

**“Piloting of eco-innovative fishery supply–chains to market added–value Adriatic fish products”**

Priority Axis: Blue innovation

1.1 - Enhance the framework conditions for innovation in the relevant sectors of the blue economy within the cooperation area

## **D3.1.2: Report of the mapped fisheries in Croatia**

WP3 - Piloting of sustainable and eco-certified fishery productions/ A3.1. Analysis of state, management, and seasonality of fisheries in the Adriatic Sea.

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## GLOSSARY

CFP	Common Fisheries Policy
DCF	Data Collection Framework
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FDI	Fishery Dependent Information
GFCM	General Fisheries Commission for the Mediterranean
GSA	Geographical Subarea
ICCAT	International Commission for the Conservation of Atlantic Tunas
JRC	European Commission Joint Research Centre
MA	Ministry of Agriculture
MSY	Maximum Sustainable Yield
SAC	GFCM Scientific Advisory Committee
STECF	Scientific, Technical and Economic Committee for Fisheries

## EXECUTIVE SUMMARY

This report provides an overview of Adriatic fisheries in the framework of **Prizefish**, a project coordinated by the Alma Mater Studiorum - Università Di Bologna (Italy) within the INTERREG V-A ITALY – CROATIA COOPERATION PROGRAMME 2014-2020, which involves partners from both sides of the Adriatic Sea. The project goal is to engage Adriatic fisheries in moving towards sustainability.

In particular the report, corresponding to deliverable **D3.1.2 “Report of the mapped fisheries in Croatia”**, summarises the results of the “Activity 3.1: Analysis of state, management and seasonality of fisheries in the Adriatic Sea” of the Work Package 3 (WP3) of the Prizefish Project, providing an overview of the all fisheries traditionally carried out by the Croatian fleet in Geographical Subarea (GSA) 17 of the General Fisheries Commission for the Mediterranean (GFCM). The same analysis has been conducted on the Italian side of the Adriatic, leading to a **Report of the mapped fisheries in Italy** ( deliverable D3.1.1), that after being shared with the other PPs was published on the Prizefish project website.

Based on these preliminary analyses, a certain number of fisheries per each of the two countries will be selected to enter in a mapping phase that will gather all existing data, documenting in details local fishing practices, their environment, social and economic importance and traditional skills, in order to develop precise guidelines on how to reach sustainable standards at regional level (Activity 3.2: Selection of sustainable fisheries and guidelines on how to reach sustainable standards).

The 1161 Croatian fisheries (as combination of species and gears) mapped in the deliverable 3.1.2. are therefore the assessment basis, from which about 20 will be selected for the following activities. The number of fisheries is significantly higher than that in the Italian side of the Adriatic Sea (622 fisheries mapped in the deliverable 3.1.1), because Croatian vessels use a wider range of gears.

The report provides the following quantitative and qualitative information:

- a list of all the fisheries (combination of species and gear/target group) operating under the scope of the project with indication of: the main target species, the main gears used, stock area, and availability of stock assessment and exploitation levels;
- average landings in volume and value in recent years;
- landing composition in terms of volume and value by fishery;
- fleet composition by fishing technique;
- geographical characterisation of the main fisheries;
- list of the main landing ports.

The main sources of information are Data Collection Framework from the JRC data dissemination tool (<https://stecf.jrc.ec.europa.eu/data-dissemination>), the latest GFCM, ICCAT and STECF evaluations, national regulations, and the EU Fleet Register. Information on fish stock status was also extracted from the recent literature.

## 1. INTRODUCTION

Almost 90% of the fish stocks assessed in the Mediterranean Sea are presumed to be overexploited (Colloca et al, 2017). This is the result of fleet overcapacity, poor involvement of the fishing sector in decision-making processes and weak market engagement in promoting the sustainable exploitation of natural resources. Also in the Adriatic Sea, recent analyses have shown that most of the relevant stocks suffer of over-fishing or severe exploitation and decline risk, stressing the need to make the methods and intensity of the fishing harvest more compatible with the potential for biological renewability of species.

The Common Fisheries Policy of the European Union recommends to implement medium-term strategy for sustainability, based on strong scientific/socio-economic analyses and innovative actions that can empower small-scale fishermen and fishery operators to adopt low-impact fishing methods. Accordingly, the Common Organization of the Markets in fisheries and aquaculture products of the EU recommends cross-border cooperation among fishers towards sustainable fishing to match market demands and consumer attitudes, as well as to create innovative added-value seafood products that can penetrate with success EU and non-EU markets.

However, the eco-labels for fishery and aquaculture products currently in use are mostly private and international, and there are almost no public ones that comply with requirements established for environmental labels.

In this framework, the PRIZEFISH project aims to innovate fisheries in the North Central Adriatic area by piloting eco-labeled fish productions and fishery products derived, throughout the implementation of a cross-border, territorial and socio-economic developmental change in the cooperative renewable exploitation of Adriatic fishery resources, that would produce benefits in the long-term also to Adriatic marine ecosystems.

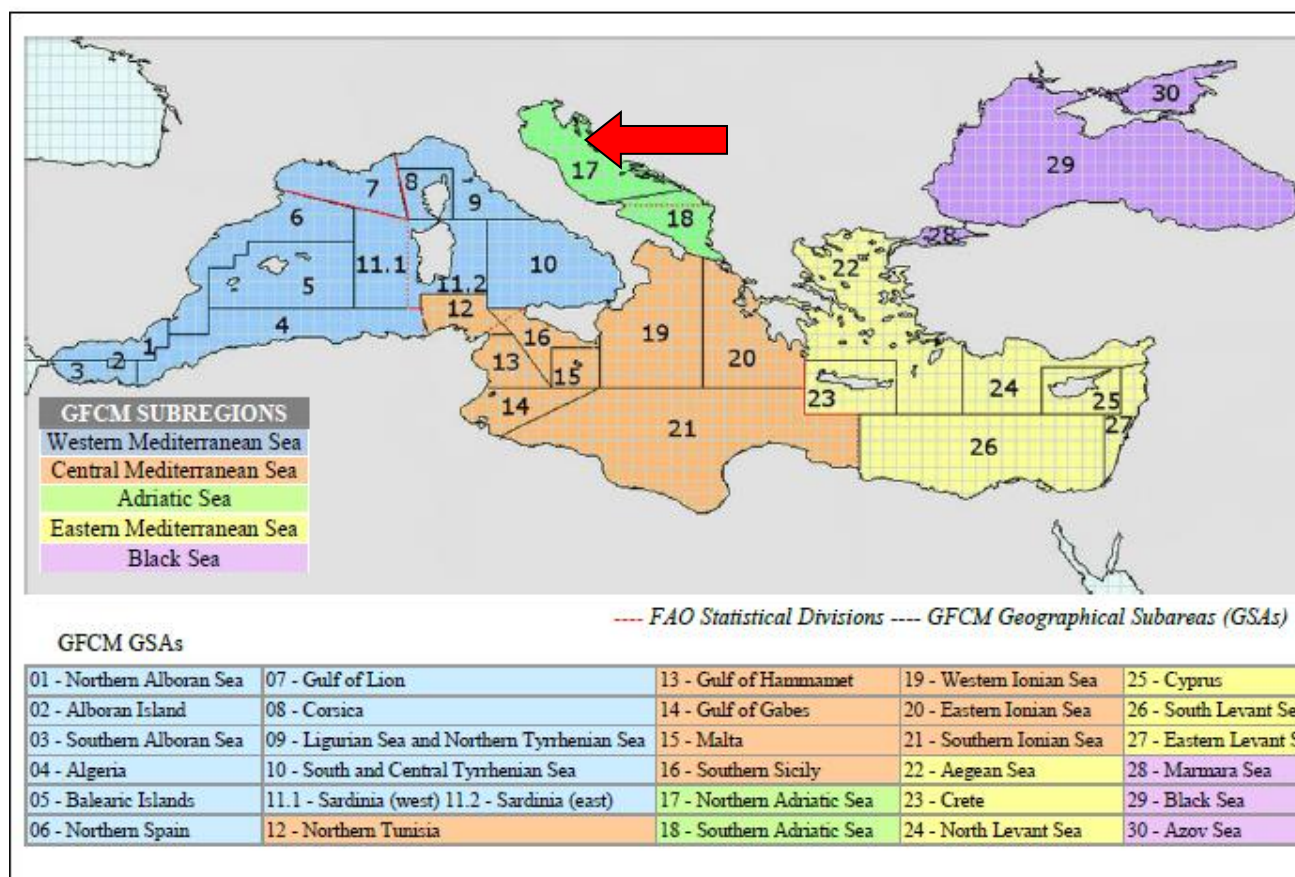
This can be achieved in particular through the development of a certification scheme for an eco-label brand fully Adriatic, the **Adriatic Responsible Fishery (ARF)**, that would combine environmental protection with the social dimension and economic aspects. The purpose of Adriatic Responsible Fishery (ARF) is to provide a framework for the recognition of fisheries management best practices



and to foster the adoption of measures capable of achieving and maintaining appropriate level of stocks over time. The ARF programme will focus on the value of certification in driving improvement in the marine environment and in enhancing traceability and transparency throughout the supply chains. However, besides the direct benefits of certification and market recognition, the ARF standard and assessment process will provide a tool to diagnose and identify improvement needs at a more general level, irrespective of eventual certification. Notably, management authorities could begin to use the ARF standard as an independent, credible ground-truthing approach before making wide-sweeping adjustments to enhance efficiencies for all fisheries, not just those seeking certification.

This multi-stakeholder, collaborative approach, which has become known as the Project Pre-Assessment (PPA) model, has already been applied in the Mediterranean region, in Australia, Indonesia, Mexico, South Africa, Japan, and the UK with the aim of helping in the improvement of the management of the sector. Through a combination of mapping and pre-assessment exercises, the PPA model offers governments, fishermen, scientists, market players, and local non-governmental organisations the opportunity to collaborate to identify the most efficient route to make environmental improvements at the most appropriate scale. Critical features of a PPA are that its intended impact extends beyond the immediate project results and that it has the purpose of improving management. Fisheries deciding to pursue certification when their performance allows to do so, find in the PPA a streamlined, stakeholder-supported approach to sustainability, whereas those that do not choose to pursue certification still benefit through PPA projects and can achieve significant management efficiencies. Prizefish is therefore a “PPA project” involving both Italian and Croatian fisheries.

The report summarises the results of the “Activity 3.1 – Analysis of state, management and seasonality of fisheries in the Adriatic Sea” of the Work Package 3 (WP3) of the Project, whose aim is to provide an overview of and to map Croatian fisheries in Geographical Subarea (GSA) 17 of the General Fisheries Commission for the Mediterranean (GFCM).



**Figure 1 – GSA 17: Northern Adriatic Sea**

Source: GFCM Data Collection Reference Framework, Version 2018.1 (GFCM, 2018).

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- a list of all the fisheries operating under the scope of the project with indication of: the main target species, the main gears used, stock area, and availability of stock assessment and exploitation levels;
- average landings in volume and value in the most recent years;

- landing composition in terms of volume and value by fishery;
- fleet composition by fishing technique;
- geographical characterisation of the main fisheries;
- list of the main landing ports.

The study, methodology, including data sources, the way data were analysed, and the mapping results are reported in the chapters that follow.

## 2. METHODOLOGY

### 2.1 Data sources

A variety of data types were used to conduct the mapping. These data and their sources are listed below.

#### 2.1.1 Fleet Register

Official data on the Croatian fishing fleet and ports recorded in the Croatian Fleet Register were downloaded from the European Commission web site (Management of fishing capacity - fishing fleet: [https://ec.europa.eu/fisheries/cfp/fishing\\_rules/fishing\\_fleet\\_en](https://ec.europa.eu/fisheries/cfp/fishing_rules/fishing_fleet_en)). Data included the vessel details reported in the Fishing License which is released to vessel owners by the MA, namely port name, vessel name, owner's name, registration number, vessel length, main gear type, secondary gear type, tonnage, engine power and year of construction.

#### 2.1.2 European Commission

##### *Data Collection Framework (DCF) database*

The EU DCF is publicly available on the DCF website at <https://datacollection.jrc.ec.europa.eu/data-analysis>. Data are available for use according to the format (i.e. variables and disaggregation level) stated in each data call. Official Data calls (e.g. EU Aquaculture, Fisheries-Dependent Information, Fleet Economic Performance, Mediterranean and Black Sea and Fish Processing Industry) are launched periodically (usually once a year) and are principally aimed at gathering information for the main DCF end-user, the Scientific, Technical and Economic Committee for Fisheries (STECF), for analysis and reports.

##### *Scientific, Technical and Economic Committee for Fisheries (STECF)*

The STECF performs periodic (usually yearly) stock assessments of several species of commercial interest, whose distribution falls within EU GSAs. Summaries of such assessments are publicly available on its website at <https://stecf.jrc.ec.europa.eu/dd/medbs/ram>. Detailed information is also available, in the form of reports, on the webpage: <https://stecf.jrc.ec.europa.eu/reports/medbs>.

In parallel to the STECF, the Scientific Advisory Committee (SAC) to the GFCM, runs stock assessments for shared Mediterranean demersal stocks and small pelagic fish stocks.

#### 2.1.3 General Fisheries Commission for the Mediterranean (GFCM)

The SAC-GFCM Working Groups on Stock Assessment of Demersal (WGSAD) and Small Pelagic Species (WGSASP) annually perform stock assessment for different shared demersal and small pelagic

Mediterranean species of commercial interest. Their outcomes are regularly published as an annex to the annual SAC report and are publicly available on the GFCM website. The SAC-GFCM results were cross-checked and incorporated in the present report along with the STECF data.

#### 2.1.4 International Commission for the Conservation of Atlantic Tunas (ICCAT)

Highly migratory stocks in the Atlantic Ocean and the Mediterranean Sea fall under the purview of the ICCAT. Its scientific working group periodically produces stock assessments for tuna and tuna-like species. The information is publicly available on the ICCAT website.

#### 2.1.5 Other sources: scientific literature

Since a preliminary examination indicated that stock assessments were only partially available for GSA 17, the decision was made to review the recent literature for information on the status of the Adriatic stocks in the area included in the Prizefish project, even if it had not been formally validated by the STECF or the GFCM.

In particular, the paper by Froese et al. (2018) examines the current status, exploitation pattern, required stock rebuilding time, potential future catch if stocks are managed at the maximum sustainable yield (MSY), and consequent future profitability of 397 European stocks. Fishing pressure and biomass are estimated from 2000 to 2017 in 10 European eco-regions and in two wide-ranging regions. The authors also analyse stocks that are distributed in the GSA 17.

## 2.2 Data analysis and reporting

### 2.2.1 Fishing fleet data: gears, métiers and fishing technique

The composition of the Croatian fishing fleet in GSA 17 was obtained from the raw data from the Fleet Register –which reports the main gear of each vessel as stated in the fishing license–by sorting them out in a pivot table. The database was last updated on 22.07.2019.

The gears are reported in the Fleet Register according to the DCF classification<sup>1</sup> and are structured by fishing activity (métier) and region in line with the Commission Decision of 18 December 2009 according to a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013 (2010/93/EC). These data are summarised in Table 1.

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<sup>1</sup>Also adopted by the GFCM (GFCM, 2018).

Table 1–Acronyms and gear types as reported in Commission Decision 2010/93/EC

<b>Gear acronym</b>	<b>Gear description</b>
DRB	Boat dredges
DRH	Hand dredges
FPN	Stationary uncovered pound nets
FPO	Pots
FYK	Fyke nets
GNC	Encircling gillnets
GND	Driftnets
GNS	Set gillnets (anchored)
GTN	Combined gillnets-trammel nets
GTR	Trammel nets
HAR	Harpoons
HMD	Mechanised dredges including suction dredges
LA	Lampara nets
LHM	Handlines and pole-lines (mechanised)
LHP	Handlines and pole-lines (hand-operated)
LLD	Drifting longlines
LLS	Set longlines
LNB	Boat-operated lift nets
LNS	Shore-operated stationary lift nets
LTL	Troll lines
MIS	Miscellaneous Gear
NK	NOT KNOWN <sup>2</sup>
NO	NO GEAR
OTB	Bottom otter trawl
OTM	Midwater otter trawl
OTT	Otter twin trawl
PS	Purse seines
PTB	Bottom pair trawl
PTM	Pelagic pair trawl
SB	Beach seines
SDN	Danish seines
SPR	Pair seines

<sup>2</sup> NK, Not Known is allowed in case of confidentiality issues.



<b>Gear acronym</b>	<b>Gear description</b>
SSC	Scottish seines
SV	Beach and boat seines
TBB	Beam trawl

Source: <https://datacollection.jrc.ec.europa.eu/web/dcf/wordef/gear-type>

According to the Commission Decision of 6 November 2008 – which adopted 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 to the CFP (2008/949/EC) – a métier is “a group of fishing operations targeting a similar (assemblage of) species, using similar gear, during the same period of the year and/or the same area and which are characterised by a similar exploitation pattern”. The notion of métier is therefore closely linked to fishermen’s activities, patterns, traditions, and gears. Accordingly, each métier involves a set of fishing operations characterised by a combination of fishing gear, target species, area, and season which make up homogeneous units that supply the main characteristics of a large number of fishing trips in a single variable (González-Álvarez et al., 2016).

The list of métiers of the Mediterranean Sea (Table 2) has been identified by the Regional Coordination Meeting for the Mediterranean and the Black Sea (RCMMED&BS, Sete 2008) and is available on the STECF website (<https://datacollection.jrc.ec.europa.eu/wordef/fishing-activity-metier>).

**Table 2 – List of métiers in the Mediterranean Sea up to level 4.**

Level 1	Level 2	Level 3	Level 4
<b>Activity</b>	<b>Gear classes</b>	<b>Gear groups</b>	<b>Gear type</b>
<b>Fishing Activity</b>	<b>Dredges</b>	Dredges	Boat dredge [DRB]
	<b>Trawls</b>	Bottom trawls	Bottom otter trawl [OTB]
			Multi-rig otter trawl [OTT]
			Bottom pair trawl [PTB]
			Beam trawl [TBB]
		Pelagic trawls	Midwater otter trawl [OTM]
			Pelagic pair trawl [PTM]

Level 1	Level 2	Level 3	Level 4
Activity	Gear classes	Gear groups	Gear type
	<b>Hooks and Lines</b>	Rods and Lines	Hand and Pole lines [LHP] [LHM]
			Trolling lines [LTL]
		Longlines	Drifting longlines [LLD]
			Set longlines [LLS]
			Pots and Traps [FPO]
	<b>Traps</b>	Traps	Fyke nets [FYK]
			Stationary uncovered pound nets [FPN]
	<b>Nets</b>	Nets	Trammel net [GTR]
			Set gillnet [GNS]
			Driftnet [GND]
	<b>Seines</b>	Surrounding nets	Purse seine [PS]
			Lampara nets [LA]
		Seines	Fly shooting seine [SSC]
			Anchored seine [SDN]
			Pair seine [SPR]
<b>Other gear</b>	Other gear	Beach and boat seine [SB] [SV]	
<b>Misc. (Specify)</b>	Misc. (Specify)	Glass eel fishing	
<b>Other activity than fishing</b>			
<b>Inactive</b>			
<b>Recreational fisheries</b>			

Source: <https://datacollection.jrc.ec.europa.eu/wordef/fishing-activity-metier>



Thus, a métier is essentially based on a combination of a gear (as listed above), a target assemblage and a mesh size. The analysis performed in the present report stops at level 5 of the definition of métier employed by the DCF system, i.e. the target assemblage, which is represented by a category of species that are biologically and environmentally similar. The abbreviations of the assemblages are reported in Table 3.

**Table 3 – Acronyms and target assemblages as reported in the DCF framework**

Target assemblage	Description
ANA	Anadromous
CAT	Catadromous
CEP	Cephalopods
CRU	Crustaceans
DEF	Demersal fish
DWS	Deep-water species
FIF	Finfish
FWS	Freshwater species
GLE	Glass eel
LPF	Large pelagic fish
MCD	Mixed crustaceans and demersal fish
MCF	Mixed cephalopods and demersal fish
MDD	Mixed demersal and deep-water species
MOL	Molluscs
MPD	Mixed pelagic and demersal fish
SLP	Small and large pelagic fish
SPF	Small pelagic fish

Source: Acronyms of target assemblage as reported in Appendix VI of the FDI data call 2018 on <https://datacollection.jrc.ec.europa.eu/dc/fdi>.

Since a vessel may use more than one gear during the year, and in some cases - especially where passive gears are concerned, also during the same day—the DCF framework has adopted the concept of fishing technique, indicating an aggregation of vessels using similar gears. Thus, a vessel is categorised under a given fishing technique on the basis of the “predominant” gear it uses. According to Commission Regulation (EC) No. 1639/2001 of 25 July 2001, establishing the minimum and extended EU programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) No.1543/2000 (OJ L 222, 17.8.2001, p. 53),

predominant is defined as follows: “If a vessel spends more than 50% of its time using a specific type of fishing technique, it should be included in the corresponding segment” (note 2 of Appendix III, section C), where a segment is the combination of a particular fishing technique category and a vessel length category (Appendix III), as also reported in Figure 2.

Appendix III (section C)  
Basic segmentation of vessels for capacities (MP)

Vessel length		< 12 m	12 – < 24 m	24 – < 40 m	≥ 40 m
Mobile gears	Type of fishing technique				
	Beam trawl				
	Demersal trawl and demersal seiner				
	Pelagic trawl and seiners				
	Dredges				
Passive gears	Polyvalent				
	Gears using hooks				
	Drift and fixed nets	( <sup>1</sup> )			
	Pots and traps				
Polyvalent gears	Polyvalent				
	Combining mobile and passive gears				

(<sup>1</sup>) This segment is aggregated for all passive gears.  
 Note 1: If a gear category contains fewer than 10 vessels, then the cell can be merged with a neighbouring length category to be specified in the national programme.  
 Note 2: If a vessel spends more than 50 % of its time using a specific type of fishing technique, it should be included in the corresponding segment.  
 Note 3: Length is defined as length overall (LOA).

**Figure 2 – Definition of fleet segment under the DCF system**

Source: Commission Regulation (EC) No. 1639/2001 of 25 July 2001 (Appendix VI)

Furthermore, according to EU Reg. 93/2010, if a vessel cannot be allocated to a fishing segment according to the predominance criterion, it is to be allocated to one of the following segments: (a) ‘Vessels using Polyvalent active gears’ if it only uses active gears; b) ‘Vessels using Polyvalent passive gears’ if it only uses passive gears; (c) ‘Vessels using active and passive gears’.

When data on effort and landings are available by métier, the fishing technique is important from an economic point of view, since it is the category used for the collection and release - under the DCF - of fleet and economic data. Income and costs refer to the vessel unit; notably, some costs cannot be attributed to a separate gear, but to the vessel as a unit.

The fishing techniques identified by the DCF (European Decision 2008/949/EC, Appendix III) are reported in Table 4.

**Table 4 – Acronyms and fishing techniques identified by the DCF**

Fishing technique acronym	Fishing technique description
DFN	Drift and/or fixed netters
DRB	Dredgers

<b>Fishing technique acronym</b>	<b>Fishing technique description</b>
DTS	Demersal trawlers and/or demersal seiners
FPO	Vessels using pots and/or traps
HOK	Vessels using hooks (longliners)
MGO	Vessel using other active gears
MGP	Vessels using polyvalent active gears only
PG	Vessels using passive gears only for vessels < 12m
PGO	Vessels using other passive gears
PGP	Vessels using polyvalent passive gears only
PMP	Vessels using active and passive gears (polyvalent)
PS	Purse seiners
TM	Pelagic trawlers
TBB	Beam trawlers

*Source: European Decision 2008/949/EC, Appendix III*

The association of gears (Table 1) and of target assemblage (Table 3) is defined as a “fishery”. The fisheries that are addressed in this report are listed in Table 6.

The analysis of fleet data performed for this report is based on the fishing technique and provides, wherever possible, information on the relationship between fishing technique and fishery taken.

Fleet data were processed to produce a list of the main fishing ports in GSA 17.

**Table 5– List of registration ports in GSA 17 (Croatia)**

Port name	Port name	Port name	Port name	Port name	Port name	Port name
Antenal	Fažana	Ljubeščica	Omišalj	Rab	Splitska	Unije
Bakar	Hvar	Lokrum	Omiš	Raša	Split	Uvala Mir
Baška	Ilok	Lopud	Obonjan	Rabac	Skradin	Vodice
Batina	Ist	Lopar	Opatija	Rogač	Susak	Viganj
Bibinje	Jablanac	Lastovo	Orebić	Rogoznica	Stomorska	Vrgorac
Belišće	Jadrija	Mali Lošinj	Osijek	Rijeka	Ston	Vir
Blace	Jelsa	Luka	Pag	Rogotin	Sustjepan	Vis
Biograd na Moru	Karlobag	Makarska	Pašman	Rovinj	Sućuraj	Veli Iž
Bol	Kali	Malinska	Pučišća	Sali	Supetar	Valbiska
Brbinj - Lučina	Kaštel Sućurac	Maslenica	Polače	Stobrec	Sućurac	Vela Luka
Brioni	Kastel Gomilica	Marčana	Ploče	Sobra	Sutivan	Veli Lošinj
Baška Voda	Klek	Metković	Plomin	Suđurađ	Sveti Juraj	Vranjic
Božava	Klimno	Milna	Pomena	Senj	Sveti Kajo	Vrgada
Čilipi	Komiža	Mali Iž	Punat	Stari Grad	Tkon	Vrbnik
Čavle	Klana	Mišnjak	Poreč	Starigrad	Tisno	Vrsar
Crikvenica	Korčula	Mošćenička Draga	Postire	Šibenik	Tunarica	Vrboska
Cres	Kostrena	Merag	Preko	Silba	Tribunj	RIS Inland waterways
Cavtat	Kaprije	Muna na Žirju	Primošten	Sisak	Trpanj	Zadar
Dalmacia	Kraljevica	Martinšćica	Prizna	Slano	Trstenik	Zagreb
Dubrovnik	Krk	Murter	Prapratno	Selce	Trogir	Žigljen
Dragoslavec	Koromačno	Nerezine	Prvić Šepurine	Solin	Turanj	Zlarin
Donje Celo	Kukljica	Novi Vinodolski	Prvić	Šilo	Ubli	Žut - Marina
Drvenik	Kneža	Novalja	Porozina	Slatine	Ugljan	
Dugi Rat	Lamjane	Obrovac	Pula	Sumartin	Umag	

## 2.2.2 Identification of fisheries

The importance of the fisheries found within GSA 17 was established also using a recent and validated scientific method, the STECF/EWG 15-14 (STECF, 2015) approach, which considers the 75 % threshold of the cumulative value and volume of landings. The approach was originally developed by the STECF to address the EC request for support of the implementation of the landing obligation and has been employed to identify the main European demersal fisheries in the Mediterranean.

The 75% threshold of the cumulative value and volume of landings (sum of the values of the two years for which data were available, 2015-2016) was used for each fishery and gear combination, to identify the most represented taxa, which characterise the fisheries<sup>3</sup>.

In the plot, the change in the slope of the cumulative value and volume of landings is reported to provide detailed information on catch composition. A mixed category was created for taxa accounting for less than 500 kg in landing weight, which were pooled into a group that was defined as “OTH” (others).

Only assessments whose reference year was 2012 or later were used. Where multiple sources of information were available for the same stock, only the most recent were considered. The information on stock status was reported in terms of  $F/F_{MSY}$  ( $F$ =fishing mortality;  $F_{MSY}$  =fishing mortality at MSY level). If biomass reference points were available, such information was also reported.

The analysis of activity by metier allowed identifying the combinations of gear and target assemblage (“fishery”), which are listed in Table 6.

**Table 6—Main fisheries identified in the GSA 17**

<b>Gear_target assemblage</b>	<b>“Fishery” description</b>
DRB_MOL	Boat dredges for molluscs
FPO_DEF	Pots and traps for demersal fish
FYK_CAT	Fyke nets for catadromous
FYK_DEF	Fyke nets for demersal fish
GND_SPF	Driftnets for small pelagic fish
GNS_DEF	Set gillnets (anchored) for demersal fish

<sup>3</sup>For fisheries here we intend the combination of target groups of species and gears.

