MEDITERRANEAN SHARK COMPASS

An overview of recent policy changes and the way forward

DECEMBER 2025 UPDATE

ACKNOWLEDGEMENTS

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Sandbar shark, *Carcharhinus plumbeus*, in the Strait of Sicily © Rocco Canella/WWF Mediterranean

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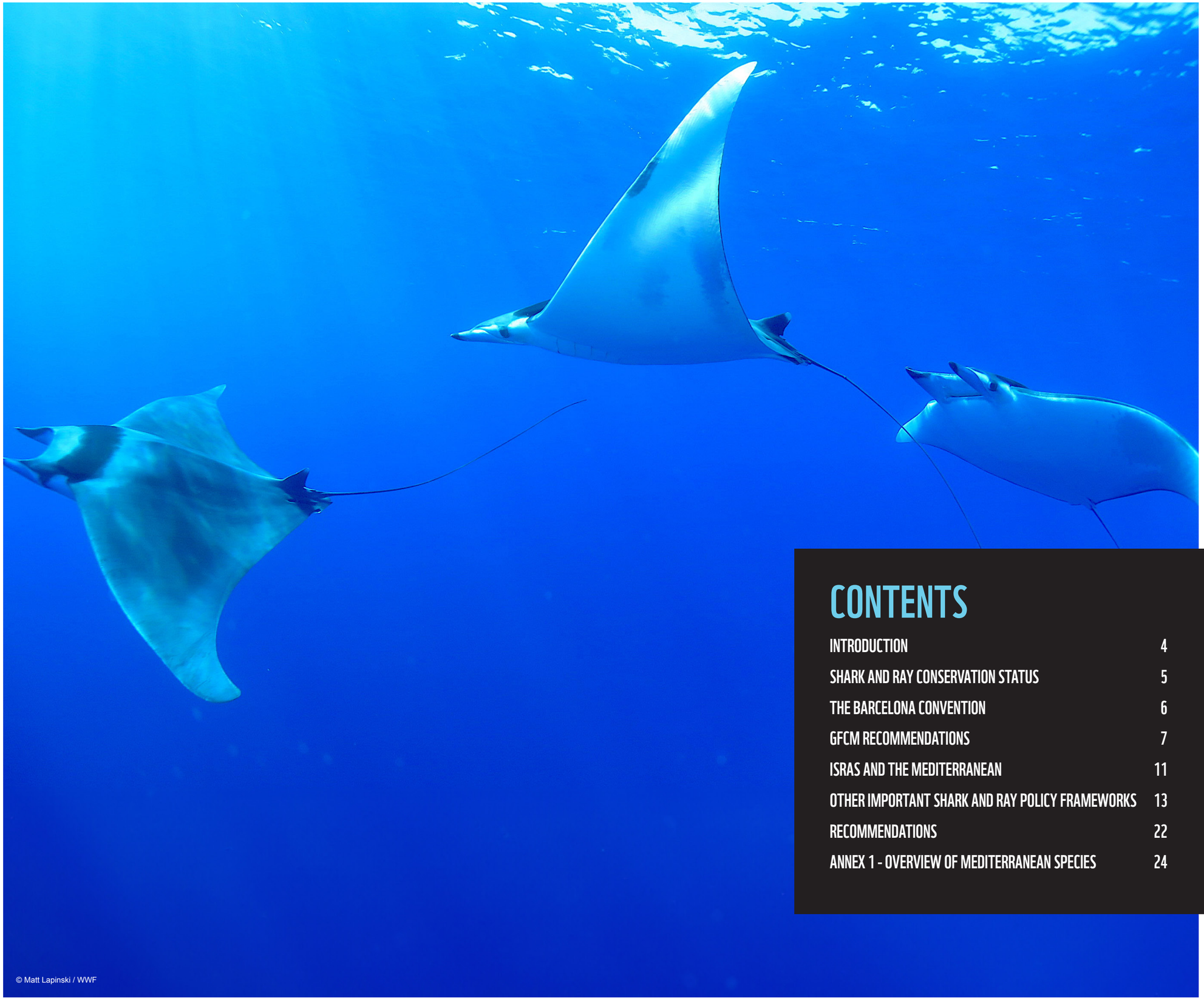

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INTRODUCTION

Shark[1] policy is complex. While some species groups clearly need to be protected, like dolphins and whales, and others are clearly suited to commercial exploitation, like pelagic bony fishes, sharks have spanned both categories – they have been targeted as a source of food and other products for centuries. Yet, in recent decades, their conservation status has become a cause for serious concern amid dramatic population declines and our growing understanding of the varied and vital roles they play in the ocean ecosystem.

This duality means that dealing with shark populations is difficult – not just for government decision-makers or fisheries managers, who must create and maintain a workable regulatory framework that protects livelihoods and vulnerable species alike, but also for fishers who must ensure they're complying with current regulations and not fishing illegally.

Mandates and accountability for shark management and conservation often remain split between fisheries and environmental authorities, and a lack of collaboration and joined-up thinking between the two sides presents both a theoretical and practical barrier to meaningful implementation and workable enforcement.

This document aims to shed some light on current laws and policies regarding shark and ray species in the Mediterranean[2]. It surveys key provisions in force today, and explains what they mean in practice for fishers, managers, national administrations, and other stakeholders. It also makes a series of recommendations on further actions that are needed to secure viable shark and ray populations across the region.

The Mediterranean is home to a higher percentage of threatened shark and ray species (58%) than anywhere else in the world. Will this still be the case in years to come? Mediterranean countries say they want to protect and restore populations of these iconic species, but what really matters is the extent to which this is reflected in real actions.

In fact, all shark species would profit from the implementation of existing policies and legislation. There are currently 28 species that still lack any kind of management measures or are not covered in any international policy annexes; of these, 10 species are threatened (7 Vulnerable, 3 Endangered), and urgently need protection.


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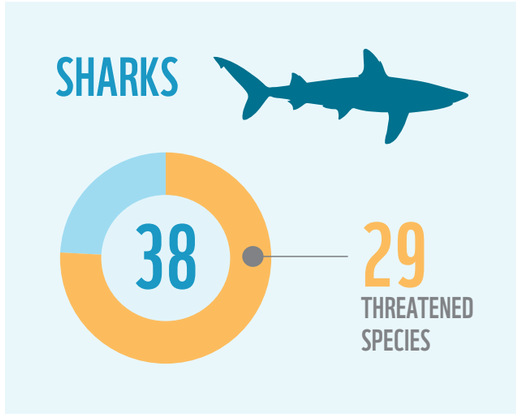
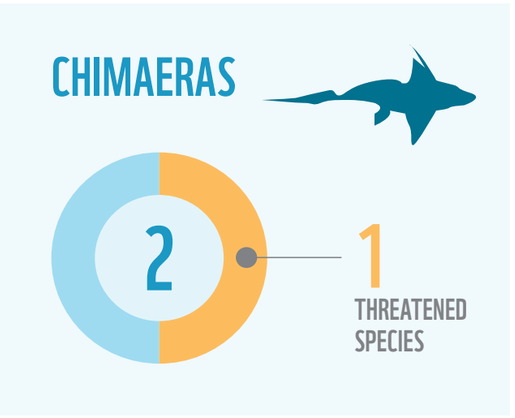
At this decisive moment, we call on fisheries managers, decision-makers, and recreational and professional fishers alike to ensure that current legislation is implemented and adhered to. This will require adequate capacity for scientific monitoring and research, enforcement, training of control authorities and fishers in species identification and current regulations, training in handling and releasing bycatch, appropriate information to the public, and cutting-edge science to inform new advice. In addition, policy gaps remain, with species at the brink of extinction lacking any regional protection or management. The Mediterranean has already experienced regional and local extinctions, and urgent action is needed to prevent any more from occurring.

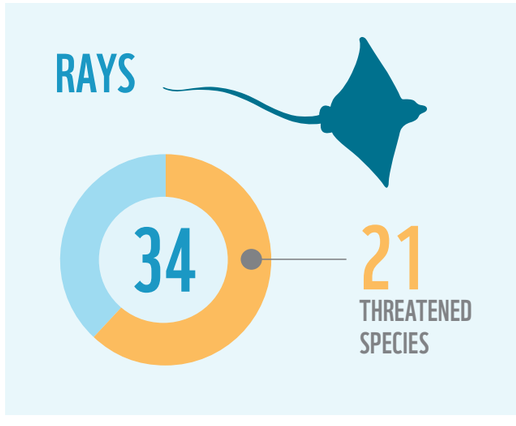
There's much work still to do before we secure a future for our sharks and rays – and, by extension, a healthy and thriving Mediterranean Sea.

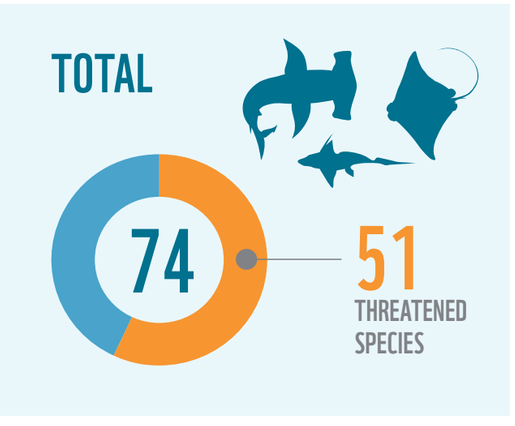
SHARK AND RAY CONSERVATION STATUS IN THE MEDITERRANEAN

In recent decades, the conservation status of sharks and rays has deteriorated sharply. Of the 74 species of chondrichthyans (sharks, rays, and chimaeras) reported in the Mediterranean, 51 (69%) are threatened[3], a situation much worse than the already dramatic 37% globally[4], and a deterioration since the last update (2021) and the previous one (2016, 53%). In this context, 'threatened' means listed as Critically Endangered, Endangered, or Vulnerable on the IUCN Red List.









