## Non-managed species in EU fisheries

## Responsibility to Manage Species

Marine commercial species are a natural renewable resource but they are not always managed in the most responsible way ${ }^{1}$, despite fisheries resources providing an important part of the food supply ${ }^{2}$ and supporting many people's livelihoods across the EU ${ }^{3}$. Inadequate or inexistent management of exploited fishery resources constitutes a real threat not only to fish stocks but also to the future of fishing activity and to the communities dependent on these resources.

The responsibility and need to properly manage fish resources has been highlighted in several international conventions and guidelines. Thus the United Nations Convention on the Law of the Sea (1982), to which the European Union is a party, sets out the obligations of states with regard to the proper conservation and management measures for every fish stock affected by exploitation, while the Code of Conduct for Responsible Fisheries (1995) seeks to implement a more effective framework for the management and conservation of marine living resources as a whole. In addition, the Common Fisheries Policy (CFP) was adopted to ensure that the exploitation of fisheries resources by Community vessels is carried out at sustainable levels by establishing a system of management, control and enforcement measures.


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## Management Measures for Fish Species

Common fish resources need to be managed responsibly by both policymakers and fishermen, with an appropriate control system needed to guarantee that the stock is not overexploited and that fishing activity does not cease to be economically viable in the medium to long term. To avoid this undesirable situation, management measures exist that limit the type and quantity of fish removed from the sea. According to the FAO guidebook ${ }^{5}$, these include:

- Input controls, also known as fishing effort management. These impose restrictions on the fleet capacity (based mainly on gross tonnage and engine power) per days at sea. Other surrogates used relate to a given combination of inputs into the fishing activity: for example, the number of hooks or kilometres of nets that may be deployed by a fishing vessel during a period of time spent active at sea.
- Output controls, also known as catch limits. These are quantitative limits on the amount of fish that can be taken from a stock in a period of time. Usually, catch limit is expressed in tonnes of live-weight equivalent for a year or a fishing season (Total Allowable Catches), but it is also occasionally set in terms of the number of fish that may be landed in a day (bag limits).

According to these management measures, species have been classified in this report as:

## Managed species

input and output controls are implemented in more than $75 \%$ of catches ${ }^{6}$

## Partially managed species

input and output controls are implemented in less than $75 \%$ of catches ${ }^{6}$

## Non-managed species

input or/and output controls are not implemented

It should be highlighted that although both type of measures aim to balance fishing pressure with real fishing possibilities, they are not enough by themselves to guarantee the proper management of the species and secure the social, economic and environmental objectives that should be attained for guaranteeing a sustainable level of fishing activity. Additional measures are needed, such as science-based technical measures intended to increase the intraspecific and interspecific selectivity, and an efficient system of control,
"The exploitation of a fish stock without management measures cannot guarantee its sustainability" monitoring and surveillance to ensure that rules are fully enforced.

However, even if a species is considered to be managed according to these criteria, it does not necessarily follow that it is exploited in a responsible way, as the fishing activity may be associated with high by-catch and discard rates or additional direct impact in the ecosystem. Moreover, effort and catch limits are very often set without regard for scientific advice or in the absence of sound information due to

[^1]a lack of reporting ${ }^{7}$. A lack of effective control measures can lead to quota overshooting, illegal fishing or false declarations of vessel capacity (such as engine power).

In the case of non-managed species, the worst possible case scenario is possible. In this scenario, stock status, species biology, and characteristics of the fishery remain poorly reported or unknown, but managers allow exploitation to continue in disregard of basic precautionary measures, putting the survival of marine species and the equilibrium of the whole ecosystem at risk.

## Species Management by Taxonomic Groups

The European Union (EU-27) overall catch declaration includes more than 830 different marine species ${ }^{8}$. The catch composition is strongly dominated by marine fish with 601 species ( $72,1 \%$ ), of which 494 Osteichthyes and 107 Chondrichthyes, followed by molluscs ( 88 species, 10.6\%) and crustaceans ( 84 species, $10.1 \%$ ). Species of other taxonomic groups are also declared, but these are far fewer in number and represent a tiny percentage of the total number of caught species. These include mammals, seaweed, echinoderms, cnidarians, tunicates, agnates and annelids.


Figure 1. Catch rates of major taxonomic groups.
Of the total number of declared species, only around 146 species (18\%) are managed, including those that are partially managed, and these accounts for $69 \%$ of total catches. We can therefore observe a preference towards managing only those species that form a large proportion of catches. In terms of volume of managed catches, only fish ( $78 \%$ ) and crustaceans ( $44 \%$ ) show a high ratio of managed catches among the main taxonomic groups. However, even for these groups the ratio of managed species is low, just $18 \%$ for fish and $13 \%$ for crustaceans. As far as the other taxonomic groups mentioned above are concerned, it is fair to say that a very low proportion, if any, of their species and catches are managed.