<b>Gear_target assemblage</b>	<b>“Fishery” description</b>
GNS_SLP	Set gillnets (anchored) for small pelagic fish
GTR_DEF	Trammel nets for demersal fish
LHP-LHM_CEP	Handlines and pole lines for cephalopods
LHP-LHM_FIF	Handlines and pole lines for finfish
LLD_LPF	Drifting longlines for large pelagic fish
LLS_DEF	Set longlines for demersal fish
LTL_LPF	Troll lines for large pelagic fish
MIS_MIS	Miscellaneous gears for miscellaneous fish
OTB_DEF	Bottom otter trawl for demersal fish
OTB_DWS	Bottom otter trawl for deep water species
OTB_MDD	Bottom otter trawl for mixed demersal and deep-water species
OTM_MPD	Midwater otter trawl for mixed pelagic and demersal fish
PS_LPF	Purse seines for large pelagic fish
PS_SPF	Purse seines for small pelagic fish
PTM_SPF	Pelagic pair trawl for small pelagic fish
SB-SV_DEF	Beach and boat seines for demersal fish
TBB_DEF	Beam trawl for demersal fish

Source: <https://datacollection.jrc.ec.europa.eu/>

### 3. MAPPING RESULT: Croatian fisheries operating in the GSA17 potentially eligible for eco-labelling process

The mapping process yielded 1161 species/gears combinations, defined as fisheries. Details on fleet composition by fishing techniques and vessels size, on the most important fishing ports, on the composition of landings (using the 75% threshold approach) are given in the following sections.

#### 3.1. Fleet composition

In GSA 17 operate 6.093 Croatian fishing vessels. With regards to vessels falling under the polyvalent passive gears segment (PGP), there was a major change from 2016 regarding a very specific category of non-commercial fishery that prior to the accession of Croatia to the EU belonged to small scale fleet for personal use. Those vessels were transferred to the commercial category in 2015, pursuant to the regulations in force. Administrative process of licensing followed throughout 2016. Following the transfer from the previous non-commercial fishery into the commercial one, Croatia included the small-scale vessels for personal needs into the national sampling scheme within the amended National Data Collection Programme (*source*: Annual report on balance between fishing capacity and fishing opportunities for 2018, available at: <https://ec.europa.eu/2018-fleet-capacity-report-croatiaen.pdf>).

However, although the current fleet composition include the full PGP segment (as reflected by the total number of vessels) the influence of those vessels on the following analyses is minor due to low value and volume of landings (they are not full-time engaged in the fishery and most of them have very limited activity).

In view of the foregoing, the fishing techniques most practiced are drift and/or fixed netters, followed by polyvalent passive gears only, demersal trawlers and/or demersal seiners, other active gears, hooks (longliners) and pots and/or traps. The GSA 17 Croatian fishing fleet has a total tonnage of 34.509 GT and 262.142 kW of total engine power. In 2015, there were 2.384 (FTE) employed in the fishing sector (EUMOFA, 2015). The average age of vessels is 35 years old. Average vessels length overall (LOA) is 11 meters.

**Table 7 - GSA 17: Fleet composition by fishing technique and vessel size class  
(length overall, LOA) as of 31 December 2018**

fishing_tech	vessel_length	Total number of vessels	Vessel tonnage	Engine power	Fishing days	kW fishing days (e)	Average vessel length	Average vessel age
DFN	VL0006	313	320	4.032	20.674	266.690	5	35
DFN	VL0612	669	2.380	42.689	47.314	3.083.657	8	34
DFN	VL1218	17	218	3.010	1.041	168.244	13	35
DRB	VL0612	13	106	1.589	1.232	155.672	11	35
DRB	VL1218	28	409	4.993	3.240	569.797	14	34
DRB	VL1824	1	55	242	156	37.752	21	62
DTS	VL0006	4	4	59	146	2.038	5	45
DTS	VL0612	162	1.315	15.033	14.791	1.502.523	10	37
DTS	VL1218	168	3.207	26.239	17.006	2.633.952	15	43
DTS	VL1824	30	2.094	8.350	4.556	1.390.026	20	46
DTS	VL2440	13	1.700	5.997	2.089	974.774	26	32
FPO	VL0006	43	49	1.143	4.270	133.306	5	28
FPO	VL0612	110	293	5.870	15.656	833.234	7	35
FPO	VL1218	1	10	124	4	496	12	29
HOK	VL0006	80	77	1.489	2.942	56.000	5	33
HOK	VL0612	226	928	24.166	10.764	1.197.084	8	30
HOK	VL1218	5	99	2.473	313	170.766	13	21
MGO	VL0006	264	209	4.309	14.936	281.967	4	25
MGO	VL0612	70	249	5.006	5.283	448.713	8	33
MGO	VL1218	2	20	73	153	7.818	12	55
MGP	VL0612	2	19	121	116	4.832	11	33
MGP	VL1218	1	14	220	2	440	14	1
PGO	VL0006	6	6	230	415	16.751	5	24
PGO	VL0612	2	5	94	128	5.936	7	29
PGP	VL0006	56*	2.417	17.439	2.197	19.269	5	38
PGP	VL0612	775	1.742	17.015	2.528	86.382	7	39
PMP	VL0006	28	25	248	1.106	12.963	5	36
PMP	VL0612	38	117	2.973	2.714	232.102	8	32
PMP	VL1218	3	28	413	260	34.932	13	35
PS	VL0006	2	2	53	189	6.543	5	21
PS	VL0612	33	199	2.541	2.684	225.695	10	43
PS	VL1218	31	638	5.313	3.908	700.907	15	40
PS	VL1824	49	3.933	17.147	7.609	2.712.768	21	51
PS	VL2440	73	11.620	41.434	11.283	6.545.218	29	29
TBB	VL0612	1	1	13	36	477	6	58
<b>Totale complessivo</b>		<b>3.263</b>	<b>34.509</b>	<b>262.142</b>	<b>201.741</b>	<b>24.519.725</b>	<b>11</b>	<b>35</b>

Source: <https://stecf.jrc.ec.europa.eu/data-dissemination>



### 3.2. Fishing fleet distribution

Along the Croatian side of the Adriatic Sea there are 166 fishing landing places, out of which 63 represent 95% of the catches. Ports of major importance are the port of Dubrovnik, Split and Zadar, followed by Rijeka, Pula, Šibenik and Senj. The fishing techniques most used by vessels operating in those ports are polyvalent passive gears, drift and/or fixed netters, demersal trawlers and/or demersal seiners and other active gears (fig. 3.2.1.).

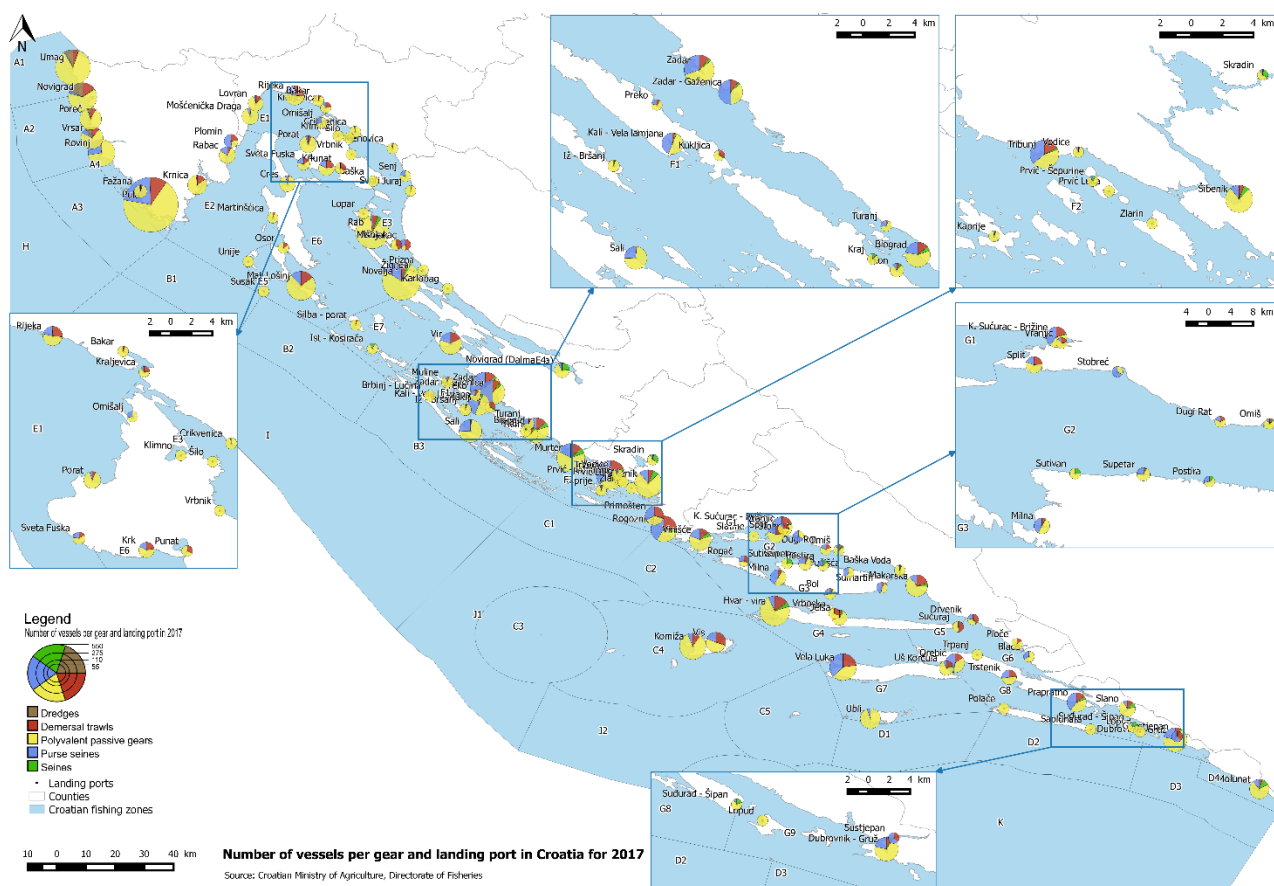


Figure 3.2.1. – GSA17: Map of registration ports and fleet characterisation by compartment

Source: <https://www.eurofish.dk/croatia>

### 3.3. The most important fisheries for volume and value of landings

The most important fisheries in terms of landing volume are purse seines for small pelagic fish (65,458.42 tons); bottom otter trawl for demersal fish (2,310.64 tons) and bottom otter trawl for crustaceans (839.95 tons). The same three fisheries are the most important also in terms of value of landings, in the following order: purse seines for small pelagic fish (30,262.91EUR); bottom otter trawl for demersal fish (6,707.33 EUR); bottom otter trawl for crustaceans (4,803.05 EUR).

**Table 8 – GSA 17: Landings volume and value (mean 2015-2016)**

Fishery	Gear type	Mean landings in weight 2015-2016 (Tons)	Mean value of landings 2015-2016 (K Euro)	% Landings	% Revenues
SPF	PS	65,458.43	30,262.91	90.14	50.84
DEF	OTB	2,310.64	6,707.34	3.18	11.27
CRU	OTB	839.95	4,803.05	1.16	8.07
CEP	OTB	838.15	2,872.07	1.15	4.82
DEF	GTR	238.48	1,956.58	0.33	3.29
MOL	DRB	534.21	1,815.23	0.74	3.05
DEF	GNS	164.93	970.90	0.23	1.63
DEF	LLS	181.37	741.74	0.25	1.25
FIF	GNS	135.08	690.82	0.19	1.16
CRU	FPO	39.14	621.96	0.05	1.04
DEF	DRB	54.37	439.29	0.07	0.74
BFTE	LHP	47.83	433.91	0.07	0.73
CEP	FPO	78.31	404.74	0.11	0.68
LPF	PS	78.27	396.93	0.11	0.67
FIF	PS	94.50	295.57	0.13	0.50
CEP	DRB	60.36	251.70	0.08	0.42

Source: <https://stecf.jrc.ec.europa.eu/data-dissemination>

### 3.4. Composition of landings (volume and value) by fishery and species according to the 75% threshold approach, sum 2015-2016

As regards cephalopods fished by boat dredges, the Common cuttlefish and the Horned and musky octopuses are the most important species in terms of both value and volume of landings (fig. 3.4.1.).

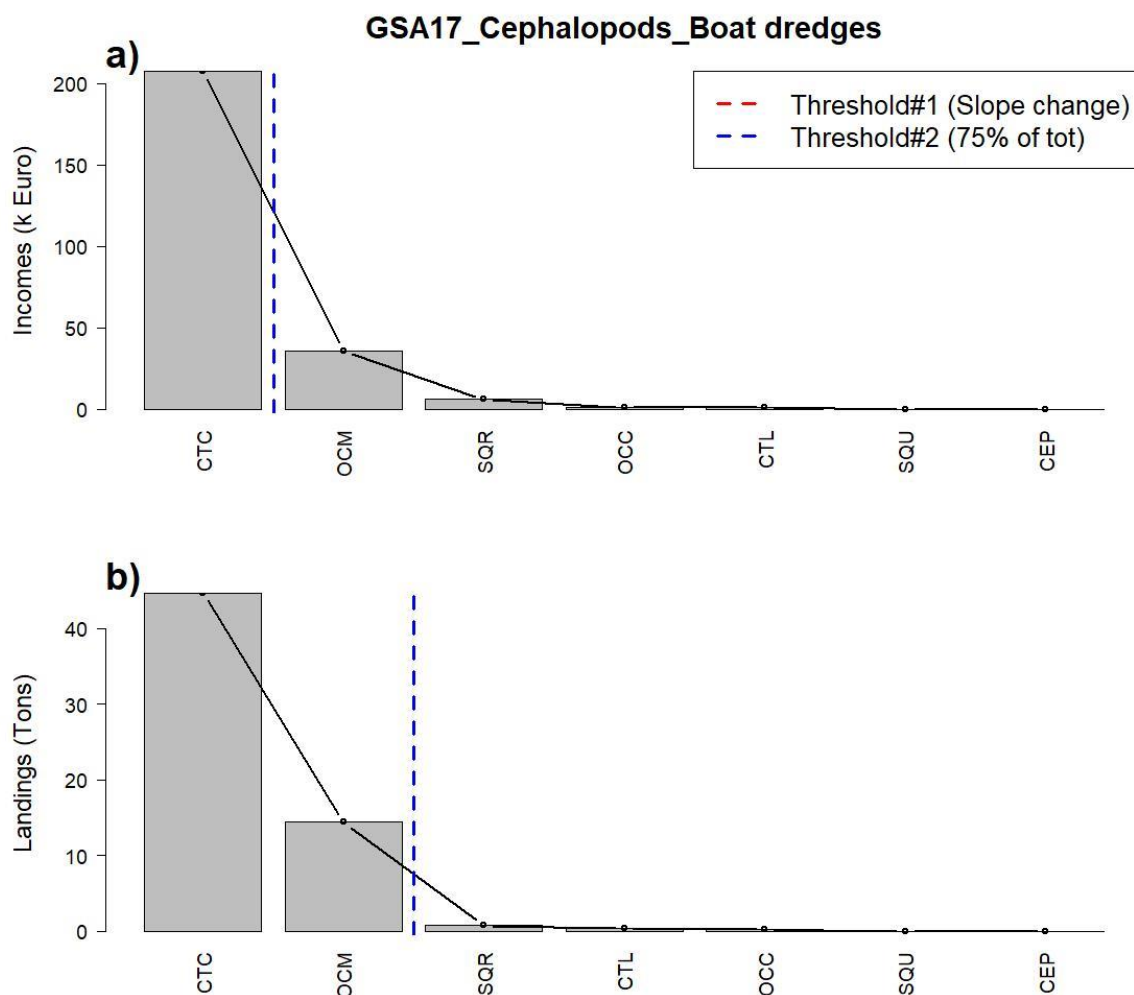


Fig. 3.4.1.: Landing value (a) and volume (b) of cephalopods fished by boat dredges in the Croatian side of GSA17.

As regards the cephalopods fished by bottom otter trawl, the Horned and musky octopuses, the European squid and the Common octopus are the most important species in terms of value of landings. In terms of volume of landings the most important are the Horned and musky octopuses, the Various squids nei and the European squid (fig. 3.4.2.)

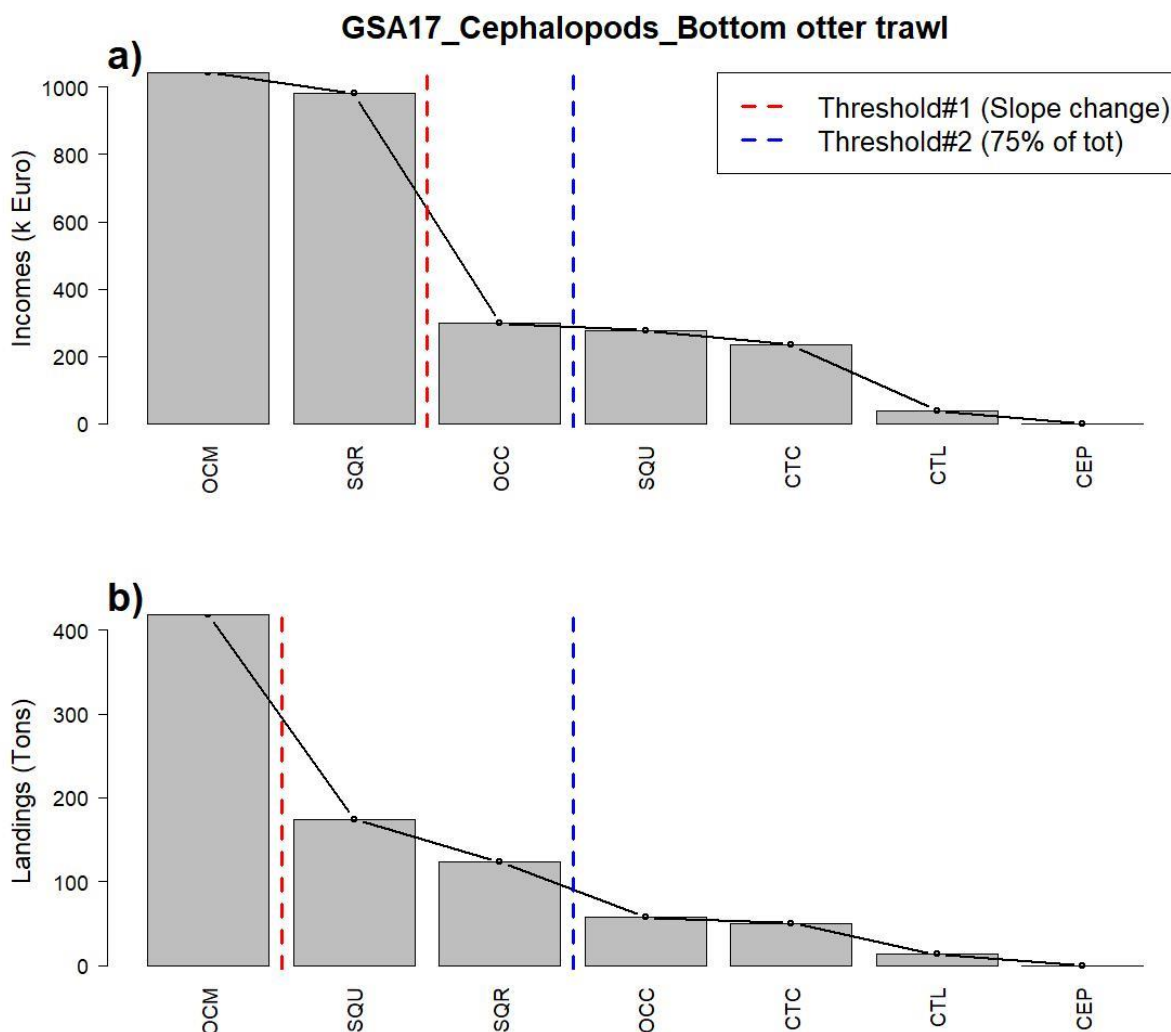


Fig. 3.4.2.: Landing value (a) and volume (b) of cephalopods fished by bottom otter trawl in the Croatian side of GSA17.

As regards cephalopods fished by pots, the Common octopus is the most important species in terms of both value and volume of landings (fig. 3.4.3.).

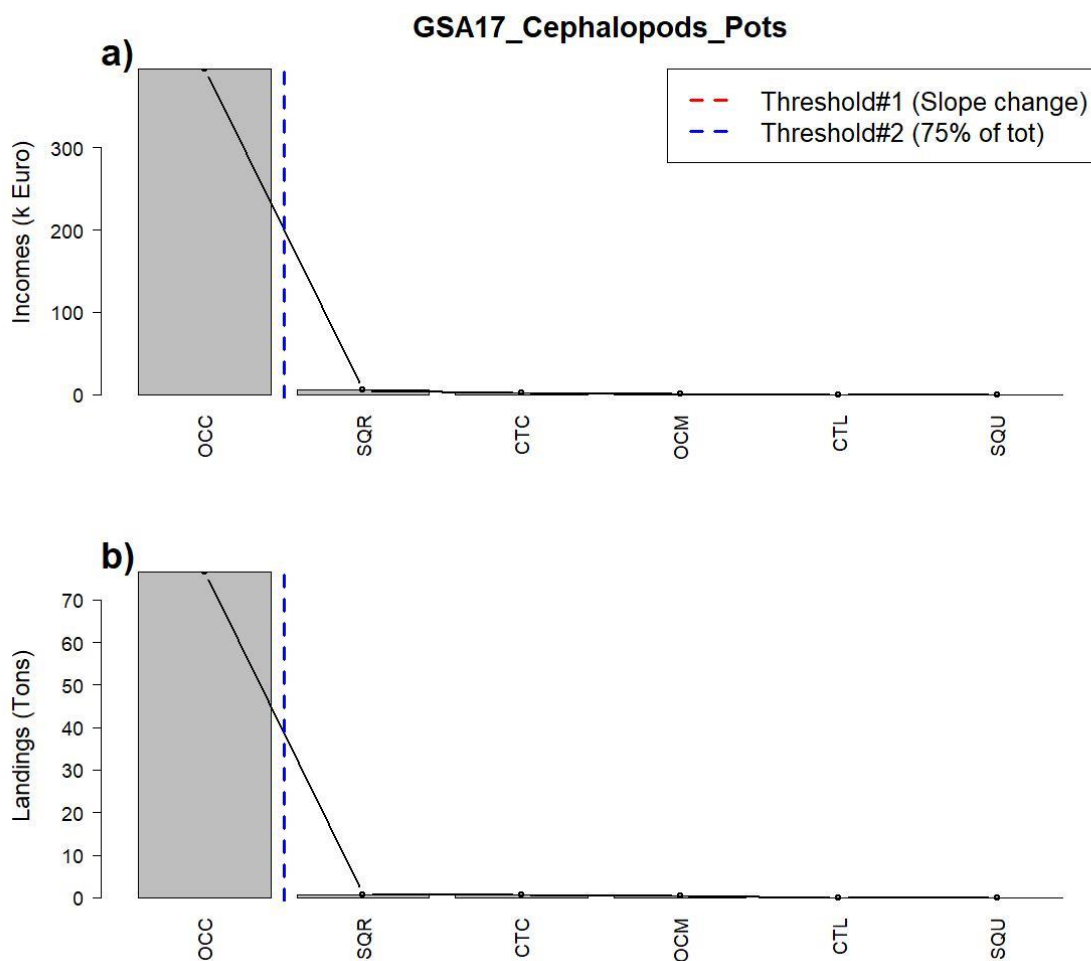


Fig. 3.4.3.: Landing value (a) and volume (b) of cephalopods fished by pots in the Croatian side of GSA17.

With reference to crustaceans fished by bottom otter trawl, the Norway lobster and the Deep-water rose shrimp are the most important species in terms of value and volume of landings (fig. 3.4.4.).

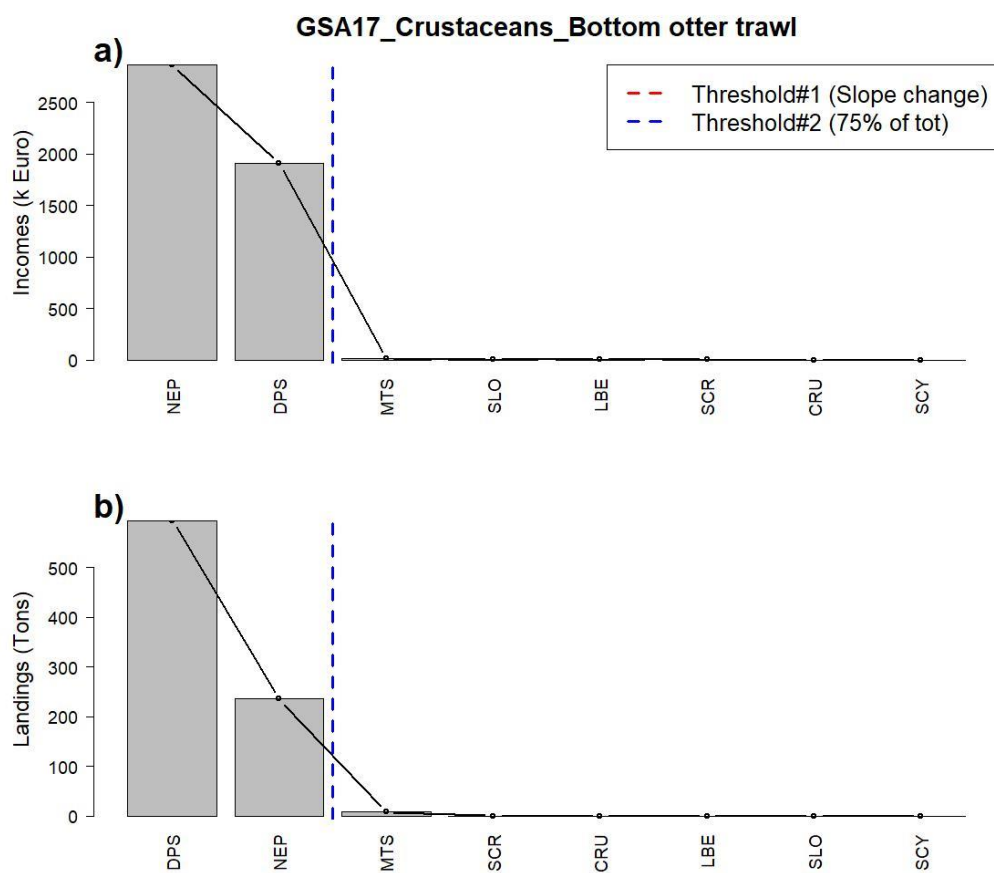


Fig. 3.4.4.: Landing value (a) and volume (b) of crustaceans fished by bottom otter trawl in the Croatian side of GSA17.

As regards crustaceans fished by pots, the Norway lobster and the Common spiny lobster are the most important fisheries in terms of both value and volume (fig. 3.4.5.).

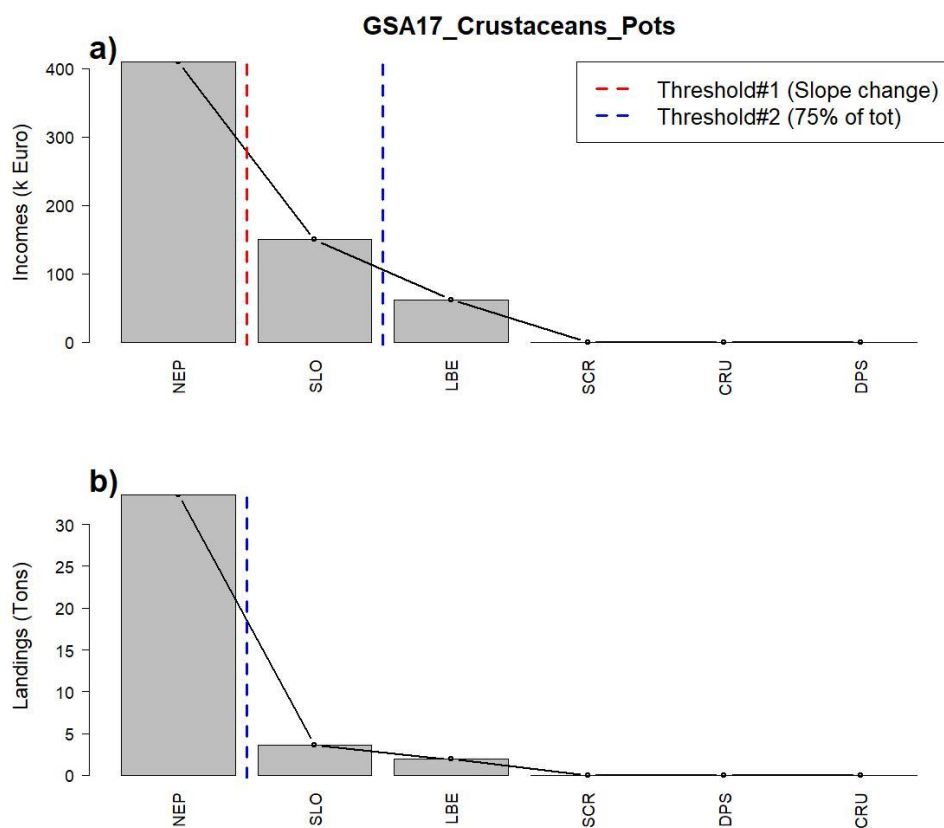


Fig. 3.4.5.: Landing value (a) and volume (b) of crustaceans fished by pots in the Croatian side of GSA17.