THE BARCELONA CONVENTION

Regional marine biodiversity is protected through the 'Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean Sea' and its protocols, more commonly known as the Barcelona Convention. The Convention is a legally binding instrument that requires the 21 riparian countries to cooperate to protect and enhance the Mediterranean marine environment and coastal area, and to contribute to sustainable development.

As well as including a specific Regional Plan of Action for Chondrichtyans (see the section on action plans below), the Barcelona Convention Protocol concerning Specially Protected Areas and Biological Diversity maintains two important Annexes:

- **ANNEX II:** Endangered or threatened species that the Parties shall manage with the aim of maintaining them in a favourable state of conservation. They shall ensure their maximum possible protection and recovery.
- **ANNEX III:** List of species whose exploitation is regulated.

When these were launched in 1996, there were 3 shark species listed in Annex II and 5 in Annex III – but as their populations have continued to decline, the number of species included in the Annexes has risen.

In December 2023, the Contracting Parties of the Barcelona Convention amended Annexes II and III of the SPA/BD Protocol to strengthen shark and ray protection, adding effectively 9 new species (6 species on Annex II and 3 on Annex III), taking the total number of species included from 33 to 42[5]. A further list of species has been submitted to the Barcelona Convention Focal Point and will be considered by the COP24 in December 2025.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GFCM RECOMMENDATIONS

The General Fisheries Commission for the Mediterranean (GFCM) is an agency of the Food and Agriculture Organization of the United Nations (FAO). As the Regional Fisheries Management Organization (RFMO) for the Mediterranean, the GFCM has a mandate "to ensure the conservation and sustainable use, at the biological, social, economic and environmental level, of marine living resources"[6].

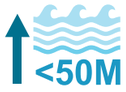
It does this by adopting binding recommendations and other resolutions on behalf of its members, who are then responsible for transposing the decisions into their own national legislations, and monitoring and enforcing their implementation.

While Mediterranean countries are generally parties to other relevant agreements such as the Barcelona Convention, CITES, and the Convention on Migratory Species (see below), regional fisheries are managed in practice within the GFCM framework.

RECOMMENDATION GFCM/36/2012/3 ON FISHERIES MANAGEMENT MEASURES FOR CONSERVATION OF SHARKS AND RAYS

The GFCM adopted its first general recommendation on sharks and rays in 2012 (**GFCM/36/2012/3**), amended in 2018 (**GFCM/42/2018/2**). Key provisions include the following:

- **Finning:** Bans all onboard finning of species that can be caught (all sharks must be landed with their fins attached to their bodies), and the retention, trans-shipment, or landing of fins. Beheading and skinning on board are also banned, as well as before the first sale.



- **Area-based fisheries:** Bans trawling within 3 nautical miles of the coast or in depths of less than 50m. Allowance is made for a limited number of 'specific and spatially limited' exemptions, usually for vessels <12m, and these need to be carefully monitored and reported on, with efforts to mitigate impacts on the marine environment

- **Threatened species:** Obliges members to ensure high protection from fishing activities and bans landing, sale, or trans-shipment for any species listed in Annex II of the SPA/BD Protocol of the Barcelona Convention; and obliges them to record and report data in vessel logbooks of any on catches of species in Annexes II and III.

Since then, the GFCM has adopted a significant set of additional measures that expand the scope of this first recommendation. These are summarized below, starting with the most wide-ranging.

RECOMMENDATION GFCM/44/2021/16 ON ADDITIONAL CONSERVATION AND MITIGATION MEASURES FOR THE CONSERVATION OF ELASMOBRANCHS IN THE MEDITERRANEAN SEA

The most recent general recommendation followed the GFCM Scientific Advisory Committee on Fisheries' recommendation to improve elasmobranch conservation. The recommendation quotes the MedFish4Ever Ministerial Declaration of 2017, which highlights the need to "ensure adequate protection of vulnerable species". Also, it references the GFCM 2030 Strategy, which includes a specific target to minimize and mitigate unwanted interactions between fisheries and marine ecosystems. It recognizes that fisheries remain "the most serious current anthropogenic threat" to elasmobranch species, and calls on all members "to encourage further actions" to improve their conservation status – including the following:

Management measures

- Train and incentivize skippers to reduce shark bycatch mortality (e.g., reward low-impact practices, certify 'shark-friendly' products)
- Research gear, equipment, and techniques to reduce bycatch mortality and increase post-release survival.

Data collection, monitoring and research

- Improve data collection and monitoring information on sharks and rays
- Identify critical habitats
- Research the impact of different fishing gears (e.g., wire leaders on longlines), and consider changing national legislation depending on the results
- Carry out pilot projects on listed species to collect additional data and ensure compliance
- Carry out at least five species-specific actions to improve the conservation status

Species-specific actions

Smooth-hound shark *(Mustelus asterias, M. mustelus, M. punctulatus)*	**Common thresher** *(Alopias vulpinus)*	**Sandbar shark** *(Carcharhinus plumbeus)*	**Gulper shark** *(Centrophorus granulosus)*	**Sharpnose sevengill shark** *(Heptranchias perlo)*	**Piked dogfish** *(Squalus acanthias)*	**Blue shark** *(Prionace glauca)*

For all of the species above, members should:

- Assess bycatch and targeted catch rates in all fisheries
- Assess the bycatch survival rate
- Identify critical habitats
- Identify fishing tech solutions to reduce bycatch and increase post-release survival
- Compile any fisheries measures in place (including spatial) that can positively affect the species' conservation
- Assess priority market demand (domestic, export, etc.), if any

Scientific Advisory Committee

The recommendation also sets a series of tasks for the SAC:

- Advise on good practices to increase post-release survival
- Advise on new conservation measures for listed species, such as:
  - Maximum catch percentage or number per species per trip
  - Species-specific minimum and maximum landing sizes
  - Restriction of elasmobranch recreational fisheries
- Run socioeconomic studies to increase knowledge on elasmobranch depredation
- Provide elements for an overall conservation and management framework for listed species, including objectives, targets, and timescales, and best estimates of population sizes
- Advise on area- and threat-based conservation efforts

THE DATA COLLECTION REFERENCE FRAMEWORK

The GFCM DCRF[7] is the framework for Contracting Parties to submit fisheries-related data and information on their national fisheries sectors. It provides the basis for the scientific advice formulated by GFCM subsidiary bodies.

It can be an effective tool for shark and ray conservation too: you cannot manage what you do not measure, so GFCM recommendations have mandated members to use the DCRF to submit increasingly detailed information on managed species (those listed in Annexes II and III of the Barcelona Convention, as well as an additional 37 species). When these species are caught, even as bycatch, members must record and transmit a comprehensive set of data that covers inter alia:

- The GFCM subarea where the fish was caught (the Mediterranean is divided into 28 subareas)
- The source of data (biological sampling on board, or at landing place, or market, or scientific survey)
- The fleet segment and the fishing gear
- The name of the species, the total number of individuals caught, and their weight
- The number of individuals released alive
- The number of dead individuals

If this information were consistently forthcoming across the region, we would learn a lot more about sharks and rays and how to reduce their interactions with fisheries – but the GFCM acknowledges that its members need to increase their efforts. In a technical paper from 2019 on the methodology to monitor the incidental catch of vulnerable species, it states: *"There are still large gaps in knowledge of the actual extent of bycatch in the Mediterranean and the Black Sea. Control and surveillance at landing sites are ineffective in recording bycatch, because animals are generally either released alive (with unknown post-release survival) or discarded dead by fishers at sea despite regulations in place, and programmes for monitoring incidental catch using on-board observers with statistically robust sampling designs are not regularly implemented for all fisheries in these areas."* [8] The methodology needs to be applied as per recommendation GFCM/44/2021/16, to collect data on shark bycatch.

Measures adopted by the GFCM on shark and ray bycatch data must be appropriately transposed, implemented, and enforced by all members at the national level – this must be done within 4 months of the GFCM Commission's adoption of the recommendation, although in practice this does not always occur.

RECOMMENDATION GFCM/45/2022/12 ON THE ESTABLISHMENT OF A SET OF MINIMUM RULES FOR SUSTAINABLE RECREATIONAL FISHERIES IN THE MEDITERRANEAN SEA

Recreational fishing undoubtedly has a significant effect on many species, including sharks and rays; therefore, the GFCM has recently begun serious efforts to quantify its impact and manage it sustainably.

GFCM/45/2022/12 introduces various controls, including a prohibition on retaining many species of sharks and rays during recreational fishing activities. These include species listed in Appendices I and II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), species listed in Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), and species listed in Annex II of the SPA/BD Protocol of the Barcelona Convention. It therefore covers 46 species in the Mediterranean. GFCM members had until March 2024 to submit an implementation plan outlining how they will meet their obligations under this recommendation.

RECOMMENDATION GFCM/46/2023/22 ON A GFCM SCHEDULE ADDRESSING COMPLIANCE ISSUES AND CORRESPONDING ACTIONS, REPEALING RESOLUTIONS GFCM/44/2021/13 AND GFCM/43/2019/5

In 2023, the GFCM adopted a new compliance framework, establishing a formal schedule and set of actions to assess the adherence of Contracting Parties to conservation and management measures. This mechanism introduces a tiered evaluation of compliance, including reporting obligations, enforcement of spatial closures, and implementation of gear restrictions. It allows the Compliance Committee to categorize Parties by level of compliance and request corrective action plans. Although its application to elasmobranchs remains limited, it provides, in principle, a pathway to monitor implementation of GFCM shark-related measures, particularly the white shark (*Carcharodon carcharias*) protection measures (Recommendation **GFCM/36/2012/3**), which requires CPCs to prohibit capture and trade, and to report incidental catches.

