de loisir (récréative et sportive) en mer en Métropole et dans les DOM.  
2009  
Prepared by IFOP and IFREMER



## **BOX 2 (AS AN EXAMPLE): ECONOMIC VALUATION TECHNIQUES FOR RECREATIONAL FISHERIES**

Current economic valuation techniques can be divided into three sub-categories:

### **1) Revealed-preference approaches:**

Travel cost: Valuations of site-based amenities are implied by the costs people incur to enjoy them (e.g. improved sport fishing activities, fishing tour).

Market methods: Valuations are directly obtained from what people may be willing to pay for the service or goods (e.g. eco-labelling price differentials, increased value of a fishery).

Hedonic methods: The value of a service is implied by what people will be willing to pay for a service through purchases in related markets, such as housing markets (e.g. recreational vessel purchases, housing purchases on coastal areas and waterfronts).

Production approaches: Service values are assigned from the impacts of those services on economic outputs (e.g. increased efficiency from by catch reduction methods, improved CPUE in a fishery).

### **2) Stated-preference approaches:**

Contingent valuation: People are directly asked their willingness to pay or accept compensation for some change in ecological service (e.g. coastal reef preservation, endangered species protection).

Conjoint analysis: People are asked to choose or rank different service scenarios or ecological conditions that differ in the combination of the conditions (e.g. MPA with varying levels of permitted human activities).

### **3) Cost-based approaches:**

Replacement cost: The loss of a natural system service is evaluated in terms of what it would cost to replace that service (e.g. alternative coastal livelihoods).

Avoidance cost: A service is valued on the basis of costs avoided, or extent to which it allows the avoidance of costly averting behaviours, including mitigation (e.g. participatory fisheries management reduces conflicts, health benefits of fish products).

*Source: Farber et al., 2006.*

*Notes:* Examples have been changed to reflect fisheries aspects

Current economic evaluation techniques can be divided into three sub-categories:

### **4) Revealed-preference approaches:**

Travel cost: Assessments of site-based amenities are made by the costs people incur to enjoy them (e.g. improved sport fishing activities, fishing tour).

Market methods: Assessments are obtained directly from what people may be willing to pay for the service or goods (e.g. eco-labelling price differentials, increased value of a fishery).



Hedonic methods: The value of a service is implied by what people will be willing to pay for a service through purchases in related markets, such as housing markets (e.g. recreational vessel purchases, housing purchases on coastal areas and waterfronts).

Production approaches: Service values are assigned according to the impacts of those services on economic outputs (e.g. increased efficiency from by-catch reduction methods, improved CPUE in a fishery).

### **5) Stated-preference approaches:**

Contingent valuation: People are directly asked their willingness to pay or accept compensation for some change in ecological services (e.g. coastal reef preservation, endangered species protection).

Conjoint analysis: People are asked to choose or rank different service scenarios or ecological conditions that differ in the combination of the conditions (e.g. MPA with varying levels of permitted human activities).

### **6) Cost-based approaches:**

Replacement cost: The loss of a natural system service is evaluated in terms of what it would cost to replace that service (e.g. alternative coastal livelihoods).

Avoidance cost: A service is valued on the basis of costs avoided, or extent to which it allows the avoidance of costly averting behaviours, including mitigation (e.g. participatory fisheries management reduces conflicts, health benefits of fish products).

*Source:* Farber *et al.*, 2006.

*Notes:* Examples have been changed to reflect fisheries aspects.