Regarding demersal fish fished by boat dredges, the Common sole is the most important species in terms of both value and volume of landings (fig. 3.4.6).

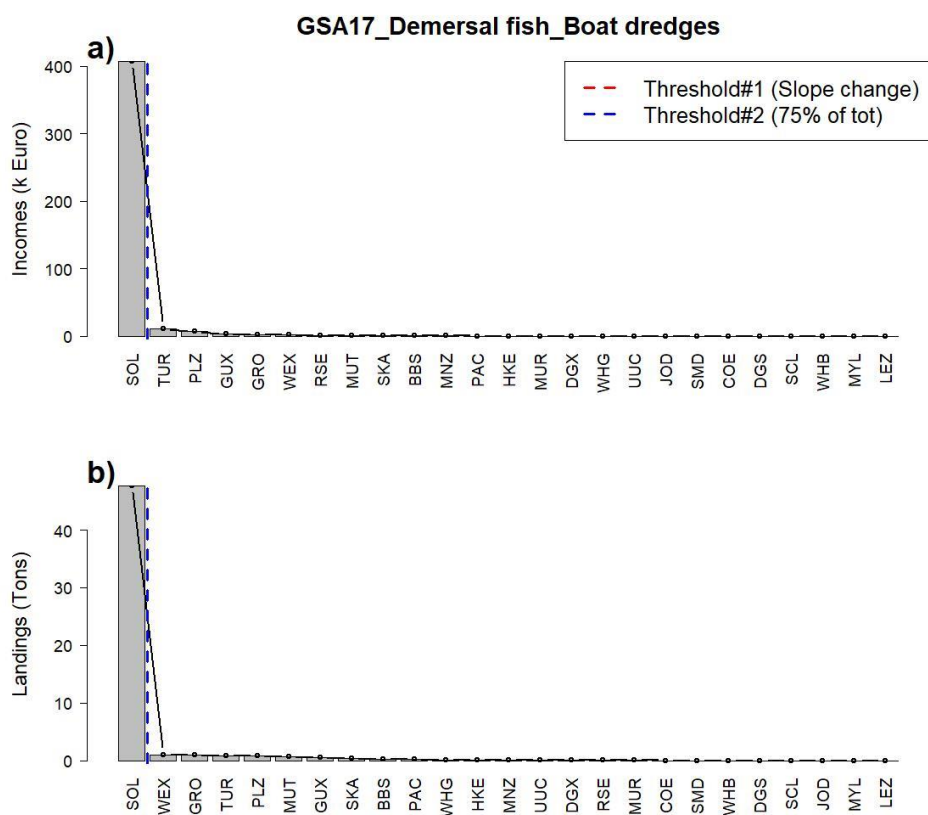


Fig. 3.4.6.: Landing value (a) and volume (b) of demersal fish fished by boat dredges in the Croatian side of GSA17.



As regards demersal fish fished by bottom otter trawl, the European hake, the Red Mullet, the John dory, the Monkfishes nei are the most important species in terms of value of landings. In terms of volume the most important are the Red Mullet, the European hake and the Whiting (fig. 3.4.7.).

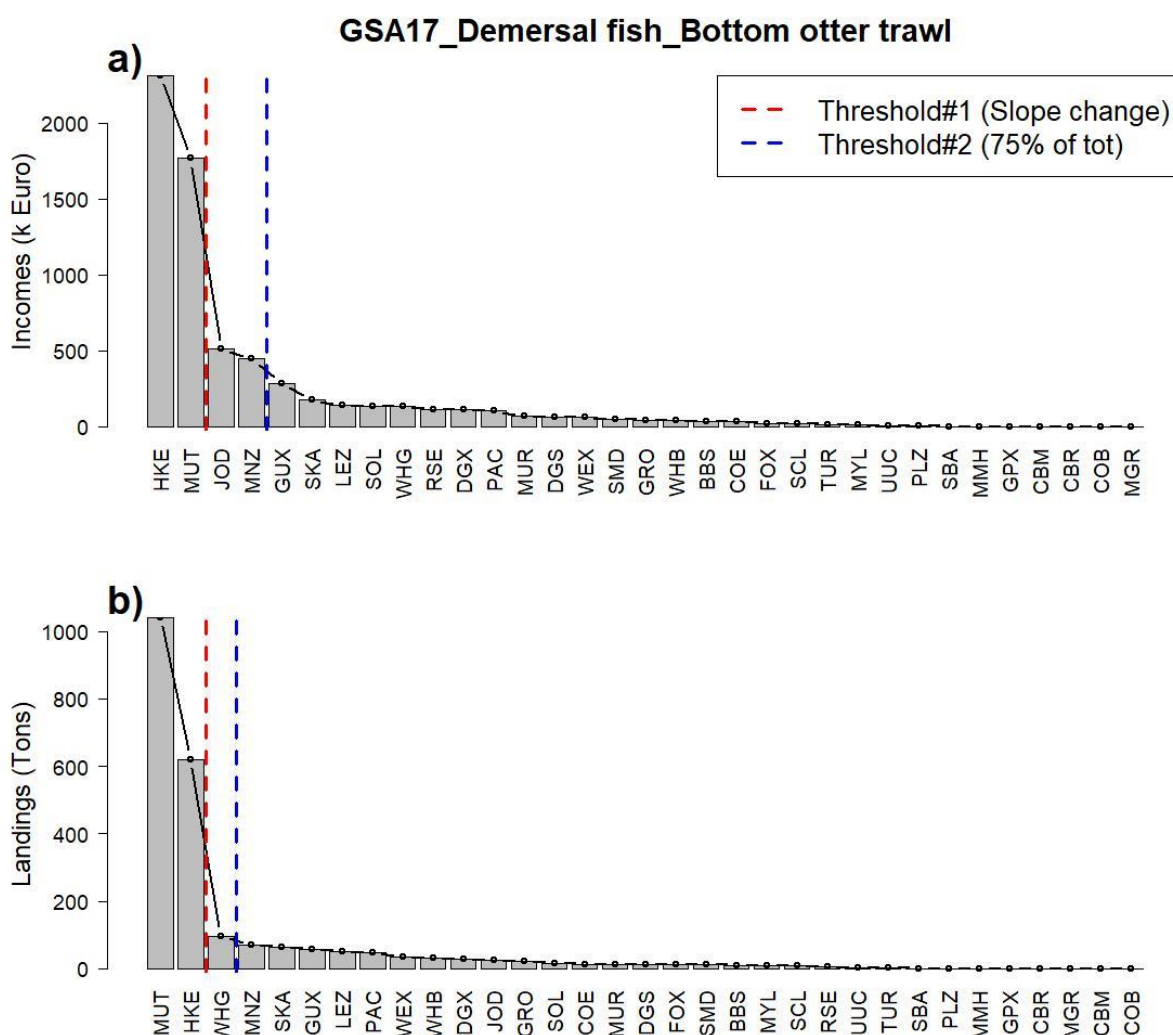


Fig. 3.4.7: Landing value (a) and volume (b) of demersal fish fished by bottom otter trawl in the Croatian side of GSA17.

As regards demersal fish fished by set gillnets nets (anchored), the Red scorpionfish, the European Hake, the John dory, the Turbot, the Common Sole, the Picked dogfish and the Dogfish sharks nei are the most important species in terms of value of landings. In terms of volume the most important are: the European Hake, the Red scorpionfish, the Groundfishes nei, the Dogfish sharks nei, the Picked dogfish, the Raja rays nei, the Black scorpionfish, the John dory, the Red mullet, the Common pandora, the Common sole (fig. 3.4.8.).

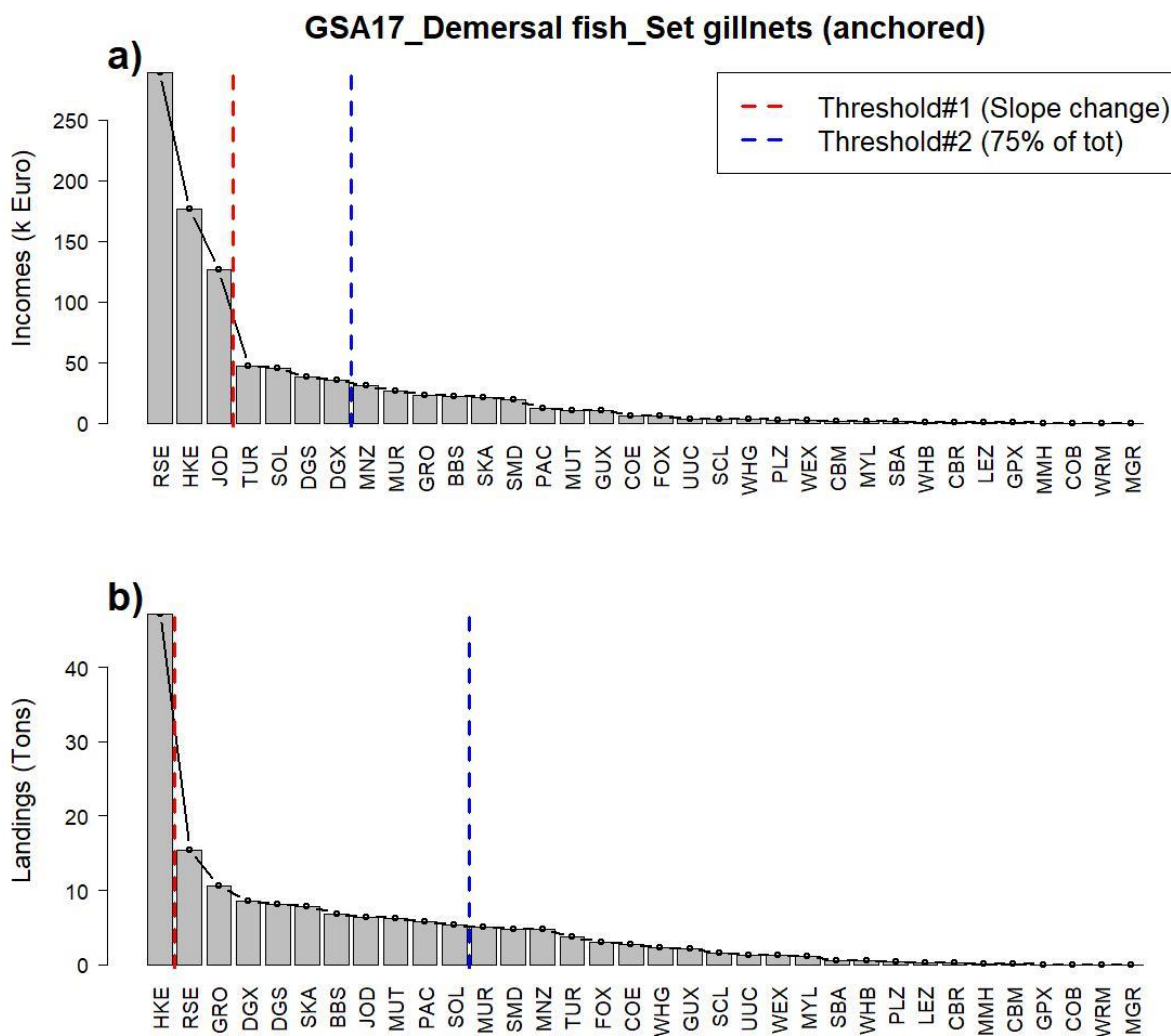


Fig. 3.4.8: Landing value (a) and volume (b) of demersal fish fished by set gillnets (anchored) in the Croatian side of GSA17.

As regards demersal fish fished by set longlines, the European Hake and the Gurnards, sea robins nei are the most important species in terms of value and volume of landings respectively. Other important species in terms of value are the Red scorpionfish and the European conger. In terms of volume the European conger too (fig.3.4.9).

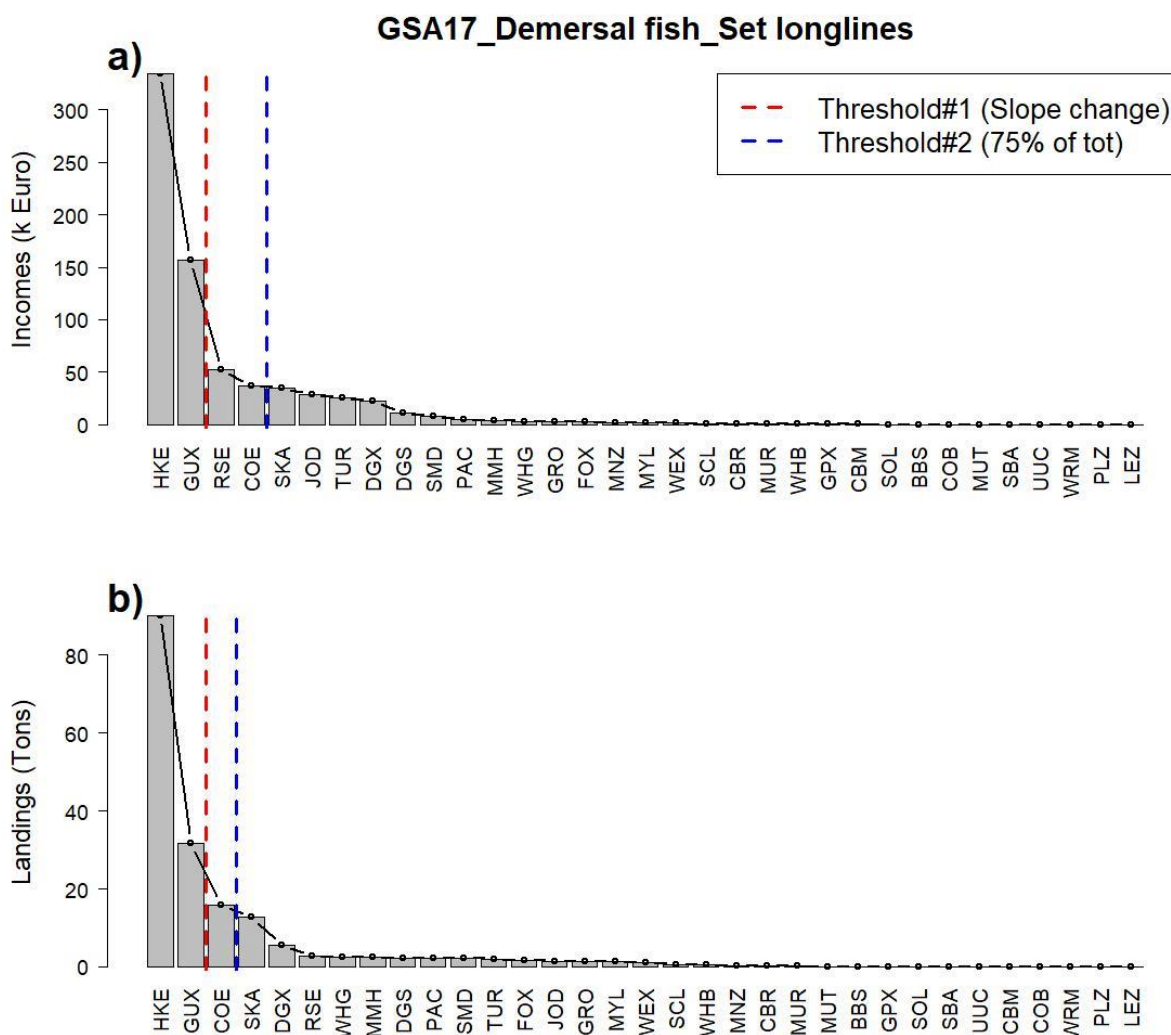


Fig. 3.4.9.: Landing value (a) and volume (b) of demersal fish fished by set longlines in the Croatian side of GSA17.

As regards demersal fish fished by trammel nets, the Common Sole and the Turbot are the most important species in terms of both value and volume of landings. The Red scorpionfish is the third in terms of value (fig. 3.4.10.).

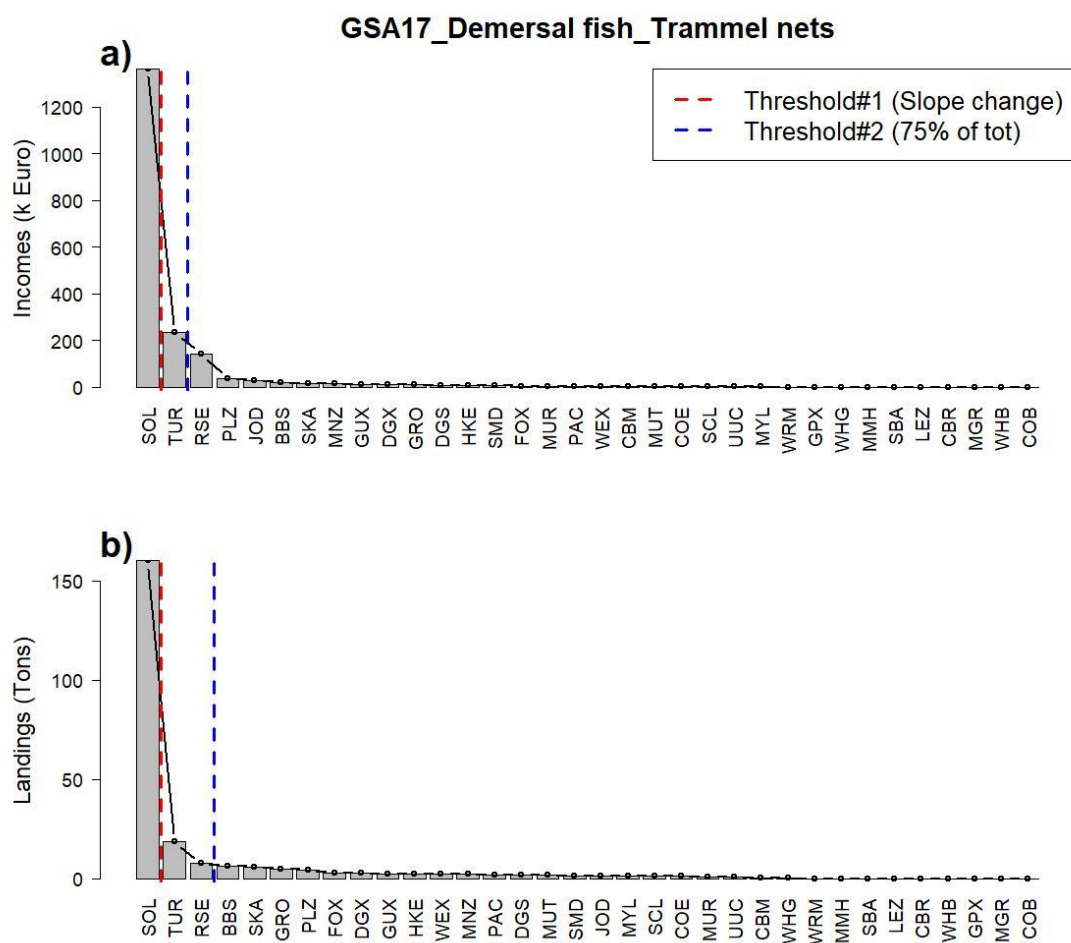


Fig. 3.4.10.: Landing value (a) and volume (b) of demersal fish fished by trammel nets in the Croatian side of GSA17.

As regards finfish fished by purse seines, the Gilthead seabream and the Bogue are the most important species in terms of both value and volume of landings respectively (fig.3.4.11).

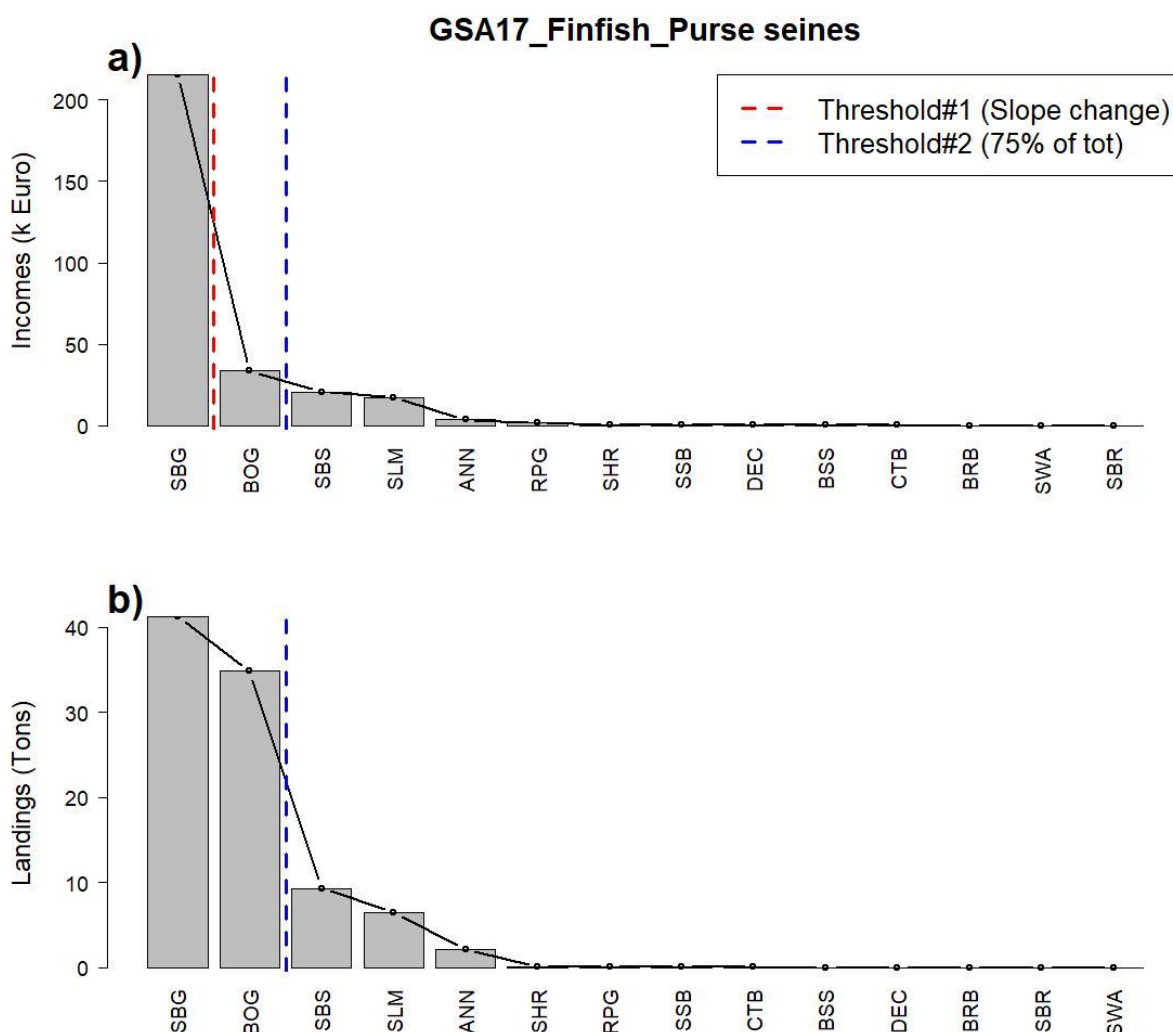


Fig. 3.4.11.: Landing value (a) and volume (b) of finfish fished by purse seines in the Croatian side of GSA17.

As regards finfish fished by set gillnets (anchored) the Gilthead seabream, Common dentex, Black scorpionfish, Salema are the most important species in terms of value of landings. The Gilthead seabream, Salema, Bogue and Saddled seabream are the most important in terms of volume (fig. 3.4.12).

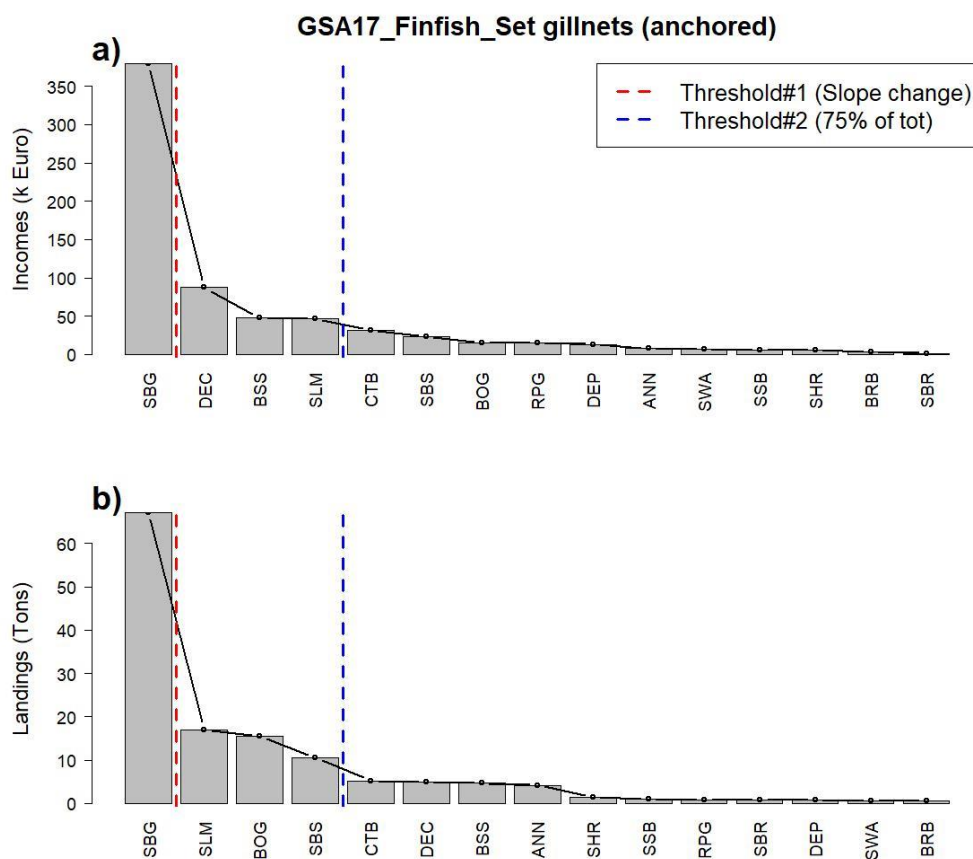


Fig. 3.4.12: Landing value (a) and volume (b) of finfish fished by set gillnets (anchored) in the Croatian side of GSA17.



As regards large pelagic fish fished by purse seines, the Greater amberjack and the Atlantic bonito are the most important species in terms of value of landings. In terms of volume the most important are: Greater amberjack, Little tunny (=Atl.blackskipj) and the Atlantic bonito (fig. 3.4.13.).