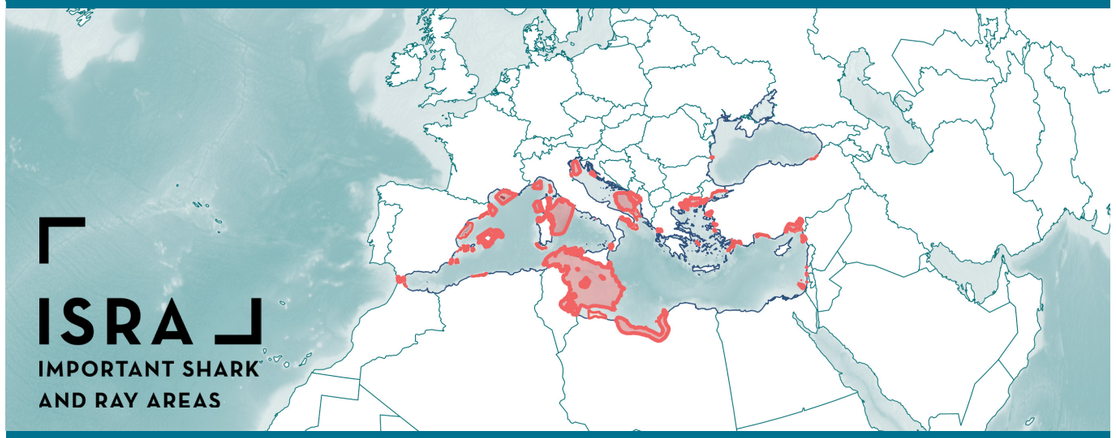
RESOLUTION GFCM/41/2017/5 ON A NETWORK OF ESSENTIAL FISH HABITATS

The GFCM's resolutions do not have the same binding authority as its recommendations, but members are nonetheless expected to take proactive steps to support their implementation. Resolution **GFCM/41/2017/5** targets increased knowledge of the regional distribution of essential fish habitats which it defines as "habitats identified as essential to the ecological and biological requirements for critical life history stages of exploited [Ed. commercial] fish species," and sensitive habitats, which it defines as "fragile habitats that are recognized internationally as ecologically important, which support important assemblages of commercial and non-commercial fish species [Ed. which includes shark species] and which may require special protection". The resolution aims to map out a network of such habitats, and could ultimately support the creation of Fisheries Restricted Areas to protect them.

Historically, there has been a notable lack of information on sharks' critical habitats in the Mediterranean, and hence, little basis for protecting them. New data from across the region will enable the Scientific Advisory Committee to identify areas where spatial protection interventions will be most beneficial to shark species.

Work under this resolution is ongoing, and it could receive a significant boost from IUCN's work on ISRAs (see opposite).

ISRAS AND THE MEDITERRANEAN: PROCESS COMPLETED



Area-based conservation is a vital tool for reversing the steep decline in shark and ray numbers, providing shelter from fishing pressure and habitat change – but which areas do we need to protect and/or manage?

That's the question that the IUCN Shark Specialist Group has set out to answer on a global basis, and WWF has been involved with its ongoing work on the subject in the Mediterranean.

The Important Shark and Ray Areas (ISRAs) initiative aims to identify and delineate discrete areas of habitat critical to the survival of sharks, rays, and chimaeras. Specifically, the goal is to mobilize scientists and conservationists to identify the region's ISRAs, which the IUCN defines as "discrete, three-dimensional portions of habitat, important for one or more shark species, that are delineated and have the potential to be managed for conservation".

Potential ISRAs are assessed against a range of standardized, science-based, evidence-driven criteria that reflect the animals' complex behaviours, ecology, and biological needs, including vulnerability, range restriction, key life-history activities, distinctiveness, and diversity.

Like Important Marine Mammal Areas, Important Bird and Biodiversity Areas, and Key Biodiversity Areas, ISRAs do not in themselves offer protection: their management is a separate question. Their primary purpose is to inform decision-makers of the importance of particular areas for shark and ray populations, and to provide a peer-reviewed scientific basis for any area-based conservation action. In this respect, they have enormous potential to inform and accelerate place-based conservation measures, whether for selecting MPAs and creating MPA networks, feeding into environmental impact assessments and marine spatial planning exercises, informing decisions on fisheries areas or temporal management measures, or for the inclusion of shark and ray-specific measures in MPA management plans. At its 14th Meeting in 2024, the Convention on Migratory Species (CMS) formally adopted Resolution 14.7 on ISRAs, recognizing them as an advisory, science-based mechanism to identify and prioritize critical habitats for migratory sharks and rays. The Resolution encourages all Range States to integrate ISRAs into marine spatial planning, MPA designation, and other area-based conservation processes to strengthen habitat protection and ecological connectivity for CMS-listed species (see CMS section below).

In 2023, the first ISRA assessment for the Mediterranean and the Black Sea was completed, resulting in the identification of 65 ISRAs, 6 candidate ISRAs, and 20 Areas of Interest (AoIs) across the region, with over 63% of Mediterranean shark and ray species covered by at least one of the identified ISRAs[9]. Each ISRA includes two main categories of species: leading or qualifying species, which define the area because they meet one or more ISRA criteria; and supporting or benefiting species, which also occur within the area and gain protection from its delineation if measures are adopted for the area.

These areas cover key habitats across the Mediterranean, including coastal nurseries, feeding grounds, movement areas, and deep-sea habitats. In many cases, they overlap with existing spatial designations such as MPAs, KBAs, and EBSAs.

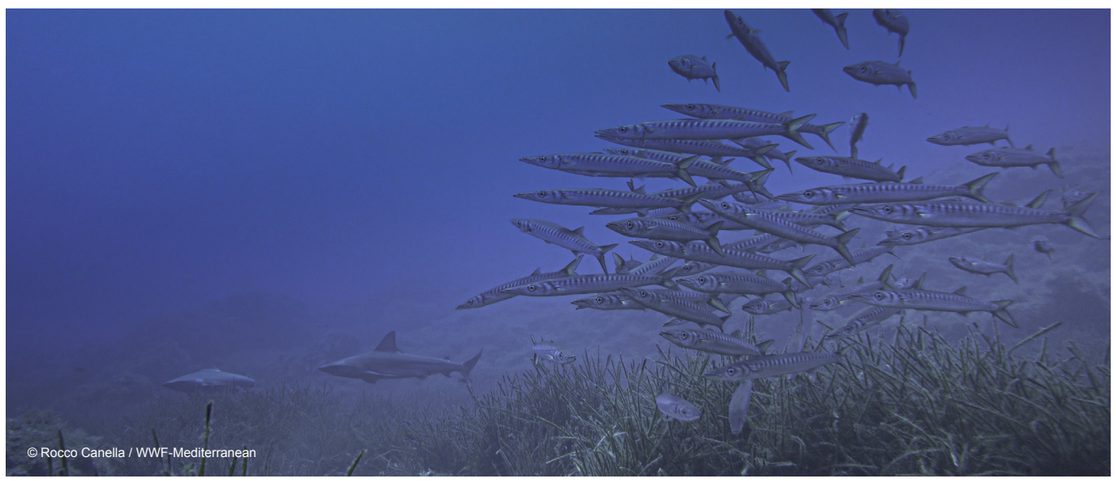
RESOLUTION GFCM/46/2026/4 ON A REGIONAL PLAN OF ACTION TO MONITOR AND MITIGATE INTERACTIONS BETWEEN FISHERIES AND VULNERABLE SPECIES

The Regional Plan of Action to Monitor and Mitigate Interactions Between Fisheries and Vulnerable Species in the Mediterranean and the Black Sea (RPOA-VUL) establishes the first region-wide framework to address bycatch and depredation of elasmobranchs and other vulnerable taxa, including marine mammals, seabirds, turtles, and sturgeons.

The RPOA-VUL provides a comprehensive roadmap to 2030, structured around three operational pillars: monitoring, management, and capacity development. Its overarching goal is to reduce and, where possible, eliminate the incidental capture and fishing mortality of vulnerable species, as well as depredation activities of marine megafauna in fishing gear, including through:

- Bycatch monitoring programmes to systematically collect and report data on incidental captures of sharks and rays, including spatial-temporal risk mapping, post-release mortality assessment, and harmonized regional protocols aligned with FAO/GFCM technical standards.
- Mitigation and management measures, such as gear modification, changes in fishing behaviour and timing, area-based restrictions, and pilot trials to reduce shark and ray bycatch in high-risk fisheries.
- Spatial management tools, including the identification of areas and periods of high interaction risk, and the potential establishment of well-managed conservation areas or other effective area-based conservation measures.
- Capacity-building and awareness, through training of fishers on safe handling and release of incidentally caught species, dissemination of identification guides, and stakeholder-led pilot projects.
- Data systems, including the creation of a pan-Mediterranean and Black Sea multi-taxa database on bycatch and depredation, compatible with the GFCM Data Collection Reference Framework (DCRF) and the EU Data Collection Framework (DCF).

As part of the implementation of the RPOA-VUL, the GFCM has launched a series of pilot projects from 2024 to 2025 to test and improve bycatch mitigation methods across key subregions. One of these projects, developed in partnership with WWF-Adria and Croatia's Institute of Oceanography and Fisheries, aims to reduce shark and ray bycatch in gillnets and combined nets in the northern Adriatic, a critical area for elasmobranch interactions. The project combines field testing of gear changes with a tagging programme designed to track sharks and rays, adding information about their transboundary movements across the Adriatic, providing data to support cross-border management measures.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OTHER IMPORTANT SHARK AND RAY POLICY FRAMEWORKS

THE INTERNATIONAL CONVENTION FOR THE CONSERVATION OF ATLANTIC TUNAS (ICCAT)


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ICCAT is the RFMO responsible for the conservation and management of tuna and tuna-like species in the Atlantic, including its adjacent seas (the Mediterranean and Black Seas). Only two Mediterranean states, Israel and Lebanon, have not ratified the convention. As is the case for the GFCM, an ICCAT 'Recommendation' is binding on all its Parties, except for any that formally register an objection.