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Figure 2. Percentage of managed and non-managed species and catches of major taxonomic groups

## Species Management by Areas

The EU fleet accounts for the majority of the volume of catches and the capture of species within EU waters. However EU fishing activity is also carried out around the world in the Economic Exclusive Zones of third countries and in international waters, in most cases under Fisheries Partnership Agreements and private agreements with third countries and under the rules of Regional Fisheries Management Organisations ${ }^{9}$.

By area, the highest declared number of exploited species is found in the Northeast Atlantic Ocean (FAO $27)^{10}$ with 426 species, followed by the Mediterranean Sea (FAO 37) with 256 species and the Eastern central Atlantic Ocean (FAO 34) with 213 species. In other areas the number of declared species is lower than 50, even though in some of these cases, such as the Southeast Pacific (FAO 87), total catches are significant.

In terms of the percentage of managed species, the northwest Atlantic Ocean (FAO 21) and the western central Atlantic (FAO 31) are the areas in which the highest proportion of species is managed, with $64 \%$ and $52 \%$ respectively, although it should be noted that the number of different species captured in this area is very low. In other areas the proportion of managed species is lower than $30 \%$ and, in a number of cases - the eastern central Atlantic (FAO 34), Mediterranean and Black Sea (FAO 37), southwest Atlantic Ocean (FAO 41), southwest Pacific (FAO 81) and Antarctic Pacific (FAO 88) - this value is lower than $15 \%$. In most instances, except for in certain areas like 41-southwest Atlantic, 47-southeast Atlantic and 51 -western Indian, the proportion of managed species is lower than the managed volume of catches.

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Figure 3. Number of exploited species declared by EU fleet in FAO areas
For international waters and EEZs of third countries, effort and catch limits agreed in fisheries partnerships agreements are based on commercial relationships rather than science. RFMOs only define sound measures (like TACs) for the most valuable disputed species, such as several types of tuna and tuna-like species, or in the best cases set restrictions in the fleet capacity and establish a general TAC for a wide group of species.

In the main areas encompassing EU waters, there is a clear difference in management between the northeast Atlantic (FAO 27) and the Mediterranean and Black Sea (FAO 37). Although the rate of managed species is low in both areas, with just $21 \%$ and $2 \%$ respectively, the proportion of managed catches is very different, with $79 \%$ for the first and $2 \%$ for the second. This is due to the lack of management measures for most Mediterranean and Black Sea fisheries, in particular with regard to output controls.


Figure 4. Percentage of species $(\mathrm{Sp})$ and catches $(\mathrm{Tn})$ managed in main FAO areas by European fleet.

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## Species Management by EU Country

The number of species declared by Member States is very heterogeneous ${ }^{11}$ : while Portugal (PT) captures around 349 different species, France (FR) 280, Spain 229 (SP) and United Kingdom (UK) 185, most countries declare the capture of less than 100 species.

There is more management of captured species among fleets from northern EU countries than among those harboured in southern member states. Among EU coastal member states, Sweden (SE), Denmark (DK), and Germany (DE) show the highest ratio of managed species, including partially managed, with $52 \%, 51 \%$, and $50 \%$ respectively. For other Member States, including those that capture a higher number of species, the ratio of managed species is less than $50 \%$, this figure being lower than $5 \%$ in the case of Greece (EL), Italy (IT), Malta (MT), Cyprus (CY) and Bulgaria (BG).


Figure 5. Number of total species declared by EU coastal Member States.

Overexploitation occurs in $62 \%$ of the EU fish stocks of the North East Atlantic and reaches $82 \%$ in the Mediterranean Sea ${ }^{12}$. It therefore appears that the degree of management for both areas correlates with the stock status, as those countries which focus their activity on a few species of the Northeast Atlantic have a higher proportion of managed species and catches. Meanwhile, those countries that focus their activity in the Mediterranean and Black Sea ${ }^{13}$ (such as Cyprus (CY), Greece (EL), Italy (IT), Malta (MT), Romania (RO) and Slovenia (SI)) or in non-European waters - where management measures are less stringent - show a lower proportion of managed species and catches.


Figure 6. Percentage of managed and non-managed species (Sp) and catches (Tn) by coastal Member States

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## Conclusion

Managing fish stocks and ensuring they are maintained within sustainable levels is a binding obligation under EU Regulations and International agreements. And yet, despite this clear mandate, 686 species ( $82 \%$ of total) are still exploited and commercialised by the EU fleet without sound management measures, and for most of them the stock status is unknown. In terms of volume, they represent a significant proportion ( $31 \%$ ) of the EU fleet total captured volume and $36 \%$ of the total economic value of captures landed in EU ports.