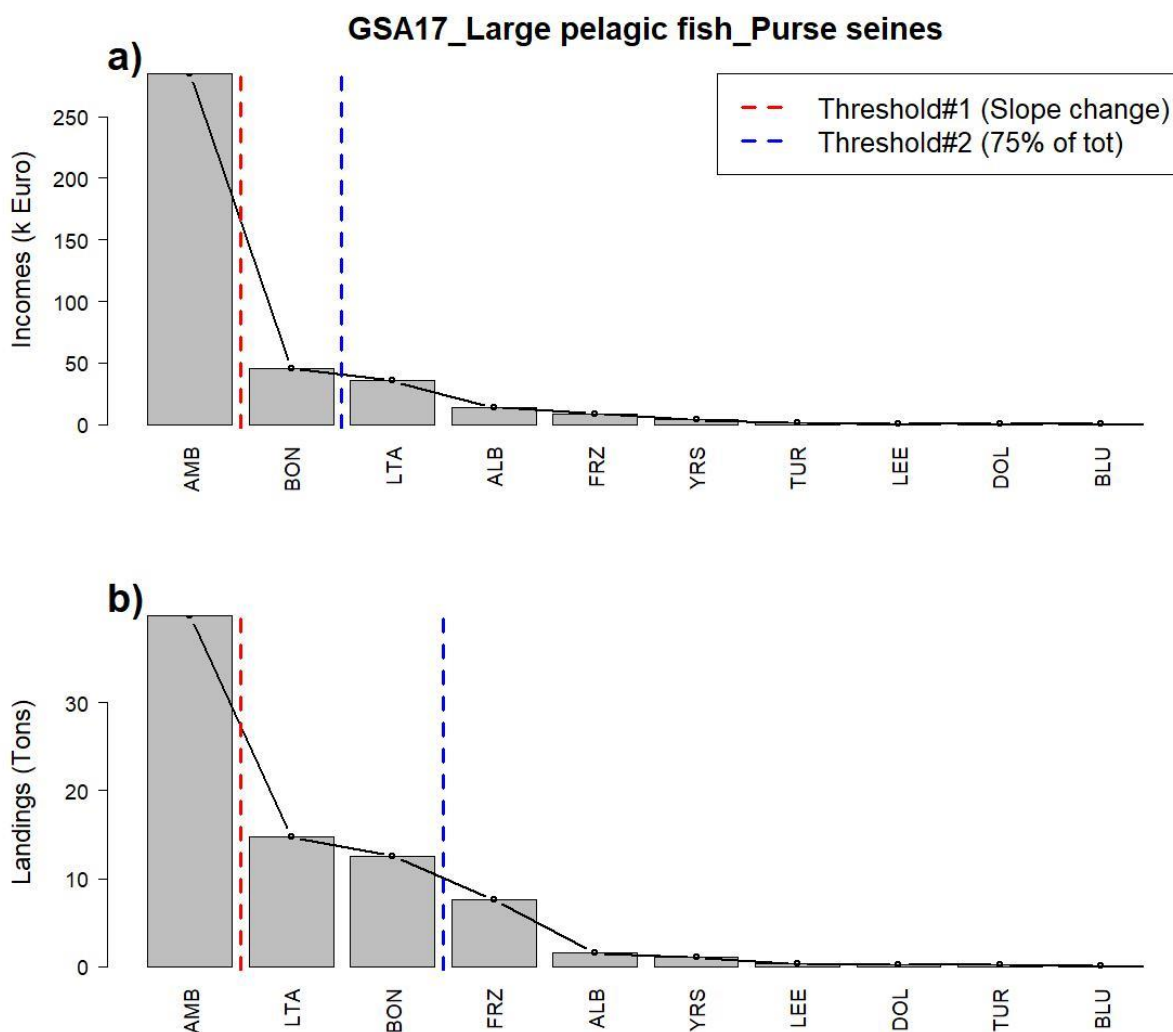


Fig. 3.4.13.:Landing value (a) and volume (b) of large pelagic fish fished by purse seines the Croatian side of GSA17.

As regards molluscs fished by boat dredges, the European flat oyster and the Great Mediterranean Scallop are the most important species in terms of value of and volume landings (fig. 3.4.14.).

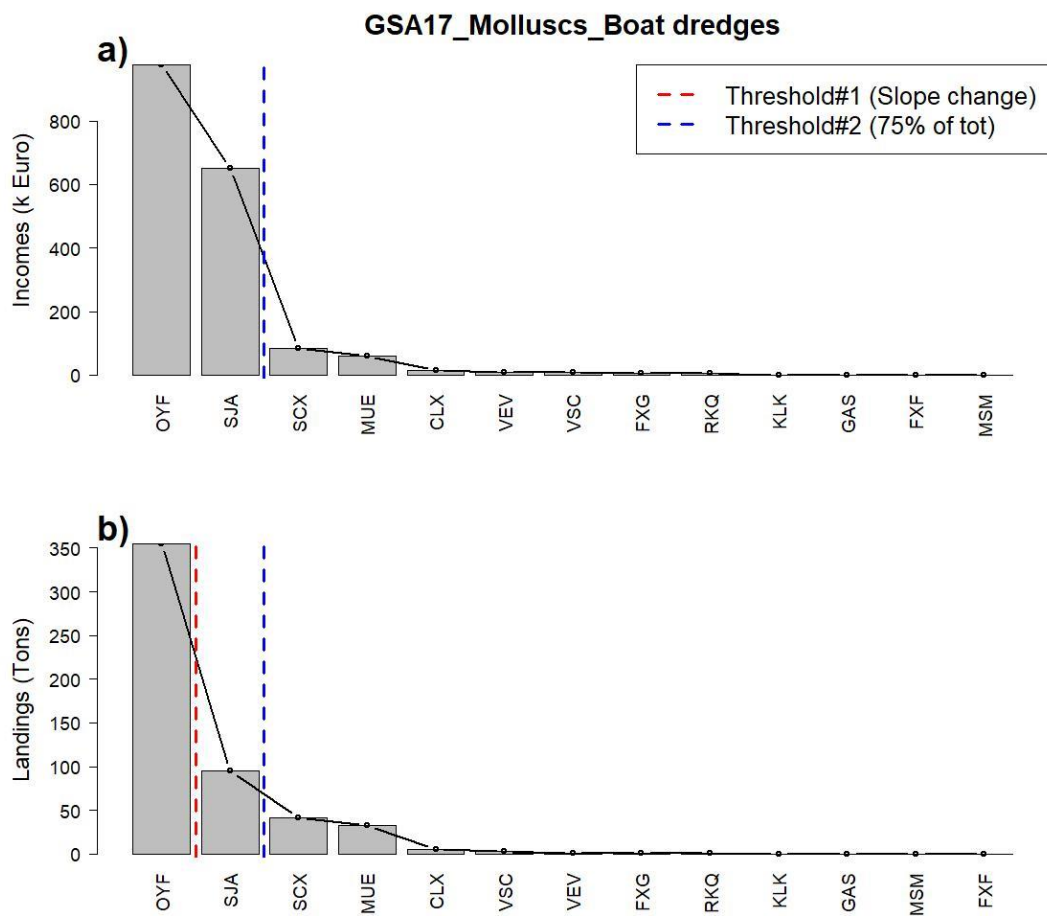


Fig. 3.4.13.: Landing value (a) and volume (b) of molluscs fished by boat dredges in the Croatian side of GSA17.



As regards small pelagic fish fished by purse seines, the European pilchard(=Sardine) and the European anchovy are the most important species in terms of both value and volume landings (fig. 3.4.14.).

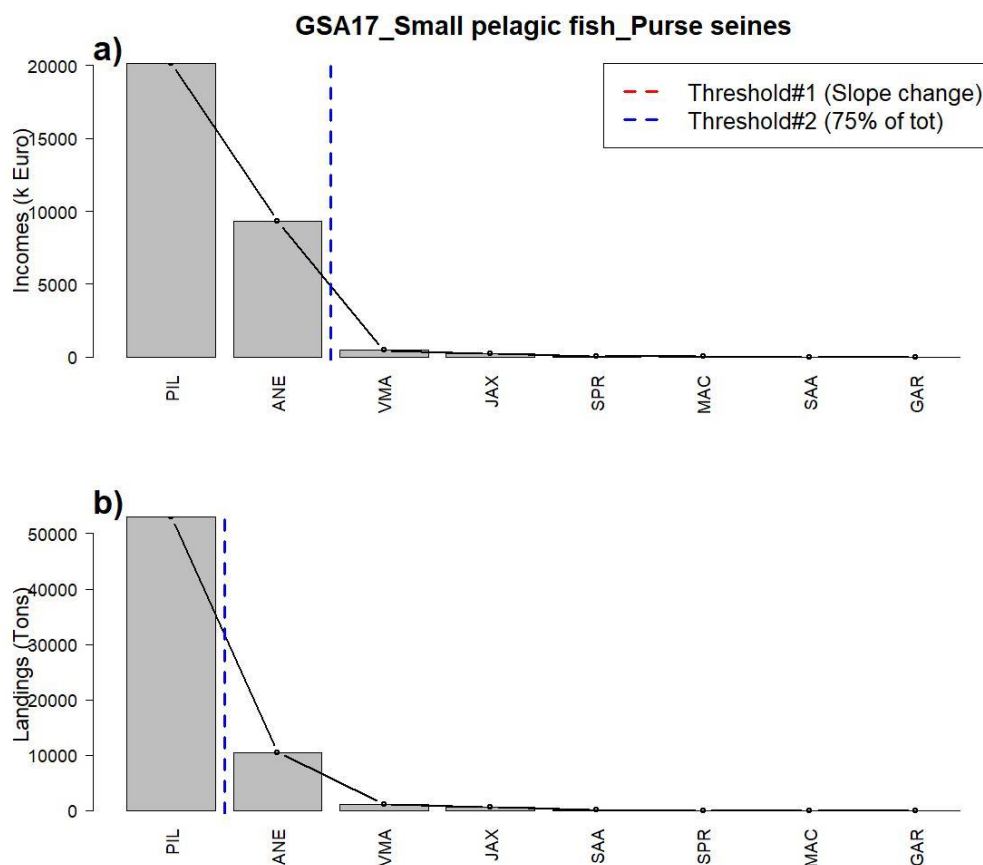


Fig. 3.4.14.: Landing value (a) and volume (b) of small pelagic fish fished by purse seines in the Croatian side of GSA17.

## 4. CONCLUSIONS

In the Croatian side of the Adriatic Sea (GSA17), the most important fisheries (as combination of species and gears) in terms of value are the following:

- European pilchard(=Sardine) fished by purse seines;
- European anchovy fished by purse seines;
- Norway lobster fished by bottom otter trawl;
- European hake fished by bottom otter trawl;
- Deep-water rose fished by shrimp bottom otter trawl;
- Red mullet fished by bottom otter trawl;
- Common sole fished by trammel nets;
- Warty venus;
- Horned and musky octopuses fished by bottom otter trawl;
- European squid fished by bottom otter trawl.

The most important in terms of volume are:

- European pilchard(=Sardine) fished by purse seines;
- European anchovy fished by purse seines;
- Atlantic chub mackerel fished by purse seines;
- Red mullet fished by bottom otter trawl;
- European hake fished by bottom otter trawl;
- Jack and horse mackerels fished by purse seines;
- Deep-water rose shrimp fished by bottom otter trawl;
- Horned and musky octopuses fished by bottom otter trawl;
- European flat oyster fished by boat dredges;
- Norway lobster fished by bottom otter trawl.

Therefore, some of these fisheries, such as the European pilchard(=Sardine) fished by purse seines, the European anchovy fished by purse seines, the European hake fished by bottom otter trawl, the Deep-water rose fished by shrimp bottom otter trawl, are among the most important in both terms of value and volume of landings.

However, the first 20 fisheries in terms of value (Table 4.1) should be considered as potentially interested in applying for certification process, taking into account also the sustainability of the fishing techniques.

**Table. 4.1 First 20 Fisheries in the Croatian side of the GSA 17 by value of landings**

N°	Spp (3 alpha code)	Common name (English)	Fishing technique acronym	Fishing technique description	Mean value of landings 2015-2016 (K Euro)
1	PIL	European pilchard(=Sardine)	PS	Purse seines	20142.21
2	ANE	European anchovy	PS	Purse seines	9296.42
3	NEP	Norway lobster	OTB	Bottom otter trawl	2865.58
4	HKE	European hake	OTB	Bottom otter trawl	2312.87
5	DPS	Deep-water rose shrimp	OTB	Bottom otter trawl	1908.97
6	MUT	Red mullet	OTB	Bottom otter trawl	1768.60
7	SOL	Common sole	GTR	Trammel nets	1363.90
8	VEV	Warty venus	NK <sup>4</sup>	-	1055.12
9	OCM	Horned and musky octopuses	OTB	Bottom otter trawl	1043.37
10	SQR	European squid	OTB	Bottom otter trawl	980.31
11	OYF	European flat oyster	DRB	Boat dredges	976.83
12	SJA	Great Mediterranean scallop	DRB	Boat dredges	651.65
13	OCC	Common octopus	NK	-	543.55
14	JOD	John dory	OTB	Bottom otter trawl	509.74
15	VMA	Atlantic chub mackerel	PS	Bottom otter trawl	469.54
16	MNZ	Monkfishes nei	OTB	Bottom otter trawl	445.44
17	BFT	Atlantic bluefin tuna	LHP	Handlines and pole-lines (hand-operated)	433.90
18	NEP	Norway lobster	FPO	Pots	409.89

<sup>4</sup> NK, Not Known is allowed in case of confidentiality issues.

N°	Spp (3 alpha code)	Common name (English)	Fishing technique acronym	Fishing technique description	Mean value of landings 2015-2016 (K Euro)
19	SOL	Common sole	DRB	Boat dredges	407.20
20	OCC	Common octopus	FPO	Pots	395.51

Source: <https://stecf.jrc.ec.europa.eu/data-dissemination>

In addition, according to our expertise and considering the environmental impacts of gears, the following fisheries out of the top 20 in terms of value (as reported in Table 4.1.) are potential source of eco-labelled products and, therefore, should be selected as “candidate sustainable fisheries” to start an Adriatic Responsible Fishery (ARF) certification process:

- Deep-water rose shrimp fished by bottom otter trawl;
- Common sole fished by trammel nets;
- Atlantic bluefin tuna fished by Handlines and pole-lines (hand-operated);
- Norway lobster fished by pots;
- Common octopus fished by pots.

In view of their potential high value on the market, also the European pilchard(=Sardine) fished by purse seines and the European anchovy fished by purse seines can be included as “special cases”, given that small pelagic species reproduce very quickly and the fishing technique is selective. The guidelines on how to reach sustainable standards (Deliverable 3.2.3: Sustainability guidelines) to be developed in the framework of Activity 3.2 in month 24 of the Project, will specify the conditions under which those two fisheries can apply to the Adriatic Responsible Fishery (ARF) certification process.

The provisional list reported in Table 4.1., will be compared to that emerging from the *Activity 3.1: Analysis of state, management and seasonality of fisheries* carried out in the Italian side of the Adriatic Sea, provided under Deliverable 3.1.1 in month 10 of the Prizefish Project.

Based on this preliminary scrutiny, a final list of 10-20 fisheries will be developed taking into account, besides the potential market added-value of fisheries products and the characteristics of the fisheries sector in both sides of the Adriatic Sea, also the environmental impacts of the fisheries concerned as well as their social and economic dimension.

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## 6. Annex I – List of species fished in GSA 17

The table below (Table 6.1.) reports species included in the mapping of GSA 17 by Spp. acronym (3 alpha code), scientific name, and common name (in English).

Spp. (FAO 3-alpha code)	Scientific name	Common name (English)
AGK	<i>Gymnothorax unicolor</i>	Brown moray
ALB	<i>Thunnus alalunga</i>	Albacore
ALV	<i>Alopias vulpinus</i>	Thresher
AMB	<i>Seriola dumerili</i>	Greater amberjack
ANE	<i>Engraulis encrasicolus</i>	European anchovy
ANK	<i>Lophius budegassa</i>	Blackbellied angler
ANN	<i>Diplodus annularis</i>	Annular seabream
ARA	<i>Aristeus antennatus</i>	Blue and red shrimp
ARG	<i>Argentina spp</i>	Argentines
ARS	<i>Aristaeomorpha foliacea</i>	Giant red shrimp
BBS	<i>Scorpaena porcus</i>	Black scorpionfish
BFT	<i>Thunnus thynnus</i>	Atlantic bluefin tuna
BIL	<i>Istiophoridae</i>	Marlins, sailfishes, etc. nei
BLL	<i>Scophthalmus rhombus</i>	Brill
BLU	<i>Pomatomus saltatrix</i>	Bluefish
BOG	<i>Boops boops</i>	Bogue
BON	<i>Sarda sarda</i>	Atlantic bonito
BOY	<i>Bolinus brandaris</i>	Purple dye murex
BPI	<i>Spicara maena</i>	Blotched picarel
BRB	<i>Spondylisoma cantharus</i>	Black seabream
BRF	<i>Helicolenus dactylopterus</i>	Blackbelly rosefish
BSH	<i>Prionace glauca</i>	Blue shark
BSS	<i>Dicentrarchus labrax</i>	European seabass
BSX	<i>Serranidae</i>	Groupers, seabasses nei
CBC	<i>Cepola macrophthalmalma</i>	Red bandfish
CBM	<i>Sciaena umbra</i>	Brown meagre
CIL	<i>Citharus linguatula</i>	Spotted flounder
CLV	<i>Veneridae</i>	Venus clams nei
COB	<i>Umbrina cirrosa</i>	Shi drum
COE	<i>Conger conger</i>	European conger
COZ	<i>Cardiidae</i>	Cockles nei
CRA	<i>Brachyura</i>	Marine crabs nei

<b>CRU</b>	<i>Crustacea</i>	Marine crustaceans nei
<b>CSH</b>	<i>Crangon crangon</i>	Common shrimp
<b>CTB</b>	<i>Diplodus vulgaris</i>	Common two-banded seabream
<b>CTC</b>	<i>Sepia officinalis</i>	Common cuttlefish
<b>CTL</b>	<i>Sepiidae, Sepiolidae</i>	Cuttlefish, bobtail squids nei
<b>CTZ</b>	<i>Chelidonichthys lastoviza</i>	Streaked gurnard
<b>CVW</b>	<i>Chlorophthalmus agassizi</i>	Shortnose greeneye
<b>DEC</b>	<i>Dentex dentex</i>	Common dentex
<b>DGZ</b>	<i>Squalus spp</i>	Dogfishes nei
<b>DOL</b>	<i>Coryphaena hippurus</i>	Common dolphinfish
<b>DON</b>	<i>Donax spp</i>	Donax clams
<b>DPS</b>	<i>Parapenaeus longirostris</i>	Deep-water rose shrimp
<b>EDT</b>	<i>Eledone moschata</i>	Musky octopus
<b>EHI</b>	<i>Centracanthus cirrus</i>	Curled picarel
<b>ELE</b>	<i>Anguilla anguilla</i>	European eel
<b>EOI</b>	<i>Eledone cirrhosa</i>	Horned octopus
<b>EZS</b>	<i>Scorpaena elongata</i>	Slender rockfish
<b>FIM</b>	<i>Aphia minuta</i>	Transparent goby
<b>FLE</b>	<i>Platichthys flesus</i>	European flounder
<b>FOR</b>	<i>Phycis phycis</i>	Forkbeard
<b>FRZ</b>	<i>Auxis thazard, A. rochei</i>	Frigate and bullet tunas
<b>GAR</b>	<i>Belone belone</i>	Garfish
<b>GAS</b>	<i>Gastropoda</i>	Gastropods nei
<b>GAU</b>	<i>Galeus spp</i>	Crest-tail catsharks nei
<b>GFB</b>	<i>Phycis blennoides</i>	Greater forkbeard
<b>GPA</b>	<i>Gobiidae</i>	Gobies nei
<b>GPD</b>	<i>Epinephelus marginatus</i>	Dusky grouper
<b>GUG</b>	<i>Eutrigla gurnardus</i>	Grey gurnard
<b>GUM</b>	<i>Chelidonichthys obscurus</i>	Longfin gurnard
<b>GUN</b>	<i>Trigla lyra</i>	Piper gurnard
<b>GUR</b>	<i>Aspitrigla cuculus</i>	Red gurnard
<b>GUU</b>	<i>Chelidonichthys lucerna</i>	Tub gurnard
<b>HKE</b>	<i>Merluccius merluccius</i>	European hake
<b>HMM</b>	<i>Trachurus mediterraneus</i>	Mediterranean horse mackerel
<b>HOM</b>	<i>Trachurus trachurus</i>	Atlantic horse mackerel
<b>HXT</b>	<i>Heptranchias perlo</i>	Sharptooth sevengill shark



<b>JAA</b>	<i>Trachurus picturatus</i>	Blue jack mackerel
<b>JAI</b>	<i>Raja miraletus</i>	Brown ray
<b>JOD</b>	<i>Zeus faber</i>	John dory
<b>JRS</b>	<i>Raja asterias</i>	Mediterranean starry ray
<b>KLK</b>	<i>Callista chione</i>	Smooth callista
<b>LBE</b>	<i>Homarus gammarus</i>	European lobster
<b>LEE</b>	<i>Lichia amia</i>	Leerfish
<b>LTA</b>	<i>Euthynnus alletteratus</i>	Little tunny(=Atl.black skipj)
<b>LZS</b>	<i>Liza saliens</i>	Leaping mullet
<b>MAC</b>	<i>Scomber scombrus</i>	Atlantic mackerel
<b>MAS</b>	<i>Scomber japonicus</i>	Chub mackerel
<b>MGA</b>	<i>Liza aurata</i>	Golden grey mullet
<b>MGC</b>	<i>Liza ramada</i>	Thinlip grey mullet
<b>MMH</b>	<i>Muraena helena</i>	Mediterranean moray
<b>MOL</b>	<i>Mollusca</i>	Marine molluscs nei
<b>MON</b>	<i>Lophius piscatorius</i>	Angler(=Monk)
<b>MPT</b>	<i>Mustelus punctulatus</i>	Blackspotted smooth-hound
<b>MSF</b>	<i>Arnoglossus laterna</i>	Mediterranean scaldfish
<b>MTS</b>	<i>Squilla mantis</i>	Spottail mantis squillid
<b>MUE</b>	<i>Murex spp</i>	Murex
<b>MUF</b>	<i>Mugil cephalus</i>	Flathead grey mullet
<b>MUL</b>	<i>Mugilidae</i>	Mullets nei
<b>MUR</b>	<i>Mullus surmuletus</i>	Surmullet
<b>MUT</b>	<i>Mullus barbatus</i>	Red mullet
<b>MZZ</b>	<i>Osteichthyes</i>	Marine fishes nei
<b>NAU</b>	<i>Naucrates ductor</i>	Pilotfish
<b>NEP</b>	<i>Nephrops norvegicus</i>	Norway lobster
<b>NSQ</b>	<i>Nassarius mutabilis</i>	Changeable nassa
<b>OCC</b>	<i>Octopus vulgaris</i>	Common octopus
<b>OUW</b>	<i>Alloteuthis spp</i>	Alloteuthis squids nei
<b>PAC</b>	<i>Pagellus erythrinus</i>	Common pandora
<b>PIL</b>	<i>Sardina pilchardus</i>	European pilchard(=Sardine)
<b>POA</b>	<i>Brama brama</i>	Atlantic pomfret
<b>POD</b>	<i>Trisopterus minutus</i>	Poor cod
<b>POP</b>	<i>Trachinotus ovatus</i>	Pompano
<b>POR</b>	<i>Lamna nasus</i>	Porbeagle



<b>PRA</b>	<i>Pandalus borealis</i>	Northern prawn
<b>RAE</b>	<i>Solen marginatus</i>	European razor clam
<b>RJA</b>	<i>Raja alba</i>	White skate
<b>RJC</b>	<i>Raja clavata</i>	Thornback ray
<b>RJM</b>	<i>Raja montagui</i>	Spotted ray
<b>RPG</b>	<i>Pagrus pagrus</i>	Red porgy
<b>RSE</b>	<i>Scorpaena scrofa</i>	Red scorpionfish
<b>SAA</b>	<i>Sardinella aurita</i>	Round sardinella
<b>SAN</b>	<i>Ammodytes spp</i>	Sandeels(=Sandlances) nei
<b>SAU</b>	<i>Scomberesox saurus</i>	Atlantic saury
<b>SBA</b>	<i>Pagellus acarne</i>	Axillary seabream
<b>SBG</b>	<i>Sparus aurata</i>	Gilthead seabream
<b>SBL</b>	<i>Hexanchus griseus</i>	Bluntnose sixgill shark
<b>SBR</b>	<i>Pagellus bogaraveo</i>	Blackspot(=red) seabream
<b>SBS</b>	<i>Oblada melanura</i>	Saddled seabream
<b>SCF</b>	<i>Scophthalmidae</i>	Turbots nei
<b>SCO</b>	<i>Scorpaenidae</i>	Scorpionfishes nei
<b>SCR</b>	<i>Maja squinado</i>	Spinous spider crab
<b>SCX</b>	<i>Pectinidae</i>	Scallops nei
<b>SDS</b>	<i>Mustelus asterias</i>	Starry smooth-hound
<b>SFS</b>	<i>Lepidopus caudatus</i>	Silver scabbardfish
<b>SHR</b>	<i>Diplodus puntazzo</i>	Sharpsnout seabream
<b>SIL</b>	<i>Atherinidae</i>	Silversides(=Sand smelts) nei
<b>SJA</b>	<i>Pecten jacobaeus</i>	Great Mediterranean scallop
<b>SKA</b>	<i>Raja spp</i>	Raja rays nei
<b>SKJ</b>	<i>Katsuwonus pelamis</i>	Skipjack tuna
<b>SKX</b>	<i>Elasmobranchii</i>	Sharks, rays, skates, ect.
<b>SLM</b>	<i>Sarpa salpa</i>	Salema
<b>SLO</b>	<i>Palinurus elephas</i>	Common spiny lobster
<b>SMD</b>	<i>Mustelus mustelus</i>	Smooth-hound
<b>SNQ</b>	<i>Scorpaena notata</i>	Small red scorpionfish
<b>SOL</b>	<i>Solea solea</i>	Common sole
<b>SOX</b>	<i>Soleidae</i>	Soles nei
<b>SPC</b>	<i>Spicara smaris</i>	Picarel
<b>SPN</b>	<i>Sphyrna spp</i>	Hammerhead sharks nei
<b>SPR</b>	<i>Sprattus sprattus</i>	European sprat

Source:

<b>SQC</b>	<i>Loligo spp</i>	Common squids nei
<b>SQE</b>	<i>Todarodes sagittatus</i>	European flying squid
<b>SQM</b>	<i>Illex coindetii</i>	Broadtail shortfin squid
<b>SQR</b>	<i>Loligo vulgaris</i>	European squid
<b>SRG</b>	<i>Diplodus spp</i>	Sargo breams nei
<b>SRX</b>	<i>Rajiformes</i>	Rays, stingrays, mantas nei
<b>SSB</b>	<i>Lithognathus mormyrus</i>	Sand steenbras
<b>STT</b>	<i>Dasyatidae</i>	Stingrays, butterfly rays nei
<b>SVE</b>	<i>Chamelea gallina</i>	Striped venus
<b>SWA</b>	<i>Diplodus sargus</i>	White seabream
<b>SWO</b>	<i>Xiphias gladius</i>	Swordfish
<b>SYC</b>	<i>Scyliorhinus canicula</i>	Small-spotted catshark
<b>SYT</b>	<i>Scyliorhinus stellaris</i>	Nursehound
<b>TDQ</b>	<i>Todaropsis eblanae</i>	Lesser flying squid
<b>TGS</b>	<i>Penaeus kerathurus</i>	Caramote prawn
<b>TRA</b>	<i>Trachinidae</i>	Weeverfishes nei
<b>TUR</b>	<i>Psetta maxima</i>	Turbot
<b>UUC</b>	<i>Uranoscopus scaber</i>	Stargazer
<b>VMA</b>	<i>Scomber colias</i>	Atlantic chub mackerel
<b>WHB</b>	<i>Micromesistius poutassou</i>	Blue whiting(=Poutassou)
<b>WHG</b>	<i>Merlangius merlangus</i>	Whiting
<b>WRA</b>	<i>Labridae</i>	Wrasses, hogfishes, etc. nei
<b>XKX</b>	<i>Plesionika spp</i>	Plesionika shrimps nei
<b>XYN</b>	<i>Xyrichtys novacula</i>	Pearly razorfish
<b>YRS</b>	<i>Sphyraena sphyraena</i>	European barracuda

Source: <https://stecf.jrc.ec.europa.eu/data-dissemination>

## 7. Annex II– Mapping results in Excel Table

The overall results of the mapping of fisheries in the Croatian side of the Adriatic Sea, detailed in Section 3 of the Report, are available at the following table:

