Key facts

- The Mediterranean Sea is considered to be a biodiversity “hotspot” characterized by an unusually high species diversity for a temperate sea. It contains around 7% of the total global marine fish species, with a wide range of both temperate and tropical species being present.

- Of the 519 native marine fish species and subspecies occurring in the Mediterranean Sea, 73 are cartilaginous fish (sharks, rays and chimaeras) and 446 are bony fish. At present, 12% of bony fish and 40% of cartilaginous native fish are regionally threatened with extinction. The Mediterranean region hosts some of the most threatened cartilaginous fish populations in the world.

- A total of 74 assessed species is endemic to the Mediterranean Sea, unique to this region. Endemic species are more frequently found in the western half of the Mediterranean Sea, especially around the Ligurian, Tyrrhenian and Tunisian coastlines.

- The high number of Data Deficient species highlights the substantial lack of information on the conservation status of Mediterranean marine fish. Among endemic species, more than 40% is listed as Data Deficient, suggesting that increased funding and research are needed to be directed towards these groups.

- Over half of the assessed species are threatened by targeted fishing or accidental capture such as by-catch. The majority of threatened species are under no protection or effective management plans. However, the effective implementation (and control) of existing measures is critical to ensure the survival of Mediterranean marine fish.
Conservation Status Assessment

Out of the 519 native marine fish species and subspecies included in this regional assessment, more than 8% (43 species) are threatened, with 15 (3%) assessed as Critically Endangered (14 of which are sharks and rays), 13 (2.5%) as Endangered (9 of these being sharks and rays), and 15 species (3%) are considered Vulnerable (8 being sharks and 7 being bony fishes). An additional 22 species (4%) are listed as Near Threatened whereas almost one-third (151 species) were classified as Data Deficient.

<table>
<thead>
<tr>
<th>Categories</th>
<th>No. of Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR Critically Endangered</td>
<td>15</td>
</tr>
<tr>
<td>EN Endangered</td>
<td>13</td>
</tr>
<tr>
<td>VU Vulnerable</td>
<td>15</td>
</tr>
<tr>
<td>NT Near Threatened</td>
<td>22</td>
</tr>
<tr>
<td>LC Least Concern</td>
<td>303</td>
</tr>
<tr>
<td>DD Data Deficient</td>
<td>151</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>519</strong></td>
</tr>
</tbody>
</table>

Main Threats

Fishing is by far the most common threat to marine fish, affecting 33% of Mediterranean native species, with an additional 18% of species being threatened by by-catch. Other important threats include pollution, affecting 7.5% of species; habitat loss, affecting 7.4% of species; and human disturbance, affecting 5% of species. Only a very low percentage (<1%) of species are affected by invasive alien species.

Conservation Actions

Regional conservation management, such as the designation of ‘no-take zones’ or the creation of effective marine protected areas, should be implemented to reduce pressures on fish populations and safeguard critical fish habitats. Increased funding and research also needs to be directed towards these Data Deficient species. Regional collaboration, especially among the southern and eastern Mediterranean countries, should be strengthened. Information is still lacking from many countries, particularly those bordering the southern and eastern shores of the Mediterranean Sea. It is essential that this strong regional cooperation continues and that new collaborations with other countries are forged, so that this first evaluation of the threat status of native Mediterranean marine fishes can be consolidated and updated as new information becomes available.

For more information

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The Status and Distribution of Mediterranean Marine Fish

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Species richness

Marine fish species distribution is not homogeneous. The western end of the Mediterranean Sea, as linked to the Atlantic Ocean through the Strait of Gibraltar, has surface waters which are well oxygenated, resulting in generally higher productivity and a richer species composition. Denser concentration of threatened species are observed in more heavily populated coastal habitats.

Special story

The Atlantic bluefin tuna *Thunnus thynnus* (EN). This is a pelagic, oceanodromus species that has been fished in the Mediterranean Sea for hundreds of years. Its stock is currently being over-fished in the basin. In the Mediterranean Sea, the actual official estimate of the catch that is caged after being caught is probably close to 39,000 t/year. Although some countries have ceased fishing in the Mediterranean, illegal catches continue. Heightened enforcement of existing measures is therefore needed to prevent the extinction of the species.