## **BOX 3 MAIN RECREATIONAL FISHING REGULATIONS IN THE MEDITERRANEAN COUNTRIES**

### **European Union**

- COUNCIL REGULATION (EC) No. 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No. 2847/93 and repealing Regulation (EC) No. 1626/94.
- COUNCIL REGULATION (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy
- COMMISSION DECISION of 6 November 2008 adopting a multiannual Community programme pursuant to Council Regulation (EC) No 199/2008 establishing a Community framework for the



collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy

- COUNCIL REGULATION (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966
- COMMISSION IMPLEMENTING REGULATION (EU) No 404/2011 of 8 April 2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the Common Fisheries Policy

#### **France**

- Decree No. 90-618 of July 11 1990 on the exercise of marine recreational fisheries.
- Decree No. 99-1163 December 21 1999 amending Decree No. 90-618.
- Charte d'engagements et d'objectifs pour une pêche maritime de loisir écoresponsable.
- Arrêté du 17 mai 2011 imposant le marquage des captures effectuées dans le cadre de la pêche maritime de loisir JORF № 0123

#### **Greece**

- Presidential Order No. 373 on sport-recreational fishing of 16 July 1985

#### **Italy**

- Presidential Decree No. 1639 of October 2, 1968 regulating Sea fishing.

#### **Malta**

- Fishing vessels regulations of September 14, 2004 (subsidiary legislation 425.07).
- Fishery regulations of May 25, 1934; April 23, 1935 (subsidiary legislation 10.12).

#### **Slovenia**

- Marine Fisheries Act of June 12, 2002.

#### **Spain**

- Order 1999/05160 of February 26, 1999 adopted by the Ministry of Agriculture, Fisheries and food on the marine recreational fisheries regulation.
- Order of July 24, 2000 amending the Order 1999/05160.
- Royal Decret 347/2011, de 11 de marzo, por el que se regula la pesca marítima de recreo en aguas exteriores

#### **BOX 4 (AS A REAL EXAMPLE): BAG LIMIT IN THE BASIC RECREATIONAL SALTWATER FISHING REGULATIONS FOR STATE WATERS OF FLORIDA**

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## Basic recreational saltwater fishing regulations for state waters of Florida

This brief summary of regulations governs the taking of saltwater species in Florida state waters for personal use. It is not applicable to the commercial harvesting of these species. The absence of complete laws, rules and regulations in this summary does not relieve persons from compliance with those laws, rules or regulations. State waters extend to 3 nautical miles on the Atlantic and 9 nautical miles on the Gulf. Federal rules apply beyond state waters unless expressly stated otherwise. For species that do not have an established bag limit, more than 100 pounds or two fish per harvester per day (whichever is greater), is considered commercial quantities. A saltwater products license and commercial vessel registration are required to harvest commercial quantities of unregulated species. It is illegal to sell recreationally harvested fish without compliance with commercial license requirements. Issue Forty One, July 2012. Highlights indicate recent regulation changes.