Scientific name	Common name (English)	Gear type	Fishery	Stock area (management area)	Stock assessment (Y/N)	GFCM Statistical area (i.e. GSAs of statistical area)	F / F M S Y	Ref. year	Landing volume: Mean landings in weight 2015-2016 (Tons)	Total value for species: Mean value of landings 2015-2016 (K Euro)	Comments
Atherina hepsetus	Mediterranean sand smelt	FYK	MPD	17					0,0048	0,01225453	
Atherina hepsetus	Mediterranean sand smelt	GNS	MPD	17					2,98269	8,672408878	
Atherina hepsetus	Mediterranean sand smelt	GTN	MPD	17					0,0022	0,007051297	
Atherina hepsetus	Mediterranean sand smelt	GTR	MPD	17					0,08688	0,260431353	
Atherina hepsetus	Mediterranean sand smelt	LHP	MPD	17					0,061	0,188666113	
Atherina hepsetus	Mediterranean sand smelt	NK	MPD	17					0,008	0,020424218	
Atherina hepsetus	Mediterranean sand smelt	OTB	MPD	17					0,0148	0,041860476	
Atherina hepsetus	Mediterranean sand smelt	PS	MPD	17					0,6098	1,793257738	
Atherina hepsetus	Mediterranean sand smelt	SB	MPD	17					2,7651	7,308855733	
Atherina	Mediterranean	TBB	MPD	17					0,12895	0,3983363	

hepset us	sand smelt											
Anthozoa		NK	MD D	17					0,8395	12,2354464		
Thunnus alalunga	Albacore	DRB	LPF	17					0,00405	0,034849283		
Thunnus alalunga	Albacore	GNS	LPF	17					0,06	0,530259133		
Thunnus alalunga	Albacore	GTR	LPF	17					0,04625	0,474824228		
Thunnus alalunga	Albacore	LHP	LPF	17					3,5979	34,89818836		
Thunnus alalunga	Albacore	LLD	LPF	17					0,84235	8,538478956		
Thunnus alalunga	Albacore	LLS	LPF	17					0,9064	8,102706685		
Thunnus alalunga	Albacore	LTL	LPF	17					0,0441	0,491511699		
Thunnus alalunga	Albacore	NK	LPF	17					0,04475	0,385063067		
Thunnus alalunga	Albacore	OTB	LPF	17					1,8934	17,98914091		
Thunnus alalunga	Albacore	PS	LPF	17					1,5267	14,16571663		
Seriola dumerilii	Greater amberjack	FPO	LPF	17	Y		1,207	2,014	0,00605	0,042998169	Froese et al., 2018; B> BMSY	
Seriola dumerilii	Greater amberjack	GNS	LPF	17	Y		1,207	2,014	3,422795	23,98488164	Froese et al., 2018; B> BMSY	
Seriola dumerilii	Greater amberjack	GTN	LPF	17	Y		1,207	2,014	0,26054	1,823598537	Froese et al., 2018; B> BMSY	
Seriola dumerilii	Greater amberjack	GTR	LPF	17	Y		1,207	2,014	0,462775	3,237803243	Froese et al., 2018; B> BMSY	

Seriola dumerilii	Greater amberjack	LHP	LPF	17	Y		1,27	2014	3,276175	23,22962848	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	LLD	LPF	17	Y		1,27	2014	0,4265	3,029921142	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	LLS	LPF	17	Y		1,27	2014	1,30096	9,027706419	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	LTL	LPF	17	Y		1,27	2014	0,165	1,186224739	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	NK	LPF	17	Y		1,27	2014	0,55635	3,916543974	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	OTB	LPF	17	Y		1,27	2014	0,26285	1,846802735	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	PS	LPF	17	Y		1,27	2014	39,8986	284,8428849	Froese et al., 2018; B> BMSY
Seriola dumerilii	Greater amberjack	SB	LPF	17	Y		1,27	2014	4,01688	28,17903861	Froese et al., 2018; B> BMSY
Engraulis encrasicolus	European anchovy	FPO	SPF	17	Y	17; 18	1,78	2015	0,0038	0,003344798	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	GNS	SPF	17	Y	17; 18	1,78	2015	0,322983	0,286485257	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	GTN	SPF	17	Y	17; 18	1,78	2015	0,0062	0,005341595	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	GTR	SPF	17	Y	17; 18	1,78	2015	0,07602	0,069416623	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	LHP	SPF	17	Y	17; 18	1,78	2015	0,41097093	0,349387732	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	LLS	SPF	17	Y	17; 18	1,78	2015	0,0123	0,010717114	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	LTL	SPF	17	Y	17; 18	1,78	2015	0,0015	0,001269613	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76

Engraulis encrasicolus	European anchovy	NK	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	0,013305	0,011494636	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	OTB	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	1,16946	1,040745462	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	OTM	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	0,11	0,101256402	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	PS	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	10503,06616	9296,423527	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	SB	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	5,251128	4,696358777	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Engraulis encrasicolus	European anchovy	TBB	SPF	17	Y	17; 18	1, 7 8	2 0 1 5	0,002	0,001692817	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMY = 2.76
Diplodus annularis	Annular seabream	DRB	FIF	17					0,00325	0,006573903	
Diplodus annularis	Annular seabream	FPO	FIF	17					0,11775	0,227535811	
Diplodus annularis	Annular seabream	FYK	FIF	17					0,001	0,001790641	
Diplodus annularis	Annular seabream	GNS	FIF	17					4,210795	7,774922541	
Diplodus annularis	Annular seabream	GTN	FIF	17					0,294925	0,533976746	
Diplodus annularis	Annular seabream	GTR	FIF	17					0,45186	0,844432637	
Diplodus annularis	Annular seabream	LHP	FIF	17					0,01495	0,027779702	
Diplodus annularis	Annular seabream	LLS	FIF	17					0,031875	0,062229258	
Diplodus annularis	Annular seabream	LTL	FIF	17					0,0005	0,00101137	

Diplodus annularis	Annular seabream	NK	FIF	17					0,00615	0,012323796	
Diplodus annularis	Annular seabream	OTB	FIF	17					0,0545	0,099086943	
Diplodus annularis	Annular seabream	PS	FIF	17					2,1159	3,790789142	
Diplodus annularis	Annular seabream	SB	FIF	17					0,07575	0,149799046	
Diplodus annularis	Annular seabream	TBB	FIF	17					0,006	0,012136437	
Atherina boyeri	Big-scale sand smelt	FPO	MPD	17					0,0005	0,001903826	
Atherina boyeri	Big-scale sand smelt	FYK	MPD	17					0,0035	0,013903985	
Atherina boyeri	Big-scale sand smelt	GNS	MPD	17					1,2725	4,933269561	
Atherina boyeri	Big-scale sand smelt	GTN	MPD	17					0,0488	0,186225751	
Atherina boyeri	Big-scale sand smelt	GTR	MPD	17					0,165005	0,653349563	
Atherina boyeri	Big-scale sand smelt	LHP	MPD	17					0,0085	0,03236505	
Atherina boyeri	Big-scale sand smelt	NK	MPD	17					0,0111	0,043600753	
Atherina boyeri	Big-scale sand smelt	OTB	MPD	17					0,0055	0,021849119	
Atherina boyeri	Big-scale sand smelt	PS	MPD	17					5,967495	23,00094583	
Atherina boyeri	Big-scale sand smelt	SB	MPD	17					1,32875	5,182403643	
Atherina boyeri	Big-scale sand smelt	TBB	MPD	17					0,0029	0,011042194	
Scorpaena porcus	Black scorpion fish	DRB	DEF	17					0,213925	0,655001106	
Scorpaena porcus	Black scorpion fish	FPO	DEF	17					0,13195	0,402183901	

Scorpaena porcus	Black scorpion fish	FYK	DEF	17					0,0005	0,001396355	
Scorpaena porcus	Black scorpion fish	GNS	DEF	17					6,89501	22,27164882	
Scorpaena porcus	Black scorpion fish	GTN	DEF	17					1,43006	4,657719952	
Scorpaena porcus	Black scorpion fish	GTR	DEF	17					6,408735	20,49143498	
Scorpaena porcus	Black scorpion fish	LHP	DEF	17					0,056075	0,18791914	
Scorpaena porcus	Black scorpion fish	LLS	DEF	17					0,07268	0,223564514	
Scorpaena porcus	Black scorpion fish	LTL	DEF	17					0,002	0,007232648	
Scorpaena porcus	Black scorpion fish	NK	DEF	17					0,373025	1,193522137	
Scorpaena porcus	Black scorpion fish	OTB	DEF	17					10,53020983	32,94426547	
Scorpaena porcus	Black scorpion fish	PS	DEF	17					0,1064	0,383212028	
Scorpaena porcus	Black scorpion fish	SB	DEF	17					0,76606	2,568576983	
Scorpaena porcus	Black scorpion fish	TBB	DEF	17					0,003	0,008789937	
Thunnus thynnus	Atlantic bluefin tuna	LHP	BFE	17	Y	All the Mediterranean	0,4	2013	47,83426064	433,9065702	ICCAT, B < BMSY
Thunnus thynnus	Atlantic bluefin tuna	LLD	BFE	17	Y	All the Mediterranean	0,4	2013	1,31165328	11,90607967	ICCAT, B < BMSY
Pomatomus saltatrix	Bluefish	GNS	LPF	17					0,286425	1,078377557	
Pomatomus saltatrix	Bluefish	GTN	LPF	17					0,01455	0,054276546	
Pomatomus saltatrix	Bluefish	GTR	LPF	17					0,025525	0,094868898	
Pomatomus	Bluefish	LHP	LPF	17					0,02225	0,081732053	



saltatri x											
Pomato mus saltatri x	Bluefish	LLS	LPF	17					0,0045	0,016512665	
Pomato mus saltatri x	Bluefish	NK	LPF	17					0,01845	0,068403022	
Pomato mus saltatri x	Bluefish	OTB	LPF	17					0,02105	0,07724258	
Pomato mus saltatri x	Bluefish	PS	LPF	17					0,13035	0,485512342	
Boops boops	Bogue	DRB	FIF	17	Y		1, 8	2 0 1 4	0,00265	0,002513059	Froese et al., 2018; B< BMSY
Boops boops	Bogue	FPO	FIF	17	Y		1, 8	2 0 1 4	0,1247	0,121680722	Froese et al., 2018; B< BMSY
Boops boops	Bogue	FYK	FIF	17	Y		1, 8	2 0 1 4	0,0155	0,015100493	Froese et al., 2018; B< BMSY
Boops boops	Bogue	GNS	FIF	17	Y		1, 8	2 0 1 4	15,52044	14,94483136	Froese et al., 2018; B< BMSY
Boops boops	Bogue	GTN	FIF	17	Y		1, 8	2 0 1 4	0,165335	0,158476837	Froese et al., 2018; B< BMSY
Boops boops	Bogue	GTR	FIF	17	Y		1, 8	2 0 1 4	0,64368	0,620263953	Froese et al., 2018; B< BMSY
Boops boops	Bogue	LHP	FIF	17	Y		1, 8	2 0 1 4	0,1204	0,114600656	Froese et al., 2018; B< BMSY
Boops boops	Bogue	LLS	FIF	17	Y		1, 8	2 0 1 4	0,18125	0,176399425	Froese et al., 2018; B< BMSY
Boops boops	Bogue	LTL	FIF	17	Y		1, 8	2 0 1 4	0,002	0,001931558	Froese et al., 2018; B< BMSY
Boops boops	Bogue	NK	FIF	17	Y		1, 8	2 0 1 4	0,05045	0,049195731	Froese et al., 2018; B< BMSY
Boops boops	Bogue	OTB	FIF	17	Y		1, 8	2 0	8,61057994	8,329546757	Froese et al., 2018; B< BMSY

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Boops boops	Bogue	OT M	FIF	17	Y		1, 8	2 0 1 4	0,004	0,003932938	Froese et al., 2018; B< BMSY
Boops boops	Bogue	PS	FIF	17	Y		1, 8	2 0 1 4	34,845525	33,63158273	Froese et al., 2018; B< BMSY
Boops boops	Bogue	SB	FIF	17	Y		1, 8	2 0 1 4	20,532685	19,82167343	Froese et al., 2018; B< BMSY
Boops boops	Bogue	TBB	FIF	17	Y		1, 8	2 0 1 4	0,0635	0,060218596	Froese et al., 2018; B< BMSY
Sarda sarda	Atlantic bonito	DRB	LPF	17					0,00105	0,00365957	
Sarda sarda	Atlantic bonito	FPO	LPF	17					0,02365	0,089672812	
Sarda sarda	Atlantic bonito	GNS	LPF	17					9,791745	35,97501783	
Sarda sarda	Atlantic bonito	GTN	LPF	17					0,65405	2,40800187	
Sarda sarda	Atlantic bonito	GTR	LPF	17					1,509965	5,626565959	
Sarda sarda	Atlantic bonito	LHP	LPF	17					0,7418	2,718874622	
Sarda sarda	Atlantic bonito	LLD	LPF	17					0,0255	0,100605845	
Sarda sarda	Atlantic bonito	LLS	LPF	17					0,0863	0,313363421	
Sarda sarda	Atlantic bonito	LTL	LPF	17					0,04535	0,165763951	
Sarda sarda	Atlantic bonito	NK	LPF	17					0,054	0,192461671	
Sarda sarda	Atlantic bonito	OTB	LPF	17					0,378175	1,359503179	
Sarda sarda	Atlantic bonito	PS	LPF	17					12,54055	45,63513437	
Sarda sarda	Atlantic bonito	SB	LPF	17					1,78595	6,612931154	
Spicara maena	Blotche d picarel	FPO	MP D	17					0,1014	0,173375152	
Spicara maena	Blotche d picarel	GNS	MP D	17					1,353855	2,535375691	
Spicara maena	Blotche d picarel	GTN	MP D	17					0,004	0,008884024	
Spicara maena	Blotche d picarel	GTR	MP D	17					0,0495	0,091020069	
Spicara maena	Blotche d picarel	LHP	MP D	17					0,0025	0,005552515	
Spicara maena	Blotche d picarel	LLS	MP D	17					0,0145	0,028316972	
Spicara maena	Blotche d picarel	NK	MP D	17					0,46935	0,916081705	
Spicara maena	Blotche d picarel	OTB	MP D	17					0,1946	0,394083224	

Spicara maena	Blotched picarel	PS	MPD	17					0,3015	0,580736537	
Spicara maena	Blotched picarel	SB	MPD	17					1,62915	3,202584508	
Spondyliosoma cantharus	Black seabream	FPO	FIF	17	Y		2,03	2,014	3,68234	22,88162931	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	GNS	FIF	17	Y		2,03	2,014	0,550115	3,359361383	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	GTN	FIF	17	Y		2,03	2,014	0,0406	0,261972035	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	GTR	FIF	17	Y		2,03	2,014	0,31177	1,837733501	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	LHP	FIF	17	Y		2,03	2,014	0,229875	1,386707815	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	LLS	FIF	17	Y		2,03	2,014	1,64595	10,13429294	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	LTL	FIF	17	Y		2,03	2,014	0,019125	0,126141956	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	NK	FIF	17	Y		2,03	2,014	0,06875	0,452026786	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	OTB	FIF	17	Y		2,03	2,014	0,01685	0,110974639	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	PS	FIF	17	Y		2,03	2,014	0,015	0,077893151	Froese et al., 2018; B< BMSY
Spondyliosoma cantharus	Black seabream	SB	FIF	17	Y		2,03	2,014	0,1122	0,653511901	Froese et al., 2018; B< BMSY
Dicentrarchus labrax	European seabass	DRB	FIF	17					0,0108	0,108821933	
Dicentrarchus labrax	European seabass	FPO	FIF	17					0,058925	0,614430048	
Dicentrarchus labrax	European seabass	FYK	FIF	17					0,0015	0,016620471	
Dicentrarchus labrax	European seabass	GNS	FIF	17					4,639885	47,89592303	

Dicentr archus labrax	Europea n seabass	GTN	FIF	17					0,539485	5,359320509	
Dicentr archus labrax	Europea n seabass	GTR	FIF	17					0,851775	8,609134023	
Dicentr archus labrax	Europea n seabass	LHP	FIF	17					0,23965	2,420624954	
Dicentr archus labrax	Europea n seabass	LLS	FIF	17					0,185115	1,844143543	
Dicentr archus labrax	Europea n seabass	LTL	FIF	17					0,0228	0,231657955	
Dicentr archus labrax	Europea n seabass	NK	FIF	17					1,186755	12,14626152	
Dicentr archus labrax	Europea n seabass	OTB	FIF	17					0,68451	6,953156766	
Dicentr archus labrax	Europea n seabass	PS	FIF	17					0,0395	0,400989235	
Dicentr archus labrax	Europea n seabass	SB	FIF	17					0,1087	1,039116619	
Dicentr archus labrax	Europea n seabass	TBB	FIF	17					0,0005	0,005540157	
Sciaena umbra	Brown meagre	FPO	DEF	17					0,0071	0,105845101	
Sciaena umbra	Brown meagre	GNS	DEF	17					0,12543	2,041541736	
Sciaena umbra	Brown meagre	GTN	DEF	17					0,02425	0,38999097	
Sciaena umbra	Brown meagre	GTR	DEF	17					0,23431	3,720089004	
Sciaena umbra	Brown meagre	LHP	DEF	17					0,0253	0,404717	
Sciaena umbra	Brown meagre	LLS	DEF	17					0,027455	0,431808045	
Sciaena umbra	Brown meagre	LTL	DEF	17					0,0046	0,069161057	
Sciaena umbra	Brown meagre	NK	DEF	17					0,085975	1,362695272	
Sciaena umbra	Brown meagre	OTB	DEF	17					0,01135	0,188488355	
Sciaena umbra	Brown meagre	SB	DEF	17					0,00175	0,029913774	
Serranu s cabrilla	Comber	FPO	DEF	17					0,0058	0,016159839	
Serranu s cabrilla	Comber	GNS	DEF	17					0,231625	0,683282018	
Serranu s cabrilla	Comber	GTN	DEF	17					0,00235	0,006209196	

Serranus cabrilla	Comber	GTR	DEF	17				0,04325	0,126851448	
Serranus cabrilla	Comber	LHP	DEF	17				0,183925	0,547974815	
Serranus cabrilla	Comber	LLS	DEF	17				0,262875	0,771114216	
Serranus cabrilla	Comber	LTL	DEF	17				0,002325	0,006573299	
Serranus cabrilla	Comber	NK	DEF	17				0,001	0,002642211	
Serranus cabrilla	Comber	OTB	DEF	17				0,02165	0,064364751	
Serranus cabrilla	Comber	SB	DEF	17				0,0125	0,035051916	
Cephalopoda	Cephalopods nei	DRB	CEP	17				0,00125	0,003693326	
Cephalopoda	Cephalopods nei	GNS	CEP	17				0,04	0,14111409	
Cephalopoda	Cephalopods nei	GTR	CEP	17				0,00995	0,037996749	
Cephalopoda	Cephalopods nei	LHP	CEP	17				0,003	0,011729941	
Cephalopoda	Cephalopods nei	OTB	CEP	17				0,17275	0,588992606	
Cephalopoda	Cephalopods nei	SB	CEP	17				0,4325	1,489493938	
Bivalvia	Clams, etc. nei	DRB	MOL	17				5,465525	15,29528683	
Bivalvia	Clams, etc. nei	FPO	MOL	17				0,002	0,00573188	
Bivalvia	Clams, etc. nei	GNS	MOL	17				0,0235	0,06734959	
Bivalvia	Clams, etc. nei	GTR	MOL	17				0,1152	0,32370162	
Bivalvia	Clams, etc. nei	NK	MOL	17				2,6629	7,599325304	
Bivalvia	Clams, etc. nei	OTB	MOL	17				0,1924	0,544919232	
Umbrina cirrosa	Shi drum	GNS	DEF	17				0,035205	0,252909234	
Umbrina cirrosa	Shi drum	GTN	DEF	17				0,005	0,047105673	
Umbrina cirrosa	Shi drum	GTR	DEF	17				0,002775	0,018887069	
Umbrina cirrosa	Shi drum	LLS	DEF	17				0,021345	0,200131223	
Umbrina cirrosa	Shi drum	NK	DEF	17				0,0015	0,012736206	

Umbrina cirrosa	Shidrum	OTB	DEF	17					0,007225	0,061090217	
Conger conger	European conger	DRB	DEF	17	Y		3,074	2	0,051225	0,120213851	Froese et al., 2018; B< BMSY
Conger conger	European conger	FPO	DEF	17	Y		3,074	2	5,083695	11,93100221	Froese et al., 2018; B< BMSY
Conger conger	European conger	FYK	DEF	17	Y		3,074	2	0,2627	0,608555075	Froese et al., 2018; B< BMSY
Conger conger	European conger	GNS	DEF	17	Y		3,074	2	2,7079	6,3695031	Froese et al., 2018; B< BMSY
Conger conger	European conger	GTN	DEF	17	Y		3,074	2	0,38807	0,905433399	Froese et al., 2018; B< BMSY
Conger conger	European conger	GTR	DEF	17	Y		3,074	2	1,17082	2,740767315	Froese et al., 2018; B< BMSY
Conger conger	European conger	LHP	DEF	17	Y		3,074	2	0,76465	1,80026113	Froese et al., 2018; B< BMSY
Conger conger	European conger	LLD	DEF	17	Y		3,074	2	0,0715	0,171371056	Froese et al., 2018; B< BMSY
Conger conger	European conger	LLS	DEF	17	Y		3,074	2	15,81395	37,14635007	Froese et al., 2018; B< BMSY
Conger conger	European conger	LTL	DEF	17	Y		3,074	2	0,14025	0,328526927	Froese et al., 2018; B< BMSY
Conger conger	European conger	NK	DEF	17	Y		3,074	2	1,927175	4,530317424	Froese et al., 2018; B< BMSY
Conger conger	European conger	OTB	DEF	17	Y		3,074	2	13,37016975	31,42582289	Froese et al., 2018; B< BMSY
Conger conger	European conger	OTM	DEF	17	Y		3,074	2	0,0015	0,003595197	Froese et al., 2018; B< BMSY
Conger conger	European conger	PS	DEF	17	Y		3,074	2	0,0042	0,00974311	Froese et al., 2018; B< BMSY

Conger conger	European conger	SB	DEF	17	Y		3,07	2014	0,03205	0,075112373	Froese et al., 2018; B< BMSY
Conger conger	European conger	TBB	DEF	17	Y		3,07	2014	0,2685	0,620206294	Froese et al., 2018; B< BMSY
Crustacea	Marine crustaceans nei	DRB	CRU	17					0,0589	0,396518517	
Crustacea	Marine crustaceans nei	FPO	CRU	17					0,00255	0,016954445	
Crustacea	Marine crustaceans nei	GNS	CRU	17					0,2228	1,458566776	
Crustacea	Marine crustaceans nei	GTN	CRU	17					0,0089	0,060520915	
Crustacea	Marine crustaceans nei	GTR	CRU	17					0,42445	2,794986703	
Crustacea	Marine crustaceans nei	LHP	CRU	17					0,00735	0,050818913	
Crustacea	Marine crustaceans nei	LLS	CRU	17					0,01	0,069141378	
Crustacea	Marine crustaceans nei	NK	CRU	17					0,07155	0,459489234	
Crustacea	Marine crustaceans nei	OTB	CRU	17					0,310175	2,043812264	
Crustacea	Marine crustaceans nei	PS	CRU	17					0,004	0,027656551	
Crustacea	Marine crustaceans nei	SB	CRU	17					0,008	0,049900258	
Crustacea	Marine crustaceans nei	TBB	CRU	17					0,00025	0,001559383	
Diplodus vulgaris	Common two-banded seabream	DRB	FIF	17					0,00475	0,028486197	
Diplodus vulgaris	Common two-banded seabream	FPO	FIF	17					0,178025	1,065928851	
Diplodus vulgaris	Common two-banded seabream	GNS	FIF	17					5,20564	31,18666928	



Diplodus vulgaris	Common two-banded seabream	GTN	FIF	17					0,3501	2,097449301	
Diplodus vulgaris	Common two-banded seabream	GTR	FIF	17					0,979530815	5,86665977	
Diplodus vulgaris	Common two-banded seabream	LHP	FIF	17					0,465325	2,786473689	
Diplodus vulgaris	Common two-banded seabream	LLD	FIF	17					0,01195	0,07160294	
Diplodus vulgaris	Common two-banded seabream	LLS	FIF	17					0,994445	5,955207291	
Diplodus vulgaris	Common two-banded seabream	LTL	FIF	17					0,373235	2,235620877	
Diplodus vulgaris	Common two-banded seabream	NK	FIF	17					6,289955	37,67371856	
Diplodus vulgaris	Common two-banded seabream	OTB	FIF	17					0,157759185	0,944947077	
Diplodus vulgaris	Common two-banded seabream	PS	FIF	17					0,05775	0,345913043	
Diplodus vulgaris	Common two-banded seabream	SB	FIF	17					1,438125	8,617919973	
Sepia officinalis	Common cuttlefish	DRB	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	44,63003687	207,600346	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	FPO	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,589415	2,731883628	STECF, B < BMSY

Sepia officinalis	Common cuttlefish	FYK	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,006	0,028572793	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	GNS	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	4,913235055	22,79899549	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	GTN	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	16,16562	74,96050557	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	GTR	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	27,30068588	127,0381512	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	LHP	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	1,21219	5,623234783	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	LLS	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,077925	0,361264179	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	LTL	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,0504	0,234873981	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	NK	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	3,719605	17,32412288	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	OTB	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	50,67161707	234,6968641	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	PS	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,1588	0,748211027	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	SB	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	2,787095	13,03658162	STECF, B < BMSY
Sepia officinalis	Common cuttlefish	TBB	CEP	17	Y	17; 18	1, 3 1	2 0 1 6	0,0015	0,006861949	STECF, B < BMSY
Ruditapes decussatus	Grooved carpet shell	FPO	MOL	17					0,0015	0,013768355	
Ruditapes decussatus	Grooved carpet shell	GNS	MOL	17					0,000305	0,002799566	
Ruditapes decussatus	Grooved carpet shell	GTN	MOL	17					0,005	0,045894517	

Ruditapes decussatus	Grooved carpet shell	GTR	MOL	17					0,0185	0,17133908	
Ruditapes decussatus	Grooved carpet shell	LLS	MOL	17					0,002	0,018357807	
Ruditapes decussatus	Grooved carpet shell	NK	MOL	17					3,997	36,96897126	
Ruditapes decussatus	Grooved carpet shell	OTB	MOL	17					0,0015	0,013768355	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	DRB	CEP	17					0,35015	0,986044492	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	FPO	CEP	17					0,0055	0,016316273	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	GNS	CEP	17					0,11733	0,324484314	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	GTN	CEP	17					0,0975	0,271892786	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	GTR	CEP	17					0,04975	0,142824883	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	LHP	CEP	17					0,02565	0,072228271	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	LLS	CEP	17					0,0084	0,023791267	
Sepiidae, Sepioidae	Cuttlefish, bobtail squids nei	NK	CEP	17					0,0346	0,099750741	
Sepiidae, Sepioidae	Cuttlefish, bobtail	OTB	CEP	17					13,53308993	38,49809554	

	squids nei										
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	SB	CEP	17					0,01725	0,049711373	
Dentex dentex	Common dentex	FPO	FIF	17	Y		1, 7 4	2 0 1 4	0,300025	5,378094146	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	FYK	FIF	17	Y		1, 7 4	2 0 1 4	0,02555	0,432264369	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	GNS	FIF	17	Y		1, 7 4	2 0 1 4	4,938134335	87,17509353	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	GTN	FIF	17	Y		1, 7 4	2 0 1 4	0,73652	13,15060134	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	GTR	FIF	17	Y		1, 7 4	2 0 1 4	1,37558	24,13066214	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	LHP	FIF	17	Y		1, 7 4	2 0 1 4	2,245835	39,33258798	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	LLD	FIF	17	Y		1, 7 4	2 0 1 4	0,11725	2,095922115	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	LLS	FIF	17	Y		1, 7 4	2 0 1 4	3,714455	65,6664852	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	LTL	FIF	17	Y		1, 7 4	2 0 1 4	0,257675	4,518302863	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	NK	FIF	17	Y		1, 7 4	2 0 1 4	3,955305	69,77239446	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	OTB	FIF	17	Y		1, 7 4	2 0 1 4	0,943325655	16,49670174	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	PS	FIF	17	Y		1, 7 4	2 0 1 4	0,03075	0,523825939	Froese et al., 2018; B< BMSY
Dentex dentex	Common dentex	SB	FIF	17	Y		1, 7 4	2 0 1 4	0,706555	12,57302601	Froese et al., 2018; B< BMSY