Adopted in 1966, the convention establishing ICCAT was amended by a Protocol in November 2019. This Protocol must now be ratified by at least three-quarters of its Contracting Parties to enter into force, a process that might take several years. The amended convention clarifies its material scope of application. It will expressly include, besides tuna and tuna-like species, "elasmobranchs that are oceanic, pelagic and highly migratory"[10]. See Table 1 at the end of this document for references to ICCAT recommendations for Mediterranean species.

Noteworthy is ICCAT's decision to extend its ban on retaining North Atlantic shortfin mako (which applies to the Mediterranean population) and continued strict quotas for blue sharks, reinforcing existing protections (ICCAT Rec. 21-09) in late 2023, showing the significant impact of this Convention for the species it covers. However, the Mediterranean blue shark population is currently lacking any management, data is scarce, and the IUCN Red List Assessment lists the population as Critically Endangered. This Mediterranean stock is therefore in urgent need of management measures.

In recent years, ICCAT has reinforced shark conservation through new measures. Recommendation 23-11 (adopted in 2023) introduced updated management for South Atlantic blue sharks (Prionace glauca), maintaining strict catch limits and data-reporting requirements. The ban on retaining North Atlantic shortfin mako sharks (Isurus oxyrinchus) remains in force under Rec. 21-09, applicable to Mediterranean populations. In 2024, ICCAT also restructured its management framework, creating a dedicated "Sharks (SHK)" species group within its bycatch work plan, an important step toward more consistent monitoring and assessment.

Despite these advances, the management of the Mediterranean blue shark population remains limited, with little data and no region-specific measures. The IUCN Red List continues to classify the Mediterranean stock as Critically Endangered, underscoring the urgent need for targeted management and reporting under ICCAT's expanding mandate.

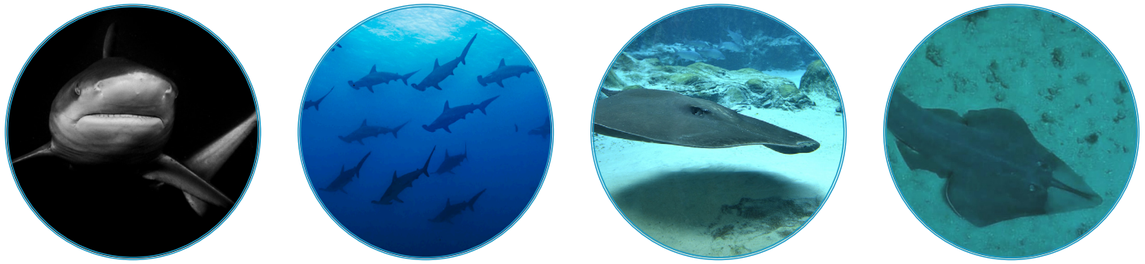
CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to ensure that international trade in wild specimens does not threaten the survival of the species. It is a voluntary agreement, but all Mediterranean states are Parties and are therefore required to implement its provisions through national legislation, enforcement, and permitting systems.

CITES-listed species are subject to specific trade controls depending on which Appendix they are included in. Appendix I lists species threatened with extinction, and trade is permitted only in exceptional circumstances. Appendix II includes species that are not necessarily threatened with extinction, but whose trade must nonetheless be regulated to ensure their survival. For both appendices, an export permit can be granted when the exporting country's scientific authority issues a Non-Detriment Finding (NDF) confirming that the trade will not harm the survival of that species. Additional documentation, such as 'Introduction from the Sea' or 'Legal Acquisition' certificates, may also be required under certain circumstances, particularly for specimens taken from international waters.

CITES began to list shark and ray species in 2003, adding more over the years, and today it covers 23 Mediterranean species. All of these are in Appendix II, except for 7 species of *Pristidae* (sawfishes) which are in Appendix I; however, the latter are deemed already extinct in the Mediterranean.

The most recent listings, adopted at CITES COP19 and effective from November 2023, added:



Carcharhinidae spp.
(requiem sharks)

Sphyrnidae spp.
(hammerhead sharks)

Potamotrygon spp.
(freshwater stingrays)

Rhinobatidae spp.
(guitarfishes)

- *Carcharhinidae spp.* (requiem sharks) – 54 additional species, of which 6 are present in the Mediterranean
- *Sphyrnidae spp.* (hammerhead sharks) – 6 additional species, of which 3 are relevant for the Mediterranean (2 present and 1 vagrant species)
- *Potamotrygon spp.* (freshwater stingrays) – 7 species, not present in the Mediterranean
- *Rhinobatidae spp.* (guitarfishes) – 37 species, of which 2 are present in the Mediterranean

Since then, no new listings have entered into force, but several important proposals are under consideration for CITES COP20 (November-December 2025). A coalition of governments, including the European Union, has proposed the inclusion of the tope shark (*Galeorhinus galeus*) and all smoothhound sharks (*Mustelus spp.*) in Appendix II. Both groups are commercially caught in the Mediterranean, with G. galeus listed as Critically Endangered in the region, and Mustelus species widely traded for their meat. Their listing would require export permits and NDFs to ensure trade is sustainable and legally sourced.

Implementation capacity varies widely among Mediterranean countries. While some have well-established permitting and monitoring systems, others face limited institutional or technical resources. The expanding scope of shark and ray listings underscores the need for greater capacity-building, particularly in fisheries and customs services, to ensure monitoring of trade and compliance with CITES obligations.

THE CONVENTION ON MIGRATORY SPECIES

The Convention on the Conservation of Migratory Species of Wild Animals (CMS), also known as the Bonn Convention, is a global platform for the conservation and sustainable use of migratory animals and their habitats. With the exception of Türkiye, all Mediterranean states are parties to the Convention.

The CMS provides a legal framework for coordinated action across species' migratory ranges and has established several specialized agreements for different taxa. Among these is the Memorandum of Understanding (MoU) on the Conservation of Migratory Sharks (Sharks MoU), the first global instrument of its kind, to which WWF is a 'cooperating partner'. The MoU aims "to achieve and maintain a favourable conservation status for migratory sharks based on the best available scientific information and taking into account the socio-economic value of these species for the people in various countries". It currently lists 37 species in its Annex I and is implemented by signatories through a Conservation Plan built around five main objectives:

1. Improving the understanding of migratory shark populations through research, monitoring, and information exchange
2. Ensuring that directed and non-directed fisheries for sharks are sustainable
3. Ensuring, to the extent practicable, the protection of critical habitats and migratory corridors and critical life stages of sharks
4. Increasing public awareness of threats to sharks and their habitats, and enhancing public participation in conservation activities
5. Enhancing national, regional, and international cooperation

At CMS COP14, Parties adopted several important measures for elasmobranchs, marking one of the most significant steps forward for shark and ray conservation under the Convention to date. Key decisions of Mediterranean relevance included:

- The addition of the blackchin guitarfish (Glaucostegus cemiculus), Lusitanian cownose ray (*Rhinoptera marginata*), and duckbill/bull ray (*Aetomylaeus bovinus*) to Appendix II globally, with their Mediterranean populations also listed on Appendix I[11], recognizing their critical regional status.
- The adoption of a Single Species Action Plan (SSAP) for the angelshark (*Squatina squatina*) in the Mediterranean Sea; a comprehensive, regionally coordinated roadmap to protect this Critically Endangered species[12].
- The endorsement of Important Shark and Ray Areas (ISRAs) and a call for Parties to integrate ISRAs into marine spatial planning, national biodiversity strategies, and other conservation frameworks.
- The launch of new Concerted Actions (cooperative conservation programmes) for species such as the blue shark (*Prionace glauca*), and renewal of actions for wedgefishes (*Rhinobatidae*), including the common guitarfish (*Rhinobatos rhinobatos*).

BBNJ AGREEMENT

In September 2025, the Agreement under the United Nations Convention on the Law of the Sea (UNCLOS) on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) reached the threshold for entry into force. This historic moment marks the beginning of a new chapter for marine biodiversity conservation and sustainable management in the high seas, an important step toward addressing persistent governance gaps in areas beyond national jurisdiction.

For sharks and rays, many of which are highly migratory and depend on offshore habitats that extend across jurisdictional boundaries, the BBNJ Agreement provides an essential new layer of protection. It introduces mechanisms for:

- Establishing marine protected areas and other area-based management tools (ABMTs) in the high seas, which could secure key pelagic and deep-water habitats used by elasmobranchs;
- Requiring environmental impact assessments (EIAs) for activities that may affect marine biodiversity, offering a process to identify and mitigate risks from fishing, shipping, and emerging industries;
- Promoting capacity-building, data-sharing, and technology transfer, helping to address knowledge gaps on shark and ray ecology, connectivity, and mortality beyond national waters.

The Agreement complements regional and species-focused instruments already active in the Mediterranean, such as the GFCM, the Barcelona Convention, or the ACCOBAMS Agreement, by providing a global governance framework that links these efforts to conservation action in areas beyond national jurisdiction, ensuring migratory sharks and rays benefit from connected, ecosystem-based protection across their full range.

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PLANS OF ACTION FOR THE CONSERVATION AND MANAGEMENT OF SHARKS

In 1999, FAO launched the 'International Plan of Action for the Conservation and Management of Sharks' (IPOA). This non-binding instrument required states to establish their own national POAs for conserving and managing sharks in their waters, covering areas such as knowledge of stocks, data collection and research, and an assessment of threats to populations. These POAs should also detail strategies for achieving their objectives, including monitoring, control and surveillance activities, as well as training personnel to identify shark species.