Species	Minimum Size Limits	Closed Season	Daily Rec. Bag Limit	Remarks
Amberjack, Greater	28" fork Atlantic; 30" total Gulf	June 1 - July 31 Gulf of Mexico	1 per harvester per day	
Amberjack, Lesser & Banded Rudderfish	Not less than 14" or more than 22" fork		5 aggregate of lesser amberjack and banded rudderfish	
Bilfish	Sailfish 63"; Blue Marlin 99"; White Marlin 66"; Bonningspear Spearfish 66"		1 per harvester per day aggregate bag limit	Measured tip of lower jaw to fork. All landed fish must be reported to NOAA within 24 hours 800-894-6525 or <a href="http://floridaseapermit.noaa.gov">floridaseapermit.noaa.gov</a> . HMS permit required in federal waters.
Black Drum	Not less than 14" or more than 24"		5 per harvester per day	May possess one over 24". Snatching prohibited.
Blunfish	12" fork		10 per harvester per day	
Bonefish			0 per harvester per day	Catch and release only. Hook and line gear only.
Clams (Hard)	3" thick across hinge	May not harvest half hour after official sunset until half hour before official sunrise	One 5 gal. bucket per harvester or 2 per vessel, whichever is less per day (whole in shell)	Illegal to harvest from closed areas. Go to <a href="http://floridaseapermit.noaa.gov">www.floridaseapermit.noaa.gov</a> for allowable harvesting areas.
Cobia (Ling)	33" fork		1 per harvester or 6 per vessel per day, whichever is less	
Crab, Blue		Sept. 20 - Oct. 4 Gulf state waters beyond 3 miles closed to traps; federal waters closed to traps. Regional trap closures apply	10 gallons whole per harvester per day	5 traps maximum. Trap requirements apply. Harvest of egg-bearing crabs prohibited.
Crab, Blue Land		July 1 - Oct. 31	30 per harvester per day	Trapping prohibited. Harvest of egg-bearing females prohibited. Harvest prohibited in state parks and from the right-of-way of federal, state or county maintained roads.
Crab, Stone	2 3/4" claw	May 18 - Oct. 14	1 gal. Stone Crab claws per harvester or 2 gal. per vessel, whichever is less	5 traps maximum. Trap requirements apply. Illegal to possess whole crab. Harvest of egg-bearing crabs prohibited.
Dolphin	20" fork Atlantic		10 per harvester per day, not to exceed 60 per vessel per day	
Flounder	12"		10 per harvester per day	May be harvested by spearing. Snatching prohibited.
Gag	24" Atlantic & Monroe County 22" Gulf (excluding Monroe County)	State waters of Gulf (except Franklin, Wakulla, Jefferson & Taylor) OPEN July 1, 2012 and CLOSED on Nov. 1, 2012. State waters off Franklin, Wakulla, Jefferson, Taylor are CLOSED July 1, 2012 - June 30, 2013. Atlantic & Monroe County CLOSED Jan. 1 - April 30	1 per harvester per day Atlantic & Monroe County: 2 per harvester per day Gulf (excluding Monroe County)	No more than 2 fish may be Gag or Black Grouper, either individually or in combination in Atlantic & Monroe County. Included within the 3 per harvester per day (Atlantic & Monroe County) and 4 per harvester per day (Gulf excluding Monroe County) Grouper aggregate bag limit. Zero daily bag and possession limit for captain & crew on for-hire vessels. Please check back with MyFWC.com for the latest updates.
Grouper, Black	24" Atlantic & Monroe County 22" Gulf (excluding Monroe County)	Closed in Gulf (excluding Monroe County) Feb. 1 - March 31 Closed Atlantic & Monroe County Jan. 1 - April 30	1 per harvester per day Atlantic & Monroe County: 4 per harvester per day Gulf (excluding Monroe County)	
Grouper, Red	20"	Closed in Gulf (excluding Monroe County) Feb. 1 - March 31 Closed Atlantic & Monroe County Jan. 1 - April 30	3 per harvester per day Atlantic & Monroe County: 4 per harvester per day Gulf (excluding Monroe County)	Included within the 3 per harvester per day (Atlantic & Monroe County) and 4 per harvester per day (Gulf excluding Monroe County) Grouper aggregate bag limit. Zero daily bag and possession limit for captain & crew on for-hire vessels.
Grouper, Snowy			1 per harvester per day Atlantic	
Grouper, Yellowfin & Yellowmouth	20"	Closed in Gulf (excluding Monroe County) Feb. 1 - March 31 Closed Atlantic & Monroe County Jan. 1 - April 30		
Grouper, Scamp	20" Atlantic & Monroe County; 16" Gulf (excluding Monroe County)	Closed in Gulf (excluding Monroe County) Feb. 1 - March 31 Closed Atlantic & Monroe County Jan. 1 - April 30		
Grouper, Wahoo & Speckled Hind			1 per vessel per day of each species	
Grouper, all others		Closed in Gulf (excluding Monroe County) Feb. 1 - March 31 for Rock Hind and Red Hind Closed Atlantic & Monroe County Jan. 1 - April 30 for Tiger, Rock Hind, Red Hind, Coney, Grunts		
Hogfish	12" fork		5 per harvester per day	
Mackerel, King	24" fork		2 per harvester per day	Bag limit reduced to 1 in some state waters when federal waters are closed to all harvest.
Mackerel, Spanish	12" fork		15 per harvester per day	Transfer of Spanish Mackerel to other vessels at sea is prohibited.
Mullet, Striped (Black) & Silver			50 aggregate per harvester per day; Aggregate vessel limits: Feb. 1-Aug. 31: 100 per vessel; Sept. 1-Jan. 31: 50 per vessel	Mullet aggregate bag limit includes Striped and Silver. See DMFR for additional restrictions in Pinellas and Charlotte counties.
Oysters	3"	June, July, Aug. In Dixie, Wakulla, Levy counties. July, Aug., Sept. in all other areas	2 bags per harvester or vessel, whichever is less per day. 1 bag = 60 lbs. or two 5 gal. buckets (whole-in-shell)	Aquaculture Bay Area summer & winter seasons/areas. Harvest from approved shellfish areas only. Go to <a href="http://floridaseapermit.noaa.gov">www.floridaseapermit.noaa.gov</a> for allowable harvesting areas.
Permit	22" fork SPZ; Not less than 11" or more than 22" fork all other areas	May 1 - July 31 SPZ Only	1 per harvester per day, not to exceed 2 per vessel per day SPZ; 2 per harvester per day all other state waters	May possess 1 over 22" fork length in all other areas, not to exceed 2 over 22" fork per vessel per day. See page 11 for gear restrictions. For map of SPZ, please see: MyFWC.com/Fishing/Saltwater/Regulations/Permit.
Pompano, Florida	13" fork		8 per harvester per day	Hook and line, cast net, and beach or haul seine ONLY.
Pompano, African	24" fork		2 per harvester per day, not to exceed 2 per vessel per day	