Figure 7. Percentage of managed species, catches and value by EU fleet.

## What Oceana Wants

In order to attain overarching objectives for a sustainable and viable long term exploitation of fishing resources, a science-based management of all commercially exploited species should be considered the highest priority for decision makers.

- Oceana demands an increase the number of managed species through the progressive establishment of technical measures, effort restrictions and catch limits, based on a science and ecosystem approach. Criteria for selecting the managed species should not be restricted to the number of catches, but should take into account the value of species and their sensitivity to overexploitation.
- The current EU proposal for a new Common Fisheries Policy should include provisions guaranteeing that all commercial fish stocks are covered by management measures, particularly under multi-annual plans and/or TACs and quota systems.
- A major effort should be made in EU waters to increase the number of species managed through scientific based output controls, especially in the Mediterranean Region. For shared stocks, the EU must take the lead in ensuring the adoption of similar measures within the relevant RFMOs.
- The EU must ensure that the European fleet conducts its activities under the same management conditions both inside and outside EU waters.
- A lack of scientific information should not mean a lack of management. The precautionary principle should be applied in all cases where full data is not available, through the setting of precautionary catch limits and other management measures.

Examples of non-managed or partially managed species for which an improvement of management measures should be implemented:

## Relevant species biology

Red porgy
Groupers
Shads
Squids
Stony sea-urchin
Sea-cucumbers

## Relevant species in catches

Pilchard
Anchovy
Skipjack tuna
Round sardinella
Yellowfin tuna
Great Atlantic scallop

## Relevant species in value

Deepwater rose shrimp
Red mullet
Spottail mantis squillid
Horned \& musky octopuses
Hakes.
Common spiny lobster

## Data Source

Fishery species catches and value data contained in this report have been obtained from Eurostat's programme of fishery statistics ${ }^{14}$, and refer to 2009. The data presented do not include aquaculture production. Catch statistics are submitted to Eurostat by EU Member States in compliance of different regulations; however, it should be noted that reporting data is known to be incomplete and the data also excludes certain quantities of fishery products which are caught but not landed (e.g. fish caught but rejected at sea like non-commercial species, under-sized fish, etc). Likewise, the value of fishery products refers to values of fishery products landed in EU ports regardless of the nationality of the vessel making the landings. On the other hand, landings by vessels of the reporting country in foreign ports are excluded.


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[^0]:    1 According to SOFIA (Sate of world fisheries and aquaculture, FAO, Rome 2010 ) $85 \%$ of world fisheries are fully exploited, overexploited or depleted, and only $10 \%$ of global exploited fish stocks are assessed.
    2 Average consumption of fish in EU is $21.8 \mathrm{Kg} /$ person/year in 2007, figure calculated by Oceana from FAOSTAT.
    3141110 employments in the EU fisheries sector and 126307 in the EU processing sector according to the 2009 Annual Economic Report on the European Fishing Fleet and the 2009 Report on the evaluation of data collection related to the fish processing sector. Office for Official Publications of the European Communities.
    4 Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy.

[^1]:    ${ }^{5}$ Cochrane K.L. 2002. A fishery manager's guidebook. Management measures and their application. FAO Fisheries Technical Paper, $\mathrm{N}^{\circ} 424$. Roma, FAO, 231p.
    6 Catch limits agreed in fisheries partnerships agreements (FPA) have not been considered as an output control measure as they are a commercial agreements not based on science.

[^2]:    7 The European Commission recognizes in the COM No 298 (2011) that for the North East Atlantic in $20102 / 3$ of the TACs were assigned without knowledge of the stock's status, and that $33 \%$ of scientific advice was not followed.
    ${ }^{8}$ Figure calculated from Eurostat's databases available at http://ec.europa.eu/eurostat. Accessed January 2012

[^3]:    9 COM 424 final (2011). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on external Dimension of the Common Fisheries Policy. 16pp. 10 This area is also the most important fishing ground for the EU fleet with around $70 \%$ of EU catches.

[^4]:    11 By number of catches, the figures are dominated by Denmark ( 777.747 tonnes), Spain ( 762.810 tonnes), France (434.623) and UK ( 586.645 tonnes). These countries in turn accounted for $15 \%, 15 \%, 9 \%$ and $12 \%$ of total EU catches respectively. 12 COM 298 final (2011). Communication from the Commission concerning a consultation on Fishing Opportunities.

[^5]:    ${ }^{14}$ Eurostat's databases are available through the Eurostat internet site: http://ec.europa.eu/eurostat