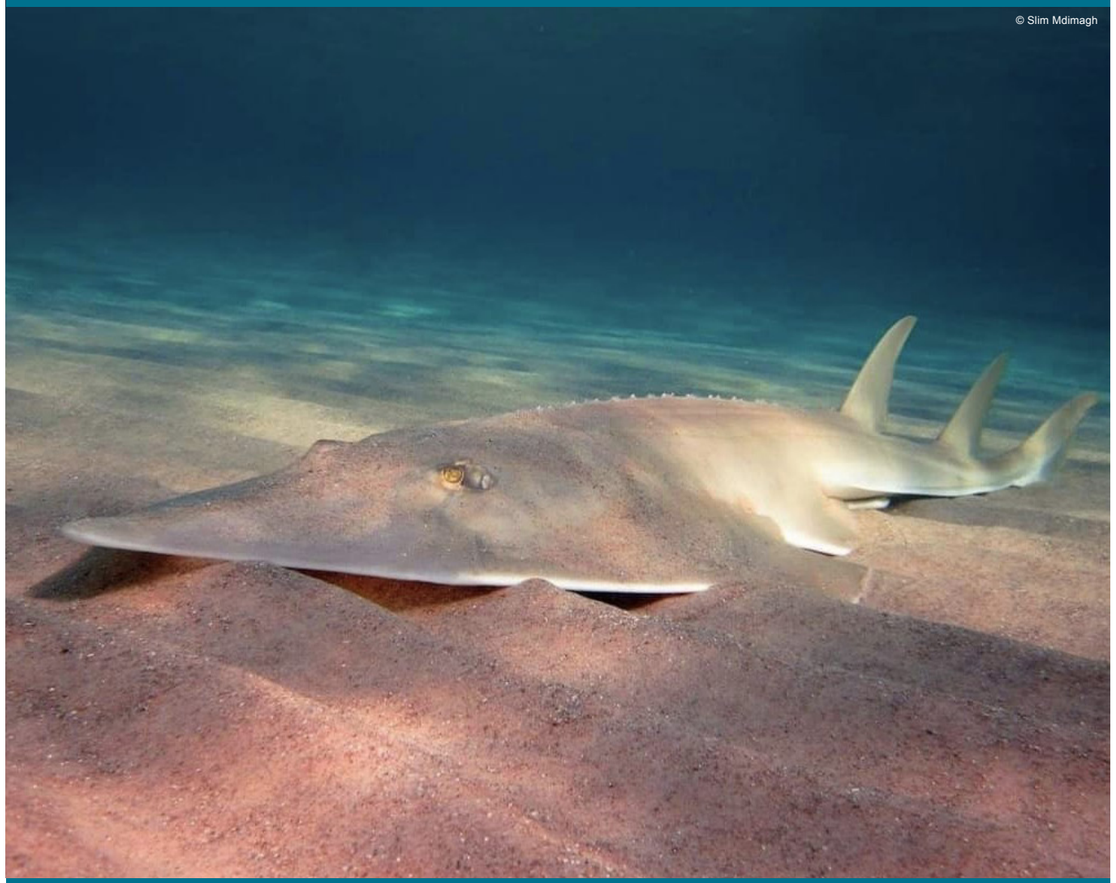
At the regional level, the Barcelona Convention's Regional Activity Centre for Specially Protected Areas (SPA/RAC) translated the IPOA's principles into the Action Plan for the Conservation of Cartilaginous Fishes (Chondrichthyans) in the Mediterranean Sea. Originally adopted in 2003, it has been revised three times, and again in 2025 (pending adoption at COP24 in December 2025) to align with the Post-2020 SAPBIO and the Kunming-Montreal Global Biodiversity Framework. The 2025 draft introduces new priorities for 2025-2030, including a renewed call for Contracting Parties to develop and adopt National Shark Plans where they do not yet exist, and to integrate shark and ray conservation into national biodiversity and fisheries frameworks.

Although implementation varies, several Mediterranean countries have begun developing national plans or modifying their laws to align with the regional action plan. The implementation of the plan is regularly assessed as part of the ordinary procedure leading to Barcelona Convention Meetings of the Contracting Parties; however, the low level of reporting remains a barrier to grasping the scale of implementation[13]. Some positive progress is anticipated in countries like Tunisia, which is working on a specific national plan for sharks and rays (see case study opposite).

The European Union adopted its own Community Plan of Action for Sharks in 2009, aiming to provide "a comprehensive and coherent legislative policy and legislative framework for the conservation and management of sharks within and outside Community waters" – which its Member States are individually responsible for implementing and enforcing. The EU Plan of Action has not been updated since 2009; however, its objectives have been embedded in broader EU legislation, notably through the transposition of the GFCM recommendations and the SPA/BD Protocol, and more recently in the EU Marine Action Plan and the Nature Restoration Law (see EU section).

In June 2025 at UNOC, the Coalition to Halt Shark and Ray Extinction initiative, spearheaded by France, was officially launched, bringing together countries, regional organisations, NGOs and industry stakeholders committed to reversing the alarming decline of sharks and rays. The coalition sets out a collective roadmap to eliminate over-exploitation, reduce bycatch, strengthen trade controls and restore critical habitats, with special emphasis on species that are Endangered or Critically Endangered. Partner signatories pledge to engage in international instruments (such as the General Fisheries Commission for the Mediterranean, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Convention on Migratory Species), integrate shark and ray conservation into national plans, and report progress transparently. The coalition aims at uniting fragmented efforts and signalling global commitment from the Partner signatories to take and advocate for measures in favour of the recovery of sharks and rays.

RECOVERY OF SHARKS AND RAYS IN THE GULF OF GABÈS, TUNISIA



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The Gulf of Gabès, on Tunisia's southern coast, is one of the Mediterranean's most important nursery grounds for sharks and rays. Its shallow, highly productive waters host several critically endangered species. Yet, decades of overfishing, habitat degradation, and incidental capture have led to drastic declines in population.

To reverse this trend, WWF and its partners, including the National Institute of Marine Sciences and Technologies (INSTM), the UNEP Mediterranean Action Plan, the Specially Protected Areas Regional Activity Center (SPA/RAC), and national fisheries authorities, implemented the Recovering Sharks and Rays in the Gulf of Gabès project under the global Shark and Ray Recovery Initiative (SARRI).

The project developed recovery plans for key species, identified critical habitats, and pilot spatial and technical measures to reduce bycatch, while strengthening national legislation and offering alternative livelihoods for small-scale fishers.This project also coordinated the development of Tunisia's National Plan of Action for Sharks and Rays (NPOA-Sharks), which aims to ensure the conservation, management, and sustainable use of shark and ray species in national waters. This process also aligns with the Barcelona Convention's call for all Contracting Parties to elaborate national action plans for these species, ensuring coherent management and regional cooperation. Once finalized, Tunisia's NPOA-Sharks could serve as a model for other southern Mediterranean countries, linking national priorities with regional commitments.

EU POLICIES

While no shark species is listed in the EU Habitat Directive, elasmobranchs are covered by several key pieces of EU fisheries and marine conservation legislation. The Technical Measures Regulation[15] (TMR) establishes rules on fishing gear, practices, and sensitive species protection. It lists a limited number of prohibited species, including white sharks (*Carcharodon carcharias*), angelsharks (*Squatina spp.*), sawfishes (*Pristidae spp.*), and others.

Under the EU Action Plan on Marine Ecosystems (2023), the European Commission called Member States to adopt new measures, including "to develop threshold values for the maximum allowable mortality rate from incidental catches of the species selected by Member States"[16], and to adopt national measures or submit joint recommendations to the Commission to minimize bycatch (or reduce it to the level that enables the full recovery of the populations) of, inter alia, angel shark, common skate, guitarfish, Maltese skate, white shark, sand tiger shark, smalltooth sand tiger shark and spiny butterfly ray by the end of 2024; and the remaining sensitive marine species that are at risk of incidental catches, prioritizing those in "unfavourable conservation status" or threatened by extinction by the end of 2030.

Through the transposition of GFCM recommendations into EU law, all 24 species listed in Annex II of the SPA/BD Protocol of the Barcelona Convention are already prohibited from being retained, landed, or sold in all EU Member States.

The Marine Strategy Framework Directive (MSFD) remains the EU's central legal instrument for achieving Good Environmental Status (GES) in marine waters, including maintaining healthy populations of marine species. The Directive is currently under review (REFIT process).

In 2024, the European Commission issued guidance on threshold values for incidental catches of sensitive species, which may serve as a basis for defining sustainable bycatch limits for sharks and rays under Descriptor 1 (biodiversity) and Descriptor 4 (food webs). Once thresholds are agreed upon, the Common Fisheries Policy (CFP) can be used to set binding limits, ensuring they are not exceeded. A formal legislative proposal to strengthen the MSFD is expected in 2025, potentially introducing clearer species-specific indicators for elasmobranchs.

A major policy milestone came with the adoption of the Nature Restoration Law in 2024. This piece of legislation is the first binding EU legislation on ecosystem restoration. The law requires the restoration of at least 20% of the EU's land and sea areas by 2030 and all degraded ecosystems by 2050. It explicitly includes marine habitats that are critical for emblematic species, such as sharks and rays. Annex 3 of the Regulation lists marine species whose habitat must be restored (see Annex 1). Each Member State is now preparing a National Restoration Plan (2024-2026), which should include measures to rehabilitate essential fish habitats (e.g., nurseries for angelsharks or guitarfishes), remove pressures from bycatch and overfishing, and enhance protection of sensitive coastal and offshore areas.

While implementation is uneven across Member States, these instruments form the backbone of the EU's policy framework for elasmobranch conservation. A major challenge remains in aligning fisheries management, marine ecosystem restoration, and biodiversity conservation priorities. However, there is an increasingly comprehensive legal basis to protect sharks and rays across the Mediterranean through EU instruments.

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FIRST PROMISING RESULTS OF COLLABORATION BETWEEN FISHERIES AND RESEARCH IN THE NORTHERN ADRIATIC

© Carlotta Mazzoldik / WWF

Reducing bycatch rates of shark species is challenging, given their large sizes and the high fishing effort in the area. Reducing fishing impacts – through minimum mesh sizes, shark excluder devices, etc. – may interfere with fishing activities, making these strategies less likely to be accepted by fishers. In some cases, effective and more acceptable management strategies may include integrating multiple approaches, such as releasing sharks at vulnerable life stages (e.g., early juveniles, which are usually of low commercial value) and avoiding fishing in sensitive areas.