Dentex gibbosus	Pink dentex	FPO	FIF	17				0,0013	0,024296482	
Dentex gibbosus	Pink dentex	GNS	FIF	17				0,745	13,31458984	
Dentex gibbosus	Pink dentex	LHP	FIF	17				0,0268	0,462811338	
Dentex gibbosus	Pink dentex	LLD	FIF	17				0,509	8,965532938	
Dentex gibbosus	Pink dentex	LLS	FIF	17				1,01909	17,84774918	
Dentex gibbosus	Pink dentex	LTL	FIF	17				0,003	0,050829816	
Dentex gibbosus	Pink dentex	NK	FIF	17				0,0128	0,216873882	
Dentex gibbosus	Pink dentex	OTB	FIF	17				0,005	0,08471636	
Dentex gibbosus	Pink dentex	SB	FIF	17				0,006	0,107771786	
Squalus acanthias	Picked dogfish	DRB	DEF	17				0,0226	0,102387806	
Squalus acanthias	Picked dogfish	FPO	DEF	17				0,01565	0,079684204	
Squalus acanthias	Picked dogfish	GNS	DEF	17				8,067939805	37,94795531	
Squalus acanthias	Picked dogfish	GTN	DEF	17				0,1652	0,787895202	
Squalus acanthias	Picked dogfish	GTR	DEF	17				1,8582	8,915735511	
Squalus acanthias	Picked dogfish	LHP	DEF	17				0,0321	0,160782928	
Squalus acanthias	Picked dogfish	LLS	DEF	17				2,25419	10,98816347	
Squalus acanthias	Picked dogfish	LTL	DEF	17				0,0088	0,041407811	
Squalus acanthias	Picked dogfish	NK	DEF	17				0,03675	0,17290398	
Squalus acanthias	Picked dogfish	OTB	DEF	17				12,87278888	61,84098755	
Squalus acanthias	Picked dogfish	PS	DEF	17				0,0015	0,006685819	

Squalus acanthias	Picked dogfish	SB	DEF	17				0,04585	0,21296817	
Squalidae	Dogfish sharks nei	DRB	DEF	17				0,0785	0,333932796	
Squalidae	Dogfish sharks nei	FPO	DEF	17				0,05425	0,23008427	
Squalidae	Dogfish sharks nei	FYK	DEF	17				0,004	0,016470613	
Squalidae	Dogfish sharks nei	GNS	DEF	17				8,54792	35,7699183	
Squalidae	Dogfish sharks nei	GTN	DEF	17				0,171925	0,720707295	
Squalidae	Dogfish sharks nei	GTR	DEF	17				2,820275	11,81730426	
Squalidae	Dogfish sharks nei	LHP	DEF	17				0,2834	1,171356385	
Squalidae	Dogfish sharks nei	LLD	DEF	17				0,5095	2,126351734	
Squalidae	Dogfish sharks nei	LLS	DEF	17				5,44887	22,82062122	
Squalidae	Dogfish sharks nei	LTL	DEF	17				0,017	0,072408706	
Squalidae	Dogfish sharks nei	NK	DEF	17				0,1187	0,503358735	
Squalidae	Dogfish sharks nei	OTB	DEF	17				26,89364951	112,6777897	
Squalidae	Dogfish sharks nei	OTM	DEF	17				0,003	0,012778007	
Squalidae	Dogfish sharks nei	PS	DEF	17				0,21235	0,881290722	
Squalidae	Dogfish sharks nei	SB	DEF	17				0,1086	0,454686315	
Coryphaena hippurus	Common dolphin fish	DRB	LPF	17				0,0945	0,284531631	
Coryphaena hippurus	Common dolphin fish	FPO	LPF	17				0,0045	0,013620906	
Coryphaena hippurus	Common dolphin fish	GNS	LPF	17				0,15887	0,410271281	

Coryphaena hippurus	Common dolphin	GTN	LPF	17					0,003	0,009080604	
Coryphaena hippurus	Common dolphin	GTR	LPF	17					0,0153	0,03445276	
Coryphaena hippurus	Common dolphin	LHP	LPF	17					0,1701	0,394930412	
Coryphaena hippurus	Common dolphin	LLD	LPF	17					0,1031	0,304030571	
Coryphaena hippurus	Common dolphin	LLS	LPF	17					0,208845	0,555946532	
Coryphaena hippurus	Common dolphin	LTL	LPF	17					0,0095	0,024735478	
Coryphaena hippurus	Common dolphin	NK	LPF	17					0,0089	0,020407002	
Coryphaena hippurus	Common dolphin	OTB	LPF	17					0,03495	0,10498509	
Coryphaena hippurus	Common dolphin	PS	LPF	17					0,2447	0,502503339	
Coryphaena hippurus	Common dolphin	SB	LPF	17					0,0255	0,052564053	
Parapenaeus longirostris	Deep-water rose shrimp	DRB	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0113	0,036291533	STECF
Parapenaeus longirostris	Deep-water rose shrimp	FPO	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0035	0,011885556	STECF
Parapenaeus longirostris	Deep-water rose shrimp	FYK	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,005	0,016979366	STECF
Parapenaeus longirostris	Deep-water rose shrimp	GNS	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,088475	0,286909577	STECF
Parapenaeus longirostris	Deep-water rose shrimp	GTN	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,00155	0,004743145	STECF



Parape naeus longiro stris	Deep- water rose shrimp	GTR	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0036	0,011100283	STECF
Parape naeus longiro stris	Deep- water rose shrimp	LHP	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,02675	0,090839607	STECF
Parape naeus longiro stris	Deep- water rose shrimp	LLS	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0095	0,029070893	STECF
Parape naeus longiro stris	Deep- water rose shrimp	LTL	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,028	0,095084449	STECF
Parape naeus longiro stris	Deep- water rose shrimp	NK	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,055	0,173341859	STECF
Parape naeus longiro stris	Deep- water rose shrimp	OTB	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	594,5154071	1908,971098	STECF
Parape naeus longiro stris	Deep- water rose shrimp	OT M	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0257	0,085477522	STECF
Parape naeus longiro stris	Deep- water rose shrimp	PS	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,00985	0,030595227	STECF
Parape naeus longiro stris	Deep- water rose shrimp	SB	CRU	17	Y	17; 18; 19	2, 0 1	2 0 1 6	0,0044	0,013464413	STECF
Anguill a anguilla	Europea n eel	FYK	GLE	17					0,23	2,137142972	
Anguill a anguilla	Europea n eel	GNS	GLE	17					0,00825	0,086201305	
Anguill a anguilla	Europea n eel	GTR	GLE	17					0,002	0,016402614	
Anguill a anguilla	Europea n eel	LHP	GLE	17					0,0005	0,004100653	
Anguill a anguilla	Europea n eel	NK	GLE	17					0,0109	0,128220285	
Anguill a anguilla	Europea n eel	SB	GLE	17					0,009	0,091261667	
Anguill a anguilla	Europea n eel	TBB	GLE	17					0,1115	0,914445703	
Phycis spp	Forkbea rds nei	FPO	DEF	17					0,92965	1,681468883	

Phycis spp	Forkbeards nei	GNS	DEF	17					3,108775	5,819796481	
Phycis spp	Forkbeards nei	GTN	DEF	17					0,27877	0,506278429	
Phycis spp	Forkbeards nei	GTR	DEF	17					2,8984	5,39162168	
Phycis spp	Forkbeards nei	LHP	DEF	17					0,1207	0,222299127	
Phycis spp	Forkbeards nei	LLS	DEF	17					1,620575	2,935427506	
Phycis spp	Forkbeards nei	LTL	DEF	17					0,00335	0,006997094	
Phycis spp	Forkbeards nei	NK	DEF	17					0,00965	0,017942789	
Phycis spp	Forkbeards nei	OTB	DEF	17					12,17902458	21,37027451	
Phycis spp	Forkbeards nei	SB	DEF	17					0,00925	0,014964924	
Auxis thazard , A. rochei	Frigate and bullet tunas	DRB	LPF	17					0,0096	0,011359088	
Auxis thazard , A. rochei	Frigate and bullet tunas	FPO	LPF	17					0,105	0,126198028	
Auxis thazard , A. rochei	Frigate and bullet tunas	GNS	LPF	17					5,085405	5,865549535	
Auxis thazard , A. rochei	Frigate and bullet tunas	GTN	LPF	17					0,199	0,232430831	
Auxis thazard , A. rochei	Frigate and bullet tunas	GTR	LPF	17					0,58268	0,679454506	
Auxis thazard , A. rochei	Frigate and bullet tunas	LHP	LPF	17					0,03545	0,040919622	
Auxis thazard , A. rochei	Frigate and bullet tunas	LLS	LPF	17					0,06186	0,069687517	
Auxis thazard , A. rochei	Frigate and bullet tunas	LTL	LPF	17					0,0095	0,011417916	
Auxis thazard , A. rochei	Frigate and bullet tunas	NK	LPF	17					0,3617	0,405797532	
Auxis thazard , A. rochei	Frigate and bullet tunas	OTB	LPF	17					0,31475	0,361130368	
Auxis thazard	Frigate and	PS	LPF	17					7,6151	8,847585232	

, A. rochei	bullet tunas										
Auxis thazard, A. rochei	Frigate and bullet tunas	SB	LPF	17					0,58675	0,680770805	
Flexopecten flexuosus	Flexuou s scallop	DRB	MOL	17					0,022	0,158348523	
Flexopecten flexuosus	Flexuou s scallop	GNS	MOL	17					0,0085	0,06118011	
Flexopecten flexuosus	Flexuou s scallop	GTN	MOL	17					0,004	0,02879064	
Flexopecten flexuosus	Flexuou s scallop	OTB	MOL	17					0,06125	0,440856683	
Flexopecten flexuosus	Flexuou s scallop	PS	MOL	17					0,007	0,050090202	
Flexopecten glaber	Smooth scallop	DRB	MOL	17					0,81375	5,857095931	
Flexopecten glaber	Smooth scallop	OTB	MOL	17					0,03585	0,258036116	
Belone belone	Garfish	DRB	SPF	17	Y		0,2094	0,025	0,04249538	0,04249538	Froese et al., 2018; B< BMSY
Belone belone	Garfish	GNS	SPF	17	Y		0,2094	0,018585	0,042785487	0,042785487	Froese et al., 2018; B< BMSY
Belone belone	Garfish	GTR	SPF	17	Y		0,2094	0,0005	0,001151888	0,001151888	Froese et al., 2018; B< BMSY
Belone belone	Garfish	LHP	SPF	17	Y		0,2094	0,0069	0,014688134	0,014688134	Froese et al., 2018; B< BMSY
Belone belone	Garfish	OTB	SPF	17	Y		0,2094	0,0078	0,017969456	0,017969456	Froese et al., 2018; B< BMSY
Belone belone	Garfish	PS	SPF	17	Y		0,2094	2,38085	4,011496391	4,011496391	Froese et al., 2018; B< BMSY
Belone belone	Garfish	SB	SPF	17	Y		0,2094	0,5955	1,020738533	1,020738533	Froese et al., 2018; B< BMSY

Gastro poda	Gastrop ods nei	DRB	MOL	17					0,0506	0,182835576	
Gastro poda	Gastrop ods nei	GTN	MOL	17					0,0065	0,023310913	
Gastro poda	Gastrop ods nei	GTR	MOL	17					0,0579	0,215078576	
Gastro poda	Gastrop ods nei	NK	MOL	17					0,2405	1,048307285	
Gastro poda	Gastrop ods nei	OTB	MOL	17					0,055	0,219953318	
Epinep helus spp	Grouper s nei	FPO	DEF	17					0,00065	0,007124782	
Epinep helus spp	Grouper s nei	GNS	DEF	17					0,0444	0,508427418	
Epinep helus spp	Grouper s nei	GTN	DEF	17					0,00375	0,044201821	
Epinep helus spp	Grouper s nei	GTR	DEF	17					0,025625	0,287832572	
Epinep helus spp	Grouper s nei	LHP	DEF	17					0,0205	0,25292459	
Epinep helus spp	Grouper s nei	LLS	DEF	17					0,050275	0,596845834	
Epinep helus spp	Grouper s nei	LTL	DEF	17					0,0055	0,06028662	
Epinep helus spp	Grouper s nei	OTB	DEF	17					0,0239	0,292119894	
Osteich thyes	Groundf ishes nei	DRB	DEF	17					0,949725	1,847855824	
Osteich thyes	Groundf ishes nei	FPO	DEF	17					0,77235	1,753528705	
Osteich thyes	Groundf ishes nei	FYK	DEF	17					0,0059	0,01395359	
Osteich thyes	Groundf ishes nei	GNS	DEF	17					10,60416	23,48003925	
Osteich thyes	Groundf ishes nei	GTN	DEF	17					1,4509	3,094854731	
Osteich thyes	Groundf ishes nei	GTR	DEF	17					4,747405	10,37890054	
Osteich thyes	Groundf ishes nei	LHP	DEF	17					0,6548	1,471143478	
Osteich thyes	Groundf ishes nei	LLD	DEF	17					0,408	0,9442081	
Osteich thyes	Groundf ishes nei	LLS	DEF	17					1,458025	3,264155399	
Osteich thyes	Groundf ishes nei	LTL	DEF	17					0,061	0,126848044	
Osteich thyes	Groundf ishes nei	NK	DEF	17					2,05111	4,530149342	
Osteich thyes	Groundf ishes nei	OTB	DEF	17					21,503925	44,93502805	
Osteich thyes	Groundf ishes nei	OT M	DEF	17					0,008	0,015259985	

Osteichthyes	Groundfishes nei	PS	DEF	17					1,11995	2,15470725	
Osteichthyes	Groundfishes nei	SB	DEF	17					2,56925	5,818895473	
Triglidae	Gurnards, searobins nei	DRB	DEF	17					0,60021	3,000176099	
Triglidae	Gurnards, searobins nei	FPO	DEF	17					0,159225	0,813666925	
Triglidae	Gurnards, searobins nei	FYK	DEF	17					0,03595	0,185636636	
Triglidae	Gurnards, searobins nei	GNS	DEF	17					2,180356455	10,61219308	
Triglidae	Gurnards, searobins nei	GTN	DEF	17					0,12789	0,643063522	
Triglidae	Gurnards, searobins nei	GTR	DEF	17					2,55248	12,63680677	
Triglidae	Gurnards, searobins nei	LHP	DEF	17					0,11153	0,573563539	
Triglidae	Gurnards, searobins nei	LLD	DEF	17					0,0015	0,007003845	
Triglidae	Gurnards, searobins nei	LLS	DEF	17					31,707855	156,970246	
Triglidae	Gurnards, searobins nei	LTL	DEF	17					0,02055	0,105076478	
Triglidae	Gurnards, searobins nei	NK	DEF	17					0,031475	0,153850129	
Triglidae	Gurnards, searobins nei	OTB	DEF	17					58,17515742	285,890949	
Triglidae	Gurnards, searobins nei	PS	DEF	17					0,00835	0,043117271	
Triglidae	Gurnards, searobins nei	SB	DEF	17					0,102715	0,500488252	

Merlucius merlucius	European hake	DRB	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,115825	0,431400962	GFCM
Merlucius merlucius	European hake	FPO	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,5154	1,914910664	GFCM
Merlucius merlucius	European hake	FYK	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,0487	0,183810758	GFCM
Merlucius merlucius	European hake	GNS	DEF	17	Y	17; 18	2, 6	2 0 1 5	47,16693036	176,2160007	GFCM
Merlucius merlucius	European hake	GTN	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,23942	0,890487638	GFCM
Merlucius merlucius	European hake	GTR	DEF	17	Y	17; 18	2, 6	2 0 1 5	2,33669063	8,724953844	GFCM
Merlucius merlucius	European hake	LHP	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,41415	1,552086172	GFCM
Merlucius merlucius	European hake	LLD	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,0114	0,042788423	GFCM
Merlucius merlucius	European hake	LLS	DEF	17	Y	17; 18	2, 6	2 0 1 5	90,1733	334,4369937	GFCM
Merlucius merlucius	European hake	LTL	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,0361	0,136000944	GFCM
Merlucius merlucius	European hake	NK	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,360975	1,354237599	GFCM
Merlucius merlucius	European hake	OTB	DEF	17	Y	17; 18	2, 6	2 0 1 5	620,0186637	2312,874489	GFCM
Merlucius merlucius	European hake	OTM	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,1999	0,751218063	GFCM
Merlucius merlucius	European hake	PS	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,11025	0,409207884	GFCM
Merlucius merlucius	European hake	SB	DEF	17	Y	17; 18	2, 6	2 0 1 5	0,31808507	1,188023867	GFCM

Trachus spp	Jack and horse mackerels nei	DRB	SPF	17					0,0013	0,000531358	
Trachus spp	Jack and horse mackerels nei	FPO	SPF	17					0,03275	0,013426585	
Trachus spp	Jack and horse mackerels nei	FYK	SPF	17					0,0005	0,000187438	
Trachus spp	Jack and horse mackerels nei	GNS	SPF	17					10,44941	4,473894315	
Trachus spp	Jack and horse mackerels nei	GTN	SPF	17					0,2367	0,103548048	
Trachus spp	Jack and horse mackerels nei	GTR	SPF	17					0,988615	0,413655098	
Trachus spp	Jack and horse mackerels nei	LHP	SPF	17					0,511004215	0,221237054	
Trachus spp	Jack and horse mackerels nei	LLS	SPF	17					0,2172	0,094769697	
Trachus spp	Jack and horse mackerels nei	LTL	SPF	17					0,006	0,00224926	
Trachus spp	Jack and horse mackerels nei	NK	SPF	17					0,0159	0,006434959	
Trachus spp	Jack and horse mackerels nei	OTB	SPF	17					73,72514447	31,97597675	
Trachus spp	Jack and horse mackerels nei	OTM	SPF	17					0,8595	0,405304245	
Trachus spp	Jack and horse mackerels nei	PS	SPF	17					619,9281922	248,3618971	
Trachus spp	Jack and horse mackerels nei	SB	SPF	17					5,433225	2,352262059	
Zeus faber	John dory	DRB	DEF	17					0,00875	0,173441311	
Zeus faber	John dory	FPO	DEF	17					0,1289	2,54720261	



Zeus faber	John dory	GNS	DEF	17					6,428215	126,745312	
Zeus faber	John dory	GTN	DEF	17					0,29213	5,763961996	
Zeus faber	John dory	GTR	DEF	17					1,557725	30,73757961	
Zeus faber	John dory	LHP	DEF	17					0,27825	5,488246831	
Zeus faber	John dory	LLD	DEF	17					0,2165	4,289958415	
Zeus faber	John dory	LLS	DEF	17					1,466705	28,96824625	
Zeus faber	John dory	LTL	DEF	17					0,0045	0,087895409	
Zeus faber	John dory	NK	DEF	17					0,14565	2,877337025	
Zeus faber	John dory	OTB	DEF	17					25,87125498	509,7488364	
Zeus faber	John dory	OTM	DEF	17					0,0095	0,185556975	
Zeus faber	John dory	PS	DEF	17					0,01189	0,234436199	
Zeus faber	John dory	SB	DEF	17					1,02135	20,19231606	
Callista chione	Smooth callista	DRB	MOL	17					0,1288	0,505909602	
Callista chione	Smooth callista	FPO	MOL	17					0,022	0,083445778	
Callista chione	Smooth callista	GNS	MOL	17					0,0113	0,044330429	
Callista chione	Smooth callista	GTR	MOL	17					0,0015	0,005689485	
Callista chione	Smooth callista	HMD	MOL	17					0,01	0,037929899	
Callista chione	Smooth callista	LHP	MOL	17					0,055	0,216657274	
Callista chione	Smooth callista	NK	MOL	17					54,2402	209,7211532	
Callista chione	Smooth callista	OTB	MOL	17					0,065	0,246544346	
Homarus gammarus	European lobster	DRB	CRU	17	Y		1,75	2013	0,007	0,224903081	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	FPO	CRU	17	Y		1,75	2013	1,90171	62,08772521	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	GNS	CRU	17	Y		1,75	2013	1,10496	36,07117939	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	GTN	CRU	17	Y		1,75	2013	0,0693	2,264731282	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	GTR	CRU	17	Y		1,75	2013	0,30924	10,0863122	Froese et al., 2018; B< BMSY

Homarus gammarus	European lobster	LHP	CRU	17	Y		1,75	2013	0,06575	2,17508194	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	LLS	CRU	17	Y		1,75	2013	0,025125	0,824849475	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	NK	CRU	17	Y		1,75	2013	0,1706	5,521890454	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	OTB	CRU	17	Y		1,75	2013	0,134585	4,373128807	Froese et al., 2018; B< BMSY
Homarus gammarus	European lobster	SB	CRU	17	Y		1,75	2013	0,005	0,165587619	Froese et al., 2018; B< BMSY
Lichia amia	Leerfish	DRB	LPF	17					0,00625	0,026027946	
Lichia amia	Leerfish	FPO	LPF	17					0,0045	0,012694018	
Lichia amia	Leerfish	GNS	LPF	17					0,49733	1,704816666	
Lichia amia	Leerfish	GTN	LPF	17					0,018625	0,055998844	
Lichia amia	Leerfish	GTR	LPF	17					0,19625	0,676470473	
Lichia amia	Leerfish	LHP	LPF	17					0,104075	0,398786616	
Lichia amia	Leerfish	LLD	LPF	17					0,143	0,528340487	
Lichia amia	Leerfish	LLS	LPF	17					0,0899	0,303848108	
Lichia amia	Leerfish	NK	LPF	17					0,0161	0,055761926	
Lichia amia	Leerfish	OTB	LPF	17					0,097475	0,392999898	
Lichia amia	Leerfish	PS	LPF	17					0,29125	0,915904271	
Lichia amia	Leerfish	SB	LPF	17					2,6368	7,493217307	
Lepidorhombus spp	Megrims nei	DRB	DEF	17					0,0011	0,003046772	
Lepidorhombus spp	Megrims nei	GNS	DEF	17					0,23795	0,658914738	
Lepidorhombus spp	Megrims nei	GTR	DEF	17					0,0504	0,139449775	
Lepidorhombus spp	Megrims nei	LHP	DEF	17					0,0206	0,055234606	
Lepidorhombus spp	Megrims nei	LLS	DEF	17					0,0006	0,001608775	

Lepidor hombus spp	Megrims nei	NK	DEF	17					0,0155	0,043068972	
Lepidor hombus spp	Megrims nei	OTB	DEF	17					50,81010437	138,3310019	
Lepidor hombus spp	Megrims nei	OTM	DEF	17					0,001	0,002778643	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	FPO	LPF	17					0,0165	0,046573709	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	GNS	LPF	17					8,542185	21,83672878	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	GTN	LPF	17					0,24375	0,651034498	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	GTR	LPF	17					0,674415	1,757402644	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	LHP	LPF	17					2,52655	6,259450289	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	LLD	LPF	17					4,30575	13,70407529	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	LLS	LPF	17					2,883265	7,28199044	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	LTL	LPF	17					0,1503	0,334228394	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	OTB	LPF	17					1,07935	2,332738048	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	PS	LPF	17					14,74134895	35,64872888	
Euthynus alletteratus	Little tunny(= Atl.black skipj)	SB	LPF	17					1,91815	6,133946132	
Scomber scombrus	Atlantic mackerel	DRB	SPF	17					0,0032	0,003584009	
Scomber	Atlantic mackerel	FYK	SPF	17					0,0005	0,000868484	

scombrus											
Scomber scombrus	Atlantic mackerel	GNS	SPF	17					3,95684	5,774269933	
Scomber scombrus	Atlantic mackerel	GTN	SPF	17					0,05975	0,083331423	
Scomber scombrus	Atlantic mackerel	GTR	SPF	17					0,169725	0,250169397	
Scomber scombrus	Atlantic mackerel	LHP	SPF	17					0,04211	0,067004896	
Scomber scombrus	Atlantic mackerel	LLS	SPF	17					0,0286	0,041379091	
Scomber scombrus	Atlantic mackerel	LTL	SPF	17					0,0055	0,009553322	
Scomber scombrus	Atlantic mackerel	NK	SPF	17					0,0035	0,003920009	
Scomber scombrus	Atlantic mackerel	OTB	SPF	17					5,46745	7,565143365	
Scomber scombrus	Atlantic mackerel	OTM	SPF	17					0,025	0,043424189	
Scomber scombrus	Atlantic mackerel	PS	SPF	17					23,521775	32,85600754	
Scomber scombrus	Atlantic mackerel	SB	SPF	17					0,0885	0,106523817	
Argyrosomus regius	Meagre	FPO	DEF	17					0,0025	0,005709122	
Argyrosomus regius	Meagre	GNS	DEF	17					0,01135	0,025110464	
Argyrosomus regius	Meagre	GTR	DEF	17					0,02475	0,054575179	
Argyrosomus regius	Meagre	LHP	DEF	17					0,0095	0,020894142	

Argyros omus regius	Meagre	NK	DEF	17				0,001	0,002339826	
Argyros omus regius	Meagre	OTB	DEF	17				0,0176	0,039425403	
Argyros omus regius	Meagre	PS	DEF	17				0,1376	0,304531125	
Argyros omus regius	Meagre	SB	DEF	17				0,00075	0,001719758	
Muraena helena	Mediterranean moray	FPO	DEF	17				0,801625	1,281805384	
Muraena helena	Mediterranean moray	GNS	DEF	17				0,176925	0,281274647	
Muraena helena	Mediterranean moray	GTN	DEF	17				0,0049	0,007966549	
Muraena helena	Mediterranean moray	GTR	DEF	17				0,1458	0,232887863	
Muraena helena	Mediterranean moray	LHP	DEF	17				0,0183	0,029286223	
Muraena helena	Mediterranean moray	LLS	DEF	17				2,439115	3,872364436	
Muraena helena	Mediterranean moray	LTL	DEF	17				0,075	0,117406249	
Muraena helena	Mediterranean moray	NK	DEF	17				0,006	0,009754957	
Muraena helena	Mediterranean moray	OTB	DEF	17				0,216	0,345994814	
Muraena helena	Mediterranean moray	SB	DEF	17				0,002	0,003118396	
Lophius spp	Monkfishes	DRB	DEF	17				0,086445	0,548021806	
Lophius spp	Monkfishes	FPO	DEF	17				0,071725	0,457166121	
Lophius spp	Monkfishes	GNS	DEF	17				4,81813751	30,89031366	
Lophius spp	Monkfishes	GTN	DEF	17				0,08145	0,516690598	
Lophius spp	Monkfishes	GTR	DEF	17				2,21176	14,15873238	
Lophius spp	Monkfishes	LHP	DEF	17				0,03325	0,2147114	
Lophius spp	Monkfishes	LLS	DEF	17				0,300265	1,925538204	
Lophius spp	Monkfishes	LTL	DEF	17				0,00225	0,014334453	
Lophius spp	Monkfishes	NK	DEF	17				0,05185	0,330196807	

Lophius spp	Monkfishes nei	OTB	DEF	17					69,5200572	445,4477207	
Lophius spp	Monkfishes nei	OTM	DEF	17					0,0014	0,009088097	
Lophius spp	Monkfishes nei	PS	DEF	17					0,002	0,012802051	
Lophius spp	Monkfishes nei	SB	DEF	17					0,036415	0,232479481	
Mytilus galloprovincialis	Mediterranean mussel	DRB	MOL	17					0,0295	0,039521877	
Mytilus galloprovincialis	Mediterranean mussel	GNS	MOL	17					0,0379	0,051128557	
Mytilus galloprovincialis	Mediterranean mussel	LHP	MOL	17					0,002	0,002679449	
Mytilus galloprovincialis	Mediterranean mussel	LLS	MOL	17					0,004125	0,00589039	
Mytilus galloprovincialis	Mediterranean mussel	NK	MOL	17					62,921225	86,63083629	
Mytilus galloprovincialis	Mediterranean mussel	PS	MOL	17					0,02	0,028559472	
Mytilus galloprovincialis	Mediterranean mussel	SB	MOL	17					0,01	0,01383849	
Tetraodon belone	Mediterranean sea bream	SB	LPF	17					0,01	0,039843902	
Squilla mantis	Spottail mantis squillid	DRB	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,42332	0,6930987	STECF
Squilla mantis	Spottail mantis squillid	GNS	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,07039363	0,114500055	STECF
Squilla mantis	Spottail mantis squillid	GTN	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,00508	0,008009402	STECF
Squilla mantis	Spottail mantis squillid	GTR	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,29645	0,481413654	STECF
Squilla mantis	Spottail mantis squillid	LHP	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,00975	0,016174277	STECF