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Florida Fish and Wildlife Conservation Commission



## **BOX 5 (AS AN EXAMPLE): RECREATIONAL FISHING DATA COLLECTION SYSTEM**

Each one of the recreational fishing sectors requires different systems:

For tourism charter recreational fishing, since a professional skipper intervenes in these activities, collection of data of captures can be made per fishing day.

For sport fishing (competitions) as these activities should have a person or organizing entity which has been authorized to develop the competition, data collection concerning captures can be made per competition.

For leisure fishing, as the number of actors in the monitored area is known, in order to gain knowledge of the effort applied, we should have three regular inputs:

- 1) Information gathered by voluntary members of the collaborating stakeholder groups.
- 2) Landing statistics in the recreational harbours, not to be confused with inspections.
- 3) Recreational fishing activity carried out under the supervision of technicians from fishing administrations or collaborating scientific institutions.

With these three inputs a model can be made with high reliability results.

## **6. MINORITY STATEMENTS**

### **3.1.1.4 SPORTs FISHING LICENSE**

From the point of view of the fishing administration, the recreational fishing licenses should be enough for the development of the recreational sport fishery sector activities.

#### IFSUA minority statement

Sport licenses have been issued by fishing federations for more than 70 years (and are still being issued). These federations require this license to allow participation in regional, national and international championships. Governments may, in addition to these official competitions, allow other kind of contests outside this framework and require contestants to hold recreational fishing licenses only.

Sport licensing is an excellent tool to make an effective biological and socio-economic assessment of fishing competitions. In this context, and to make assessment more reliable, it would be desirable that this license be issued by fishing method. In addition to sport licenses, organizers should require participants to hold recreational fishing licenses too.

### **3.2.5 MARINE RESERVES**



\* GFCM definition of MPA: A marine reserve, park or other area protected from uncontrolled human access and use by application of various restrictions and activities, development and exploitation. They are defined as Marine Reserves, Parks or with other appellations depending on their characteristics.

Recreational fisheries may play an important socio-economic role in coastal regions. As such, management measures within Marine Protected Areas\* (MPAs) always need to be taken in accordance with the specific environmental impact on living aquatic resources and their habitats of each of the different fishing activities, having as the main goal, keeping or improving the conservation status of the marine ecosystems.

#### *Minority Statement, IFSUA, FIPS-M and FIPSAS.*

(\*) Therefore, before prohibiting any recreational fishing activity within MPAs, managers should make every effort to ensure that no other management tools can be applied to achieve the same conservation goals.