To understand key biological traits (e.g., the use of space) and explore feasible fisheries management measures and bycatch mitigation measures, work led by the University of Padova within the Italian monitoring programmes of the Marine Strategy Framework Directive (MSFD, Directive 2008/56/EC) and within the MedBycatch[17] project assessed the potential of a management strategy including the release of juveniles of commercial elasmobranch species. Between 2020 and 2023, researchers were on board 90 fishing trips using different gears (otter trawling, pelagic trawling, gill nets), and, by combining conventional tagging and acoustic telemetry, they assessed at-vessel and post-release mortality of almost 3,500 individuals from 13 species. From this, they constructed individual-based population-dynamics models to determine the expected recovery of populations under different minimum conservation sizes and survival rates. Results for the three most common species, *Mustelus mustelus*, *M. punctulatus*, and *Squalus acanthias*, highlighted that individuals may remain in the same area for several weeks, with initial results indicating the potential effectiveness of the release of juveniles and the avoidance of certain areas.[18]

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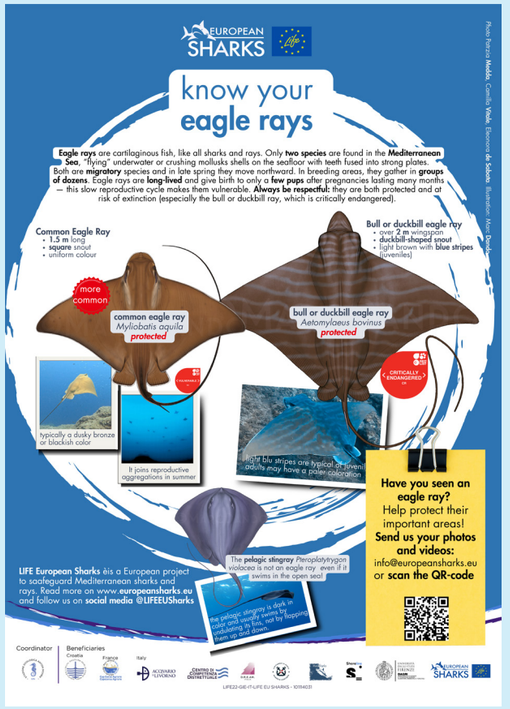
LIFE EUROPEAN SHARKS PROJECT (2023-2027)

Co-funded by the European Union

The LIFE European Sharks project, co-funded by the EU LIFE Programme and coordinated by Stazione Zoologica Anton Dohrn, advances the conservation of Mediterranean sharks and rays through science-based participatory actions that support the sustainable management of elasmobranchs, in line with European and international commitments. Operating in Italy, Spain, Croatia, France and Slovenia, the project trains fisheries officers and fishers to reduce mortality of protected species – its core mission; trials voluntary measures to reduce mortality of non-protected species; promotes responsible catch-and-release and safe handling in recreational fisheries; and works with sea users to locate critical areas, to step up their protection. It also works to shift public perception of sharks and rays from 'dangerous' to 'endangered', also promoting a culture of sustainable seafood consumption.

The LIFE EUSharks training programme is built around a standardized toolkit and a dedicated training module developed by an interdisciplinary team of shark specialists, fisheries experts, enforcement agencies and communicators. The project has produced an updated review of international, regional and national legislation across the partner countries, supported by practical tools that help officers and fishers identify protected and regulated species and correctly interpret the rules – making compliance, enforcement and reporting more consistent and effective. These resources also raise awareness of shark- and ray-related regulations among a broader community of marine stakeholders, from MPAs and local authorities to the general public. They can be downloaded from the project's website: www.europeansharks.eu



The toolkit includes:

- Mediterranean shark-ray regulations in Italy (Italian - English), Croatia (Croatian - English), Spain (Spanish)
- A sanctioning guide for illegal fishing of sharks and rays (unofficial, pending clarifications by the Italian Fishery Ministry)
- A web-based app listing all protected species and applicable rules for fishers
- A poster of protected and regulated species in Italy, to be adapted for other countries
- A standard PowerPoint presentation with key ID guides for protected, regulated and lookalike species, in Italian, which are then tailored to local fishing techniques/species; and for fish steaks to be used in fish markets
- Illustrated fact sheets on protected/regulated species(currently: basking shark (IT-EN), eagle rays (EN-IT-FR), stingrays (EN-IT-FR), catsharks (IT)
- Guidelines to release sharks unharmed: a training video tutorial, co-produced with CIESM, the eLIFE project guidelines and for recreational fishers
- An expert helpline, providing guidance for fishers and inspectors
- A sighting form, both paper (IT and FR) and online, the official Italian form to report sharks/rays

RECOMMENDATIONS

This brief overview of regional conservation frameworks for sharks and rays indicates that existing regulations are sufficient to significantly improve their status in the Mediterranean. However, far better implementation and enforcement is required. While some progress is evident, achieving full commitment from all countries would significantly improve these efforts.

WWF calls for action in the following key areas:

- Countries should ensure the implementation of existing legislation and the harmonization of national, Mediterranean, and global policies, with an urgent need to transpose new regional measures into national legal frameworks.

- Countries should ensure the collection and submission of robust fisheries data at the national level, in line with the GFCM Data Collection Reference Framework, to support the development of strong scientific advice.

- Countries and the GFCM should support the development of national capacity, particularly among authorities and fishers, to implement policies and legislation, including those under GFCM, CITES, CMS, and the Barcelona Convention.

- Countries should support the adoption of enhanced spatial management measures at national and Mediterranean levels through the GFCM to protect critical habitats for sharks and rays and to support the establishment of coherent networks of well-managed areas, including Fisheries Restricted Areas and other spatio-temporal measures, for both exploited and non-commercial vulnerable species.

- Countries should support the inclusion of specific management measures for sharks and rays in existing marine protected areas (MPAs) where they overlap with important habitats.

- Countries should integrate Important Shark and Ray Areas (ISRAs) into national marine spatial planning processes and National Biodiversity Strategies and Action Plans (NBSAPs), as encouraged by the Convention on Migratory Species (CMS Resolution 14.7), to strengthen ecological connectivity and habitat protection.

- Countries should develop or update National Plans of Action (NPOAs) for sharks as tools to ensure collaboration between environmental and fisheries management authorities and to support the implementation of the GFCM Regional Plan of Action for Vulnerable Species (RPOA-VUL).

- Countries and the GFCM should develop population recovery plans and fisheries management measures, including technical measures with measurable and science-based objectives at both national and regional levels in collaboration with all stakeholders, including decision-makers, fishers, and coastal communities.

- Countries should ensure the implementation of previously and new species listings in the Annexes of the SPA/BD Protocol of the Barcelona Convention, and should support local communities in transitioning where required. New listings decided in 2023 and 2025 include in Annex II: common thresher shark (*Alopias vulpinus*), sandbar shark (*Carcharhinus plumbeus*), blue shark (*Prionace glauca*), gulper shark (*Centrophorus* spp.), kitefin shark (*Dalatias licha*), bramble shark (*Echinorhinus brucus)*, common stingray (*Dasyatis pastinaca*), cownose ray (*Aetomylaeus bovinus*), eagle ray (*Myliobatis aquila*), bigeye thresher shark. (*Alopias superciliosus*), brown ray (*Bathytoshia lata*), Lusitanian cownose ray (*Rhinoptera marginata*); Annex III: marbeled stingray (*Dasyatis marmorata*), six gill shark (*Hexanchus griseus*), and pelagic stingray (*Pteroplatytrygon violacea*).

- Countries should ensure the implementation of Mediterranean-relevant shark and ray species in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). New decisions taken at CITES COP20 include:
  - tope shark (*Galeorhinus galeus*), smoothhound sharks (*Mustelus* spp.) and gulper sharks (*Centrophridae* spp.) in Appendix II to regulate trade
  - manta and mobula rays (*Mobulidae* spp.) in Appendix I, prohibiting commercial trade
  - giant guitarfish (*Glaucostegus* spp.) under a zero trade quota.

- At the EU level, countries should:
  - Integrate shark and ray recovery targets into their national implementation of the revised MSFD, including explicit objectives under Descriptors 1 (Biodiversity) and 3 (Commercial species).
  - Ensure that national restoration plans developed under the EU Nature Restoration Law include specific measures to restore shark and ray populations, such as the restoration of critical habitats (nursery and breeding areas), the reduction of bycatch and mortality, and the improvement of ecological connectivity between key habitats.
  - Further mobilize EU and national funding (e.g., EMFAF, LIFE) to support data collection, enforcement, and science-based conservation actions for sharks and rays.

ANNEX 1

Table 1 – Overview of Mediterranean species, their conservation status, and related legislation and policies. In order to identify the species listed below, a range of identification guides exists[19].