Squilla mantis	Spottail mantis squillid	LLS	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,0135	0,021100811	STECF
Squilla mantis	Spottail mantis squillid	NK	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,03075	0,051075097	STECF
Squilla mantis	Spottail mantis squillid	OTB	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	8,494056265	13,73407109	STECF
Squilla mantis	Spottail mantis squillid	OT M	CRU	17	Y	17; 18	2, 0 5	2 0 1 6	0,005	0,007815116	STECF
Murex spp	Murex	DRB	MOL	17					32,681875	60,45205887	
Murex spp	Murex	GNS	MOL	17					0,0211	0,037961111	
Murex spp	Murex	GTN	MOL	17					0,0495	0,090695166	
Murex spp	Murex	GTR	MOL	17					0,914125	1,704191281	
Murex spp	Murex	NK	MOL	17					1,2523	2,278401053	
Murex spp	Murex	OTB	MOL	17					2,3977	4,500946256	
Mugilid ae	Mulletts nei	DRB	MP D	17					0,01765	0,02687709	
Mugilid ae	Mulletts nei	FPO	MP D	17					3,177725	5,106155075	
Mugilid ae	Mulletts nei	FYK	MP D	17					0,002	0,003184652	
Mugilid ae	Mulletts nei	GNS	MP D	17					38,41294	60,40499585	
Mugilid ae	Mulletts nei	GTN	MP D	17					5,108195	8,367348152	
Mugilid ae	Mulletts nei	GTR	MP D	17					3,509935	5,598151551	
Mugilid ae	Mulletts nei	LHP	MP D	17					0,163675	0,254906116	
Mugilid ae	Mulletts nei	LLS	MP D	17					0,36576	0,531440213	
Mugilid ae	Mulletts nei	LTL	MP D	17					0,0069	0,009768414	
Mugilid ae	Mulletts nei	NK	MP D	17					0,82617	1,317073948	
Mugilid ae	Mulletts nei	OTB	MP D	17					0,35605	0,59096726	
Mugilid ae	Mulletts nei	PS	MP D	17					52,32407	81,29267106	
Mugilid ae	Mulletts nei	SB	MP D	17					1,80915	2,851271356	
Mugilid ae	Mulletts nei	TBB	MP D	17					0,0005	0,000707856	
Mullus surmuletus	Surmullet	DRB	DEF	17					0,066875	0,353530161	



Mullus surmuletus	Surmullet	FPO	DEF	17					0,0159	0,08413426	
Mullus surmuletus	Surmullet	GNS	DEF	17					5,047665	26,65261118	
Mullus surmuletus	Surmullet	GTN	DEF	17					0,176075	0,930212716	
Mullus surmuletus	Surmullet	GTR	DEF	17					0,8951	4,730518641	
Mullus surmuletus	Surmullet	LHP	DEF	17					0,01965	0,103756144	
Mullus surmuletus	Surmullet	LLS	DEF	17					0,144175	0,761876664	
Mullus surmuletus	Surmullet	LTL	DEF	17					0,003	0,015785976	
Mullus surmuletus	Surmullet	NK	DEF	17					0,259975	1,374004018	
Mullus surmuletus	Surmullet	OTB	DEF	17					12,9179248	68,23729172	
Mullus surmuletus	Surmullet	PS	DEF	17					0,0135	0,071036892	
Mullus surmuletus	Surmullet	SB	DEF	17					3,17318	16,75967305	
Mullus barbatus	Red mullet	DRB	DEF	17	Y		0,32692	2	0,6987	1,183730627	STECF
Mullus barbatus	Red mullet	FPO	DEF	17	Y		0,32692	2	0,232225	0,393459554	STECF
Mullus barbatus	Red mullet	FYK	DEF	17	Y		0,32692	2	0,0025	0,004206019	STECF
Mullus barbatus	Red mullet	GNS	DEF	17	Y		0,32692	2	6,29216741	10,73554657	STECF
Mullus barbatus	Red mullet	GTN	DEF	17	Y		0,32692	2	0,11215	0,190805943	STECF

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Mullus barbatus	Red mullet	GTR	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	1,663994685	2,846306949	STECF
Mullus barbatus	Red mullet	LHP	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,6223	1,050861497	STECF
Mullus barbatus	Red mullet	LLS	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,08	0,136530872	STECF
Mullus barbatus	Red mullet	LTL	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,31575	0,531220176	STECF
Mullus barbatus	Red mullet	NK	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,6085	1,033303743	STECF
Mullus barbatus	Red mullet	OTB	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	1040,502872	1768,605058	STECF
Mullus barbatus	Red mullet	OTM	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,1045	0,178805221	STECF
Mullus barbatus	Red mullet	PS	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	0,115195	0,196074785	STECF
Mullus barbatus	Red mullet	SB	DEF	17	Y		0, 3 2 2 6 9 2	2 0 1 6	6,9832	11,88972191	STECF
Myliobatis aquila	Common eagle ray	DRB	DEF	17					0,0076	0,007914292	

Myliobatis aquila	Common eagle ray	FPO	DEF	17				0,0177	0,019879032	
Myliobatis aquila	Common eagle ray	GNS	DEF	17				1,14791406	1,325251482	
Myliobatis aquila	Common eagle ray	GTN	DEF	17				0,047	0,050969531	
Myliobatis aquila	Common eagle ray	GTR	DEF	17				1,381195	1,652190268	
Myliobatis aquila	Common eagle ray	LHP	DEF	17				0,04595	0,052408472	
Myliobatis aquila	Common eagle ray	LLD	DEF	17				0,6595	0,845347092	
Myliobatis aquila	Common eagle ray	LLS	DEF	17				1,37405	1,619304417	
Myliobatis aquila	Common eagle ray	NK	DEF	17				0,008	0,010019073	
Myliobatis aquila	Common eagle ray	OTB	DEF	17				9,88471582	11,45056535	
Myliobatis aquila	Common eagle ray	PS	DEF	17				0,5032	0,524009435	
Myliobatis aquila	Common eagle ray	SB	DEF	17				0,15095	0,181346293	
Osteichthyes	Marine fishes nei	DRB	MPD	17				6,492775	7,918415946	
Osteichthyes	Marine fishes nei	FPO	MPD	17				0,419875	0,497004566	
Osteichthyes	Marine fishes nei	FYK	MPD	17				0,005	0,005733448	
Osteichthyes	Marine fishes nei	GNS	MPD	17				4,47851	5,397467626	
Osteichthyes	Marine fishes nei	GTN	MPD	17				0,80735	0,971693707	
Osteichthyes	Marine fishes nei	GTR	MPD	17				2,488755	2,985313234	
Osteichthyes	Marine fishes nei	LHP	MPD	17				0,17365	0,206872493	
Osteichthyes	Marine fishes nei	LLS	MPD	17				0,5287	0,627828963	
Osteichthyes	Marine fishes nei	LTL	MPD	17				0,0103	0,012454043	

Osteichthyes	Marine fishes nei	NK	MPD	17					0,920925	1,160783162	
Osteichthyes	Marine fishes nei	OTB	MPD	17					16,82713988	20,11235922	
Osteichthyes	Marine fishes nei	OTM	MPD	17					0,01125	0,012900258	
Osteichthyes	Marine fishes nei	PS	MPD	17					15,8027	20,12681433	
Osteichthyes	Marine fishes nei	SB	MPD	17					1,43305	1,704471369	
Osteichthyes	Marine fishes nei	TBB	MPD	17					0,001	0,001275318	
Nephrops norvegicus	Norway lobster	DRB	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,0038	0,044789598	STECF
Nephrops norvegicus	Norway lobster	FPO	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	33,54871	409,8967043	STECF
Nephrops norvegicus	Norway lobster	GNS	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,534313185	6,52153144	STECF
Nephrops norvegicus	Norway lobster	GTN	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,014625	0,180868159	STECF
Nephrops norvegicus	Norway lobster	GTR	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,109989135	1,328676224	STECF
Nephrops norvegicus	Norway lobster	LHP	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,0785	0,95761333	STECF
Nephrops norvegicus	Norway lobster	LLS	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,09255	1,129679266	STECF
Nephrops norvegicus	Norway lobster	NK	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,0512	0,619636621	STECF
Nephrops norvegicus	Norway lobster	OTB	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	235,7070137	2865,585904	STECF
Nephrops norvegicus	Norway lobster	PS	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,0025	0,029466841	STECF

Nephrops norvegicus	Norway lobster	SB	CRU	17	Y	17; 18	1, 3 1	2 0 1 6	0,011649255	0,142605132	STECF
Octopus vulgaris	Common octopus	DRB	CEP	17					0,19485	0,987713625	
Octopus vulgaris	Common octopus	FPO	CEP	17					76,59398	395,5114599	
Octopus vulgaris	Common octopus	FYK	CEP	17					0,003	0,014913202	
Octopus vulgaris	Common octopus	GNS	CEP	17					9,22191001	47,29899323	
Octopus vulgaris	Common octopus	GTN	CEP	17					2,377005	12,35230528	
Octopus vulgaris	Common octopus	GTR	CEP	17					13,90968693	71,33062345	
Octopus vulgaris	Common octopus	LHP	CEP	17					20,938525	108,0200267	
Octopus vulgaris	Common octopus	LLS	CEP	17					1,0467	5,358451925	
Octopus vulgaris	Common octopus	LTL	CEP	17					0,139	0,722289201	
Octopus vulgaris	Common octopus	NK	CEP	17					105,20659	543,5556994	
Octopus vulgaris	Common octopus	OTB	CEP	17					57,46346243	297,6596537	
Octopus vulgaris	Common octopus	PS	CEP	17					0,04005	0,201971936	
Octopus vulgaris	Common octopus	SB	CEP	17					3,20406	16,48353034	
Eledone spp	Horned and musky octopuses	DRB	CEP	17					14,38884497	35,98961812	
Eledone spp	Horned and musky octopuses	FPO	CEP	17					0,44669	1,096538856	
Eledone spp	Horned and musky octopuses	GNS	CEP	17					0,59221304	1,497304275	
Eledone spp	Horned and	GTN	CEP	17					0,0226	0,055836883	

	musky octopus es										
Eledone spp	Horned and musky octopus es	GTR	CEP	17					1,268692445	3,252935952	
Eledone spp	Horned and musky octopus es	LHP	CEP	17					0,1643	0,419221033	
Eledone spp	Horned and musky octopus es	LLS	CEP	17					0,0882	0,219525833	
Eledone spp	Horned and musky octopus es	LTL	CEP	17					0,002	0,00474494	
Eledone spp	Horned and musky octopus es	NK	CEP	17					0,46045	1,158312865	
Eledone spp	Horned and musky octopus es	OTB	CEP	17					418,265173	1043,372141	
Eledone spp	Horned and musky octopus es	OTM	CEP	17					0,0705	0,169276464	
Eledone spp	Horned and musky octopus es	PS	CEP	17					0,02315	0,059605768	
Eledone spp	Horned and musky octopus es	SB	CEP	17					0,474048505	1,210351474	
Ostrea edulis	European flat oyster	DRB	MOL	17					355,0094983	976,8392044	
Ostrea edulis	European flat oyster	FPO	MOL	17					0,025	0,065795565	
Ostrea edulis	European flat oyster	GNS	MOL	17					0,25505	0,674396573	
Ostrea edulis	European flat oyster	GTR	MOL	17					0,08139999	0,215773936	

Ostrea edulis	European flat oyster	LHP	MOL	17					0,03525	0,103403731	
Ostrea edulis	European flat oyster	NK	MOL	17					45,860345	128,0489936	
Ostrea edulis	European flat oyster	OTB	MOL	17					17,11675155	46,61019515	
Ostrea edulis	European flat oyster	PS	MOL	17					0,0015	0,004420267	
Pagellus erythrinus	Common pandora	DRB	DEF	17	Y		1,766	2013	0,209125	0,443502581	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	FPO	DEF	17	Y		1,766	2013	0,2205	0,485159694	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	FYK	DEF	17	Y		1,766	2013	0,0025	0,005600824	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	GNS	DEF	17	Y		1,766	2013	5,80787	12,69320492	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	GTN	DEF	17	Y		1,766	2013	0,767845	1,682345049	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	GTR	DEF	17	Y		1,766	2013	1,978107695	4,370948881	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	LHP	DEF	17	Y		1,766	2013	0,703425	1,527674776	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	LLD	DEF	17	Y		1,766	2013	0,00565	0,011920557	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	LLS	DEF	17	Y		1,766	2013	2,19299	4,799646349	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	LTL	DEF	17	Y		1,766	2013	0,17835	0,388322959	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	NK	DEF	17	Y		1,766	2013	0,39665	0,860126316	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	OTB	DEF	17	Y		1,766	2013	47,09943488	102,8779687	Froese et al., 2018; B< BMSY

Pagellus erythrinus	Common pandora	OTM	DEF	17	Y		1,706	2013	0,00575	0,012906363	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	PS	DEF	17	Y		1,706	2013	0,166765	0,353151317	Froese et al., 2018; B< BMSY
Pagellus erythrinus	Common pandora	SB	DEF	17	Y		1,706	2013	2,57754	5,6841384	Froese et al., 2018; B< BMSY
Spicara spp	Picarels nei	GNS	MPD	17					1,430925	2,460585343	
Spicara spp	Picarels nei	GTN	MPD	17					0,02445	0,041242961	
Spicara spp	Picarels nei	GTR	MPD	17					0,050375	0,0873066	
Spicara spp	Picarels nei	LHP	MPD	17					0,02175	0,036609966	
Spicara spp	Picarels nei	LLS	MPD	17					0,00685	0,011370457	
Spicara spp	Picarels nei	NK	MPD	17					0,04105	0,067947257	
Spicara spp	Picarels nei	OTB	MPD	17					0,596575	1,044093548	
Spicara spp	Picarels nei	PS	MPD	17					0,186475	0,337940116	
Spicara spp	Picarels nei	SB	MPD	17					0,8263	1,4723244	
Sardina pilchardus	European pilchard (=Sardine)	FPO	SPF	17	Y	17; 18	2,008	2015	0,0077	0,00294258	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	GNS	SPF	17	Y	17; 18	2,008	2015	1,271482	0,483028091	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	GTN	SPF	17	Y	17; 18	2,008	2015	0,0173	0,00654578	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	GTR	SPF	17	Y	17; 18	2,008	2015	0,08458	0,032073136	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	LHP	SPF	17	Y	17; 18	2,008	2015	1,53114525	0,578441611	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	LLS	SPF	17	Y	17; 18	2,008	2015	0,0472	0,017868861	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87



Sardina pilchardus	European pilchard (=Sardine)	LTL	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	0,006	0,002263822	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	NK	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	0,06777	0,025689112	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	OTB	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	0,72074	0,273383514	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	OTM	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	2,3295	0,880601978	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	PS	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	53035,25736	20142,21229	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	SB	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	7,608212	2,885047954	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Sardina pilchardus	European pilchard (=Sardine)	TBB	SPF	17	Y	17; 18	2, 0 8	2 0 1 5	0,008	0,003018429	GFCM, B < BMSY; Assessment carried out also by STECF and F/FMSY = 4.87
Pleuronectidae	Righteye flounders nei	DRB	DEF	17					0,85005	6,941797662	
Pleuronectidae	Righteye flounders nei	FPO	DEF	17					0,002	0,016283634	
Pleuronectidae	Righteye flounders nei	GNS	DEF	17					0,364735	2,979432853	
Pleuronectidae	Righteye flounders nei	GTN	DEF	17					0,124525	1,014244621	
Pleuronectidae	Righteye flounders nei	GTR	DEF	17					4,58599	37,46606073	
Pleuronectidae	Righteye flounders nei	LHP	DEF	17					0,00475	0,038801915	
Pleuronectidae	Righteye flounders nei	LLS	DEF	17					0,001	0,008141817	
Pleuronectidae	Righteye flounders nei	NK	DEF	17					0,00405	0,033080193	

Pleuronectidae	Righteye flounder s nei	OTB	DEF	17				0,766789995	6,271061868	
Pleuronectidae	Righteye flounder s nei	OTM	DEF	17				0,0543	0,442100672	
Pleuronectidae	Righteye flounder s nei	PS	DEF	17				1,18	9,607344248	
Arca noae	Noah's ark	DRB	MOL	17				0,714625	4,339783961	
Arca noae	Noah's ark	FPO	MOL	17				0,01	0,059334836	
Arca noae	Noah's ark	GNS	MOL	17				0,02675	0,154736976	
Arca noae	Noah's ark	GTR	MOL	17				0,0165	0,096113874	
Arca noae	Noah's ark	LHP	MOL	17				0,091	0,512304947	
Arca noae	Noah's ark	LLS	MOL	17				0,0055	0,031170757	
Arca noae	Noah's ark	NK	MOL	17				24,7786	145,8738632	
Arca noae	Noah's ark	OTB	MOL	17				0,05425	0,317094772	
Pagrus pagrus	Red porgy	FPO	FIF	17				0,15374	2,858600693	
Pagrus pagrus	Red porgy	FYK	FIF	17				0,00565	0,098796722	
Pagrus pagrus	Red porgy	GNS	FIF	17				0,791575	14,73998045	
Pagrus pagrus	Red porgy	GTN	FIF	17				0,006525	0,116342005	
Pagrus pagrus	Red porgy	GTR	FIF	17				0,159475	2,88076994	
Pagrus pagrus	Red porgy	LHP	FIF	17				0,45228	8,341227438	
Pagrus pagrus	Red porgy	LLS	FIF	17				5,971	110,6054849	
Pagrus pagrus	Red porgy	LTL	FIF	17				0,0157	0,284859054	
Pagrus pagrus	Red porgy	NK	FIF	17				0,09465	1,713431248	
Pagrus pagrus	Red porgy	OTB	FIF	17				0,289424955	5,227902965	
Pagrus pagrus	Red porgy	PS	FIF	17				0,096175	1,852342995	
Pagrus pagrus	Red porgy	SB	FIF	17				0,01225	0,221837963	
Scorpaena scrofa	Red scorpion fish	DRB	DEF	17				0,067835	1,262772602	
Scorpaena scrofa	Red scorpion fish	FPO	DEF	17				0,457775	8,549445602	
Scorpaena scrofa	Red scorpion fish	GNS	DEF	17				15,44938142	288,9234298	

Scorpaena scrofa	Red scorpion fish	GTN	DEF	17				0,723375	13,53831212	
Scorpaena scrofa	Red scorpion fish	GTR	DEF	17				7,709945	144,0905327	
Scorpaena scrofa	Red scorpion fish	LHP	DEF	17				0,48015	9,003975474	
Scorpaena scrofa	Red scorpion fish	LLS	DEF	17				2,812975	52,59834656	
Scorpaena scrofa	Red scorpion fish	LTL	DEF	17				0,0185	0,34766591	
Scorpaena scrofa	Red scorpion fish	NK	DEF	17				0,185	3,463199441	
Scorpaena scrofa	Red scorpion fish	OTB	DEF	17				6,07905851	113,6009755	
Scorpaena scrofa	Red scorpion fish	OTM	DEF	17				0,000375	0,00695257	
Scorpaena scrofa	Red scorpion fish	PS	DEF	17				0,01075	0,20179396	
Scorpaena scrofa	Red scorpion fish	SB	DEF	17				0,344765	6,488143992	
Sardine lla aurita	Round sardinella	GNS	SPF	17				0,0509	0,016843594	
Sardine lla aurita	Round sardinella	NK	SPF	17				0,02	0,0069908	
Sardine lla aurita	Round sardinella	OTB	SPF	17				0,008	0,002626467	
Sardine lla aurita	Round sardinella	PS	SPF	17				63,41975	21,14683065	
Sardine lla aurita	Round sardinella	SB	SPF	17				0,01	0,0034954	
Pagellus acarne	Axillary seabream	GNS	DEF	17				0,60947	1,29204352	
Pagellus acarne	Axillary seabream	GTR	DEF	17				0,1068	0,226714988	
Pagellus acarne	Axillary seabream	LHP	DEF	17				0,016925	0,036316278	
Pagellus acarne	Axillary seabream	LLS	DEF	17				0,03605	0,076834206	
Pagellus acarne	Axillary seabream	LTL	DEF	17				0,0115	0,024393865	

Pagellus acarne	Axillary seabream	NK	DEF	17				0,0604	0,127391865	
Pagellus acarne	Axillary seabream	OTB	DEF	17				1,144399985	2,421927034	
Pagellus acarne	Axillary seabream	SB	DEF	17				0,1794	0,378352461	
Sparus aurata	Gilthead seabream	DRB	FIF	17				0,0857	0,494728124	
Sparus aurata	Gilthead seabream	FPO	FIF	17				1,286025	7,144914674	
Sparus aurata	Gilthead seabream	FYK	FIF	17				0,00525	0,02884252	
Sparus aurata	Gilthead seabream	GNS	FIF	17				67,12139043	379,7586586	
Sparus aurata	Gilthead seabream	GTN	FIF	17				10,361645	56,9487474	
Sparus aurata	Gilthead seabream	GTR	FIF	17				14,63547362	83,52239219	
Sparus aurata	Gilthead seabream	LHP	FIF	17				1,3648	7,697794514	
Sparus aurata	Gilthead seabream	LLD	FIF	17				0,054	0,332703566	
Sparus aurata	Gilthead seabream	LLS	FIF	17				3,449155	19,49228659	
Sparus aurata	Gilthead seabream	LTL	FIF	17				0,28565	1,6079398	
Sparus aurata	Gilthead seabream	NK	FIF	17				10,26746	57,02387398	
Sparus aurata	Gilthead seabream	OTB	FIF	17				2,616935905	14,38026425	
Sparus aurata	Gilthead seabream	PS	FIF	17				41,266025	215,4706365	
Sparus aurata	Gilthead seabream	SB	FIF	17				1,632945	9,320049762	
Pagellus bogaraveo	Blackspot(=red) seabream	GNS	FIF	17				0,77471	1,488018675	
Pagellus bogaraveo	Blackspot(=red) seabream	GTN	FIF	17				0,0055	0,010358874	

Pagellus bogaraveo	Blackspot(=red) seabream	GTR	FIF	17					0,0125	0,024283836	
Pagellus bogaraveo	Blackspot(=red) seabream	LHP	FIF	17					0,26895	0,49978555	
Pagellus bogaraveo	Blackspot(=red) seabream	LLS	FIF	17					0,0218	0,044448947	
Pagellus bogaraveo	Blackspot(=red) seabream	NK	FIF	17					0,00705	0,014587192	
Pagellus bogaraveo	Blackspot(=red) seabream	OTB	FIF	17					0,33835	0,644429326	
Pagellus bogaraveo	Blackspot(=red) seabream	PS	FIF	17					0,005	0,010457079	
Pagellus bogaraveo	Blackspot(=red) seabream	SB	FIF	17					0,28695	0,565800052	
Oblada melanura	Saddled seabream	DRB	FIF	17	Y		3,6	2014	0,0027	0,005793818	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	FPO	FIF	17	Y		3,6	2014	0,996475	2,256865641	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	GNS	FIF	17	Y		3,6	2014	10,55064	23,71523125	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	GTN	FIF	17	Y		3,6	2014	0,20265	0,454920452	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	GTR	FIF	17	Y		3,6	2014	0,68439	1,545739211	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	LHP	FIF	17	Y		3,6	2014	0,10495	0,237872975	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	LLS	FIF	17	Y		3,6	2014	0,06016	0,134370935	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	LTL	FIF	17	Y		3,6	2014	0,0158	0,035511378	Froese et al., 2018; B< BMSY

Oblada melanura	Saddled seabream	NK	FIF	17	Y		3,6	2014	10,856	24,46419136	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	OTB	FIF	17	Y		3,6	2014	0,229614925	0,52542322	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	PS	FIF	17	Y		3,6	2014	9,3412	20,7702568	Froese et al., 2018; B< BMSY
Oblada melanura	Saddled seabream	SB	FIF	17	Y		3,6	2014	3,40193507	7,774778037	Froese et al., 2018; B< BMSY
Scyliorhinus spp	Catsharks, nursehounds nei	DRB	DEF	17					0,0216	0,040853598	
Scyliorhinus spp	Catsharks, nursehounds nei	FPO	DEF	17					0,0385	0,073271946	
Scyliorhinus spp	Catsharks, nursehounds nei	GNS	DEF	17					1,59885087	3,116179636	
Scyliorhinus spp	Catsharks, nursehounds nei	GTN	DEF	17					0,13695	0,268763165	
Scyliorhinus spp	Catsharks, nursehounds nei	GTR	DEF	17					1,19010544	2,346484894	
Scyliorhinus spp	Catsharks, nursehounds nei	LHP	DEF	17					0,08765	0,178489419	
Scyliorhinus spp	Catsharks, nursehounds nei	LLS	DEF	17					0,587025	1,142861566	
Scyliorhinus spp	Catsharks, nursehounds nei	LTL	DEF	17					0,003	0,005836049	
Scyliorhinus spp	Catsharks, nursehounds nei	NK	DEF	17					0,0387	0,072547114	
Scyliorhinus spp	Catsharks, nursehounds nei	OTB	DEF	17					9,140313375	17,77480938	
Scyliorhinus spp	Catsharks, nursehounds nei	OTM	DEF	17					0,0052	0,010657156	

Scyliorhinus spp	Catsharks, nursehounds nei	PS	DEF	17					0,0055	0,010439165	
Scyliorhinus spp	Catsharks, nursehounds nei	SB	DEF	17					0,018	0,033350642	
Maja squinado	Spinous spider crab	DRB	CRU	17					0,040425	0,204584543	
Maja squinado	Spinous spider crab	FPO	CRU	17					0,034525	0,176165914	
Maja squinado	Spinous spider crab	GNS	CRU	17					7,56897	37,61643427	
Maja squinado	Spinous spider crab	GTN	CRU	17					0,19085	0,955428801	
Maja squinado	Spinous spider crab	GTR	CRU	17					4,720095	23,51930343	
Maja squinado	Spinous spider crab	LHP	CRU	17					0,0164	0,079686854	
Maja squinado	Spinous spider crab	NK	CRU	17					0,0678	0,338109283	
Maja squinado	Spinous spider crab	OTB	CRU	17					0,654250005	3,2787819	
Maja squinado	Spinous spider crab	SB	CRU	17					0,0045	0,021989895	
Pectinidae	Scallops nei	DRB	MOL	17					41,102985	84,90952677	
Pectinidae	Scallops nei	FPO	MOL	17					0,0025	0,005017428	
Pectinidae	Scallops nei	GNS	MOL	17					0,03275	0,06744091	
Pectinidae	Scallops nei	GTR	MOL	17					0,09265	0,18594588	
Pectinidae	Scallops nei	NK	MOL	17					1,914	4,07662036	
Pectinidae	Scallops nei	OTB	MOL	17					4,7277	9,753340337	
Scyllarus arctus	Lesser slipper lobster	GNS	CRU	17					0,001	0,003485912	
Scyllarus arctus	Lesser slipper lobster	GTR	CRU	17					0,003	0,010457736	
Scyllarus arctus	Lesser slipper lobster	OTB	CRU	17					0,011	0,038345036	
Lepidopus caudatus	Silver scabbardfish	GNS	LPF	17					0,00357	0,007752742	