#### **3.4.1 SPORT FISHING**

Fishing competitions can have positives values: they can be an opportunity to promote social activities among people sharing the same interests, to improve relations among recreational fishermen and local authorities or other institutional bodies, to spread conservation principles, to improve knowledge on RF techniques.

Given the fact that during official competition catches are made in a relatively small space-time boundary, prior authorization from relevant authorities is necessary.

Fisheries managers should make sure that strict control of fishing competitions is carried out, requiring that the organizers complete reports of the activity, i.e., spatial coordinates, date, fishing method, number of participants, quantities of fish caught, and species. A properly managed competition could be a valid tool for data collection. (\*)

The fishing competition organizer (individual or entity) should be responsible for the compliance with the different authorizations required.

In sport fishing competitions, for target species subjected to a rebuilding programme the catch and release practice should be mandatory. Should this not been possible, those species should be banned.

In addition to the previously mentioned authorizations, the organizing entity has to establish an institutional framework which sets clear rules ensuring ethical and sustainable fisheries.

Occasionally some professional vessels are used for fishing competitions.

In fishing competitions sale or trade of catches obtained should be prohibited.

#### *Minority Statement, FIPS-M and FIPSAS*



(\*) A properly managed competition could be a valid tool for data collection, with this aim, official Sport Federations or Organizations should be preferred as organizers because they are able to endure correct data collection.

#### **BOX 5 (AS AN EXAMPLE). RECREATIONAL FISHING DATA COLLECTION SYSTEM**

Minority Statement, IFSUA, FIPS MER and FIPSAS

*Delete box 6, The data collection system should be discussed for each segment and context.*

### **7. REFERENCE DOCUMENTS**

1. CODE OF CONDUCT FOR RESPONSIBLE FISHERIES, FAO 1.995.
2. CONCLUSIONS. FIRST MEDITERRANEAN CONGRESS OF THE MARINE GAME FISHING - Palma de Mallorca, Set 2006.
3. GFCM, STUDIES AND REVIEWS. RECREATIONAL FISHERIES IN THE MEDITERRANEAN COUNTRIES: A REVIEW OF EXISTING LEGAL FRAMEWORKS, No. 81 2007 - By Charline Gaudin, Legal Assistant and Cassandra De Young, Fishery Planning Analyst Development and Planning Service, FAO Fisheries and Aquaculture Department.
4. Sport fishing in America. AN ECONOMIC ENGINE AND CONSERVATION POWERHOUSE. JANUARY 2008.
5. TRANSVERSAL WORKSHOP ON THE MONITORING RECREATIONAL FISHERIES IN THE GFCM AREA. Scientific Advisory Committee (SAC) - Palma de Majorca, Spain, 20-22 October 2010.
6. TECHNICAL GUIDELINES No. 13, RESPONSIBLE FISHERIES. FAO 2012.
7. Recreational Compliance Guide. Guide for Complying with the Atlantic Tunas, Swordfish, Sharks, and Billfish Regulations. NOAA 2.012.
8. FISHING REGULATIONS. Applies to Florida State Waters of the Gulf and Atlantic. FLORIDA Saltwater Recreational 2.012.
9. RAC MED WG RF 2011-2013 POSITIONS  
  
9.1 Ref. 79/AV RAC MED OPINION ON DEFINITIONS OF RECREATIONAL FISHERIES, Rome, 27 March 2012



- 9.2 Ref. 80/AV RAC MED OPINION ON RECREATIONAL FISHERIES ACCORDING TO THE EC MEDITERRANEAN REGULATION Rome, 27 March 2012
- 9.3 Ref. 124/AV MED RAC POSITION ON RECREATIONAL FISHING Rome, 5 May 2011
- 9.4 Ref: 160/REL REPORT OF THE WORKING GROUP (WG 4) ON RECREATIONAL FISHERIES Rome, 4th June 2012

## 10. RAC MED RF EC CONSULTATIONS AND ANSWERS 2011-2013

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