SCIENTIFIC NAME	VERNACULAR NAME	To be released unharmed and alive for commercial fisheries	Prohibited for recreational fishing	UNCLOS	Barcelona Convention Annex	CITES	CMS	CMS Sharks MoU	ICCAT *19-01: definition of oceanic, pelagic, and highly migratory	GFCM GFCM/42/2018/2 (prohibiton of retention)	GFCM GFCM/44/2021/16 Annex I Species specific actions	IUCN status**	Redlist Med (updated)	Redlist Global (EU) (updated)	EU Nature Restoration Law (Annex III)	ISRAs	Name of ISRAs
Aetomylaeus bovinus	Duckbill eagle ray	●	●		B II	II	I (& II globally)					CR	CR	CR		●	Amvrakikos Gulf ISRA, Balearic Islands ISRA, Iskenderun and Mersin Bays ISRA, Rosh-Hanikra Achziv ISRA, Strait of Sicily and Tunisian Plateau ISRA, Thracian Sea Shelf ISRA
Alopias superciliosus	Bigeye thresher	●	●	I	B II	II	II		*09-07 (prohibition)			EN	EN	VU (EN)			
Alopias vulpinus	Common thresher	●	●	I	B II	II	II		*09-07 (monitoring)		●	EN	EN	VU (EN)		●	River Bojana/Buna Delta ISRA
Bathytoshia lata	Brown stingray	●	●		B II							VU	VU	VU		●	Balearic Islands ISRA
Carcharhinus altimus	Bignose shark		●			II						NT	DD	NT (DD)			
Carcharhinus brachyurus	Copper shark		●			II						VU	DD	VU (DD)			
Carcharhinus brevipinna	Spinner shark		●			II						VU		VU		●	Strait of Sicily and Tunisian Plateau ISRA
Carcharhinus obscurus	Dusky shark		●			II		Annex I				EN	DD	EN (DD)			
Carcharhinus plumbeus	Sandbar shark	●	●	I	B II	II					●	EN	EN	EN		●	Boncuk Bay ISRA, Cervia-Marina di Ravenna ISRA, Iskenderun and Mersin Bays ISRA, Jerba-Zarzis ISRA, Pelagie Archipelago and Levante Shoal ISRA, Southeastern Aegean Sea ISRA, Strait of Sicily and Tunisian Plateau ISRA
Carcharias taurus	Sand tiger shark	●	●		B II	II	I (& II globally)			●		CR	CR	CR			
Carcharodon carcharias	White shark	●	●	I	B II	II	Appendix I & II		*	●		CR	CR	VU (CR)	●	●	Edremit Bay ISRA, Strait of Sicily and Tunisian Plateau ISRA
Centrophorus uyato	Little gulper shark	●	●		B II	II					●	CR	CR	EN (VU)		●	Balearic Islands ISRA, Strait of Sicily and Tunisian Plateau ISRA
Centroscymnus coelolepis	Portuguese dogfish											NT	LC	NT (EN)			
Cetorhinus maximus	Basking shark	●	●	I	B II	II	I & II		*	●		EN	EN	EN	●	●	Balearic Islands ISRA, Ligurian Sea ISRA, Northeastern Sardinia ISRA, Western Apulian Coast ISRA
Chimaera monstrosa	Rabbitfish											VU	NT	VU (NT)		●	Strait of Sicily and Tunisian Plateau ISRA
Dalatias licha	Kitefin shark	●	●		B II							VU	VU	VU (EN)		●	Balearic Islands ISRA, Strait of Sicily and Tunisian Plateau ISRA
Dasyatis marmorata	Marbled stingray				B III							NT	DD	NT (DD)		●	Danny Reef Palmahim ISRA, Gdor Kurkar Ridges ISRA
Dasyatis pastinaca	Common stingray				B II							VU	VU	VU		●	Balearic Islands ISRA, Cala Vella Mallorca ISRA, Danny Reef Palmahim ISRA, Gdor Kurkar Ridges ISRA, Iskenderun and Mersin Bays ISRA, Jerba-Zarzis ISRA, Murcia Eastern Coast ISRA, Strait of Messina ISRA, Strait of Sicily and Tunisian Plateau ISRA, Thracian Sea Shelf ISRA
Dasyatis tortonesei	Tortonese's stingray											DD		DD			
Dipturus cf batis		●	●		B II					●		CR	CR	CR			
Dipturus nidarosiensis	Norwegian skate											EN		EN (NT)	●		
Dipturus oxyrinchus	Longnosed skate											VU	NT	VU		●	Cilician Basin ISRA
Echinorhinus brucus	Bramble shark	●	●		B II							EN					
Etmopterus spinax	Velvet belly lanternshark											VU	LC	VU (NT)		●	Balearic Islands ISRA, Gulf of Antalya ISRA, Murcia Pockmarks ISRA, Santa Maria di Leuca ISRA, Sigacik Bay ISRA, Strait of Sicily and Tunisian Plateau ISRA

SCIENTIFIC NAME	VERNACULAR NAME	To be released unharmed and alive for commercial fisheries	Prohibited for recreational fishing	UNCLOS	Barcelona Convention Annex	CITES	CMS	CMS Sharks MoU	ICCAT *19-01: definition of oceanic, pelagic, and highly migratory	GFCM GFCM/42/2018/2 (prohibiton of retention)	GFCM GFCM/44/2021/16 Annex I Species specific actions	IUCN status**	Redlist Med (updated)	Redlist Global (EU) (updated)	EU Nature Restoration Law (Annex III)	ISRAs	Name of ISRAs
Galeorhinus galeus	Tope	●	●		B II	II		Annex I		●		CR	VU	CR (VU)		●	Balearic Islands ISRA, Strait of Gibraltar ISRA, Strait of Sicily and Tunisian Plateau ISRA
Galeus atlanticus	Atlantic sawtail catshark											NT	NT	NT			
Galeus melastomus	Blackmouth catshark											LC	LC	LC		●	Balearic Islands ISRA, Eastern Corsica ISRA, Gulf of Antalya ISRA, Otranto Channel ISRA, Palmahim Brine Pools ISRA, Petit to Grand Rhône Canyon Heads ISRA, Sigacik Bay ISRA
Glaucostegus cemiculus	Blackchin guitarfish	●	●		B II	Zero quota II	I (& II globally)			●		CR		CR		●	Dalia Beach ISRA, Danny Reef Palmahim ISRA, Gdor Kurkar Ridges ISRA, Iskenderun and Mersin Bays ISRA, Izmir Bay ISRA, Jerba-Zarzis ISRA, Latakia - Baniyas ISRA, Strait of Sicily and Tunisian Plateau ISRA
Gymnura altavela	Spiny butterfly ray	●	●		B II					●		CR	CR	EN (CR)		●	Amvrakikos Gulf ISRA, Balearic Islands ISRA, El Toro - Sa Dragonera ISRA, Latakia - Baniyas ISRA, Marina Alta ISRA, Murcia Eastern Coast ISRA, Rosh-Hanikra Achziv ISRA, Thracian Sea Shelf ISRA
Heptranchias perlo	Sharpnose sevengill Shark				B III						●	NT	DD	NT (DD)			
Hexanchus griseus	Bluntnose sixgill shark			I	B III							NT	LC	NT (LC)		●	Ibiza Channel Slope ISRA, Prince Islands ISRA, Strait of Messina ISRA
Himantura leoparda	Leopard whipray											EN		EN			
Hydrolagus mirabilis	Large-eyed rabbitfish											LC		LC			
Isurus oxyrinchus	Shortfin mako	●	●	I	B II	II	II	Annex I	*19-06; 14-06; 10-06 partial prohibition	●		CR	CR	EN (DD)		●	Pelagie Archipelago and Levante Shoal ISRA, Strait of Sicily and Tunisian Plateau ISRA
Lamna nasus	Porbeagle	●	●		B II	II	II	Annex I	*15-06 (prohibition)	●		CR	CR	VU (CR)			
Leucoraja circularis	Sandy skate	●	●		B II					●		CR	CR	VU		●	Balearic Islands ISRA, Strait of Sicily and Tunisian Plateau ISRA
Leucoraja melitensis	Maltese skate	●	●		B II					●		CR	CR	CR		●	Strait of Sicily and Tunisian Plateau ISRA
Leucoraja naevus	Cuckoo skate											NT	NT	NT			
Mobula mobular	Spinetail devil ray	●	●		B II	I	I & II	Annex I	*	●		CR	EN	CR	●	●	Balearic Islands ISRA, Corsica Canyons ISRA, Gaza ISRA, Ligurian Sea ISRA, Strait of Messina ISRA, Strait of Sicily and Tunisian Plateau ISRA, Tyrrhenian ISRA
Mustelus asterias	Starry smoothhound		●		B III	II					●	VU	VU	NT		●	Marmara Sea Shelf ISRA, Strait of Sicily and Tunisian Plateau ISRA
Mustelus mustelus	Common smoothhound		●		B III	II					●	EN	VU	EN (VU)		●	Amvrakikos Gulf ISRA, Balearic Islands ISRA, Iskenderun and Mersin Bays ISRA, Jerba-Zarzis ISRA, Kerkennah ISRA, Latakia - Baniyas ISRA, Marmara Sea Shelf ISRA, Northwest Adriatic ISRA, River Bojana/Buna Delta ISRA, Strait of Sicily and Tunisian Plateau ISRA, Thracian Sea Shelf ISRA, Tripolitania ISRA
Mustelus punctulatus	Blackspotted smoothhound		●		B III	II					●	VU	VU	VU		●	
Myliobatis aquila	Common eagle ray	●	●		B II							CR	VU	CR (VU)		●	Jerba-Zarzis ISRA, River Bojana/Buna Delta ISRA, Strait of Sicily and Tunisian Plateau ISRA
Odontaspis ferox	Smalltooth sand tiger	●	●		B II			Annex I		●		CR	CR	EN (CR)			
Oxynotus centrina	Angular roughshark	●	●		B II					●		CR	CR	EN (VU)		●	Balearic Islands ISRA, Benidorm Island ISRA, Egadi Archipelago ISRA, Murcia Eastern Coast ISRA, Santa Croce Bank ISRA, Strait of Sicily and Tunisian Plateau ISRA, Thracian Sea Shelf ISRA
Prionace glauca	Blue shark	●	●	I	B II	II	II		*19-07 (monitoring)		●	CR	CR	NT		●	Balearic Islands ISRA, Costa Brava Canyons ISRA, Eastern Gulf of Lion ISRA, Ras Akrata – Cap Tenes ISRA, River Bojana/Buna Delta ISRA, Southern Adriatic Pit ISRA, Strait of Gibraltar ISRA, Strait of Sicily and Tunisian Plateau ISRA
Pristis pectinata		●	●		B II	I	I & II	Annex I		●		CR	CR	CR	●		
Pristis pristis		●	●		B II	I	I & II	Annex I		●		CR	CR	CR	●		
Pteroplatytrygon violacea	Pelagic stingray				B III				*			LC	LC	LC			