Lepidopus caudatus	Silver scabbardfish	GTR	LPF	17					0,0005	0,000502333	
Lepidopus caudatus	Silver scabbardfish	LLS	LPF	17					0,001	0,001004665	
Lepidopus caudatus	Silver scabbardfish	OTB	LPF	17					0,0703	0,081737519	
Diplodus puntazzo	Sharpsnout seabream	DRB	FIF	17					0,0294	0,060012215	
Diplodus puntazzo	Sharpsnout seabream	FPO	FIF	17					0,03465	0,152108665	
Diplodus puntazzo	Sharpsnout seabream	GNS	FIF	17					1,4338	5,740518109	
Diplodus puntazzo	Sharpsnout seabream	GTN	FIF	17					0,851975	3,910486685	
Diplodus puntazzo	Sharpsnout seabream	GTR	FIF	17					0,276205	1,181915345	
Diplodus puntazzo	Sharpsnout seabream	LHP	FIF	17					0,01495	0,072017887	
Diplodus puntazzo	Sharpsnout seabream	LLS	FIF	17					0,099885	0,420530756	
Diplodus puntazzo	Sharpsnout seabream	LTL	FIF	17					0,00615	0,038057275	
Diplodus puntazzo	Sharpsnout seabream	NK	FIF	17					1,47371	5,982123848	
Diplodus puntazzo	Sharpsnout seabream	OTB	FIF	17					0,154975	0,768798726	
Diplodus puntazzo	Sharpsnout seabream	PS	FIF	17					0,15725	0,584599223	
Diplodus puntazzo	Sharpsnout seabream	SB	FIF	17					0,378985	1,822702523	



Pecten jacobaeus	Great Mediterranean scallop	DRB	MOL	17	Y		0,77	2015	94,65603883	651,6563388	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	GNS	MOL	17	Y		0,77	2015	0,06825	0,469759405	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	GTR	MOL	17	Y		0,77	2015	0,11796833	0,812128181	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	HMD	MOL	17	Y		0,77	2015	0,0025	0,017222059	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	LHP	MOL	17	Y		0,77	2015	0,01925	0,132452436	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	NK	MOL	17	Y		0,77	2015	4,332625	29,81966039	Froese et al., 2018; B< BMSY
Pecten jacobaeus	Great Mediterranean scallop	OTB	MOL	17	Y		0,77	2015	4,140232795	28,50620402	Froese et al., 2018; B< BMSY
Raja spp	Raja rays nei	DRB	DEF	17					0,41825	1,13974715	
Raja spp	Raja rays nei	FPO	DEF	17					0,09455	0,259990106	
Raja spp	Raja rays nei	FYK	DEF	17					0,00075	0,00209642	
Raja spp	Raja rays nei	GNS	DEF	17					7,87476561	21,54885134	
Raja spp	Raja rays nei	GTN	DEF	17					0,148645	0,408996846	
Raja spp	Raja rays nei	GTR	DEF	17					6,004205	16,4496761	
Raja spp	Raja rays nei	LHP	DEF	17					0,19645	0,542029023	
Raja spp	Raja rays nei	LLS	DEF	17					12,807985	35,03686455	
Raja spp	Raja rays nei	LTL	DEF	17					0,0077	0,02079261	
Raja spp	Raja rays nei	NK	DEF	17					0,032975	0,089737146	
Raja spp	Raja rays nei	OTB	DEF	17					64,63126505	177,0923526	
Raja spp	Raja rays nei	OTM	DEF	17					0,00085	0,002272436	
Raja spp	Raja rays nei	PS	DEF	17					0,016	0,042775265	
Raja spp	Raja rays nei	SB	DEF	17					0,15064	0,409737117	
Sarpa salpa	Salema	DRB	FIF	17					0,0198	0,054029959	
Sarpa salpa	Salema	FPO	FIF	17					0,307825	0,836238984	

Sarpa salpa	Salema	FYK	FIF	17				0,003	0,008034379	
Sarpa salpa	Salema	GNS	FIF	17				17,055505	46,46008303	
Sarpa salpa	Salema	GTN	FIF	17				5,41414	14,71660328	
Sarpa salpa	Salema	GTR	FIF	17				3,425515	9,310809356	
Sarpa salpa	Salema	LHP	FIF	17				0,0132	0,035569323	
Sarpa salpa	Salema	LLS	FIF	17				0,07887	0,216239106	
Sarpa salpa	Salema	LTL	FIF	17				0,002	0,005356253	
Sarpa salpa	Salema	NK	FIF	17				14,276275	38,90001023	
Sarpa salpa	Salema	OTB	FIF	17				0,356075	0,967384072	
Sarpa salpa	Salema	PS	FIF	17				6,442	17,52853151	
Sarpa salpa	Salema	SB	FIF	17				2,45464	6,665831268	
Palinurus elephas	Common spiny lobster	DRB	CRU	17	Y		0,794	0,0595	2,388976838	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	FPO	CRU	17	Y		0,794	3,64768	149,7696103	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	GNS	CRU	17	Y		0,794	4,02741	165,359423	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	GTN	CRU	17	Y		0,794	0,0252	1,031569139	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	GTR	CRU	17	Y		0,794	0,344865	14,28055911	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	LHP	CRU	17	Y		0,794	0,006675	0,277254586	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	LLS	CRU	17	Y		0,794	0,29743	12,14362066	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	NK	CRU	17	Y		0,794	0,009625	0,386452134	Froese et al., 2018; B< BMSY
Palinurus elephas	Common spiny lobster	OTB	CRU	17	Y		0,794	0,12381	5,022356613	Froese et al., 2018; B< BMSY
Mustelus	Smooth-hound	DRB	DEF	17				0,0465	0,14541982	

mustelus											
Mustelus mustelus	Smoothhound	FPO	DEF	17					0,0041	0,014342508	
Mustelus mustelus	Smoothhound	GNS	DEF	17					4,823225	19,2796181	
Mustelus mustelus	Smoothhound	GTN	DEF	17					0,11855	0,426196025	
Mustelus mustelus	Smoothhound	GTR	DEF	17					1,62695	7,192463682	
Mustelus mustelus	Smoothhound	LHP	DEF	17					0,0131	0,037193848	
Mustelus mustelus	Smoothhound	LLD	DEF	17					0,01435	0,050536489	
Mustelus mustelus	Smoothhound	LLS	DEF	17					2,12694	8,31123765	
Mustelus mustelus	Smoothhound	LTL	DEF	17					0,0015	0,004258838	
Mustelus mustelus	Smoothhound	NK	DEF	17					0,05545	0,169705184	
Mustelus mustelus	Smoothhound	OTB	DEF	17					11,84374976	47,98433318	
Mustelus mustelus	Smoothhound	PS	DEF	17					0,0035	0,017817204	
Mustelus mustelus	Smoothhound	SB	DEF	17					0,0737	0,322946813	
Solea solea	Common sole	DRB	DEF	17	Y		1,80769	2	47,67011315	407,2043479	STECF
Solea solea	Common sole	FPO	DEF	17	Y		1,80769	2	0,01155	0,096794002	STECF

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Solea solea	Common sole	FYK	DEF	17	Y		1,80769	2016	0,002	0,016731589	STECF
Solea solea	Common sole	GNS	DEF	17	Y		1,80769	2016	5,33563	45,73035086	STECF
Solea solea	Common sole	GTN	DEF	17	Y		1,80769	2016	3,270435	27,42795816	STECF
Solea solea	Common sole	GTR	DEF	17	Y		1,80769	2016	160,2169867	1363,902959	STECF
Solea solea	Common sole	LHP	DEF	17	Y		1,80769	2016	0,0349	0,300288392	STECF
Solea solea	Common sole	LLS	DEF	17	Y		1,80769	2016	0,037445	0,318179089	STECF
Solea solea	Common sole	LTL	DEF	17	Y		1,80769	2016	0,0025	0,021853783	STECF
Solea solea	Common sole	NK	DEF	17	Y		1,80769	2016	0,30251	2,567716622	STECF
Solea solea	Common sole	OTB	DEF	17	Y		1,80769	2016	16,09450002	137,0755065	STECF
Solea solea	Common sole	OTM	DEF	17	Y		1,80769	2016	0,07095	0,593553136	STECF

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Solea solea	Common sole	PS	DEF	17	Y		1, 8 0 7 6 9	2 0 1 6	0,0046	0,039083804	STECF
Spicara smaris	Picarel	SB	DEF	17					0,01529	0,131966999	
Spicara smaris	Picarel	FPO	MP D	17					0,00415	0,005787825	
Spicara smaris	Picarel	FYK	MP D	17					0,00725	0,010010642	
Spicara smaris	Picarel	GNS	MP D	17					10,841375	15,2183902	
Spicara smaris	Picarel	GTN	MP D	17					0,1155	0,159806284	
Spicara smaris	Picarel	GTR	MP D	17					0,417	0,579576318	
Spicara smaris	Picarel	LHP	MP D	17					0,10205	0,143482961	
Spicara smaris	Picarel	LLS	MP D	17					0,05375	0,074668004	
Spicara smaris	Picarel	LTL	MP D	17					0,038	0,053928672	
Spicara smaris	Picarel	NK	MP D	17					2,01675	2,825366694	
Spicara smaris	Picarel	OTB	MP D	17					3,979114925	5,582904285	
Spicara smaris	Picarel	PS	MP D	17					1,1842	1,656109547	
Spicara smaris	Picarel	SB	MP D	17					86,22676507	120,6212376	
Spongii dae	Sponges	DRB	MD D	17					0,015	0,005836614	
Spongii dae	Sponges	GNS	MD D	17					0,005185	0,002017522	
Spongii dae	Sponges	GTR	MD D	17					0,00655	0,002458403	
Spongii dae	Sponges	LHP	MD D	17					0,03555	0,01366564	
Spongii dae	Sponges	NK	MD D	17					23,393625	8,801539112	
Spongii dae	Sponges	OTB	MD D	17					0,0035	0,001283882	
Sprattus sprattus	European sprat	SB	MD D	17					0,096	0,037354325	
Sprattus sprattus	European sprat	GNS	SPF	17					1,46704	2,213799101	
Sprattus sprattus	European sprat	GTN	SPF	17					0,0027	0,004056702	
Sprattus sprattus	European sprat	GTR	SPF	17					0,00115	0,001703939	

sprattus											
Sprattus sprattus	European sprat	LHP	SPF	17					0,002	0,003019522	
Sprattus sprattus	European sprat	OTB	SPF	17					0,0235	0,035465348	
Sprattus sprattus	European sprat	PS	SPF	17					32,32352	48,34686539	
Loligo vulgaris	European squid	SB	SPF	17	Y		0,893	2	10,887505	16,28165861	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	DRB	CEP	17	Y		0,893	2	0,7519	6,068244535	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	FPO	CEP	17	Y		0,893	2	0,66989	5,37630068	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	FYK	CEP	17	Y		0,893	2	0,0055	0,044221325	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	GNS	CEP	17	Y		0,893	2	3,262130395	25,61863188	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	GTN	CEP	17	Y		0,893	2	0,0811	0,661857448	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	GTR	CEP	17	Y		0,893	2	0,83832	6,624535776	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	LHP	CEP	17	Y		0,893	2	15,76081	126,2983908	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	LLS	CEP	17	Y		0,893	2	0,54025	4,352758851	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	LTL	CEP	17	Y		0,893	2	0,26225	2,105713011	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	NK	CEP	17	Y		0,893	2	5,257705	42,16733305	Froese et al., 2018; B< BMSY

Loligo vulgaris	European squid	OTB	CEP	17	Y		0,89	2013	123,7574669	980,319993	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	OTM	CEP	17	Y		0,89	2013	0,075	0,623422043	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	PS	CEP	17	Y		0,89	2013	0,8175	6,561041135	Froese et al., 2018; B< BMSY
Loligo vulgaris	European squid	SB	CEP	17					7,315445	58,22405721	
Loligini dae, Omastrephidae	Various squids	TBB	CEP	17					0,0014	0,010799289	
Loligini dae, Omastrephidae	Various squids	DRB	CEP	17					0,0385	0,062745192	
Loligini dae, Omastrephidae	Various squids	FPO	CEP	17					0,003785	0,006106434	
Loligini dae, Omastrephidae	Various squids	GNS	CEP	17					0,162082475	0,255581177	
Loligini dae, Omastrephidae	Various squids	GTN	CEP	17					0,0437	0,071424862	
Loligini dae, Omastrephidae	Various squids	GTR	CEP	17					0,22105	0,3587681	
Loligini dae, Omastrephidae	Various squids	LHP	CEP	17					0,1078375	0,172085991	
Loligini dae, Omastrephidae	Various squids	LLS	CEP	17					0,0208	0,033540294	
Loligini dae, Omastrephidae	Various squids	LTL	CEP	17					0,002	0,003270192	

Loligini dae, Ommas trephid ae	Various squids nei	NK	CEP	17					0,0108	0,017061605	
Loligini dae, Ommas trephid ae	Various squids nei	OTB	CEP	17					174,2827526	276,9308863	
Loligini dae, Ommas trephid ae	Various squids nei	OTM	CEP	17					0,0722	0,114036721	
Loligini dae, Ommas trephid ae	Various squids nei	PS	CEP	17					0,8875125	1,382272938	
Lithogn athus mormyrus	Sand steenbras	SB	CEP	17					0,0325	0,052069366	
Lithogn athus mormyrus	Sand steenbras	DRB	FIF	17					0,0135	0,066601653	
Lithogn athus mormyrus	Sand steenbras	FPO	FIF	17					0,0223	0,114224294	
Lithogn athus mormyrus	Sand steenbras	FYK	FIF	17					0,001	0,004933455	
Lithogn athus mormyrus	Sand steenbras	GNS	FIF	17					0,96786	5,98704091	
Lithogn athus mormyrus	Sand steenbras	GTN	FIF	17					0,149525	0,80457142	
Lithogn athus mormyrus	Sand steenbras	GTR	FIF	17					0,221335	1,413687919	
Lithogn athus mormyrus	Sand steenbras	LHP	FIF	17					0,015	0,082708534	
Lithogn athus mormyrus	Sand steenbras	LLS	FIF	17					0,04556	0,285308813	
Lithogn athus mormyrus	Sand steenbras	LTL	FIF	17					0,004	0,031342754	



Lithognathus mormyrus	Sandsteenbras	NK	FIF	17					0,4299	2,79899925	
Lithognathus mormyrus	Sandsteenbras	OTB	FIF	17					0,028725	0,148969097	
Lithognathus mormyrus	Sandsteenbras	PS	FIF	17					0,08085	0,554139347	
Chamelea gallina	Striped venus	SB	FIF	17	Y		1,5	2014	0,6059	3,048386398	Froese et al., 2018; B< BMSY
Chamelea gallina	Striped venus	GNS	MOL	17	Y		1,5	2014	0,03	0,088519012	Froese et al., 2018; B< BMSY
Chamelea gallina	Striped venus	GTN	MOL	17	Y		1,5	2014	0,00125	0,003728846	Froese et al., 2018; B< BMSY
Chamelea gallina	Striped venus	GTR	MOL	17	Y		1,5	2014	0,00625	0,018287354	Froese et al., 2018; B< BMSY
Chamelea gallina	Striped venus	LLS	MOL	17	Y		1,5	2014	0,09605	0,281009186	Froese et al., 2018; B< BMSY
Chamelea gallina	Striped venus	NK	MOL	17	Y		1,5	2014	0,0117	0,033117617	Froese et al., 2018; B< BMSY
Diplodus sargus	White seabream	OTB	MOL	17					0,04895	0,143263936	
Diplodus sargus	White seabream	DRB	FIF	17					0,00175	0,02196946	
Diplodus sargus	White seabream	FPO	FIF	17					0,086525	1,117371242	
Diplodus sargus	White seabream	GNS	FIF	17					0,575375	7,279589692	
Diplodus sargus	White seabream	GTN	FIF	17					0,16433	2,053307764	
Diplodus sargus	White seabream	GTR	FIF	17					0,27795	3,543003702	
Diplodus sargus	White seabream	LHP	FIF	17					0,1088	1,377657946	
Diplodus sargus	White seabream	LLD	FIF	17					0,0003	0,003415558	

Diplodus sargus	White seabream	LLS	FIF	17					0,447735	5,832369961	
Diplodus sargus	White seabream	LTL	FIF	17					0,116825	1,414480795	
Diplodus sargus	White seabream	NK	FIF	17					0,976025	12,50567698	
Diplodus sargus	White seabream	OTB	FIF	17					0,0558	0,712677025	
Diplodus sargus	White seabream	PS	FIF	17					0,0023	0,032458422	
Xiphias gladius	Swordfish	SB	FIF	17	Y	All the Mediterranean	1,822	2013	0,04855	0,555614586	ICCAT, B < BMSY
Xiphias gladius	Swordfish	GNS	LPF	17	Y	All the Mediterranean	1,822	2013	0,057	0,444649513	ICCAT, B < BMSY
Xiphias gladius	Swordfish	GTR	LPF	17	Y	All the Mediterranean	1,822	2013	0,0009	0,006994214	ICCAT, B < BMSY
Xiphias gladius	Swordfish	LHP	LPF	17	Y	All the Mediterranean	1,822	2013	3,698743425	28,93071116	ICCAT, B < BMSY
Xiphias gladius	Swordfish	LLD	LPF	17	Y	All the Mediterranean	1,822	2013	12,59844273	98,12390509	ICCAT, B < BMSY
Xiphias gladius	Swordfish	LLS	LPF	17	Y	All the Mediterranean	1,822	2013	0,341625	2,667336203	ICCAT, B < BMSY
Xiphias gladius	Swordfish	LTL	LPF	17	Y	All the Mediterranean	1,822	2013	0,449875	3,517761478	ICCAT, B < BMSY
Xiphias gladius	Swordfish	NK	LPF	17	Y	All the Mediterranean	1,822	2013	0,0075	0,058285124	ICCAT, B < BMSY
Xiphias gladius	Swordfish	OTB	LPF	17	Y	All the Mediterranean	1,822	2013	0,08275	0,646599316	ICCAT, B < BMSY

Psetta maxima	Turbot	PS	LPF	17	Y		0,93	2013	0,23866346	1,857247826	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	DRB	DEF	17	Y		0,93	2013	0,889526065	11,20490845	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	FPO	DEF	17	Y		0,93	2013	0,011	0,139663414	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	FYK	DEF	17	Y		0,93	2013	0,005	0,062338616	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	GNS	DEF	17	Y		0,93	2013	3,72345575	46,87395269	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	GTN	DEF	17	Y		0,93	2013	0,29924	3,780349103	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	GTR	DEF	17	Y		0,93	2013	18,55343333	233,9683673	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	LHP	DEF	17	Y		0,93	2013	0,0129	0,16083363	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	LLS	DEF	17	Y		0,93	2013	2,045265	25,73569149	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	LTL	DEF	17	Y		0,93	2013	0,006	0,07480634	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	NK	DEF	17	Y		0,93	2013	0,03995	0,50199578	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	OTB	DEF	17	Y		0,93	2013	1,304159835	16,44382686	Froese et al., 2018; B> BMSY
Psetta maxima	Turbot	PS	DEF	17	Y		0,93	2013	0,10555	1,315968197	Froese et al., 2018; B> BMSY
Paracentrotus lividus	Stony sea urchin	SB	DEF	17					0,0085	0,106108198	
Echinoidea	Sea urchins, etc. nei	NK	MD D	17					0,087	0,00181343	

Echinoidea	Sea urchins, etc. nei	GNS	MD D	17				0,0015	0,00181343	
Echinoidea	Sea urchins, etc. nei	LHP	MD D	17				0,0068	0,015544936	
Uranoscopus	Stargazer	NK	MD D	17				10,5986	17,62053611	
Uranoscopus	Stargazer	DRB	DEF	17				0,0827	0,17800611	
Uranoscopus	Stargazer	FPO	DEF	17				0,017875	0,039496349	
Uranoscopus	Stargazer	GNS	DEF	17				1,323295	3,151679343	
Uranoscopus	Stargazer	GTN	DEF	17				0,0989	0,25130124	
Uranoscopus	Stargazer	GTR	DEF	17				0,86135	2,021983899	
Uranoscopus	Stargazer	LHP	DEF	17				0,0026	0,006291093	
Uranoscopus	Stargazer	LLS	DEF	17				0,0294	0,066783313	
Uranoscopus	Stargazer	LTL	DEF	17				0,0003	0,000613604	
Uranoscopus	Stargazer	NK	DEF	17				0,0136	0,034401984	
Uranoscopus	Stargazer	OTB	DEF	17				3,59522495	8,46953646	
Venus verrucosa	Warty venus	SB	DEF	17				0,007	0,018534597	
Venus verrucosa	Warty venus	DRB	MOL	17				0,917	7,852009789	
Venus verrucosa	Warty venus	FPO	MOL	17				0,1495	1,251849494	
Venus verrucosa	Warty venus	GNS	MOL	17				0,10925	0,932570043	
Venus verrucosa	Warty venus	GTN	MOL	17				0,114	0,9778264	
Venus verrucosa	Warty venus	GTR	MOL	17				0,1147	0,967917917	
Venus verrucosa	Warty venus	HMD	MOL	17				0,0115	0,096209495	

Venus verrucosa	Warty venus	LHP	MOL	17					0,272	2,390646121	
Venus verrucosa	Warty venus	LLS	MOL	17					0,0075	0,064547004	
Venus verrucosa	Warty venus	NK	MOL	17					122,743775	1055,120222	
Venus verrucosa	Warty venus	OTB	MOL	17					0,01805	0,153259179	
Scomber colias	Atlantic chub mackerel	PS	MOL	17					0,138	1,154513949	
Scomber colias	Atlantic chub mackerel	DRB	SPF	17					0,00025	0,000092542	
Scomber colias	Atlantic chub mackerel	FPO	SPF	17					0,04115	0,016178712	
Scomber colias	Atlantic chub mackerel	GNS	SPF	17					12,03169	5,296205739	
Scomber colias	Atlantic chub mackerel	GTN	SPF	17					0,396865	0,172458701	
Scomber colias	Atlantic chub mackerel	GTR	SPF	17					0,876875	0,371789005	
Scomber colias	Atlantic chub mackerel	LHP	SPF	17					0,327236445	0,13438706	
Scomber colias	Atlantic chub mackerel	LLS	SPF	17					0,100475	0,046952909	
Scomber colias	Atlantic chub mackerel	LTL	SPF	17					0,0015	0,000747069	
Scomber colias	Atlantic chub mackerel	NK	SPF	17					0,07505	0,028356585	
Scomber colias	Atlantic chub mackerel	OTB	SPF	17					18,62467994	8,491463257	
Scomber colias	Atlantic chub mackerel	OTM	SPF	17					0,2925	0,131611885	

Scomber colias	Atlantic chub mackerel	PS	SPF	17					1178,527695	469,5466241	
Chlamys varia	Variolated scallop	SB	SPF	17					4,507465	2,011151312	
Chlamys varia	Variolated scallop	DRB	MOL	17					2,61495	7,146020163	
Chlamys varia	Variolated scallop	GNS	MOL	17					0,0035	0,008122336	
Chlamys varia	Variolated scallop	NK	MOL	17					0,23675	0,649200313	
Trachinus spp	Weeversnei	OTB	MOL	17					8,26045	22,63946287	
Trachinus spp	Weeversnei	DRB	DEF	17					1,0482848	1,753993683	
Trachinus spp	Weeversnei	FPO	DEF	17					0,06045	0,101842147	
Trachinus spp	Weeversnei	FYK	DEF	17					0,0105	0,018093884	
Trachinus spp	Weeversnei	GNS	DEF	17					1,264985	2,144743202	
Trachinus spp	Weeversnei	GTN	DEF	17					0,098875	0,166756794	
Trachinus spp	Weeversnei	GTR	DEF	17					2,23513	3,781423702	
Trachinus spp	Weeversnei	LHP	DEF	17					0,1276	0,217899025	
Trachinus spp	Weeversnei	LLS	DEF	17					0,95641	1,616535563	
Trachinus spp	Weeversnei	LTL	DEF	17					0,0033	0,005577767	
Trachinus spp	Weeversnei	NK	DEF	17					0,14485	0,241732742	
Trachinus spp	Weeversnei	OTB	DEF	17					35,65787961	60,3066503	
Trachinus spp	Weeversnei	OTM	DEF	17					0,0069	0,011579181	
Trachinus spp	Weeversnei	PS	DEF	17					0,002	0,00332202	
Micromesistius poutassou	Blue whiting(=Poutassou)	SB	DEF	17	Y		0,503	2	0,387725	0,653982155	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	DRB	DEF	17	Y		0,503	2	0,02785	0,033626609	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	FPO	DEF	17	Y		0,503	2	0,073	0,089908679	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	GNS	DEF	17	Y		0,503	2	0,59908	0,698329858	Froese et al., 2018; B< BMSY

Micromesistius poutassou	Blue whiting(=Poutassou)	GTN	DEF	17	Y		0,55	2013	0,0085	0,010278599	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	GTR	DEF	17	Y		0,55	2013	0,03375	0,040727821	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	LHP	DEF	17	Y		0,55	2013	0,0194	0,023148119	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	LLS	DEF	17	Y		0,55	2013	0,554175	0,64144913	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	NK	DEF	17	Y		0,55	2013	0,01165	0,014549636	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	OTB	DEF	17	Y		0,55	2013	31,98207984	38,69257747	Froese et al., 2018; B< BMSY
Micromesistius poutassou	Blue whiting(=Poutassou)	PS	DEF	17	Y		0,55	2013	0,02505	0,029960663	Froese et al., 2018; B< BMSY
Merlangius merlangus	Whiting	SB	DEF	17					0,0315	0,037918518	
Merlangius merlangus	Whiting	DRB	DEF	17					0,1356	0,180665764	
Merlangius merlangus	Whiting	FPO	DEF	17					0,602325	0,817471441	
Merlangius merlangus	Whiting	GNS	DEF	17					2,259420735	3,096293015	
Merlangius merlangus	Whiting	GTN	DEF	17					0,028075	0,037721077	
Merlangius merlangus	Whiting	GTR	DEF	17					0,19918106	0,27003639	
Merlangius merlangus	Whiting	LHP	DEF	17					0,0989	0,138779933	
Merlangius merlangus	Whiting	LLS	DEF	17					2,465425	3,296748538	

Merlangius merlangus	Whiting	LTL	DEF	17					0,0075	0,01054353	
Merlangius merlangus	Whiting	NK	DEF	17					0,01845	0,024985709	
Merlangius merlangus	Whiting	OTB	DEF	17					95,95335513	131,5559902	
Merlangius merlangus	Whiting	OTM	DEF	17					0,032	0,045157437	
Merlangius merlangus	Whiting	PS	DEF	17					1,13	1,508781014	
Polychaeta	Marine worms	SB	DEF	17					0,005097015	0,006903235	
Polychaeta	Marine worms	DRB	MD D	17					0,0008	0,006402611	
Polychaeta	Marine worms	GNS	MD D	17					0,00125	0,010004079	
Polychaeta	Marine worms	GTR	MD D	17					0,0095	0,076627864	
Polychaeta	Marine worms	LHP	MD D	17					0,005	0,040442649	
Polychaeta	Marine worms	LLS	MD D	17					0,0005	0,004001632	
Polychaeta	Marine worms	LTL	MD D	17					0,005	0,04044265	
Polychaeta	Marine worms	NK	MD D	17					1,70545	13,68579143	
Labrus merula	Brown wrasse	OTB	MD D	17					0,014	0,112045685	
Labrus merula	Brown wrasse	FPO	DEF	17					0,00475	0,019808838	
Labrus merula	Brown wrasse	GNS	DEF	17					0,01711	0,080837559	
Labrus merula	Brown wrasse	GTN	DEF	17					0,00295	0,016120681	
Labrus merula	Brown wrasse	GTR	DEF	17					0,149815	0,651316589	
Labrus merula	Brown wrasse	LHP	DEF	17					0,00125	0,007231534	
Labrus merula	Brown wrasse	LLS	DEF	17					0,00285	0,016487896	
Labrus merula	Brown wrasse	LTL	DEF	17					0,00175	0,010124147	
Sphyraena sphyraena	European barracuda	NK	DEF	17					0,00375	0,01959296	
Sphyraena sphyraena	European barracuda	GNS	LPF	17					0,604915	2,328138736	



Sphyraena sphyraena	European barracuda	GTN	LPF	17					0,03725	0,144150558	
Sphyraena sphyraena	European barracuda	GTR	LPF	17					0,307025	1,173309464	
Sphyraena sphyraena	European barracuda	LHP	LPF	17					0,00915	0,034827964	
Sphyraena sphyraena	European barracuda	LLS	LPF	17					0,0055	0,020753954	
Sphyraena sphyraena	European barracuda	NK	LPF	17					0,0881	0,340243347	
Sphyraena sphyraena	European barracuda	OTB	LPF	17					0,0753	0,290739506	
Sphyraena sphyraena	European barracuda	PS	LPF	17					1,04575	4,031990312	
Sphyraena sphyraena	European barracuda	SB	LPF	17					0,161375	0,620178253	