SCIENTIFIC NAME	VERNACULAR NAME	To be released unharmed and alive for commercial fisheries	Prohibited for recreational fishing	UNCLOS	Barcelona Convention Annex	CITES	CMS	CMS Sharks MoU	ICCAT *19-01: definition of oceanic, pelagic, and highly migratory	GFCM GFCM/42/2018/2 (prohibiton of retention)	GFCM GFCM/44/2021/16 Annex I Species specific actions	IUCN status**	Redlist Med (updated)	Redlist Global (EU) (updated)	EU Nature Restoration Law (Annex III)	ISRAs	Name of ISRAs
Raja asterias	Starry skate											NT	NT	LC		●	Central Catalonia ISRA, Ebro Delta ISRA, M'Diq & Cabo Negro ISRA, Marina Alta ISRA, Murcia Eastern Coast ISRA, Murcia Pockmarks ISRA, River Bojana/Buna Delta ISRA
Raja brachyura	Blonde skate											NT	NT	NT			
Raja clavata	Thornback skate											NT	NT	NT		●	Latakia - Baniyas ISRA, The Trabzon-Rize ISRA
Raja miraletus	Brown skate											LC	LC	LC			
Raja montagui	Spotted skate											LC	LC	LC			
Raja polystigma	Speckled skate											LC	LC	LC		●	Balearic Islands ISRA, Marina Alta ISRA, Roses ISRA
Raja radula	Rough skate											EN	EN	EN		●	Balearic Islands ISRA, Cala Vella Mallorca ISRA, Egadi Archipelago ISRA, Formentera Island ISRA, Gulf of Antalya ISRA, Jerba-Zarzis ISRA, Marina Alta ISRA, Strait of Sicily and Tunisian Plateau ISRA, Thracian Sea Shelf ISRA
Raja undulata	Undulate skate											NT	NT	NT			
Rhinobatos rhinobatos	Common guitarfish	●	●		B II	II	Appendix I & II	Annex I		●		CR	EN	CR (EN)	●	●	Danny Reef Palmahim ISRA, Iskenderun and Mersin Bays ISRA, Murcia Eastern Coast ISRA, Strait of Sicily and Tunisian Plateau ISRA
Rhinoptera marginata	Lusitanian cownose ray	●	●		B II		I (& II globally)					CR	DD	CR (DD)		●	Gdor Kurkar Ridges ISRA, Iskenderun and Mersin Bays ISRA, Rosh-Hanikra Achziv ISRA
Rostroraja alba	White skate	●	●		B II					●		EN	EN	EN (CR)	●	●	Balearic Islands ISRA, Formentera Island ISRA, Strait of Sicily and Tunisian Plateau ISRA
Scyliorhinus canicula	Smallspotted catshark											LC		LC		●	Central Catalonia ISRA, Eastern Corsica ISRA, Ebro Delta ISRA, Egadi Archipelago ISRA, Thracian Sea Shelf ISRA, Tuscany Offshore Thumb ISRA
Scyliorhinus stellaris	Nursehound											VU	NT	VU (NT)		●	Balearic Islands ISRA, Santa Croce Bank ISRA, Strait of Sicily and Tunisian Plateau ISRA
Somniosus rostratus	Little sleeper shark											LC	DD	LC		●	Ibiza Channel Slope ISRA, Ligurian Sea ISRA
Sphyrna lewini	Scalloped hammerhead	●	●		B II	II	II		*10-08 (prohibition)	●		CR		CR (DD)			
Sphyrna mokarran (vagrant)		●	●		B II	II	I & II		*10-08 (prohibition)	●		CR		CR (DD)			
Sphyrna zygaena		●	●		B II	II	II	Annex I	*10-08 (prohibition)	●		CR	CR	VU(DD)		●	
Squalus acanthias	Spiny dogfish		●		B III		II	Annex I				EN	EN	VU (EN)		●	Northwest Adriatic ISRA, Strait of Sicily and Tunisian Plateau ISRA, Vama Veche ISRA
Squalus blainville	Longnose spurdog											DD	DD	DD		●	North Cyclades ISRA, Sigacik Bay ISRA, Sulcis ISRA
Squatina aculeata	Sawback angelshark	●	●		B II					●		CR	CR	CR		●	Strait of Sicily and Tunisian Plateau ISRA
Squatina oculata	Smoothback angelshark	●	●		B II					●		CR	CR	CR		●	Sirt Gulf ISRA, Southeastern Aegean Sea ISRA, Strait of Sicily and Tunisian Plateau ISRA
Squatina squatina	Angelshark	●	●		B II		I & II	Annex I		●		CR	CR	CR	●	●	Eastern Corsica ISRA, Sirt Gulf ISRA, Strait of Sicily and Tunisian Plateau ISRA, Western Virsko More ISRA
Taeniurops grabatus	Round fantail stingray											NT	DD	NT (DD)		●	Rosh-Hanikra Achziv ISRA
Tetronarce nobiliana	Great torpedo ray											LC	LC	LC			
Torpedo marmorata	Marbled torpedo ray											VU	LC	VU (LC)		●	Balearic Islands ISRA, Strait of Sicily and Tunisian Plateau ISRA
Torpedo torpedo	Ocellate torpedo											VU	LC	VU (LC)		●	Lagoon of Bizerte ISRA, Strait of Sicily and Tunisian Plateau ISRA

Extremely rare or vagrant species have been excluded.

*Based on the IUCN 2016 Mediterranean assessments and the 2021 Global assessments.

**Based on most recent IUCN Red List Assessments (IUCN 2016 Mediterranean list and Global/European Assessments up to 2025)

UNCLOS: Annex I: requires cooperation for the management of of straddling stocks and highly migratory species in the EEZs and the high seas.

CITES: includes species threatened with extinction and provides the greatest level of protection, including restrictions on commercial trade; App II: includes species that, although currently not threatened with extinction, may become so without trade controls. It also includes species that resemble other listed species and need to be regulated in order to effectively control the trade in those other listed species.

CMS: App I Range States Parties should endeavour to conserve and, where feasible and appropriate, restore important habitats of those species, minimize obstacles on migratory routes, control the introduction of exotic species and prohibit the catching of listed animals; App II: CMS acts as a framework convention – it does not provide any specific protection to them, but requires that Parties conclude global or regional agreements on specified species.

CMS Shark MoU Annex I: CMS MoU signatories adopted a conservation plan. Updated to COP12 new listings.

Barcelona Convention Annex II: List of endangered and threatened species; Annex III: List of species whose exploitation is regulated.

(+) Rhinobatos rhinobatos is listed in CMS as Appendix I (Mediterranean population) and Appendix II (Global population).

REFERENCES

1. Sharks, rays, and chimaeras (hereafter ‘sharks’)
2. Disclaimer: The information contained in this summary document on legislation is intended solely for general informational purposes. It is not intended to serve as legal advice, and should not be relied upon as such.
3. IUCN SSC Shark Specialist Group. 2023. *Inventory of Knowledge: Geographic Ranges of Sharks, Rays, and Chimaeras in the Mediterranean and the Black Seas, Important Shark and Ray Areas (ISRA) Region 3*. February 2023. Dubai: IUCN SSC Shark Specialist Group.
4. https://www.cell.com/current-biology/fulltext/S0960-9822(21)01198-2
5. Notably, Libya, Morocco and Tunisia entered formal reservations on the Annex amendments, and the EU noted a reservation on *Myliobatis aquila*, delaying application of those specific listings for those Parties.
6. The ‘Agreement for the Establishment of the General Fisheries Commission for the Mediterranean’ wasadopted under Article XIV of the FAO Constitution in 1949 and entered into force on 20 February 1952. It was amended four times (1963, 1972, 1997 and 2014); https://www.fao.org/gfcm/about/legal-framework/en/
7. https://www.fao.org/gfcm/data/dcrf/fr/
8. FAO. 2019. *Monitoring the incidental catch of vulnerable species in Mediterranean and Black Sea fisheries.*
9. Jabado, R.W., García-Rodríguez, E., Kyne, P.M., Charles, R., Armstrong, A.H., Bortoluzzi, J., Mouton, T.L., Gonzalez-Pestana, A., Battle-Morera, A., Rohner, C. & Notarbartolo di Sciara, G. 2023. *Mediterranean and Black Seas: A regional compendium of Important Shark and Ray Areas*. Dubai: IUCN SSC Shark Specialist Group.
10. ICCAT has already adopted measure 19-01 which lists the elasmobranchs to which the amended ICCAT convention will apply. See https://www.iccat.int/Documents/Recs/compendiopdf-e/2019-01-e.pdf
11. The CMS has two appendices of particular importance: Appendix I lists migratory species that are threatened with extinction, requiring Parties to strictly protect them, conserve their habitats, and mitigate obstacles to migration; Appendix II lists migratory species that have an unfavourable conservation status and would significantly benefit from international cooperation through agreements or concerted actions.
12. The plan was intended to build on an earlier Mediterranean Angel Sharks Regional Action Plan created by the Angel Shark Conservation Network in 2019.
13. https://spa-rac.org/uploads/CKFiles/files/wg608_6_en.pdf
14. The Recovering Sharks and Rays in the Gulf of Gabès project is implemented with financial support from the Shark Conservation Fund (SCF).
15. (EU) 2019/1241
16. European Commission. 2023. EU Action Plan: Protecting and restoring marine ecosystems for sustainable and resilient fisheries.
17. As per Decision (EU) 2017/848 Member States shall establish the threshold values for the mortality rate from incidental bycatch per species, through regional or subregional cooperation.
18. Mazzoldi et al. as presented in the GFCM Subregional committee fr the Adriatic in May 2023.
19. https://portals.iucn.org/library/node/49019 ; https://www.fao.org/3/I6911EN/i6911en.pdf

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